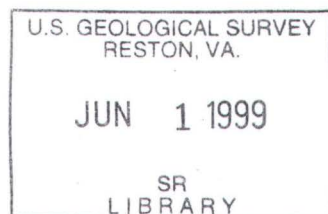


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Water Resources Data New Jersey Water Year 1997

Volume 2. Ground-Water Data



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-97-2

Prepared in cooperation with the New Jersey Department
of Environmental Protection and with other agencies



CALENDAR FOR WATER YEAR 1997

1996

OCTOBER

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1997

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31						

SEPTEMBER

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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 1997". 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-97-1 (for Volume 1) and NJ-97-2 (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 1997

Volume 2. Ground-Water Data

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



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-97-2
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

Tom Casadevall, *Acting 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 Gibbs

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

J.F. Dudek

D.S. Kauffman

T.J. Reed

G.L. Centinaro

B. Gray

R.C. McTigue

G.C. Steckroat

V. Corcino, Jr.

K. Isaacs

J.H. Oden

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

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, Associate District Chief for Hydrologic Data Assessment Studies and Information Management; Eric J. Evenson, District Chief, New Jersey; and William J. Carswell, Jr., Regional Hydrologist, Northeastern Region.

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4. TITLE AND SUBTITLE Water Resources Data - New Jersey, Water Year 1997, Volume 2 Ground-Water Data				5. FUNDING NUMBERS
6. AUTHOR(S) W.D. Jones and M.J. DeLuca				
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13. ABSTRACT (Maximum 200 words) Water-resources data for the 1997 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 188 wells and water-quality analyses of ground water from 43 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 237
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GROUND WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

GROUND-WATER LEVEL RECORDS

	NJ-WRD WELL NUMBER	PAGE
<u>ATLANTIC COUNTY</u>		
ACOW 2 Obs	01-710	24
Jobs Point Obs	01-578	25
Margate Firehouse 1 Obs	01-834	26
Burk Ave TW Obs	01-702	27
Galen Hall Obs	01-037	28
HTMUA 9 Obs	01-1219	29
Oceanville 1 Obs	01-180	30
FAA Pomona Obs	01-703	31
FAA Intermediate Obs	01-775	32
FAA Shallow Obs	01-776	33
Scholler 1 Obs	01-256	34
<u>BERGEN COUNTY</u>		
Saddle River 17 Obs	03-289	35
<u>BURLINGTON COUNTY</u>		
Mount Obs	05-570	36
Atsion 1 Obs	05-407	37
Atsion 2 Obs	05-408	38
Atsion 3 Obs	05-409	39
Penn SF Shallow Obs	05-628	40
Penn SF Deep Obs	05-630	41
Evesham 4 Obs	05-1387	42
Coyle 2 Obs	05-1391	43
Coyle Airport Obs	05-676	44
Butler Place 1 Obs	05-683	45
Butler Place 2 Obs	05-684	46
Lebanon SF 23-D Obs	05-689	47
New Lisbon 1 Obs	05-1389	48
New Lisbon 2 Obs	05-1390	49
Medford Twp MW-1 Obs	05-1155	50
Medford 1 Obs	05-258	51
Medford 2 Obs	05-259	52
Medford 5 Obs	05-261	53
Medford 4 Obs	05-262	54
Campbell 1 Obs	05-274	55
Willingboro 2 Obs	05-645	56
Willingboro 1 Obs	05-063	57
Rhodia 1 Obs	05-440	58
<u>CAMDEN COUNTY</u>		
CMMUA PZ 3	07-740	59
CMMUA PZ 4	07-741	60
New Brooklyn Park 1 Obs	07-476	61
New Brooklyn Park 2 Obs	07-477	62
New Brooklyn Park 3 Obs	07-478	63
CMMUA PZ 2	07-742	64
CMMUA PZ 1	07-743	65
CMMUA PZ 5	07-744	66
CMMUA PZ 8	07-745	67
Winslow 5 Obs	07-503	68
CMMUA PZ 7	07-746	69
CMMUA PZ 6	07-747	70
Elm Tree 2 Obs	07-412	71
Elm Tree 3 Obs	07-413	72
Hutton Hill 1 Obs	07-117	73
Hutton Hill 2 Obs	07-118	74
Egbert Obs	07-283	75

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>CAPE MAY COUNTY</u>		
West Cape May 1 Obs.....	09-150	76
Traffic Circle Obs.....	09-020	77
Coast Guard 800 Obs.....	09-302	78
Canal 5 Obs.....	09-048	79
Higbee Beach 3 Obs.....	09-049	80
M-1 N Wildwood 800 Obs.....	09-337	81
Airport 7 Obs	09-060	82
Pump Pond N. Obs.....	09-333	83
Cape May 42 Obs.....	09-080	84
Cape May 23 Obs.....	09-081	85
Oyster 800 Obs	09-306	86
Oyster Lab 4 Obs	09-089	87
Cape May County Park 8 Obs	09-099	88
<u>CUMBERLAND COUNTY</u>		
Heislerville 1 Obs	11-118	89
Heislerville 2 Obs	11-119	90
Jones Island 2 Obs	11-096	91
Jones Island 1 Obs	11-097	92
Sheppards 2 Obs	11-073	93
Ragovin 2100 Obs.....	11-137	94
Fair Grounds 3 Obs.....	11-163	95
Vocational School 2 Obs.....	11-042	96
Vocational School 1 Obs.....	11-043	97
Vocational School 3 Obs.....	11-044	98
Natural Area 1 Obs	11-237	99
<u>ESSEX COUNTY</u>		
Christ Church 2 Obs.....	13-095	100
Canoe Brook 30 Obs.....	13-013	101
Neutral Zone Obs.....	13-014	102
East Orange 28 Obs	13-094	103
East Orange Shallow Obs	13-096	104
<u>GLOUCESTER COUNTY</u>		
Newfield 2-A Obs	15-372	105
USGS UND06.....	15-1213	106
Glassboro ML-1 Obs.....	15-1126	107
USGS GSC Obs-1 Shallow.....	15-1054	108
USGS AG02.....	15-1208	109
WTMUA Monitoring 1 Obs	15-1033	110
Mantua Shallow Obs.....	15-741	111
Mantua Deep Obs	15-742	112
Stefka 1 Obs.....	15-712	113
Stefka 2 Obs.....	15-713	114
Stefka 3 Obs.....	15-727	115
Stefka 4 Obs.....	15-728	116
Deptford Deep Obs	15-671	117
Eagle Point 3 Obs.....	15-323	118
<u>HUNTERDON COUNTY</u>		
Corsalo Rd TB 1 Obs.....	19-251	119
Bird Obs	19-002	120
Environmental Ctr 1 Obs	19-276	121
Readington School 11 Obs.....	19-270	122

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>MERCER COUNTY</u>	<u>WELL NUMBER</u>	
Civil Defense Obs.....	21-028.....	123
Bristol-Myers 100 Obs.....	21-289.....	124
Cranston Farms 15 Obs.....	21-364.....	125
Washington Crossing Pk 14 Obs.....	21-366.....	126
SBMWA Honey Branch 10 Obs.....	21-088.....	127
AT&T North Obs.....	21-365.....	128
<u>MIDDLESEX COUNTY</u>		
Plainsboro Pond Obs.....	23-273.....	129
Forsgate 3 Obs.....	23-228.....	130
Forsgate 4 Obs.....	23-229.....	131
Forsgate 1 Obs.....	23-291.....	132
Forsgate 2 Obs.....	23-292.....	133
Morrell 1 Obs.....	23-104.....	134
Runyon 1 Obs.....	23-194.....	135
Fischer Obs.....	23-070.....	136
SWD 2 Obs.....	23-344.....	137
SWD 1 Obs.....	23-351.....	138
Duh Say 4 Obs.....	23-365.....	139
SRWD 2 Obs.....	23-439.....	140
Rutgers Golf 13 Obs.....	23-1165.....	141
American Cyanamid 1 Obs.....	23-482.....	142
<u>MONMOUTH COUNTY</u>		
DOE-Sea Girt Obs.....	25-486.....	143
Allaire State Park C Obs.....	25-429.....	144
Howell Twp 1 Obs.....	25-635.....	145
Howell Twp 2 Obs.....	25-636.....	146
Howell Twp 3 Obs.....	25-637.....	147
Howell Twp 4 Obs.....	25-638.....	148
Howell Twp 5 Obs.....	25-639.....	149
Fort Monmouth 1-NCO Obs.....	25-353.....	150
Village 215 Obs.....	25-250.....	151
Marlboro 1 Obs.....	25-272.....	152
Sandy Hook 2 Obs.....	25-771.....	153
AHWD B Obs.....	25-715.....	154
Sandy Hook SP 1 Obs.....	25-316.....	155
Keyport 4 Obs.....	25-206.....	156
<u>MORRIS COUNTY</u>		
Recreation Fld Obs.....	27-001.....	157
MBWD 4 Obs.....	27-017.....	158
Briarwood School Obs.....	27-012.....	159
Exxon Obs.....	27-014.....	160
Drew University Farm Obs.....	27-1303.....	161
W B Driver 2 Obs.....	27-003.....	162
Morristown Arpt 2 Obs.....	27-015.....	163
Clemens Obs.....	27-004.....	164
Sandoz Obs.....	27-005.....	165
Mt Freedom 2 Obs.....	27-023.....	166
Black River 10 Obs.....	27-1190.....	167
Green Acres Obs.....	27-006.....	168
Troy Meadows 1 Obs.....	27-020.....	169
Roxbury 1 Obs.....	27-1191.....	170
Morris Maint Yd 22 Obs.....	27-1192.....	171
Berkshire Valley 9 Obs.....	27-027.....	172
Green Pond 5 Obs.....	27-028.....	173

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>OCEAN COUNTY</u>		
Great Bay Blvd 1 Obs	29-1210	174
Garden St Pky 1 Obs	29-513	175
Garden St Pky 2 Obs	29-514	176
Island Beach 1 Obs	29-017	177
Island Beach 2 Obs	29-018	178
Island Beach 3 Obs	29-019	179
Island Beach 4 Obs	29-020	180
DOE-Forked River Obs	29-585	181
Webbs Mills 2 Obs	29-425	182
Toms River 2 Obs	29-534	183
Toms River 84 Obs	29-085	184
Fort Dix RLF-30 Obs	29-1059	185
Mantoloking 6 Obs	29-503	186
LNAS-EC Obs	29-1060	187
Colliers Mills 1 Obs	29-138	188
Colliers Mills 2 Obs	29-139	189
Colliers Mills 3 Obs	29-140	190
Colliers Mills 4 Obs	29-141	191
PPWD 6 Obs	29-530	192
<u>SALEM COUNTY</u>		
Parvin SP 1 Obs	33-841	193
Parvin SP 2 Obs	33-842	194
Salem 1 Obs	33-251	195
Salem 2 Obs	33-252	196
Salem 3 Obs	33-253	197
Horner Obs	33-020	198
Point Airy Obs	33-187	199
Penns Grove 14 Obs	33-348	200
<u>SUSSEX COUNTY</u>		
Byram Twp PW-1 Obs	37-359	201
Whittingham 19 Obs	37-203	202
Sparta Twp 6 Obs	37-204	203
Swartwood Park 5 Obs	37-205	204
Fairgrounds 7 Obs	37-206	205
Taylor Obs	37-202	206
Walpack Twp 4 Obs	37-207	207
<u>UNION COUNTY</u>		
White Lab 3 Obs	39-102	208
White Lab 4 Obs	39-115	209
Union County Park Obs	39-119	210
Schweitzer Obs	39-058	211

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

QUALITY OF GROUND WATER RECORDS

	<u>NJ-WRD</u> <u>WELL NUMBER</u>	<u>PAGE</u>
<u>ATLANTIC COUNTY</u>		
New 4	01-039	215
VCWD 8	01-600	215
Well 8/Route 575	01-958	215
<u>BURLINGTON COUNTY</u>		
Sewerage 1	05-782	218
QWO-3A	05-835	218
QWO-3B	05-836	218
New Lisbon 2	05-1092	218
PTMUA MW-5	05-1349	218
Cinnaminson HS MW-5	05-1392	218
Mt Holly SLF PZ-26S	05-1393	218
Mt Holly SLF PZ-26M	05-1394	218
Evesham MUA Site 3-OBS 3	05-1395	218
Lumberton NIKE MW-1	05-1396	218
Lumberton SLF MW-4	05-1397	218
Amerada Hess MW-17	05-1398	218
Moorestown Twp MW-2	05-1399	218
Mt Holly Gas Works MW-1S	05-1400	218
Mt Holly Gas Works MW-2I	05-1401	218
NJDOT Pesticide MW-2	05-1402	218
NJDOT Pesticide MW-1	05-1403	218
Tabernacle Park Irr	05-1404	218
<u>CAMDEN COUNTY</u>		
Shell Srvc Sta MW-4	07-871	223
Campbell Soup EMW-9	07-872	223
Paintworks MGT MW-28	07-873	223
Buzby LF MW-100	07-874	223
<u>CAPE MAY COUNTY</u>		
Shore Div 13	09-124	215
CIWC 1	09-136	215
<u>GLOUCESTER COUNTY</u>		
NPWD 2/NPWD 5	15-207	215
WDTWD 4	15-276	215
Clayton 1	15-998	215
<u>MIDDLESEX COUNTY</u>		
Perth Amboy 5	23-195	216
<u>MONMOUTH COUNTY</u>		
W Keansburg 2	25-112	216
4-75/RB 5	25-360	216
West Belmar	25-440	216
Rosehill 2A	25-698	216
Sandy Hook 2 Obs	25-771	216
<u>OCEAN COUNTY</u>		
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PPWD 4	29-533	217
Mystic 7	29-814	217
MTMUA 11 Util Easement	29-1101	217
Memorial Sch Fld Irr	29-1178	217
State Game Farm Dom Well	29-1192	217
<u>SALEM COUNTY</u>		
PTWD 5	33-360	217

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 43 wells and ground-water levels in 188 wells. Locations of these wells are shown on figures 5 and 6. 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-97-2." 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://wwwnj.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.

Pinelands Commission, Terrance D. Moore, Executive
Director

Evesham Municipal Utilities Authority, J. Robert Flynn,
Director

SUMMARY OF HYDROLOGIC CONDITIONS

Ground-Water Levels

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. Changes in water levels show the general response of the ground-water system to natural climate changes and ground-water withdrawals. 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.

During the 1997 water year, ground-water levels were measured in 188 wells. Previous record low water levels were exceeded in 18 of the 188 wells in the statewide observation-well network during the 1997 water year. Fifteen of the record low water levels were in wells located in the Coastal Plain, and three were in wells located in the northern part of the State. Previous record high water levels were exceeded in 26 network observation wells during the 1997 water year. Six of these wells are screened in the Englishtown aquifer system and the Wenonah-Mount Laurel aquifer in the northern part of the Coastal Plain in Monmouth and Ocean Counties, and seven are screened in the Potomac-Raritan-Magothy aquifer system in the southern part of the Coastal Plain in Gloucester County.

Water-level measurements in confined aquifers in the Coastal Plain in water year 1997, 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 in some of the confined aquifers in the northern part of the Coastal Plain (Monmouth, eastern Middlesex, Ocean, and northeastern Burlington Counties) continued to rise; and long-term water-level declines in the Potomac-Raritan-Magothy aquifer system in Burlington, Camden, and Gloucester Counties began to abate.

The greatest long-term water-level decline in an observation well has been measured in the New Brooklyn Park 3 observation well (NJ-WRD well number 7-478), screened in the Wenonah-Mount Laurel aquifer in Camden County. The water level in this well has declined more than 60 feet since April 1983. Water levels in other observation wells in the Wenonah-Mount Laurel aquifer in the southern Coastal Plain (NJ-WRD well numbers 5-1155 and 33-20) also declined.

Previous record low water levels were exceeded in six observation wells screened in the Atlantic City 800-foot sand (Atlantic and Cape May Counties) in the 1997 water year (NJ-WRD well numbers 1-37, 1-578, 1-702, 9-302, 9-306, and 9-337). Water levels also declined in two other wells screened in the Atlantic City 800-foot sand in Atlantic County (NJ-WRD well numbers 1-180 and 1-703).

Water levels in wells screened in the Piney Point aquifer in Cumberland County (NJ-WRD well numbers 11-44, 11-96, and 11-163) and one well in Atlantic County (NJ-WRD well number 1-834) also continued to decline. Water levels in the remaining three network observation wells screened in the Piney Point aquifer in Ocean County were relatively unchanged.

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. In Critical Area 1, which consists of Middlesex, Monmouth, and Ocean Counties, withdrawals from the Wenonah-Mount Laurel aquifer, Englishtown aquifer system, and Upper and Middle Potomac-Raritan-Magothy aquifers are restricted. Pumpage restrictions in this area began in 1989. In Critical Area 2, which consists of Camden, most of Burlington and Gloucester, and parts of Atlantic, Cumberland, Ocean, Monmouth, and Salem Counties, withdrawals from the Upper, Middle, and Lower Potomac-Raritan-Magothy aquifers are restricted. Pumping restrictions here went into effect 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 (Potomac-Raritan-Magothy aquifer system, Englishtown aquifer system, and Wenonah-Mount Laurel aquifer) in southern Monmouth and northern Ocean Counties (Critical Area 1). Water levels in network observation wells in the Englishtown aquifer system, and the Wenonah-Mount Laurel aquifer (NJ-WRD well numbers 25-353, 25-429, 25-486, 25-637, 25-638, 29-138, 29-503, and 29-534) continued to rise during the 1997 water year. This rise in water levels is the result of a reduction in ground-water withdrawals and an increase in surface-water withdrawals for public water supply and a shift in withdrawals from deep, confined aquifers to shallower aquifers. The recovery of water levels in some observation wells in the Potomac-Raritan-Magothy aquifer system in Monmouth and Ocean Counties may be leveling off (NJ-WRD well numbers 25-206, 25-272, 25-316, 25-635, 25-639, 29-19, and 29-85). Water levels in some observation wells in these aquifers in Middlesex County (NJ-WRD well numbers 23-229, 23-365, and 23-439), however, may still be recovering.

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, the long-term water-level declines have ceased in observation wells screened in the Potomac-Raritan-Magothy aquifer system (NJ-WRD well numbers 5-258, 5-261, 5-262, 5-440, 5-645, 7-117, 7-412, 7-413, 7-476, 7-477, 15-671, 15-741, 15-742, 33-251, and 33-253). Water levels in seven observation wells screened in the Potomac-Raritan-Magothy aquifer system in Gloucester County exceeded their previous highs of record. The water level in the Deptford Deep observation well (NJ-WRD well number 15-671) exceeded the previous highest level by more than 10 feet.

The effects of climate on daily mean water levels in four observation wells during water year 1997 can be seen in the hydrographs shown in figure 1. Monthly extreme and long-term-average water levels are shown for comparison. The Taylor well (NJ-WRD well number 37-202) and the Cranston Farms 15 well (NJ-WRD well number 21-364) are open to fractured-rock aquifers; the Lebanon State Forest 23-D well (NJ-WRD well number 5-689) and the WTMUA Monitoring 1 well (NJ-WRD well number 15-1033) are screened in an unconfined sand and gravel aquifer. These wells are distant from pumping centers.

Above-average cumulative precipitation throughout the 1996 water year and the first six months of the 1997 water year caused water levels in many observation wells open to unconfined and fractured-rock aquifers to rise. Previous record high water levels were exceeded in 11 observation wells open to unconfined or fractured-rock aquifers during the 1997 water year (NJ-WRD well numbers 7-503, 11-118, 13-95, 15-372, 15-1033, 15-1054, 21-289, 21-365, 23-1165, 27-1303, and 37-359). Several prolonged dry periods during late spring and summer caused water levels to decline throughout the State; however, water levels in most observation wells tapping fractured-rock and unconfined aquifers were above their historical monthly means by September 1997.

Water Quality

In water year 1997, the U.S. Geological Survey (USGS) and the New Jersey Department of Environmental Protection (NJDEP), as part of the cooperative Ambient Ground-Water-Quality Network, assessed the quality of shallow ground water in NJDEP Watershed Management Area 19, which consists of the Rancocas Creek, Pennsauken Creek, and Cooper River Basins. The NJDEP Watershed Management Areas are organizational geographic areas within which water and water-related resources are managed on a scientific basis by State and local governments, the private sector, and citizen stakeholders. The State of New Jersey consists of 96 watersheds that are grouped into 20 Watershed Management Areas and 5 Watershed Regions.

In this assessment, water was collected from 22 shallow wells in Watershed Management Area 19--18 wells in Burlington County and 4 wells in Camden County (fig. 2). The depth of the wells that were sampled ranged from 10 to 85 feet below land surface.

Three factors that affect the quality of shallow ground water in an unconfined aquifer are (1) mixing with water from losing stream reaches, (2) the geologic material through which the ground water flows, and (3) land use. Three of the 22 wells sampled (fig. 2) are located near losing stream reaches; water in these wells is most likely to be affected by the quality of water in the nearby stream. Three additional wells are located near stream reaches that appear to be losing water to the unconfined aquifer; water in these wells also may be affected by streamwater quality. The remaining 16 wells are not located near losing stream reaches. The 22 wells sampled are screened in seven different hydrogeologic units, which are composed of different geologic materials, and are located in urban, agricultural, and undeveloped land-use areas (based on New Jersey

Department of Environmental Protection digital data, 1: 24,000 scale, 1986) (table 1).

The major-ion chemistry of the water from the 22 wells is highly variable (fig. 3). Concentrations of dissolved oxygen in 5 of the 19 wells in which this constituent was measured were less than or equal to 1.0 milligrams per liter; this ground water is considered to be anoxic. Anoxic water was found in wells in agricultural and urban land-use areas, but not in wells in undeveloped land-use areas (table 1).

Nitrate-plus-nitrite nitrogen concentrations in water from the 22 wells ranged from less than 0.05, the laboratory reporting limit, to 9.9 milligrams per liter (table 1). In general, concentrations of nitrate-plus-nitrite nitrogen were lower in wells in undeveloped land-use areas than in wells in agricultural or urban land-use areas.

Ground water from 17 wells was analyzed for volatile organic compounds (table 1). Water in 7 of the 17 wells contained four different volatile organic compounds in concentrations greater than or equal to the laboratory reporting limit of 0.2 micrograms per liter. Volatile organic compounds were reported in sample water from wells in all three land-use categories. The most frequently reported volatile organic compounds were chloroform and methyl tert-butyl ether; each compound was detected in water samples from four wells. Two samples contained both chloroform and methyl tert-butyl ether, and one contained both trichlorofluoromethane and 1,2-dichloropropane. The highest concentrations of chloroform and methyl tert-butyl ether were 1.0 and 5.4 micrograms per liter, respectively, and were not found in water from the same well.

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; high concentrations 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 measured at one point in time.

In the 1940's, the USGS established a saltwater-monitoring network in the Coastal Plain of New Jersey to document 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 1997 water year, the USGS sampled water from 21 wells in seven counties. Chloride concentrations in these samples 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.

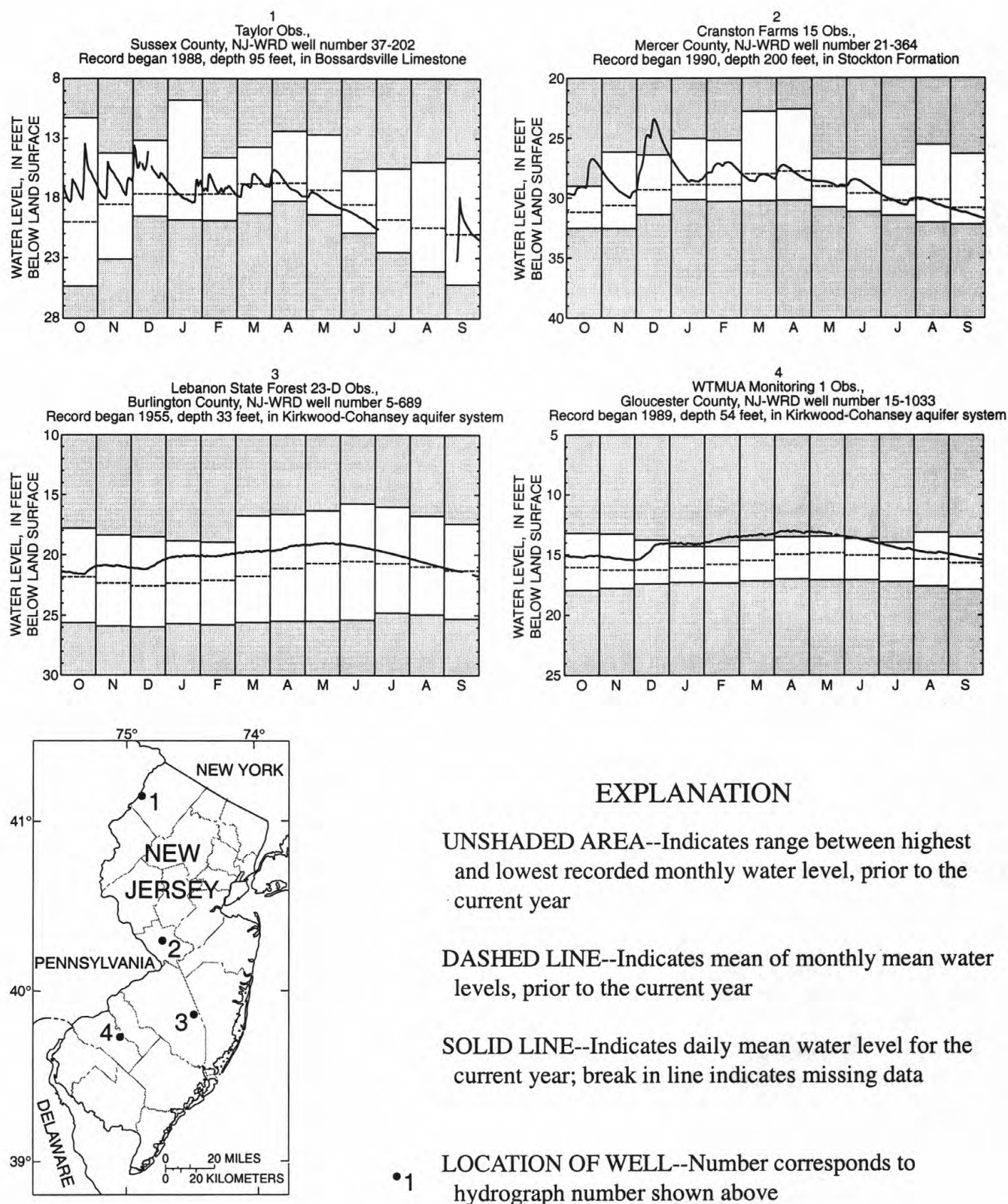


Figure 1. Ground-water levels at key observation wells in New Jersey during water year 1997.

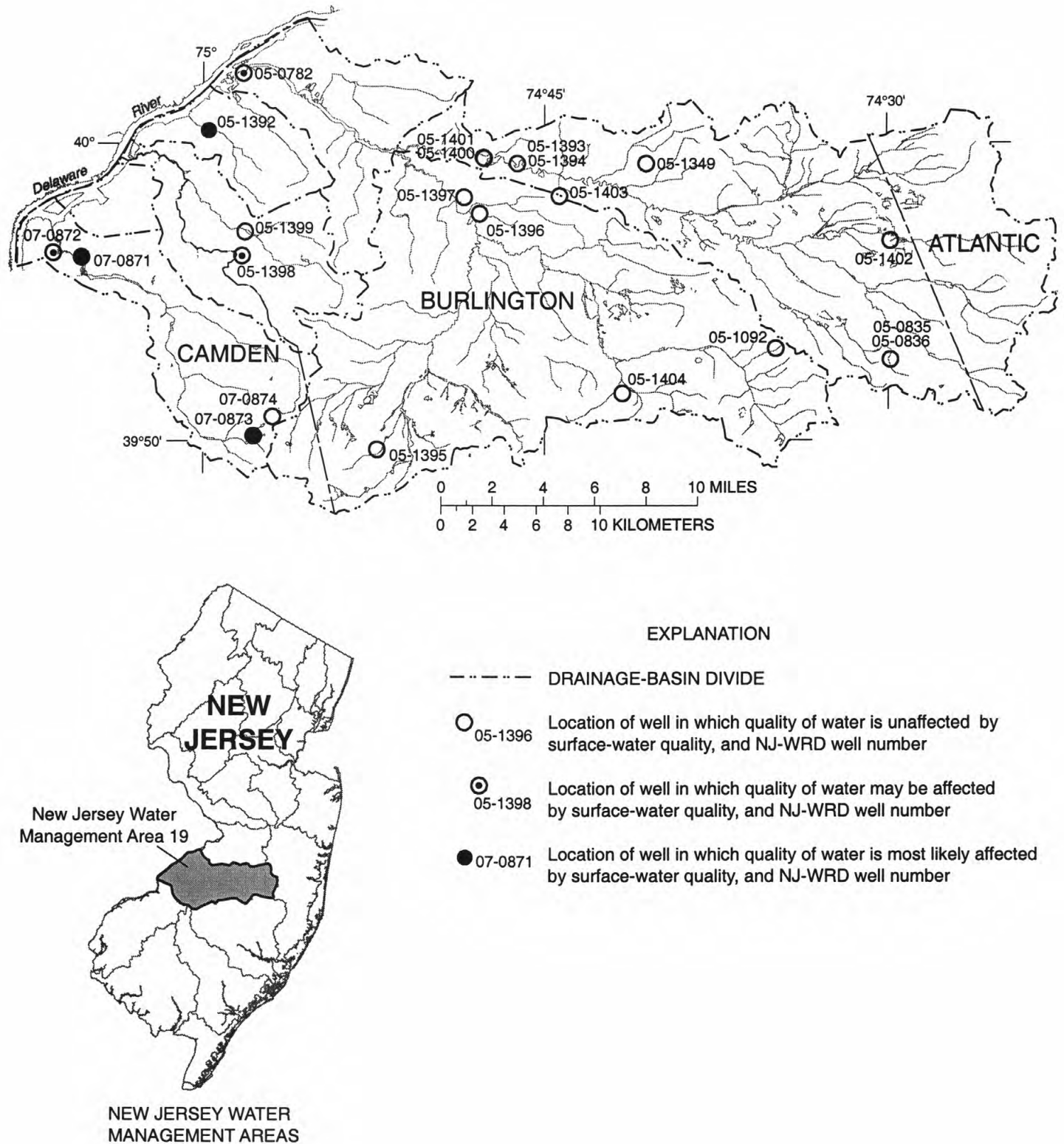


Figure 2. Locations of 22 wells sampled in water year 1997 as part of the U.S. Geological Survey-New Jersey Department of Environmental Protection cooperative ambient ground-water-quality network showing wells in which quality of water is or may be affected by quality of water in nearby streams.

Table 1. Hydrogeologic unit, land use, and results of analyses for selected water quality constituents in samples from 22 wells sampled as part of U.S. Geological Survey -N.J. Department of Environmental Protection (cooperative) Ambient Ground-Water-Quality Network, water year 1997

[mg/L, milligrams per liter; --, no data available; <, less than]

NJ- WRD Well Number	Hydrogeologic unit	Predominant land use(s) ¹	Water type (dominant cation and anion)	Dis- solved oxygen, mg/L	Volatile organic compounds measured in concentrations greater than the laboratory reporting limit	Nitrogen, NO ₂ ⁺ NO ₃ ⁻ , mg/L
05-0782	Middle Potomac-Raritan-Magothy aquifer	Urban	Calcium-magnesium-sulfate	3.0	Not analyzed for VOC's	3.7
05-0835	Kirkwood-Cohansey aquifer system	Undeveloped	Sodium-sulfate	9.9	Chloroform	0.07
05-0836	Kirkwood-Cohansey aquifer system	Undeveloped	Sodium-sulfate	8.7	Chloroform	0.05
05-1092	Kirkwood-Cohansey aquifer system	Undeveloped	Sodium-chloride	6.2	Chloroform, methyl tert-butyl ether	1.5
05-1349	Vincentown Formation	Agricultural	Sodium-calcium -chloride	7.4	None	4.4
05-1392	Middle Potomac-Raritan-Magothy aquifer	Urban	Magnesium-chloride	8.9	None	0.77
05-1393	Wenonah-Mount Laurel aquifer	Urban-undeveloped	Magnesium-sulfate	--	None	0.12
05-1394	Wenonah-Mount Laurel aquifer	Urban-undeveloped	Calcium-carbonate	--	None	0.05
05-1395	Kirkwood-Cohansey aquifer system	Undeveloped-urban	Sodium-chloride	7.6	Not analyzed for VOC's	0.18
05-1396	Wenonah-Mount Laurel aquifer	Agricultural	Calcium-sulfate	8.8	None	9.9
05-1397	Wenonah-Mount Laurel aquifer	Agricultural	Iron-calcium-sulfate	0.2	None	0.18
05-1398	Englishtown aquifer system	Urban	Sodium-chloride	0.3	None	1.7
05-1399	Englishtown aquifer system	Urban	Calcium-sulfate	3.0	Methyl tert-butyl ether	0.07
05-1400	Wenonah-Mount Laurel aquifer	Urban	Sodium-chloride	4.7	Not analyzed for VOC's	0.98
05-1401	Wenonah-Mount Laurel aquifer	Urban	Calcium-sulfate	2.7	Not analyzed for VOC's	<0.05
05-1402	Kirkwood-Cohansey aquifer system	Agricultural	Sodium-chloride	0.5	Methyl tert-butyl ether	<0.05
05-1403	Hornerstown Sand	Agricultural	Calcium-chloride	8.8	None	0.9
05-1404	Kirkwood-Cohansey aquifer system	Agricultural	Magnesium-sodium-chloride	7.5	Chloroform, methyl tert-butyl ether	7.9
07-0871	Upper Potomac-Raritan-Magothy aquifer	Urban	Sodium-chloride	0.4	Not analyzed for VOC's	6.4
07-0872	Upper Potomac-Raritan-Magothy aquifer	Urban	Calcium-bicarbonate	4.4	Trichlorofluoromethane, 1,2-dichloropropane	0.23
07-0873	Kirkwood-Cohansey aquifer system	Urban	Sodium-chloride	--	None	2.9
07-0874	Kirkwood-Cohansey aquifer system	Urban	Calcium-bicarbonate	1.0	None	1.0

¹ Land use based on New Jersey Department of Environmental Protection digital data, 1:24,000 scale, 1986

During the 1997 water year, saltwater intrusion continued in many communities along Raritan Bay, the Atlantic Coast, the Delaware Bay, and the lower Delaware River, and in central Gloucester County.

Water in a recently drilled well (NJ-WRD well number 25-771) screened in the Englishtown aquifer system in Sea Bright Borough, Monmouth County, was sampled and analyzed this year. The chloride concentration of the water from this well (15,000 mg/L) is similar to that of seawater. Saltwater was not detected in this aquifer system anywhere else in the Coastal Plain. Additional monitoring is needed to determine whether this high chloride concentration is static or is increasing over time.

EXPLANATION OF THE RECORDS

The ground-water level and ground-water quality data published in this report are for the 1997 water year that began October 1, 1996, and ended September 30, 1997. 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 5 and 6. 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

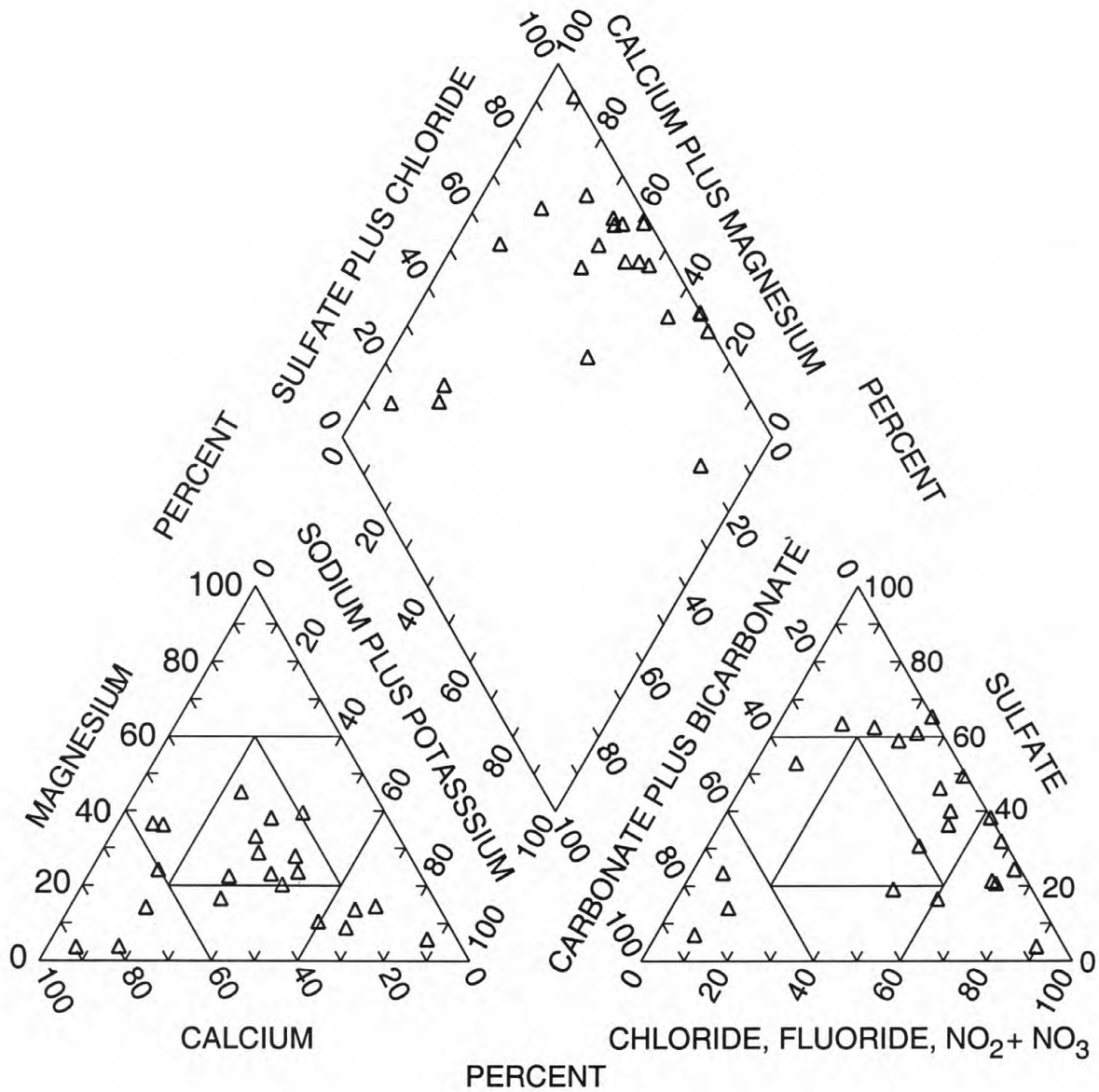


Figure 3. Trilinear diagram showing the distribution of major ions in ground water from 22 wells sampled in water year 1997 as part of the U.S. Geological Survey-New Jersey Department of Environmental Protection cooperative ambient ground-water-quality network.

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 (fig. 4).

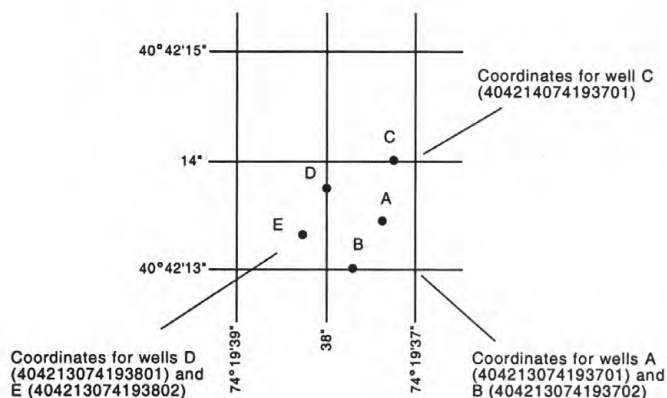


Figure 4. System for numbering wells and miscellaneous sites (latitude and longitude)

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 5.

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 daily mean 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. Trend lines may be shown on the graphs where there are at least 3 sequential measurements at a well, each within 70 days of the last measurement. The trend line may be interpreted as a general direction of water-level movement. Actual water levels may deviate from this line.

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 6.

Data Collection and Computation

The records of ground-water quality in this report were obtained from water-quality monitoring studies in spe-

cific 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.

Remark codes

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

PRINTED

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

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 collected 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.

Pump blank - a blank solution that is processed through the same pump-and-tubing system used for an environmental sample.

Standpipe blank - a blank solution that is poured from the containment vessel (standpipe) before the pump is inserted to obtain the pump blank.

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.

Cannister blank - a blank solution that is taken directly from a stainless steel cannister

just before the VOC sampler is submerged to obtain a field blank 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:

Concurrent samples - a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

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.--Spike samples are a set of environmental or reference-material 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.

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 NWIS data base.

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

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

High-Flow Water Quality Management Objectives

Hydrologic Controls on Well-Contributing Areas in New Jersey

Hydrology of Surficial Aquifer Systems

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

Low Flow Characteristics of New Jersey Streams

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

Movement of Chromium in the Ground Water of Pennsauken Township, Camden County

Multispecies Transport in Ground Water

New Jersey-Long Island National Water Quality Assessment

New Jersey Tide Telemetry System

Pascack Brook Flood Warning System

Passaic Flood Warning System

Program to Maintain and Update Ground-Water Models to Evaluate Continued Water-Supply Development

Quality of Water Data Collection Network

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

Rahway Flood Warning System

Reconstruction of Natural Streamflow Records, Passaic and Hackensack River Basins

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)

Small Watershed Flood Data Collection

Somerset County Flood-Information System

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

Vulnerability of Community Water-Supply Wells in New Jersey to Contamination by Volatile Organic Compounds and Disinfection By-Products

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

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ACCESS TO USGS WATER DATA

The U.S. Geological Survey provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (WWW). These data may be accessed at

<http://water.usgs.gov>

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch 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 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 Coordina-

tion 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, NWIS, to uniquely identify a specific constituent. The codes used in NWIS 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."

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L.M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W. S. Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.
- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W. E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 pages.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurement at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F. A. Kilpatrick and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 34 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F. A. Kilpatrick, R. E. Rathbun, Nobuhiro Yotsukura, G. W. Parker, and L. L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. *Levels at streamflow gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A20. 1993. 38 pages.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS--TWRI Book 3, Chapter A21. 1995. 56 pages.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. *Regression modeling of ground-water flow*, by R. L. Cooley and R. L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.
- 3-B4. *Supplement 1. Regression modeling of ground-water flow - Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R. L. Cooley: USGS--TWRI Book 3, Chapter B4. 1993. 8 pages.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction*, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E. J. Wexler: USGS--TWRI Book 3, Chapter B7. 1992. 190 pages.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 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.
- 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.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, by D. N. Myers and F. D. Wilde: USGS--TWRI Book 9, Chapter A7. 1997. 49 p.

WATER RESOURCES DATA-NEW JERSEY, 1997

20

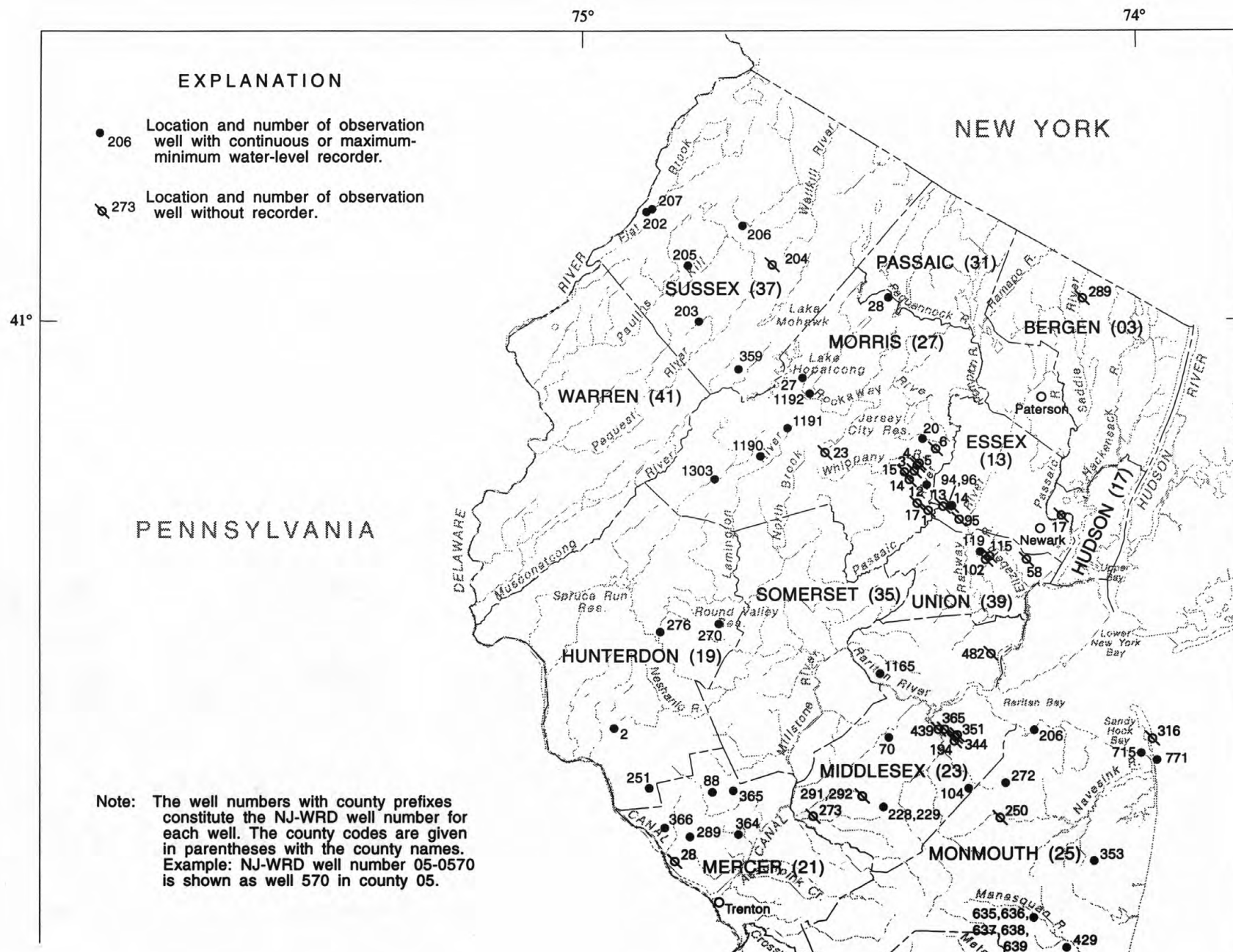




Figure 5. Location of ground-water-level observation wells in New Jersey.

WATER RESOURCES DATA-NEW JERSEY, 1997

22

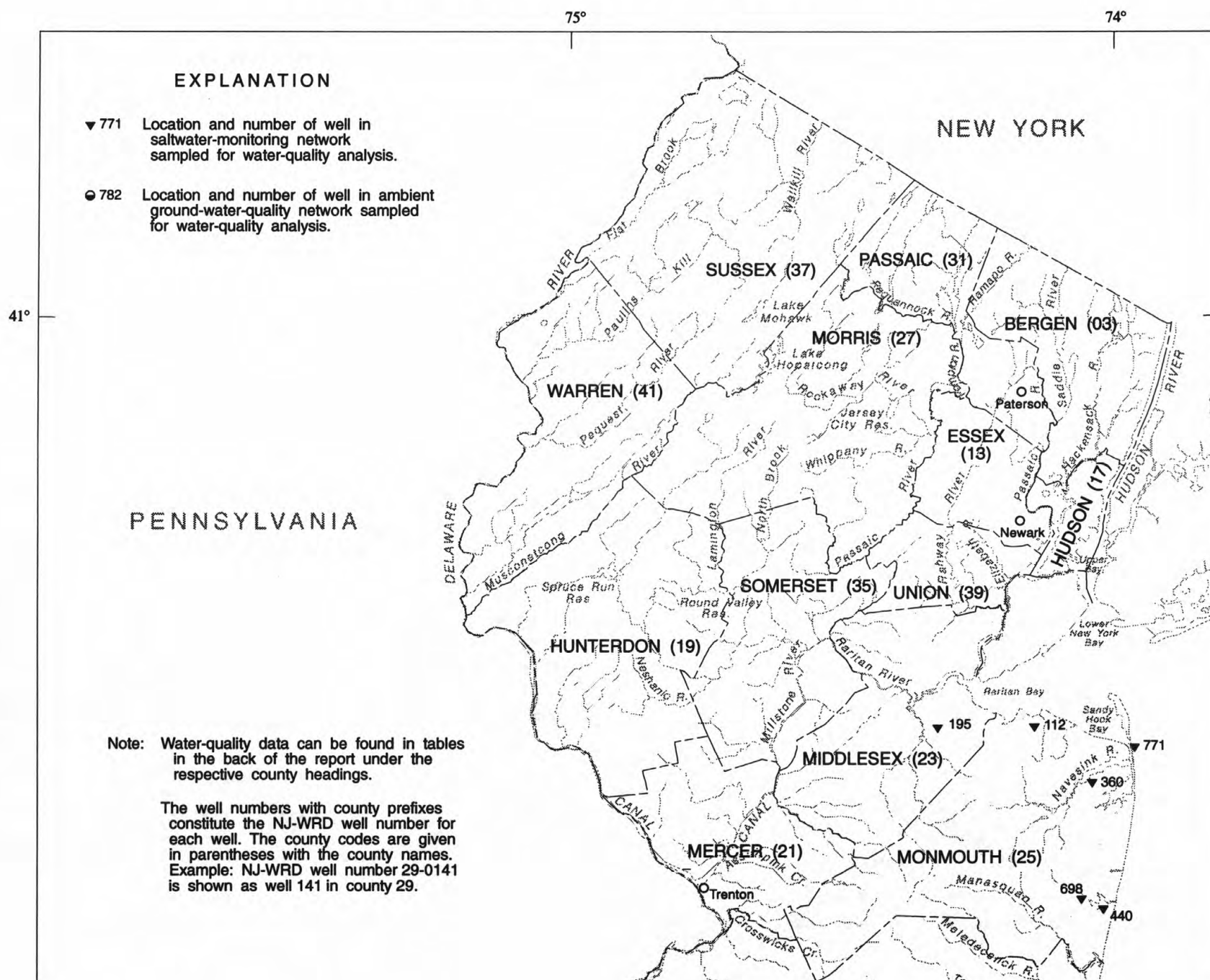




Figure 6. Locations of ground-water-quality sampling sites in New Jersey.

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.

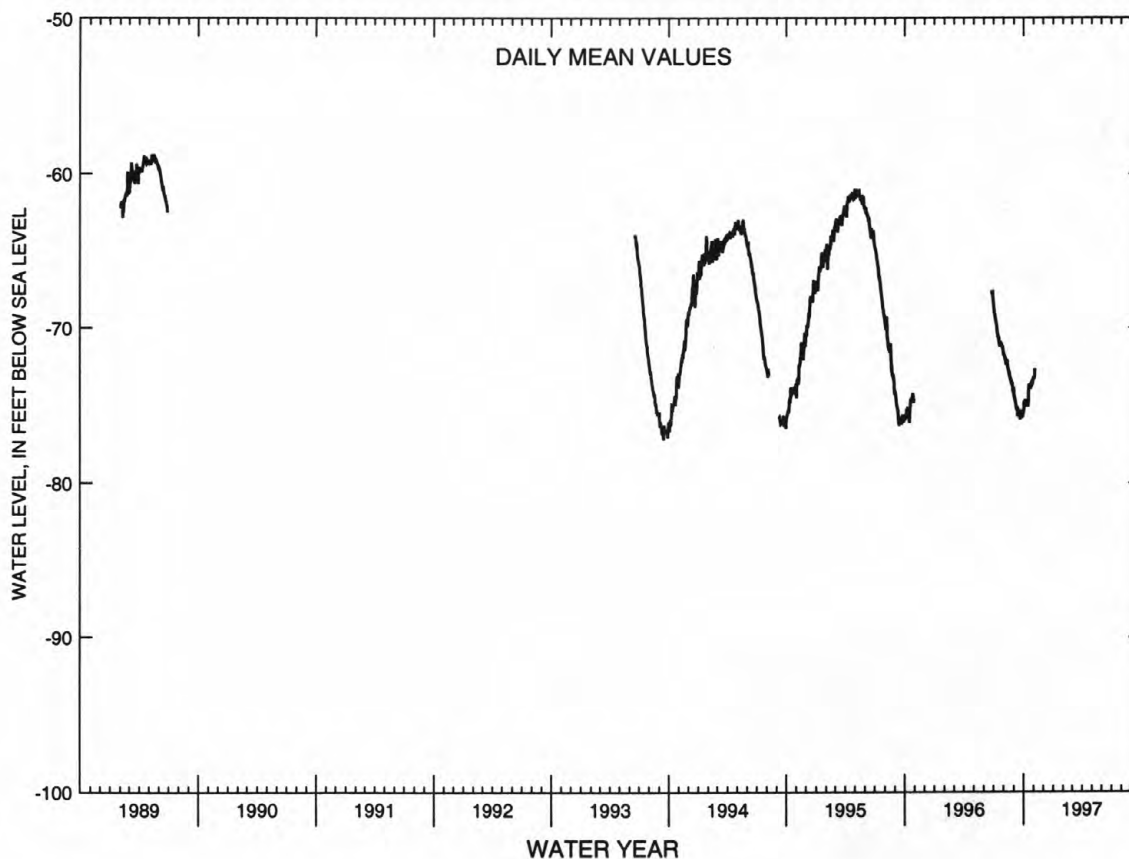
PERIOD OF RECORD.--Feb. to June 1989 and June 1993 to current year. Records for 1989, 1993 and 1995 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-74.84	-73.25	---	---	---	---	---	---	---	---	---	---
10	-75.13	---	---	---	---	---	---	---	---	---	---	---
15	-74.88	---	---	---	---	---	---	---	---	---	---	---
20	-73.72	---	---	---	---	---	---	---	---	---	---	---
25	-73.86	---	---	---	---	---	---	---	---	---	---	---
EOM	-73.45	---	---	---	---	---	---	---	---	---	---	---
MEAN	-74.44	---	---	---	---	---	---	---	---	---	---	---

NJ-WRD WELL NO. 01-0710



GROUND-WATER LEVELS

25

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.

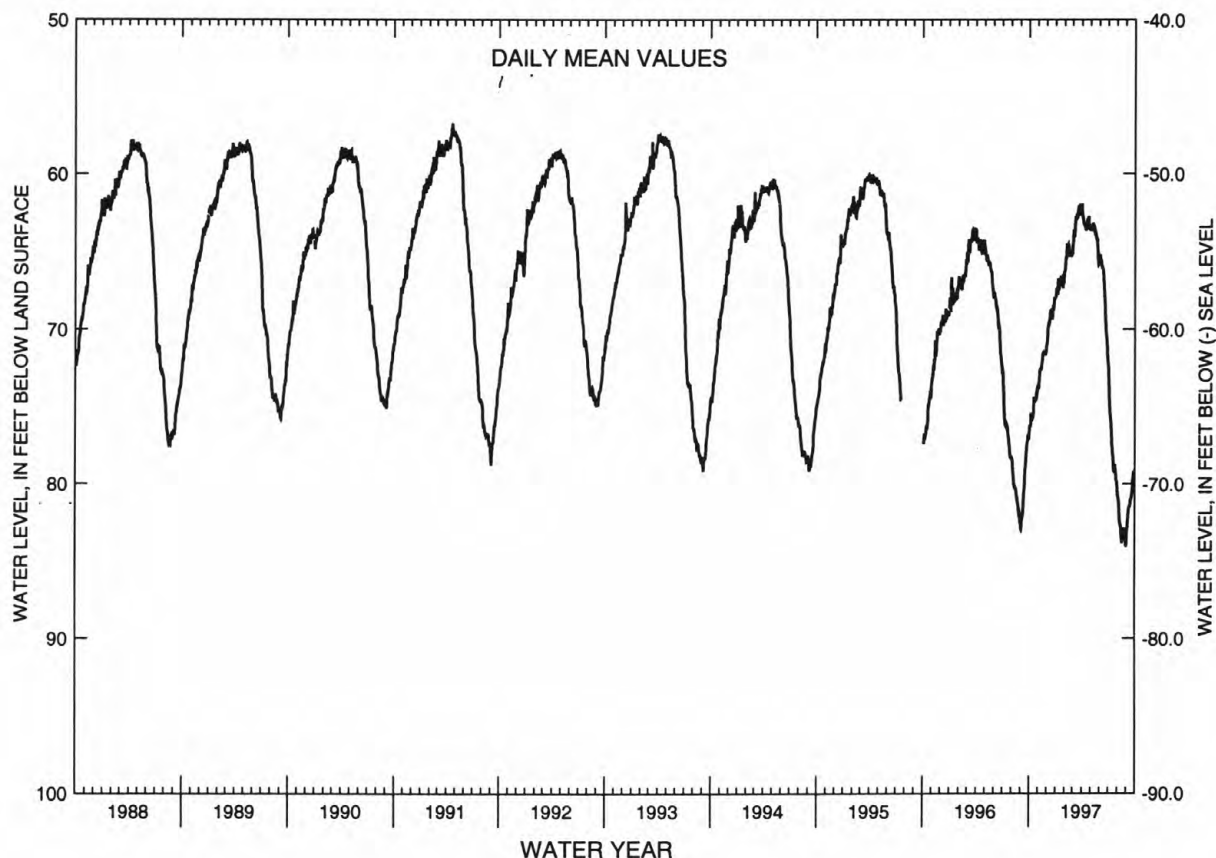
PERIOD OF RECORD.--Oct. 1959 to current year. Records for 1975 to 1980 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.10 ft below land surface, Apr. 13, 1961; lowest, 84.76 ft below land surface, Sept. 2, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	76.24	73.65	70.38	67.32	65.38	63.85	62.88	63.52	65.54	73.58	80.83	83.12
10	75.84	72.57	69.68	66.76	64.77	62.90	63.34	63.31	65.96	75.71	82.10	81.81
15	75.71	72.18	68.81	67.02	64.80	62.75	63.66	63.53	66.37	77.47	82.80	81.51
20	74.41	71.57	69.34	66.81	65.18	62.24	62.94	63.96	68.03	78.64	83.55	80.93
25	74.56	71.46	68.75	66.57	65.21	62.67	63.15	64.51	70.24	78.74	83.17	79.79
EOM	73.84	71.32	67.93	66.26	65.12	62.39	63.65	65.67	71.76	79.77	83.48	79.36
MEAN	75.28	72.27	69.21	67.13	65.17	62.97	63.16	64.06	67.52	76.91	82.42	81.42
WTR YR 1997 MEAN 70.67 HIGH 61.95 APR 1 LOW 84.08 SEP 2												

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.--Submersible logger pressure transducer--60 minute recording interval. Digital water-level recorder, May 1988 to May 1997.

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.

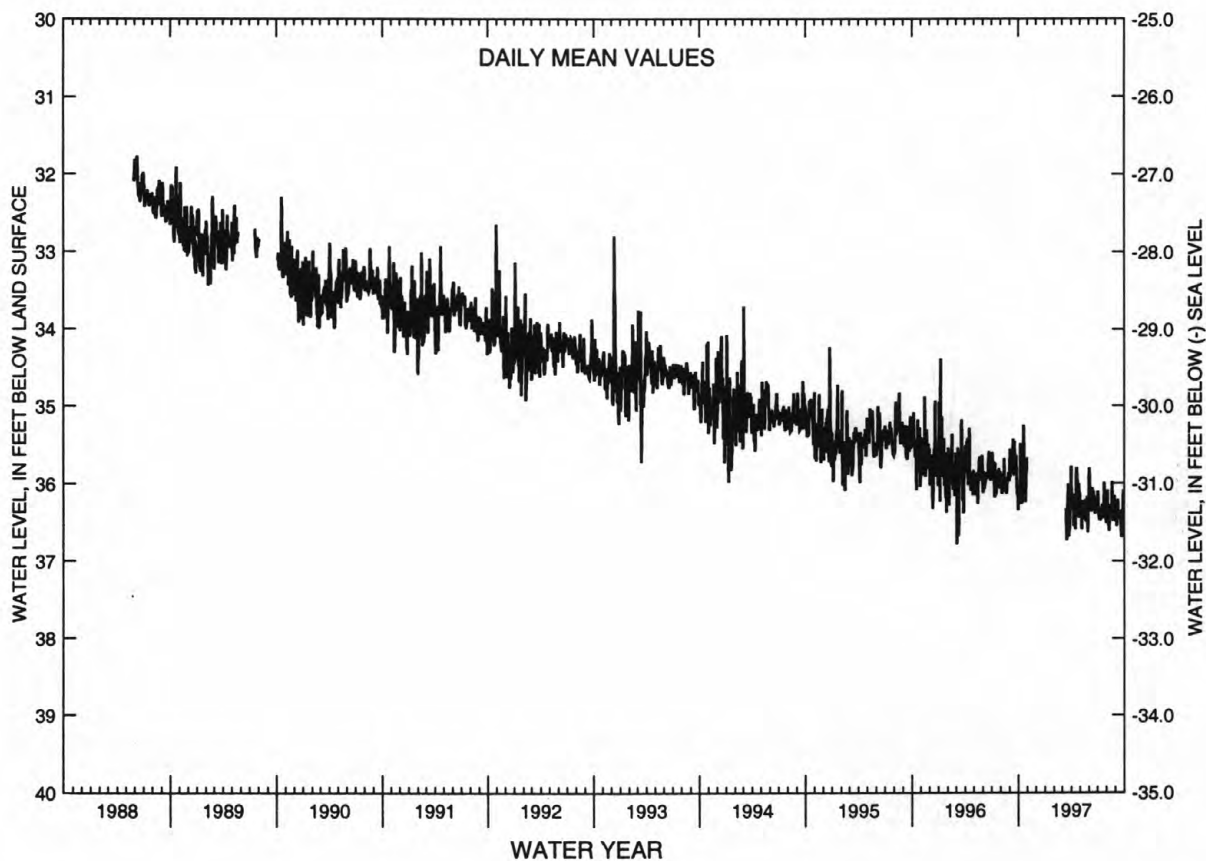
PERIOD OF RECORD.--May 1988 to current year. Records for 1988 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.05 ft below land surface, June 2, 1988; lowest, 37.34 ft below land surface, Mar. 25, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.25	---	---	---	---	---	36.26	36.41	36.01	36.27	36.09	36.44
10	35.87	---	---	---	---	---	36.53	36.22	36.35	36.41	36.58	36.21
15	36.25	---	---	---	---	36.39	36.55	36.22	36.17	36.34	36.28	36.42
20	35.34	---	---	---	---	36.22	35.81	36.21	36.25	36.36	36.23	36.41
25	36.07	---	---	---	---	36.68	---	36.23	36.25	35.99	36.48	36.34
EOM	---	---	---	---	---	36.06	36.29	36.33	36.37	36.48	36.34	36.42
MEAN	35.95	---	---	---	---	36.39	36.21	36.36	36.18	36.31	36.34	36.41
WTR YR 1997	HIGH 35.25 OCT 19 LOW 36.73 MAR 16											

NJ-WRD WELL NO. 01-0834



GROUND-WATER LEVELS

27

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.

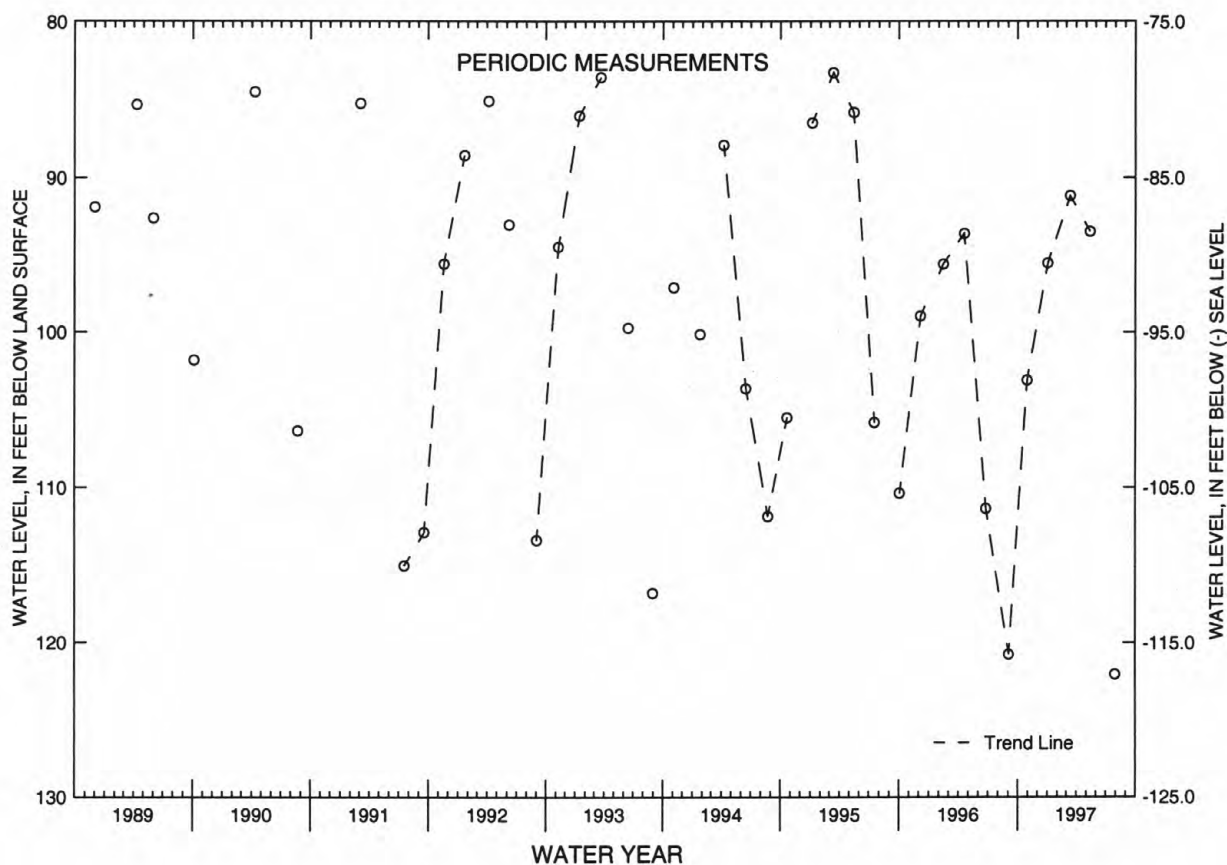
PERIOD OF RECORD.--October 1985 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 73.20 ft below land surface, May 17, 1986; lowest, 122.08 ft below land surface, July 31, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	103.13	MAR 13	91.18	JUL 31	122.08
JAN 3	95.52	MAY 14	93.47		

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.

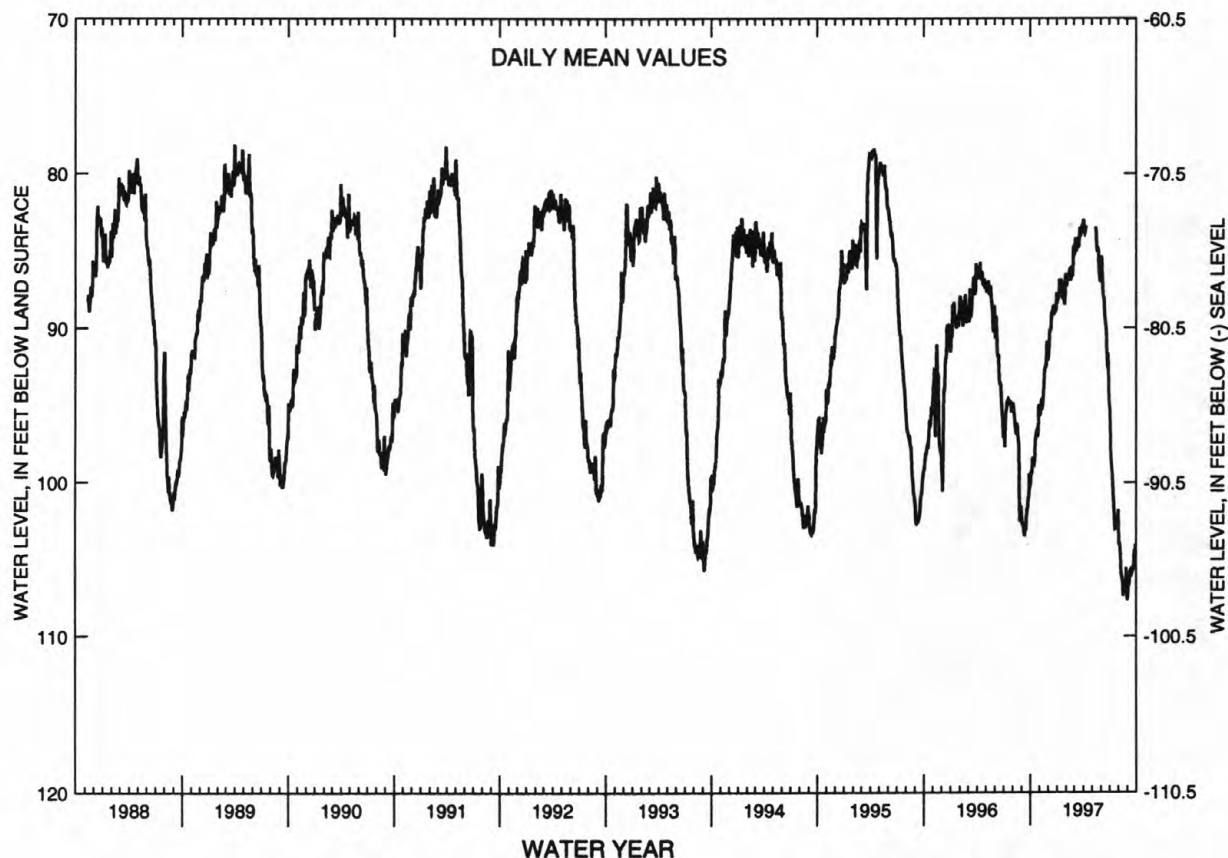
PERIOD OF RECORD.--Jan. 1949 to current year. Records for 1949 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.58 ft below land surface, Mar. 7, 1962; lowest, 107.83 ft below land surface, Sept. 2, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	99.26	95.58	91.24	88.14	86.86	84.31	83.52	---	85.79	96.68	103.98	106.65
10	98.52	94.88	90.12	86.90	86.82	84.86	83.57	---	87.90	99.18	105.32	106.02
15	98.78	94.24	89.01	87.21	86.20	84.16	---	83.50	89.24	100.86	106.22	106.13
20	97.05	92.66	88.82	87.79	86.58	83.87	---	84.81	90.16	102.75	107.07	105.60
25	96.56	92.44	88.67	87.50	86.35	83.85	---	85.69	92.61	102.21	106.95	104.78
EOM	95.00	92.00	87.76	86.52	84.92	83.78	---	86.93	94.42	102.64	106.78	104.01
MEAN	97.94	93.73	89.59	87.74	86.52	84.28	---	85.37	89.37	100.32	105.67	105.87
WTR YR 1997	MEAN 93.35 HIGH 83.00 APR 2 LOW 107.67 SEP 2											

NJ-WRD WELL NO. 01-0037



GROUND-WATER LEVELS

29

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.

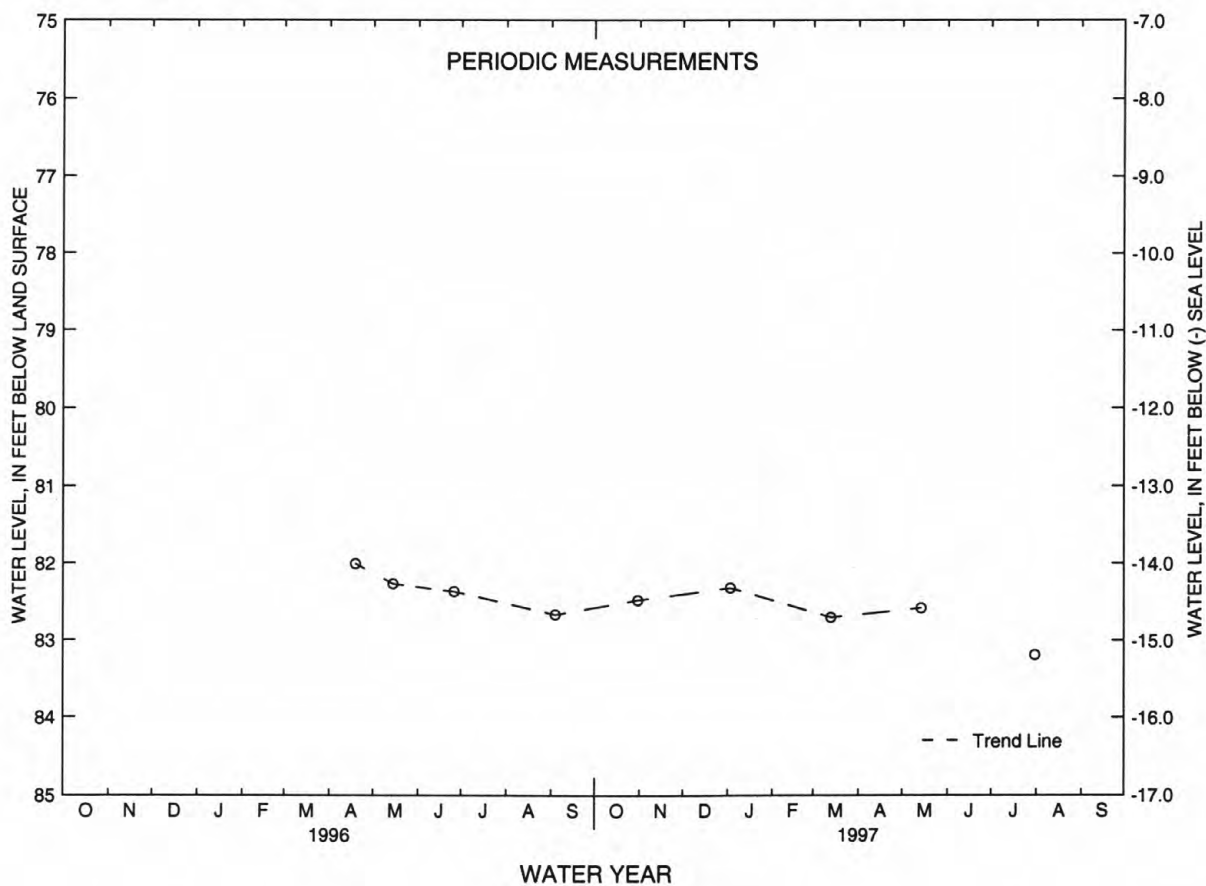
PERIOD OF RECORD.--April 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 82.01 ft below land surface, Apr. 19, 1996; lowest, 83.19 ft below land surface, July 31, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	82.48	MAR 13	82.70	JUL 31	83.19
JAN 3	82.32	MAY 14	82.58		

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.

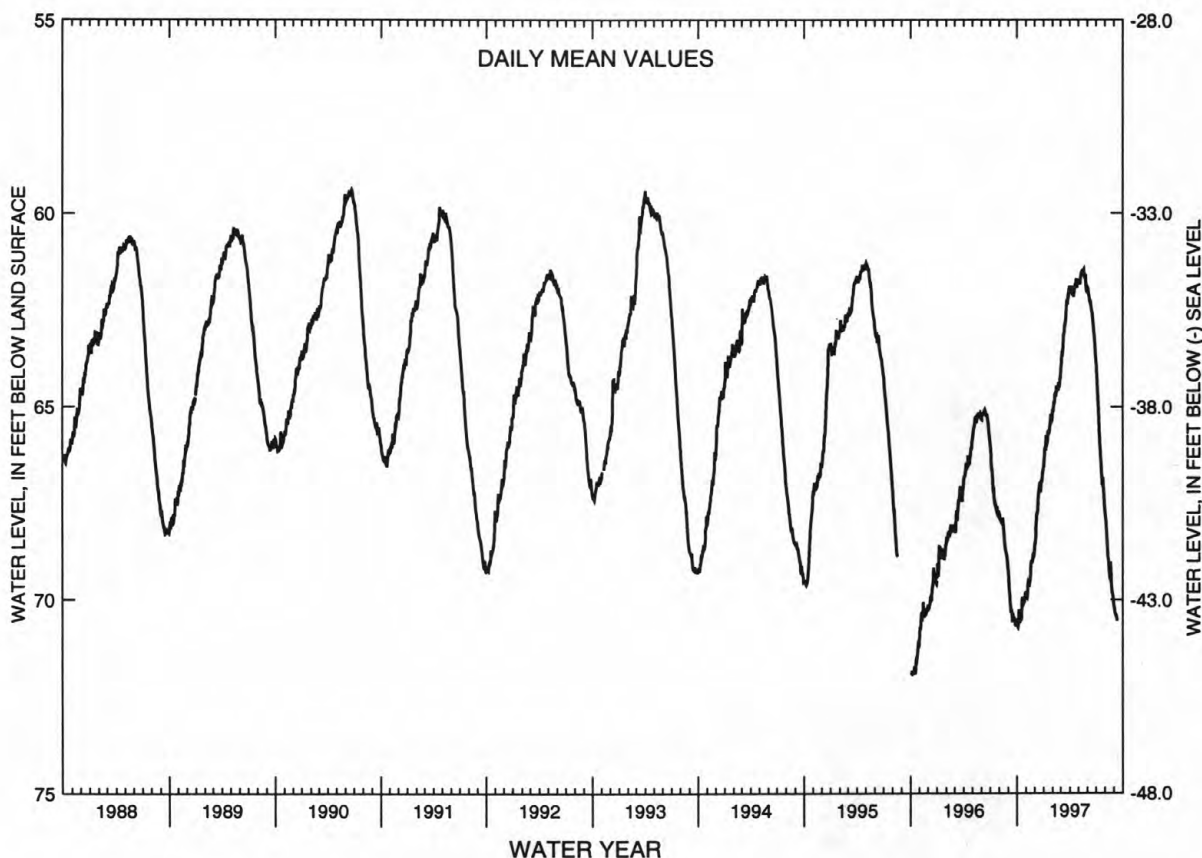
PERIOD OF RECORD.--Oct. 1959 to current year. Records for 1975 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	70.70	69.96	68.40	66.09	64.86	63.67	61.96	61.83	62.01	64.27	67.97	70.32
10	70.33	69.55	67.79	65.74	64.68	63.24	62.08	61.60	62.26	65.09	68.65	70.41
15	70.52	69.53	67.23	65.85	64.46	62.84	62.12	61.46	62.45	66.00	69.11	---
20	69.94	69.01	67.12	65.61	64.58	62.48	61.84	61.46	62.70	66.69	69.49	---
25	70.04	68.93	66.93	65.20	64.45	62.31	61.77	61.61	63.10	66.84	69.69	---
EOM	69.83	68.80	66.61	65.15	64.27	61.91	61.78	62.02	63.67	67.61	70.01	---
MEAN	70.29	69.36	67.44	65.77	64.65	62.89	61.91	61.68	62.57	65.89	69.00	---
WTR YR 1997	MEAN 65.78 HIGH 61.46 MAY 15 LOW 70.70 OCT 5											

NJ-WRD WELL NO. 01-0180



GROUND-WATER LEVELS

31

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.

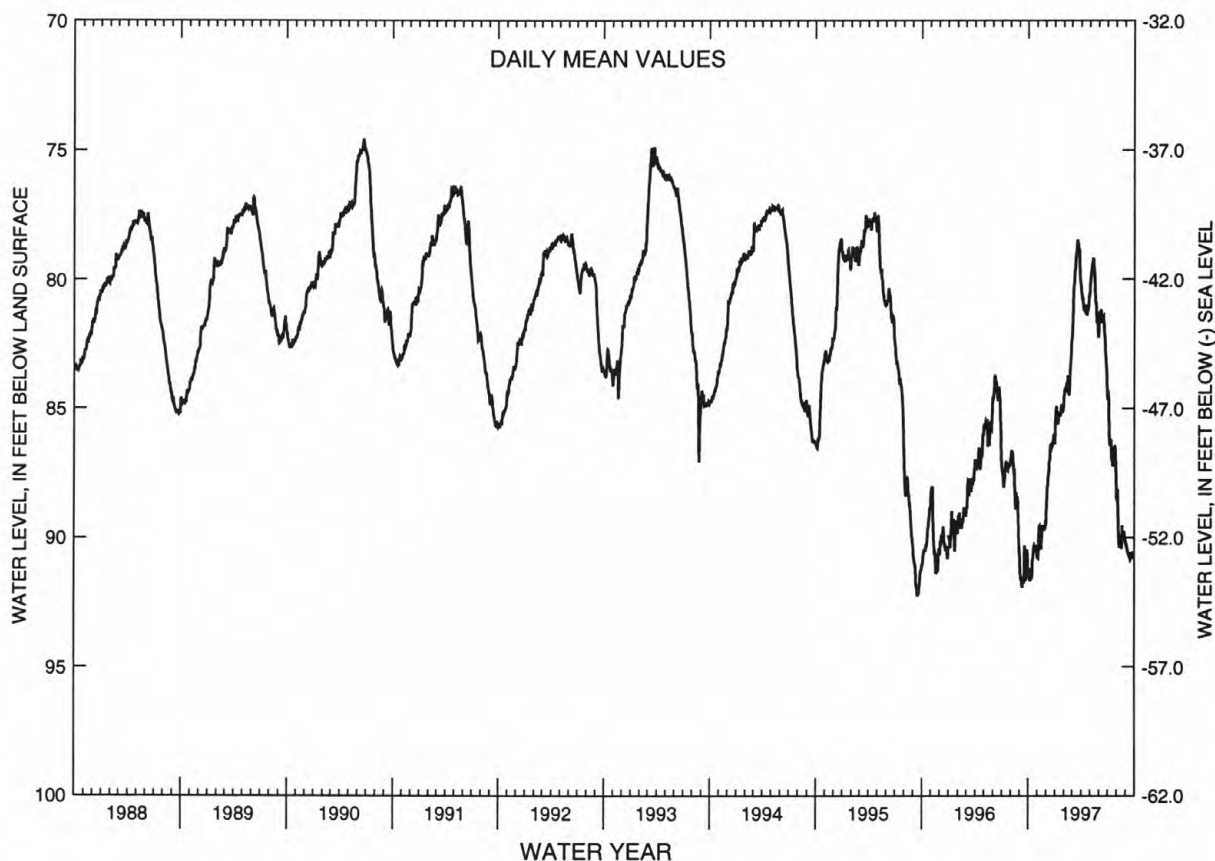
PERIOD OF RECORD.--Oct. 1985 to current year. Records for 1985 to 1986 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	91.40	90.55	88.24	85.03	84.19	80.92	80.77	79.95	81.27	84.58	88.16	90.29
10	91.27	89.72	87.49	85.13	84.12	79.82	81.11	79.37	81.29	86.42	90.16	90.60
15	91.39	90.42	86.89	85.27	83.80	78.96	81.21	79.44	81.51	86.83	90.19	90.73
20	90.39	89.58	86.48	85.13	84.19	78.48	81.21	80.80	81.92	87.16	90.38	90.62
25	90.50	89.74	86.29	84.95	83.05	78.88	81.05	81.69	82.95	86.54	89.87	90.65
EOM	90.51	89.34	86.38	84.74	82.36	80.17	80.63	82.23	84.17	87.68	90.05	90.63
MEAN	90.94	89.91	87.10	85.21	83.89	79.73	80.94	80.41	82.01	86.32	89.69	90.59
WTR YR 1997	MEAN 85.57 HIGH 78.48 MAR 20 LOW 91.68 OCT 7											

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.

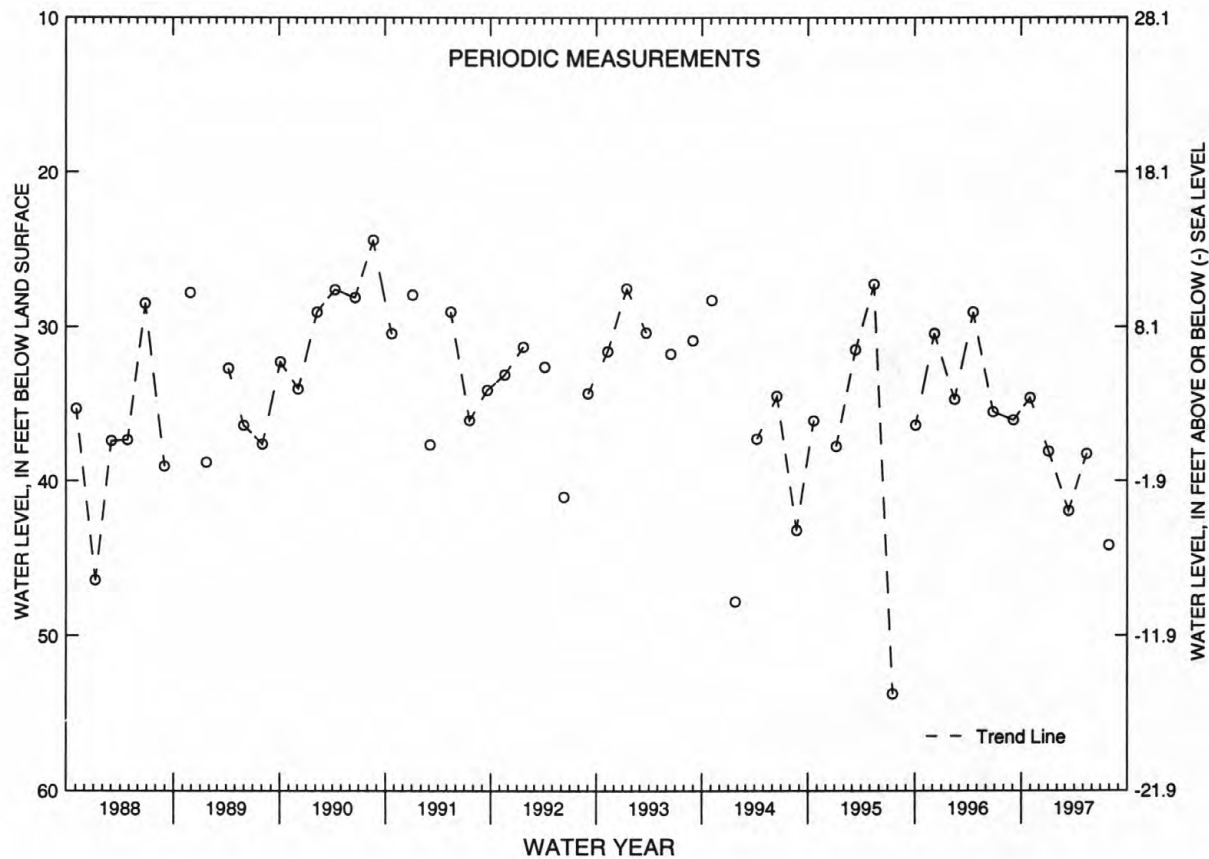
PERIOD OF RECORD.--May 1985 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	34.56	MAR 13	41.93	JUL 31	44.15
JAN 3	38.08	MAY 14	38.22		

NJ-WRD WELL NO. 01-0775



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.

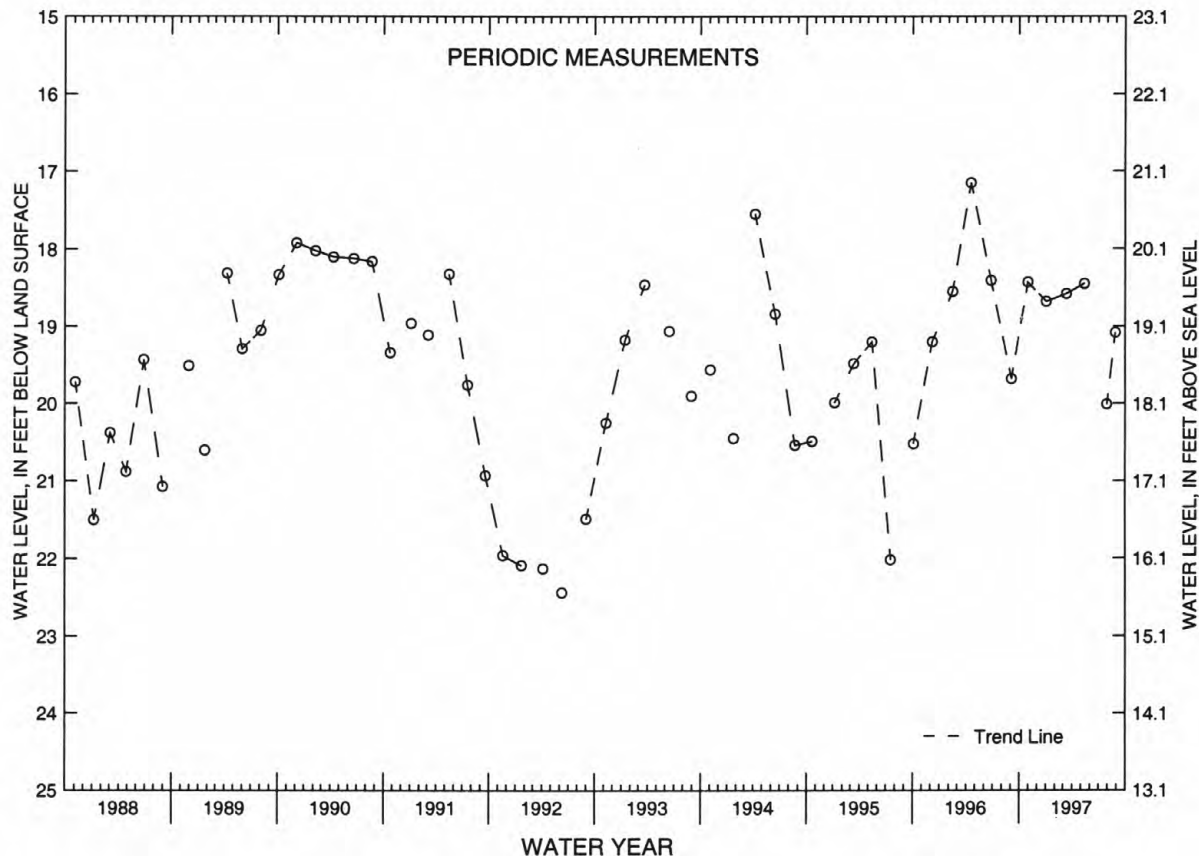
PERIOD OF RECORD.--May 1985 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	18.43	MAR 13	18.58	JUL 31	20.01
JAN 3	18.68	MAY 14	18.45	AUG 29	19.08

NJ-WRD WELL NO. 01-0776



GROUND-WATER LEVELS

ATLANTIC COUNTY

393333074442401. 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.

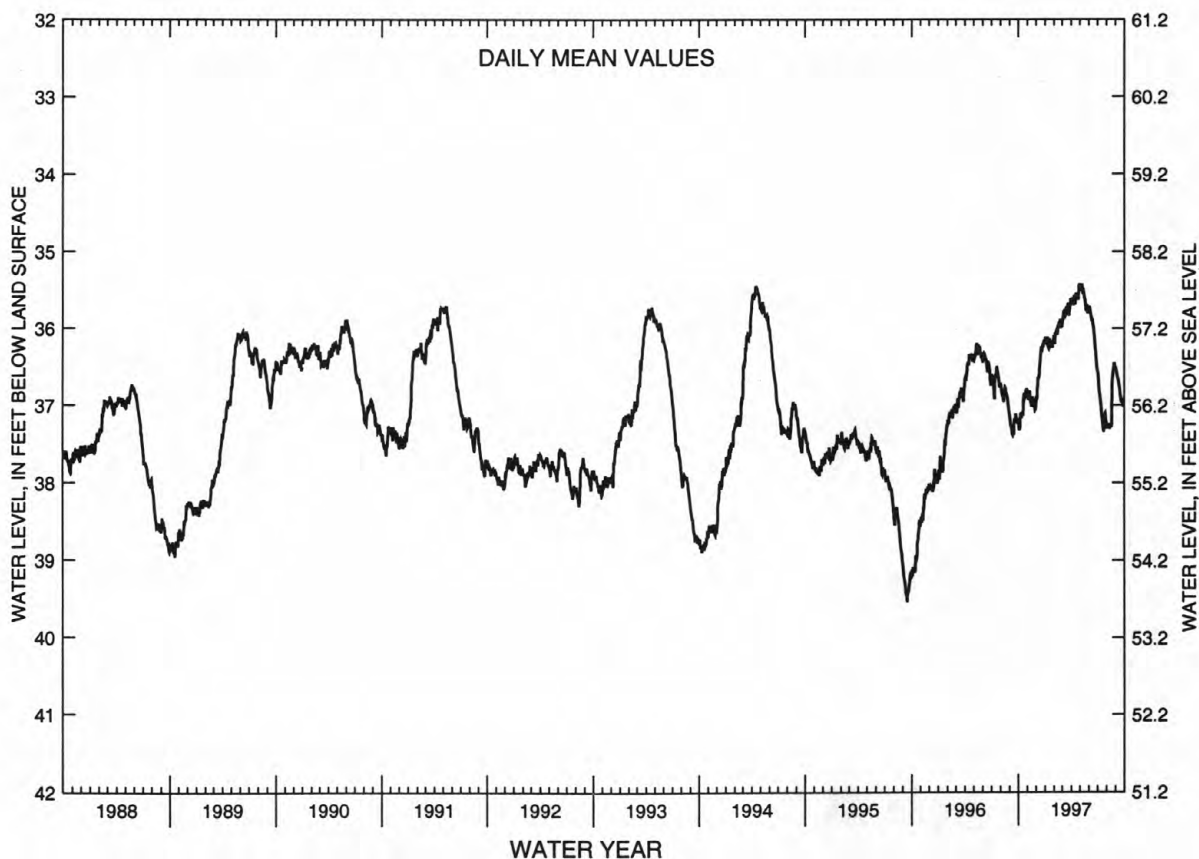
PERIOD OF RECORD.--Apr. 1962 to current year. Records for 1962 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	37.32	36.92	36.90	36.11	36.07	35.84	35.67	35.48	35.74	36.66	37.26	36.56
10	37.10	36.86	36.66	36.11	36.03	35.76	35.68	35.47	35.85	36.88	37.27	36.66
15	37.12	37.00	36.45	36.25	35.95	35.72	35.67	35.53	35.93	37.06	37.26	36.75
20	36.90	36.91	36.28	36.18	35.95	35.70	35.59	35.63	36.07	37.26	37.23	36.89
25	36.86	37.02	36.21	36.15	35.99	35.82	35.58	35.73	36.29	37.18	36.55	36.92
EOM	36.81	37.04	36.17	36.11	35.98	35.62	35.46	35.77	36.52	37.20	36.51	36.94
MEAN	37.05	36.94	36.47	36.18	36.01	35.78	35.60	35.59	36.01	37.00	37.01	36.77
WTR YR 1997	MEAN 36.37 HIGH 35.42 MAY 1 LOW 37.34 JUL 23											

NJ-WRD WELL NO. 01-0256



GROUND-WATER LEVELS

35

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.

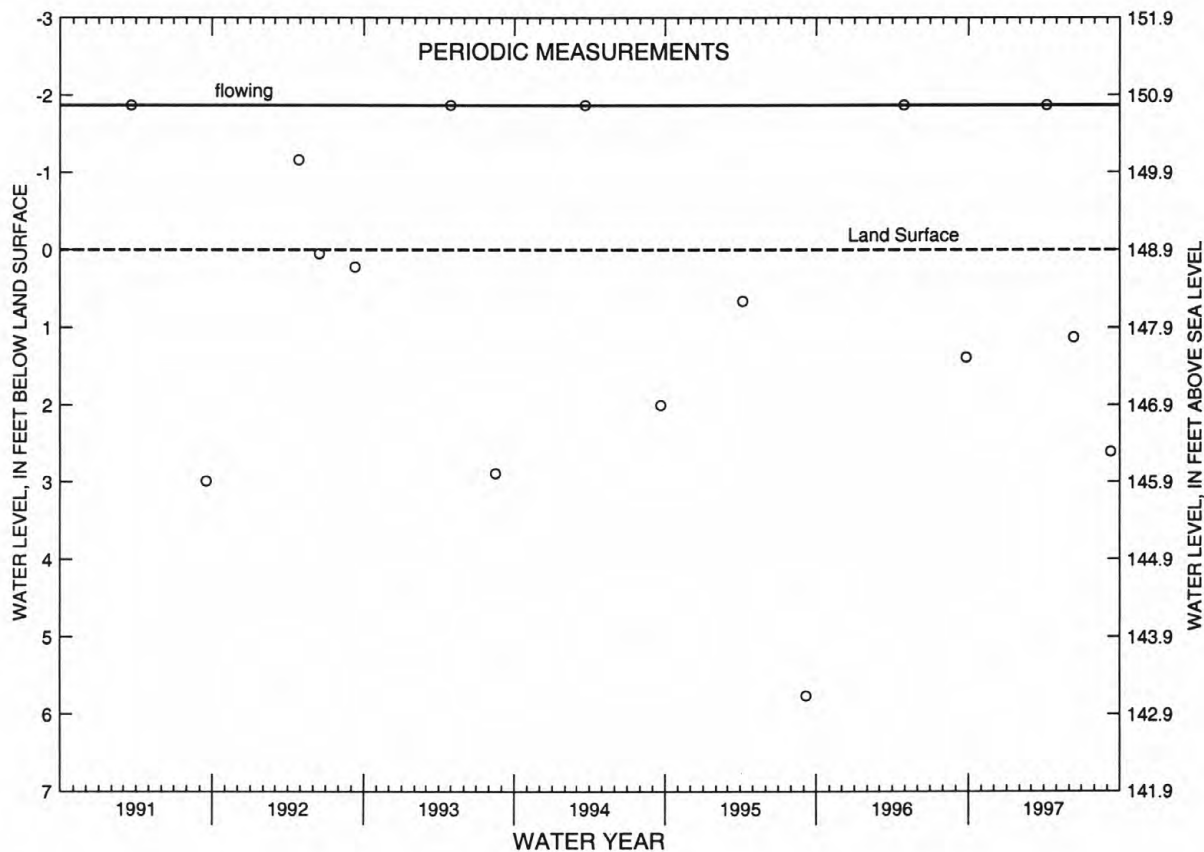
PERIOD OF RECORD.--Mar. 1991 to current year

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, Apr. 8, 1997; lowest, 5.76 ft below land surface, Sept. 6, 1995.

WATER LEVEL, IN FEET ABOVE (-) OR BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 8	-1.87	JUN 12	1.12	SEP 9	2.61

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.

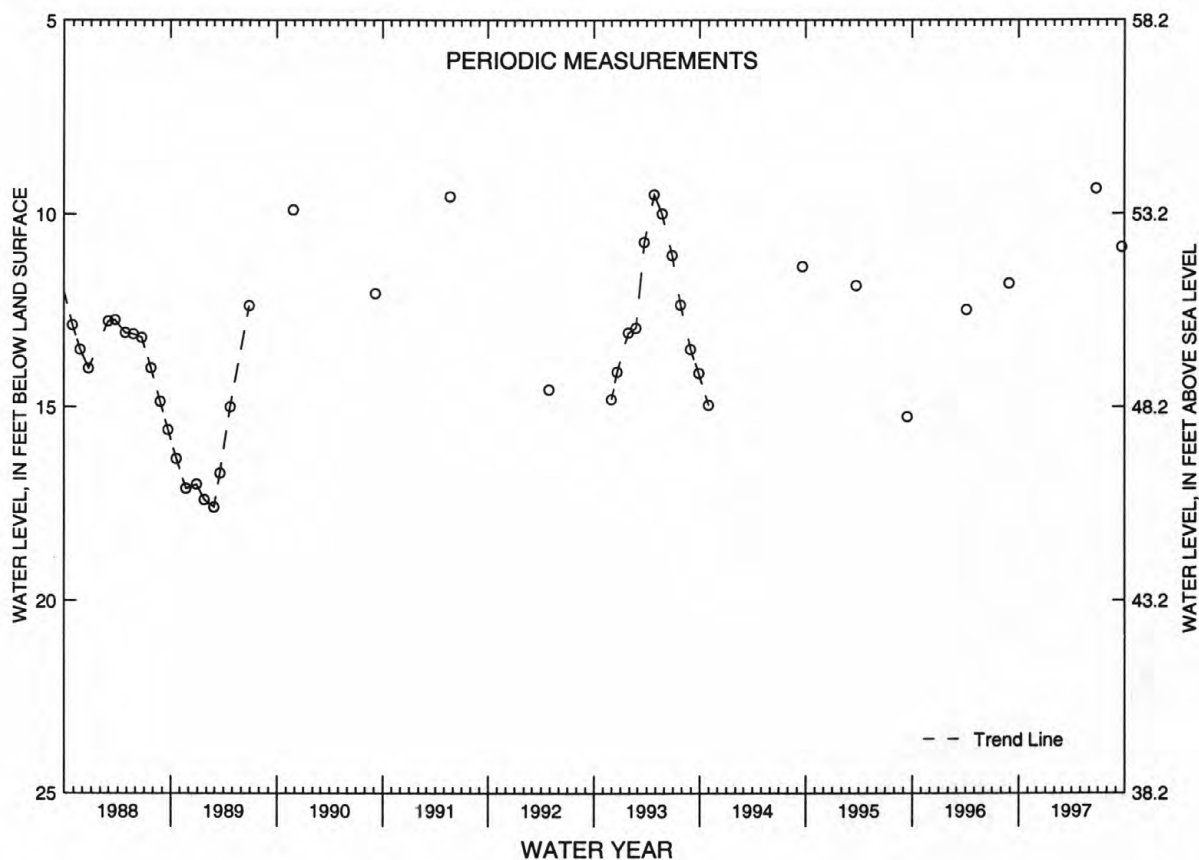
PERIOD OF RECORD.--Sept. 1955 to current year. Records for 1955 to 1977 and 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 26	9.35	SEP 23	10.86

NJ-WRD WELL NO. 05-0570



GROUND-WATER LEVELS

37

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.

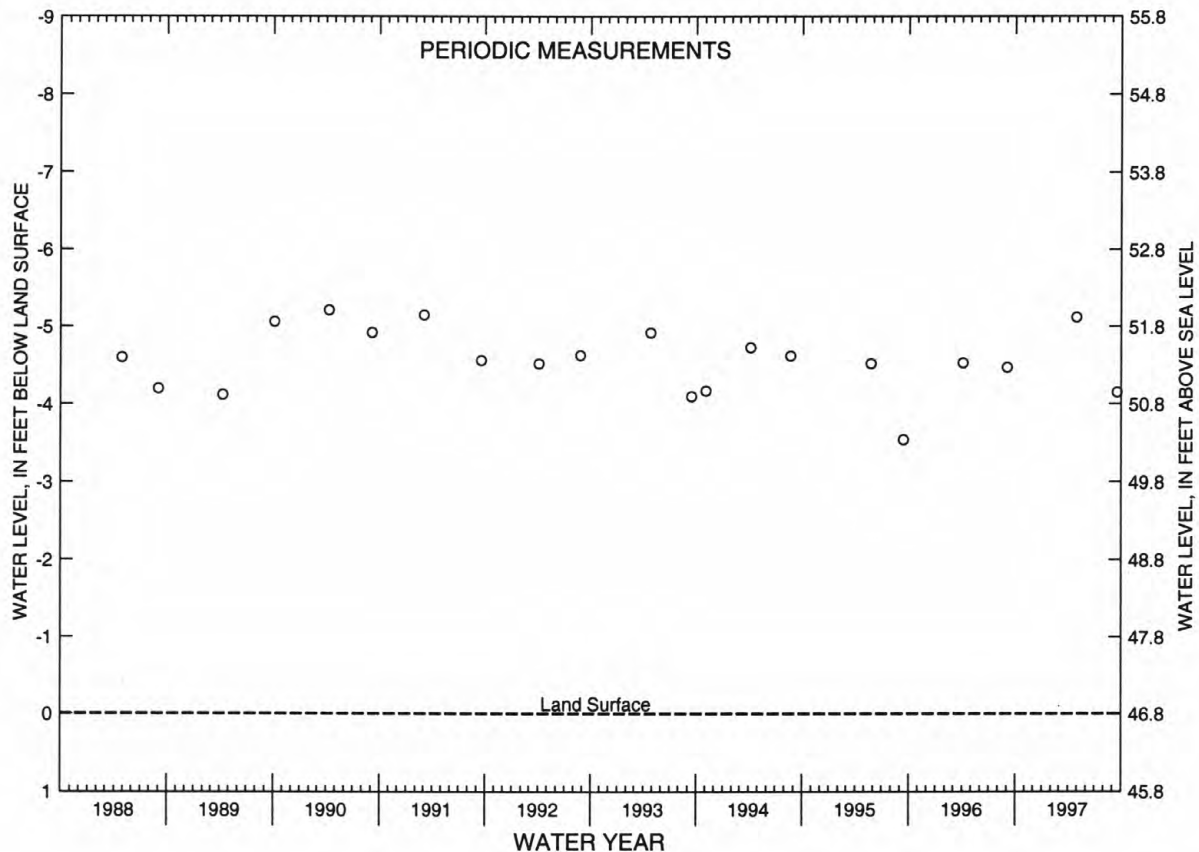
PERIOD OF RECORD.--Oct. 1963 to Sept. 1966, June 1968 to current year. Records for 1963 to 1966 and 1968 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 30	-5.12	SEP 18	-4.15

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.

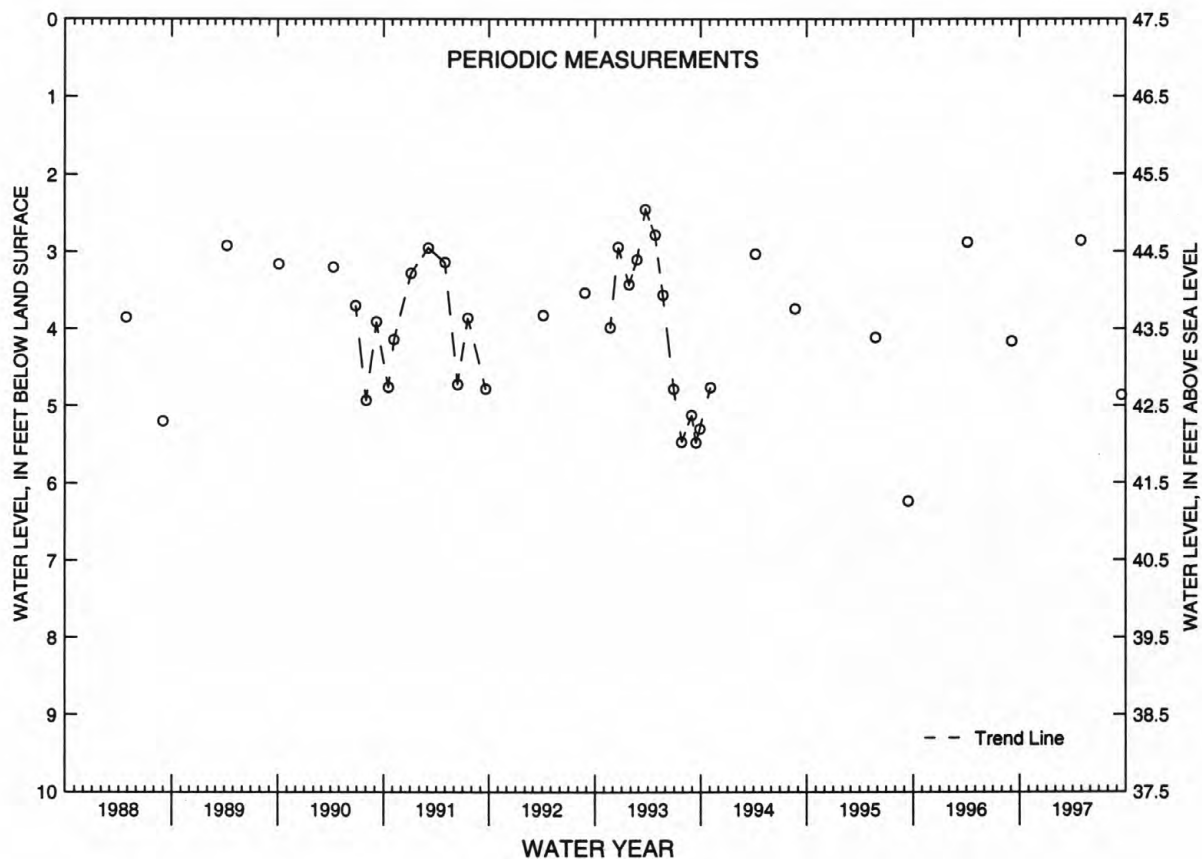
PERIOD OF RECORD.--Oct. 1963 to current year. Records for 1963 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 30	2.86	SEP 18	4.86

NJ-WRD WELL NO. 05-0408



GROUND-WATER LEVELS

39

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.

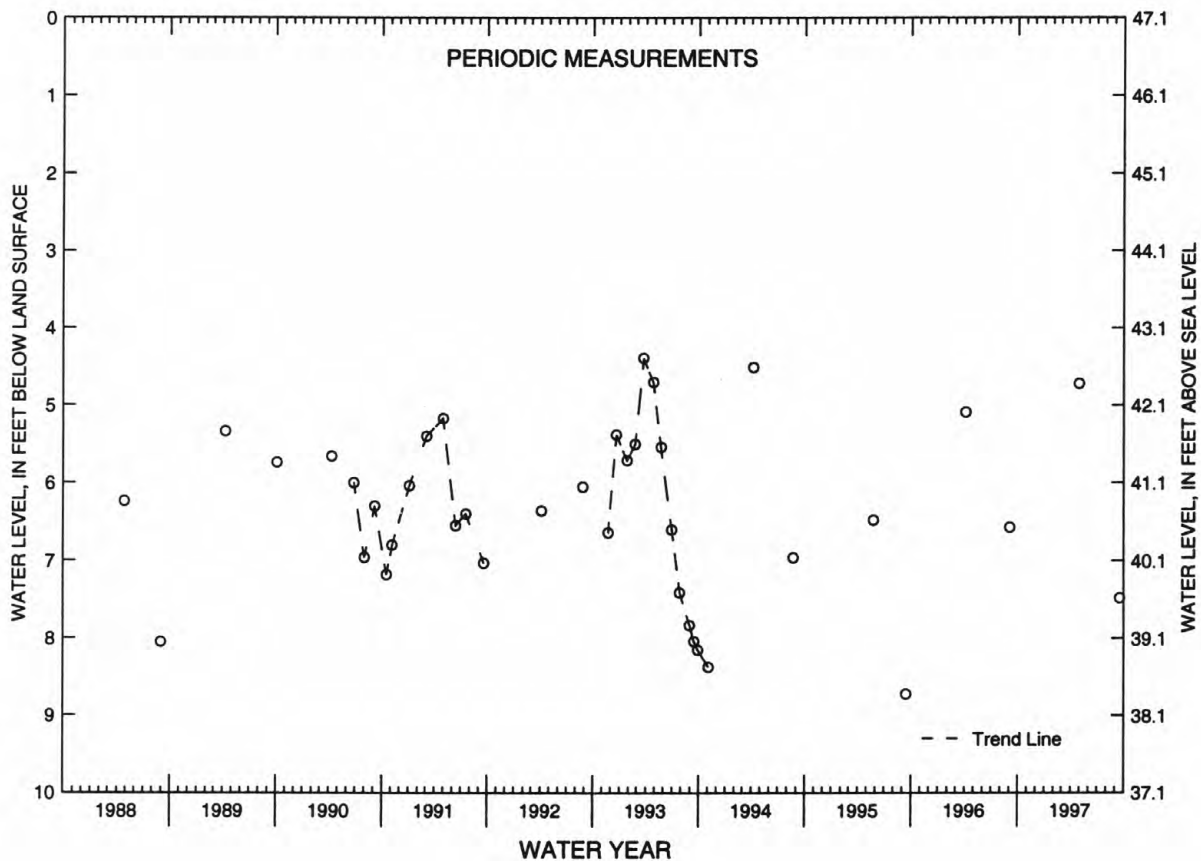
PERIOD OF RECORD.--October 1963 to current year. Records for 1963 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 30	4.72	SEP 18	7.48

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.

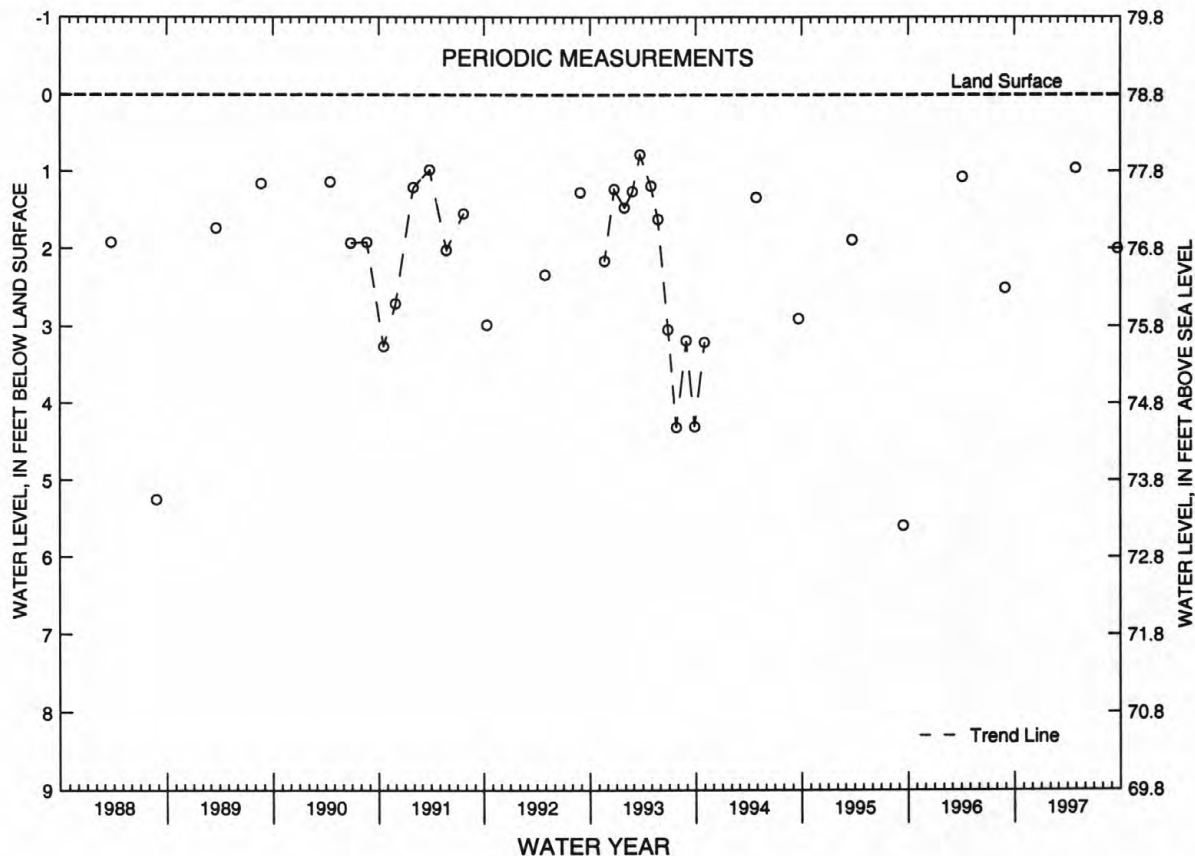
PERIOD OF RECORD.--Dec. 1936 to current year. Records for 1975 to 1981 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 30	0.96	SEP 23	2.00

NJ-WRD WELL NO. 05-0628



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.

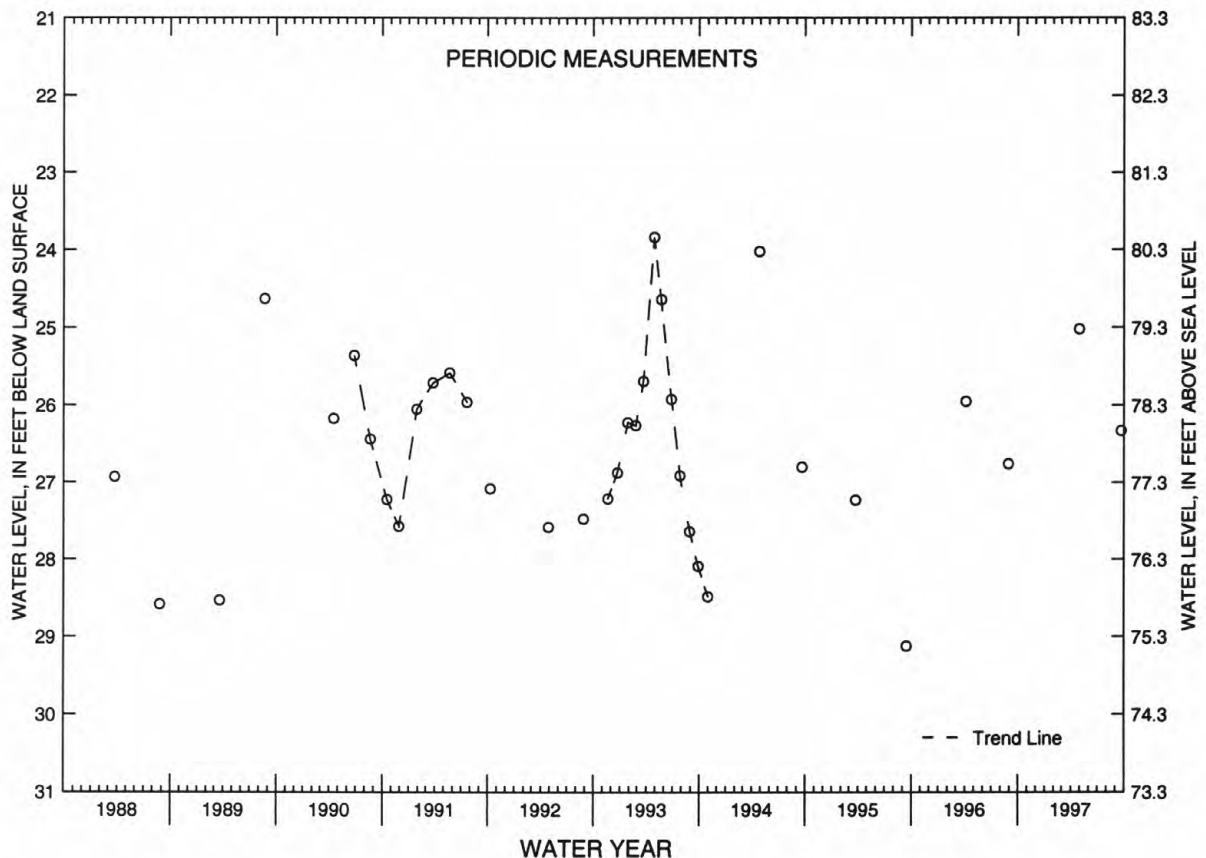
PERIOD OF RECORD.--Jan 1951 to current year. Records for 1951 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 30	25.02	SEP 23	26.33

NJ-WRD WELL NO. 05-0630



GROUND-WATER LEVELS

BURLINGTON COUNTY

394800074524601. Local I.D., Evesham 4 Obs. NJ-WRD Well Number 05-1387.

LOCATION.--Lat 39°48'00", long 74°52'46", Hydrologic Unit 02040301, near the intersection of Thomas Eakins and Georgia O'Keefe roads, Evesham Township.

Owner: Evesham Municipal Utilities Authority.

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

WELL CHARACTERISTICS.-- Drilled artesian observation well, diameter 2 in., depth 355 ft, screened 335 to 355 ft.

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

DATUM.-- Land surface is 119 ft above sea level, from topographic map.

Measuring point: Top of base of aluminum locking cap, 1.40 ft above land surface

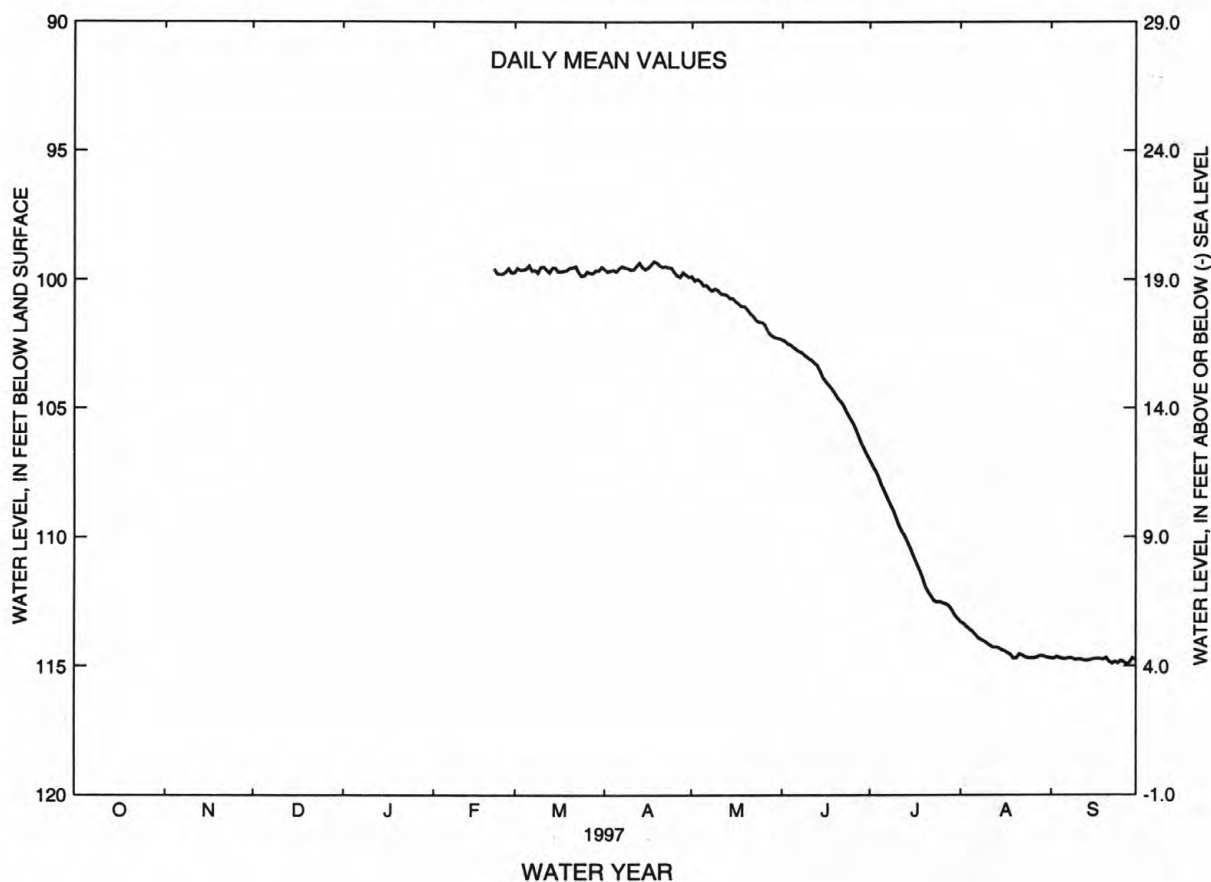
PERIOD OF RECORD.--Feb. 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 99.24 ft below land surface, Apr. 18, 1997; lowest, 114.97 ft below land surface, Sept. 27, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	99.59	99.69	100.23	102.62	107.99	113.64	114.72
10	---	---	---	---	---	99.52	99.62	100.41	103.04	109.28	114.11	114.74
15	---	---	---	---	---	99.55	99.60	100.72	103.80	110.50	114.37	114.74
20	---	---	---	---	---	99.55	99.46	101.13	104.60	111.93	114.70	114.68
25	---	---	---	---	99.78	99.85	99.72	101.65	105.52	112.50	114.68	114.79
EOM	---	---	---	---	99.74	99.51	99.91	102.28	106.81	113.15	114.67	114.75
MEAN	---	---	---	---	---	99.64	99.59	100.97	104.07	110.53	114.26	114.76
WTR YR 1997	HIGH 99.29 APR 18 LOW 114.94 SEP 27											

NJ-WRD WELL NO. 05-1387



BURLINGTON COUNTY

394904074253601. Local I.D., Coyle 2 Obs (OW96). NJ-WRD Well Number 05-1391.

LOCATION.--Lat 39°49'04", long 74°25'36", Hydrologic Unit 02040301, at the State Forest Fire Service installation, Coyle Field, Woodland Township.
Owner: State of New Jersey-DEP/Division of Parks and Forestry.

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

WELL CHARACTERISTICS.-- Drilled artesian observation well, diameter 4 in., depth 1441 ft, screened 1416 to 1436 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, 4.00 ft above land surface

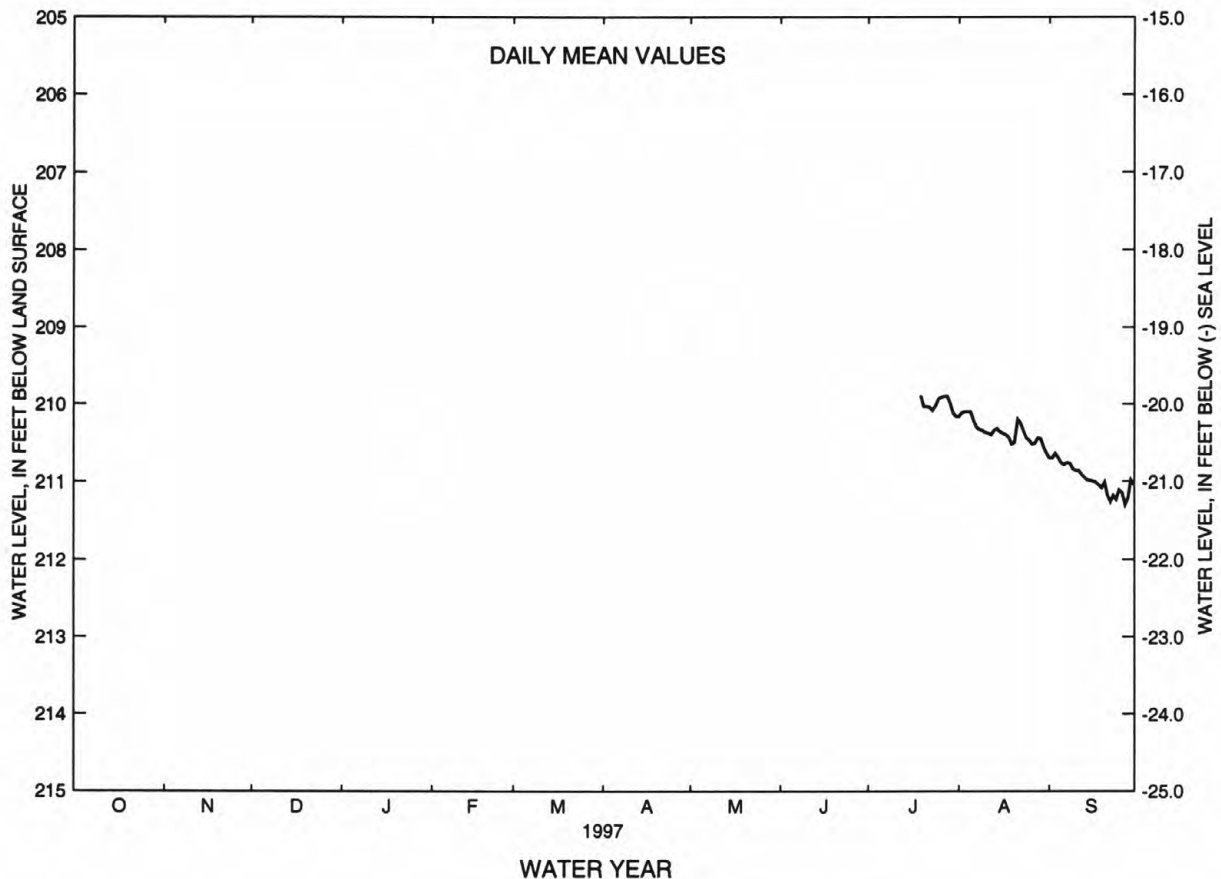
PERIOD OF RECORD.--July 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 209.82 ft below land surface, July 18, 1997; lowest, 211.32 ft below land surface, Sept. 27, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	---	210.10	210.76
10	---	---	---	---	---	---	---	---	---	---	210.37	210.86
15	---	---	---	---	---	---	---	---	---	---	210.36	210.99
20	---	---	---	---	---	---	---	---	---	210.03	210.50	211.01
25	---	---	---	---	---	---	---	---	---	209.93	210.47	211.11
ECM	---	---	---	---	---	---	---	---	---	210.16	210.64	211.04
MEAN	---	---	---	---	---	---	---	---	---	---	210.35	210.97
WTR YR 1997 HIGH 209.84 JUL 18 LOW 211.30 SEP 27												

NJ-WRD WELL NO. 05-1391



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.

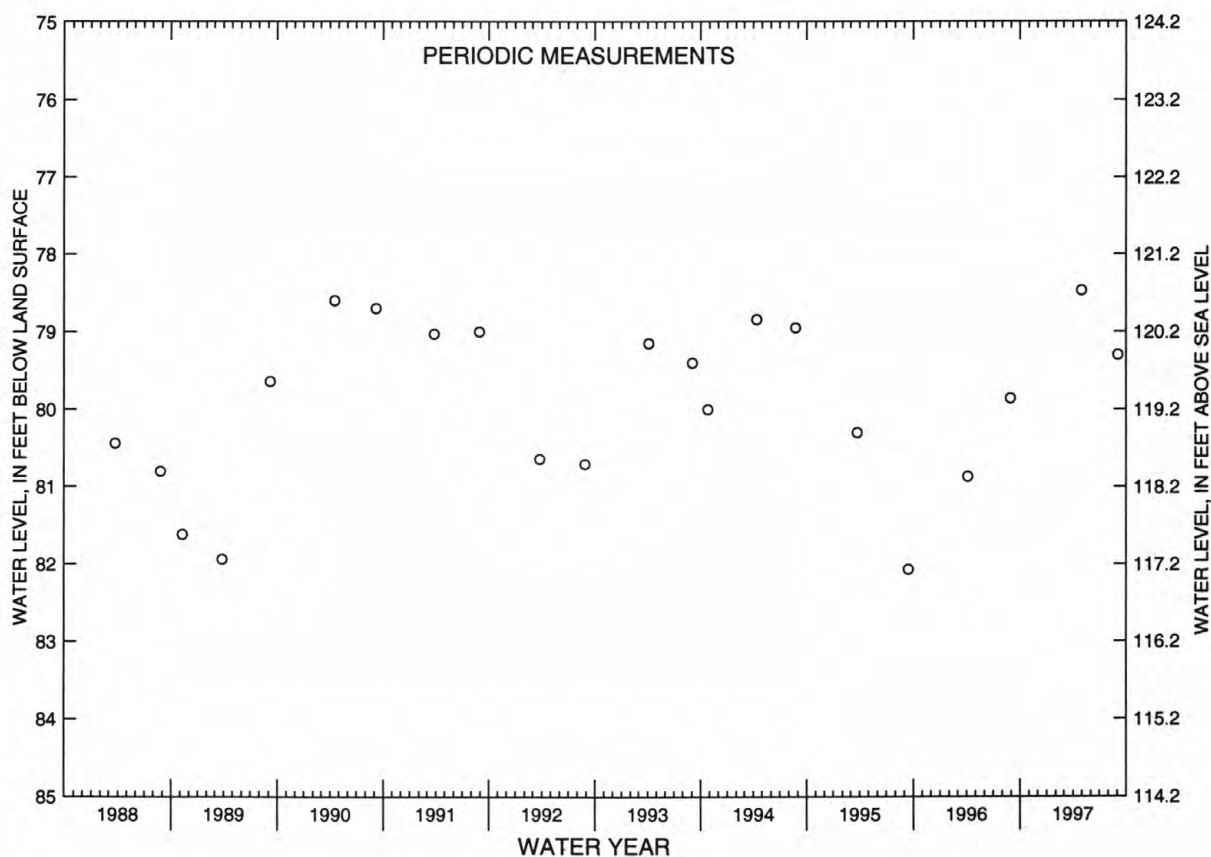
PERIOD OF RECORD.--Feb. 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 30	78.47	SEP 4	79.30

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.

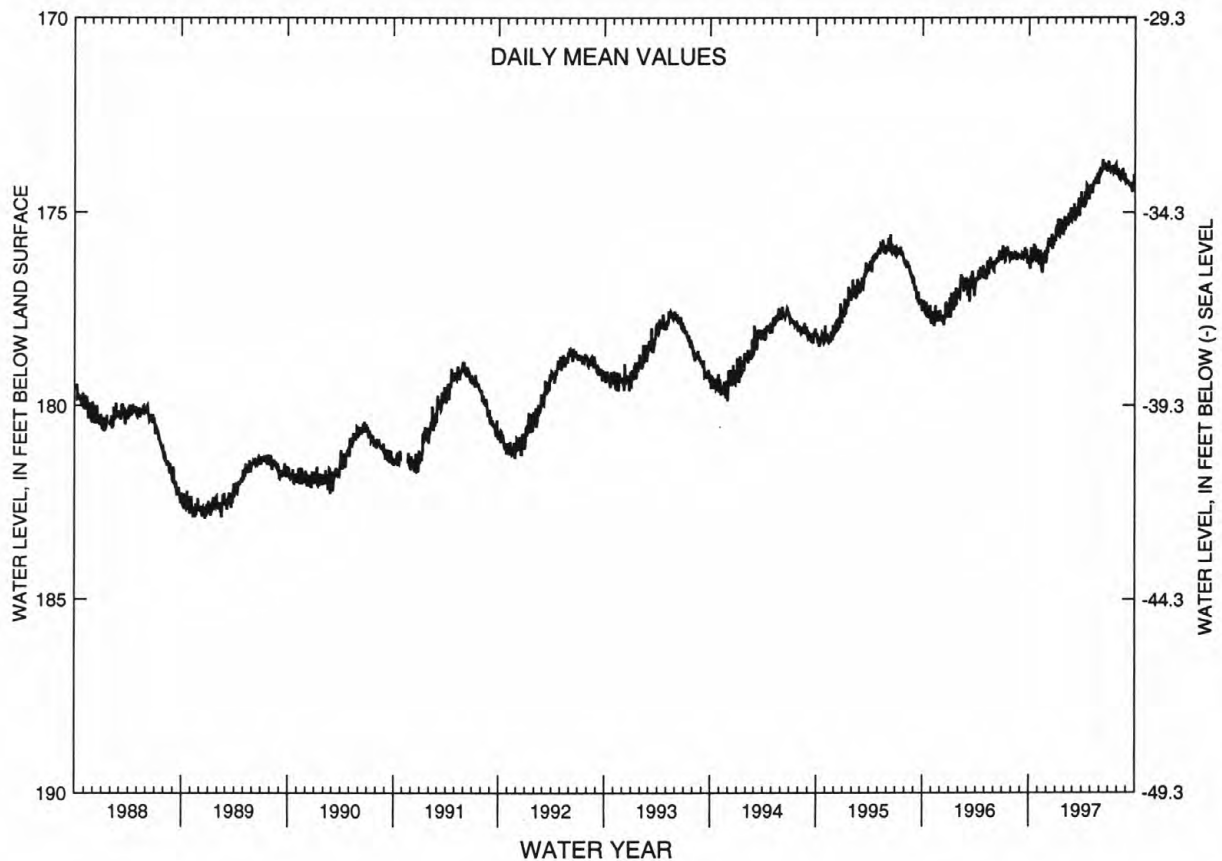
PERIOD OF RECORD.--Oct. 1964 to current year. Records for 1964 to 1977 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	176.46	176.33	176.05	175.33	175.12	175.00	174.86	174.49	173.93	173.82	173.89	174.24
10	175.98	176.13	175.88	175.17	175.17	174.90	174.85	174.24	173.90	173.88	174.12	174.24
15	176.22	176.54	175.88	175.57	175.02	174.86	174.79	174.16	173.82	173.84	174.04	174.30
20	175.87	176.07	175.75	175.36	175.19	174.81	174.44	174.12	173.81	173.97	174.10	174.22
25	176.14	176.20	175.71	175.19	175.21	175.03	174.53	174.04	173.79	173.84	174.13	174.23
EOM	176.03	176.24	175.68	175.19	175.13	174.46	174.42	174.02	173.89	174.03	174.18	174.09
MEAN	176.13	176.23	175.80	175.43	175.16	174.91	174.59	174.25	173.84	173.86	174.04	174.26
WTR YR 1997	MEAN 174.88 HIGH 173.64 JUN 13 LOW 176.54 NOV 15											

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.

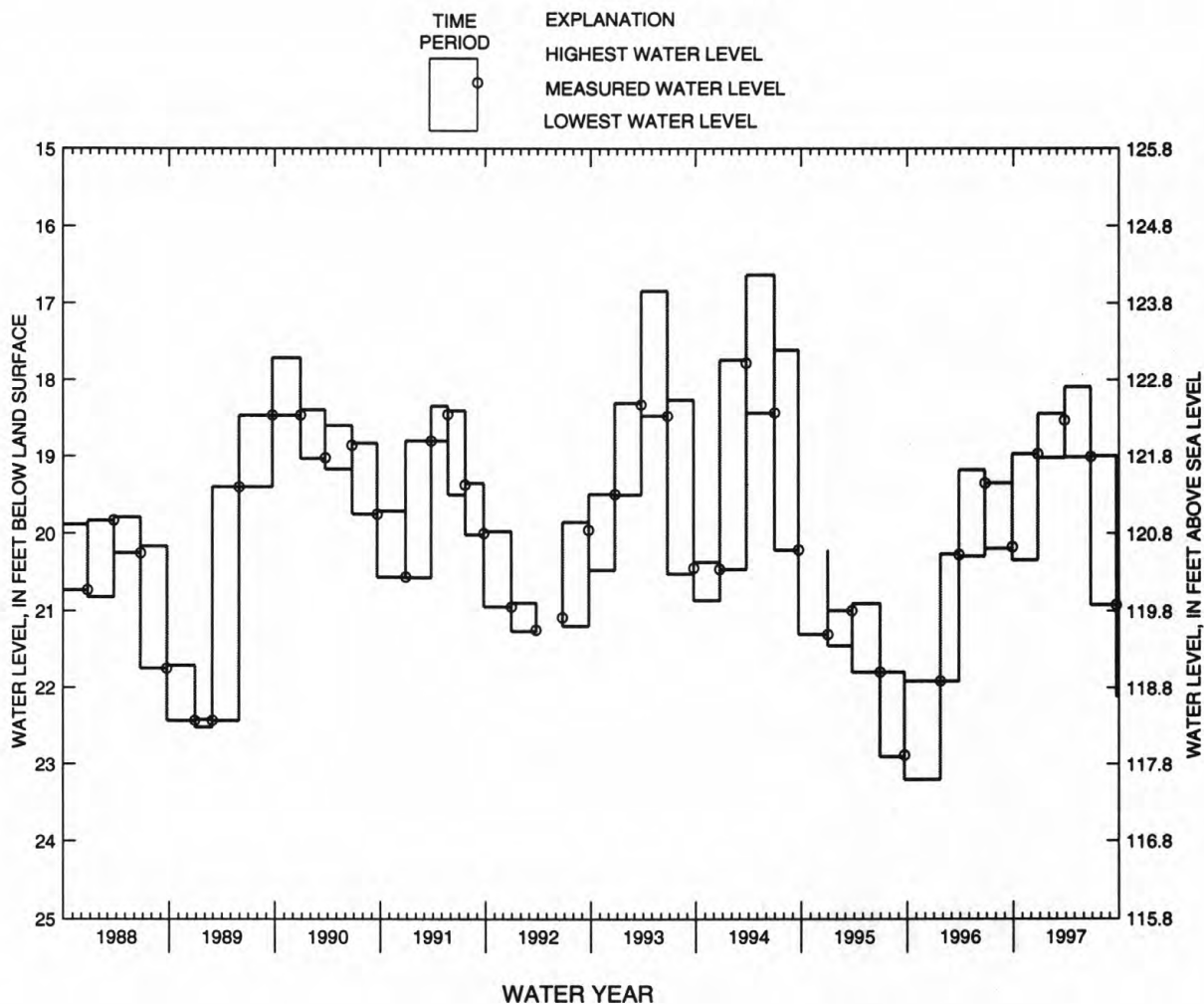
PERIOD OF RECORD.--May 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1996 TO DEC. 24, 1996	18.97	20.34	DEC. 24, 1996	18.97
DEC. 24, 1996 TO MAR. 27, 1997	18.44	19.02	MAR. 27, 1997	18.53
MAR. 27, 1997 TO JUNE 26, 1997	18.09	19.01	JUNE 26, 1997	19.01
JUNE 26, 1997 TO SEPT. 23, 1997	19.00	20.92	SEPT. 23, 1997	20.92

NJ-WRD WELL NO. 05-0684



GROUND-WATER LEVELS

47

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.

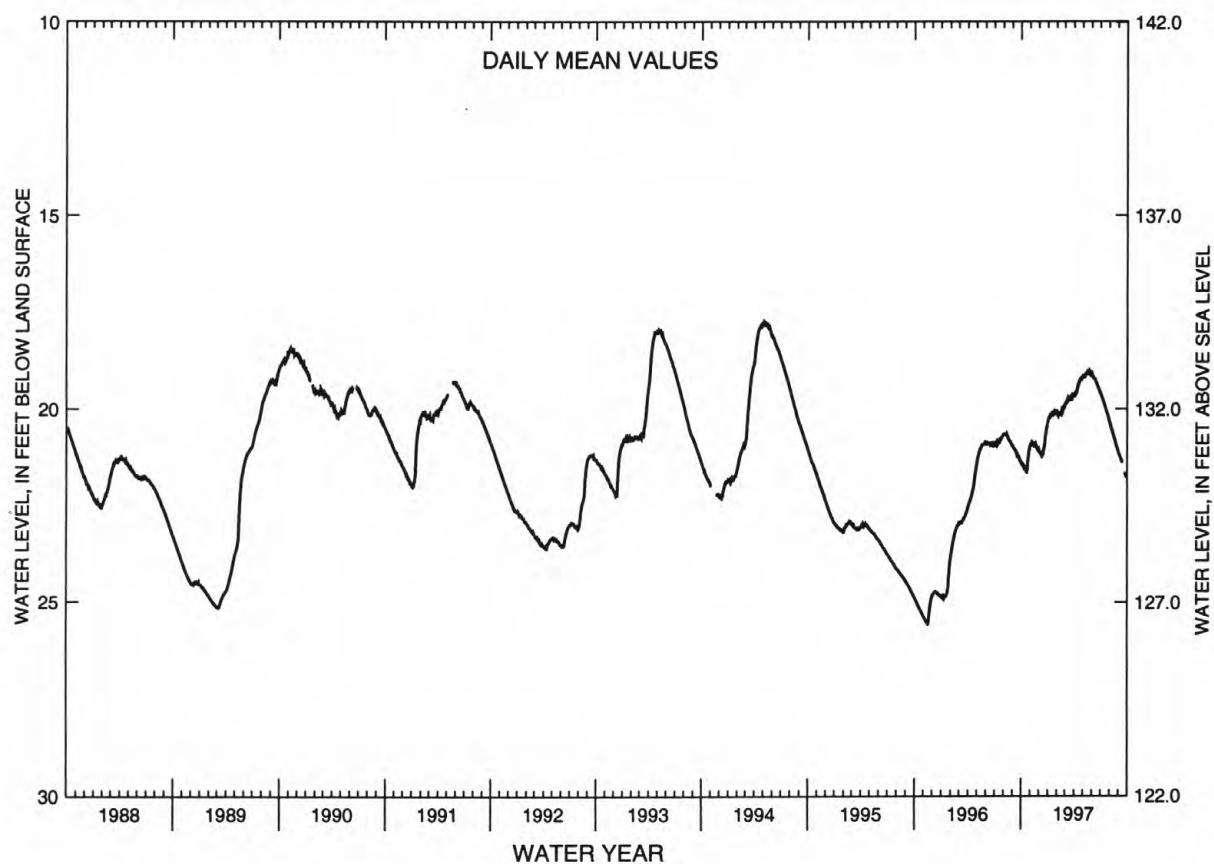
PERIOD OF RECORD.--Sept. 1955 to current year. Records for 1955 to 1979 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.45	20.90	21.14	20.22	20.08	19.83	19.68	19.21	19.15	19.66	20.40	21.19
10	21.48	20.88	21.20	20.12	20.13	19.76	19.59	19.11	19.23	19.77	20.55	21.29
15	21.57	20.97	21.19	20.12	20.08	19.74	19.44	19.07	19.30	19.88	20.67	21.37
20	21.60	20.90	20.96	20.07	20.05	19.68	19.29	19.05	19.38	20.01	20.80	---
25	21.31	21.01	20.64	20.04	19.97	19.75	19.25	19.03	19.47	20.13	20.94	21.65
EOM	20.97	21.09	20.39	20.05	19.95	19.61	19.18	19.08	19.58	20.30	21.08	21.77
MEAN	21.41	20.95	20.94	20.15	20.07	19.75	19.42	19.11	19.31	19.92	20.70	21.39
WTR YR 1997	MEAN 20.24 HIGH 19.03 MAY 25 LOW 21.77 SEP 30											

NJ-WRD WELL NO. 05-0689



GROUND-WATER LEVELS

BURLINGTON COUNTY

395309074352101. Local I.D., New Lisbon 1 Obs. NJ-WRD Well Number 05-1389.

LOCATION.--Lat 39°53'09", long 74°35'21", Hydrologic Unit 02040202, at New Lisbon Developmental Center, Woodland Township.
Owner: State of New Jersey - Human Services Dept.

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

WELL CHARACTERISTICS.-- Drilled artesian observation well, diameter 4 in., depth 920 ft, screened 900 to 920 ft.

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

DATUM.-- Land surface is 105 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 2.30 ft above land surface

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

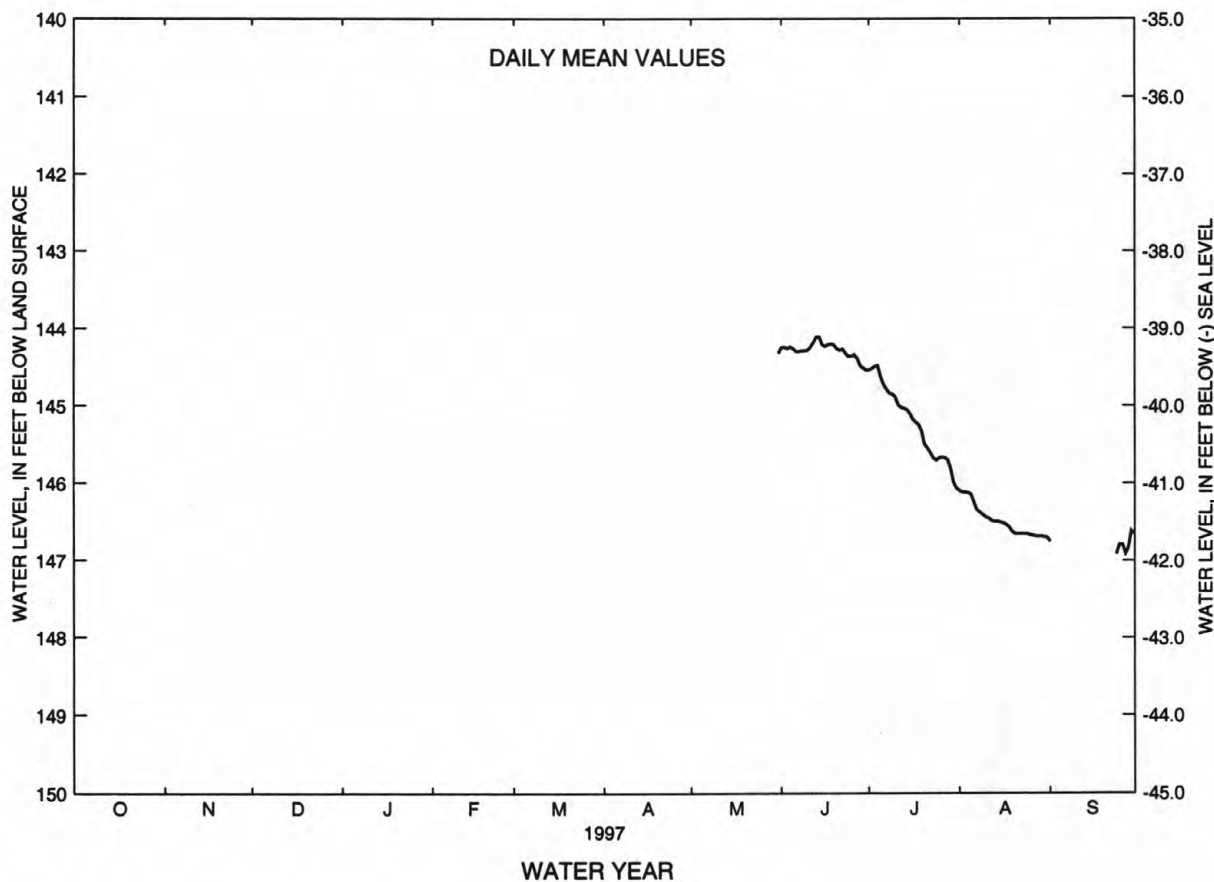
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 144.09 ft below land surface, June 13-14, 1997; lowest, 146.95 ft below land surface, Sept. 24, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	144.26	144.62	146.14	---
10	---	---	---	---	---	---	---	---	144.28	144.89	146.43	---
15	---	---	---	---	---	---	---	---	144.21	145.10	146.50	---
20	---	---	---	---	---	---	---	---	144.26	145.49	146.65	---
25	---	---	---	---	---	---	---	---	144.36	145.67	146.66	146.79
EOM	---	---	---	---	---	---	---	144.32	144.54	146.06	146.70	146.65
MEAN	---	---	---	---	---	---	---	---	144.28	145.21	146.48	---

WTR YR 1997 HIGH 144.11 JUN 13 LOW 146.91 SEP 24

NJ-WRD WELL NO. 05-1389



GROUND-WATER LEVELS

49

BURLINGTON COUNTY

395309074352102. Local I.D., New Lisbon 2 Obs. NJ-WRD Well Number 05-1390.

LOCATION.--Lat 39°53'09", long 74°35'21", Hydrologic Unit 02040202, at New Lisbon Developmental Center, Woodland Township.
Owner: State of New Jersey-Human Services Dept.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.-- Drilled artesian observation well, diameter 4 in., depth 635 ft, screened 615 to 635 ft.

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

DATUM.-- Land surface is 105 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 3.60 ft above land surface

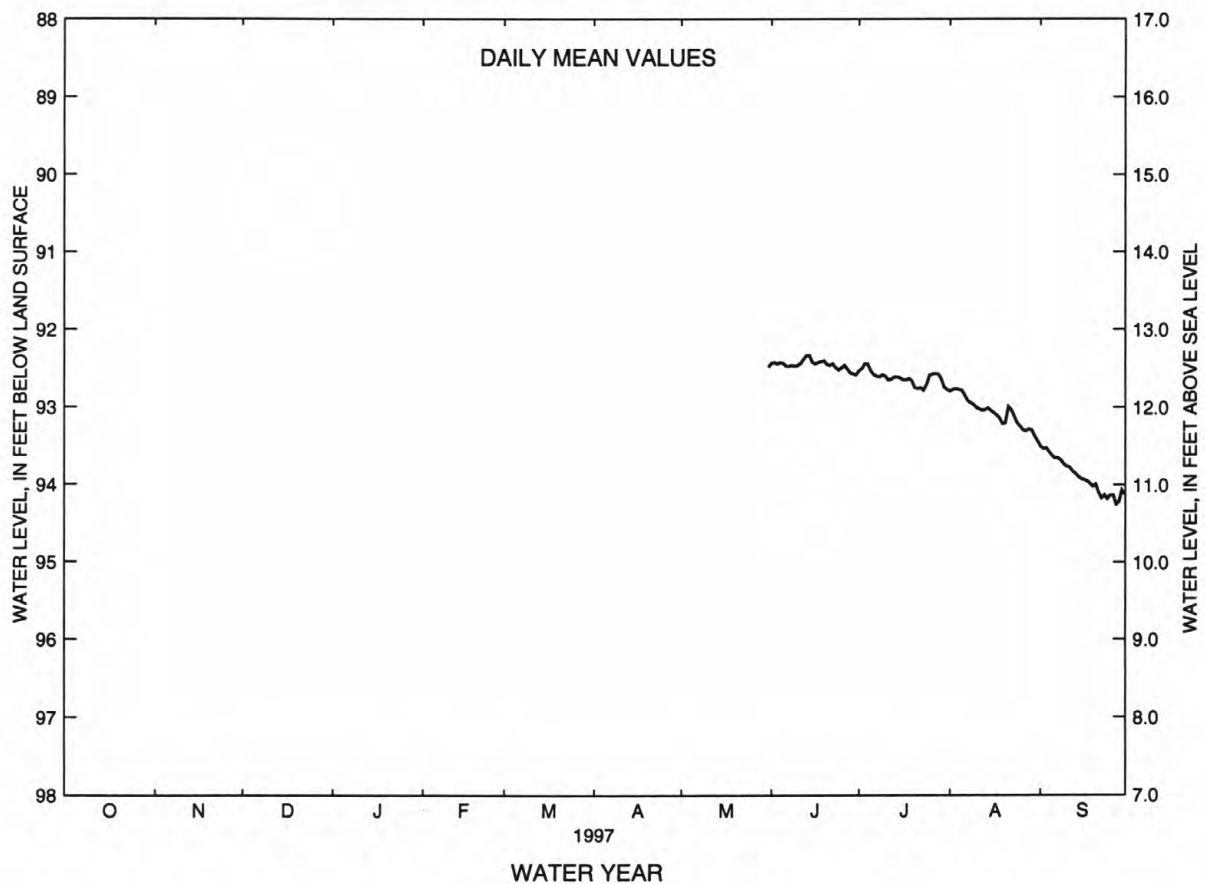
PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 92.30 ft below land surface, June 13-14, 1997; lowest, 94.26 ft below land surface, Sept. 27-28, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	92.43	92.53	92.78	93.62
10	---	---	---	---	---	---	---	---	92.46	92.60	93.00	93.76
15	---	---	---	---	---	---	---	---	92.42	92.62	93.04	93.92
20	---	---	---	---	---	---	---	---	92.45	92.75	93.20	93.99
25	---	---	---	---	---	---	---	---	92.49	92.59	93.24	94.13
EOM	---	---	---	---	---	---	---	92.48	92.58	92.77	93.43	94.12
MEAN	---	---	---	---	---	---	---	---	92.45	92.62	93.06	93.89
WTR YR 1997	HIGH 92.33 JUN 13 LOW 94.25 SEP 27											

NJ-WRD WELL NO. 05-1390



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.

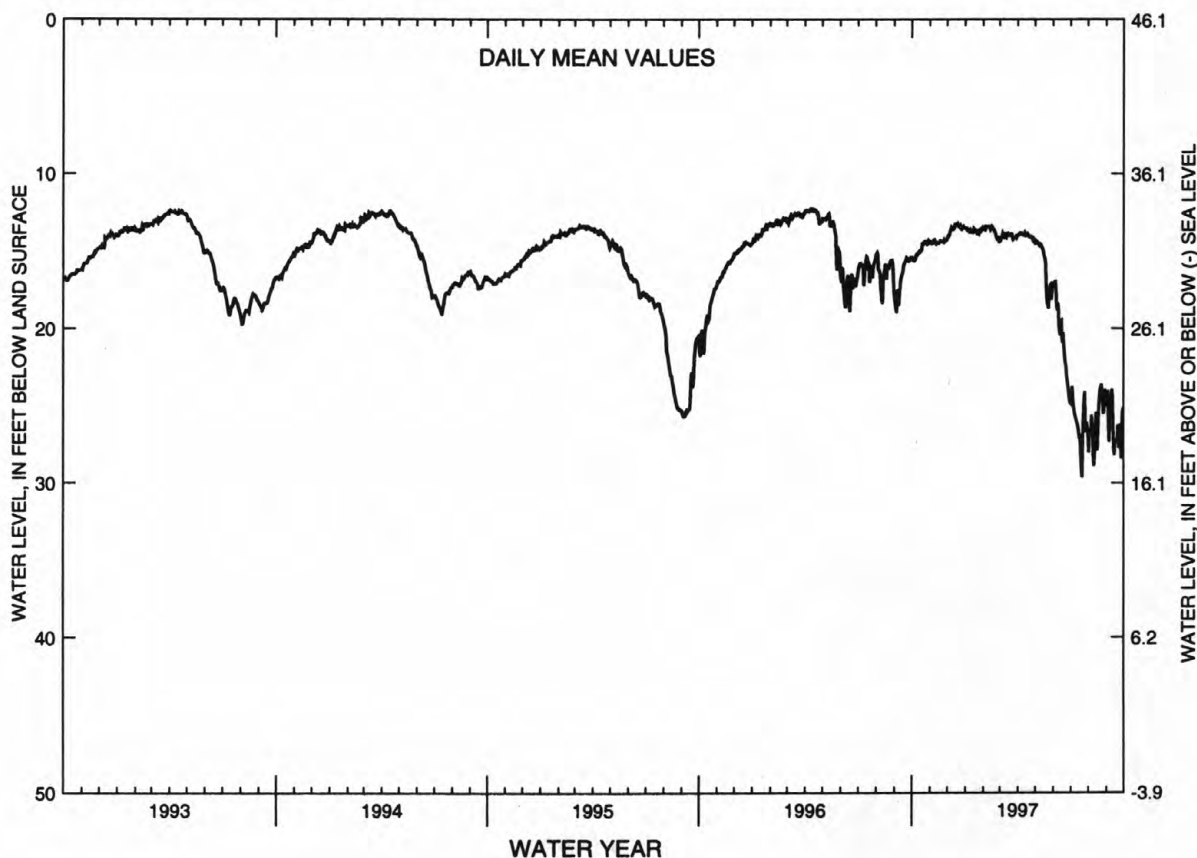
PERIOD OF RECORD.--Sept. 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.17 ft below land surface, Apr. 16, 1996; lowest, 29.81 ft below land surface, July 21, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.62	14.50	13.96	13.59	13.43	14.06	13.90	14.50	16.96	24.51	26.75	26.23
10	15.20	14.39	13.60	13.63	13.43	13.89	13.97	14.55	18.63	25.81	28.30	24.15
15	15.06	14.52	13.37	13.81	13.40	13.86	14.01	14.94	19.49	26.64	25.41	28.18
20	14.54	14.35	13.32	13.70	13.78	13.91	14.08	17.09	21.49	29.30	24.84	27.15
25	14.45	14.45	13.49	13.60	14.27	14.22	14.16	17.98	23.26	24.33	24.29	26.19
EOM	14.41	14.30	13.53	13.46	14.40	14.00	14.43	17.33	24.78	26.48	24.17	25.15
MEAN	14.93	14.41	13.55	13.69	13.69	14.04	14.02	15.94	20.47	26.08	25.92	26.16
WTR YR 1997	MEAN 17.76 HIGH 13.22 DEC 19 LOW 29.61 JUL 21											

NJ-WRD WELL NO. 05-1155



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.

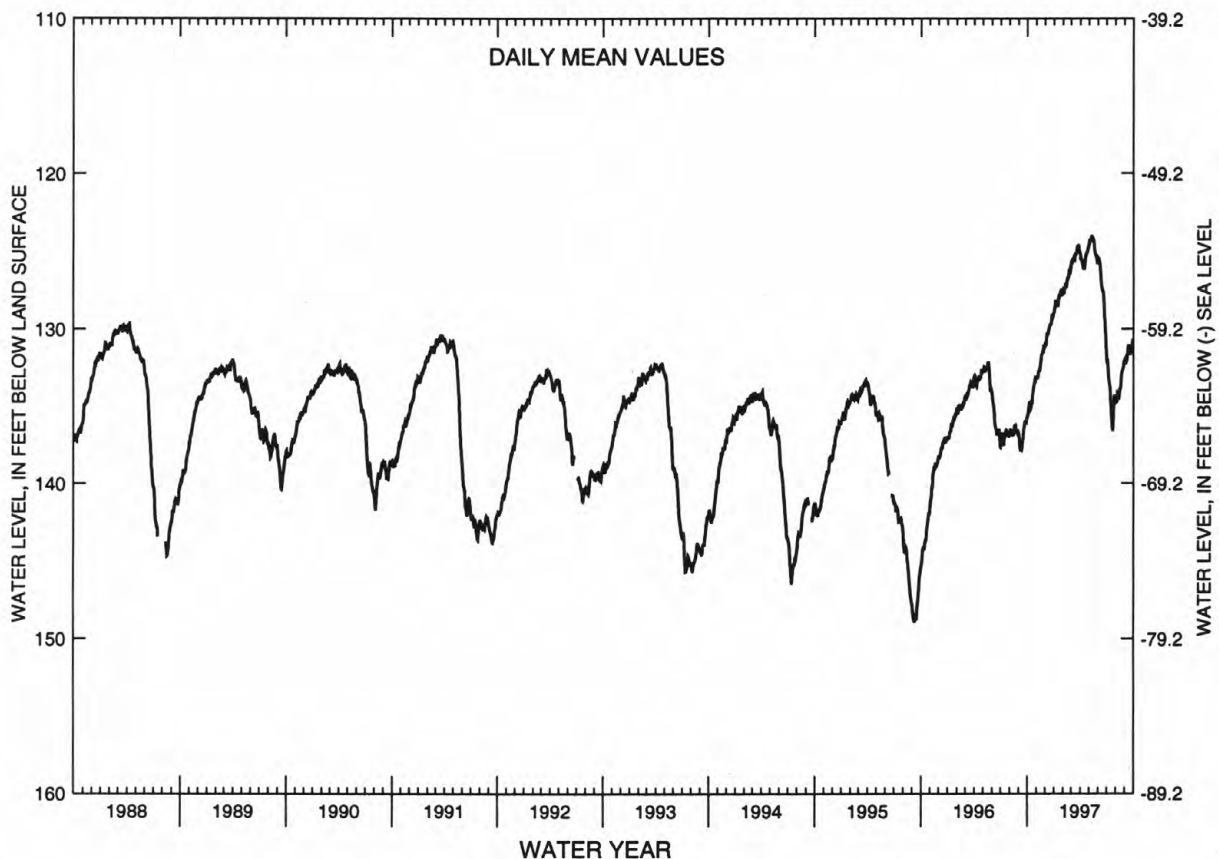
PERIOD OF RECORD.--Oct. 1963 to current year. Records for 1963 to 1975 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	135.34	133.20	130.84	128.40	127.43	125.61	125.56	124.32	125.53	132.14	134.72	131.99
10	134.92	132.71	130.39	128.18	127.11	125.41	125.94	124.06	126.31	133.48	134.21	131.98
15	134.88	132.25	129.90	128.42	126.73	125.12	126.17	124.17	127.33	134.61	134.05	131.10
20	134.08	131.61	129.73	127.73	126.59	124.97	125.21	124.83	127.71	136.25	133.52	131.46
25	133.51	131.43	129.30	127.42	126.40	124.75	125.08	125.29	129.44	135.18	132.69	131.27
EOM	133.18	131.07	129.02	127.63	125.93	125.07	124.72	125.73	131.38	134.42	132.07	130.66
MEAN	134.44	132.14	129.94	128.10	126.86	125.21	125.47	124.68	127.56	134.19	133.66	131.51
WTR YR 1997	MEAN 129.51 HIGH 124.06 MAY 10 LOW 136.59 JUL 22											

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.

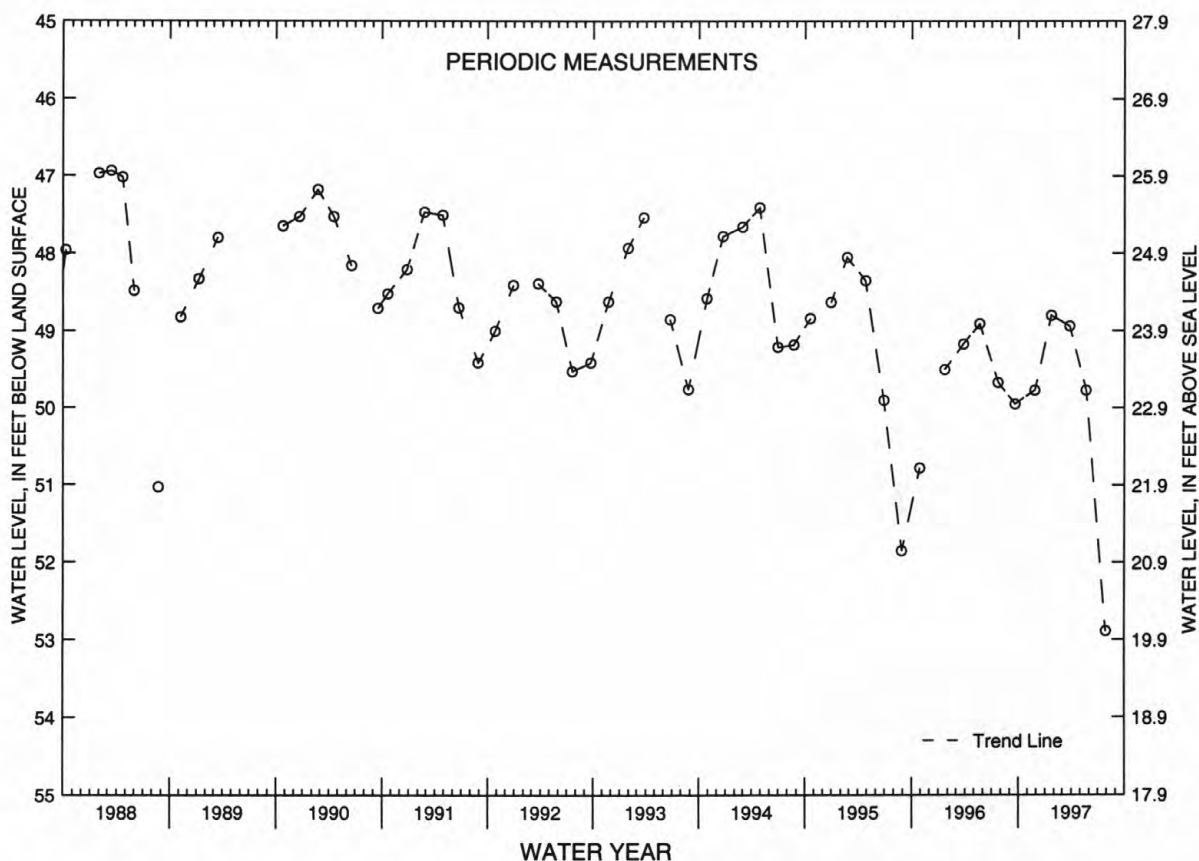
PERIOD OF RECORD.--Oct. 1963 to Aug. 1975, Feb. 1977 to current year. Records for 1963 to 1975 and 1987 to 1989 are unpublished and are available in files of the New Jersey District office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 27	49.77	MAR 27	48.94	JUL 30	52.89
JAN 22	48.80	MAY 22	49.77		

NJ-WRD WELL NO. 05-0259



GROUND-WATER LEVELS

53

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.

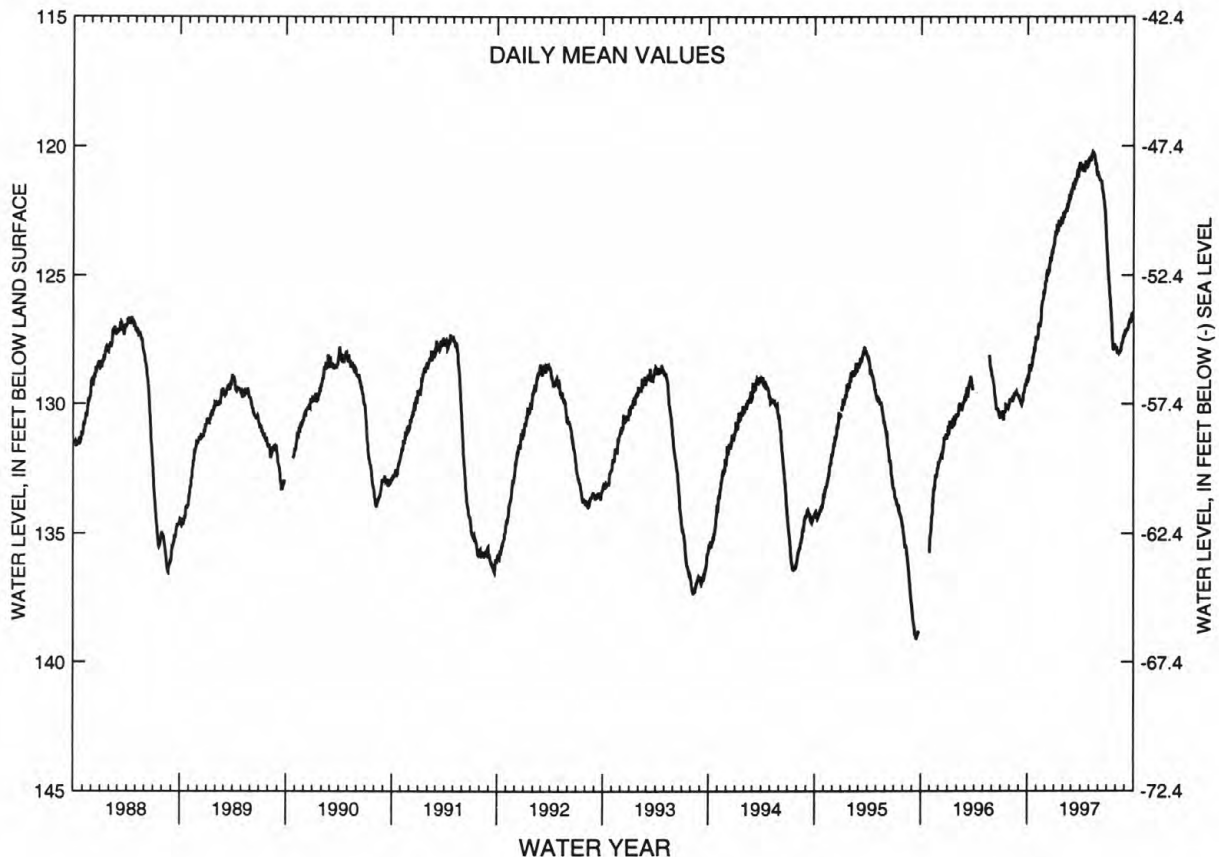
PERIOD OF RECORD.--Jan. 1968 to current year. Records for 1968 to 1977 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	129.01	127.42	125.20	123.34	122.50	121.62	120.88	120.56	121.23	124.59	127.84	127.23
10	128.52	126.90	124.92	123.02	122.47	121.41	120.94	120.31	121.35	125.49	128.01	127.13
15	128.60	126.86	124.75	123.19	122.21	121.24	121.01	120.23	121.68	126.22	127.99	126.96
20	128.15	126.08	124.39	122.95	122.18	121.08	120.73	120.39	122.02	127.33	127.89	126.68
25	127.95	125.82	124.08	122.74	122.03	121.14	120.74	120.68	122.49	127.81	127.59	126.64
EOM	127.46	125.55	123.83	122.64	121.88	120.63	120.58	121.10	123.60	127.81	127.37	126.46
MEAN	128.37	126.56	124.57	123.13	122.30	121.28	120.77	120.55	121.86	126.31	127.78	126.94
WTR YR 1997	MEAN 124.22 HIGH 120.23 MAY 15 LOW 129.09 OCT 1											

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.

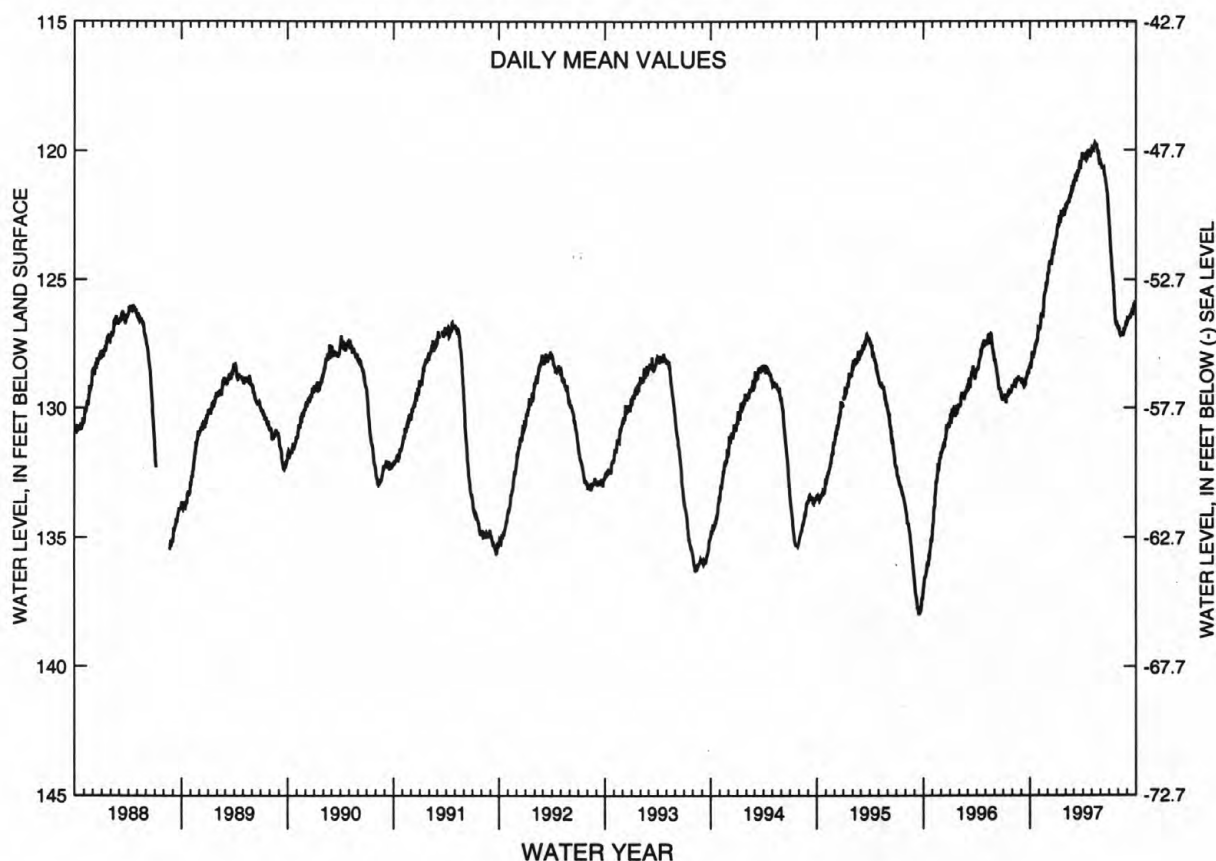
PERIOD OF RECORD.--Jan. 1968 to current year. Records for 1968 to 1975 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	128.37	126.87	124.69	122.84	122.00	121.14	120.34	120.04	120.59	123.46	126.89	126.59
10	127.86	126.37	124.41	122.52	121.97	120.93	120.34	119.80	120.69	124.33	127.17	126.49
15	127.94	126.36	124.28	122.67	121.72	120.76	120.39	119.70	120.92	125.05	127.15	126.39
20	127.52	125.57	123.94	122.40	121.70	120.58	120.13	119.82	121.24	126.07	127.13	126.10
25	127.41	125.33	123.61	122.24	121.54	120.65	120.17	120.04	121.62	126.65	126.93	126.02
EOM	126.93	125.05	123.34	122.14	121.39	120.09	120.03	120.44	122.52	126.89	126.71	125.86
MEAN	127.75	126.04	124.08	122.63	121.81	120.79	120.18	119.99	121.09	125.17	126.98	126.33
WTR YR 1997	MEAN 123.59 HIGH 119.70 MAY 15 LOW 128.44 OCT 1											

NJ-WRD WELL NO. 05-0262



GROUND-WATER LEVELS

55

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.

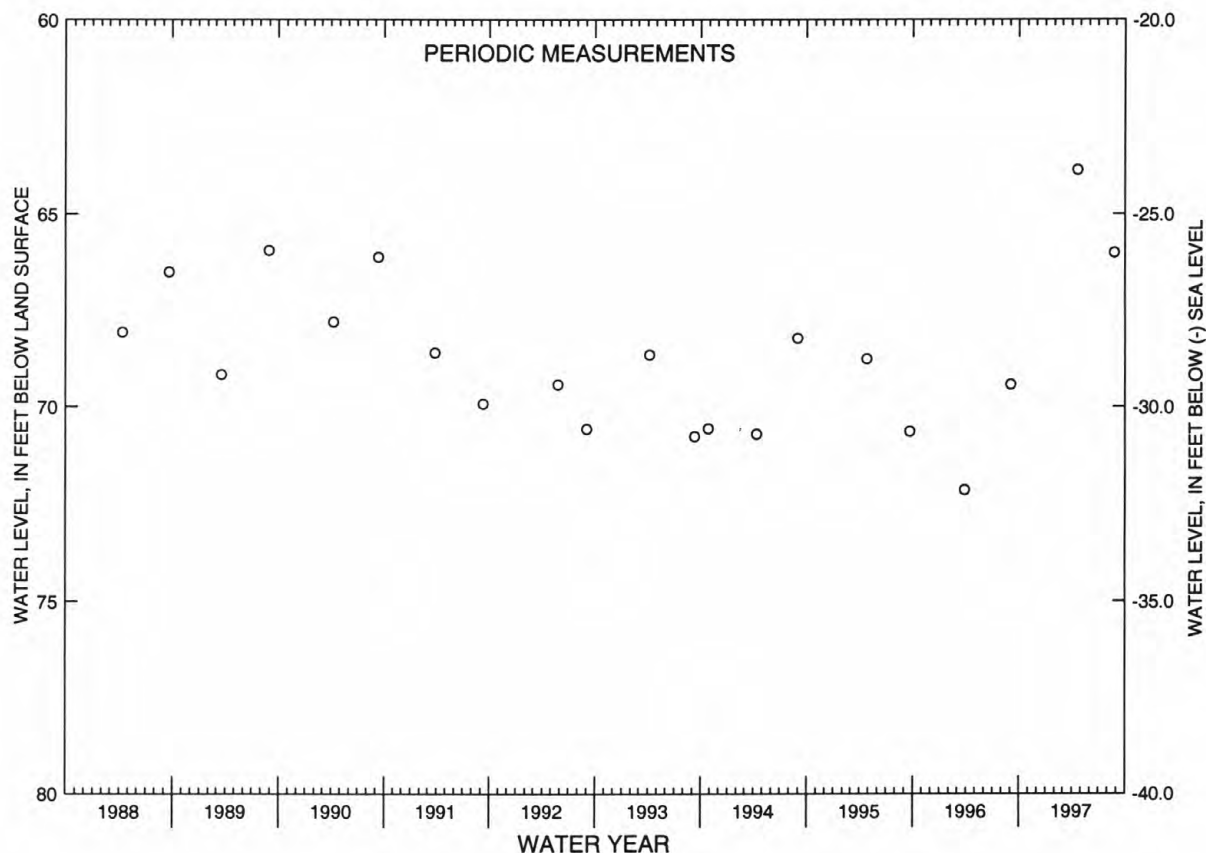
PERIOD OF RECORD.--Apr. 1972 to Apr. 1984, May 1986 to current year. Records for 1972 to 1984 and 1986 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 21	63.87	AUG 26	66.00

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.

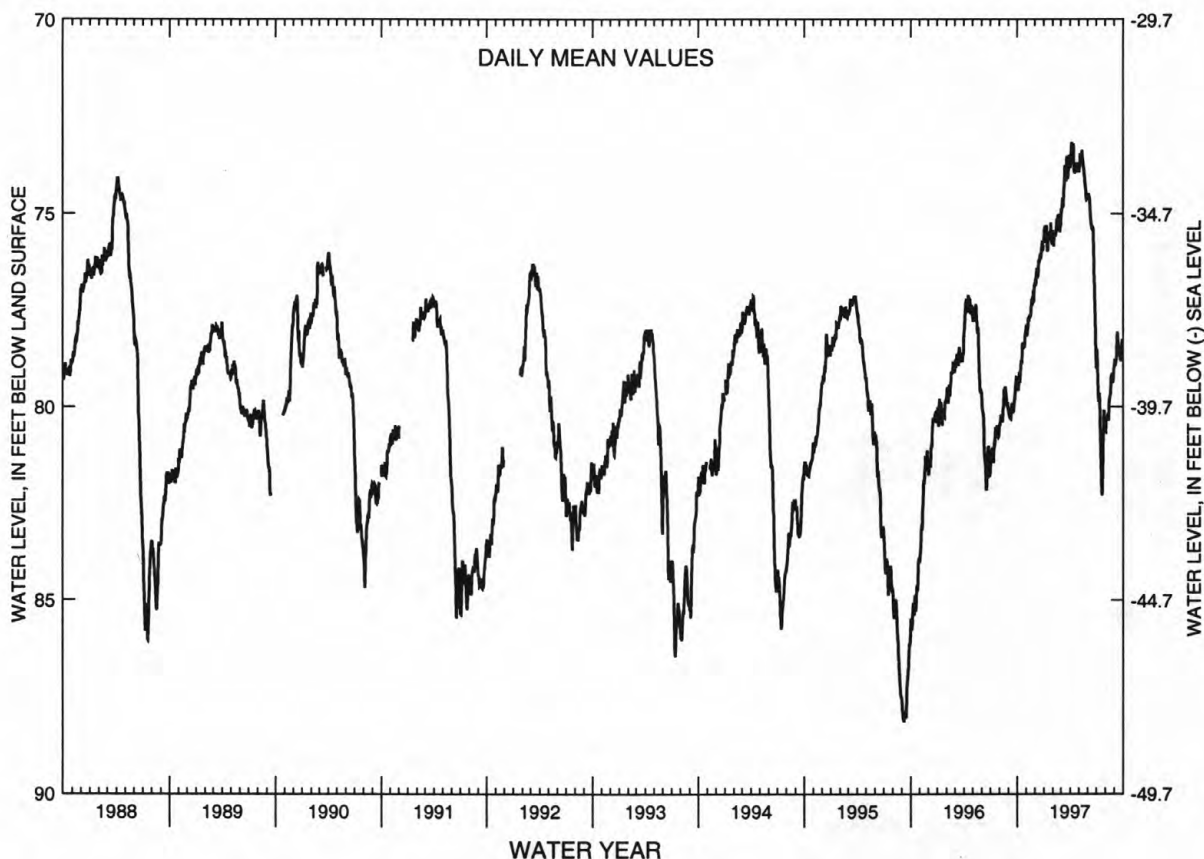
PERIOD OF RECORD.--Mar. 1966 to Sept. 1975, Mar. 1977 to current year. Records for 1966 to 1975 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	79.58	78.09	76.79	75.31	75.56	74.81	73.51	73.75	74.50	78.73	80.33	78.91
10	79.27	77.72	76.65	75.30	75.55	74.52	73.27	73.54	74.80	79.87	80.18	78.67
15	78.79	77.68	76.24	75.90	75.16	73.75	73.83	73.53	75.33	80.56	79.86	78.37
20	78.35	77.24	76.13	75.50	75.27	73.88	73.82	73.92	75.35	82.17	79.65	78.45
25	78.45	77.29	75.85	75.24	75.47	74.09	73.79	74.31	76.75	80.94	79.15	78.62
EOM	78.08	76.89	75.91	75.44	75.31	73.67	73.83	74.59	78.49	80.48	79.07	78.27
MEAN	78.83	77.54	76.28	75.57	75.39	74.20	73.64	73.91	75.60	80.32	79.85	78.59
WTR YR 1997	MEAN 76.66 HIGH 73.16 APR 7 LOW 82.28 JUL 21											

NJ-WRD WELL NO. 05-0645



GROUND-WATER LEVELS

57

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.

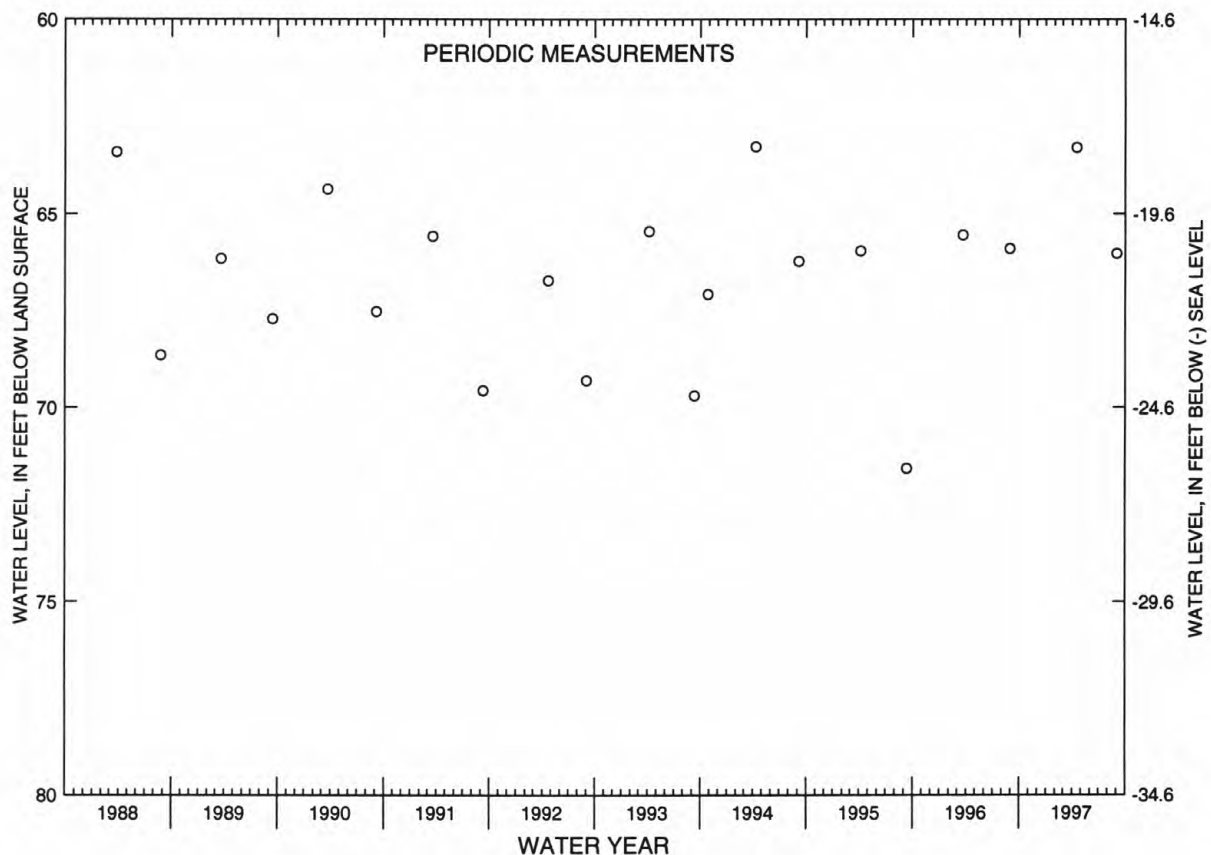
PERIOD OF RECORD.--Mar. 1966 to current year. Records for 1966 to 1975 and 1988 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17	63.29	SEP 3	66.02

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.

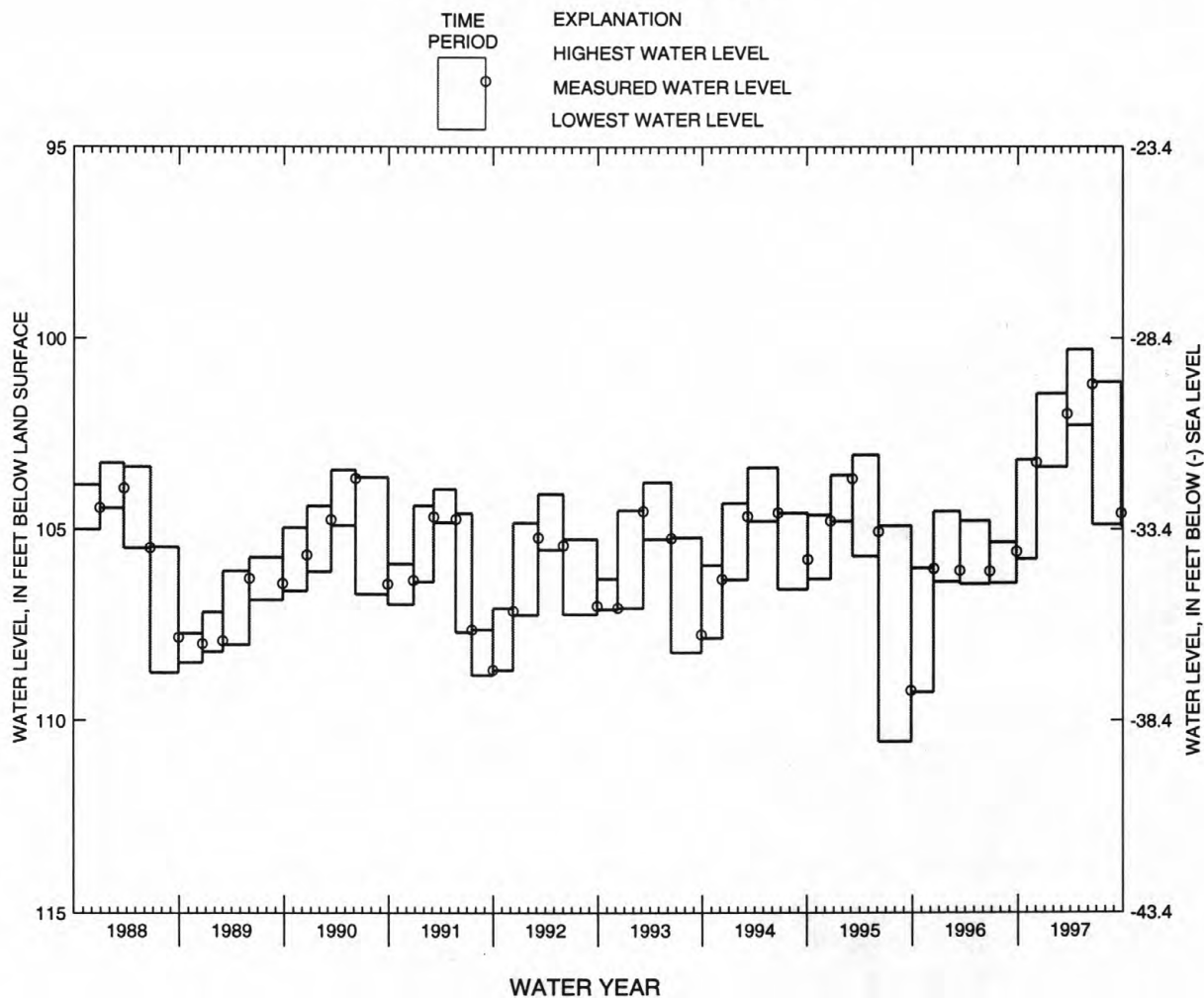
PERIOD OF RECORD.--Dec. 1968 to current year. Records for 1968 to 1978 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1996 TO DEC. 4, 1996	103.18	105.76	DEC. 4, 1996	103.25
DEC. 4, 1996 TO MAR. 21, 1997	101.45	103.37	MAR. 21, 1997	101.98
MAR. 21, 1997 TO JUNE 18, 1997	100.29	102.28	JUNE 18, 1997	101.20
JUNE 18, 1997 TO SEPT. 26, 1997	101.15	104.87	SEPT. 26, 1997	104.59

NJ-WRD WELL NO. 05-0440



GROUND-WATER LEVELS

59

CAMDEN COUNTY

394131074481901. Local I.D., CCMUA PZ 3. NJ-WRD Well Number 07-0740

LOCATION.--Lat 39°41'31", long 74°48'19", Hydrologic Unit 02040301, on the south side of Albertson Brook near the intersection of Myrtle and Fleming Avenues, Waterford Township.

Owner: Camden County Municipal Utilities Authority.

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

WELL CHARACTERISTICS.-- Drilled water-table observation well, diameter 2 in., depth 13 ft, screened 8 to 13 ft.

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

DATUM.-- Land surface is 65 ft above sea level, from topographic map.

Measuring point: Top of coupling, 2.05 ft above land surface

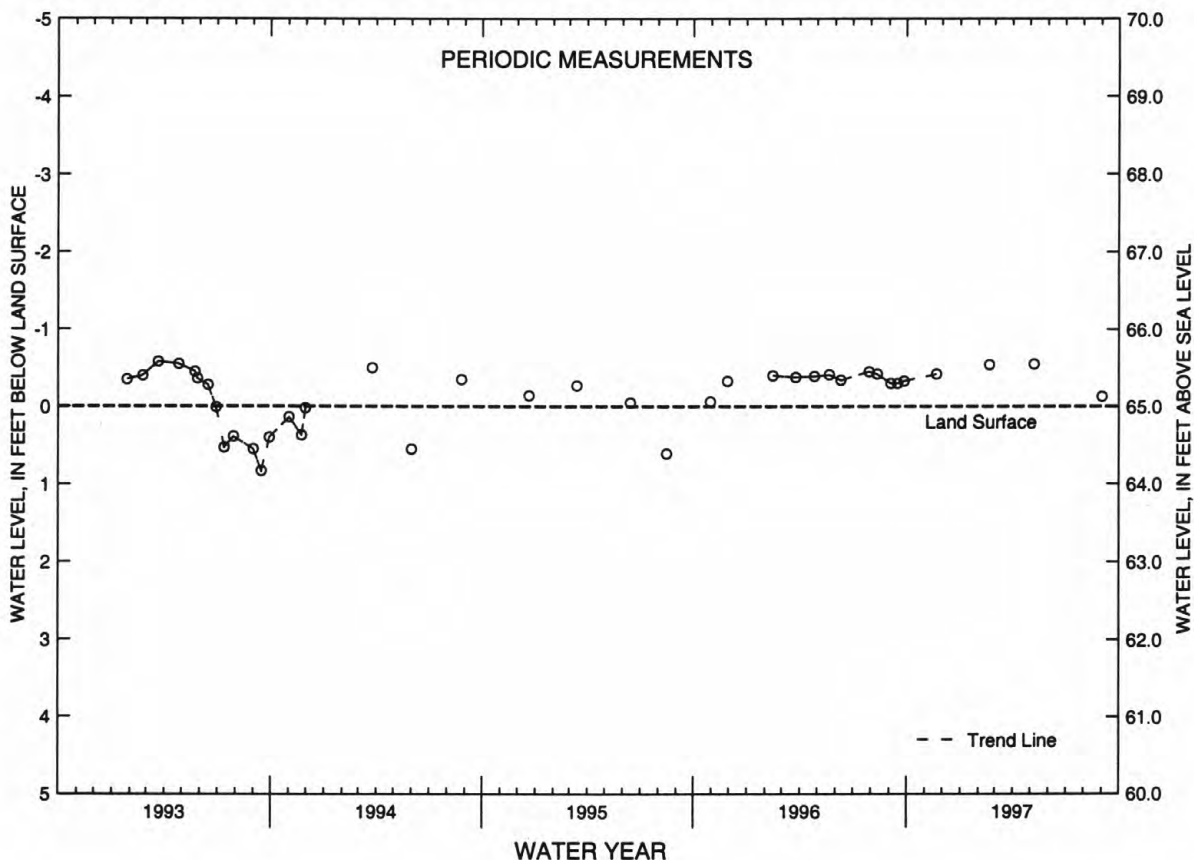
PERIOD OF RECORD.--Jan. 1993 to current year. Records for 1993 to 1996 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.58 ft above land surface, Mar. 22, 1993; lowest, 0.83 ft below land surface, Sept. 15, 1993.

WATER LEVEL, IN FEET ABOVE (-) OR BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21	-0.42	FEB 20	-0.54	MAY 8	-0.55	SEP 2	-0.13

NJ-WRD WELL NO. 07-0740



GROUND-WATER LEVELS

CAMDEN COUNTY

394208074534801. Local I.D., CCMUA PZ 4. NJ-WRD Well Number 07-0741.

LOCATION.--Lat 39°42'08", long 74°53'48", Hydrologic Unit 02040301, on the west side of Cedar Brook Rd. (Rt. 73) near Braddock, Winslow Township.
Owner: Camden County Municipal Utilities Authority.

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

WELL CHARACTERISTICS.-- Drilled water-table observation well, diameter 4 in., depth 32 ft, screened 27 to 32 ft.

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

DATUM.-- Land surface is 135 ft above sea level, from topographic map.
Measuring point: Top of casing, 2.30 ft above land surface

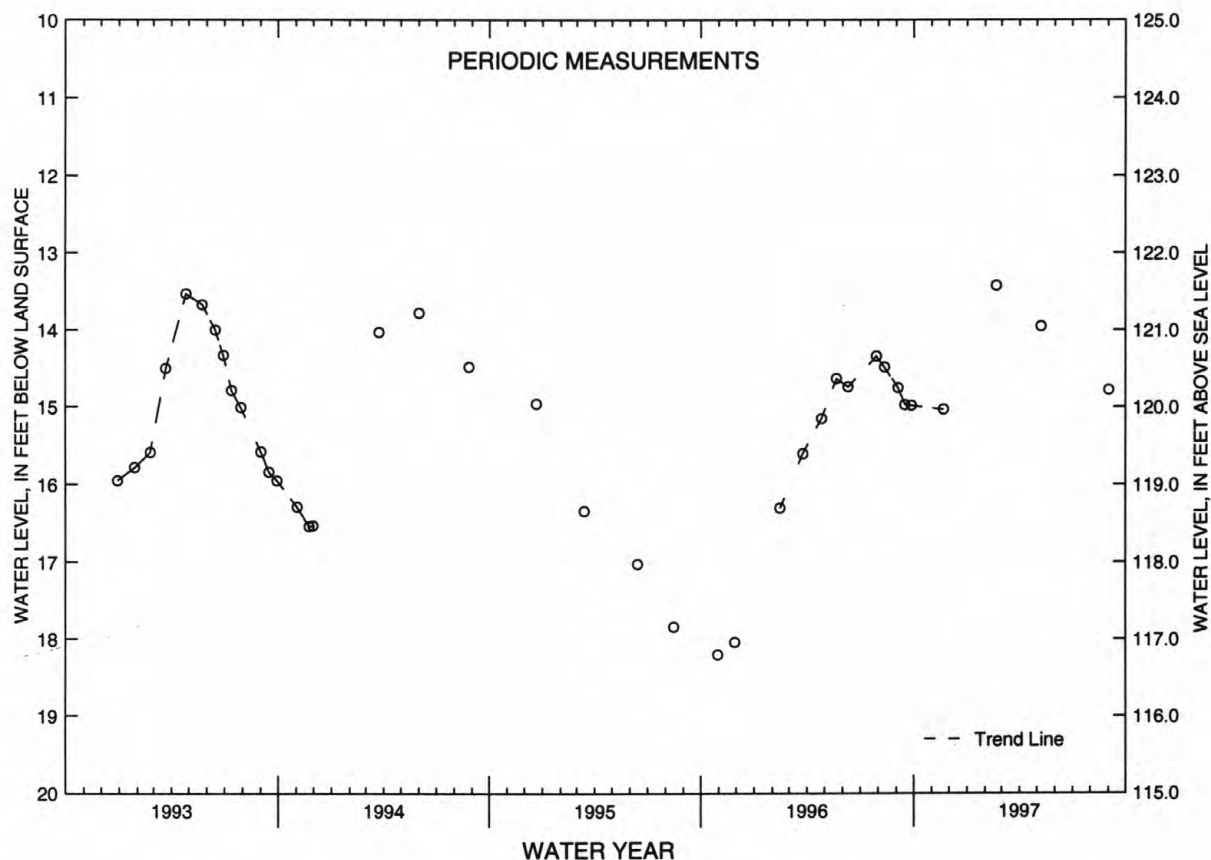
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.42 ft below land surface, Feb. 20, 1997; lowest, 18.20 ft below land surface, Oct. 31, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21	15.03	FEB 20	13.42	MAY 8	13.95	SEP 2	14.78

NJ-WRD WELL NO. 07-0741



GROUND-WATER LEVELS

61

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.

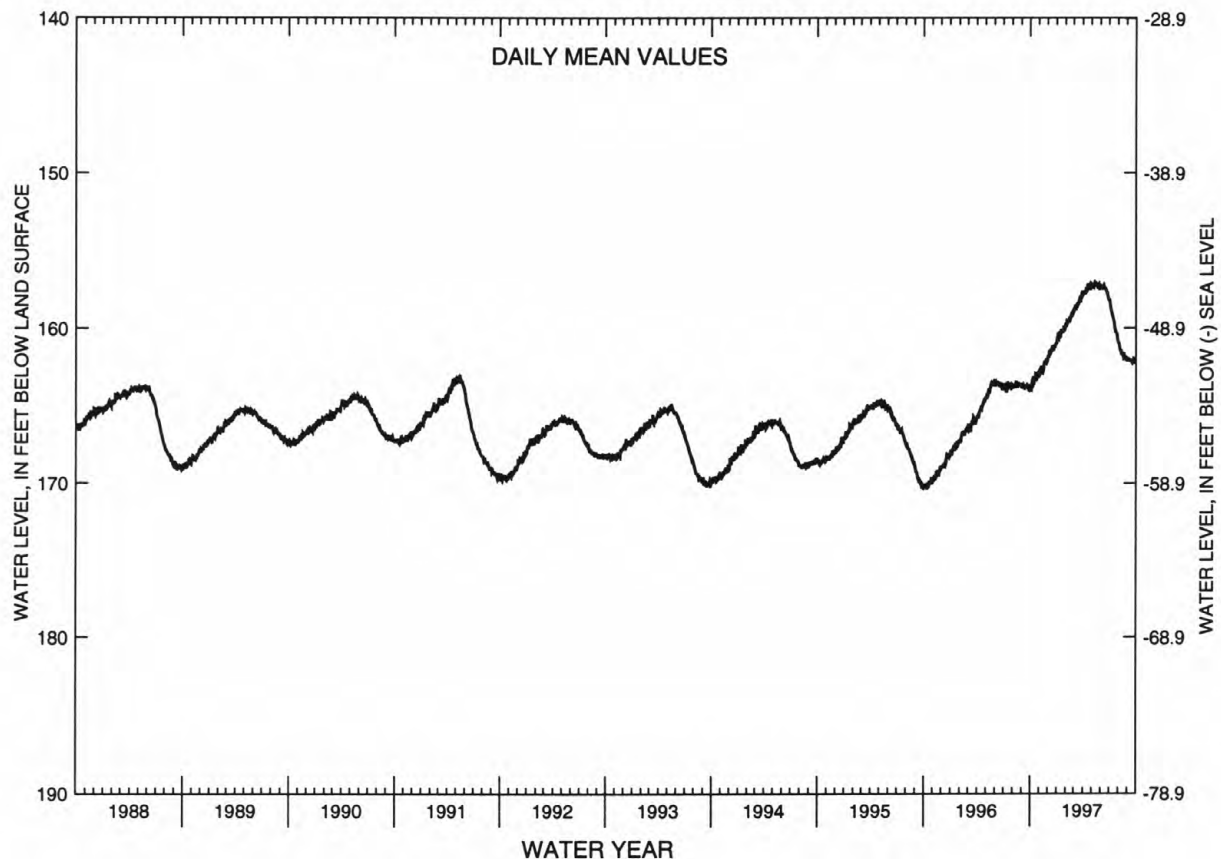
PERIOD OF RECORD.--Aug. 1960 to current year. Records for 1960 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	163.98	162.94	161.85	160.51	159.61	158.76	157.87	157.35	157.38	158.49	161.04	162.07
10	163.37	162.56	161.60	160.25	159.55	158.54	157.78	157.15	157.45	158.99	161.50	162.05
15	163.43	162.79	161.51	160.49	159.28	158.36	157.71	157.12	157.45	159.38	161.59	162.13
20	162.98	162.18	161.32	160.16	159.30	158.18	157.35	157.18	157.56	159.94	161.81	162.07
25	163.12	162.18	161.17	159.88	159.18	158.28	157.40	157.24	157.77	160.24	161.95	162.08
EOM	162.82	162.12	160.98	159.77	159.02	157.62	157.29	157.36	158.18	160.84	162.02	161.97
MEAN	163.35	162.50	161.41	160.35	159.41	158.40	157.53	157.27	157.55	159.48	161.57	162.10
WTR YR 1997	MEAN 160.08 HIGH 157.12 MAY 13 LOW 163.98 OCT 5											

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.

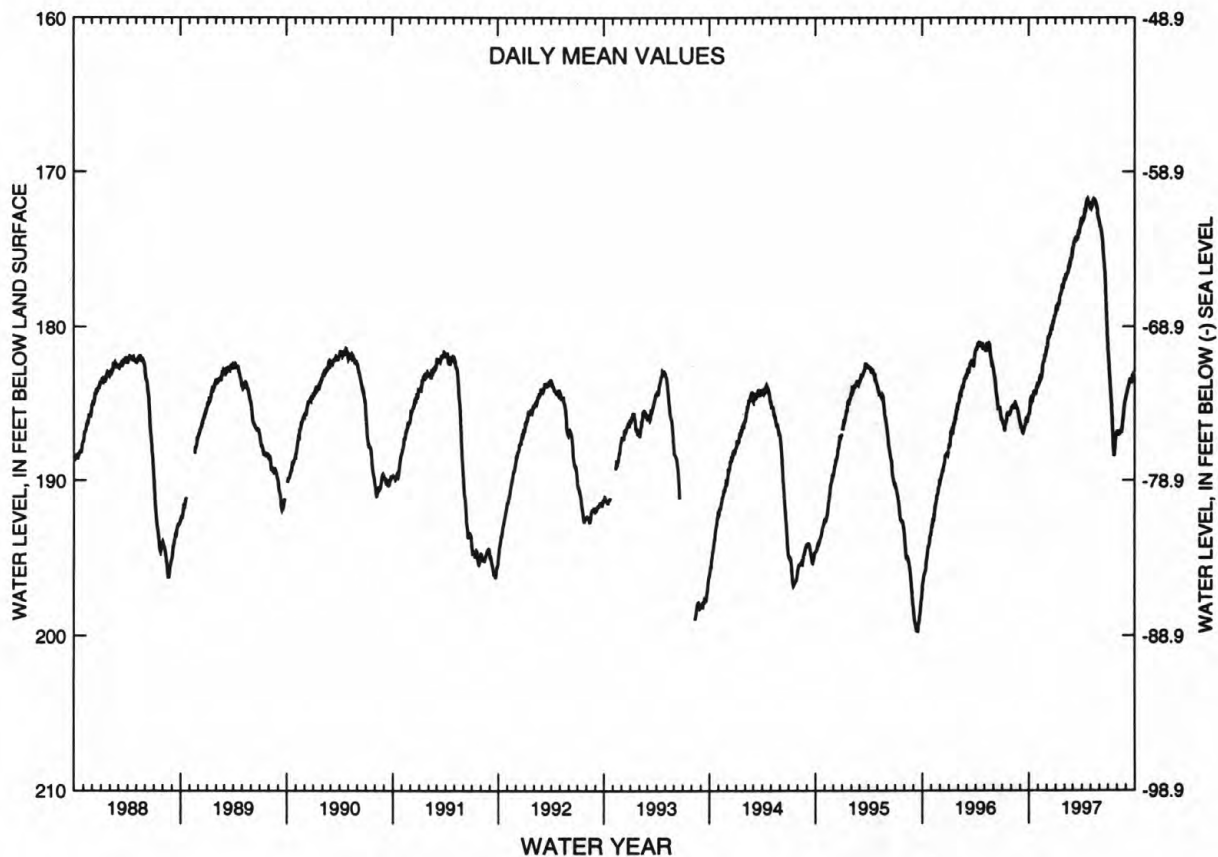
PERIOD OF RECORD.--May 1961 to current year. Records for 1961 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	185.58	183.74	181.26	178.65	176.72	174.69	173.22	172.28	173.50	182.34	186.86	184.36
10	184.70	183.36	180.72	178.43	176.59	174.26	172.97	171.91	173.98	183.95	186.84	183.94
15	184.70	183.25	180.47	178.33	176.19	174.21	172.47	171.80	175.07	185.46	186.84	183.49
20	184.23	182.35	180.02	177.77	175.95	174.07	171.92	171.91	176.22	187.67	186.62	183.40
25	184.37	182.02	179.62	177.24	175.64	173.89	172.08	172.25	178.30	188.05	185.64	183.18
EOM	183.79	181.67	179.24	176.96	175.25	173.21	172.25	173.06	180.70	186.99	184.79	183.01
MEAN	184.67	182.87	180.29	178.10	176.24	174.18	172.48	172.21	175.74	185.41	186.35	183.71
WTR YR 1997	MEAN 179.38 HIGH 171.80 MAY 15 LOW 188.42 JUL 23											

NJ-WRD WELL NO. 07-0477



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.

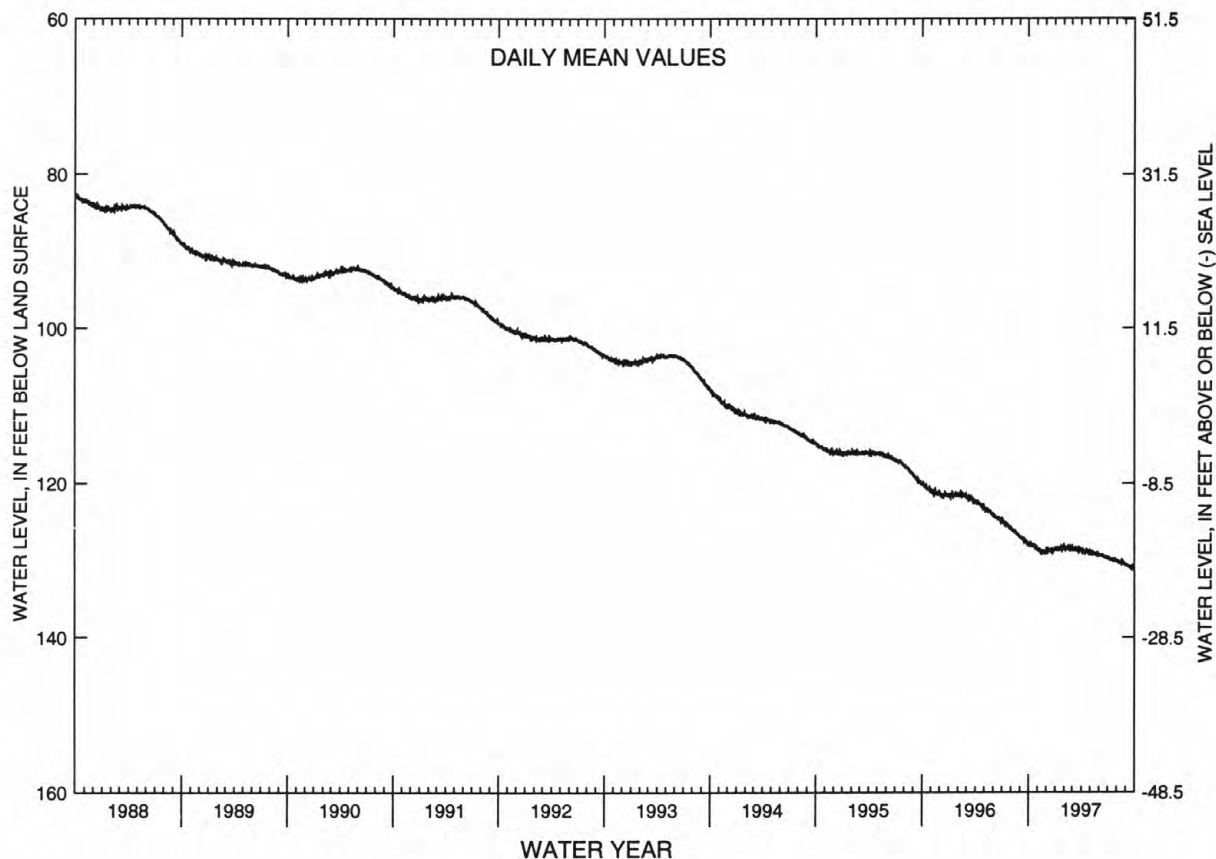
PERIOD OF RECORD.--May 1961 to current year. Records for 1961 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 56.12 ft below land surface, Aug. 14, 1962; lowest, 131.04 ft below land surface, Sept. 27, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	128.08	128.71	128.91	128.39	128.28	128.52	128.84	129.07	129.31	129.71	130.06	130.63
10	127.79	128.66	128.76	128.26	128.39	128.57	128.94	128.98	129.41	129.82	130.30	130.71
15	128.15	129.06	128.72	128.55	128.32	128.54	128.99	129.04	129.44	129.86	130.24	130.82
20	127.89	128.79	128.73	128.37	128.53	128.60	128.78	129.11	129.53	130.00	130.35	130.84
25	128.31	128.96	128.68	128.20	128.63	128.86	128.94	129.19	129.60	129.84	130.38	130.89
EOM	128.38	129.03	128.65	128.28	128.58	128.50	128.91	129.30	129.73	130.09	130.52	130.82
MEAN	128.09	128.82	128.72	128.43	128.44	128.63	128.83	129.12	129.45	129.85	130.26	130.79
WTR YR 1997 MEAN 129.12 HIGH 127.74 OCT 9 LOW 131.02 SEP 27												

NJ-WRD WELL NO. 07-0478



GROUND-WATER LEVELS

CAMDEN COUNTY

394337074461401. Local I.D., CCMUA PZ 2. NJ-WRD Well Number 07-0742.

LOCATION.--Lat 39°43'37", long 74°46'14", Hydrologic Unit 02040301, on the east side of Burnt House Rd, near Sleeper Branch, Waterford Township.
Owner: Camden County Municipal Utilities Authority.

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

WELL CHARACTERISTICS.-- Drilled water-table observation well, diameter 4 in., depth 18 ft, screened 13 to 18 ft.

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

DATUM.-- Land surface is 60 ft above sea level, from topographic map.
Measuring point: Top of casing, 1.46 ft above land surface

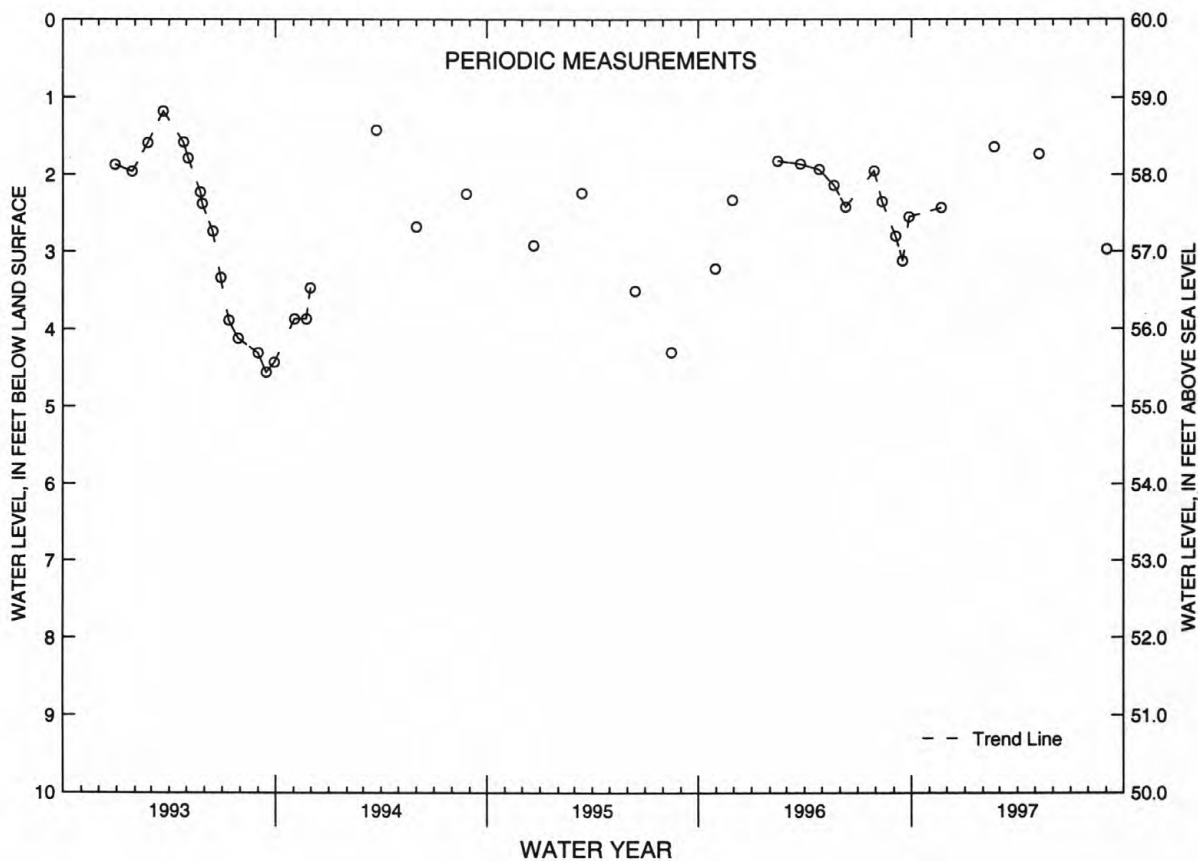
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.18 ft below land surface, Mar. 22, 1993; lowest, 4.56 ft below land surface, Sept. 15, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21	2.43	FEB 20	1.64	MAY 8	1.73	SEP 2	2.97

NJ-WRD WELL NO. 07-0742



GROUND-WATER LEVELS

65

CAMDEN COUNTY

394340074461401. Local I.D., CCMUA PZ 1. NJ-WRD Well Number 07-0743.

LOCATION.--Lat 39°43'40", long 74°46'14", Hydrologic Unit 02040301, on the west side of Burnt House Rd. near Sleeper Branch, Waterford Township.
Owner: Camden County Municipal Utilities Authority.

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

WELL CHARACTERISTICS.-- Drilled water-table observation well, diameter 4 in., depth 17 ft, screened 12 to 17 ft.

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

DATUM.-- Land surface is 60 ft above sea level, from topographic map.
Measuring point: Top of casing, 1.43 ft above land surface

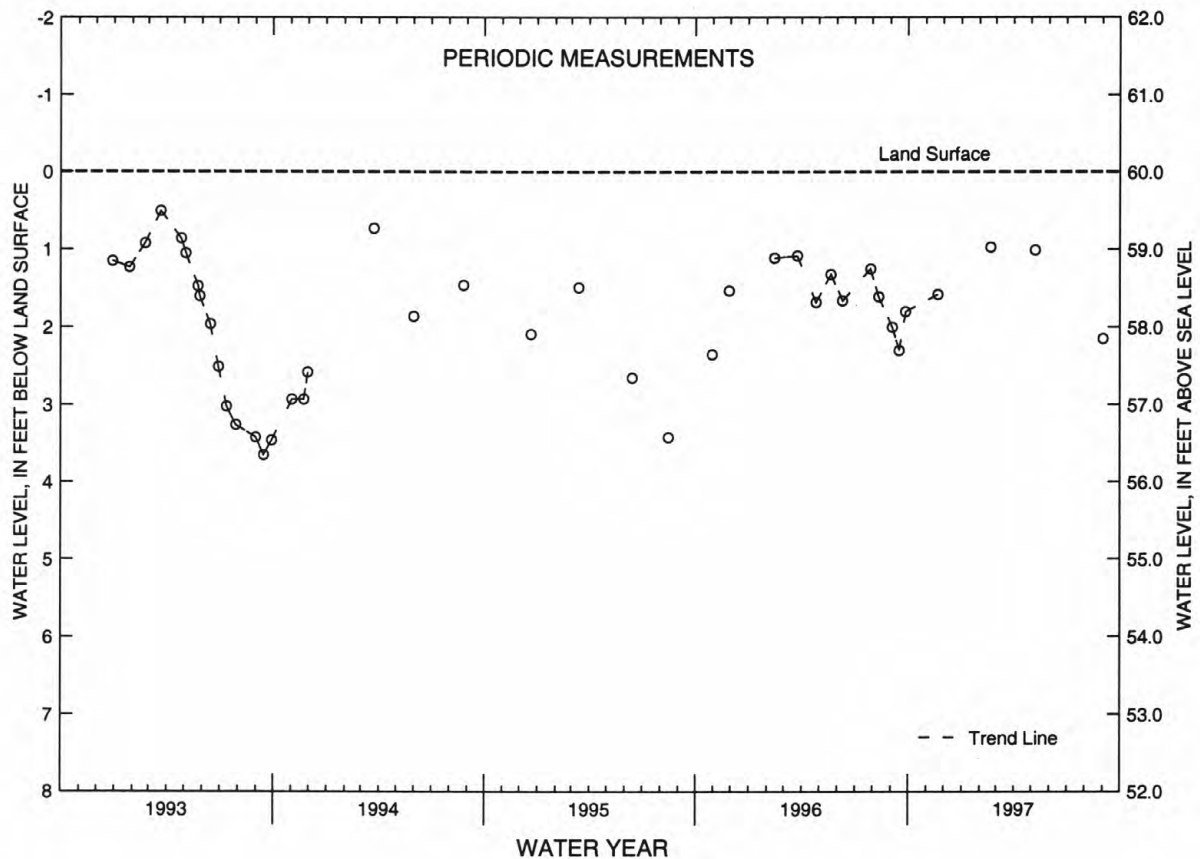
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.51ft below land surface, Feb. 22, 1993; lowest, 3.65 ft below land surface, Sept. 15, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21	1.58	FEB 20	0.97	MAY 8	1.01	SEP 2	2.15

NJ-WRD WELL NO. 07-0743



GROUND-WATER LEVELS

CAMDEN COUNTY

394410074534501. Local I.D., CCMUA PZ 5. NJ-WRD Well Number 07-0744.

LOCATION.--Lat 39°44'10", long 74°53'45", Hydrologic Unit 02040301, on the north side of Center Ave. near Chesilhurst, Winslow Township.
Owner: Camden County Municipal Utilities Authority.

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

WELL CHARACTERISTICS.-- Drilled artesian observation well, diameter 4 in., depth 47 ft, screened 42 to 47 ft.

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

DATUM.-- Land surface is 155 ft above sea level, from topographic map.
Measuring point: Top of casing, 2.13 ft above land surface

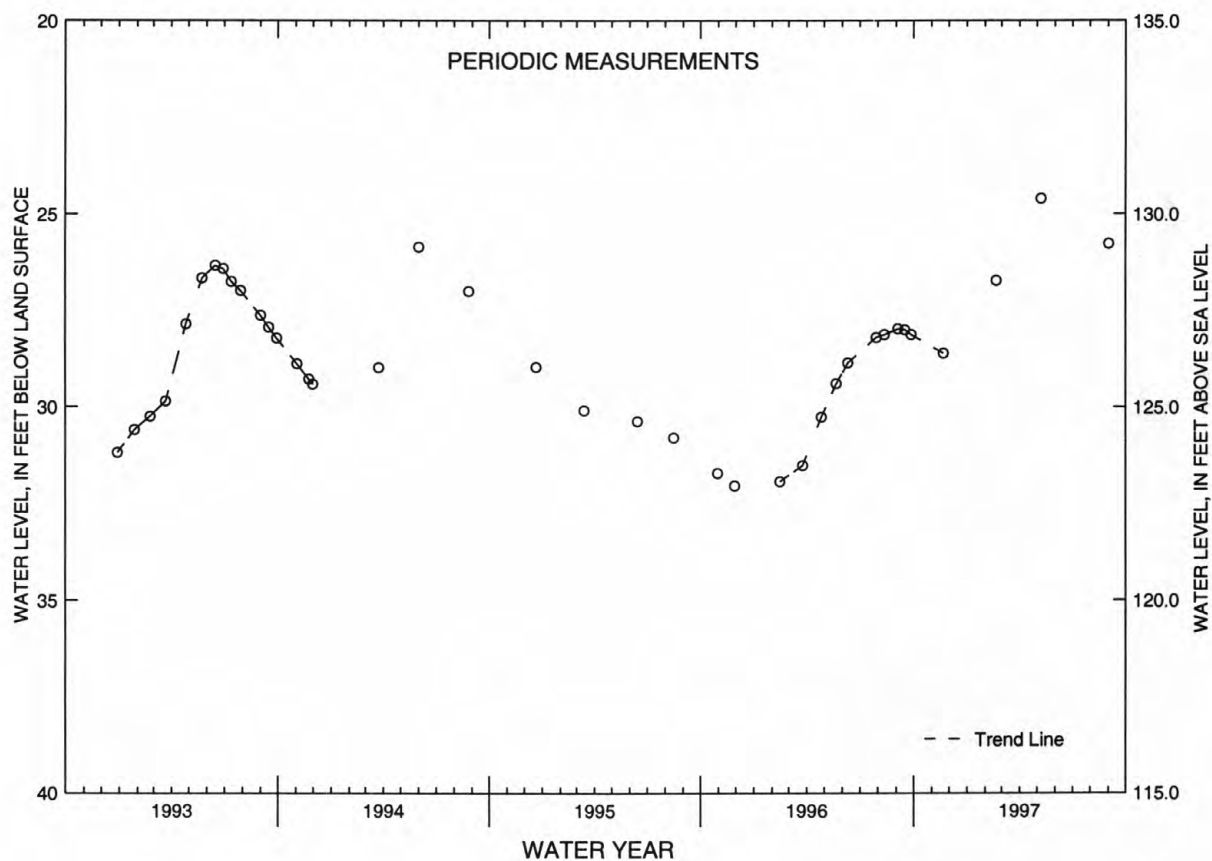
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.60 ft below land surface, May 8, 1997; lowest, 32.05 ft below land surface, Nov. 29, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21	28.60	FEB 20	26.72	MAY 8	24.60	SEP 2	25.77

NJ-WRD WELL NO. 07-0744



GROUND-WATER LEVELS

67

CAMDEN COUNTY

394413074494901. Local I.D., CCMUA PZ 8. NJ-WRD Well Number 07-0745.

LOCATION.--Lat 39°44'13", long 74°49'49", Hydrologic Unit 02040301, on the south side of Burnt Mill Rd and southeast of Beaverdam Lake, Waterford Township.

Owner: Camden County Municipal Utilities Authority.

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

WELL CHARACTERISTICS.-- Drilled water-table observation well, diameter 4 in., depth 25 ft, screened 20 to 25 ft.

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

DATUM.-- Land surface is 90 ft above sea level, from topographic map.

Measuring point: Top of casing, 0.81 ft above land surface

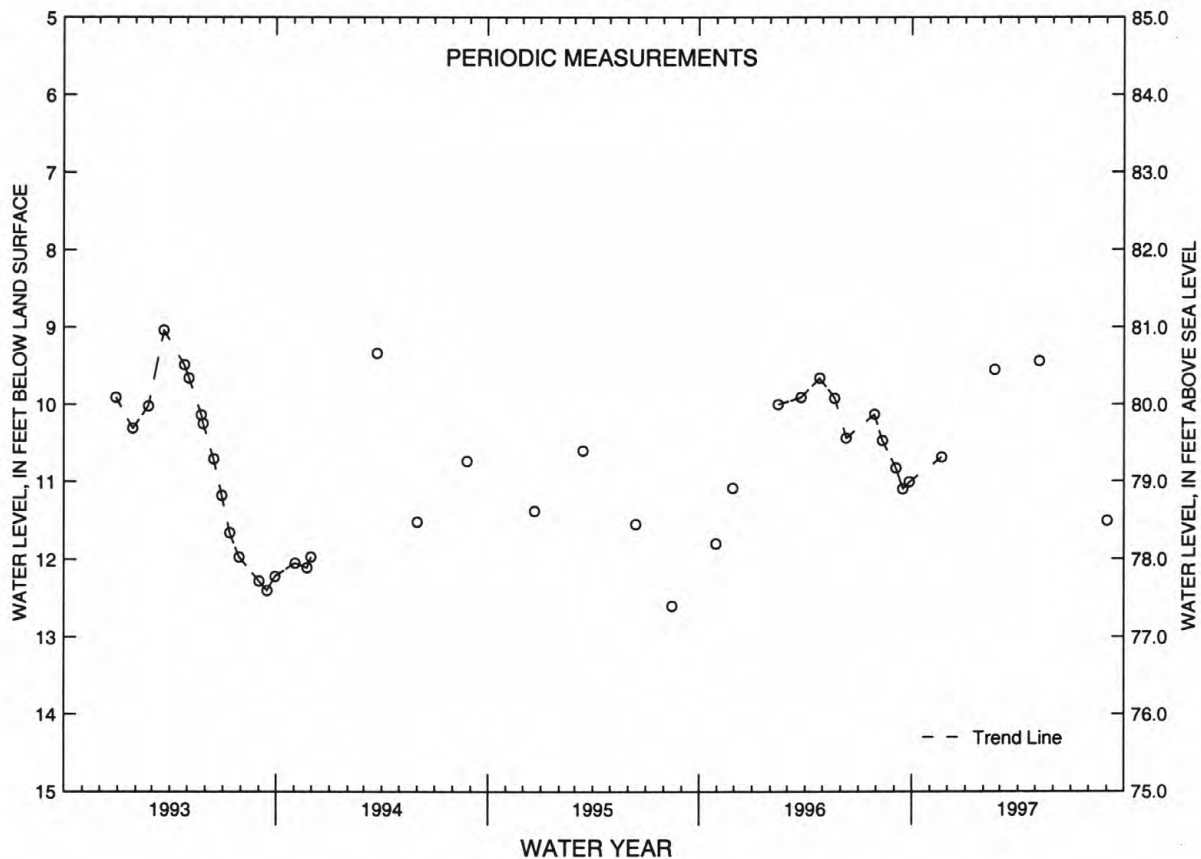
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.04 ft below land surface, Mar. 22, 1993; lowest, 12.60 ft below land surface, Aug. 16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21	10.69	FEB 20	9.55	MAY 8	9.44	SEP 2	11.51

NJ-WRD WELL NO. 07-0745



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.

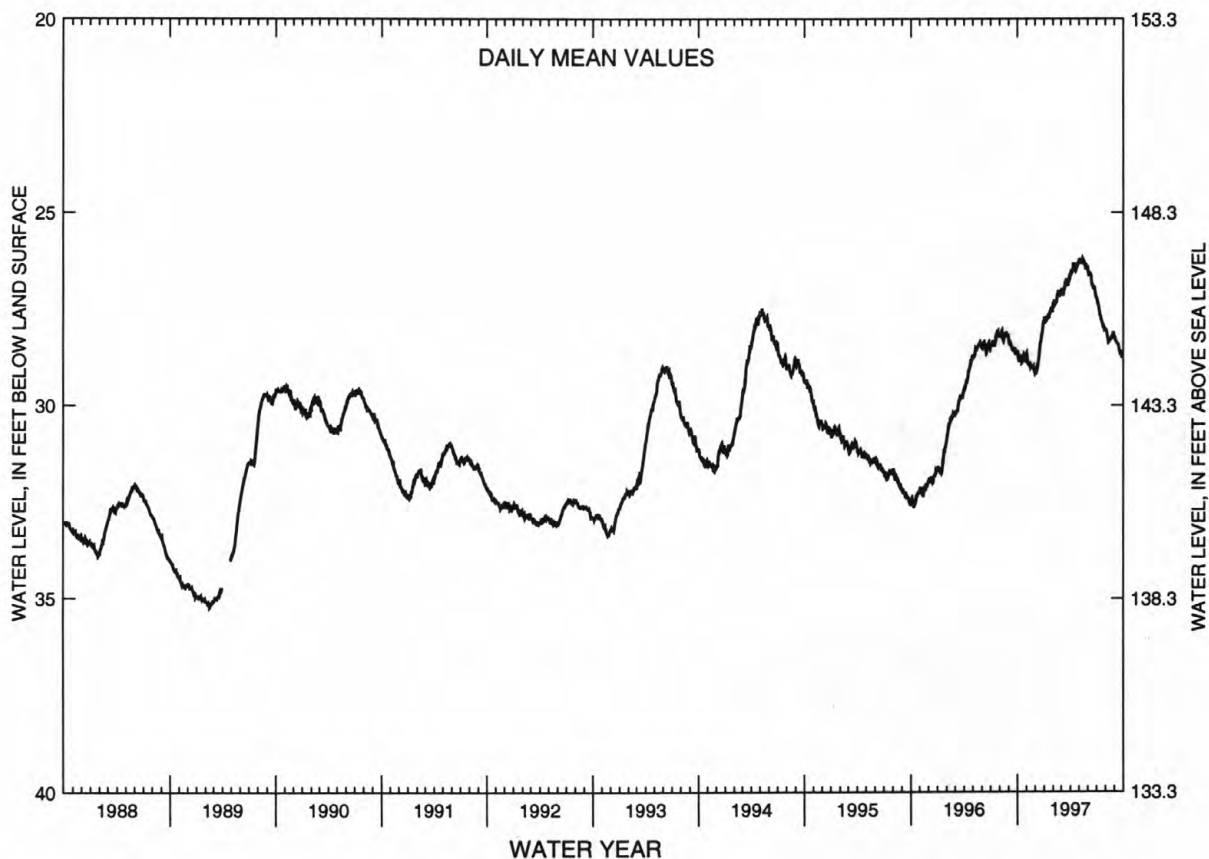
PERIOD OF RECORD.--Dec. 1972 to current year. Records for 1972 to 1980 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.11 ft below land surface, May 3, 1997; lowest, 38.35 ft below land surface, between June 3 and Oct. 6, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.84	28.85	29.13	27.73	27.33	26.99	26.53	26.24	26.58	27.32	28.08	28.31
10	28.74	28.93	29.00	27.70	27.36	26.97	26.49	26.29	26.59	27.50	28.29	28.39
15	28.88	29.02	28.72	27.68	27.16	26.88	26.46	26.21	26.86	27.69	28.31	28.44
20	28.79	29.01	28.38	27.60	27.15	26.75	26.51	26.28	26.95	27.85	28.29	28.62
25	28.76	29.01	28.18	27.46	27.14	26.84	26.41	26.32	26.96	27.98	28.26	28.63
EOM	28.73	29.17	27.80	27.42	27.11	26.60	26.31	26.40	27.20	28.02	28.20	28.77
MEAN	28.77	28.96	28.59	27.66	27.23	26.89	26.45	26.30	26.80	27.68	28.22	28.49
WTR YR 1997	MEAN 27.67 HIGH 26.20 MAY 3 LOW 29.19 DEC 3											

NJ-WRD WELL NO. 07-0503



GROUND-WATER LEVELS

69

CAMDEN COUNTY

394516074520501. Local I.D., CCMUA PZ 7. NJ-WRD Well Number 07-0746.

LOCATION.--Lat 39°45'16", long 74°52'05", Hydrologic Unit 02040301, on the north side of Burnt Mill Rd., Waterford Township.

Owner: Camden County Municipal Utilities Authority.

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

WELL CHARACTERISTICS.-- Drilled water-table observation well, diameter 4 in., depth 23 ft, screened 18 to 23 ft.

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

DATUM.-- Land surface is 110 ft above sea level, from topographic map.

Measuring point: Top of casing, 1.33 ft above land surface

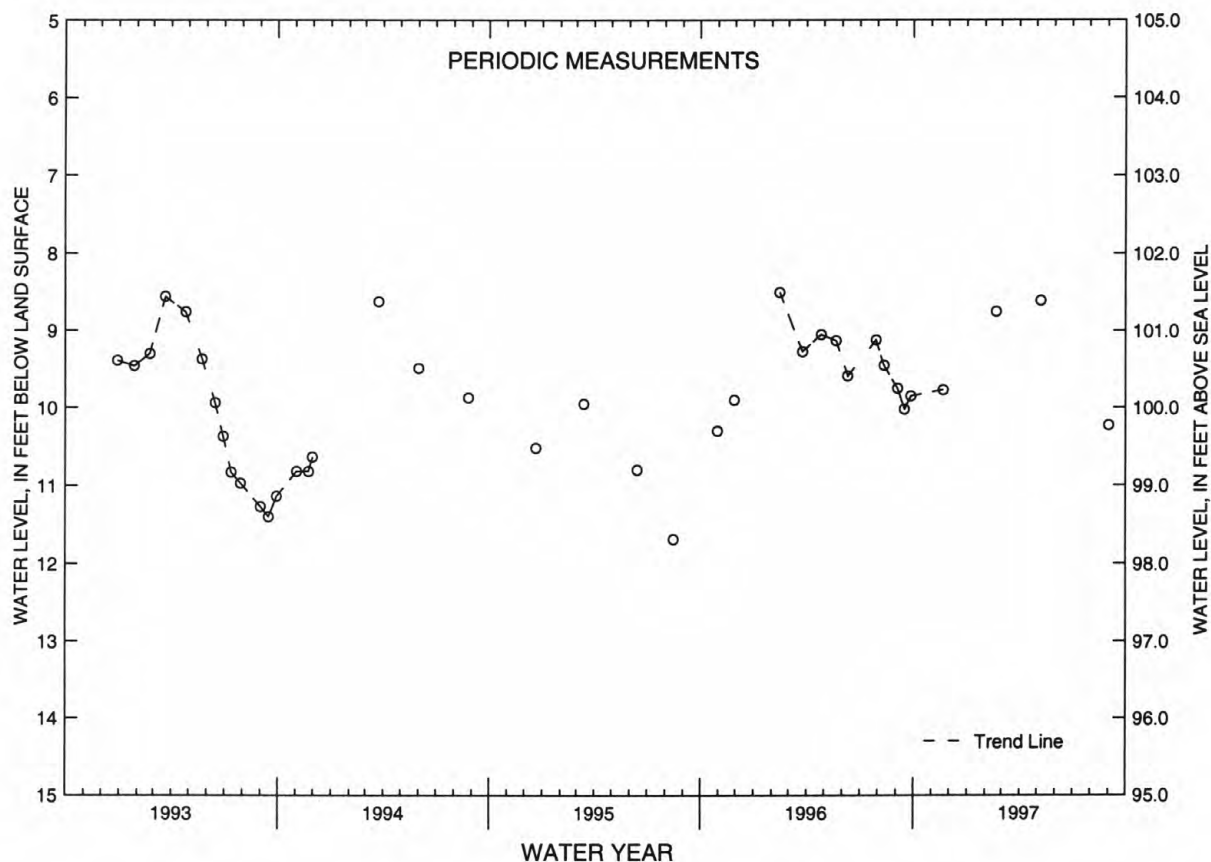
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.50 ft below land surface, Feb. 15, 1996; lowest, 11.69 ft below land surface, Aug. 16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21	9.77	FEB 20	8.75	MAY 8	8.61	SEP 2	10.23

NJ-WRD WELL NO. 07-0746



GROUND-WATER LEVELS

CAMDEN COUNTY

394630074492801. Local I.D., CCMUA PZ 6. NJ-WRD Well Number 07-0747.

LOCATION.--Lat 39°46'30", long 74°49'28", Hydrologic Unit 02040301, on the north side of Jackson Rd., about 1,500 ft east of Atco Dragway, Waterford Township.

Owner: Camden County Municipal Utilities Authority.

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

WELL CHARACTERISTICS.-- Drilled water-table observation well, diameter 4 in., depth 35 ft, screened 30 to 35 ft.

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

DATUM.-- Land surface is 110 ft above sea level, from topographic map.

Measuring point: Top of casing, 1.33 ft above land surface

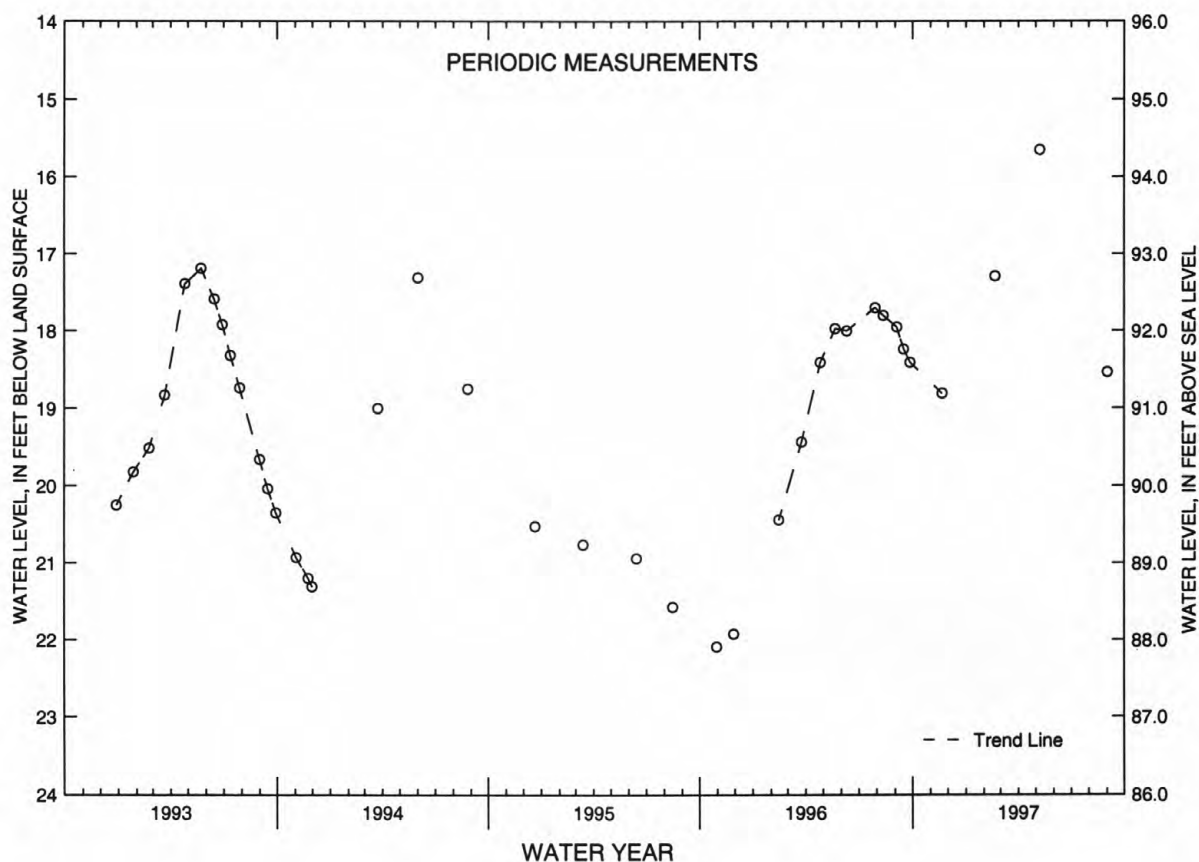
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.65 ft below land surface, May 8, 1997; lowest, 22.09 ft below land surface, Oct. 31, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21	18.81	FEB 20	17.29	MAY 8	15.65	SEP 2	18.54

NJ-WRD WELL NO. 07-0747



GROUND-WATER LEVELS

71

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.

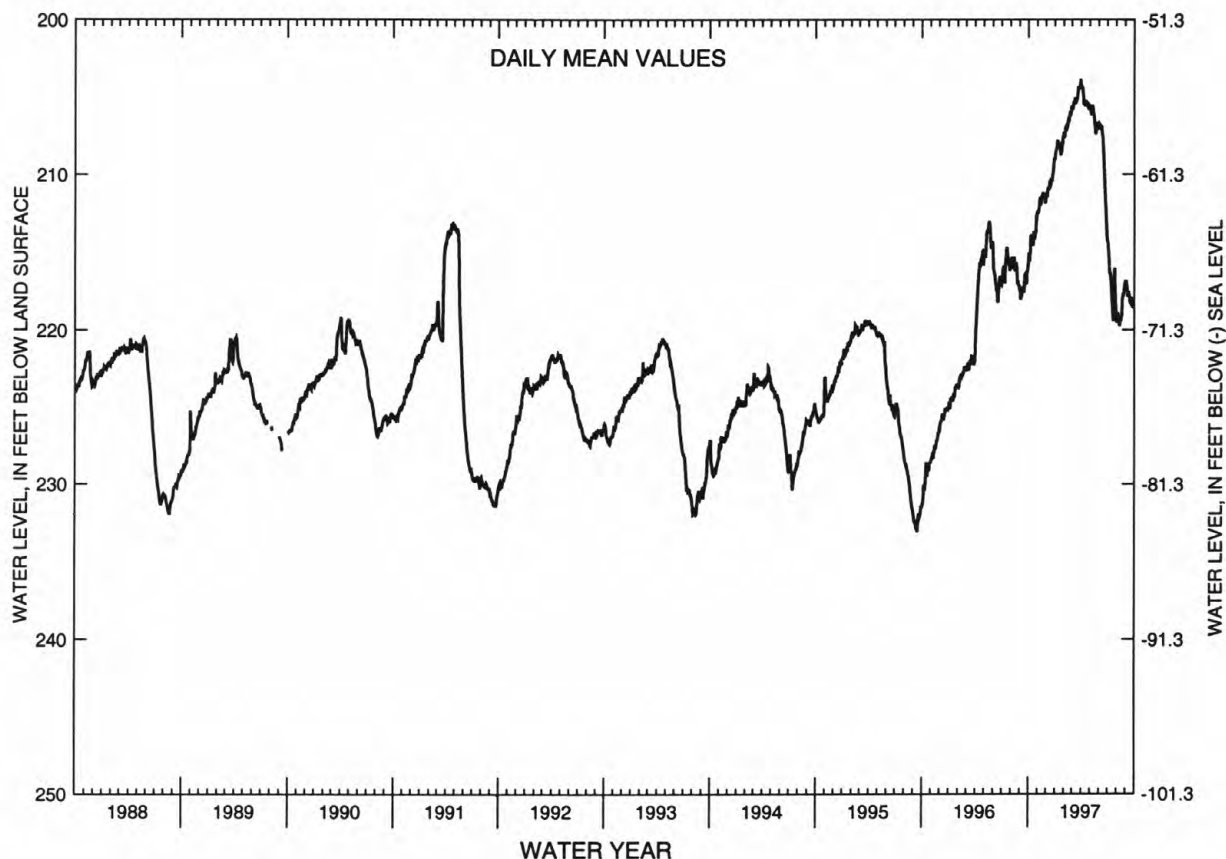
PERIOD OF RECORD.--Mar. 1964 to current year. Records for 1964 to 1978 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	215.44	212.36	211.47	208.41	207.02	205.60	204.49	206.09	206.80	214.92	219.23	217.06
10	213.88	211.48	210.87	207.81	206.98	205.14	205.40	205.53	207.06	216.42	219.55	217.89
15	214.58	211.66	210.56	208.32	206.52	205.04	205.61	206.13	207.76	217.51	219.20	217.81
20	213.71	211.18	210.34	208.56	206.33	204.82	205.41	207.27	209.70	219.14	219.16	218.06
25	213.70	211.31	209.91	208.15	206.09	204.51	205.67	206.81	212.06	216.53	217.64	218.31
EOM	212.46	211.77	209.00	207.38	205.71	203.86	205.56	207.00	214.07	218.90	216.97	218.23
MEAN	214.17	211.73	210.44	208.21	206.63	204.98	205.20	206.40	209.10	217.01	218.72	217.81
WTR YR 1997	MEAN 210.90	HIGH 203.86	MAR 31	LOW 219.75	AUG 12							

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.

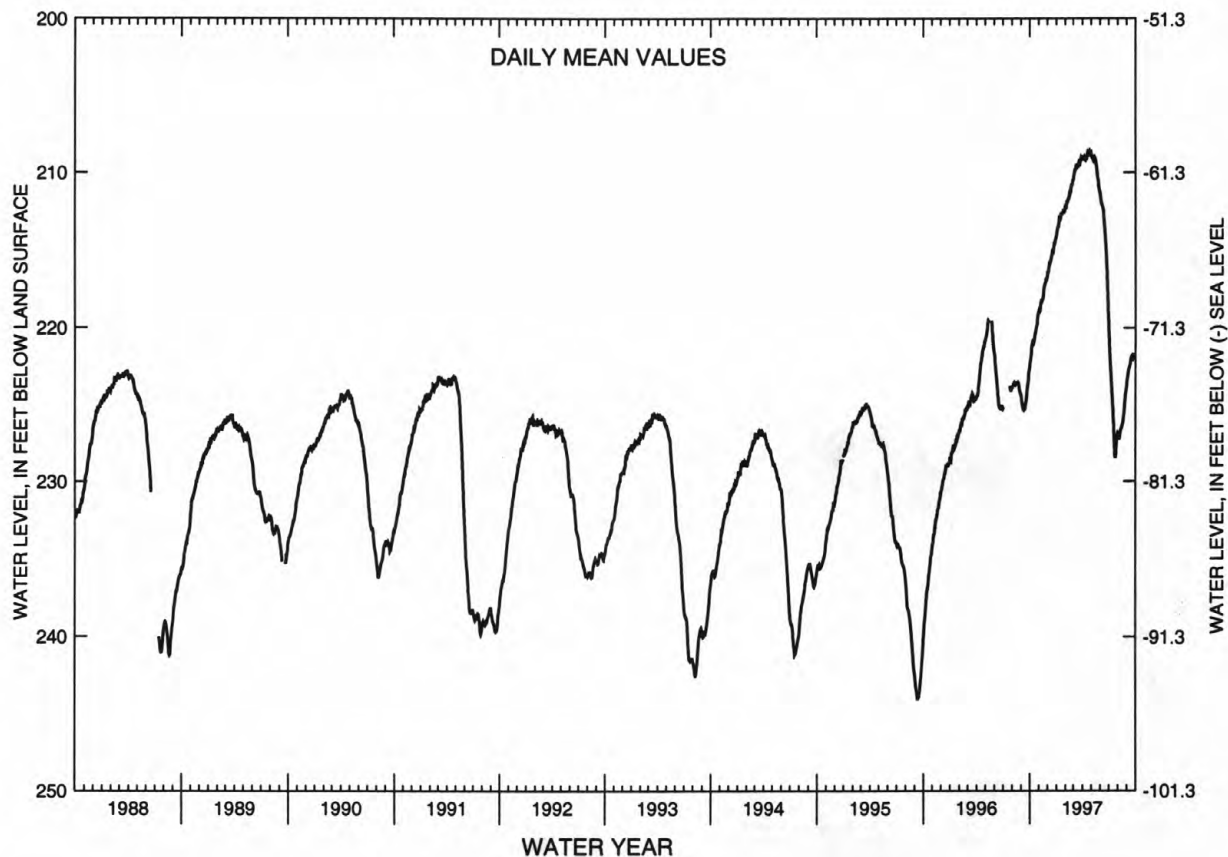
PERIOD OF RECORD.--Dec. 1963 to current year. Records for 1963 to 1977 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	222.04	218.88	216.34	213.54	211.93	210.02	209.20	209.09	211.91	221.60	227.04	223.22
10	221.06	218.30	215.81	213.04	211.75	209.58	209.18	209.04	212.20	223.35	226.86	222.62
15	220.95	218.11	215.44	212.94	211.37	209.51	209.20	209.08	213.11	224.97	226.53	222.20
20	220.37	217.32	214.98	212.59	211.11	209.40	208.80	209.63	214.41	227.16	226.14	221.78
25	219.94	217.02	214.56	212.39	210.77	209.31	208.78	210.41	216.24	228.43	225.18	221.76
EOM	219.02	216.74	214.14	212.18	210.52	208.94	208.80	211.23	219.07	226.99	224.05	221.77
MEAN	220.77	217.87	215.31	212.97	211.42	209.56	208.96	209.66	213.91	225.00	226.09	222.38
WTR YR 1997	MEAN 216.20 HIGH 208.65 APR 24 LOW 228.48 JUL 24											

NJ-WRD WELL NO. 07-0413



GROUND-WATER LEVELS

73

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.

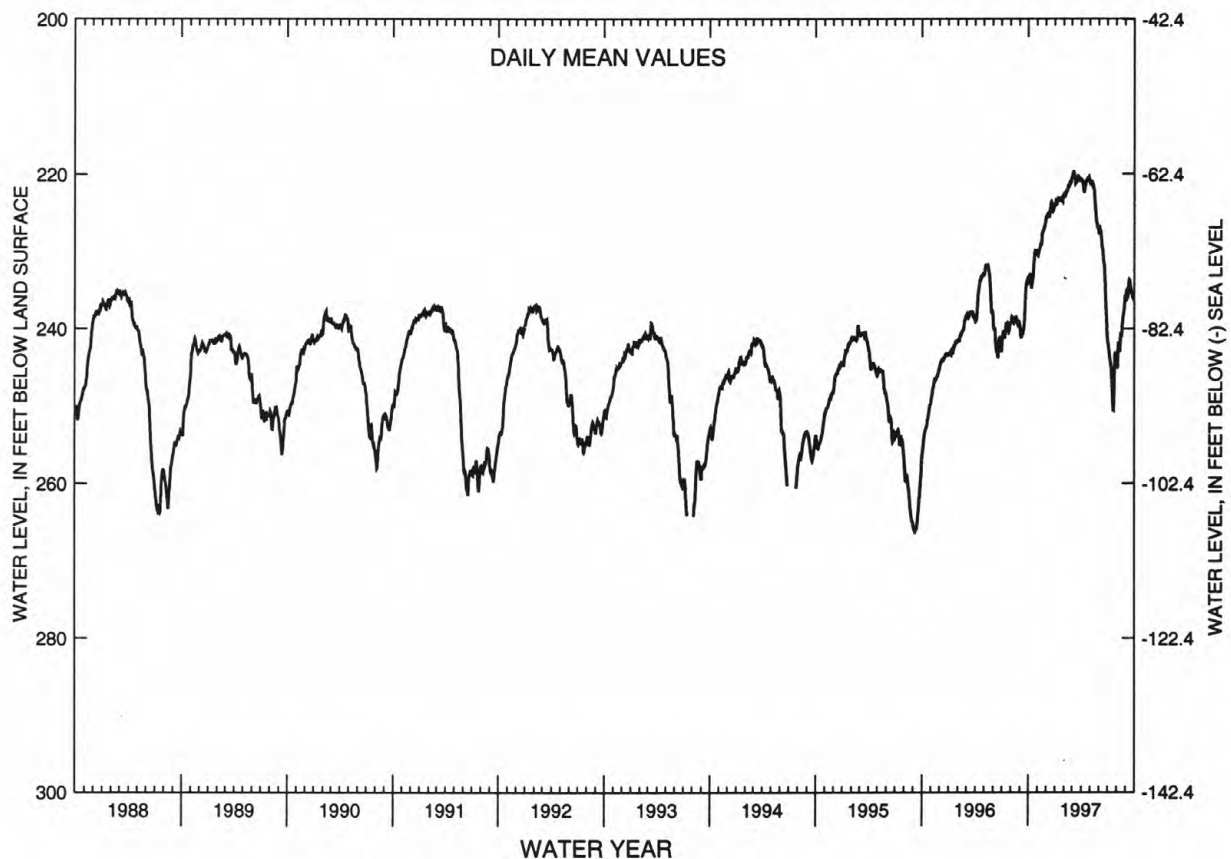
PERIOD OF RECORD.--Aug. 1967 to current year. Records for 1967 to 1978 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	233.14	230.26	225.55	223.40	222.61	219.84	220.95	221.32	227.13	242.34	244.97	235.00
10	233.86	229.50	225.51	223.39	222.13	220.43	222.04	221.18	228.15	244.09	242.13	235.84
15	233.93	229.25	224.97	223.25	221.68	220.86	221.65	221.76	229.77	245.87	240.97	233.59
20	231.67	227.53	223.60	223.18	221.38	220.52	220.83	224.15	231.72	250.15	240.61	234.67
25	229.91	227.02	224.58	223.22	221.09	220.78	220.58	226.28	236.09	245.98	238.22	235.33
EOM	230.18	225.93	224.14	222.67	220.53	220.61	220.84	226.99	240.56	243.43	235.90	235.49
MEAN	232.27	228.46	224.73	223.35	221.81	220.50	221.10	223.32	231.39	245.10	240.93	235.12
WTR YR 1997	MEAN 229.08	HIGH 219.59	MAR 6	LOW 250.60	JUL 22							

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.--Digital water-level recorder--60-minute punch. Periodic measurements, Apr. 1975 to Jan. 1997. 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.

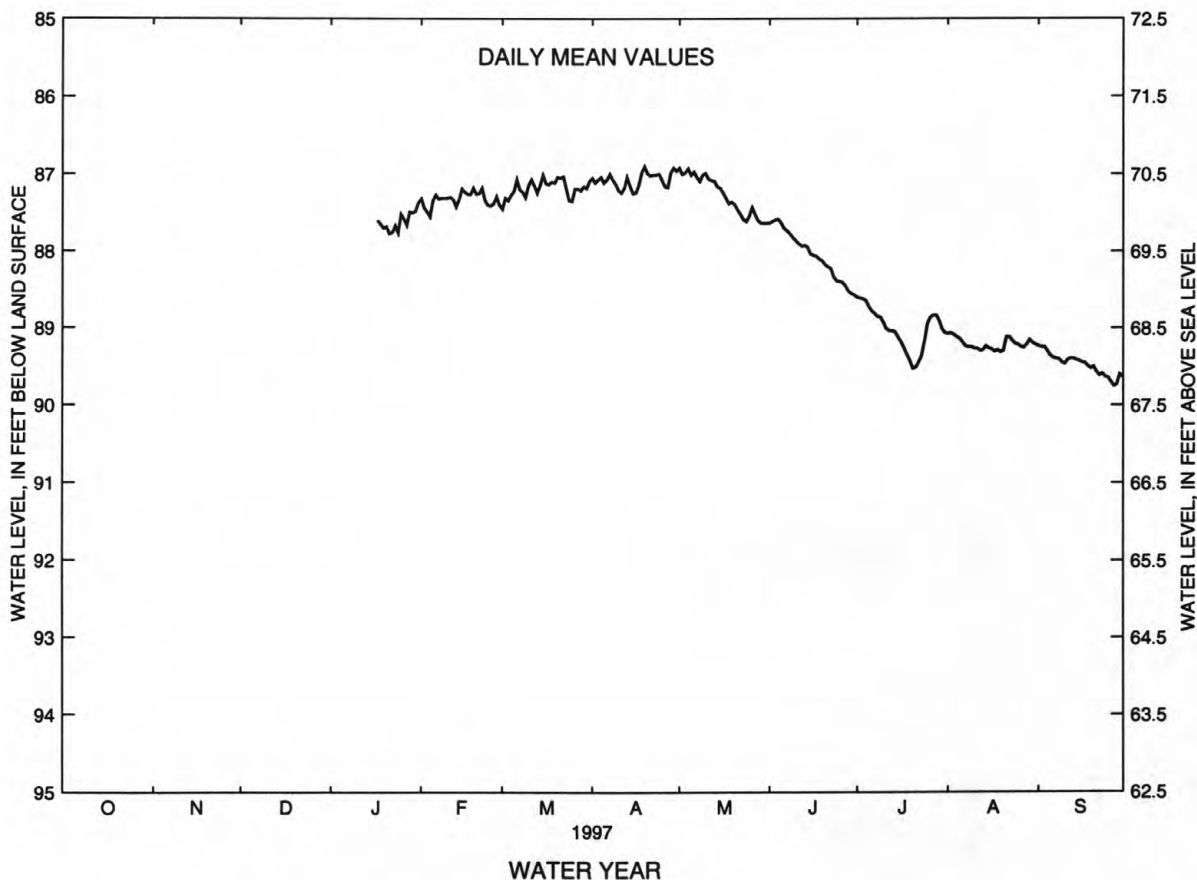
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 84.87 ft below land surface, Apr. 27, 1973; lowest, 90.46 ft below land surface, Aug 30, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	87.34	87.22	87.11	87.01	87.63	88.72	89.13	89.35
10	---	---	---	---	87.31	87.14	87.21	86.99	87.86	88.93	89.26	89.46
15	---	---	---	---	87.19	87.01	87.25	87.18	88.03	89.12	89.26	89.42
20	---	---	---	87.68	87.26	87.04	86.99	87.39	88.17	89.52	89.29	89.50
25	---	---	---	87.52	87.41	87.35	87.08	87.54	88.39	88.94	89.21	89.64
EOM	---	---	---	87.37	87.40	87.09	86.96	87.63	88.57	89.06	89.21	89.63
MEAN	---	---	---	---	87.32	87.18	87.08	87.27	88.04	89.01	89.21	89.48

WTR YR 1997 HIGH 86.90 APR 19 LOW 89.75 SEP 27

NJ-WRD WELL NO. 07-0118



GROUND-WATER LEVELS

75

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.

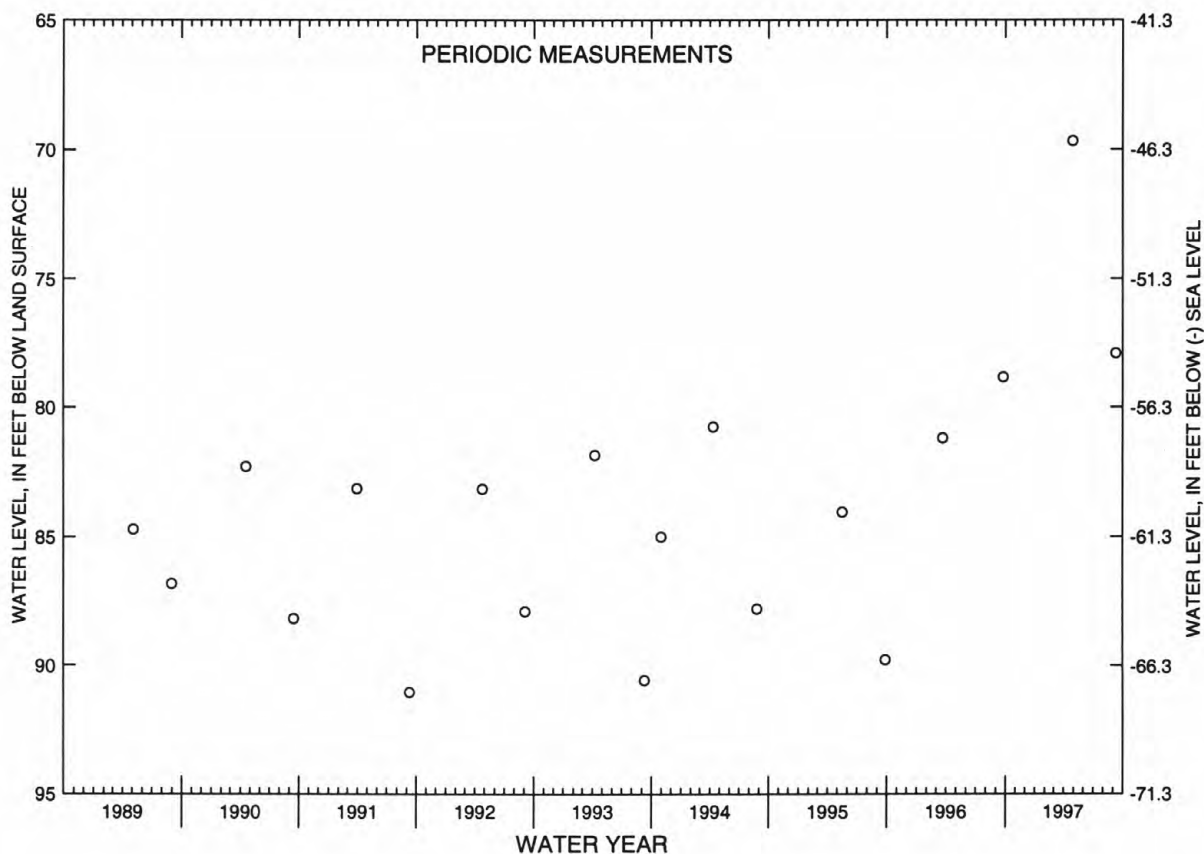
PERIOD OF RECORD.--June 1963 to current year. Records for 1963 to 1982 and 1988 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 29	69.67	SEP 10	77.90

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.

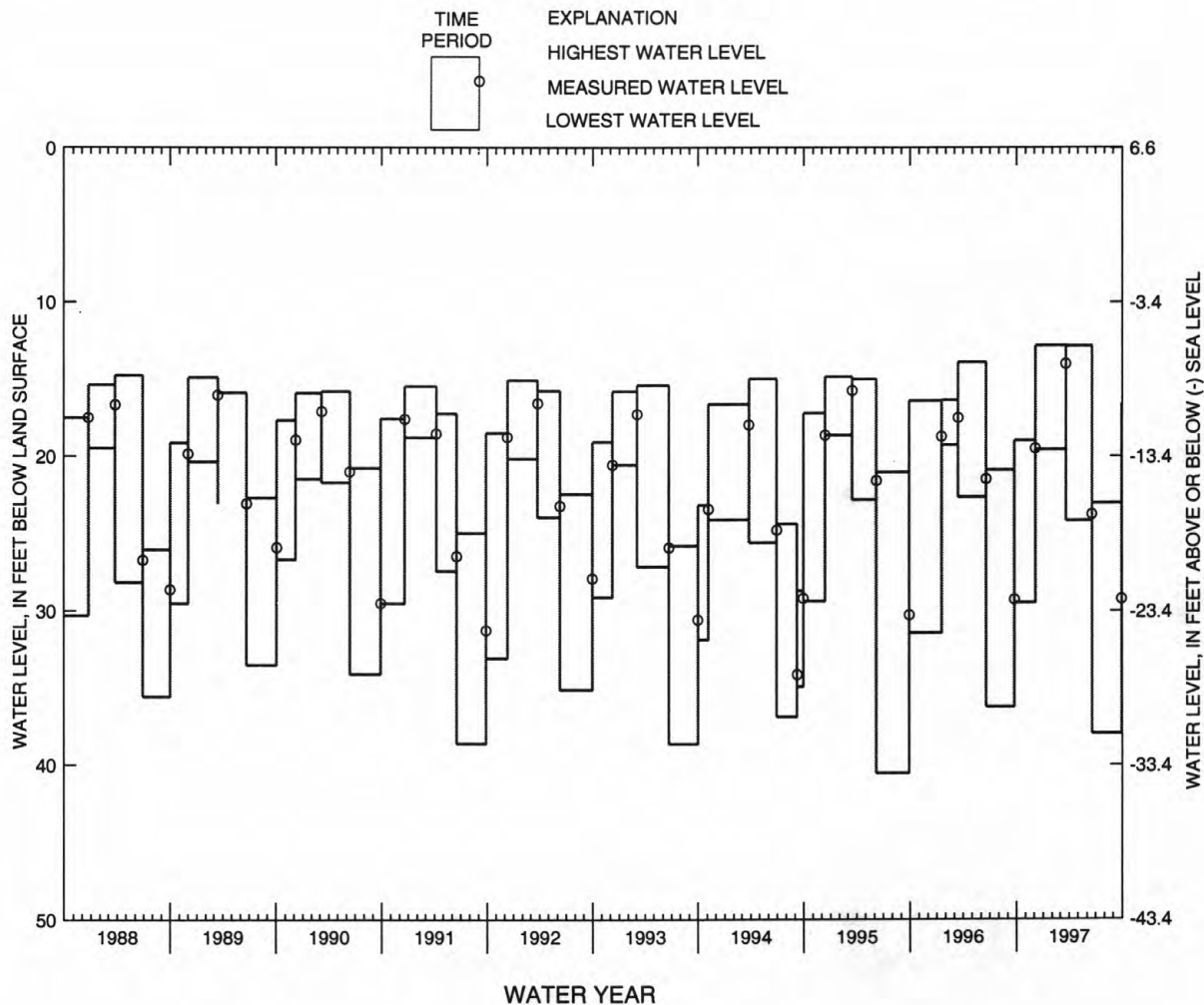
PERIOD OF RECORD.--June 1957 to current year. Records for 1957 to 1982 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.81 ft below land surface, between Dec. 5, 1996 and Mar. 20, 1997; lowest, 41.30 ft below land surface, Sept. 3, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 24, 1996 TO DEC. 5, 1996	18.99	29.48	DEC. 5, 1996	19.50
DEC. 5, 1996 TO MAR. 20, 1997	12.81	19.56	MAR. 20, 1997	13.99
MAR. 20, 1997 TO JUNE 19, 1997	12.85	24.16	JUNE 19, 1997	23.74
JUNE 19, 1997 TO SEPT. 30, 1997	23.04	37.97	SEPT. 30, 1997	29.23

NJ-WRD WELL NO. 09-0150



GROUND-WATER LEVELS

77

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.

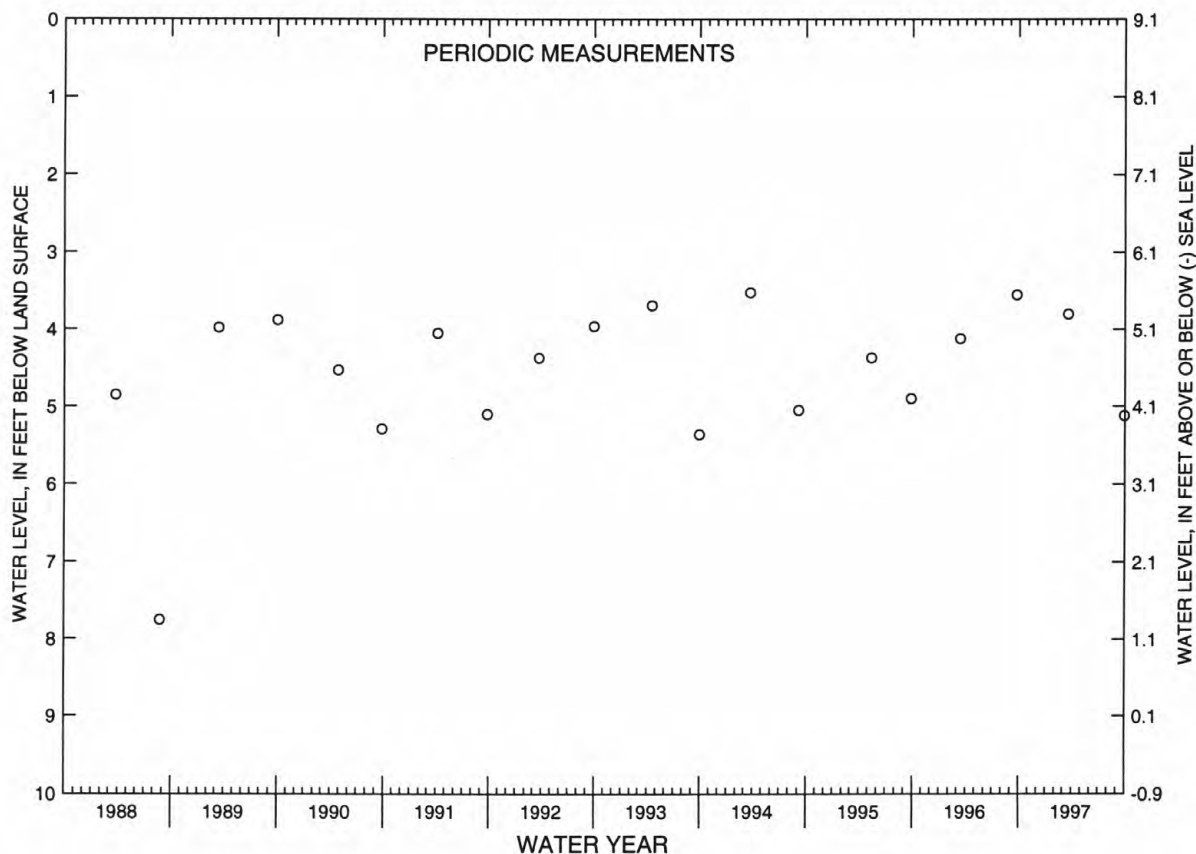
PERIOD OF RECORD.--Jan. 1963 to current year. Records for 1963 to 1982 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 20	3.80	SEP 30	5.12

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.--Submersible logger pressure transducer--60 minute recording interval. Water-level recorder, Feb. 1990 to June 1997.

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.

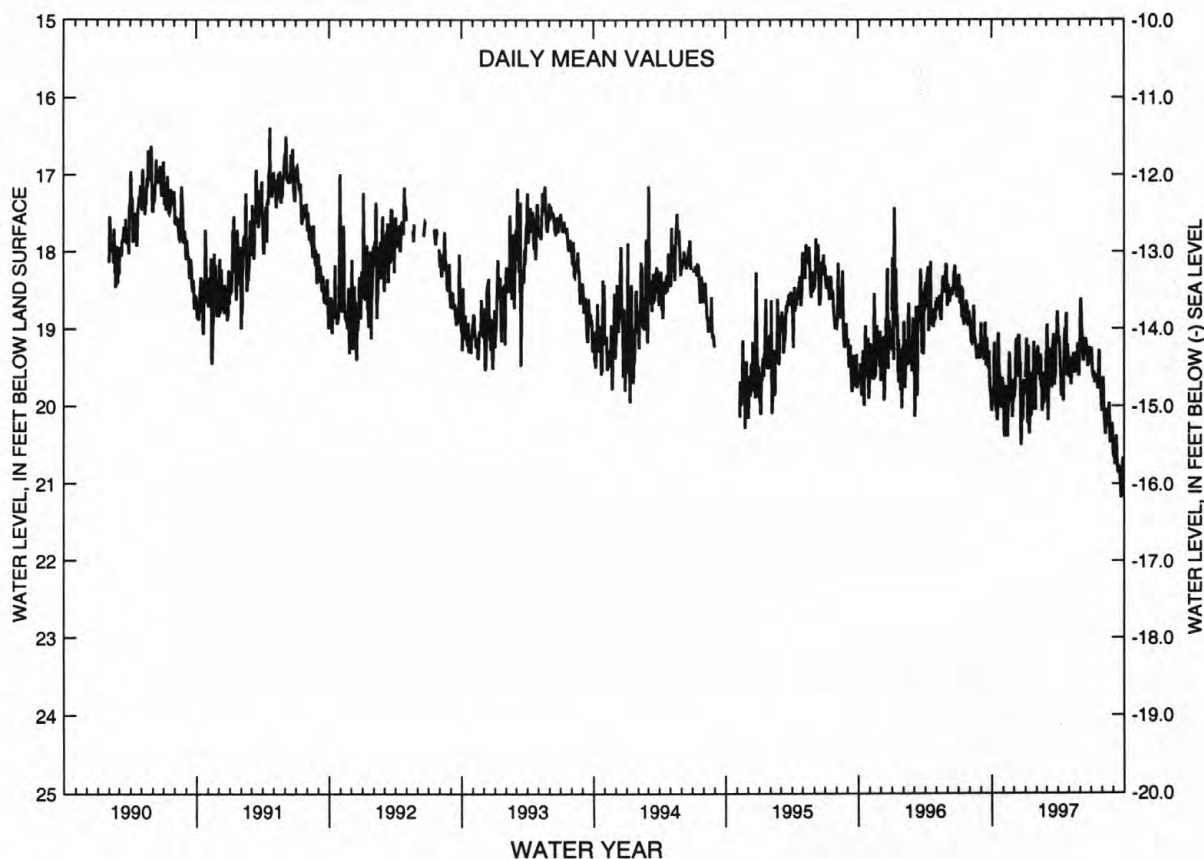
PERIOD OF RECORD.--Feb. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.04 ft below land surface, Apr. 21, 1991; lowest, 21.56 ft below land surface, Sept. 30, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.87	20.39	19.72	19.13	19.23	20.18	19.11	19.56	---	19.45	19.63	20.56
10	19.67	19.96	19.55	19.22	19.33	19.33	---	19.37	19.37	19.56	20.28	20.38
15	20.05	20.09	19.10	19.83	19.73	19.72	19.87	19.33	19.16	19.62	20.05	20.80
20	19.06	19.50	20.23	19.84	19.57	19.07	19.00	19.31	19.32	19.63	20.06	20.87
25	19.86	19.88	20.12	19.17	19.74	19.63	19.08	19.32	19.37	19.28	20.47	20.83
EOM	19.68	19.85	19.72	19.30	19.29	18.78	19.48	19.34	19.46	19.96	20.40	21.11
MEAN	19.75	19.92	19.66	19.76	19.60	19.39	19.36	19.46	19.21	19.59	20.14	20.76
WTR YR 1997	MEAN 19.72 HIGH 18.61 JUN 3 LOW 21.18 SEP 23											

NJ-WRD WELL NO. 09-0302



GROUND-WATER LEVELS

79

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.

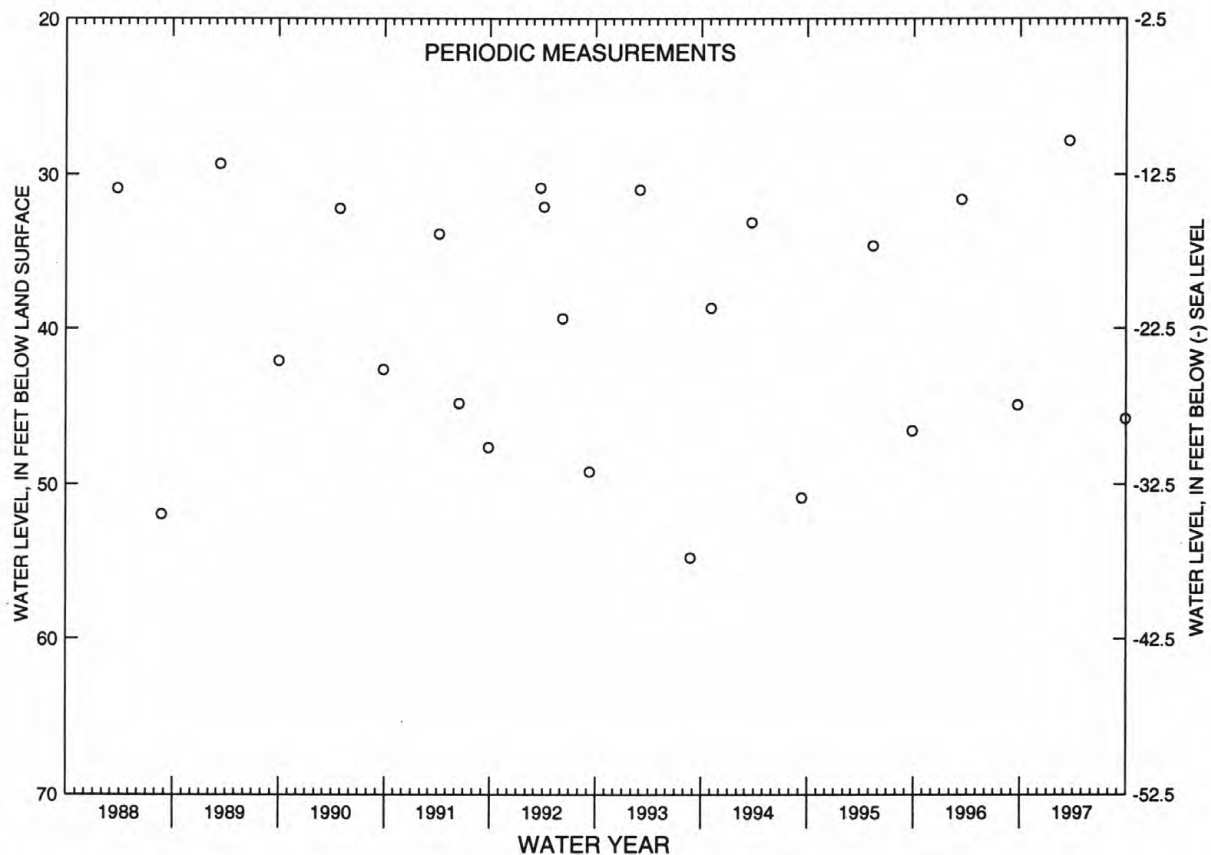
PERIOD OF RECORD.--July 1957 to current year. Records for 1957 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 20	27.81	SEP 30	45.77

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.

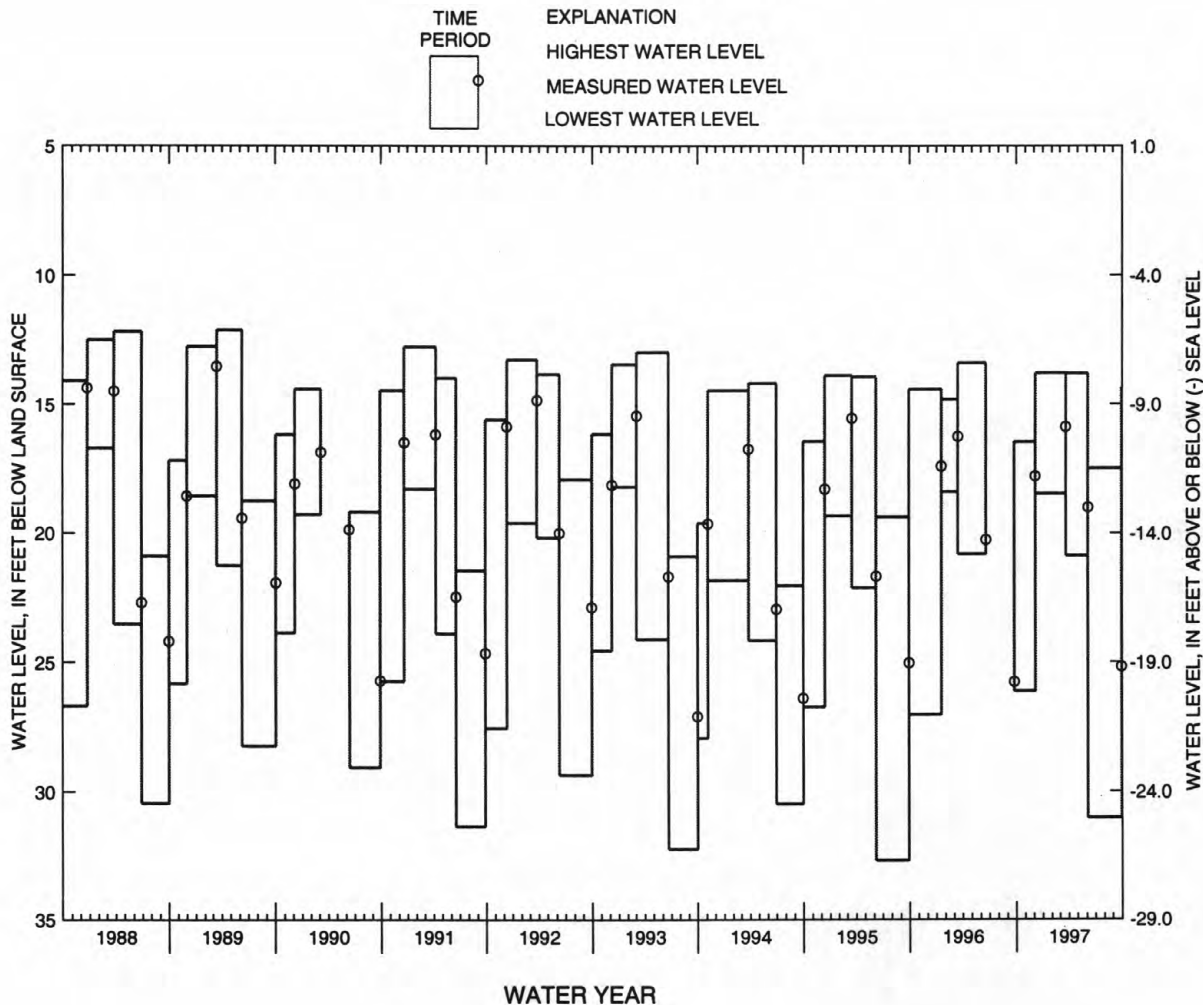
PERIOD OF RECORD.--May 1965 to current year. Records for 1975 to 1980 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 24, 1996 TO DEC. 5, 1996	16.46	26.13	DEC. 5, 1996	17.78
DEC. 5, 1996 TO MAR. 20, 1997	13.78	18.47	MAR. 20, 1997	15.87
MAR. 20, 1997 TO JUNE 5, 1997	13.80	20.88	JUNE 5, 1997	19.00
JUNE 5, 1997 TO SEPT. 30, 1997	17.48	31.02	SEPT. 30, 1997	25.18

NJ-WRD WELL NO. 09-0049



GROUND-WATER LEVELS

81

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.

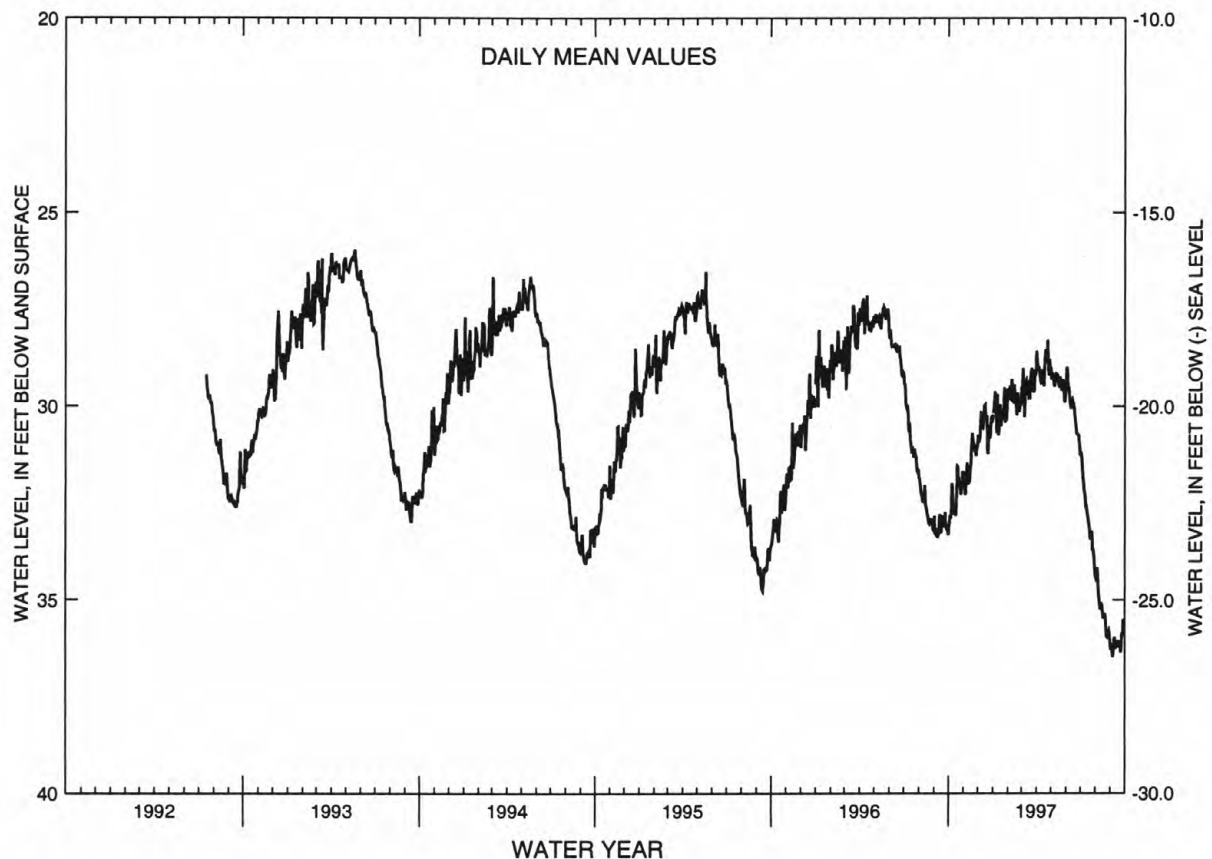
PERIOD OF RECORD.--July 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.93 ft below land surface, May 20, 1993; lowest, 37.21 ft below land surface, Sept. 16, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.90	32.28	30.76	29.62	29.47	29.30	29.02	29.25	29.42	31.64	34.17	36.30
10	32.50	31.63	30.55	29.69	29.63	29.34	29.39	29.18	29.99	32.26	35.13	35.97
15	32.72	31.58	29.97	30.20	29.66	29.51	29.39	29.21	29.90	32.77	35.17	36.17
20	31.55	30.88	31.11	30.21	30.08	29.19	28.53	29.24	30.36	33.20	35.40	36.12
25	32.13	31.08	30.83	29.52	30.03	29.64	28.70	29.43	30.73	33.26	35.96	35.87
EOM	31.78	30.96	30.22	29.55	29.90	29.09	29.13	29.68	31.23	34.24	36.03	35.92
MEAN	32.36	31.43	30.50	30.14	29.79	29.45	29.00	29.38	30.10	32.76	35.24	36.11
WTR YR 1997 MEAN 31.36 HIGH 28.29 APR 24 LOW 36.48 SEP 6												

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.

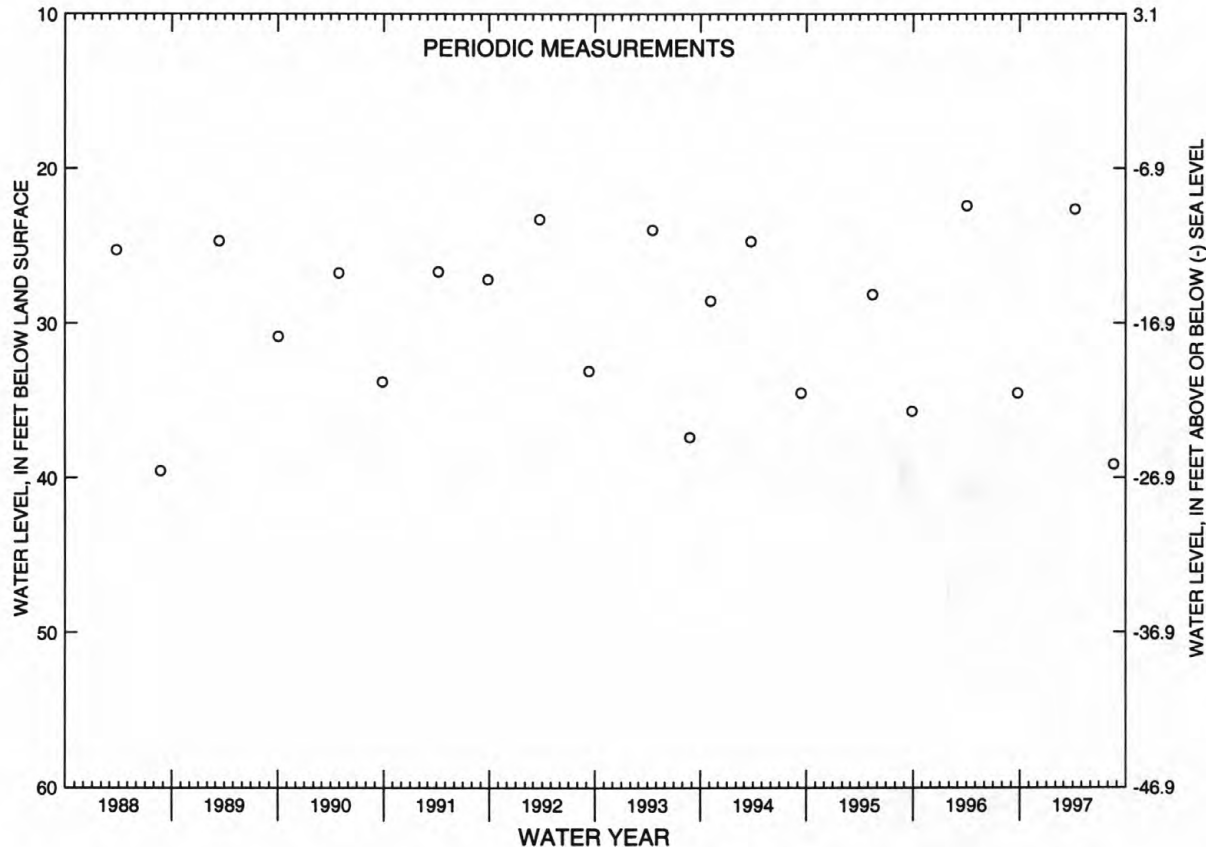
PERIOD OF RECORD.--Jan. 1963 to current year. Records for 1963 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 10	22.65	AUG 21	39.14

NJ-WRD WELL NO. 09-0060



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.

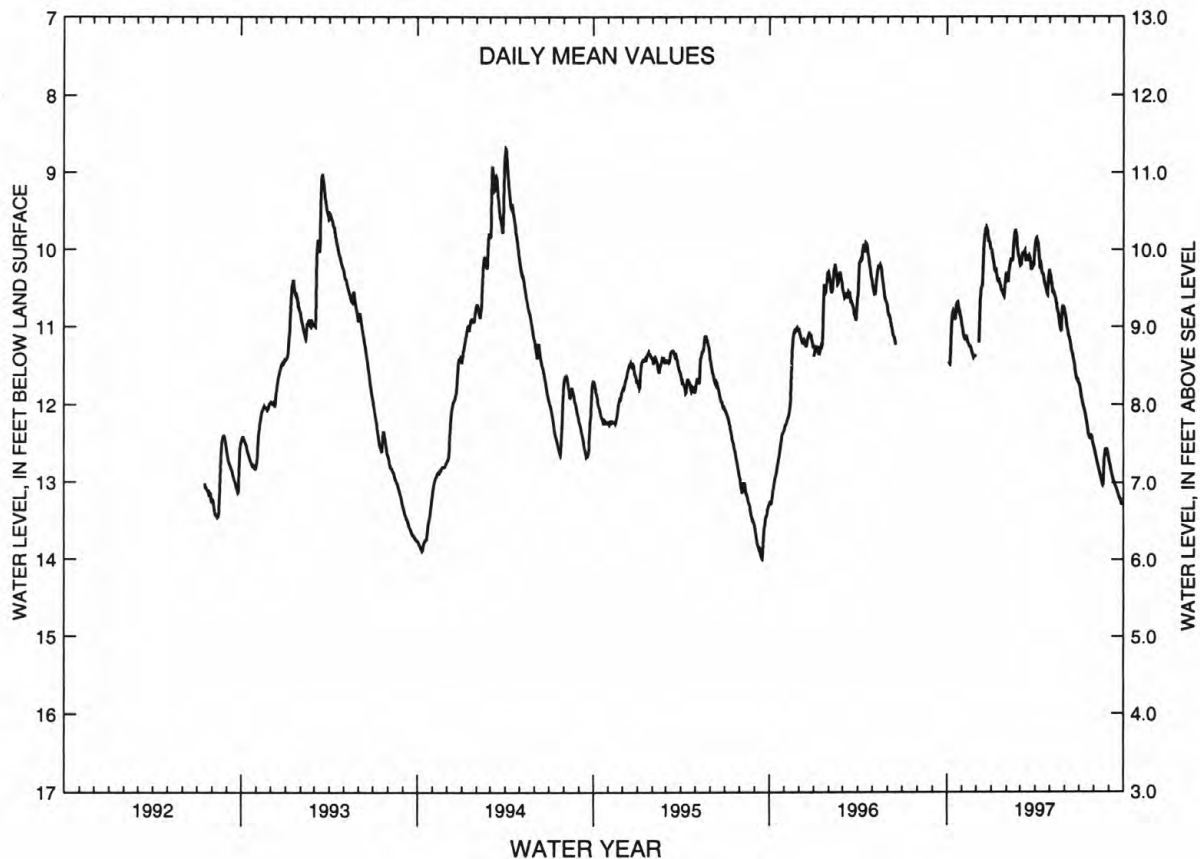
PERIOD OF RECORD.--July 1992 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.45	11.12	---	10.14	10.34	10.10	9.88	10.44	10.95	11.86	12.66	12.84
10	11.04	11.12	10.58	10.24	10.13	10.02	---	10.55	11.13	12.02	12.80	12.97
15	10.81	11.23	10.16	10.42	9.99	10.07	10.30	10.68	11.29	12.15	12.93	13.05
20	10.74	11.30	9.73	10.47	9.79	10.08	10.42	10.87	11.43	12.36	13.02	13.14
25	10.75	11.39	9.84	10.54	10.06	10.25	10.54	11.06	11.63	12.39	12.57	13.22
EOM	10.95	---	10.00	10.31	10.17	10.02	10.30	10.75	11.72	12.52	12.68	13.28
MEAN	10.93	11.23	10.15	10.36	10.08	10.12	10.23	10.68	11.29	12.17	12.75	13.05
WTR YR 1997	MEAN 11.11 HIGH 9.71 DEC 21 LOW 13.28 SEP 27											

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.

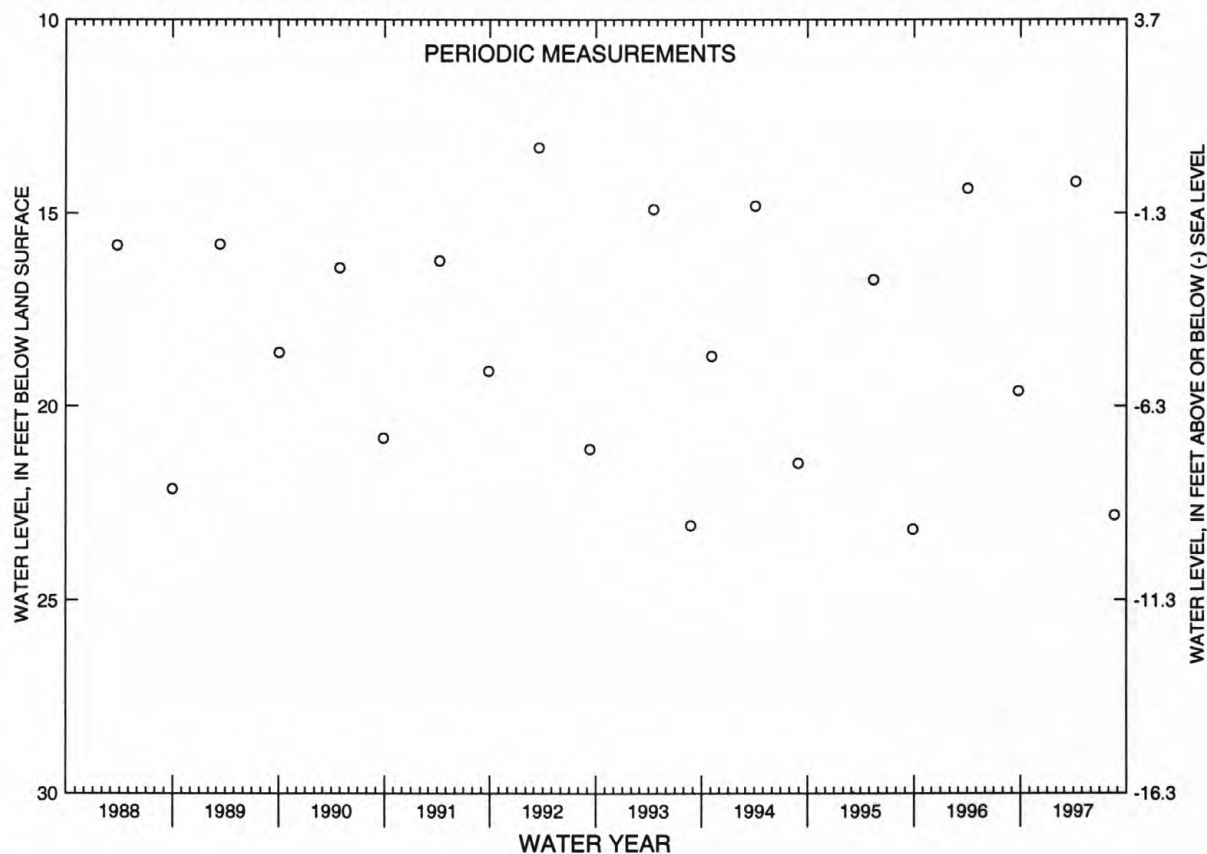
PERIOD OF RECORD.--July 1957 to current year. Records for 1957 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 10	14.19	AUG 21	22.81

NJ-WRD WELL NO. 09-0080



GROUND-WATER LEVELS

85

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.

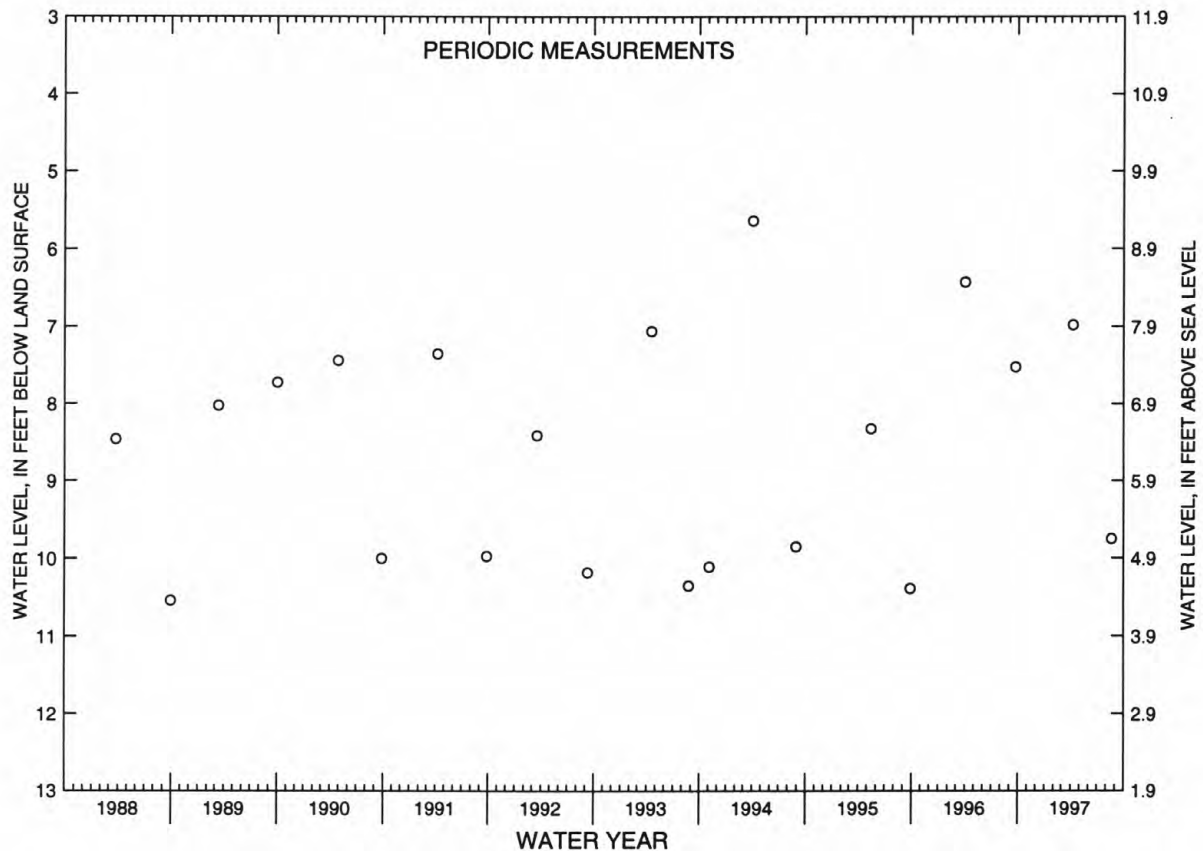
PERIOD OF RECORD.--June 1957 to current year. Records for 1957 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 10	6.98	AUG 21	9.75

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.

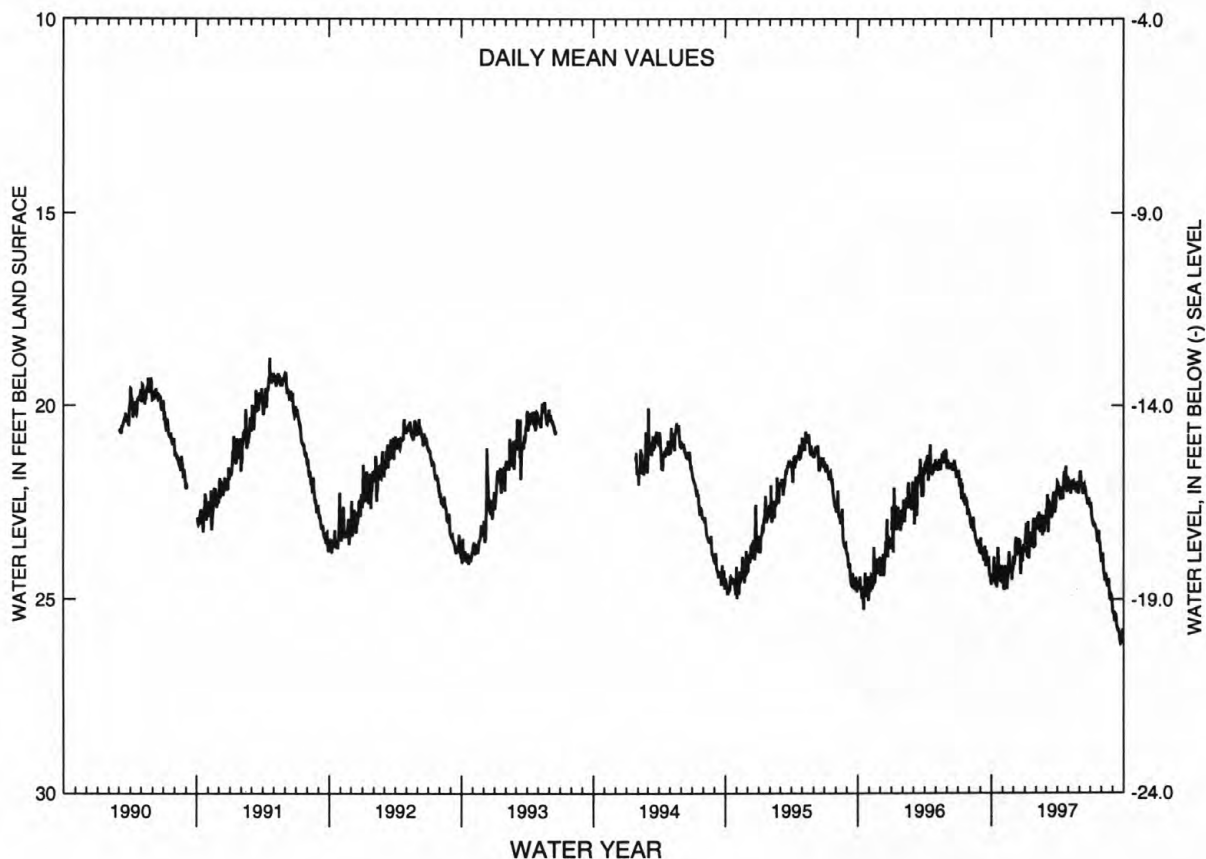
PERIOD OF RECORD.--Mar. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.74 ft below land surface, May 15, 1991; lowest, 27.02 ft below land surface, Sept. 30, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.53	24.75	23.97	23.03	22.83	22.52	22.17	22.09	21.89	22.80	23.80	25.42
10	24.31	24.33	23.77	22.98	23.00	22.49	22.42	21.92	22.24	23.00	24.44	25.38
15	24.59	24.51	23.42	23.54	22.93	22.59	22.38	21.94	22.12	23.11	24.41	25.76
20	23.71	23.96	24.15	23.41	23.22	22.31	21.69	21.96	22.35	23.39	24.62	25.89
25	24.41	24.23	23.97	22.90	23.17	22.75	21.85	22.02	22.45	23.21	24.98	25.85
EOM	24.20	24.13	23.62	22.90	23.04	22.13	22.02	22.05	22.62	23.90	25.15	26.14
MEAN	24.33	24.31	23.75	23.43	23.05	22.57	22.07	22.07	22.19	23.17	24.50	25.72
WTR YR 1997	MEAN 23.44 HIGH 21.56 APR 24 LOW 26.16 SEP 23											

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.

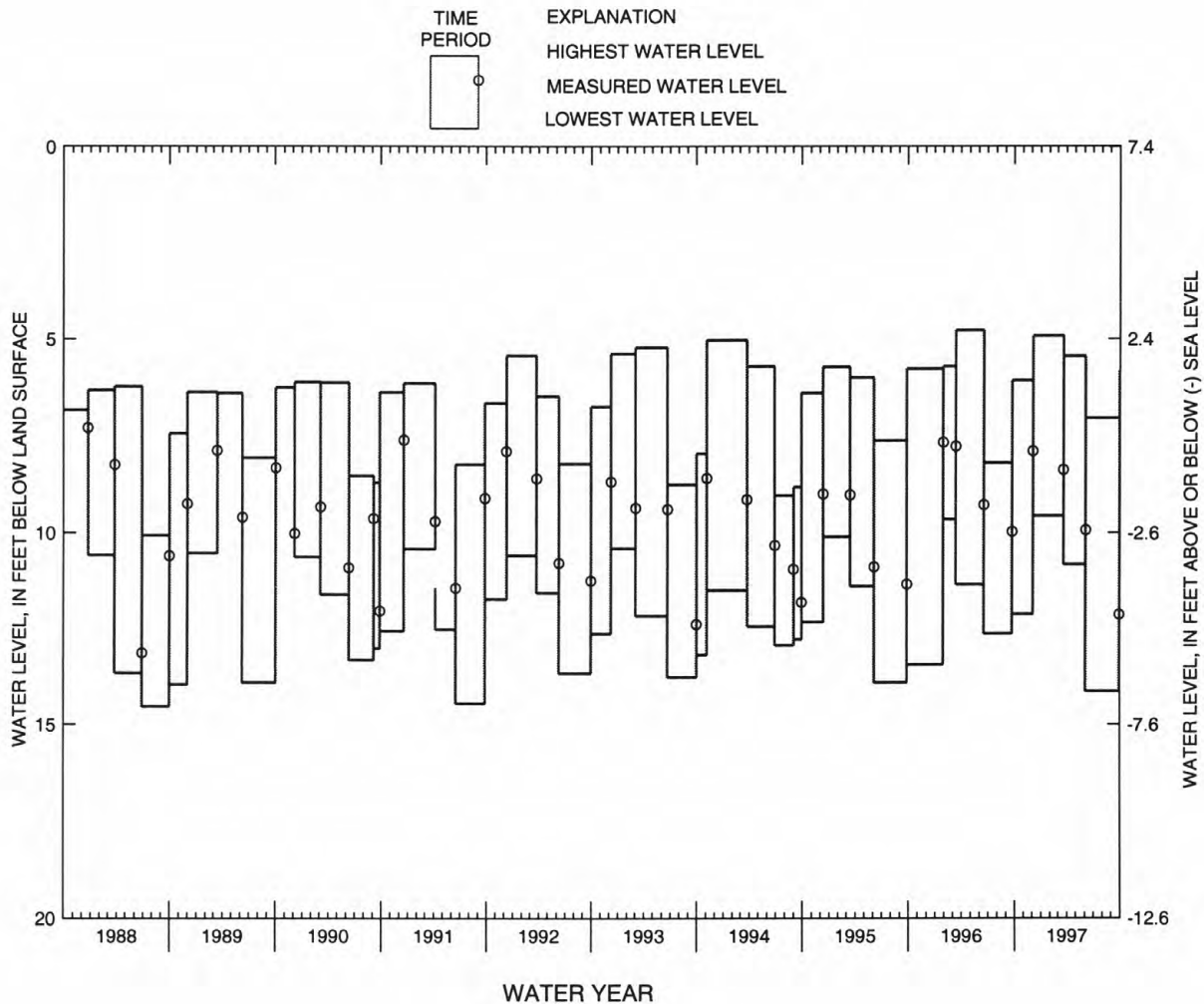
PERIOD OF RECORD.--Aug. 1957 to current year. Records for 1957 to 1982 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 24, 1996 TO DEC. 5, 1996	6.08	12.11	DEC. 5, 1996	7.90
DEC. 5, 1996 TO MAR. 20, 1997	4.92	9.56	MAR. 20, 1997	8.38
MAR. 20, 1997 TO JUNE 5, 1997	5.45	10.82	JUNE 5, 1997	9.93
JUNE 5, 1997 TO SEPT. 30, 1997	7.05	14.14	SEPT. 30, 1997	12.12

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.

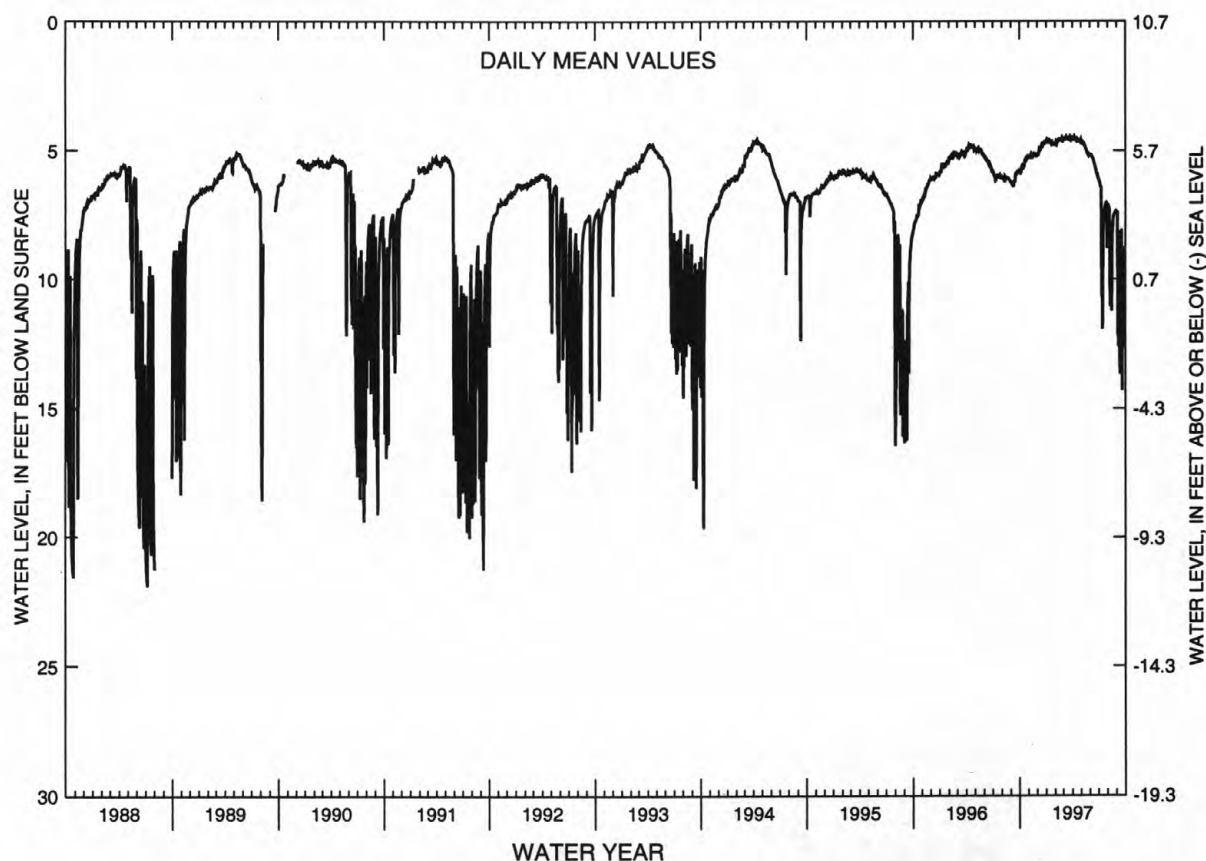
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.73 ft below land surface, Apr. 5, 1958; lowest, 22.01 ft below land surface, July 9, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.86	5.27	5.15	4.57	4.66	4.52	4.52	4.69	5.16	6.23	7.24	8.61
10	5.60	5.18	5.00	4.53	4.62	4.50	4.54	4.69	5.26	6.41	11.05	8.48
15	5.64	5.26	4.84	4.70	4.51	4.47	4.60	4.81	5.45	11.93	8.70	9.81
20	5.38	5.11	4.73	4.71	4.60	4.50	4.61	4.97	5.64	7.42	7.83	9.43
25	5.32	5.18	4.73	4.69	4.63	4.60	4.61	5.13	5.89	7.07	7.45	12.57
EOM	5.22	5.21	4.67	4.72	4.62	4.47	4.59	5.19	6.08	8.03	7.38	8.73
MEAN	5.54	5.20	4.87	4.68	4.62	4.53	4.55	4.89	5.51	7.53	7.95	9.78

WTR YR 1997 MEAN 5.81 HIGH 4.46 MAR 6 LOW 14.30 SEP 21

NJ-WRD WELL NO. 09-0099



GROUND-WATER LEVELS

89

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 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.

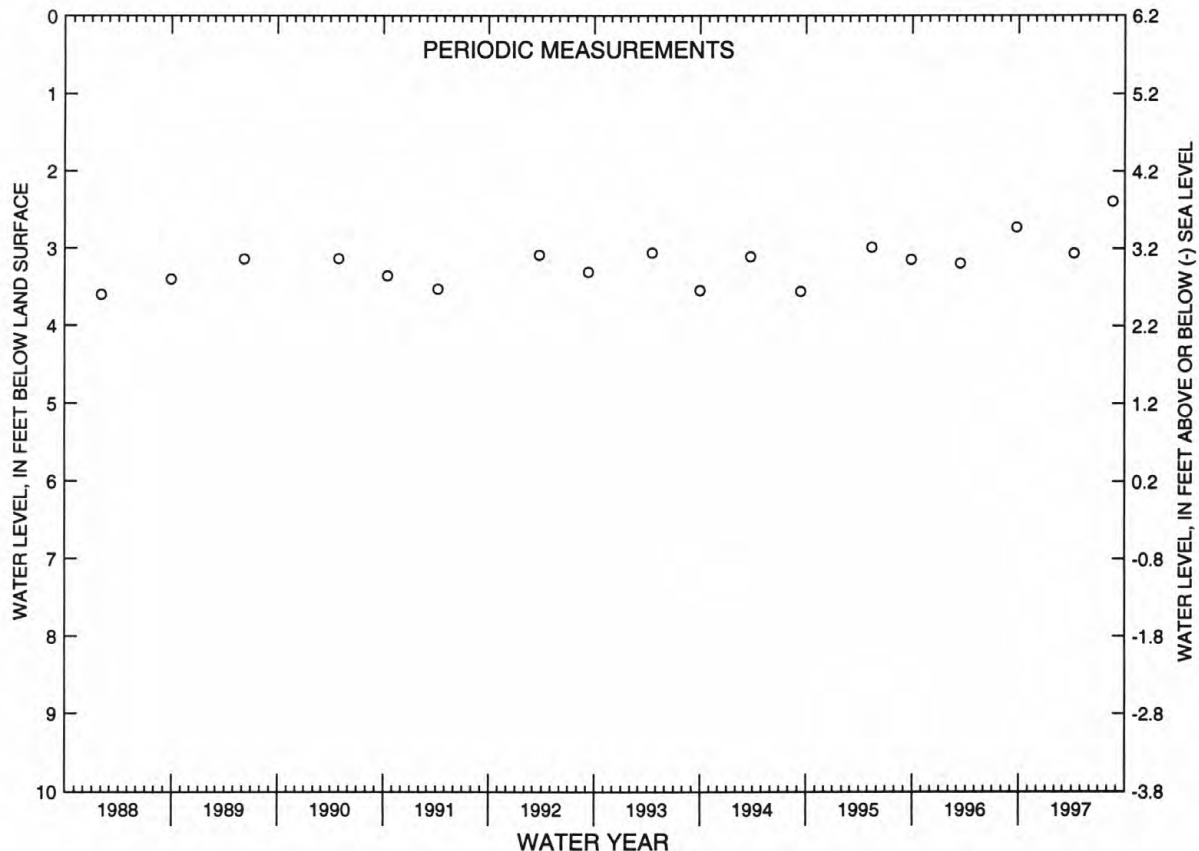
PERIOD OF RECORD.--Mar. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.39 ft below land surface, Aug. 21, 1997; lowest, 3.79 ft below land surface, Aug. 12, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 10	3.06	AUG 21	2.39

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 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.

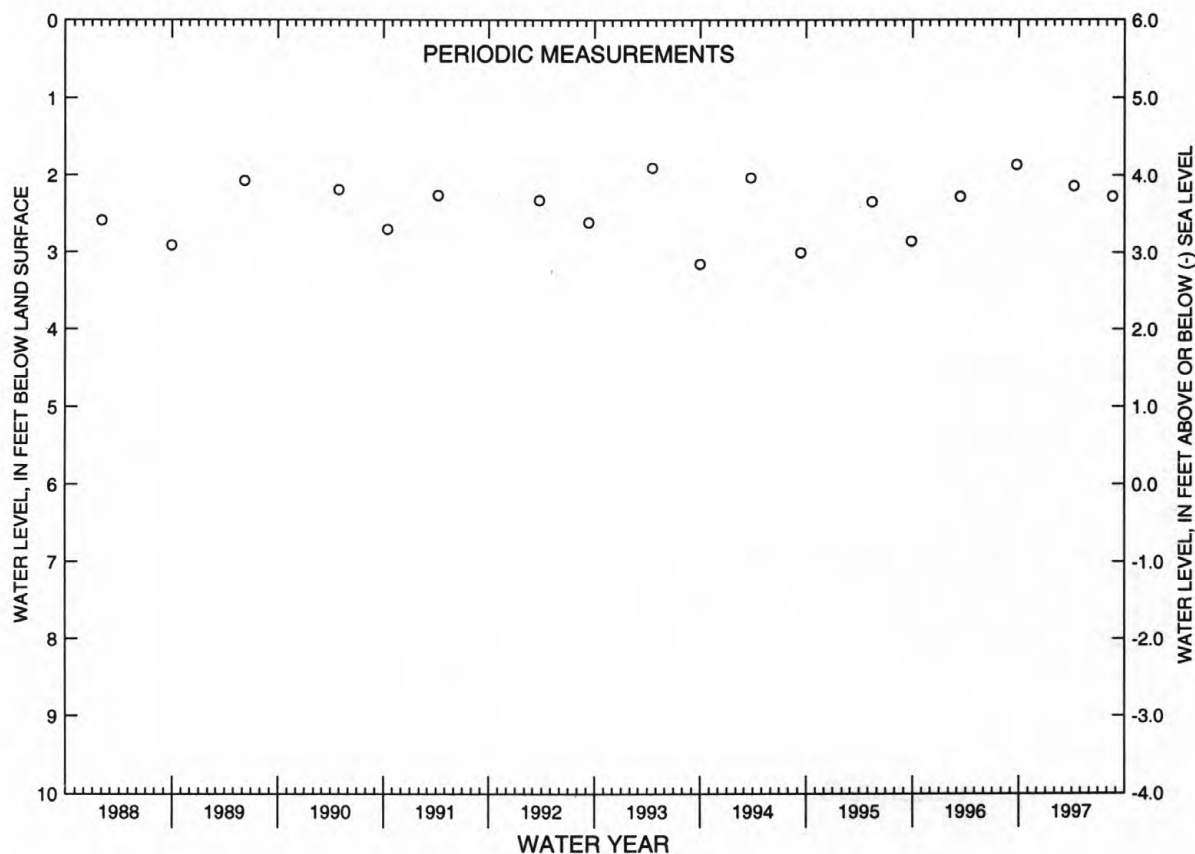
PERIOD OF RECORD.--Mar. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 10	2.14	AUG 21	2.27

NJ-WRD WELL NO. 11-0119



GROUND-WATER LEVELS

91

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.

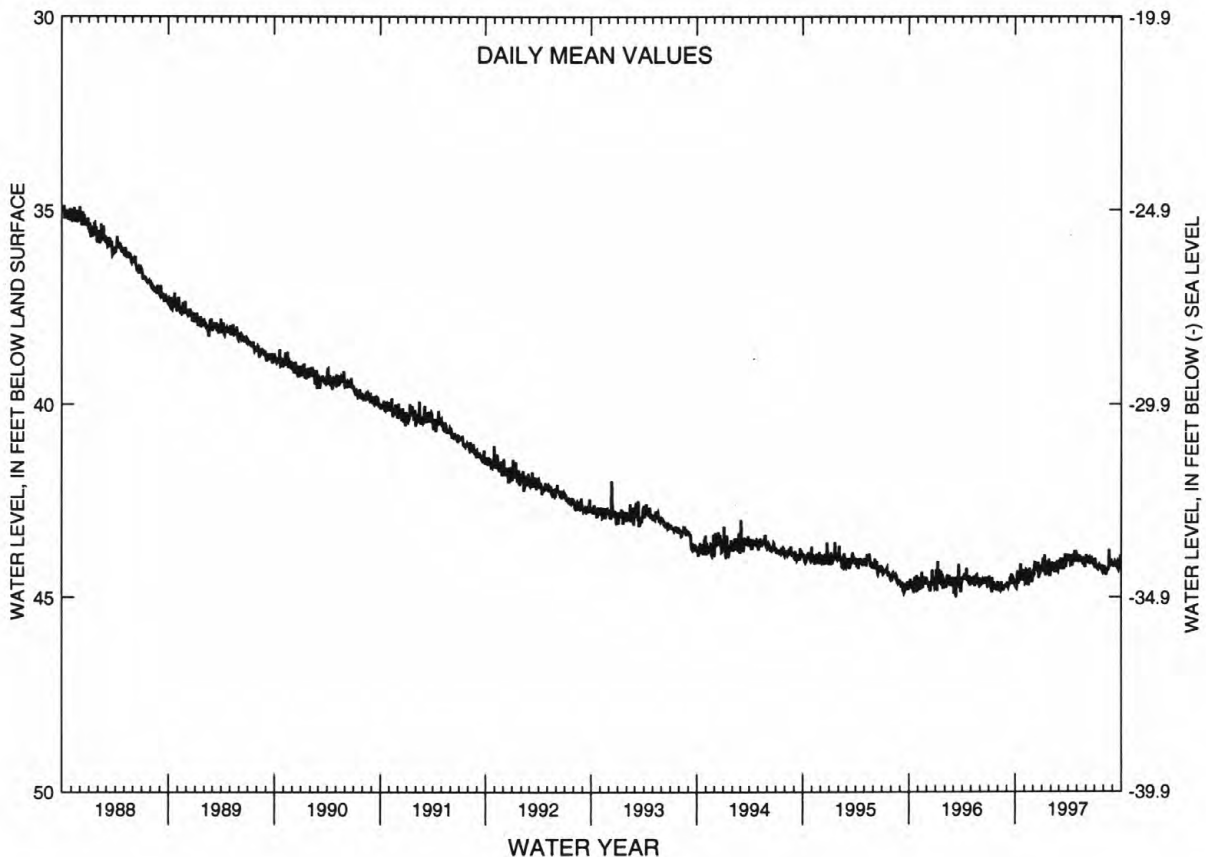
PERIOD OF RECORD.--Mar. 1972 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.78	44.65	44.43	44.00	44.10	44.08	44.07	44.05	43.98	44.15	44.20	44.19
10	44.44	44.43	44.29	43.92	44.17	44.02	44.17	43.93	44.10	44.22	44.41	44.09
15	44.59	44.70	44.23	44.34	44.12	44.09	44.20	43.96	44.06	44.23	44.29	44.16
20	44.18	44.33	44.37	44.25	44.31	44.02	43.89	44.01	44.07	44.26	44.18	44.08
25	44.48	44.44	44.34	44.03	44.33	44.23	43.91	44.00	44.07	44.18	44.19	44.13
EOM	44.37	44.50	44.30	44.16	44.27	43.90	43.97	44.11	44.18	44.38	44.14	44.04
MEAN	44.50	44.50	44.27	44.25	44.22	44.11	44.00	44.04	44.05	44.21	44.23	44.16
WTR YR 1997	MEAN 44.21 HIGH 43.78 AUG 21 LOW 44.78 OCT 5											

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.

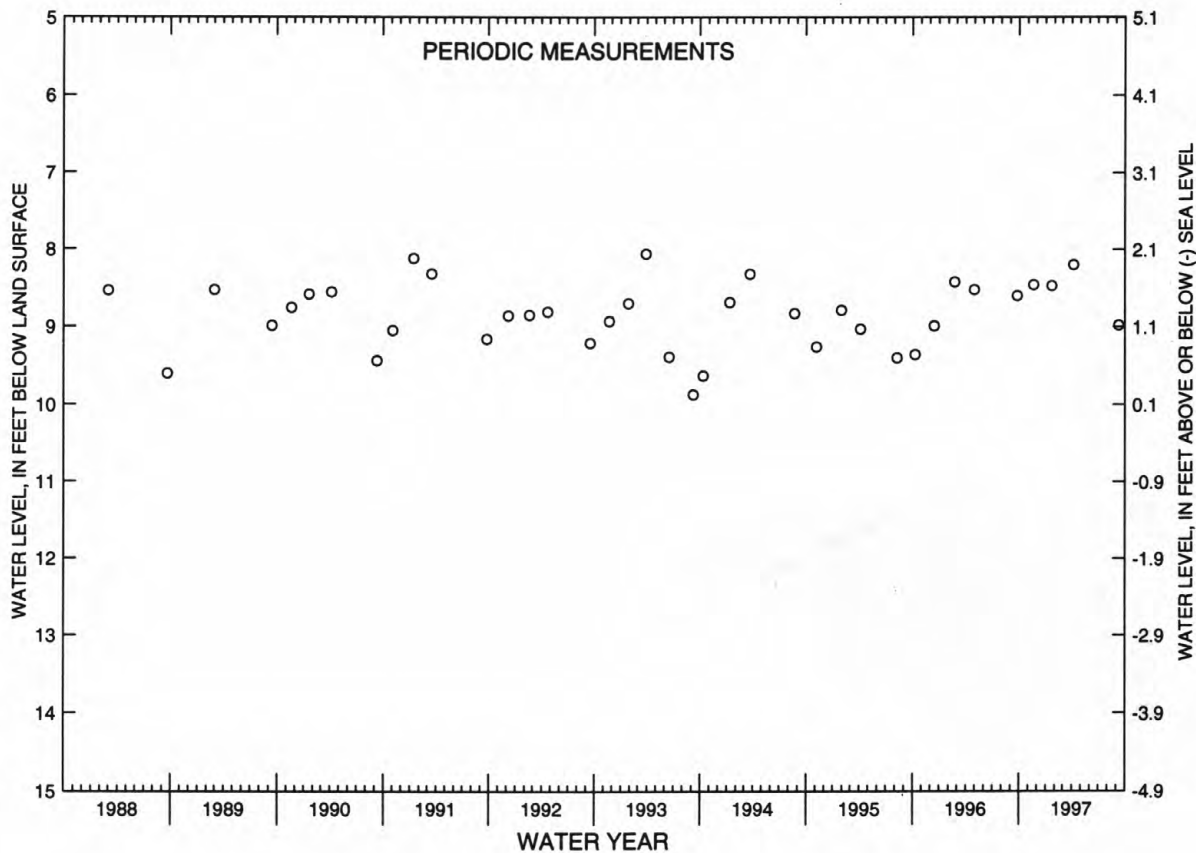
PERIOD OF RECORD.--Mar. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	8.46	APR 8	8.20
JAN 23	8.47	SEP 10	8.98

NJ-WRD WELL NO. 11-0097



GROUND-WATER LEVELS
CUMBERLAND COUNTY

93

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.

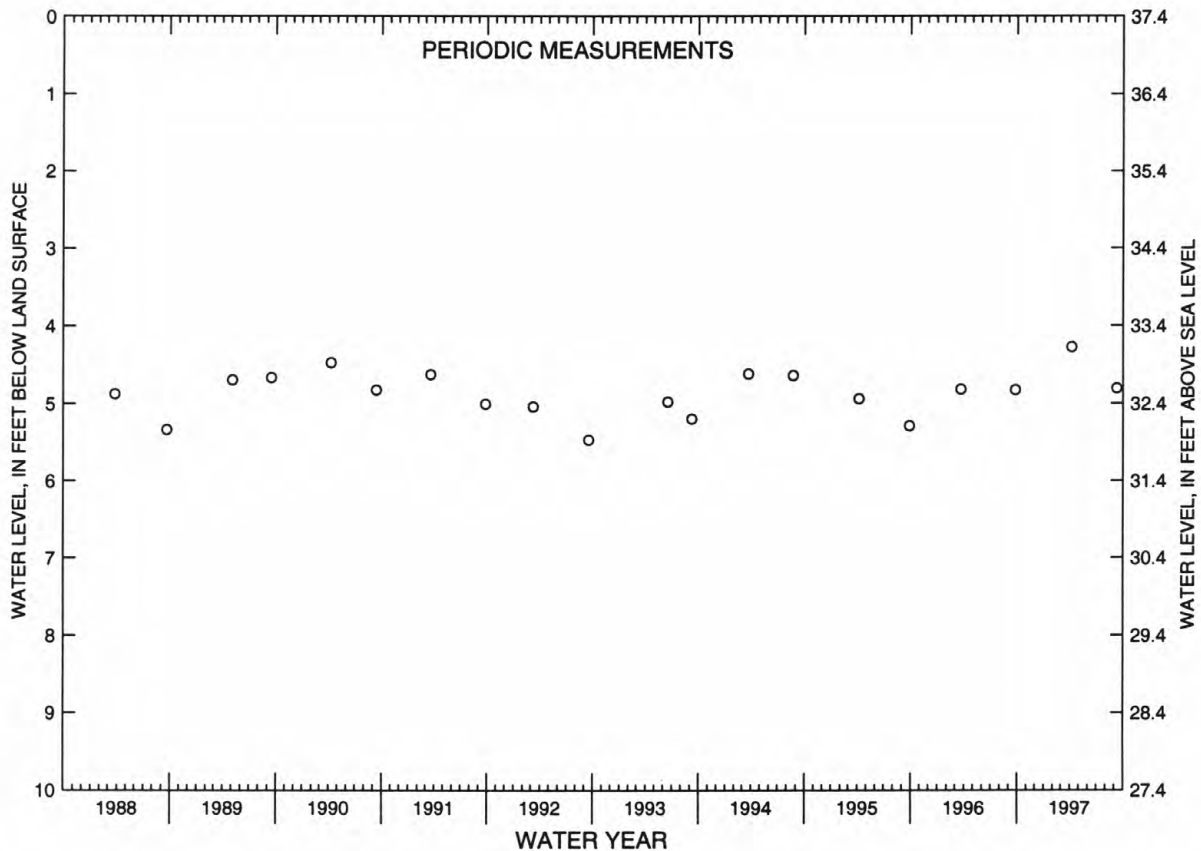
PERIOD OF RECORD.--Mar. 1973 to current year. Records for 1973 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 8	4.28	SEP 10	4.81

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.

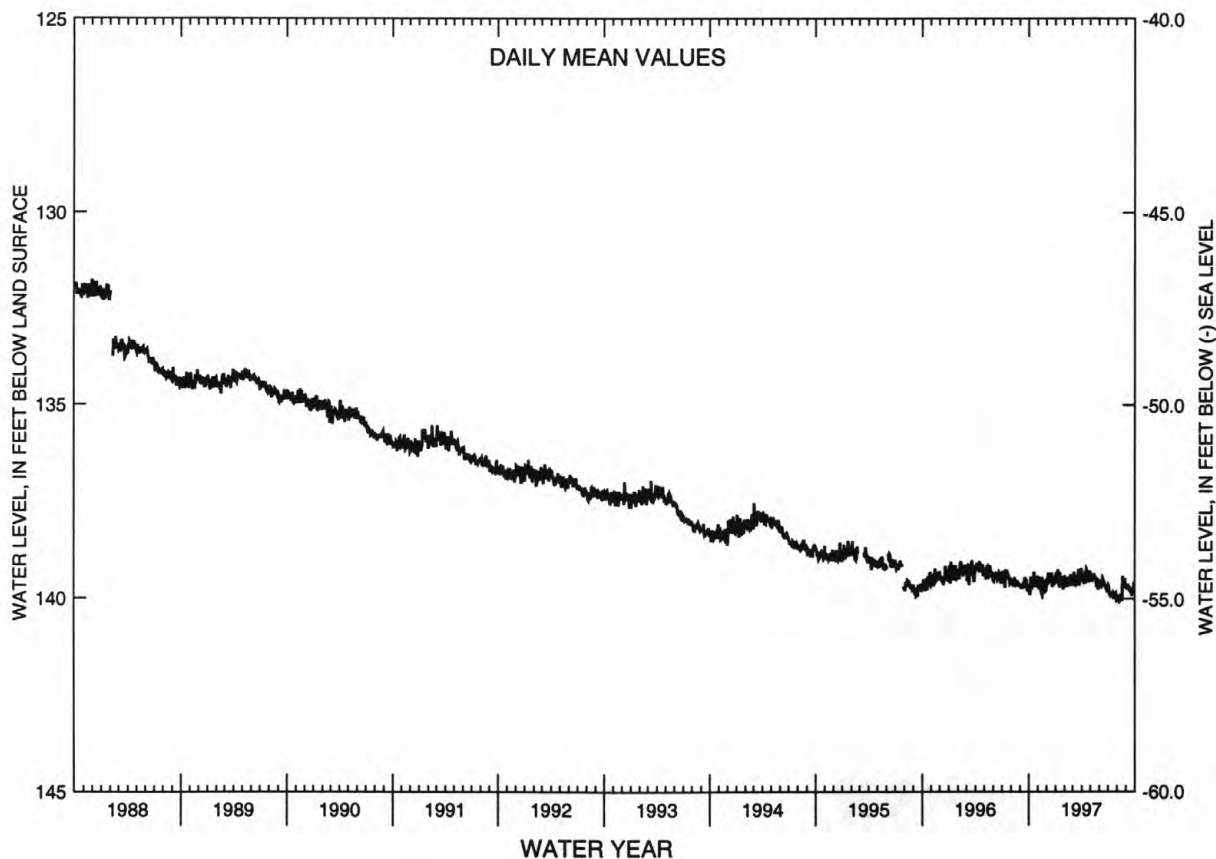
PERIOD OF RECORD.--Oct. 1974 to current year. Records for 1974 to 1977 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 115.82 ft below land surface, Apr. 3, 1975; lowest, 140.08 ft below land surface, Aug. 19, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	139.89	139.72	139.63	139.30	139.45	139.46	139.56	139.51	139.59	139.78	139.92	139.72
10	139.48	139.56	139.53	139.24	139.54	139.41	139.59	139.36	139.64	139.85	140.07	139.70
15	139.67	139.90	139.58	139.63	139.43	139.40	139.59	139.37	139.59	139.86	139.98	139.77
20	139.36	139.53	139.53	139.51	139.59	139.37	139.35	139.46	139.65	139.97	139.96	139.71
25	139.58	139.67	139.52	139.41	139.63	139.61	139.46	139.50	139.69	139.89	139.63	139.73
EOM	139.48	139.76	139.53	139.46	139.57	139.20	139.38	139.58	139.81	140.04	139.66	139.61
MEAN	139.60	139.67	139.51	139.52	139.54	139.46	139.43	139.49	139.63	139.87	139.85	139.74
WTR YR 1997	MEAN 139.61 HIGH 139.20 MAR 31 LOW 140.07 AUG 10											

NJ-WRD WELL NO. 11-0137



GROUND-WATER LEVELS

95

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.

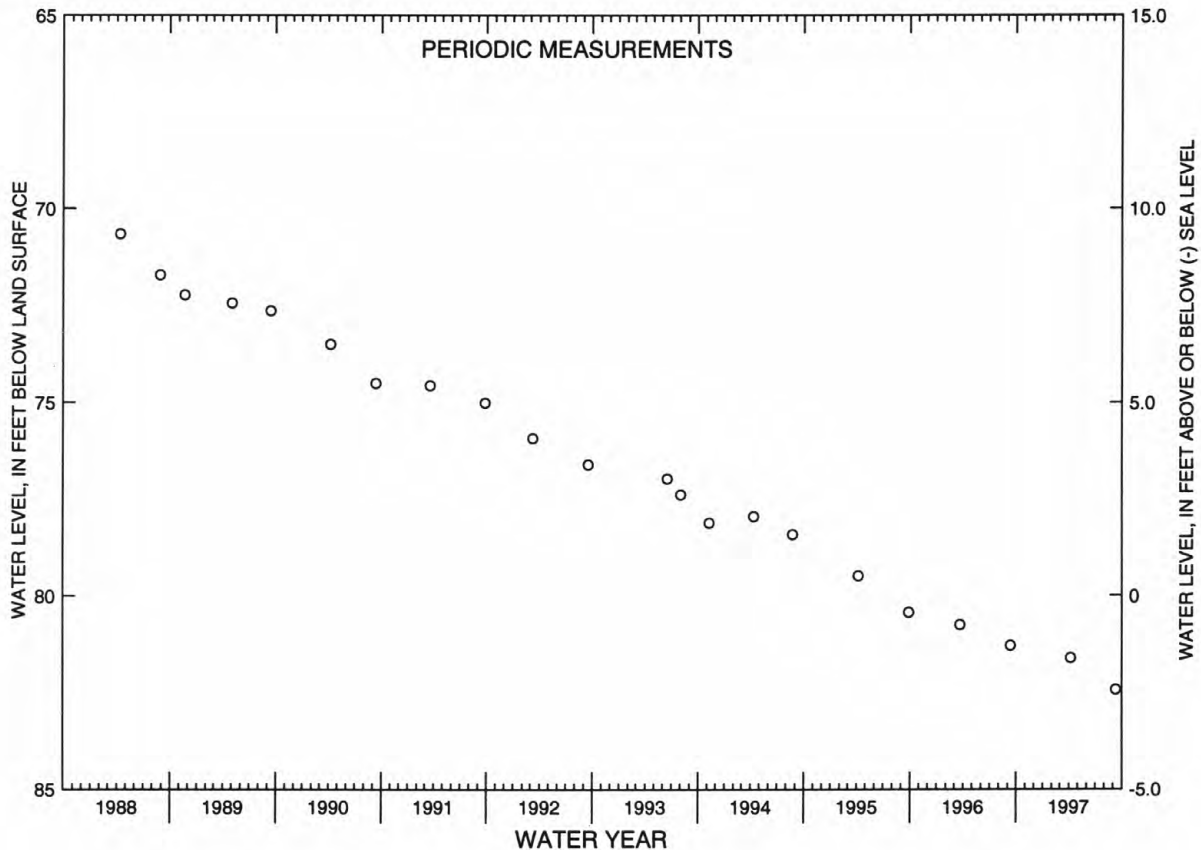
PERIOD OF RECORD.--May 1973 to current year. Records for 1973 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 54.62 ft below land surface, May 4, 1973; lowest, 82.41 ft below land surface, Sept. 10, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997 MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 8	81.59	SEP 10	82.41

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.

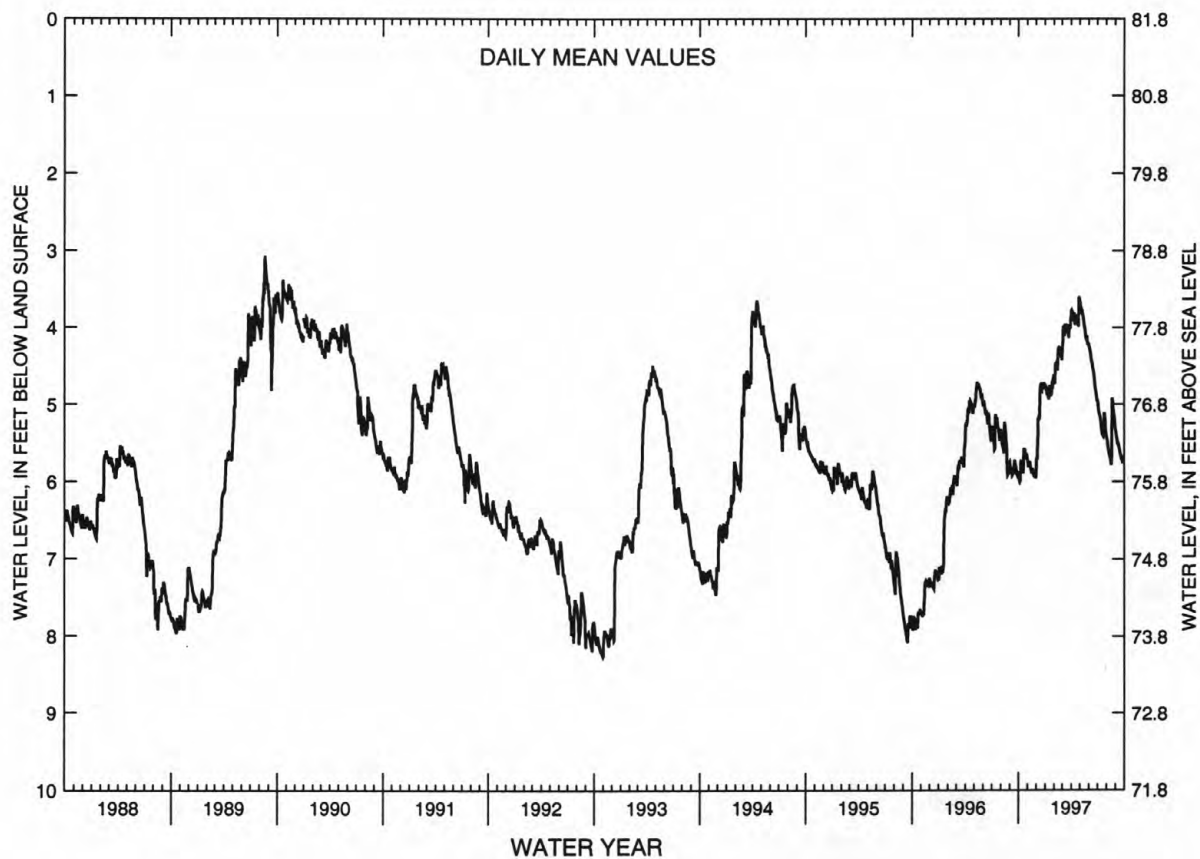
PERIOD OF RECORD.--Mar. 1972 to current year. Records from 1972 to 1987 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.99	5.80	5.71	4.77	4.50	3.99	3.83	3.77	4.28	5.06	5.48	5.41
10	5.72	5.77	5.19	4.78	4.47	3.95	3.90	3.77	4.41	5.15	5.62	5.51
15	5.84	5.88	4.81	4.90	4.28	3.97	3.96	3.90	4.52	5.30	5.70	5.57
20	5.57	5.87	4.80	4.82	4.32	3.96	3.92	4.04	4.64	5.39	5.64	5.66
25	5.66	5.94	4.77	4.70	4.37	4.09	3.94	4.14	4.80	5.11	5.06	5.72
EOM	5.69	5.94	4.78	4.61	4.42	3.88	3.63	4.21	4.95	5.38	5.27	5.72
MEAN	5.77	5.85	5.05	4.80	4.43	4.04	3.85	3.95	4.55	5.21	5.42	5.57
WTR YR 1997	MEAN 4.88 HIGH 3.59 APR 29 LOW 6.00 OCT 6											

NJ-WRD WELL NO. 11-0042



GROUND-WATER LEVELS

97

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.

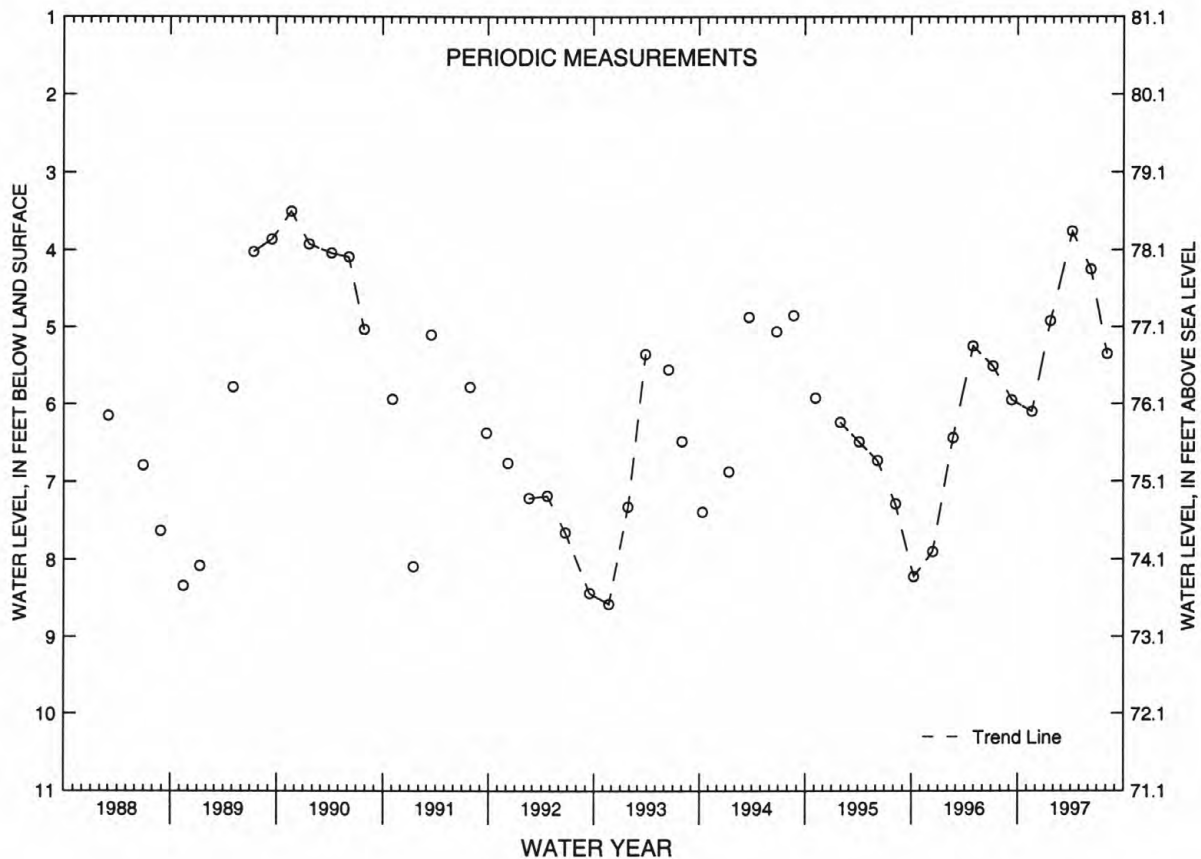
PERIOD OF RECORD.--Mar. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	6.10	APR 8	3.76	AUG 6	5.35
JAN 23	4.92	JUN 11	4.25		

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.

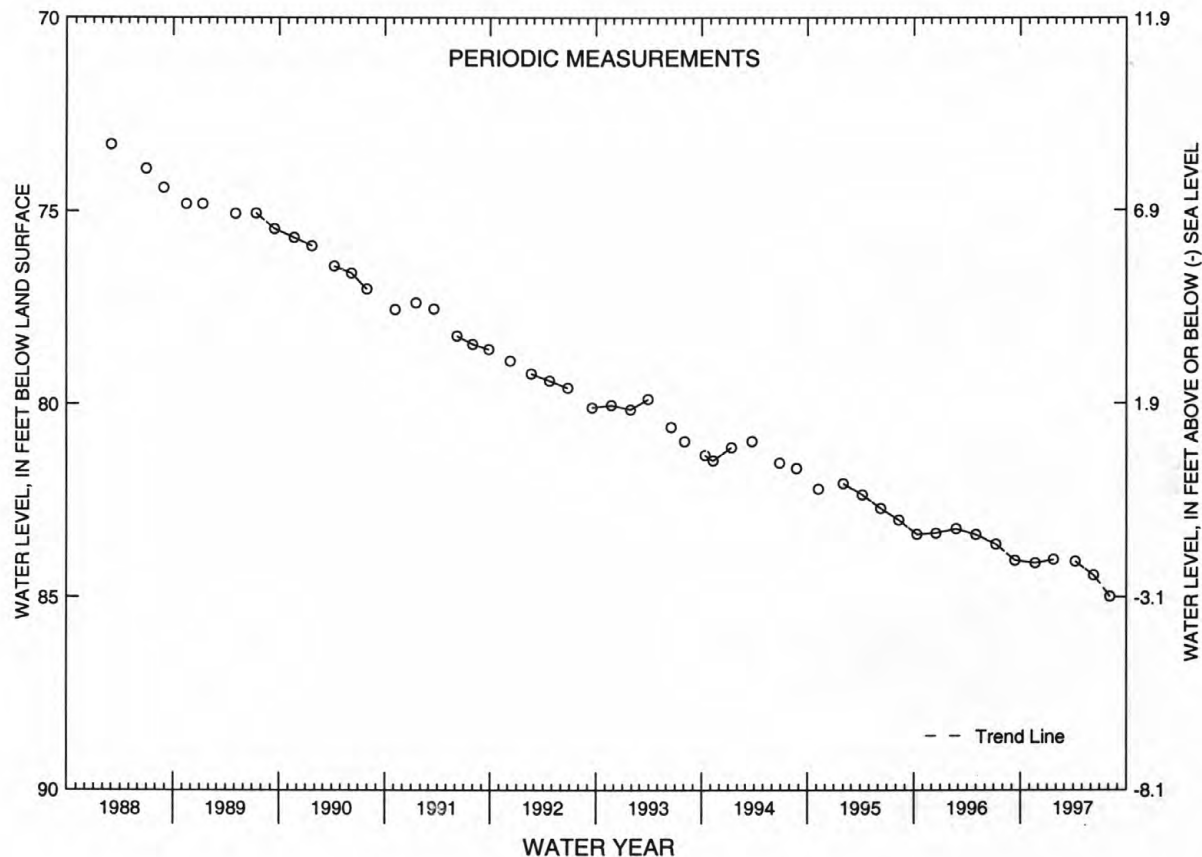
PERIOD OF RECORD.--July 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 58.79 ft below land surface, July 31, 1972; lowest, 84.98 ft below land surface, Aug. 6, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	84.11	APR 8	84.07	AUG 6	84.98
JAN 23	84.02	JUN 11	84.43		

NJ-WRD WELL NO. 11-0044



GROUND-WATER LEVELS

CUMBERLAND COUNTY

99

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.

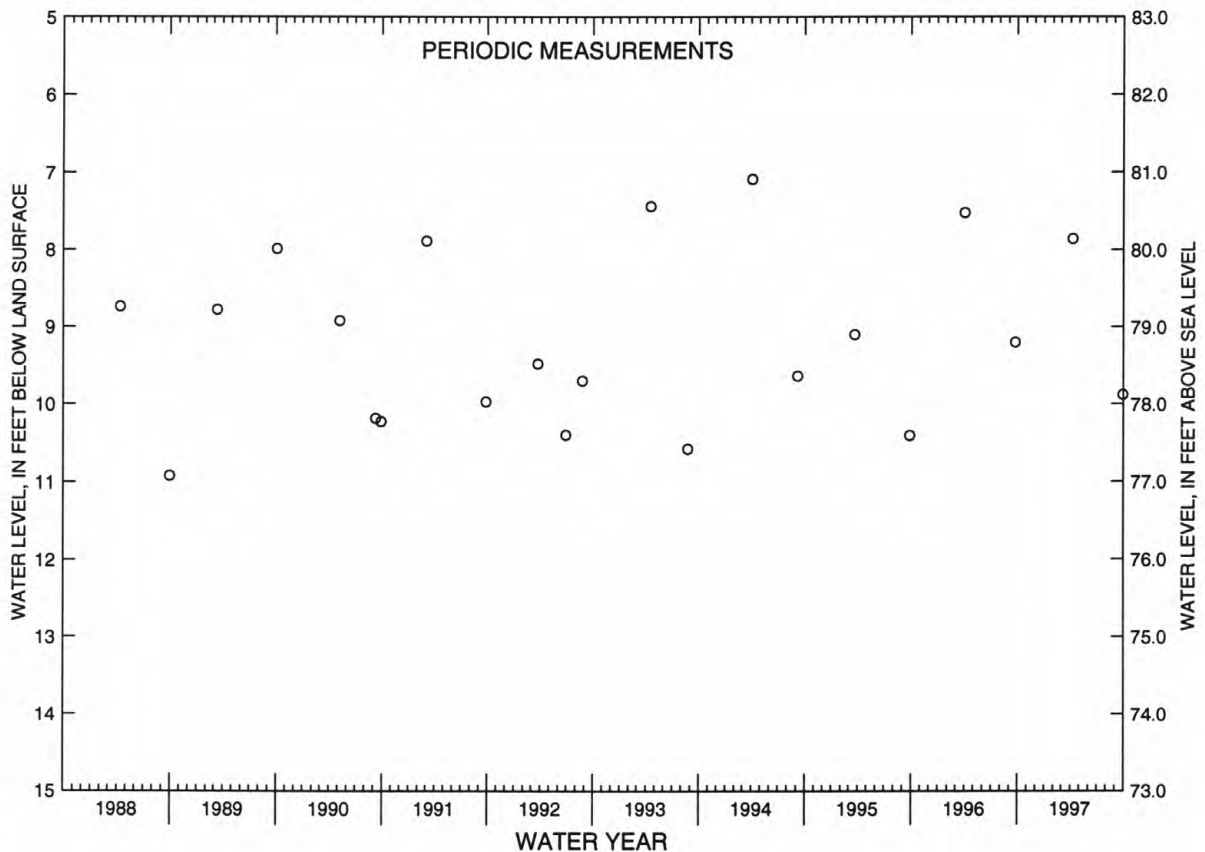
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.92 ft below land surface, Feb. 9, 1973; lowest, 11.05 ft below land surface, Sept. 20, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 10	7.86	SEP 30	9.88

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.

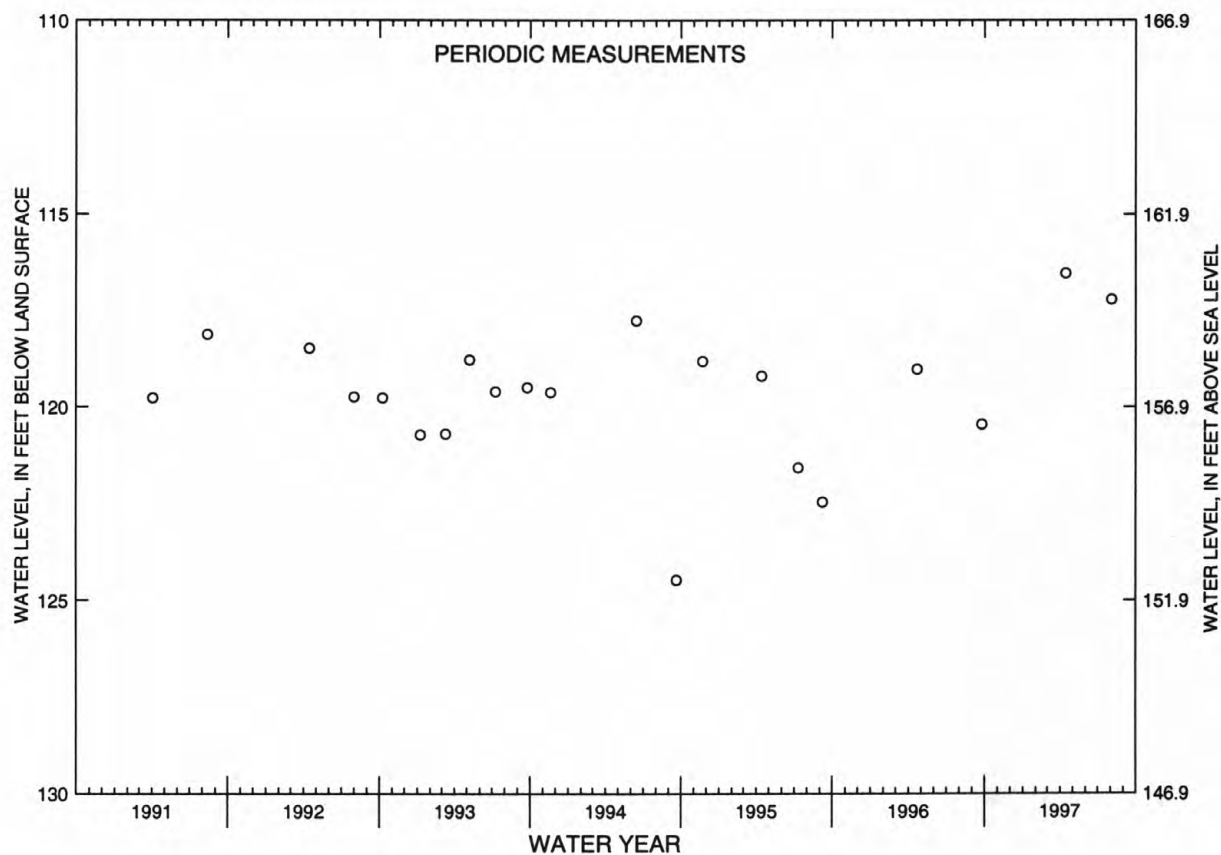
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 116.53 ft below land surface, Apr. 15, 1997; lowest, 124.47 ft below land surface, Sept. 20, 1994.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 15	116.53	AUG 4	117.21

NJ-WRD WELL NO. 13-0095



GROUND-WATER LEVELS

101

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.

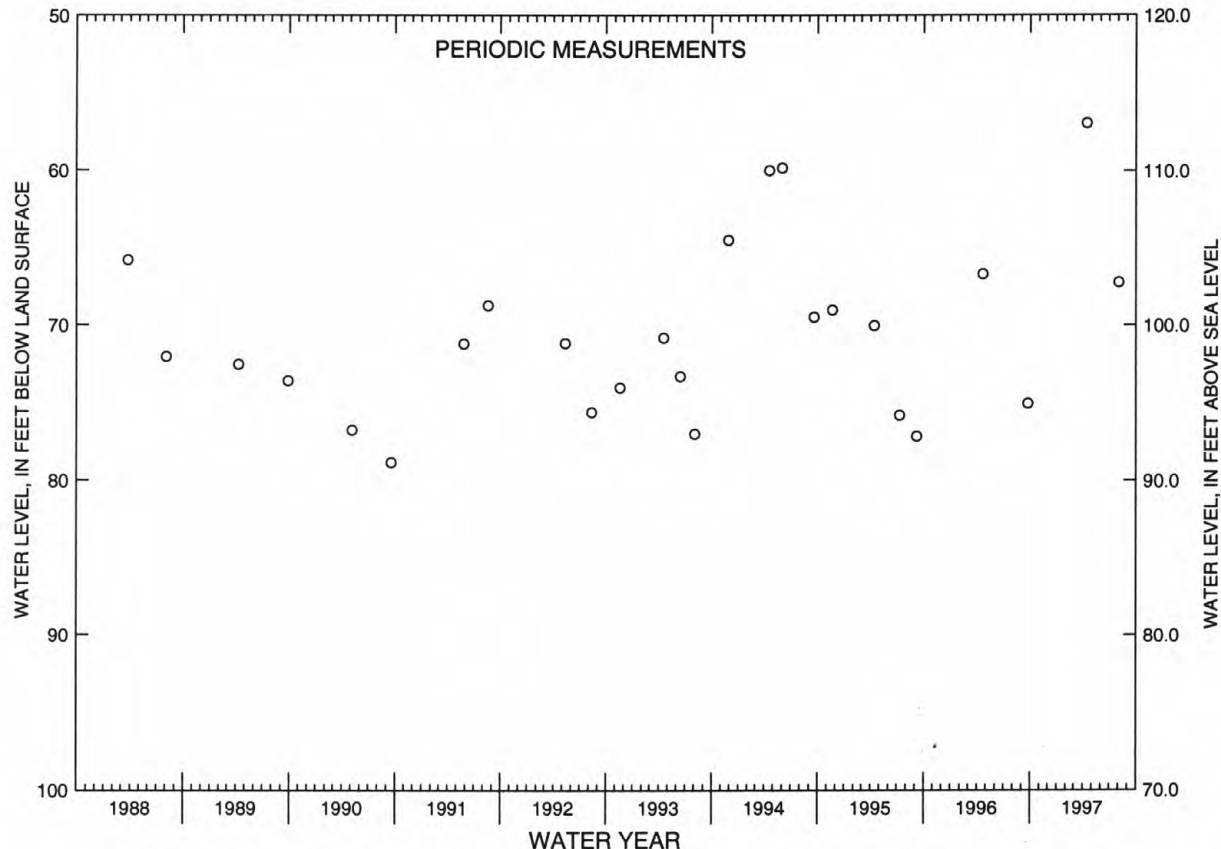
PERIOD OF RECORD.--Sept. 1925 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 15	56.94	AUG 4	67.22

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.

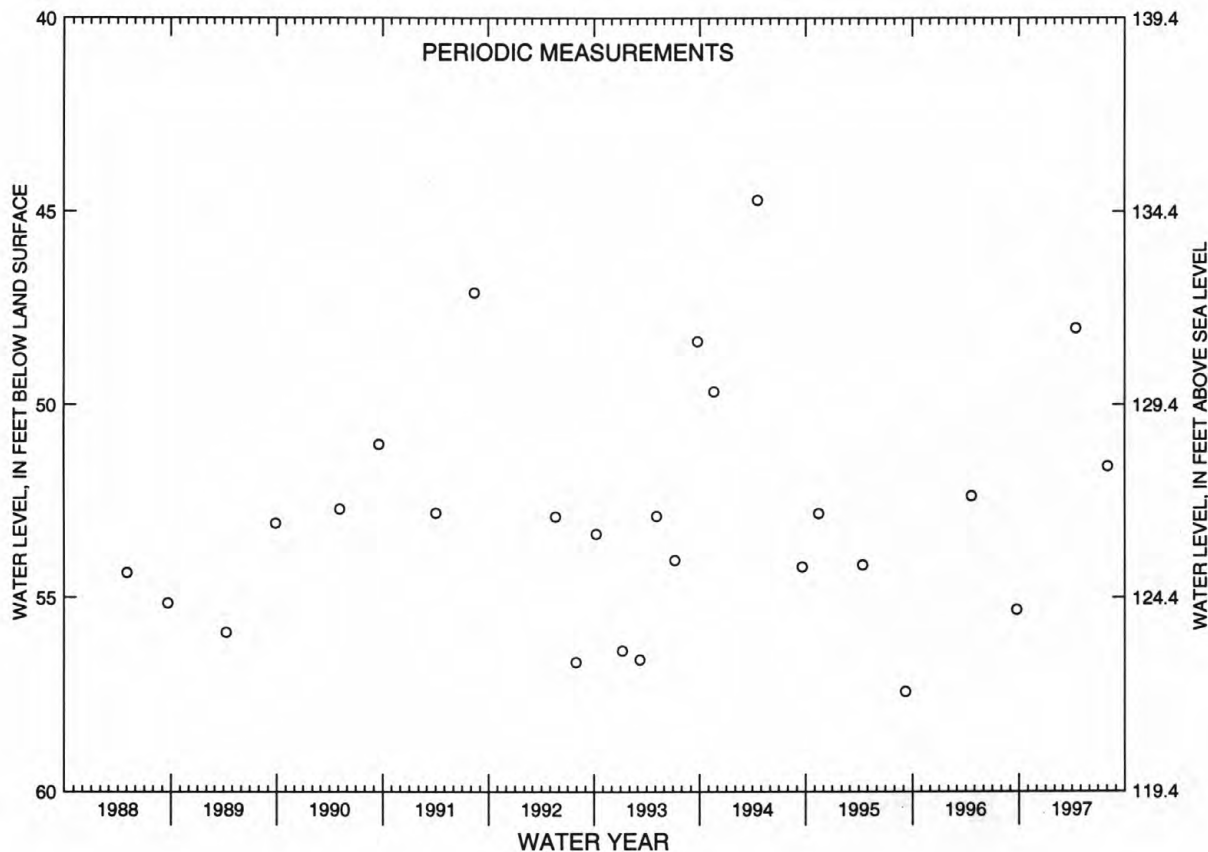
PERIOD OF RECORD.--Nov. 1926 to Oct. 1984, May 1986 to current year. Records for 1975 to 1984 and 1986 to 1989 are unpublished and are available in files of the New Jersey District office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 15	48.02	AUG 4	51.59

NJ-WRD WELL NO. 13-0014



GROUND-WATER LEVELS

103

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.

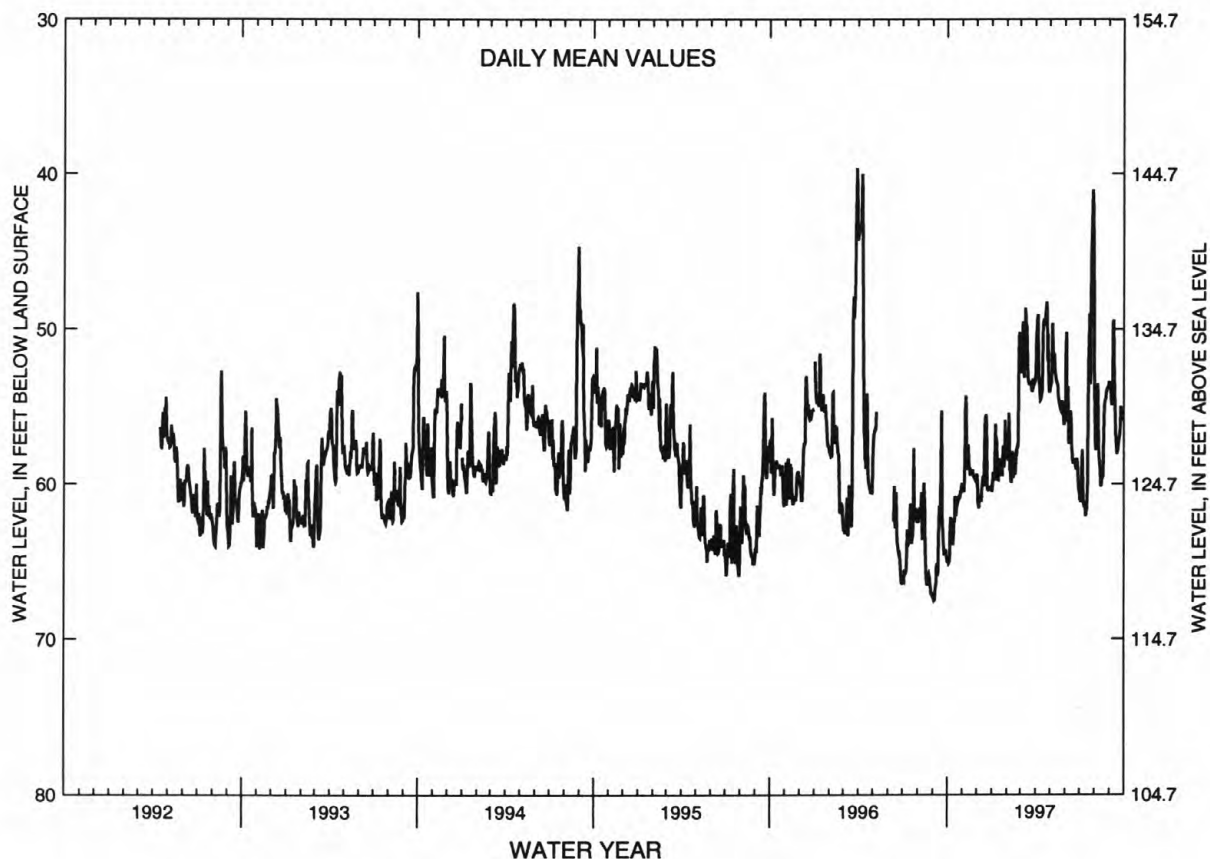
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 39.05 ft below land surface, Mar. 30, 1996; lowest, 67.74 ft below land surface, Sept. 4, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	65.13	60.05	61.57	59.67	55.39	50.57	49.20	52.69	54.99	60.53	57.42	54.49
10	63.58	58.58	61.04	57.01	59.93	51.40	54.14	51.63	56.76	61.34	57.61	49.40
15	62.36	58.85	60.15	59.06	58.62	50.97	53.99	53.43	57.56	61.61	60.15	57.22
20	61.63	59.35	55.59	59.22	57.76	53.42	49.75	54.72	58.41	51.91	57.73	57.33
25	60.80	59.61	60.35	58.06	53.74	53.96	48.69	54.70	58.43	47.73	54.43	54.96
EOM	60.06	59.61	60.44	57.61	52.23	53.12	54.08	55.41	60.48	44.74	53.52	55.91
MEAN	62.41	58.92	59.70	58.62	57.44	52.38	51.49	53.74	56.97	55.27	56.43	55.16

WTR YR 1997 MEAN 56.55 HIGH 41.05 JUL 29 LOW 65.16 OCT 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.

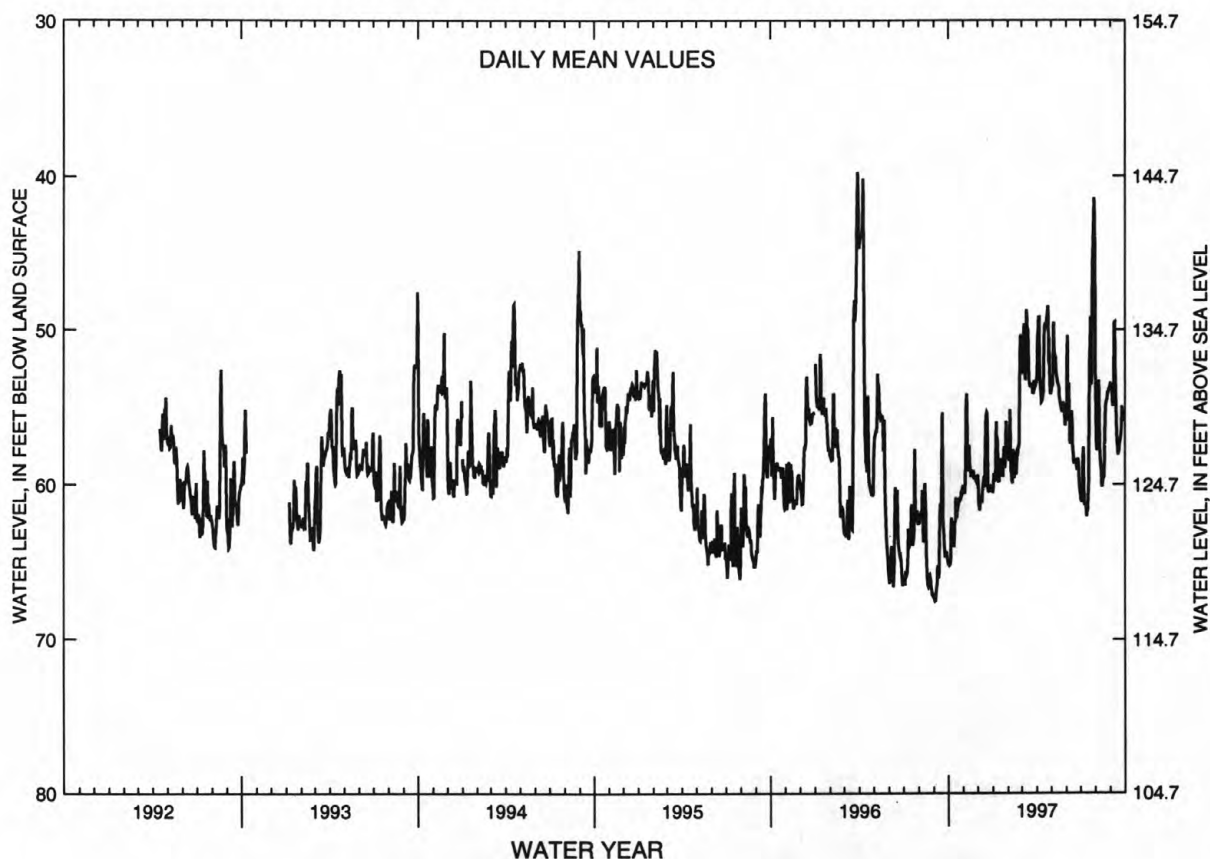
PERIOD OF RECORD.--Apr. 1991 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	65.14	60.12	61.63	59.71	55.18	50.57	49.19	52.66	55.12	60.44	57.41	54.59
10	63.57	58.69	61.05	56.99	59.92	51.41	54.25	51.74	56.72	61.31	57.68	49.51
15	62.32	58.90	60.18	59.06	58.57	51.12	54.10	53.53	57.60	61.51	60.14	57.27
20	61.69	59.41	55.42	59.25	57.71	53.55	49.95	54.81	58.43	51.99	57.71	57.36
25	60.86	59.66	60.38	58.09	53.60	54.09	48.92	54.76	58.43	47.88	54.49	54.96
EOM	60.14	59.64	60.45	57.62	52.32	53.25	54.18	55.48	60.46	45.16	53.61	55.95
MEAN	62.43	58.96	59.69	58.63	57.40	52.50	51.64	53.81	56.98	55.31	56.46	55.21
WTR YR 1997	MEAN 56.59 HIGH 41.43 JUL 29 LOW 65.16 OCT 4											

NJ-WRD WELL NO. 13-0096



GROUND-WATER LEVELS

105

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.

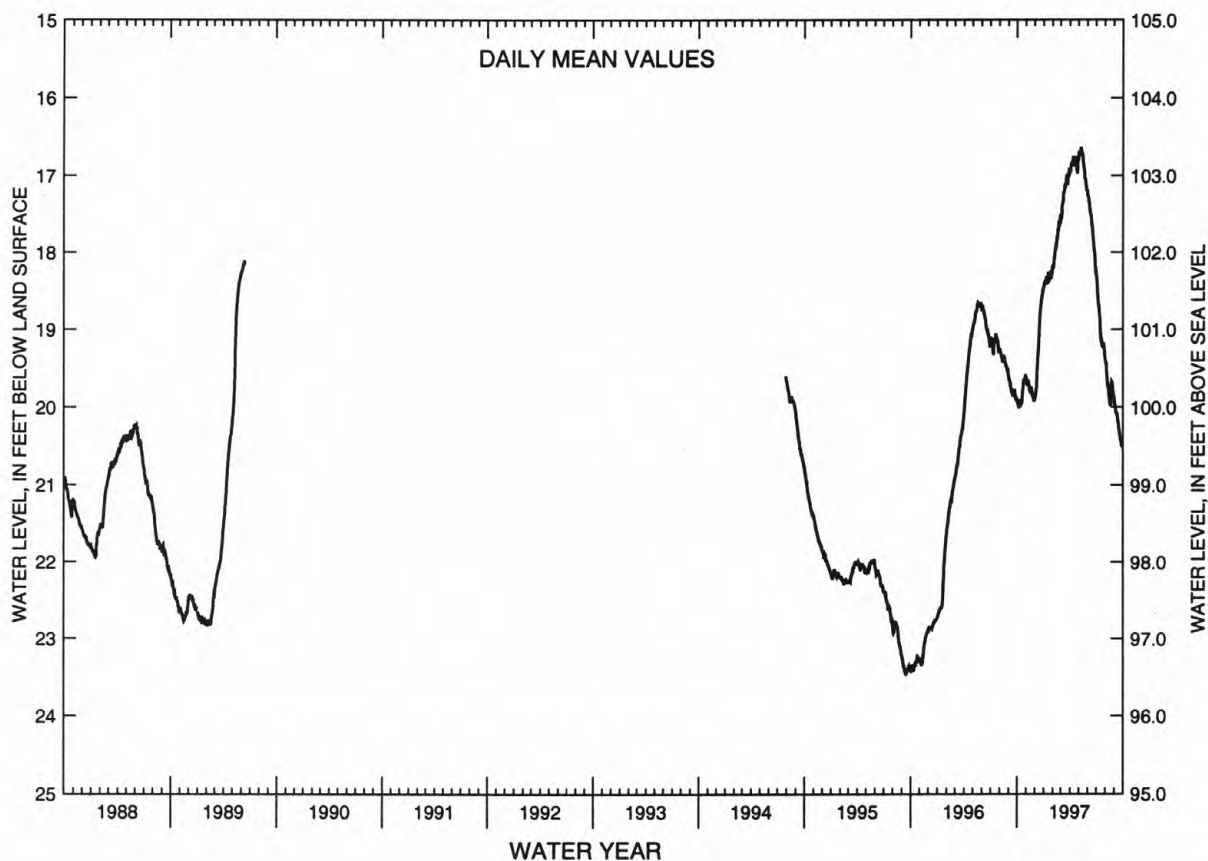
PERIOD OF RECORD.--Jan. 1987 to June 1989, Aug. 1994 to current year. Records for 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.62 ft below land surface, May 3, 1997; lowest, 23.53 ft below land surface, Sept. 14-15, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.99	19.70	19.80	18.38	18.13	17.40	16.88	16.74	17.29	18.43	19.43	19.96
10	19.96	19.68	19.48	18.32	17.95	17.21	16.84	16.65	17.44	18.68	19.74	20.08
15	19.93	19.79	19.13	18.39	17.83	17.15	16.86	16.71	17.58	18.98	19.88	20.19
20	19.79	19.79	18.76	18.32	17.72	17.02	16.85	16.90	17.79	19.15	19.97	20.30
25	19.65	19.88	18.62	18.24	17.60	17.07	16.93	17.04	17.98	19.20	19.68	20.42
EOM	19.61	19.92	18.48	18.17	17.62	16.93	16.79	17.19	18.26	19.35	19.86	20.52
MEAN	19.84	19.77	19.11	18.34	17.86	17.18	16.85	16.86	17.65	18.91	19.71	20.21
WTR YR 1997	MEAN 18.53 HIGH 16.65 MAY 9 LOW 20.52 SEP 30											

NJ-WRD WELL NO. 15-0372



GROUND-WATER LEVELS

GLOUCESTER COUNTY

393749074550901. Local I.D., USGS UND06. NJ-WRD Well Number 15-1213.

LOCATION.--Lat 39°37'49", long 74°55'09", Hydrologic Unit 02040302, at Winslow Wildlife Management Area, Monroe Township.
Owner: U.S. Geological Survey - State of New Jersey-DEP/Fish, Game & Wildlife.

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

WELL CHARACTERISTICS.-- Drilled water-table observation well, diameter 2 in., depth 15 ft, screened 13 to 15 ft.

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

DATUM.-- Land surface is 97 ft above sea level, from topographic map.
Measuring point: Top of outer protective casing, 2.30 ft above land surface

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

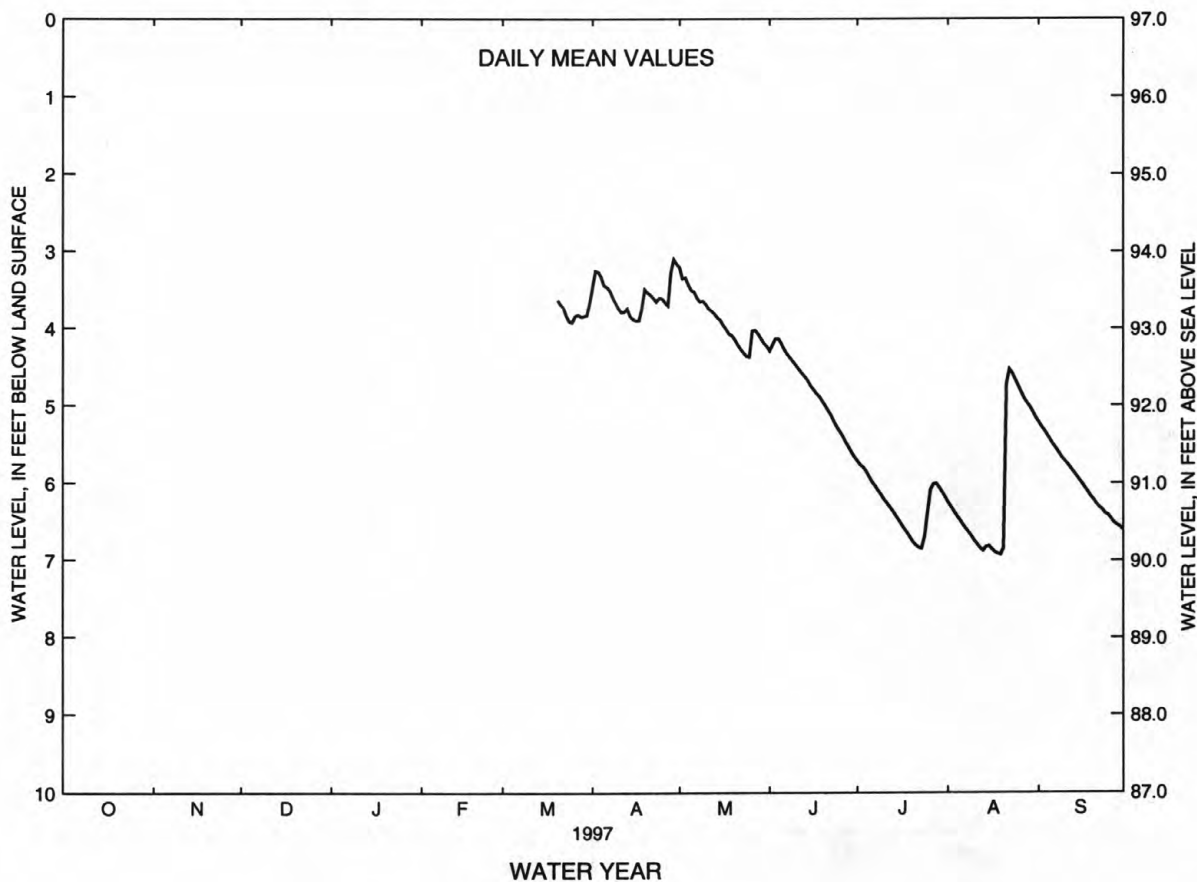
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.09 ft below land surface, Apr. 29, 1997; lowest, 6.93 ft below land surface, Aug. 19-20, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	3.44	3.50	4.19	5.91	6.47	5.44
10	---	---	---	---	---	---	3.74	3.68	4.48	6.20	6.74	5.71
15	---	---	---	---	---	---	3.88	3.89	4.74	6.47	6.81	5.95
20	---	---	---	---	---	3.63	3.53	4.14	5.00	6.76	6.84	6.21
25	---	---	---	---	---	3.92	3.61	4.37	5.33	6.37	4.74	6.41
EOM	---	---	---	---	---	3.67	3.16	4.23	5.66	6.17	5.15	6.60
MEAN	---	---	---	---	---	---	3.57	3.89	4.80	6.27	6.02	5.96

WTR YR 1997 HIGH 3.10 APR 29 LOW 6.92 AUG 19

NJ-WRD WELL NO. 15-1213



GROUND-WATER LEVELS

107

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.

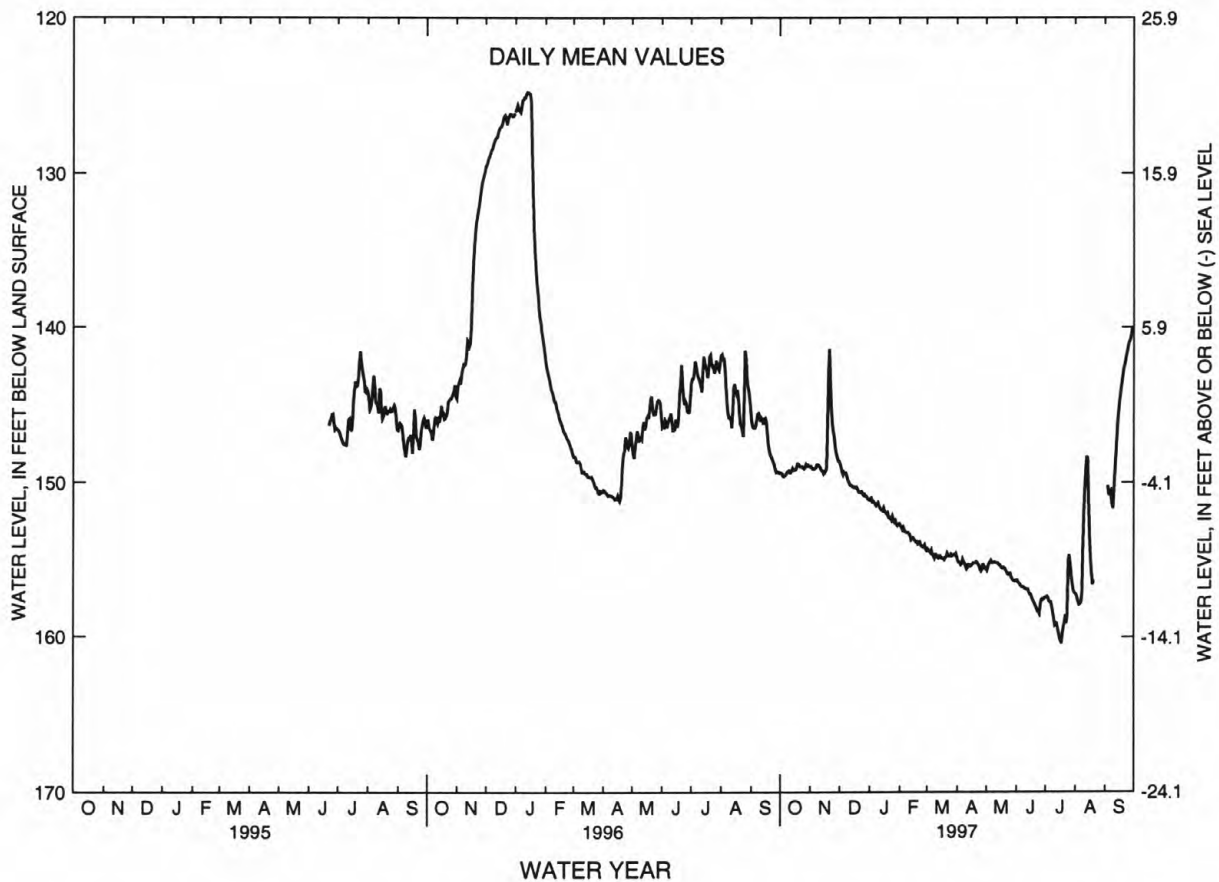
PERIOD OF RECORD.--Jan. 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 124.76 ft below land surface, Jan. 12-13, 1996; lowest, 160.48 ft below land surface, July 18-19, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	149.59	149.13	149.47	151.19	152.87	154.51	155.29	155.13	156.58	157.68	157.87	150.81
10	149.23	148.90	149.85	151.29	153.21	154.63	155.43	155.12	156.84	158.81	151.88	150.46
15	149.20	149.42	150.28	151.80	153.54	154.71	155.39	155.27	157.23	159.75	151.36	145.31
20	148.79	142.95	150.44	151.94	153.95	154.84	155.18	155.49	157.84	159.31	156.32	142.73
25	149.05	146.76	150.71	152.17	154.15	154.75	155.60	155.86	158.48	155.10	---	141.15
EOM	148.95	148.57	151.10	152.67	154.29	154.57	155.52	156.36	157.51	157.11	---	139.96
MEAN	149.16	147.86	150.11	151.84	153.53	154.67	155.28	155.56	157.27	158.11	154.65	144.96
WTR YR 1997	MEAN 152.82 HIGH 139.96 SEP 30 LOW 160.41 JUL 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, 3.85 ft above land surface.

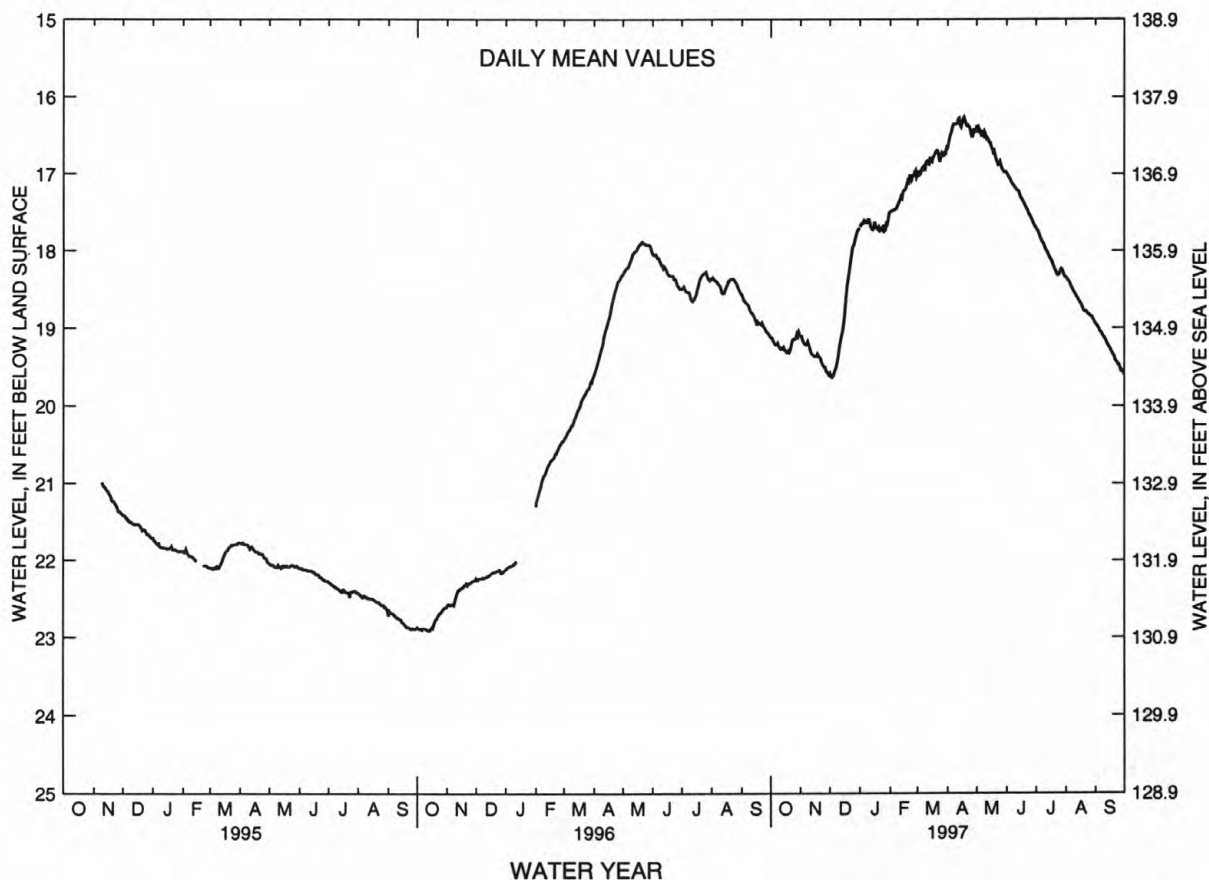
PERIOD OF RECORD.--Mar. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.24 ft below land surface, Apr. 18, 1997; lowest, 22.98 ft below land surface, Sept. 14, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.20	19.20	19.59	17.60	---	16.94	16.45	16.47	17.08	17.81	18.42	19.03
10	19.24	19.25	19.32	17.59	17.36	16.84	16.35	16.48	17.18	17.95	18.55	19.13
15	19.28	19.36	18.96	17.70	17.21	16.83	16.39	16.59	17.30	18.08	18.66	19.25
20	19.31	19.37	18.33	17.69	17.10	16.70	16.35	16.76	17.42	18.22	18.78	19.36
25	19.14	19.50	17.93	17.66	17.01	16.78	16.47	16.84	17.54	18.30	18.82	19.47
EOM	19.09	19.60	17.70	17.50	17.04	16.65	16.43	16.97	17.68	18.34	18.93	19.60
MEAN	19.20	19.34	18.73	17.66	17.20	16.83	16.40	16.67	17.32	18.07	18.66	19.27
WTR YR 1997	MEAN 17.96 HIGH 16.26 APR 18 LOW 19.63 DEC 3											

NJ-WRD WELL NO. 15-1054



GROUND-WATER LEVELS

109

GLOUCESTER COUNTY

394256075101001. Local I.D., USGS AG02. NJ-WRD Well Number 15-1208.

LOCATION.--Lat 39°42'56", long 75°10'10", Hydrologic Unit 02040202, at Heritage Farm, Elmer- Barnsboro Rd., Richwood, Harrison Township.
Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS.-- Drilled water-table observation well, diameter 2 in., depth 33 ft, screened 31 to 33 ft.

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

DATUM.-- Land surface is 135 ft above sea level, from topographic map.

Measuring point: Top of outer protective casing, 2.95 ft above land surface

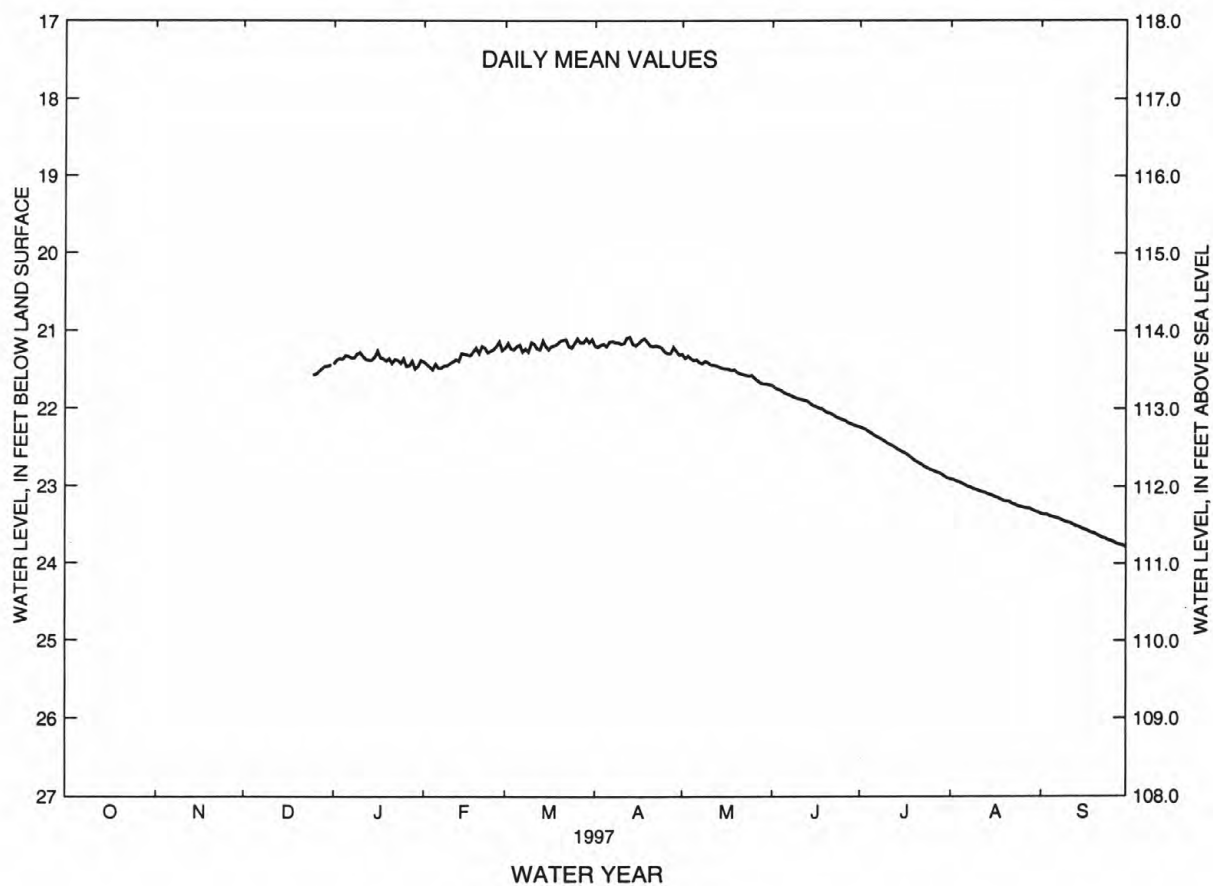
PERIOD OF RECORD.--Dec. 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.01 ft below land surface, Mar. 26, Apr. 12-13, 1997; lowest, 23.79 ft below land surface, Sept. 30, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	21.32	21.43	21.20	21.20	21.38	21.79	22.31	22.96	23.39
10	---	---	---	21.28	21.42	21.15	21.17	21.41	21.87	22.43	23.04	23.46
15	---	---	---	21.34	21.30	21.20	21.19	---	21.96	22.54	23.11	23.54
20	---	---	---	21.36	21.29	21.13	21.19	21.53	22.05	22.67	23.19	23.62
25	---	---	21.57	21.36	21.24	21.16	21.27	21.57	22.14	22.78	23.26	23.70
EOM	---	---	21.44	21.38	21.25	21.11	21.31	21.69	22.22	22.89	23.33	23.78
MEAN	---	---	---	21.37	21.33	21.18	21.18	21.49	21.97	22.56	23.12	23.55
WTR YR 1997	HIGH 21.08 APR 13 LOW 23.78 SEP 30											

NJ-WRD WELL NO. 15-1208



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.

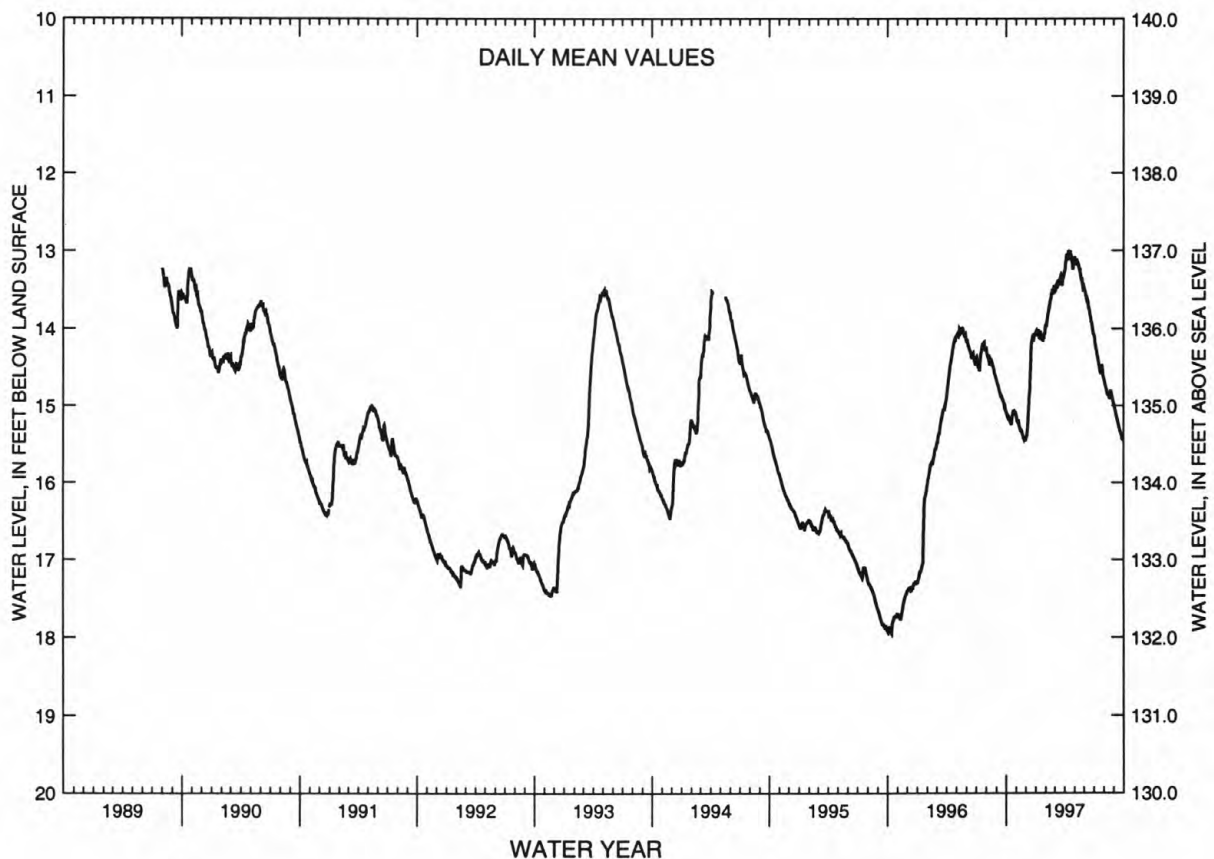
PERIOD OF RECORD.--Aug. 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.98 ft below land surface, Apr. 13, 1997; lowest, 17.95 ft below land surface, Oct. 13-15, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.14	15.20	15.39	14.02	13.90	13.45	13.14	13.16	13.54	14.18	14.73	15.05
10	15.15	15.23	15.04	14.01	13.76	13.39	13.08	13.13	13.62	14.30	14.81	15.14
15	15.22	15.32	14.65	14.12	13.64	13.39	13.12	13.18	13.74	14.41	14.84	15.23
20	15.14	15.36	14.16	14.08	13.57	13.31	13.10	13.28	13.83	14.54	14.90	15.31
25	15.10	15.43	14.11	14.08	13.53	13.40	13.19	13.35	13.93	14.51	14.84	15.37
EOM	15.10	15.46	14.07	13.96	13.55	13.26	13.11	13.46	14.06	14.63	14.96	15.46
MEAN	15.14	15.31	14.63	14.08	13.69	13.39	13.11	13.25	13.75	14.39	14.82	15.23
WTR YR 1997	MEAN 14.24 HIGH 13.00 APR 13 LOW 15.46 NOV 30											

NJ-WRD WELL NO. 15-1033



GROUND-WATER LEVELS

111

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.

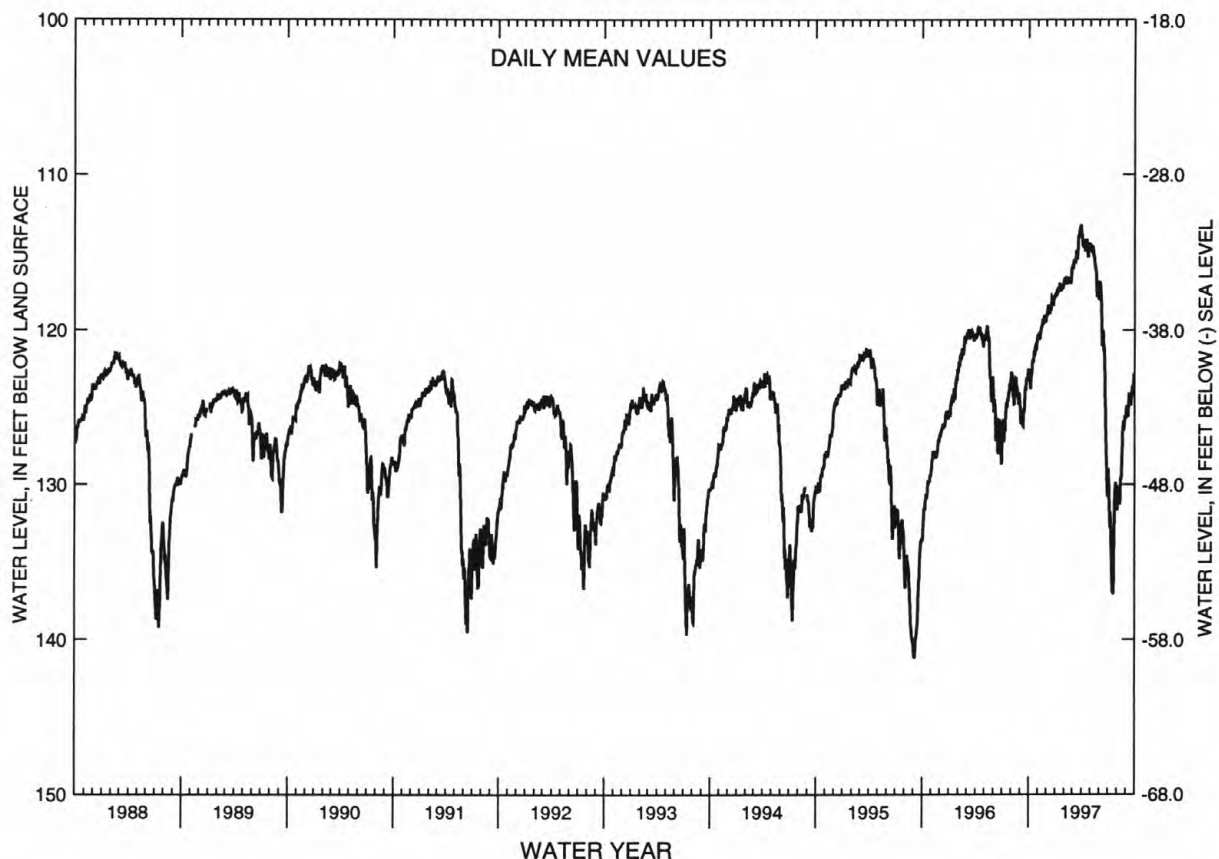
PERIOD OF RECORD.--July 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 113.05 ft below land surface, Mar. 31, 1997; lowest, 141.36 ft below land surface, Sept. 6-7, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	123.33	120.62	118.77	117.79	116.69	115.75	114.48	114.80	116.94	129.96	130.83	124.90
10	122.93	120.26	118.59	117.32	116.55	115.50	114.65	114.59	119.31	131.75	131.13	125.60
15	121.93	119.81	118.67	117.32	116.98	114.93	114.68	115.22	120.05	135.77	129.50	124.28
20	121.42	119.54	117.85	117.14	116.74	114.68	114.34	115.95	121.74	137.08	128.00	124.89
25	121.16	119.15	118.34	117.05	116.61	113.90	114.77	117.85	127.18	131.05	125.89	123.60
EOM	120.41	119.19	117.74	116.74	116.03	113.24	114.71	117.90	130.68	130.68	125.56	122.83
MEAN	122.03	119.78	118.41	117.33	116.69	114.84	114.50	115.84	121.93	132.68	128.84	124.50
WTR YR 1997	MEAN 120.65 HIGH 113.24 MAR 31 LOW 137.08 JUL 20											

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.

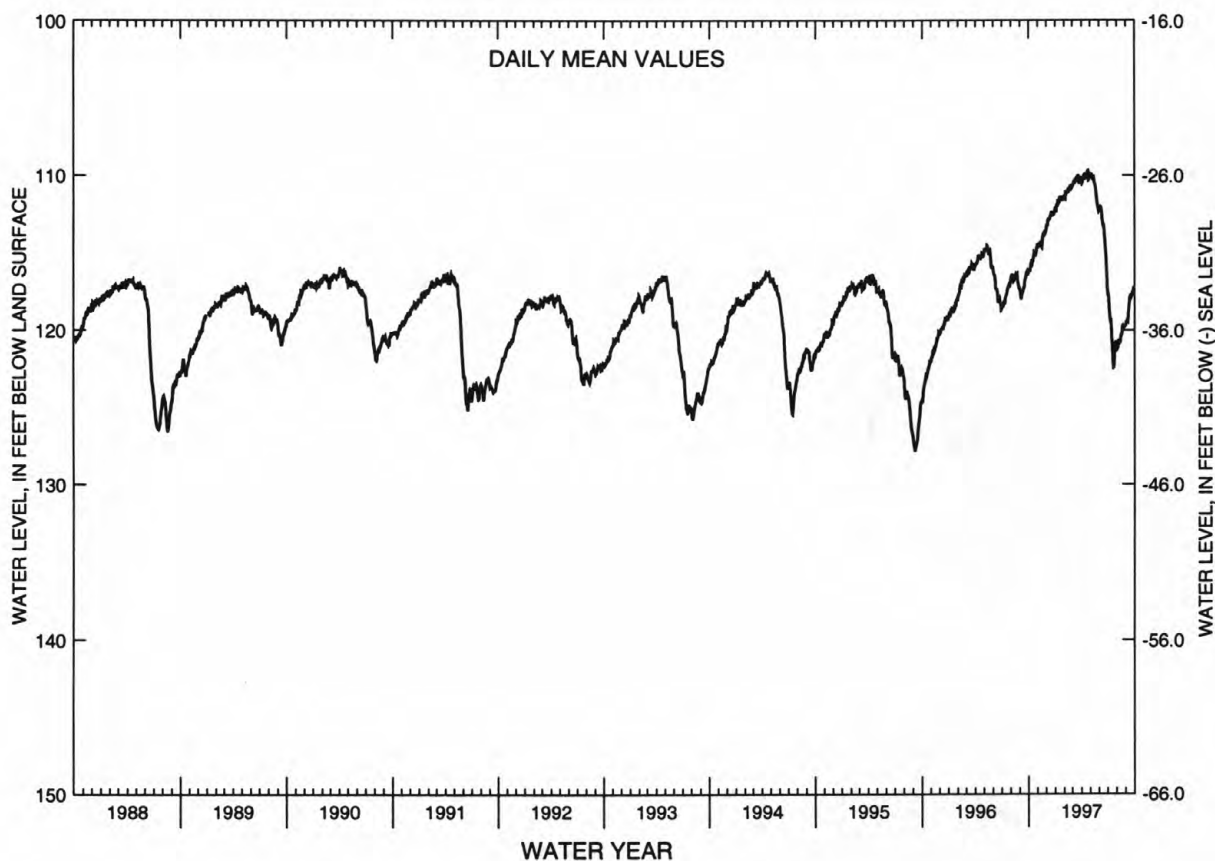
PERIOD OF RECORD.--Nov. 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 109.61 ft below land surface, Apr. 24, 1997; lowest, 127.89 ft below land surface, Sept. 8-9, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	116.19	114.46	113.19	111.93	111.16	110.51	110.41	110.01	112.00	118.13	121.13	119.45
10	115.68	114.44	112.92	111.55	111.05	110.26	110.16	110.22	112.32	119.38	120.76	119.11
15	115.51	114.63	112.67	111.68	110.82	110.12	110.25	110.23	113.21	120.51	120.48	117.91
20	115.03	113.78	112.50	111.46	110.89	109.96	109.87	110.72	113.85	122.27	120.05	117.80
25	115.00	113.74	112.46	111.33	110.89	110.52	110.07	111.62	115.18	121.43	119.86	117.47
EOM	114.52	113.50	112.32	111.34	110.73	110.15	109.96	112.27	117.26	121.10	119.69	117.22
MEAN	115.40	114.14	112.68	111.69	110.99	110.35	110.07	110.74	113.61	120.21	120.38	118.34
WTR YR 1997	MEAN 114.08 HIGH 109.69 APR 24 LOW 122.42 JUL 21											

NJ-WRD WELL NO. 15-0742



GROUND-WATER LEVELS

113

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.

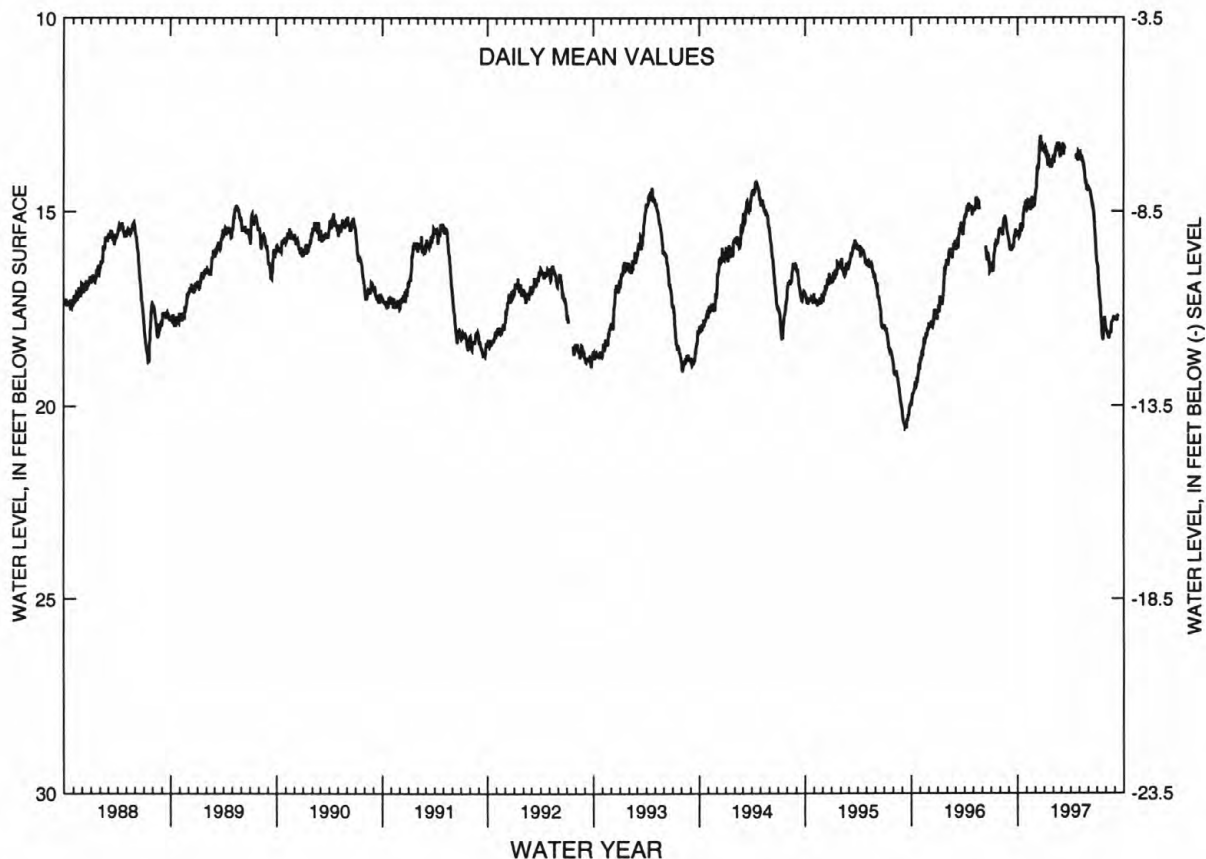
PERIOD OF RECORD.--Mar. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.99 ft below land surface, Dec. 19, 1996; lowest, 20.58 ft below land surface, Sept. 16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.50	14.91	14.39	13.32	13.53	13.38	---	13.57	14.42	16.41	18.07	17.78
10	15.51	14.75	13.93	13.42	13.36	13.32	---	13.57	14.54	17.06	18.22	17.77
15	15.48	14.96	13.46	13.78	13.22	---	---	13.71	14.81	17.57	18.16	---
20	15.33	14.64	13.18	13.72	13.33	---	13.53	13.98	14.98	18.19	18.05	---
25	14.87	14.86	13.32	13.65	13.59	---	13.58	14.19	15.51	17.99	17.82	---
EOM	14.75	14.76	13.44	13.58	13.53	---	13.50	14.39	16.14	17.93	17.74	---
MEAN	15.27	14.81	13.66	13.63	13.43	---	---	13.88	14.93	17.43	18.01	---
WTR YR 1997	MEAN 15.02	HIGH 13.04	DEC 19	LOW 18.29	JUL 22							

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.

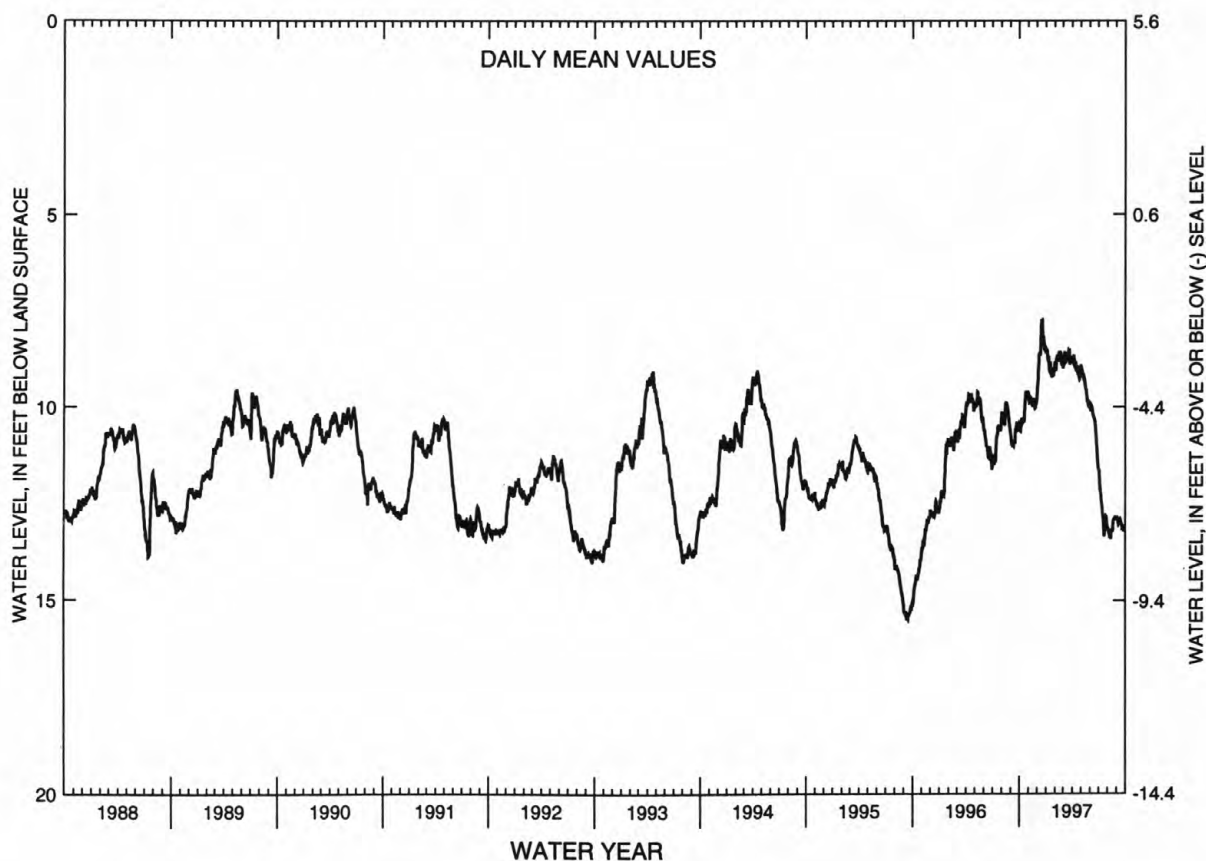
PERIOD OF RECORD.--May 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.68 ft below land surface, Dec. 17, 1996; lowest, 15.50 ft below land surface, Sept. 16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.62	9.87	9.27	8.51	8.78	8.70	8.78	9.12	9.95	11.94	13.17	12.90
10	10.31	9.80	8.64	8.68	8.66	8.64	8.96	9.18	10.09	12.32	13.36	13.00
15	10.39	9.99	8.02	9.07	8.56	8.58	9.07	9.34	10.28	12.76	13.22	---
20	9.96	9.85	7.98	9.06	8.72	8.55	9.14	9.59	10.47	13.24	13.15	13.00
25	9.69	10.02	8.34	8.98	8.93	8.82	9.23	9.83	11.01	12.93	12.88	13.06
EOM	9.69	9.83	8.54	8.85	8.99	8.69	8.98	9.97	11.57	13.03	12.85	13.11
MEAN	10.14	9.87	8.52	8.91	8.76	8.72	8.96	9.47	10.45	12.60	13.11	13.00
WTR YR 1997	MEAN 10.21	HIGH 7.72	DEC 17	LOW 13.37	AUG 12							

NJ-WRD WELL NO. 15-0713



GROUND-WATER LEVELS
GLOUCESTER COUNTY

115

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.

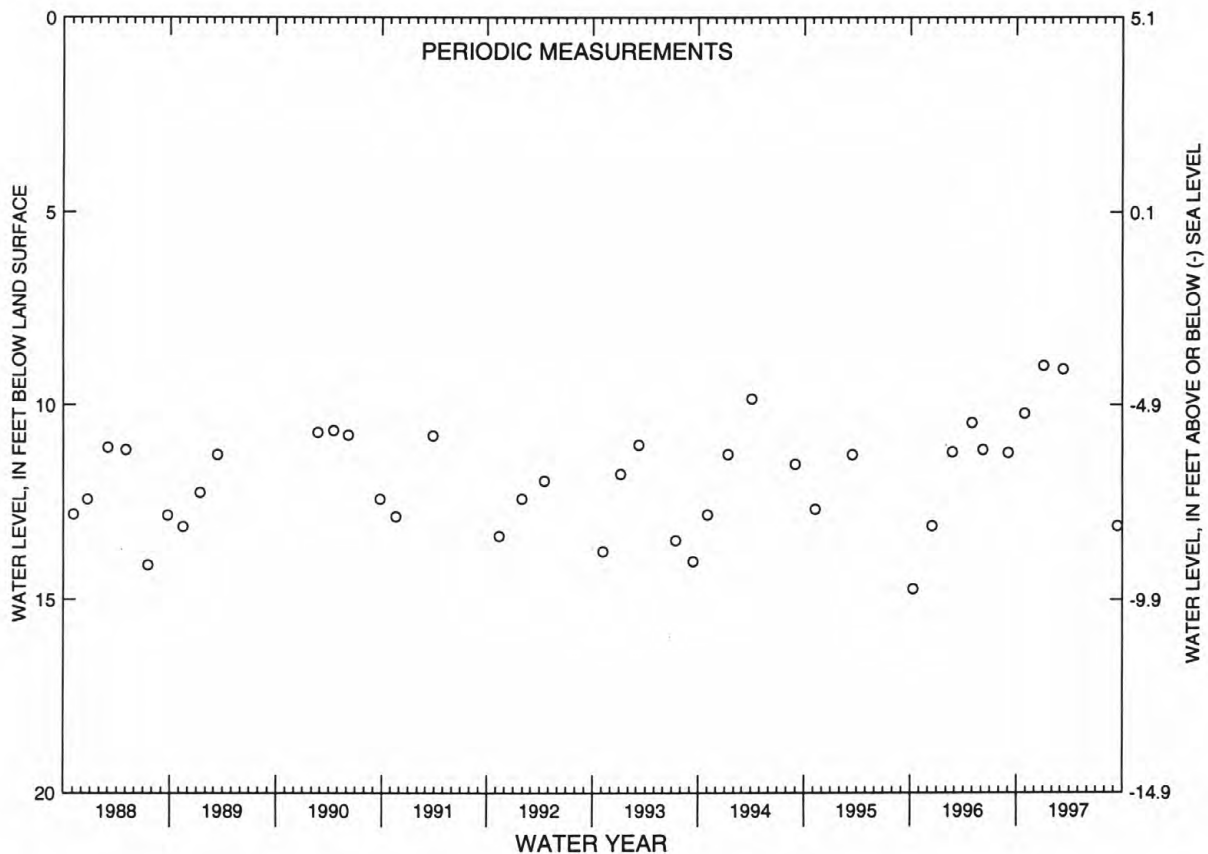
PERIOD OF RECORD.--June 1987 to current year. Records for 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.98 ft below land surface, Jan. 2, 1997; lowest, 14.72 ft below land surface, Oct. 11, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	10.22	MAR 11	9.07
JAN 2	8.98	SEP 15	13.10

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 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.

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

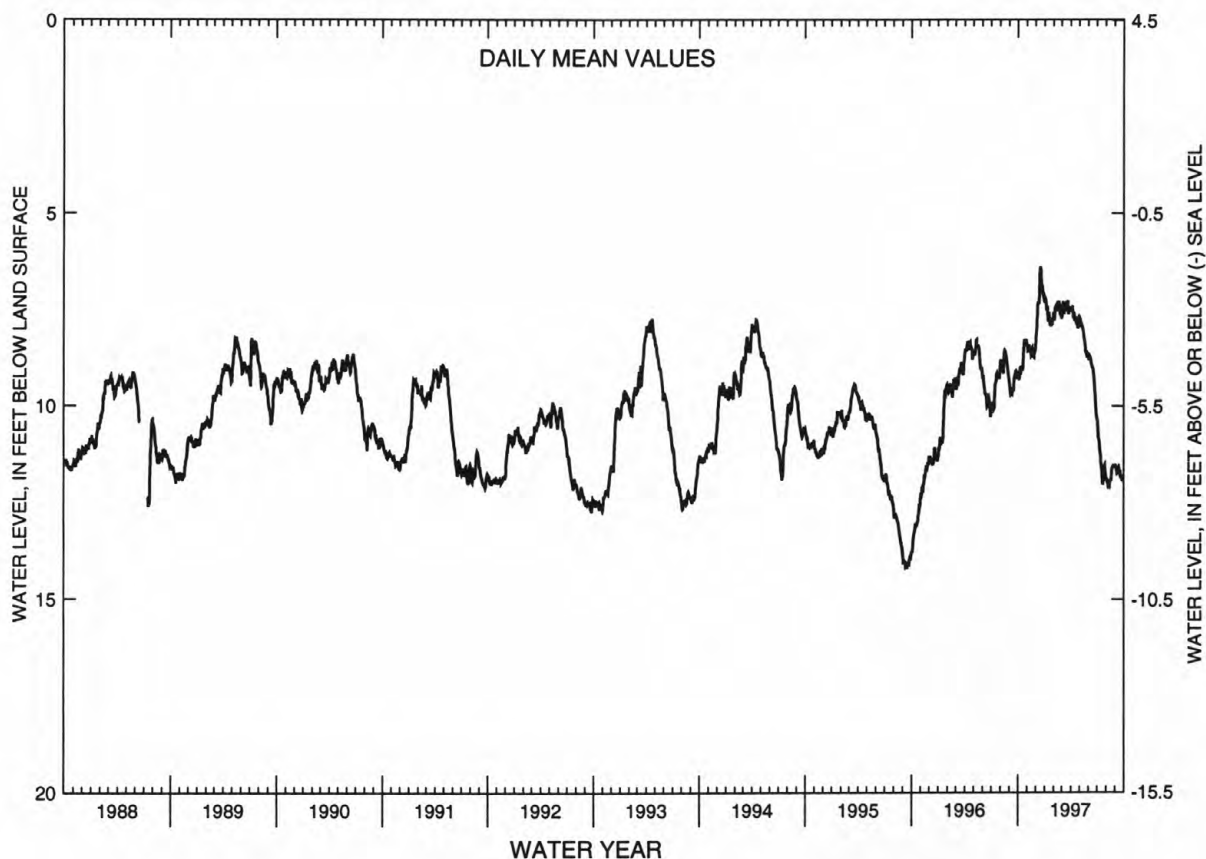
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.34 ft below land surface, Dec. 17, 1996; lowest, 14.20 ft below land surface, Sept. 15-16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.32	8.55	7.96	7.22	7.50	7.43	7.50	7.83	8.67	10.64	11.91	11.60
10	8.99	8.48	7.32	7.38	7.37	7.37	7.68	7.87	8.81	11.03	12.10	11.74
15	9.07	8.68	6.70	7.77	7.27	7.28	7.78	8.05	9.00	11.47	11.96	11.59
20	8.65	8.53	6.62	7.77	7.42	7.26	7.83	8.31	9.19	11.95	11.91	11.74
25	8.36	8.73	7.00	7.70	7.65	7.57	7.91	8.58	9.70	11.67	11.58	11.80
EOM	8.36	8.54	7.23	7.58	7.69	7.44	7.71	8.71	10.27	11.76	11.56	11.86
MEAN	8.82	8.56	7.20	7.61	7.47	7.44	7.68	8.19	9.17	11.32	11.84	11.72

WTR YR 1997 MEAN 8.93 HIGH 6.38 DEC 17 LOW 12.10 AUG 10

NJ-WRD WELL NO. 15-0728



GROUND-WATER LEVELS

117

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.

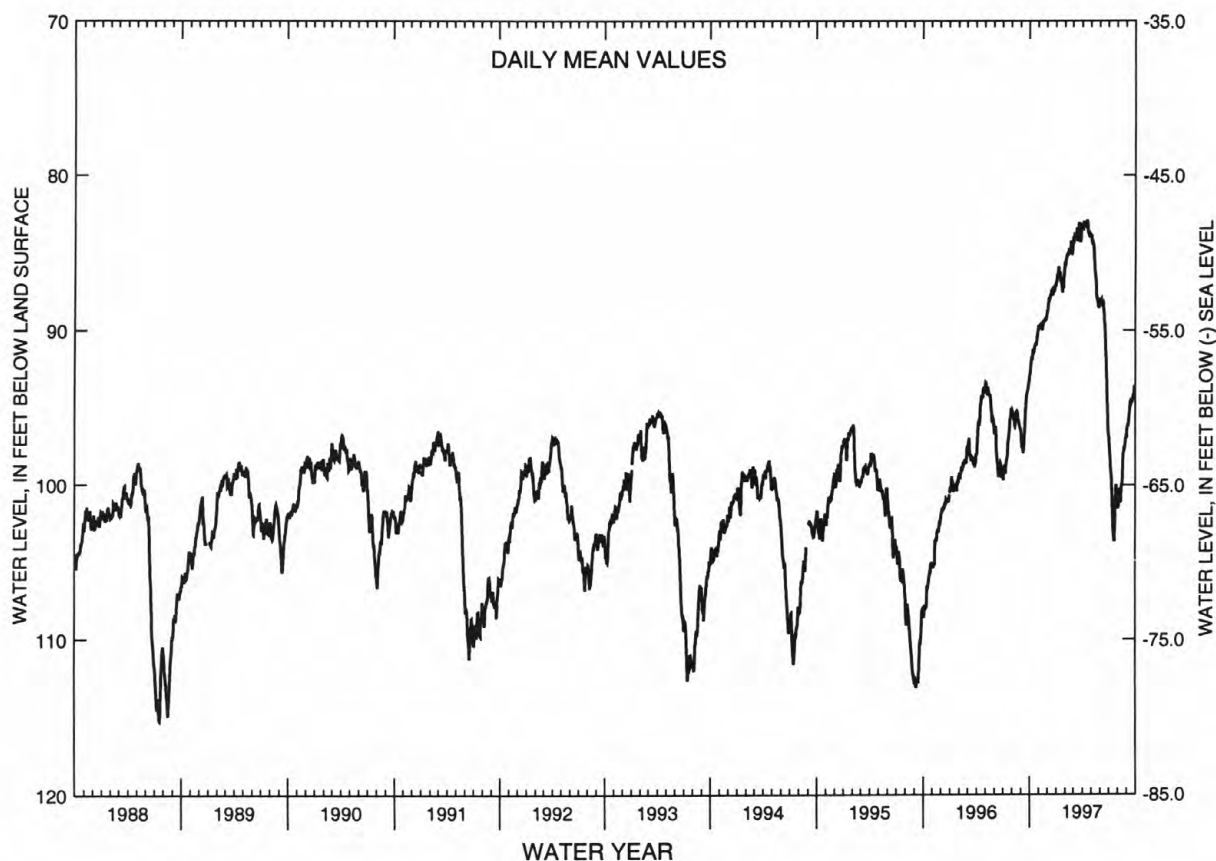
PERIOD OF RECORD.--June 1986 to current year. Records for 1986 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 82.78 ft below land surface, Apr. 18, 1997; lowest 115.36 ft below land surface, July 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	92.71	89.81	88.55	86.47	85.32	84.00	83.46	84.29	87.93	97.62	101.31	96.26
10	91.85	89.57	88.00	85.90	85.16	83.91	83.33	84.50	88.36	99.31	100.56	95.64
15	91.45	89.96	87.64	86.25	84.73	83.70	83.33	86.03	88.79	101.44	100.09	94.60
20	91.01	89.48	87.62	86.60	84.66	83.31	83.14	87.29	90.12	103.44	98.67	94.59
25	90.90	89.36	87.46	86.81	85.12	84.27	83.81	88.07	93.02	101.31	97.68	94.18
EOM	90.12	89.12	87.13	85.76	84.63	83.25	83.95	88.01	96.26	100.68	96.91	93.57
MEAN	91.52	89.58	87.79	86.64	85.04	83.82	83.40	86.19	90.16	100.33	99.45	95.06
WTR YR 1997 MEAN 89.96 HIGH 82.90 APR 18 LOW 103.58 JUL 21												

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.

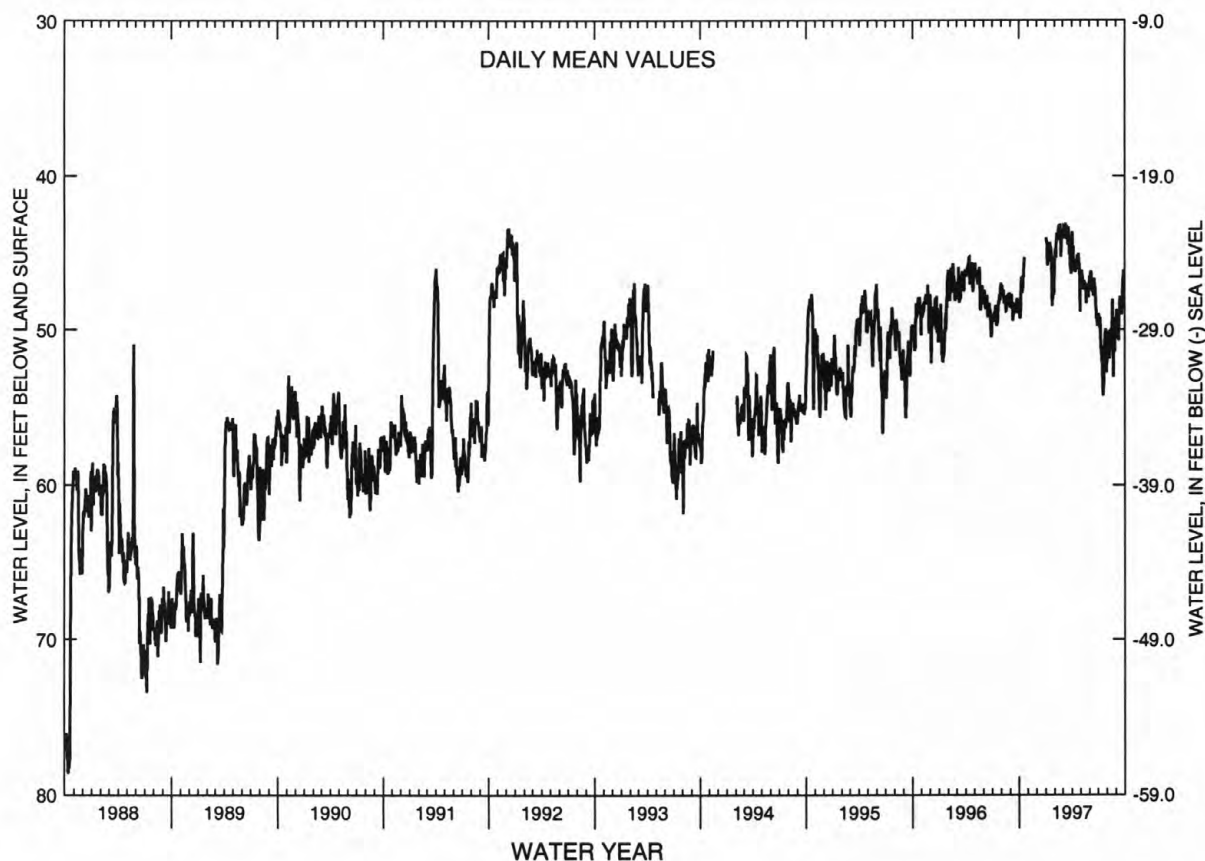
PERIOD OF RECORD.--Nov. 1949 to current year. Records for 1975 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	49.22	---	---	44.23	44.70	43.32	45.31	46.21	46.63	49.28	50.64	49.54
10	46.58	---	---	45.03	43.96	43.07	46.16	46.88	46.96	50.21	51.90	49.91
15	47.22	---	---	44.69	43.37	43.29	46.03	46.80	47.51	52.14	50.01	48.26
20	45.38	---	---	44.70	43.73	43.67	45.14	47.17	47.08	54.04	48.43	48.52
25	---	---	---	47.37	44.44	44.38	45.04	47.74	48.63	50.68	51.45	47.45
EOM	---	---	---	46.45	44.05	46.38	48.82	47.32	49.72	52.79	49.30	47.83
MEAN	---	---	---	45.67	44.14	44.11	45.66	47.12	47.51	51.11	50.64	48.62
WTR YR 1997	HIGH 43.07 MAR 10 LOW 54.26 JUL 19											

NJ-WRD WELL NO. 15-0323



GROUND-WATER LEVELS

119

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.

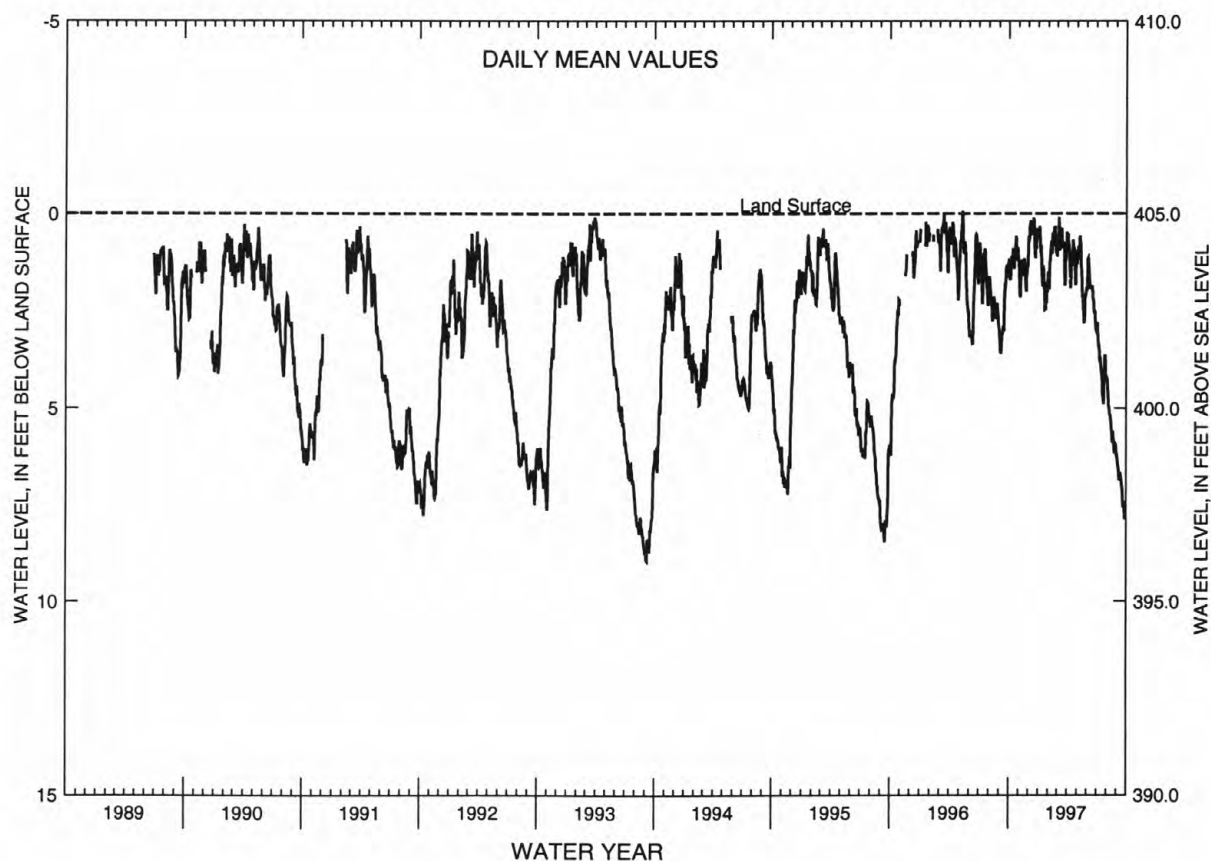
PERIOD OF RECORD.--June 1989 to current year. Records for 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.67	2.06	.66	.32	1.30	.45	.90	.99	1.14	3.05	4.36	6.41
10	1.09	1.33	.55	.80	.77	.51	1.73	.57	1.82	3.54	5.06	6.85
15	1.18	1.54	.43	1.86	.49	.38	1.35	1.43	1.91	3.93	5.34	6.76
20	.96	1.24	.47	1.96	.64	.72	.80	2.21	2.18	4.63	5.89	7.06
25	.86	2.00	.80	1.88	.94	1.81	1.50	2.61	2.49	4.20	6.03	7.43
EOM	1.09	1.34	.48	1.54	1.02	.47	1.14	1.92	2.99	4.26	6.05	7.66
MEAN	1.14	1.55	.54	1.47	.93	.81	1.14	1.63	2.02	3.82	5.33	6.96
WTR YR 1997 MEAN 2.28 HIGH .09 MAR 6 LOW 7.88 SEP 27												

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.

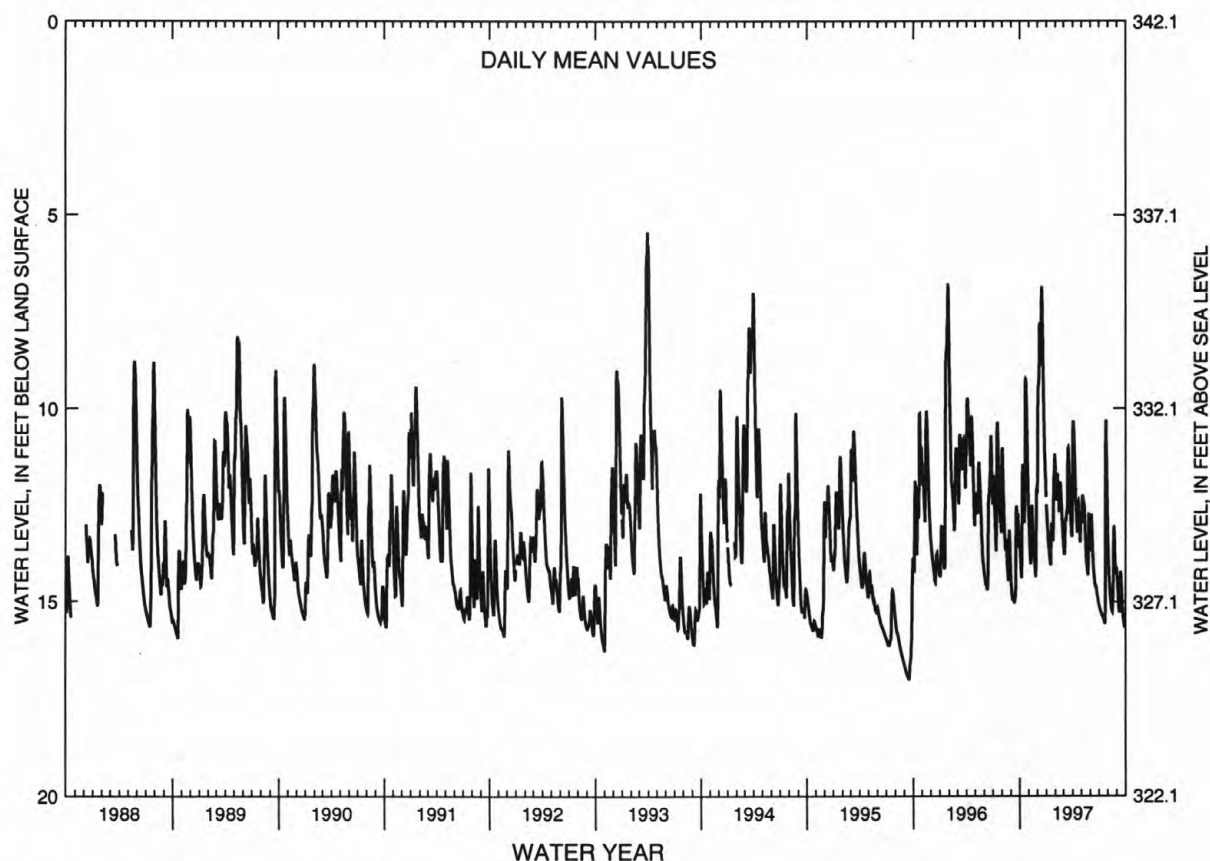
PERIOD OF RECORD.--June 1965 to current year. Records for 1965 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.01	13.63	9.43	13.04	12.36	13.70	10.50	12.32	12.73	15.16	14.10	14.60
10	11.79	12.92	7.99	13.62	12.00	12.90	11.74	12.48	13.71	15.29	14.80	15.21
15	12.19	13.04	6.85	14.01	12.47	11.67	12.74	13.15	14.33	15.38	15.18	14.22
20	9.31	13.77	8.72	12.97	12.17	11.51	12.38	14.00	14.58	15.48	14.87	14.86
25	10.08	14.35	10.92	12.75	12.99	12.67	13.01	14.31	14.78	10.88	13.39	15.46
EOM	12.36	12.11	12.27	11.45	13.39	13.04	12.69	13.33	14.99	12.54	14.09	15.66
MEAN	11.98	13.31	9.43	12.97	12.31	12.61	12.17	13.13	14.13	14.42	14.29	14.91
WTR YR 1997 MEAN 12.97 HIGH 6.85 DEC 15 LOW 15.66 SEP 30												

NJ-WRD WELL NO. 19-0002



GROUND-WATER LEVELS

121

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.

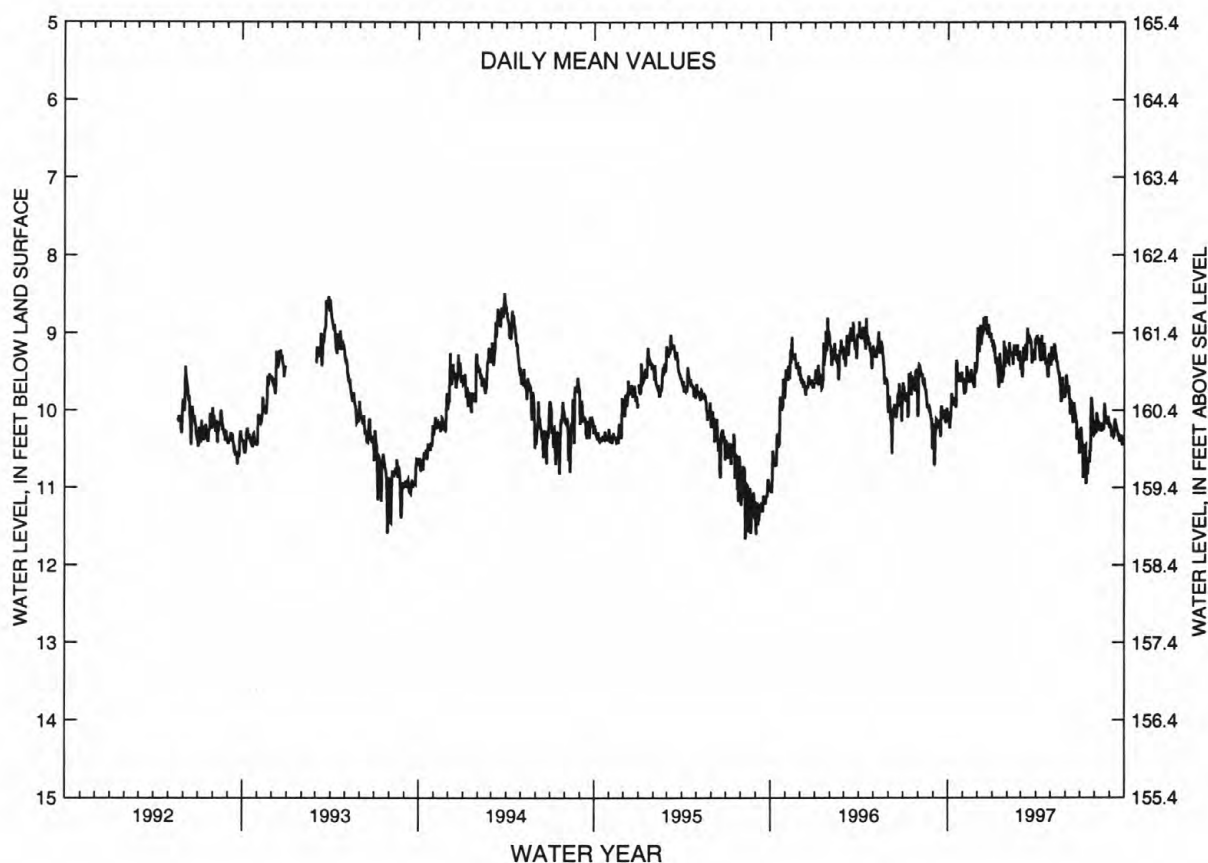
PERIOD OF RECORD.--Mar. 1991 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.23	9.74	9.23	9.15	9.12	9.47	9.14	9.29	9.68	10.41	10.03	10.34
10	9.93	9.49	9.05	9.31	9.28	9.16	9.34	9.16	9.90	10.45	10.19	10.32
15	9.93	9.64	8.96	9.58	9.15	8.94	9.35	9.36	9.99	10.74	10.27	10.20
20	9.39	9.56	8.93	9.46	9.29	9.07	9.31	9.58	10.00	10.65	10.20	10.30
25	9.58	9.69	8.95	9.10	9.36	9.34	9.51	9.62	10.38	9.83	10.13	10.32
EOM	9.62	9.45	9.12	9.25	9.47	9.07	9.41	9.83	10.56	10.30	10.21	10.40
MEAN	9.79	9.59	8.99	9.38	9.28	9.24	9.27	9.48	9.99	10.44	10.16	10.30
WTR YR 1997	MEAN 9.66 HIGH 8.79 DEC 17 LOW 10.95 JUL 14											

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.

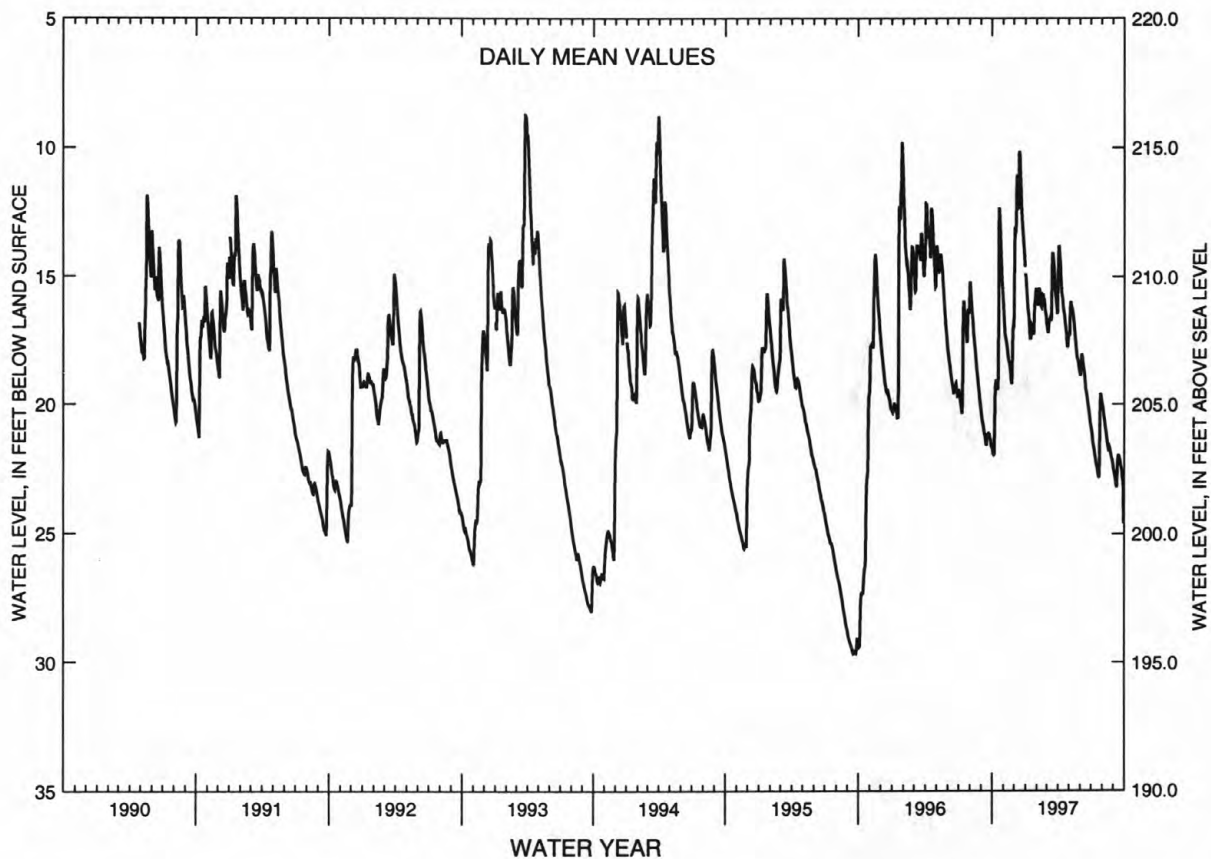
PERIOD OF RECORD.--Apr. 1990 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.92	16.98	13.33	15.59	15.97	17.20	14.16	16.14	18.04	21.28	20.30	22.77
10	19.83	17.56	11.42	16.48	15.64	16.64	15.39	16.26	18.52	21.77	20.86	23.19
15	19.18	18.15	10.15	17.47	15.99	14.79	16.20	16.83	19.17	22.24	21.35	21.99
20	13.23	18.56	11.76	16.93	15.87	14.53	16.74	17.64	19.70	22.64	21.82	22.15
25	13.81	19.21	13.31	16.69	16.38	15.76	17.46	18.27	20.19	21.51	21.89	22.57
EOM	15.65	16.93	14.61	15.45	16.73	16.16	17.28	18.73	20.82	19.82	22.33	24.62
MEAN	17.91	17.76	12.61	16.38	15.93	15.96	16.01	17.30	19.29	21.52	21.27	22.65
WTR YR 1997	MEAN 17.89 HIGH 10.15 DEC 15 LOW 24.62 SEP 30											

NJ-WRD WELL NO. 19-0270



GROUND-WATER LEVELS

123

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.

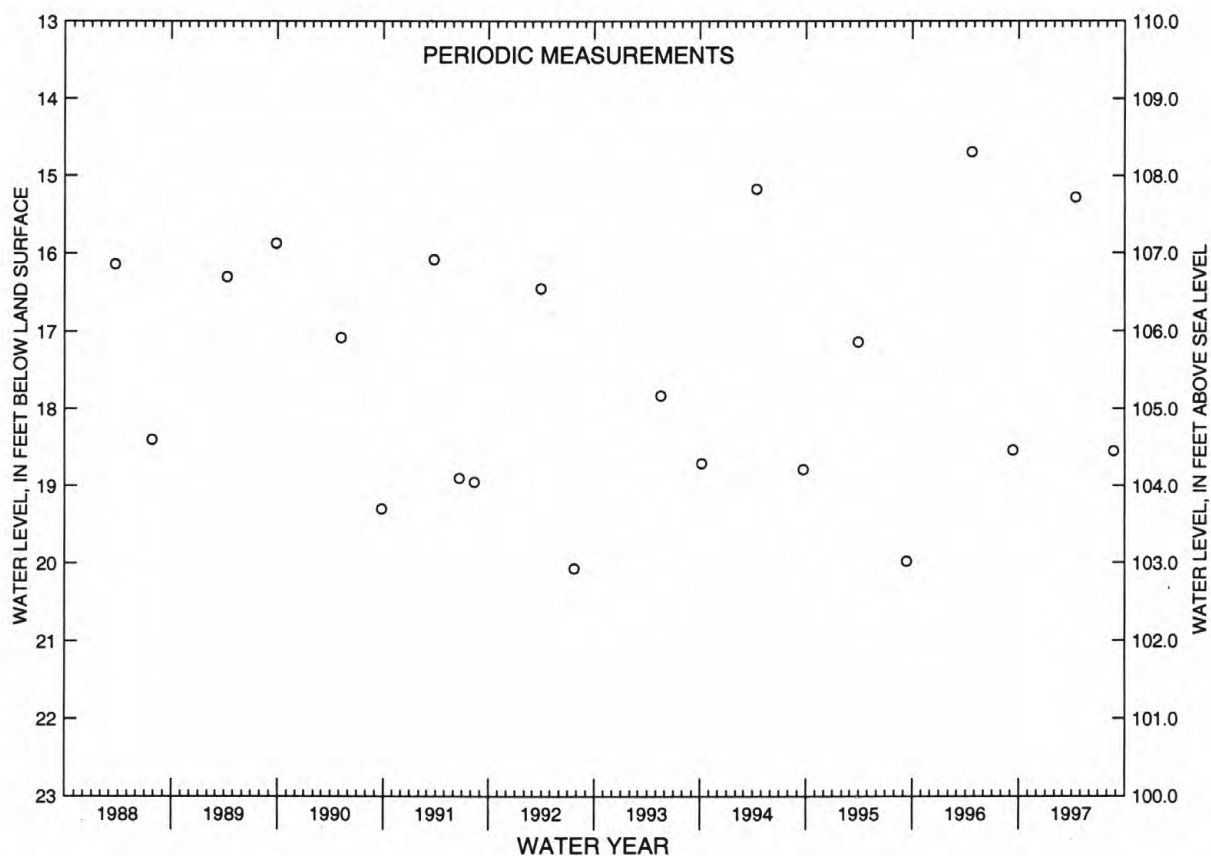
PERIOD OF RECORD.--June 1964 to Sept. 1976, Apr. 1978 to current year. Records for 1964 to 1976 and 1978 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 16	15.28	AUG 25	18.55

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.

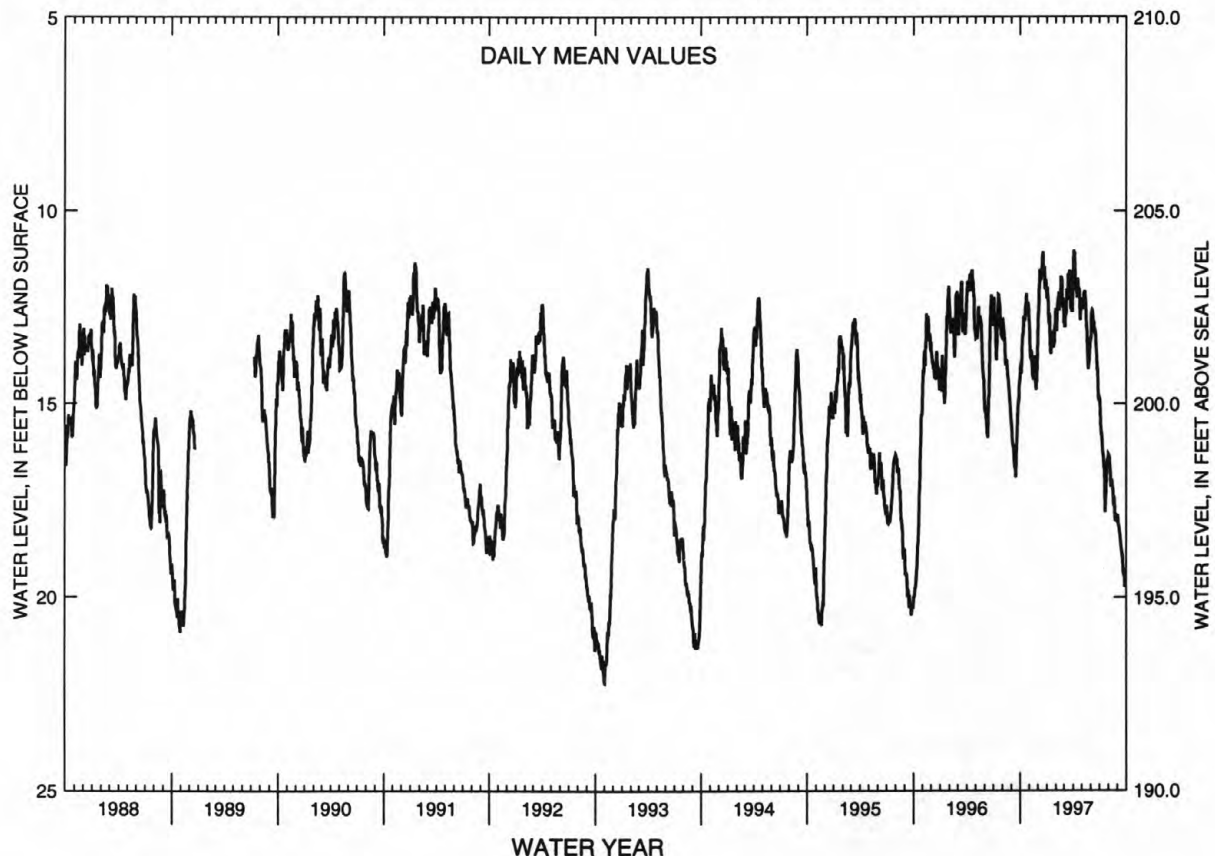
PERIOD OF RECORD.--Dec. 1986 to current year. Records for 1986 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.96 ft below land surface, Apr. 4, 1997; lowest, 22.29 ft below land surface, Nov. 1-2, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.23	13.74	12.44	12.23	12.66	12.95	11.22	12.58	12.65	15.29	16.36	18.10
10	13.21	13.93	11.74	12.67	12.24	12.20	11.91	12.10	12.80	15.84	17.14	18.36
15	12.85	14.37	11.64	13.71	12.16	11.71	12.26	12.31	13.20	16.34	17.09	18.71
20	12.50	13.89	11.36	13.13	11.94	11.54	12.04	13.20	13.46	17.09	17.51	18.89
25	12.56	14.64	11.75	13.21	12.53	12.57	12.44	14.05	14.11	17.05	17.96	19.27
EOM	12.67	13.63	12.12	12.61	12.73	12.31	12.50	13.39	14.93	16.51	17.96	19.45
MEAN	13.05	13.97	11.83	13.01	12.35	12.29	11.94	12.93	13.42	16.27	17.20	18.75
WTR YR 1997	MEAN 13.92 HIGH 11.02 APR 4 LOW 19.73 SEP 27											

NJ-WRD WELL NO. 21-0289



GROUND-WATER LEVELS

125

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.

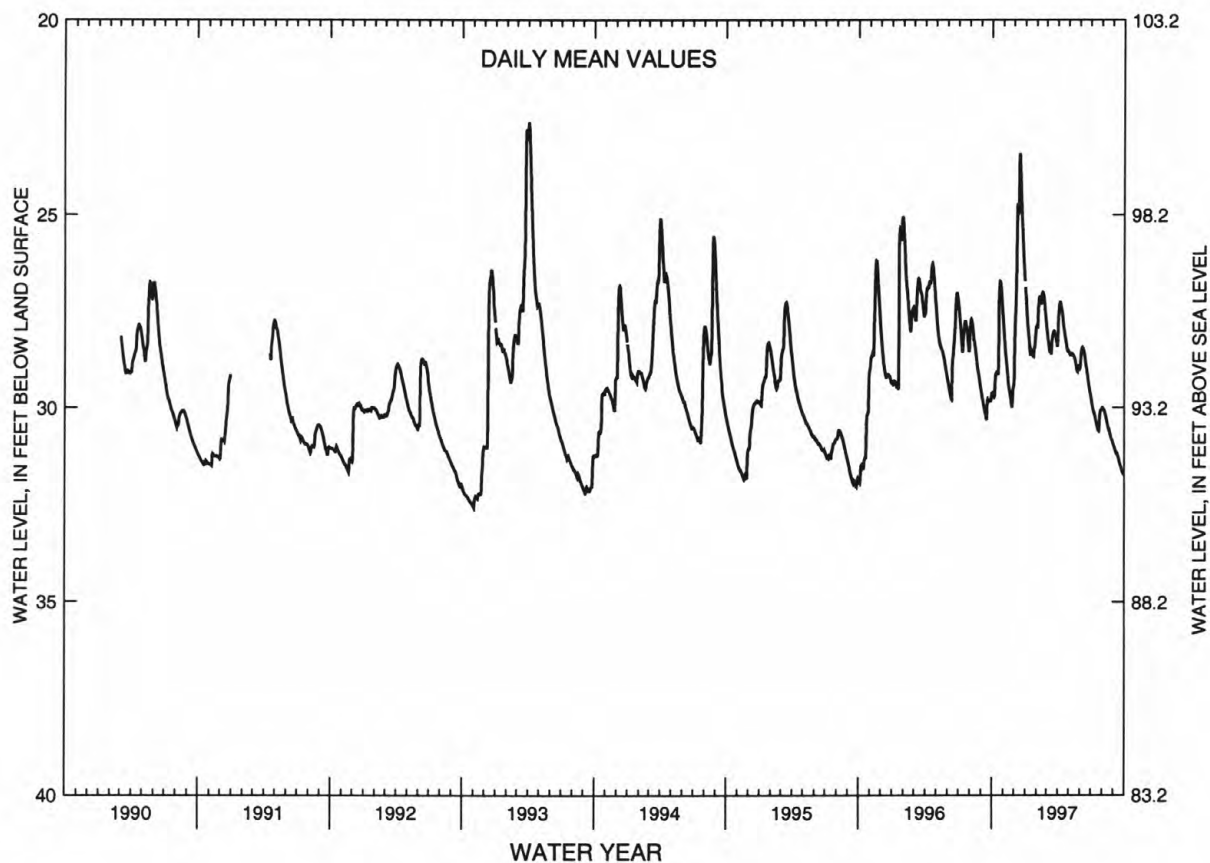
PERIOD OF RECORD.--Mar. 1990 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.69	28.32	27.48	27.44	27.61	28.25	27.34	28.62	28.52	29.94	30.03	31.04
10	29.22	28.86	24.73	28.10	27.13	28.55	27.38	28.60	28.48	30.12	30.16	31.18
15	29.09	29.38	23.55	28.65	27.11	28.35	27.75	28.67	28.72	30.35	30.36	31.27
20	27.37	29.70	24.31	28.57	27.08	28.03	28.10	28.84	29.05	30.54	30.58	31.44
25	26.82	29.99	25.61	28.51	27.51	28.14	28.40	29.07	29.37	30.30	30.73	31.59
EOM	27.60	29.41	26.71	27.94	27.83	28.38	28.54	28.96	29.67	30.03	30.90	31.72
MEAN	28.47	29.15	25.63	28.14	27.36	28.27	27.88	28.76	28.93	30.20	30.41	31.32
WTR YR 1997	MEAN 28.71 HIGH 23.41 DEC 16 LOW 31.72 SEP 30											

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.

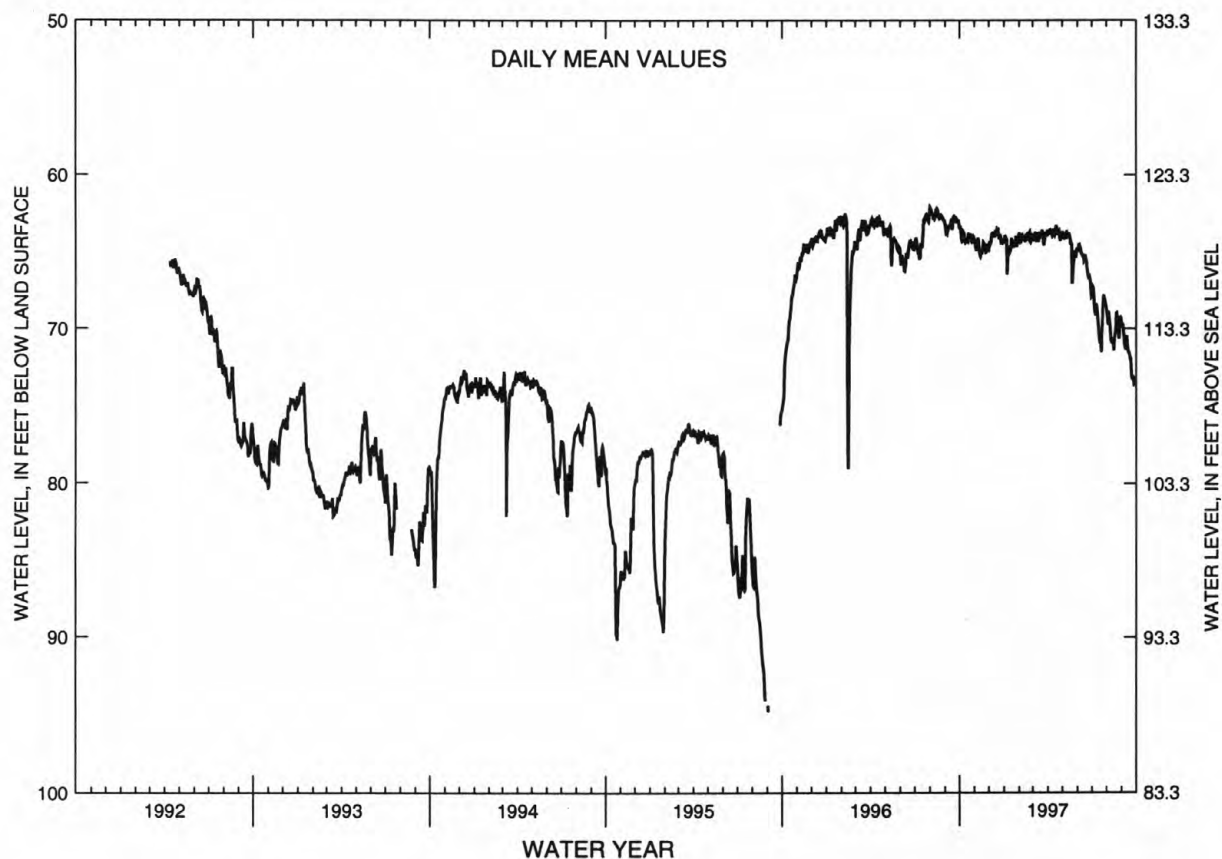
PERIOD OF RECORD.--Apr. 1991 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	64.19	64.72	64.38	64.14	63.83	63.99	63.82	64.21	64.51	67.85	68.88	70.24
10	63.77	64.79	64.04	64.65	64.22	63.88	63.94	63.70	65.10	68.40	70.76	71.29
15	64.45	65.11	63.82	64.67	63.84	63.73	63.92	63.87	65.56	70.07	71.03	71.49
20	63.89	64.45	63.81	64.51	63.96	63.57	63.78	64.46	65.65	71.23	70.08	71.92
25	64.06	65.03	64.26	63.99	64.28	64.23	64.00	65.34	66.62	67.99	70.11	73.04
EOM	64.14	64.92	64.21	63.78	64.20	63.67	63.87	64.78	67.92	68.60	69.34	73.28
MEAN	64.07	64.74	64.03	64.53	64.07	64.00	63.76	64.56	65.67	69.02	69.94	71.67
WTR YR 1997	MEAN 65.85 HIGH 63.29 APR 18 LOW 73.57 SEP 27											

NJ-WRD WELL NO. 21-0366



GROUND-WATER LEVELS

127

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.

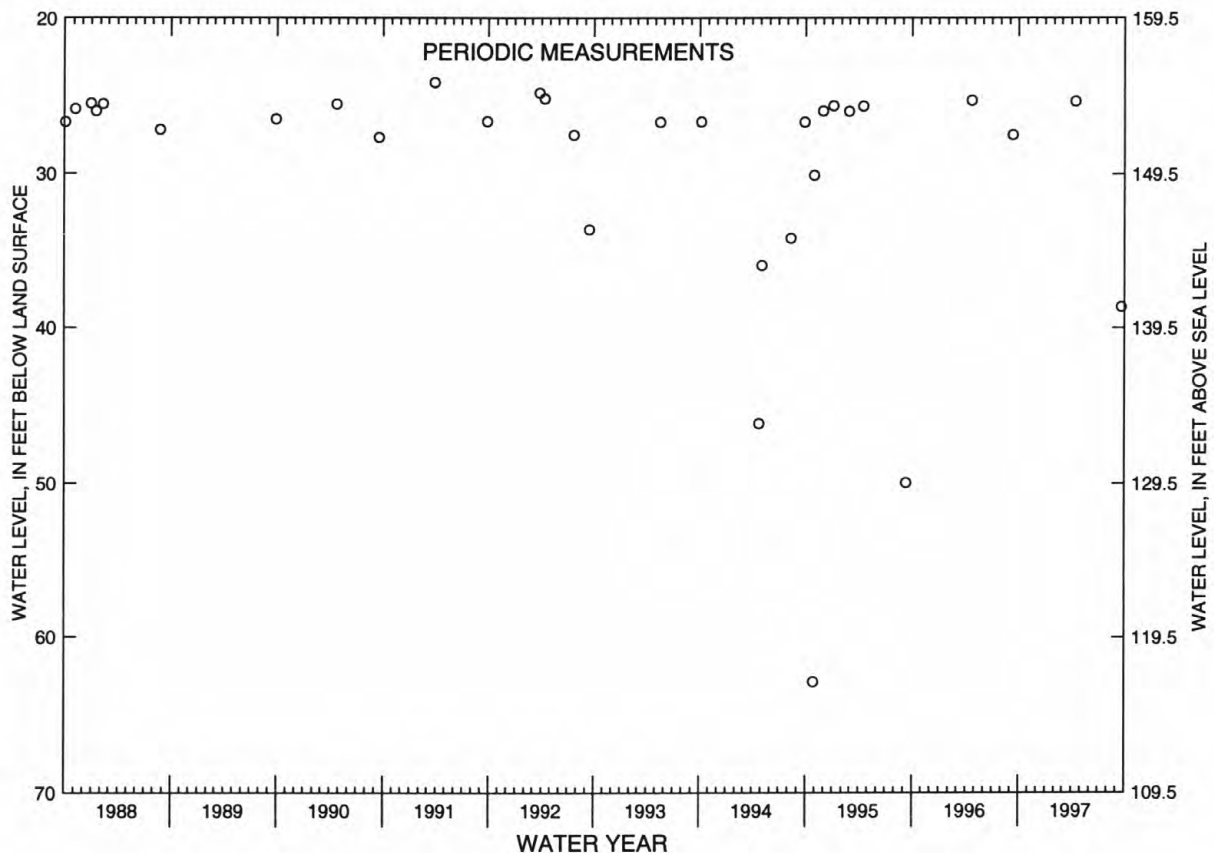
PERIOD OF RECORD.--June 1967 to current year. Records for 1967 to 1975 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 16	25.34	SEP 22	38.66

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.

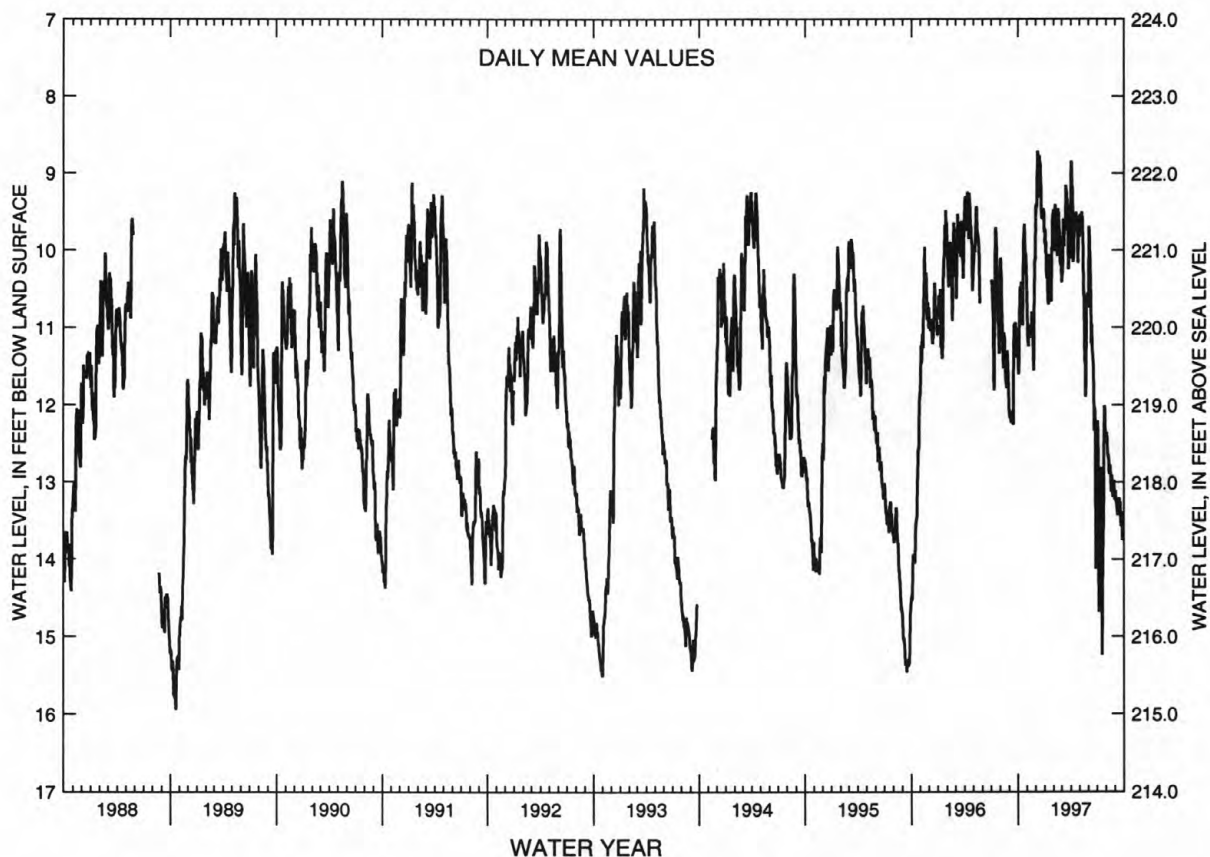
PERIOD OF RECORD.--Feb. 1987 to current year. Records for 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.49 ft below land surface, Dec. 8, 1996; lowest, 16.72 ft below land surface, July 18, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.45	11.17	9.41	9.89	9.48	9.99	9.18	9.65	9.79	12.41	12.42	13.24
10	10.61	11.05	9.17	10.21	9.75	9.74	10.12	9.50	10.53	13.24	12.68	13.40
15	10.73	11.13	8.90	10.66	9.47	9.15	9.74	10.17	11.28	12.83	12.78	13.26
20	9.90	10.95	9.47	10.18	9.88	9.33	9.58	11.45	11.71	14.48	13.09	13.26
25	9.96	11.32	9.51	9.96	10.19	10.16	10.02	11.45	12.20	12.51	13.19	13.39
EOM	10.45	9.92	9.77	9.47	10.40	9.70	9.63	10.61	12.66	12.46	13.17	13.56
MEAN	10.53	10.92	9.29	10.14	9.79	9.79	9.62	10.36	11.38	13.07	12.83	13.36
WTR YR 1997	MEAN 10.93 HIGH 8.71 DEC 8 LOW 15.24 JUL 19											

NJ-WRD WELL NO. 21-0365



GROUND-WATER LEVELS

129

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.

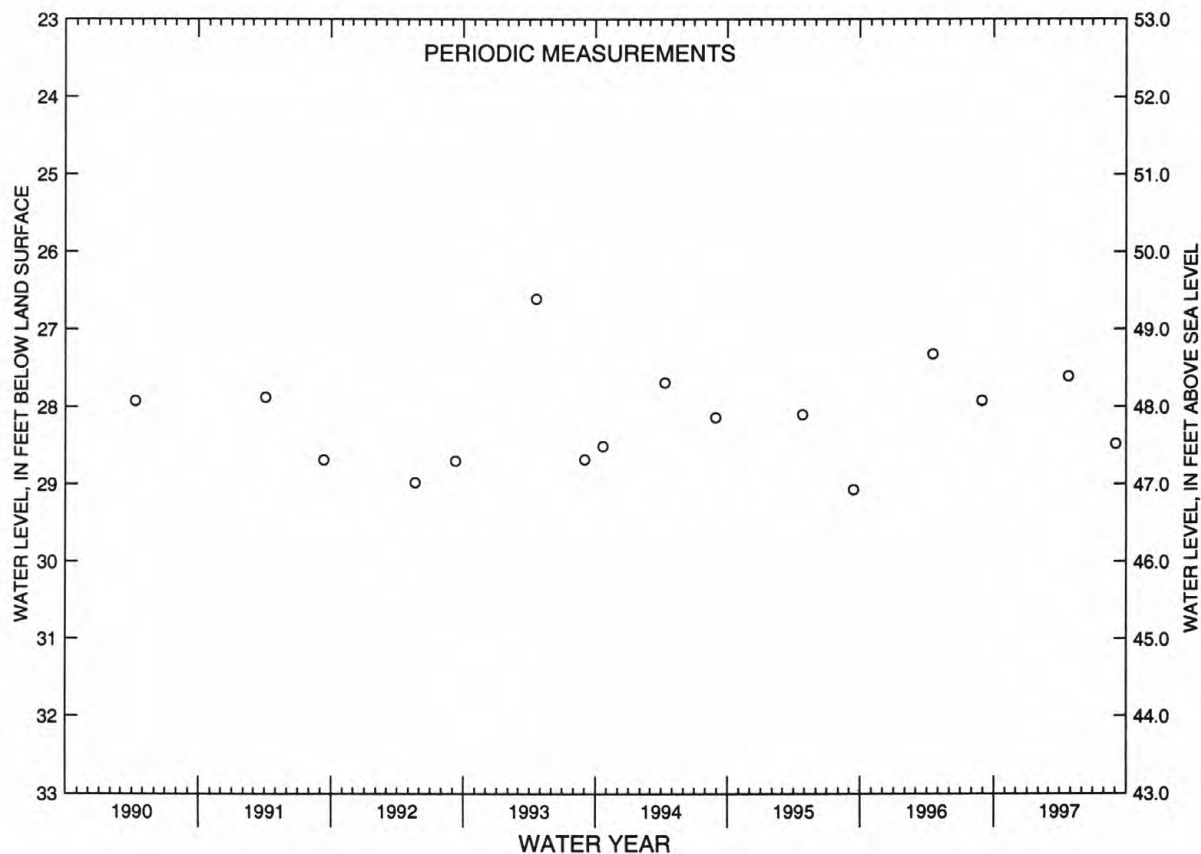
PERIOD OF RECORD.--Dec. 1970 to Nov. 1984, Apr. 1987 to Sept. 1987, Apr. 1990 to current year. Records for 1970 to 1984, and 1987 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 25	27.61	SEP 3	28.48

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.

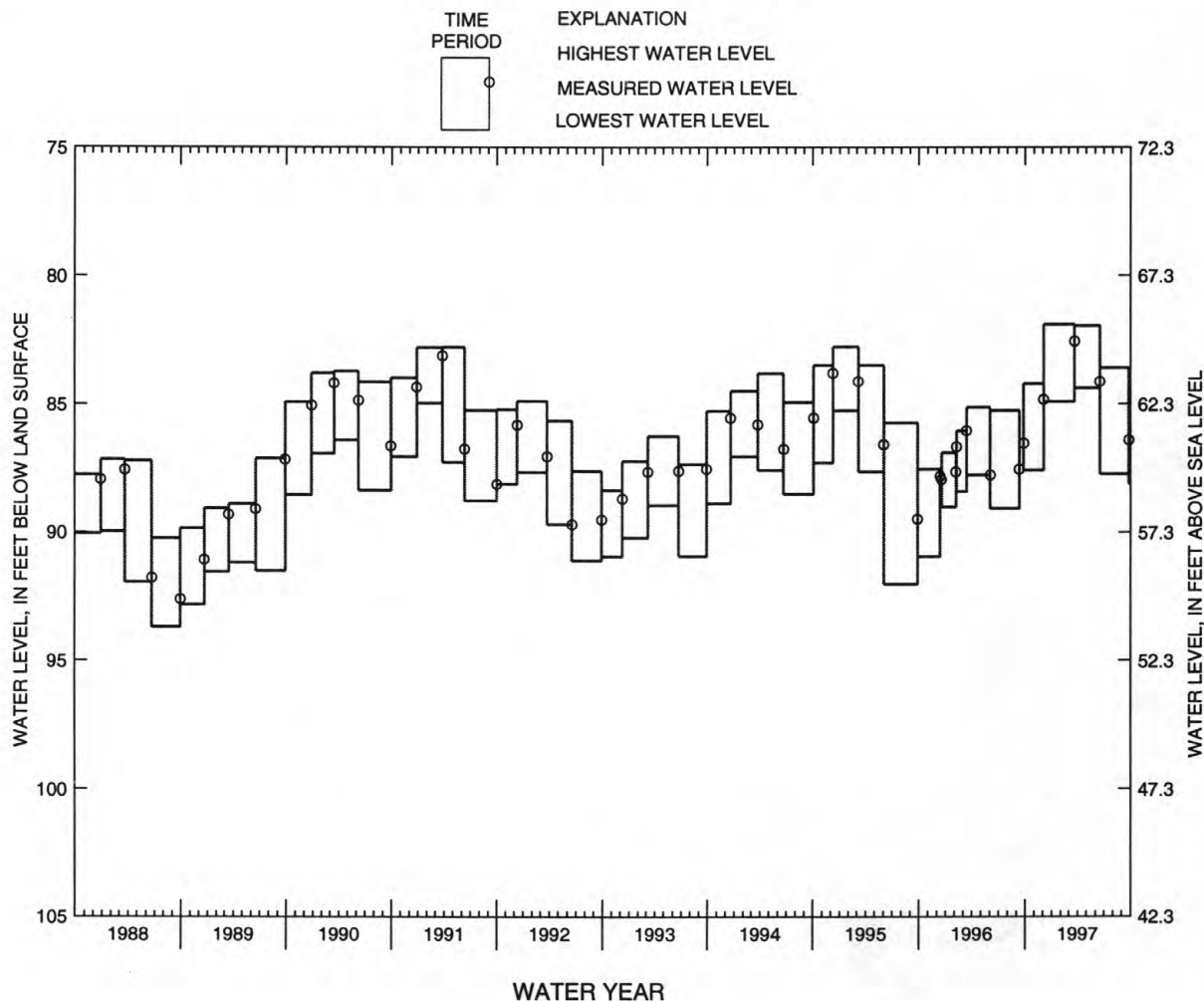
PERIOD OF RECORD.--Oct. 1961 to current year. Records for 1961 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1996 TO DEC. 4, 1996	84.21	87.56	DEC. 4, 1996	84.82
DEC. 4, 1996 TO MAR. 21, 1997	81.90	84.91	MAR. 21, 1997	82.56
MAR. 21, 1997 TO JUNE 18, 1997	81.96	84.38	JUNE 18, 1997	84.13
JUNE 18, 1997 TO SEPT. 26, 1997	83.58	87.72	SEPT. 26, 1997	86.40

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.

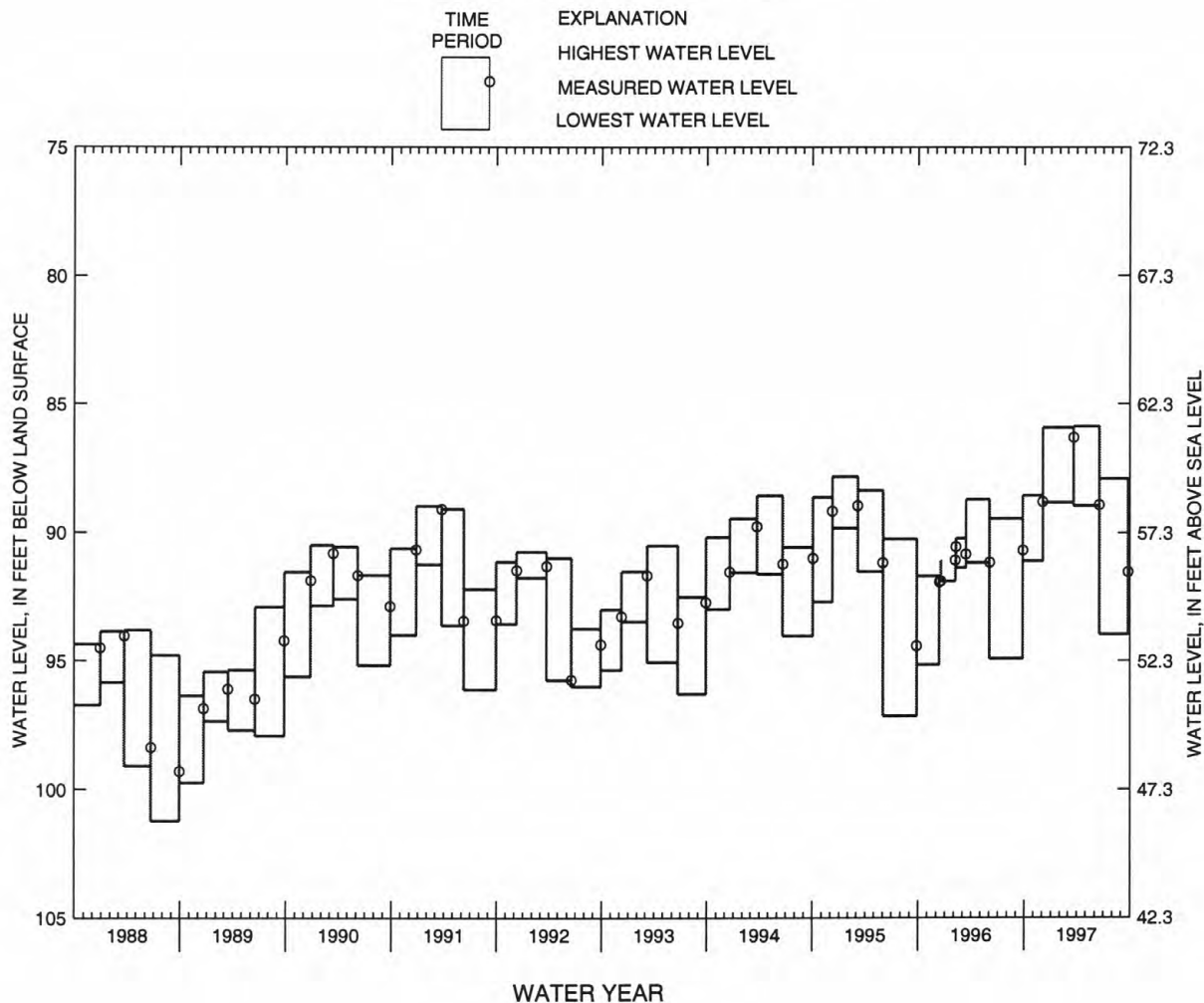
PERIOD OF RECORD.--Apr. 1965 to current year. Records for 1965 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1996 TO DEC. 4, 1996	88.55	91.10	DEC. 4, 1996	88.79
DEC. 4, 1996 TO MAR. 21, 1997	85.91	88.83	MAR. 21, 1997	86.30
MAR. 21, 1997 TO JUNE 18, 1997	85.87	88.96	JUNE 18, 1997	88.93
JUNE 18, 1997 TO SEPT. 26, 1997	87.90	93.98	SEPT. 26, 1997	91.54

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.

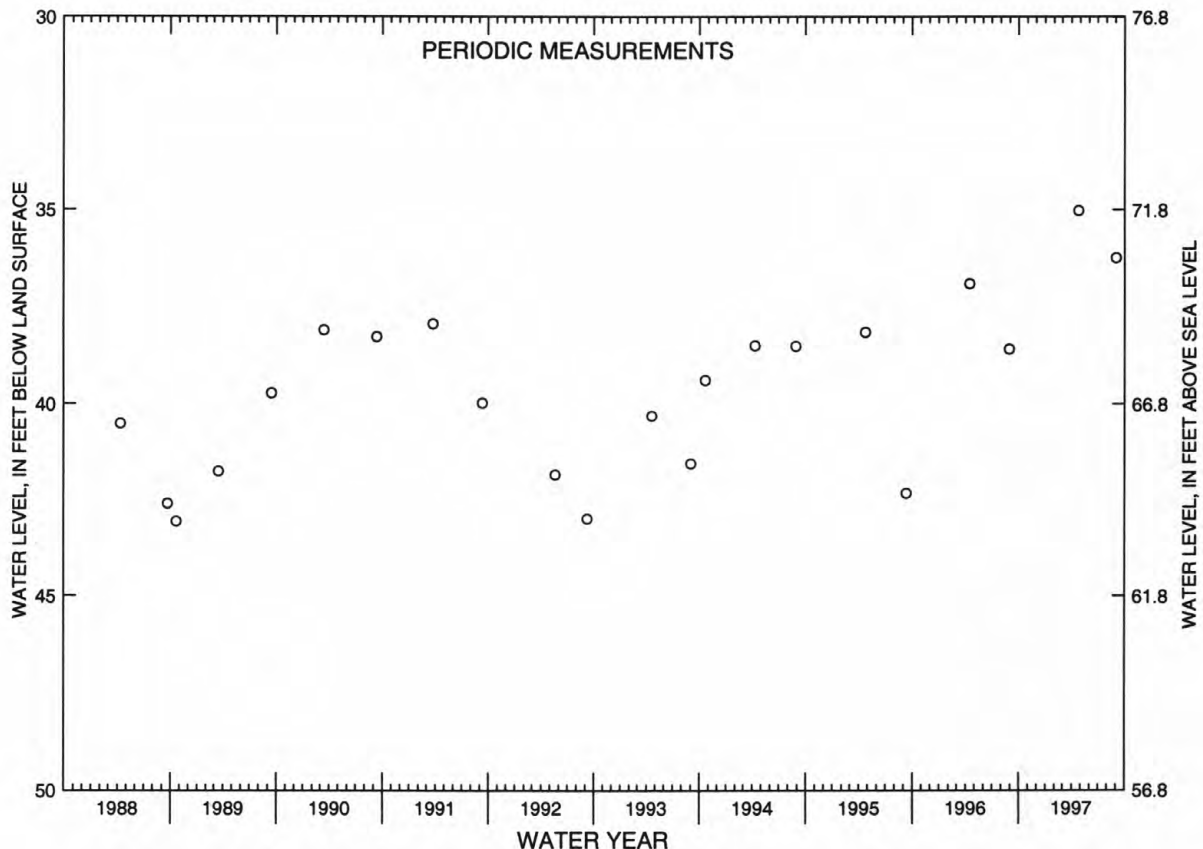
PERIOD OF RECORD.--Apr. 1965 to current year. Records for 1965 to 1975 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 25	35.02	SEP 3	36.24

NJ-WRD WELL NO. 23-0291



GROUND-WATER LEVELS

133

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.

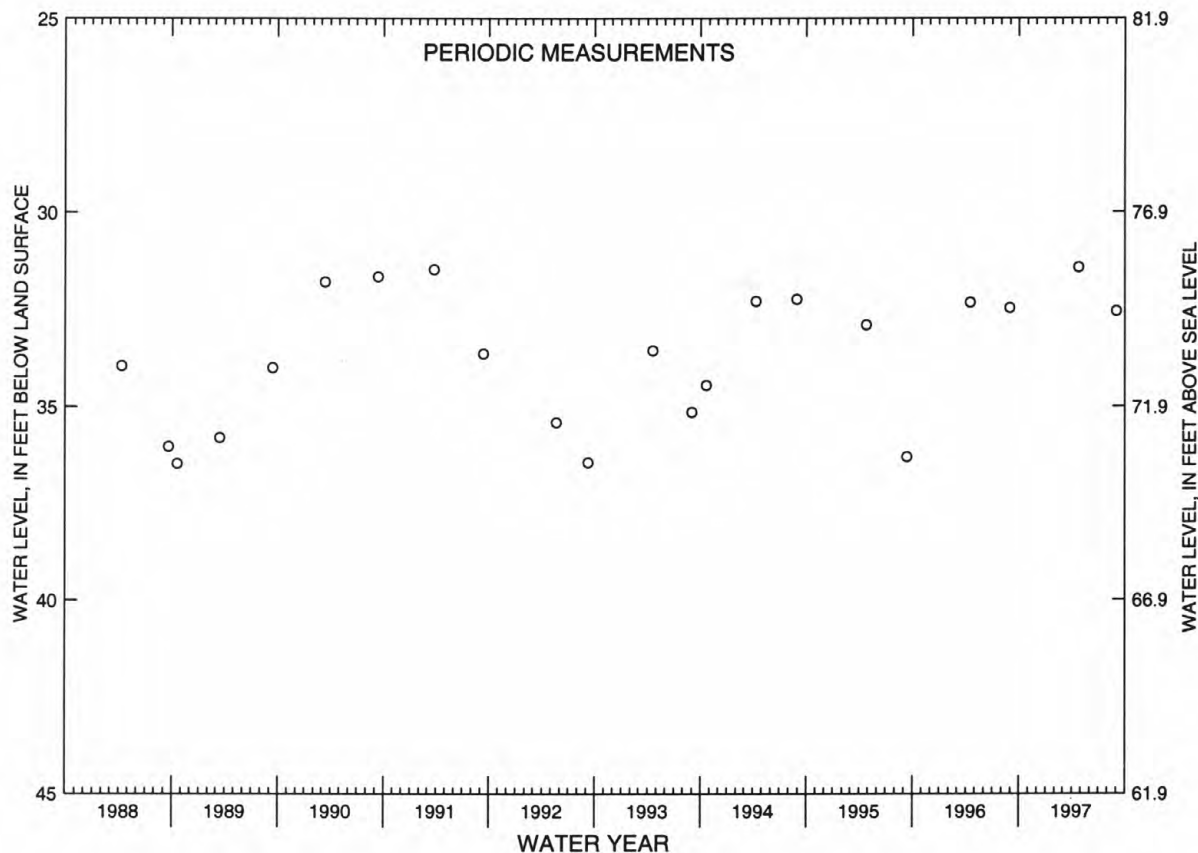
PERIOD OF RECORD.--October 1961 to current year. Records for 1961 to 1983 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 25	31.43	SEP 3	32.55

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 west 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.

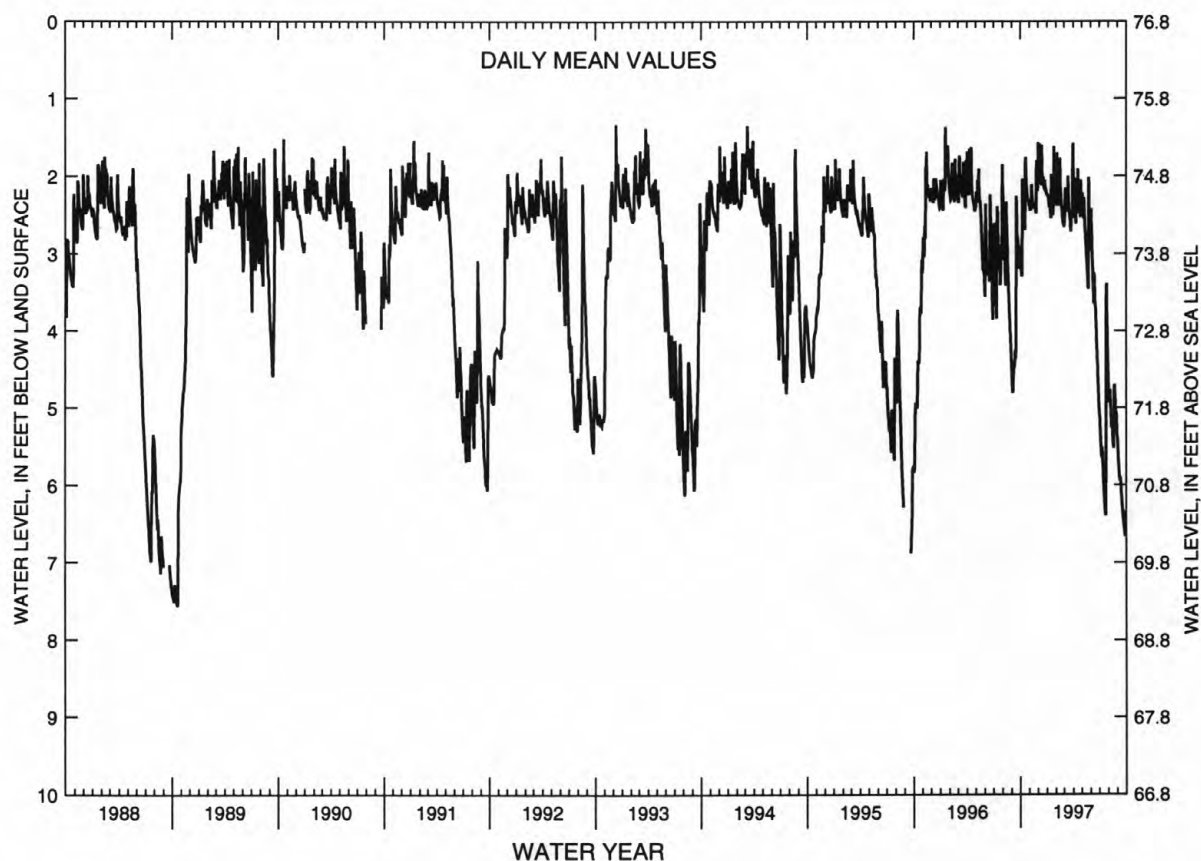
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.84 ft below land surface, Jan. 19, 1996; lowest, 10.40 ft below land surface, Oct. 13, 1953.
Well was dry, Aug. to Sept. 1932, before deepening.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.22	2.43	2.09	2.25	1.70	2.22	2.30	2.36	2.74	5.35	4.93	5.65
10	2.11	2.18	2.03	2.28	2.28	2.22	2.55	2.29	3.38	5.53	5.07	5.93
15	2.56	2.39	1.84	2.54	1.77	2.00	2.35	2.81	3.41	5.90	5.23	6.08
20	1.76	2.37	2.04	2.39	2.38	2.48	2.19	3.15	3.88	6.29	5.52	6.36
25	2.24	2.46	2.05	1.62	2.59	2.71	2.37	3.01	4.42	3.54	4.89	6.54
EOM	2.37	2.19	2.23	2.20	2.64	1.93	2.28	2.88	4.96	4.46	5.27	6.34

WTR YR 1997 MEAN 3.24 HIGH 1.57 DEC 2 LOW 6.66 SEP 28

NJ-WRD WELL NO. 23-0104



GROUND-WATER LEVELS

135

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.

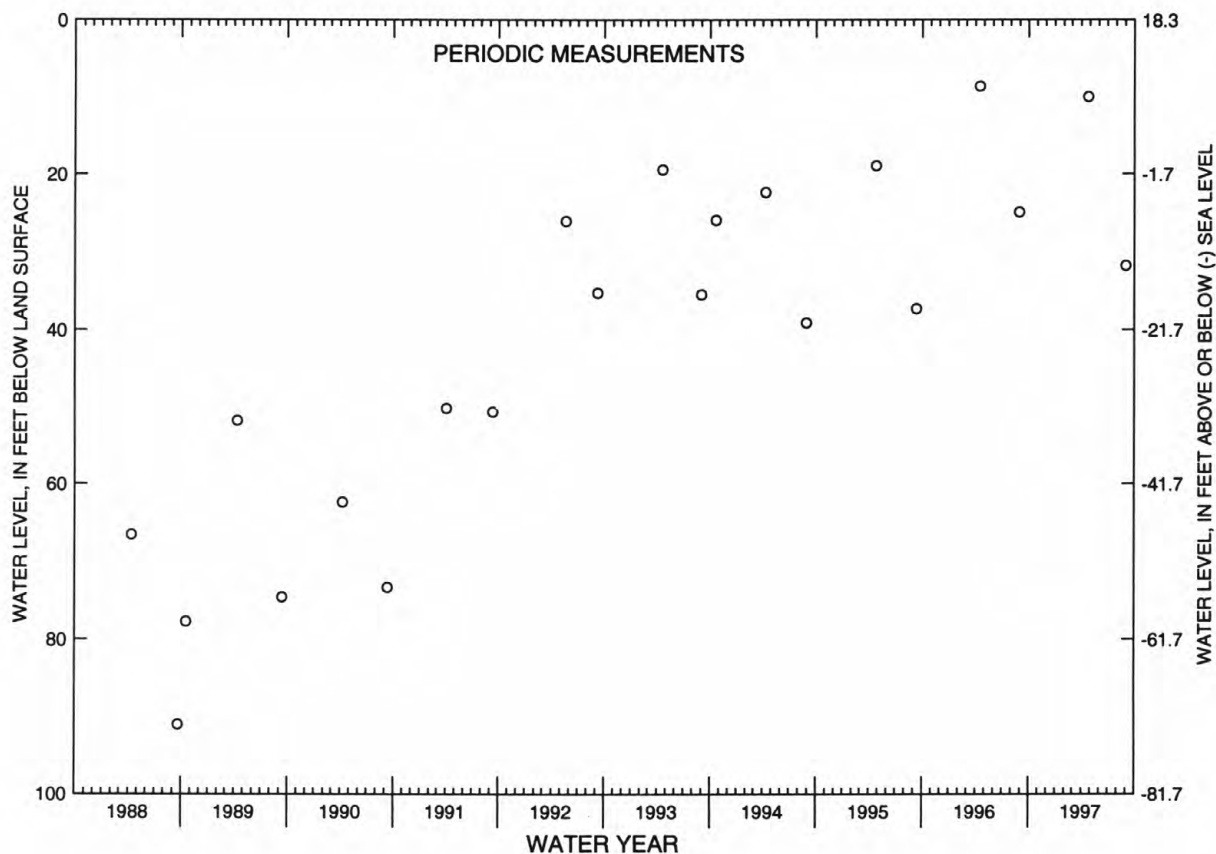
PERIOD OF RECORD.--Aug. 1934 to current year. Records for 1934 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 25	9.98	SEP 3	31.80

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.

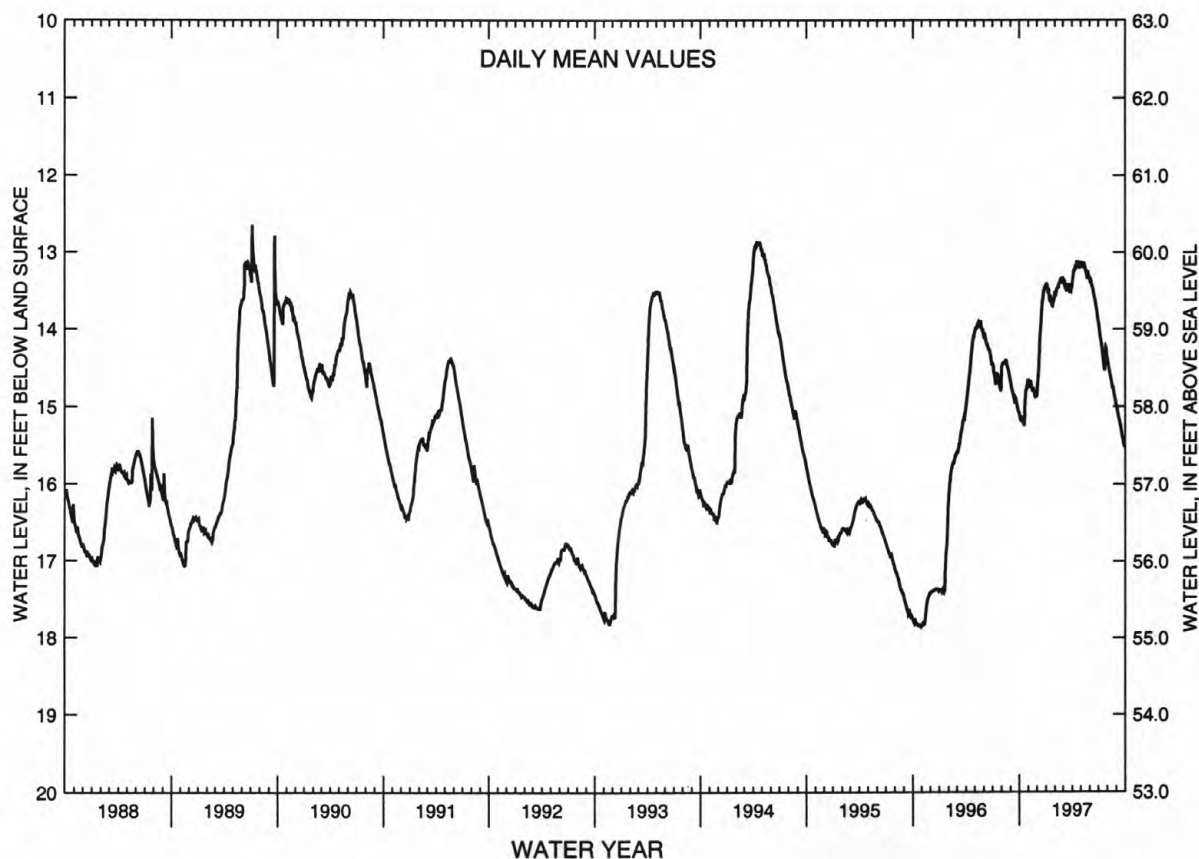
PERIOD OF RECORD.--June 1936 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.17	14.72	14.62	13.42	13.50	13.40	13.31	13.18	13.36	14.01	14.47	15.05
10	15.14	14.70	14.20	13.47	13.45	13.41	13.23	13.13	13.45	14.15	14.58	15.15
15	15.22	14.80	13.90	13.63	13.39	13.45	13.20	13.16	13.54	14.30	14.67	15.23
20	15.01	14.80	13.63	13.65	13.39	13.42	13.14	13.25	13.62	14.47	14.77	15.33
25	14.78	14.89	13.50	13.62	13.39	13.51	13.18	13.31	13.74	14.35	14.84	15.43
EOM	14.71	14.87	13.45	13.53	13.39	13.45	13.14	13.32	13.88	14.36	14.97	15.53
MEAN	15.03	14.78	13.95	13.57	13.43	13.45	13.21	13.22	13.56	14.24	14.68	15.25
WTR YR 1997	MEAN 14.03 HIGH 13.12 APR 18 LOW 15.53 SEP 30											

NJ-WRD WELL NO. 23-0070



GROUND-WATER LEVELS

137

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.

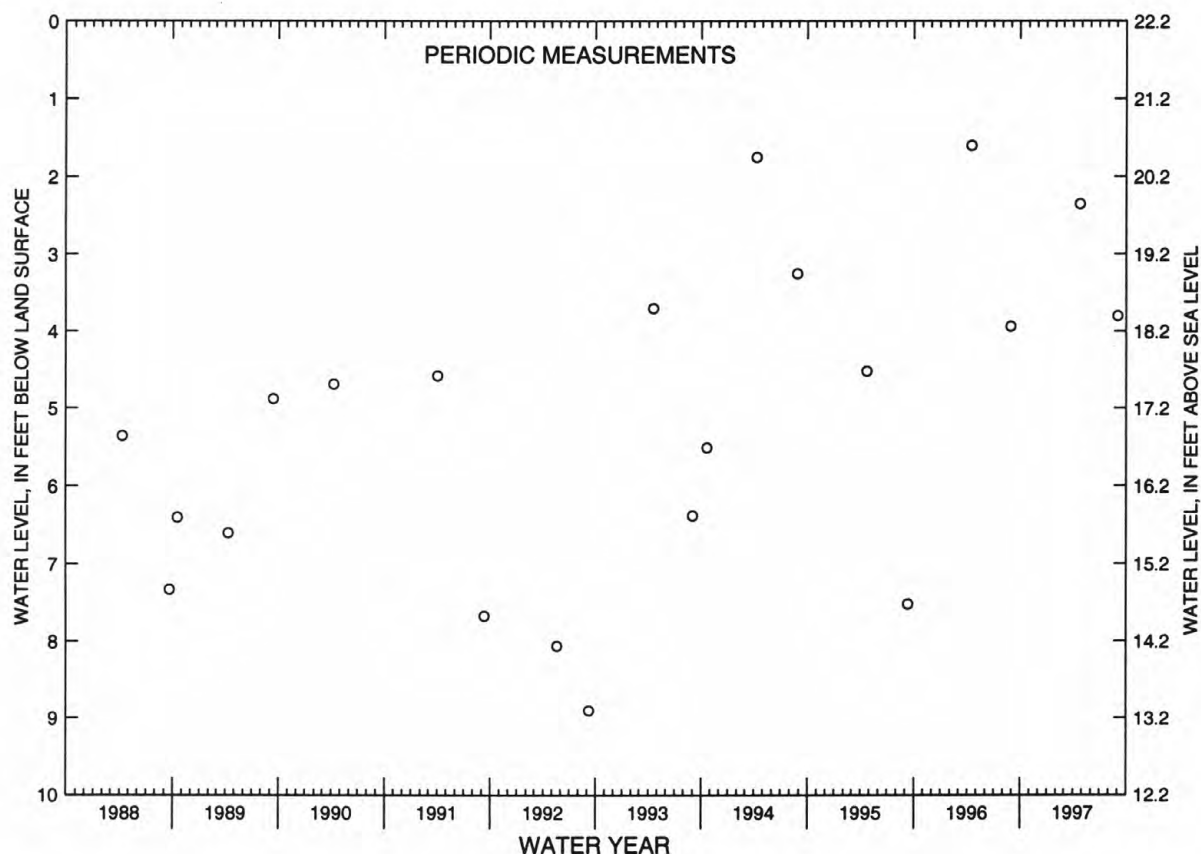
PERIOD OF RECORD.--Nov. 1968 to current year. Records for 1968 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 25	2.35	SEP 3	3.80

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.

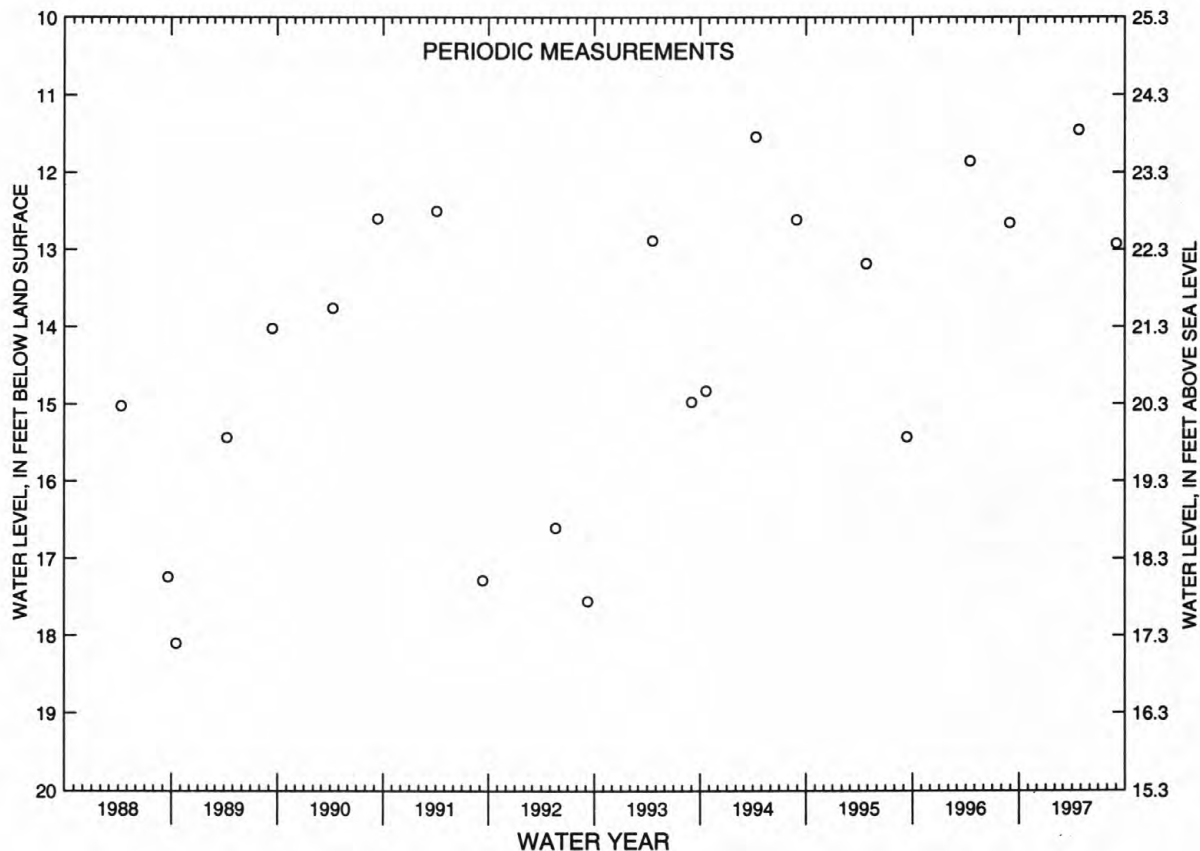
PERIOD OF RECORD.--Nov. 1968 to current year. Records for 1968 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 25	11.45	SEP 3	12.92

NJ-WRD WELL NO. 23-0351



GROUND-WATER LEVELS

139

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.

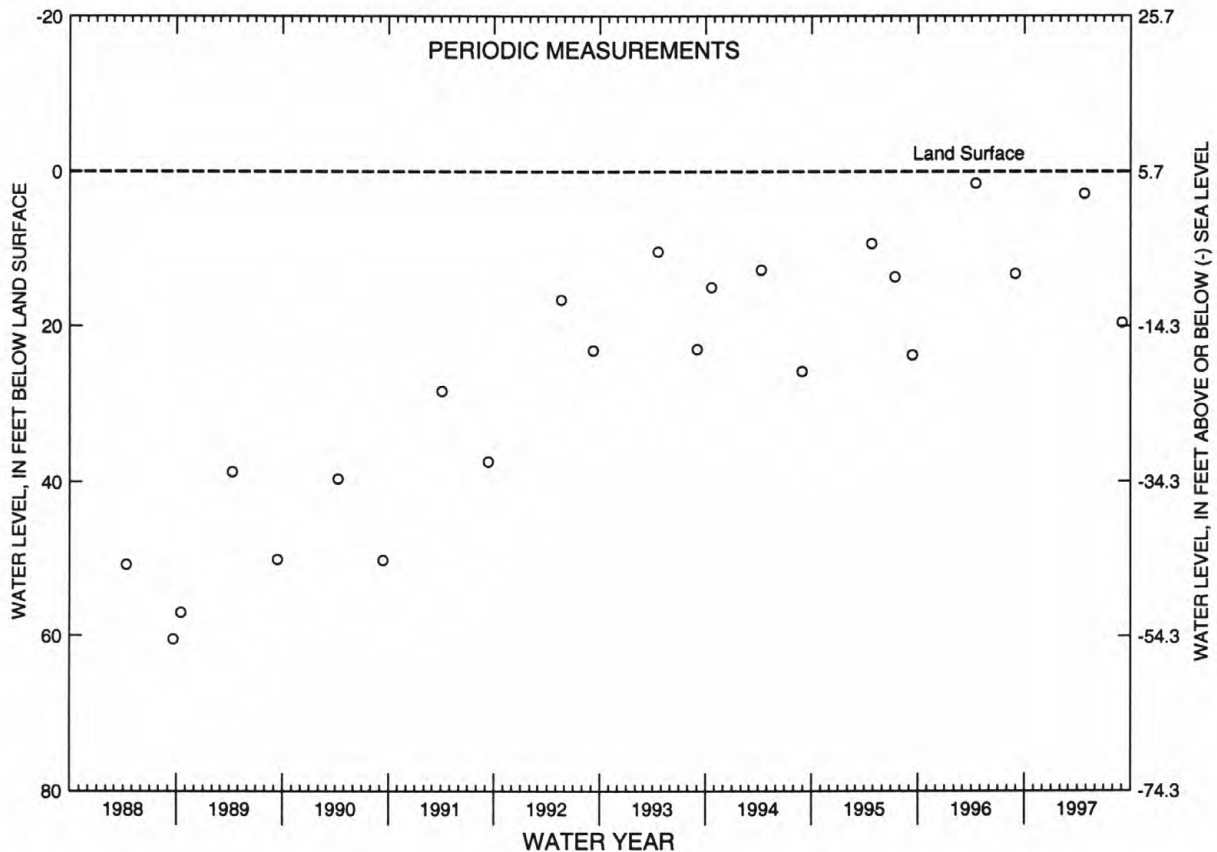
PERIOD OF RECORD.--Jan. 1936 to Nov. 1984, May 1986 to current year. Records for 1936 to 1984 and 1986 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 25	2.82	SEP 3	19.55

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.

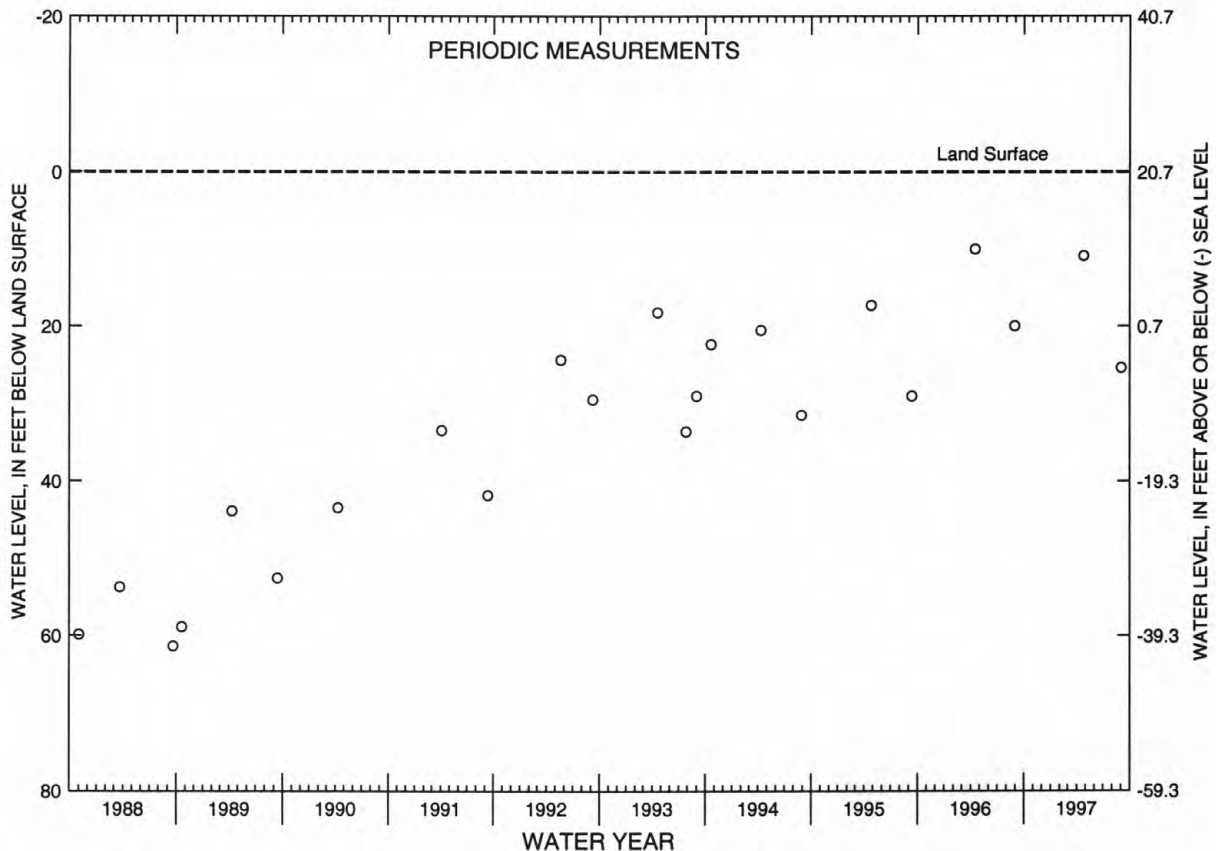
PERIOD OF RECORD.--January 1968 to current year. Records for 1968 to 1975 and 1988 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 25	10.88	SEP 3	25.37

NJ-WRD WELL NO. 23-0439



GROUND-WATER LEVELS

141

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.

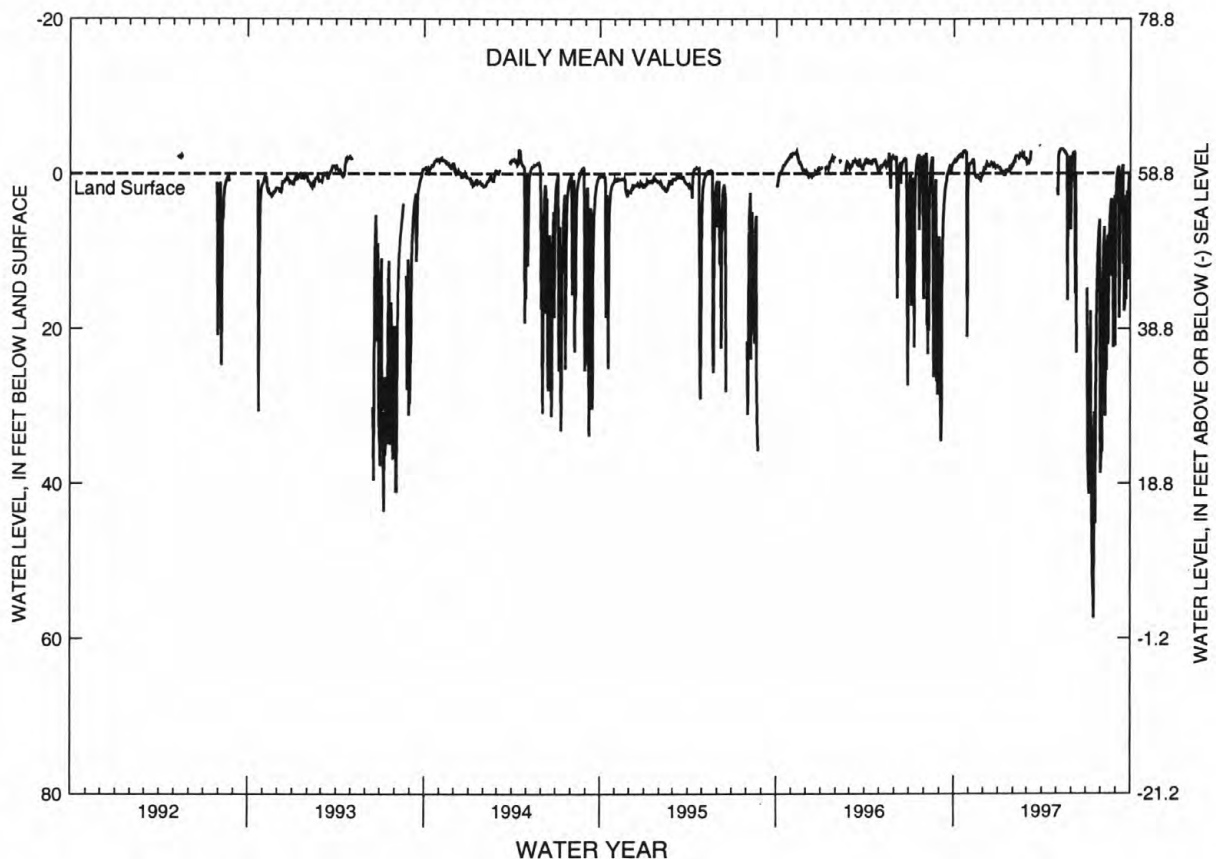
PERIOD OF RECORD.--June 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.72 ft above land surface, Mar. 12, May 1, 1997; lowest, 58.29 ft below land surface, July 18, 1997.

WATER LEVEL, IN FEET ABOVE (-) OR BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-1.51	-1.34	-.63	-.68	-2.13	-1.38	---	-2.08	-2.68	34.09	16.68	-.40
10	-2.23	-1.77	-1.04	-.43	-2.26	---	---	-3.15	.14	31.64	26.95	4.36
15	-2.23	.39	-1.15	.17	-2.44	---	---	-3.09	---	51.10	7.98	-.82
20	-2.81	.36	-1.11	-.48	-2.28	---	---	-2.66	---	43.65	5.73	16.69
25	-2.77	.88	-.98	-.70	-1.85	---	---	.43	---	12.62	4.46	2.32
EOM	-.29	.05	-.73	-1.13	-1.66	---	---	7.21	---	30.60	22.18	-.01
MEAN	-.95	-.28	-.98	-.44	-2.10	---	---	-1.17	---	30.35	15.17	4.78
WTR YR 1997	HIGH -3.65 MAR 27 LOW 57.34 JUL 18											

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.

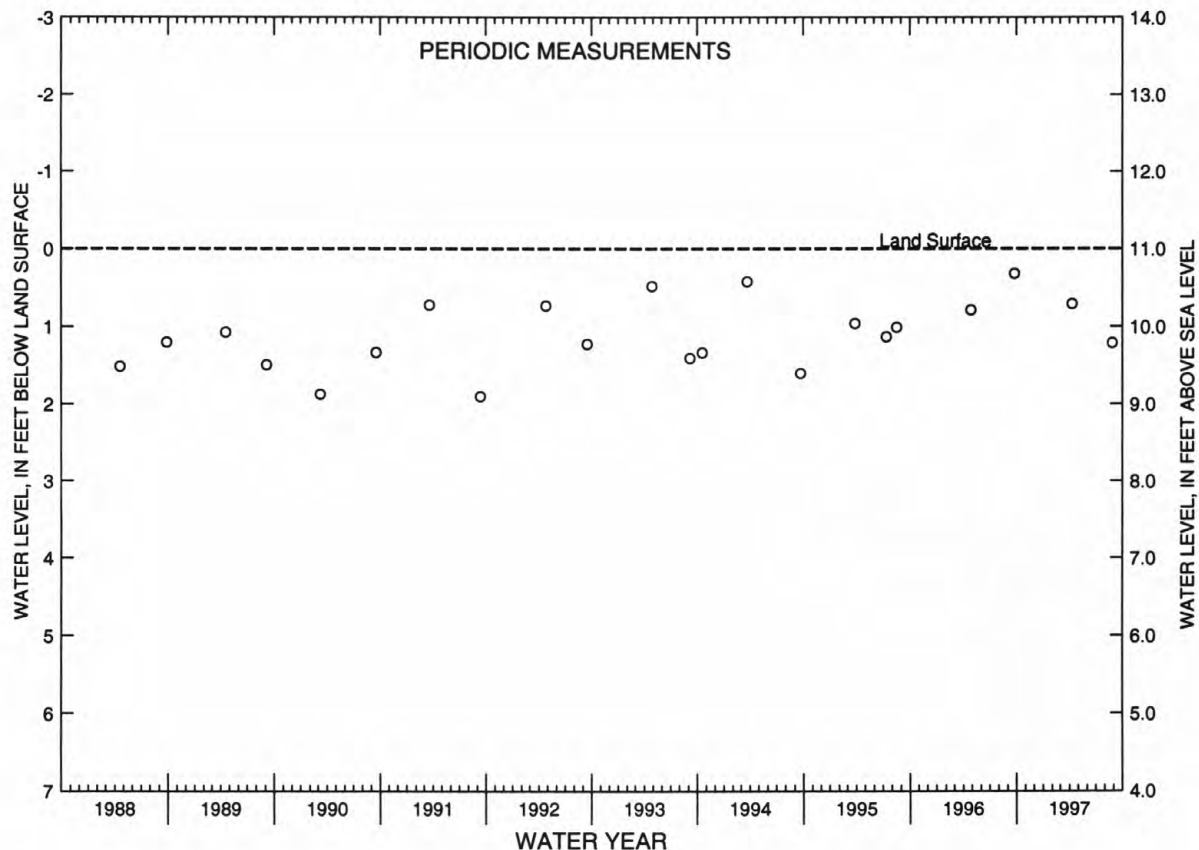
PERIOD OF RECORD.--Sept. 1950 to current year. Records for 1950 to 1982 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 11	0.71	AUG 28	1.21

NJ-WRD WELL NO. 23-0482



GROUND-WATER LEVELS

143

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.

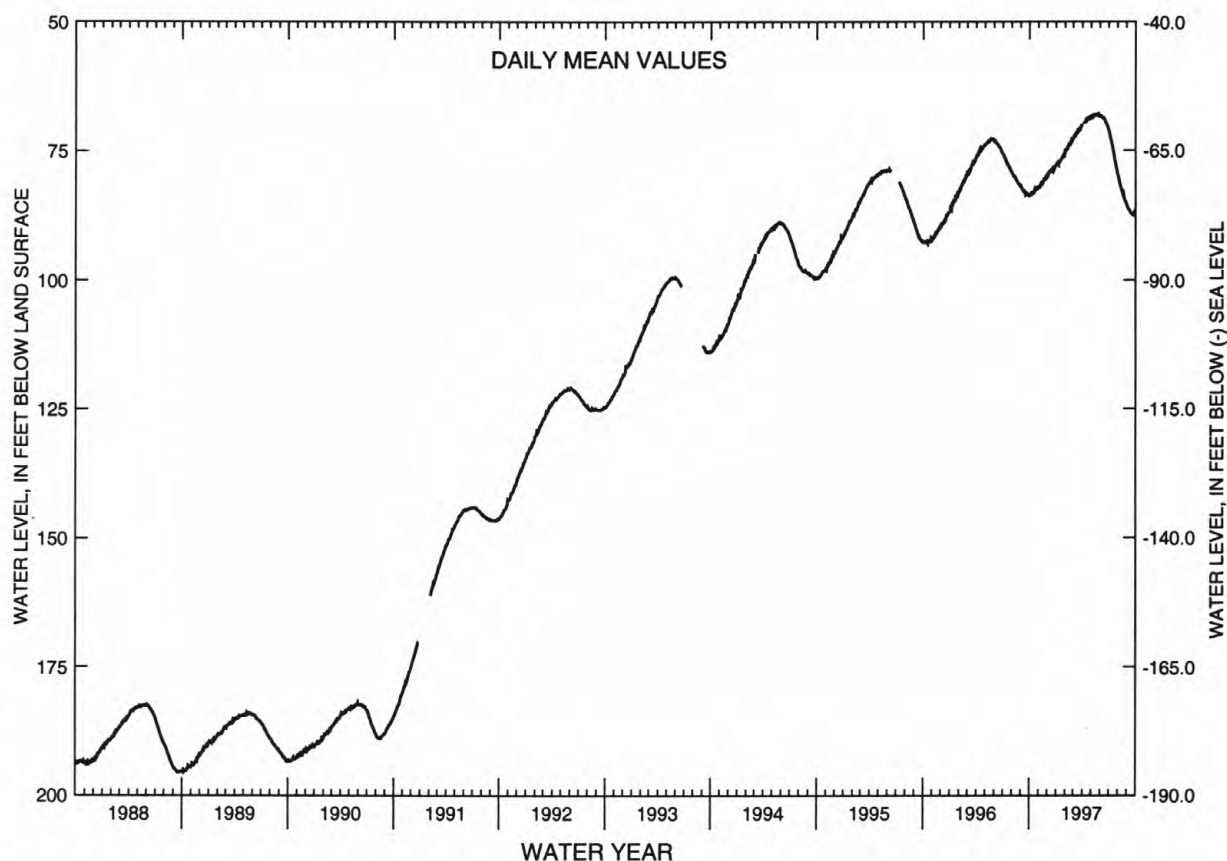
PERIOD OF RECORD.--May 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 67.88 ft below land surface, May 26, 1997; lowest, 195.60 ft below land surface, Sept. 17, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	83.65	82.17	79.79	77.38	74.84	72.25	---	68.54	68.34	71.91	80.39	86.01
10	83.14	81.51	79.27	76.99	74.45	71.88	69.61	68.21	68.70	73.24	81.78	86.49
15	83.27	81.43	78.80	77.07	73.90	71.41	69.43	68.13	68.90	74.58	82.61	87.00
20	82.36	80.66	78.74	76.58	73.70	71.03	68.75	68.07	69.45	76.19	83.57	87.17
25	82.51	80.56	78.47	75.76	73.30	70.92	68.68	68.14	70.01	77.54	84.48	87.39
EOM	82.05	80.23	78.05	75.36	72.88	69.90	68.65	68.37	70.91	79.42	85.27	87.35
MEAN	82.97	81.20	78.93	76.82	74.09	71.43	69.08	68.30	69.18	75.04	82.68	86.80
WTR YR 1997	MEAN 76.52 HIGH 68.04 MAY 26 LOW 87.49 SEP 27											

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.

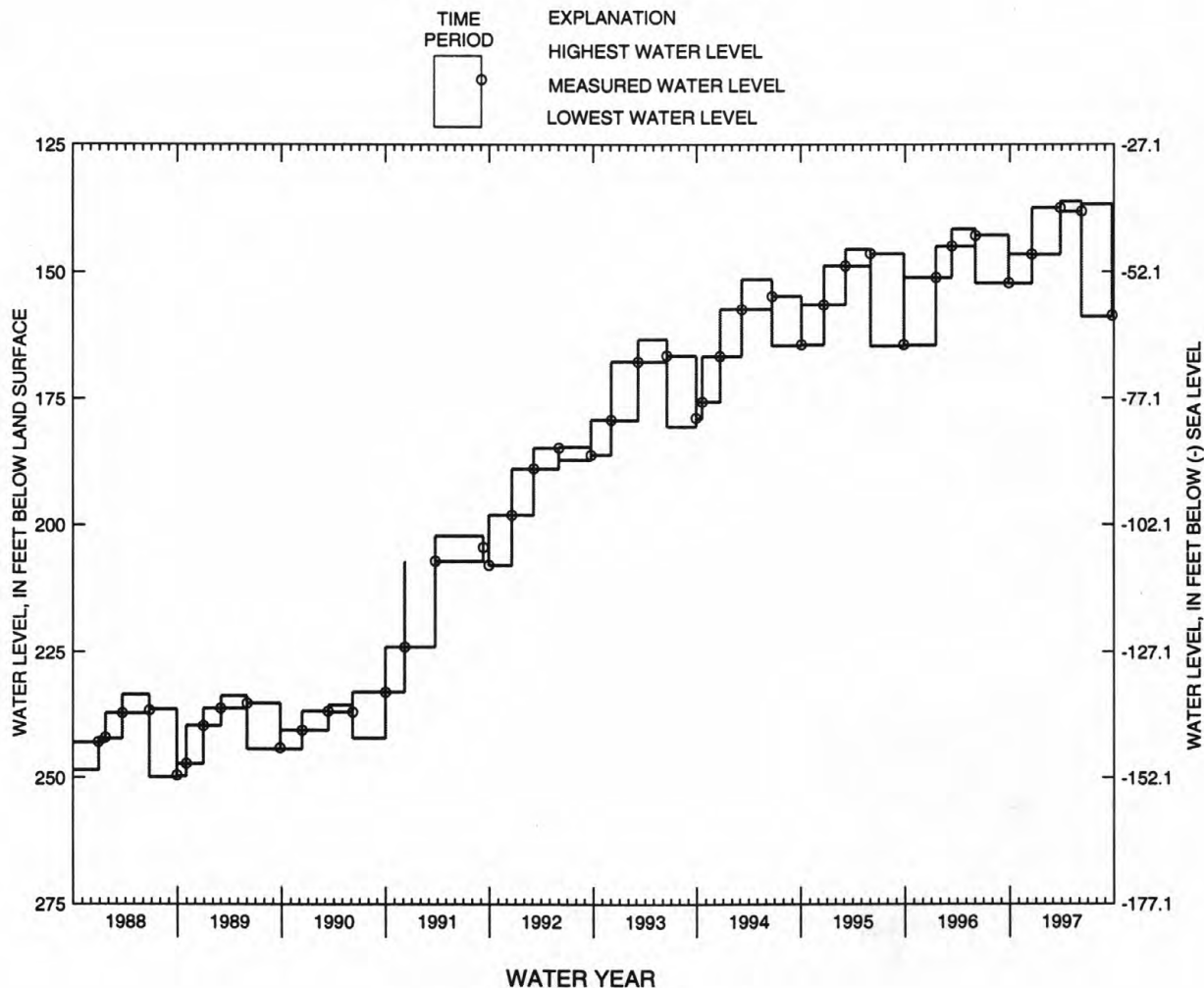
PERIOD OF RECORD.--Feb. 1964 to current year. Records for 1964 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 136.19 ft below land surface, between Mar. 27 and June 10, 1997; lowest, 249.89 ft below land surface, between June 24 and Sept. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1996 TO DEC. 17, 1996	146.53	152.29	DEC. 17, 1996	146.53
DEC. 17, 1996 TO MAR. 27, 1997	137.43	146.56	MAR. 27, 1997	137.43
MAR. 27, 1997 TO JUNE 10, 1997	136.19	138.15	JUNE 10, 1997	138.10
JUNE 10, 1997 TO SEPT. 26, 1997	136.69	158.88	SEPT. 26, 1997	158.59

NJ-WRD WELL NO. 25-0429



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.

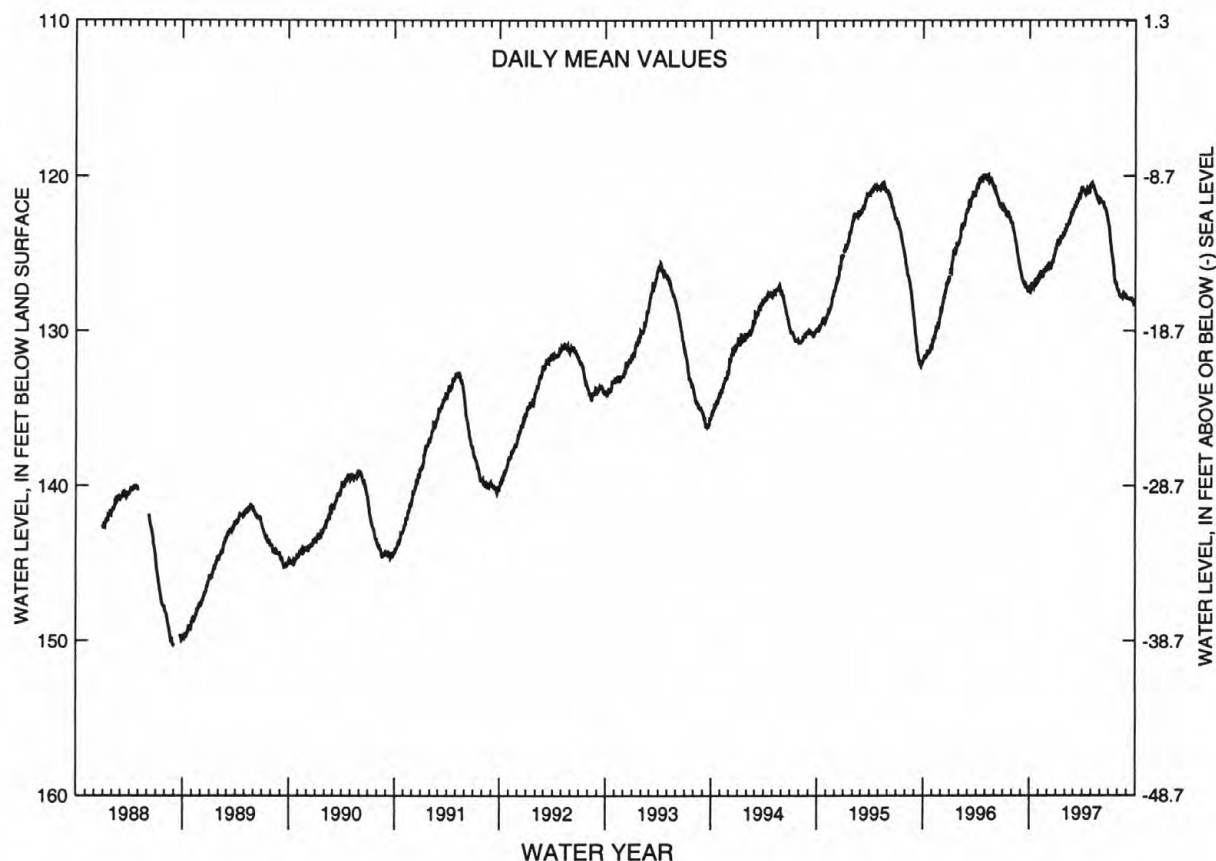
PERIOD OF RECORD.--Dec. 1987 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	127.41	126.57	125.88	124.32	123.21	122.04	121.00	120.55	121.57	123.69	127.39	127.90
10	126.92	126.19	125.79	124.01	123.13	121.72	121.07	120.63	121.67	124.65	127.73	127.95
15	127.19	126.50	125.81	124.24	122.77	121.46	121.19	120.92	121.96	125.34	127.80	127.91
20	126.69	126.04	125.48	123.89	122.67	121.31	120.97	121.23	122.13	126.32	127.82	127.87
25	126.84	126.04	125.09	123.57	122.49	121.40	120.98	121.41	122.45	126.83	127.67	128.05
EOM	126.50	126.02	124.74	123.46	122.31	120.66	120.63	121.55	123.01	127.30	127.84	128.06
MEAN	126.99	126.25	125.48	124.08	122.89	121.54	120.92	121.04	122.01	125.44	127.65	127.97
WTR YR 1997	MEAN 124.37 HIGH 120.42 MAY 4 LOW 128.29 SEP 27											

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 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.

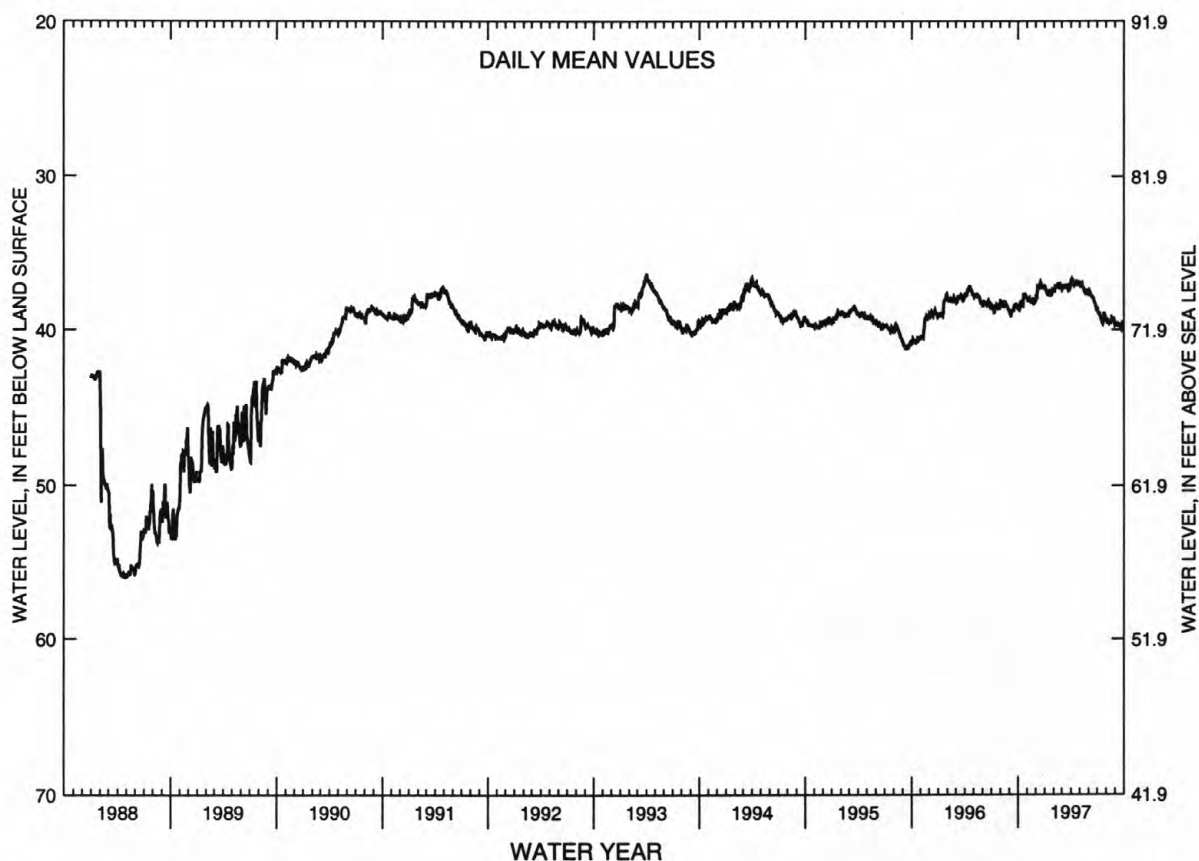
PERIOD OF RECORD.--Dec. 1987 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	38.71	38.12	37.84	37.35	37.21	37.19	36.81	37.06	37.44	38.88	39.31	39.66
10	38.19	37.99	37.19	37.40	37.13	37.14	37.04	37.03	37.71	38.93	39.56	39.74
15	38.40	38.22	36.99	37.71	36.94	37.03	37.08	37.27	37.83	39.32	39.52	39.65
20	37.61	38.09	37.05	37.63	37.09	37.11	36.83	37.50	38.05	39.59	39.47	39.71
25	37.84	38.31	37.16	37.51	37.28	37.41	37.00	37.59	38.29	38.93	39.38	39.83
EOM	37.84	38.19	37.32	37.34	37.27	37.07	36.87	37.50	38.66	39.29	39.58	39.65
MEAN	38.18	38.12	37.28	37.53	37.17	37.21	36.90	37.31	37.93	39.12	39.43	39.72
WTR YR 1997	MEAN 37.99 HIGH 36.70 APR 4 LOW 39.96 SEP 27											

NJ-WRD WELL NO. 25-0636



GROUND-WATER LEVELS

147

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.

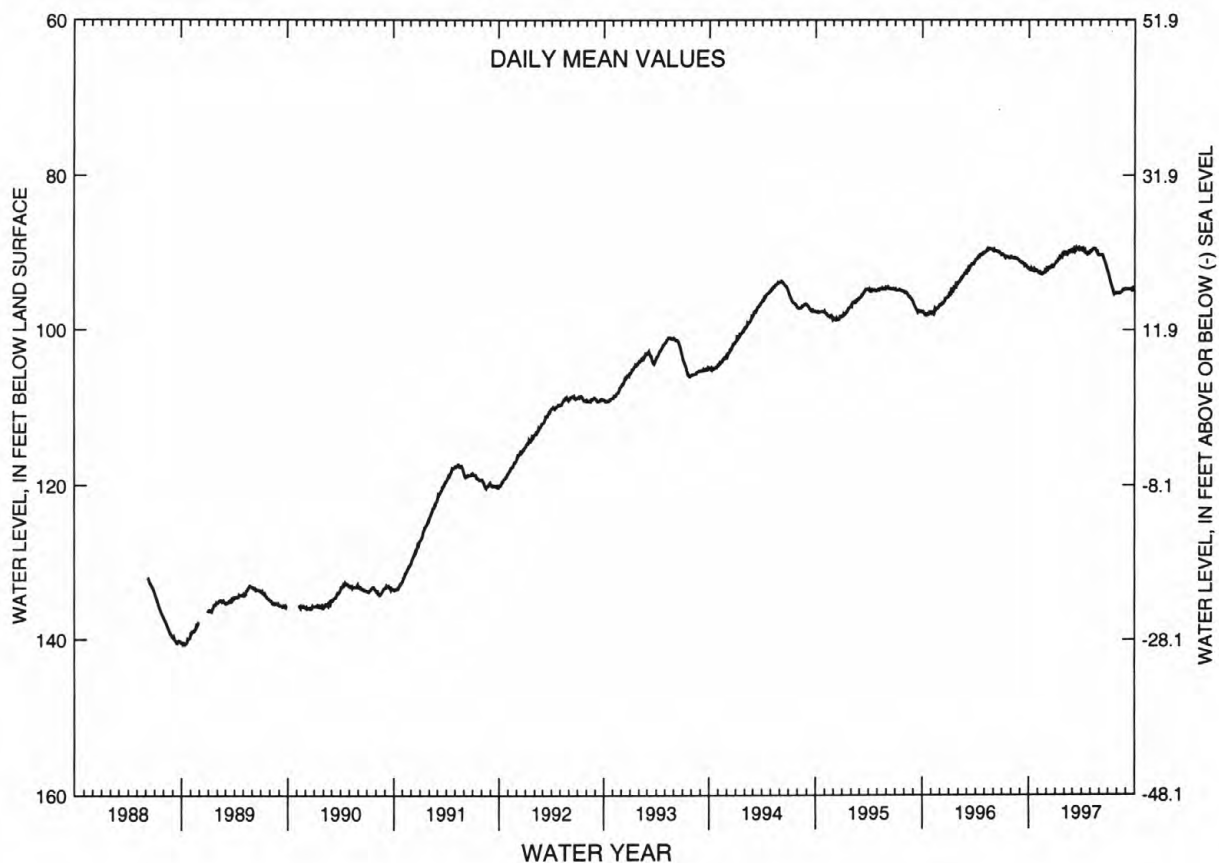
PERIOD OF RECORD.--Dec. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 89.30 ft below land surface, Mar. 31-Apr. 1, 1997; lowest, 140.65 ft below land surface, Oct. 6-7, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	92.20	92.60	92.19	91.09	89.90	89.69	89.60	89.75	90.27	92.97	95.15	94.72
10	92.03	92.51	91.97	90.80	89.92	89.55	89.79	89.49	90.26	93.74	95.23	94.71
15	92.28	92.75	91.89	90.78	89.82	89.40	90.01	89.40	90.58	94.39	95.13	94.68
20	92.06	92.52	91.73	90.48	89.88	89.43	90.09	89.51	91.09	95.11	94.98	94.68
25	92.27	92.57	91.64	90.21	89.88	89.65	90.07	89.88	91.64	95.21	94.82	94.74
EOM	92.30	92.43	91.44	90.00	89.81	89.35	89.89	90.30	92.32	95.24	94.73	94.58
MEAN	92.19	92.56	91.84	90.67	89.90	89.56	89.84	89.72	90.87	94.28	95.01	94.71
WTR YR 1997	MEAN 91.78	HIGH 89.35	MAR 31	LOW 95.37	JUL 23							

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.

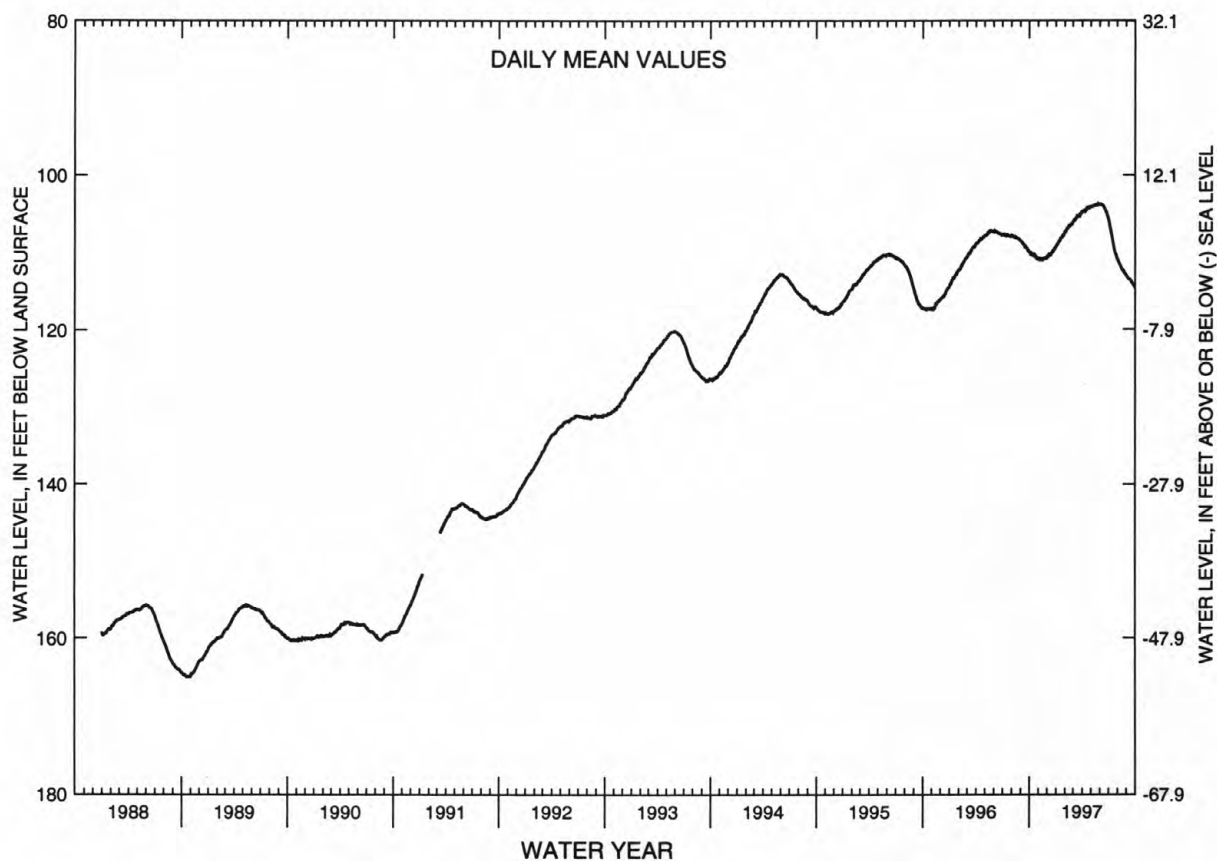
PERIOD OF RECORD.--Dec. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 103.74 ft below land surface, May 26-27, 1997; lowest, 165.02 ft below land surface, Oct. 21, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	110.31	111.04	110.57	109.05	107.19	105.93	104.76	104.14	103.79	106.38	111.21	113.26
10	110.23	110.95	110.33	108.69	106.90	105.73	104.71	103.99	103.93	107.36	111.66	113.54
15	110.49	111.02	110.29	108.56	106.59	105.43	104.57	103.94	104.12	108.30	112.03	113.61
20	110.41	110.80	109.96	108.17	106.61	105.32	104.28	103.87	104.52	109.37	112.41	113.89
25	110.71	110.86	109.71	107.91	106.42	105.29	104.23	103.88	104.92	110.14	112.67	114.18
EOM	110.83	110.79	109.42	107.50	106.16	104.85	104.15	103.83	105.58	110.83	112.99	114.25
MEAN	110.48	110.91	110.12	108.43	106.77	105.50	104.49	103.96	104.34	108.45	112.03	113.72
WTR YR 1997	MEAN 108.28 HIGH 103.75 MAY 26 LOW 114.37 SEP 28											

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.

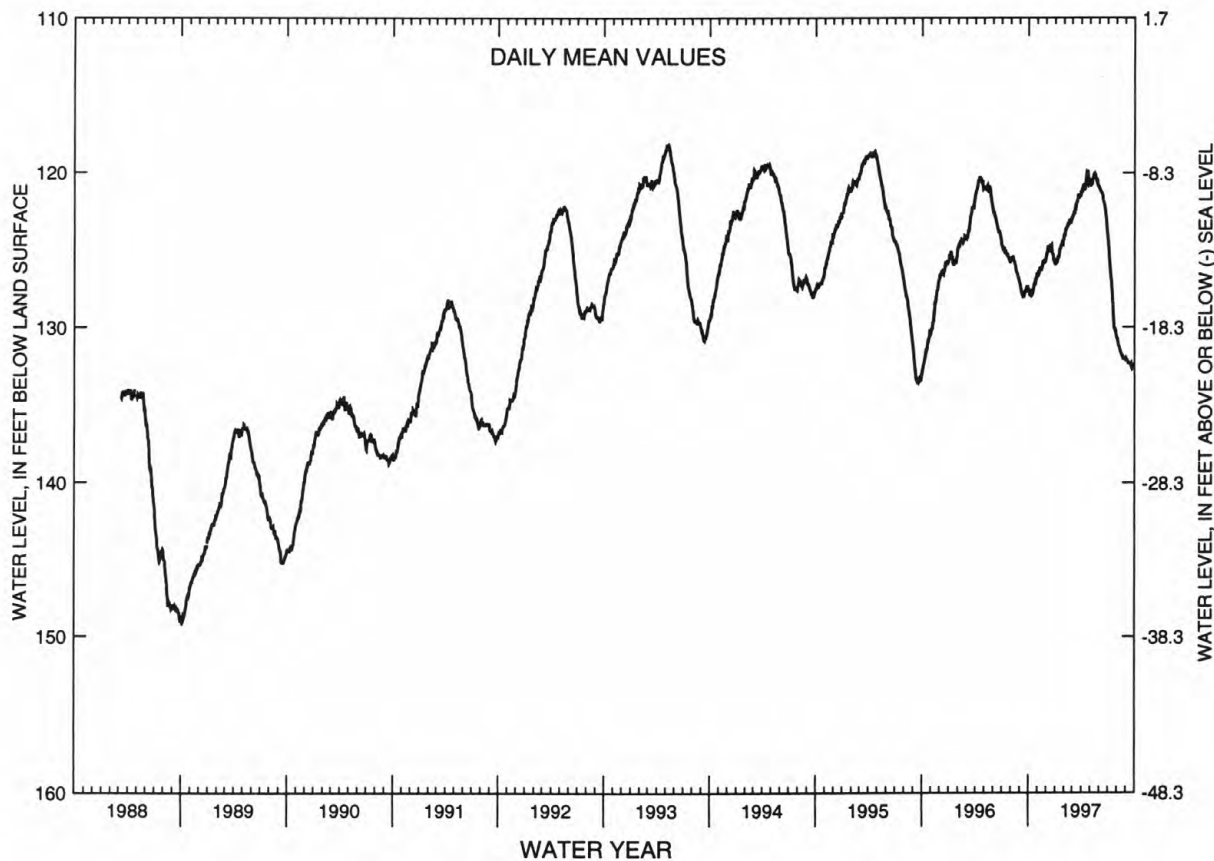
PERIOD OF RECORD.--Mar. 1988 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	127.91	126.58	125.16	125.73	123.68	122.71	121.10	120.69	121.09	125.02	130.89	132.12
10	127.65	126.17	124.89	125.39	123.50	122.34	120.76	120.38	121.28	126.44	131.27	132.30
15	127.79	126.24	124.92	125.28	123.18	121.88	120.92	120.05	121.76	127.42	131.62	132.32
20	127.24	125.73	124.92	124.74	123.14	121.56	120.05	120.19	122.12	129.14	131.87	132.35
25	127.05	125.80	125.43	124.38	123.18	121.60	120.52	120.44	122.81	130.06	132.01	132.54
EOM	126.62	125.58	125.89	124.04	122.98	121.21	120.47	120.85	123.92	130.64	132.06	132.39
MEAN	127.43	126.08	125.14	125.09	123.39	122.01	120.63	120.44	121.94	127.75	131.53	132.33
WTR YR 1997	MEAN 125.33 HIGH 119.83 APR 23 LOW 132.67 SEP 27											

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.

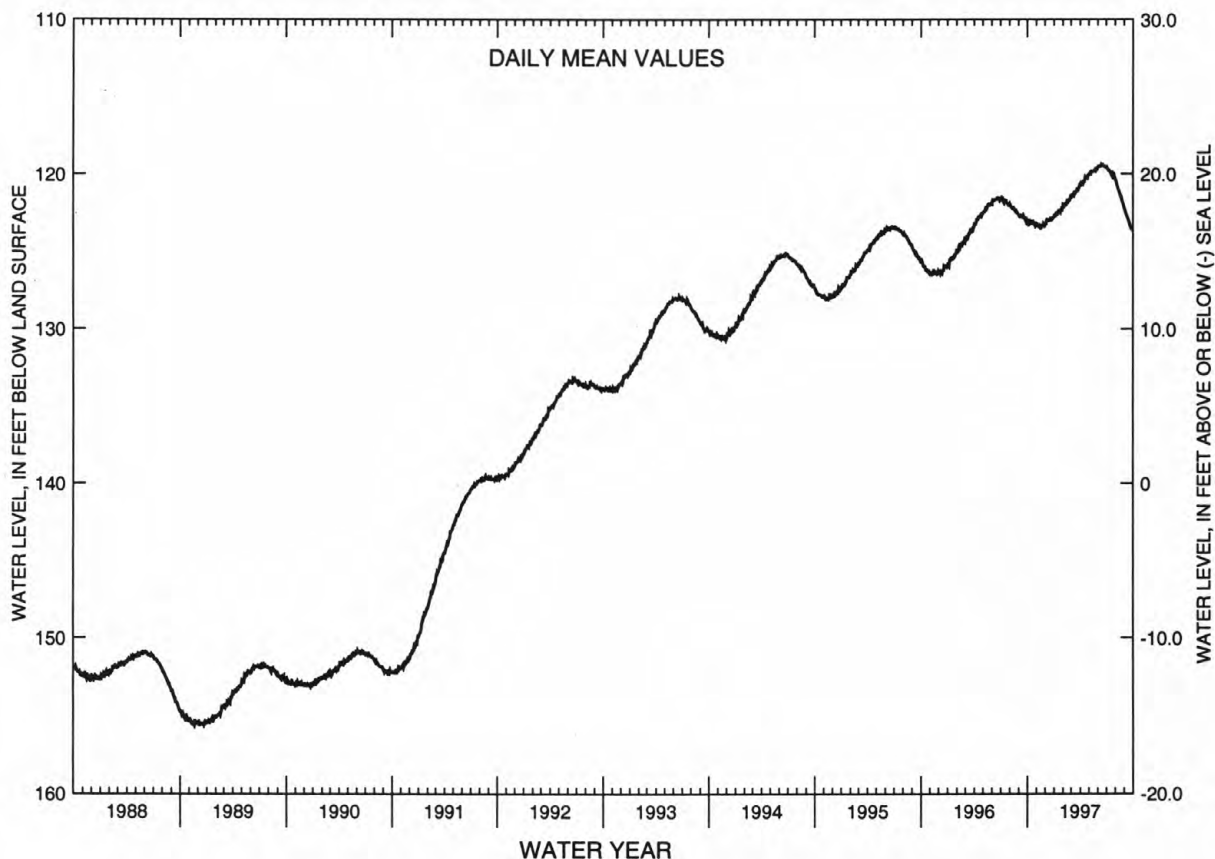
PERIOD OF RECORD.--Feb. 1985 to current year. Records for 1985 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 119.39 ft below land surface, June 13-14, 1997; lowest, 155.63 ft below land surface, Dec. 22-23, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	123.32	123.39	123.25	122.65	122.03	121.46	120.73	120.03	119.50	119.61	120.49	122.41
10	123.00	123.28	123.03	122.48	122.00	121.30	120.64	119.86	119.52	119.75	120.90	122.70
15	123.21	123.51	123.03	122.62	121.79	121.11	120.54	119.83	119.43	119.86	121.16	122.93
20	123.00	123.33	122.91	122.45	121.75	121.07	120.23	119.78	119.46	120.11	121.51	123.17
25	123.19	123.39	122.87	122.27	121.71	121.09	120.22	119.72	119.51	119.91	121.74	123.44
EOM	123.20	123.40	122.83	122.20	121.57	120.69	120.08	119.65	119.60	120.29	122.10	123.44
MEAN	123.18	123.37	123.00	122.51	121.87	121.18	120.44	119.85	119.50	119.89	121.20	122.95
WTR YR 1997	MEAN 121.58 HIGH 119.39 JUN 14 LOW 123.60 SEP 28											

NJ-WRD WELL NO. 25-0353



GROUND-WATER LEVELS

151

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.

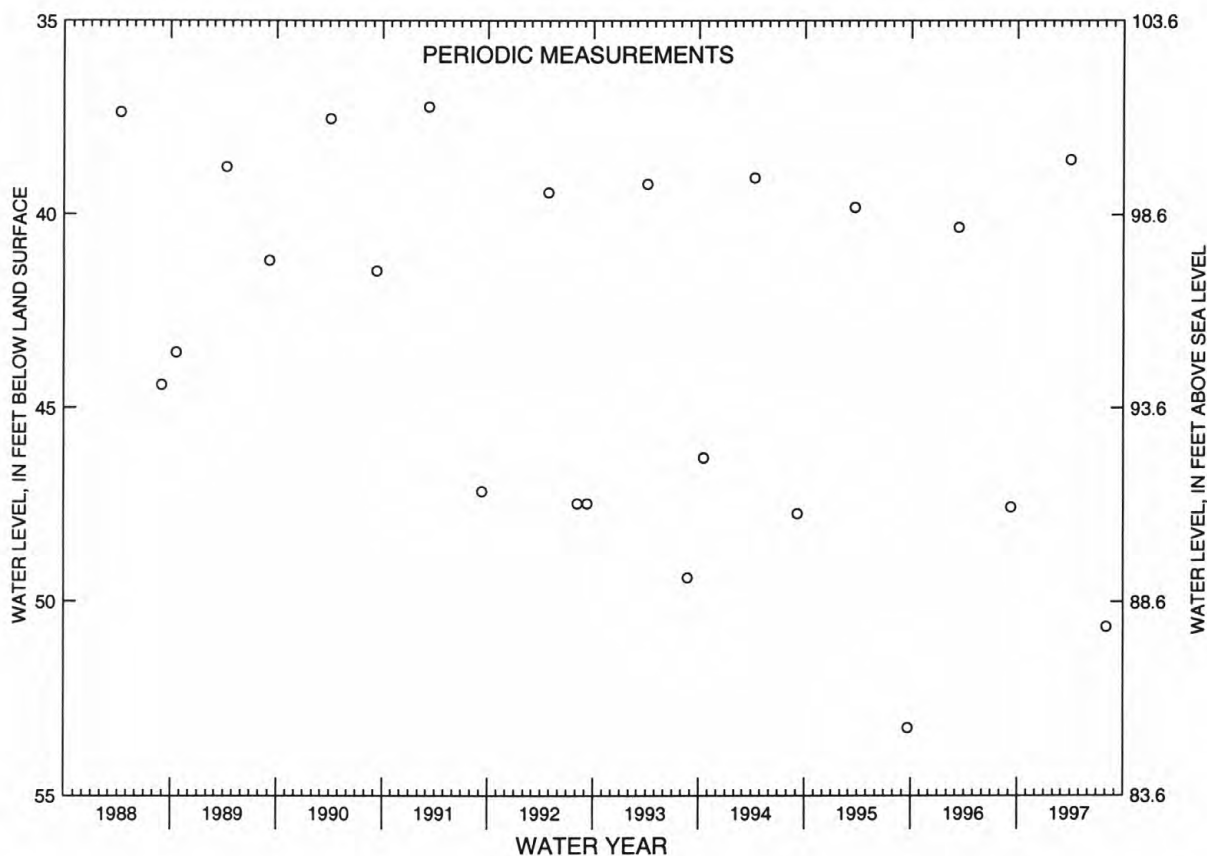
PERIOD OF RECORD.--Apr. 1971 to Sept. 1984, May 1986 to current year. Records for 1971 to 1976 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 2	38.57	AUG 5	50.65

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.

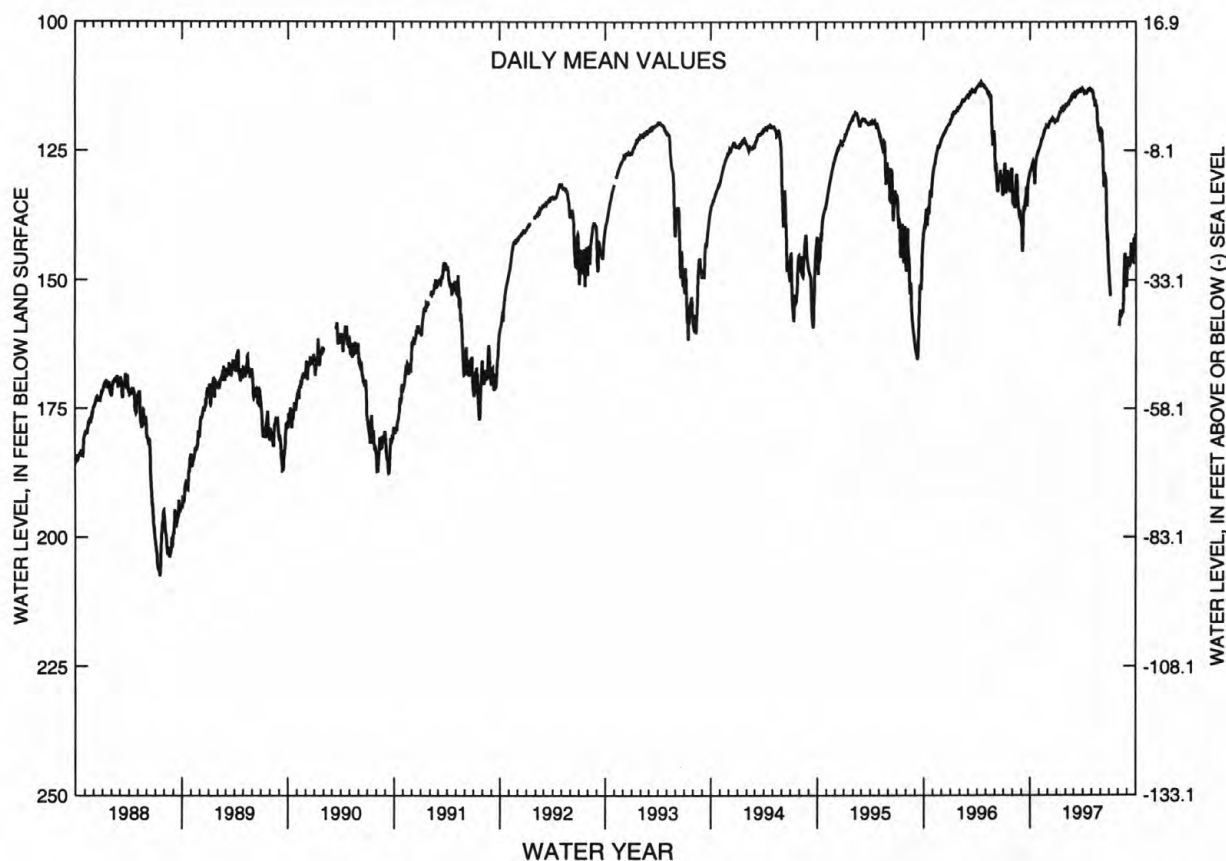
PERIOD OF RECORD.--Jan. 1973 to current year. Records for 1973 to 1977 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	128.61	124.00	119.97	118.68	116.08	114.51	113.73	113.66	121.13	152.97	---	145.86
10	127.35	122.79	119.32	117.79	115.69	113.71	113.85	115.17	128.57	---	156.67	147.20
15	129.32	122.10	119.06	117.39	115.16	113.42	113.60	115.71	129.51	---	156.31	142.92
20	127.76	121.03	119.04	116.78	114.94	113.29	113.19	117.81	132.52	---	153.64	146.05
25	125.90	120.54	119.31	116.63	114.35	113.47	113.00	121.40	141.64	---	144.85	141.96
EOM	124.90	120.36	119.33	116.34	114.13	112.98	113.61	123.33	148.70	---	150.48	141.15
MEAN	127.61	122.08	119.36	117.52	115.28	113.62	113.38	117.33	132.33	---	153.02	145.40
WTR YR 1997	MEAN 125.20 HIGH 112.95 APR 24 LOW 158.84 AUG 6											

NJ-WRD WELL NO. 25-0272



GROUND-WATER LEVELS

153

MONMOUTH COUNTY

402350073583901. Local I.D., Sandy Hook 2 Obs. NJ-WRD Well Number 25-0771.

LOCATION.--Lat 40°23'50", long 73°58'39", Hydrologic Unit 02030104, near the main entrance of Sandy Hook National Park, Sea Bright Boro.
Owner: U.S. Dept. of Interior-National Park Service.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.-- Drilled artesian observation well, diameter 4 in., depth 278 ft, screened 258 to 278 ft.

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

DATUM.-- Land surface is 7 ft above sea level, from topographic map.
Measuring point: Top of casing, ft above land surface

REMARKS.--Water-level affected by tidal fluctuation. Water-quality data for 1997 are available elsewhere in this report.

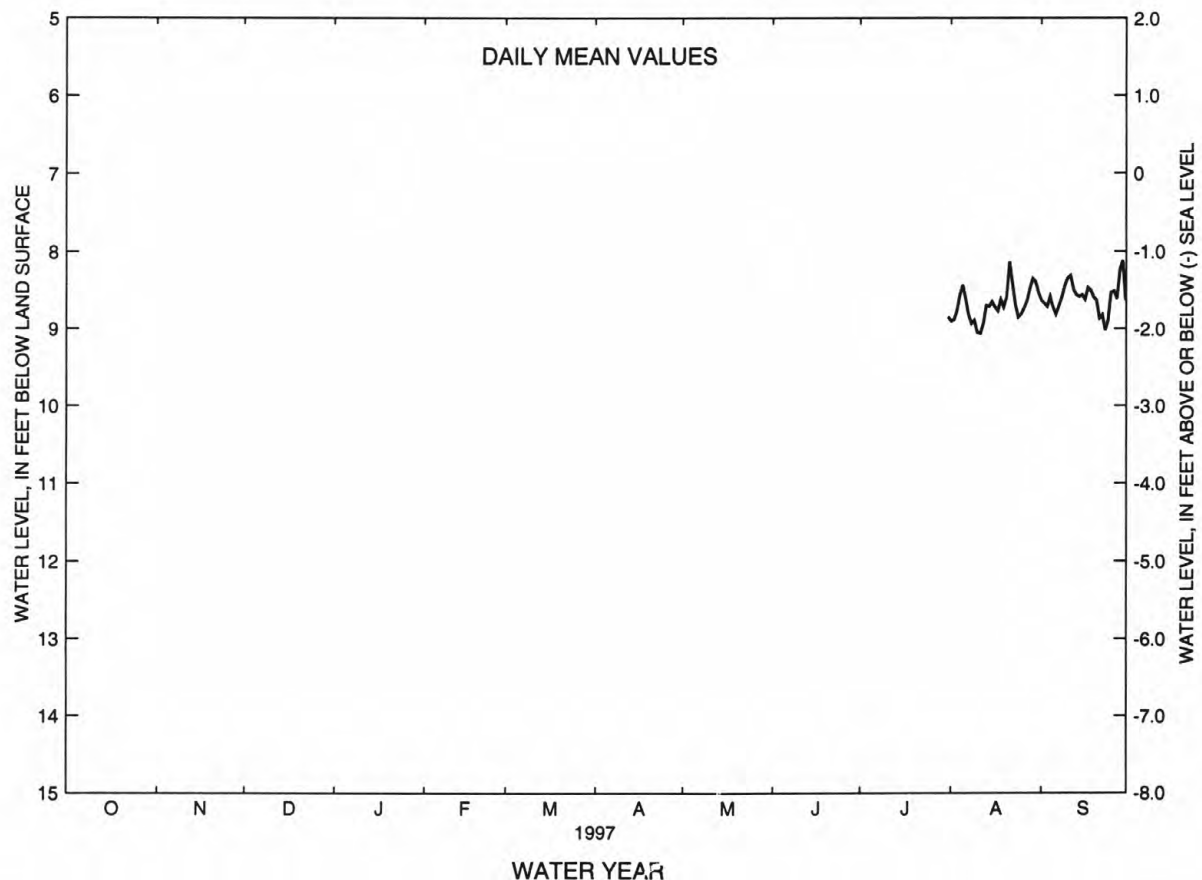
PERIOD OF RECORD.--July 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.38 ft below land surface, Aug. 20, 1997; lowest, 10.55 ft below land surface, Aug. 20, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	---	8.43	8.72
10	---	---	---	---	---	---	---	---	---	---	9.05	8.34
15	---	---	---	---	---	---	---	---	---	---	8.65	8.56
20	---	---	---	---	---	---	---	---	---	---	8.60	8.63
25	---	---	---	---	---	---	---	---	---	---	8.81	8.53
EOM	---	---	---	---	---	---	---	---	---	8.85	8.53	8.63
MEAN	---	---	---	---	---	---	---	---	---	---	8.69	8.59
WTR YR 1997 HIGH 8.12 SEP 29 LOW 9.06 AUG 11												

NJ-WRD WELL NO. 25-0771



GROUND-WATER LEVELS

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.

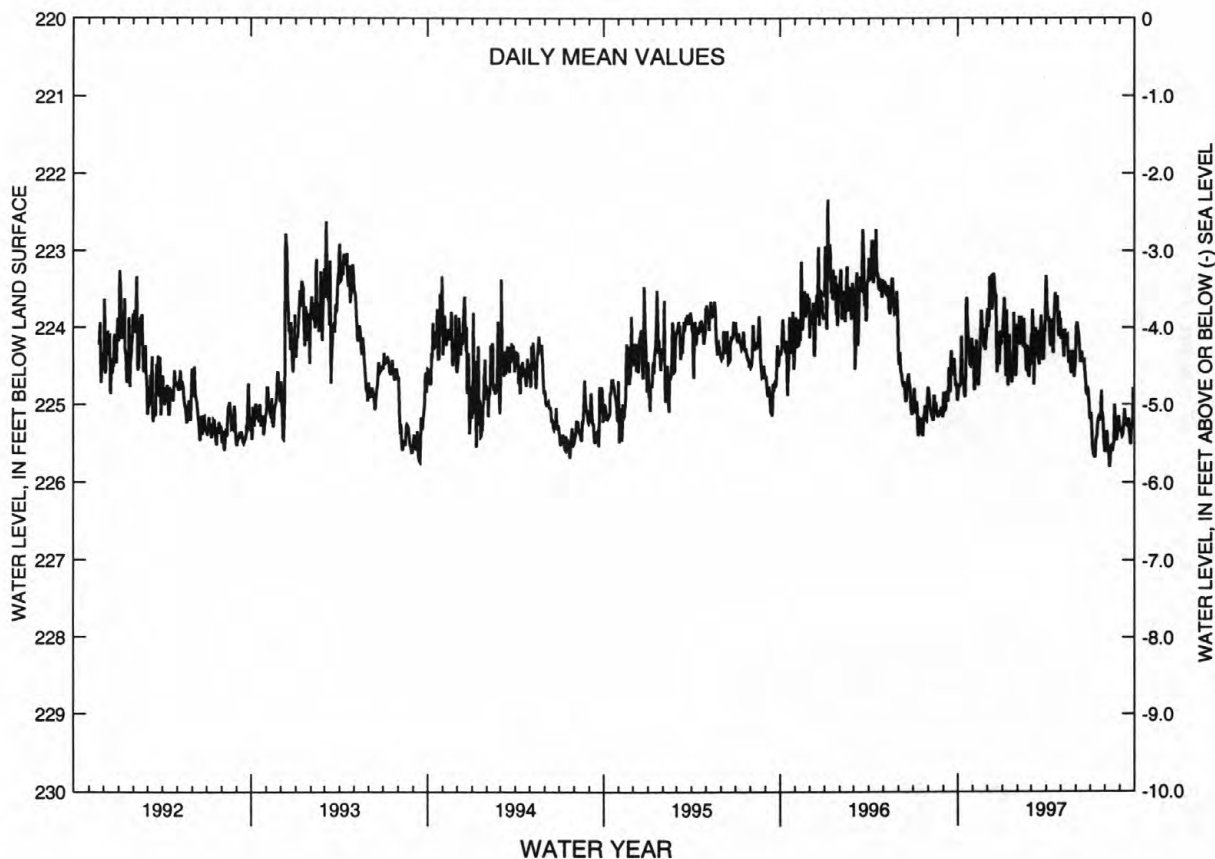
PERIOD OF RECORD.--Aug. 1991 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	224.75	224.81	223.92	223.60	223.85	223.92	223.90	224.13	223.97	225.39	225.34	225.35
10	224.38	224.32	223.68	223.77	224.01	224.05	224.24	224.02	224.34	225.66	225.69	225.15
15	224.86	224.52	223.34	224.39	223.98	224.04	224.28	224.10	224.42	225.42	225.52	225.26
20	223.60	223.92	224.20	224.50	224.55	224.03	223.54	224.30	224.55	225.17	225.45	225.18
25	224.35	224.19	224.33	223.80	224.64	224.42	223.67	224.40	224.78	224.82	225.46	225.29
EOM	224.21	224.02	224.16	224.06	224.49	223.69	224.00	224.47	225.15	225.53	225.24	225.15
MEAN	224.46	224.30	223.85	224.30	224.23	224.17	223.89	224.29	224.46	225.31	225.45	225.26
WTR YR 1997	MEAN 224.50 HIGH 223.29 DEC 14 LOW 225.80 AUG 11											

NJ-WRD WELL NO. 25-0715



GROUND-WATER LEVELS

155

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.

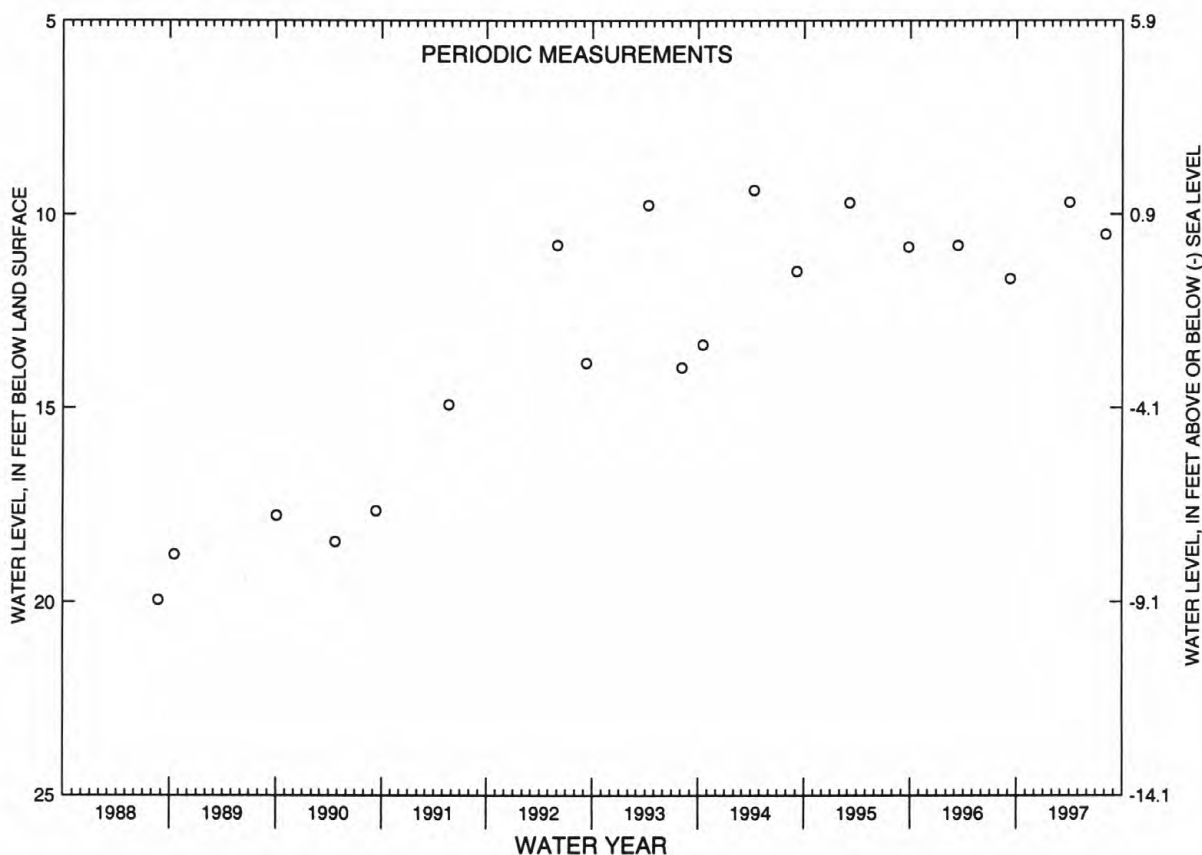
PERIOD OF RECORD.--May 1965 to Dec. 1984, Aug. 1988 to current year. Records for 1965 to 1976 and 1988 to 1992 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 2	9.69	AUG 5	10.52

NJ-WRD WELL NO. 25-0316



GROUND-WATER LEVELS

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.

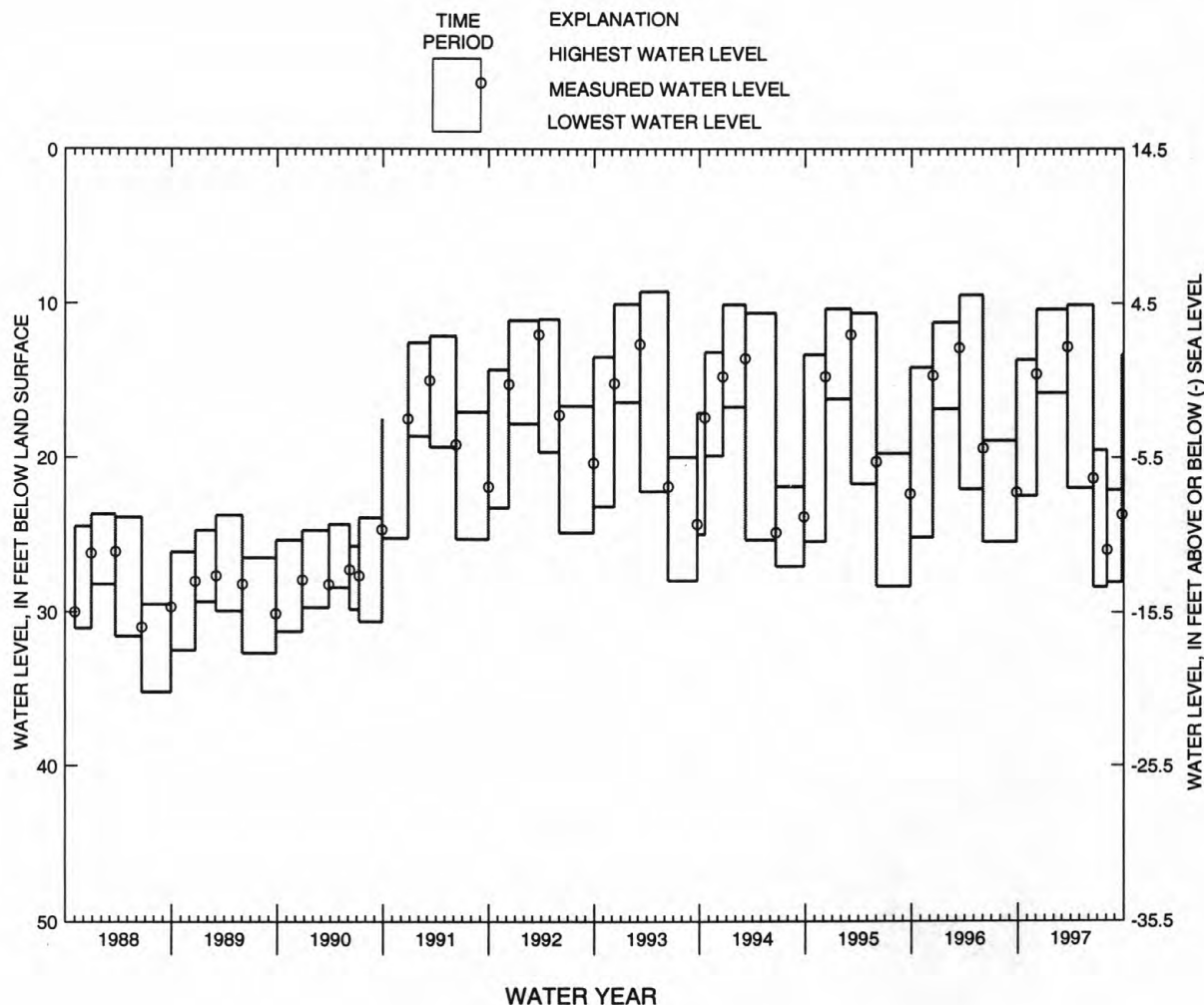
PERIOD OF RECORD.--June 1978 to current year.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1996 TO DEC. 4, 1996	13.67	22.42	DEC. 4, 1996	14.61
DEC. 4, 1996 TO MAR. 21, 1997	10.37	15.84	MAR. 21, 1997	12.82
MAR. 21, 1997 TO JUNE 18, 1997	10.09	21.93	JUNE 18, 1997	21.31
JUNE 18, 1997 TO AUG. 5, 1997	19.53	28.33	AUG. 5, 1997	25.92
AUG. 5, 1997 TO SEPT. 26, 1997	22.05	28.02	SEPT. 26, 1997	23.66

NJ-WRD WELL NO. 25-0206



GROUND-WATER LEVELS

157

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.

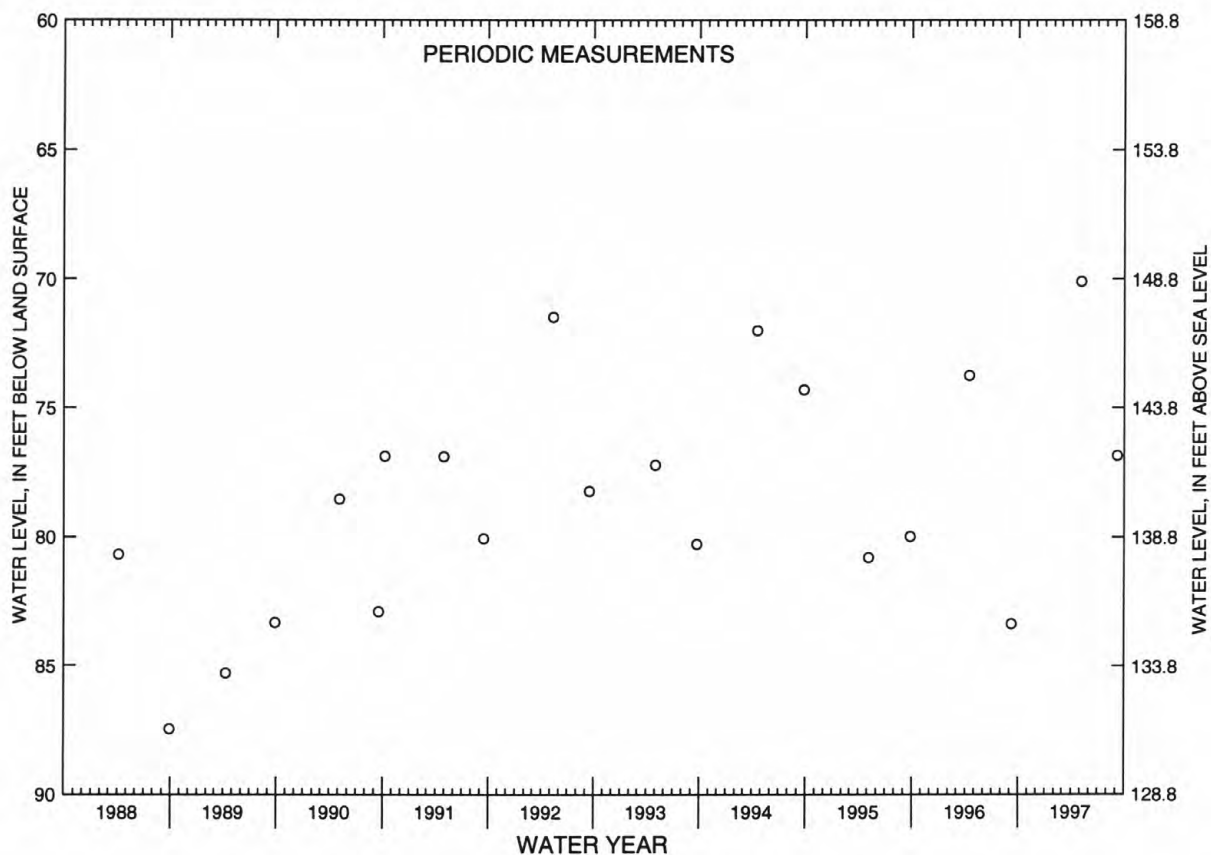
PERIOD OF RECORD.--Mar. 1967 to current year. Records for 1967 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 6	70.10	SEP 9	76.86

NJ-WRD WELL NO. 27-0001



GROUND-WATER LEVELS

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.

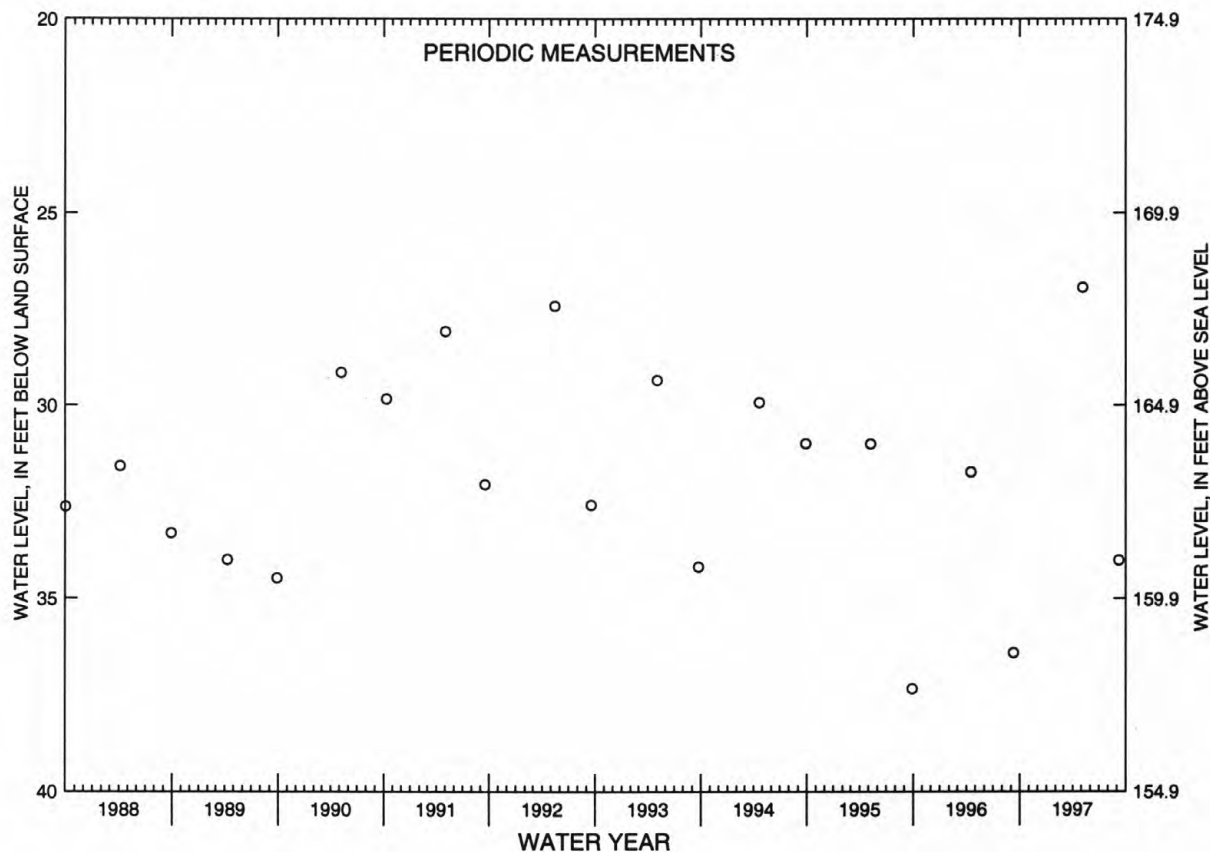
PERIOD OF RECORD.--Apr. 1955 to current year. Records for 1955 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 6	26.94	SEP 9	34.01

NJ-WRD WELL NO. 27-0017



GROUND-WATER LEVELS

159

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.

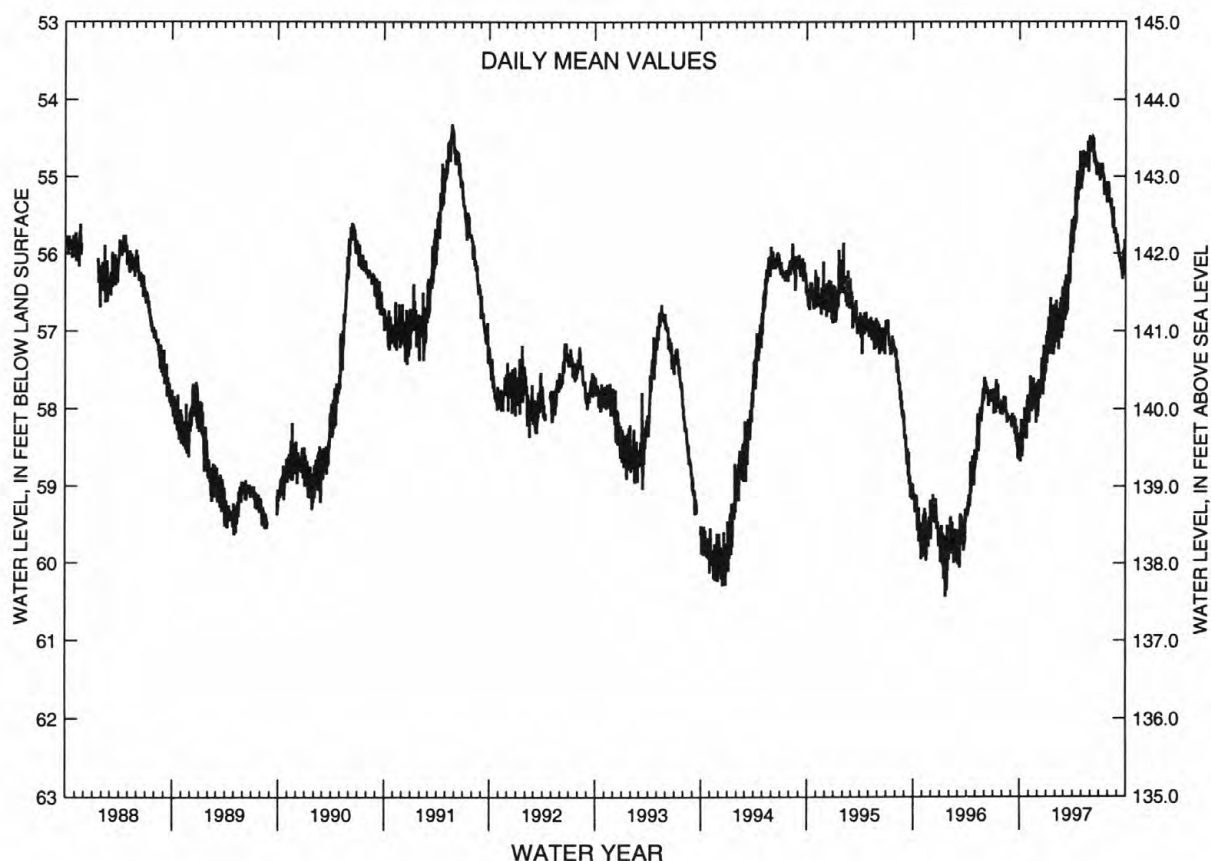
PERIOD OF RECORD.--Mar. 1967 to current year. Records for 1967 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	58.58	57.95	57.93	57.00	56.60	56.59	55.87	55.07	54.57	55.05	55.15	55.91
10	58.42	57.93	57.84	56.82	56.88	56.28	55.68	54.76	54.60	54.98	55.35	56.02
15	58.37	58.00	57.75	56.94	56.83	56.49	55.51	54.74	54.82	54.95	55.47	56.10
20	58.27	57.79	57.80	56.93	57.02	56.07	55.30	54.79	54.86	55.24	55.56	56.05
25	58.35	57.83	57.63	56.67	56.79	56.01	55.18	54.54	54.81	55.07	55.72	55.96
EOM	58.04	57.90	57.42	56.65	57.00	55.56	55.01	54.48	54.94	55.26	55.86	56.12
MEAN	58.28	57.89	57.63	57.08	56.87	56.34	55.34	54.80	54.73	55.04	55.47	56.05
WTR YR 1997	MEAN 56.29 HIGH 54.47 JUN 1 LOW 58.67 OCT 4											

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.

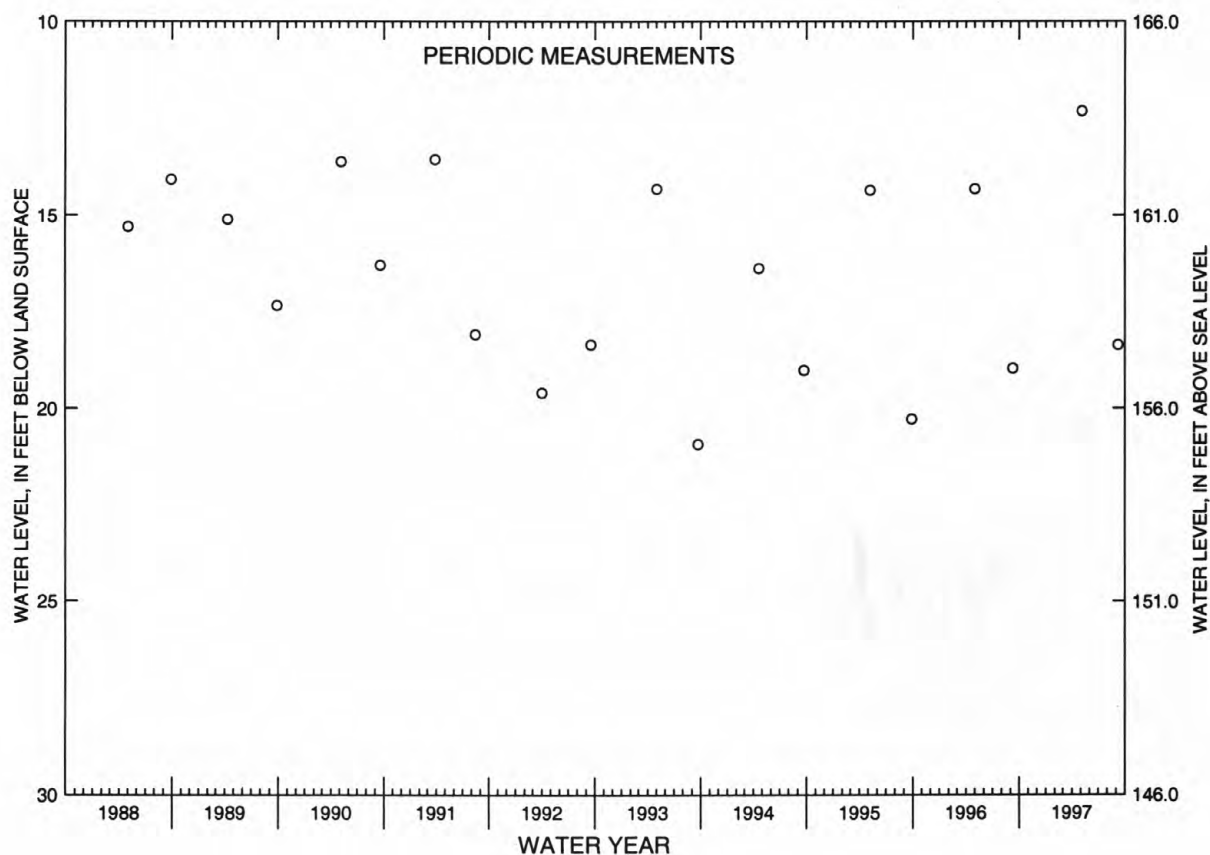
PERIOD OF RECORD.--May 1967 to current year. Records for 1967 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 6	12.30	SEP 9	18.37

NJ-WRD WELL NO. 27-0014



GROUND-WATER LEVELS

161

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.

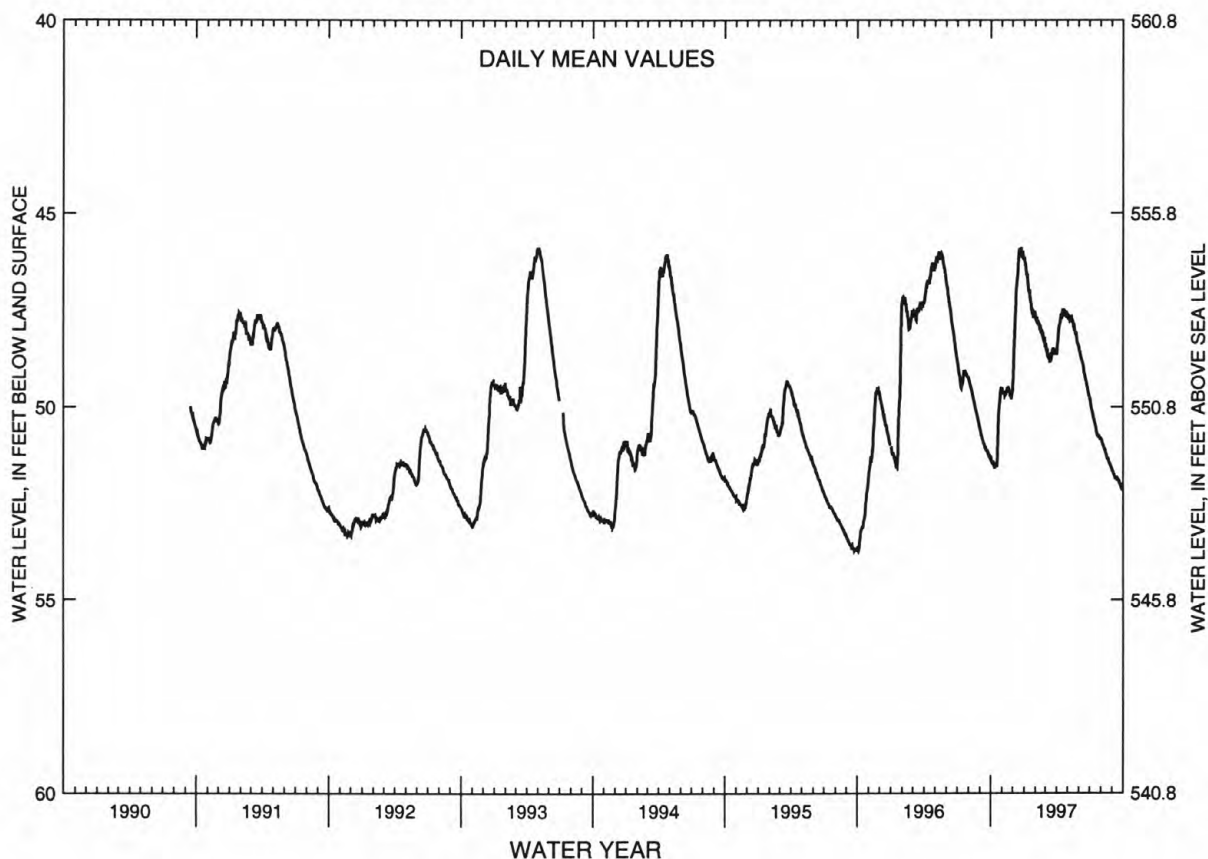
PERIOD OF RECORD.--Sept. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.83 ft below land surface, Dec. 19, 24, 1997; lowest, 53.76 ft below land surface, Oct. 4, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.46	49.64	48.31	46.29	47.68	48.55	48.21	47.73	48.63	49.99	50.93	51.73
10	51.51	49.68	47.07	46.60	47.83	48.62	47.82	47.69	48.82	50.22	51.06	51.85
15	51.52	49.62	46.47	47.04	47.97	48.79	47.68	47.78	49.09	50.40	51.20	51.84
20	51.18	49.55	46.06	47.32	48.17	48.51	47.58	47.99	49.30	50.65	51.34	51.91
25	49.93	49.71	46.09	47.49	48.29	48.55	47.62	48.12	49.49	50.75	51.46	52.00
EOM	49.56	49.58	46.17	47.53	48.46	48.54	47.63	48.40	49.75	50.81	51.60	52.15
MEAN	50.91	49.62	46.86	47.03	47.98	48.61	47.78	47.92	49.09	50.41	51.22	51.89
WTR YR 1997	MEAN 49.11 HIGH 45.89 DEC 24 LOW 52.15 SEP 30											

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.

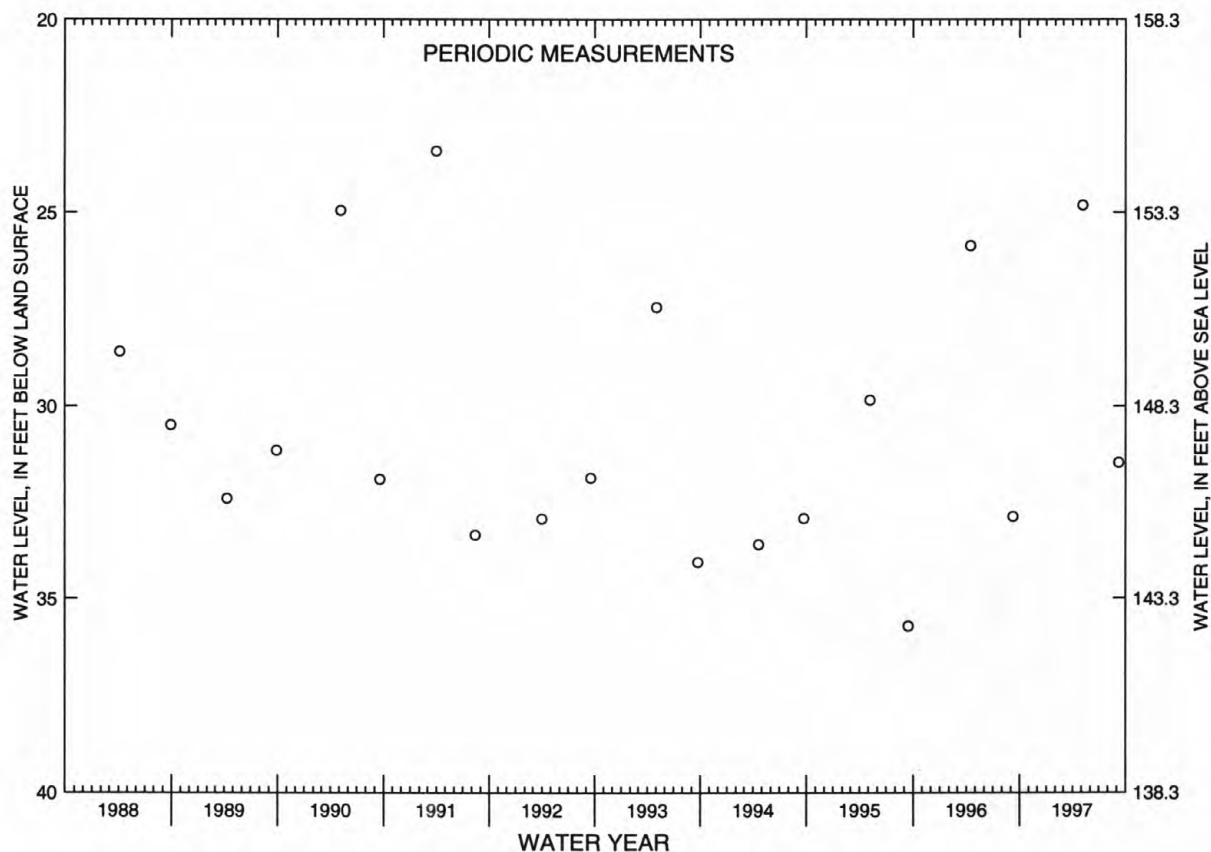
PERIOD OF RECORD.--Mar. 1966 to current year. Records for 1966 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 6	24.81	SEP 9	31.47

NJ-WRD WELL NO. 27-0003



GROUND-WATER LEVELS

163

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.

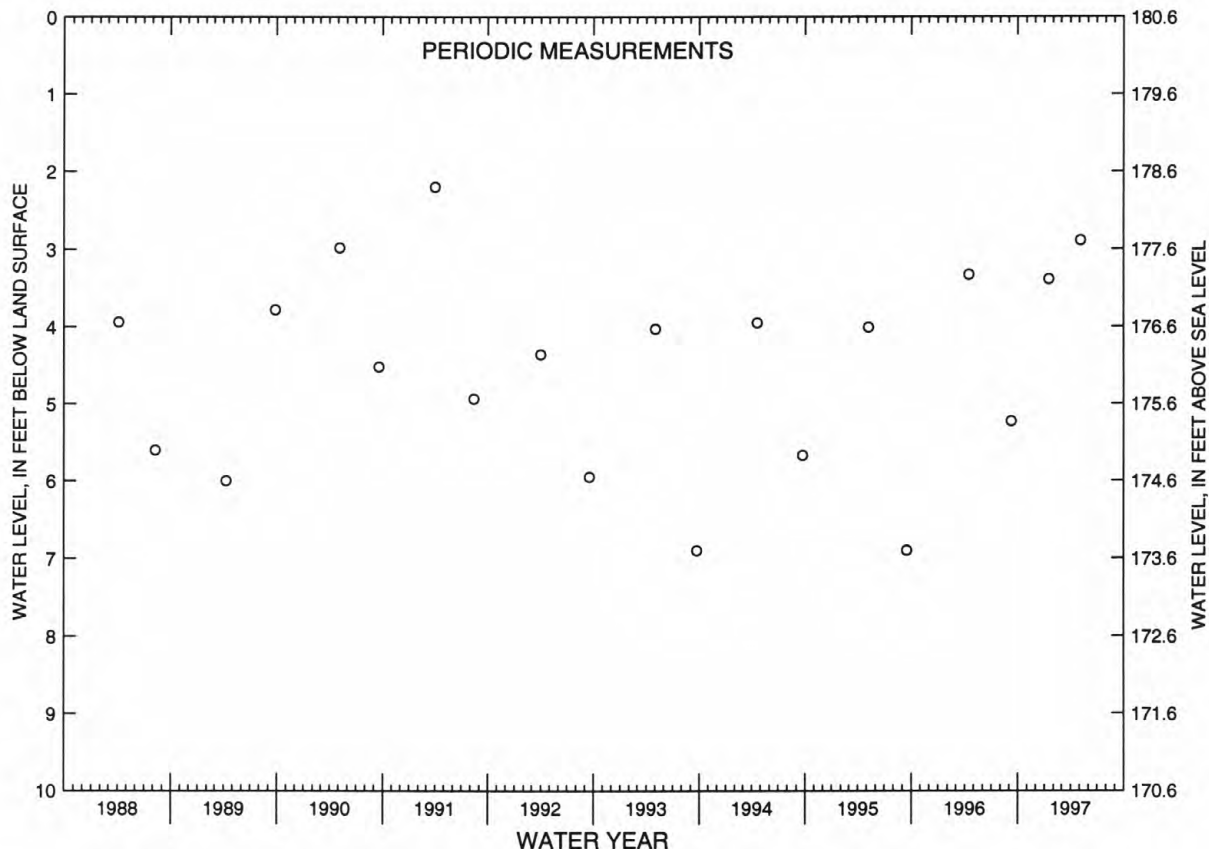
PERIOD OF RECORD.--Apr. 1960 to Feb. 1975, Mar. 1977 to Sept. 1984, Oct. 1985 to May 1997 (discontinued). Records for 1960 to 1975 and 1977 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 17	3.39	MAY 6	2.89

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.

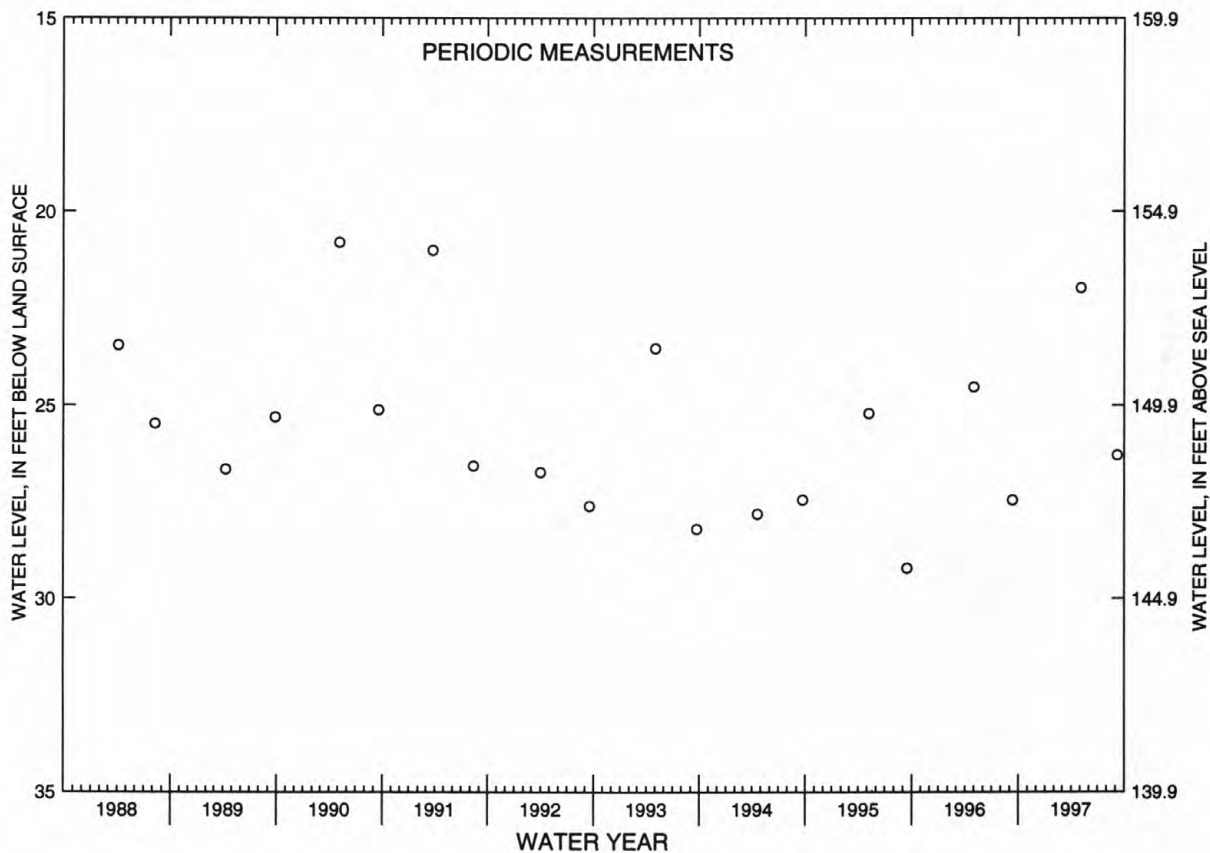
PERIOD OF RECORD.--May 1966 to Sept. 1984, Apr. 1987 to current year. Records for 1966 to 1984 and 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 5	21.97	SEP 9	26.30

NJ-WRD WELL NO. 27-0004



GROUND-WATER LEVELS

165

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.

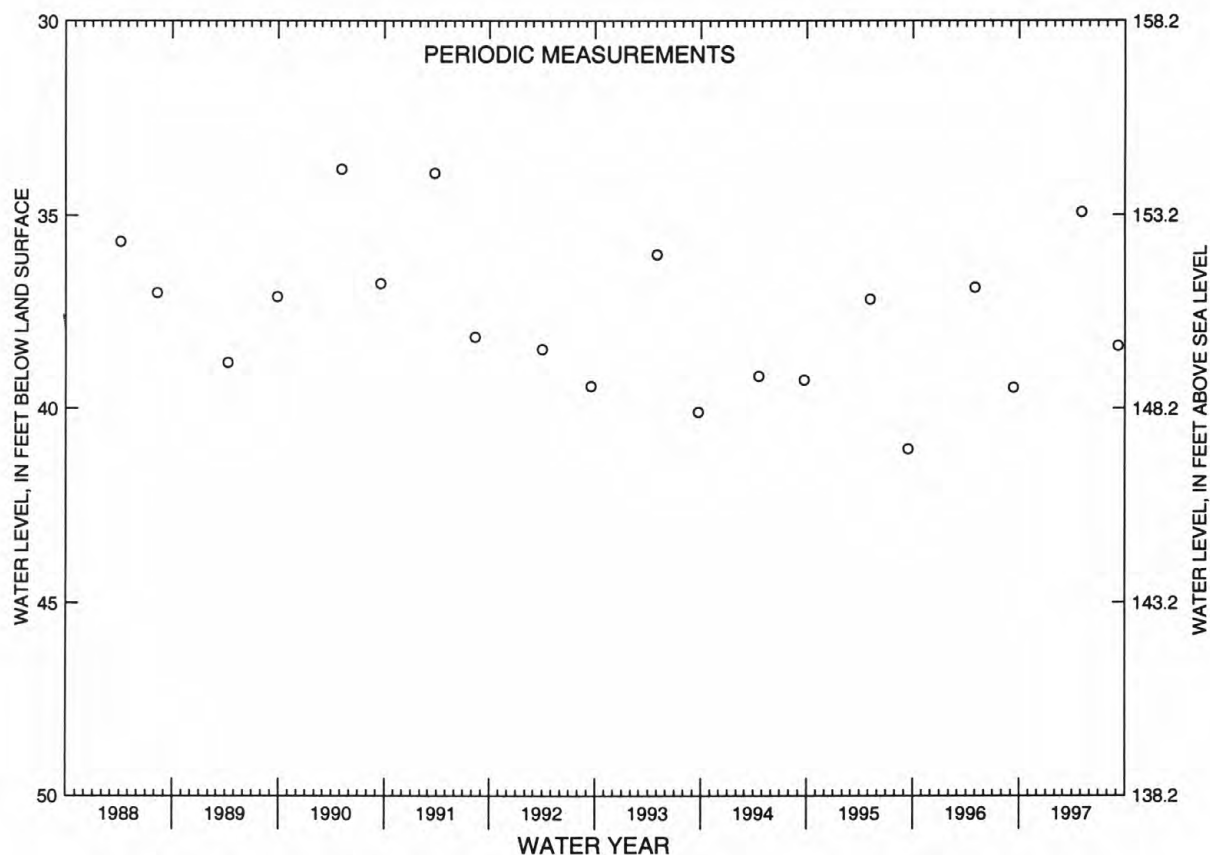
PERIOD OF RECORD.--Feb. 1966 to current year. Records for 1966 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 5	34.93	SEP 9	38.38

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.

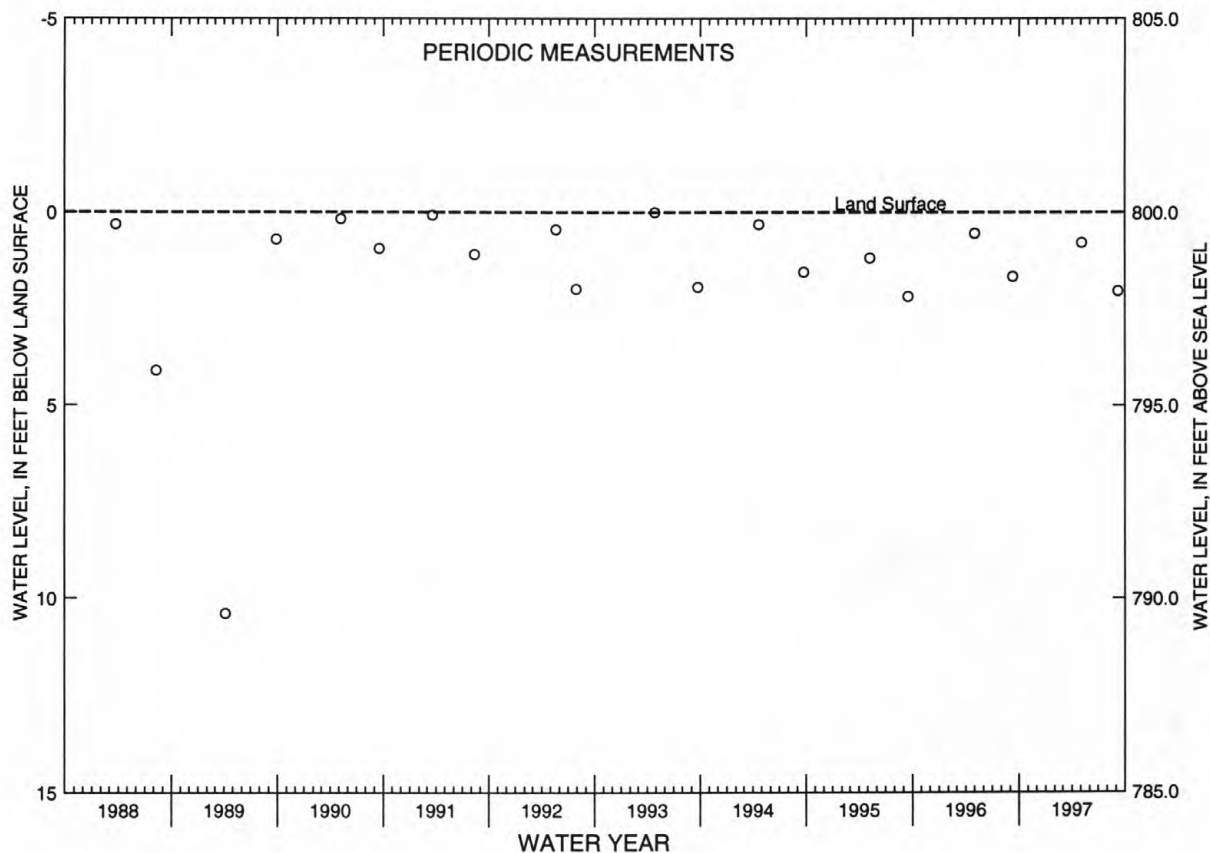
PERIOD OF RECORD.--Jan. 1964 to current year. Records for 1964 to 1975 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 5	0.79	SEP 9	2.05

NJ-WRD WELL NO. 27-0023



GROUND-WATER LEVELS

167

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.

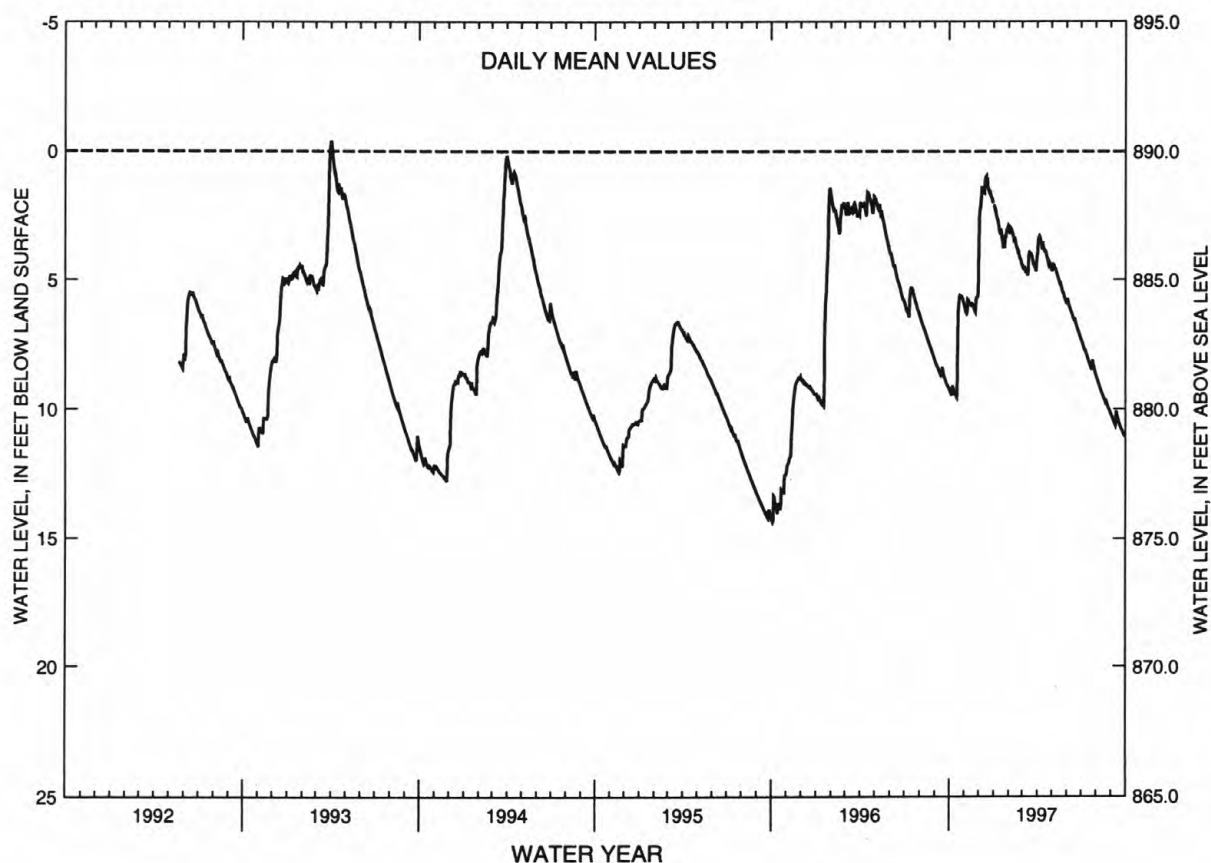
PERIOD OF RECORD.--Apr. 1991 to current year.

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, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.38	6.24	2.22	2.28	2.97	4.59	3.36	4.45	5.92	7.53	8.93	10.38
10	9.16	5.79	1.48	2.69	3.23	4.67	3.65	4.63	6.23	7.75	9.21	10.62
15	9.45	5.99	1.05	3.24	3.47	4.05	3.83	4.95	6.49	8.05	9.47	10.33
20	6.88	6.02	1.30	3.55	3.88	4.00	3.99	5.18	6.68	8.34	9.70	10.64
25	5.63	6.27	1.56	3.26	4.18	4.43	4.41	5.52	6.97	8.11	9.87	10.86
EOM	5.87	5.67	2.02	2.93	4.40	4.31	4.52	5.86	7.27	8.64	10.15	11.06
MEAN	7.98	6.00	1.78	2.99	3.57	4.42	3.91	5.05	6.49	8.03	9.47	10.56
WTR YR 1997	MEAN 5.86 HIGH .97 DEC 17 LOW 11.06 SEP 30											

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.

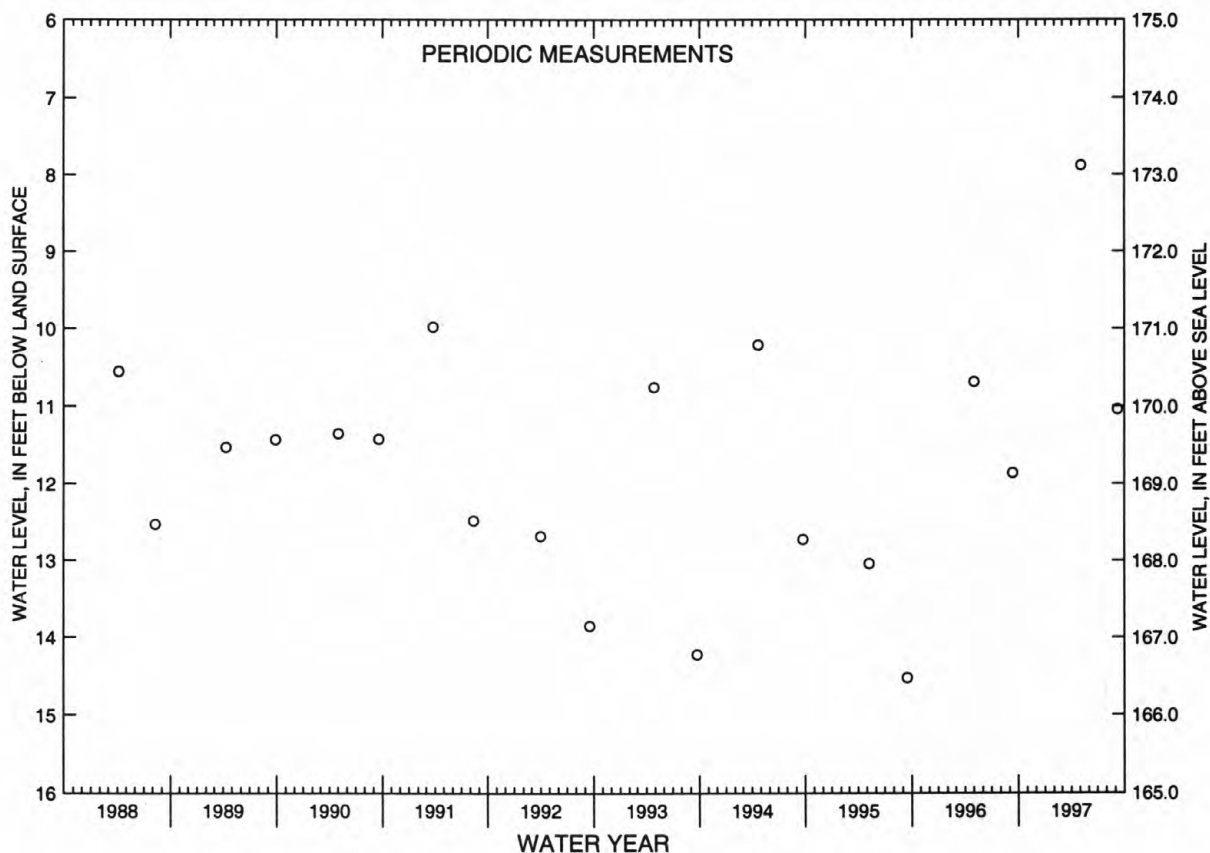
PERIOD OF RECORD.--Mar. 1967 to current year.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 5	7.88	SEP 9	11.04

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.

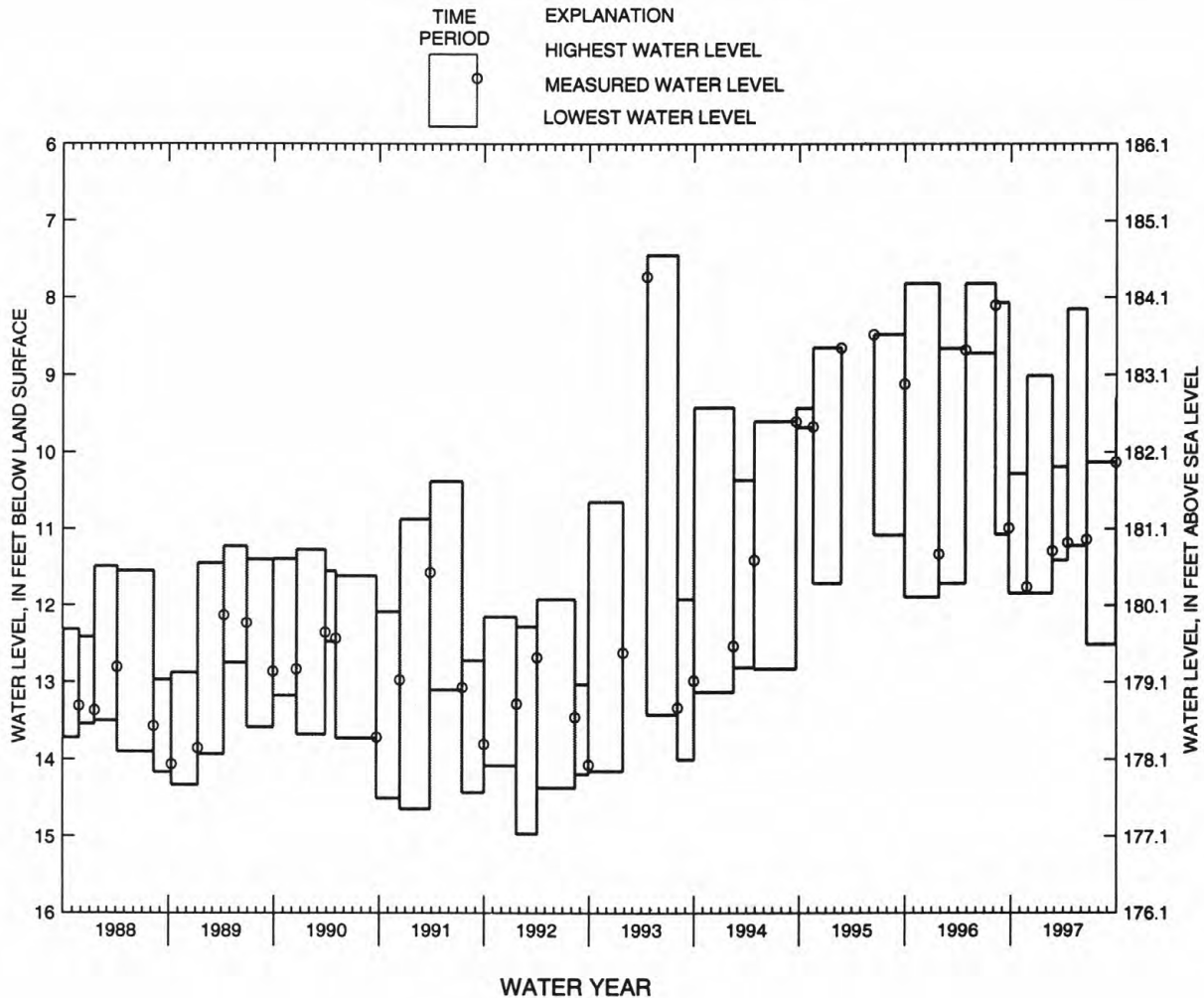
PERIOD OF RECORD.--Dec. 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 24, 1996 TO NOV. 25, 1996	10.28	11.84	NOV. 25, 1996	11.76
NOV. 25, 1996 TO FEB. 21, 1997	9.01	11.84	FEB. 21, 1997	11.29
FEB. 21, 1997 TO APR. 15, 1997	10.19	11.41	APR. 15, 1997	11.18
APR. 15, 1997 TO JUNE 20, 1997	8.15	11.22	JUNE 20, 1997	11.14
JUNE 20, 1997 TO SEPT. 30, 1997	10.13	12.51	SEPT. 30, 1997	10.13

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.

Measuring point: Top of recorder shelf, 2.20 ft above land surface.

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

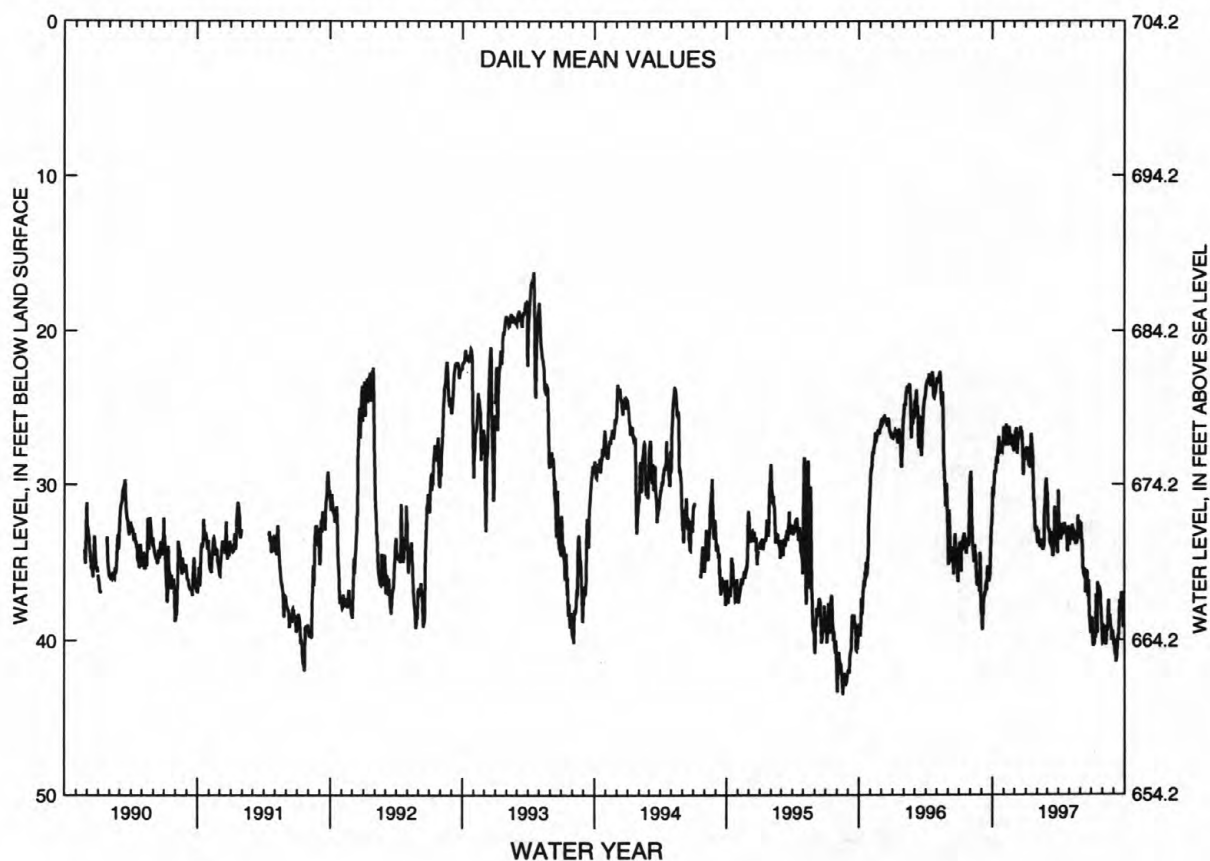
PERIOD OF RECORD.--Nov. 1989 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.79	27.37	26.51	27.63	32.97	32.86	32.94	33.60	33.58	39.47	39.52	40.92
10	29.24	26.27	27.77	28.77	34.05	33.85	33.35	32.61	35.36	40.22	40.31	41.26
15	28.64	27.18	26.77	27.90	33.78	33.56	33.11	33.65	35.92	37.08	39.29	39.79
20	26.87	27.09	26.65	27.78	34.04	33.91	32.85	33.55	35.60	36.84	38.97	37.52
25	27.55	26.95	28.76	31.04	30.80	33.15	33.36	33.34	36.18	36.74	39.16	36.94
EOM	27.17	27.83	28.36	33.04	29.87	34.45	32.70	32.36	39.60	39.15	39.71	39.06
MEAN	28.64	26.98	27.30	29.16	32.97	33.21	32.97	33.24	35.82	38.52	39.32	39.27
WTR YR 1997	MEAN 33.11 HIGH 26.09 NOV 9 LOW 41.42 SEP 8											

NJ-WRD WELL NO. 27-1191



GROUND-WATER LEVELS

171

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.

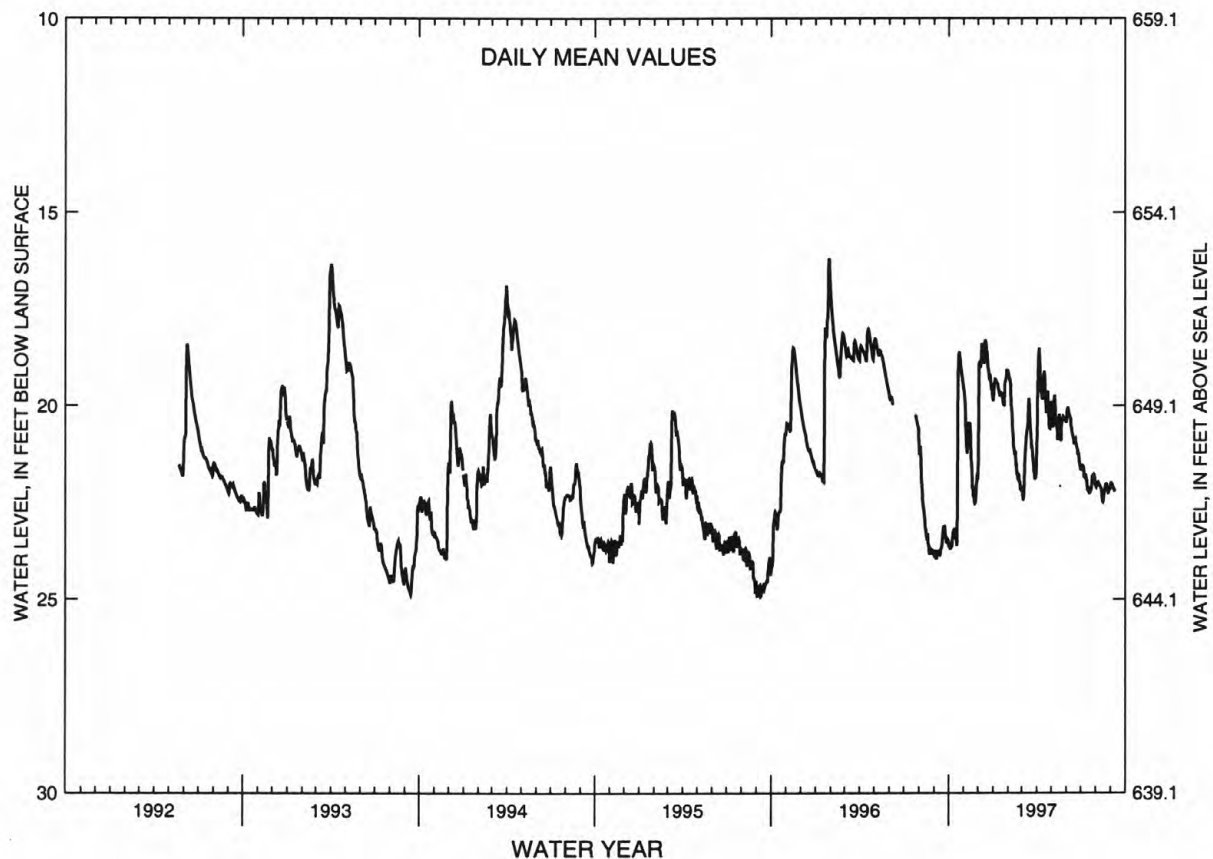
PERIOD OF RECORD.--Apr. 1991 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.64	20.50	19.01	19.33	19.34	22.31	18.72	20.56	20.07	21.56	21.99	22.07
10	23.30	20.58	18.47	19.44	20.66	20.88	19.66	20.30	20.32	21.79	22.08	22.22
15	23.34	20.69	18.31	19.76	21.22	20.01	19.23	20.66	20.79	22.19	22.48	---
20	19.93	22.12	18.75	19.78	21.74	20.76	19.98	20.75	20.86	22.21	22.19	---
25	18.87	22.51	19.20	19.47	21.95	21.55	19.99	20.33	21.27	21.81	22.11	---
EOM	19.49	21.83	19.84	19.10	22.22	21.61	20.02	20.41	21.60	22.02	22.14	---
MEAN	21.76	21.26	19.07	19.55	20.92	21.25	19.71	20.38	20.76	21.90	22.15	---
WTR YR 1997	MEAN 20.83 HIGH 18.31 DEC 15 LOW 23.64 OCT 5											

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.

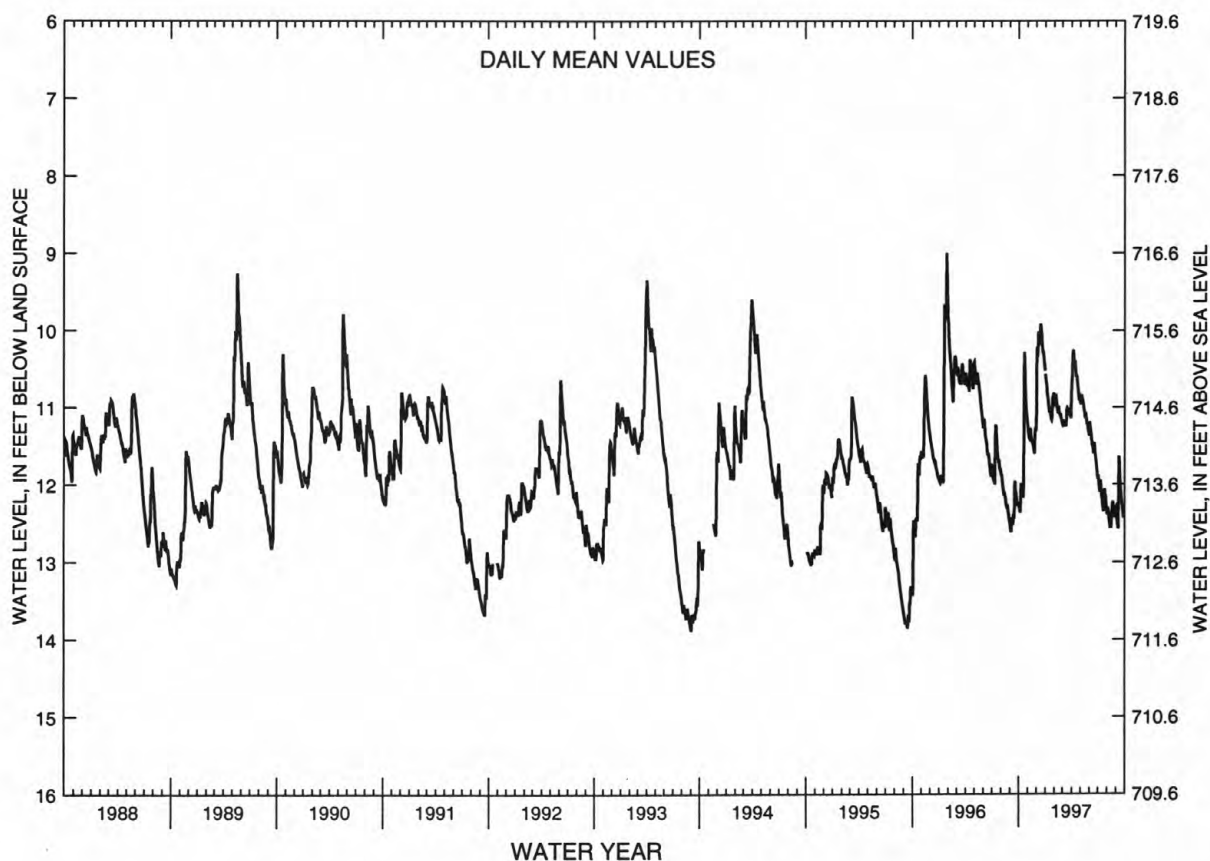
PERIOD OF RECORD.--Nov. 1981 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.32	11.37	10.34	10.70	10.86	11.23	10.36	10.85	11.26	11.97	12.31	12.44
10	11.99	11.27	10.09	10.89	10.98	11.21	10.39	10.91	11.43	11.95	12.47	12.57
15	12.11	11.43	9.91	11.07	11.00	11.04	10.51	11.05	11.54	12.16	12.54	11.82
20	10.56	11.49	10.12	11.12	11.10	11.02	10.62	11.07	11.49	12.33	12.32	12.13
25	10.83	11.60	10.27	10.87	11.16	11.11	10.84	11.21	11.69	12.06	12.34	12.31
EOM	11.16	11.31	10.52	10.90	11.21	10.97	10.88	11.34	11.89	12.30	12.38	12.39
MEAN	11.64	11.39	10.24	10.91	11.03	11.13	10.59	11.07	11.51	12.12	12.39	12.23
WTR YR 1997	MEAN 11.36 HIGH 9.91 DEC 15 LOW 12.57 SEP 10											

NJ-WRD WELL NO. 27-0027



GROUND-WATER LEVELS

173

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.

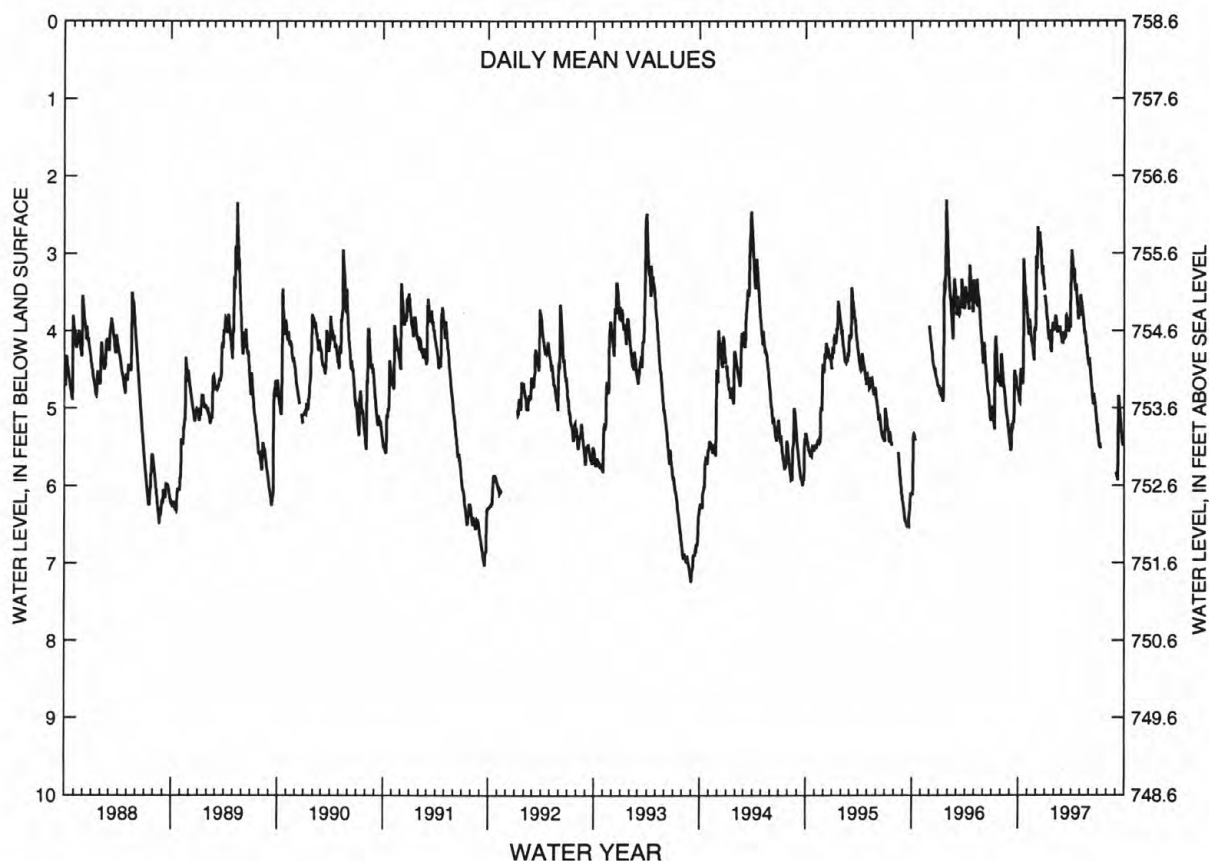
PERIOD OF RECORD.--Nov. 1981 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.89	3.98	3.20	3.66	3.86	4.15	3.03	3.58	4.42	5.36	---	5.83
10	4.49	3.86	2.83	3.85	3.88	4.07	3.27	3.68	4.64	5.45	---	5.93
15	4.59	4.11	2.74	4.11	3.94	3.81	3.41	3.89	4.88	---	---	4.91
20	3.07	4.21	3.03	4.14	3.99	3.85	3.49	4.00	4.84	---	---	5.15
25	3.44	4.38	3.16	3.99	4.05	4.01	3.76	4.19	4.99	---	---	5.37
EOM	3.69	4.00	3.47	3.91	4.11	3.63	3.69	4.39	5.20	---	---	5.45
MEAN	4.19	4.06	3.07	3.93	3.96	3.97	3.41	3.94	4.78	---	---	5.36
WTR YR 1997	MEAN 4.10 HIGH 2.66 DEC 8 LOW 5.93 SEP 10											

NJ-WRD WELL NO. 27-0028



GROUND-WATER LEVELS

OCEAN COUNTY

393115074191001. Local I.D., Great Bay Blvd. 1 Obs. NJ-WRD Well Number 29-1210.

LOCATION.--Lat 39°31'15", long 74°19'10", Hydrologic Unit 02040301, on the west side of Great Bay Boulevard, about 200 ft north of Little Sheepshad Creek, Little Egg Harbor Township.

Owner: State of New Jersey-DEP/Fish, Game & Wildlife.

AQUIFER.--Piney Point aquifer of Eocene age.

WELL CHARACTERISTICS.-- Drilled artesian observation well, diameter 4 in., depth 880 ft, screened 860 to 880 ft.

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

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

Measuring point: Top of base of locking cap, 4.70 ft above land surface

REMARKS.--Water level affected by tidal fluctuation.

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

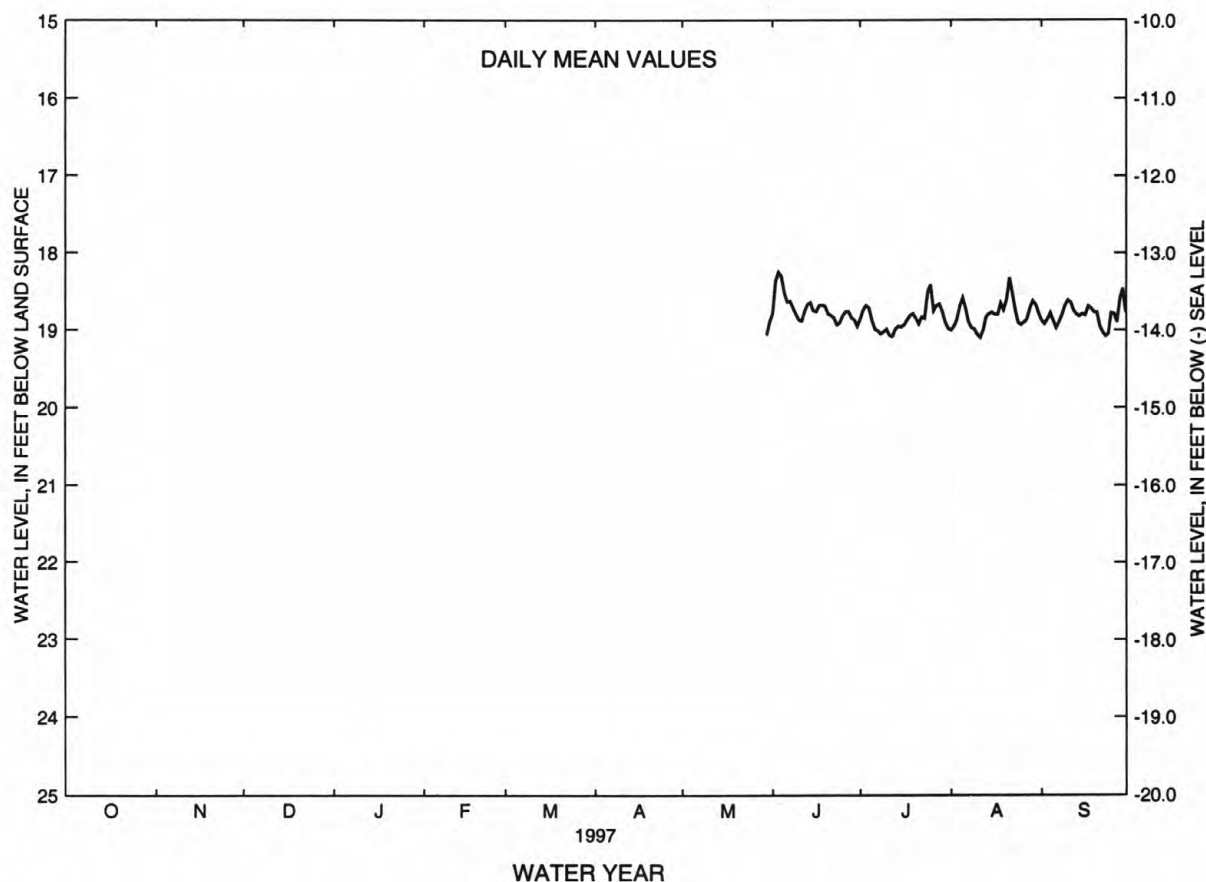
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.13 ft below land surface, Aug. 20, 1997; lowest, 19.52 ft below land surface, May 29, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	18.51	18.87	18.58	18.88
10	---	---	---	---	---	---	---	---	18.87	18.99	19.06	18.61
15	---	---	---	---	---	---	---	---	18.75	18.96	18.77	18.79
20	---	---	---	---	---	---	---	---	18.79	18.85	18.61	18.77
25	---	---	---	---	---	---	---	---	18.82	18.41	18.93	18.78
EOM	---	---	---	---	---	---	---	18.89	18.95	18.98	18.79	18.77
MEAN	---	---	---	---	---	---	---	---	18.72	18.85	18.80	18.81

WTR YR 1997 HIGH 18.25 JUN 3 LOW 19.14 MAY 29

NJ-WRD WELL NO. 29-1210



GROUND-WATER LEVELS

175

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.

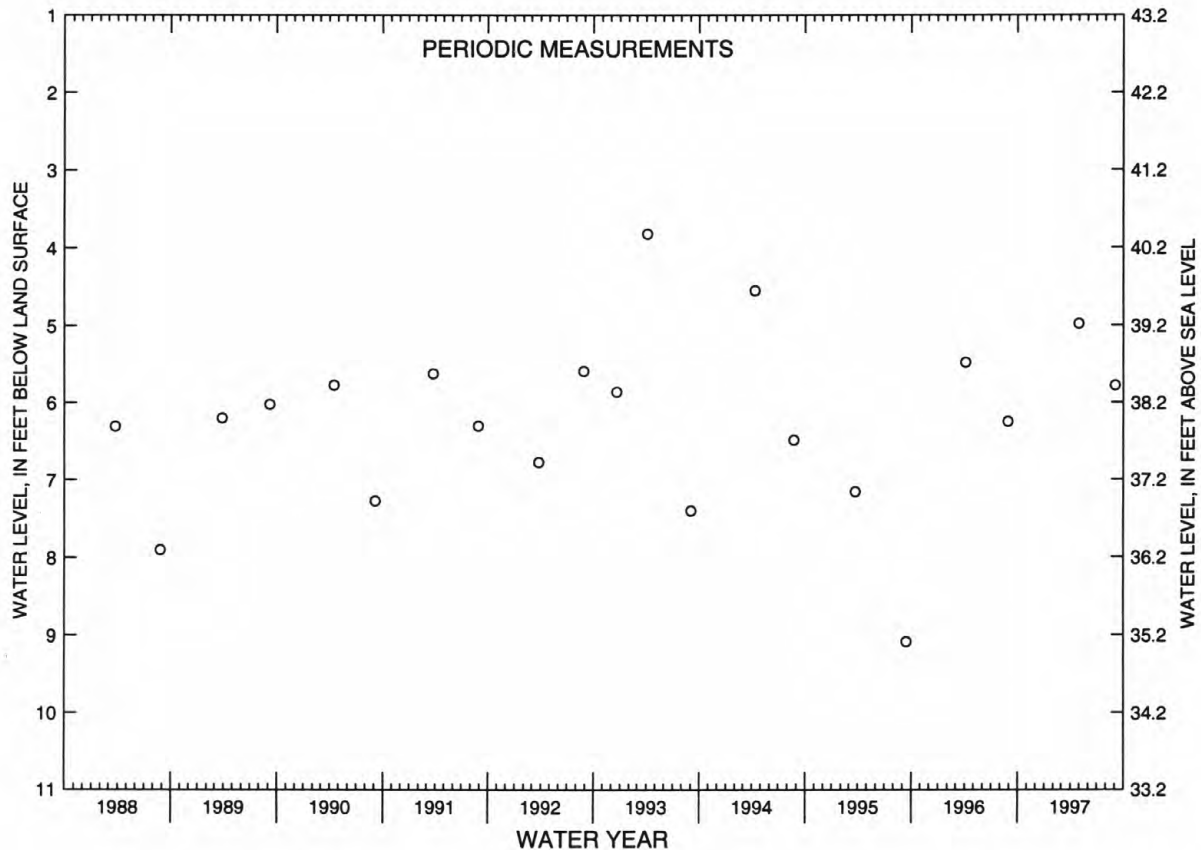
PERIOD OF RECORD.--May 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 30	4.98	SEP 4	5.78

NJ-WRD WELL NO. 29-0513



GROUND-WATER LEVELS

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.

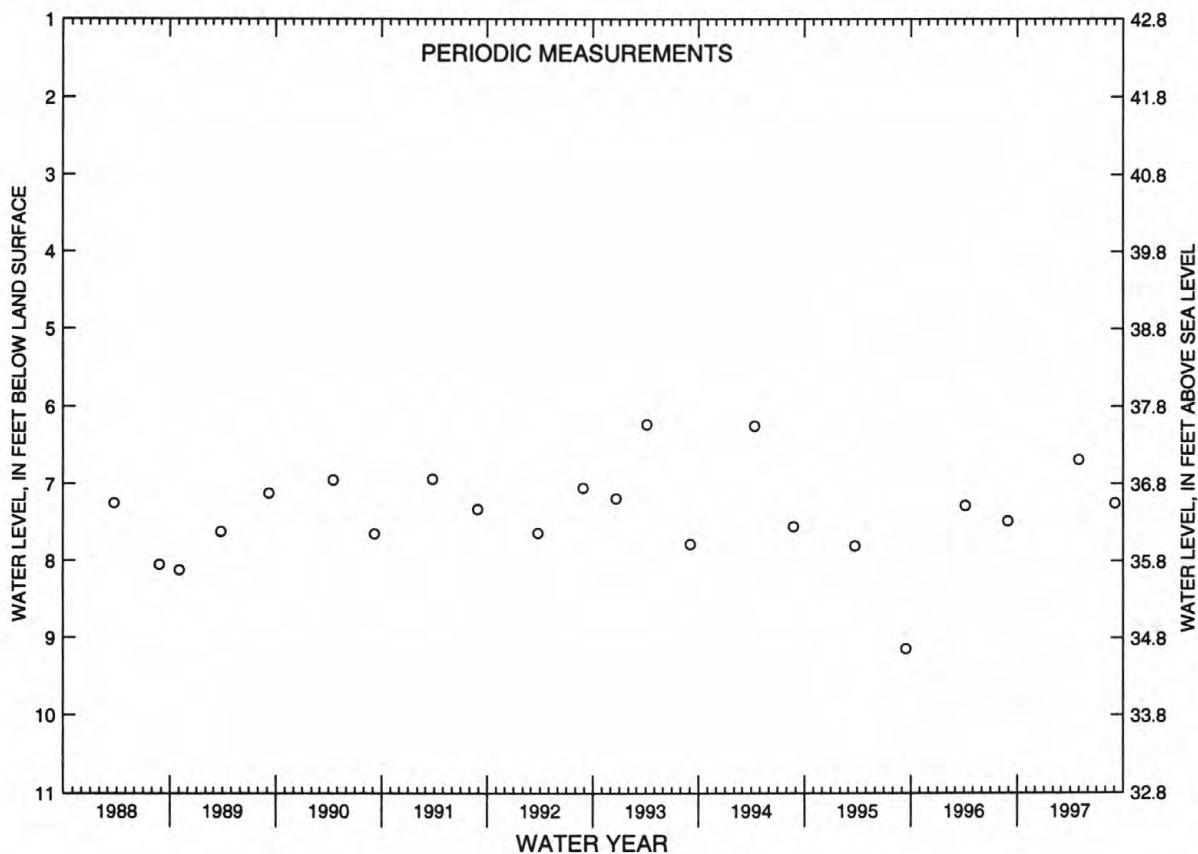
PERIOD OF RECORD.--Feb. 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 30	6.69	SEP 4	7.25

NJ-WRD WELL NO. 29-0514



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.

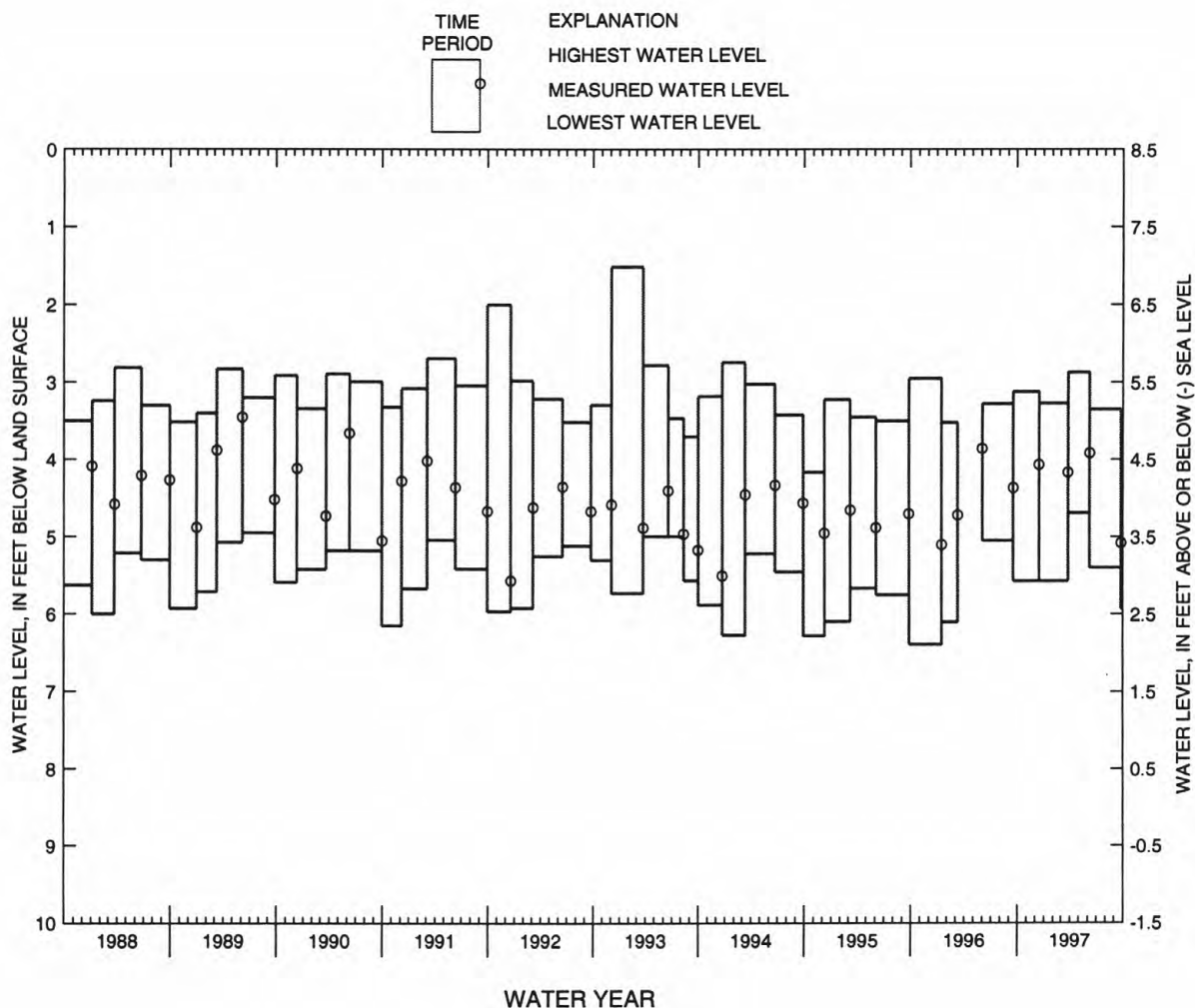
PERIOD OF RECORD.--July 1962 to current year. Records for 1962 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 19, 1996 TO DEC. 17, 1996	3.12	5.57	DEC. 17, 1996	4.07
DEC. 17, 1996 TO MAR. 27, 1997	3.27	5.57	MAR. 27, 1997	4.17
MAR. 27, 1997 TO JUNE 10, 1997	2.87	4.69	JUNE 10, 1997	3.92
JUNE 10, 1997 TO SEPT. 26, 1997	3.35	5.40	SEPT. 26, 1997	5.08

NJ-WRD WELL NO. 29-0017



GROUND-WATER LEVELS

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.

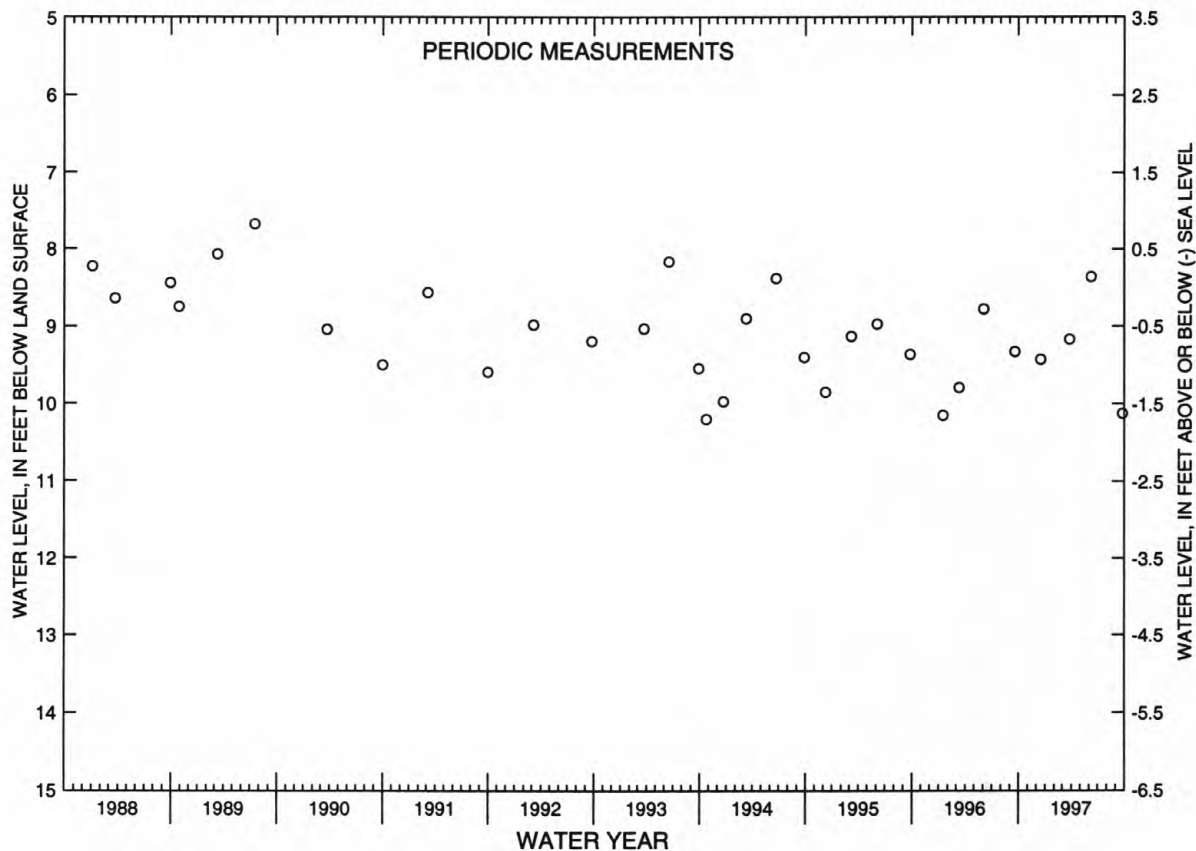
PERIOD OF RECORD.--July 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 17	9.43	JUN 10	8.36
MAR 27	9.17	SEP 26	10.13

NJ-WRD WELL NO. 29-0018



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.

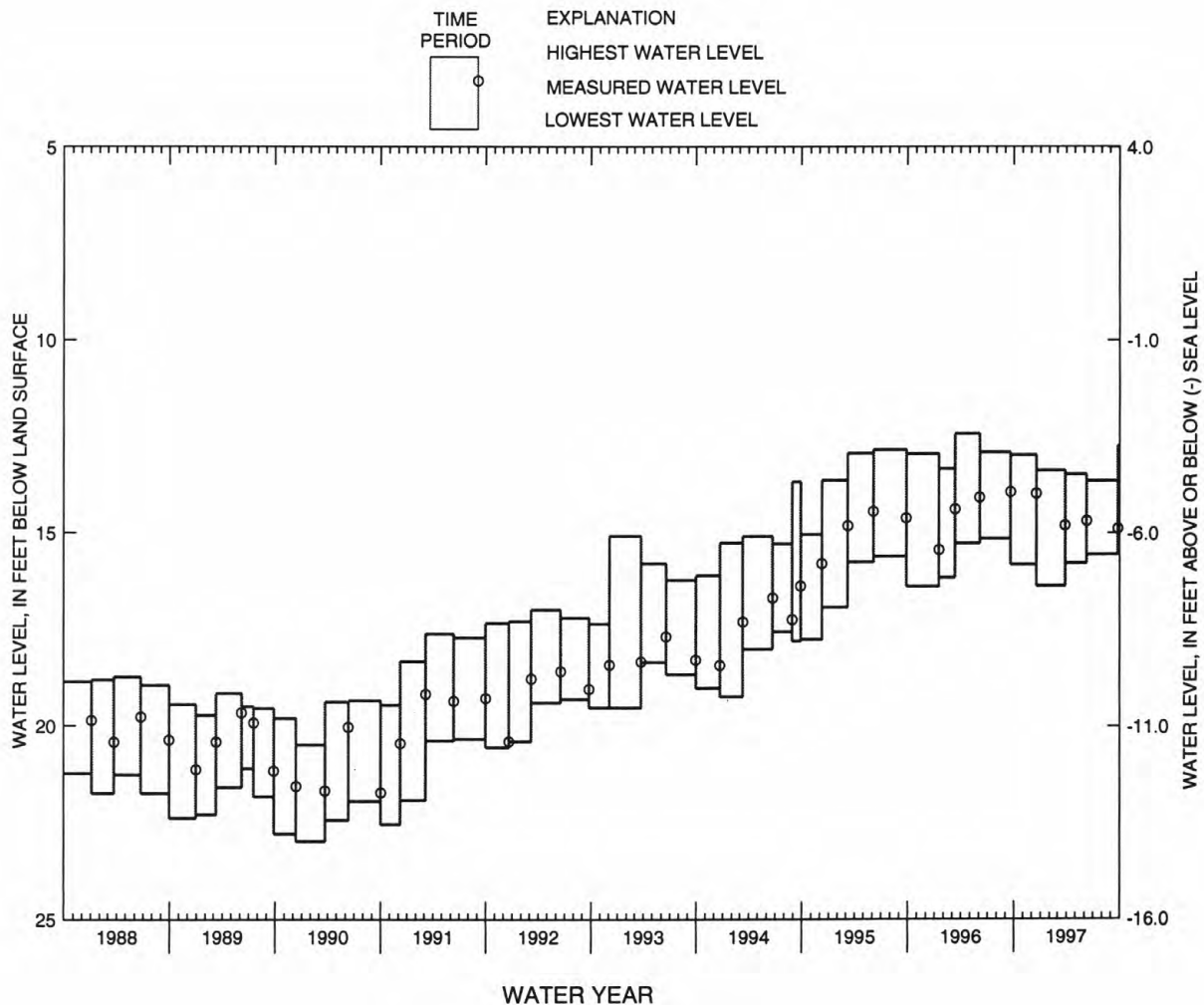
PERIOD OF RECORD.--Nov. 1968 to current year. Records for 1968 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 19, 1996 TO DEC. 17, 1996	12.98	15.81	DEC. 17, 1996	13.98
DEC. 17, 1996 TO MAR. 27, 1997	13.38	16.36	MAR. 27, 1997	14.80
MAR. 27, 1997 TO JUNE 10, 1997	13.48	15.77	JUNE 10, 1997	14.69
JUNE 10, 1997 TO SEPT. 26, 1997	13.65	15.55	SEPT. 26, 1997	14.89

NJ-WRD WELL NO. 29-0019



GROUND-WATER LEVELS

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.

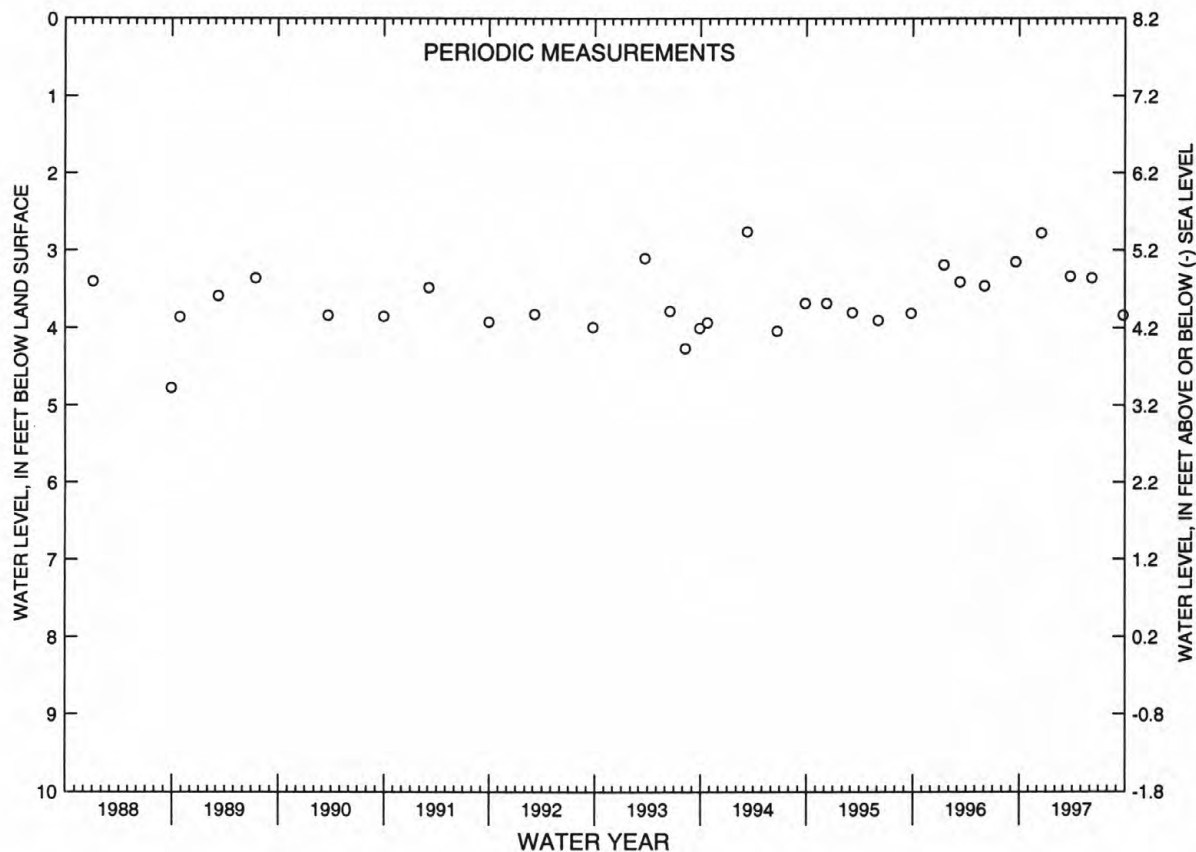
PERIOD OF RECORD.--May 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 17	2.78	JUN 10	3.36
MAR 27	3.34	SEP 26	3.84

NJ-WRD WELL NO. 29-0020



GROUND-WATER LEVELS

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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.

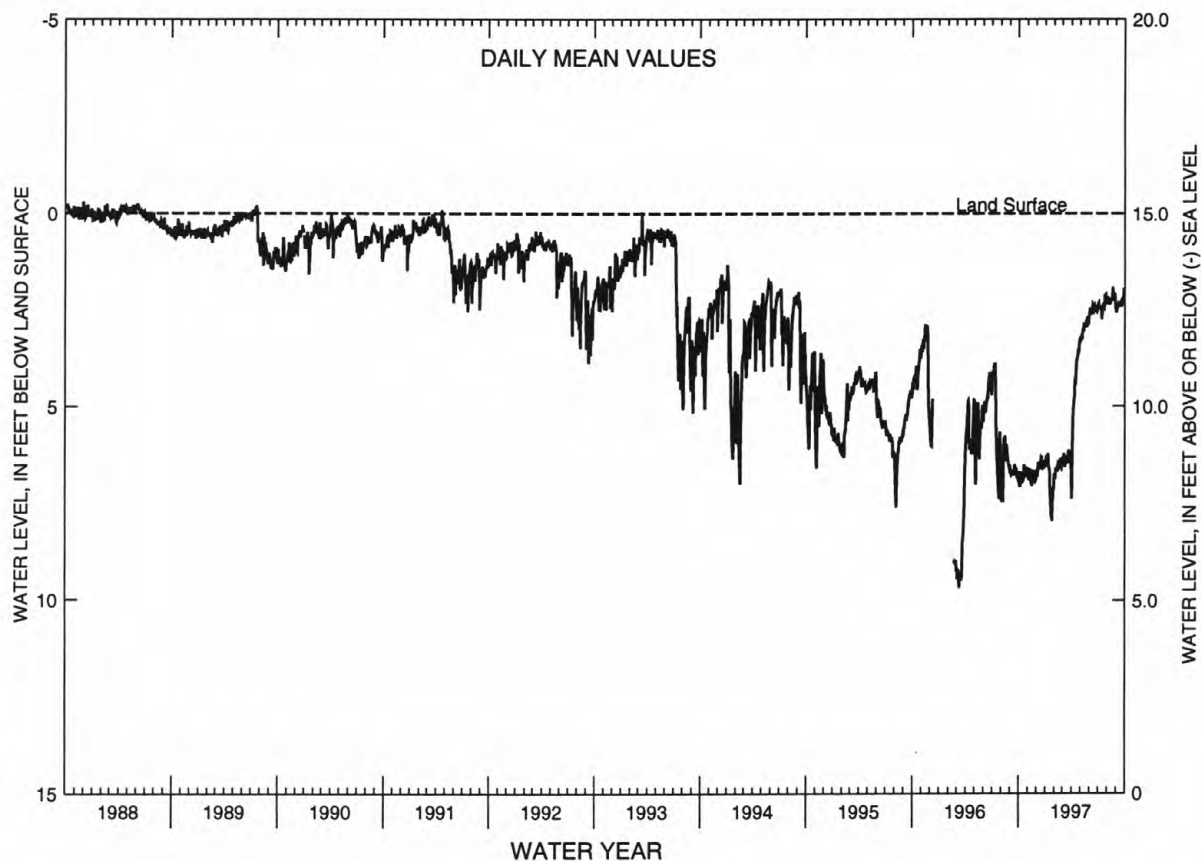
PERIOD OF RECORD.--Apr. 1984 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.06	6.86	6.79	6.26	6.58	6.36	5.77	3.27	2.51	2.41	2.16	2.46
10	6.73	6.71	6.58	6.21	6.57	6.28	4.86	2.99	2.52	2.41	2.35	2.37
15	6.93	7.03	6.49	6.61	6.39	6.26	4.37	2.90	2.51	2.65	2.25	2.37
20	6.50	6.65	6.45	7.56	6.57	6.24	3.81	2.83	2.43	2.50	2.22	2.29
25	6.67	6.81	6.48	7.35	6.58	6.42	3.56	2.75	2.45	2.13	2.14	2.24
EOM	6.61	6.87	6.50	6.82	6.52	6.58	3.35	2.71	2.50	2.30	2.43	2.00
MEAN	6.78	6.80	6.53	6.90	6.57	6.34	4.52	2.98	2.48	2.39	2.21	2.35
WTR YR 1997	MEAN 4.73 HIGH 1.91 AUG 21 LOW 7.93 JAN 24											

NJ-WRD WELL NO. 29-0585



GROUND-WATER LEVELS

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.

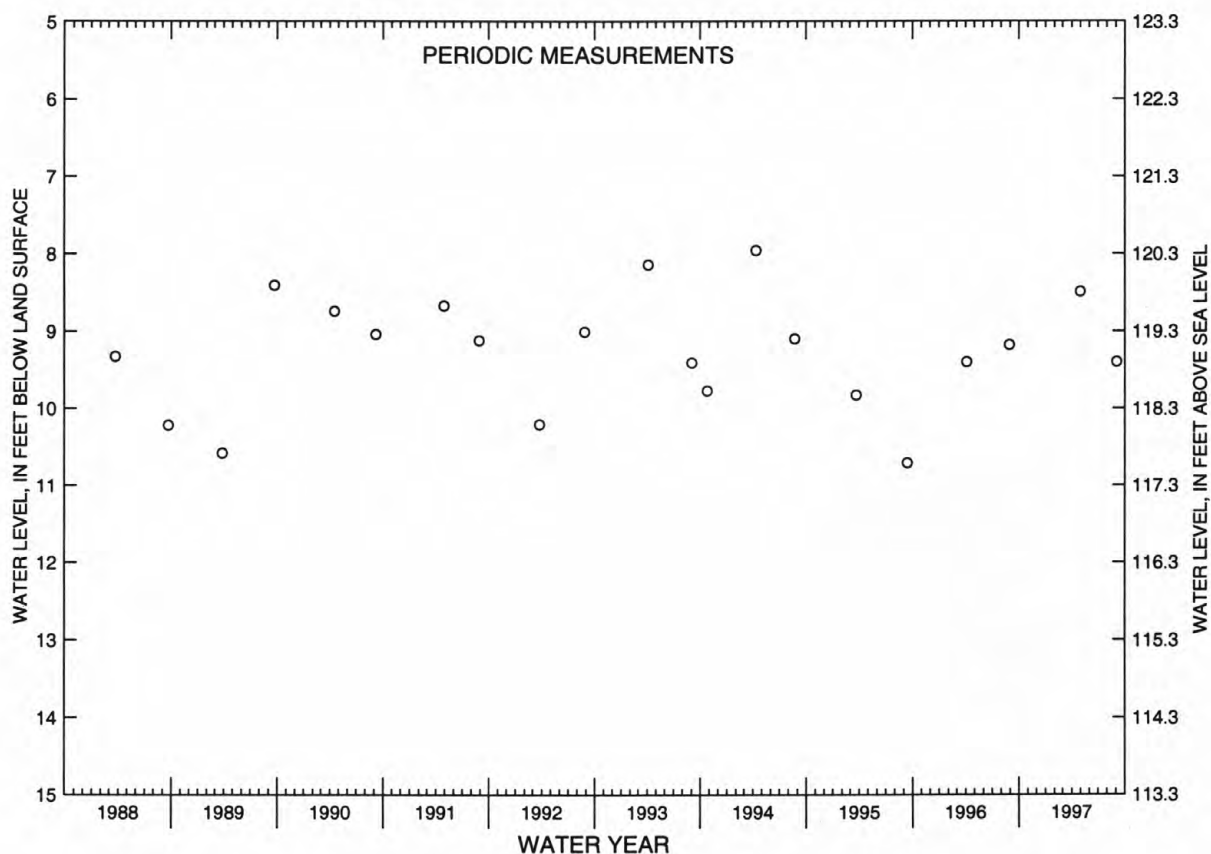
PERIOD OF RECORD.--Feb. 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 30	8.49	SEP 4	9.40

NJ-WRD WELL NO. 29-0425



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.

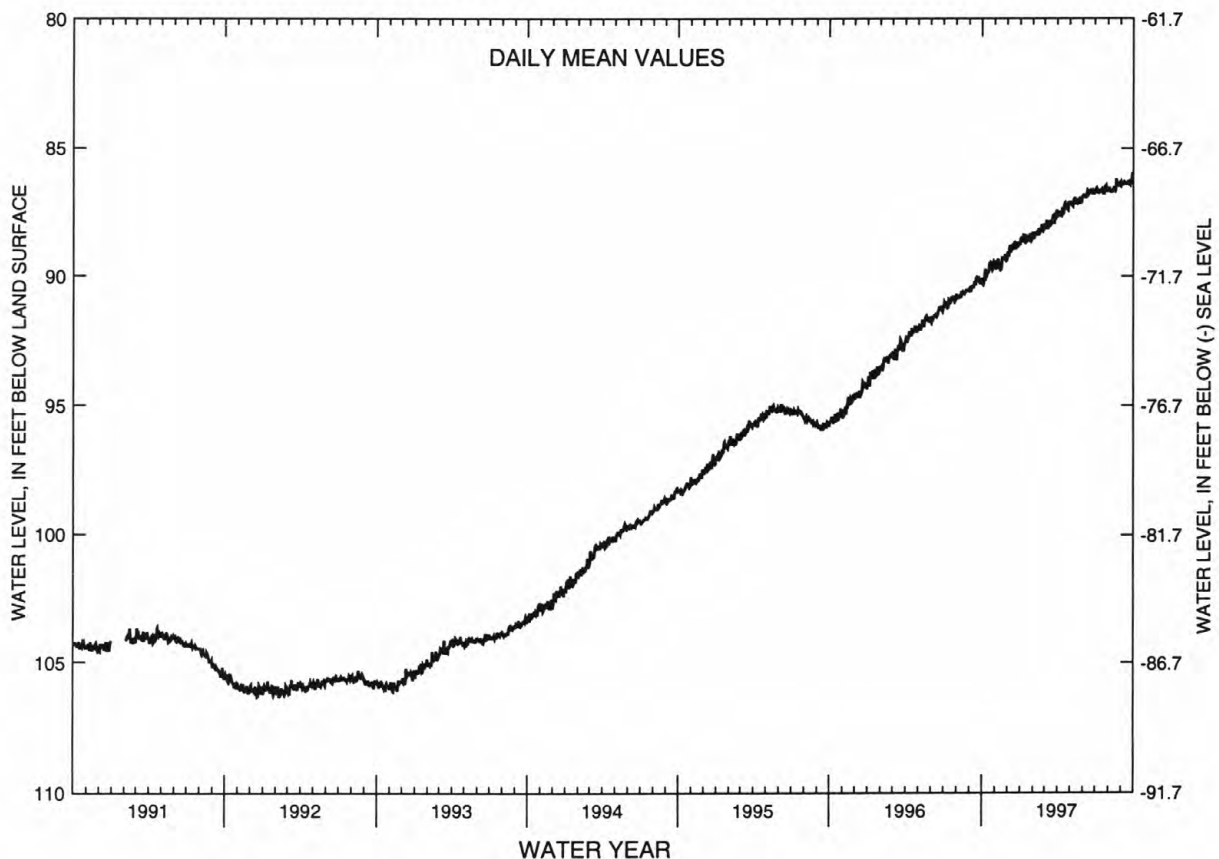
PERIOD OF RECORD.--Dec. 1965 to current year. Records for 1965 to 1976 and 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	90.27	89.68	89.16	88.46	88.27	88.00	87.68	87.24	86.85	86.67	86.56	86.41
10	89.77	89.44	88.94	88.35	88.30	87.89	87.64	87.05	86.86	86.70	86.70	86.37
15	89.91	89.74	88.94	88.68	88.14	87.81	87.59	87.00	86.77	86.65	86.60	86.37
20	89.48	89.27	88.79	88.50	88.26	87.75	87.26	87.01	86.73	86.73	86.62	86.26
25	89.63	89.31	88.76	88.33	88.25	87.91	87.30	86.97	86.69	86.48	86.45	86.26
EOM	89.48	89.35	88.73	88.35	88.15	87.42	87.19	86.95	86.75	86.66	86.46	86.00
MEAN	89.81	89.46	88.87	88.55	88.26	87.86	87.41	87.08	86.77	86.64	86.54	86.33
WTR YR 1997	MEAN 87.80 HIGH 85.96 SEP 29 LOW 90.27 OCT 5											

NJ-WRD WELL NO. 29-0534



GROUND-WATER LEVELS

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.

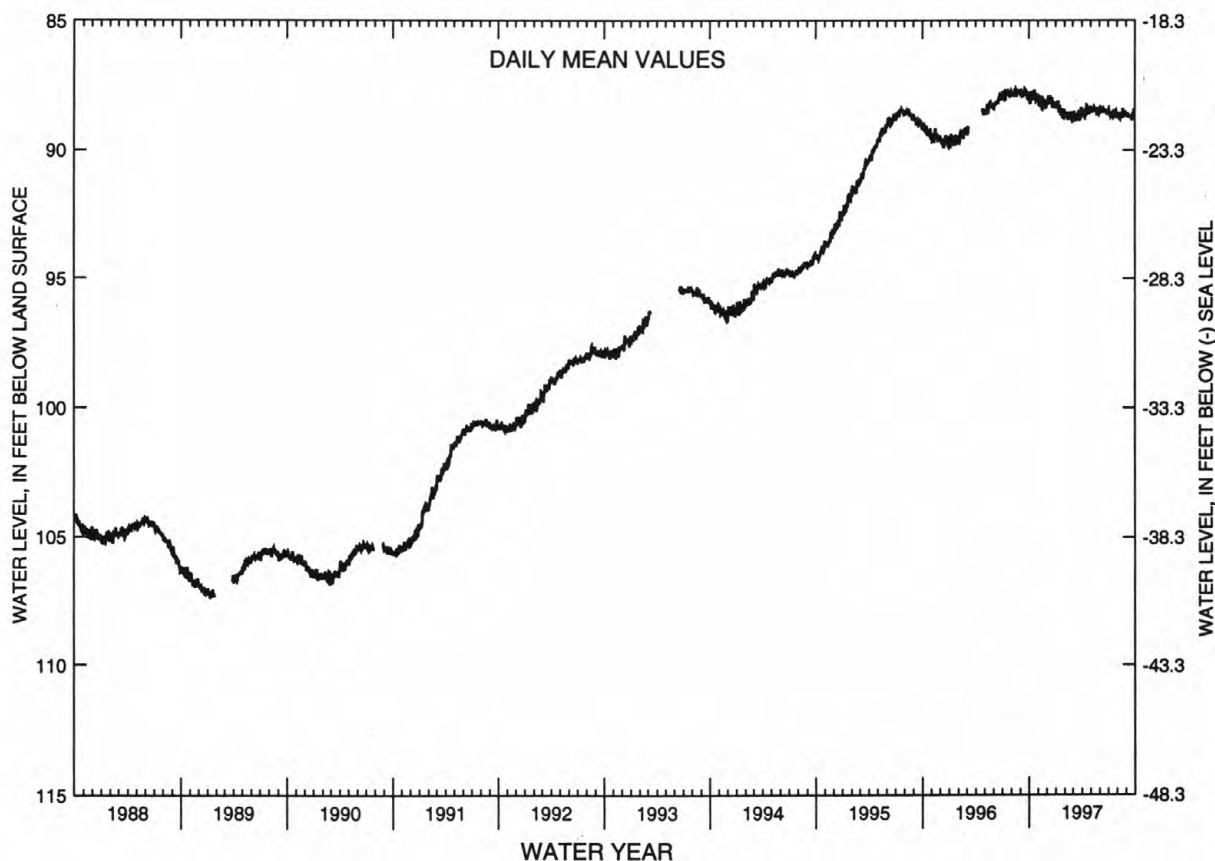
PERIOD OF RECORD.--July 1968 to current year. Records for 1968 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	88.21	88.19	88.23	88.14	88.60	88.69	88.68	88.52	88.45	88.55	88.58	88.68
10	87.79	88.03	88.10	88.09	88.63	88.63	88.70	88.35	88.50	88.63	88.77	88.69
15	88.03	88.41	88.20	88.27	88.70	88.62	88.69	88.36	88.48	88.60	88.68	88.72
20	87.71	88.05	88.17	88.50	88.76	88.60	88.39	88.43	88.51	88.71	88.73	88.65
25	87.96	88.23	88.23	88.77	88.80	88.84	88.51	88.44	88.48	88.51	88.64	88.66
EOM	87.91	88.34	88.31	88.58	88.76	88.35	88.42	88.48	88.60	88.69	88.67	88.47
MEAN	87.94	88.17	88.16	88.43	88.67	88.67	88.50	88.46	88.47	88.59	88.65	88.69
WTR YR 1997	MEAN 88.45 HIGH 87.71 OCT 19 LOW 88.89 MAR 9											

NJ-WRD WELL NO. 29-0085



GROUND-WATER LEVELS

185

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.

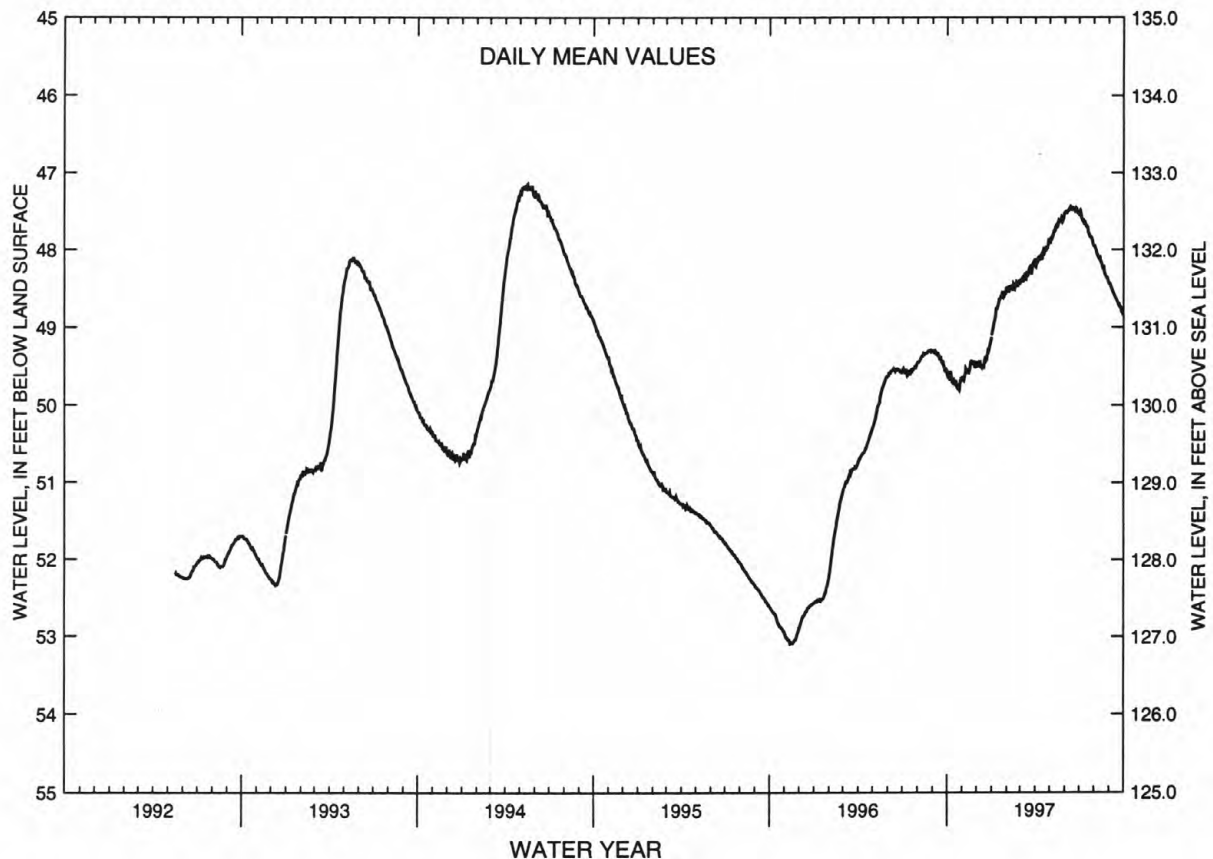
PERIOD OF RECORD.--May 1992 to current year. Records for 1992 are unpublished and are available in files of the New Jersey District Office.

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, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	49.65	49.64	49.50	48.94	48.47	48.37	48.18	47.86	47.50	47.56	48.00	48.48
10	49.64	49.56	49.52	48.76	48.47	48.32	48.13	47.76	47.47	47.64	48.10	48.56
15	49.73	49.57	49.50	48.69	48.46	48.32	48.12	47.68	47.49	47.68	48.16	48.63
20	49.75	49.45	49.43	48.60	48.48	48.23	48.03	47.64	47.47	47.78	48.25	48.69
25	49.79	49.46	49.31	48.54	48.45	48.26	47.99	47.58	47.46	47.83	48.34	48.73
EOM	49.66	49.49	49.13	48.48	48.45	48.12	47.90	47.53	47.53	47.95	48.42	48.85
MEAN	49.69	49.54	49.40	48.72	48.47	48.30	48.06	47.70	47.48	47.71	48.18	48.63
WTR YR 1997	MEAN 48.49 HIGH 47.44 JUN 13 LOW 49.80 OCT 26											

NJ-WRD WELL NO. 29-1059



GROUND-WATER LEVELS

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.

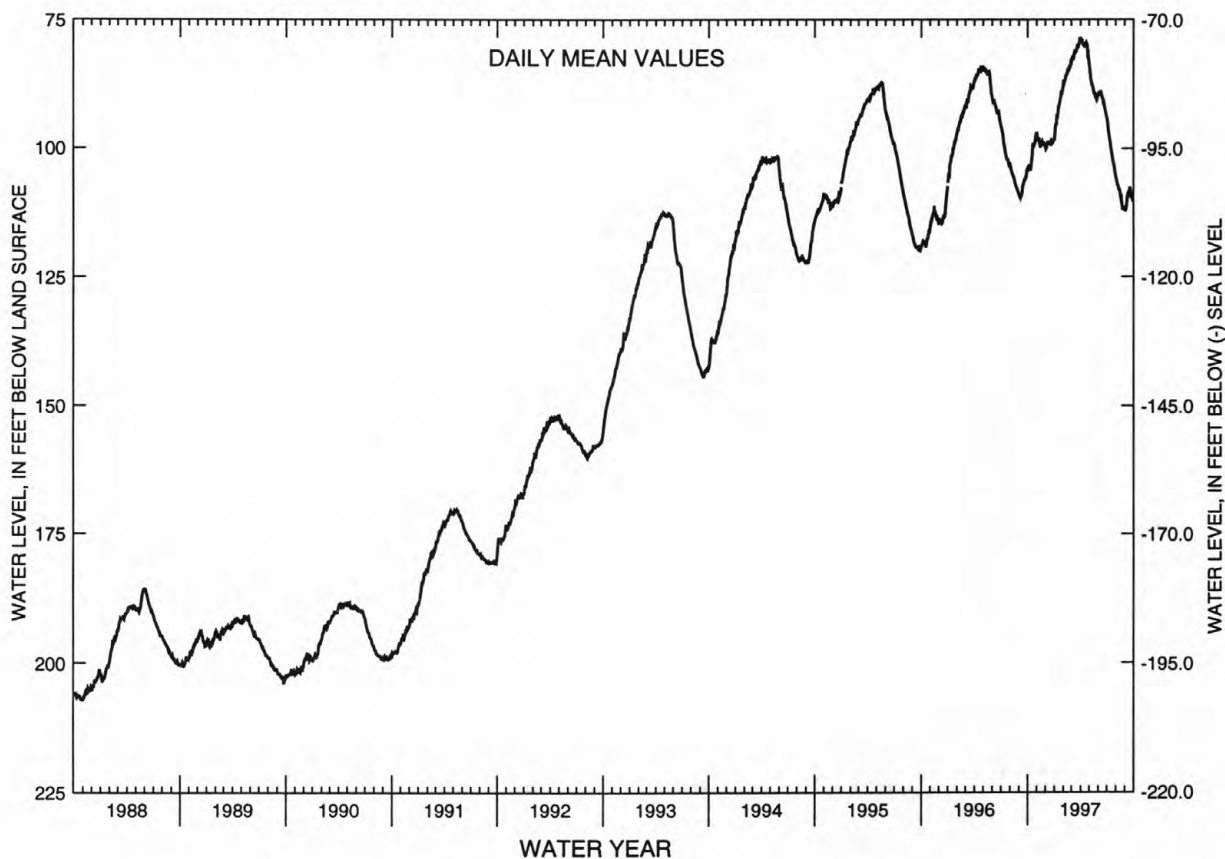
PERIOD OF RECORD.--Oct. 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 78.03 ft below land surface, Apr. 1, 1997; lowest, 207.49 ft below land surface, Oct. 31, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	104.02	98.40	99.94	95.70	86.62	82.13	78.98	85.27	89.33	95.12	106.29	112.03
10	104.01	98.66	99.28	93.37	85.91	81.48	79.74	87.09	89.33	97.64	107.36	110.14
15	102.45	99.57	98.78	92.38	85.03	80.92	80.09	88.07	89.91	99.50	108.11	109.33
20	99.05	98.83	99.20	90.82	84.75	80.18	79.45	89.12	90.99	101.39	109.82	107.54
25	99.13	98.96	98.84	88.71	84.02	80.07	80.01	89.68	92.20	102.74	111.62	109.08
EOM	97.18	99.60	98.65	87.78	83.33	78.61	82.75	89.68	93.52	105.09	111.63	110.39
MEAN	101.39	98.77	99.06	92.40	85.38	80.93	79.85	87.92	90.52	99.62	108.82	109.78
WTR YR 1997	MEAN 94.61 HIGH 78.39 APR 1 LOW 112.09 SEP 4											

NJ-WRD WELL NO. 29-0503



GROUND-WATER LEVELS

187

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.

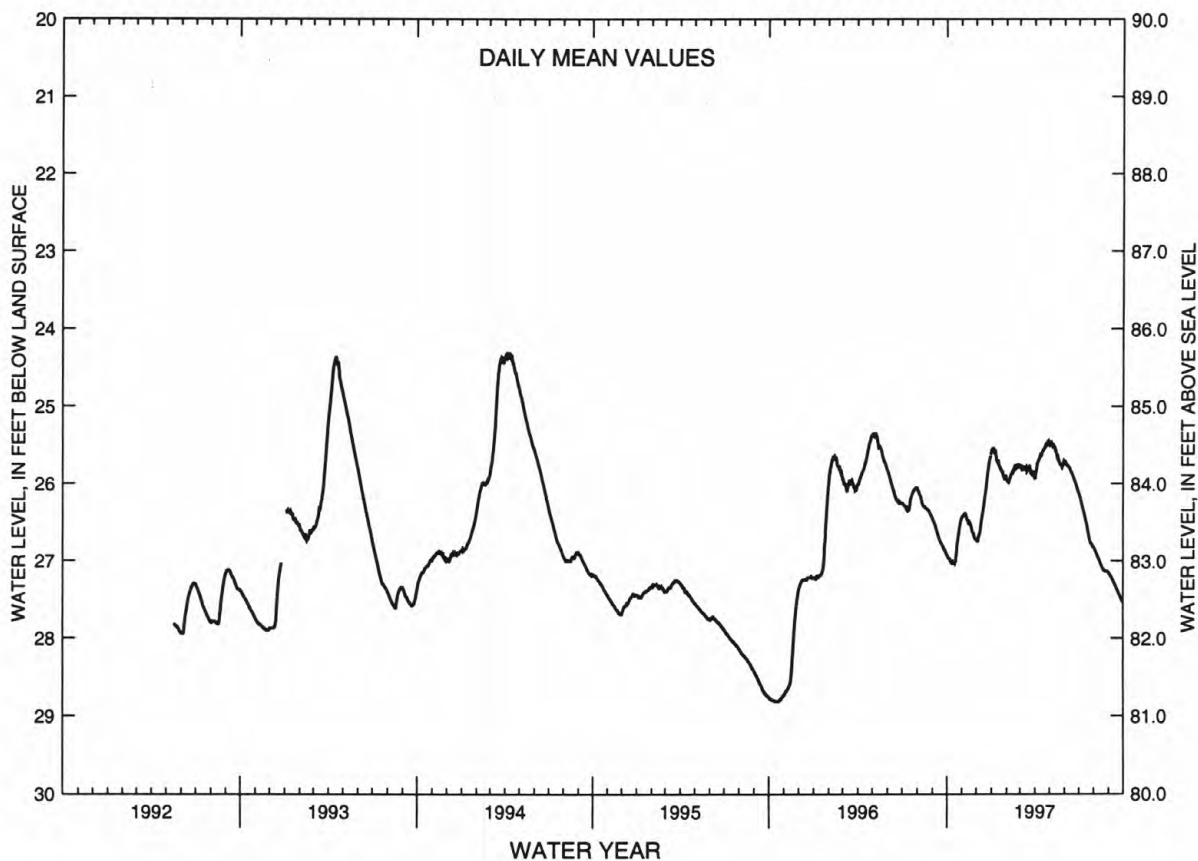
PERIOD OF RECORD.--May 1992 to current year. Records for 1992 are unpublished and are available in files of the New Jersey District Office.

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, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.96	26.41	26.74	25.54	25.94	25.80	25.83	25.48	25.73	26.19	26.87	27.19
10	27.01	26.40	26.60	25.56	25.91	25.78	25.69	25.49	25.78	26.32	26.95	27.25
15	27.02	26.50	26.37	25.73	25.83	25.79	25.64	25.57	25.84	26.45	27.03	27.32
20	27.00	26.53	26.14	25.79	25.80	25.79	25.56	25.68	25.91	26.60	27.10	27.38
25	26.70	26.64	25.87	25.83	25.78	25.87	25.51	25.75	25.99	26.75	27.13	27.45
EOM	26.47	26.72	25.64	25.90	25.78	25.87	25.48	25.72	26.10	26.82	27.14	27.53
MEAN	26.88	26.51	26.28	25.73	25.86	25.81	25.64	25.61	25.86	26.48	27.02	27.33
WTR YR 1997	MEAN 26.25 HIGH 25.46 MAY 1 LOW 27.53 SEP 30											

NJ-WRD WELL NO. 29-1060



GROUND-WATER LEVELS

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.

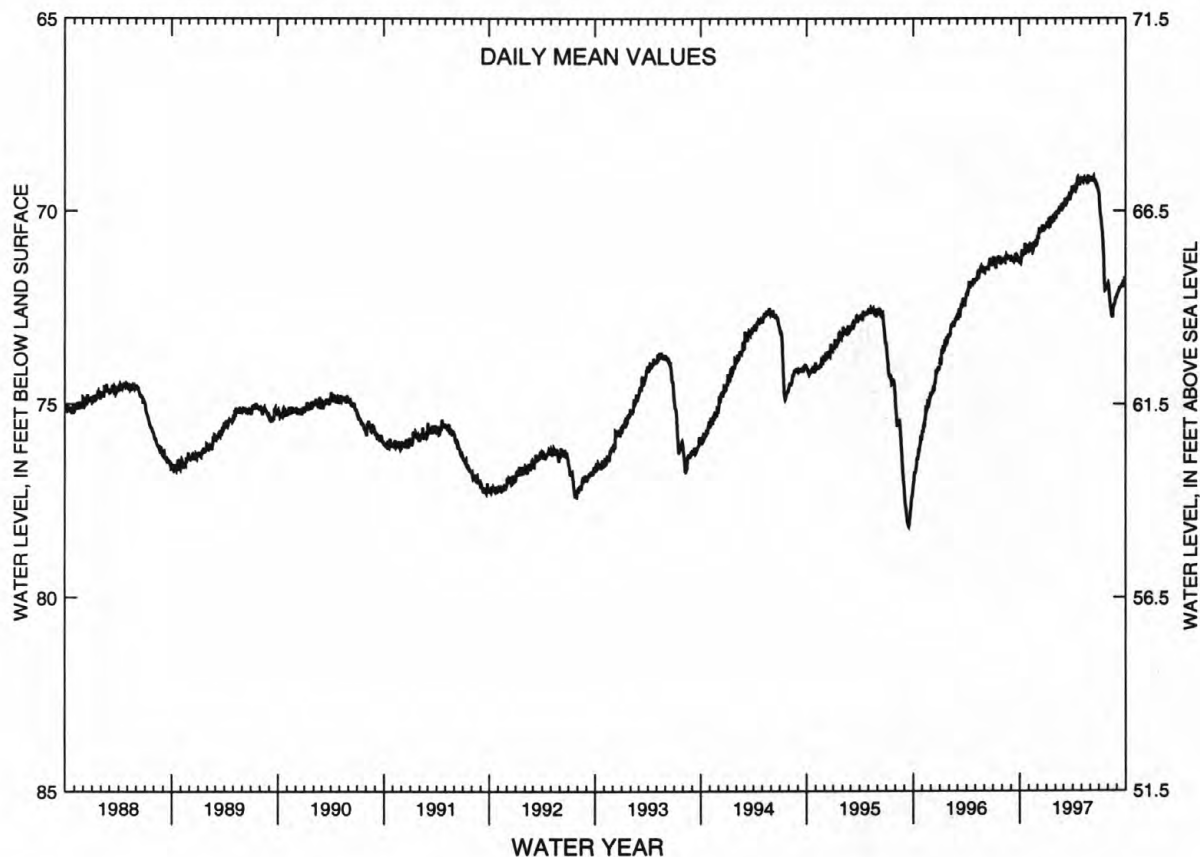
PERIOD OF RECORD.--Feb. 1964 to current year. Records for 1964 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	71.33	71.01	70.72	70.27	70.00	69.80	69.50	69.25	69.17	69.89	71.92	72.14
10	71.02	70.88	70.53	70.18	70.01	69.70	69.48	69.15	69.22	70.26	72.40	72.04
15	71.12	71.05	70.51	70.34	69.89	69.64	69.45	69.15	69.20	70.68	72.70	71.96
20	70.83	70.81	70.46	70.22	69.97	69.60	69.22	69.19	69.28	71.62	72.62	71.87
25	70.96	70.88	70.42	70.09	69.96	69.69	69.26	69.16	69.32	71.97	72.42	71.84
EOM	70.90	70.85	70.41	70.07	69.91	69.36	69.20	69.18	69.47	71.99	72.24	71.73
MEAN	71.06	70.91	70.50	70.26	69.98	69.68	69.33	69.20	69.24	70.93	72.35	71.98
WTR YR 1997	MEAN 70.46 HIGH 69.08 MAY 26 LOW 72.72 AUG 16											

NJ-WRD WELL NO. 29-0138



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.

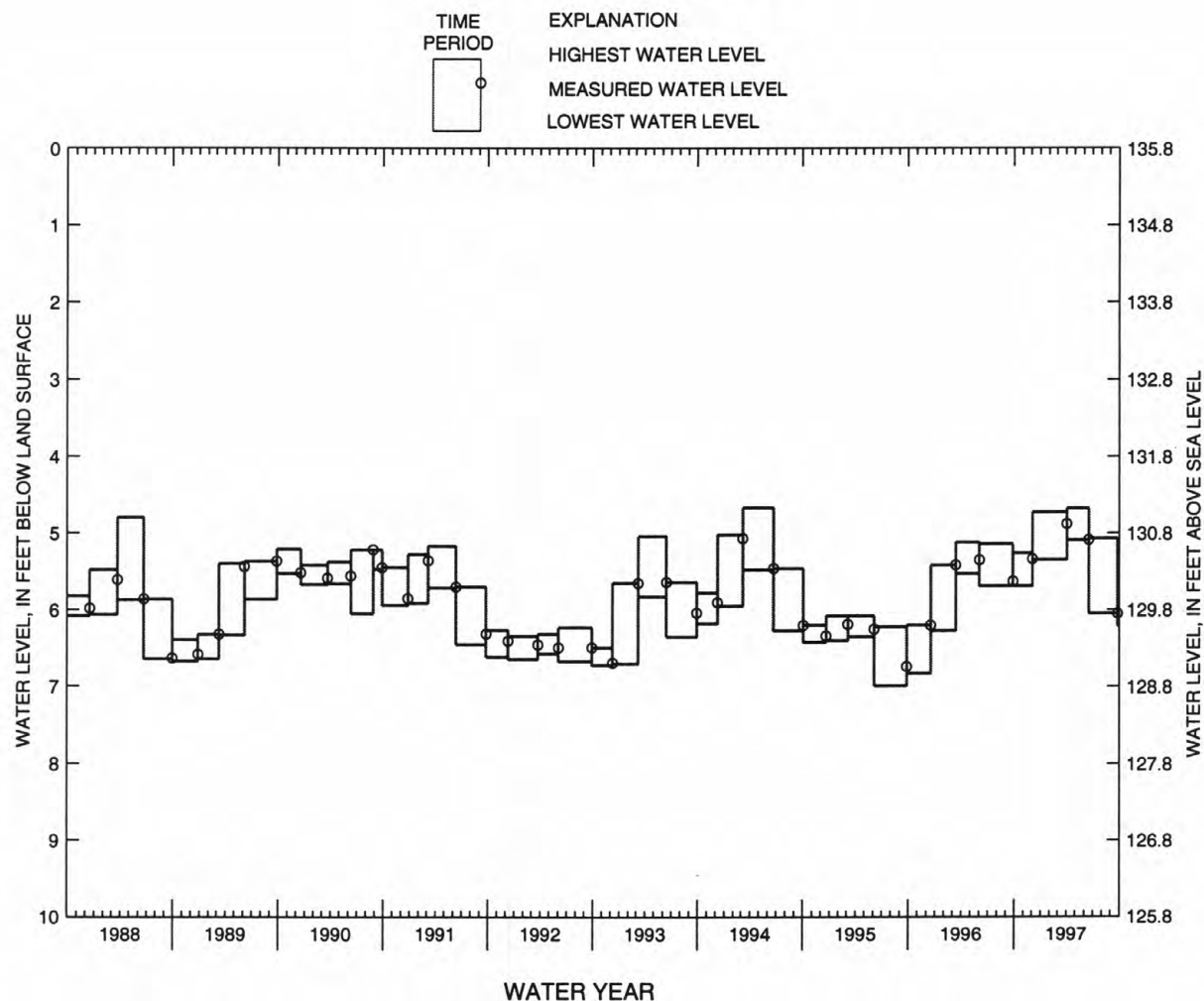
PERIOD OF RECORD.--Jan. 1964 to current year. Records for 1964 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1996 TO DEC. 4, 1996	5.26	5.69	DEC. 4, 1996	5.34
DEC. 4, 1996 TO APR. 2, 1997	4.73	5.35	APR. 2, 1997	4.88
APR. 2, 1997 TO JUNE 18, 1997	4.68	5.09	JUNE 18, 1997	5.09
JUNE 18, 1997 TO SEPT. 26, 1997	5.07	6.05	SEPT. 26, 1997	6.05

NJ-WRD WELL NO. 29-0139



GROUND-WATER LEVELS

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.

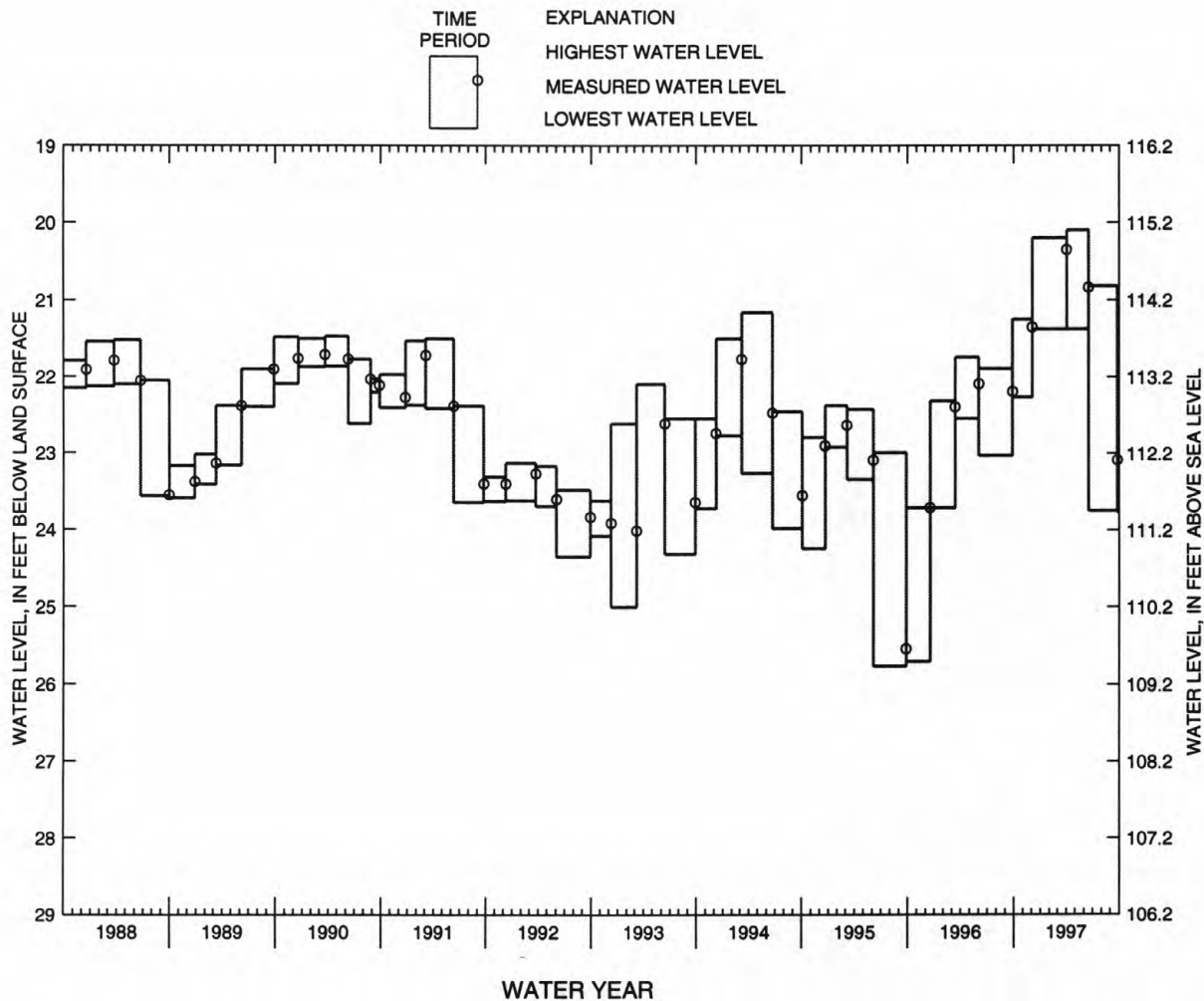
PERIOD OF RECORD.--Jan. 1964 to current year. Records for 1964 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1996 TO DEC. 4, 1996	21.25	22.26	DEC. 4, 1996	21.35
DEC. 4, 1996 TO APR. 2, 1997	20.20	21.38	APR. 2, 1997	20.35
APR. 2, 1997 TO JUNE 18, 1997	20.10	21.38	JUNE 18, 1997	20.84
JUNE 18, 1997 TO SEPT. 26, 1997	20.82	23.75	SEPT. 26, 1997	23.09

NJ-WRD WELL NO. 29-0140



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.

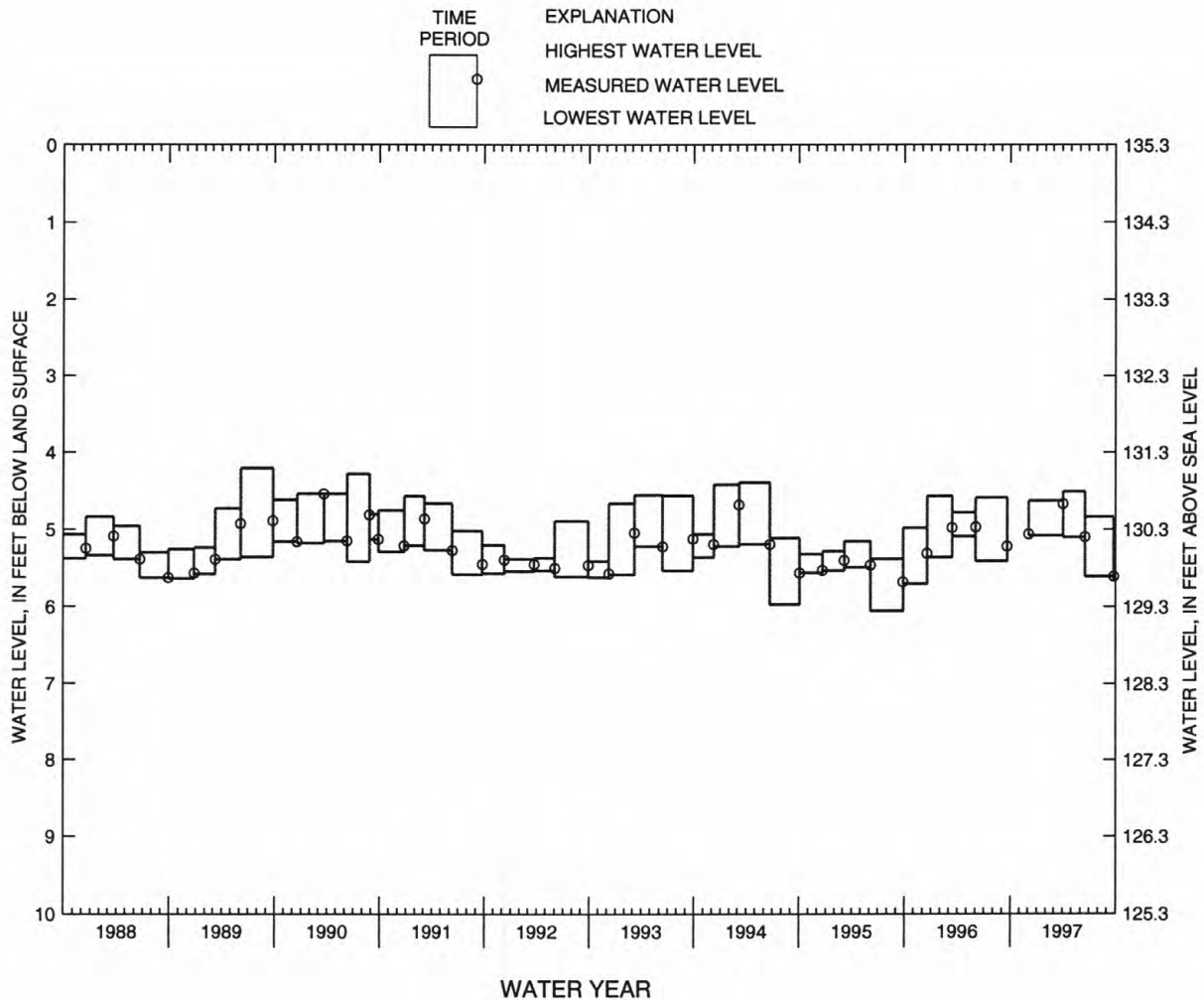
PERIOD OF RECORD.--Mar. 1964 to current year. Records for 1964 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 20, 1996 TO DEC. 4, 1996	4.57	5.36	DEC. 4, 1996	5.06
DEC. 4, 1996 TO APR. 2, 1997	4.63	5.08	APR. 2, 1997	4.67
APR. 2, 1997 TO JUNE 18, 1997	4.51	5.10	JUNE 18, 1997	5.10
JUNE 18, 1997 TO SEPT. 26, 1997	4.84	5.61	SEPT. 26, 1997	5.61

NJ-WRD WELL NO. 29-0141



GROUND-WATER LEVELS

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.

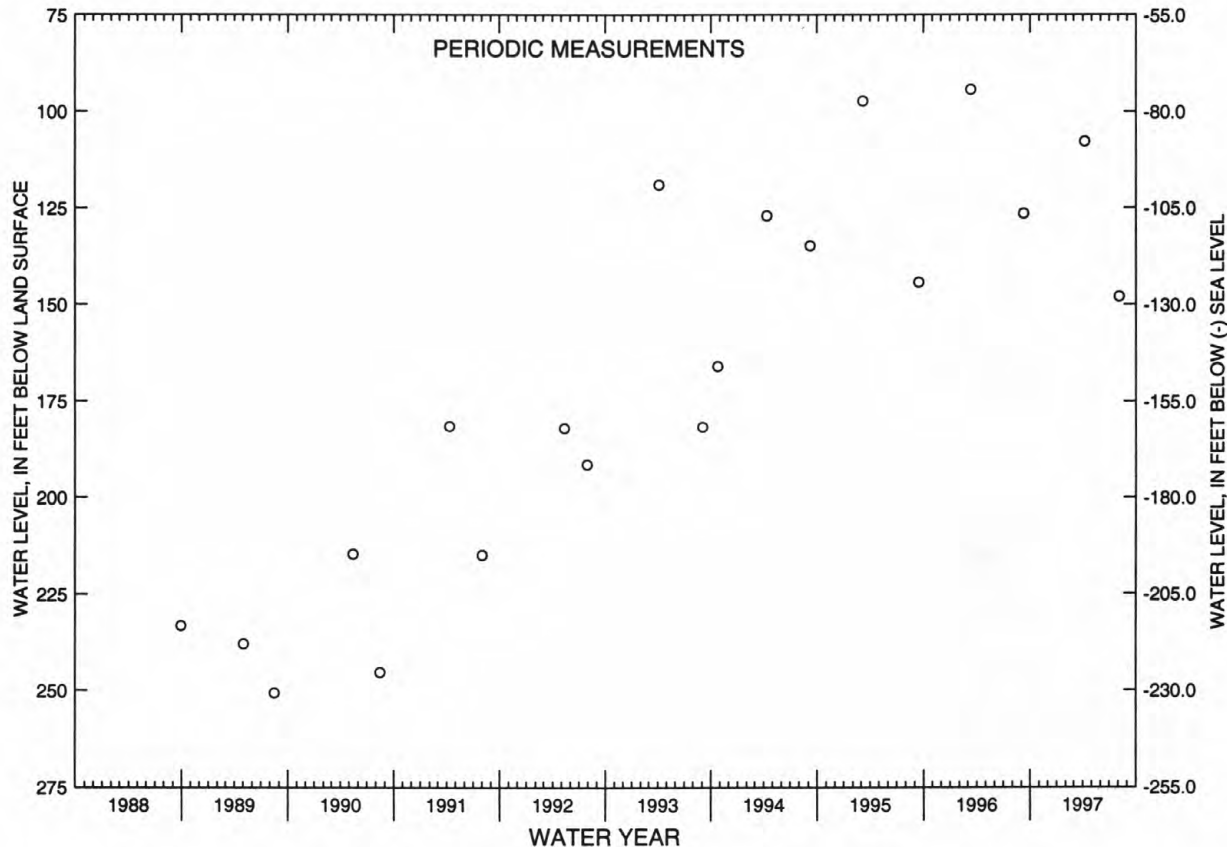
PERIOD OF RECORD.--Sept. 1988 to current year. Records for 1988 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 7	107.79	AUG 5	147.88

NJ-WRD WELL NO. 29-0530



GROUND-WATER LEVELS

193

SALEM COUNTY

393055075083501. Local I.D., Parvin SP 1 Obs (OW A). NJ-WRD Well Number 33-0841.

LOCATION.--Lat 39°30'55", long 75°08'35", Hydrologic Unit 02040206, Parvin State Park, Almond Rd (Rt. 540), Pittsgrove Township.
 Owner: State of New Jersey-DEP/Div of Parks and Forestry.

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

WELL CHARACTERISTICS.-- Drilled artesian observation well, diameter 4 in., depth 1,025 ft, screened 1,005 to 1,025ft.

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

DATUM.-- Land surface is 75 ft above sea level, from topographic map.
 Measuring point: Top of recorder shelf, 3.20 ft above land surface

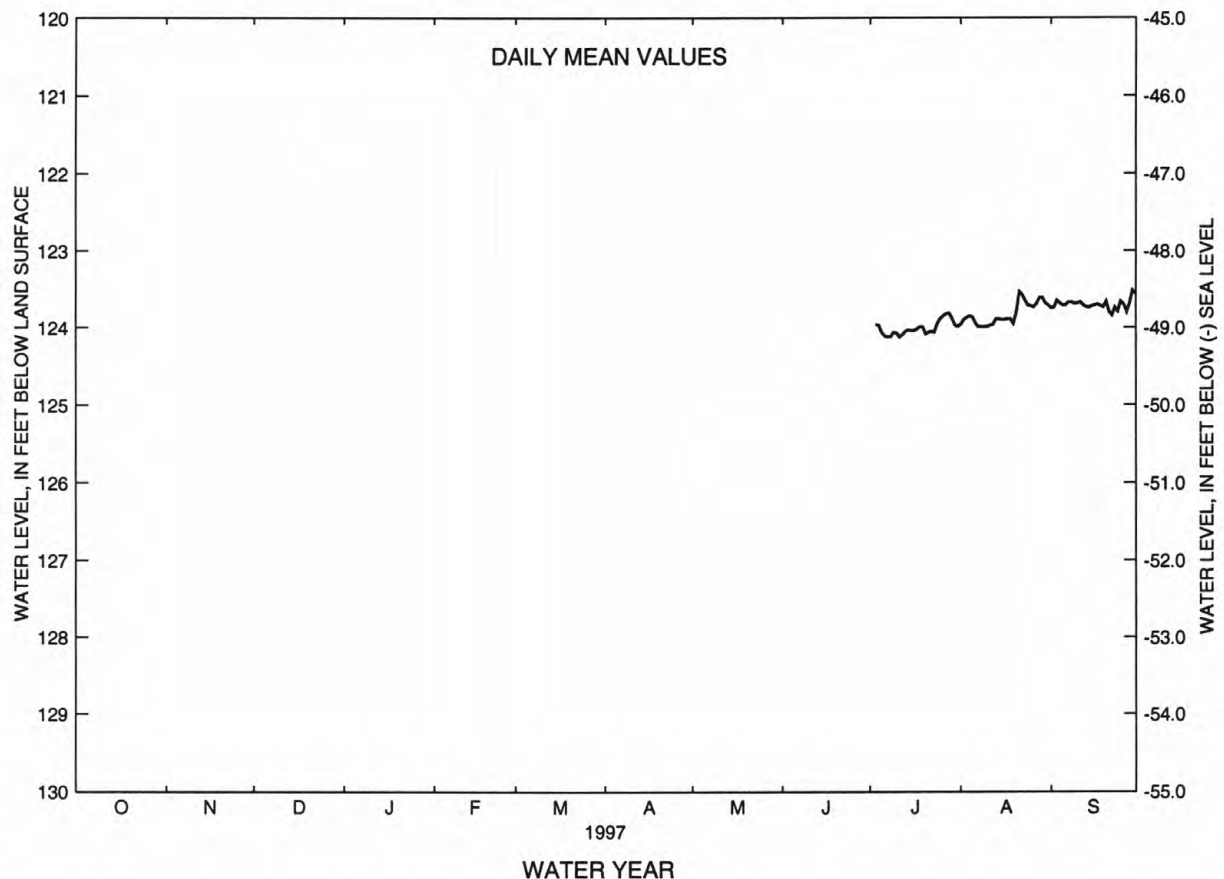
PERIOD OF RECORD.--July 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 123.45 ft below land surface, Sept. 29, 1997; lowest, 124.14 ft below land surface, July 6, 8, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	124.06	123.86	123.71
10	---	---	---	---	---	---	---	---	---	124.07	123.99	123.68
15	---	---	---	---	---	---	---	---	---	124.04	123.90	123.72
20	---	---	---	---	---	---	---	---	---	124.08	123.81	123.66
25	---	---	---	---	---	---	---	---	---	123.88	123.72	123.66
EOY	---	---	---	---	---	---	---	---	---	123.98	123.71	123.56
MEAN	---	---	---	---	---	---	---	---	---	124.01	123.83	123.70
WTR YR 1997	HIGH 123.52 SEP 29 LOW 124.12 JUL 7											

NJ-WRD WELL NO. 33-0841



GROUND-WATER LEVELS

SALEM COUNTY

393055075083502. Local I.D., Parvin SP 2 Obs (OW 96B). NJ-WRD Well Number 33-0842.

LOCATION.--Lat 39°30'55", long 75°08'35", Hydrologic Unit 02040206, Parvin State Park, Almond Rd (Rt. 540), Pittsgrove Township.
Owner: State of New Jersey-DEP/Div of Parks and Forestry.

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

WELL CHARACTERISTICS.-- Drilled artesian observation well, diameter 4 in., depth 695 ft, screened 675 to 695 ft.

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

DATUM.-- Land surface is 75 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 2.70 ft above land surface

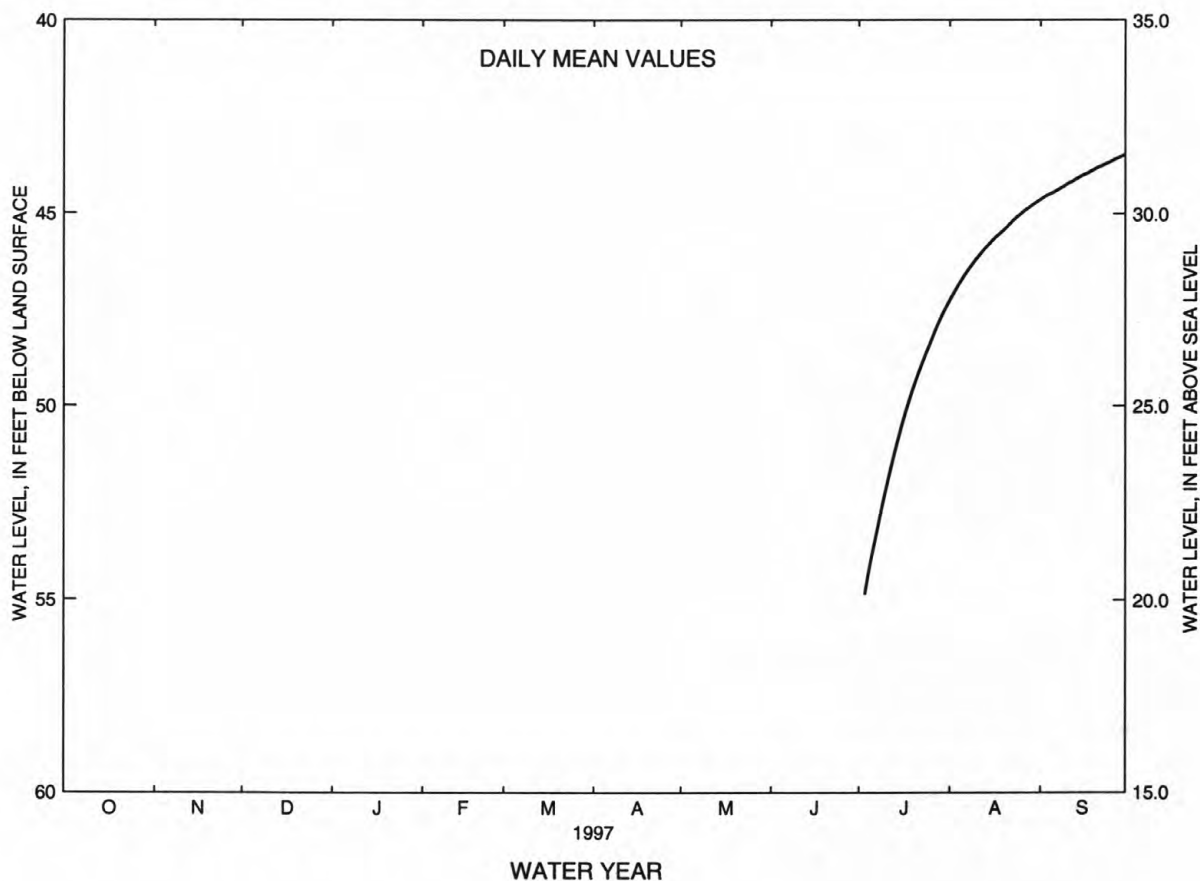
PERIOD OF RECORD.--July 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 43.45 ft below land surface, Sept. 30, 1997; lowest, 55.86 ft below land surface, July 1, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	53.99	46.71	44.46
10	---	---	---	---	---	---	---	---	---	52.19	46.17	44.24
15	---	---	---	---	---	---	---	---	---	50.67	45.73	44.03
20	---	---	---	---	---	---	---	---	---	49.42	45.38	43.84
25	---	---	---	---	---	---	---	---	---	48.41	45.01	43.66
EOM	---	---	---	---	---	---	---	---	---	47.38	44.68	43.47
MEAN	---	---	---	---	---	---	---	---	---	50.65	45.75	44.03
WTR YR 1997	HIGH 43.47 SEP 30 LOW 55.32 JUL 2											

NJ-WRD WELL NO. 33-0842



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.

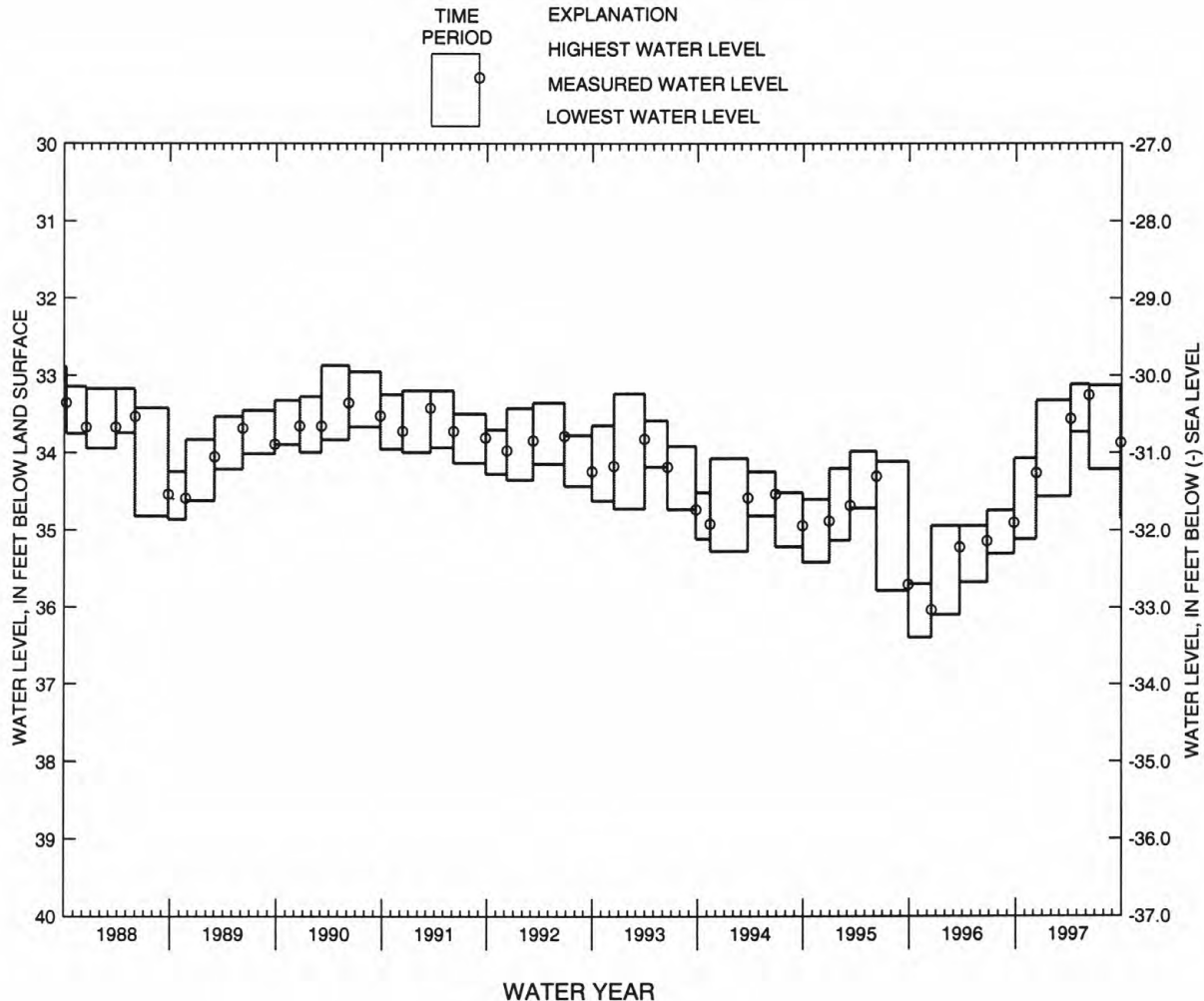
PERIOD OF RECORD.--Nov. 1965 to July 1970, Oct. 1972 to Aug. 1975, Oct. 1976 to current year. Records for 1965 to 1970 and for 1972 to 1980 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 25, 1996 TO DEC. 11, 1996	34.07	35.11	DEC. 11, 1996	34.26
DEC. 11, 1996 TO APR. 8, 1997	33.32	34.56	APR. 8, 1997	33.56
APR. 8, 1997 TO JUNE 11, 1997	33.11	33.73	JUNE 11, 1997	33.25
JUNE 11, 1997 TO SEPT. 29, 1997	33.13	34.21	SEPT. 29, 1997	33.87

NJ-WRD WELL NO. 33-0251



GROUND-WATER LEVELS

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.

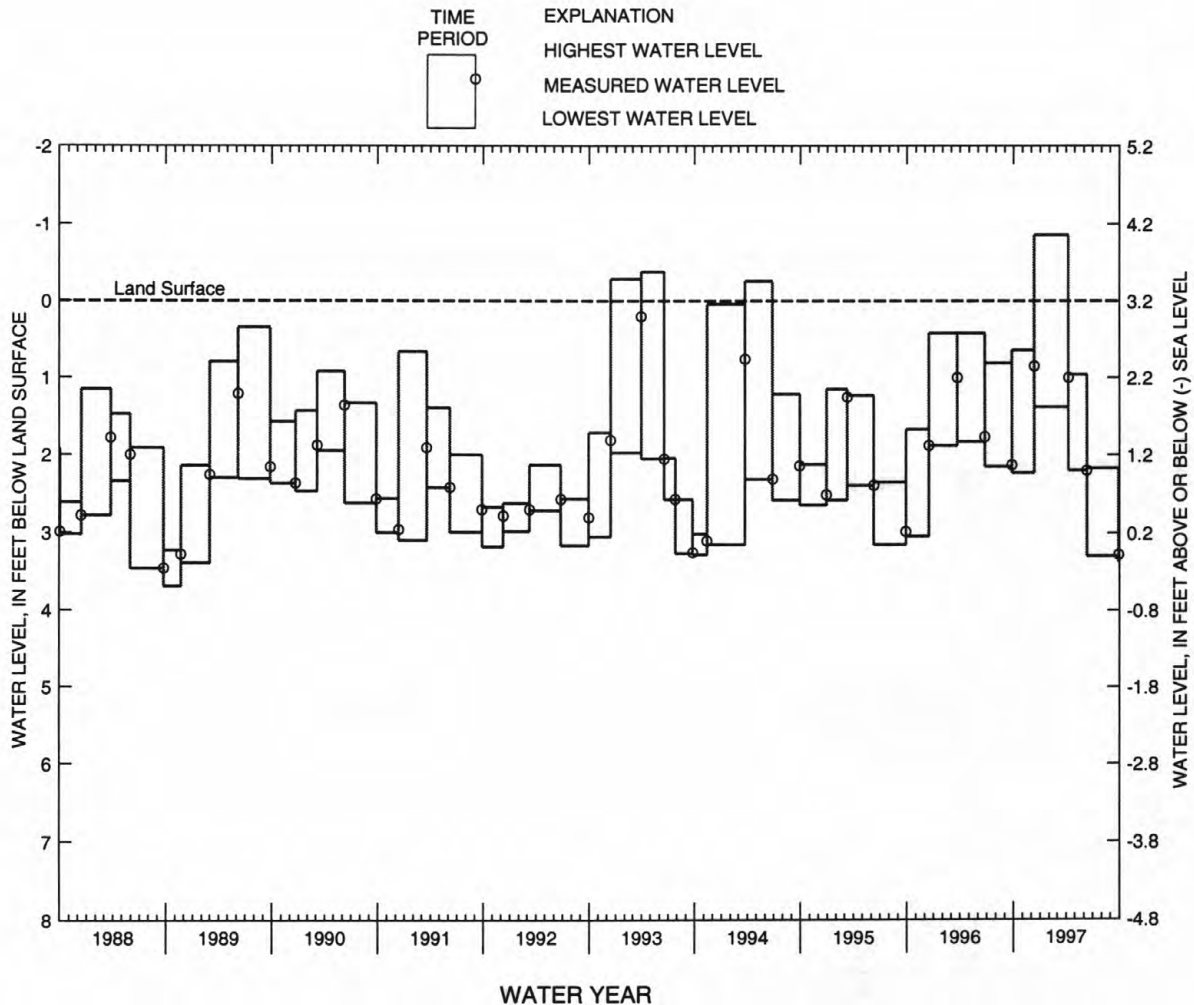
PERIOD OF RECORD.--Nov. 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.86 ft above land surface, between Dec. 11, 1996 and Apr. 8, 1997; lowest, 6.45 ft below land surface, Sept. 9, 1966.

WATER LEVEL, IN FEET ABOVE (-) OR BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 25, 1996 TO DEC. 11, 1996	0.64	2.23	DEC. 11, 1996	0.85
DEC. 11, 1996 TO APR. 8, 1997	-0.86	1.38	APR. 8, 1997	1.00
APR. 8, 1997 TO JUNE 11, 1997	0.96	2.20	JUNE 11, 1997	2.20
JUNE 11, 1997 TO SEPT. 29, 1997	2.17	3.30	SEPT. 29, 1997	3.28

NJ-WRD WELL NO. 33-0252



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.

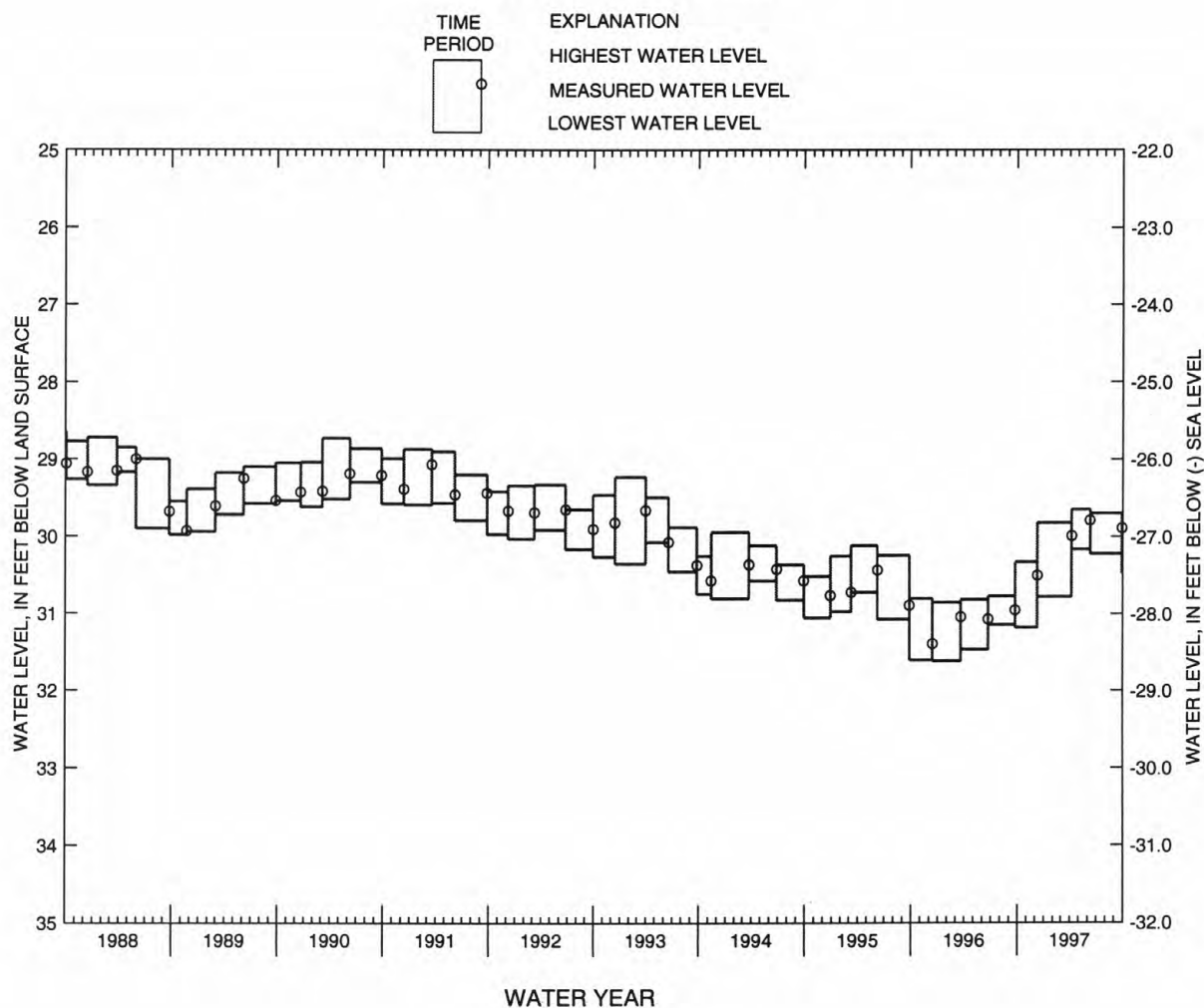
PERIOD OF RECORD.--Nov. 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 25, 1996 TO DEC. 11, 1996	30.33	31.18	DEC. 11, 1996	30.50
DEC. 11, 1996 TO APR. 8, 1997	29.82	30.78	APR. 8, 1997	29.99
APR. 8, 1997 TO JUNE 11, 1997	29.65	30.16	JUNE 11, 1997	29.79
JUNE 11, 1997 TO SEPT. 29, 1997	29.70	30.22	SEPT. 29, 1997	29.89

NJ-WRD WELL NO. 33-0253



GROUND-WATER LEVELS

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.

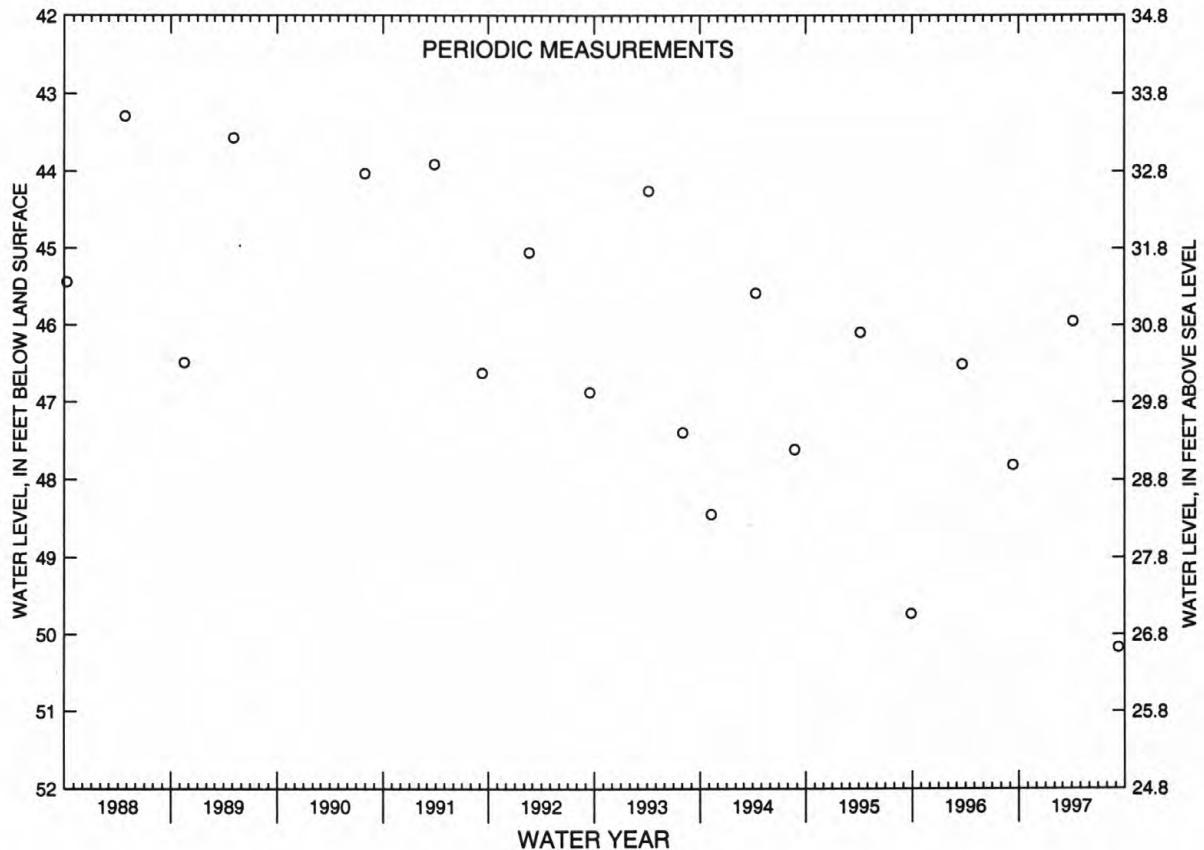
PERIOD OF RECORD.--June 1959 to current year. Records for 1959 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 38.32 ft below land surface, Apr. 25, 1961; lowest, 50.17 ft below land surface, Sept. 10, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 8	45.95	SEP 10	50.17

NJ-WRD WELL NO. 33-0020



GROUND-WATER LEVELS

199

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.

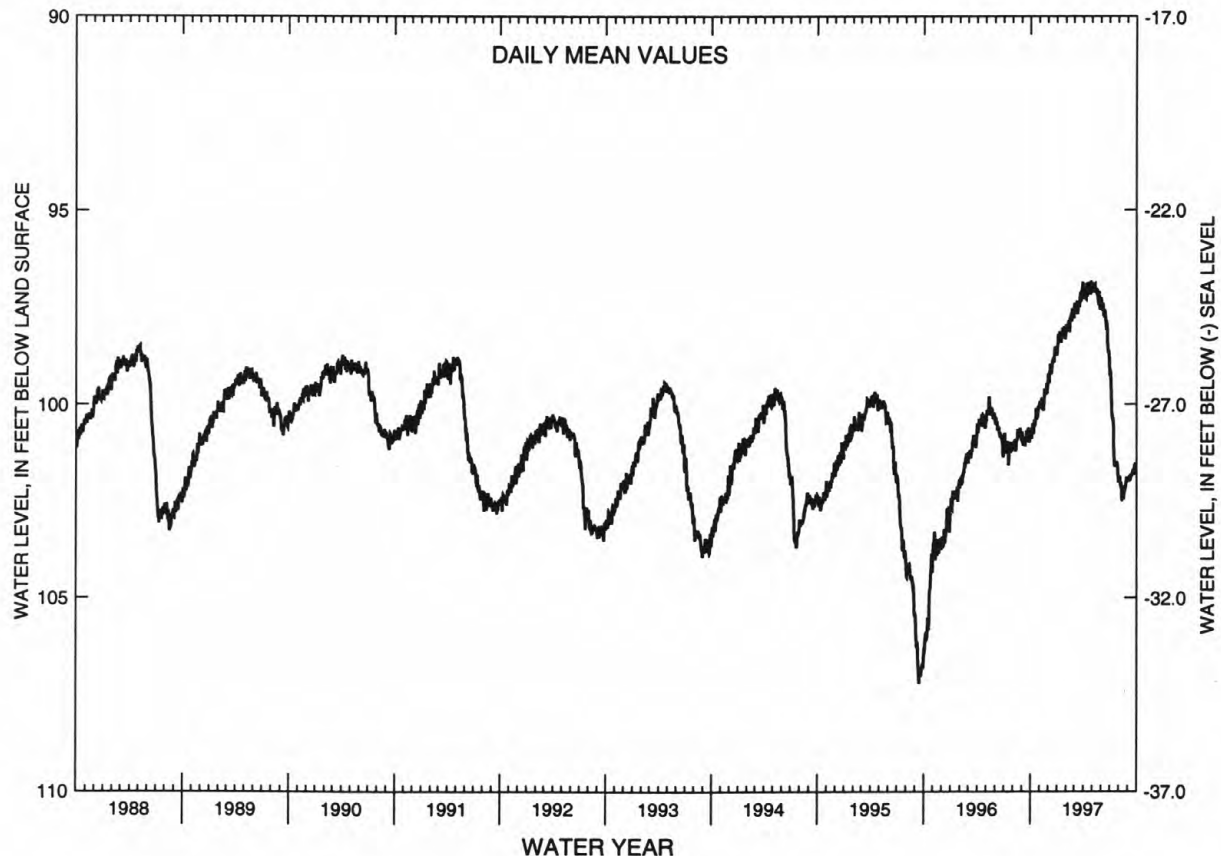
PERIOD OF RECORD.--Feb. 1959 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	100.85	100.05	99.45	98.20	97.98	97.56	97.29	96.99	97.54	99.31	101.90	101.95
10	100.56	99.97	99.14	98.12	97.85	97.34	97.28	96.94	97.58	100.30	102.04	101.90
15	100.53	100.09	98.96	98.41	97.75	97.36	97.23	97.03	97.62	101.13	102.21	101.84
20	100.11	99.70	98.88	98.03	97.86	97.39	96.91	97.14	98.09	101.59	102.31	101.69
25	100.33	99.59	98.59	98.00	97.72	97.29	97.14	97.21	98.56	101.49	102.14	101.66
EOM	100.11	99.45	98.72	98.04	97.79	96.86	97.03	97.39	98.80	101.94	102.00	101.73
MEAN	100.44	99.84	98.95	98.26	97.85	97.36	97.08	97.14	97.88	100.80	102.12	101.83
WTR YR 1997	MEAN 99.14 HIGH 96.83 APR 28 LOW 102.51 AUG 12											

NJ-WRD WELL NO. 33-0187



GROUND-WATER LEVELS

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.

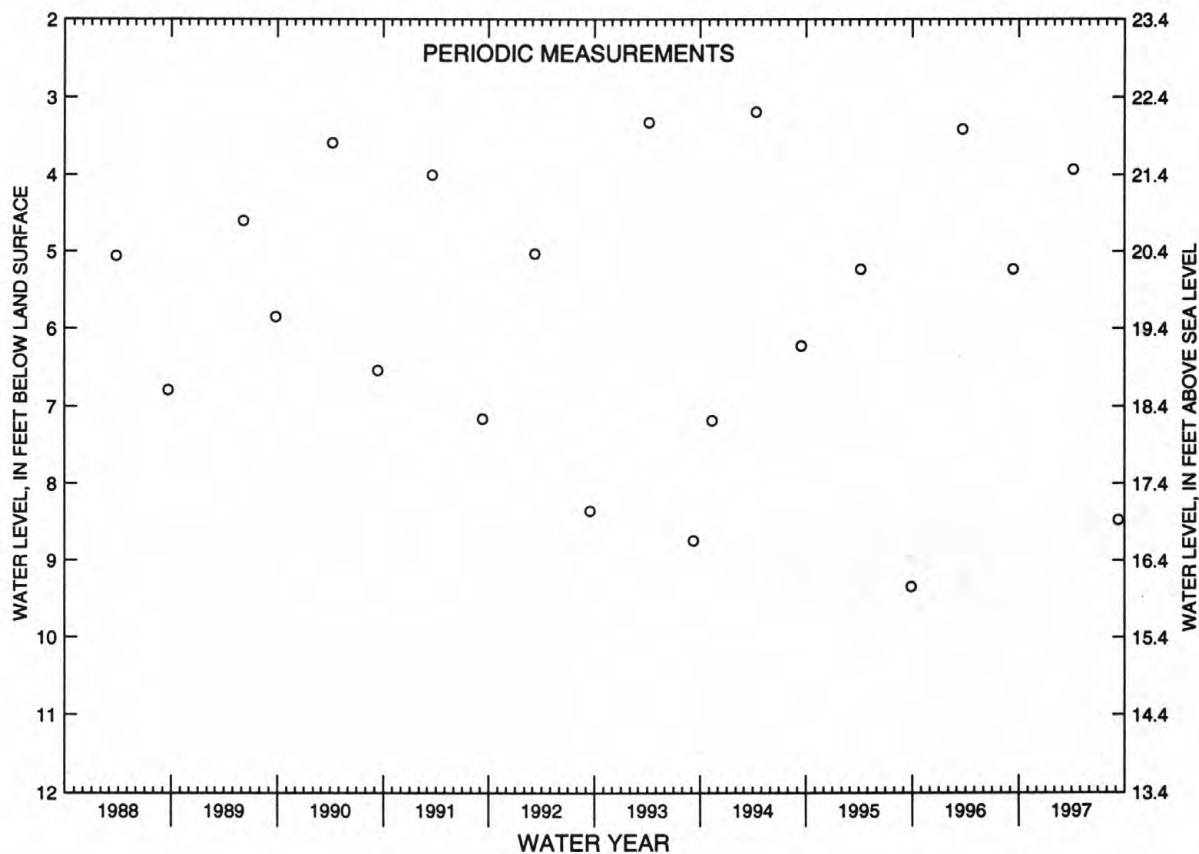
PERIOD OF RECORD.--June 1959 to Mar. 1975, Feb. 1977 to current year. Records for 1959 to 1975 and 1977 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 8	3.93	SEP 10	8.47

NJ-WRD WELL NO. 33-0348



GROUND-WATER LEVELS

201

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.

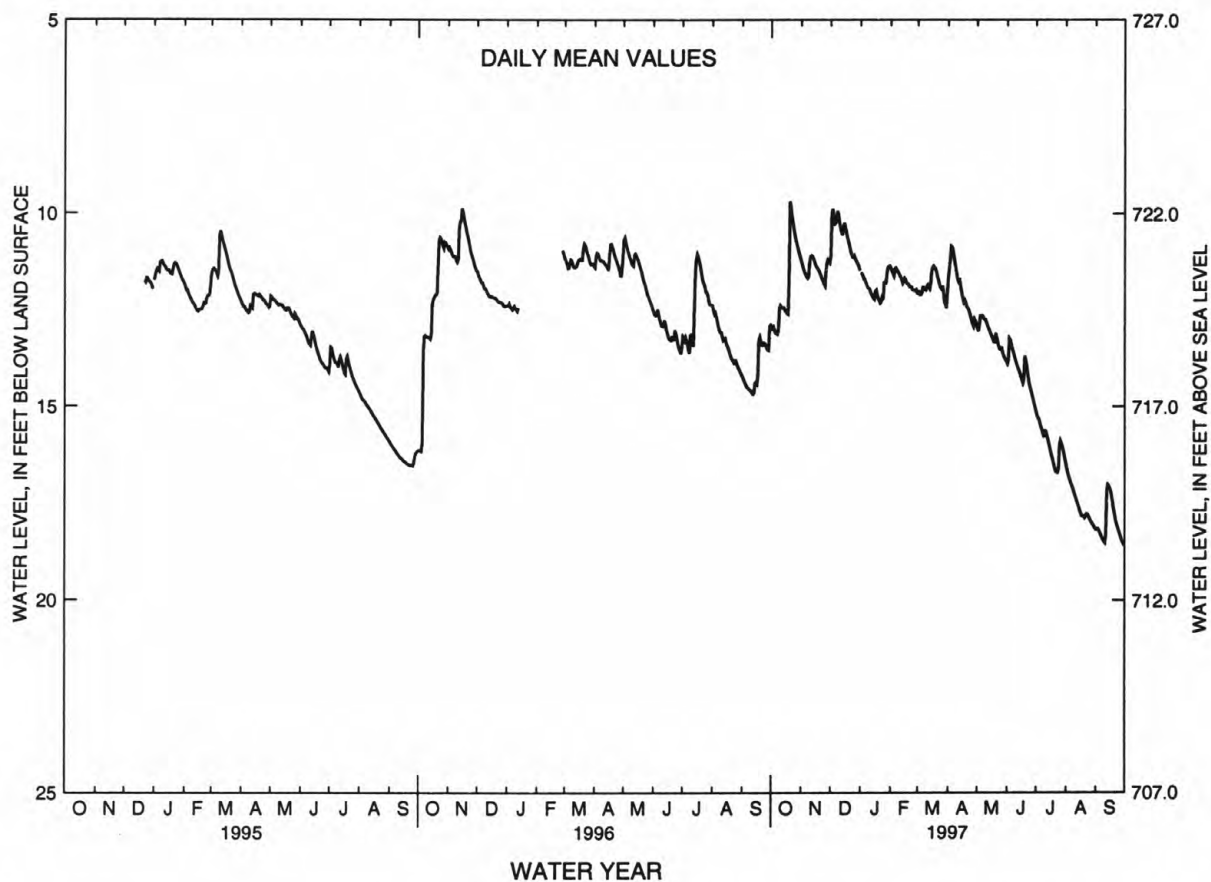
PERIOD OF RECORD.--Dec. 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.64 ft below land surface, Oct. 20, 1996; lowest, 18.62 ft below land surface, Sept. 30, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.08	11.56	10.26	11.69	11.41	12.03	10.85	12.65	13.37	15.46	16.93	18.26
10	12.37	11.10	10.22	11.94	11.58	11.86	11.59	12.78	13.84	15.63	17.30	18.51
15	12.51	11.30	10.23	12.20	11.66	11.44	12.06	13.11	14.23	16.08	17.68	17.11
20	9.69	11.55	10.81	12.24	11.87	11.51	12.39	13.09	13.80	16.60	17.87	17.77
25	10.54	11.85	11.08	11.77	11.97	11.94	12.76	13.51	14.54	16.03	17.88	18.24
EOM	11.15	11.24	11.45	11.34	12.04	12.03	12.88	13.81	15.05	16.42	18.15	18.58
MEAN	11.83	11.41	10.64	11.88	11.71	11.86	11.99	13.15	14.07	15.99	17.53	17.99
WTR YR 1997	MEAN 13.35 HIGH 9.69 OCT 20 LOW 18.58 SEP 30											

NJ-WRD WELL NO. 37-0359



GROUND-WATER LEVELS

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.

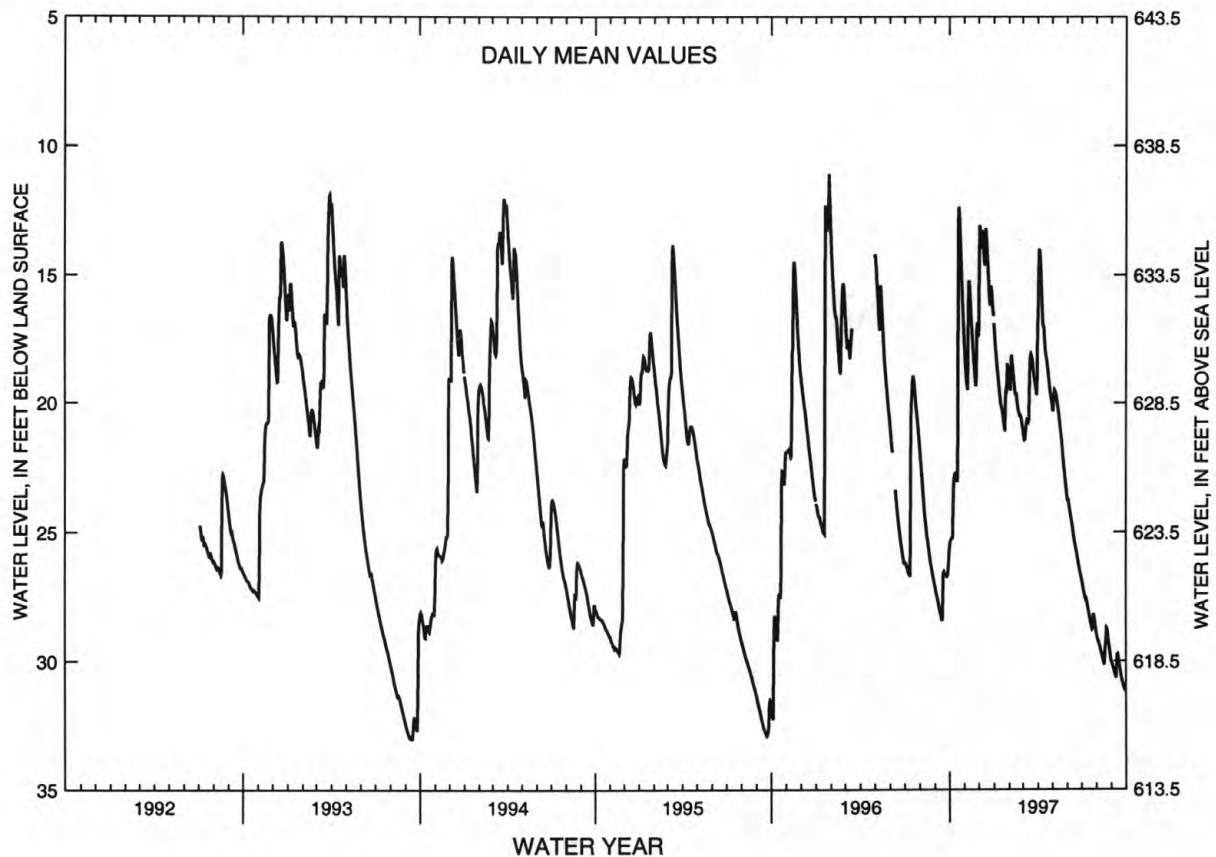
PERIOD OF RECORD.--Apr. 1991 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.28	18.94	13.76	17.99	18.75	21.43	14.07	19.64	23.89	27.22	29.23	30.29
10	23.31	15.28	13.77	19.05	18.93	20.67	16.19	19.79	24.50	27.53	29.59	30.62
15	22.80	16.58	13.21	20.02	19.71	19.60	17.44	20.49	25.12	28.00	29.99	29.81
20	12.83	18.13	14.89	20.52	20.29	18.22	18.35	21.30	25.67	28.51	29.35	30.43
25	14.31	19.33	15.62	19.84	20.51	19.06	19.23	22.30	26.22	28.34	29.05	30.85
EOM	17.23	17.36	16.60	18.81	20.85	19.13	19.94	23.40	26.72	28.81	29.95	31.19
MEAN	20.35	17.70	14.71	19.29	19.65	19.83	17.35	21.01	25.14	27.95	29.44	30.43
WTR YR 1997	MEAN 21.91 HIGH 12.39 OCT 21 LOW 31.19 SEP 30											

NJ-WRD WELL NO. 37-0203



GROUND-WATER LEVELS

203

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.

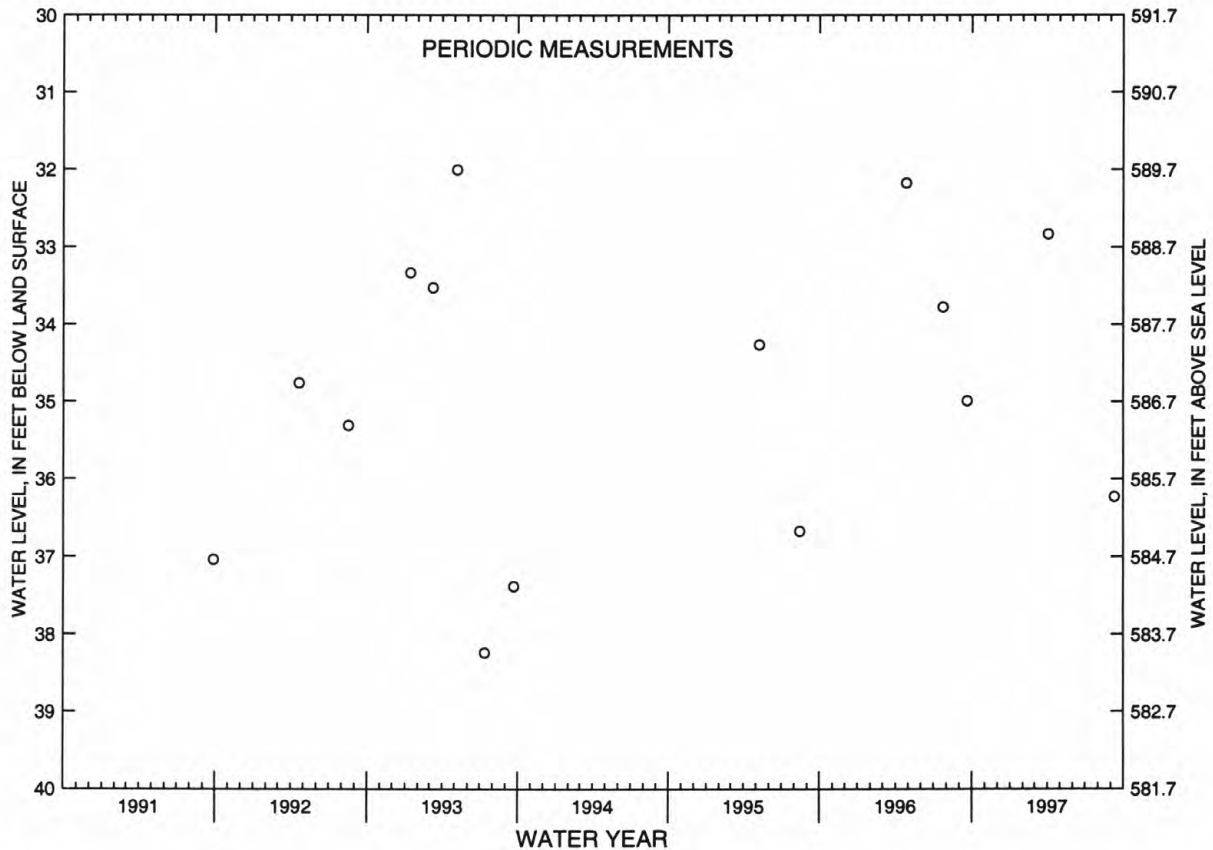
PERIOD OF RECORD.--Aug. 1991 to Sept. 1993, May 1995 to current year.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 3	32.83	SEP 10	36.23

NJ-WRD WELL NO. 37-0204



GROUND-WATER LEVELS

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.

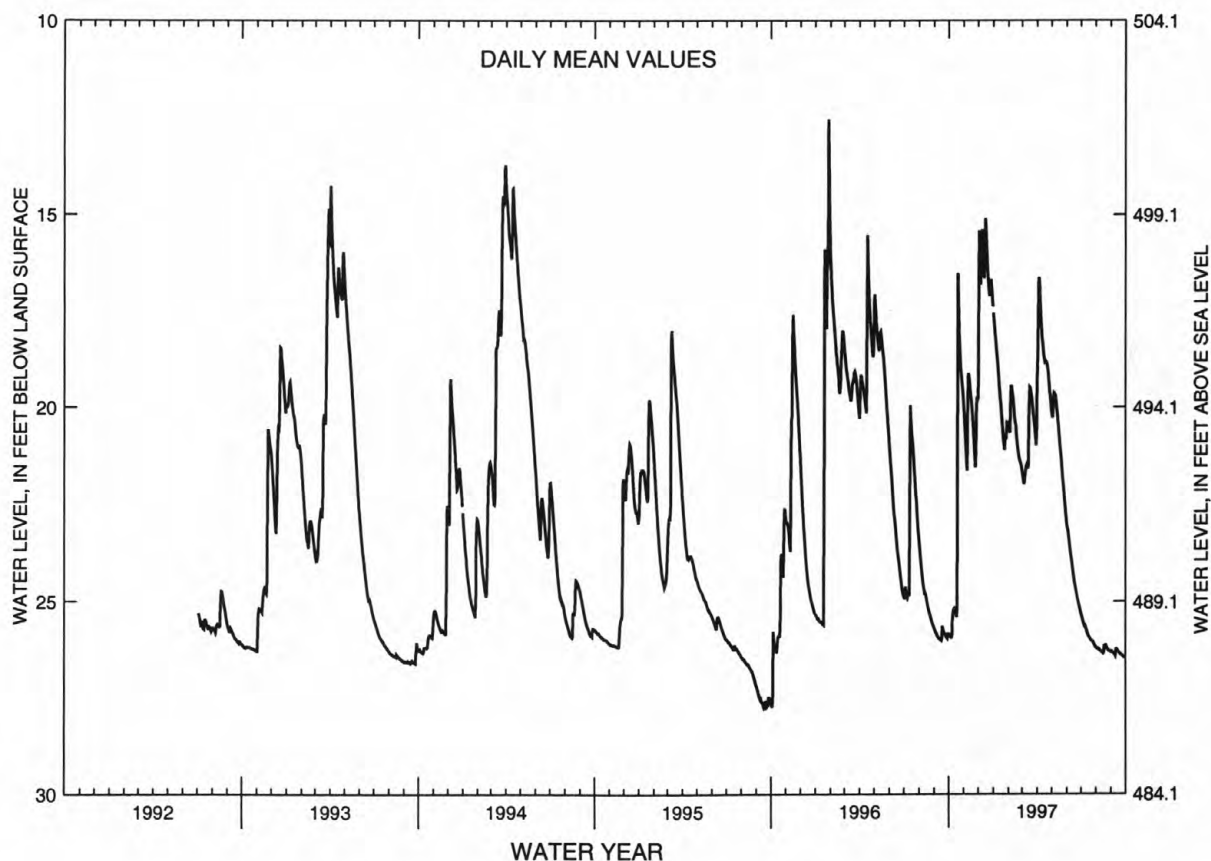
PERIOD OF RECORD.--Apr. 1991 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.91	20.96	16.72	18.16	20.05	21.97	16.62	19.78	23.31	25.50	26.21	26.33
10	25.31	19.21	15.77	18.88	19.76	21.48	17.96	19.82	23.83	25.64	26.28	26.41
15	25.27	19.66	15.10	19.78	20.41	20.38	18.68	20.50	24.31	25.85	26.34	26.28
20	16.51	20.44	16.45	20.58	21.05	19.68	18.83	21.21	24.68	25.97	26.25	26.36
25	18.77	21.54	16.87	20.73	21.40	20.31	19.28	21.99	24.99	26.03	26.24	26.41
EOM	19.77	19.82	17.36	20.42	21.57	20.56	20.01	22.85	25.27	26.18	26.31	26.47
MEAN	22.80	20.31	16.44	19.63	20.57	20.84	18.54	20.91	24.24	25.82	26.25	26.35
WTR YR 1997	MEAN 21.90 HIGH 15.10 DEC 15 LOW 26.47 SEP 30											

NJ-WRD WELL NO. 37-0205



GROUND-WATER LEVELS

205

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.

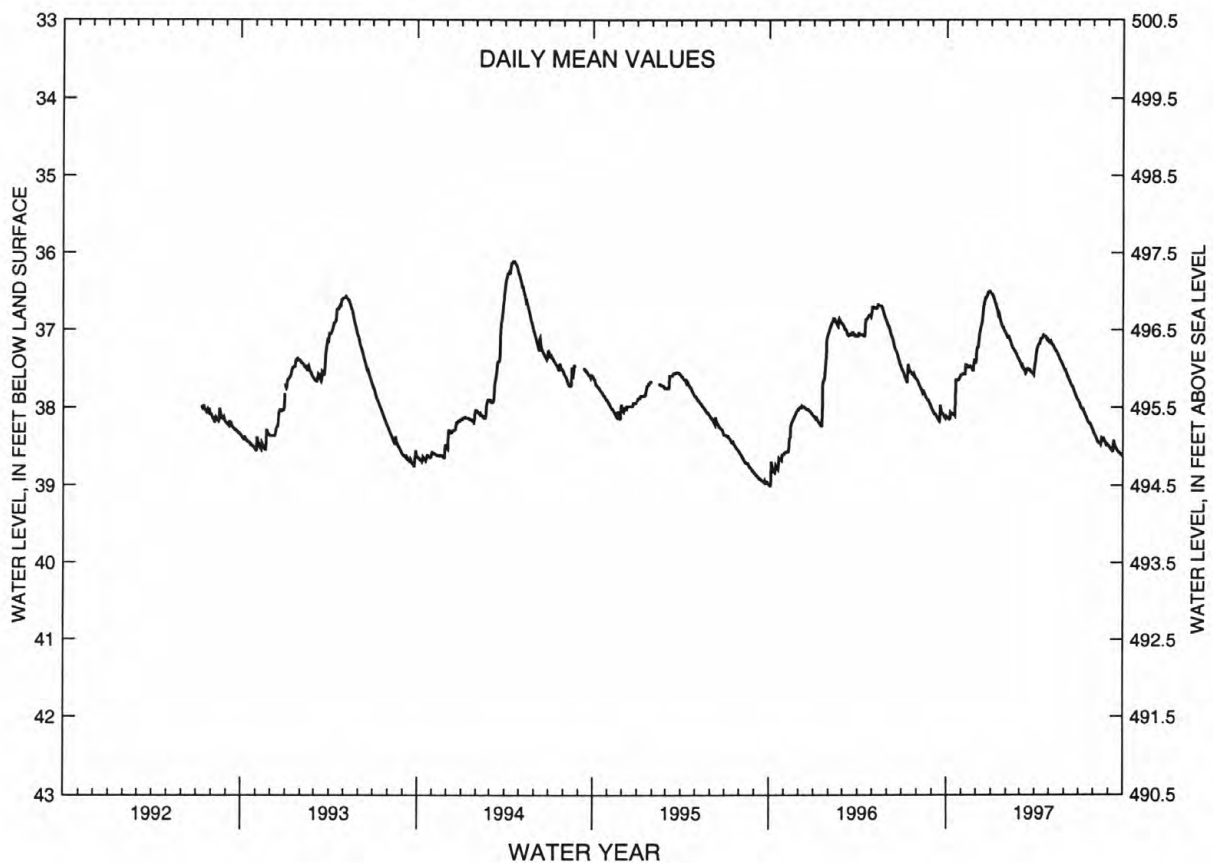
PERIOD OF RECORD.--Apr. 1991 to current year.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	38.14	37.57	37.22	36.56	37.08	37.47	37.27	37.17	37.54	37.98	38.36	38.52
10	38.07	37.45	36.98	36.66	37.16	37.51	37.18	37.21	37.62	38.00	38.44	38.57
15	38.09	37.48	36.74	36.79	37.24	37.51	37.11	37.27	37.70	38.09	38.46	38.49
20	37.63	37.48	36.58	36.88	37.29	37.51	37.08	37.33	37.75	38.17	38.43	38.55
25	37.64	37.52	36.51	36.96	37.36	37.55	37.10	37.40	37.84	38.20	38.44	38.58
EOM	37.58	37.42	36.51	37.05	37.40	37.51	37.15	37.48	37.91	38.29	38.49	38.61
MEAN	37.91	37.49	36.80	36.79	37.22	37.51	37.17	37.29	37.70	38.10	38.42	38.54
WTR YR 1997	MEAN 37.58 HIGH 36.50 DEC 27 LOW 38.61 SEP 29											

NJ-WRD WELL NO. 37-0206



GROUND-WATER LEVELS

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.

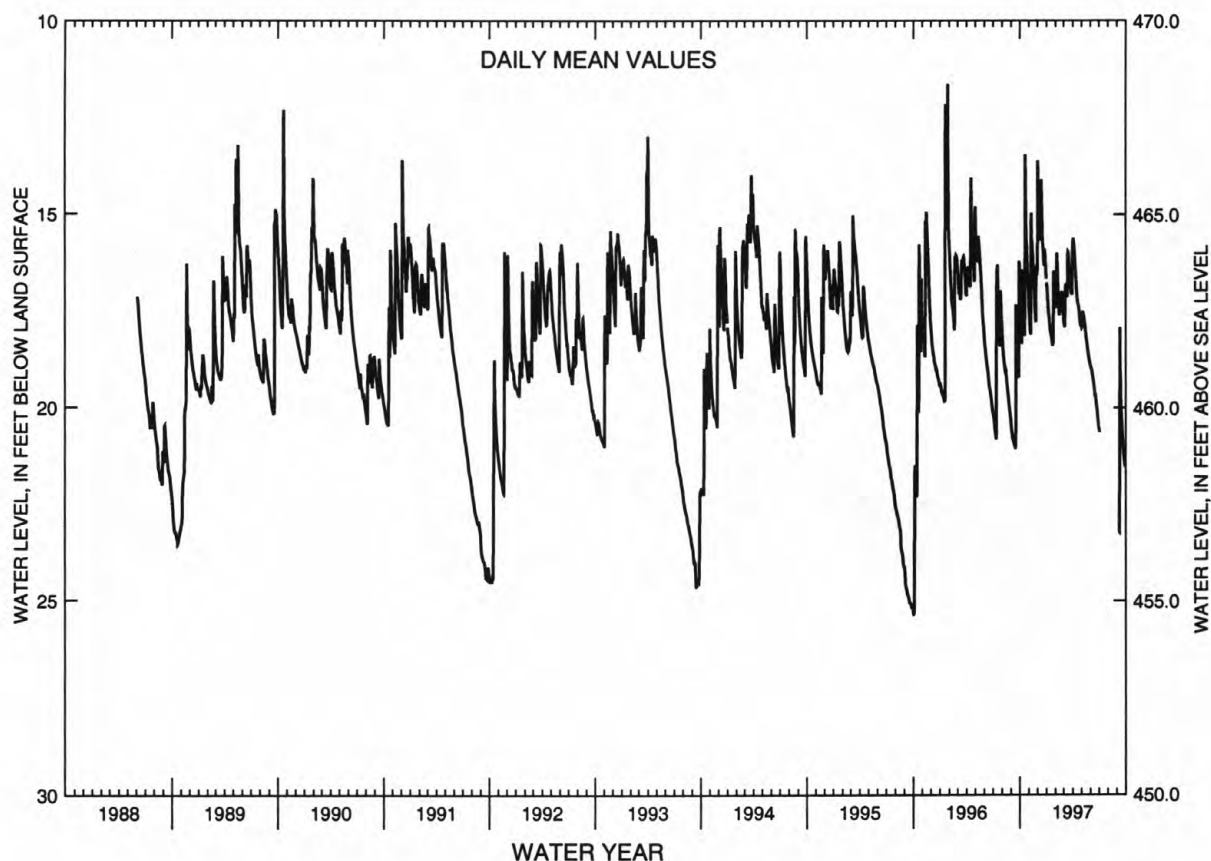
PERIOD OF RECORD.--June 1988 to current year. Records for 1988 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.09	17.92	15.50	17.16	16.07	17.91	15.76	17.55	19.00	---	---	---
10	16.62	15.34	15.49	17.65	16.98	16.89	16.33	17.65	19.23	---	---	23.22
15	17.66	16.10	---	18.07	17.34	16.05	16.98	18.00	19.52	---	---	19.67
20	13.44	16.87	15.85	18.28	17.12	16.32	17.32	18.32	19.75	---	---	20.57
25	15.82	17.77	15.89	16.53	17.29	16.91	17.65	18.61	20.08	---	---	21.16
EOM	17.01	16.56	16.65	17.30	17.64	16.35	17.86	18.87	20.48	---	---	21.52
MEAN	16.81	16.80	15.58	17.54	17.12	16.88	16.84	18.14	19.58	---	---	20.75
WTR YR 1997	MEAN 17.56 HIGH 13.44 OCT 20 LOW 23.22 SEP 10											

NJ-WRD WELL NO. 37-0202



GROUND-WATER LEVELS

207

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.

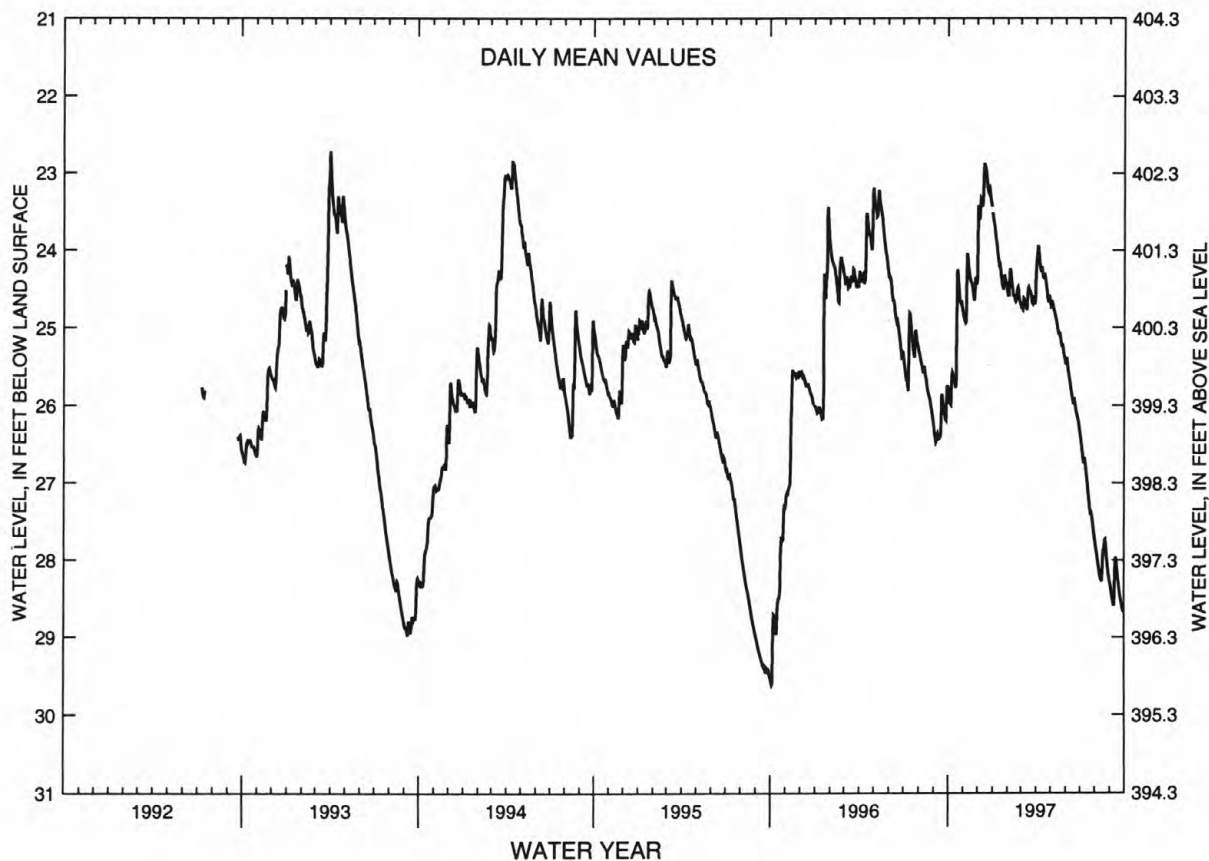
PERIOD OF RECORD.--Apr. 1991 to current year.

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 1996 TO SEPTEMBER 1997
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.93	24.90	23.59	23.66	24.42	24.76	23.95	24.67	25.43	26.51	27.88	28.41
10	25.60	24.04	23.39	23.91	24.41	24.68	24.22	24.81	25.67	26.70	28.10	28.59
15	25.69	24.33	22.87	24.19	24.59	24.57	24.31	24.97	25.88	26.88	28.26	28.00
20	24.79	24.44	23.04	24.37	24.61	24.53	24.34	25.07	25.93	27.20	27.87	28.30
25	24.57	24.65	23.15	24.41	24.59	24.69	24.59	25.24	26.10	27.39	27.86	28.52
EOM	24.74	24.44	23.43	24.47	24.70	24.60	24.64	25.40	26.28	27.66	28.22	28.67
MEAN	25.30	24.52	23.31	24.12	24.53	24.64	24.32	24.99	25.83	26.98	27.99	28.37
WTR YR 1997	MEAN 25.41 HIGH 22.87 DEC 15 LOW 28.67 SEP 30											

NJ-WRD WELL NO. 37-0207



GROUND-WATER LEVELS

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.

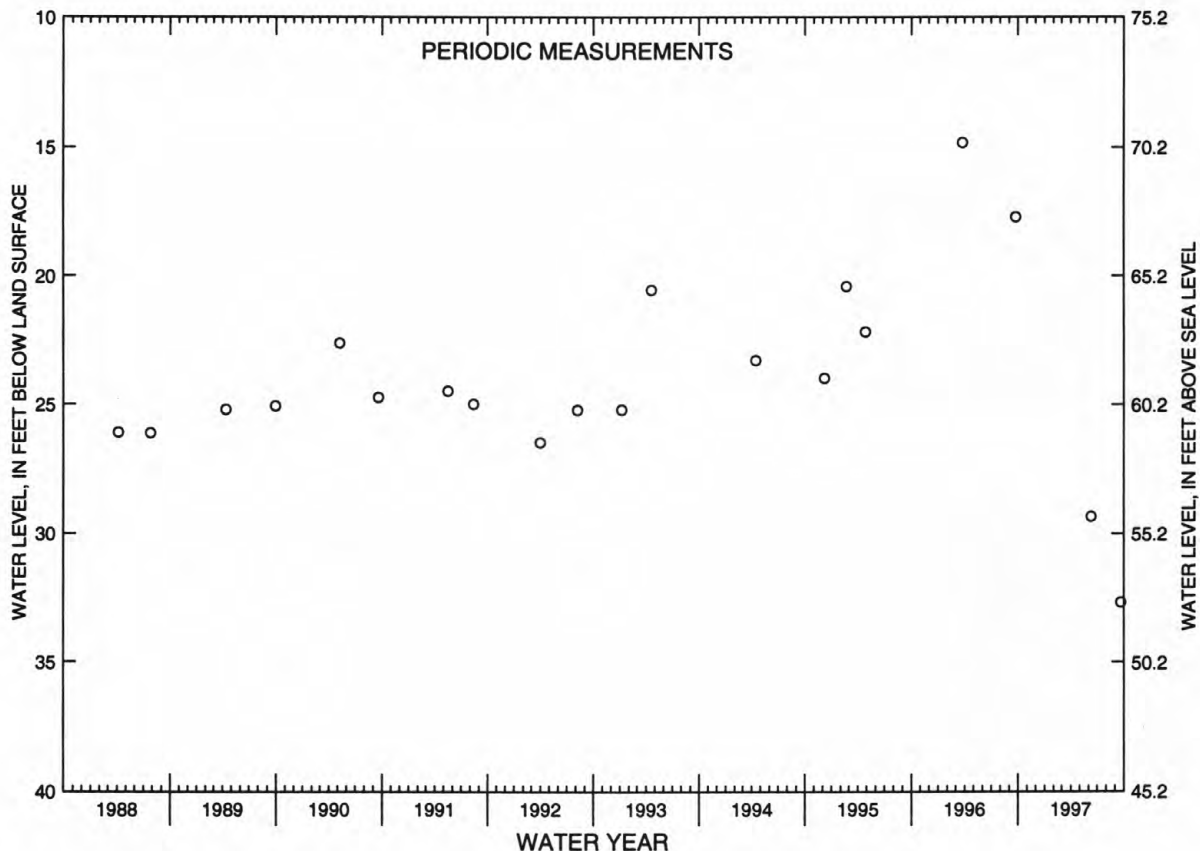
PERIOD OF RECORD.--Sept. 1952 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.51 ft below land surface, Apr. 17, 1961; lowest, 32.68 ft below land surface, Sept. 22, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 11	29.34	SEP 22	32.68

NJ-WRD WELL NO. 39-0102



GROUND-WATER LEVELS

209

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 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.

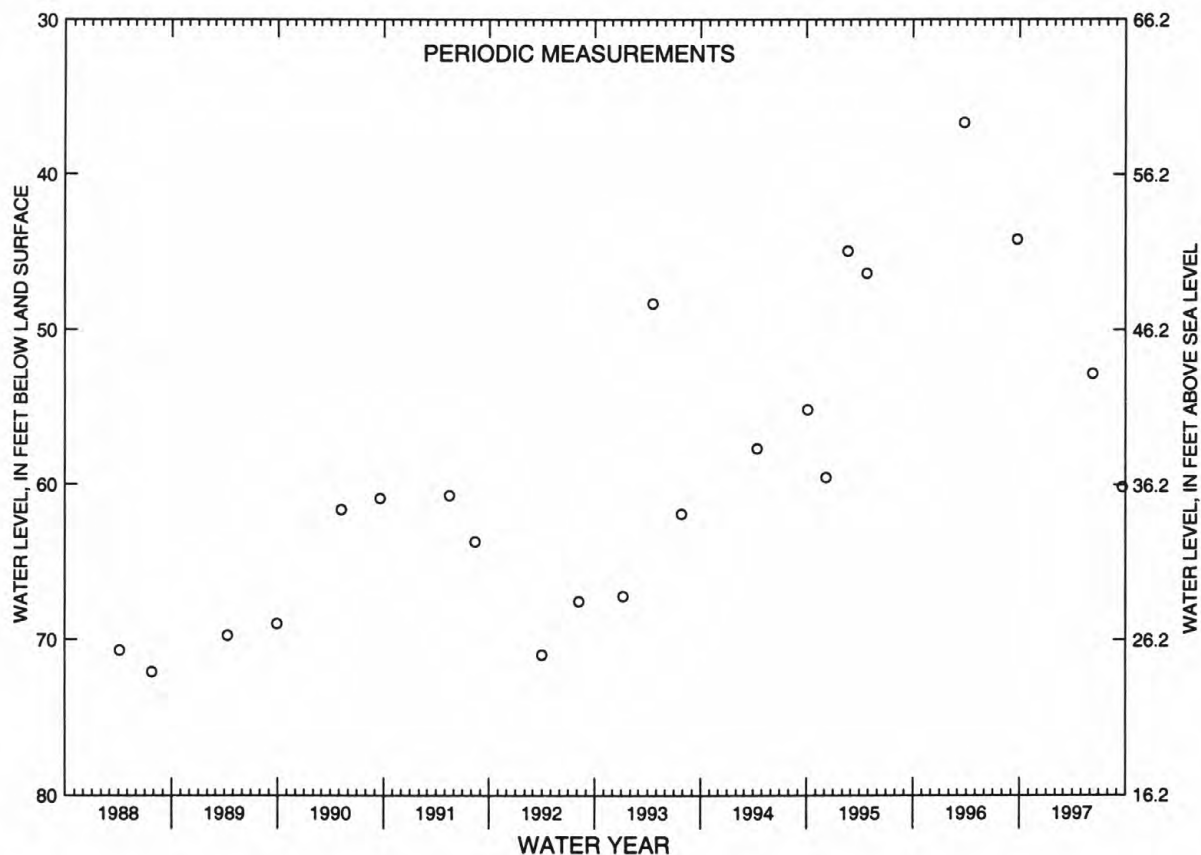
PERIOD OF RECORD.--Apr. 1952 to current year. Records for 1952 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 11	52.80	SEP 22	60.14

NJ-WRD WELL NO. 39-0115



GROUND-WATER LEVELS

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 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.

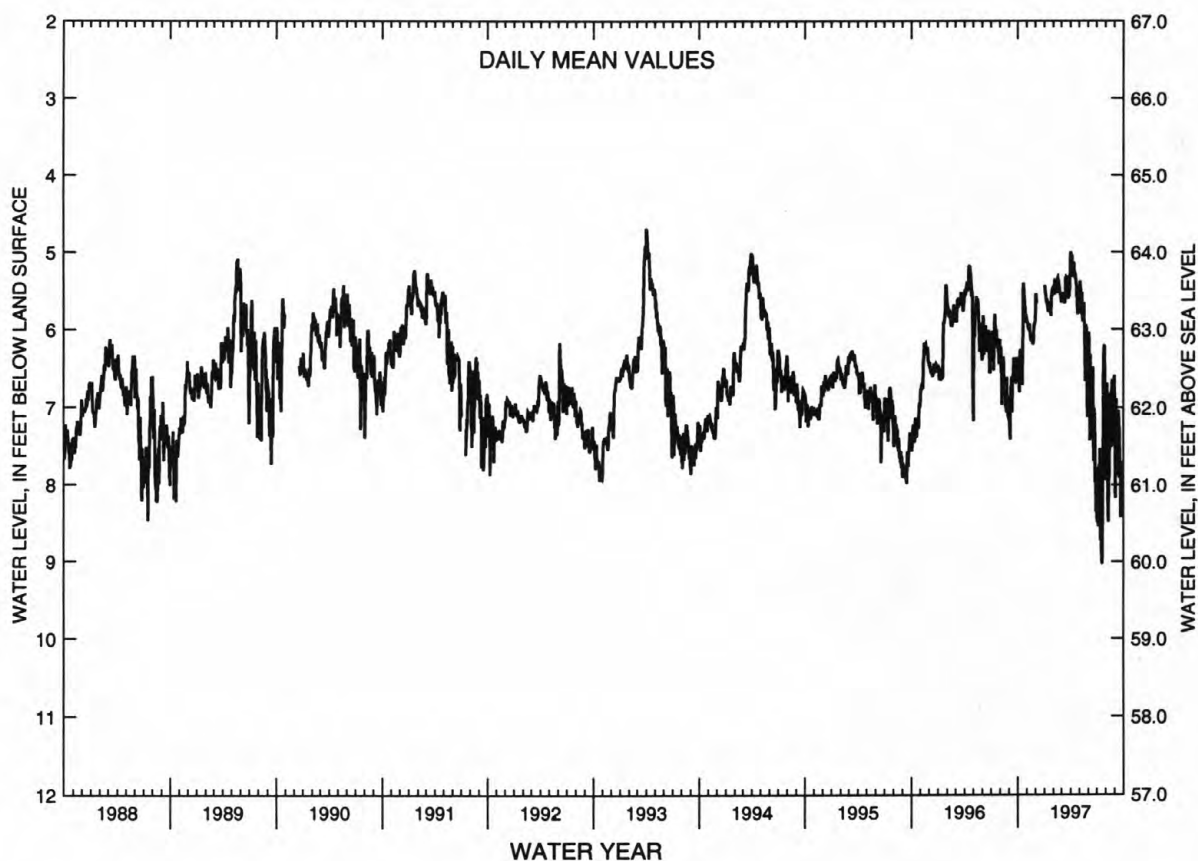
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.06 ft below land surface, June 2, 1952; lowest, 16.05 ft below land surface, June 29, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.68	5.94	5.65	5.52	5.39	5.58	5.09	5.43	6.04	7.82	7.28	7.66
10	6.26	5.94	---	5.60	5.36	5.57	5.28	5.55	6.32	8.39	8.35	7.77
15	6.47	6.13	---	5.77	5.34	5.34	5.28	5.69	7.12	8.72	7.53	7.13
20	5.51	6.11	---	5.68	5.44	5.36	5.37	6.08	7.06	9.03	7.47	7.75
25	5.64	6.13	---	5.57	5.55	5.60	5.68	6.07	7.20	6.57	6.64	7.70
EOM	5.82	5.92	---	5.47	5.63	5.30	5.66	6.26	8.07	6.95	6.65	8.41
MEAN	6.14	6.02	---	5.62	5.45	5.51	5.32	5.92	7.07	7.83	7.29	7.57

WTR YR 1997 MEAN 6.34 HIGH 5.01 APR 2 LOW 9.03 JUL 20

NJ-WRD WELL NO. 39-0119



GROUND-WATER LEVELS

211

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 1996 TO SEPTEMBER 1997
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 11	13.87	AUG 28	14.46

NJ-WRD WELL NO. 39-0058

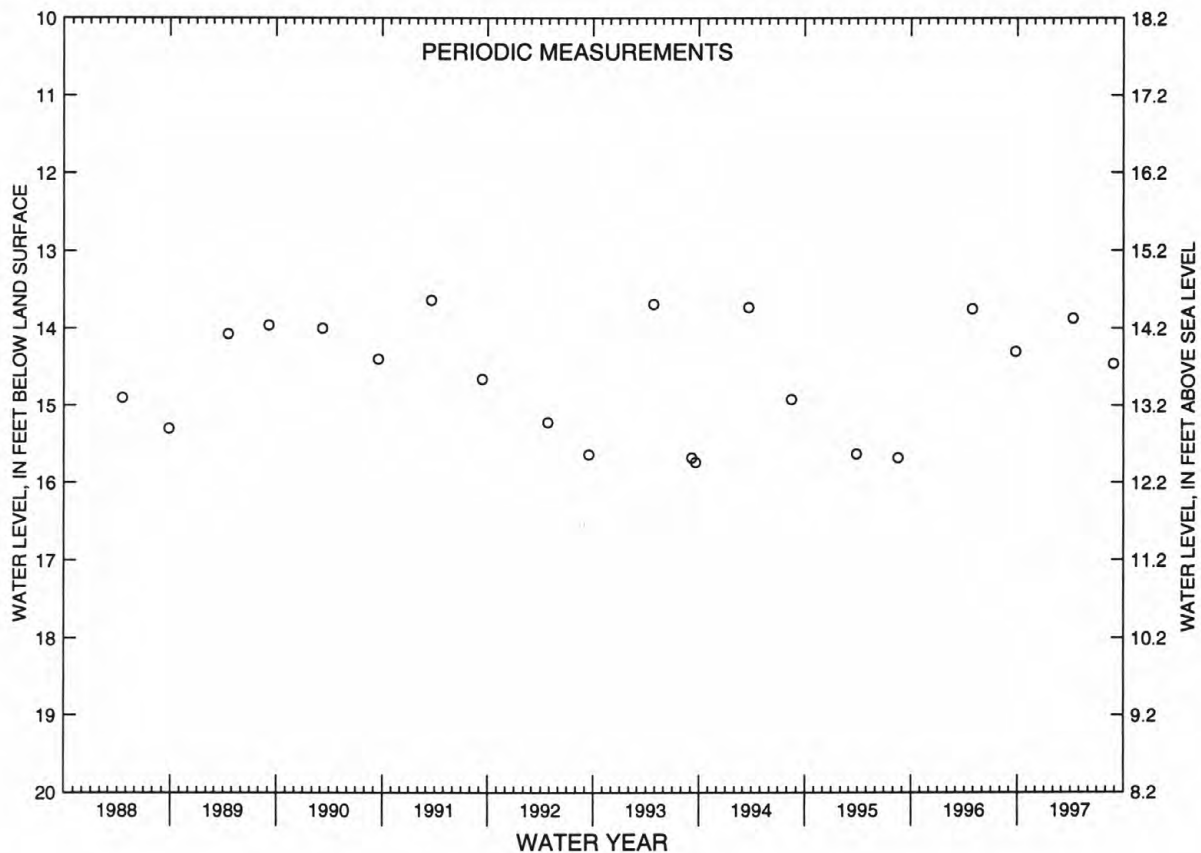


Table 2. Discontinued observation wells for which ground-water-level data are available

[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
15-296	HUNTSMAN POLYPROPYLENE CORP	SHELL 5 OBS/SEALED	394942	751317	1962-96	211MRPAL

Footnotes at end of table.

Table 2. 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
15-297	HUNTSMAN POLYPROPYLENE CORP	SHELL 6 OBS/SEALED	394942	751317	1962-96	211MRPAU
15-379	MANTUA TWP MUA	EWC 6/MANTUA OBS/SEALED	394601	751005	1988	211MRPAU
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

Footnotes at end of table.

Table 2. 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
27-323	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
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
27-1197	STATE OF NJ - GEOLOGICAL SURVEY	MADISON 8 OBS	404513	743454	1991-96	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

WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

ATLANTIC COUNTY

NJ- WRD well number	Site owner	Local identifier	Latitude	Longitude	Altitude of land surface (ft.)	Screen interval (ft.)	Aquifer unit
01-039	BRIGANTINE W D	NEW 4	392329	0742348	10	733 - 788	122KRKDL
01-600	VENTNOR CITY W D	VCWD 8	392045	0742840	8	750 - 810	122KRKDL
01-958	HAMILTON TOWNSHIP MUA	WELL 8/ROUTE 575	392708	0743808	75	120 - 180	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)
01-039	NEW 4	08-13-97	19.0	147	7.3	21	3.5
01-600	VCWD 8	08-13-97	19.0	145	7.4	21	3.8
01-958	WELL 8/ROUTE 575	09-22-97	13.0	64	5.0	7.2	14

CAPE MAY COUNTY

NJ- WRD well number	Site owner	Local identifier	Latitude	Longitude	Altitude of land surface (ft.)	Screen interval (ft.)	Aquifer unit
09-124	NJ/AMERICAN WATER CO	SHORE DIV 13	391712	0743340	8	774 - 840	122KRKDL
09-136	CORSONS INLET W D	CIWC 1	391152	0743927	7	802 - 834	122KRKDL

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)
09-124	SHORE DIV 13	08-15-97	19.0	205	7.8	29	9.5
09-136	CIWC 1	08-14-97	19.5	212	8.1	31	10

GLOUCESTER COUNTY

NJ- WRD well number	Site owner	Local identifier	Latitude	Longitude	Altitude of land surface (ft.)	Screen interval (ft.)	Aquifer unit
15-207	NATIONAL PK W D	NPWD 2/NPWD 5	395156	0751053	30	241 - 282	211MRPAL
15-276	W DEPTFORD T W D	WDTWD 4	394821	0751026	60	242 - 289	211MRPAU
15-998	US GEOLOGICAL SURVEY	CLAYTON 1	394031	0750605	141	820 - 837	211MRPAM

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)
15-207	NPWD 2/NPWD 5	09-08-97	14.0	393	6.6	42	27
15-276	WDTWD 4	09-08-97	14.5	--	8.0	68	30
15-998	CLAYTON 1	10-22-96	19.0	1220	8.3	250	200

Aquifer unit:

121CKKD - Kirkwood-Cohansey aquifer system
 122KRKDL - Atlantic City 800-foot sand of the Kirkwood Formation
 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 1996 TO SEPTEMBER 1997

MIDDLESEX COUNTY

NJ- WRD well number	Site owner	Local identifier	Latitude	Longitude	Altitude of land surface (ft.)	Screen interval (ft.)	Aquifer unit
23-195	PERTH AMBOY WATER DEPARTMENT	PERTH AMBOY 5	402537	0742001	15	50 - 80	211ODBG

NJ- WRD well number	Local identifier	Date	Tempera- ture water (deg C) (00010)	Specific conduct- ance (μ S/cm) (00095)	pH water whole field (standard units) (00400)	Sodium, dissolved (mg/L as Na) (00930)	Chloride, dissolved (mg/L as Cl) (00940)
23-195	PERTH AMBOY 5	08-26-97	12.0	283	5.1	25	44

MONMOUTH COUNTY

NJ- WRD aquifer number	Site owner	Local identifier	Latitude	Longitude	Altitude of land surface (ft.)	Screen interval (ft.)	Aquifer unit
25-112	WEST KEANSBURG W C	W KEANSBURG 2	402537	0740933	43.50	312 - 352	211ODBG
25-360	RED BANK W D	4-75/RB 5	402054	0740320	146	668 - 759	211ODBG
25-440	WALL TWP W D	WEST BELMAR	401023	0740216	25	440 - 575	211MLRW
25-698	WALL TOWNSHIP	ROSEHILL 2A	401114	0740438	110	421 - 451	211MLRW
*25-771	NATIONAL PARK SERVICE	SANDY HOOK 2 OBS	402350	0735839	7	258 - 278	211EGLS

NJ- WRD well number	Local identifier	Date	Tempera- ture water (deg C) (00010)	Specific conduct- ance (μ S/cm) (00095)	pH water whole field (standard units) (00400)	Sodium, dissolved (mg/L as Na) (00930)	Chloride, dissolved (mg/L as Cl) (00940)
25-112	W KEANSBURG 2	08-28-97	13.5	71	5.8	1.3	1.4
25-360	4-75/RB 5	09-23-97	16.5	106	6.2	1.4	1.3
25-440	WEST BELMAR	09-04-97	17.5	208	8.2	3.6	1.3
25-698	ROSEHILL 2A	09-04-97	16.0	216	8.0	2.8	1.9
25-771	SANDY HOOK 2 OBS	07-29-97	16.5	42200	7.0	8020	15000

Aquifer unit:

211ODBG - Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system
211MLRW - Wenonah-Mount Laurel aquifer
211EGLS - Englishtown aquifer system

* - Water-level data for this well are available elsewhere in this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

OCEAN COUNTY

NJ- WRD aquifer number	Site owner	Local identifier	Latitude	Longitude	Altitude of land surface (ft.)	Screen interval (ft.)	Aquifer unit
29-111	HARVEY CEDARS W D	HCWD 4	394134	0740832	9	465 - 500	122KRKDL
29-533	PT PLEASANT W D	PPWD 4	400501	0740455	7	45 - 75	121CKKD
29-814	LITTLE EGG HARBOR MUA	MYSTIC 7	393253	0742308	10	512 - 552	122KRKDL
29-1101	MANCHESTER TMUA	MTMUA 11 UTIL EASEMENT	400046	0741531	40	991 - 1141	211MRPAU
29-1178	PT PLEASANT BD ED	MEMORIAL SCH FLD IRR	400446	0740426	15	47 - 87	121CKKD
29-1192	STATE OF NJ - DEPT CORRECTIONS	STATE GAME FARM DOM WELL	395021	0741028	11	100 - 110	121CKKD

NJ- WRD well number	Local identifier	Date	Tempera- ture water (deg C) (00010)	Specific conduct- ance (μ S/cm) (00095)	pH water whole field (standard units) (00400)	Sodium, dissolved (mg/L as Na) (00930)	Chloride, dissolved (mg/L as Cl) (00940)
29-111	HCWD 4	09-24-97	16.5	71	6.3	4.3	2.6
29-533	PPWD 4	09-30-97	14.0	190	4.9	16	26
29-814	MYSTIC 7	08-16-97	16.0	63	6.4	4.6	2.6
29-1101	MTMUA 11 UTIL EASEMENT	09-05-97	20.5	165	7.1	3.6	0.78
29-1178	MEMORIAL SCH FLD IRR	10-07-96	14.0	190	4.7	12	26
29-1192	STATE GAME FARM DOM WELL	10-01-96	13.5	61	5.0	7.6	11

SALEM COUNTY

NJ- WRD aquifer number	Site owner	Local identifier	Latitude	Longitude	Altitude of land surface (ft.)	Screen interval (ft.)	Aquifer unit
33-360	PENNSVILLE T W D	PTWD 5	393750	0753131	10	101 - 117	211MRPAU

NJ- WRD well number	Local identifier	Date	Tempera- ture water (deg C) (00010)	Specific conduct- ance (μ S/cm) (00095)	pH water whole field (standard units) (00400)	Sodium, dissolved (mg/L as Na) (00930)	Chloride, dissolved (mg/L as Cl) (00940)
33-360	PTWD 5	09-09-97	13.5	190	6.5	7.8	10

Aquifer unit:

121CKKD - Kirkwood-Cohansey aquifer system

122KRKDL - Atlantic City 800-foot sand of the Kirkwood Formation

211MRPAU - Upper Potomac-Raritan-Magothy aquifer

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

BURLINGTON COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
*050782	RIVERSIDE TWP	SEWERAGE 1	400224	0745815	10.0	35 -47	211MRPAM
050835	US GEOLOGICAL SURVEY	QWO-3A	395245	0742952	132	13.4-16.4	121CKKD
050836	US GEOLOGICAL SURVEY	QWO-3B	395245	0742952	132	28.5-31.5	121CKKD
051092	STATE OF NJ - NEW LISBON STATE SCHOOL	NEW LISBON 2	395308	0743453	123	55 -85	121CKKD
051349	PEMBERTON TOWNSHIP MUA - JONES FARM	PTMUA MW-5	395920	0744032	70.6	9 -14	125VNCN
051392	CINNAMINSON TWP - CINNAMINSON HIGH SCH	CINNAMINSON HS MW-5	400028	0745946	53.7	58 -73	211MRPAM
*051393	WASTE MANAGEMENT OF NA - L&D LANDFILL	MT HOLLY SLF PZ-26S	395921	0744612	14.7	5 -10	211MLRW
*051394	WASTE MANAGEMENT OF NA - L&D LANDFILL	MT HOLLY SLF PZ-26M	395921	0744612	14.9	25 -30	211MLRW
051395	EVESHAM TWP MUA	EVESHAM MUA SITE3-OBS3	394945	0745222	98.0	20 -40	121CKKD
051396	LUMBERTON TWP - MUNICIPAL COMPLEX	LUMBERTON NIKE MW-1	395740	0744752	45.0	30 -40	211MLRW
051397	LUMBERTON TWP	LUMBERTON SLF MW-4	395813	0744833	12.0	5 -15	211MLRW
*051398	AMERADA HESS CORP	AMERADA HESS MW-17	395616	0745818	50.0	5 -25	211EGLS
*051399	MOORESTOWN TWP - KINGS HIGH- WAY WTP	MOORESTOWN WTP MW-2	395704	0745810	26.3	3 -18	211EGLS
*051400	PUBLIC SERVICE ELECTRIC & GAS CO	MT HOLLY GAS WORKS MW-1S	395932	0744740	20.0	1.2-11.2	211MLRW
*051401	PUBLIC SERVICE ELECTRIC & GAS CO	MT HOLLY GAS WORKS MW-2I	395933	0744742	15.0	20 -30	211MLRW
051402	STATE OF NJ - DOT/DIV RIGHT OF WAY	NJDOT PESTICIDE MW-2	395643	0742952	100	5 -10	121CKKD
051403	STATE OF NJ - DOT/DIV RIGHT OF WAY	NJDOT PESTICIDE MW-1	395815	0744421	60.0	8 -13	125HRRS
*051404	TABERNACLE TWP - PATTY BOWKER RD PARK	TABERNACLE PARK IRR	395138	0744135	92.0	60 -70	121CKKD

* - Field data and samples for laboratory analyses provided by New Jersey Department of Environmental Protection.
Aquifer units:

121CKKD - Kirkwood-Cohansey aquifer system
211MRPAM - Middle Potomac-Raritan-Magothy aquifer
125VNCN - Vincentown Formation
125HRRS - Hornerstown Sand
211MLRW - Wenonah-Mount Laurel aquifer
211EGLS - Englishtown aquifer system

NJ-WRD WELL NUMBER	DATE	TIME	SAMPLE TYPE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE OF 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)
050728	06-24-97	1215	ENVIRONMENTAL	299	5.4	17.5	762	3.0	32
050835	08-27-97	1810	ENVIRONMENTAL	51	4.4	12.5	759	9.9	93
050836	08-27-97	1358	ENVIRONMENTAL	41	4.6	12.0	760	8.7	81
051092	08-22-97	1104	ENVIRONMENTAL	176	5.2	15.5	754	6.2	63
	08-22-97	1104	AMBIENT BLANK	--	--	--	--	--	--
051349	09-23-97	1315	ENVIRONMENTAL	780	5.7	18.5	760	7.4	79
051392	08-21-97	1233	ENVIRONMENTAL	139	4.9	14.5	754	8.9	88
051393	07-02-97	1030	ENVIRONMENTAL	199	5.4	13.5	755	--	--
051394	07-02-97	1330	ENVIRONMENTAL	126	9.7	13.5	755	--	--
051395	07-07-97	1140	ENVIRONMENTAL	170	4.5	12.0	763	7.6	70
051396	07-09-97	1205	ENVIRONMENTAL	259	4.6	13.5	760	8.8	85
051397	06-30-97	1300	ENVIRONMENTAL	449	6.0	13.0	766	0.2	2
	06-26-97	1528	STANDPIPE BLANK	--	--	--	--	--	--
	06-26-97	1529	PUMP BLANK	--	--	--	--	--	--
	06-26-97	1530	EQUIPMENT BLANK	--	--	--	--	--	--
051398	06-26-97	1230	ENVIRONMENTAL	556	5.4	16.5	755	0.3	3
	06-26-97	1230	AMBIENT BLANK	--	--	--	--	--	--
051399	06-25-97	1230	ENVIRONMENTAL	564	6.3	14.0	758	3.0	29
	06-25-97	1230	AMBIENT BLANK	--	--	--	--	--	--
051400	07-08-97	1200	ENVIRONMENTAL	242	6.1	16.0	762	4.7	48
	06-30-97	1030	EQUIPMENT BLANK	--	--	--	--	--	--
051401	07-09-97	1230	ENVIRONMENTAL	100	5.7	14.5	758	2.7	27
051402	09-22-97	1245	ENVIRONMENTAL	49	4.9	18.5	765	0.5	5
	09-22-97	1245	AMBIENT BLANK	--	--	--	--	--	--
051403	09-17-97	1220	ENVIRONMENTAL	89	5.2	18.0	760	8.8	93
051404	08-28-97	1200	ENVIRONMENTAL	290	5.1	13.0	754	7.5	72
	08-28-97	1200	AMBIENT BLANK	--	--	--	--	--	--

BURLINGTON COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	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)	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)	CAR- BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L - CACO3) (99430)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3 (00410)
050728	06-24-97	83	17	10	17	3.6	12	--	10	9
050835	08-27-97	3	0.62	0.26	2.3	0.1	--	--	--	--
050836	08-27-97	4	0.90	0.46	1.6	0.3	1.0	--	1.0	<1
051092	08-22-97	27	8.0	1.7	17	2.1	7.0	--	6.0	7
	08-22-97	--	--	--	--	--	--	--	--	--
051349	09-23-97	240	53	27	61	4.8	32	--	26	27
051392	08-21-97	36	5.9	5.0	7.8	1.5	--	--	--	--
051393	07-02-97	49	8.0	7.1	3.8	5.9	11	--	9.0	10
051394	07-02-97	52	20	0.58	2.0	4.7	12	18	40	40
051395	07-07-97	19	5.5	1.2	17	1.0	--	--	--	--
051396	07-09-97	90	22	8.7	1.7	3.2	<1.0	--	<1.0	1
051397	06-30-97	92	28	5.6	18	6.8	37	--	30	32
	06-26-97	--	--	--	--	--	--	--	--	--
	06-26-97	--	--	--	--	--	--	--	--	--
	06-26-97	--	<0.002	<0.001	0.027	--	--	--	--	--
051398	06-26-97	110	21	13	38	4.5	22	--	18	19
	06-26-97	--	--	--	--	--	--	--	--	--
051399	06-25-97	280	68	28	11	8.0	161	--	132	132
	06-25-97	--	--	--	--	--	--	--	--	--
051400	07-08-97	54	13	4.9	18	5.7	39	--	32	32
	06-30-97	--	<0.002	<0.001	<0.025	--	--	--	--	--
051401	07-09-97	21	5.6	1.7	2.7	3.3	11	--	9.0	9
051402	09-22-97	3	0.59	0.29	8.2	0.3	4.0	--	3.0	5
	09-22-97	--	--	--	--	--	--	--	--	--
051403	09-17-97	29	8.4	2.0	2.1	0.7	8.0	--	7.0	7
051404	08-28-97	68	8.9	11	21	1.8	2.0	--	1.0	2
	08-28-97	--	--	--	--	--	--	--	--	--
NJ-WRD WELL NUMBER	DATE	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, 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)
050728	06-24-97	56	32	<0.1	4.5	180	163	<0.01	3.7	0.04
050835	08-27-97	12	4.3	<0.1	2.6	25	--	<0.01	0.07	<0.01
050836	08-27-97	8.4	3.0	<0.1	3.0	22	19	<0.01	0.05	<0.01
051092	08-22-97	14	31	<0.1	5.2	111	90	0.01	1.5	<0.01
	08-22-97	--	--	--	--	--	--	--	--	--
051349	09-23-97	15	250	0.2	6.9	494	450	<0.01	4.4	0.04
051392	08-21-97	21	18	<0.1	8.0	82	74	<0.01	0.77	0.04
051393	07-02-97	46	17	0.1	18	125	119	<0.01	0.12	0.02
051394	07-02-97	13	2.2	0.3	13	93	81	<0.01	0.05	0.03
051395	07-07-97	23	27	<0.1	4.3	84	--	<0.01	0.18	<0.01
051396	07-09-97	51	13	<0.1	8.0	169	152	<0.01	9.9	<0.01
051397	06-30-97	120	32	<0.1	17	246	287	<0.01	0.18	0.03
	06-26-97	--	--	--	--	--	--	--	--	--
	06-26-97	--	--	--	--	--	--	--	--	--
	06-26-97	--	--	--	<0.020	--	--	--	--	--
051398	06-26-97	47	120	0.2	12	307	298	0.01	1.7	0.03
	06-26-97	--	--	--	--	--	--	--	--	--
051399	06-25-97	180	23	0.2	11	459	428	0.01	0.07	1.4
	06-25-97	--	--	--	--	--	--	--	--	--
051400	07-08-97	18	32	0.1	17	154	134	0.04	0.98	0.04
	06-30-97	--	--	--	<0.020	--	--	--	--	--
051401	07-09-97	25	4.0	0.1	21	73	74	<0.01	<0.05	0.02
051402	09-22-97	4.8	5.3	<0.1	4.5	79	29	<0.01	<0.05	0.15
	09-22-97	--	--	--	--	--	--	--	--	--
051403	09-17-97	4.5	9.6	<0.1	2.7	64	39	0.12	0.90	<0.01
051404	08-28-97	27	42	<0.1	7.2	165	156	<0.01	7.9	<0.01
	08-28-97	--	--	--	--	--	--	--	--	--

BURLINGTON COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	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)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
050728	06-24-97	<0.2	--	<0.01	44.9	<1	43	--	<1	<1.0
050835	08-27-97	<0.2	--	<0.01	1090	<1	22	--	<1	<1.0
050836	08-27-97	<0.2	--	<0.01	615	<1	38	--	<1	<1.0
051092	08-22-97	<0.2	--	<0.01	288	<1	46	--	<1	<1.0
	08-22-97	--	--	--	--	--	--	--	--	--
051349	09-23-97	<0.2	--	0.02	48.2	<1	62	--	<1	1.9
051392	08-21-97	<0.2	--	<0.01	16.8	<1	110	--	<1	2.1
051393	07-02-97	<0.2	--	0.14	251	<1	70	--	<1	<1.0
051394	07-02-97	<0.2	--	0.23	16.3	<1	22	--	<1	<1.0
051395	07-07-97	<0.2	--	<0.01	1330	<1	81	--	<1	<1.0
051396	07-09-97	<0.2	--	0.01	204	<1	30	--	4	3.6
051397	06-30-97	<0.2	--	0.12	16.0	<1	58	--	<1	<1.0
	06-26-97	--	--	--	--	--	--	<2.00	--	--
	06-26-97	--	--	--	--	--	--	37.64	--	--
	06-26-97	--	--	--	<0.30	<1	<0.20	22.09	<0.30	<0.20
051398	06-26-97	<0.2	--	<0.01	377	1	200	--	<1	<1.0
	06-26-97	--	--	--	--	--	--	--	--	--
051399	06-25-97	1.5	1.6	<0.01	<5.0	2	39	--	<1	<1.0
	06-25-97	--	--	--	--	--	--	--	--	--
051400	07-08-97	<0.2	--	0.03	11.7	<1	37	--	<1	<1.0
	06-30-97	--	--	--	3.20	<1	<0.20	2.91	<0.30	<0.20
051401	07-09-97	<0.2	--	<0.01	11.2	<1	41	--	<1	<1.0
051402	09-22-97	0.8	--	0.02	2130	1	4	--	<1	3.0
	09-22-97	--	--	--	--	--	--	--	--	--
051403	09-17-97	<0.2	--	0.15	39.6	<1	12	--	<1	<1.0
051404	08-28-97	<0.2	--	<0.01	158	<1	140	--	<1	<1.0
	08-28-97	--	--	--	--	--	--	--	--	--
NJ-WRD WELL NUMBER	DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
050728	06-24-97	--	200	120	3	190	<0.1	--	--	<1
050835	08-27-97	--	1	<3	<1	61	<0.1	--	--	<1
050836	08-27-97	--	<1	<3	<1	47	<0.1	--	--	<1
051092	08-22-97	--	4	8	1	15	<0.1	--	--	<1
	08-22-97	--	--	--	--	--	--	--	--	--
051349	09-23-97	--	1	46	<1	98	<0.1	--	--	<1
051392	08-21-97	--	2	23	<1	16	<0.1	--	--	<1
051393	07-02-97	--	<1	5200	<1	300	<0.1	--	--	<1
051394	07-02-97	--	<1	26	<1	9	<0.1	--	--	<1
051395	07-07-97	--	4	8	2	34	<0.1	--	--	<1
051396	07-09-97	--	<1	23	2	120	<0.1	--	--	<1
051397	06-30-97	--	<1	37000	<1	470	<0.1	--	--	<1
	06-26-97	--	--	<3.00	--	--	--	--	--	--
	06-26-97	--	--	13.17	--	--	--	--	--	--
	06-26-97	<0.20	0.95	7.02	<0.30	0.69	<0.1	<0.20	<0.50	<1
051398	06-26-97	--	<1	26000	<1	1000	<0.1	--	--	<1
	06-26-97	--	--	--	--	--	--	--	--	--
051399	06-25-97	--	<1	19000	<1	670	<0.1	--	--	<1
	06-25-97	--	--	--	--	--	--	--	--	--
051400	07-08-97	--	2	850	<1	120	<0.1	--	--	<1
	06-30-97	<0.20	<0.20	<3.00	<0.30	<0.10	<0.1	<0.20	<0.50	<1
051401	07-09-97	--	2	4800	<1	230	<0.1	--	--	<1
051402	09-22-97	--	4	1000	1	7	<0.1	--	--	<1
	09-22-97	--	--	--	--	--	--	--	--	--
051403	09-17-97	--	20	<3	<1	12	<0.1	--	--	<1
051404	08-28-97	--	10	87	20	65	<0.1	--	--	<1
	08-28-97	--	--	--	--	--	--	--	--	--

[illegible]

WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

BURLINGTON COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	TETRA- CHLORO- ETHYL- ENE	TRI- CHLORO- FLUORO- METHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHYL- ENE	1,1,1- TRI- CHLORO- ETHANE	BENZENE O-DI- CHLORO- WATER UNFLTRD	1,2-DI- CHLORO- PROPANE	1,2- TRANS-DI- CHLORO- ETHENE	1,3-DI- CHLORO- WATER UNFLTRD
		TOTAL (UG/L) (34475)	TOTAL (UG/L) (34488)	TOTAL (UG/L) (34496)	TOTAL (UG/L) (34501)	TOTAL (UG/L) (34506)	REC (UG/L) (34536)	TOTAL (UG/L) (34541)	TOTAL (UG/L) (34546)	REC (UG/L) (34566)
050728	06-24-97	--	--	--	--	--	--	--	--	--
050835	08-27-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
050836	08-27-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051092	08-22-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	08-22-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051349	09-23-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051392	08-21-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051393	07-02-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051394	07-02-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051395	07-07-97	--	--	--	--	--	--	--	--	--
051396	07-09-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051397	06-30-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	06-26-97	--	--	--	--	--	--	--	--	--
	06-26-97	--	--	--	--	--	--	--	--	--
	06-26-97	--	--	--	--	--	--	--	--	--
051398	06-26-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	06-26-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051399	06-25-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	06-25-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051400	07-08-97	--	--	--	--	--	--	--	--	--
	06-30-97	--	--	--	--	--	--	--	--	--
051401	07-09-97	--	--	--	--	--	--	--	--	--
051402	09-22-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	09-22-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051403	09-17-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051404	08-28-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	08-28-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
NJ-WRD WELL NUMBER	DATE	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	STYRENE TOTAL (UG/L) (77128)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	XYLENE WATER UNFLTRD REC (UG/L) (81551)
050728	06-24-97	--	--	--	--	--	--	--	--	--
050835	08-27-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
050836	08-27-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051092	08-22-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.9	<0.2
	08-22-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051349	09-23-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051392	08-21-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051393	07-02-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051394	07-02-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051395	07-07-97	--	--	--	--	--	--	--	--	--
051396	07-09-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051397	06-30-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	06-26-97	--	--	--	--	--	--	--	--	--
	06-26-97	--	--	--	--	--	--	--	--	--
	06-26-97	--	--	--	--	--	--	--	--	--
051398	06-26-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	06-26-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5
051399	06-25-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.4	<0.2
	06-25-97	<0.2	EO.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2
051400	07-08-97	--	--	--	--	--	--	--	--	--
	06-30-97	--	--	--	--	--	--	--	--	--
051401	07-09-97	--	--	--	--	--	--	--	--	--
051402	09-22-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.6	<0.2
	09-22-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051403	09-17-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
051404	08-28-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	5.4	<0.2
	08-28-97	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

CAMDEN COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
*070871	SHELL OIL COMPANY	SHELL SRVC STA MW-4	395613	0750521	10.0	36-56	211MRPAU
070872	CAMPBELL SOUP COMPANY	CAMPBELL SOUP EMW-9	395622	0750636	19.0	16-26	211MRPAU
*070873	PAINTWORKS MANAGEMENT CORP	PAINTWORKS MGT MW-28	395012	0745747	100	5-25	121CKKD
*070874	BUZBY LANDFILL - ACO SITE	BUZBY LF MW-100	395051	0745657	130	31-51	121CKKD

* - Field data and samples for laboratory analyses provided by New Jersey Department of Environmental Protection.

Aquifer units:

211MRPAU - Upper Potomac-Raritan-Magothy aquifer

121CKKD - Kirkwood-Cohansey aquifer system

NJ-WRD WELL NUMBER	DATE	TIME	SAMPLE TYPE	SPE-	PH		BARO-		OXYGEN,	
				CIFIC	WATER		METRIC		DIS-	
				CON-	WHOLE		PRES-		SOLVED	
				DUCT-	FIELD	TEMPER-	SURE	OXYGEN,	(PER-	HARD-
				ANCE	(STAND-	ATURE	(MM	DIS-	CENT	TOTAL
				(US/CM	ARD	WATER	OF	SOLVED	SATUR-	(MG/L
				(00095)	UNITS)	(DEG C)	HG)	(MG/L)	ATION)	CAC03)
				(00095)	(00400)	(00010)	(00025)	(00300)	(00301)	(00900)
070871	09-16-97	1200	ENVIRONMENTAL	896	5.5	17.0	760	0.4	4	230
070872	09-16-97	1235	ENVIRONMENTAL	692.	6.7	22.0	761	4.4	51	310
	09-02-97	1610	EQUIPMENT BLANK	--	--	--	--	--	--	--
070873	08-27-97	1200	ENVIRONMENTAL	377	4.1	18.5	759	--	--	40
070874	09-18-97	1300	ENVIRONMENTAL	134	8.1	13.5	757	1.0	10	61

NJ-WRD WELL NUMBER	DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE IT-FLD AS HCO3 (99440)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L - CAC03) (99430)	ALKA- LINITY WAT WH TOT FET 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)
070871	09-16-97	56	23	72	9.7	53	43	47	140	140	<0.1
070872	09-16-97	100	13	21	15	334	274	272	51	34	0.1
	09-02-97	0.003	<0.001	<0.025	--	--	--	--	--	--	--
070873	08-27-97	8.1	4.9	44	1.9	--	--	--	46	64	0.1
070874	09-18-97	23	0.59	1.4	1.1	73	60	59	4.8	1.7	<0.1

NJ-WRD WELL NUMBER	DATE	SILICA, DIS- SOLVED (UG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, 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)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)
070871	09-16-97	8.2	502	505	<0.01	6.4	3.1	3.4	9.8	0.03	89.4
070872	09-16-97	6.5	--	408	<0.01	0.23	<0.02	<0.2	--	0.02	<10.0
	09-02-97	<0.020	--	--	--	--	--	--	--	--	<0.30
070873	08-27-97	7.3	196	--	<0.01	2.9	0.02	<0.2	--	<0.01	1360
070874	09-18-97	9.4	81	83	0.01	1.0	<0.01	<0.2	--	0.04	<5.0

NJ-WRD WELL NUMBER	DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	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)
070871	09-16-97	<1	37	--	3	<1.0	--	<1	37	<1	1500
070872	09-16-97	<1	23	--	<1	1.7	--	<1	<10	<1	<4
	09-02-97	<1	<0.20	<2.00	<0.30	<0.20	<0.20	0.33	<3.00	<0.30	0.30
070873	08-27-97	<1	170	--	1	<1.0	--	<1	3	1	200
070874	09-18-97	<1	5	--	<1	<1.0	--	<1	71	<1	8

WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

CAMDEN COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	MERCURY	MOLYB-	NICKEL	SELE-	SILVER,	ZINC,	GROSS	BETA,	ALPHA	ALPHA
		DIS-	DENUM,	DIS-	NIUM,	DIS-	DIS-	BETA,	2 SIGMA	RADIO.	COUNT,
		SOLVED	DIS-	DIS-	DIS-	SOLVED	SOLVED	DIS-	WATER,	WATER	2 SIGMA
		(UG/L AS HG) (71890)	SOLVED (UG/L AS MO) (01060)	SOLVED (UG/L AS NI) (01065)	SOLVED (UG/L AS SE) (01145)	SOLVED (UG/L AS AG) (01075)	SOLVED (UG/L AS ZN) (01090)	SOLVED (PCI/L AS CS-137) (03515)	DISS, AS CS-137 (PCI/L) (75989)	DISS AS TH-230 (PCI/L) (04126)	WAT DIS AS TH-230 (PCI/L) (75987)
070871	09-16-97	<0.1	--	--	<1	<1	130	14	4.45	7.8	3.71
070872	09-16-97	<0.1	--	--	4	<1	<20	18	4.65	3.5	2.91
	09-02-97	<0.1	<0.20	<0.50	<1	<0.20	<0.50	--	--	--	--
070873	08-27-97	1.4	--	--	2	<1	70	13	4.24	20	4.44
070874	09-18-97	<0.1	--	--	<1	<1	<3	--	--	--	--

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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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