

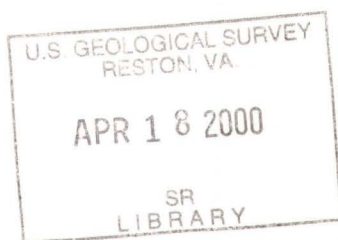
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for a changing world

# Water Resources Data New Jersey Water Year 1999

## Volume 2. Ground-Water Data

Water-Data Report NJ-99-2



U.S. Department of the Interior  
U.S. Geological Survey



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

# CALENDAR FOR WATER YEAR 1999

1998

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

1999

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





## United States Department of the Interior

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

I am pleased to announce the release of our Annual report "Water Resources Data for New Jersey, Water Year 1999". 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 again being published in three volumes:

Volume 1.--Surface-water streamflow data.

Volume 2.--Ground-water level data.

Volume 3 --Water-quality data.

This volume contains ground-water data, such as measurements of water levels 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.

This year we have added county maps with well locations and a summary table at the beginning of each county. Whenever they are available, New Jersey well permit numbers have been added to each well's descriptive information.

The New Jersey District of the U.S. Geological Survey has made a home page available on the world wide web. Real-time data for more than 30 stream-gaging stations around the State, peak-flow files for many gaging stations, ground-water level data, water-quality data, monthly hydrologic conditions and links to other sites of interest may be accessed. This information is available at:

**<http://nj.usgs.gov/>**

Copies of this report in paper or microfiche 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-99-1 (for Volume 1), NJ-99-2 (for Volume 2), or NJ-99-3 (for Volume 3). For further information on this report, or to change or remove your address from our mailing list, please contact me at the above address, telephone (609) 771-3980, or send e-mail to [wbauers@usgs.gov](mailto:wbauers@usgs.gov).

Sincerely,

William R. Bauersfeld, Chief  
Hydrologic Data Assessment Program



# Water Resources Data New Jersey Water Year 1999

## Volume 2. Ground-Water Data

By Walter D. Jones

Water-Data Report NJ-99-2



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





**UNITED STATES DEPARTMENT OF THE INTERIOR**

**BRUCE BABBITT, *Secretary***

**GEOLOGICAL SURVEY**

**Charles G. Groat, *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 3 volumes:

Volume 1. Surface-Water Data

Volume 2. Ground-Water Data

Volume 3. Water-Quality 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.

Darryl A. Pope

H.L. Burns

M.D. Morgan word processed the text of the report, and W.H. Ellis, 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:

V. Corcino, Jr.

W.D. Jones

R. Rosman

J.F. Dudek

R.W. Owre

A.B. Spehar

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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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6. AUTHOR(S)  Walter D. Jones				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division Mountain View Office Park 810 Bear Tavern Road, Suite 206 West Trenton, NJ 08628-1099				8. PERFORMING ORGANIZATION REPORT NUMBER  USGS-WDR-NJ-99-2
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13. ABSTRACT (Maximum 200 words)  Water-resources data for the 1999 water year for New Jersey are presented in three 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 a summary of the hydrologic conditions for 1999 water year; a listing of current water resource projects in New Jersey; a bibliography of water-related reports, articles, and fact sheets completed by the Geological Survey in recent years; records of ground-water levels from 192 wells; and a table of discontinued observation wells for which ground-water-level data are available. The locations of the ground-water level sites are shown on figure 3. 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 levels				15. NUMBER OF PAGES 233
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## GROUND-WATER LEVEL RECORDS

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<u>ATLANTIC COUNTY</u>	<u>WELL NUMBER</u>	
Galen Hall Obs.....	.01-0037 .....	21
Oceanville 1 Obs.....	.01-0180 .....	22
Scholler 1 Obs.....	.01-0256 .....	23
Jobs Point Obs.....	.01-0578 .....	24
Burk Ave TW Obs.....	.01-0702 .....	25
FAA Pomona Obs.....	.01-0703 .....	26
FAA Intermediate Obs.....	.01-0775 .....	27
FAA Shallow Obs.....	.01-0776 .....	28
Margate Firehouse 1 Obs.....	.01-0834 .....	29
HTMUA 9 Obs.....	.01-1219 .....	30
<u>BERGEN COUNTY</u>		
Saddle River 17 Obs.....	.03-0289 .....	32
<u>BURLINGTON COUNTY</u>		
Willingboro 1 Obs.....	.05-0063 .....	34
Medford 1 Obs.....	.05-0258 .....	35
Medford 2 Obs.....	.05-0259 .....	36
Medford 5 Obs.....	.05-0261 .....	37
Medford 4 Obs.....	.05-0262 .....	38
Campbell 1 Obs.....	.05-0274 .....	39
Atsion 1 Obs.....	.05-0407 .....	40
Atsion 2 Obs.....	.05-0408 .....	41
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Rhodia 1 Obs.....	.05-0440 .....	43
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Penn SF Shallow Obs.....	.05-0628 .....	45
Penn SF Deep Obs.....	.05-0630 .....	46
Willingboro 2 Obs.....	.05-0645 .....	47
Coyle Airport Obs.....	.05-0676 .....	48
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Butler Place 2 Obs.....	.05-0684 .....	50
Lebanon SF 23-D Obs.....	.05-0689 .....	51
Medford Twp MW-1 Obs.....	.05-1155 .....	52
McGuire 08-MW-52 Obs.....	.05-1250 .....	53
McGuire 08-MW-102 Obs.....	.05-1251 .....	54
Evesham 4 Obs.....	.05-1387 .....	55
New Lisbon 1 Obs.....	.05-1389 .....	56
New Lisbon 2 Obs.....	.05-1390 .....	57
Coyle 2 Obs.....	.05-1391 .....	58
<u>CAMDEN COUNTY</u>		
Hutton Hill 1 Obs.....	.07-0117 .....	60
Hutton Hill 2 Obs.....	.07-0118 .....	61
Egbert Obs.....	.07-0283 .....	62
Elm Tree 2 Obs.....	.07-0412 .....	63
Elm Tree 3 Obs.....	.07-0413 .....	64
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New Brooklyn Park 2 Obs.....	.07-0477 .....	66
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CMMUA PZ 1.....	.07-0743 .....	72
CMMUA PZ 5.....	.07-0744 .....	73
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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>CAMDEN COUNTY--Cont'd</u>		
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<u>CAPE MAY COUNTY</u>		
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Canal 5 Obs.....	09-0048 .....	79
Higbee Beach 3 Obs.....	09-0049 .....	80
Airport 7 Obs .....	09-0060 .....	81
Cape May 42 Obs.....	09-0080 .....	82
Cape May 23 Obs.....	09-0081 .....	83
Oyster Lab 4 Obs .....	09-0089 .....	84
Cape May County Park 8 Obs .....	09-0099 .....	85
West Cape May 1 Obs.....	09-0150 .....	86
Coast Guard 800 Obs .....	09-0302 .....	87
Oyster 800 Obs .....	09-0306 .....	88
Pump Pond N. Obs.....	09-0333 .....	89
M-1 N Wildwood 800 Obs.....	09-0337 .....	90
<u>CUMBERLAND COUNTY</u>		
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Vocational School 1 Obs.....	11-0043 .....	93
Vocational School 3 Obs.....	11-0044 .....	94
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Jones Island 2 Obs .....	11-0096 .....	96
Jones Island 1 Obs .....	11-0097 .....	97
Heislerville 1 Obs .....	11-0118 .....	98
Heislerville 2 Obs .....	11-0119 .....	99
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East Orange Shallow Obs .....	13-0096 .....	108
<u>GLOUCESTER COUNTY</u>		
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Deptford Deep Obs .....	15-0671 .....	112
Stefka 1 Obs.....	15-0712 .....	113
Stefka 2 Obs.....	15-0713 .....	114
Stefka 3 Obs.....	15-0727 .....	115
Stefka 4 Obs.....	15-0728 .....	116
Mantua Shallow Obs.....	15-0741 .....	117
Mantua Deep Obs .....	15-0742 .....	118
WTMUA Monitoring 1 Obs .....	15-1033 .....	119
USGS GSC Obs-1 Shallow.....	15-1054 .....	120
Glassboro ML-1 Obs.....	15-1126 .....	121
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# GROUND WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

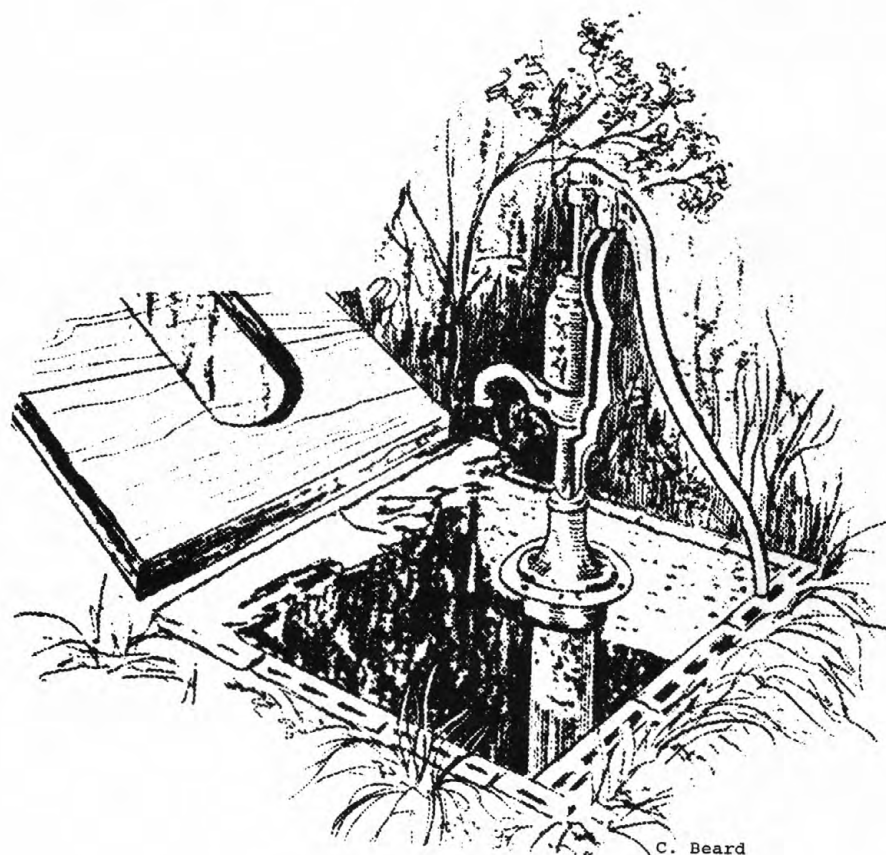
## GROUND-WATER LEVEL RECORDS

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<u>MERCER COUNTY</u>	<u>WELL NUMBER</u>	
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Runyon 1 Obs .....	23-0194 .....	139
Forsgate 3 Obs .....	23-0228 .....	140
Forsgate 4 Obs .....	23-0229 .....	141
Plainsboro Pond Obs .....	23-0273 .....	142
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SWD 1 Obs .....	23-0351 .....	146
Duh Say 4 Obs .....	23-0365 .....	147
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American Cyanamid 1 Obs .....	23-0482 .....	149
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## GROUND-WATER LEVEL RECORDS

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<u>MORRIS COUNTY--Cont'd</u>	<u>WELL NUMBER</u>	
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<u>OCEAN COUNTY</u>		
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Colliers Mills 4 Obs.....	29-0141 .....	196
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Garden St Pky 2 Obs.....	29-0514 .....	200
PPWD 6 Obs.....	29-0530 .....	201
Toms River 2 Obs.....	29-0534 .....	202
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Fort Dix RLF-30 Obs.....	29-1059 .....	204
LNAS-EC Obs.....	29-1060 .....	205
Great Bay Blvd 1 Obs.....	29-1210 .....	206
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Salem 2 Obs.....	33-0252 .....	211
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C. Beard



## 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 levels in 192 wells. Locations of these wells are shown on figure 3. 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. Beginning in the 1998 water year, the format changed to include surface-water discharge records in Volume 1, ground-water level records in Volume 2, and surface-water and ground-water quality records in Volume 3.

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-99-2." 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, maintains a 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://nj.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,  
Michael Achey, Sr., Director.

Washington Township Municipal Utilities Authority,  
Richard H. Subers, Executive Director.

Pinelands Commission, William F. Harrison, Acting Executive Director

Evesham Municipal Utilities Authority, Louis Russo, Director

## SUMMARY OF HYDROLOGIC CONDITIONS

Ground-Water Levels

More than one-half of New Jersey's drinking water comes from ground water. Concerns about the long-term availability of the ground-water supply and the effects of development on ground-water systems are of major importance. 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. These data document the general response of the ground-water system to natural climate changes and ground-water withdrawals. The U.S. Geological Survey (USGS) has operated a network of observation wells in New Jersey for the purpose of monitoring water-level changes throughout the State since 1923.

During the 1999 water year, ground-water levels were measured in 192 wells. Observation wells in which water levels exceeded their previous measured extremes (highest or lowest water levels), and for which more than 2 years of data are available, are listed in table 1. Previous record low water levels were exceeded in 49 of the 192 wells in the statewide observation-well network during the 1999 water year. Thirty of the record low water levels were in wells located in the Coastal Plain, and 19 were in wells located in the northern part of the State. Previous record high water levels were exceeded in 11 network observation wells during the 1999 water year. All of these wells are located in the Coastal Plain.

Water levels measured in confined aquifers in the Coastal Plain in water year 1999, together with those measured during previous years, show four general trends. (1) Water levels in observation wells that tap the Atlantic City 800-foot sand of the Kirkwood Formation, the Wenonah-Mount Laurel aquifer, and the Piney Point Formation in the southern part of the Coastal Plain continued to undergo long-term net declines. (2) Water levels in the Potomac-Raritan-Magothy aquifer system, Englishtown aquifer system, and the Wenonah-Mount Laurel aquifer in the northern part of the Coastal Plain (Monmouth, eastern Middlesex, and Ocean Counties), which had been rising since 1990, appear to be leveling off. (3) A 3-year rise in water levels in the Potomac-Raritan-Magothy aquifer system in Burlington, Camden, and Gloucester Counties has reversed a trend of long-term water-level declines. (4) The use of a desalination plant, which pumps brackish water from the Atlantic City 800-foot sand in Cape May City has affected two confined aquifers in the Cape May City area. Increased withdrawals from the Atlantic City 800-foot sand resulted in a decline in the water level in the Coast Guard 800 observation well (NJ-WRD well number 9-302). A reduction in withdrawals from the Cohansey sand resulted in record setting high water levels during spring 1999 in three observation wells (NJ-WRD well numbers 9-48, 9-49, and 9-150) in the Cape May City area.

The greatest long-term water-level decline in an observation well occurred in the New Brooklyn 3 observation well (NJ-WRD well number 07-478), screened in the Wenonah-Mount Laurel aquifer in Camden County. The

water level in this well declined more than 70 feet since April 1983. In contrast, the greatest increase in water levels occurred in the PPWD 6 observation well (NJ-WRD well number 29-530), screened in the Englishtown aquifer system in Ocean County. The water level in this well rose more than 169 feet from August 1989 to April 1999.

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 Potomac-Raritan-Magothy aquifer system 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 Potomac-Raritan-Magothy aquifer system, Englishtown aquifer system, and Wenonah-Mount Laurel aquifer in Critical Area 1. Water levels in the Potomac Raritan Magothy aquifer system and Mount Laurel Wenonah aquifer seem to have leveled off during 1998 and 1999, but water levels in two observation wells located in Ocean County and screened in the Englishtown aquifer system have continued to rise (NJ-WRD well numbers 29-503, and 29-530). 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.

In Critical Area 2, the shift in withdrawals away from the deeper, confined aquifers to surface water and ground water in 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 in the Critical area (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, and 15-742). Water levels in several of these wells have recovered to the levels measured during the 1970's. Since spring 1995, the water level in the Hutton Hill 1 observation well (NJ-WRD well number 07-117) has risen more than 26 feet. The shift in withdrawals during recent years to shallower aquifers has caused water levels in the Wenonah-Mount Laurel aquifer and the Englishtown aquifer system to decline in several observation wells (NJ-WRD well numbers 5-259, 5-1155, 5-1387, 5-1390, 7-118, 15-1126, 33-20).

The effects of climate on daily mean water levels in four observation wells during water year 1999 can be seen in the hydrographs shown in figure 1. Monthly extreme and long-term average water levels are shown for comparison. The Taylor Obs well (NJ-WRD well number 37-202) and the

**Table 1. Water-level records set during the 1999 water year, in observation wells with more than 2 years of data**

NJ-WRD Well Number	Local identifier	Aquifer <sup>1</sup> code	Lowest water- level, in feet below land surface	Value by which previous record low was exceeded, in feet	Year record began
<u>Record Lows in the Coastal Plain of New Jersey</u>					
09-0333	Pump Pond N Obs	112HLBC	14.16	.15	1992
01-0256	Scholler 1 Obs	121CKKD	39.61	.05	1962
07-0740	CCMUA PZ 3	121CKKD	1.16	.33	1993
07-0747	CCMUA PZ 6	121CKKD	22.57	.48	1992
11-0237	Natural Area 1 Obs	121CKKD	11.09	.04	1972
15-1033	WTMUA Monitoring 1 Obs	121CKKD	18.11	.16	1989
15-1208	USGS AG02	121CKKD	26.63	1.38	1997
15-1213	USGS UND06	121CKKD	8.55	.33	1997
29-0020	Island Beach 4 Obs	121CKKD	4.96	.14	1962
01-0578	Jobs Point Obs	122KRKDL	87.54	.28	1959
01-0703	FAA Pomona Obs	122KRKDL	100.34	.54	1985
09-0302	Coast Guard 800 Obs	122KRKDL	28.28	5.77	1990
09-0306	Oyster 800 Obs	122KRKDL	27.97	.60	1990
09-0337	M-1 N Wildwood 800 Obs	122KRKDL	38.48	1.27	1992
01-0834	Margate Firehouse 1 Obs	124PNPN	38.52	.56	1988
01-1219	HTMUA 9 Obs	124PNPN	84.19	.31	1996
11-0044	Vocational School 3 Obs	124PNPN	87.12	1.10	1972
11-0163	Fair Grounds 3 Obs	124PNPN	85.03	1.41	1973
29-1210	Great Bay Blvd 1 Obs	124PNPN	20.45	.42	1997
05-1155	Medford Twp MW-1 Obs	211MLRW	34.43	3.48	1992
05-1387	Evesham 4 Obs	211MLRW	124.39	4.40	1997
07-0118	Hutton Hill 2 Obs	211MLRW	91.68	1.19	1967
07-0478	New Brooklyn Park 3 Obs	211MLRW	141.84	5.66	1961
15-1126	Glassboro ML-1 Obs	211MLRW	171.71	3.32	1995
29-0140	Colliers Mills 3 Obs	211MLRW	26.76	1.00	1964
33-0020	Horner Obs	211MLRW	52.82	2.19	1959
05-1390	New Lisbon 2 Obs	211EGLS	96.87	1.58	1997
25-0715	AHWD B Obs	211EGLS	226.39	.19	1991
05-1389	New Lisbon 1 Obs	211MRPAU	147.14	.17	1997
11-0137	Ragovin 2100 Obs	211MRPA	140.11	.03	1974
<u>Record Lows in Northern New Jersey</u>					
27-0003	W B Driver 2 Obs	112SFDF	36.88	1.16	1966
27-0004	Clemens Obs	112SFDF	30.89	1.67	1966
27-0005	Sandoz Obs	112SFDF	42.78	1.73	1966
27-0012	Briarwood School Obs	112SFDF	61.51	.95	1967
27-0014	Exxon Obs	112SFDF	23.05	2.13	1967
27-0017	MBWD 4 Obs	112SFDF	38.53	1.19	1955
27-0027	Berkshire Valley 9 Obs	112SFDF	14.01	.13	1981
27-1191	Roxbury 1 Obs	112SFDF	52.32	2.21	1989
37-0204	Sparta Twp 6 Obs	112SFDF	47.16	3.02	1991
37-0206	Fairgrounds 7 Obs	112SFDF	34.04	.03	1991
03-0289	Saddle River 17 Obs	227PSSC	6.62	.86	1991
19-0251	Corsalo Rd TB1 Obs	227PSSC	10.65	1.11	1989
19-0270	Readington School 11 Obs	227PSSC	29.86	.16	1990
21-0289	Bristol -Myers 100 Obs	227PSSC	26.24	2.94	1986
21-0364	Cranston Farms 15 Obs	231SCKN	33.85	.90	1990

## WATER RESOURCES DATA - NEW JERSEY, 1999

Table 1. Water-level records set during the 1999 water year, in observation wells with more than 2 years of data--Continued

NJ-WRD Well Number	Local identifier	Aquifer <sup>1</sup> code	Lowest water- level, in feet below land surface	Value by which previous record low was exceeded, in feet	Year record began
<u>Record Lows in Northern New Jersey--Continued</u>					
37-0203	Whittingham 19 Obs	371ALNN	34.10	.86	1991
27-1303	Drew University Farm Obs	374LSVL	53.93	.17	1990
27-1190	Black River 10 Obs	400PCMB	14.93	.52	1991
37-0359	Byram Twp PW-1 Obs	400PCMB	22.22	.28	1994
NJ-WRD Well Number	Local identifier	Aquifer <sup>1</sup> code	Highest water- level, in feet below land surface	Value by which previous record high was exceeded, in feet	Year record began
<u>Record Highs in the Coastal Plain of New Jersey</u>					
09-0048	Canal 5 Obs	121CNSY	24.35	1.68	1957
09-0049	Highbee Beach 3 Obs	121CNSY	10.55	1.55	1965
09-0150	West Cape May 1 Obs	121CNSY	10.63	2.18	1957
29-0503	Mantoloking 6 Obs	211EGLS	72.31	5.02	1983
29-0530	PPWD 6 Obs	211EGLS	80.90	12.03	1988
05-1389	New Lisbon 1 Obs	211MRPAU	140.75	.57	1997
05-1391	Coyle 2 Obs (OW 96)	211MRPAU	207.98	1.06	1997
33-0841	Parvin SP 1 Obs (OW A)	211MRPAU	121.19	1.16	1997
15-0671	Deptford Deep Obs	211MRPAL	78.43	.89	1986
15-0742	MantuaDeep Obs	211MRPAL	107.76	.18	1986
25-0316	Sandy Hook SP1 Obs	211ODBG	8.64	.04	1965

<sup>1</sup>AQUIFER CODES:

112SFDF	-Stratified drift	211ODBG	-Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system (Middlesex and Monmouth Counties)
121CKKD	-Kirkwood-Cohansey aquifer system	227PSSC	-Passaic Formation
124PNPN	-Piney Point Formation	231SCKN	-Stockton Formation
125VNCN	-Vincentown Formation	400PCMB	-Precambrian Erathem
211MLRW	-Wenonah-Mount Laurel aquifer	374LSVL	-Leithsville Formation
211EGLS	-Englishtown aquifer system	121CNSY	-Cohansey Sand
211MRPAU	-Upper Potomac-Raritan-Magothy aquifer	112HLBC	-Holly Beach water-bearing zone
211MRPAL	-Lower Potomac-Raritan-Magothy aquifer	122KRKDL	-Atlantic City 800-foot sand of the Kirkwood Formation
211MRPA	-Potomac-Raritan-Magothy aquifer undifferentiated		

Cranston Farms 15 Obs well (NJ-WRD well number 21-364) are open to fractured-rock aquifers; the Lebanon State Forest 23-D Obs well (NJ-WRD well number 5-689) and the WTMUA Monitoring 1 Obs well (NJ-WRD well number 15-1033) are screened in an unconfined sand and gravel aquifer. These wells are distant from pumping centers.

According to the New Jersey State Climatologist, monthly precipitation, calculated from a spatially weighted average of stations throughout New Jersey, was well below normal during July to December 1998 (Office of the NJ State Climatologist, Rutgers University, New Jersey, unpub. data accessed March 1, 2000, on the World Wide Web at URL <http://climate.rutgers.edu>). Precipitation during this period was more than 11 inches below normal (normal is based on

average precipitation values from 1961-1990). This rainfall deficit caused ground-water levels to decline to record lows in many observation wells open to unconfined and fractured-rock aquifers throughout the State. Above-average cumulative precipitation from January through March provided enough water to nearly fill the surface-water reservoirs, but did not fully recharge the aquifers. Rainfall was more than 7 inches below normal from April to July 1999, causing ground-water levels to again fall to record low levels. Previous record low water levels were exceeded in 28 observation wells open to unconfined or fractured-rock aquifers during the 1999 water year. (See Table 1.) Ten of the new record lows were recorded during October 1998 to February 1999; the remaining 18 were recorded during June to September 1999.



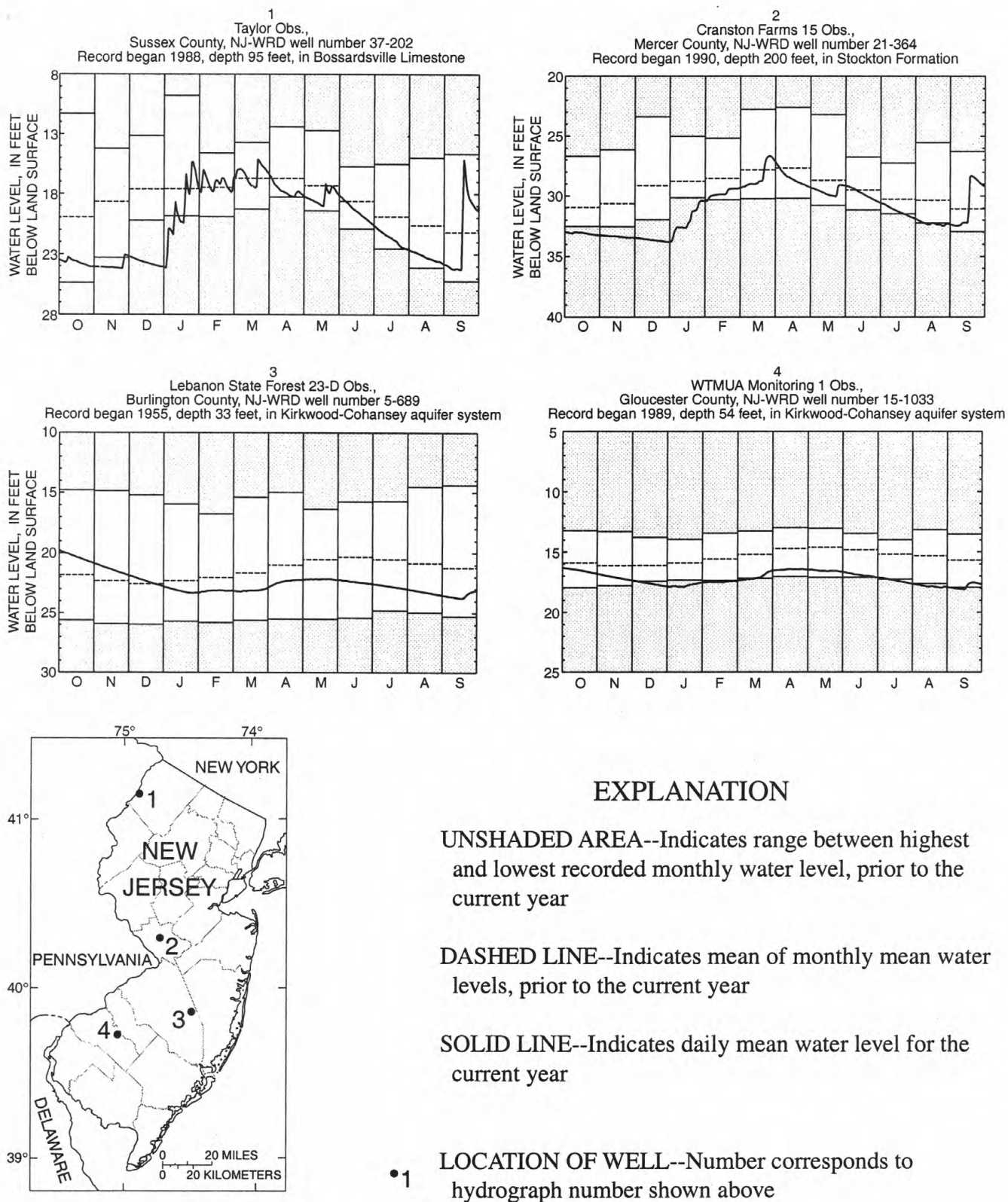


Figure 1. Ground-water levels at key observation wells in New Jersey during water year 1999.



Rainfall from Tropical Storm Floyd on September 16 and 17 caused a significant rise in ground-water levels in the fractured rock aquifers of northern New Jersey. The greatest rise in water level occurred in the Taylor Obs well (NJ-WRD well number 37-202) (See Figure 1.) Both the lowest and highest water levels of the 1999 water year were measured in this well on September 16. The lowest water level of the year occurred at 8 am before the rainfall began. The water level in this well rose more than 10 feet during that day, reaching its highest level of the water year at 8 pm.

A Drought Warning was issued on August 2, followed by a Drought Emergency on August 5. Mandatory restrictions were imposed on outdoor and nonessential water uses. The USGS increased the frequency of ground-water-level monitoring at many observation wells. A high level of cooperation among New Jersey's residents, businesses, and water suppliers helped curb consumption. Above normal rainfall during August and rainfall from Tropical Storm Floyd that ranged from 5 to 14 inches increased streamflows and reservoir levels enough to ease the water restrictions. Governor Whitman ended the Drought Emergency on September 15 in southern New Jersey and on September 27 in the northern part of the State.

## EXPLANATION OF THE RECORDS

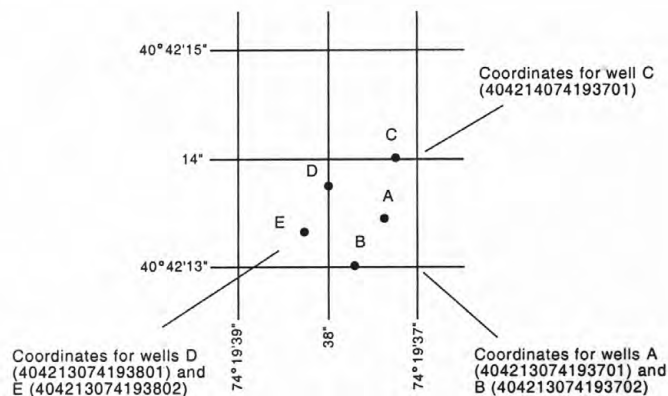
The ground-water level data published in this report are for the 1999 water year that began October 1, 1998, and ended September 30, 1999. A calendar of the water year is provided on the inside of the front cover. The locations of the wells where data were collected are shown in figure 3. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

### Station Identification Numbers

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

### Latitude-Longitude System

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



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

## Records of Ground-Water Levels

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

### Data Collection and Computation

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

Water-level data are presented by counties arranged in alphabetical order. The primary identification number for a given well is the NJ-WRD well number, a hyphenated 6 digit identification number assigned to all New Jersey wells in the Ground Water Site Inventory (GWSI) data base. The first two digits are a code for the county in which the well is located and the last four digits are a sequence number. These NJ-WRD well numbers are used in the ground-water level descriptions, and on the corresponding location map 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). Land-surface datum is a datum plane that is approximately at land surface at each well. The altitude of the land-surface and the height of the measuring point (MP) above or below land-surface 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 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 land-surface 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 land surface 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.

### 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.

#### Barnegat Bay Non-Point Source

Characterization of the Water Quality of the Delaware and Raritan Canal

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

Delaware River Basin National Water Quality Assessment

Development of Database and Models to Support Source Water Assessment Program

Distribution of MTBE and Related VOC Compounds in Lakes in Northern NJ and Investigation of Lake-Well Interactions

Distribution of Radium and Related Radionuclides in Coastal-Plain Aquifers

**CURRENT WATER RESOURCES PROJECTS  
IN NEW JERSEY--Continued**

EPA Technical Assistance Program

Estimation of the Relative Importance of Nonpoint Source Loads in the Raritan River Basin

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

Ground-Water Supply Availability in the Northern Passaic Basin

High-Flow Water Quality Management Objectives

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 GW-SW Interaction in the Northern Passaic River Valley, New Jersey

Investigation of hydrogeology and VOC Contamination in Fair Lawn, New Jersey

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

Low Flow Characteristics of New Jersey Streams

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

Model of the Manasquan Water Supply System

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

Rahway Flood Warning System

Reconstruction of Natural Streamflow Records, Passaic and Hackensack River Basins

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

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

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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.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases the water level can rise above the ground surface, yielding a flowing well.

Ground-water level is the elevation of the water table or another potentiometric surface at a particular location.

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

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



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

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.

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.

Water level is the water-surface elevation or stage of the free surface of a body of water above or below any datum, or the surface of water standing in a well, usually indicative of the position of the water table or other potentiometric surface.

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."

Well is an excavation (pit, hole, tunnel), generally cylindrical in form and often walled in, drilled, dug, driven, bored, or jetted into the ground to such a depth as to penetrate water-yielding geologic material and allow the water to flow or to be pumped to the surface.

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

## **PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY**

The U.S.G.S. 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.G.S., 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 made in the form of a 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 mention the "U.S. Geological Survey Techniques of Water-Resources Investigations."

### **Book 1. Collection of Water Data by Direct Measurement**

#### **Section D. Water Quality**

- 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, chap. 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, chap. D2. 1976. 24 pages.

### **Book 2. Collection of Environmental Data**

#### **Section D. Surface Geophysical Methods**

- 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, chap. D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS-TWRI book 2, chap. D2. 1988. 86 pages.

#### **Section E. Subsurface Geophysical Methods**

- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS-TWRI book 2, chap. E1. 1971. 126 pages.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS-TWRI book 2, chap. E2. 1990. 150 pages.

#### **Section F. Drilling and Sampling Methods**

- 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, chap. F1. 1989. 97 pages.

## PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

## Book 3. Applications of Hydraulics

## Section A. Surface-Water Techniques

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS-TWRI book 3, chap. A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS-TWRI book 3, chap. A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS-TWRI book 3, chap. A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS-TWRI book 3, chap. A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS-TWRI book 3, chap. A6. 1968. 13 pages.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS-TWRI book 3, chap. A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS-TWRI book 3, chap. 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, chap. A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS-TWRI book 3, chap. 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, chap. 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, chap. A12. 1986. 34 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS-TWRI book 3, chap. A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS-TWRI book 3, chap. A14. 1983. 46 pages.

- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS-TWRI book 3, chap. A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS-TWRI book 3, chap. A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS-TWRI book 3, chap. 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, chap. A18. 1989. 52 pages.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS-TWRI book 3, chap. 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, chap. A20. 1993. 38 pages.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS-TWRI book 3, chap. A21. 1995. 56 pages.

## Section B. Ground-Water Techniques

- 3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS-TWRI book 3, chap. 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, chap. 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, chap. B3. 1980. 106 pages.
- 3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS-TWRI book 3, chap. 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, chap. 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, chap. B5. 1987. 15 pages.



## PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

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, chap. 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, chap. B7. 1992. 190 pages.

**Section C. Sedimentation and Erosion Techniques**

3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS-TWRI book 3, chap. 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, chap. C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS-TWRI book 3, chap. C3. 1972. 66 pages.

**Book 4. Hydrologic Analysis and Interpretation****Section A. Statistical Analysis**

4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS-TWRI book 4, chap. A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H.C. Riggs: USGS-TWRI book 4, chap. A2. 1968. 15 pages.

**Section B. Surface Water**

4-B1. *Low-flow investigations*, by H.C. Riggs: USGS-TWRI book 4, chap. B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS-TWRI book 4, chap. B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS-TWRI book 4, chap. B3. 1973. 15 pages.

**Section D. Interrelated Phases of the Hydrologic Cycle**

4-D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS-TWRI book 4, chap. D1. 1970. 17 pages.

**Book 5. Laboratory Analysis****Section A. Water Analysis**

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, chap. 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, chap. 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, chap. 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, chap. 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, chap. 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, chap. A6. 1982. 181 pages.

**Section C. Sediment Analysis**

5-C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS-TWRI book 5, chap. C1. 1969. 58 pages.

**Book 6. Modeling Techniques****Section A. Ground Water**

6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS-TWRI book 6, chap. 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, chap. 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, chap. 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, chap. 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, chap. A5. 1993. 243 pages.

## PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

- 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. 1996. 125 pages.

**Book 7. Automated Data Processing and Computations****Section C. Computer Programs**

- 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, chap. 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, chap. 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, chap. C3. 1981. 110 pages.

**Book 8. Instrumentation****Section A. Instruments for Measurement of Water Level**

- 8-A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS-TWRI book 8, chap. A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS-TWRI book 8, chap. A2. 1983. 57 pages.

**Section B. Instruments for Measurement of Discharge**

- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G.F. Smoot and C.E. Novak: USGS-TWRI book 8, chap. B2. 1968. 15 pages.

**Book 9. Handbooks for Water-Resources Investigations****Section A. National Field Manual for the Collection of Water-Quality Data**

- 9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T.

Iwatsubo: USGS-TWRI book 9, chap. A1. 1998. 47 p.

- 9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A2. 1998. 94 p.
- 9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A3. 1998. 75 p.
- 9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A4. 1999. 156 p.
- 9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A5. 1999. 149 p.
- 9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements*, edited by F.D. Wilde and D.B. Radtke: USGS-TWRI book 9, chap. A6. 1998. Various pages.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, edited by D.N. Myers and F.D. Wilde: USGS-TWRI book 9, chap. A7. 1997 and 1999. Various pages.
- 9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-material samples*, by D.B. Radtke: USGS-TWRI book 9, chap. A8. 1998. 48 pages.
- 9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS-TWRI book 9, chap. A9. 1998. 60 pages.





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



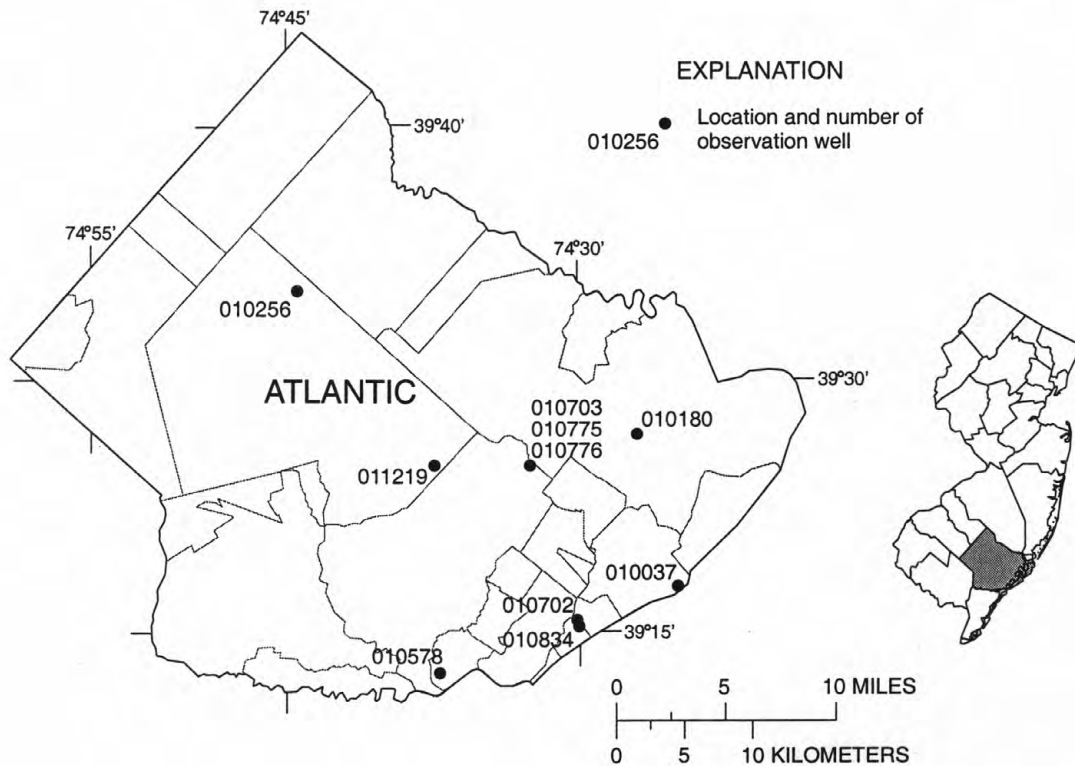
## WATER RESOURCES DATA - NEW JERSEY, 1999

## ATLANTIC COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
010037	GALEN HALL OBS	ATLANTIC CITY	842	KRKDL	DAILY
010180	OCEANVILLE 1 OBS	GALLOWAY TWP	570	KRKDL	DAILY
010256	SCHOLLER 1 OBS	HAMILTON TWP	275	CKKD	DAILY
010578	JOBS POINT OBS	SOMERS POINT CITY	680	KRKDL	DAILY
010702	BURK AVE TW OBS	MARGATE CITY	755	KRKDL	MANUAL
010703	FAA POMONA OBS	EGG HARBOR TWP	575	KRKDL	DAILY
010775	FAA INTERMEDIATE OBS	EGG HARBOR TWP	182	CKKD	MANUAL
010776	FAA SHALLOW OBS	EGG HARBOR TWP	93	CKKD	MANUAL
010834	MARGATE FIREHOUSE 1 OBS	MARGATE CITY	997	PNPN	DAILY
011219	HTMUA 9 OBS	HAMILTON TWP	742	PNPN	MANUAL

## Aquifer names

- CKKD - Kirkwood-Cohansey aquifer system
- KRKDL - Atlantic City 800-foot sand of the Kirkwood Formation
- PNPN - Piney Point aquifer





## GROUND-WATER LEVELS

21

## ATLANTIC COUNTY

NJ-WRD Well Number, 01-0037. Site I.D., 392153074250101. Local I.D., Galen Hall Obs. NJ Permit number, 56-00071.

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.

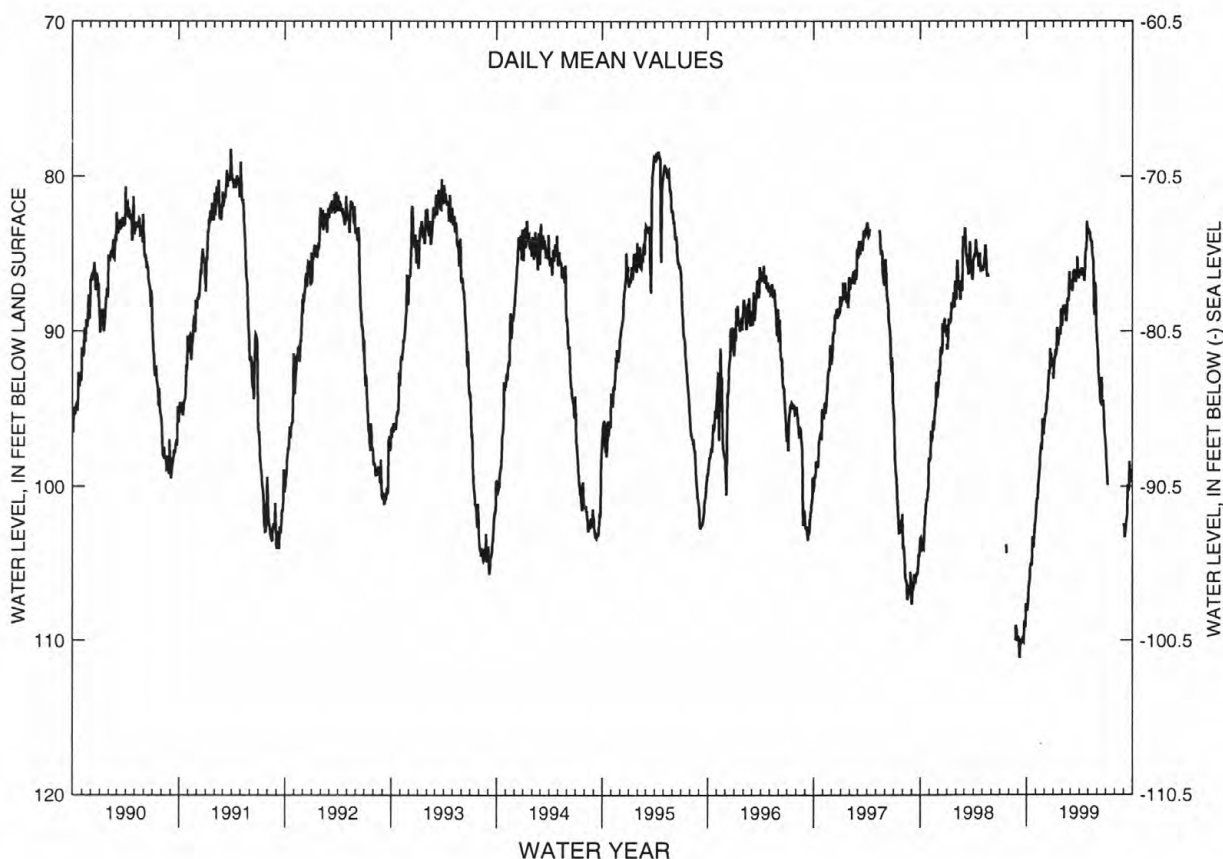
PERIOD OF RECORD.--Jan. 1949 to current year. Records for 1949 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.58 ft below land surface, Mar. 7, 1962; lowest, 111.34 ft below land surface, Sept. 7, 1998.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	107.90	101.09	95.35	92.06	88.38	87.21	86.32	83.53	91.49	98.57	---	102.73
10	106.18	100.19	94.52	91.29	88.41	86.66	85.93	84.08	93.29	---	---	102.54
15	105.07	98.95	93.33	89.78	89.37	86.02	86.07	84.48	94.63	---	---	101.36
20	104.85	97.43	92.70	90.55	87.91	86.61	86.57	85.57	94.56	---	---	100.19
25	103.98	95.87	91.54	90.25	86.32	85.21	84.78	88.61	95.01	---	---	99.44
EOM	102.37	96.31	92.14	89.61	87.28	86.59	83.40	89.87	96.86	---	---	99.32
MEAN	105.29	98.83	93.47	90.78	88.29	86.54	85.65	85.60	93.81	---	---	100.99
WTR YR 1999	MEAN 93.08	HIGH 82.91	APR 28	LOW 108.09	OCT 4							

## NJ-WRD WELL NO. 01-0037



## GROUND-WATER LEVELS

## ATLANTIC COUNTY

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

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.

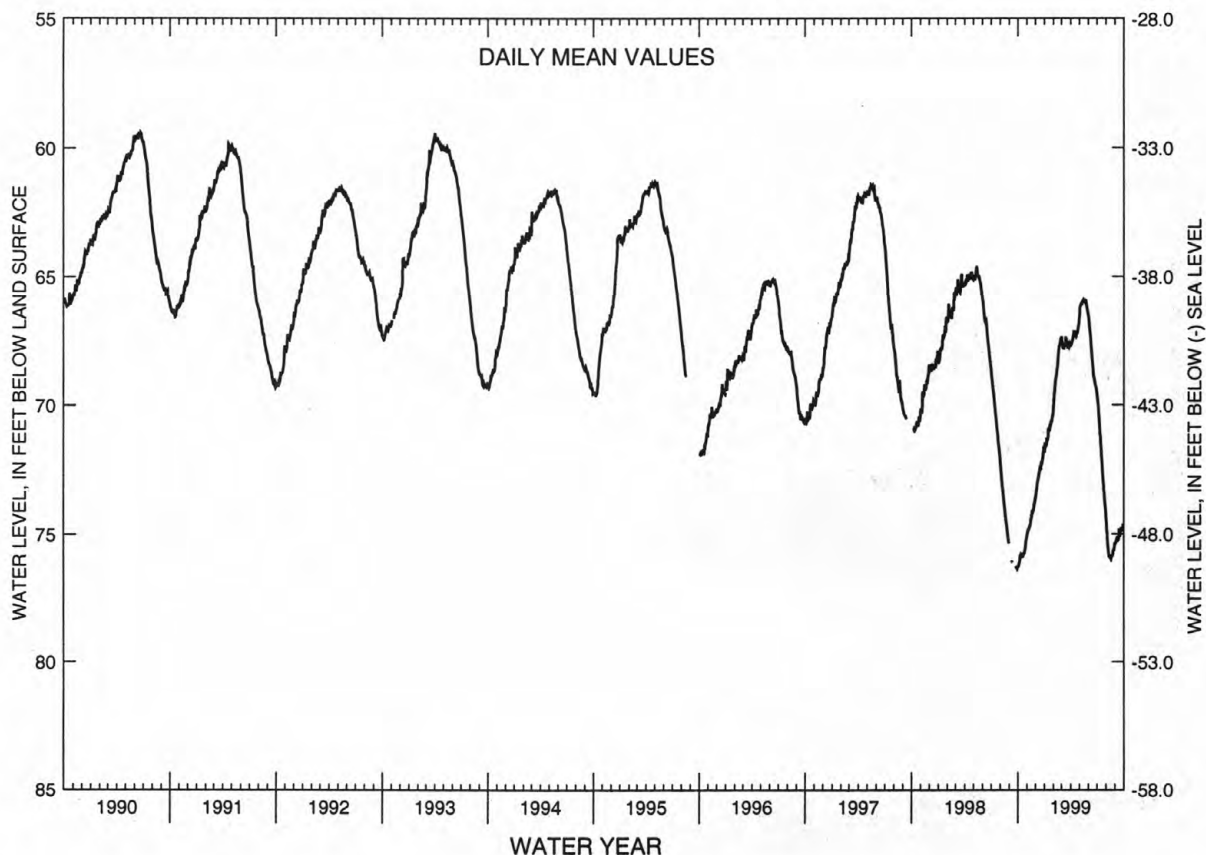
PERIOD OF RECORD.--Oct. 1959 to current year. Records for 1975 to 1981 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 33.62 ft below land surface, Apr. 13, 1961; lowest, 76.38 ft below land surface, Sept. 29, 1998.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	76.13	74.86	73.29	71.64	69.51	67.81	67.60	66.12	66.95	69.94	74.96	75.30
10	75.82	74.78	72.89	71.39	68.94	67.70	67.32	66.03	67.55	70.71	75.70	75.10
15	75.82	74.45	72.60	70.89	68.45	67.35	67.23	65.93	68.28	71.60	75.84	75.18
20	75.82	74.15	72.39	70.89	67.77	67.72	67.27	65.94	68.97	72.50	75.94	75.00
25	75.65	74.05	72.16	70.64	67.46	67.71	67.19	66.07	69.19	73.31	75.81	74.85
EOM	75.17	73.66	71.77	70.31	67.39	67.72	66.76	66.44	69.46	74.10	75.44	74.61
MEAN	75.81	74.44	72.59	71.07	68.50	67.65	67.29	66.10	68.18	71.79	75.55	75.06
WTR YR 1999	MEAN 71.20 HIGH 65.87 MAY 19 LOW 76.27 OCT 2											

## NJ-WRD WELL NO. 01-0180



## ATLANTIC COUNTY

NJ-WRD Well Number, 01-0256. Site I.D., 393333074442401. Local I.D., Scholler 1 Obs. NJ Permit number, 32-00173.

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.

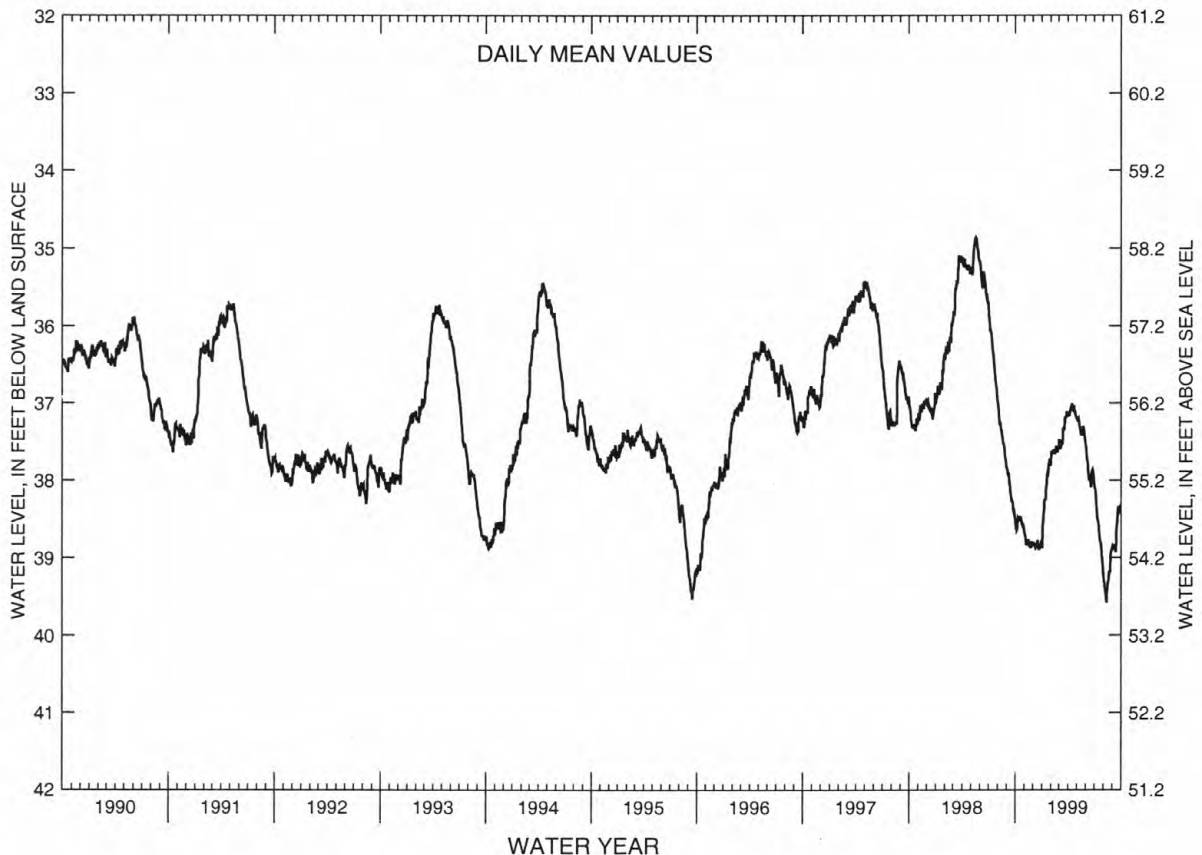
PERIOD OF RECORD.--Apr. 1962 to current year. Records for 1962 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.18 ft below land surface, Mar. 20, 1963; lowest, 39.61 ft below land surface, Aug. 13, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	38.61	38.74	38.84	38.54	37.66	37.60	37.16	37.21	37.70	38.12	39.32	38.85
10	38.49	38.84	38.87	38.27	37.64	37.49	37.09	37.25	37.89	38.38	39.49	38.83
15	38.49	38.76	38.83	38.09	37.65	37.33	37.05	37.39	37.95	38.54	39.39	38.91
20	38.49	38.80	38.87	37.92	37.57	37.35	37.09	37.39	38.08	38.76	39.28	38.45
25	38.56	38.87	38.87	37.79	37.59	37.17	37.13	37.32	37.86	38.86	39.18	38.35
EOM	38.64	38.82	38.83	37.81	37.52	37.17	37.19	37.49	38.01	39.13	38.90	38.31
MEAN	38.55	38.80	38.84	38.13	37.62	37.37	37.11	37.33	37.86	38.58	39.26	38.65
WTR YR 1999	MEAN 38.18 HIGH 37.01 APR 16 LOW 39.58 AUG 13											

## NJ-WRD WELL NO. 01-0256



## GROUND-WATER LEVELS

## ATLANTIC COUNTY

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

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.

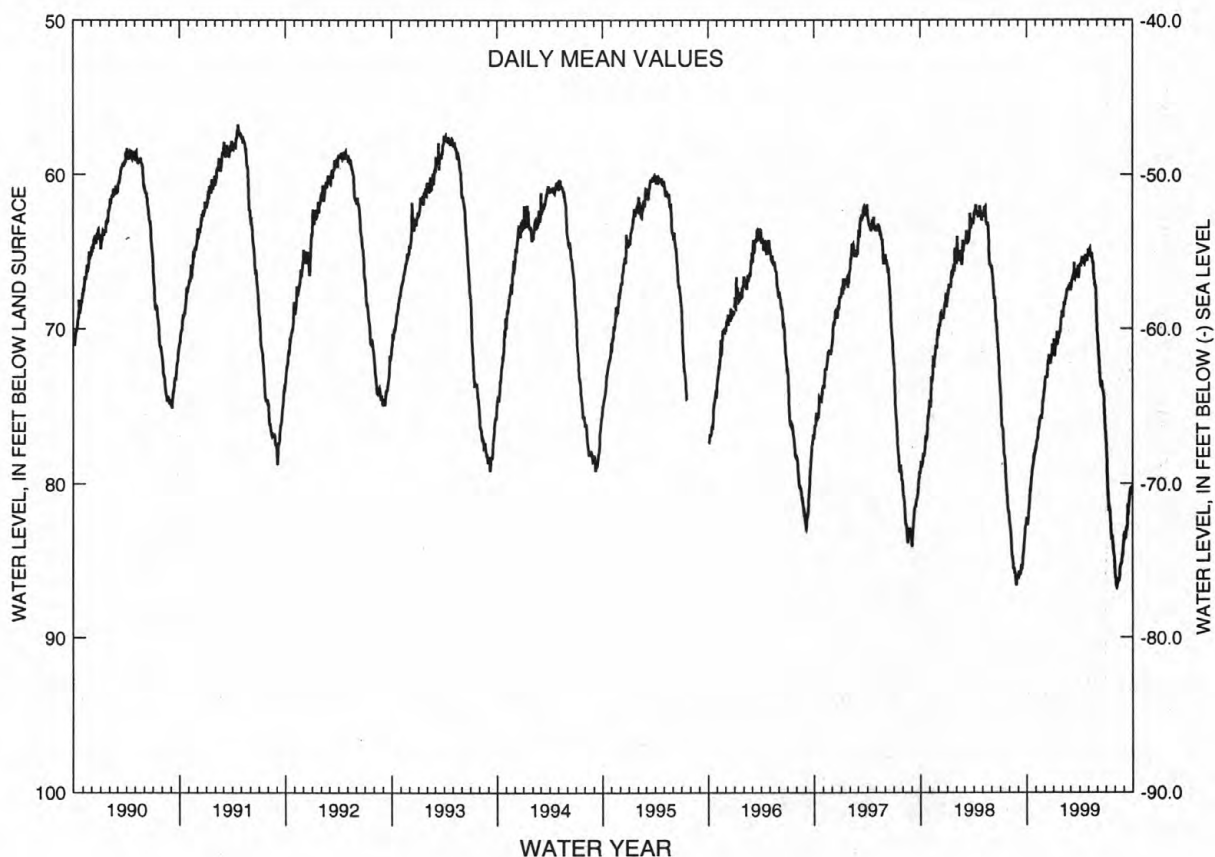
PERIOD OF RECORD.--Oct. 1959 to current year. Records for 1975 to 1980 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.10 ft below land surface, Apr. 13, 1961; lowest, 87.54 ft below land surface, Aug. 8, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	82.69	77.30	73.17	71.78	69.28	67.39	65.80	65.13	70.94	78.30	86.20	83.11
10	81.48	76.51	73.13	70.96	68.42	66.54	65.52	65.17	72.53	80.83	86.40	82.92
15	80.38	75.93	72.22	70.40	67.84	65.73	65.46	65.27	73.75	81.65	86.21	82.29
20	79.25	75.59	72.00	70.64	67.44	66.36	65.69	65.78	73.90	83.22	85.42	81.20
25	78.50	74.96	71.88	70.28	67.19	66.58	65.37	67.20	74.39	83.67	85.12	80.39
EOM	77.92	73.92	71.64	68.96	67.05	66.52	65.30	69.09	76.56	84.86	83.88	80.16
MEAN	80.21	76.06	72.41	70.62	68.01	66.62	65.62	65.98	73.19	81.66	85.68	82.01
WTR YR 1999 MEAN 74.05 HIGH 64.83 MAY 8 LOW 86.72 AUG 8												

NJ-WRD WELL NO. 01-0578





## GROUND-WATER LEVELS

25

## ATLANTIC COUNTY

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

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.

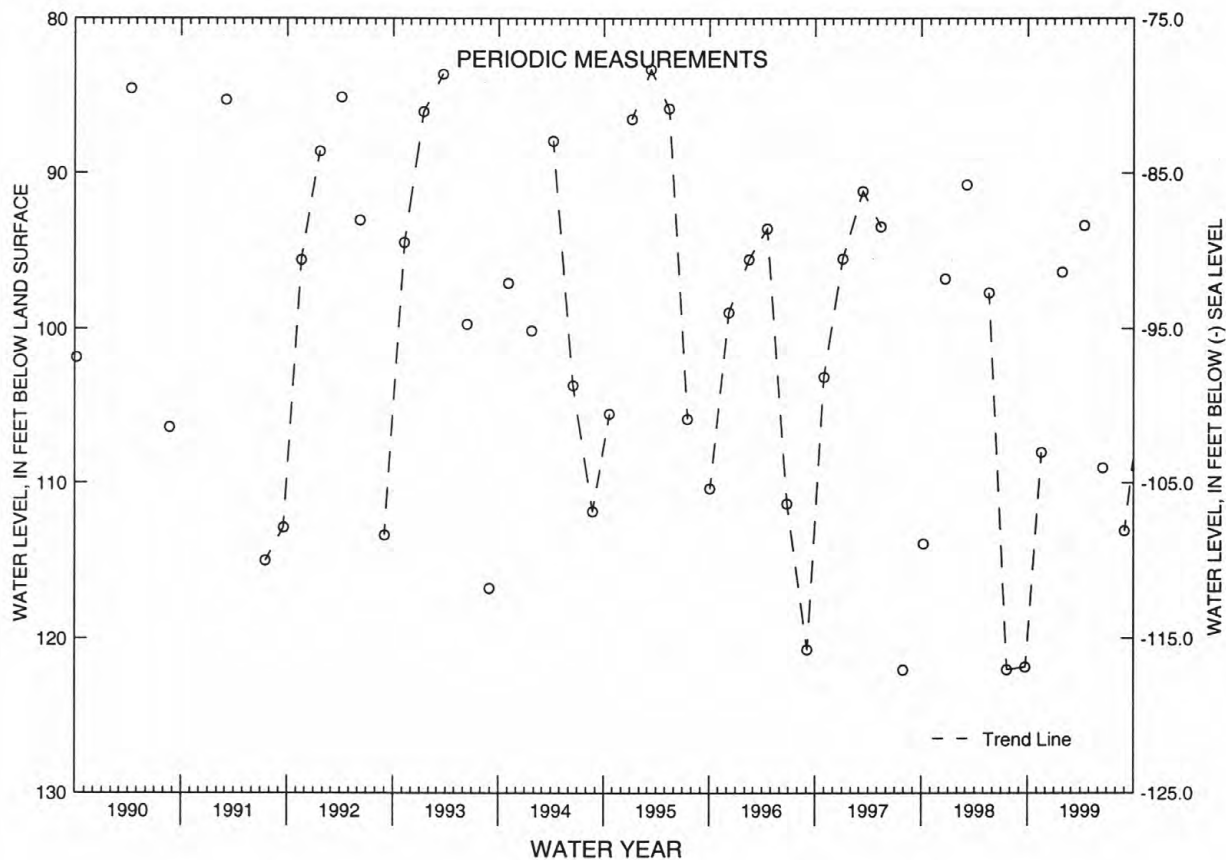
PERIOD OF RECORD.--October 1985 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
Nov 17	108.04	Apr 14	93.38	Sep 1	113.10
Jan 28	96.38	Jun 17	109.04		

## NJ-WRD WELL NO. 01-0702



## GROUND-WATER LEVELS

## ATLANTIC COUNTY

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

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.

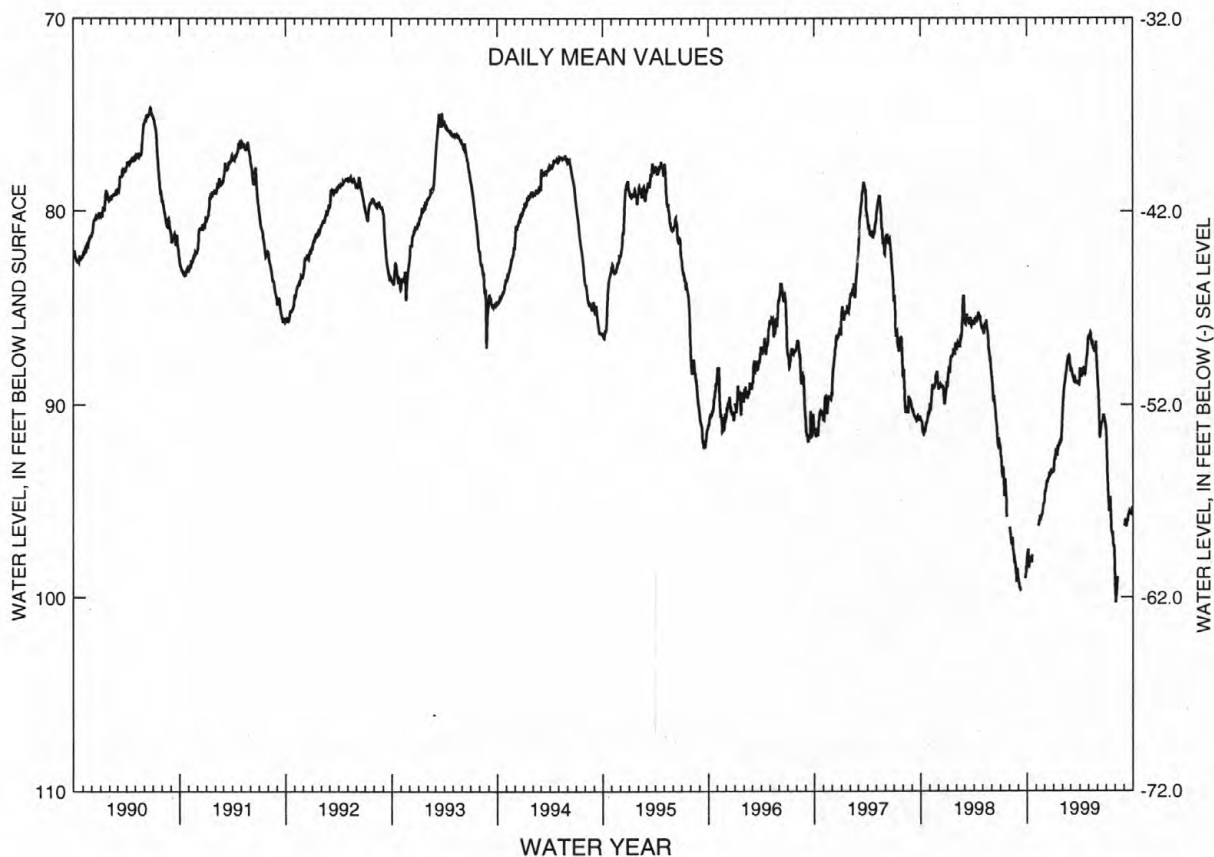
PERIOD OF RECORD.--Oct. 1985 to current year. Records for 1985 to 1986 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.74 ft below land surface, Mar. 18, 1986; lowest, 100.34 ft below land surface, Aug. 4, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	97.56	---	94.36	92.80	89.52	88.21	88.49	86.52	89.24	92.76	99.96	96.06
10	98.15	96.25	93.95	92.30	88.78	88.60	88.49	86.28	91.73	94.97	98.93	96.23
15	97.89	95.87	93.85	92.25	88.23	88.61	88.22	86.69	91.05	94.79	---	96.05
20	---	95.71	93.66	92.11	87.58	88.90	88.28	86.99	90.86	96.58	---	95.54
25	---	95.37	93.52	91.84	87.45	88.83	87.76	87.08	90.62	96.88	---	95.72
EOM	---	95.07	93.57	90.97	87.94	88.95	86.79	87.78	91.21	98.37	---	95.31
MEAN	---	95.70	93.86	92.27	88.47	88.64	88.14	86.82	90.50	95.29	---	95.86
WTR YR 1999	MEAN 92.10	HIGH 86.24	MAY 9	LOW 100.28	AUG 4							

NJ-WRD WELL NO. 01-0703



## GROUND-WATER LEVELS

27

## ATLANTIC COUNTY

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

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.

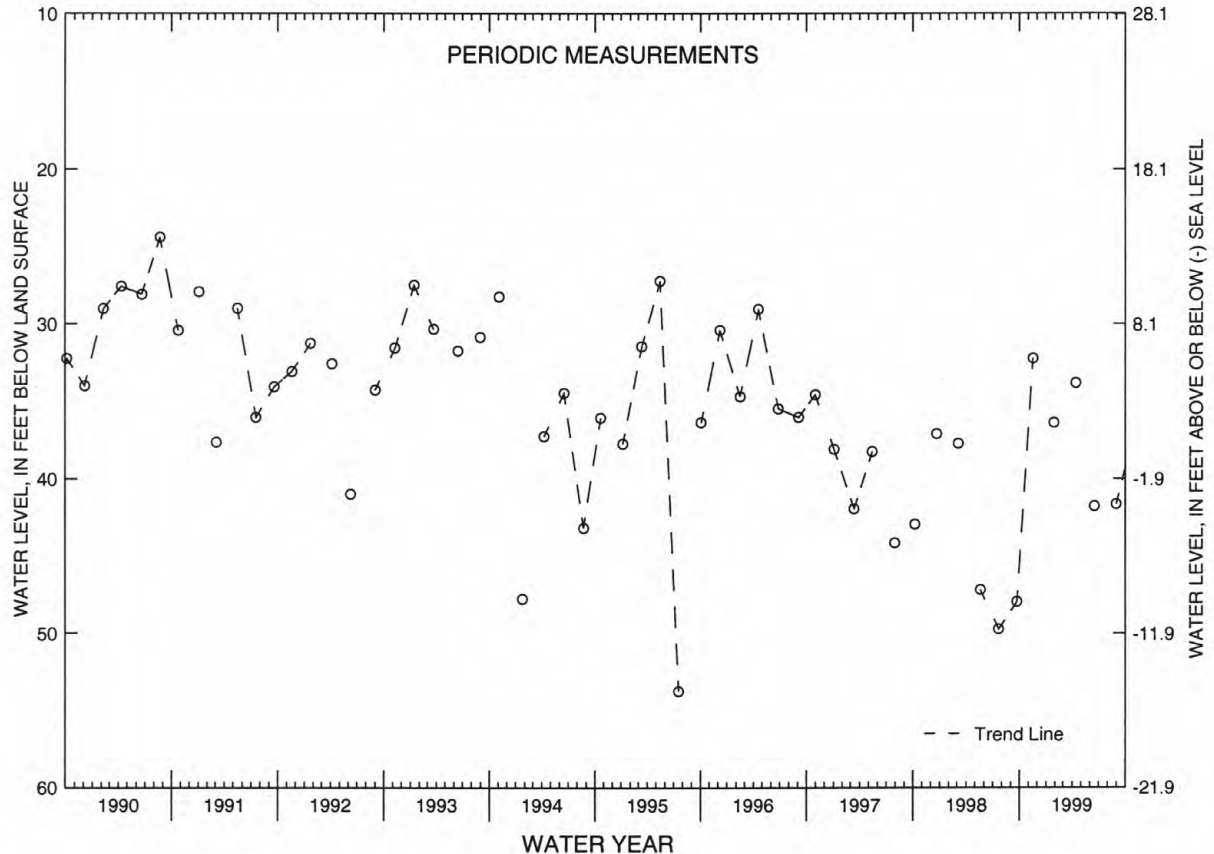
PERIOD OF RECORD.--May 1985 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
Nov 17	32.23	Apr 14	33.81	Sep 1	41.65
Jan 28	36.38	Jun 17	41.78		

## NJ-WRD WELL NO. 01-0775



## GROUND-WATER LEVELS

## ATLANTIC COUNTY

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

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.

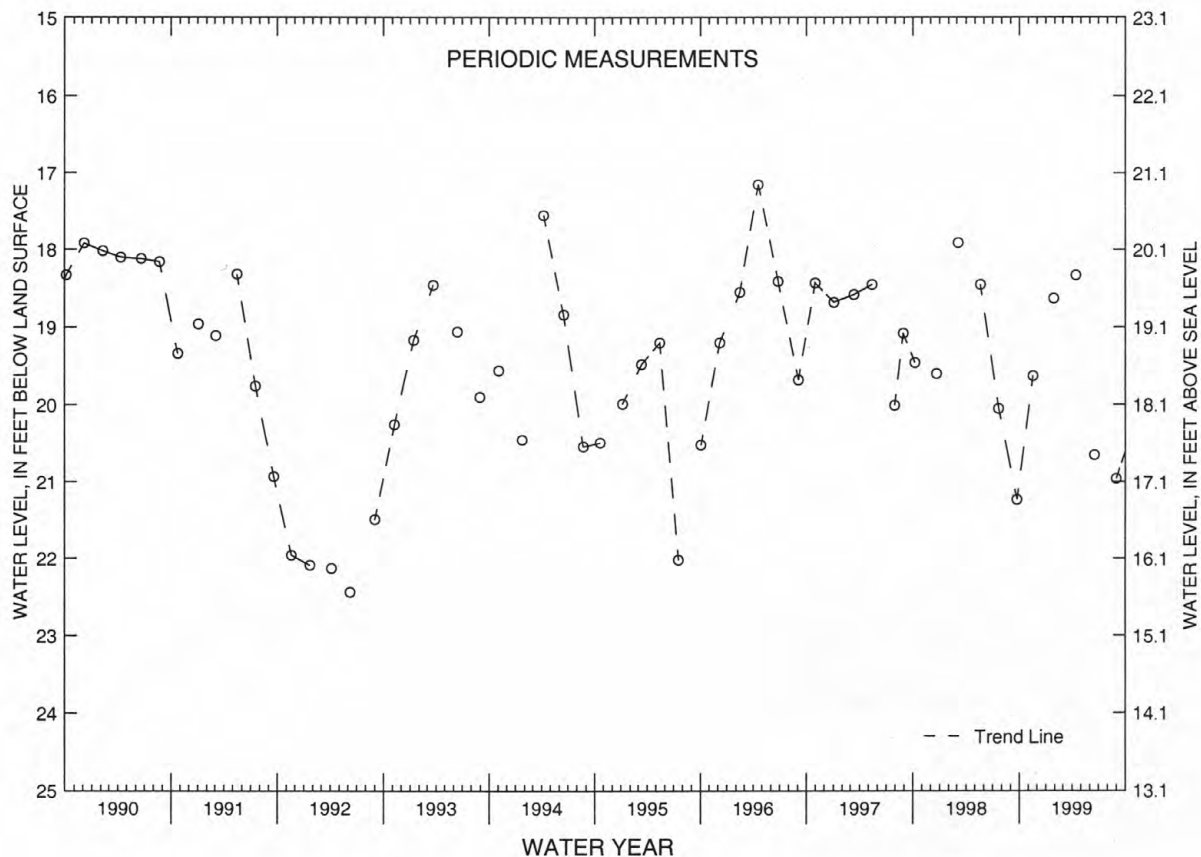
PERIOD OF RECORD.--May 1985 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
Nov 17	19.63	Apr 14	18.33	Sep 1	20.96
Jan 28	18.63	Jun 17	20.65		

## NJ-WRD WELL NO. 01-0776





## GROUND-WATER LEVELS

29

## ATLANTIC COUNTY

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

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.

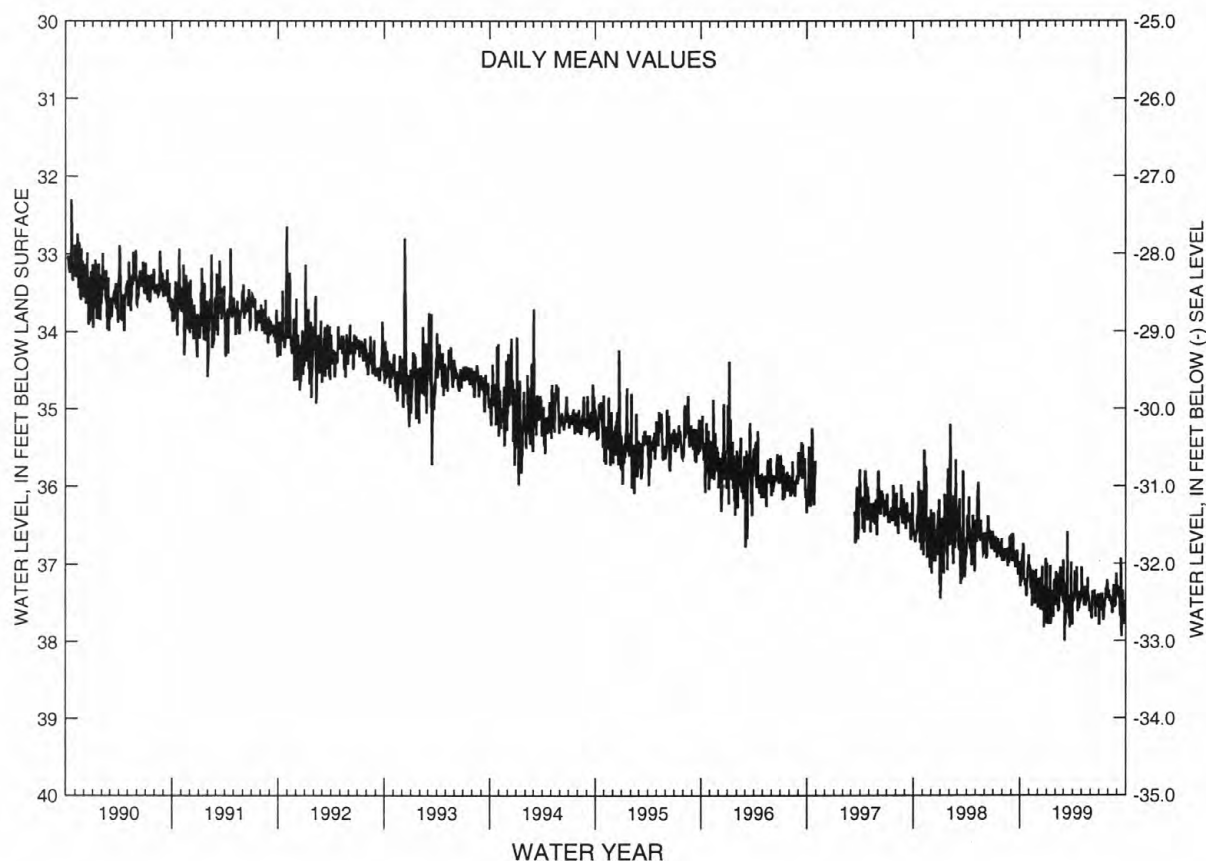
PERIOD OF RECORD.--May 1988 to current year. Records for 1988 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.05 ft below land surface, June 2, 1988; lowest, 38.52 ft below land surface, Jan. 2, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	37.22	37.07	37.34	37.75	37.45	38.00	37.49	37.38	37.68	37.48	37.34	37.28
10	36.87	37.27	37.46	37.45	37.59	37.29	37.09	37.47	37.35	37.38	37.44	37.30
15	37.02	37.08	37.43	37.02	37.44	36.59	37.22	37.48	37.48	37.60	37.53	37.55
20	37.26	37.10	37.49	37.60	37.06	37.71	37.50	37.43	37.69	37.52	37.40	37.55
25	37.38	37.41	37.54	37.66	37.12	37.55	37.58	37.36	37.49	37.38	37.52	37.69
EOM	37.04	37.22	37.55	37.50	37.03	37.79	37.43	37.58	37.50	37.27	37.12	37.48
MEAN	37.13	37.25	37.38	37.50	37.30	37.45	37.40	37.41	37.52	37.49	37.45	37.51
WTR YR 1999	MEAN 37.40 HIGH 36.59 MAR 15 LOW 38.00 MAR 5											

## NJ-WRD WELL NO. 01-0834



## GROUND-WATER LEVELS

## ATLANTIC COUNTY

NJ-WRD Well Number, 01-1219. Site I.D., 392640074372401. Local I.D., HTMUA 9 Obs. NJ Permit Number, 36-16546.

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.

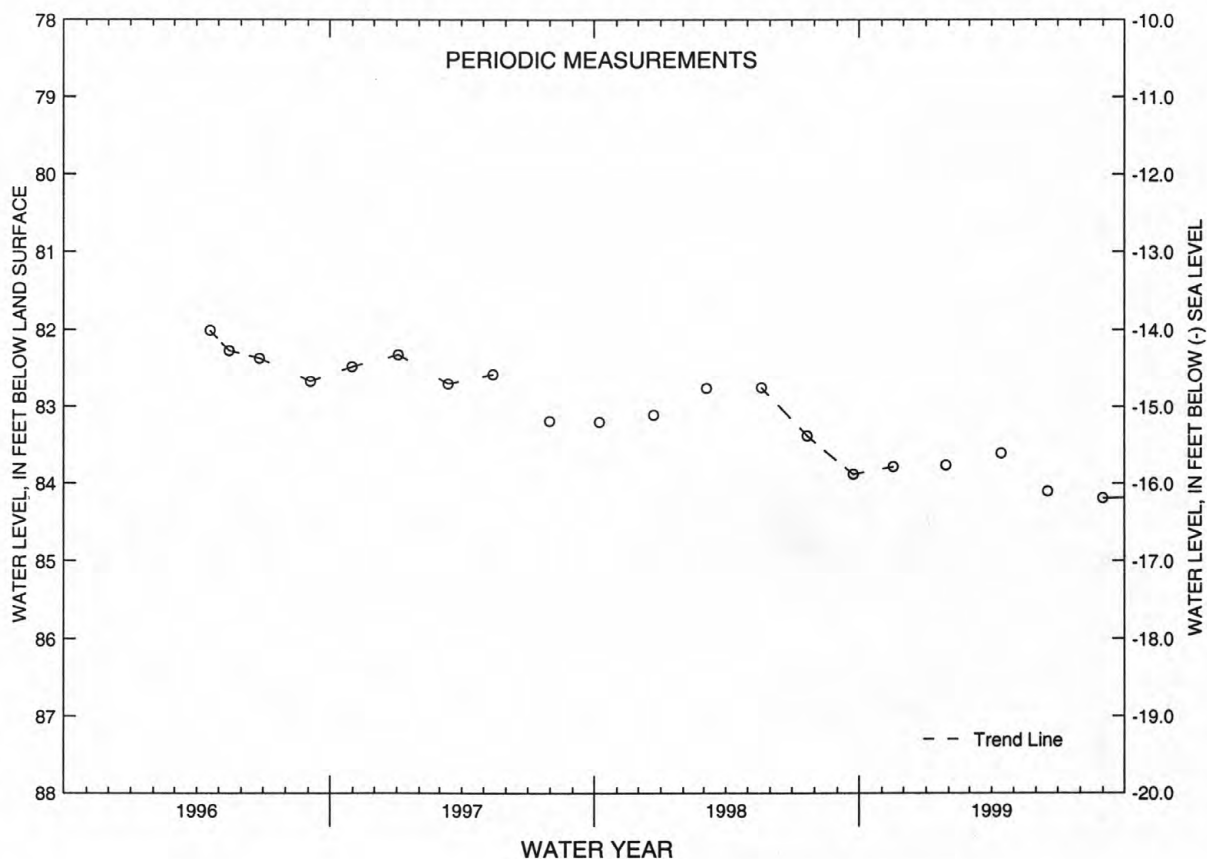
PERIOD OF RECORD.--April 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 82.01 ft below land surface, Apr. 19, 1996; lowest, 84.19 ft below land surface, Sept. 1, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
Nov 17	83.78	Apr 14	83.60	Sep 1	84.19
Jan 28	83.76	Jun 17	84.10		

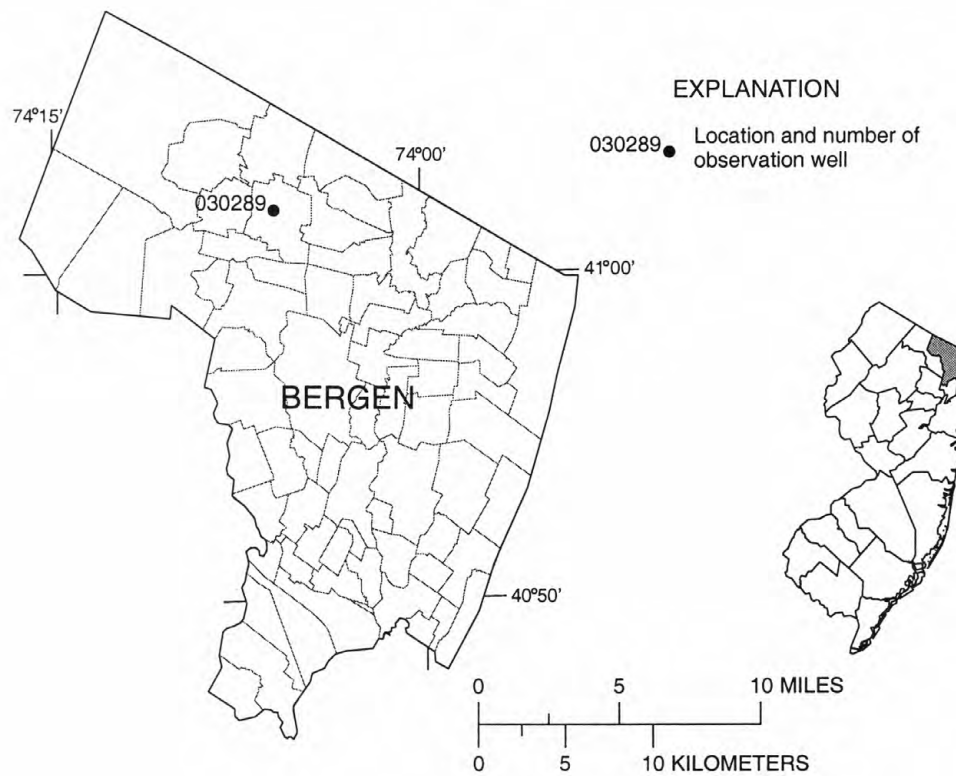
## NJ-WRD WELL NO. 01-1219



## BERGEN COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
030289	SADDLE RIVER 17 OBS	SADDLE RIVER BORO	175	PSSC	MANUAL

Aquifer names  
PSSC - Passaic Formation



## GROUND-WATER LEVELS

## BERGEN COUNTY

NJ-WRD Well Number, 03-0289. Site I.D., 410155074060201. Local I.D., Saddle River 17 Obs. NJ Permit Number, 23-09532-6.

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.

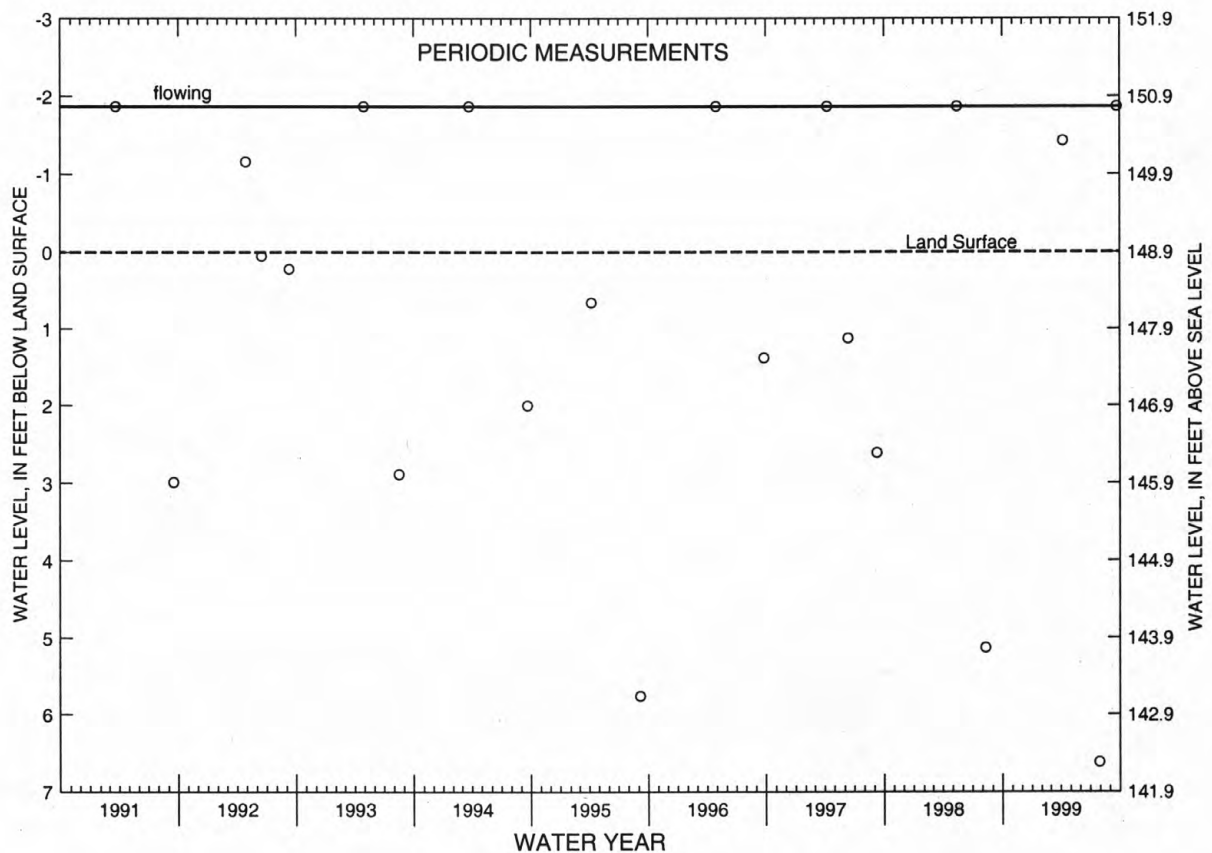
PERIOD OF RECORD.--Mar. 1991 to current year

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, May 15, 1998, Sept. 23, 1999; lowest, 6.62 ft below land surface, July 29, 1999.

WATER LEVEL, IN FEET ABOVE (-) OR BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 8	-1.43	JUL 29	6.62	SEP 23	-1.87

NJ-WRD WELL NO. 03-0289



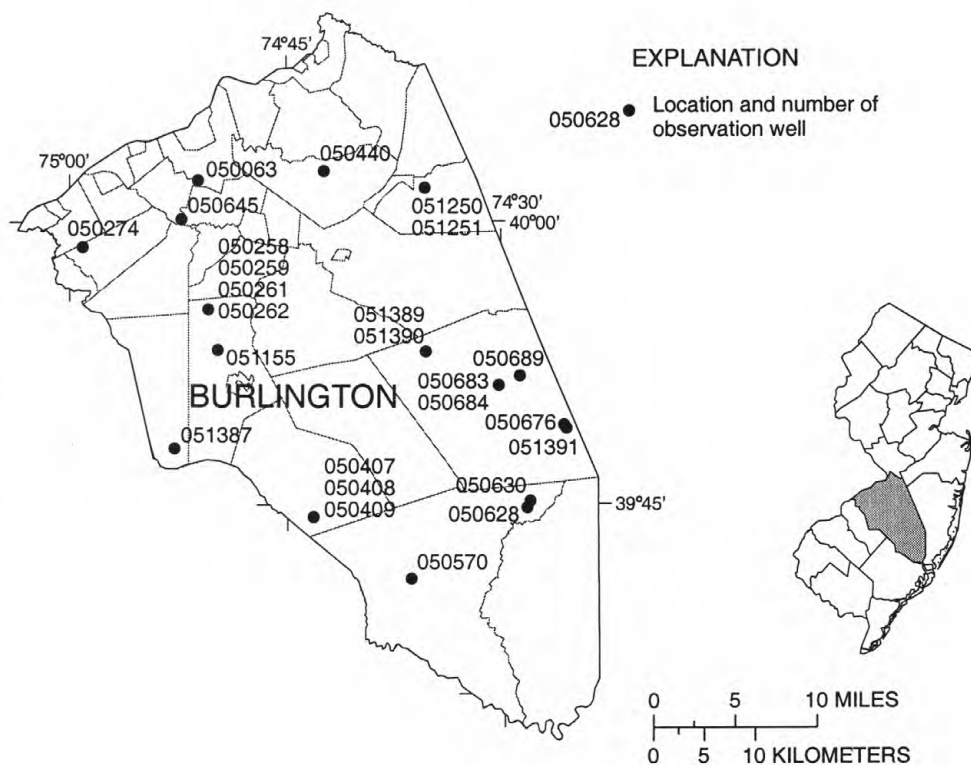


## BURLINGTON COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
050063	WILLINGBORO 1 OBS	BURLINGTON TWP	294	MRPAM	MANUAL
050258	MEDFORD 1 OBS	MEDFORD TWP	410	MRPAU	DAILY
050259	MEDFORD 2 OBS	MEDFORD TWP	263	EGLS	MANUAL
050261	MEDFORD 5 OBS	MEDFORD TWP	750	MRPAM	DAILY
050262	MEDFORD 4 OBS	MEDFORD TWP	1140	MRPAL	DAILY
050274	CAMPBELL 1 OBS	MOORESTOWN TWP	268	MRPAL	MANUAL
050407	ATSION 1 OBS	SHAMONG TWP	260	PNPN	MANUAL
050408	ATSION 2 OBS	SHAMONG TWP	65	CKKD	MANUAL
050409	ATSION 3 OBS	SHAMONG TWP	17	CKKD	MANUAL
050440	RHODIA 1 OBS	SPRINGFIELD TWP	615	MRPAM	MAXMIN
050570	MOUNT OBS	WASHINGTON TWP	25	CKKD	MANUAL
050628	PENN SF SHALLOW OBS	WASHINGTON TWP	12	CKKD	MANUAL
050630	PENN SF DEEP OBS	WASHINGTON TWP	41	CKKD	MANUAL
050645	WILLINGBORO 2 OBS	WILLINGBORO TWP	441	MRPAL	DAILY
050676	COYLE AIRPORT OBS	WOODLAND TWP	540	PNPN	MANUAL
050683	BUTLER PLACE 1 OBS	WOODLAND TWP	2120	MRPA	DAILY
050684	BUTLER PLACE 2 OBS	WOODLAND TWP	170	CKKD	MAXMIN
050689	LEBANON SF 23-D OBS	WOODLAND TWP	33	CKKD	DAILY
051155	MEDFORD TWP MW-1 OBS	MEDFORD TWP	180	MLRW	DAILY
051250	MCGUIRE 08-MW-52 OBS	NEW HANOVER TWP	55	VNCN	DAILY
051251	MCGUIRE 08-MW-102 OBS	NEW HANOVER TWP	20	CKKD	DAILY
051387	EVESHAM 4 OBS	EVESHAM TWP	355	MLRW	DAILY
051389	NEW LISBON 1 OBS	WOODLAND TWP	920	MRPAU	DAILY
051390	NEW LISBON 2 OBS	WOODLAND TWP	635	EGLS	DAILY
051391	COYLE 2 OBS (OW 96)	WOODLAND TWP	1440	MRPAU	DAILY

## Aquifer names

- CKKD - Kirkwood-Cohansey aquifer system
- EGLS - Englishtown aquifer system
- MLRW - Wenonah-Mount Laurel aquifer
- MRPA - Potomac-Raritan-Magothy aquifer
- MRPAL - Lower Potomac-Raritan-Magothy aquifer
- MRPAM - Middle Potomac-Raritan-Magothy aquifer
- MRPAU - Upper Potomac-Raritan-Magothy aquifer
- PNPN - Piney Point aquifer
- VNCN - Vincentown aquifer



## GROUND-WATER LEVELS

## BURLINGTON COUNTY

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

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.

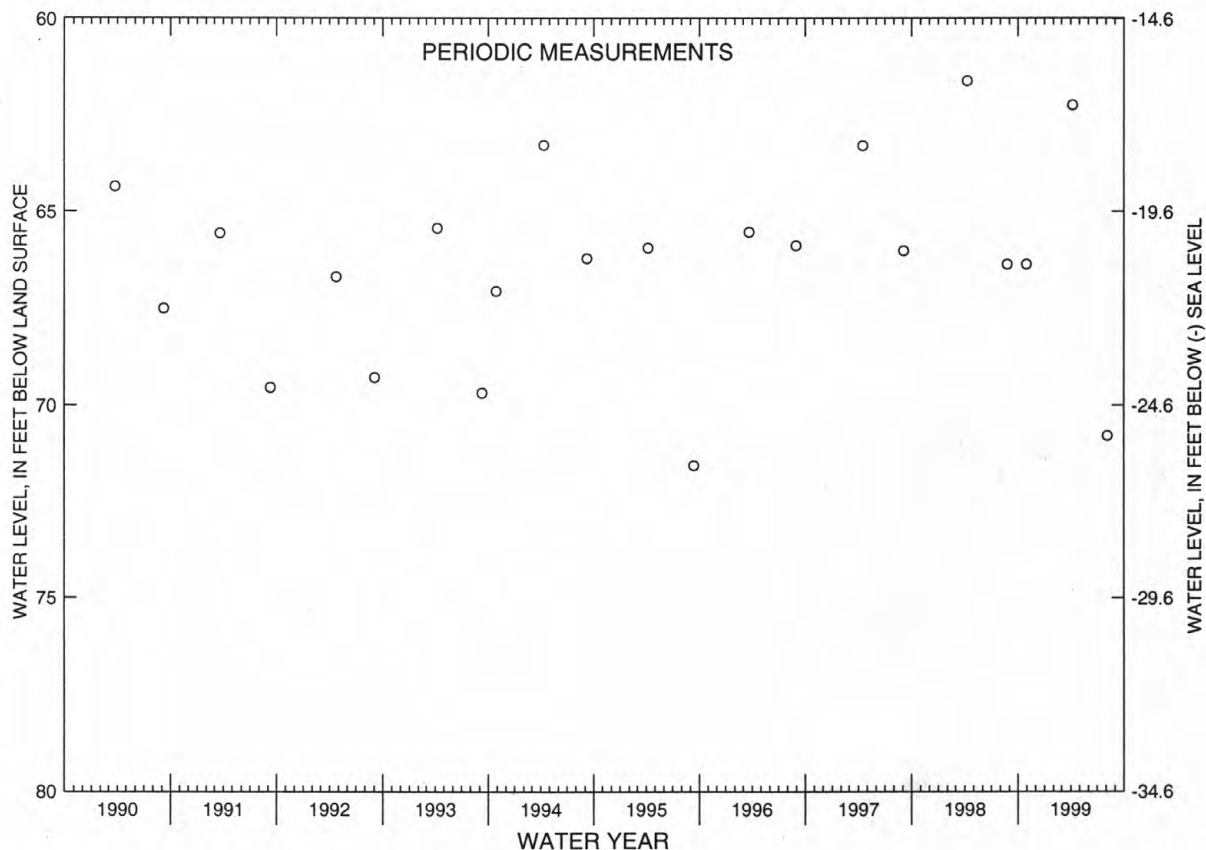
PERIOD OF RECORD.--Mar. 1966 to current year. Records for 1966 to 1975 and 1988 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 30	66.37	APR 7	62.23	AUG 6	70.80

## NJ-WRD WELL NO. 05-0063



## GROUND-WATER LEVELS

35

## BURLINGTON COUNTY

NJ-WRD Well Number, 05-0258. Site I.D., 395524074502501. Local I.D., Medford 1 Obs. NJ Permit number, 31-04627.

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.

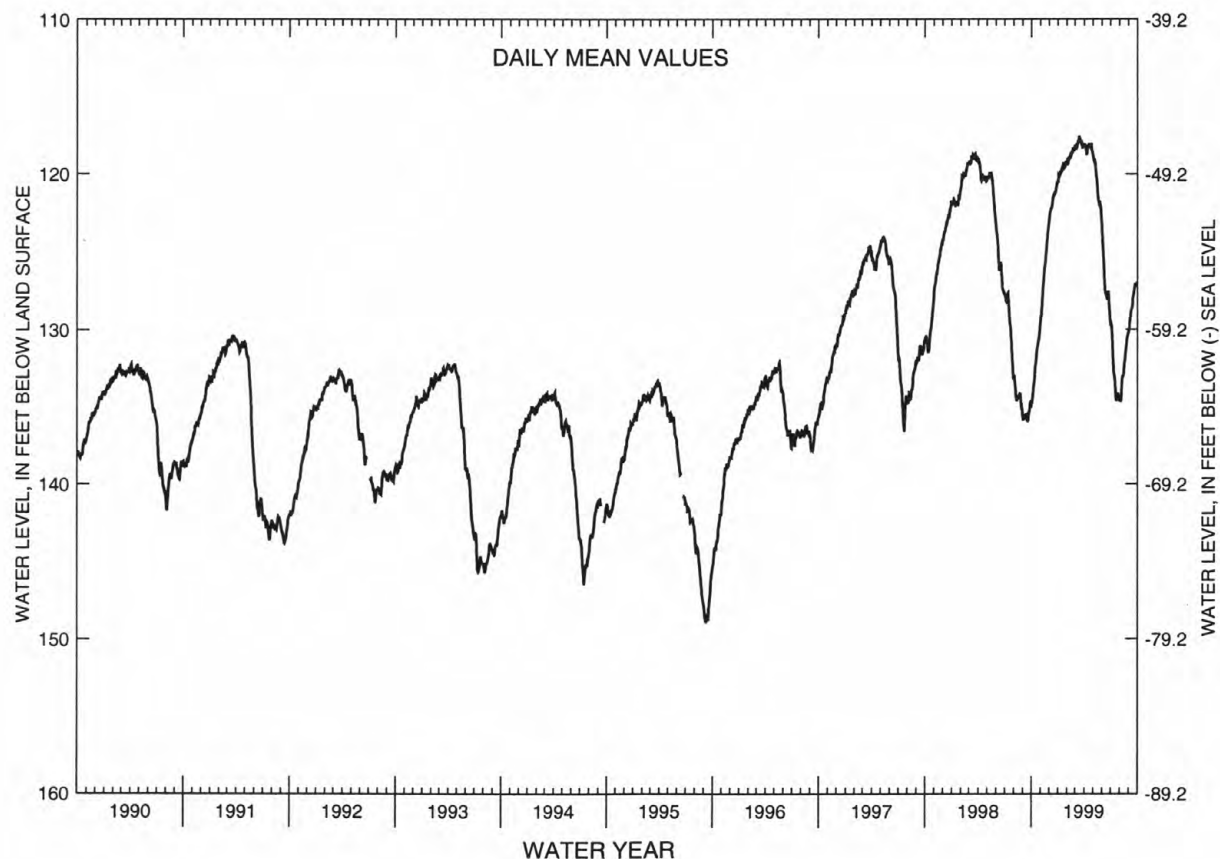
PERIOD OF RECORD.--Oct. 1963 to current year. Records for 1963 to 1975 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	134.37	128.75	122.35	120.18	119.20	118.43	118.21	119.16	124.80	129.85	134.67	129.60
10	133.46	127.30	122.12	119.86	119.01	117.99	118.71	119.40	126.82	131.89	133.25	128.80
15	132.28	126.01	121.53	119.58	118.80	117.55	118.22	120.50	127.72	133.12	132.86	128.51
20	131.28	125.10	121.14	119.63	118.56	118.00	118.17	121.66	128.10	134.62	131.93	127.59
25	130.66	124.07	121.02	119.32	118.42	118.15	118.11	121.97	128.02	134.21	131.04	127.01
EOM	129.68	123.02	120.59	119.37	118.20	118.18	118.61	123.04	129.40	134.63	130.19	126.96
MEAN	132.26	126.15	121.57	119.72	118.76	118.04	118.29	120.71	127.01	132.74	132.50	128.31
WTR YR 1999	MEAN 124.72	HIGH 117.55	MAR 15	LOW 134.77	OCT 1							

## NJ-WRD WELL NO. 05-0258



## GROUND-WATER LEVELS

## BURLINGTON COUNTY

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

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.

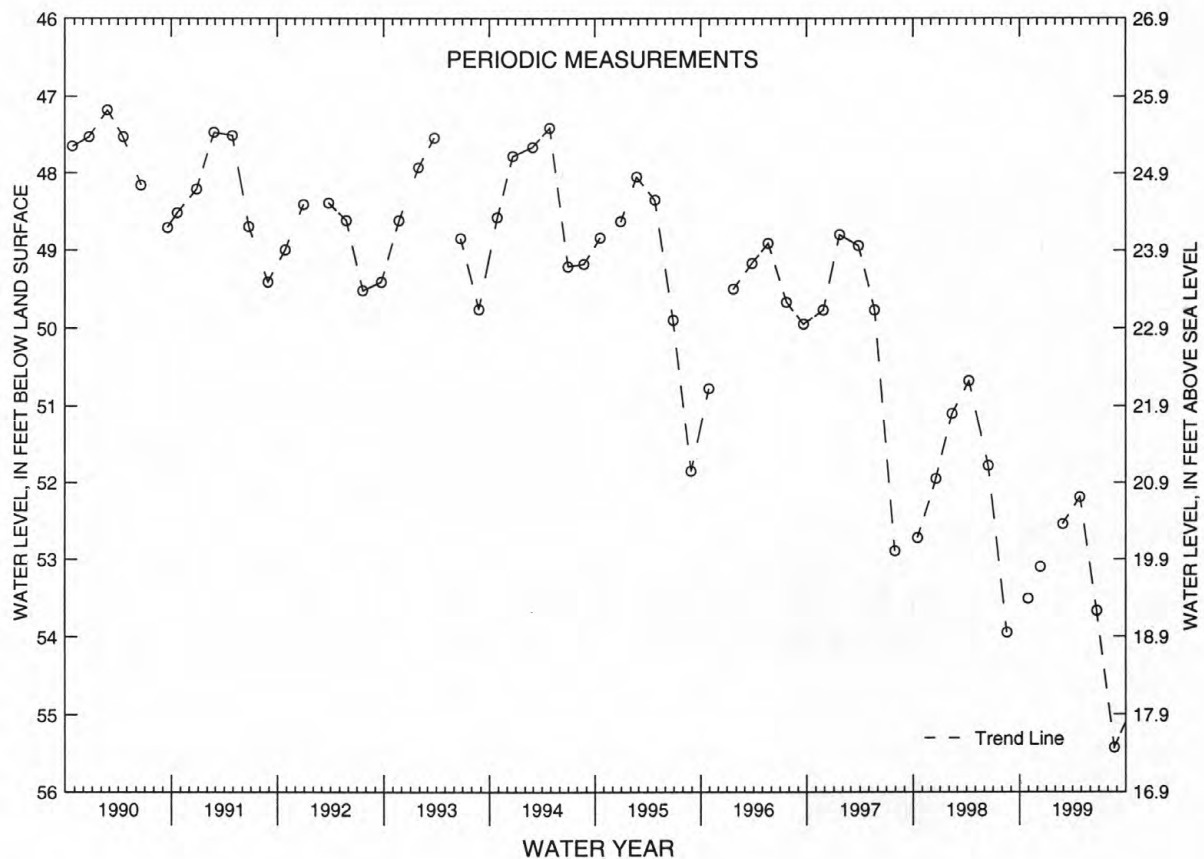
PERIOD OF RECORD.--Oct. 1963 to Aug. 1975, Feb. 1977 to current year. Records for 1963 to 1975 and 1987 to 1989 are unpublished and are available in files of the New Jersey District office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 30	53.51	FEB 26	52.54	JUN 24	53.67
DEC 11	53.10	APR 27	52.19	AUG 24	55.43

NJ-WRD WELL NO. 05-0259





## GROUND-WATER LEVELS

37

## BURLINGTON COUNTY

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

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.

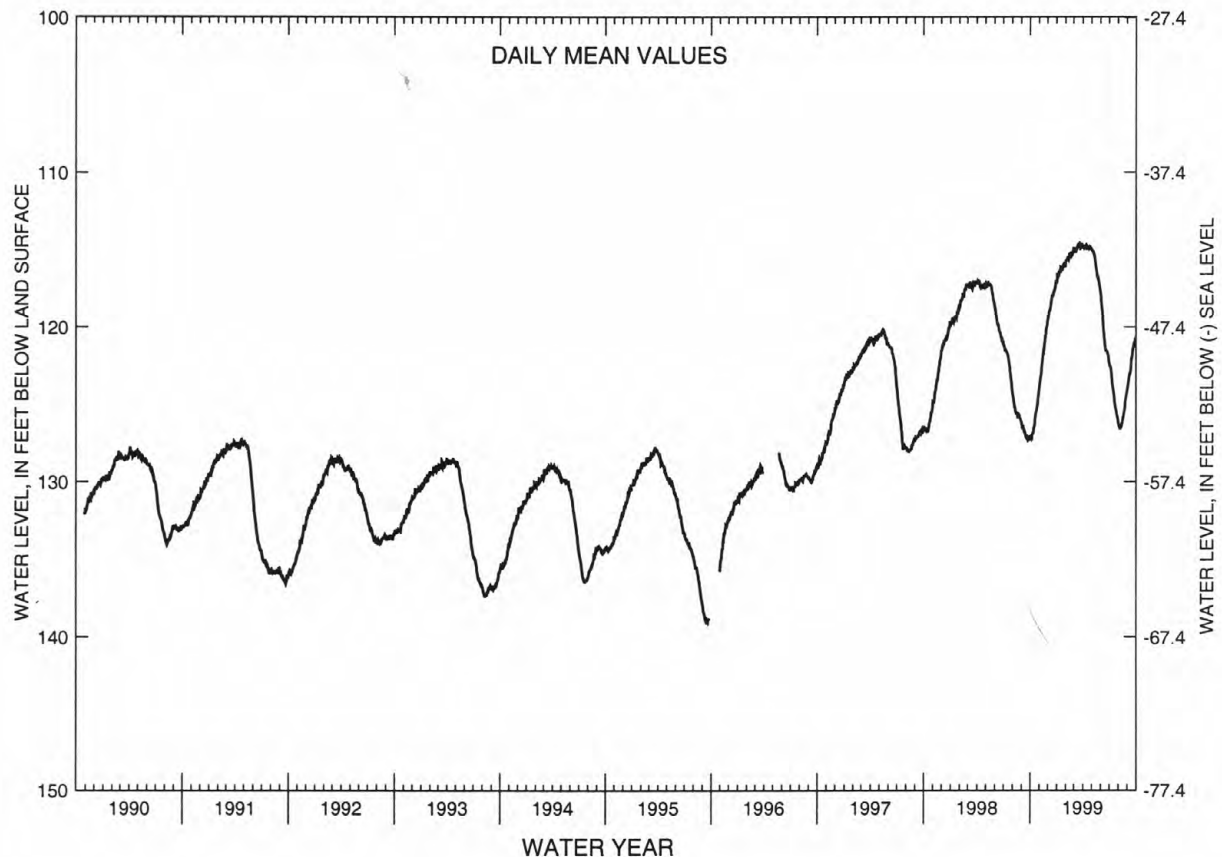
PERIOD OF RECORD.--Jan. 1968 to current year. Records for 1968 to 1977 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	127.26	123.46	119.19	116.78	115.72	115.20	114.87	115.09	118.51	122.54	126.40	123.73
10	126.88	122.75	118.79	116.46	115.57	114.88	114.89	115.28	119.66	123.04	126.56	123.04
15	126.48	121.76	118.21	116.18	115.49	114.61	114.87	115.89	120.79	124.03	126.24	122.64
20	125.70	121.07	117.94	116.16	115.17	114.83	114.87	116.57	121.53	124.81	125.74	121.73
25	125.17	120.46	117.63	115.94	115.18	114.71	114.90	116.89	121.62	125.39	125.18	121.13
EOM	124.29	119.73	117.10	116.11	114.91	114.80	114.95	117.57	122.13	125.98	124.34	120.69
MEAN	126.14	121.86	118.23	116.32	115.42	114.83	114.85	116.06	120.38	124.12	125.82	122.40
WTR YR 1999	MEAN 119.74	HIGH 114.55	MAR 22	LOW 127.28	OCT 3							

## NJ-WRD WELL NO. 05-0261



## GROUND-WATER LEVELS

## BURLINGTON COUNTY

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

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.

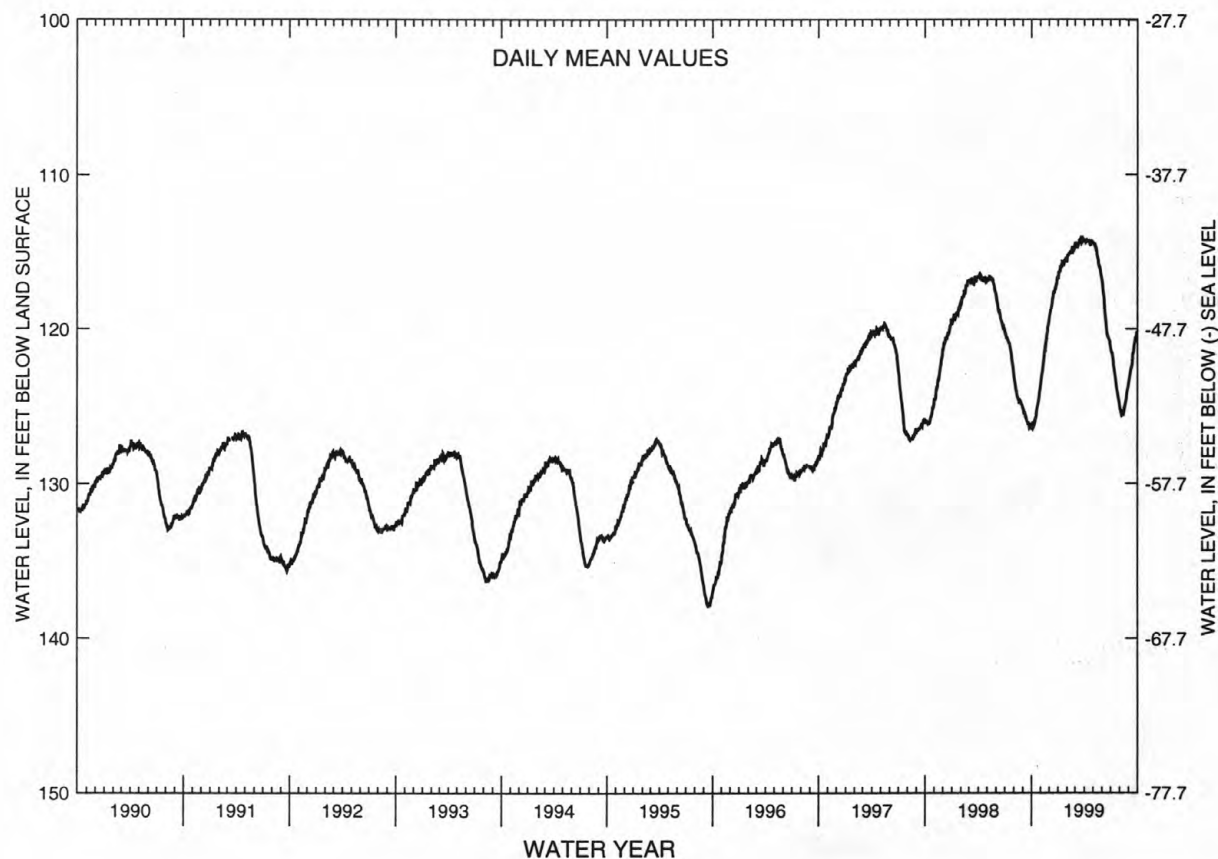
PERIOD OF RECORD.--Jan. 1968 to current year. Records for 1968 to 1975 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	126.41	123.05	118.89	116.38	115.27	114.76	114.36	114.50	117.50	121.49	125.26	123.17
10	126.08	122.42	118.49	116.01	115.13	114.45	114.30	114.68	118.48	121.92	125.56	122.52
15	125.83	121.44	117.90	115.73	115.07	114.19	114.34	115.17	119.54	122.81	125.40	122.14
20	125.17	120.78	117.59	115.71	114.75	114.38	114.38	115.69	120.44	123.50	125.00	121.29
25	124.65	120.20	117.25	115.54	114.76	114.23	114.43	116.05	120.61	124.13	124.51	120.68
EOM	123.83	119.47	116.72	115.68	114.47	114.31	114.44	116.69	121.06	124.80	123.76	120.18
MEAN	125.48	121.53	117.90	115.89	114.99	114.38	114.33	115.33	119.28	122.94	124.96	121.90
WTR YR 1999	MEAN 119.11	HIGH 114.09	MAR 22	LOW 126.45	OCT 6							

## NJ-WRD WELL NO. 05-0262



## GROUND-WATER LEVELS

39

## BURLINGTON COUNTY

NJ-WRD Well Number, 05-0274. Site I.D., 395838074590501. Local I.D., Campbell 1 Obs. NJ Permit Number, 31-03674.

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.

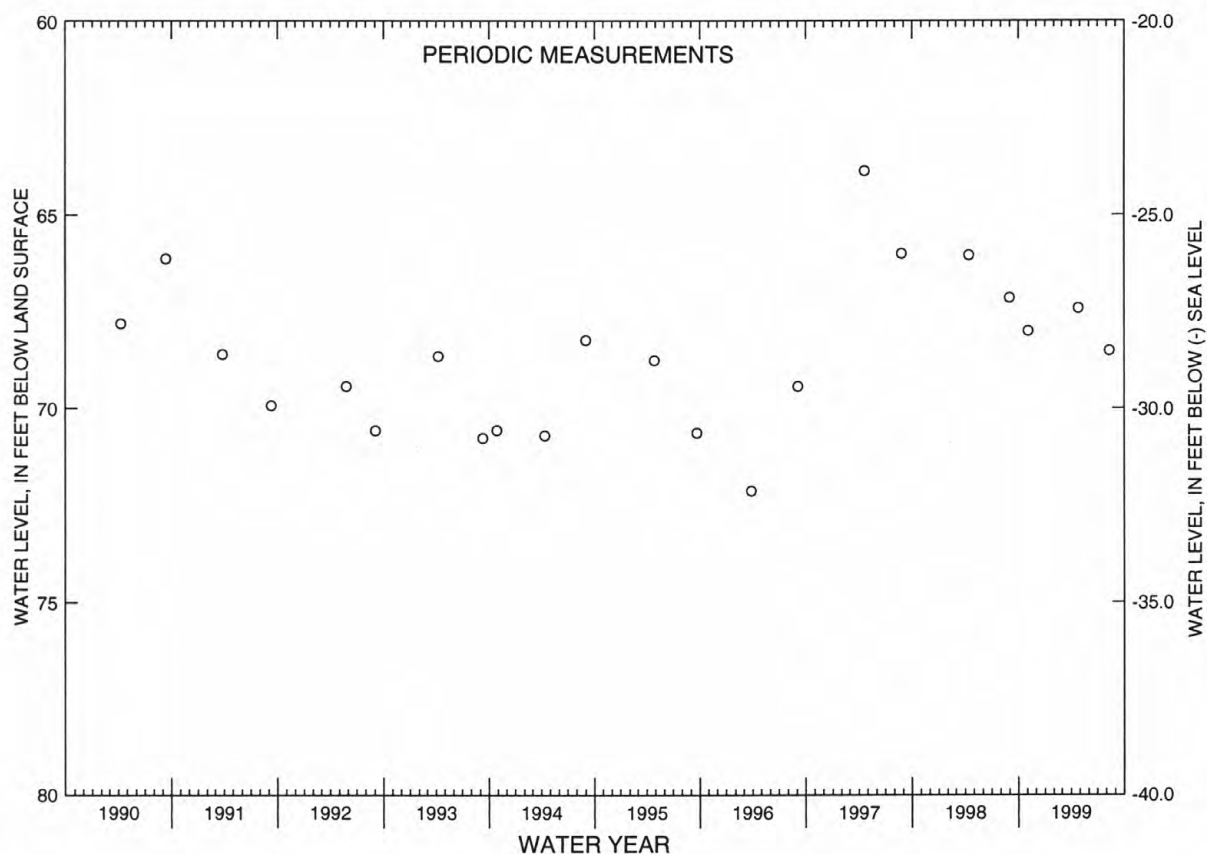
PERIOD OF RECORD.--Apr. 1972 to Apr. 1984, May 1986 to current year. Records for 1972 to 1984 and 1986 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
NOV 4	68.00	APR 27	67.41	AUG 12	68.51

## NJ-WRD WELL NO. 05-0274



## GROUND-WATER LEVELS

## BURLINGTON COUNTY

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

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.

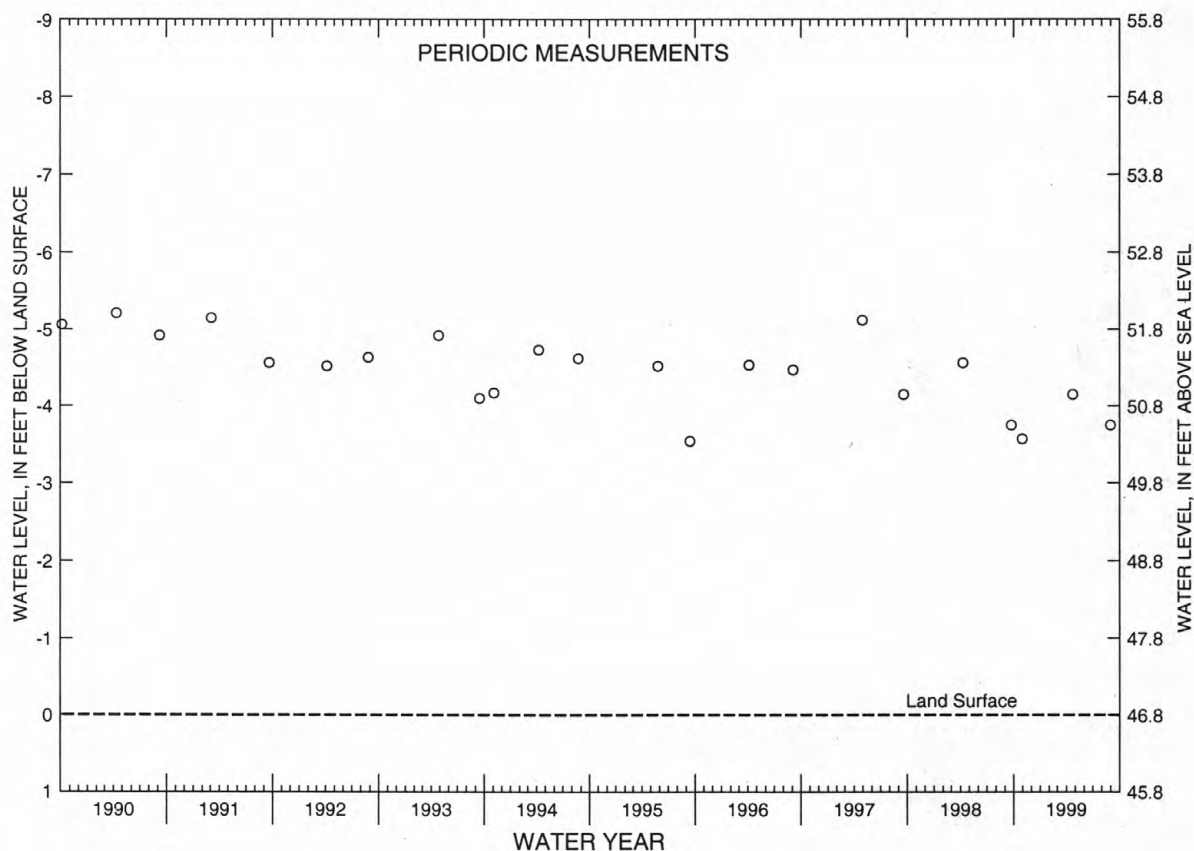
PERIOD OF RECORD.--Oct. 1963 to Sept. 1966, June 1968 to current year. Records for 1963 to 1966 and 1968 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 30	-3.57	APR 23	-4.15	SEP 1	-3.75

NJ-WRD WELL NO. 05-0407





## GROUND-WATER LEVELS

41

## BURLINGTON COUNTY

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

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.

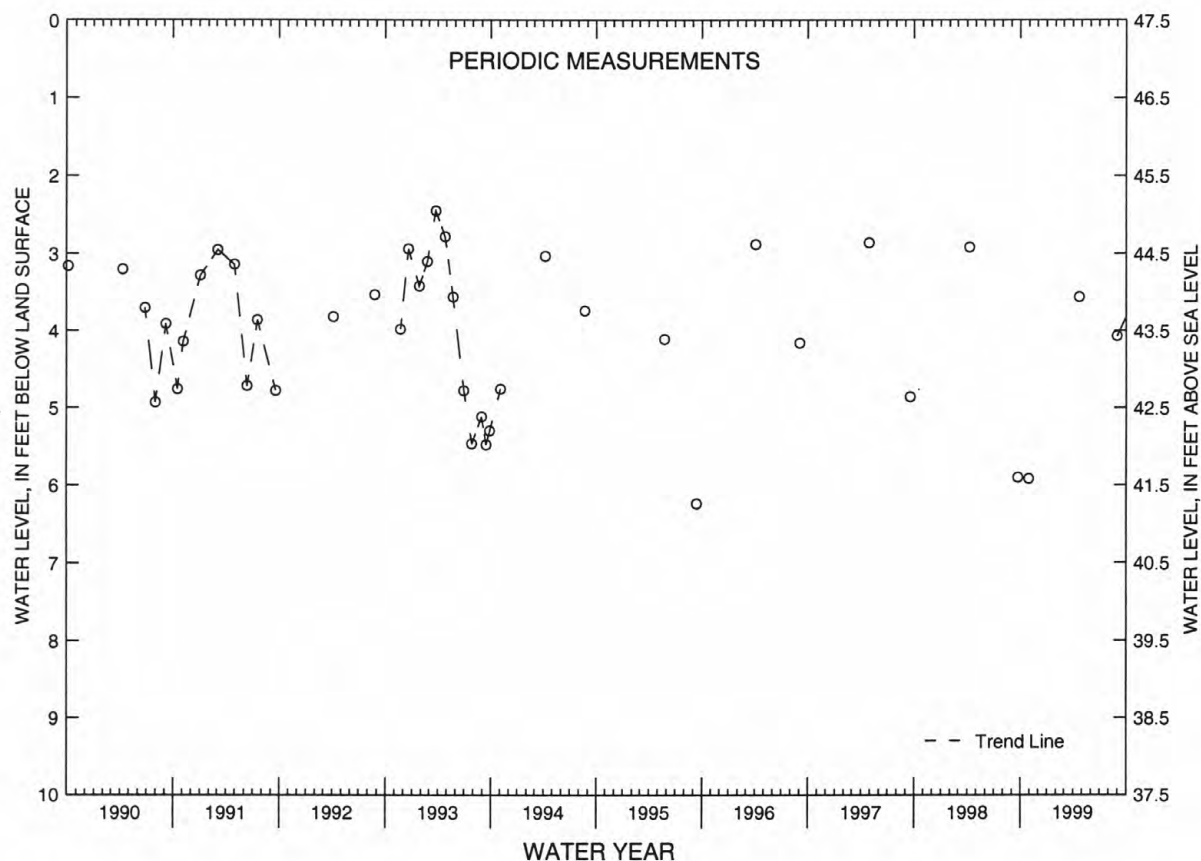
PERIOD OF RECORD.--Oct. 1963 to current year. Records for 1963 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 30	5.92	APR 23	3.56	SEP 1	4.07

## NJ-WRD WELL NO. 05-0408



## GROUND-WATER LEVELS

## BURLINGTON COUNTY

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

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.

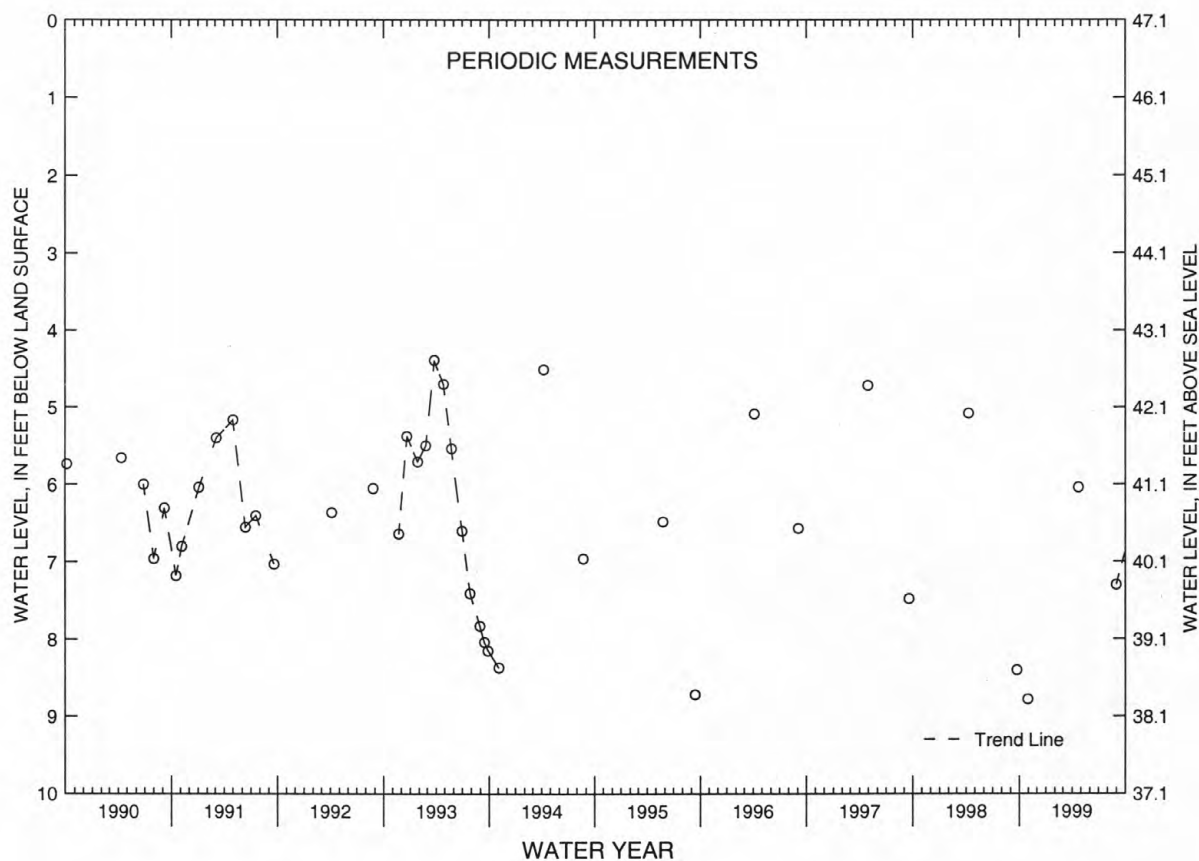
PERIOD OF RECORD.--October 1963 to current year. Records for 1963 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 30	8.78	APR 23	6.04	SEP 1	7.30

NJ-WRD WELL NO. 05-0409



## BURLINGTON COUNTY

NJ-WRD Well Number, 05-0440. Site I.D., 400242074422301. Local I.D., Rhodia 1 Obs. NJ Permit Number, 28-05128

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.

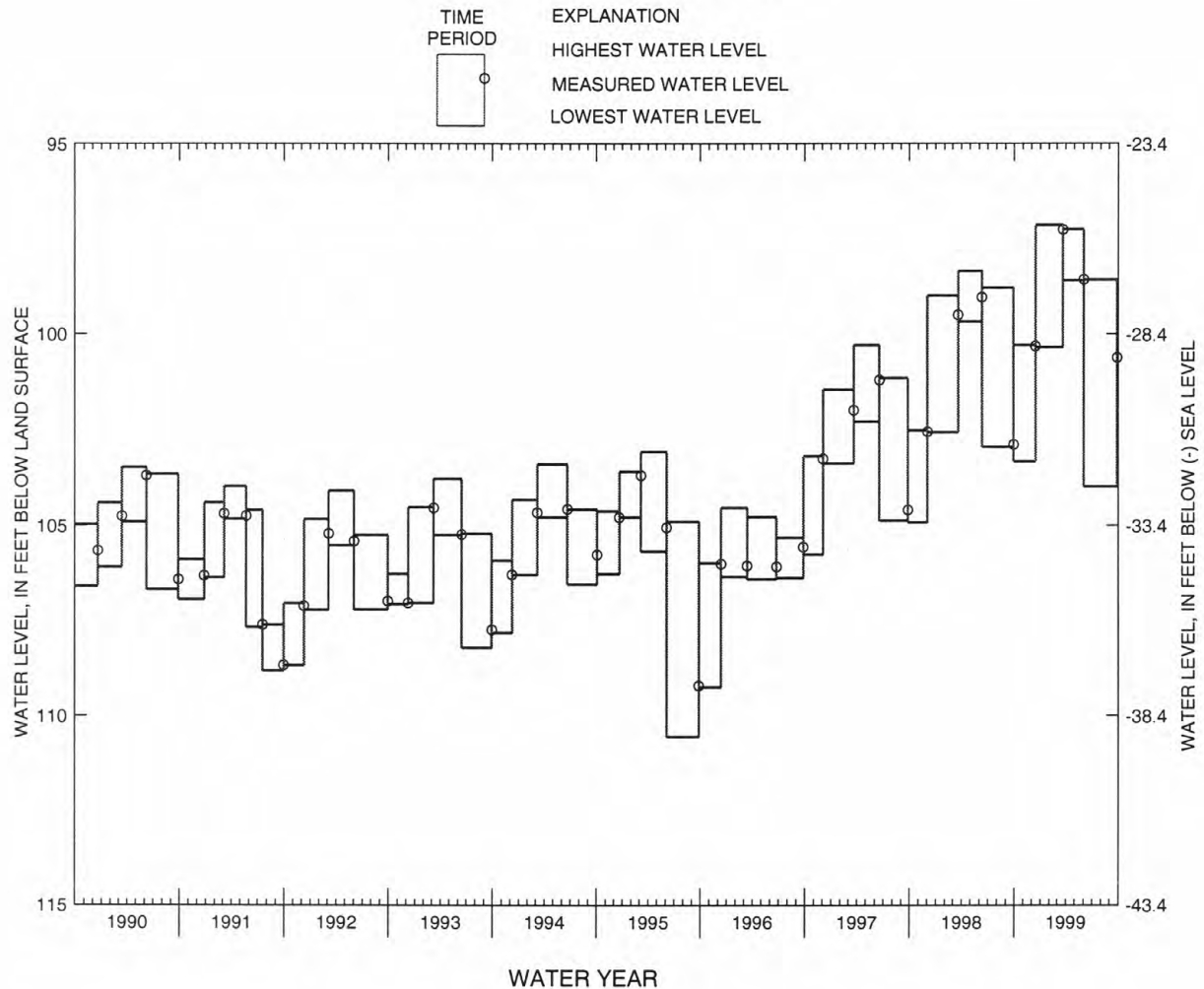
PERIOD OF RECORD.--Dec. 1968 to current year. Records for 1968 to 1978 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1998 TO DEC. 15, 1998	100.29	103.32	DEC. 15, 1998	100.32
DEC. 15, 1998 TO MAR. 22, 1999	97.14	100.35	MAR. 22, 1999	97.26
MAR. 22, 1999 TO JUNE 3, 1999	97.25	98.59	JUNE 3, 1999	98.57
JUNE 3, 1999 TO SEPT. 28, 1999	98.57	103.98	SEPT. 28, 1999	100.62

## NJ-WRD WELL NO. 05-0440



## GROUND-WATER LEVELS

## BURLINGTON COUNTY

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

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.

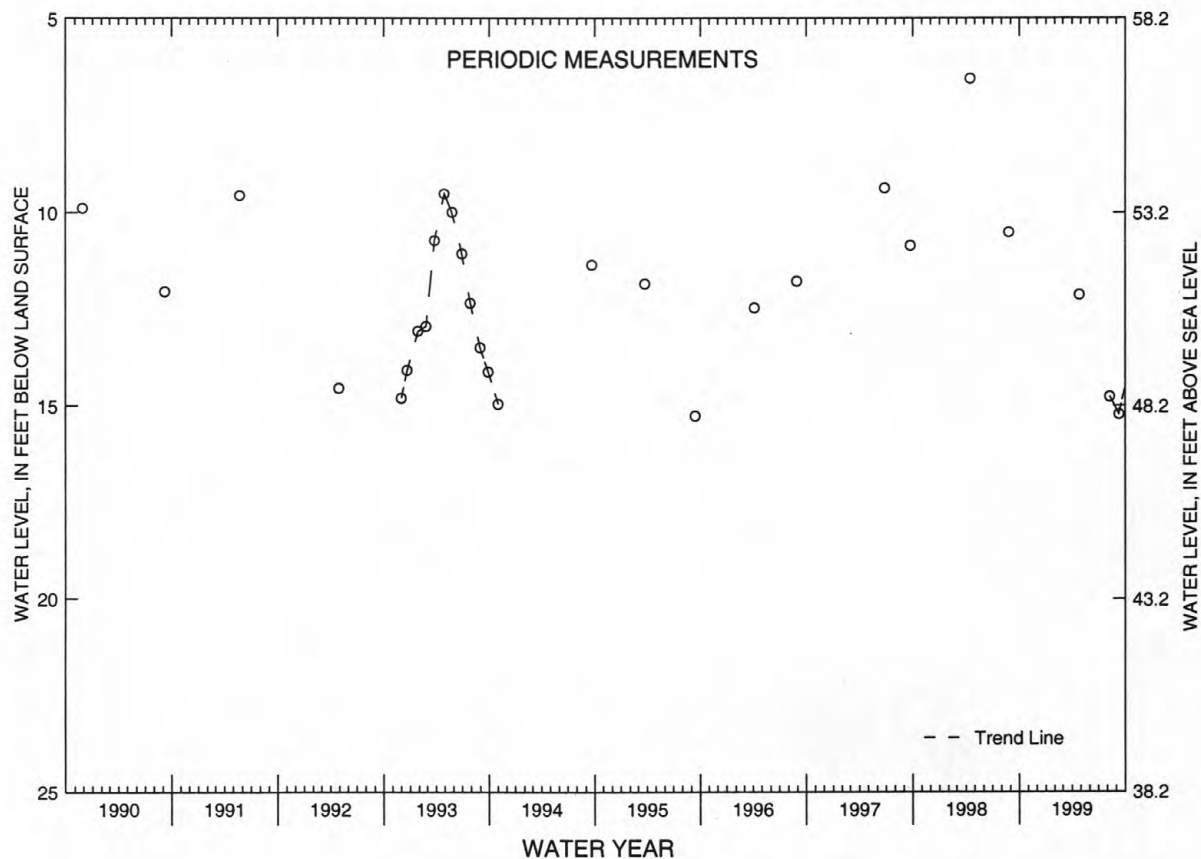
PERIOD OF RECORD.--Sept. 1955 to current year. Records for 1955 to 1977 and 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 27	12.14	AUG 10	14.77	SEP 10	15.22

NJ-WRD WELL NO. 05-0570





## GROUND-WATER LEVELS

45

## BURLINGTON COUNTY

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

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.

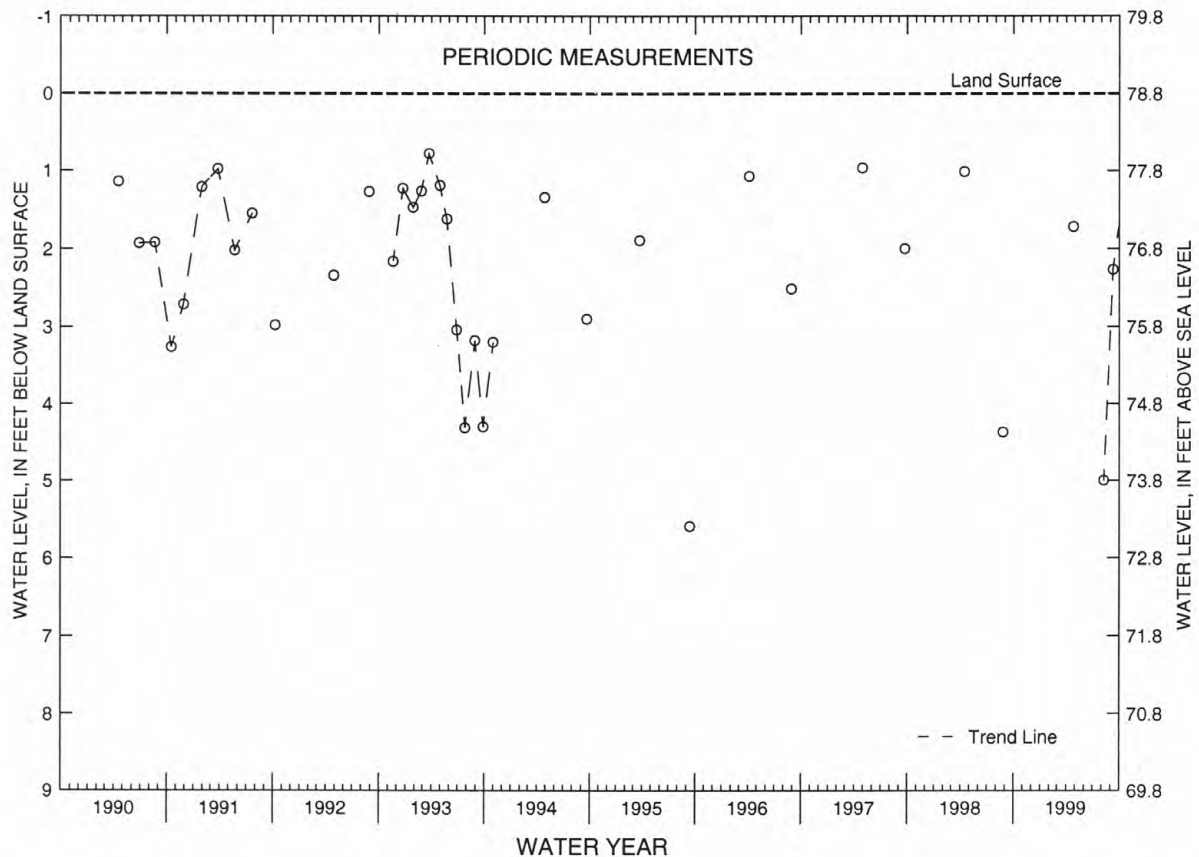
PERIOD OF RECORD.--Dec. 1936 to current year. Records for 1975 to 1981 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 27	1.72	AUG 10	5.00	SEP 10	2.27

## NJ-WRD WELL NO. 05-0628



## GROUND-WATER LEVELS

## BURLINGTON COUNTY

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

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.

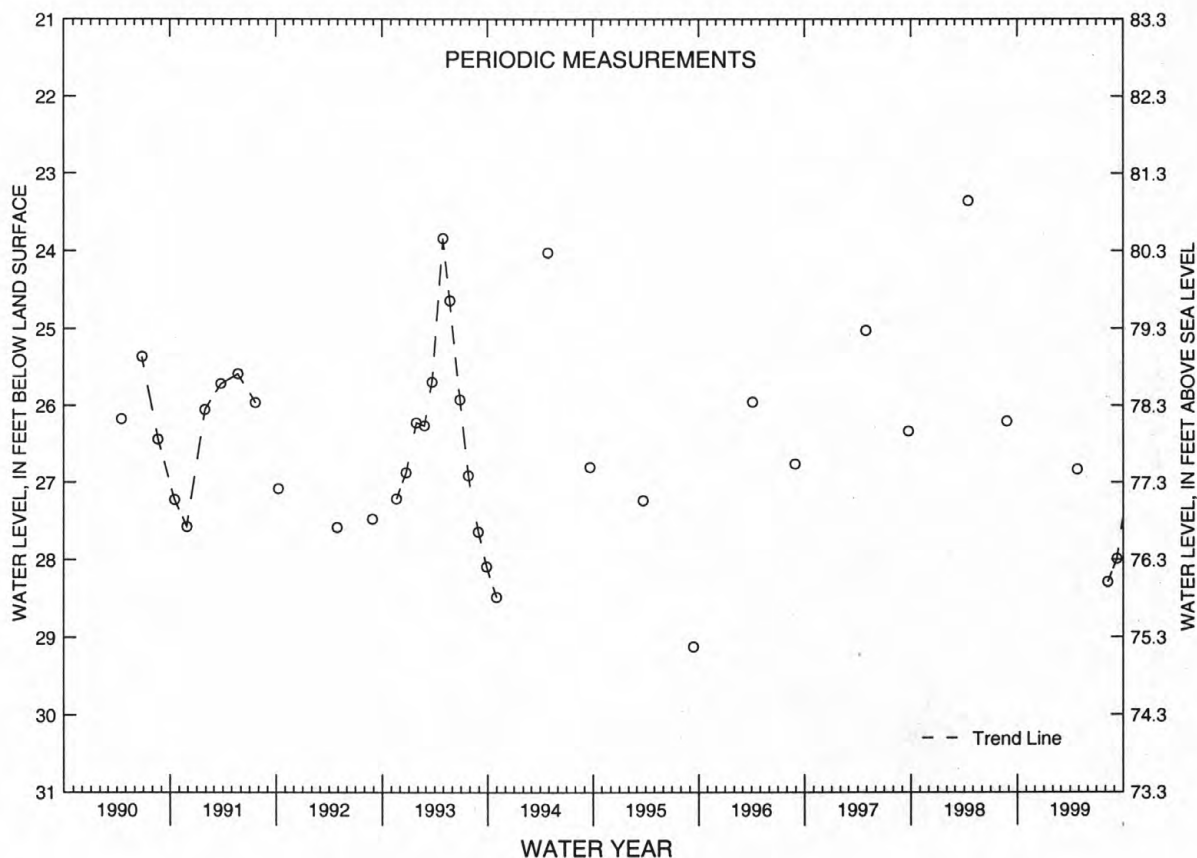
PERIOD OF RECORD.--Jan 1951 to current year. Records for 1951 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 27	26.83	AUG 10	28.29	SEP 10	27.99

NJ-WRD WELL NO. 05-0630



## BURLINGTON COUNTY

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

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.--Submersible logger pressure transducer--60-minute recording interval. Digital water-level recorder--60-minute punch, Sept. 1975 to May 1999. 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 hole in well seal, 1.94 ft below land surface.

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

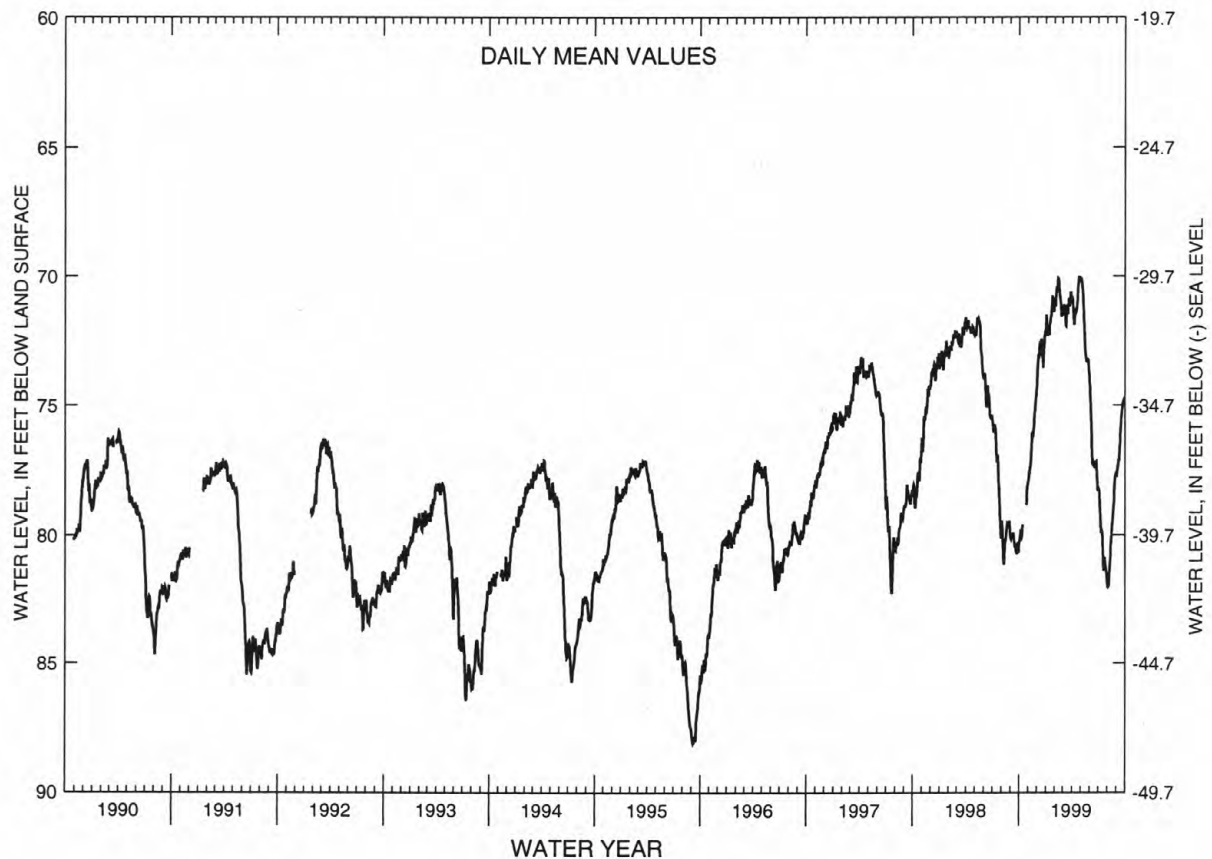
PERIOD OF RECORD.--Mar. 1966 to Sept. 1975, Mar. 1977 to current year. Records for 1966 to 1975 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	79.99	77.61	73.35	72.06	71.19	71.47	70.95	70.11	74.86	78.27	81.94	77.57
10	80.14	77.32	72.89	72.06	70.54	71.56	71.91	70.80	76.75	79.51	81.32	77.13
15	---	76.13	72.70	71.82	70.14	71.19	71.47	72.13	77.21	79.87	80.25	76.62
20	---	75.95	73.08	71.60	70.84	71.45	71.09	73.13	77.44	81.39	79.45	75.41
25	---	75.19	72.94	70.80	71.58	71.13	70.20	73.32	77.18	81.03	78.72	75.01
EOM	---	74.49	72.30	71.29	71.31	70.88	70.10	73.75	78.27	81.61	77.66	74.88
MEAN	---	76.31	72.97	71.67	70.81	71.22	70.99	71.98	76.64	80.09	80.10	76.26
WTR YR 1999	MEAN 74.75 HIGH 70.00 APR 26 LOW 82.01 AUG 3											

## NJ-WRD WELL NO. 05-0645



## GROUND-WATER LEVELS

## BURLINGTON COUNTY

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

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.

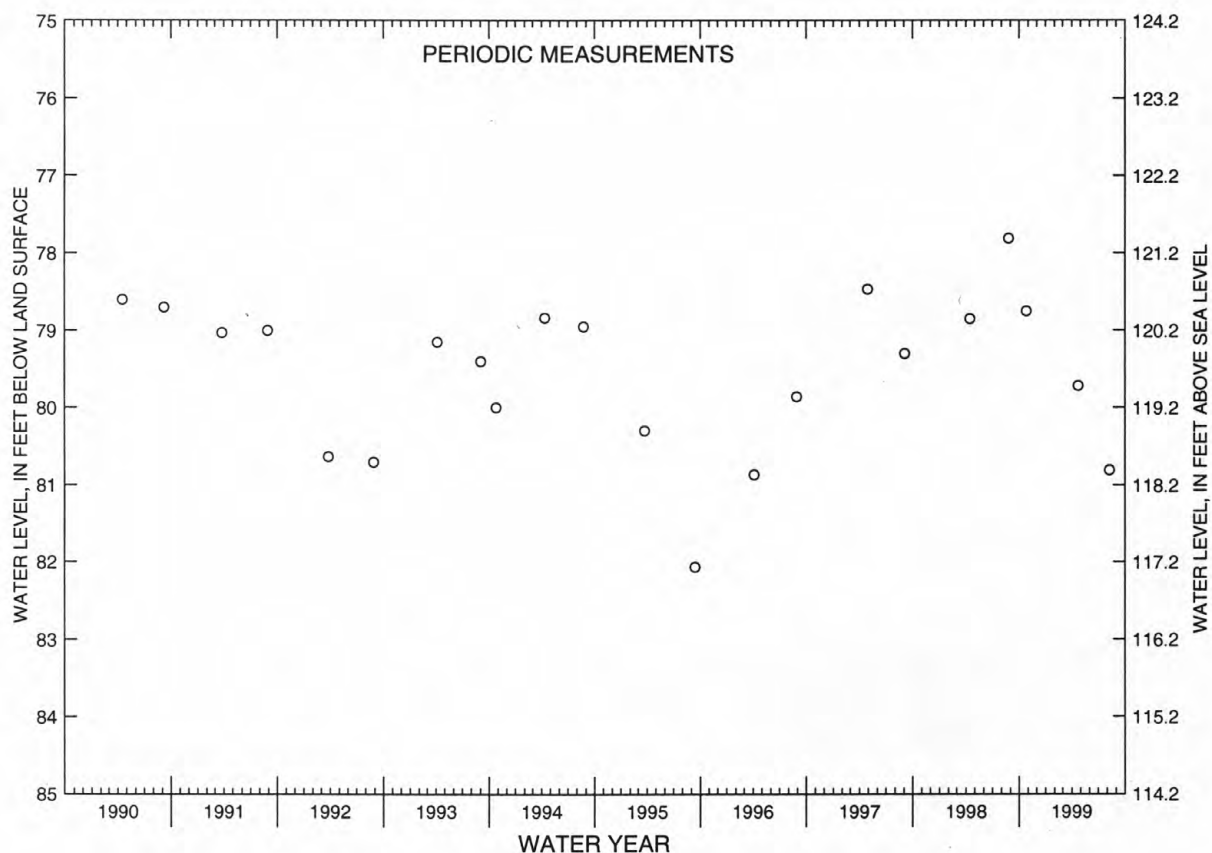
PERIOD OF RECORD.--Feb. 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 26	78.75	APR 23	79.72	AUG 10	80.81

NJ-WRD WELL NO. 05-0676





## GROUND-WATER LEVELS

49

## BURLINGTON COUNTY

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

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.

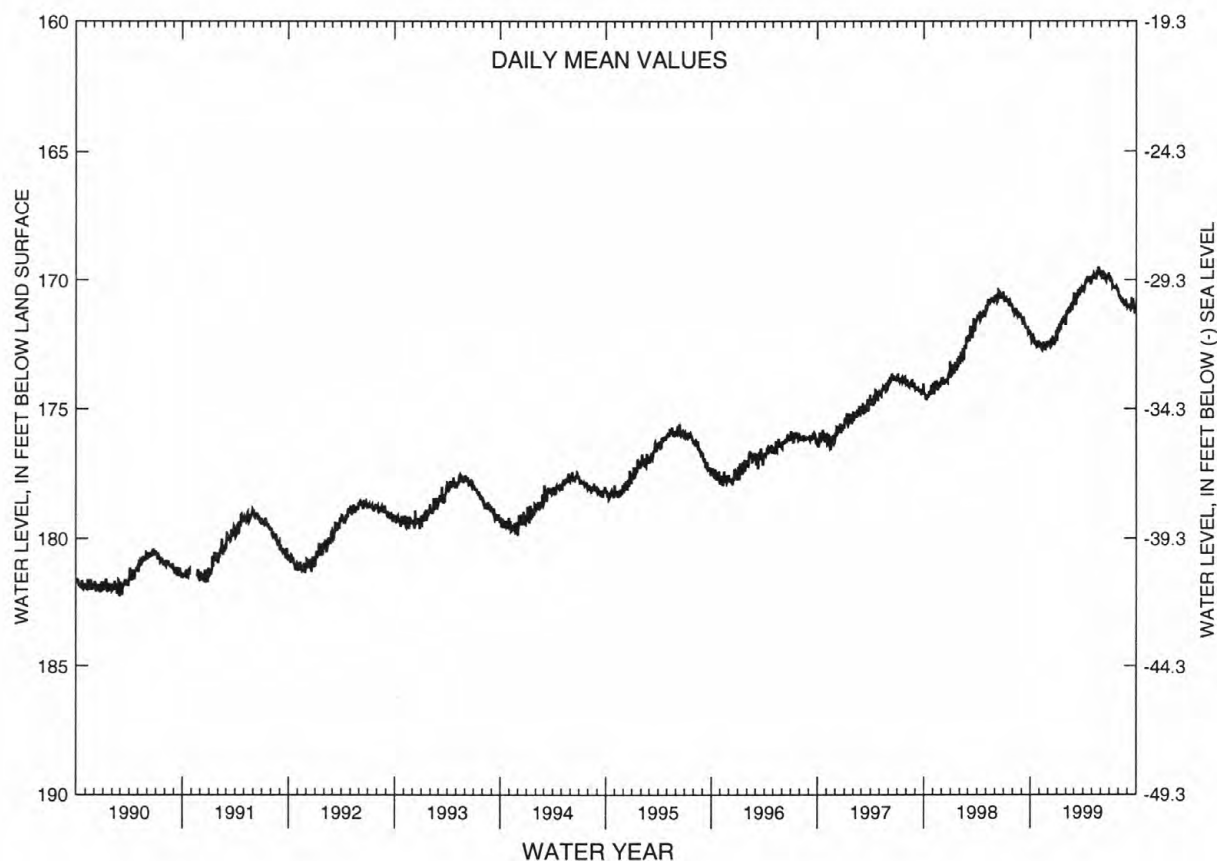
PERIOD OF RECORD.--Oct. 1964 to current year. Records for 1964 to 1977 are unpublished and are available in files of the New Jersey District Office.

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, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	172.30	172.49	172.50	172.06	171.33	170.95	170.41	169.84	169.86	169.95	170.58	171.07
10	172.15	172.71	172.60	171.85	171.23	170.61	170.13	169.84	169.89	170.00	170.75	170.94
15	172.37	172.41	172.51	171.61	171.23	170.37	169.99	169.95	169.78	170.26	170.78	171.12
20	172.39	172.48	172.49	171.62	170.93	170.62	170.02	169.74	170.04	170.28	170.90	170.98
25	172.52	172.65	172.46	171.53	170.96	170.43	170.05	169.55	169.85	170.25	170.98	171.02
EOM	172.44	172.57	172.20	171.76	170.62	170.45	170.06	169.74	169.90	170.44	171.06	170.97
MEAN	172.37	172.57	172.41	171.76	171.12	170.56	170.10	169.79	169.83	170.19	170.80	171.03
WTR YR 1999	MEAN 171.04 HIGH 169.50 MAY 24 LOW 172.75 NOV 22											

## NJ-WRD WELL NO. 05-0683



## GROUND-WATER LEVELS

## BURLINGTON COUNTY

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

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.

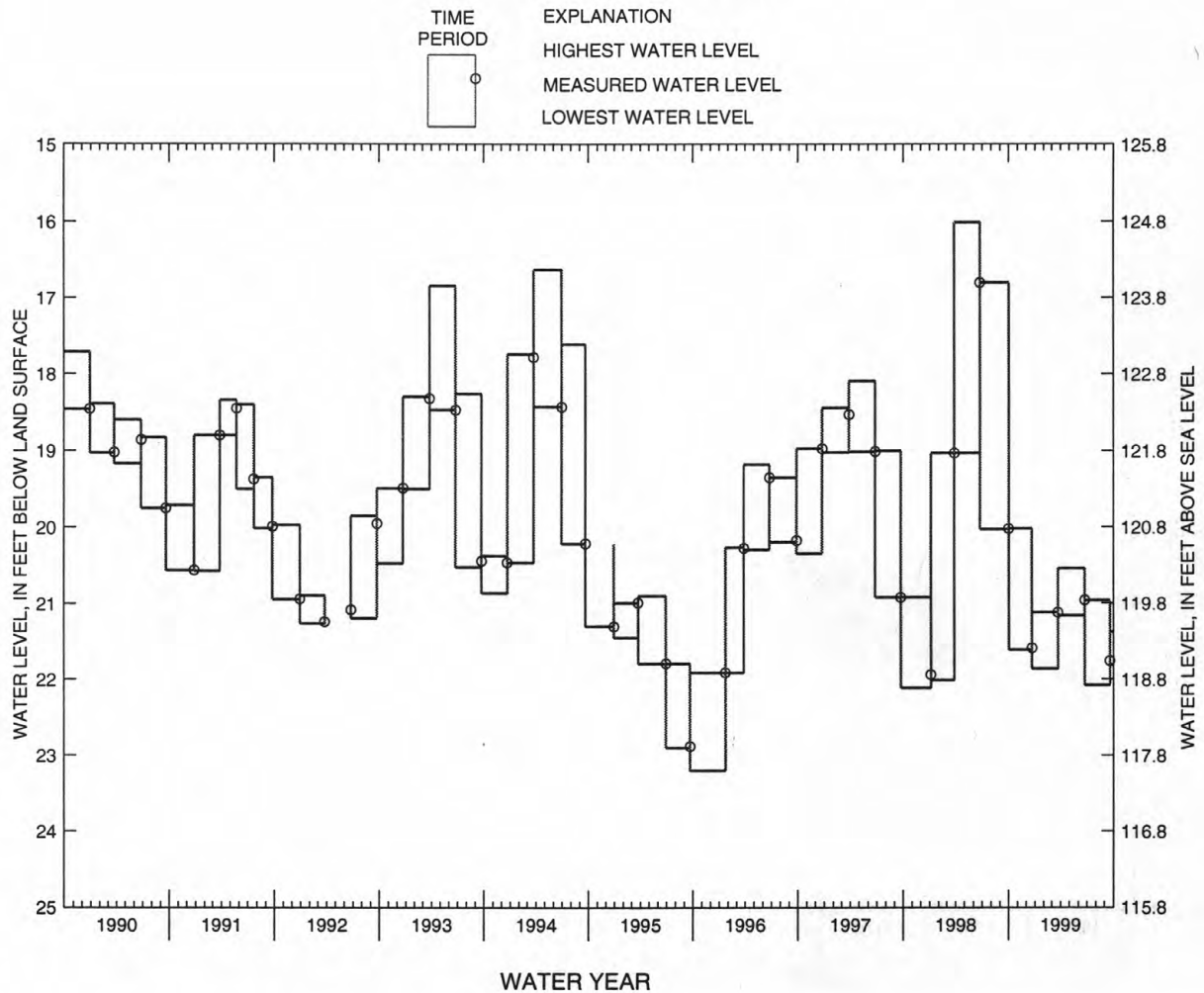
PERIOD OF RECORD.--May 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
OCT. 2, 1998 TO DEC. 21, 1998	20.02	21.61	DEC. 21, 1998	21.59
DEC. 21, 1998 TO MAR. 23, 1999	21.12	21.86	MAR. 23, 1999	21.12
MAR. 23, 1999 TO JUNE 24, 1999	20.54	21.16	JUNE 24, 1999	20.96
JUNE 24, 1999 TO SEPT. 20, 1999	20.96	22.08	SEPT. 20, 1999	21.76

## NJ-WRD WELL NO. 05-0684



## GROUND-WATER LEVELS

51

## BURLINGTON COUNTY

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

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.

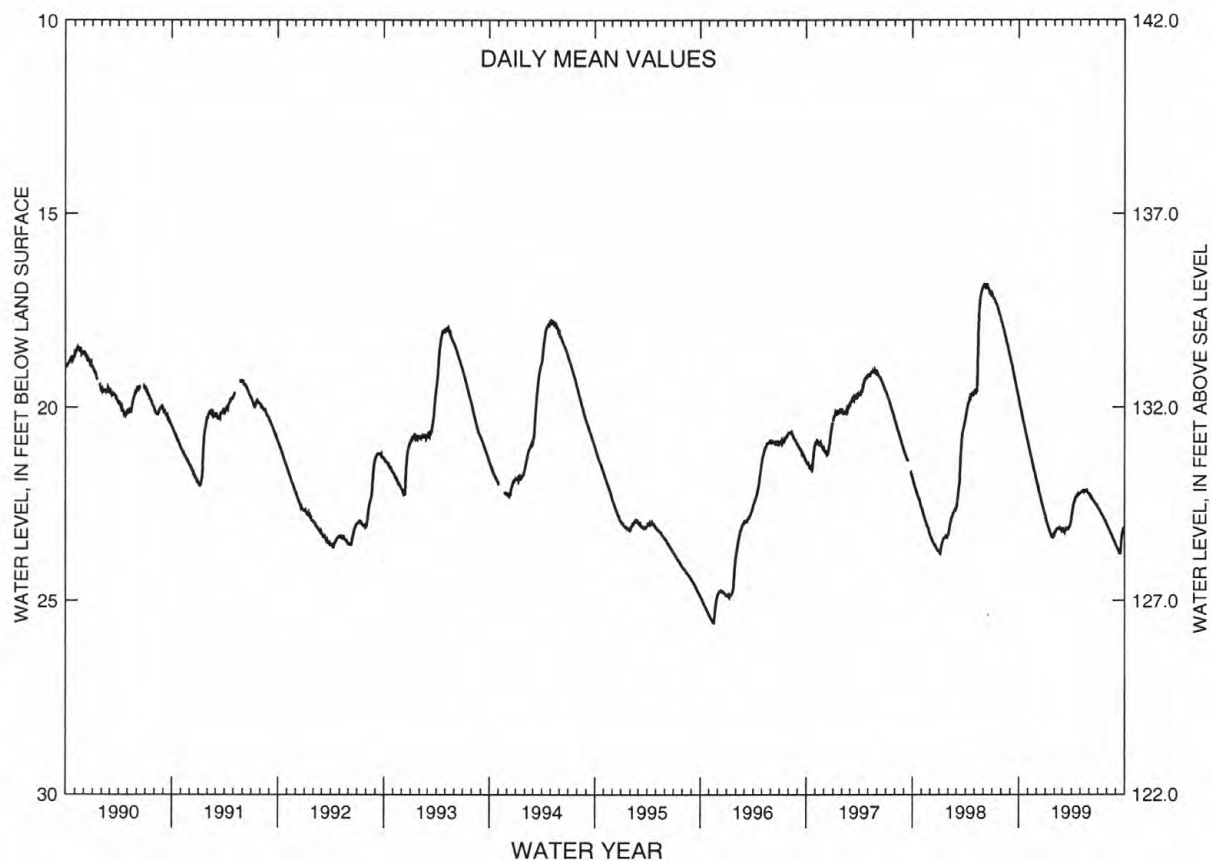
PERIOD OF RECORD.--Sept. 1955 to current year. Records for 1955 to 1979 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.94	21.01	22.00	22.94	23.21	23.22	22.68	22.19	22.28	22.62	23.07	23.60
10	20.10	21.20	22.17	23.06	23.14	23.16	22.47	22.18	22.34	22.67	23.16	23.67
15	20.29	21.34	22.31	23.17	23.13	23.13	22.35	22.19	22.38	22.76	23.24	23.76
20	20.46	21.51	22.47	23.28	23.11	23.13	22.28	22.16	22.45	22.83	23.32	23.58
25	20.64	21.69	22.62	23.34	23.15	23.09	22.24	22.16	22.49	22.89	23.42	23.23
EOM	20.84	21.85	22.80	23.32	23.13	22.93	22.22	22.22	22.55	22.99	23.52	23.10
MEAN	20.34	21.37	22.34	23.16	23.15	23.12	22.42	22.18	22.39	22.77	23.26	23.52
WTR YR 1999	MEAN 22.50 HIGH 19.77 OCT 1 LOW 23.77 SEP 17											

## NJ-WRD WELL NO. 05-0689



## GROUND-WATER LEVELS

## BURLINGTON COUNTY

NJ-WRD Well Number, 05-1155. Site I.D., 395315074494601. Local I.D., Medford Twp MW-1 Obs. NJ Permit number, 31-39849.

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.--Submersible logger pressure transducer--60-minute recording interval. Digital water-level recorder, Sept. 1992 to May 1998.

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.

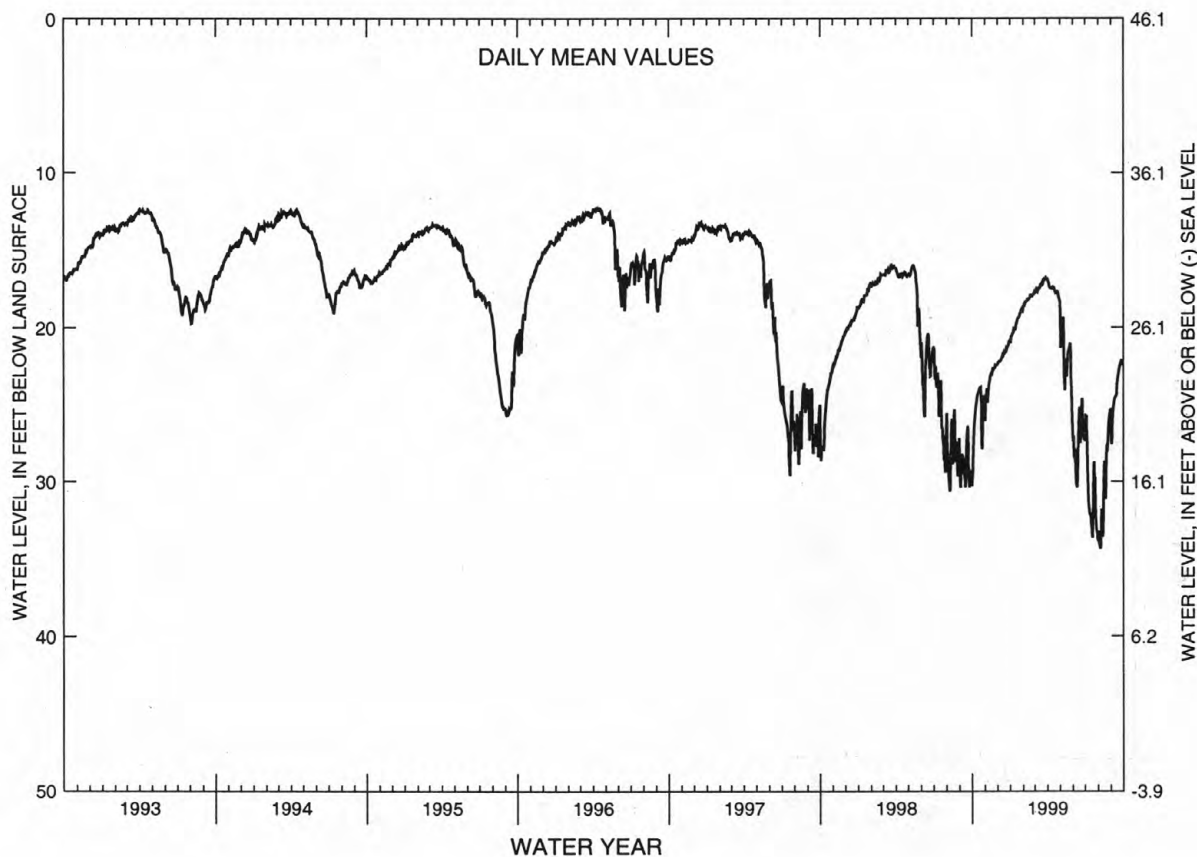
PERIOD OF RECORD.--Sept. 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.17 ft below land surface, Apr. 16, 1996; lowest, 34.43 ft below land surface, Aug. 7, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.22	24.14	22.22	20.53	18.51	17.71	17.32	19.84	28.53	26.99	34.06	26.20
10	25.16	23.86	22.06	20.20	18.30	17.47	17.50	19.54	30.17	31.44	31.78	24.63
15	24.33	23.05	21.84	19.78	18.19	17.29	17.43	22.00	26.27	32.32	30.51	24.30
20	23.93	22.65	21.58	19.41	17.90	17.25	17.70	21.75	27.50	32.79	31.05	22.91
25	27.88	22.57	21.30	19.10	17.89	16.87	17.69	21.16	25.72	29.71	27.31	22.29
EOM	25.39	22.41	20.95	18.92	17.73	16.92	18.24	26.04	26.87	33.65	25.34	22.09
MEAN	25.73	23.43	21.71	19.76	18.17	17.28	17.54	21.74	27.29	30.71	30.48	24.05
WTR YR 1999 MEAN 23.20 HIGH 16.80 MAR 28 LOW 34.36 AUG 7												

## NJ-WRD WELL NO. 05-1155





GROUND-WATER LEVELS  
BURLINGTON COUNTY

53

NJ-WRD Well Number, 05-1250. Site I.D., 400148074352001. Local I.D., McGuire 08-MW-52 Obs. NJ Permit number, 28-20189-2.

LOCATION.--Lat 40°01'48", long 74°35'20", Hydrologic Unit 02040201, at base fuel storage area, New Hanover Township.  
Owner: U.S. Air Force-Mcguire AFB.

AQUIFER.--Vincetown aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 55 ft, screened 45 to 55 ft.

INSTRUMENTATION.--Digital water-level recorder--15-minute punch.

DATUM.--Land surface is 112.20 ft above sea level.

Measuring point: Top of recorder shelf, 4.73 ft above land surface.

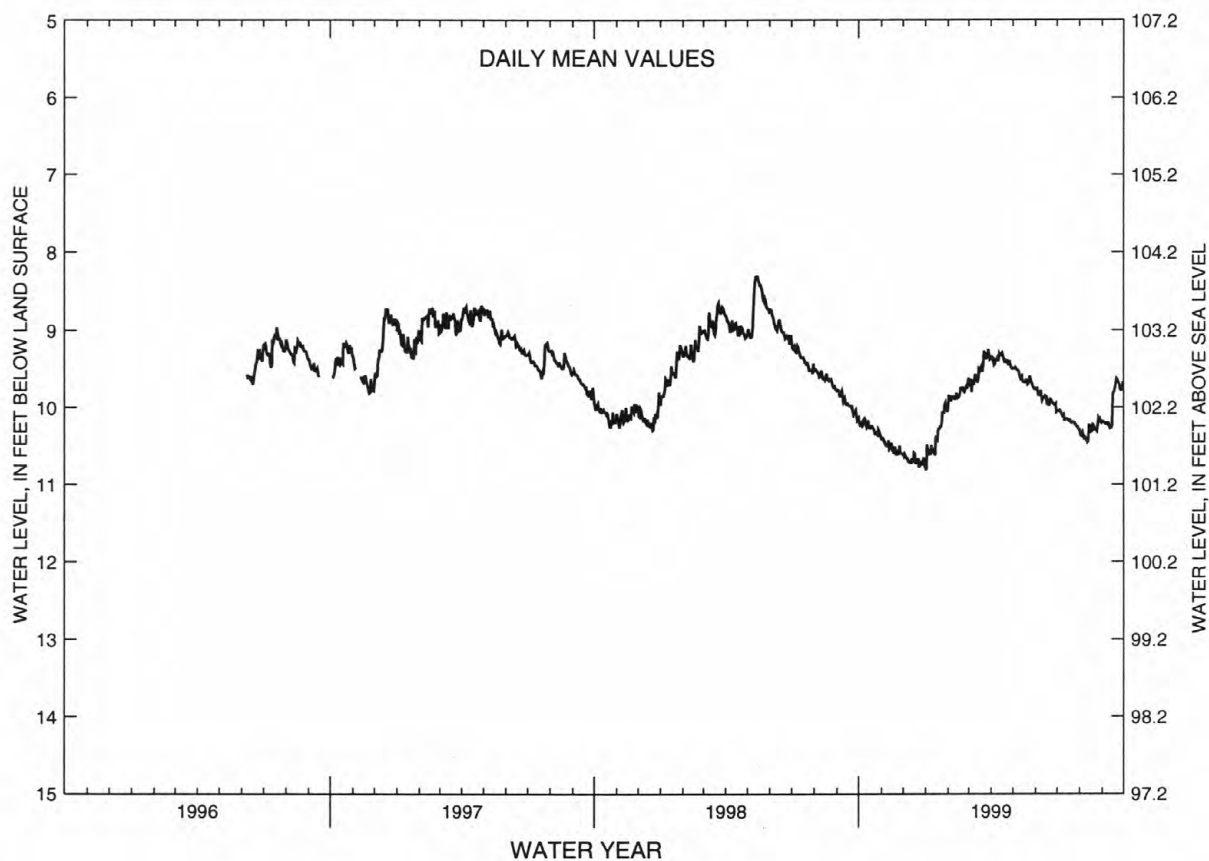
PERIOD OF RECORD.--June 1996 to current year. Records from 1996 to 1998 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.31 ft below land surface, May 13-15, 1998; lowest, 10.84 ft below land surface, Jan. 1-2, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.20	10.45	10.65	10.62	9.92	9.80	9.45	9.49	9.84	10.04	10.32	10.21
10	10.16	10.50	10.71	10.58	9.87	9.57	9.39	9.59	9.91	10.09	10.42	10.19
15	10.24	10.47	10.69	10.37	9.87	9.51	9.32	9.67	9.86	10.15	10.28	10.24
20	10.26	10.51	10.72	10.28	9.74	9.53	9.39	9.66	9.97	10.19	10.29	9.70
25	10.32	10.61	10.73	10.07	9.73	9.33	9.44	9.64	9.94	10.20	10.31	9.70
EOM	10.37	10.61	10.78	10.06	9.66	9.37	9.50	9.75	10.06	10.29	10.20	9.67
MEAN	10.25	10.52	10.68	10.37	9.82	9.52	9.39	9.62	9.89	10.15	10.30	9.97
WTR YR 1999	MEAN 10.04 HIGH 9.25 MAR 28 LOW 10.81 JAN 2											

NJ-WRD WELL NO. 05-1250



## GROUND-WATER LEVELS

## BURLINGTON COUNTY

NJ-WRD Well Number, 05-1251. Site I.D., 400148074352101. Local I.D., McGuire 08-MW-102 Obs. NJ Permit number, 28-27186.

LOCATION.--Lat 40°01'48", long 74°35'21", Hydrologic Unit 02040201, at base fuel storage area, New Hanover Township.

Owner: U.S. Air Force-McGuire AFB.

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

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Digital water-level recorder--15-minute punch.

DATUM.--Land surface is 113.49 ft above sea level.

Measuring point: Top of recorder shelf, 3.25 ft above land surface.

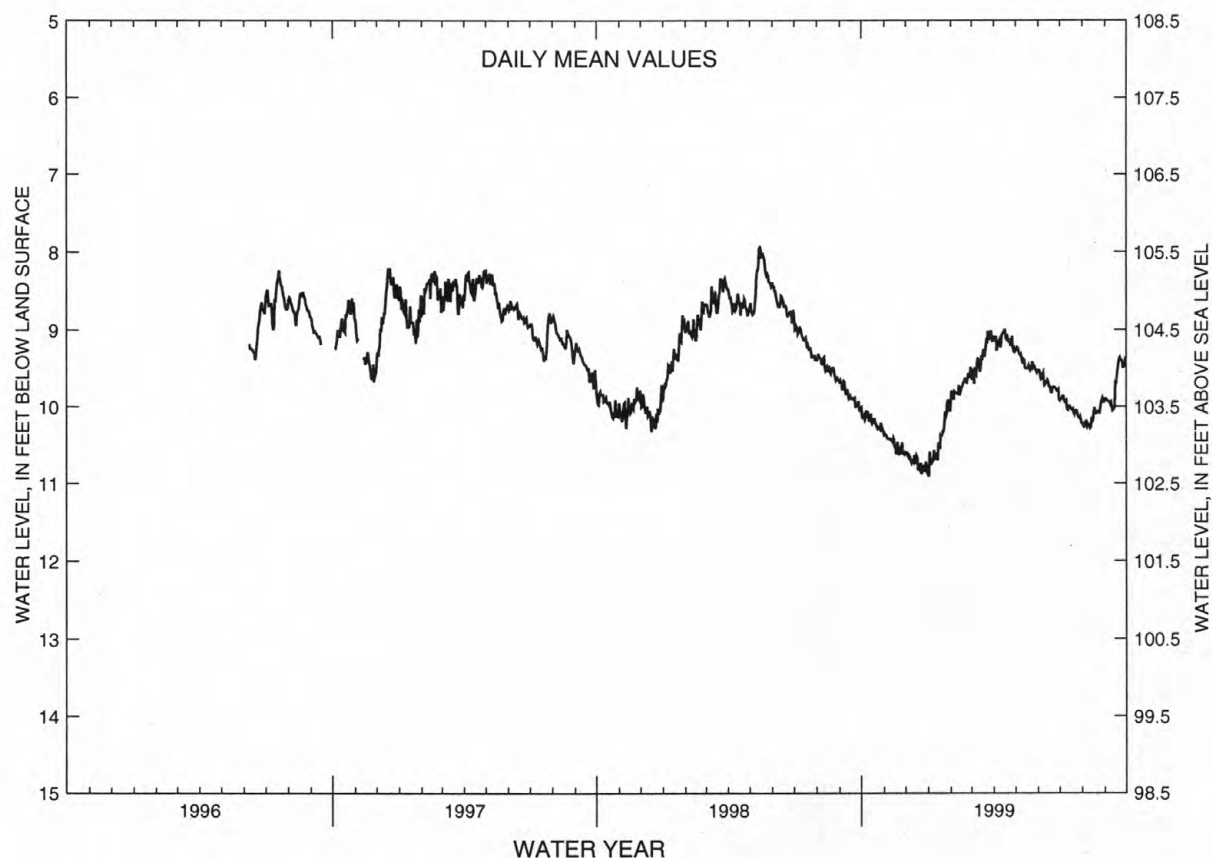
PERIOD OF RECORD.--June 1996 to current year. Records from 1996 to 1998 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.94 ft below land surface, May 14-15, 1998; lowest, 10.97 ft below land surface, Jan. 1-2, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.11	10.40	10.66	10.75	9.91	9.70	9.27	9.27	9.64	9.86	10.21	9.93
10	10.07	10.42	10.71	10.68	9.82	9.36	9.23	9.40	9.72	9.92	10.25	9.95
15	10.20	10.43	10.73	10.47	9.78	9.33	9.03	9.50	9.67	10.00	10.19	10.01
20	10.21	10.46	10.81	10.37	9.63	9.32	9.10	9.49	9.81	10.08	10.09	9.44
25	10.27	10.62	10.82	10.13	9.56	9.08	9.18	9.48	9.76	10.08	10.08	9.40
EOM	10.32	10.60	10.88	10.06	9.48	9.11	9.28	9.53	9.91	10.21	9.94	9.35
MEAN	10.18	10.49	10.73	10.44	9.74	9.33	9.14	9.42	9.70	10.02	10.13	9.71
WTR YR 1999	MEAN 9.92 HIGH 8.99 APR 16 LOW 10.91 JAN 2											

## NJ-WRD WELL NO. 05-1251



## GROUND-WATER LEVELS

55

## BURLINGTON COUNTY

NJ-WRD Well Number, 05-1387. Site I.D., 394800074524601. Local I.D., Evesham 4 Obs. NJ Permit Number, 31-40373.

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.

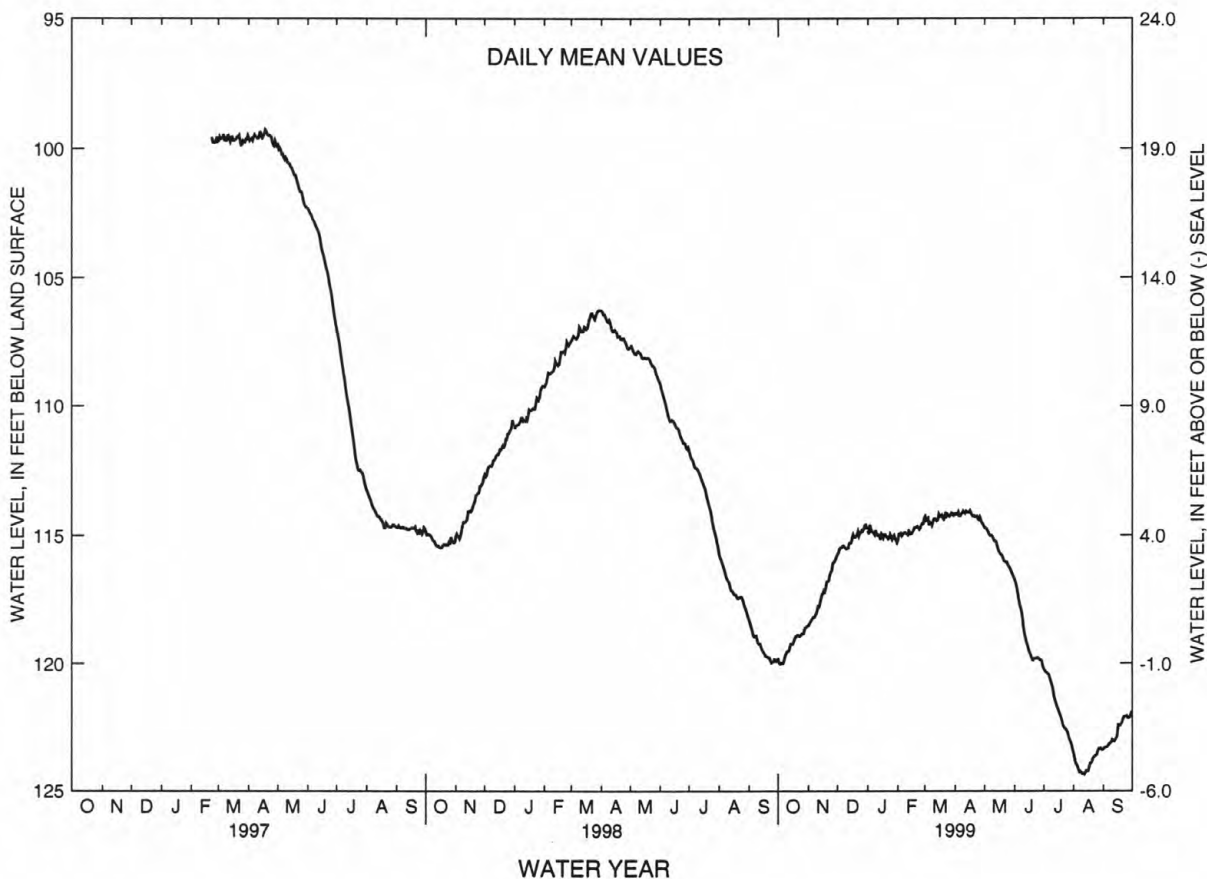
PERIOD OF RECORD.--Feb. 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 99.24 ft below land surface, Apr. 18, 1997; lowest, 124.39 ft below land surface, Aug. 10, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	119.97	118.24	115.48	114.86	115.02	114.61	114.25	114.91	117.49	120.40	124.04	123.27
10	119.55	117.96	115.52	114.94	114.94	114.37	114.13	115.13	118.57	120.95	124.35	123.00
15	119.25	117.29	115.29	114.94	114.94	114.20	114.12	115.56	119.41	121.74	124.23	122.84
20	118.90	116.79	115.05	115.06	114.68	114.39	114.25	115.89	119.87	122.30	123.85	122.30
25	118.82	116.37	114.90	115.05	114.61	114.22	114.41	116.16	119.78	122.66	123.59	122.06
EOM	118.53	115.82	114.76	115.28	114.36	114.23	114.65	116.63	120.10	123.39	123.40	121.89
MEAN	119.26	117.28	115.17	114.99	114.82	114.33	114.24	115.59	118.95	121.74	123.89	122.66
WTR YR 1999	MEAN 117.76 HIGH 114.06 APR 16 LOW 124.36 AUG 12											

## NJ-WRD WELL NO. 05-1387



## GROUND-WATER LEVELS

## BURLINGTON COUNTY

NJ-WRD Well Number, 05-1389. Site I.D., 395309074352101. Local I.D., New Lisbon 1 Obs. NJ Permit Number, 32-22005.

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.

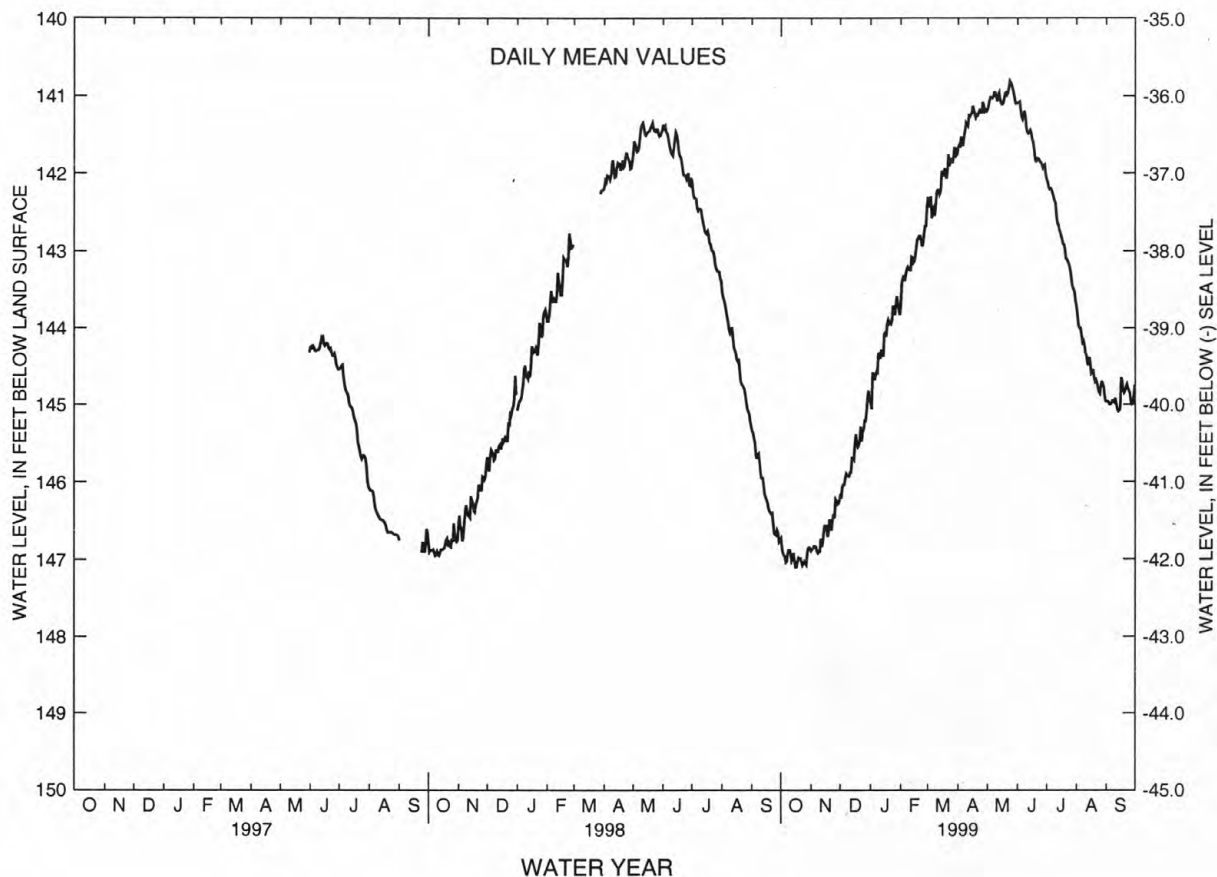
PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 140.75 ft below land surface, May 24, 1999; lowest, 147.14 ft below land surface, Oct. 16-17, 1998.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	146.96	146.83	146.04	144.68	143.39	142.58	141.64	141.02	141.27	142.20	144.00	145.00
10	146.88	146.90	145.93	144.39	143.22	142.25	141.37	141.01	141.42	142.38	144.32	144.92
15	147.02	146.56	145.71	144.07	143.13	141.97	141.23	141.10	141.48	142.76	144.45	145.05
20	146.99	146.49	145.53	143.94	142.81	142.07	141.24	140.96	141.86	142.98	144.70	144.83
25	147.03	146.47	145.33	143.75	142.77	141.82	141.22	140.83	141.86	143.22	144.86	144.85
EOM	146.86	146.24	144.97	143.83	142.44	141.75	141.20	141.10	142.02	143.66	144.96	144.75
MEAN	146.97	146.64	145.60	144.17	143.06	142.10	141.33	141.01	141.56	142.80	144.47	144.91
WTR YR 1999	MEAN 143.72 HIGH 140.81 MAY 24 LOW 147.10 OCT 16											

## NJ-WRD WELL NO. 05-1389



## GROUND-WATER LEVELS

57

## BURLINGTON COUNTY

NJ-WRD Well Number, 05-1390. Site I.D., 395309074352102. Local I.D., New Lisbon 2 Obs. NJ Permit Number 32-21804.

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.

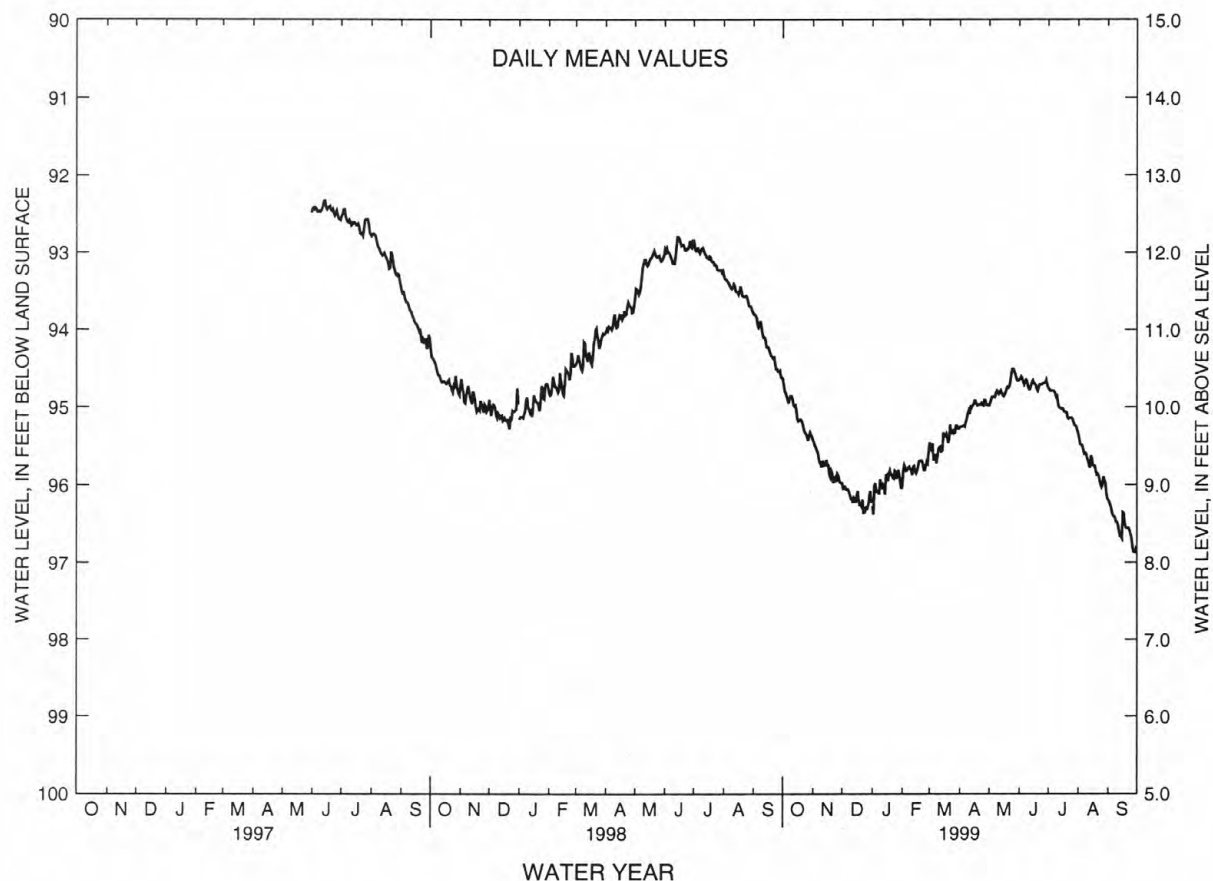
PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 92.30 ft below land surface, June 13-14, 1997; lowest, 96.87 ft below land surface, Sept. 27-29, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	94.86	95.56	96.06	96.09	95.82	95.69	95.24	94.87	94.68	94.79	95.49	96.36
10	94.86	95.77	96.18	96.00	95.81	95.54	95.05	94.80	94.74	94.86	95.66	96.48
15	95.04	95.68	96.23	95.88	95.85	95.33	94.97	94.85	94.66	95.02	95.66	96.69
20	95.17	95.82	96.26	95.87	95.69	95.46	94.97	94.74	94.79	95.07	95.87	96.56
25	95.35	95.96	96.33	95.83	95.76	95.30	94.98	94.51	94.70	95.14	96.03	96.68
EOM	95.38	95.98	96.23	96.05	95.57	95.28	94.98	94.66	94.71	95.30	96.18	96.79
MEAN	95.09	95.76	96.17	95.98	95.78	95.44	95.04	94.76	94.70	95.01	95.76	96.54
WTR YR 1999 MEAN 95.50 HIGH 94.51 MAY 25 LOW 96.87 SEP 28												

## NJ-WRD WELL NO. 05-1390





## GROUND-WATER LEVELS

## BURLINGTON COUNTY

NJ-WRD Well Number, 05-1391. Site I.D., 394904074253601. Local I.D., Coyle 2 Obs (OW96). NJ Permit Number, 32-21805.

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 1,441 ft, screened 1,416 to 1,436 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.

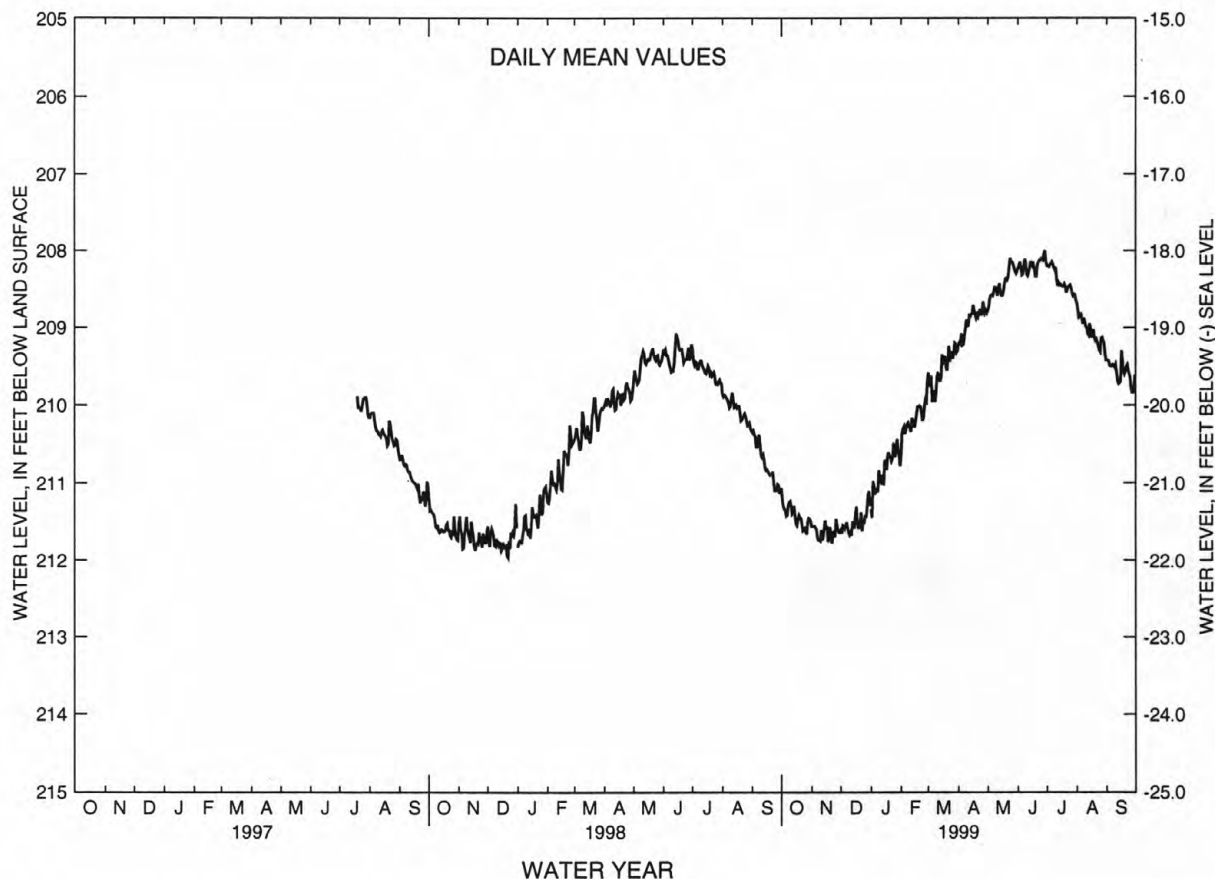
PERIOD OF RECORD.--July 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 207.98 ft below land surface, June 29, 1999; lowest, 212.01 ft below land surface, Dec. 22, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	211.35	211.58	211.59	211.15	210.37	209.96	209.23	208.58	208.32	208.17	208.81	209.50
10	211.24	211.75	211.67	210.95	210.29	209.62	208.96	208.53	208.31	208.22	208.99	209.48
15	211.41	211.49	211.59	210.71	210.27	209.35	208.82	208.59	208.15	208.44	209.01	209.69
20	211.45	211.57	211.58	210.67	210.01	209.55	208.83	208.36	208.34	208.47	209.17	209.57
25	211.59	211.70	211.53	210.57	210.02	209.33	208.83	208.15	208.10	208.45	209.31	209.64
EOM	211.50	211.64	211.30	210.78	209.70	209.30	208.81	208.27	208.14	208.66	209.42	209.61
MEAN	211.43	211.63	211.50	210.84	210.18	209.53	208.91	208.44	208.19	208.40	209.06	209.57
WTR YR 1999	MEAN 209.81 HIGH 208.00 JUN 29 LOW 211.78 NOV 22											

## NJ-WRD WELL NO. 05-1391

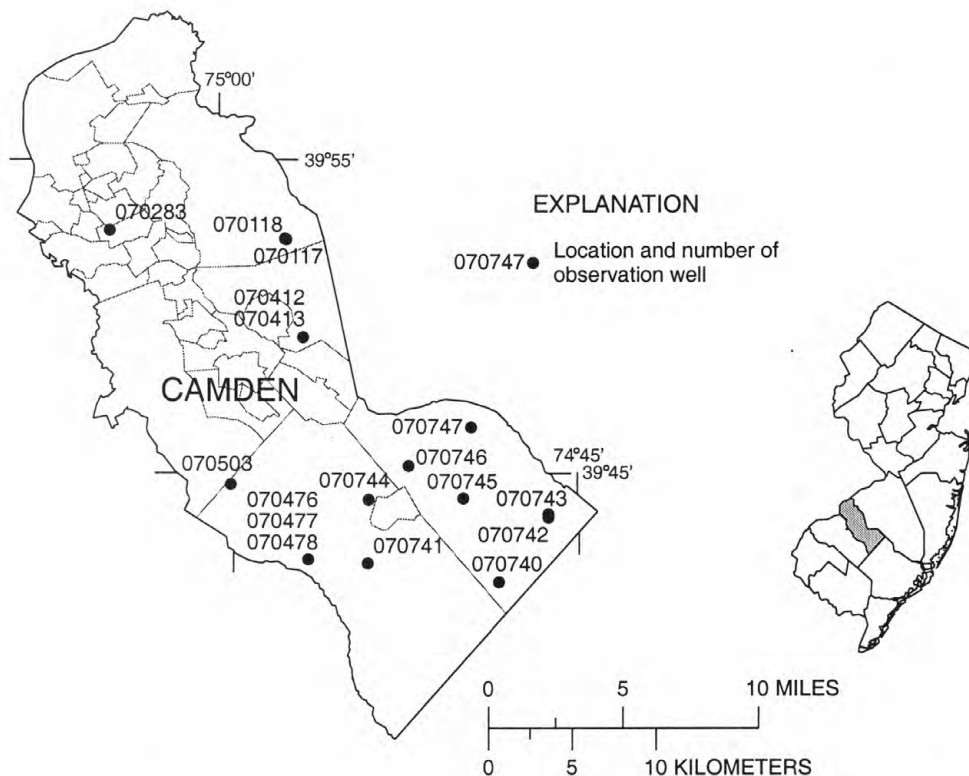


## CAMDEN COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
070117	HUTTON HILL 1 OBS	CHERRY HILL TWP	562	MRPAU	DAILY
070118	HUTTON HILL 2 OBS	CHERRY HILL TWP	147	MLRW	DAILY
070283	EGBERT OBS	HADDON HEIGHTS BORO	455	MRPAL	MANUAL
070412	ELM TREE 2 OBS	VOORHEES TWP	1090	MRPAL	DAILY
070413	ELM TREE 3 OBS	VOORHEES TWP	717	MRPAM	DAILY
070476	NEW BROOKLYN PARK 1 OBS	WINSLOW TWP	1500	MRPA	DAILY
070477	NEW BROOKLYN PARK 2 OBS	WINSLOW TWP	849	MRPAU	DAILY
070478	NEW BROOKLYN PARK 3 OBS	WINSLOW TWP	530	MLRW	DAILY
070503	WINSLOW 5 OBS	WINSLOW TWP	76	CKKD	DAILY
070740	CCMUA PZ 3	WATERFORD TWP	13	CKKD	MANUAL
070741	CCMUA PZ 4	WINSLOW TWP	32	CKKD	MANUAL
070742	CCMUA PZ 2	WATERFORD TWP	18	CKKD	MANUAL
070743	CCMUA PZ 1	WATERFORD TWP	17	CKKD	MANUAL
070744	CCMUA PZ 5	WINSLOW TWP	47	CKKD	MANUAL
070745	CCMUA PZ 8	WATERFORD TWP	25	CKKD	MANUAL
070746	CCMUA PZ 7	WATERFORD TWP	23	CKKD	MANUAL
070747	CCMUA PZ 6	WATERFORD TWP	35	CKKD	MANUAL

## Aquifer names

- CKKD - Kirkwood-Cohansey aquifer system
- MLRW - Wenonah-Mount Laurel aquifer
- MRPA - Potomac-Raritan-Magothy aquifer
- MRPAL - Lower Potomac-Raritan-Magothy aquifer
- MRPAM - Middle Potomac-Raritan-Magothy aquifer
- MRPAU - Upper Potomac-Raritan-Magothy aquifer



## GROUND-WATER LEVELS

## CAMDEN COUNTY

NJ-WRD Well Number, 07-0117. Site I.D., 395229074571201. Local I.D., Hutton Hill 1 Obs. NJ Permit Number, 31-04897.

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.

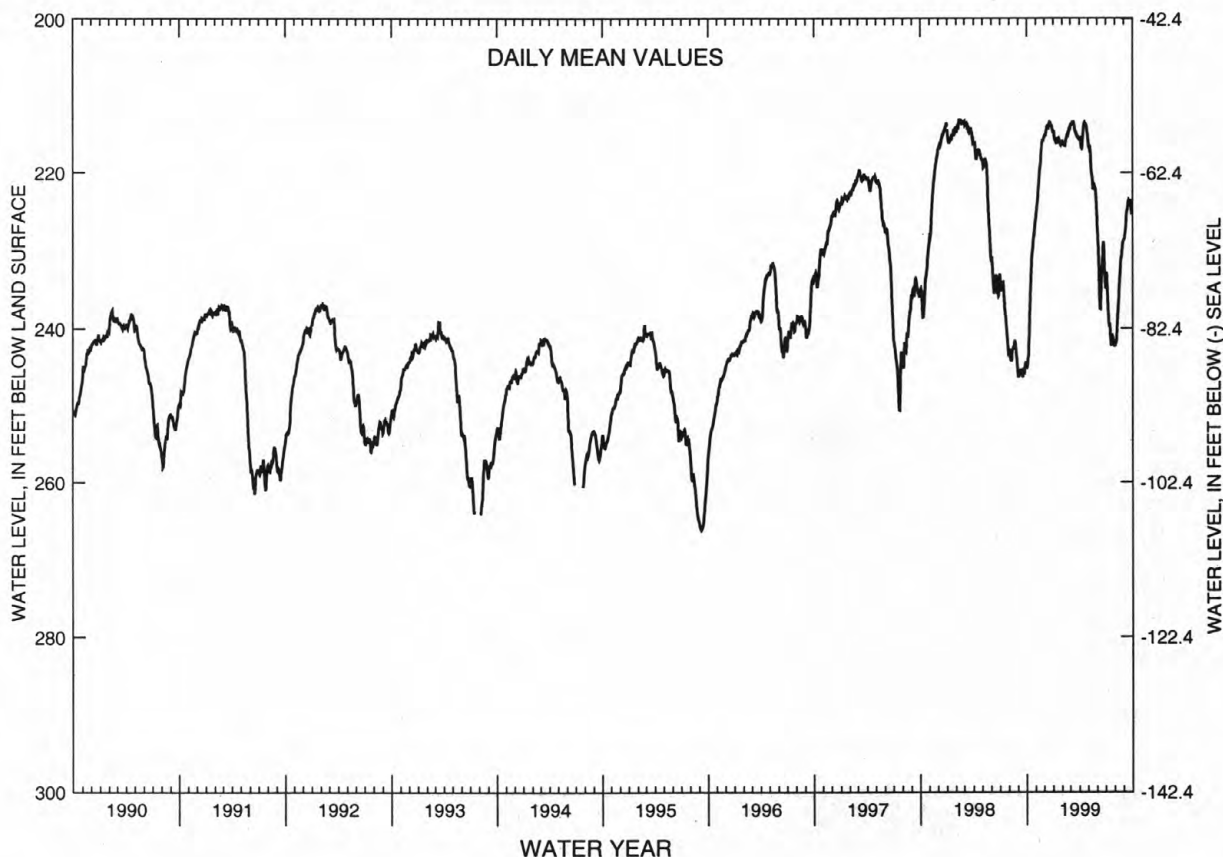
PERIOD OF RECORD.--Aug. 1967 to current year. Records for 1967 to 1978 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	243.99	224.41	215.26	215.36	216.48	213.83	215.75	216.60	229.41	233.09	241.70	228.11
10	240.01	222.08	214.14	215.57	216.53	213.42	216.86	217.89	236.21	237.84	239.31	226.00
15	234.19	219.64	214.23	215.90	215.55	213.80	214.55	220.35	235.54	239.47	236.14	224.63
20	230.22	217.46	213.39	215.47	214.80	214.93	213.54	221.83	231.21	242.23	232.79	223.68
25	228.20	215.65	213.97	216.27	214.13	215.32	213.77	221.79	229.76	241.00	230.61	223.86
EOM	226.26	215.47	214.75	216.00	214.10	215.65	215.34	224.83	234.46	242.23	228.80	224.61
MEAN	234.88	219.95	214.24	215.70	215.50	214.39	214.94	220.08	232.14	238.93	235.53	225.47
WTR YR 1999	MEAN 223.55 HIGH 213.27 MAR 12 LOW 245.10 OCT 2											

## NJ-WRD WELL NO. 07-0117



## GROUND-WATER LEVELS

61

## CAMDEN COUNTY

NJ-WRD Well Number, 07-0118. Site I.D., 395229074571202. Local I.D., Hutton Hill 2 Obs. NJ Permit Number, 31-04898.

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 recorder shelf, 1.89 ft above land surface.

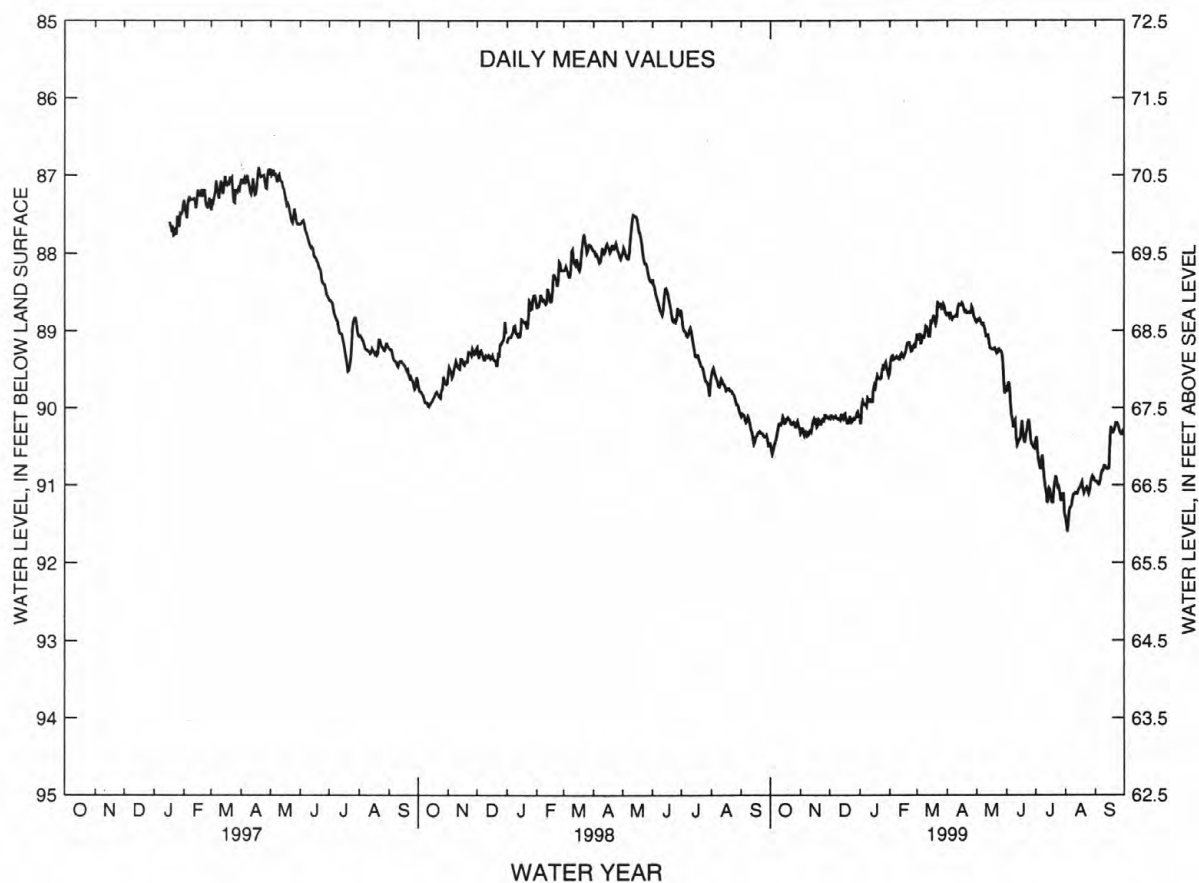
PERIOD OF RECORD.--Sept. 1967 to current year. Records for 1967 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 84.87 ft below land surface, Apr. 27, 1973; lowest, 91.68 ft below land surface, Aug. 3, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	90.48	90.35	90.13	89.95	89.37	89.17	88.83	88.87	89.93	90.73	91.32	90.99
10	90.20	90.31	90.14	89.89	89.34	88.94	88.80	89.01	90.15	90.91	91.12	90.75
15	90.14	90.14	90.13	89.75	89.34	88.88	88.67	89.22	90.40	91.04	91.04	90.78
20	90.14	90.15	90.19	89.61	89.15	88.91	88.74	89.22	90.45	91.04	91.10	90.30
25	90.18	90.18	90.16	89.46	89.20	88.66	88.77	89.26	90.27	91.02	91.11	90.24
EOM	90.26	90.13	90.13	89.58	89.15	88.79	88.87	89.71	90.52	91.38	90.94	90.27
MEAN	90.26	90.22	90.13	89.75	89.29	88.90	88.76	89.17	90.23	90.96	91.12	90.57
WTR YR 1999	MEAN 89.95 HIGH 88.62 MAR 22 LOW 91.60 AUG 3											

## NJ-WRD WELL NO. 07-0118



## GROUND-WATER LEVELS

## CAMDEN COUNTY

NJ-WRD Well Number, 07-0283. Site I.D., 395246075043301. Local I.D., Egbert Obs. NJ Permit Number, 31-04282.

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.

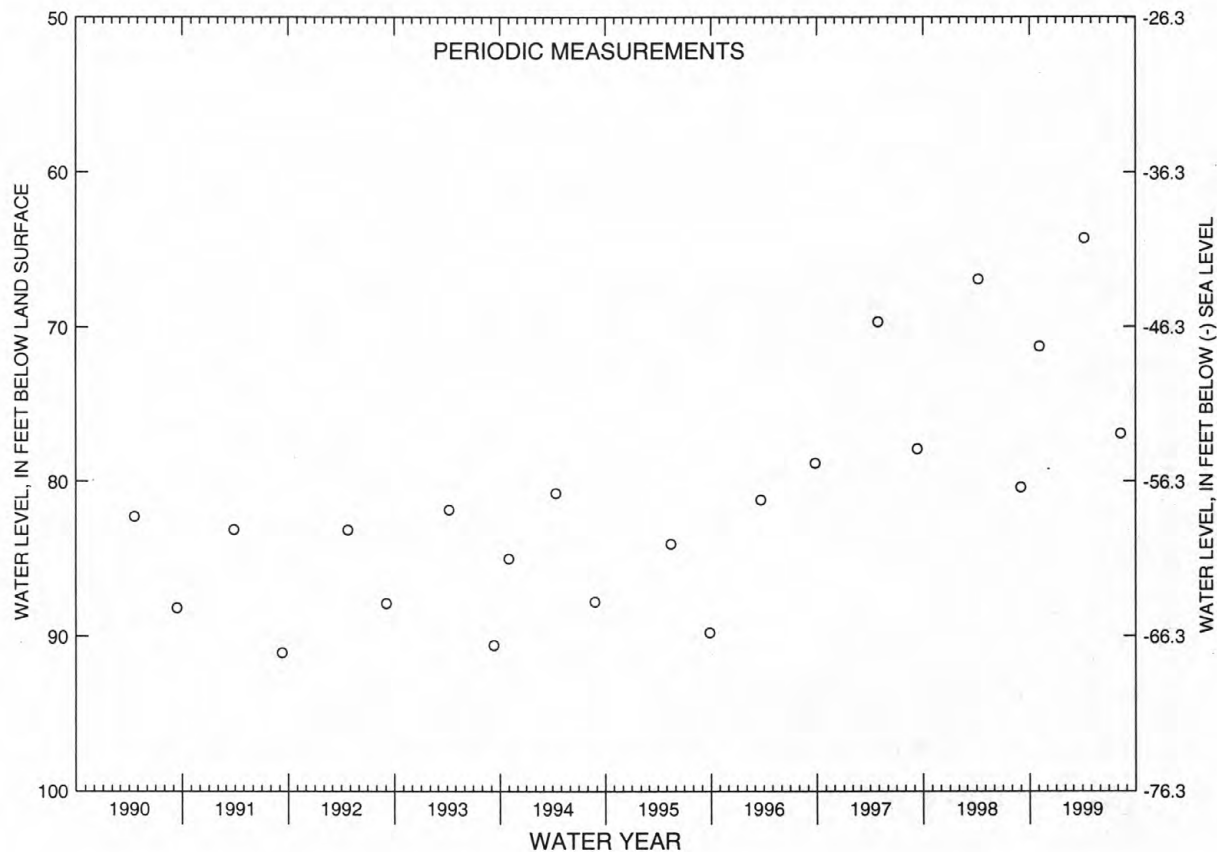
PERIOD OF RECORD.--June 1963 to current year. Records for 1963 to 1982 and 1988 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
NOV 4	71.26	APR 7	64.27	AUG 12	76.92

## NJ-WRD WELL NO. 07-0283





## CAMDEN COUNTY

NJ-WRD Well Number, 07-0412. Site I.D., 394922074563301. Local I.D., Elm Tree 2 Obs. NJ Permit Number, 31-09560.

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.

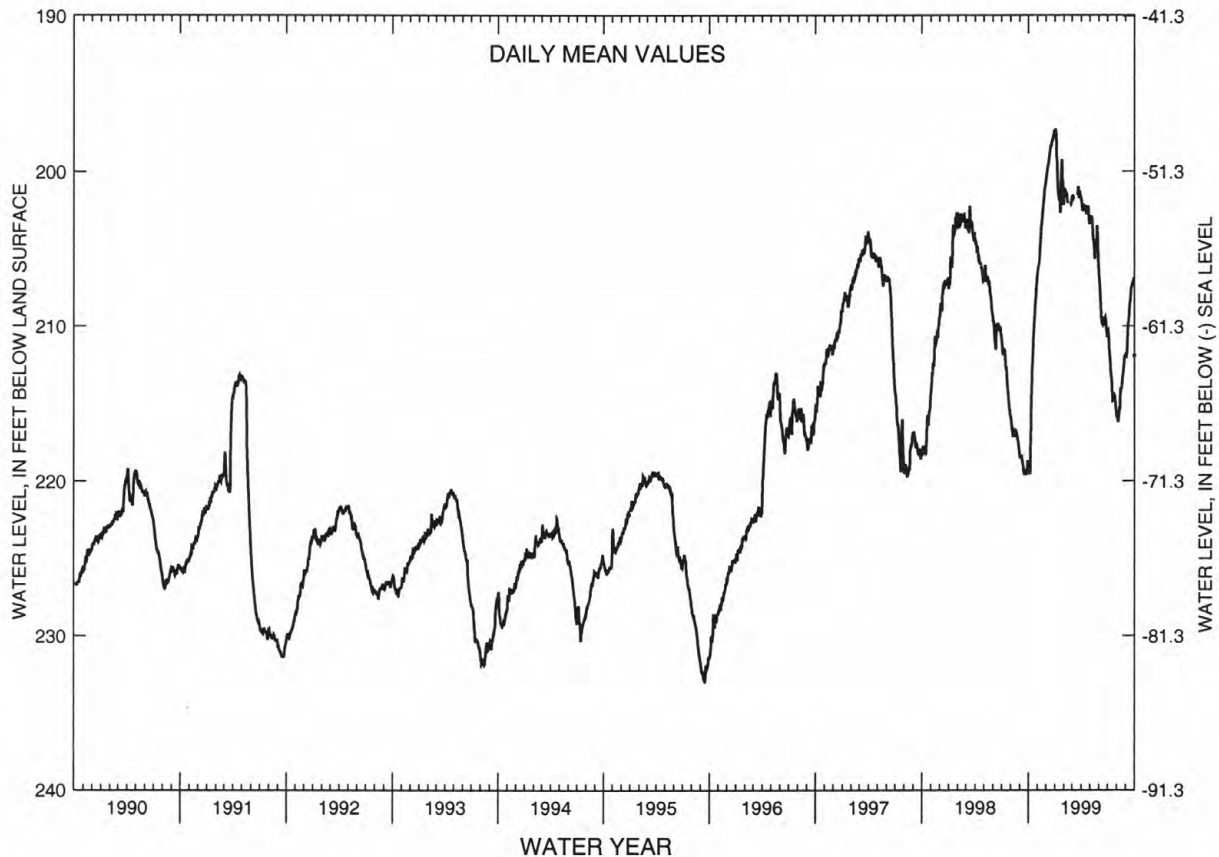
PERIOD OF RECORD.--Mar. 1964 to current year. Records for 1964 to 1978 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	219.53	206.11	200.02	197.68	201.34	201.83	202.35	202.94	207.55	210.60	215.81	211.92
10	215.68	205.24	199.45	200.27	201.39	---	202.10	203.13	209.55	212.10	215.74	210.00
15	212.34	203.62	198.80	201.52	---	---	202.43	204.51	209.65	213.38	214.14	209.08
20	210.15	202.52	198.34	202.67	---	201.55	202.73	205.07	209.99	214.84	213.77	207.86
25	208.46	201.58	197.94	199.26	202.10	201.75	202.31	204.71	209.58	214.49	212.91	207.28
EOM	206.88	200.72	197.58	202.16	201.70	201.72	203.41	205.97	210.67	215.57	212.07	206.87
MEAN	212.90	203.73	198.79	200.35	---	---	202.42	204.22	209.16	213.23	214.29	209.20
WTR YR 1999	MEAN	206.26	HIGH	197.28	JAN	3	LOW	219.57	OCT	6		

## NJ-WRD WELL NO. 07-0412



## GROUND-WATER LEVELS

## CAMDEN COUNTY

NJ-WRD Well Number, 07-0413. Site I.D., 394922074563302. Local I.D., Elm Tree 3 Obs. NJ Permit Number, 31-04561.

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.

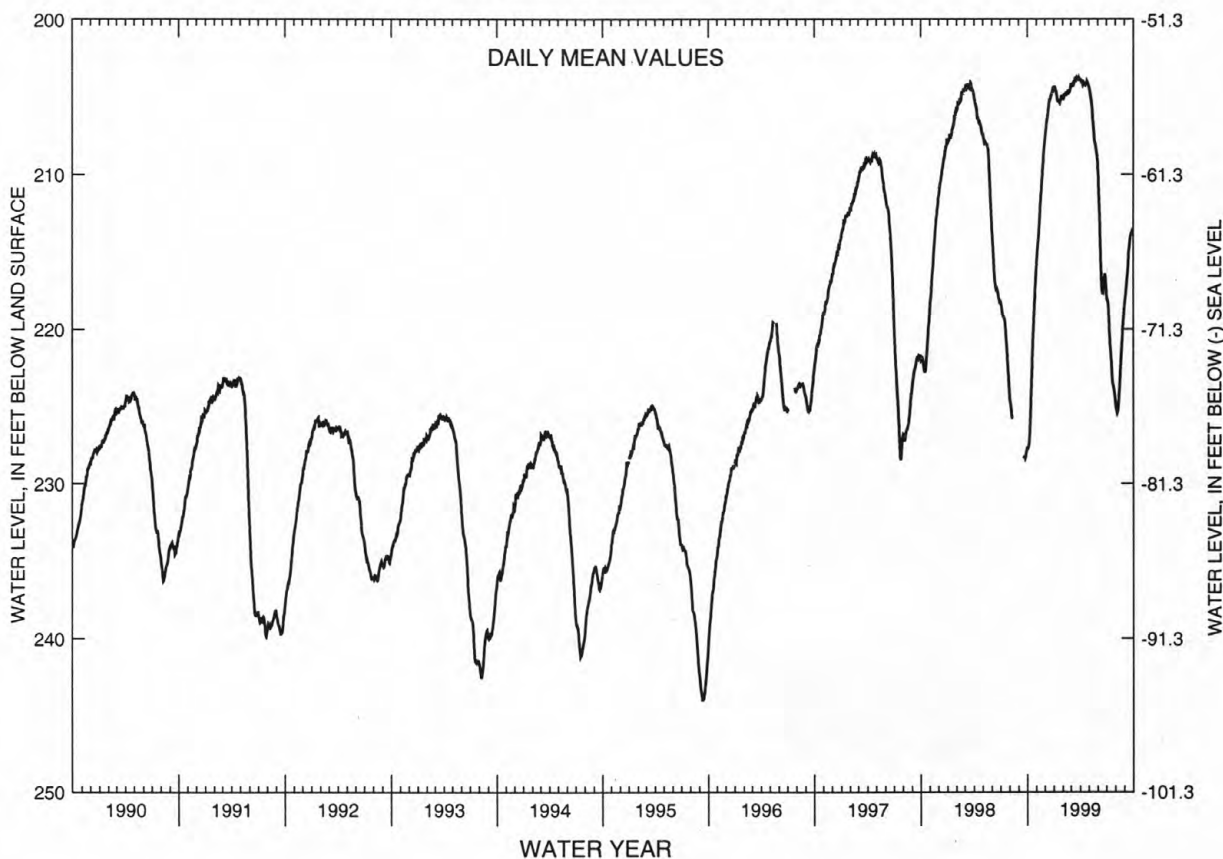
PERIOD OF RECORD.--Dec. 1963 to current year. Records for 1963 to 1977 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	227.62	214.87	206.98	204.46	204.99	204.37	203.99	204.68	211.26	218.13	225.24	217.86
10	226.46	213.71	206.32	204.79	204.92	204.04	204.11	205.26	214.16	219.20	225.30	216.87
15	223.75	211.97	205.58	205.18	204.87	203.76	204.22	206.41	217.15	221.25	223.95	215.67
20	220.85	210.44	205.14	205.37	204.62	203.97	204.18	207.57	217.55	222.78	222.17	214.42
25	218.68	209.12	204.82	205.16	204.59	203.79	204.15	208.19	216.50	223.67	220.51	213.83
EOM	216.37	207.91	204.52	205.21	204.28	203.92	204.25	208.99	217.22	224.52	218.84	213.49
MEAN	222.90	211.91	205.69	204.99	204.78	203.98	204.10	206.58	215.06	221.22	222.95	215.69
WTR YR 1999 MEAN 211.71 HIGH 203.69 MAR 22 LOW 227.75 OCT 3												

## NJ-WRD WELL NO. 07-0413



## GROUND-WATER LEVELS

65

## CAMDEN COUNTY

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

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.

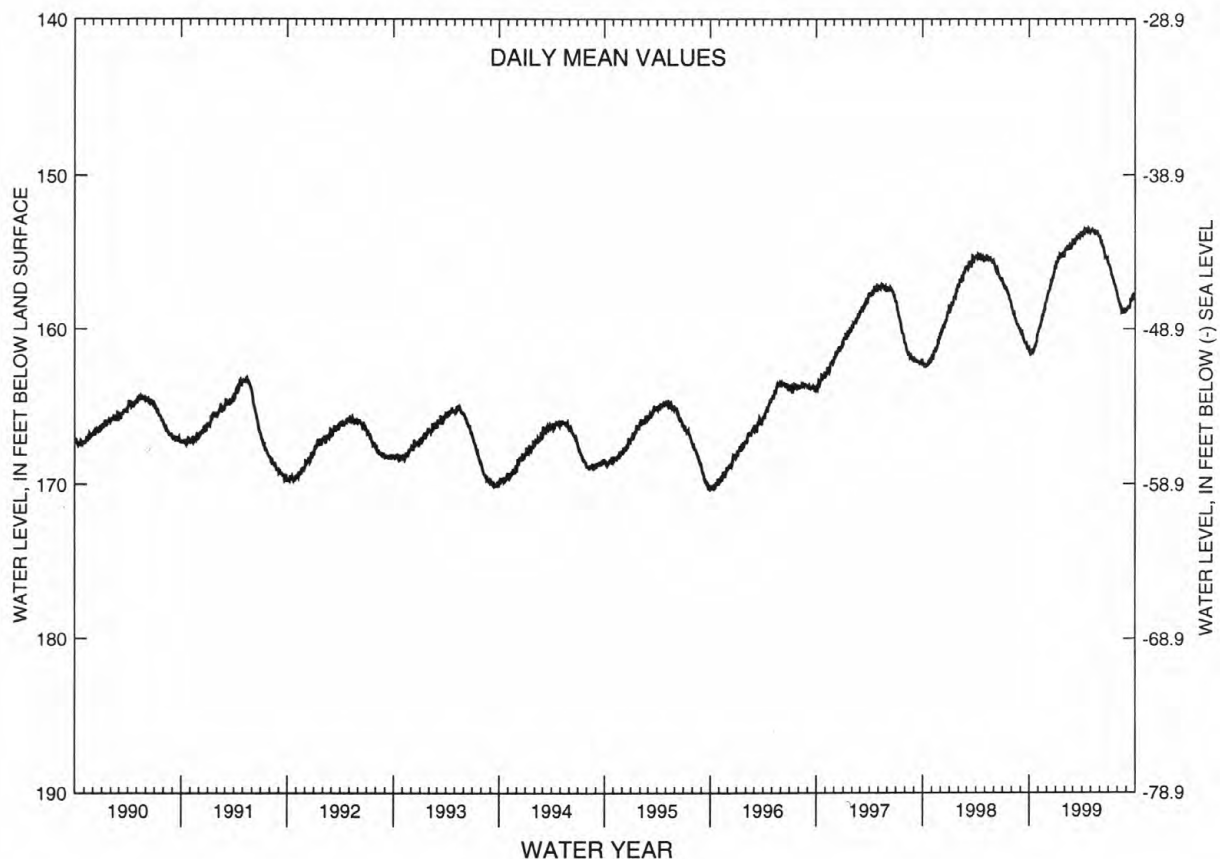
PERIOD OF RECORD.--Aug. 1960 to current year. Records for 1960 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	161.56	159.95	157.74	155.73	154.89	154.50	153.85	153.57	154.24	155.84	158.02	158.72
10	161.43	159.76	157.51	155.39	154.79	154.16	153.60	153.63	154.51	156.08	158.40	158.47
15	161.43	159.13	157.13	155.16	154.79	153.91	153.52	153.79	154.68	156.56	158.68	158.48
20	161.14	158.84	156.81	155.21	154.53	154.15	153.61	153.71	155.26	156.87	158.86	158.11
25	160.89	158.61	156.50	155.12	154.59	153.89	153.68	153.67	155.35	157.16	158.92	157.89
EOM	160.27	158.16	155.99	155.32	154.24	153.91	153.72	153.98	155.60	157.61	158.85	157.63
MEAN	161.20	159.24	157.00	155.36	154.70	154.09	153.64	153.70	154.79	156.60	158.54	158.30
WTR YR 1999	MEAN 156.44 HIGH 153.41 APR 16 LOW 161.65 OCT 6											

## NJ-WRD WELL NO. 07-0476



## GROUND-WATER LEVELS

## CAMDEN COUNTY

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

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.

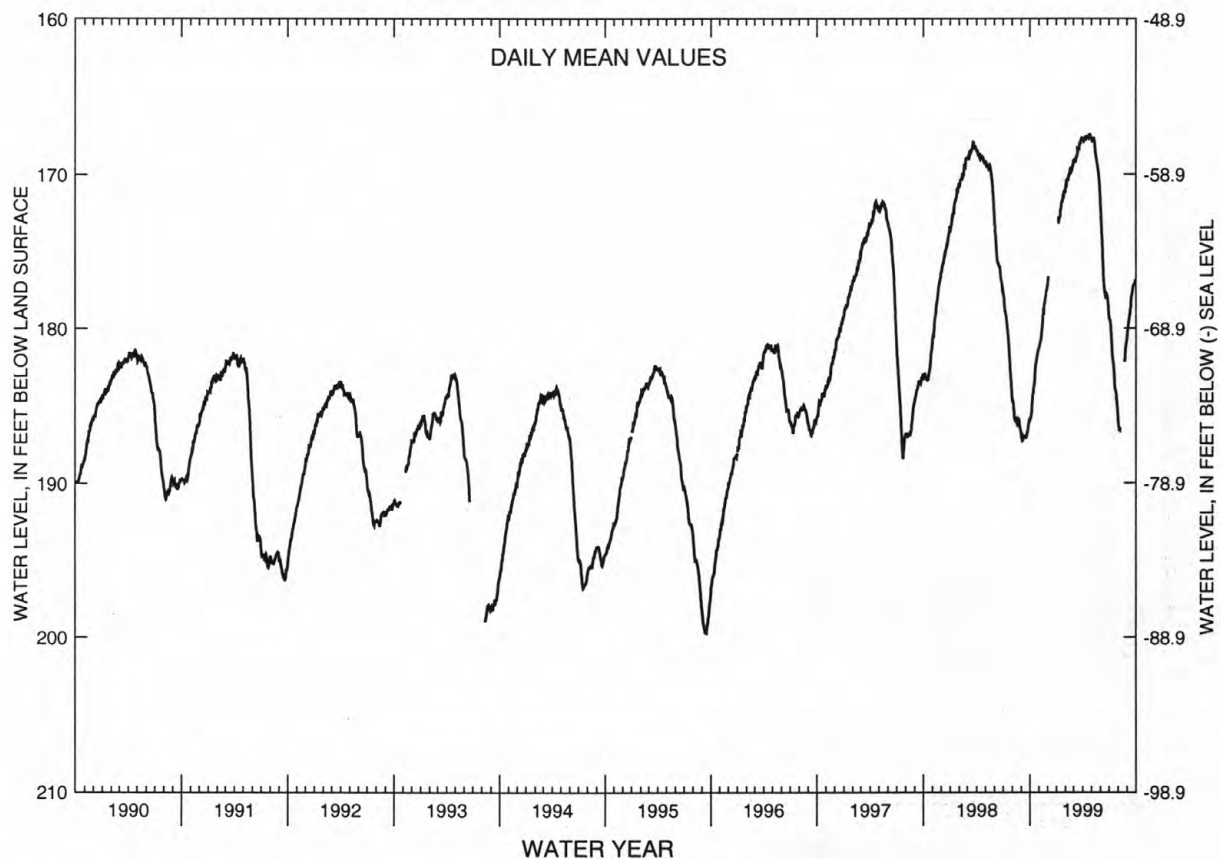
PERIOD OF RECORD.--May 1961 to current year. Records for 1961 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	185.64	180.94	---	---	170.62	169.28	167.81	167.88	173.36	179.45	186.51	179.95
10	184.43	180.38	---	172.93	170.29	168.88	167.74	167.68	175.61	180.74	---	179.13
15	183.72	179.13	---	172.31	169.99	168.44	167.59	168.58	177.41	182.11	---	178.48
20	182.47	178.37	---	171.81	169.60	168.37	167.66	169.17	178.02	183.50	---	177.58
25	181.85	177.93	---	171.34	169.54	167.91	167.53	169.77	177.89	184.14	181.97	177.12
EOM	181.34	177.34	---	171.23	169.17	167.76	167.69	171.17	178.93	185.50	180.79	176.82
MEAN	183.52	179.31	---	171.97	170.02	168.50	167.64	168.81	176.34	182.24	---	178.43
WTR YR 1999	MEAN 175.27 HIGH 167.39 APR 26 LOW 186.64 AUG 7											

NJ-WRD WELL NO. 07-0477



## GROUND-WATER LEVELS

67

## CAMDEN COUNTY

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

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.

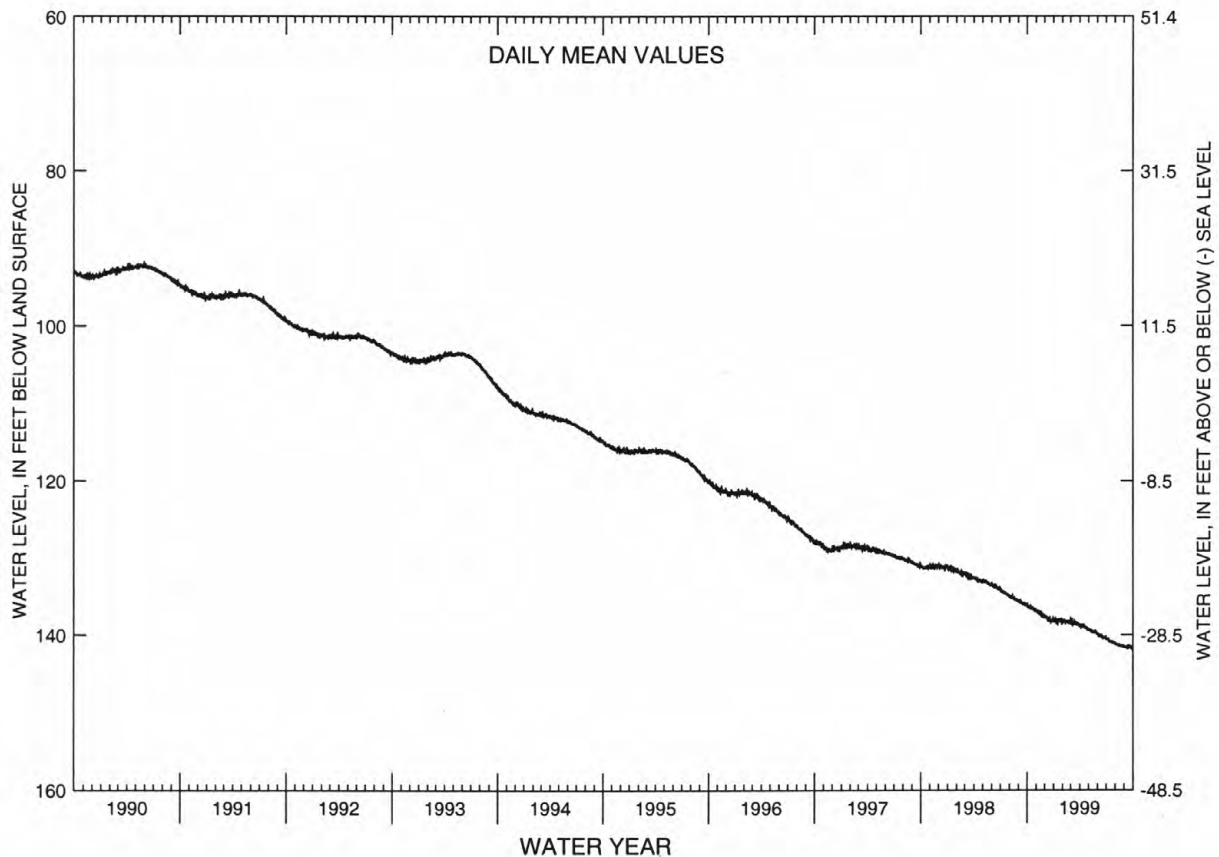
PERIOD OF RECORD.--May 1961 to current year. Records for 1961 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 56.12 ft below land surface, Aug. 14, 1962; lowest, 141.84 ft below land surface, Sept. 28, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	136.37	136.95	137.70	138.18	138.23	138.52	138.88	139.35	140.05	140.56	141.22	141.61
10	136.29	137.20	137.91	138.19	138.27	138.46	138.79	139.48	140.19	140.66	141.31	141.57
15	136.44	137.09	138.00	138.12	138.38	138.37	138.87	139.65	140.15	140.88	141.35	141.75
20	136.54	137.28	138.13	138.16	138.24	138.66	139.05	139.62	140.43	140.91	141.45	141.54
25	136.74	137.51	138.23	138.15	138.43	138.57	139.22	139.56	140.37	140.95	141.51	141.63
EOM	136.78	137.60	138.21	138.47	138.26	138.83	139.36	139.90	140.45	141.06	141.56	141.65
MEAN	136.51	137.23	137.96	138.21	138.30	138.52	138.98	139.57	140.22	140.82	141.36	141.61
WTR YR 1999	MEAN 139.11 HIGH 136.11 OCT 1 LOW 141.83 SEP 28											

## NJ-WRD WELL NO. 07-0478





## GROUND-WATER LEVELS

## CAMDEN COUNTY

NJ-WRD Well Number, 07-0503. Site I.D., 394440074593101. Local I.D., Winslow 5 Obs. NJ Permit Number, 31-05926.

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.

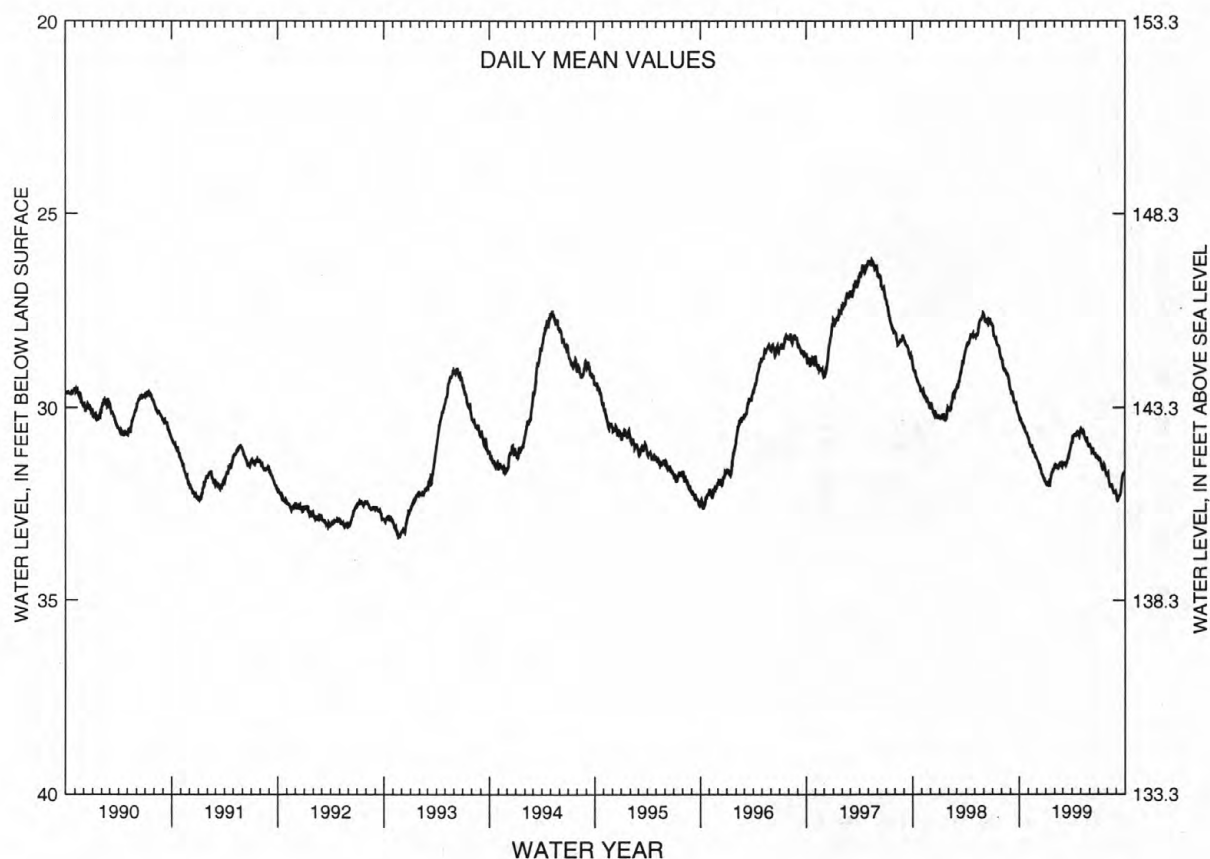
PERIOD OF RECORD.--Dec. 1972 to current year. Records for 1972 to 1980 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.26	30.85	31.38	31.98	31.51	31.48	30.83	30.59	31.02	31.33	31.71	32.37
10	30.38	30.97	31.47	31.98	31.57	31.43	30.75	30.65	31.13	31.35	31.98	32.34
15	30.46	30.97	31.59	31.93	31.56	31.42	30.69	30.73	31.12	31.55	32.05	32.31
20	30.50	31.12	31.73	31.81	31.43	31.32	30.63	30.84	31.18	31.57	32.07	32.02
25	30.64	31.23	31.82	31.68	31.49	31.16	30.69	30.85	31.26	31.56	32.22	31.75
EOM	30.75	31.28	31.92	31.59	31.46	30.93	30.64	31.00	31.29	31.74	32.19	31.73
MEAN	30.47	31.04	31.62	31.84	31.50	31.32	30.72	30.75	31.14	31.49	32.02	32.11
WTR YR 1999 MEAN 31.34 HIGH 30.17 OCT 1 LOW 32.42 SEP 7												

## NJ-WRD WELL NO. 07-0503



## GROUND-WATER LEVELS

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## CAMDEN COUNTY

NJ-WRD Well Number, 07-0740. Site I.D., 394131074481901. Local I.D., CCMUA PZ 3. NJ Permit Number, 31-39312.

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.

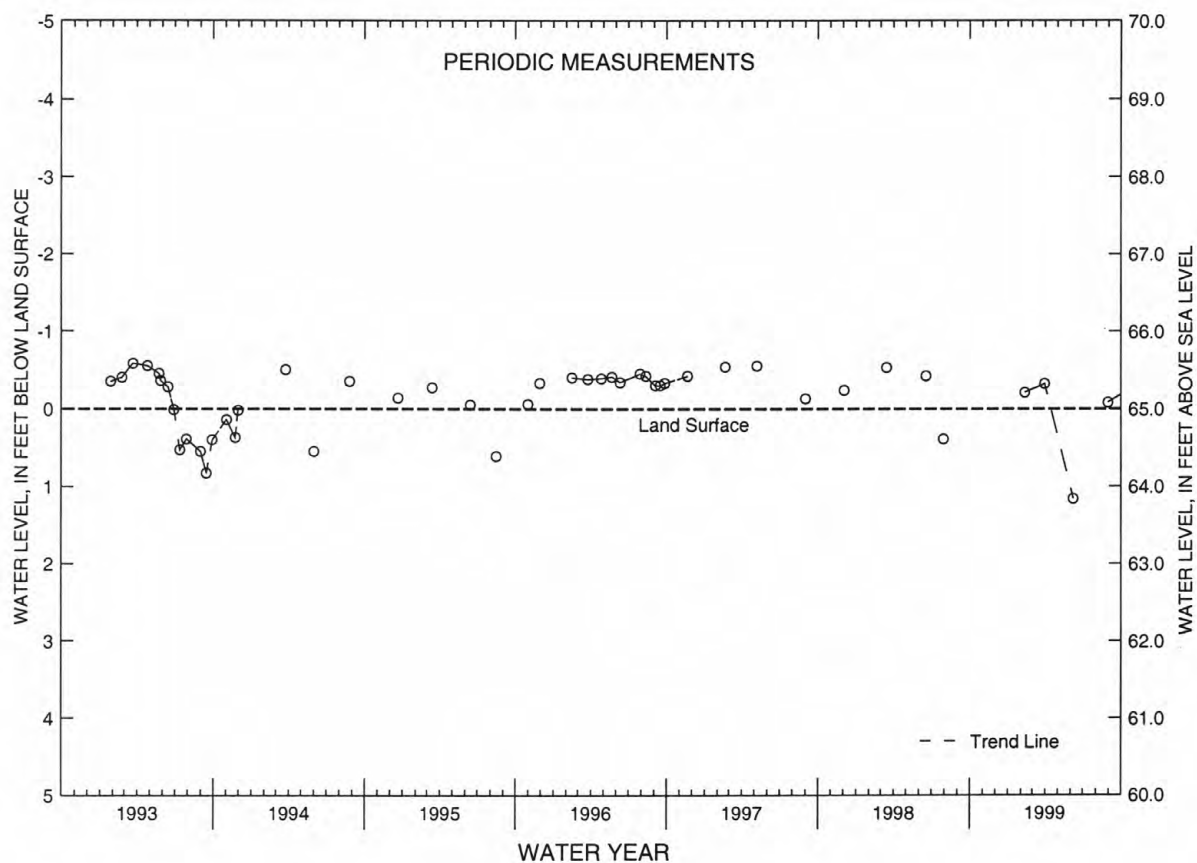
PERIOD OF RECORD.--Jan. 1993 to current year. Records for 1993 to 1996 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.58 ft above land surface, Mar. 22, 1993; lowest, 1.16 ft below land surface, June 8, 1999.

WATER LEVEL, IN FEET ABOVE (-) OR BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
FEB 11	-0.21	JUN 8	1.16
MAR 31	-0.32	AUG 31	-0.08

## NJ-WRD WELL NO. 07-0740



## GROUND-WATER LEVELS

## CAMDEN COUNTY

NJ-WRD Well Number, 07-0741 Site I.D., 394208074534801. Local I.D., CCMUA PZ 4. NJ Permit Number, 31-37739.

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.

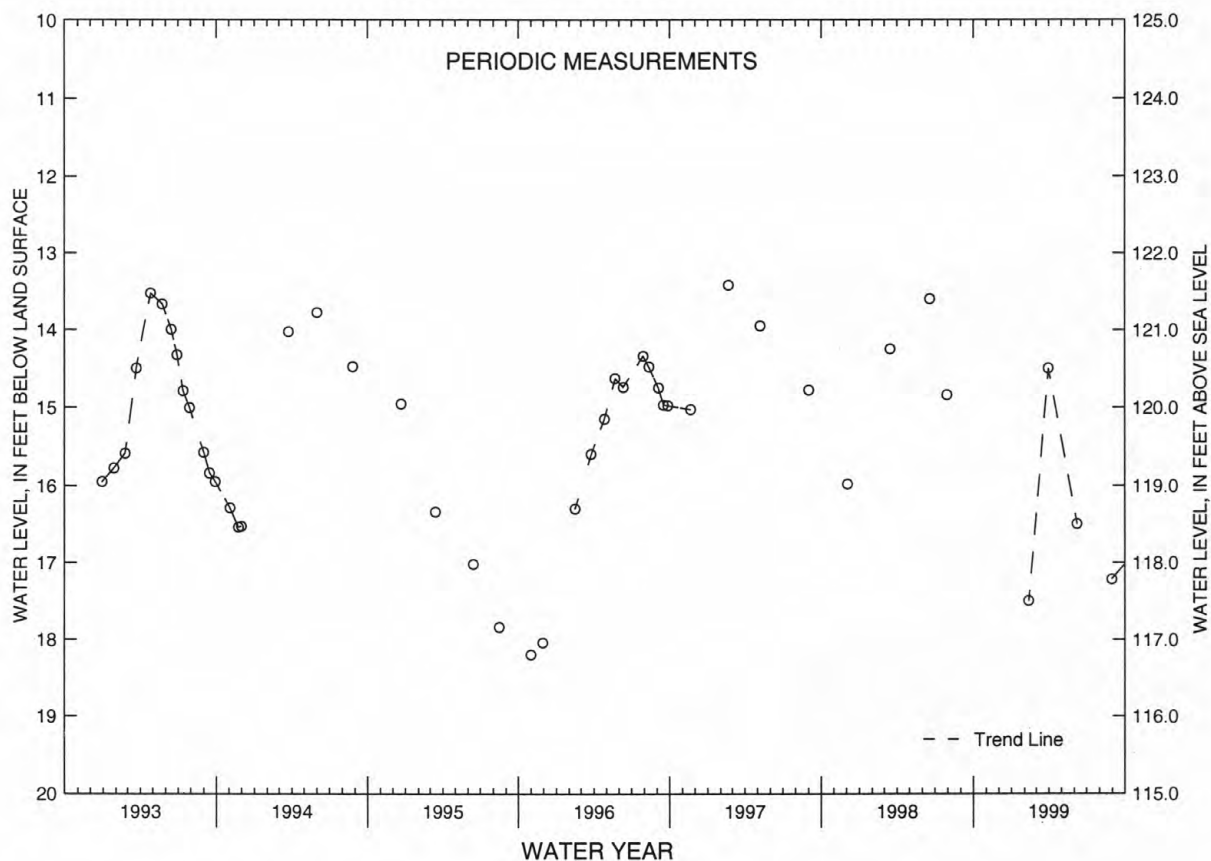
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
FEB 11	17.50	JUN 8	16.50
MAR 31	14.50	AUG 31	17.22

## NJ-WRD WELL NO. 07-0741



## CAMDEN COUNTY

NJ-WRD Well Number, 07-0742. Site I.D., 394337074461401. Local I.D., CCMUA PZ 2. NJ Permit Number, 31-37726.

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.

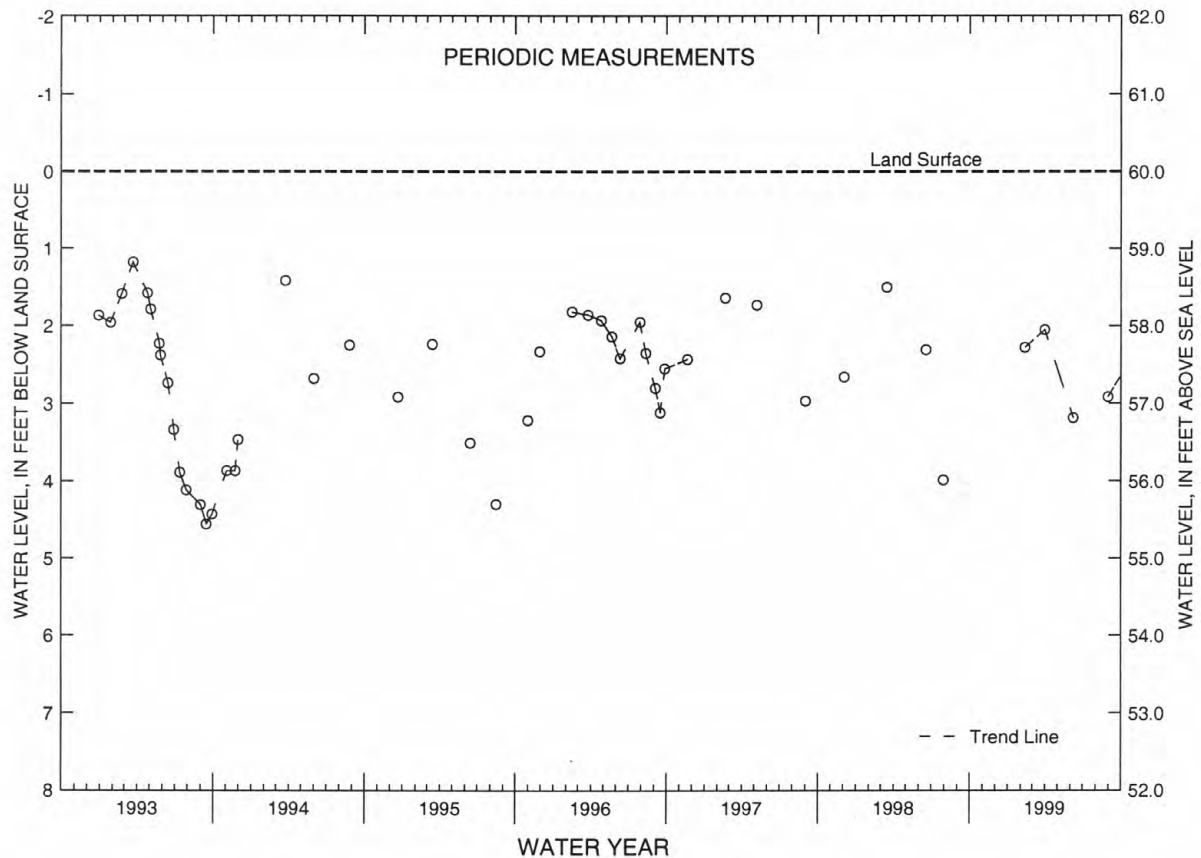
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
FEB 11	2.28	JUN 8	3.19
MAR 31	2.05	AUG 31	2.92

## NJ-WRD WELL NO. 07-0742



## GROUND-WATER LEVELS

## CAMDEN COUNTY

NJ-WRD Well Number, 07-0743. Site I.D., 394340074461401. Local I.D., CCMUA PZ 1. NJ Permit Number, 31-37727.

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.

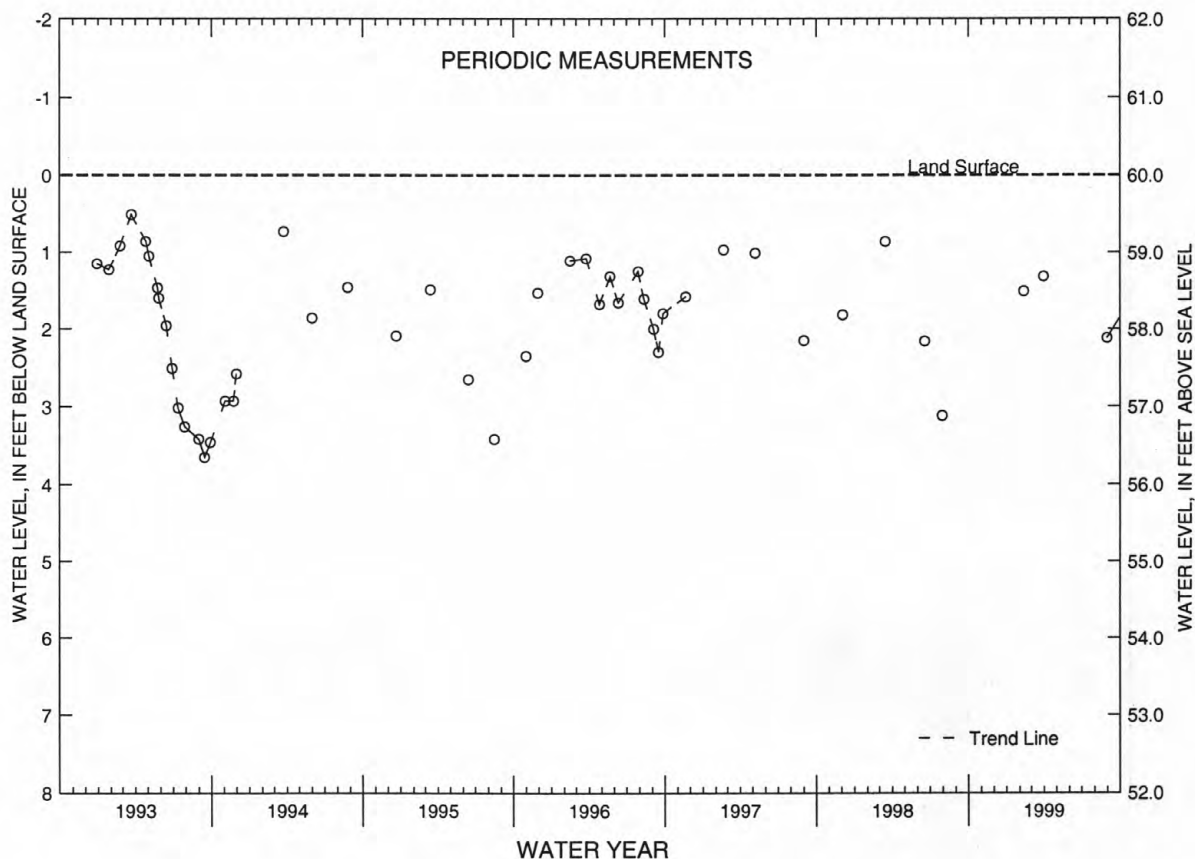
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.51 ft 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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
FEB 11	1.51	MAR 31	1.32	AUG 31	2.12

NJ-WRD WELL NO. 07-0743





## GROUND-WATER LEVELS

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## CAMDEN COUNTY

NJ-WRD Well Number, 07-0744. Site I.D., 394410074534501. Local I.D., CCMUA PZ 5. NJ Permit Number, 31-39311.

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.

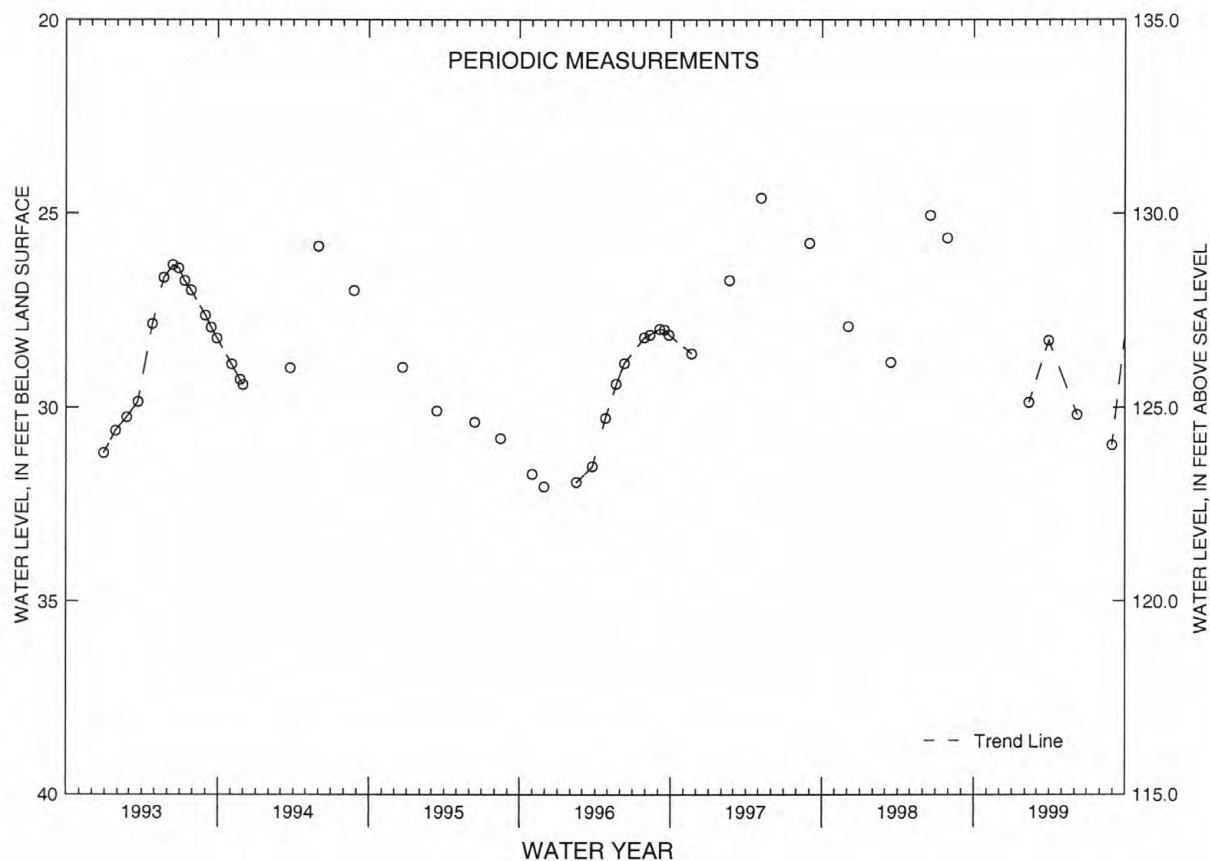
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
FEB 11	29.87	JUN 8	30.19
MAR 31	28.27	AUG 31	30.98

## NJ-WRD WELL NO. 07-0744



## GROUND-WATER LEVELS

## CAMDEN COUNTY

NJ-WRD Well Number, 07-0745, Site I.D., 394413074494901. Local I.D., CCMUA PZ 8. NJ Permit Number, 31-37724.

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.

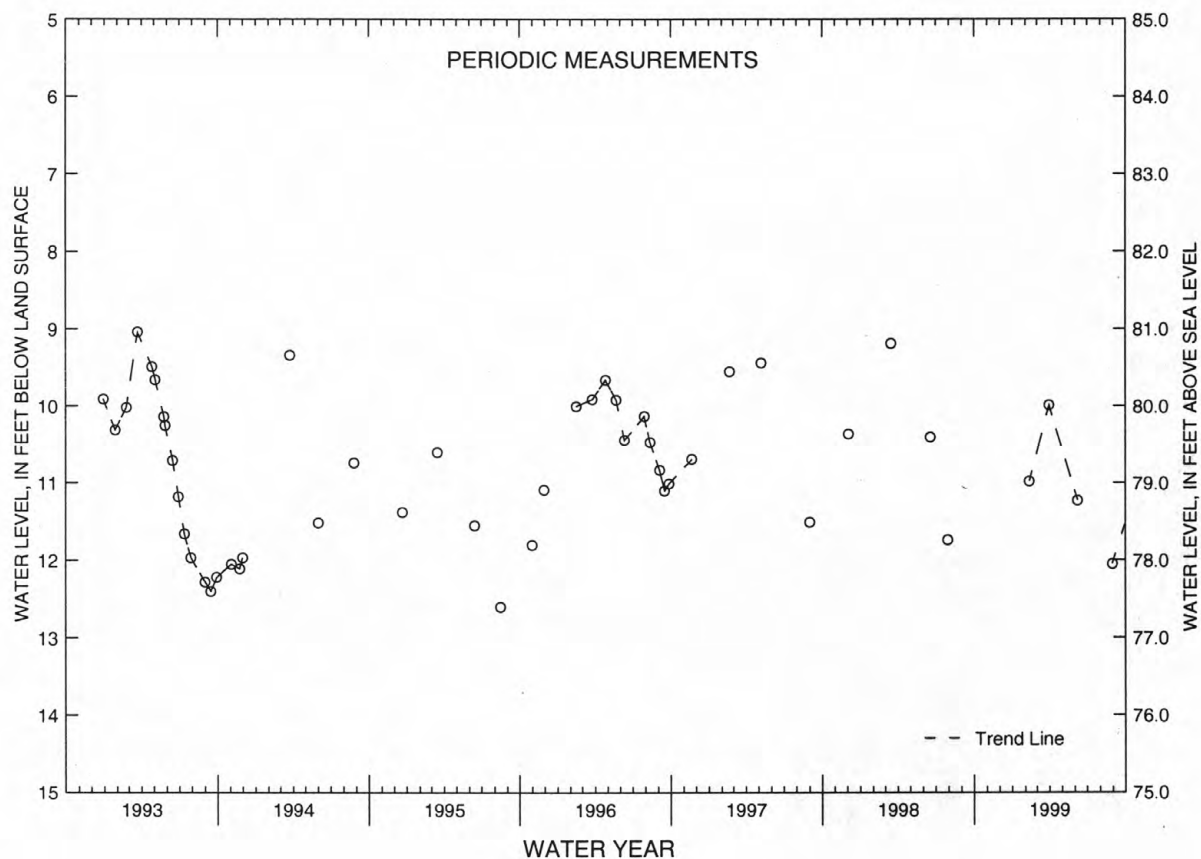
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
FEB 11	10.98	JUN 8	11.23
MAR 31	9.99	AUG 31	12.05

NJ-WRD WELL NO. 07-0745



## CAMDEN COUNTY

NJ-WRD Well Number, 07-0746. Site I.D., 394516074520501. Local I.D., CCMUA PZ 7. NJ Permit Number, 31-37738.

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.

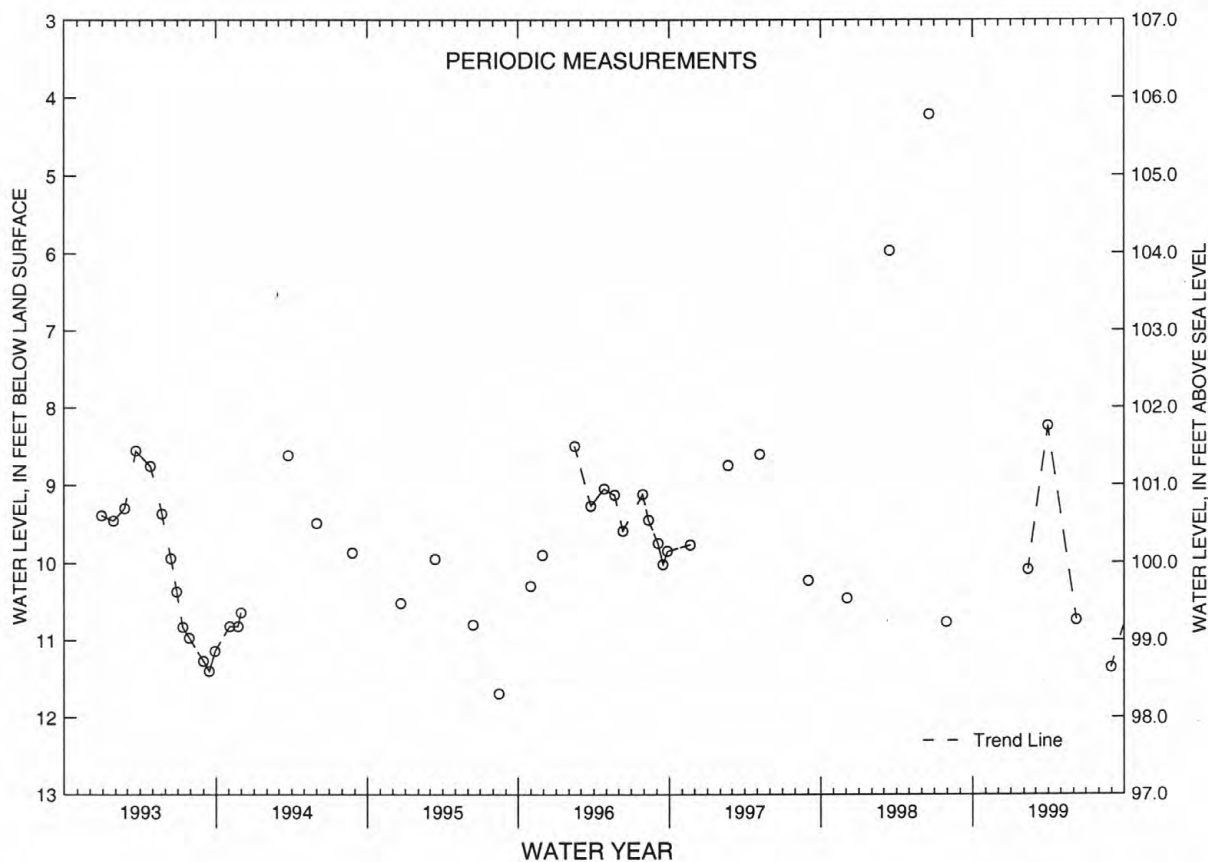
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.22 ft below land surface, Jun. 19, 1998; lowest, 11.69 ft below land surface, Aug. 16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
FEB 11	10.09	JUN 8	10.74
MAR 31	8.24	AUG 31	11.36

## NJ-WRD WELL NO. 07-0746



## GROUND-WATER LEVELS

## CAMDEN COUNTY

NJ-WRD Well Number, 07-0747. Site I.D., 394630074492801. Local I.D., CCMUA PZ 6. NJ Permit Number, 31-37725.

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, 3.01 ft above land surface.

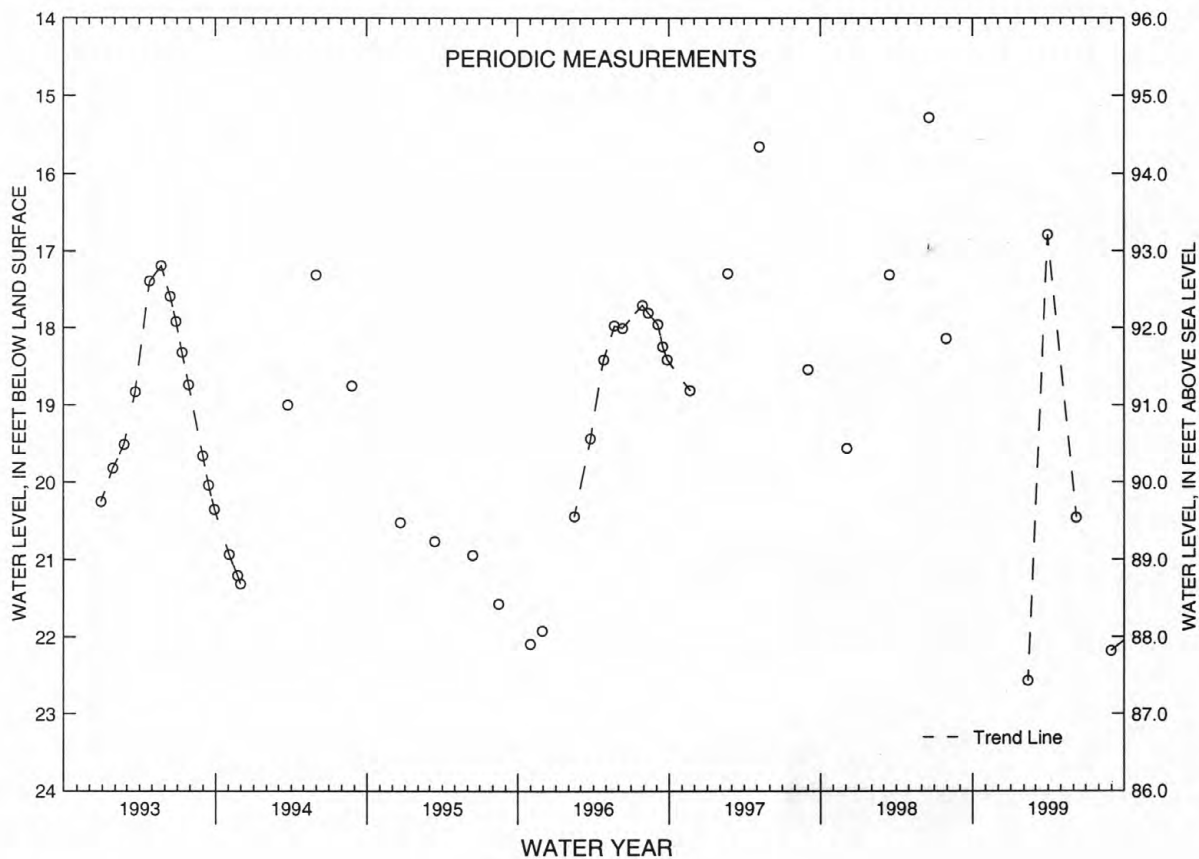
PERIOD OF RECORD.--Dec. 1992 to current year. Records for 1992 to 1996 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.28 ft below land surface, Jun. 19, 1998; lowest, 22.57 ft below land surface, Feb. 11, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
FEB 11	22.57	JUN 8	20.46
MAR 31	16.79	AUG 31	22.18

NJ-WRD WELL NO. 07-0747

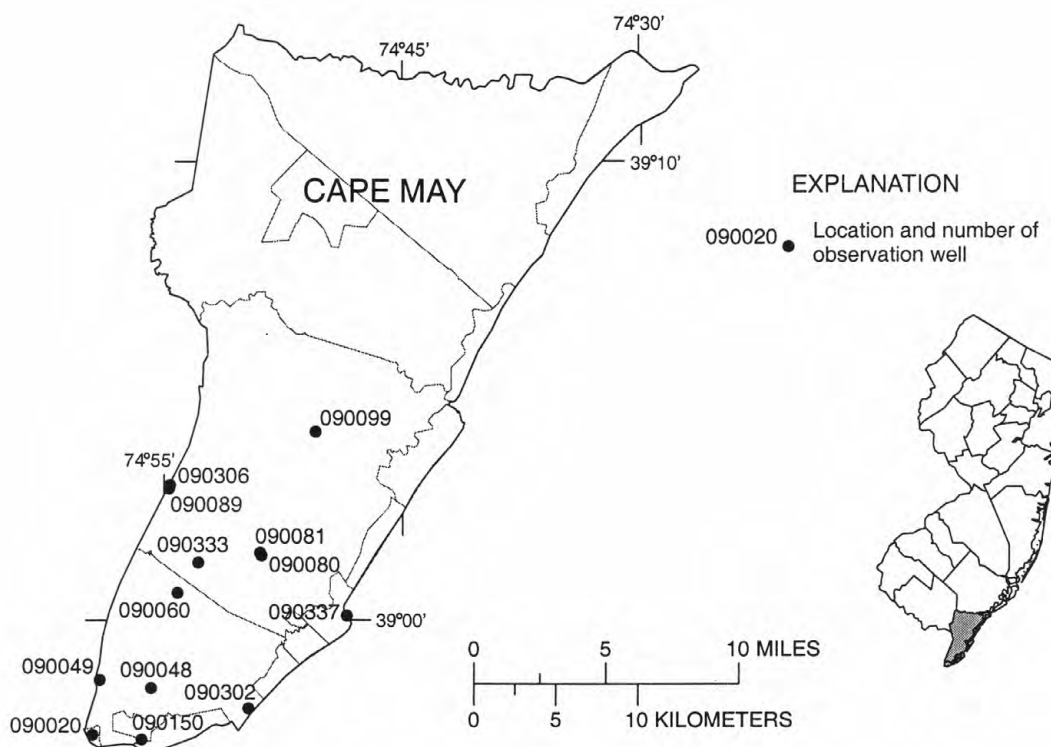


## CAPE MAY COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
090020	TRAFFIC CIRCLE OBS	CAPE MAY POINT BORO	20	HLBC	MANUAL
090048	CANAL 5 OBS	LOWER TWP	252	CNSY	MANUAL
090049	HIGBEE BEACH 3 OBS	LOWER TWP	250	CNSY	MAXMIN
090060	AIRPORT 7 OBS	LOWER TWP	257	CNSY	MANUAL
090080	CAPE MAY 42 OBS	MIDDLE TWP	252	CNSY	MANUAL
090081	CAPE MAY 23 OBS	MIDDLE TWP	26	HLBC	MANUAL
090089	OYSTER LAB 4 OBS	MIDDLE TWP	210	CNSY	MAXMIN
090099	CAPE MAY COUNTY PK 8 OBS	MIDDLE TWP	230	CNSY	DAILY
090150	WEST CAPE MAY 1 OBS	WEST CAPE MAY BORO	293	CNSY	MAXMIN
090302	COAST GUARD 800 OBS	LOWER TWP	903	KRKDL	DAILY
090306	OYSTER 800 OBS	MIDDLE TWP	709	KRKDL	DAILY
090333	PUMP POND N OBS	MIDDLE TWP	43	HLBC	DAILY
090337	M-1 N WILDWOOD 800 OBS	NORTH WILDWOOD CITY	965	KRKDL	DAILY

## Aquifer names

- CNSY - Cohansey Sand
- HLBC - Holly Beach water-bearing zone
- KRKDL - Atlantic City 800-foot sand of the Kirkwood Formation





## GROUND-WATER LEVELS

## CAPE MAY COUNTY

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

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.

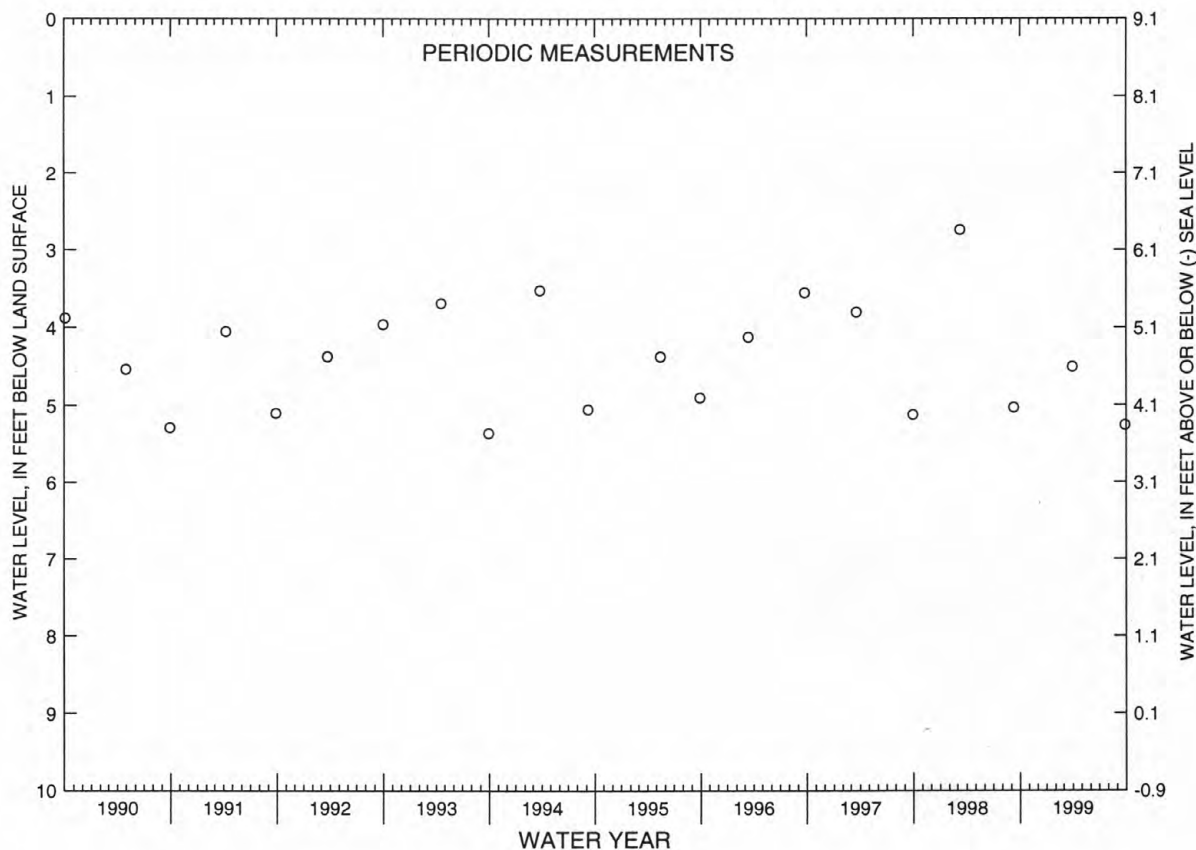
PERIOD OF RECORD.--Jan. 1963 to current year. Records for 1963 to 1982 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
MAR 31	4.50	SEP 29	5.26

## NJ-WRD WELL NO. 09-0020



## GROUND-WATER LEVELS

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## CAPE MAY COUNTY

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

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.

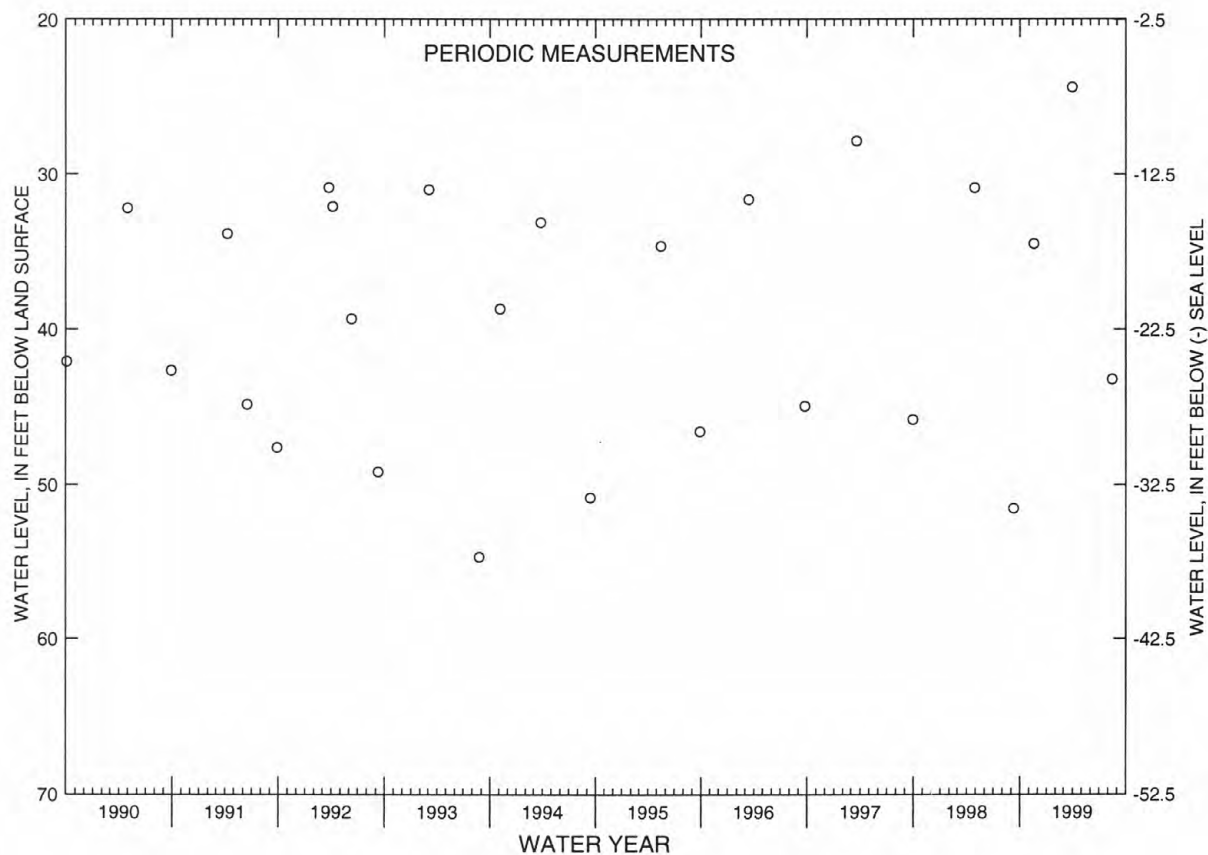
PERIOD OF RECORD.--July 1957 to current year. Records for 1957 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.35 ft below land surface, Mar. 31, 1999; lowest, 56.67 ft below land surface, Aug. 11, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
NOV 19	34.50	MAR 31	24.35	AUG 16	43.20

## NJ-WRD WELL NO. 09-0048



## GROUND-WATER LEVELS

## CAPE MAY COUNTY

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

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.

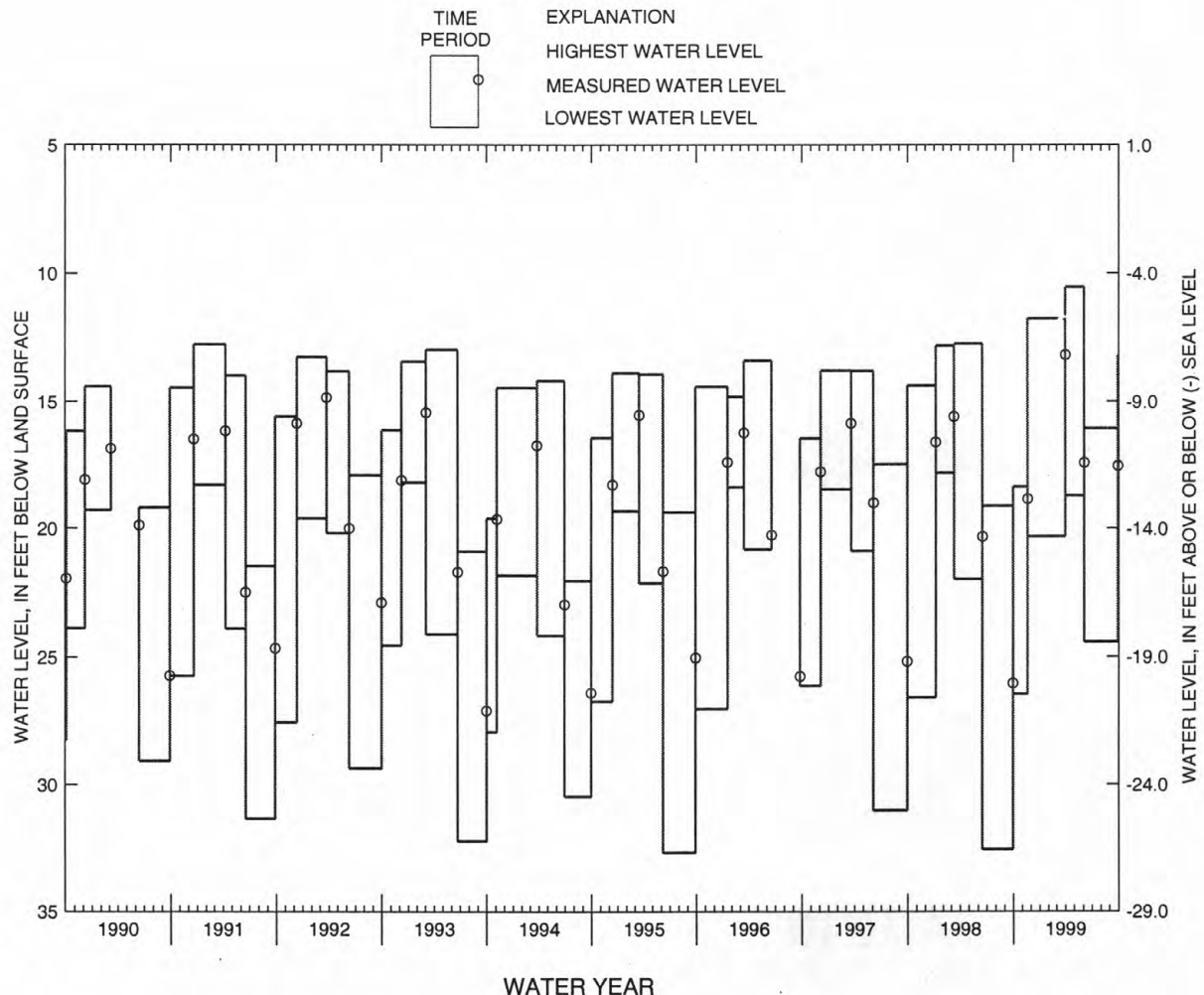
PERIOD OF RECORD.--May 1965 to current year. Records for 1975 to 1980 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.55 ft below land surface, between Mar. 31 and June 4, 1999; lowest, 34.22 ft below land surface, July 31, 1974.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 30, 1998 TO NOV. 19, 1998	18.37	26.46	NOV. 19, 1998	18.85
NOV. 19, 1998 TO MAR. 31, 1999	11.77	20.32	MAR. 31, 1999	13.19
MAR. 31, 1999 TO JUNE 4, 1999	10.55	18.72	JUNE 4, 1999	17.42
JUNE 4, 1999 TO SEPT. 29, 1999	16.07	24.43	SEPT. 29, 1999	17.55

## NJ-WRD WELL NO. 09-0049



## CAPE MAY COUNTY

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

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.

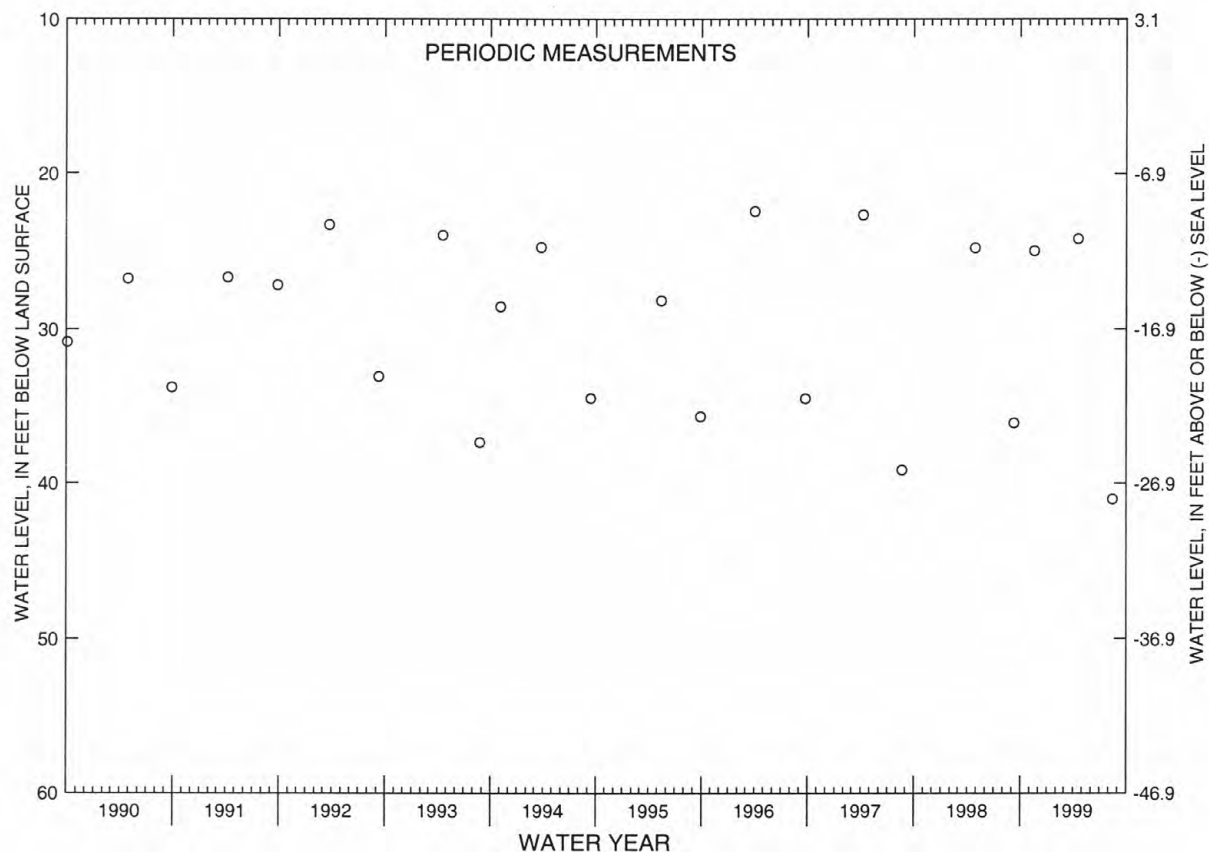
PERIOD OF RECORD.--Jan. 1963 to current year. Records for 1963 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
NOV 19	24.98	APR 19	24.19	AUG 16	41.03

## NJ-WRD WELL NO. 09-0060



## GROUND-WATER LEVELS

## CAPE MAY COUNTY

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

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.

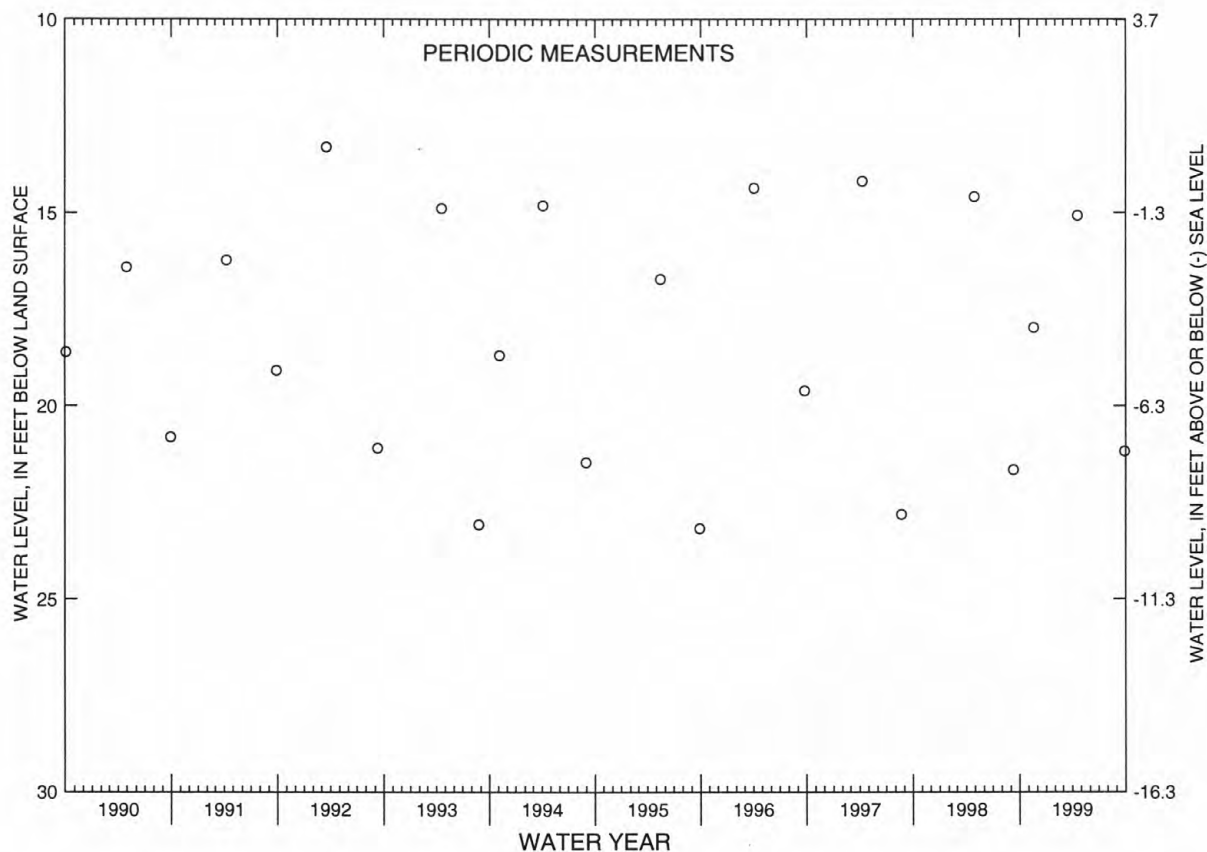
PERIOD OF RECORD.--July 1957 to current year. Records for 1957 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
NOV 19	17.97	APR 19	15.08	SEP 29	21.19

## NJ-WRD WELL NO. 09-0080





## CAPE MAY COUNTY

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

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.

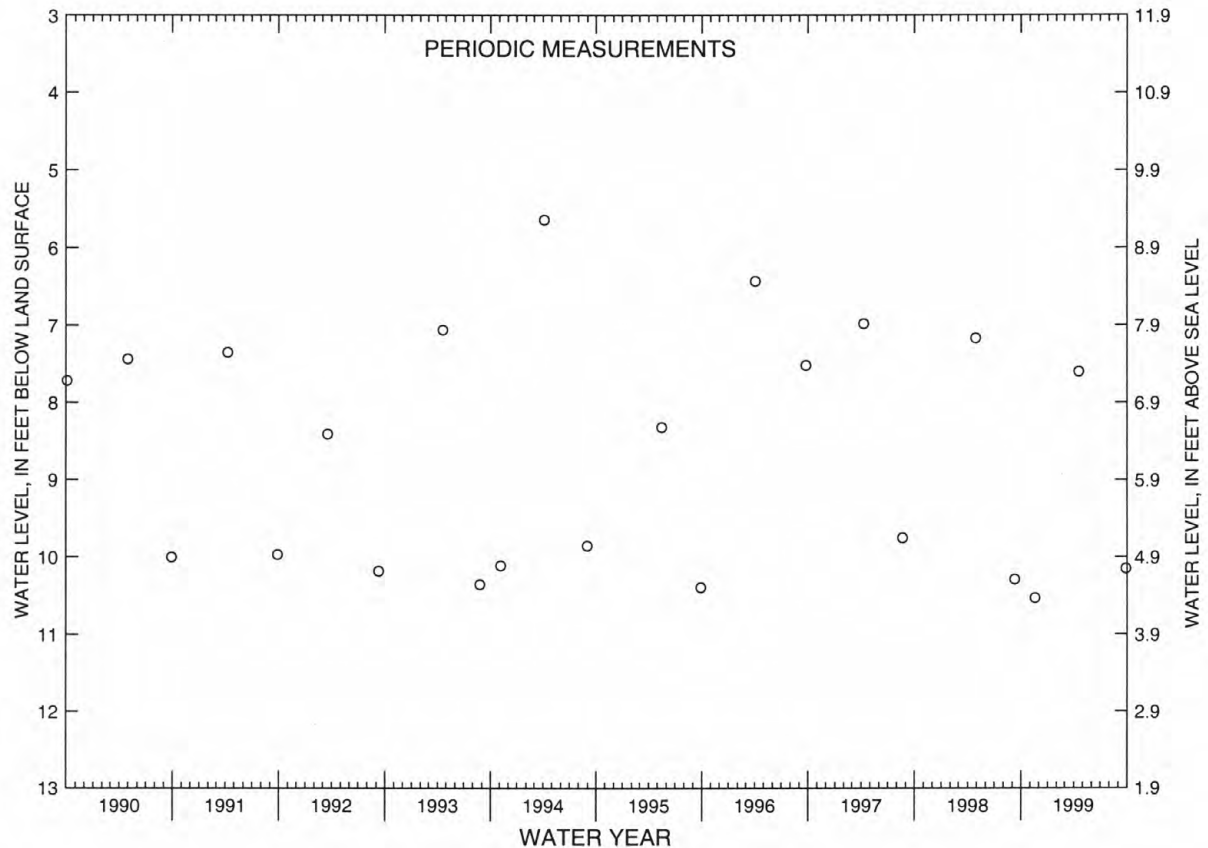
PERIOD OF RECORD.--June 1957 to current year. Records for 1957 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
NOV 19	10.53	APR 19	7.60	SEP 29	10.15

## NJ-WRD WELL NO. 09-0081



## GROUND-WATER LEVELS

## CAPE MAY COUNTY

NJ-WRD Well Number, 09-0089. Site I.D., 390425074544601. Local I.D., Oyster Lab 4 Obs. NJ Permit Number, 37-00158.

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.

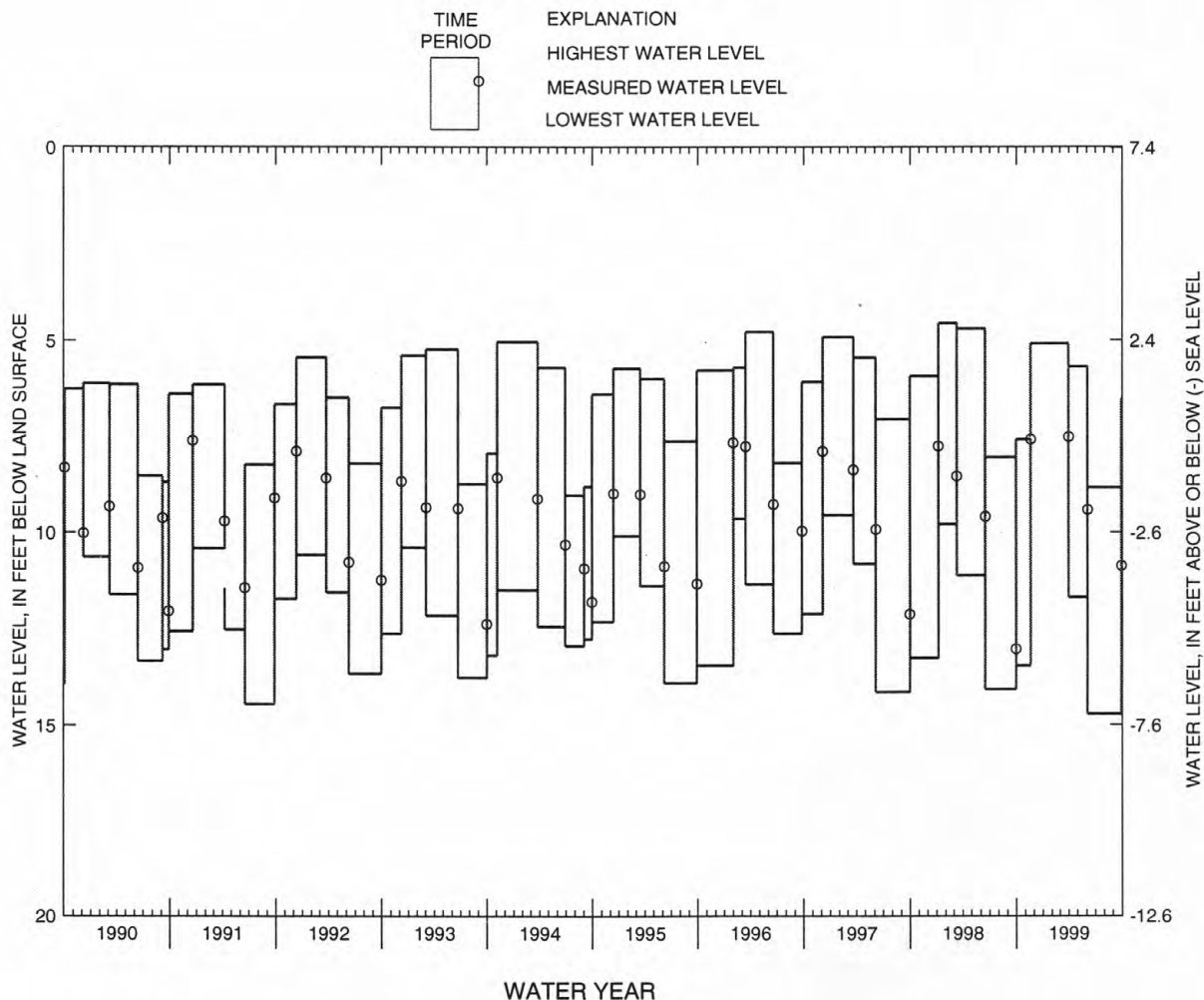
PERIOD OF RECORD.--Aug. 1957 to current year. Records for 1957 to 1982 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 30, 1998 TO NOV. 19, 1998	7.58	13.45	NOV. 19, 1998	7.59
NOV. 19, 1998 TO MAR. 31, 1999	5.09	---	MAR. 31, 1999	7.52
MAR. 31, 1999 TO JUNE 4, 1999	5.69	11.68	JUNE 4, 1999	9.42
JUNE 4, 1999 TO SEPT. 29, 1999	8.84	14.72	SEPT. 29, 1999	10.87

## NJ-WRD WELL NO. 09-0089



## GROUND-WATER LEVELS

85

## CAPE MAY COUNTY

NJ-WRD Well Number, 09-0099. Site I.D., 390608074483801. Local I.D., Cape May County Park 8 Obs. NJ Permit Number, 35-00680.

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.

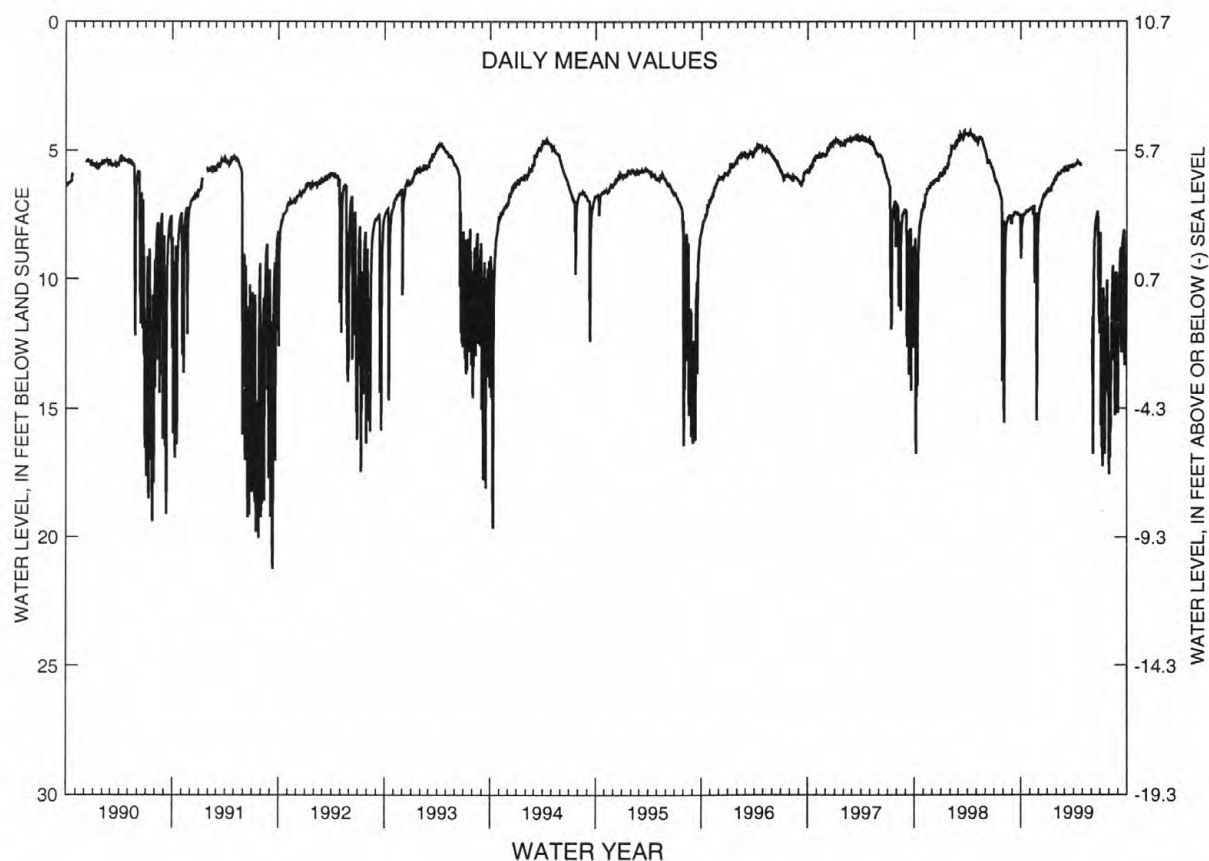
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.73 ft below land surface, Apr. 5, 1958; lowest, 22.01 ft below land surface, July 9, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.88	7.26	7.32	6.55	5.98	5.76	5.59	---	12.33	15.67	16.90	12.19
10	7.54	7.26	7.11	6.53	5.92	5.79	5.54	---	10.45	16.11	12.59	8.97
15	7.48	7.19	6.92	6.41	5.92	5.58	5.48	---	7.99	11.38	9.59	9.80
20	7.39	8.47	6.82	6.33	5.78	5.61	5.51	---	7.60	15.47	10.43	8.33
25	7.40	15.45	6.75	6.18	5.79	5.64	5.56	---	8.24	10.80	11.21	13.11
EOM	7.32	7.89	6.63	6.16	5.71	5.63	---	---	12.12	14.07	10.79	12.81
MEAN	7.61	8.27	6.98	6.40	5.88	5.68	5.54	---	9.58	13.13	12.74	10.26

WTR YR 1999 MEAN 8.39 HIGH 5.43 APR 16 LOW 17.56 AUG 2

## NJ-WRD WELL NO. 09-0099



## CAPE MAY COUNTY

NJ-WRD Well Number, 09-0150. Site I.D., 385607074555201. Local I.D., West Cape May 1 Obs. NJ Permit Number, 37-00155

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.

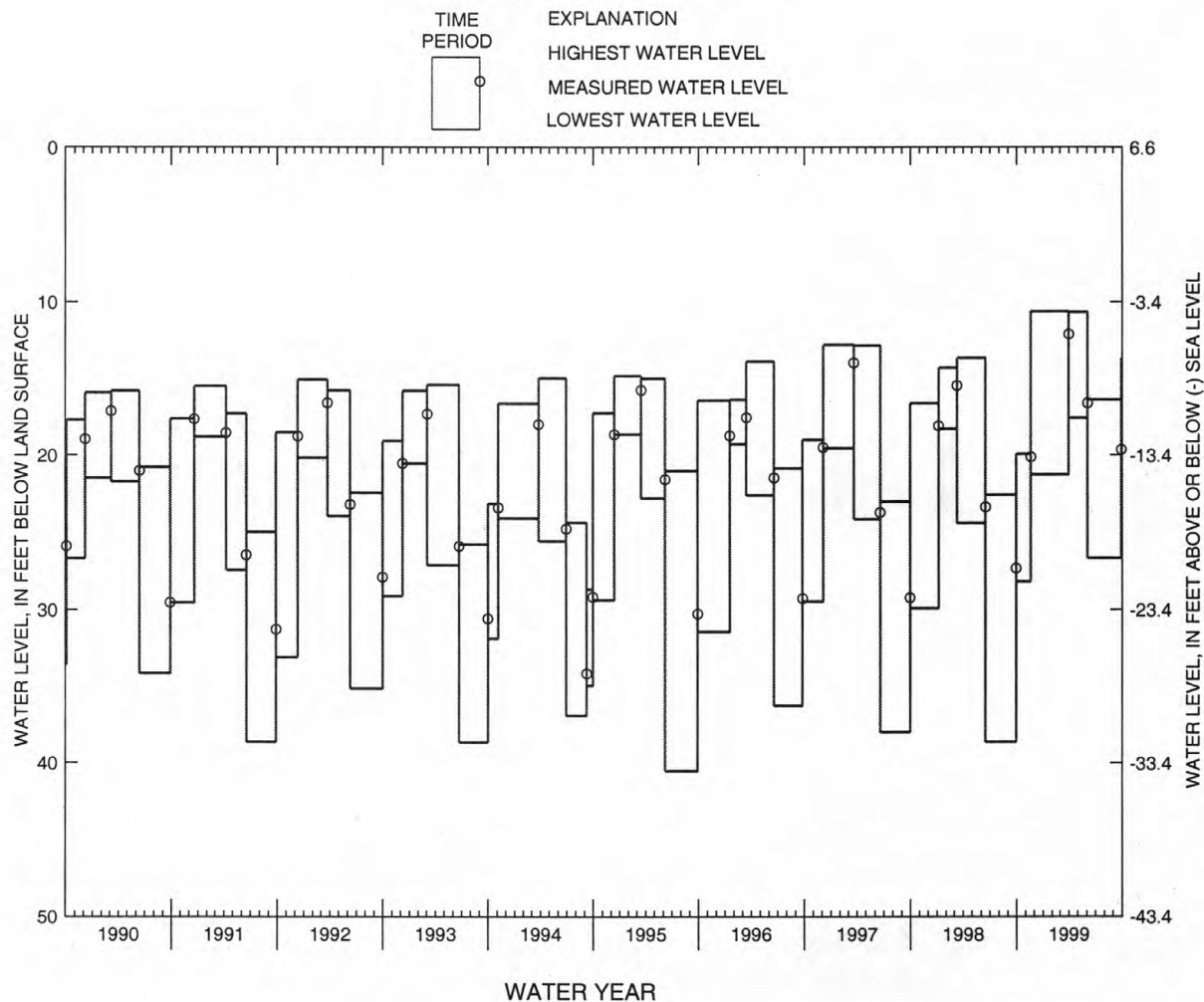
PERIOD OF RECORD.--June 1957 to current year. Records for 1957 to 1982 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.63 ft below land surface, between Nov. 19, 1998 and Mar. 31, 1999; lowest, 41.30 ft below land surface, Sept. 3, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 30, 1998 TO NOV. 19, 1998	19.92	28.19	NOV. 19, 1998	20.12
NOV. 19, 1998 TO MAR. 31, 1999	10.63	21.26	MAR. 31, 1999	12.11
MAR. 31, 1999 TO JUNE 4, 1999	10.65	17.56	JUNE 4, 1999	16.58
JUNE 4, 1999 TO SEPT. 29, 1999	16.37	26.68	SEPT. 29, 1999	19.64

## NJ-WRD WELL NO. 09-0150



## GROUND-WATER LEVELS

87

## CAPE MAY COUNTY

NJ-WRD Well Number, 09-0302. Site I.D., 385709074512801. Local I.D., Coast Guard 800 Obs. NJ Permit Number, 37-03628-9.

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.

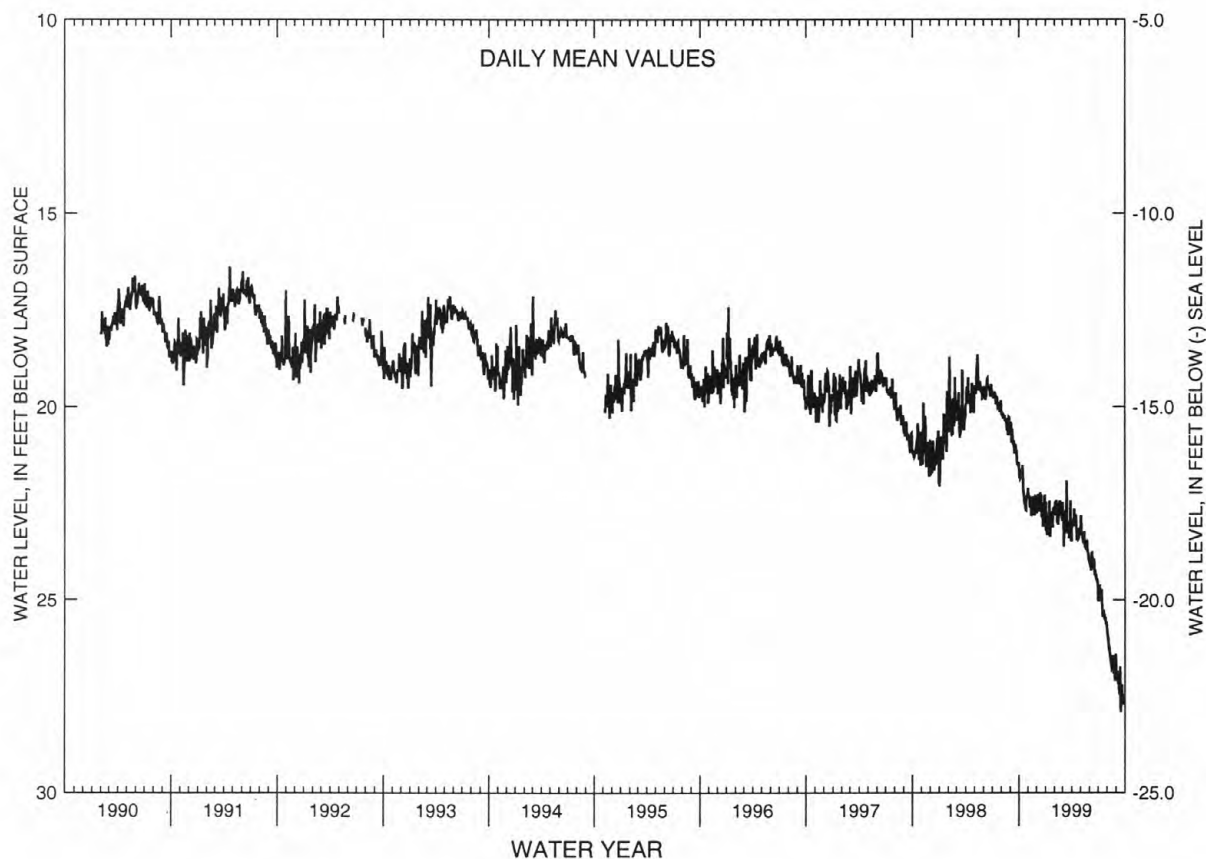
PERIOD OF RECORD.--Feb. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.04 ft below land surface, Apr. 21, 1991; lowest, 28.28 ft below land surface, Sept. 18, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.77	22.33	22.44	23.23	22.79	23.61	23.04	23.26	24.09	24.74	26.00	26.85
10	21.65	22.47	22.47	22.93	22.99	22.71	22.63	23.47	23.74	24.80	26.30	27.06
15	21.92	22.35	22.48	22.42	22.82	21.90	22.98	23.46	24.11	25.10	26.62	27.33
20	22.46	22.30	22.73	23.09	22.42	23.24	23.32	23.58	24.36	25.27	26.59	27.41
25	22.66	22.61	22.78	23.09	22.51	23.08	23.39	23.65	24.39	25.52	26.89	27.72
EOM	22.32	22.34	22.93	22.72	22.59	23.44	23.21	23.96	24.57	25.66	26.42	27.50
MEAN	22.06	22.48	22.56	22.94	22.67	22.96	23.11	23.48	24.17	25.16	26.50	27.31
WTR YR 1999 MEAN 23.79 HIGH 21.50 OCT 13 LOW 27.92 SEP 18												

## NJ-WRD WELL NO. 09-0302





## GROUND-WATER LEVELS

## CAPE MAY COUNTY

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

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.

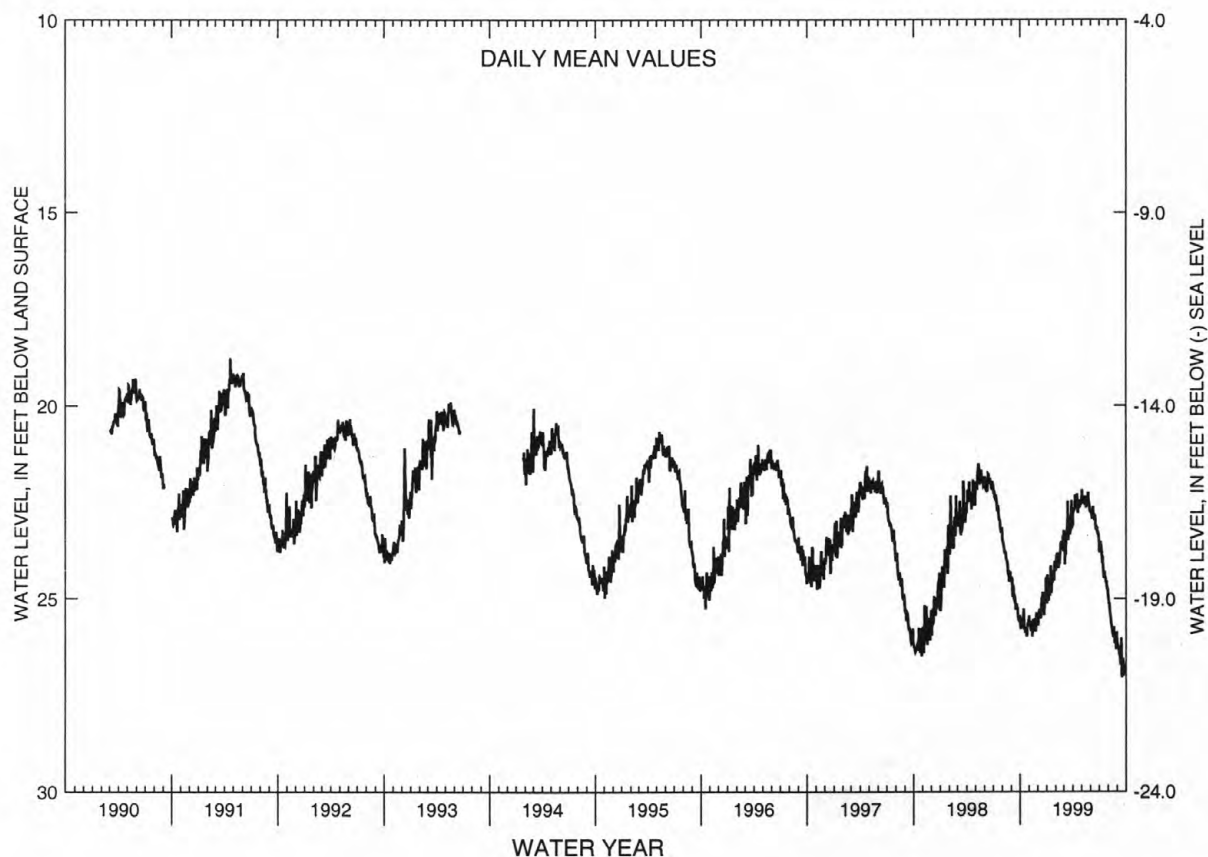
PERIOD OF RECORD.--Mar. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.74 ft below land surface, May 15, 1991; lowest, 27.97 ft below land surface, Sept. 27, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.72	25.66	25.45	25.06	24.21	24.11	22.71	22.48	22.83	23.56	25.11	26.20
10	25.50	25.72	25.39	24.68	24.20	23.24	22.31	22.52	22.61	23.76	25.51	26.34
15	25.61	25.54	25.21	24.14	23.88	22.47	22.46	22.56	22.96	24.22	25.80	26.64
20	25.87	25.51	25.16	24.59	23.52	23.34	22.64	22.52	23.21	24.35	25.81	26.58
25	25.95	25.66	25.08	24.53	23.40	22.97	22.64	22.43	23.21	24.58	26.14	26.90
EOM	25.65	25.36	25.01	24.25	23.36	23.12	22.52	22.73	23.44	24.81	25.86	26.70
MEAN	25.69	25.67	25.18	24.58	23.82	23.25	22.58	22.49	22.99	24.17	25.70	26.58
WTR YR 1999	MEAN 24.39 HIGH 22.17 MAY 3 LOW 27.05 SEP 18											

NJ-WRD WELL NO. 09-0306



## GROUND-WATER LEVELS

89

## CAPE MAY COUNTY

NJ-WRD Well Number, 09-0333. Site I.D., 390156074533401. Local I.D., Pump Pond N. Obs. NJ Permit Number, 37-04769.

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.

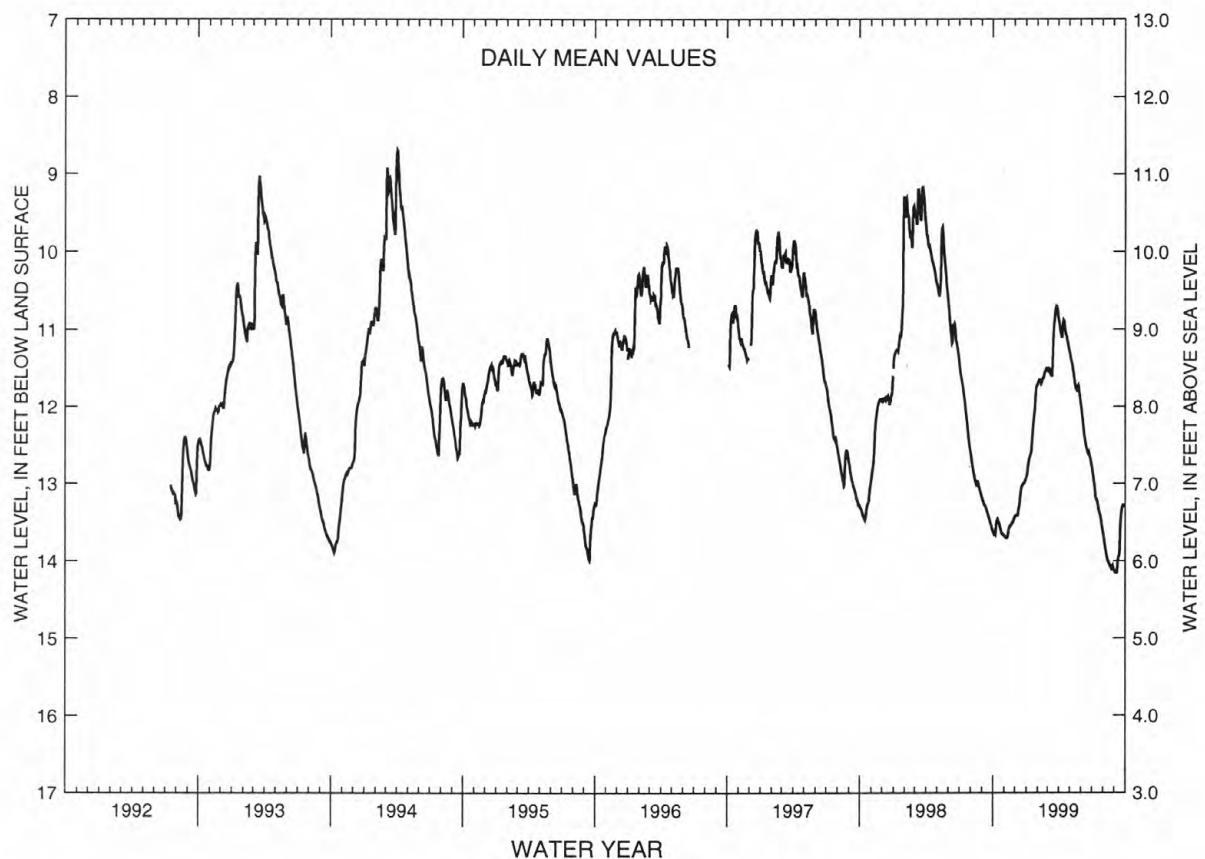
PERIOD OF RECORD.--July 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.68 ft below land surface, Apr. 2, 1994; lowest, 14.16 ft below land surface, Sept. 5-9, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.64	13.69	13.41	12.81	11.67	11.56	11.00	11.39	12.13	12.90	13.75	14.15
10	13.54	13.69	13.36	12.66	11.68	11.53	11.11	11.52	12.35	13.10	13.90	14.11
15	13.47	13.57	13.18	12.59	11.64	11.43	10.89	11.67	12.50	13.21	14.00	13.93
20	13.54	13.53	13.04	12.24	11.57	10.90	11.03	11.76	12.60	13.33	14.06	13.43
25	13.64	13.50	12.99	12.01	11.52	10.71	11.15	11.72	12.63	13.43	14.10	13.28
EOM	13.67	13.43	12.93	11.73	11.53	10.83	11.27	11.93	12.75	13.60	14.11	13.29
MEAN	13.58	13.59	13.18	12.39	11.62	11.18	11.04	11.63	12.43	13.21	13.95	13.75
WTR YR 1999	MEAN 12.64	HIGH 10.71	MAR 25	LOW 14.16	SEP 9							

## NJ-WRD WELL NO. 09-0333



## GROUND-WATER LEVELS

## CAPE MAY COUNTY

NJ-WRD Well Number, 09-0337. Site I.D., 390012074472001. Local I.D., M-1 N Wildwood 800 Obs. NJ Permit Number, 37-04660.

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.--Submersible logger pressure transducer--60-minute recording interval. Digital water-level recorder, July 1992 to May 1998.

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.

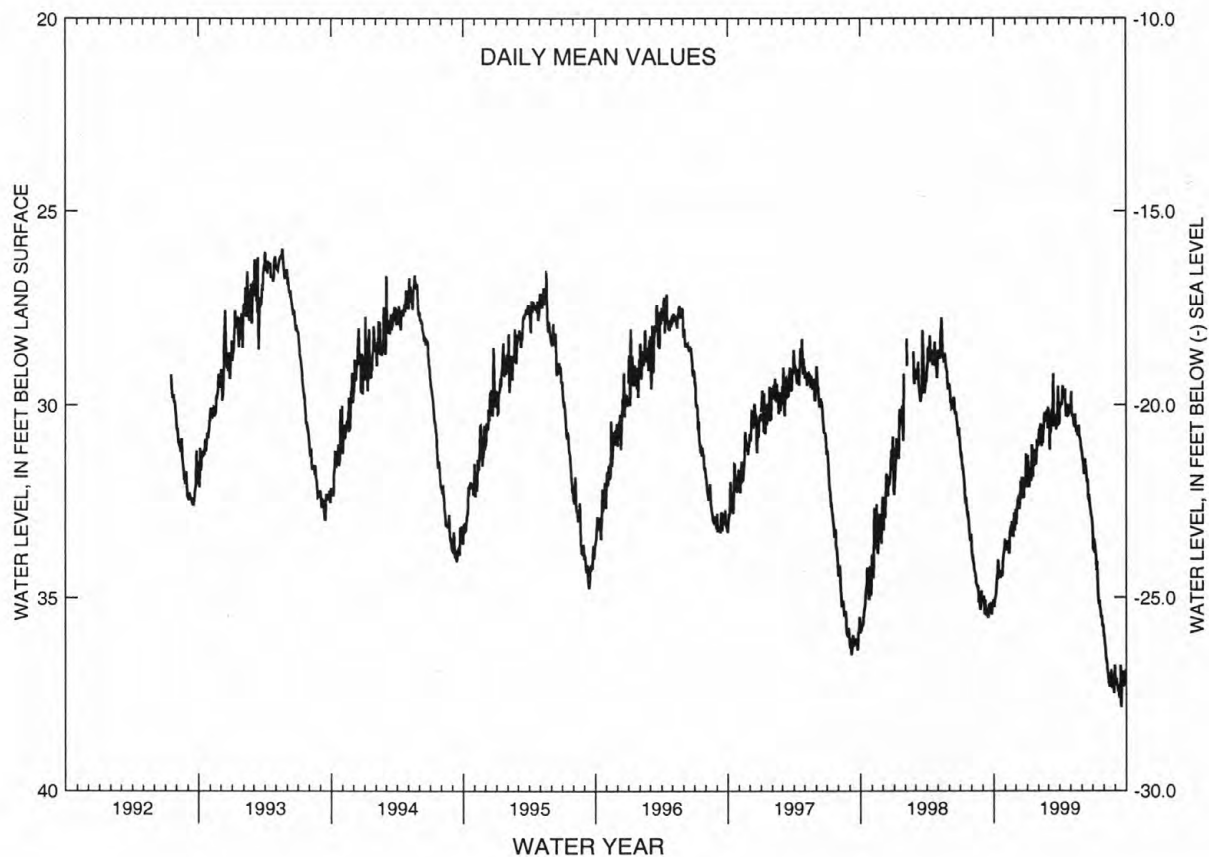
PERIOD OF RECORD.--July 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.93 ft below land surface, May 20, 1993; lowest, 38.48 ft below land surface, Sept. 17, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.02	33.60	32.68	32.08	30.97	31.16	29.95	30.23	31.54	33.59	36.28	37.09
10	34.47	33.56	32.55	31.64	31.07	30.16	29.50	30.50	31.40	33.95	36.73	37.27
15	34.30	33.29	32.31	31.08	30.71	29.19	29.77	30.52	32.01	34.66	37.10	37.36
20	34.45	33.03	32.18	31.59	30.19	30.51	30.16	30.69	32.48	35.07	37.04	37.23
25	34.38	33.13	32.06	31.56	30.14	30.26	30.27	30.77	32.69	35.51	37.29	37.27
EOM	33.75	32.71	31.95	30.97	30.13	30.49	30.07	31.14	33.10	35.83	36.75	36.88
MEAN	34.45	33.38	32.28	31.54	30.60	30.30	29.99	30.53	32.07	34.67	36.89	37.26
WTR YR 1999	MEAN 32.84	HIGH 29.19	MAR 15	LOW 37.83	SEP 17							

NJ-WRD WELL NO. 09-0337

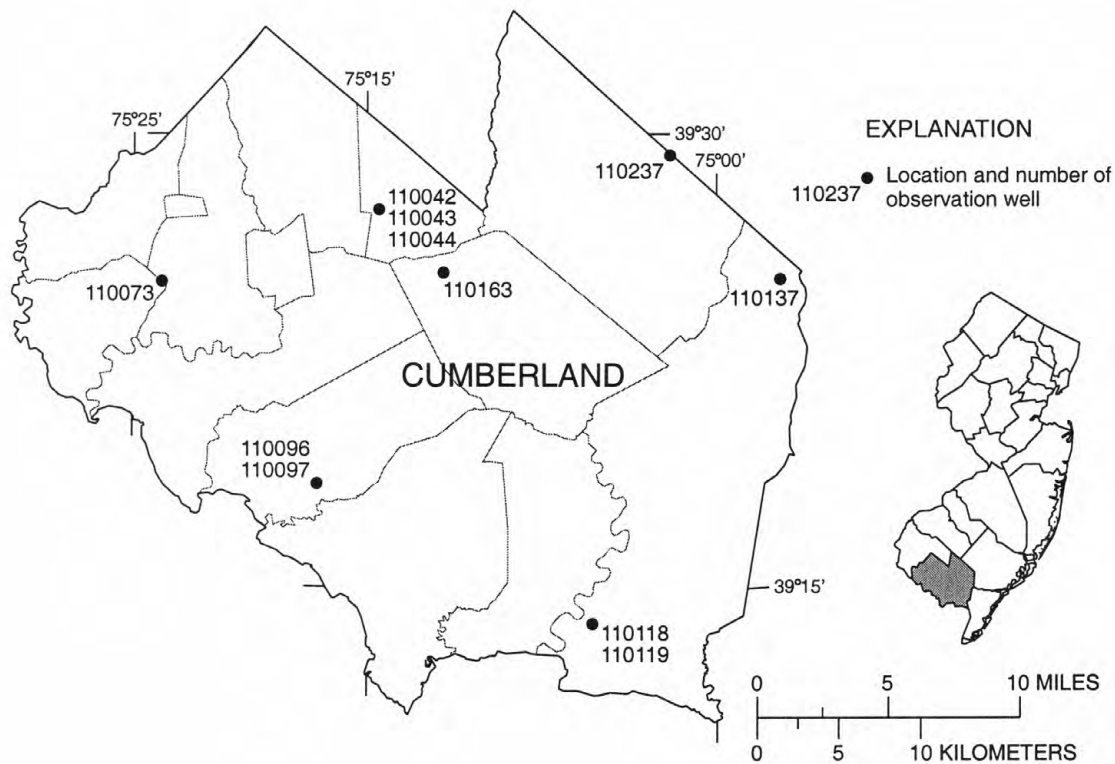


## CUMBERLAND COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
110042	VOCATIONAL SCHOOL 2 OBS	DEERFIELD TWP	47	CKKD	DAILY
110043	VOCATIONAL SCHOOL 1 OBS	DEERFIELD TWP	138	CKKD	MANUAL
110044	VOCATIONAL SCHOOL 3 OBS	DEERFIELD TWP	376	PNPN	MANUAL
110073	SHEPPARDS 2 OBS	GREENWICH TWP	40	CKKD	MANUAL
110096	JONES ISLAND 2 OBS	LAWRENCE TWP	375	PNPN	DAILY
110097	JONES ISLAND 1 OBS	LAWRENCE TWP	171	CKKD	MANUAL
110118	HEISLERVILLE 1 OBS	MAURICE RIVER TWP	41	CKKD	MANUAL
110119	HEISLERVILLE 2 OBS	MAURICE RIVER TWP	135	CKKD	MANUAL
110137	RAGOVIN 2100 OBS	MAURICE RIVER TWP	2090	MRPA	DAILY
110163	FAIR GROUNDS 3 OBS	MILLVILLE CITY	473	PNPN	MANUAL
110237	NATURAL AREA 1 OBS	VINELAND CITY	81	CKKD	MANUAL

## Aquifer names

- CKKD - Kirkwood-Cohansey aquifer system
- MRPA - Potomac-Raritan-Magothy Aquifer
- PNPN - Piney Point aquifer



## GROUND-WATER LEVELS

## CUMBERLAND COUNTY

NJ-WRD Well Number, 11-0042. Site I.D., 392731075092401. Local I.D., Vocational School 2 Obs. NJ Permit Number, 35-01145.

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.

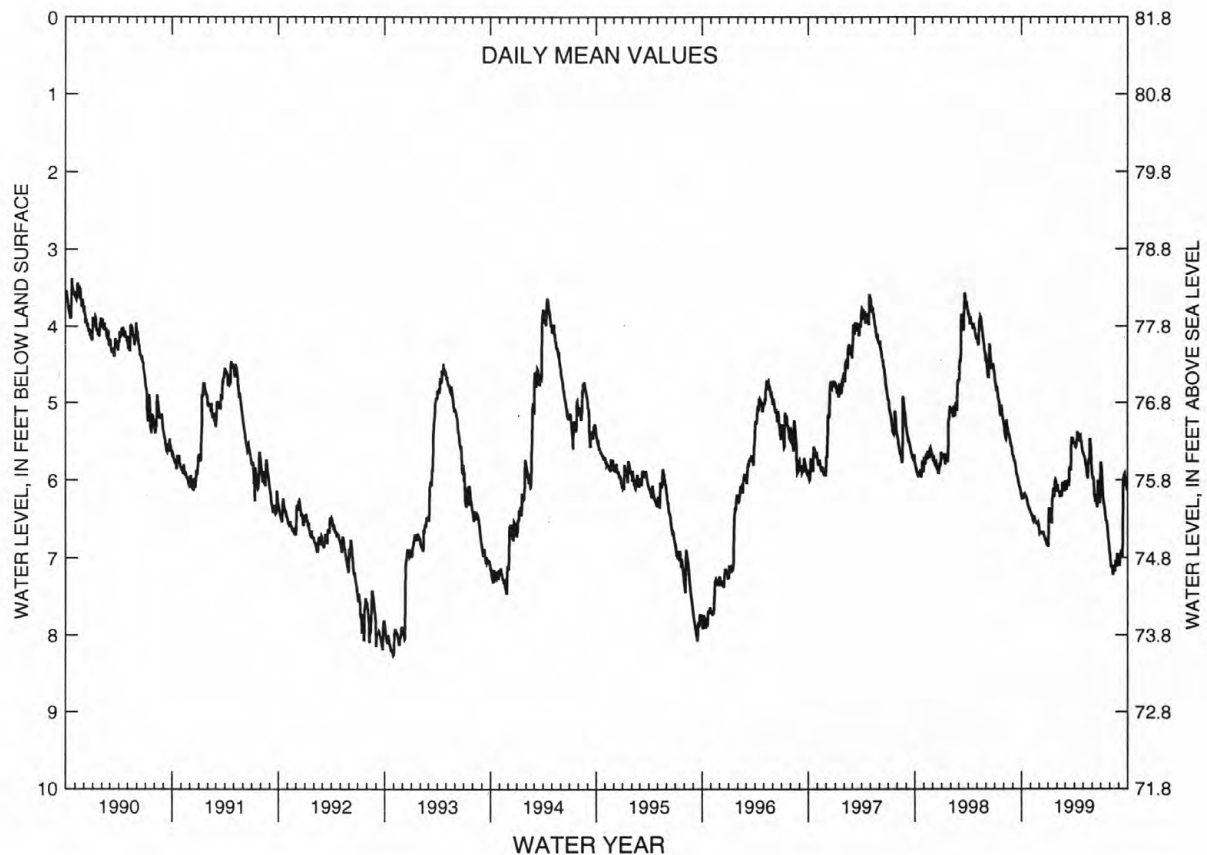
PERIOD OF RECORD.--Mar. 1972 to current year. Records from 1972 to 1987 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.23	6.45	6.67	6.37	6.14	6.13	5.57	5.69	5.97	5.86	7.06	7.10
10	6.18	6.52	6.69	6.46	6.19	6.00	5.51	5.80	6.21	6.22	7.13	6.92
15	6.20	6.48	6.68	6.34	6.20	5.86	5.41	5.92	6.24	6.36	7.11	6.99
20	6.25	6.54	6.74	6.16	6.04	5.88	5.47	5.74	6.33	6.53	7.17	5.95
25	6.33	6.57	6.78	6.02	6.11	5.47	5.51	5.48	6.13	6.63	7.12	6.00
EOM	6.40	6.59	6.81	6.14	6.09	5.53	5.64	5.82	6.14	6.88	7.04	6.09
MEAN	6.26	6.51	6.72	6.31	6.13	5.83	5.50	5.74	6.14	6.35	7.08	6.52
WTR YR 1999	MEAN 6.26 HIGH 5.38 APR 12 LOW 7.22 AUG 13											

## NJ-WRD WELL NO. 11-0042





## GROUND-WATER LEVELS

93

## CUMBERLAND COUNTY

NJ-WRD Well Number, 11-0043. Site I.D., 392732075092401. Local I.D., Vocational School 1 Obs. NJ Permit Number, 35-01146.

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.

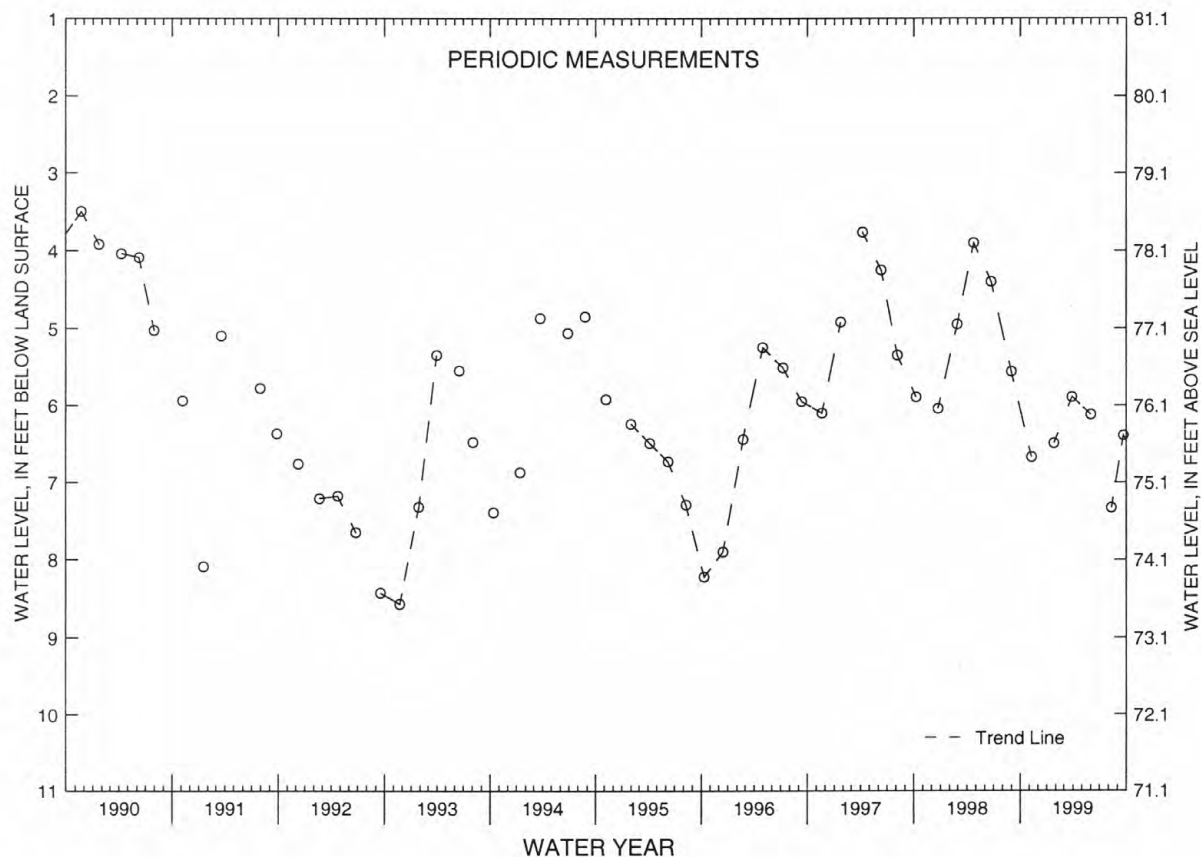
PERIOD OF RECORD.--Mar. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
NOV 9	6.67	MAR 29	5.89	AUG 12	7.33
JAN 26	6.49	JUN 2	6.12	SEP 23	6.39

## NJ-WRD WELL NO. 11-0043



## GROUND-WATER LEVELS

## CUMBERLAND COUNTY

NJ-WRD Well Number, 11-0044. Site I.D., 392733075092401. Local I.D., Vocational School 3 Obs. NJ Permit Number, 35-01197

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.

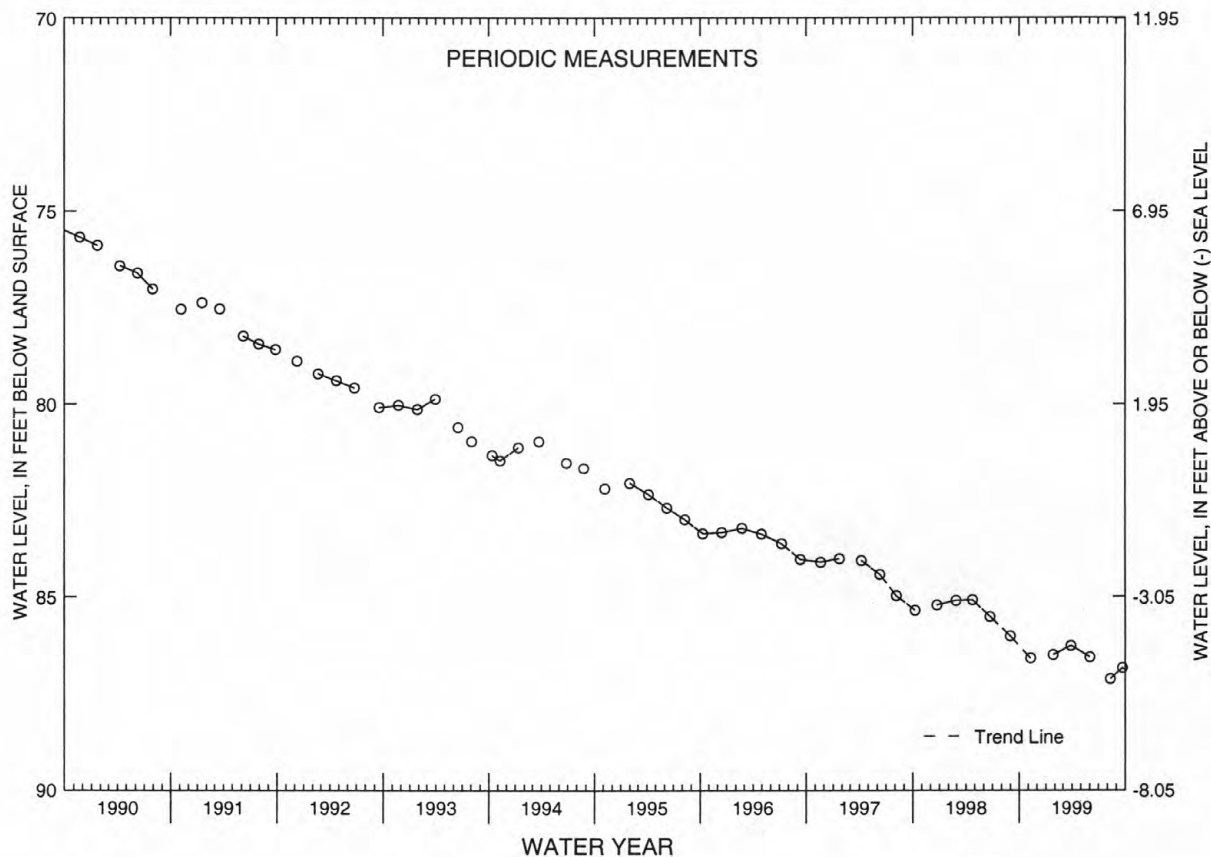
PERIOD OF RECORD.--July 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 58.79 ft below land surface, July 31, 1972; lowest, 87.12 ft below land surface, Aug. 12, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
NOV 9	86.59	MAR 29	86.27	AUG 12	87.12
JAN 26	86.50	JUN 2	86.56	SEP 23	86.84

NJ-WRD WELL NO. 11-0044



## CUMBERLAND COUNTY

NJ-WRD Well Number, 11-0073. Site I.D., 392508075184601. Local I.D., Sheppards 2 Obs.

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.

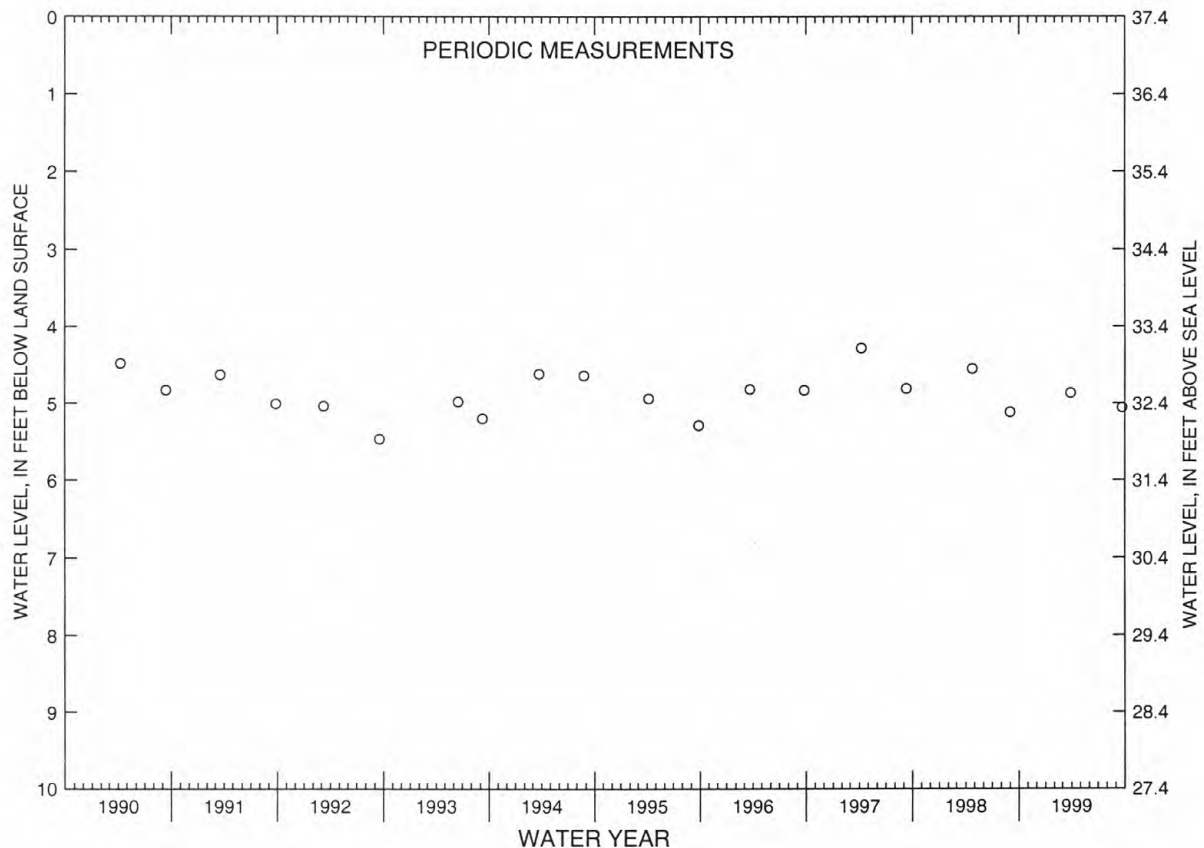
PERIOD OF RECORD.--Mar. 1973 to current year. Records for 1973 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
MAR 29	4.87	SEP 23	5.06

## NJ-WRD WELL NO. 11-0073



## GROUND-WATER LEVELS

## CUMBERLAND COUNTY

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

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.

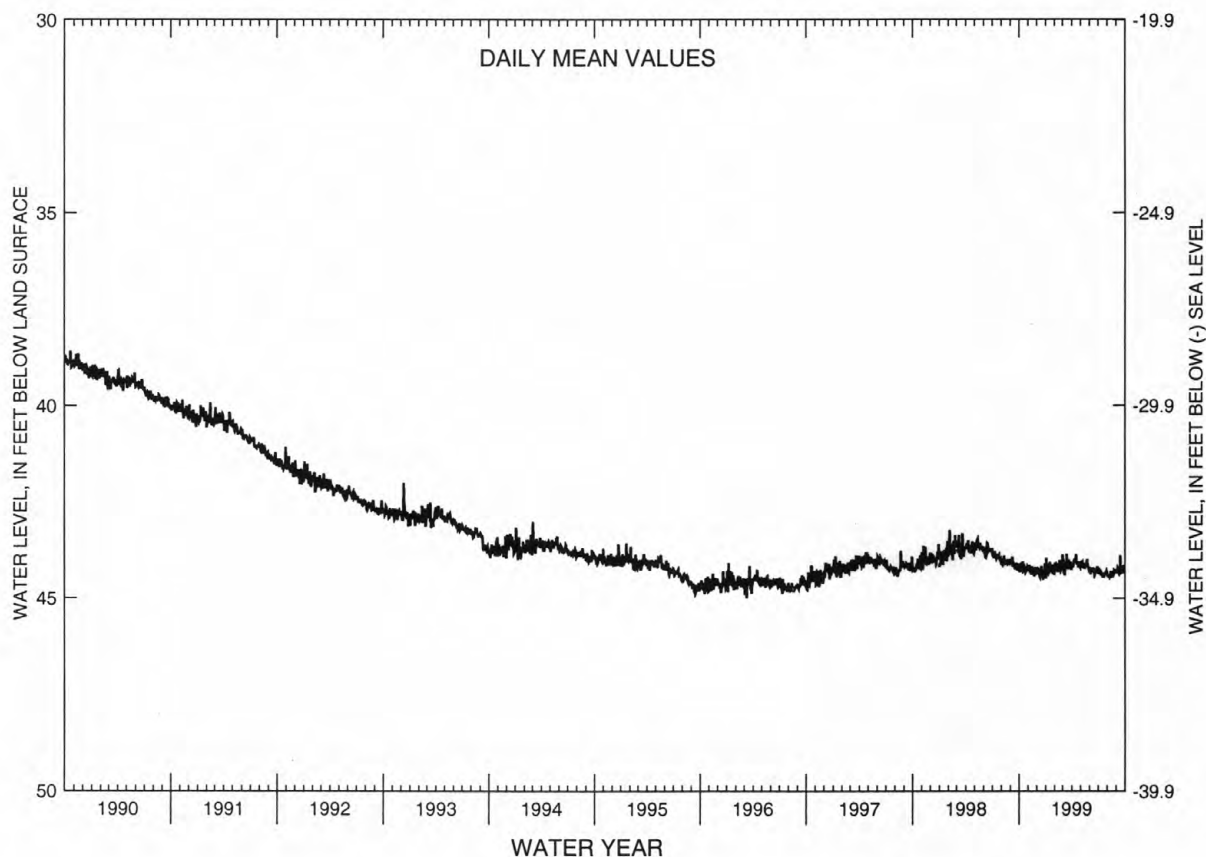
PERIOD OF RECORD.--Mar. 1972 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.28	44.16	44.29	44.38	44.27	44.36	44.20	44.11	44.35	44.30	44.38	44.27
10	44.10	44.32	44.40	44.31	44.27	44.11	44.04	44.19	44.30	44.27	44.41	44.18
15	44.21	44.17	44.36	44.06	44.25	43.86	43.99	44.20	44.25	44.39	44.39	44.34
20	44.23	44.21	44.40	44.26	44.05	44.25	44.09	44.14	44.40	44.41	44.34	44.25
25	44.31	44.38	44.43	44.28	44.14	44.16	44.20	44.08	44.27	44.35	44.36	44.26
EOM	44.20	44.30	44.34	44.40	43.95	44.26	44.19	44.25	44.28	44.32	44.27	44.14
MEAN	44.23	44.28	44.33	44.27	44.16	44.15	44.09	44.14	44.28	44.36	44.38	44.26
WTR YR 1999	MEAN 44.24 HIGH 43.86 MAR 15 LOW 44.52 DEC 23											

NJ-WRD WELL NO. 11-0096



## GROUND-WATER LEVELS

97

## CUMBERLAND COUNTY

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

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.

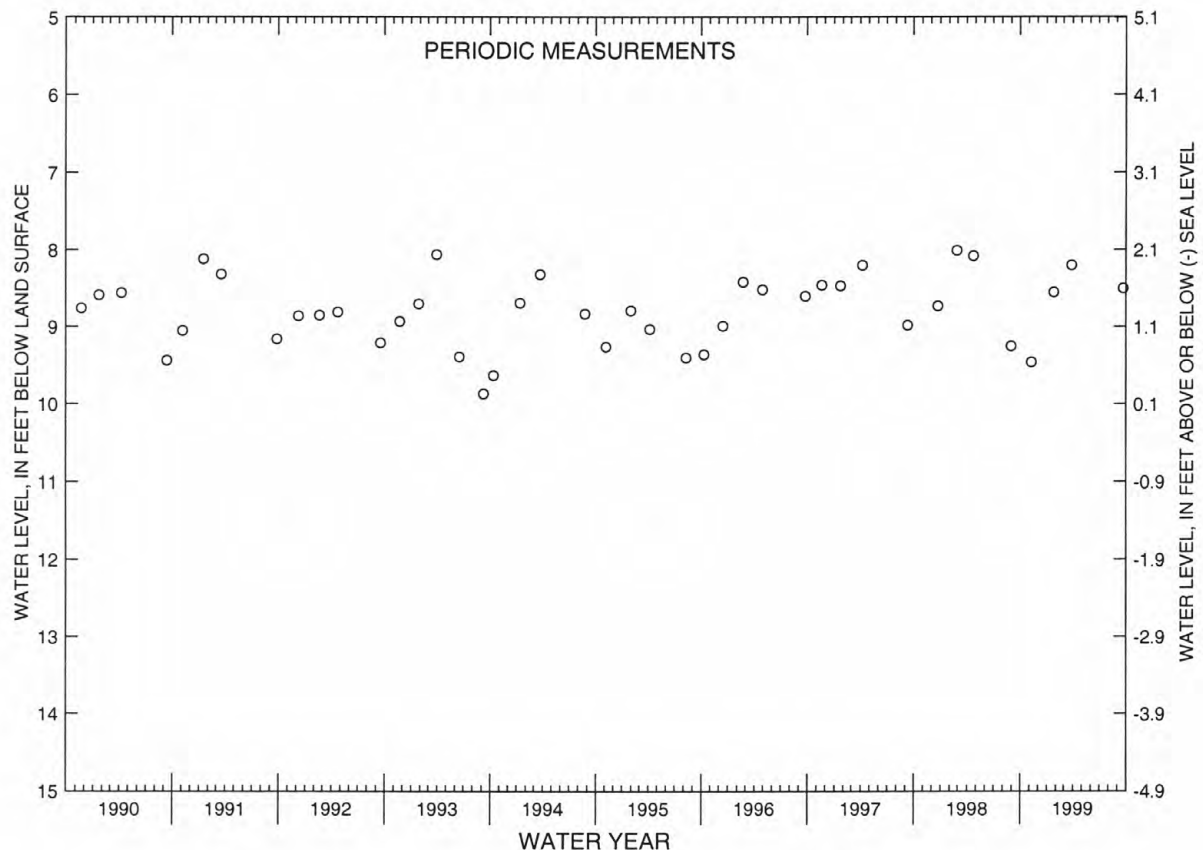
PERIOD OF RECORD.--Mar. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
NOV 9	9.46	MAR 29	8.20
JAN 26	8.55	SEP 23	8.50

## NJ-WRD WELL NO. 11-0097





## GROUND-WATER LEVELS

## CUMBERLAND COUNTY

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

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.

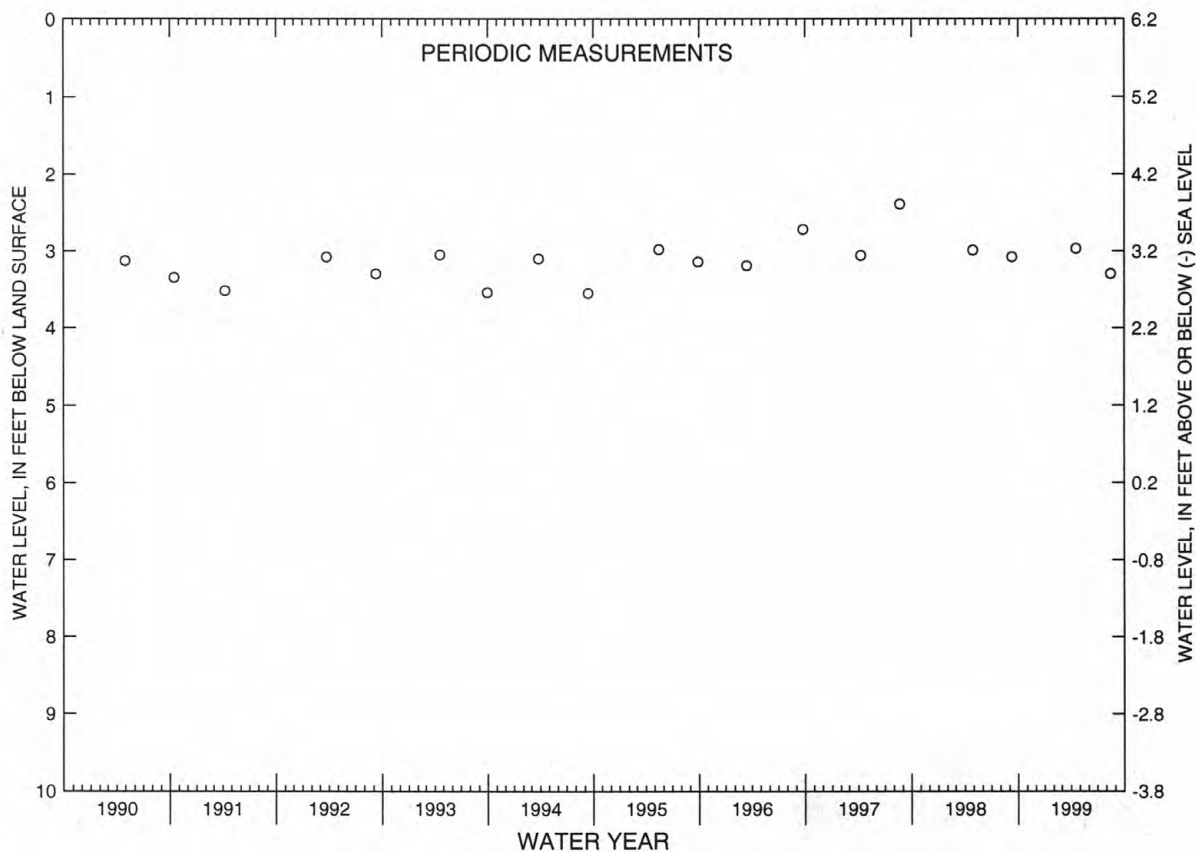
PERIOD OF RECORD.--Mar. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
APR 19	2.97	AUG 16	3.30

NJ-WRD WELL NO. 11-0118



## GROUND-WATER LEVELS

99

## CUMBERLAND COUNTY

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

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.

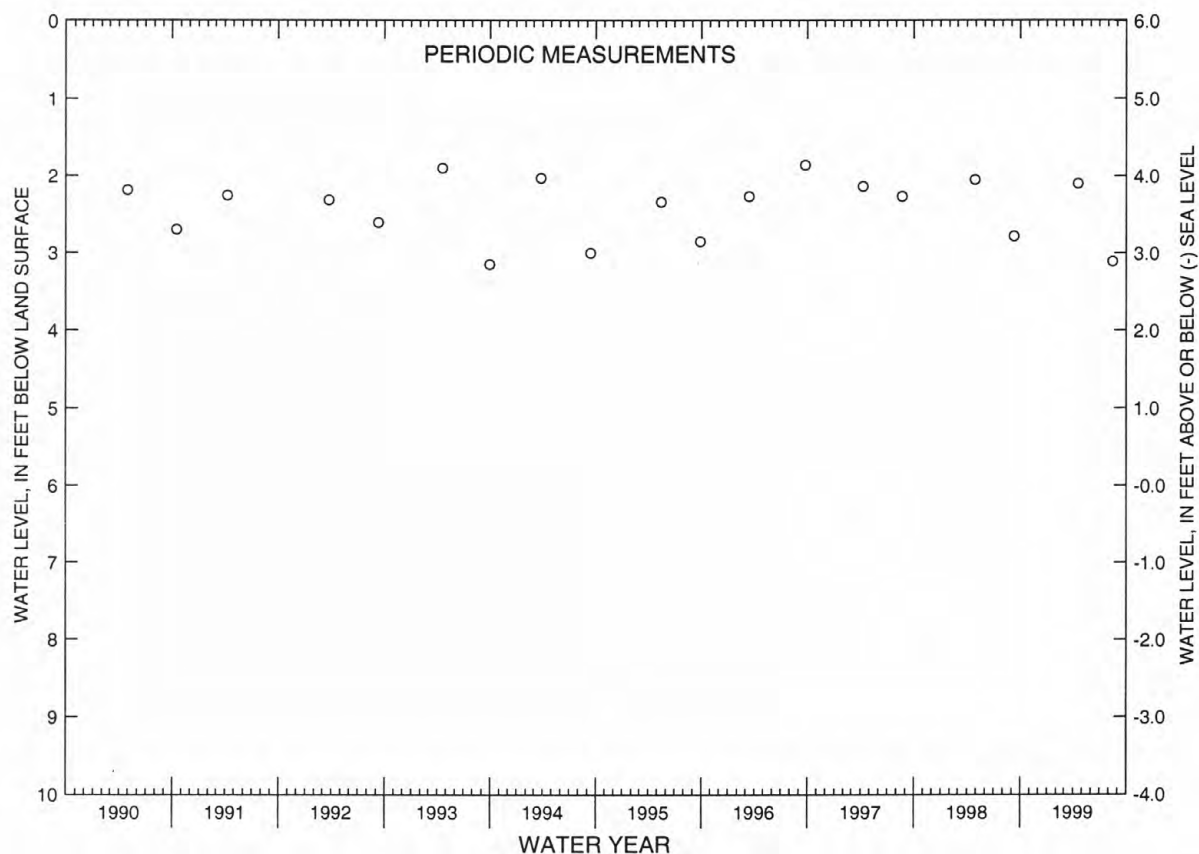
PERIOD OF RECORD.--Mar. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
APR 19	2.10	AUG 16	3.11

## NJ-WRD WELL NO. 11-0119



## GROUND-WATER LEVELS

## CUMBERLAND COUNTY

NJ-WRD Well Number, 11-0137. Site I.D., 392512074521206. Local I.D., Ragovin 2100 Obs.

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 July 28, 1995. 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 July 28, 1995.

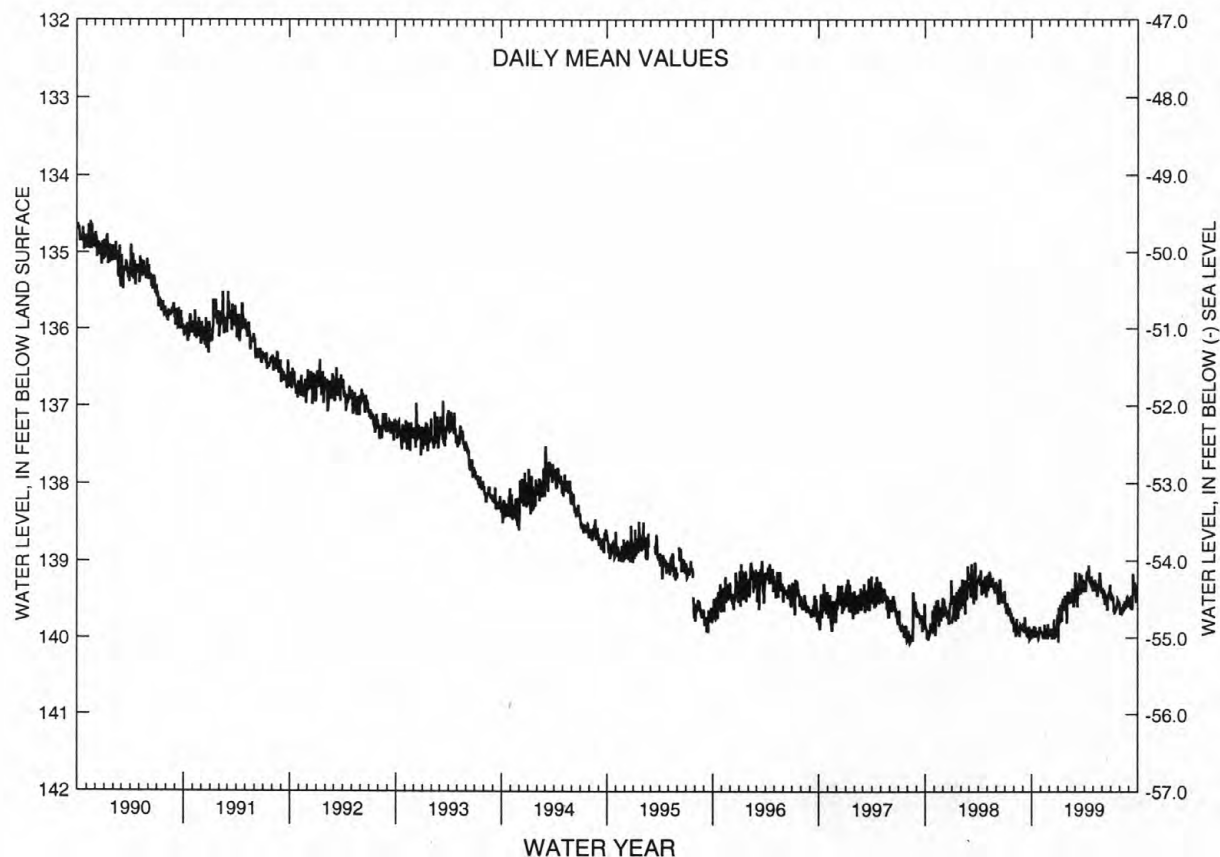
PERIOD OF RECORD.--Oct. 1974 to current year. Records for 1974 to 1977 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 115.82 ft below land surface, Apr. 3, 1975; lowest, 140.11 ft below land surface, Jan. 1-2, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	139.92	139.94	139.81	139.51	139.54	139.39	139.29	139.47	139.46	139.62	139.56
10	139.85	140.01	140.01	139.68	139.49	139.33	139.21	139.33	139.53	139.47	139.63	139.45
15	139.97	139.83	139.99	139.52	139.55	139.16	139.15	139.45	139.46	139.64	139.58	139.56
20	139.93	139.88	140.01	139.57	139.38	139.43	139.24	139.33	139.63	139.60	139.57	139.39
25	140.00	140.01	---	139.54	139.47	139.30	139.33	139.22	139.41	139.50	139.58	139.38
EOM	139.90	139.96	139.89	139.81	139.23	139.39	139.39	139.41	139.42	139.57	139.60	139.31
MEAN	139.93	139.93	139.92	139.66	139.46	139.34	139.26	139.33	139.46	139.55	139.59	139.46
WTR YR 1999	MEAN 139.56 HIGH 139.06 APR 16 LOW 140.06 JAN 2											

NJ-WRD WELL NO. 11-0137



## GROUND-WATER LEVELS

101

## CUMBERLAND COUNTY

NJ-WRD Well Number, 11-0163. Site I.D., 392528075064101. Local I.D., Fair Grounds 3 Obs. NJ Permit Number, 35-01196

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.

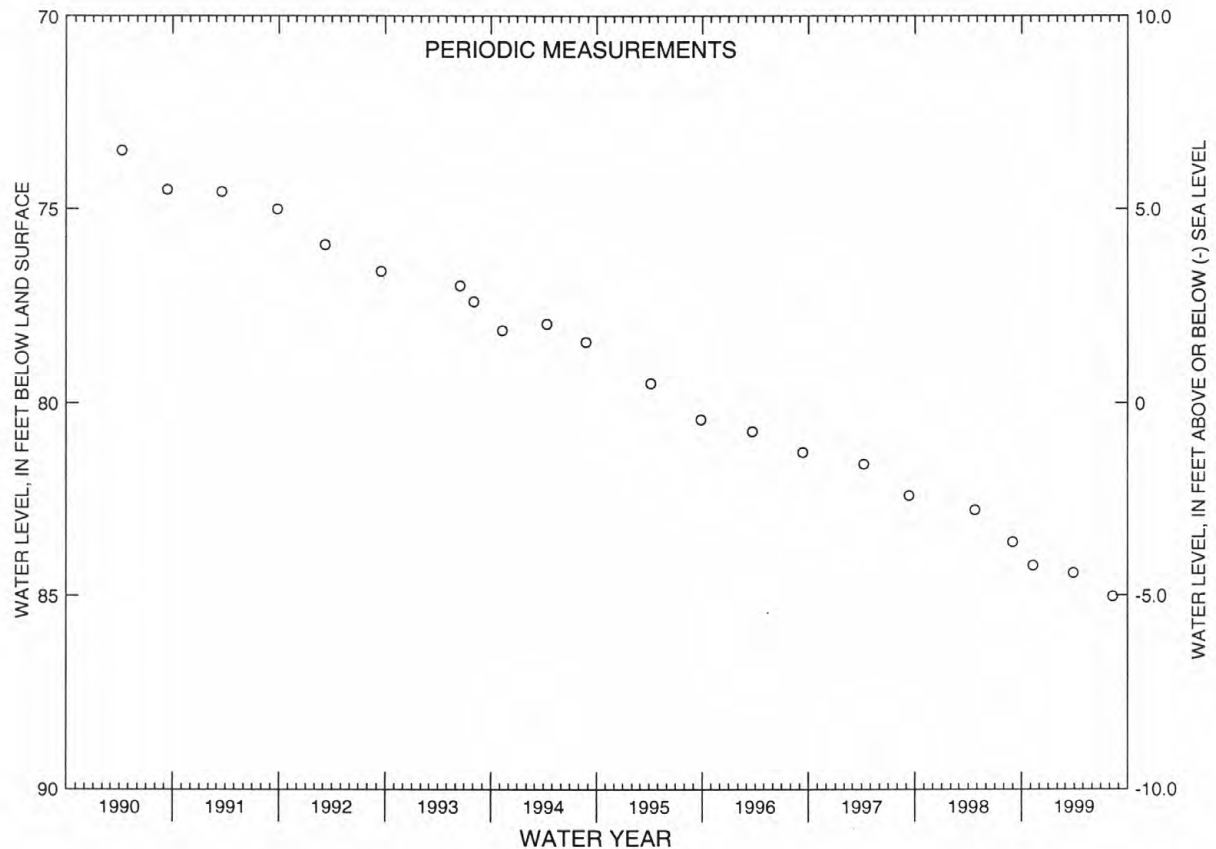
PERIOD OF RECORD.--May 1973 to current year. Records for 1973 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 54.62 ft below land surface, May 4, 1973; lowest, 85.03 ft below land surface, Aug. 12, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
NOV 9	84.23	MAR 29	84.42	AUG 12	85.03

## NJ-WRD WELL NO. 11-0163



## GROUND-WATER LEVELS

## CUMBERLAND COUNTY

NJ-WRD Well Number, 11-0237. Site I.D., 392920074570001. Local I.D., Natural Area 1 Obs. NJ Permit Number 35-01165

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.

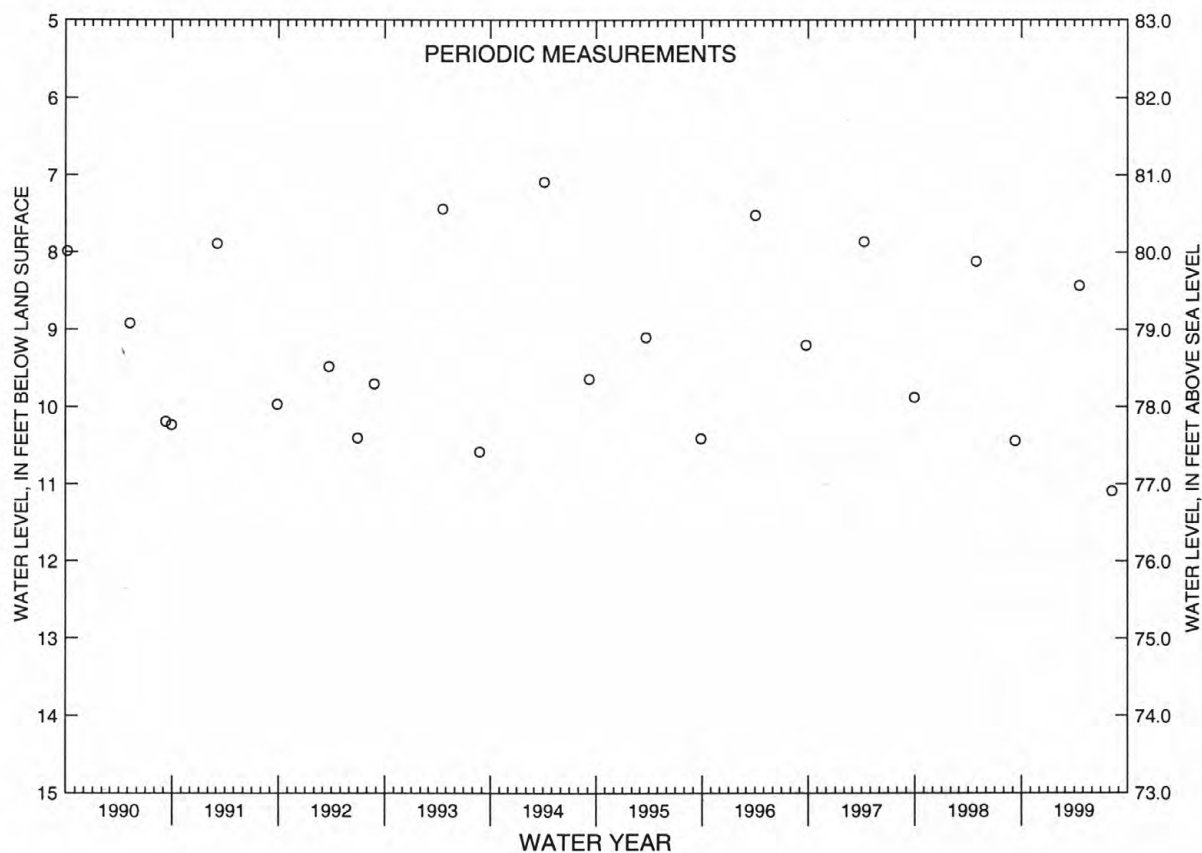
PERIOD OF RECORD.--Apr. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.92 ft below land surface, Feb. 9, 1973; lowest, 11.09 ft below land surface, Aug. 9, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
APR 19	8.43	AUG 9	11.09

NJ-WRD WELL NO. 11-0237



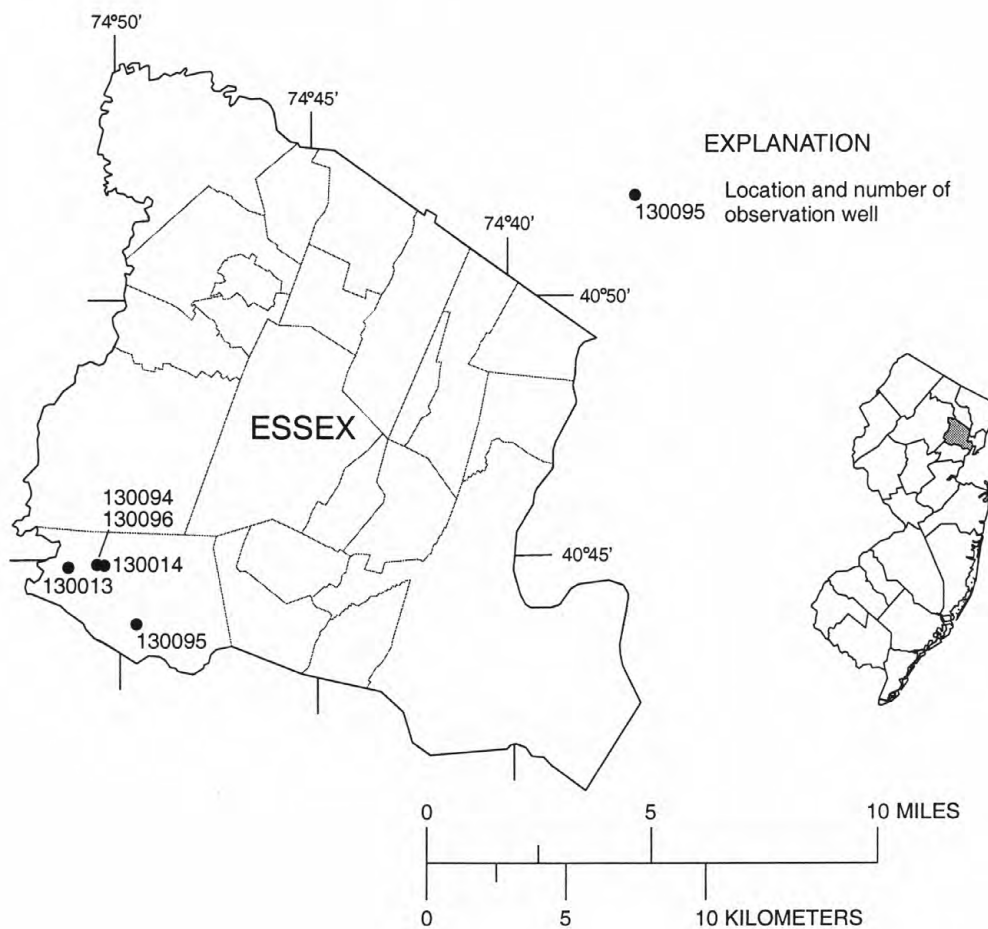


## ESSEX COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
130013	CANOE BROOK 30 OBS	MILLBURN TWP	130	SFDF	MANUAL
130014	NEUTRAL ZONE OBS	MILLBURN TWP	64	SFDF	MANUAL
130094	EAST ORANGE 28 OBS	MILLBURN TWP	298	TOWC	DAILY
130095	CHRIST CHURCH 2 OBS	MILLBURN TWP	200	SFDF	MANUAL
130096	EAST ORANGE SHALLOW OBS	MILLBURN TWP	84	SFDF	DAILY

## Aquifer names

SFDF - Stratified drift  
TOWC - Towaco Formation



## GROUND-WATER LEVELS

## ESSEX COUNTY

NJ-WRD Well Number, 13-0013. Site I.D., 404452074211601. Local I.D., Canoe Brook 30 Obs.

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 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.

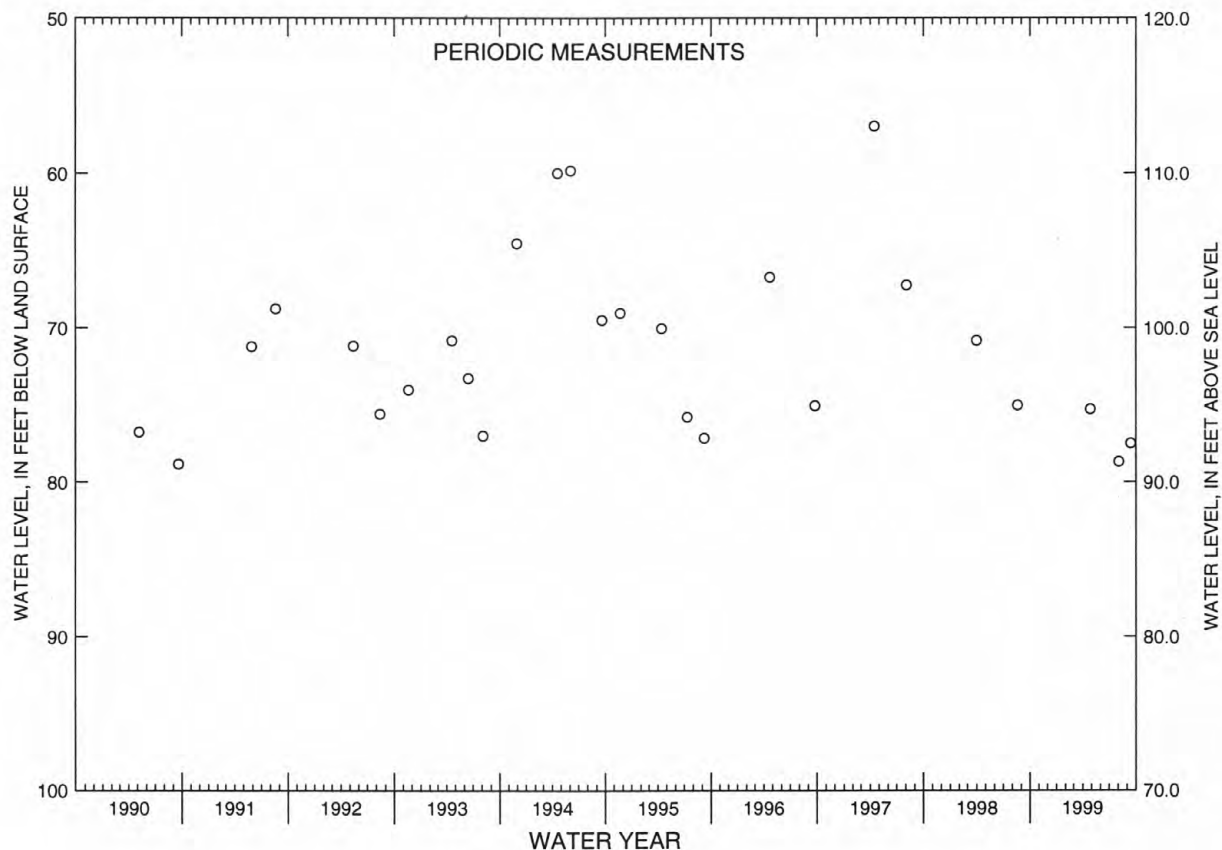
PERIOD OF RECORD.--Sept. 1925 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 28	75.28	AUG 4	78.69	SEP 14	77.51

NJ-WRD WELL NO. 13-0013



## GROUND-WATER LEVELS

105

## ESSEX COUNTY

NJ-WRD Well Number, 13-0014. Site I.D., 404454074202101. Local I.D., Neutral Zone Obs.

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.

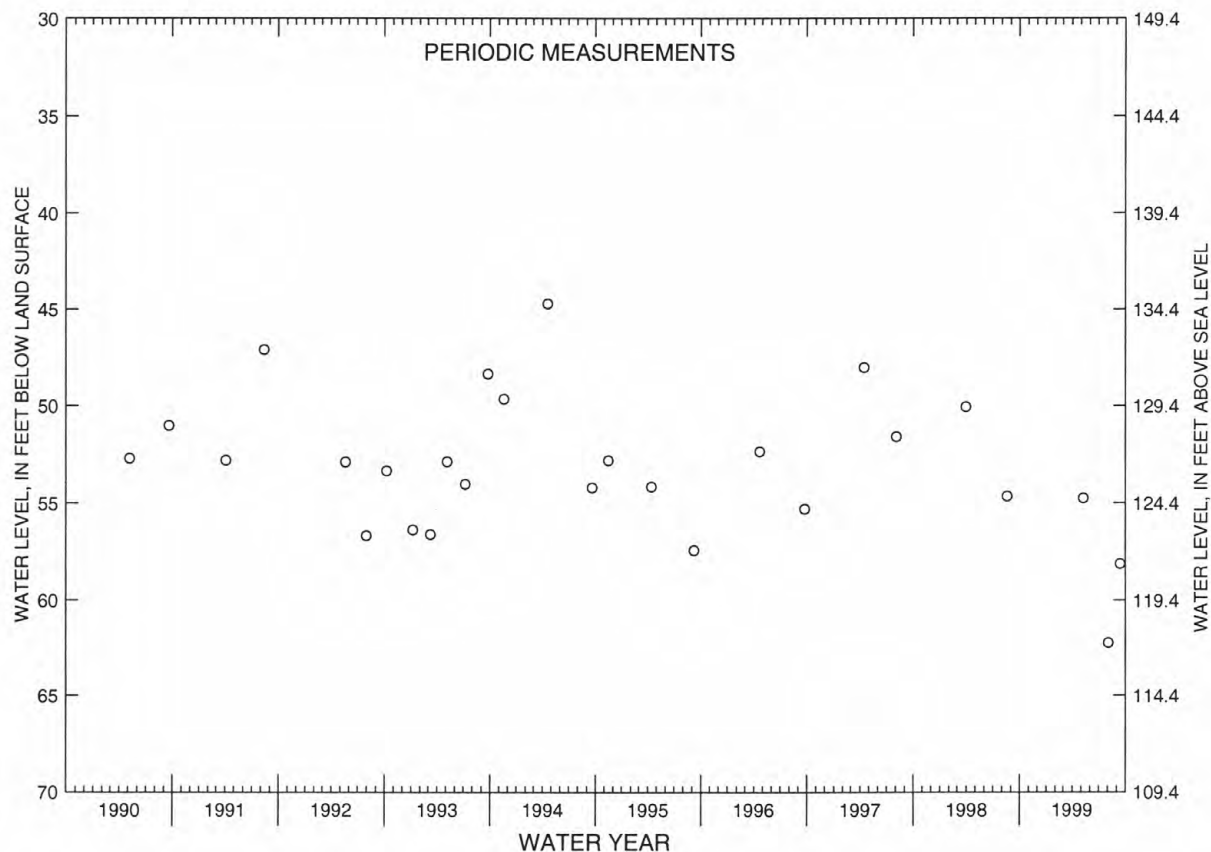
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.57 ft below land surface, Oct. 25, 1927; lowest, 63.12 ft below land surface, Apr. 10, 1967.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
MAY 10	54.76	AUG 4	>62.24*	SEP 14	58.13

\* Depth of well measured to 62.24 ft below land surface on May 10, 1999. On August 4, 1999, the well was dry, indicating that the water depth was greater than 62.24 feet below land surface.

## NJ-WRD WELL NO. 13-0014



## GROUND-WATER LEVELS

## ESSEX COUNTY

NJ-WRD Well Number, 13-0094. Site I.D., 404455074203201. Local I.D., East Orange 28 Obs. NJ Permit Number, 25-34871.

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.

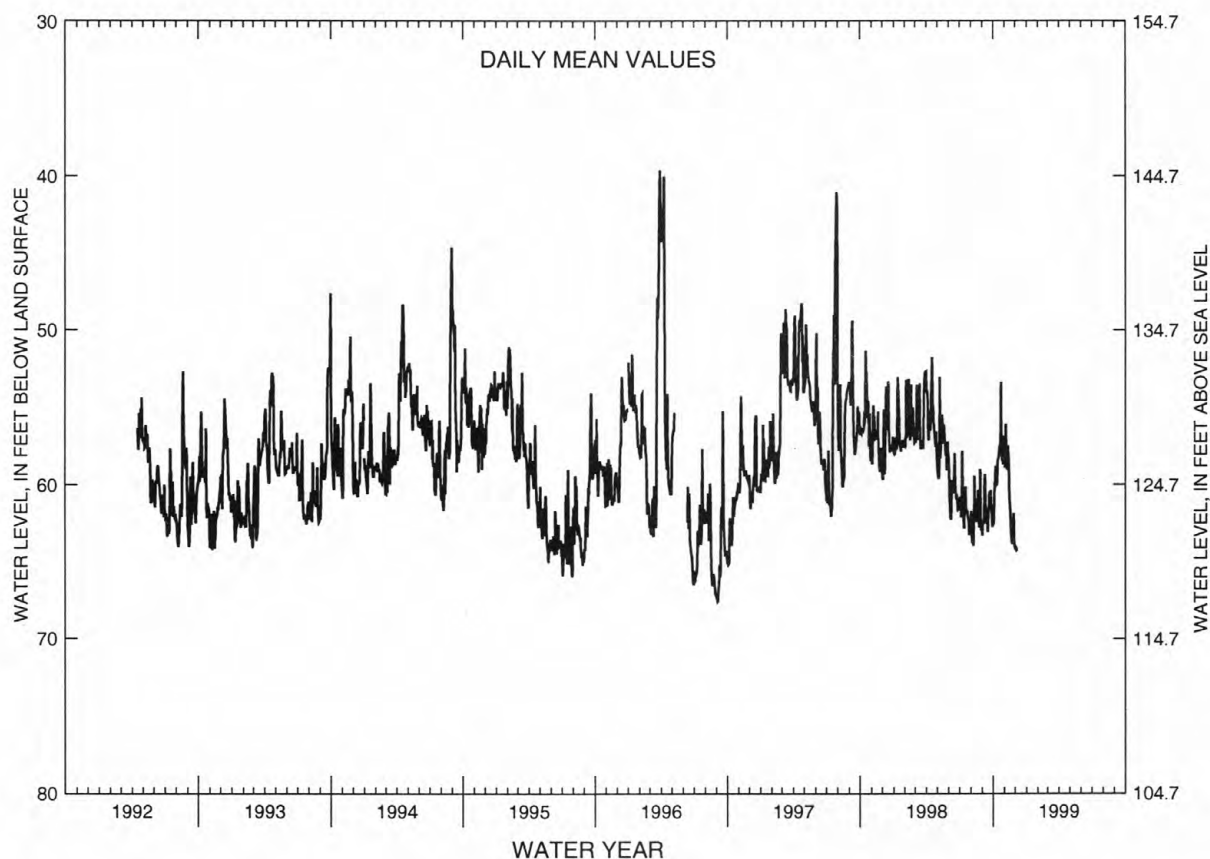
PERIOD OF RECORD.--Apr. 1991 to Dec. 1998 (discontinued).

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	60.57	56.07	64.31	---	---	---	---	---	---	---	---	---
10	59.88	58.77	---	---	---	---	---	---	---	---	---	---
15	58.38	60.39	---	---	---	---	---	---	---	---	---	---
20	57.49	63.21	---	---	---	---	---	---	---	---	---	---
25	57.99	63.52	---	---	---	---	---	---	---	---	---	---
EOM	56.85	64.04	---	---	---	---	---	---	---	---	---	---
MEAN	58.88	60.55	---	---	---	---	---	---	---	---	---	---
WTR YR 1999 HIGH 53.37 OCT 23 LOW 64.32 DEC 6												

NJ-WRD WELL NO. 13-0094



## ESSEX COUNTY

NJ-WRD Well Number, 13-0095. Site I.D., 404347074193301. Local I.D., Christ Church 2 Obs. NJ Permit Number, 26-16359-4.

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.

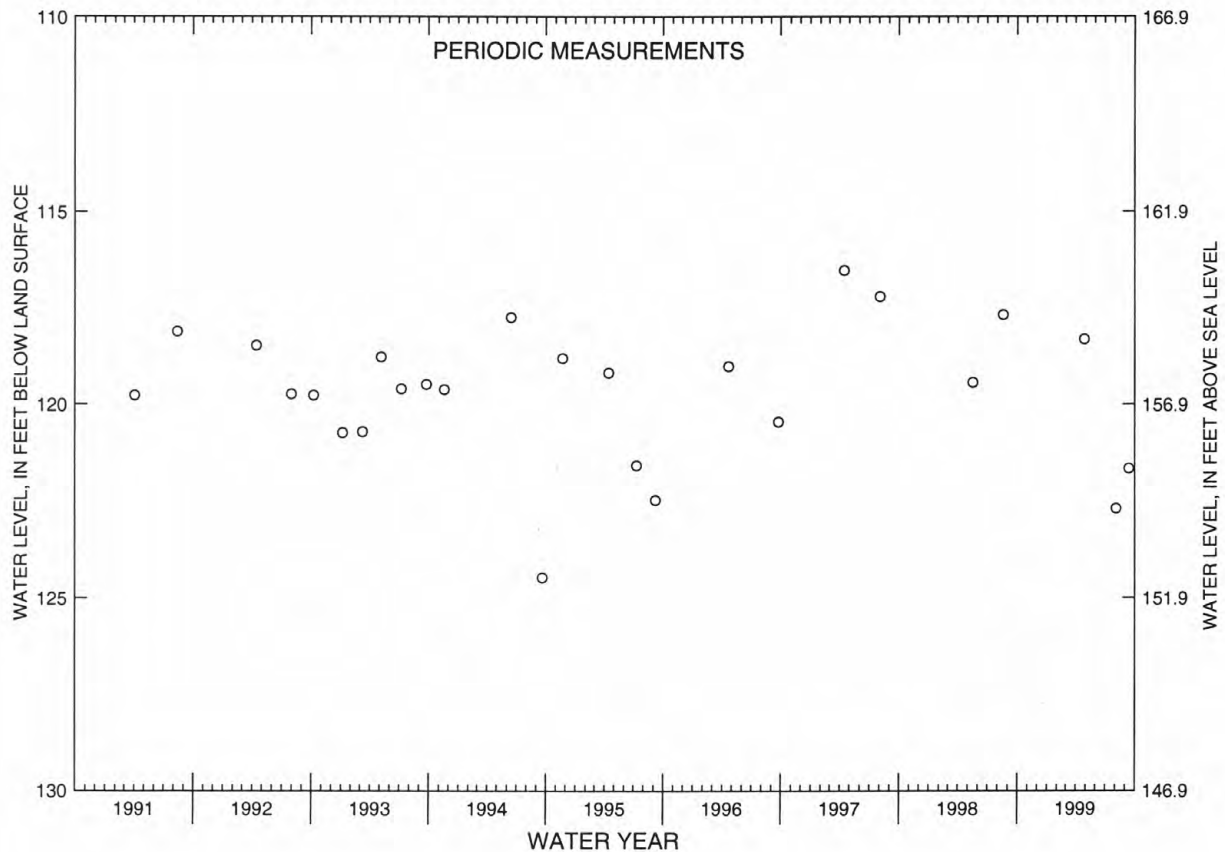
PERIOD OF RECORD.--Apr. 1991 to current year.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 28	118.32	AUG 4	122.69	SEP 14	121.65

## NJ-WRD WELL NO. 13-0095





## GROUND-WATER LEVELS

## ESSEX COUNTY

NJ-WRD Well Number, 13-0096. Site I.D., 404455074203202. Local I.D., East Orange Shallow Obs. NJ Permit Number, 25-34870.

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.

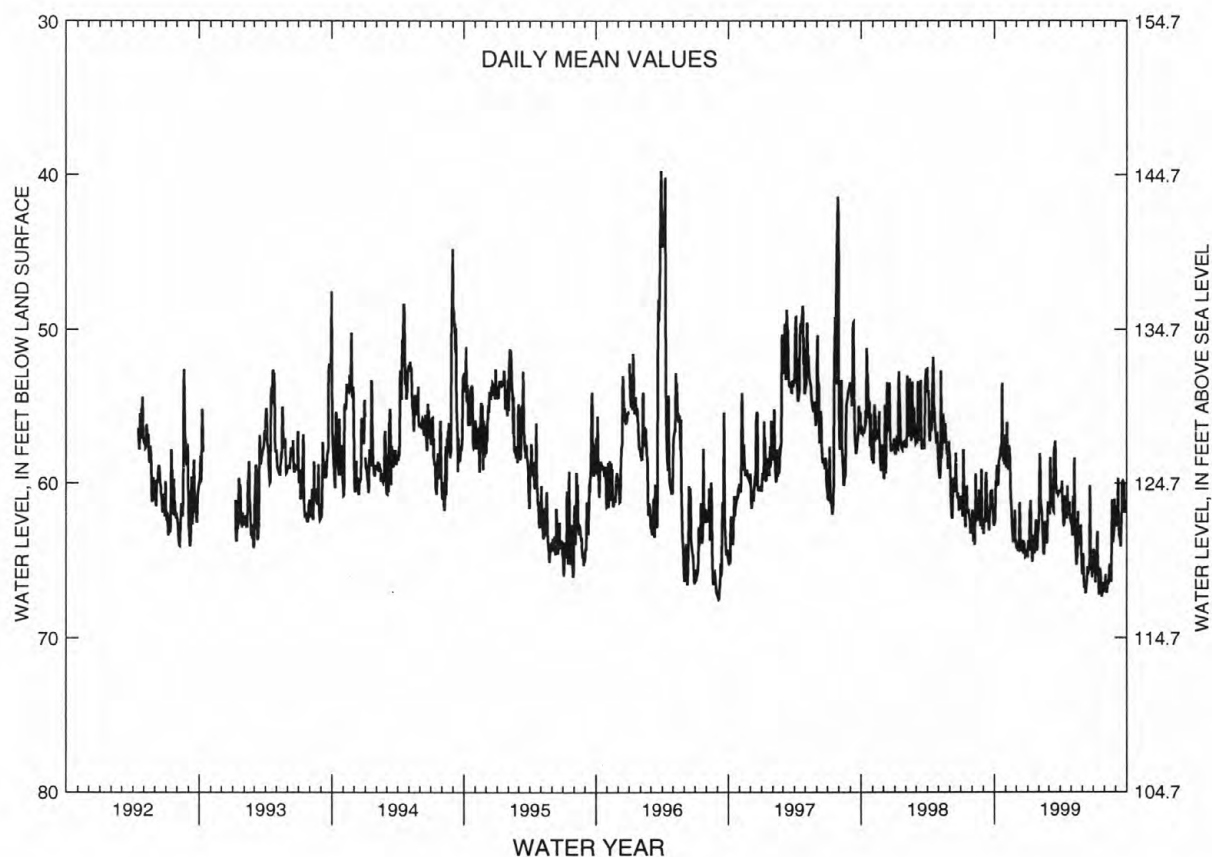
PERIOD OF RECORD.--Apr. 1991 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	60.45	56.00	64.31	64.39	58.96	58.30	60.38	63.40	66.18	64.96	66.74	62.81
10	59.94	58.83	61.24	62.47	61.86	60.44	62.61	58.35	67.13	65.16	66.56	62.95
15	58.45	60.44	64.44	64.64	64.62	58.16	60.78	64.84	65.39	65.60	65.36	64.11
20	57.58	63.20	64.56	64.56	63.04	59.92	61.62	61.82	65.61	65.49	66.32	59.87
25	58.08	63.50	64.71	62.62	62.63	60.65	62.10	64.00	64.72	67.34	63.86	61.09
EOM	56.86	64.02	64.81	63.14	61.78	60.57	62.54	65.59	64.77	66.60	62.82	61.47
MEAN	58.92	60.56	64.01	63.59	62.35	60.34	61.58	63.25	65.44	65.71	65.01	61.74
WTR YR 1999	MEAN 62.72 HIGH 53.49 OCT 23 LOW 67.34 JUL 25											

## NJ-WRD WELL NO. 13-0096

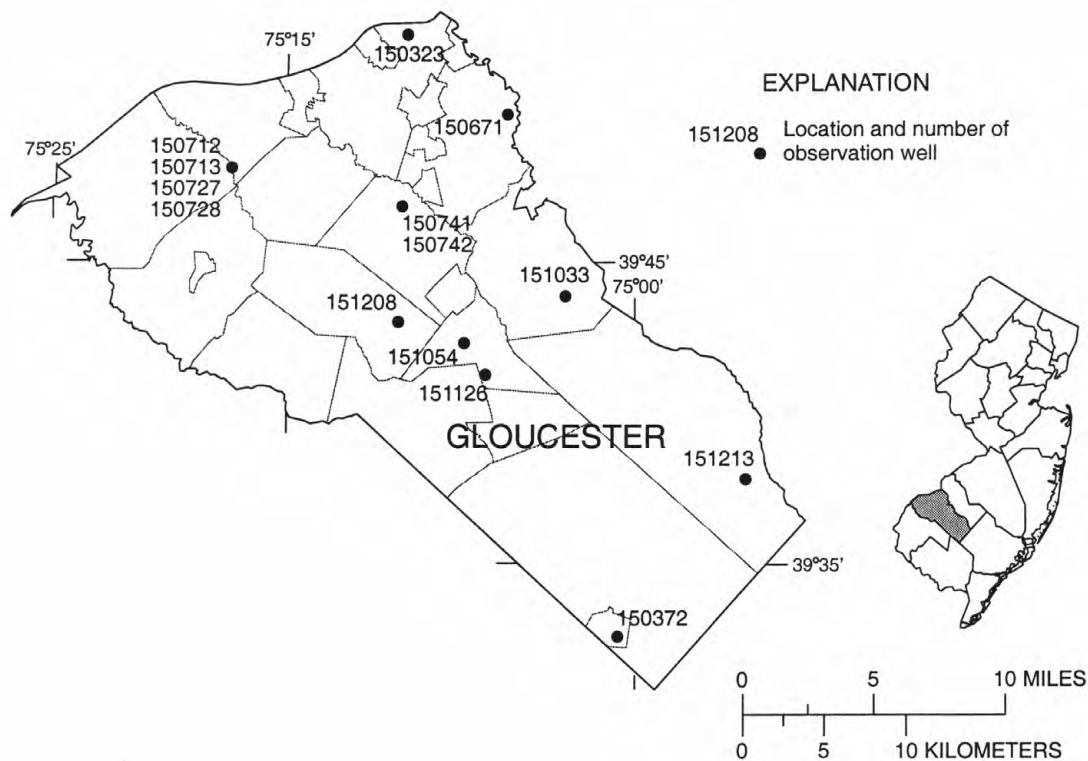


## GLOUCESTER COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
150323	EAGLE POINT 3 OBS	WEST DEPTFORD TWP	276	MRPAL	DAILY
150372	NEWFIELD 2-A OBS	NEWFIELD BORO	154	CKKD	DAILY
150671	DEPTFORD DEEP OBS	DEPTFORD TWP	670	MRPAL	DAILY
150712	STEFKA 1 OBS	GREENWICH TWP	295	MRPAL	DAILY
150713	STEFKA 2 OBS	GREENWICH TWP	155	MRPAM	DAILY
150727	STEFKA 3 OBS	GREENWICH TWP	210	MRPAM	MANUAL
150728	STEFKA 4 OBS	GREENWICH TWP	56	MRPAU	DAILY
150741	MANTUA SHALLOW OBS	MANTUA TWP	313	MRPAU	DAILY
150742	MANTUA DEEP OBS	MANTUA TWP	777	MRPAL	DAILY
151033	WTMUA MONITORING 1 OBS	WASHINGTON TWP	54	CKKD	DAILY
151054	USGS GSC OBS-1 SHALLOW	GLASSBORO BORO	36	CKKD	DAILY
151126	GLASSBORO ML-1 OBS	GLASSBORO BORO	338	MLRW	DAILY
151208	USGS AG02	HARRISON TWP	33	CKKD	DAILY
151213	USGS UND06	MONROE TWP	15	CKKD	DAILY

## Aquifer names

- CKKD - Kirkwood-Cohansey aquifer system
- MLRW - Wenonah-Mount Laurel aquifer
- MRPAL - Lower Potomac-Raritan-Magothy aquifer
- MRPAM - Middle Potomac-Raritan-Magothy aquifer
- MRPAU - Upper Potomac-Raritan-Magothy aquifer



## GROUND-WATER LEVELS

## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-0323. Site I.D., 395232075094201. Local I.D., Eagle Point 3 Obs. NJ Permit Number, 31-00037.

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.

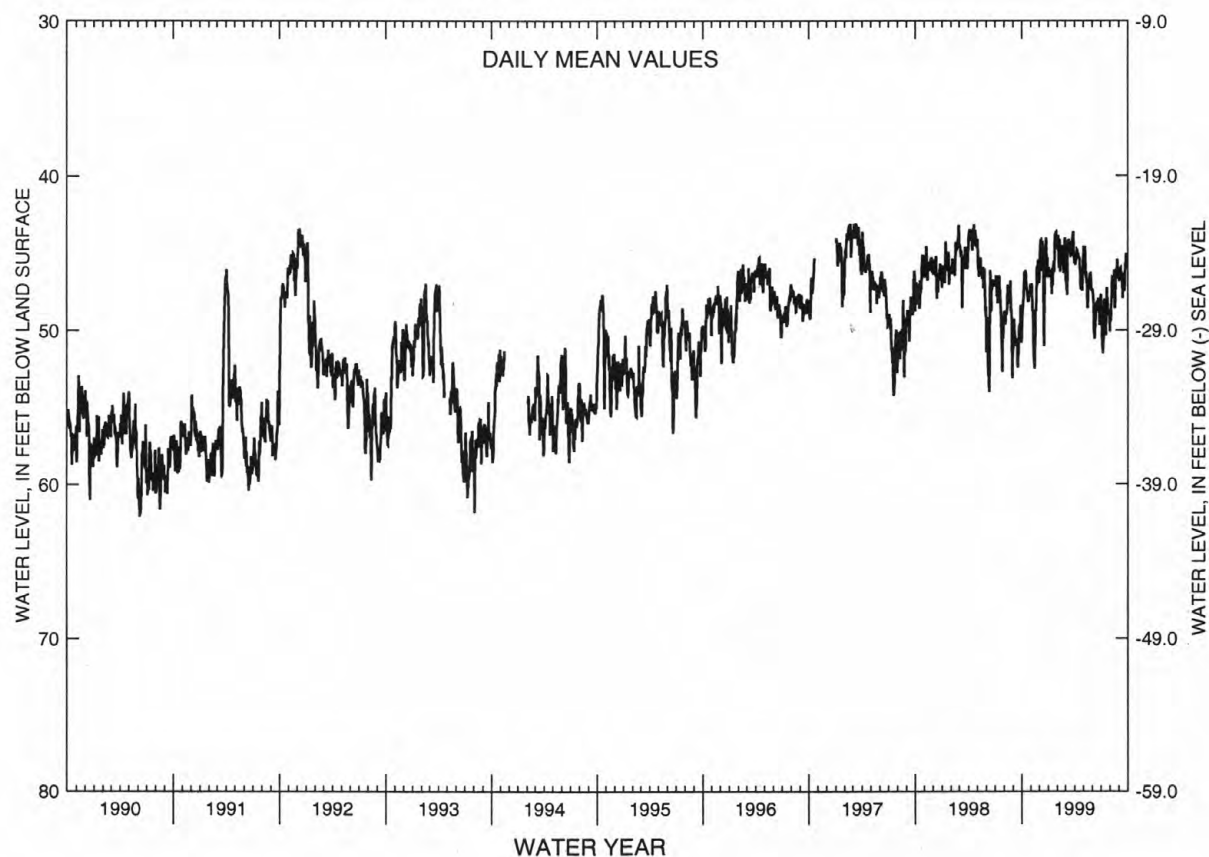
PERIOD OF RECORD.--Nov. 1949 to current year. Records for 1975 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.40	47.03	44.46	46.44	44.16	47.36	45.75	44.81	48.11	50.47	49.12	46.16
10	46.41	50.18	45.62	46.15	45.31	44.17	44.80	46.62	50.36	50.71	46.68	46.22
15	46.43	52.51	44.76	45.97	44.77	44.23	45.10	47.78	48.51	48.19	46.97	47.91
20	47.67	48.76	46.81	45.52	44.60	45.17	45.96	47.12	48.79	48.64	47.97	46.75
25	48.11	46.88	44.33	43.91	45.46	44.19	46.15	46.34	48.83	48.21	46.28	45.73
EOM	47.42	46.68	46.57	44.64	44.62	45.38	45.91	47.34	48.12	48.92	46.09	46.01
MEAN	47.59	48.41	45.80	45.66	44.99	45.08	45.80	46.44	48.73	49.05	47.32	46.33
WTR YR 1999	MEAN 46.78 HIGH 43.60 MAR 28 LOW 52.51 NOV 15											

## NJ-WRD WELL NO. 15-0323



## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-0372. Site I.D., 393246075012701. Local I.D., Newfield 2-A Obs. NJ Permit Number, 31-06092.

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.

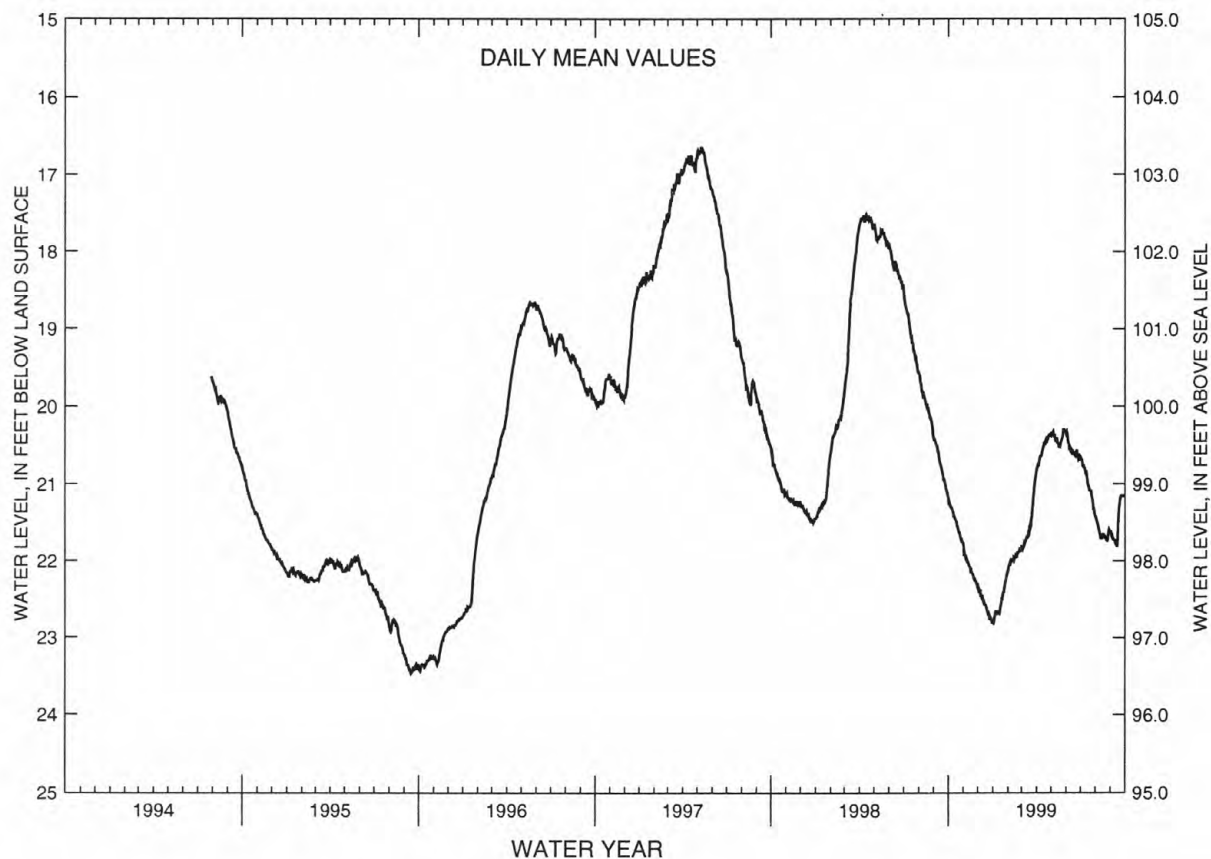
PERIOD OF RECORD.--Jan. 1987 to June 1989, Aug. 1994 to current year. Records for 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.29	21.95	22.42	22.71	22.02	21.82	20.77	20.33	20.46	20.75	21.51	21.68
10	21.35	22.01	22.50	22.65	21.98	21.72	20.64	20.45	20.58	20.80	21.63	21.73
15	21.45	22.09	22.56	22.65	21.96	21.63	20.51	20.47	20.57	20.95	21.67	21.82
20	21.55	22.17	22.65	22.49	21.92	21.53	20.47	20.49	20.64	21.08	21.67	21.26
25	21.67	22.27	22.77	22.34	21.83	21.17	20.39	20.35	20.62	21.19	21.71	21.15
EOM	21.76	22.34	22.79	22.14	21.83	20.86	20.36	20.33	20.70	21.41	21.62	21.15
MEAN	21.48	22.10	22.58	22.53	21.96	21.50	20.54	20.40	20.56	20.99	21.63	21.49
WTR YR 1999	MEAN 21.48 HIGH 20.30 MAY 26 LOW 22.82 DEC 30											

## NJ-WRD WELL NO. 15-0372



## GROUND-WATER LEVELS

## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-0671. Site I.D., 394957075053001. Local I.D., Deptford Deep Obs.

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.

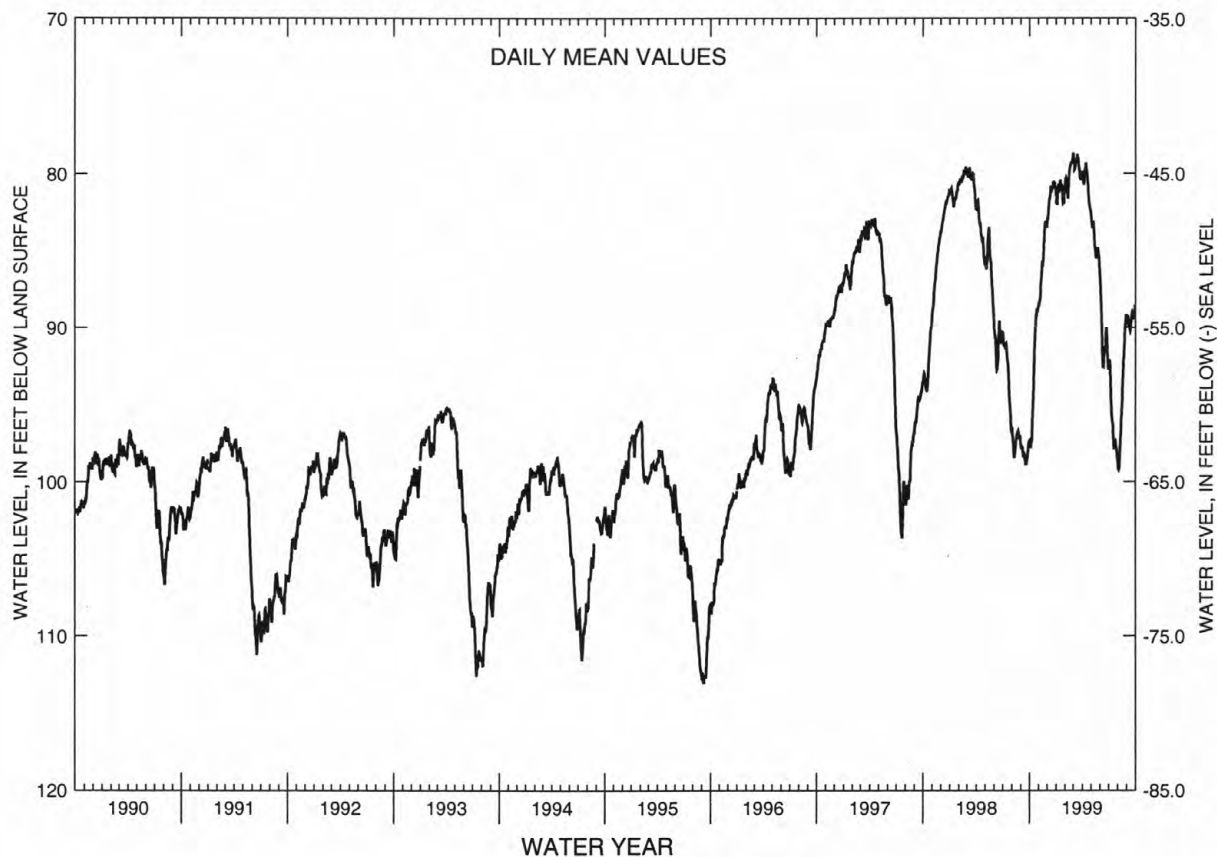
PERIOD OF RECORD.--June 1986 to current year. Records for 1986 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 78.43 ft below land surface, Mar. 1, 1999; lowest 115.36 ft below land surface, July 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	97.67	88.32	82.53	82.05	80.42	79.77	80.48	83.45	88.24	92.27	99.23	89.42
10	96.83	87.06	81.70	81.16	81.32	79.15	79.74	83.26	91.75	94.80	97.91	90.02
15	93.92	85.69	81.22	80.42	79.96	78.77	79.63	84.88	92.03	96.18	95.69	90.22
20	90.53	84.67	80.98	80.85	79.38	79.60	80.59	85.39	91.62	97.91	93.10	89.04
25	89.27	83.10	80.89	81.90	79.17	80.32	81.99	84.81	90.45	97.33	91.01	89.21
EOM	88.80	83.30	81.47	80.94	78.76	80.45	82.40	86.23	92.65	98.42	89.15	88.54
MEAN	93.21	85.85	81.41	81.24	80.06	79.54	80.65	84.46	90.61	95.76	94.82	89.50
WTR YR 1999	MEAN 86.48 HIGH 78.66 MAR 1 LOW 99.23 AUG 5											

NJ-WRD WELL NO. 15-0671





## GROUND-WATER LEVELS

113

## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-0712. Site I.D., 394808075172401. Local I.D., Stefka 1 Obs. NJ Permit Number, 30-04347.

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.

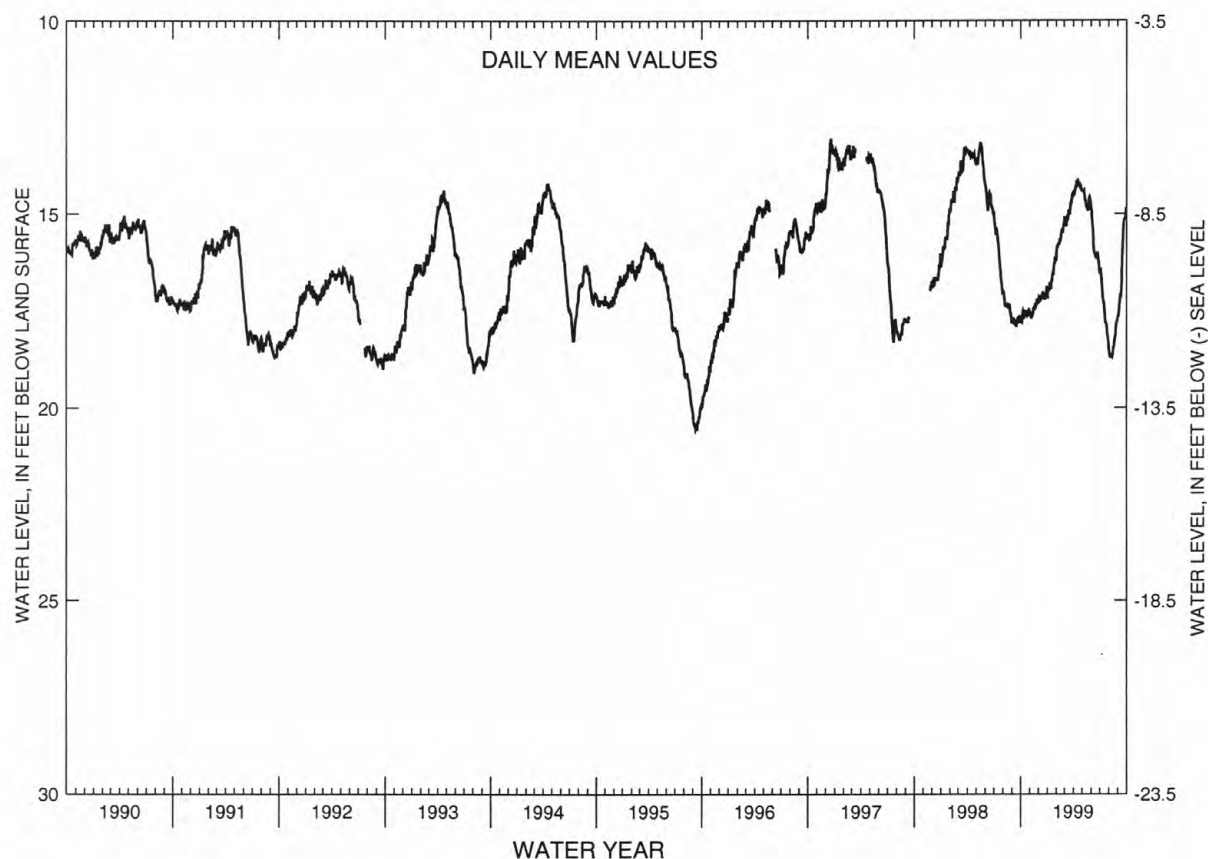
PERIOD OF RECORD.--Mar. 1987 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.76	17.62	17.19	16.99	15.89	15.34	14.50	14.42	15.21	16.49	18.63	17.59
10	17.50	17.65	17.21	16.89	15.77	15.08	14.32	14.55	15.86	16.93	18.64	17.12
15	17.58	17.42	17.17	16.74	15.71	14.91	14.21	14.80	16.04	17.29	18.61	16.93
20	17.53	17.32	17.17	16.55	15.42	15.02	14.25	14.88	16.17	17.76	18.39	15.61
25	17.60	17.38	17.17	16.30	15.32	14.66	14.33	14.62	16.07	17.89	18.12	15.12
EOM	17.49	17.26	17.10	16.24	15.13	14.55	14.41	14.75	16.46	18.32	17.77	14.85
MEAN	17.60	17.47	17.14	16.66	15.63	14.94	14.31	14.64	15.83	17.36	18.38	16.38
WTR YR 1999	MEAN 16.37 HIGH 14.10 APR 16 LOW 18.72 AUG 7											

## NJ-WRD WELL NO. 15-0712



## GROUND-WATER LEVELS

## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-0713. Site I.D., 394808075172402. Local I.D., Stefka 2 Obs. NJ Permit Number, 30-04348.

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.

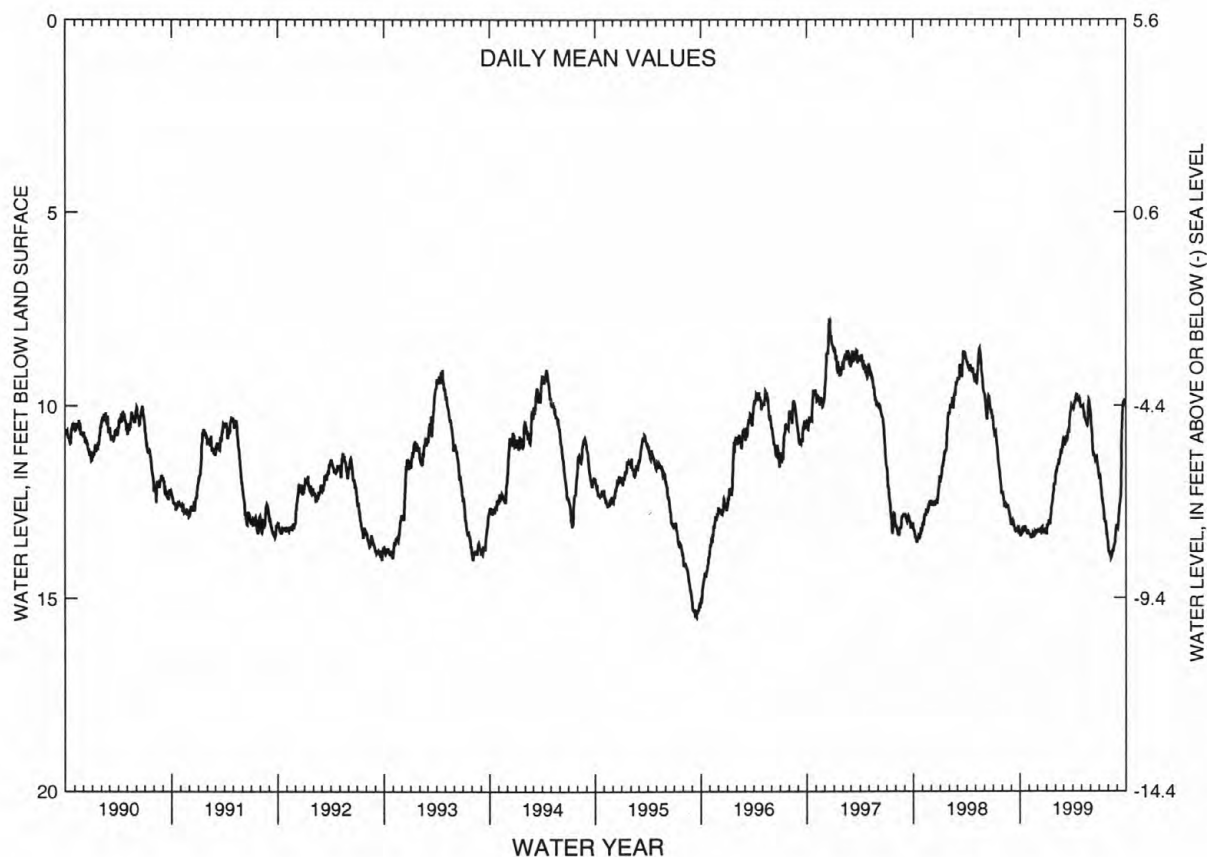
PERIOD OF RECORD.--May 1987 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.36	13.37	13.26	13.15	11.75	11.05	10.11	10.03	10.56	11.83	13.81	13.14
10	13.22	13.41	13.28	13.08	11.55	10.80	9.95	10.18	11.18	12.24	13.87	12.60
15	13.22	13.33	13.26	12.91	11.44	10.73	9.76	10.36	11.29	12.57	13.88	12.31
20	13.19	13.27	13.28	12.58	11.17	10.69	9.84	10.47	11.48	12.96	13.78	10.35
25	13.29	13.36	13.31	12.27	11.02	10.16	9.89	10.02	11.47	13.10	13.59	9.93
EOM	13.32	13.29	13.31	12.05	10.86	10.05	10.04	10.04	11.80	13.51	13.19	9.83
MEAN	13.27	13.36	13.26	12.73	11.40	10.60	9.90	10.18	11.15	12.63	13.69	11.54
WTR YR 1999	MEAN 11.99 HIGH 9.69 APR 16 LOW 13.98 AUG 12											

NJ-WRD WELL NO. 15-0713



## GROUND-WATER LEVELS

115

## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-0727. Site I.D., 394808075172403. Local I.D., Stefka 3 Obs. NJ Permit Number, 30-04548.

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.

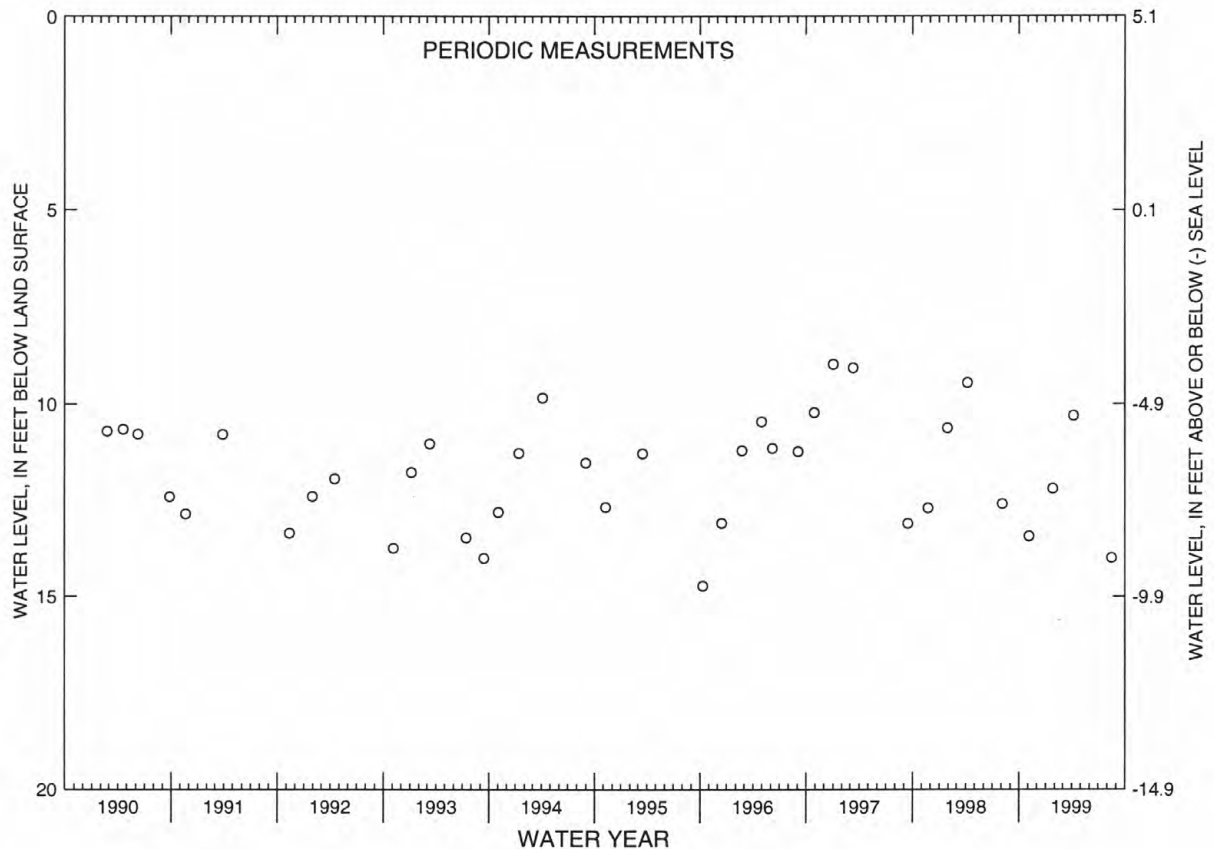
PERIOD OF RECORD.--June 1987 to current year. Records for 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
NOV 5	13.43	APR 7	10.31
JAN 26	12.19	AUG 17	14.00

## NJ-WRD WELL NO. 15-0727



## GROUND-WATER LEVELS

116

## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-0728. Site I.D., 394808075172404. Local I.D., Stefka 4 Obs. NJ Permit Number, 30-04549.

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.

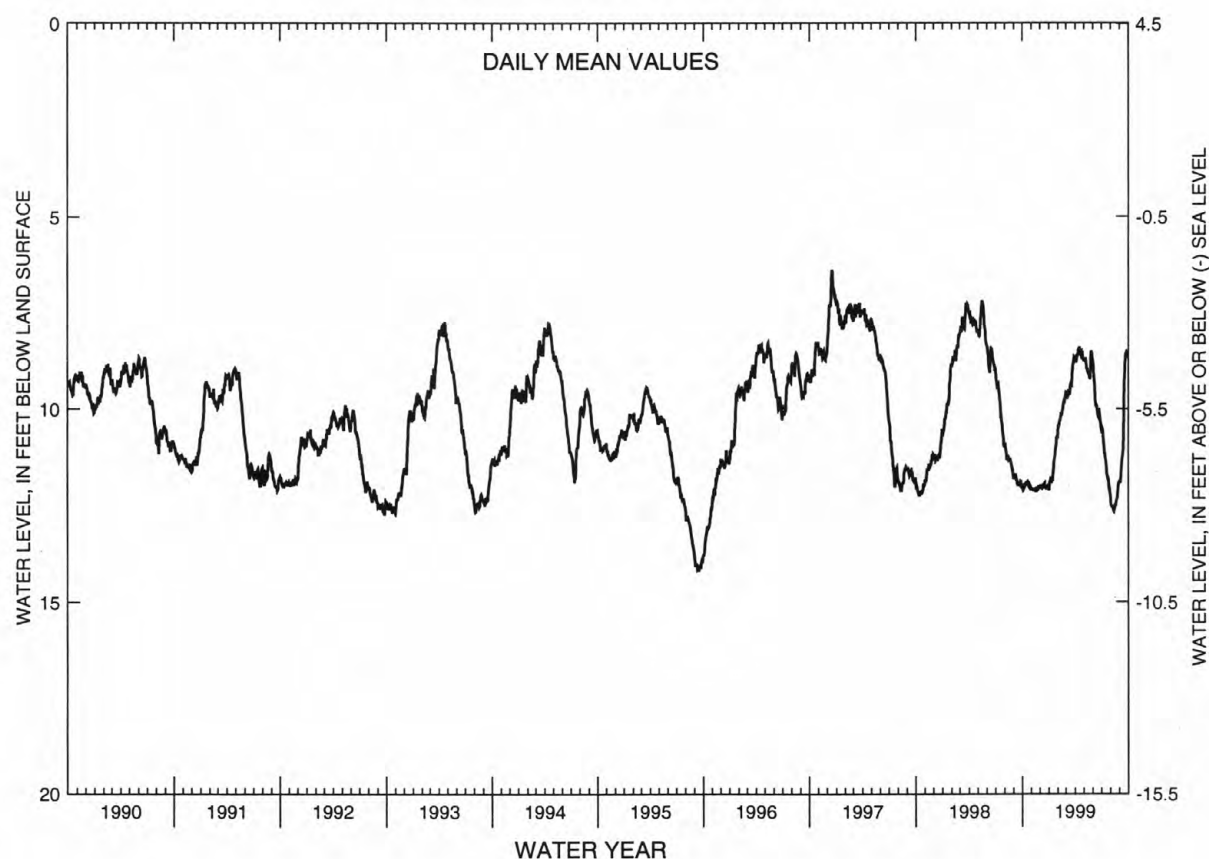
PERIOD OF RECORD.--May 1987 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.07	12.10	12.03	11.92	10.46	9.75	8.79	8.72	9.19	10.54	12.53	11.90
10	11.96	12.12	12.05	11.86	10.24	9.49	8.63	8.85	9.80	10.94	12.55	11.32
15	11.95	12.07	12.03	11.70	10.14	9.42	8.44	9.04	9.93	11.30	12.62	11.01
20	11.93	12.03	12.05	11.32	9.86	9.38	8.53	9.14	10.20	11.70	12.50	8.99
25	12.02	12.10	12.07	10.98	9.71	8.83	8.59	8.68	10.17	11.83	12.32	8.57
EOM	12.05	12.05	12.08	10.76	9.55	8.73	8.74	8.69	10.51	12.21	11.92	8.49
MEAN	12.00	12.09	12.02	11.48	10.09	9.29	8.59	8.86	9.82	11.35	12.40	10.23
WTR YR 1999 MEAN 10.70 HIGH 8.38 APR 16 LOW 12.66 AUG 13												

## NJ-WRD WELL NO. 15-0728



## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-0741. Site I.D., 394652075100401. Local I.D., Mantua Shallow Obs.

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.

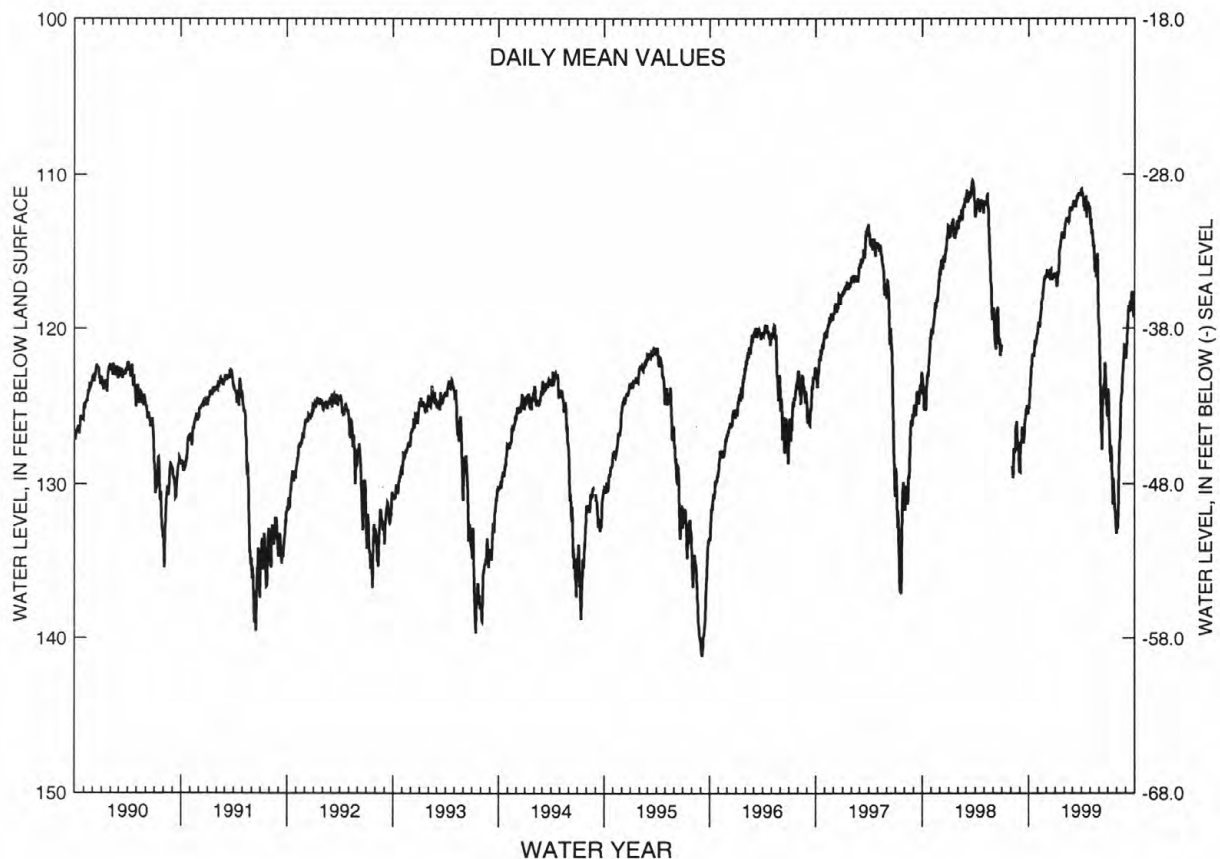
PERIOD OF RECORD.--July 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 110.14 ft below land surface, Mar. 24, 1998; lowest, 141.36 ft below land surface, Sept. 6-7, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	124.39	119.60	116.35	117.15	113.16	111.86	111.28	113.32	122.65	124.57	132.89	121.19
10	122.55	119.48	116.62	116.49	112.99	111.88	111.92	114.14	126.75	128.10	128.28	119.29
15	121.78	118.29	116.48	114.88	112.98	111.70	111.78	114.90	124.59	128.02	125.68	118.90
20	121.71	117.67	116.78	114.29	112.23	111.30	112.39	115.50	124.38	130.41	124.06	118.80
25	120.91	116.69	116.59	113.89	112.26	111.25	111.94	115.36	123.50	131.17	122.08	117.62
EOM	120.35	116.59	116.61	114.20	112.21	111.00	112.24	119.48	125.67	133.02	121.32	119.08
MEAN	122.25	118.37	116.54	115.31	112.79	111.59	111.82	115.14	124.03	128.81	126.26	119.27
WTR YR 1999	MEAN 118.56 HIGH 110.97 APR 1 LOW 133.20 AUG 1											

## NJ-WRD WELL NO. 15-0741





## GROUND-WATER LEVELS

118

## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-0742. Site I.D., 394652075100402. Local I.D., Mantua Deep Obs.

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.

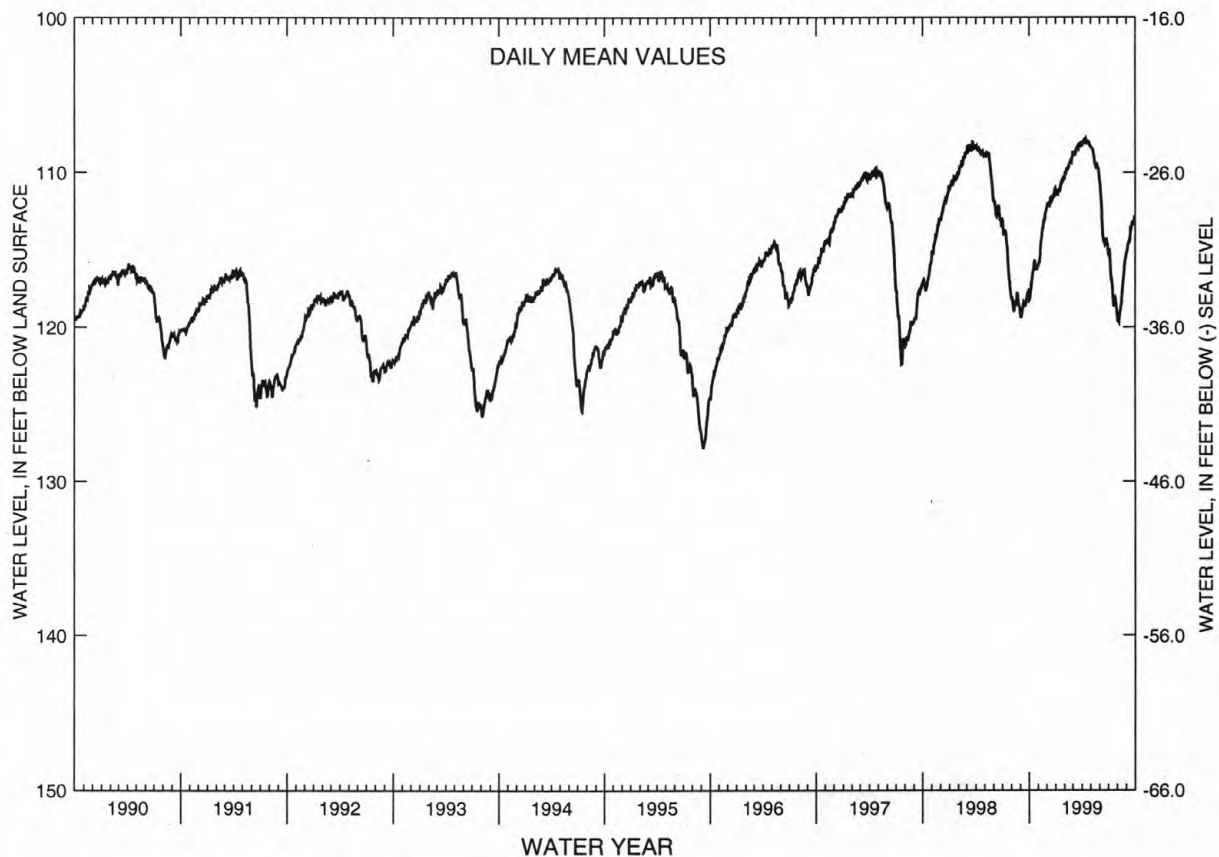
PERIOD OF RECORD.--Nov. 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 107.76 ft below land surface, Apr. 9, 1999; lowest, 127.89 ft below land surface, Sept. 8-9, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	117.88	115.76	112.08	111.30	110.12	108.93	108.11	108.40	111.34	114.96	119.54	115.01
10	117.11	114.79	112.04	111.19	109.77	108.58	107.93	108.65	113.19	116.41	119.17	114.50
15	116.40	113.85	111.76	110.96	109.64	108.32	107.94	109.31	114.37	117.22	118.58	114.20
20	115.74	113.21	111.80	110.73	109.29	108.44	108.02	109.65	114.64	118.68	117.41	113.46
25	116.24	112.99	111.54	110.42	109.18	108.20	108.16	109.66	114.33	118.05	116.41	113.22
EOM	116.04	112.37	111.22	110.50	108.77	108.15	108.31	110.28	114.96	119.07	115.47	112.84
MEAN	116.71	114.10	111.75	110.91	109.58	108.46	108.03	109.20	113.47	117.18	117.95	114.03
WTR YR 1999	MEAN 112.64 HIGH 107.85 APR 9 LOW 119.67 AUG 7											

## NJ-WRD WELL NO. 15-0742



## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-1033. Site I.D., 394354075025901. Local I.D., WTMUA Monitoring 1 Obs. NJ Permit Number, 31-31399.

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.

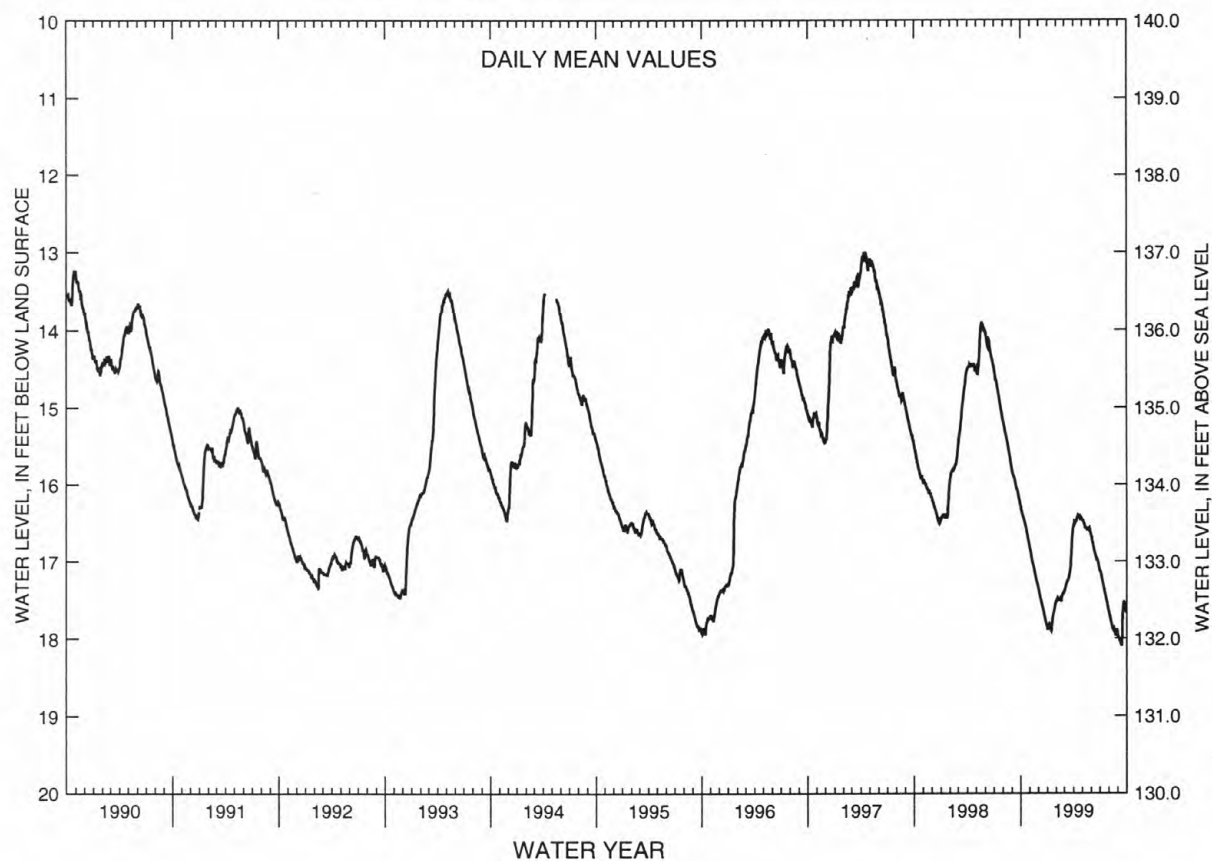
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.98 ft below land surface, Apr. 13, 1997; lowest, 18.11 ft below land surface, Sept. 16, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.36	16.90	17.43	17.83	17.49	17.33	16.51	16.48	16.74	17.15	17.71	18.00
10	16.43	17.00	17.52	17.87	17.49	17.26	16.49	16.54	16.83	17.25	17.80	18.05
15	16.50	17.08	17.59	17.89	17.49	17.23	16.42	16.57	16.90	17.34	17.88	18.10
20	16.58	17.17	17.68	17.71	17.46	17.13	16.42	16.58	16.98	17.43	17.89	17.57
25	16.68	17.27	17.77	17.63	17.41	16.87	16.42	16.58	17.01	17.52	17.96	17.56
EOM	16.80	17.34	17.86	17.53	17.40	16.56	16.46	16.65	17.11	17.64	17.92	17.67
MEAN	16.53	17.09	17.61	17.76	17.47	17.11	16.46	16.55	16.90	17.36	17.84	17.83

WTR YR 1999 MEAN 17.21 HIGH 16.29 OCT 1 LOW 18.10 SEP 15

## NJ-WRD WELL NO. 15-1033



## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-1054. Site I.D., 394221075072201. Local I.D., USGS GSC Obs-1 Shallow. NJ Permit Number, 31-33949.

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. 1994.

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.

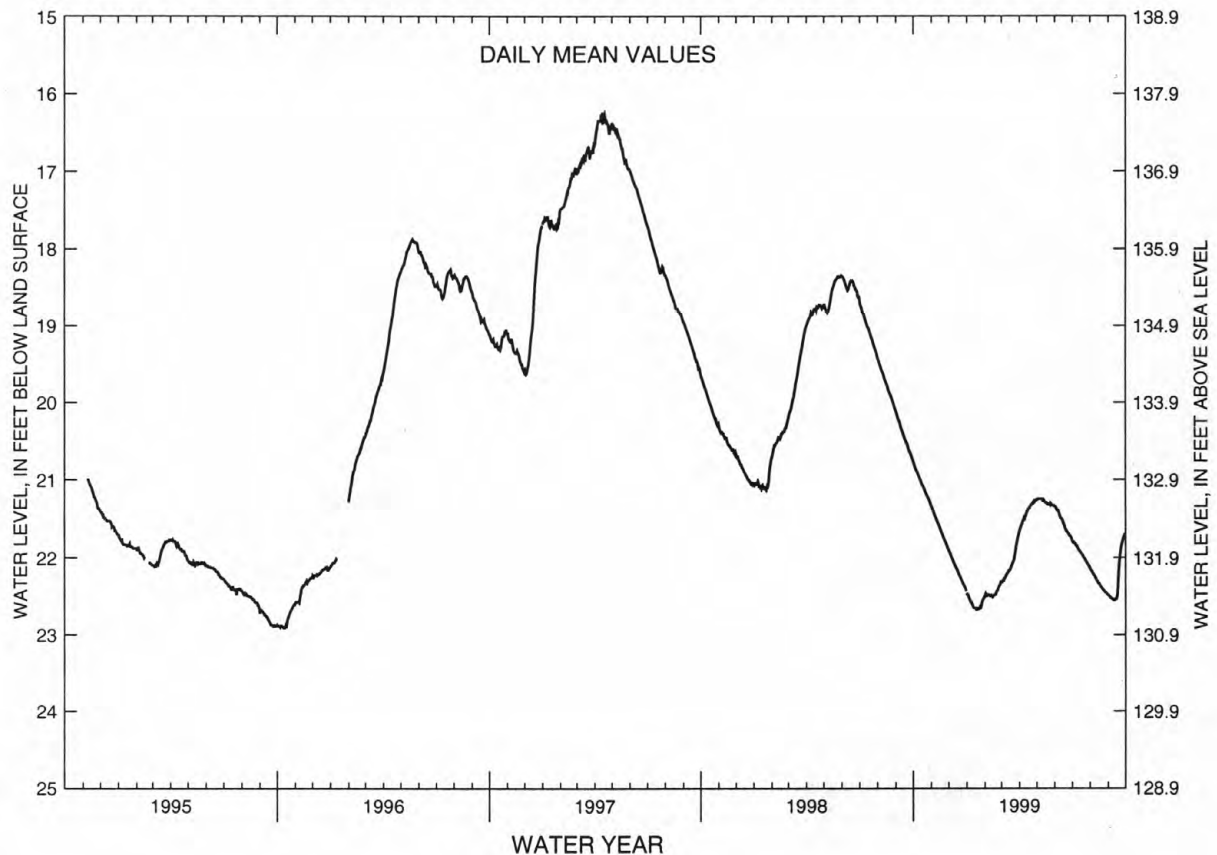
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.24 ft below land surface, Apr. 18, 1997; lowest, 22.98 ft below land surface, Sept. 14, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.85	21.41	21.98	22.53	22.49	22.30	21.58	21.25	21.39	21.82	22.19	22.52
10	20.94	21.52	22.07	22.60	22.50	22.22	21.50	21.26	21.47	21.87	22.26	22.55
15	21.04	21.61	22.15	22.65	22.50	22.17	21.40	21.29	21.55	21.93	22.33	22.54
20	21.12	21.70	22.24	22.67	22.46	22.08	21.34	21.32	21.65	21.99	22.38	22.09
25	21.21	21.80	22.33	22.64	22.37	21.93	21.29	21.33	21.70	22.05	22.43	21.81
EOM	21.32	21.89	22.43	22.51	22.32	21.69	21.27	21.34	21.77	22.13	22.48	21.70
MEAN	21.05	21.62	22.17	22.59	22.46	22.10	21.42	21.29	21.56	21.95	22.33	22.26

WTR YR 1999 MEAN 21.90 HIGH 20.76 OCT 1 LOW 22.67 JAN 17

## NJ-WRD WELL NO. 15-1054



## GROUND-WATER LEVELS

121

## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-1126. Site I.D., 394119075062701. Local I.D., Glassboro ML-1 Obs. NJ Permit Number, 31-34033-4.

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.

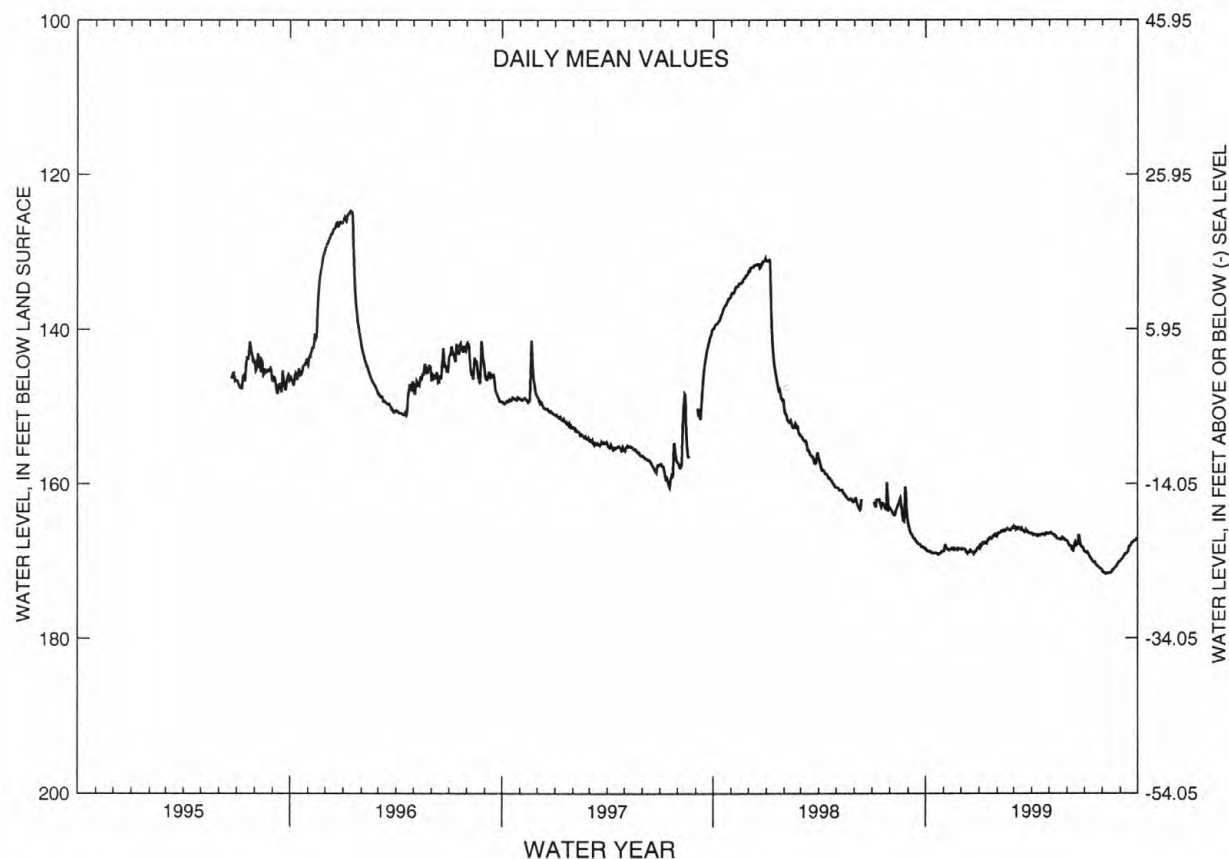
PERIOD OF RECORD.--Jan. 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 124.76 ft below land surface, Jan. 12-13, 1996; lowest, 171.71 ft below land surface, Aug. 7, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	168.71	168.16	168.44	167.99	166.40	165.90	166.60	166.43	168.01	168.85	171.53	169.64
10	168.80	168.57	168.85	167.72	166.08	165.67	166.75	166.60	168.56	169.40	171.59	169.05
15	168.96	168.37	168.87	167.40	166.06	165.83	166.71	167.12	167.59	170.00	171.55	168.69
20	168.98	168.41	168.89	167.06	165.90	166.22	166.51	167.16	167.97	170.28	171.16	167.86
25	169.04	168.52	168.90	166.75	165.85	166.14	166.59	167.00	168.03	170.78	170.75	167.41
EOM	168.74	168.50	168.45	166.85	165.57	166.46	166.47	167.37	168.60	171.15	170.11	167.00
MEAN	168.87	168.45	168.68	167.35	166.06	165.99	166.57	166.91	167.92	169.96	171.17	168.48
WTR YR 1999	MEAN 168.05 HIGH 165.48 MAR 1 LOW 171.68 AUG 7											

## NJ-WRD WELL NO. 15-1126



## GROUND-WATER LEVELS

122

## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-1208. Site I.D., 394256075101001. Local I.D., USGS AG02. NJ Permit Number, 31-49627.

LOCATION.--Lat 39°43'02", long 75°10'12", 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 140 ft above sea level, from topographic map.

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

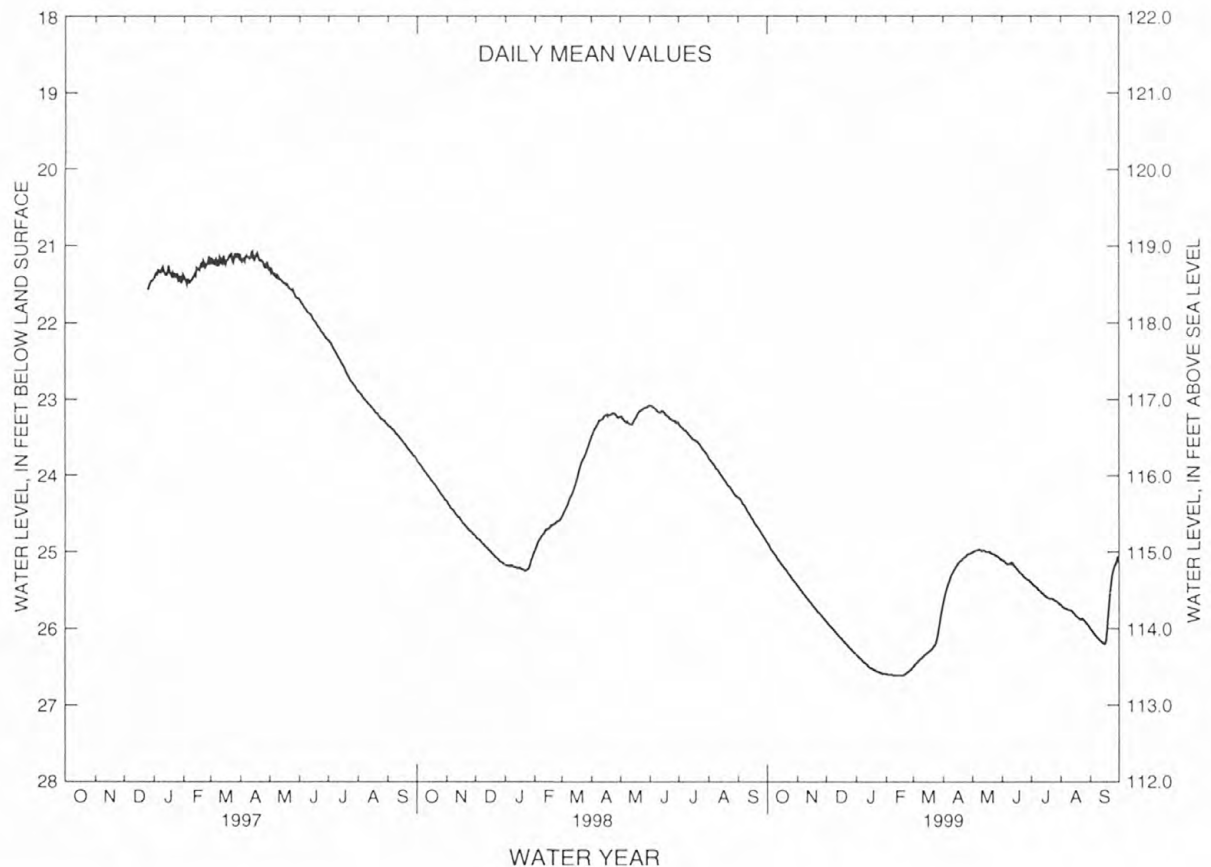
PERIOD OF RECORD.--Dec. 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.01 ft below land surface, Mar. 26, Apr. 12-13, 1997; lowest, 26.63 ft below land surface, Feb. 12, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.97	25.50	25.97	26.39	26.60	26.44	25.46	24.98	25.15	25.45	25.74	26.07
10	25.05	25.59	26.04	26.45	26.61	26.38	25.29	24.98	25.16	25.51	25.76	26.14
15	25.15	25.66	26.11	26.51	26.61	26.32	25.18	25.00	25.21	25.57	25.81	26.20
20	25.23	25.74	26.18	26.54	26.60	26.27	25.11	25.02	25.28	25.61	25.87	25.71
25	25.32	25.82	26.25	26.57	26.55	26.15	25.05	25.05	25.34	25.63	25.89	25.23
EOM	25.42	25.89	26.33	26.59	26.51	25.72	25.01	25.10	25.39	25.68	25.99	25.06
MEAN	25.16	25.67	26.12	26.50	26.59	26.26	25.23	25.01	25.23	25.56	25.83	25.82
WTR YR 1999 MEAN 25.74 HIGH 24.88 OCT 1 LOW 26.61 FEB 8												

## NJ-WRD WELL NO. 15-1208





## GROUND-WATER LEVELS

123

## GLOUCESTER COUNTY

NJ-WRD Well Number, 15-1213. Site I.D., 393749074550901. Local I.D., USGS UND06. NJ Permit Number 31-49658.

LOCATION.--Lat 39°37'52", long 74°55'13", 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.

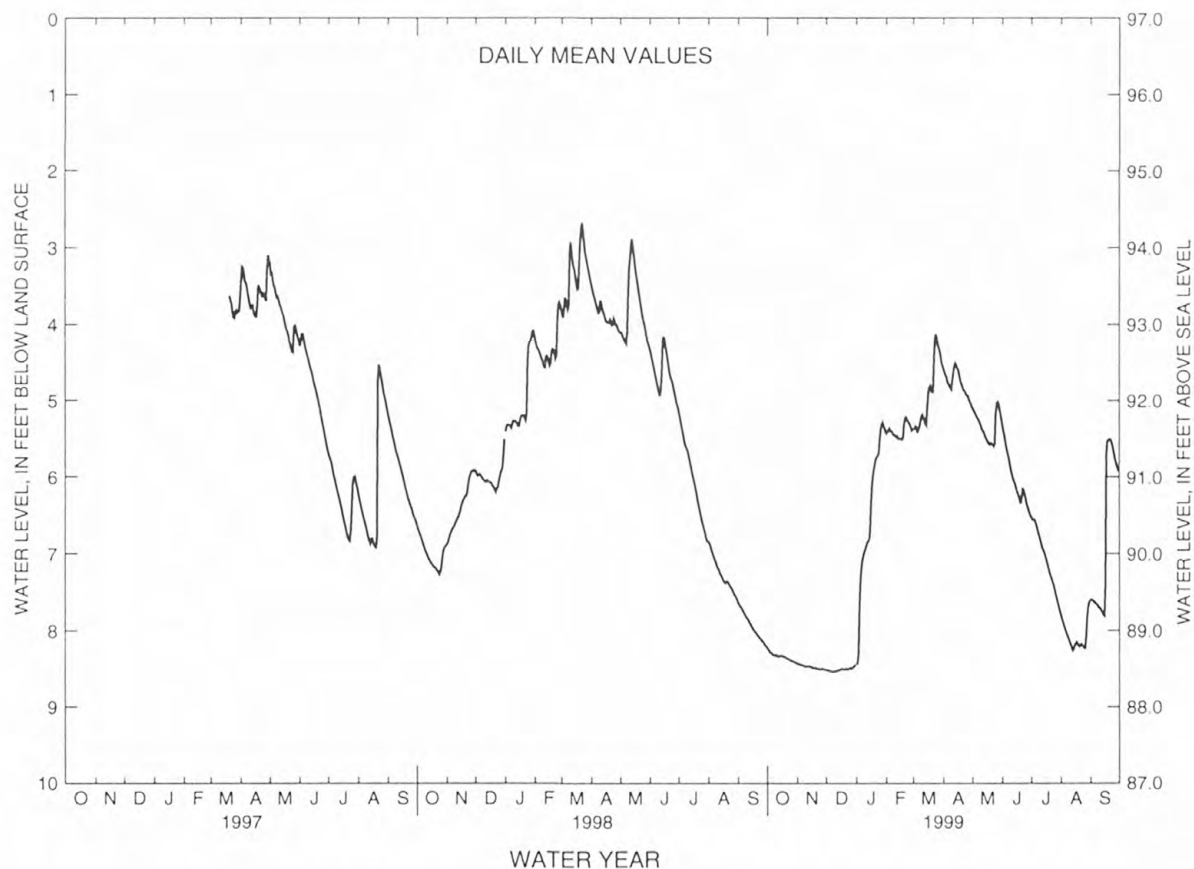
PERIOD OF RECORD.--March 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.65 ft below land surface, Mar. 21, 22, 1998; lowest, 8.55 ft below land surface, Dec. 7-8, 1998.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.29	8.45	8.53	7.36	5.40	5.42	4.76	5.21	5.62	6.59	7.98	7.63
10	8.32	8.47	8.53	6.95	5.46	5.19	4.74	5.35	5.93	6.82	8.16	7.70
15	8.33	8.48	8.51	6.71	5.50	5.09	4.57	5.50	6.14	7.02	8.19	7.81
20	8.36	8.49	8.51	5.82	5.24	4.89	4.80	5.56	6.35	7.26	8.21	5.51
25	8.39	8.51	8.50	5.51	5.31	4.19	4.93	5.18	6.28	7.46	8.23	5.69
EOM	8.43	8.51	8.45	5.41	5.38	4.55	5.08	5.27	6.51	7.77	7.61	5.93
MEAN	8.34	8.48	8.51	6.46	5.40	4.90	4.77	5.33	6.04	7.09	8.07	6.74
WTR YR 1999 MEAN 6.69 HIGH 4.13 MAR 24 LOW 8.54 DEC 7												

## NJ-WRD WELL NO. 15-1213



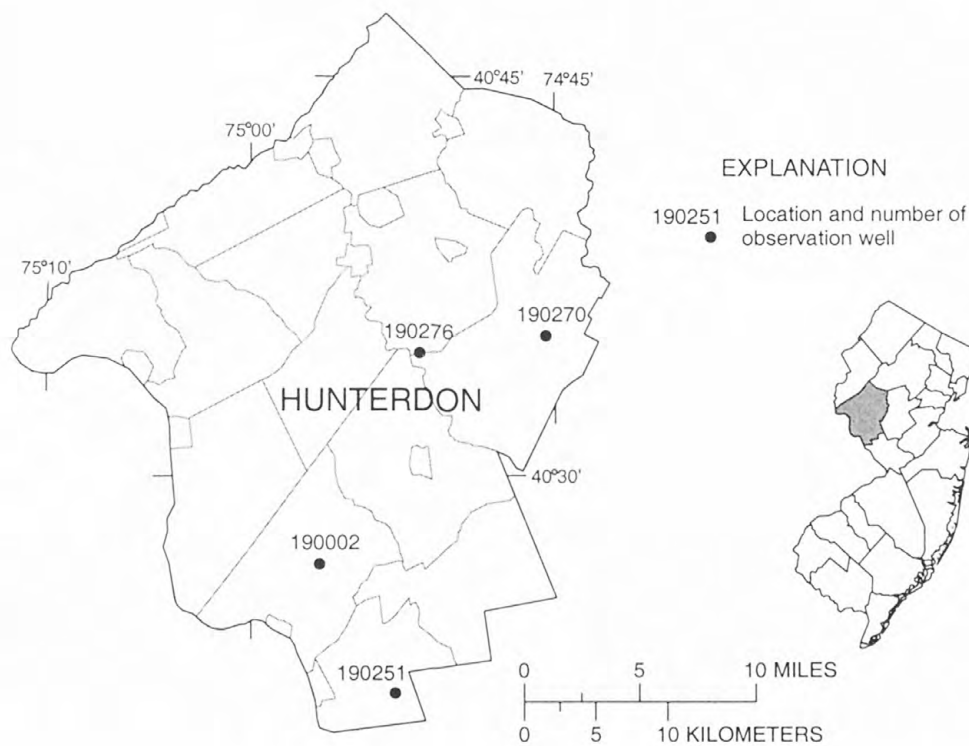
## WATER RESOURCES DATA - NEW JERSEY, 1999

## HUNTERDON COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
190002	BIRD OBS	DELAWARE TWP	21	SCKN	DAILY
190251	CORSALO RD TB1 OBS	WEST AMWELL TWP	299	PSSC	DAILY
190270	READINGTON SCHOOL 11 OBS	READINGTON TWP	101	PSSC	DAILY
190276	ENVIRONMENTAL CTR 1 OBS	CLINTON TWP	175	SCKN	DAILY

## Aquifer names

PSSC - Passaic Formation  
SCKN - Stockton Formation



## GROUND-WATER LEVELS

125

## HUNTERDON COUNTY

NJ-WRD Well Number, 19-0002. Site I.D., 402644074563601. Local I.D., Bird Obs.

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.--Submersible logger pressure transducer--60-minute recording interval. Digital water-level recorder--60-minute punch, June 1989 to July 1999. 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.

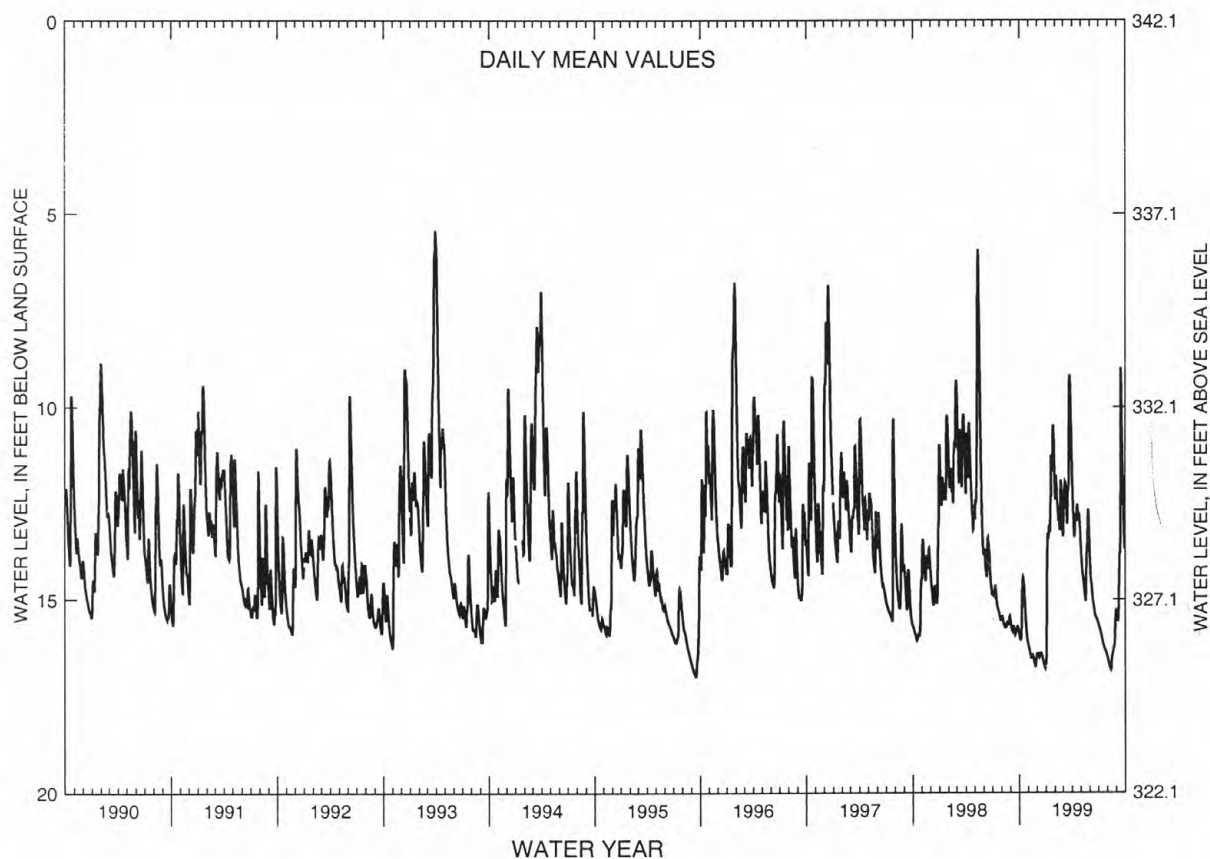
PERIOD OF RECORD.--June 1965 to current year. Records for 1965 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.05	16.30	16.41	14.08	11.78	12.22	12.61	14.03	14.47	15.72	16.60	15.47
10	15.39	16.48	16.49	13.38	12.62	12.02	13.40	14.43	14.81	15.87	16.76	15.12
15	14.46	16.44	16.40	13.26	12.92	12.98	12.84	14.82	15.14	16.05	16.80	13.83
20	15.04	16.56	16.51	11.26	12.08	12.07	12.55	14.79	15.40	16.22	16.40	10.09
25	15.69	16.72	16.68	10.50	12.63	9.26	12.82	13.34	15.49	16.32	16.24	12.17
EOM	16.13	16.49	16.76	11.85	13.34	11.12	13.35	13.49	15.59	16.45	15.31	13.70
MEAN	15.45	16.48	16.53	12.74	12.52	11.65	12.78	14.03	15.02	16.06	16.42	13.26
WTR YR 1999	MEAN 14.43 HIGH 9.00 SEP 17 LOW 16.83 AUG 14											

## NJ-WRD WELL NO. 19-0002



## GROUND-WATER LEVELS

## HUNTERDON COUNTY

NJ-WRD Well Number, 19-0251. Site I.D., 402151074525301. Local I.D., Corsalo Rd TB 1 Obs. NJ Permit Number, 27-10124.

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.--Submersible logger pressure transducer--60-minute recording interval. Digital water-level recorder, June 1989 to July 1999.

DATUM.--Land surface is 405 ft above sea level, from topographic map.

Measuring point: Top of recorder shelf, 2.50 ft above land surface.

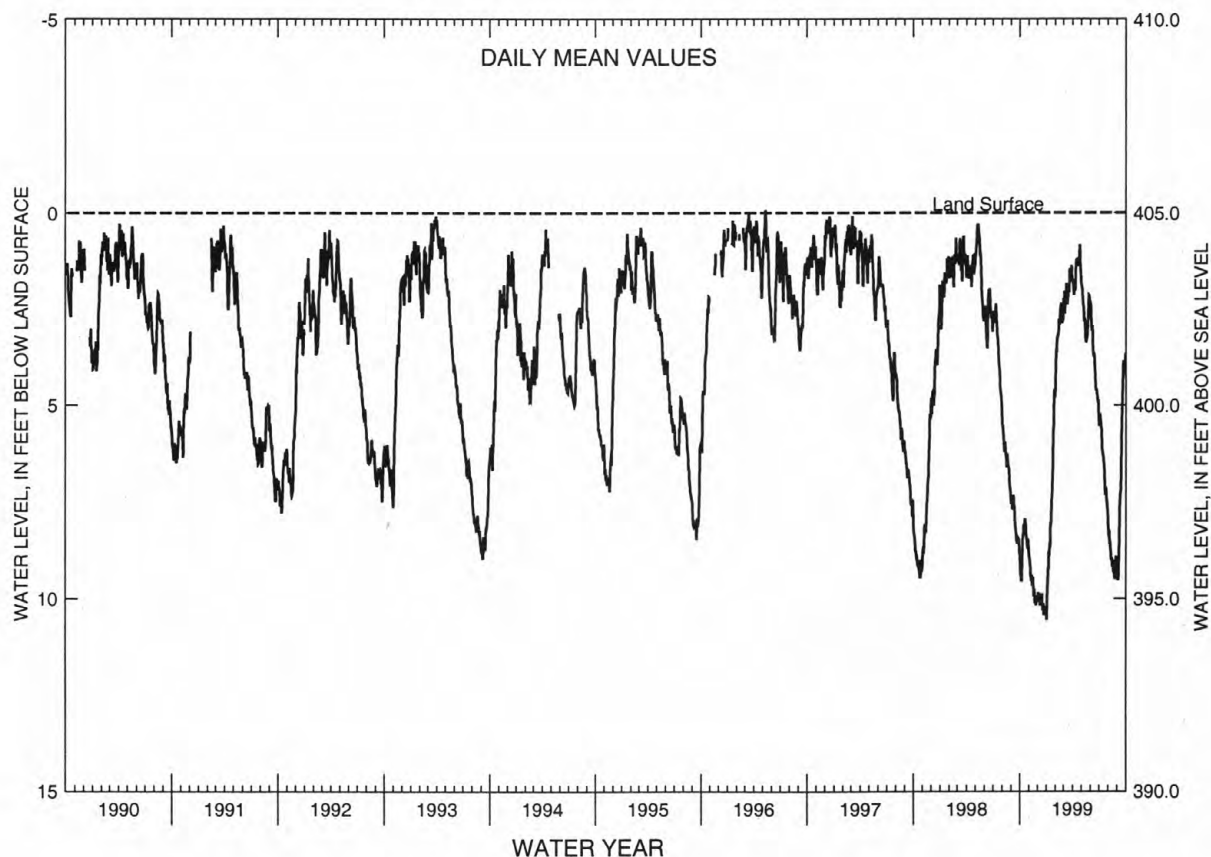
PERIOD OF RECORD.--June 1989 to current year. Records for 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.51 ft above land surface, Mar. 13, 1993; lowest, 10.65 ft below land surface, Jan. 1-2, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.44	9.10	9.99	9.66	3.63	2.62	2.06	2.11	2.96	5.32	8.25	9.53
10	8.49	9.55	10.18	8.90	3.15	1.83	2.01	2.64	3.50	5.59	8.75	7.96
15	8.09	9.45	10.15	8.06	2.90	2.07	1.27	3.24	3.75	6.28	9.06	7.18
20	8.03	9.77	10.31	7.32	2.36	2.07	1.33	3.27	4.59	---	9.32	4.84
25	8.47	10.18	10.41	5.62	2.74	1.46	1.12	2.58	4.73	7.14	9.50	3.87
EOM	8.72	10.02	10.45	4.81	2.52	1.78	1.73	2.33	5.25	7.81	9.25	3.67
MEAN	8.60	9.64	10.15	7.69	3.00	1.96	1.51	2.62	3.87	6.42	8.90	6.53
WTR YR 1999	MEAN 5.95 HIGH .83 APR 26 LOW 10.56 JAN 2											

## NJ-WRD WELL NO. 19-0251



## GROUND-WATER LEVELS

127

## HUNTERDON COUNTY

NJ-WRD Well Number, 19-0270. Site I.D., 403517074452501. Local I.D., Readington School 11 Obs. NJ Permit Number, 25-33679-7.

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.

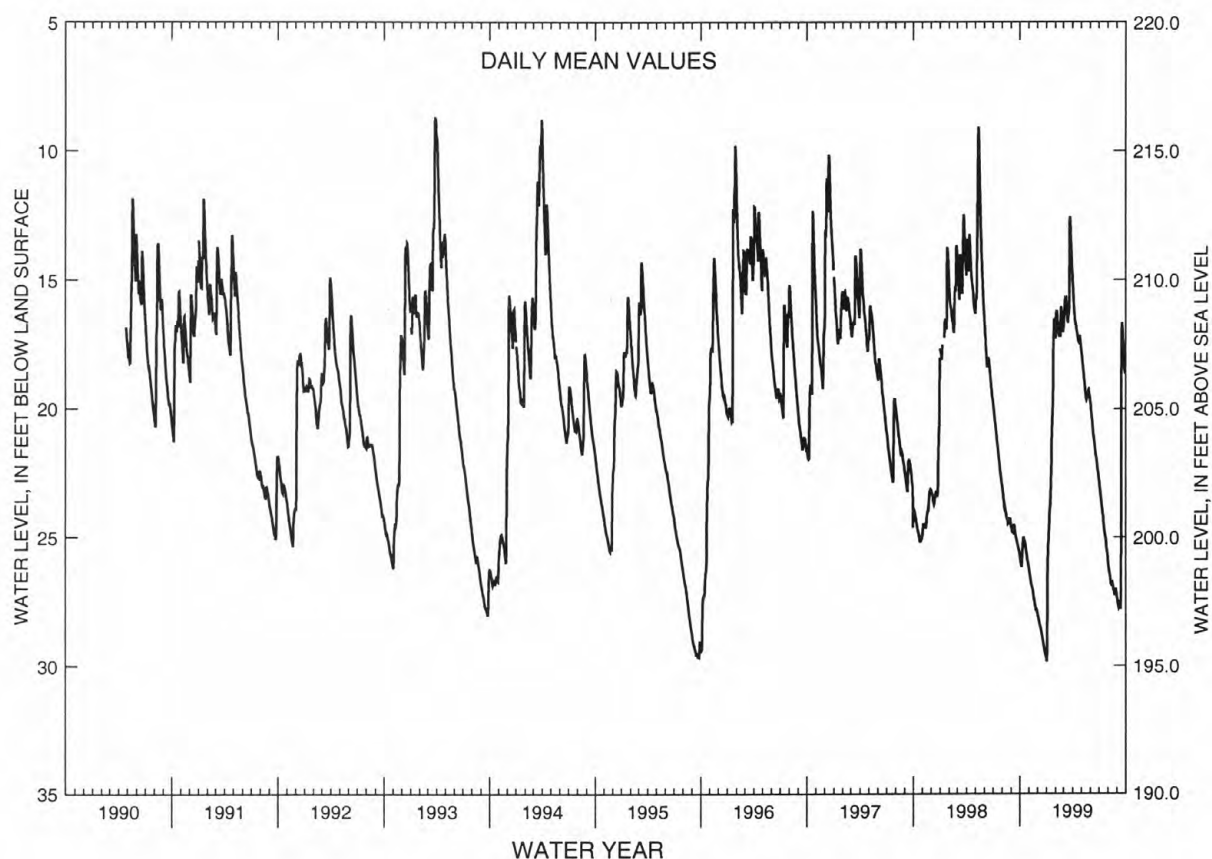
PERIOD OF RECORD.--Apr. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.64 ft below land surface, Mar. 26, 1993; lowest, 29.86 ft below land surface, Jan. 2-3, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.00	26.48	28.21	26.18	16.21	16.01	15.77	18.12	20.16	23.10	26.28	27.55
10	25.57	26.86	28.47	24.54	16.91	15.70	16.60	18.70	20.74	23.60	26.64	27.75
15	25.03	27.06	28.75	23.47	17.13	16.48	16.90	19.29	21.22	24.12	26.75	27.79
20	25.29	27.43	29.07	20.69	16.08	16.31	17.28	19.59	21.76	24.71	27.01	16.72
25	25.69	27.83	29.41	17.48	16.66	12.78	17.26	19.40	22.14	25.05	27.24	17.73
EOM	26.11	27.94	29.72	17.17	17.02	14.56	17.56	19.59	22.61	25.70	27.15	18.64
MEAN	25.61	27.14	28.84	22.41	16.73	15.36	16.69	18.99	21.23	24.24	26.75	22.97
WTR YR 1999	MEAN 22.29	HIGH 12.55	MAR 24	LOW 29.84	JAN 2							

## NJ-WRD WELL NO. 19-0270





## GROUND-WATER LEVELS

## HUNTERDON COUNTY

NJ-WRD Well Number, 19-0276. Site I.D., 403455074514801. Local I.D., Environmental Ctr 1 Obs. NJ Permit Number, 24-25826.

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.

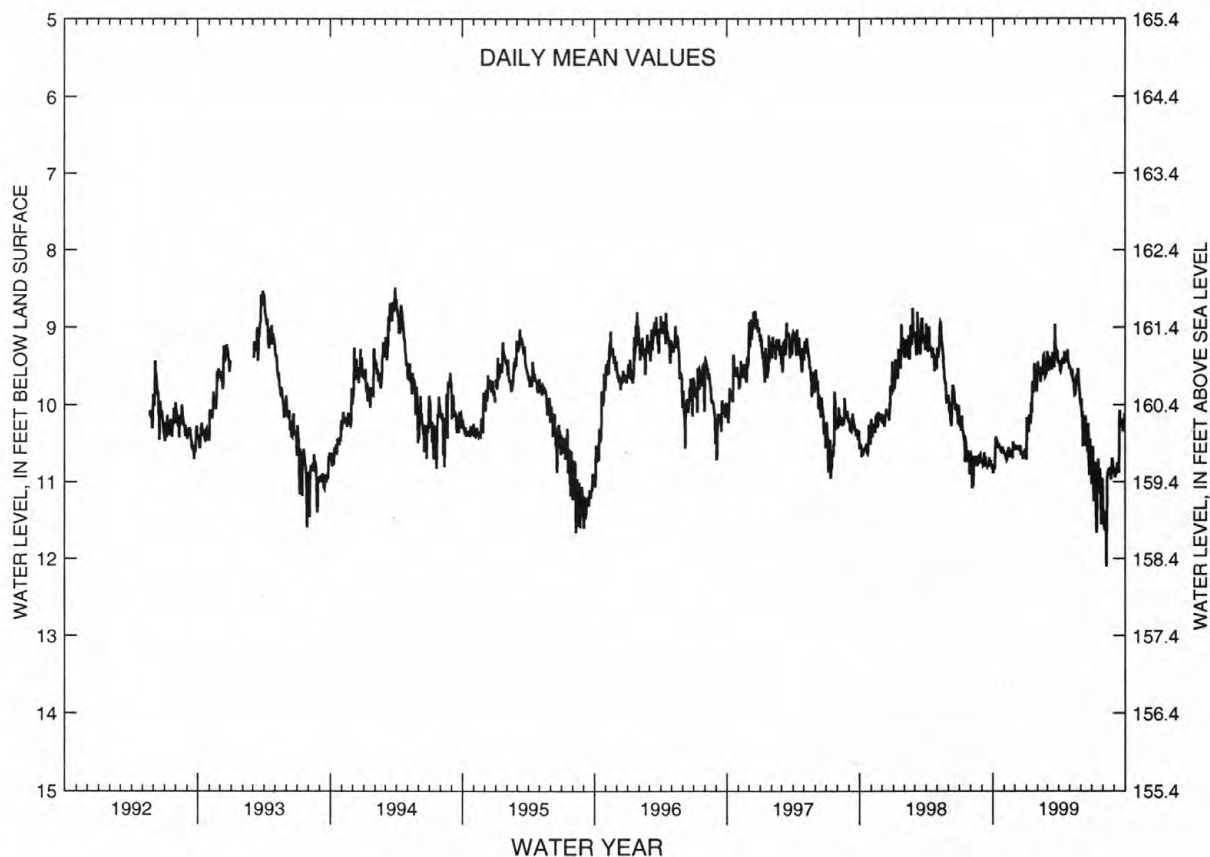
PERIOD OF RECORD.--Mar. 1991 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.79	10.63	10.57	10.28	9.61	9.56	9.55	9.54	10.12	10.56	11.60	10.92
10	10.41	10.70	10.57	10.13	9.64	9.38	9.42	9.64	10.26	10.74	11.54	10.75
15	10.54	10.57	10.60	9.98	9.57	9.32	9.47	9.85	10.21	11.66	10.88	10.87
20	10.53	10.58	10.64	9.82	9.40	9.50	9.39	9.60	10.62	10.70	10.90	10.25
25	10.59	10.69	10.68	9.57	9.54	9.32	9.35	9.54	10.91	10.85	10.94	10.29
EOM	10.60	10.55	10.64	9.83	9.45	9.46	9.51	9.97	10.86	10.98	10.84	10.11
MEAN	10.60	10.62	10.60	10.00	9.55	9.39	9.43	9.68	10.37	11.03	11.12	10.54
WTR YR 1999	MEAN 10.25 HIGH 8.96 MAR 22 LOW 12.10 AUG 11											

NJ-WRD WELL NO. 19-0276

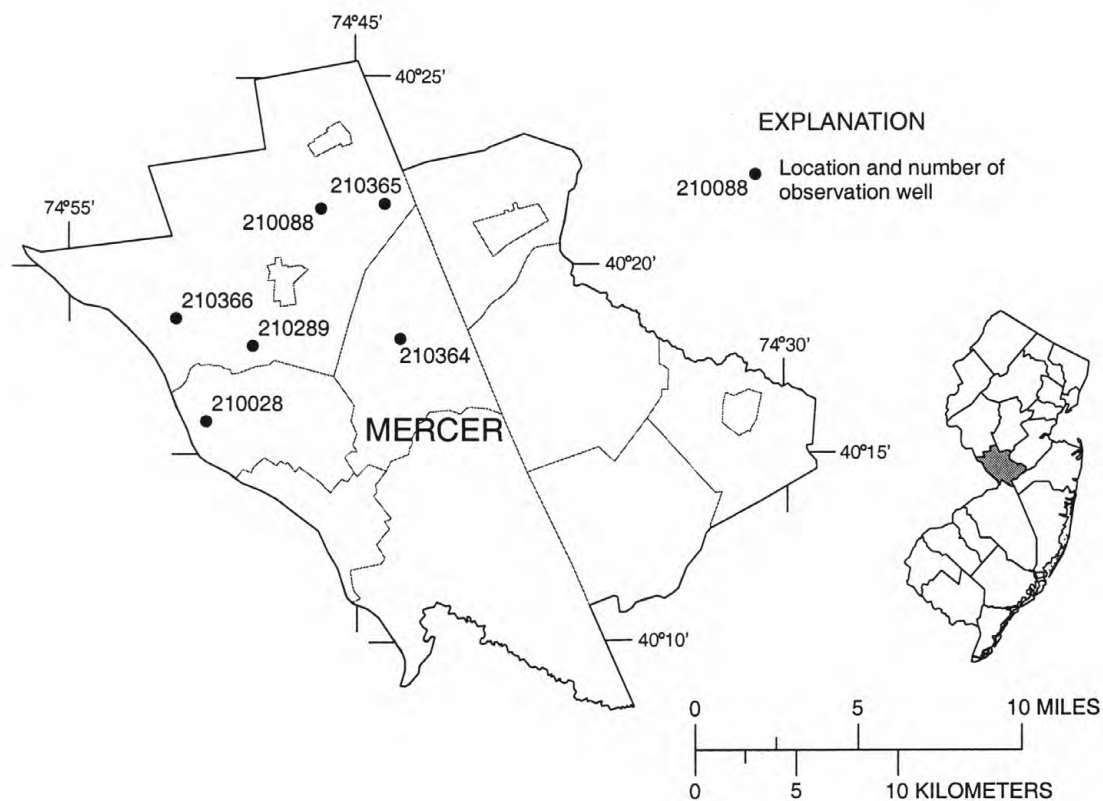


## MERCER COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
210028	CIVIL DEFENSE OBS	EWING TWP	300	LCKG	MANUAL
210088	SBMWA HONEY BR 10 OBS	HOPEWELL TWP	150	PSSC	MANUAL
210289	BRISTOL-MYERS 100 OBS	HOPEWELL TWP	300	PSSC	DAILY
210364	CRANSTON FARMS 15 OBS	LAWRENCE TWP	200	SCKN	DAILY
210365	AT&T NORTH OBS	HOPEWELL TWP	99	PSSC	DAILY
210366	WASH CROSSING PK 14 OBS	HOPEWELL TWP	225	PSSC	DAILY

## Aquifer names

LCKG - Lockatong Formation  
 PSSC - Passaic Formation  
 SCKN - Stockton Formation



## GROUND-WATER LEVELS

## MERCER COUNTY

NJ-WRD Well Number, 21-0028. Site I.D., 401552074501801. Local I.D., Civil Defense Obs. NJ Permit Number, 27-04214

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.

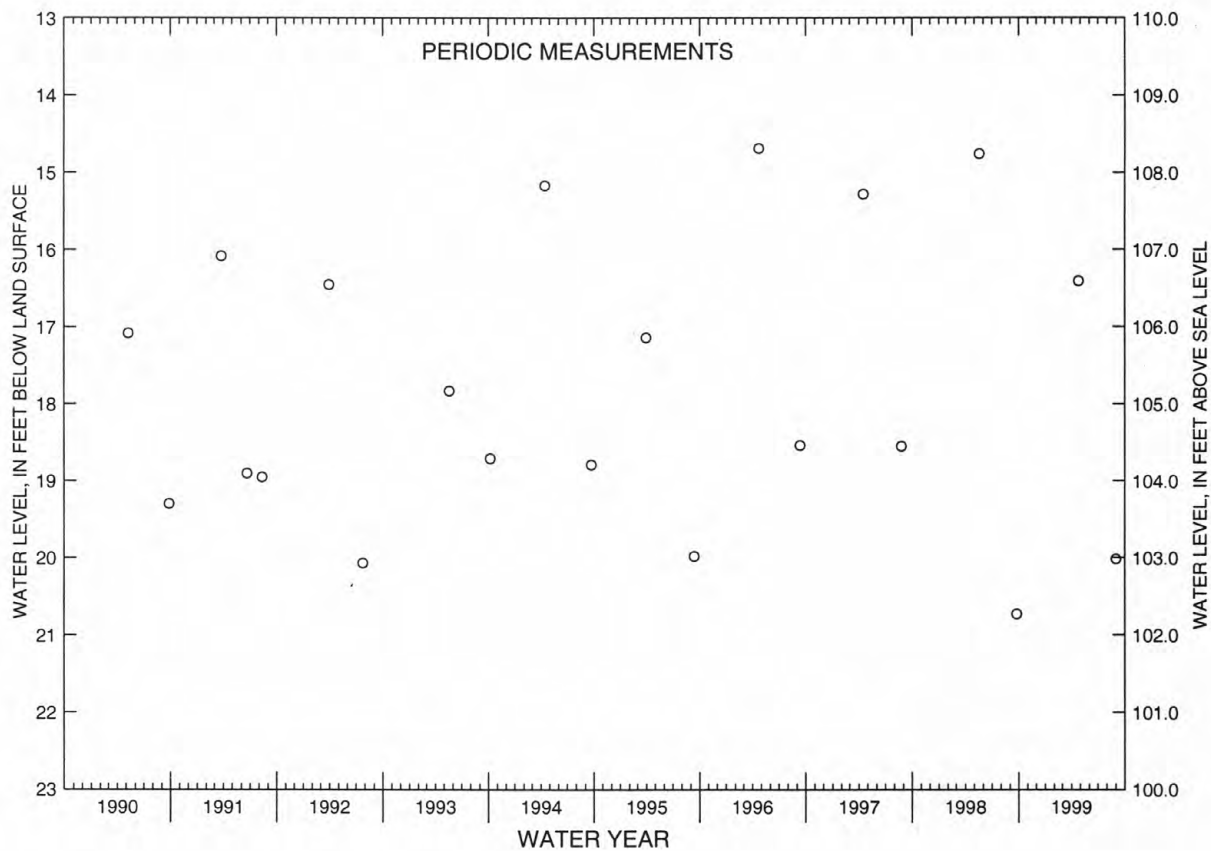
PERIOD OF RECORD.--June 1964 to Sept. 1976, Apr. 1978 to current year. Records for 1964 to 1976 and 1978 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
APR 26	16.41	SEP 2	20.02

NJ-WRD WELL NO. 21-0028



## GROUND-WATER LEVELS

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## MERCER COUNTY

NJ-WRD Well Number, 21-0088. Site I.D., 402131074461201. Local I.D., SBMWA Honey Branch 10 Obs.

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.

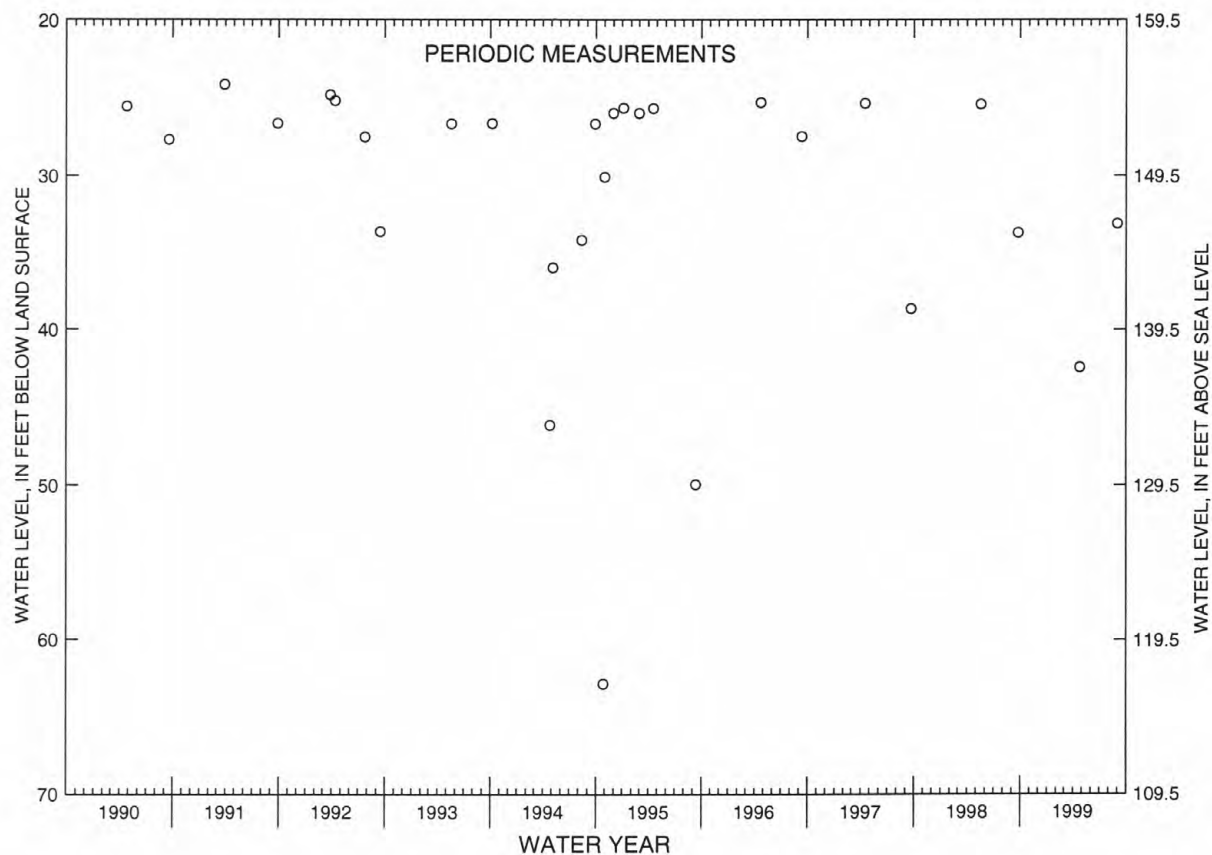
PERIOD OF RECORD.--June 1967 to current year. Records for 1967 to 1975 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
APR 26	42.43	SEP 2	33.12

## NJ-WRD WELL NO. 21-0088



## GROUND-WATER LEVELS

## MERCER COUNTY

NJ-WRD Well Number, 21-0289. Site I.D., 401753074483501. Local I.D., Bristol-Myers 100 Obs.

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 212 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. Water level was affected by Mercuri and Assoc. aquifer test, June 5-17, 1998.

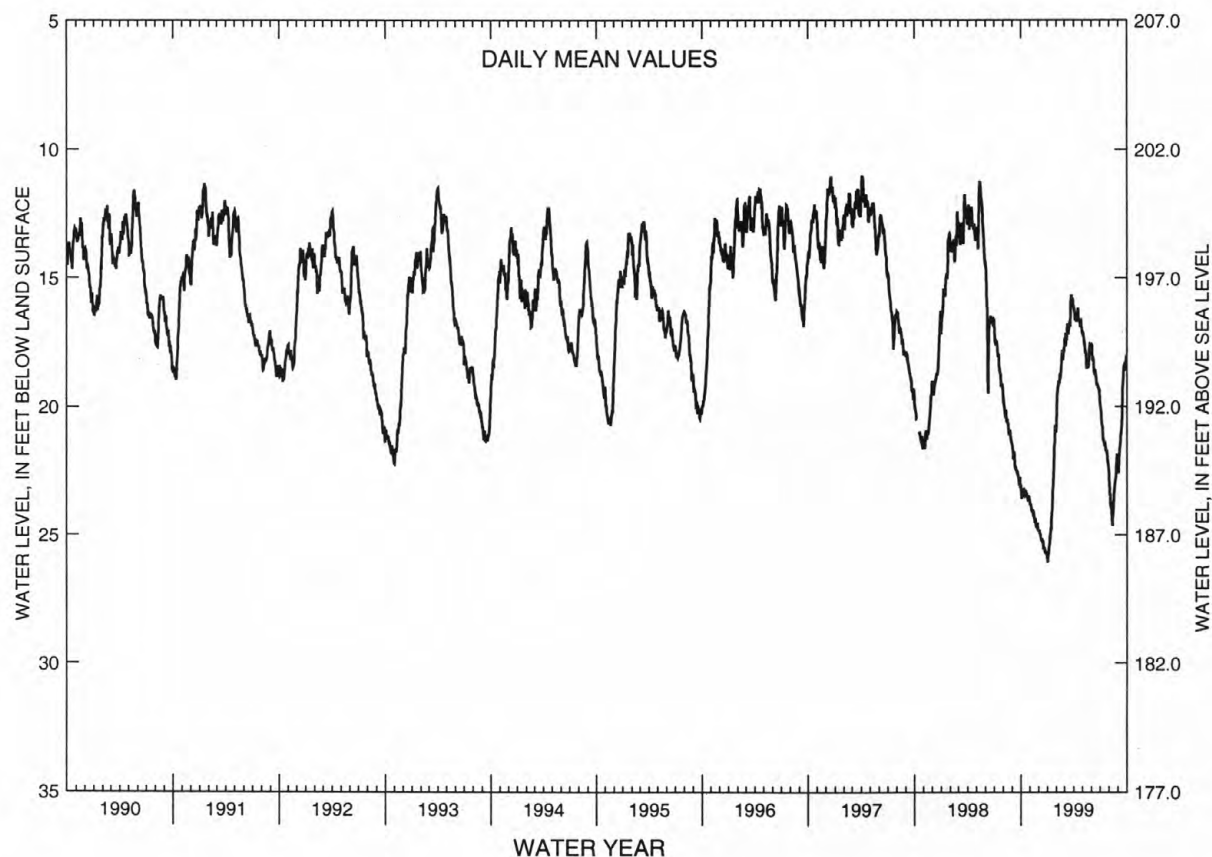
PERIOD OF RECORD.--Dec. 1986 to current year. Records for 1986 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.96 ft below land surface, Apr. 4, 1997; lowest, 26.24 ft below land surface, Jan. 1, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.46	23.90	24.96	25.70	19.47	17.66	16.57	17.24	18.19	20.21	23.39	22.01
10	23.24	24.12	25.20	25.15	19.07	16.82	16.64	17.77	18.54	20.78	24.14	21.25
15	23.37	24.25	25.33	24.24	18.86	16.85	16.33	18.39	18.65	21.40	24.16	20.67
20	23.40	24.36	25.57	23.15	17.87	16.88	16.63	18.39	19.18	21.61	23.21	18.83
25	23.54	24.75	25.69	21.49	17.86	15.70	16.84	17.83	19.23	21.73	22.68	18.29
EOM	23.72	24.83	25.94	21.01	17.63	16.15	17.12	17.63	19.63	22.47	21.85	18.02
MEAN	23.44	24.32	25.35	23.70	18.74	16.70	16.56	17.85	18.71	21.27	23.26	20.12
WTR YR 1999 MEAN 20.86 HIGH 15.65 MAR 24 LOW 26.07 JAN 2												

NJ-WRD WELL NO. 21-0289





## MERCER COUNTY

NJ-WRD Well Number, 21-0364. Site I.D., 401804074432601. Local I.D., Cranston Farms 15 Obs. NJ Permit Number, 28-230000-1.

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.

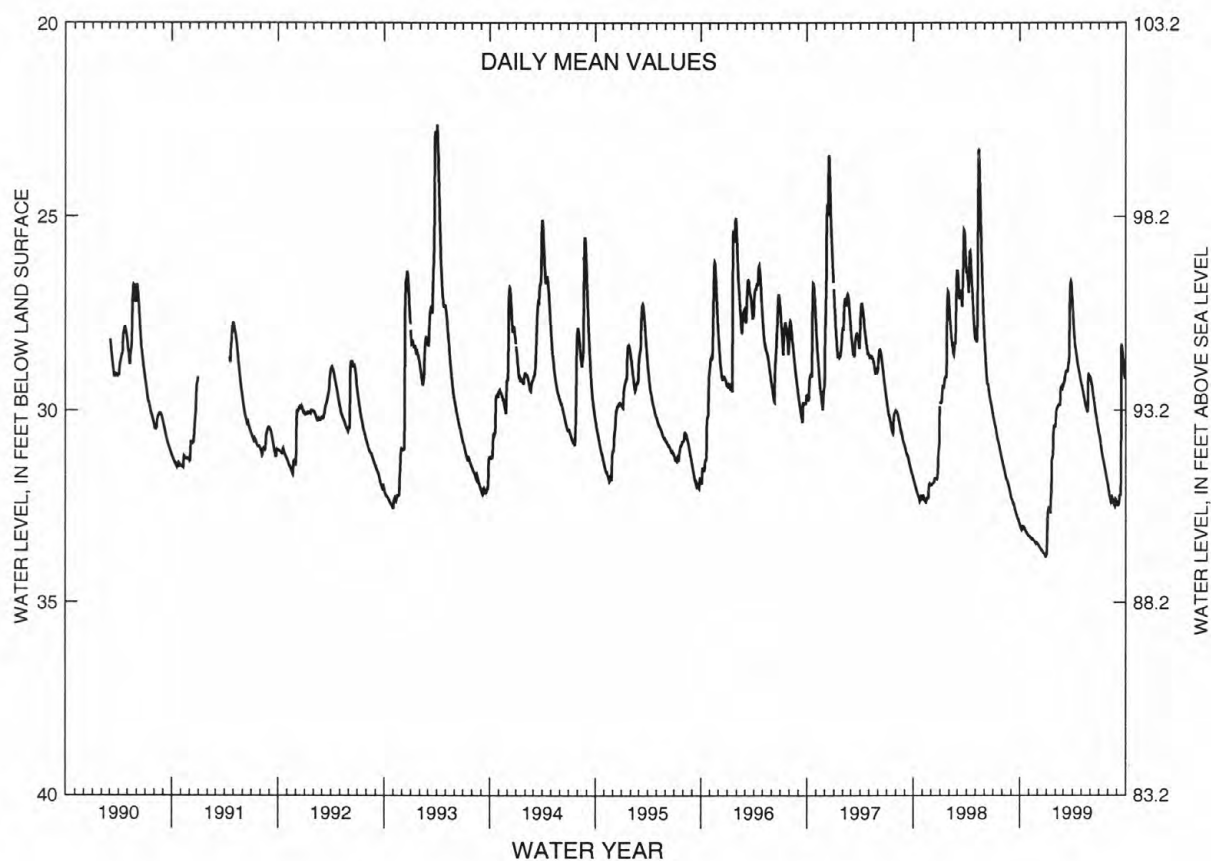
PERIOD OF RECORD.--Mar. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.58 ft below land surface, Apr. 2-3, 1993; lowest, 33.85 ft below land surface, Dec. 30, 1998.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.06	33.29	33.51	32.75	29.99	29.24	27.75	29.43	29.28	30.71	32.11	32.47
10	33.00	33.33	33.57	32.59	29.89	29.00	28.30	29.63	29.52	31.00	32.32	32.28
15	33.03	33.35	33.63	32.47	29.86	28.99	28.58	29.84	29.78	31.23	32.24	32.22
20	33.11	33.39	33.69	31.24	29.43	28.76	28.84	29.97	30.07	31.43	32.39	28.42
25	33.19	33.46	33.75	30.55	29.38	26.78	29.04	29.27	30.30	31.64	32.48	28.83
EOM	33.26	33.45	33.81	30.42	29.38	27.05	29.25	29.14	30.54	31.88	32.37	29.19
MEAN	33.10	33.36	33.64	31.90	29.76	28.37	28.48	29.57	29.82	31.25	32.28	30.62
WTR YR 1999	MEAN 31.03 HIGH 26.68 MAR 27 LOW 33.81 DEC 30											

## NJ-WRD WELL NO. 21-0364



## GROUND-WATER LEVELS

## MERCER COUNTY

NJ-WRD Well Number, 21-0365. Site I.D., 402138074435801. Local I.D., AT&T North Obs.

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.

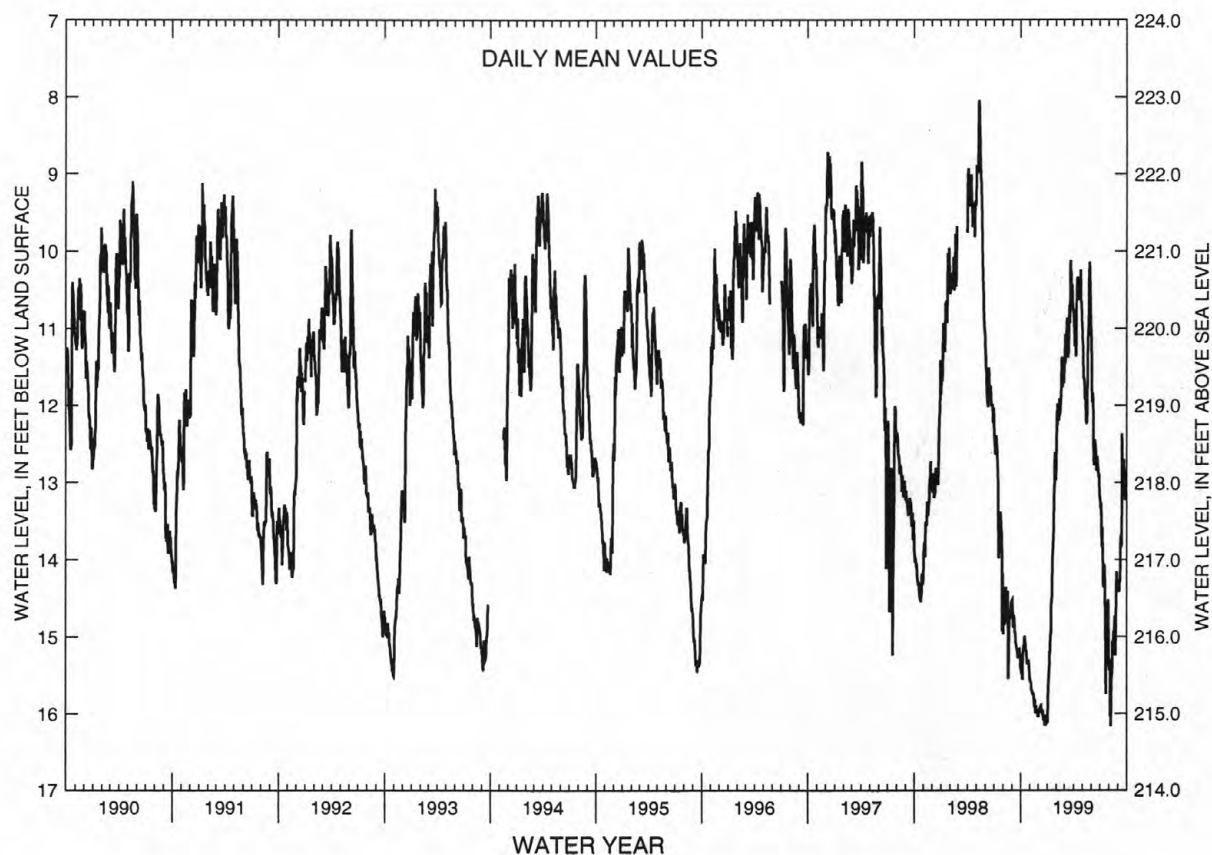
PERIOD OF RECORD.--Feb. 1987 to current year. Records for 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.94 ft below land surface, May 11-12, 1998; lowest, 16.80 ft below land surface, Aug. 19, 1998.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.48	15.59	15.98	15.61	12.26	11.44	11.23	11.42	11.96	13.33	15.39	14.41
10	15.15	15.74	15.93	15.22	12.13	10.86	11.36	11.79	12.64	13.58	15.63	14.05
15	15.03	15.75	16.01	14.52	12.07	11.12	10.41	12.20	12.47	14.13	15.10	13.84
20	15.18	15.82	16.09	13.88	11.37	10.93	10.56	11.57	12.85	14.64	14.92	12.75
25	15.30	15.99	16.16	13.11	11.58	10.37	10.47	10.40	12.81	14.76	15.04	12.95
EOM	15.49	16.05	16.10	12.97	11.53	10.75	10.82	10.88	13.10	14.64	14.41	13.00
MEAN	15.29	15.80	16.03	14.40	11.93	10.90	10.75	11.34	12.42	14.20	15.11	13.50
WTR YR 1999 MEAN 13.49 HIGH 10.12 MAR 22 LOW 16.17 AUG 8												

NJ-WRD WELL NO. 21-0365



## MERCER COUNTY

NJ-WRD Well Number, 21-0366. Site I.D., 401834074515501. Local I.D., Washington Crossing Park 14 Obs. NJ Permit Number, 27-10248-3.

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.

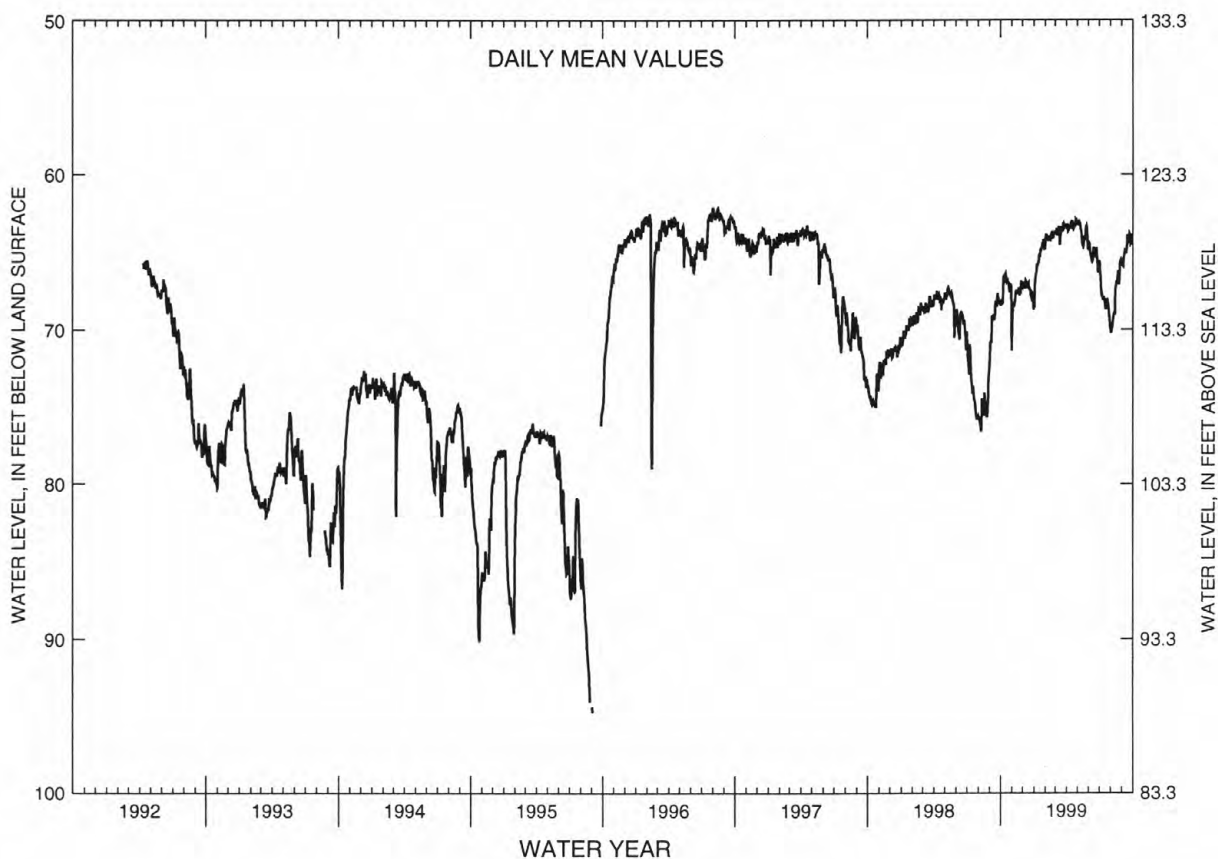
PERIOD OF RECORD.--Apr. 1991 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	68.29	68.37	67.12	66.69	64.06	63.95	63.66	63.04	64.97	66.91	69.90	65.92
10	66.47	68.14	66.87	65.89	64.15	63.43	63.41	63.58	65.60	67.95	68.99	64.77
15	66.38	67.63	67.26	65.23	64.23	63.93	63.08	64.54	64.70	68.07	67.26	64.80
20	66.86	67.29	67.46	64.90	63.84	63.70	63.36	63.99	65.37	68.34	66.83	64.15
25	67.51	67.70	67.97	64.45	63.73	63.30	63.20	63.39	65.33	68.33	67.11	64.09
EOM	68.17	67.29	68.72	64.87	63.79	63.36	63.06	64.89	65.66	69.86	65.62	63.88
MEAN	67.29	67.93	67.39	65.55	64.02	63.60	63.27	63.82	65.20	68.00	67.79	64.70
WTR YR 1999	MEAN 65.73 HIGH 62.95 APR 26 LOW 71.38 NOV 1											

## NJ-WRD WELL NO. 21-0366



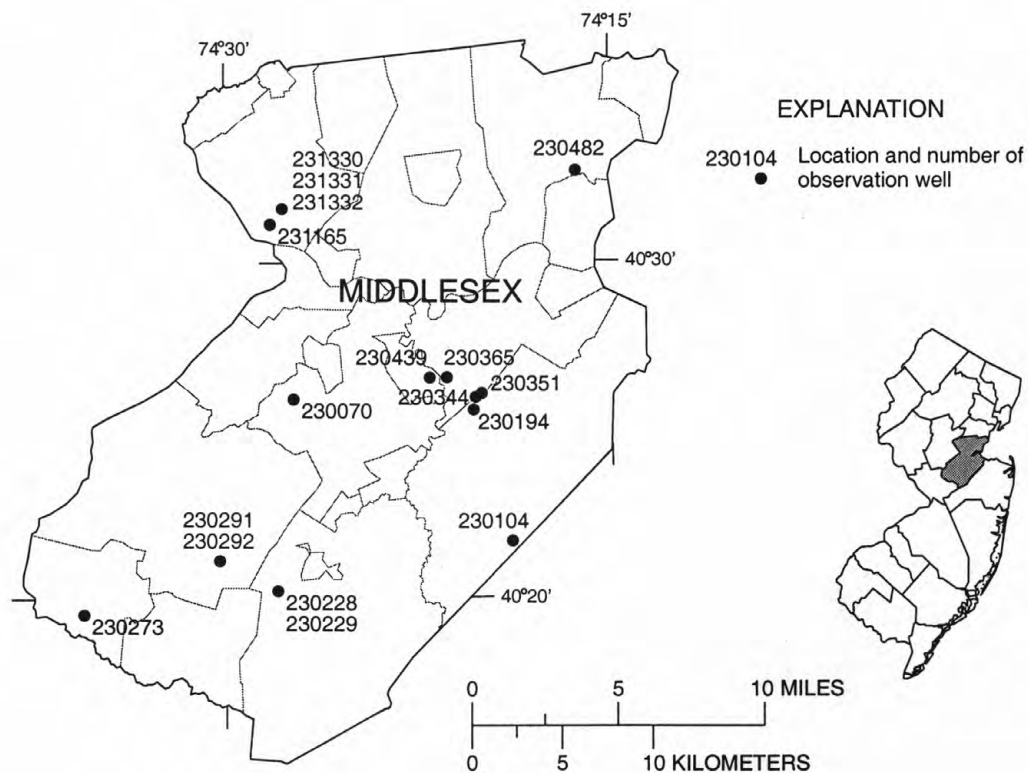
## WATER RESOURCES DATA - NEW JERSEY, 1999

## MIDDLESEX COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
230070	FISCHER OBS	EAST BRUNSWICK TWP	21	FRNG	DAILY
230104	MORRELL 1 OBS	OLD BRIDGE TWP	11	EGLS	DAILY
230194	RUNYON 1 OBS	OLD BRIDGE TWP	281	FRNG	MANUAL
230228	FORSgate 3 OBS	MONROE TWP	138	ODBG	MAXMIN
230229	FORSgate 4 OBS	MONROE TWP	330	FRNG	MAXMIN
230273	PLAINSBORO POND OBS	PLAINSBORO TWP	75	MRPAM	MANUAL
230291	FORSgate 1 OBS	SOUTH BRUNSWICK TWP	203	FRNG	MANUAL
230292	FORSgate 2 OBS	SOUTH BRUNSWICK TWP	104	ODBG	MANUAL
230344	SWD 2 OBS	SAYREVILLE BORO	37	ODBG	MANUAL
230351	SWD 1 OBS	SAYREVILLE BORO	82	ODBG	MANUAL
230365	DUH SAY 4 OBS	SAYREVILLE BORO	160	FRNG	MANUAL
230439	SRWD 2 OBS	SOUTH RIVER BORO	126	FRNG	MANUAL
230482	AMERICAN CYANAMID 1 OBS	WOODBRIIDGE TWP	76	FRNG	MANUAL
231165	RUTGERS GOLF 13 OBS	PISCATAWAY TWP	200	PSSC	DAILY
231330	RUTGERS MW-12A	PISCATAWAY TWP	80	PSSC	DAILY
231331	RUTGERS MW-12B	PISCATAWAY TWP	50	PSSC	DAILY
231332	RUTGERS MW-12C	PISCATAWAY TWP	25	PSSC	DAILY

## Aquifer names

- EGLS - Englishtown aquifer system
- FRNG - Farrington aquifer
- MRPAM - Middle Potomac-Raritan-Magothy aquifer
- ODBG - Old Bridge aquifer
- PSSC - Passaic Formation



## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-0070. Site I.D., 402553074271701. Local I.D., Fischer Obs.

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. Water-level recorder, July 1936 to April 1975.

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.

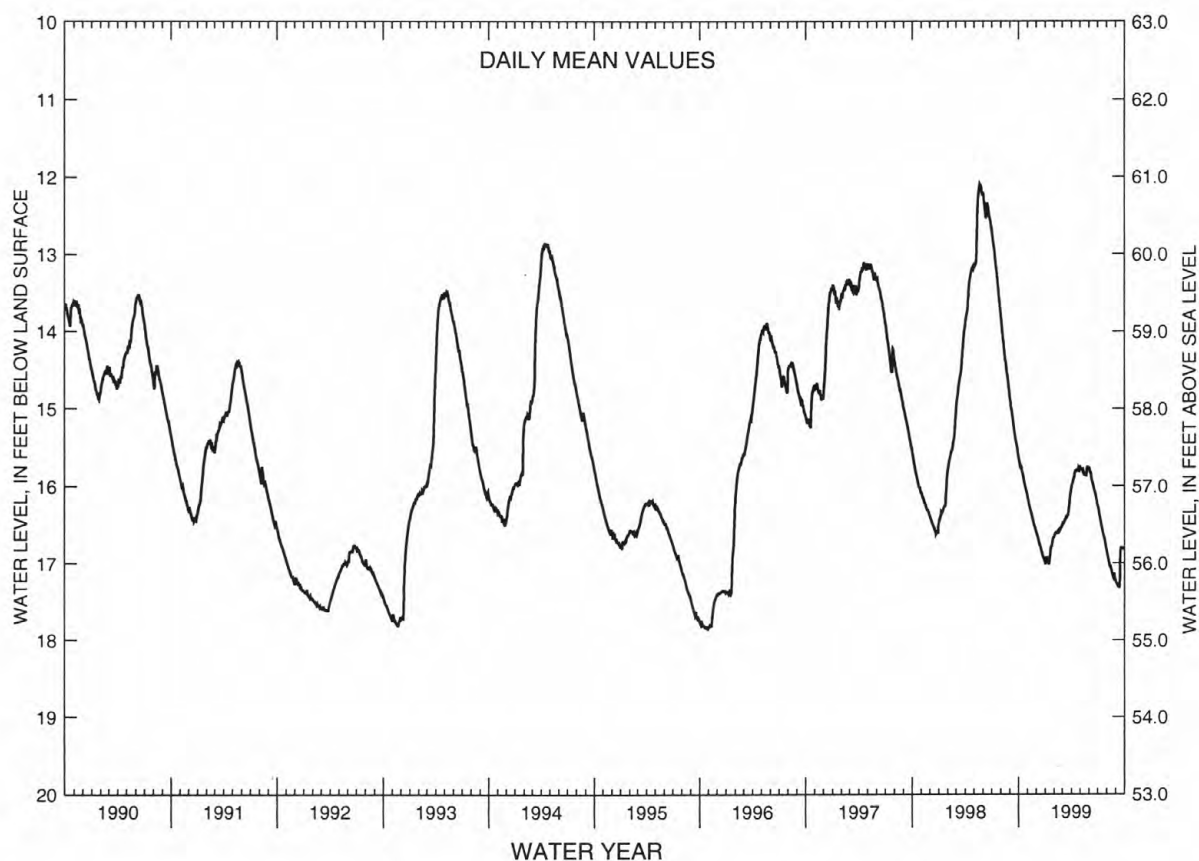
PERIOD OF RECORD.--June 1936 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.71	16.21	16.65	16.93	16.62	16.50	15.96	15.78	15.82	16.31	16.91	17.27
10	15.74	16.30	16.73	16.98	16.60	16.43	15.90	15.80	15.91	16.41	17.00	17.30
15	15.84	16.36	16.79	17.00	16.61	16.41	15.82	15.85	15.98	16.52	17.04	17.32
20	15.94	16.44	16.86	16.81	16.55	16.38	15.80	15.86	16.06	16.62	17.14	16.81
25	16.03	16.53	16.93	16.75	16.54	16.24	15.79	15.78	16.13	16.69	17.20	16.80
EOM	16.12	16.59	16.99	16.67	16.51	16.05	15.79	15.77	16.23	16.82	17.21	16.81
MEAN	15.87	16.38	16.80	16.87	16.59	16.36	15.85	15.81	15.99	16.53	17.06	17.07
WTR YR 1999	MEAN 16.43 HIGH 15.63 OCT 1 LOW 17.32 SEP 14											

## NJ-WRD WELL NO. 23-0070



## GROUND-WATER LEVELS

## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-0104. Site I.D., 402143074185201. Local I.D., Morrell 1 Obs.

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.

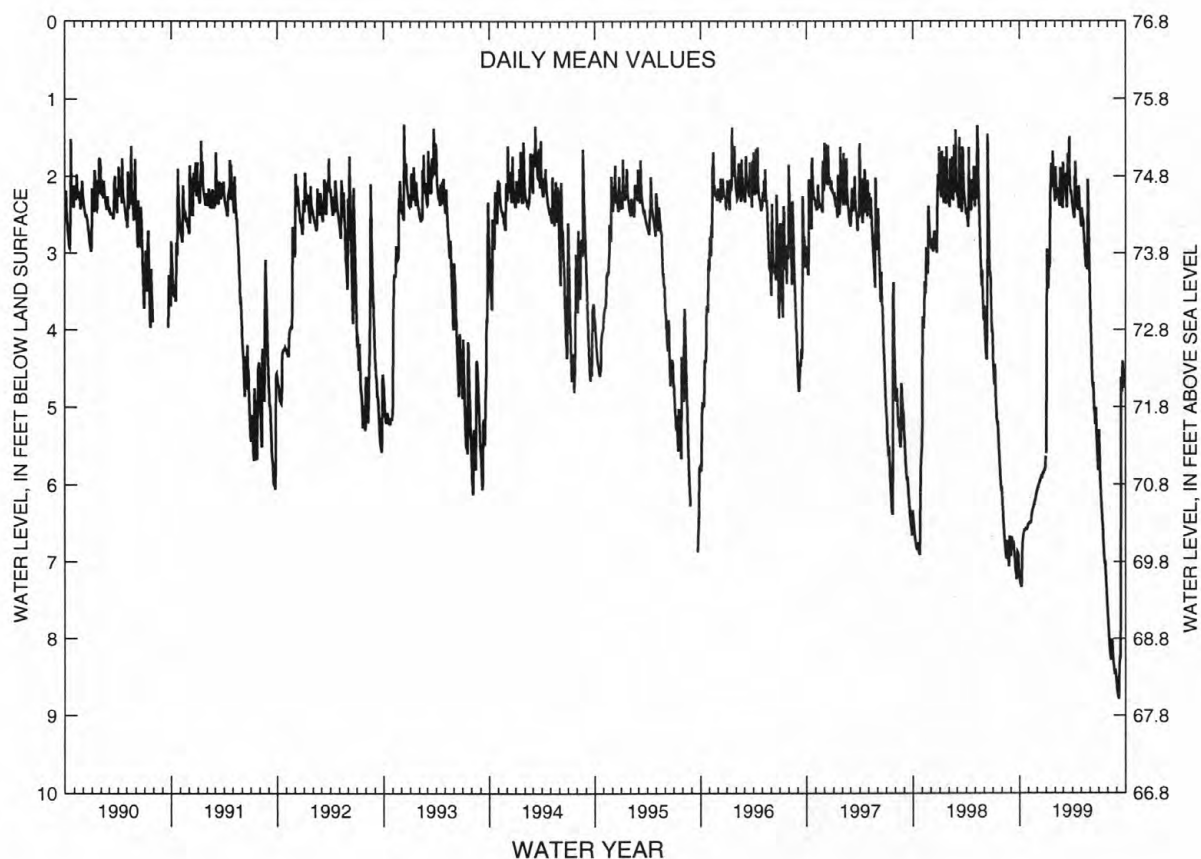
PERIOD OF RECORD.--Oct. 1923 to current year. Records for 1973 to 1985 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.27	6.50	6.03	3.15	2.13	2.17	2.49	2.44	4.03	5.61	7.91	8.72
10	6.90	6.49	5.97	3.22	2.21	2.20	2.00	2.64	4.67	6.17	8.19	8.72
15	6.64	6.34	5.91	2.46	2.35	2.23	2.23	3.02	4.91	6.51	8.08	8.27
20	6.59	6.27	5.88	2.03	2.04	2.12	2.42	2.99	5.23	6.92	8.23	4.81
25	6.57	6.20	5.83	1.77	2.35	2.10	2.22	2.04	5.41	7.11	8.44	4.62
EOM	6.52	6.10	5.64	2.32	2.31	2.34	2.58	3.28	5.82	7.56	8.52	4.72
MEAN	6.81	6.34	5.91	2.78	2.21	2.09	2.33	2.78	4.82	6.53	8.17	6.69
WTR YR 1999 MEAN 4.81 HIGH 1.49 MAR 22 LOW 8.79 SEP 9												

NJ-WRD WELL NO. 23-0104





## GROUND-WATER LEVELS

139

## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-0194. Site I.D., 402536074201801. Local I.D., Runyon 1 Obs.

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.

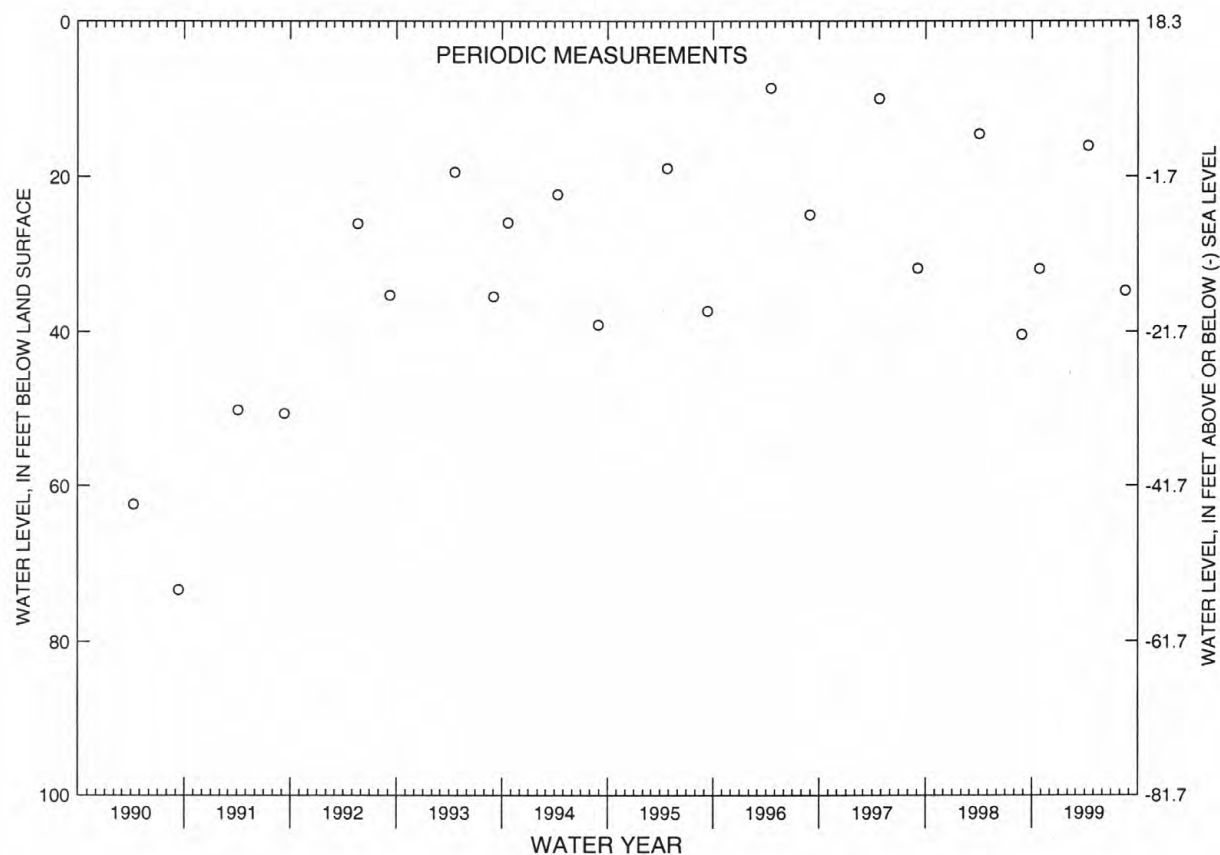
PERIOD OF RECORD.--Aug. 1934 to current year. Records for 1934 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 27	31.90	APR 13	16.11	AUG 20	34.72

## NJ-WRD WELL NO. 23-0194



## GROUND-WATER LEVELS

## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-0228. Site I.D., 402015074275701. Local I.D., Forsgate 3 Obs. NJ Permit Number, 28-04251.

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.

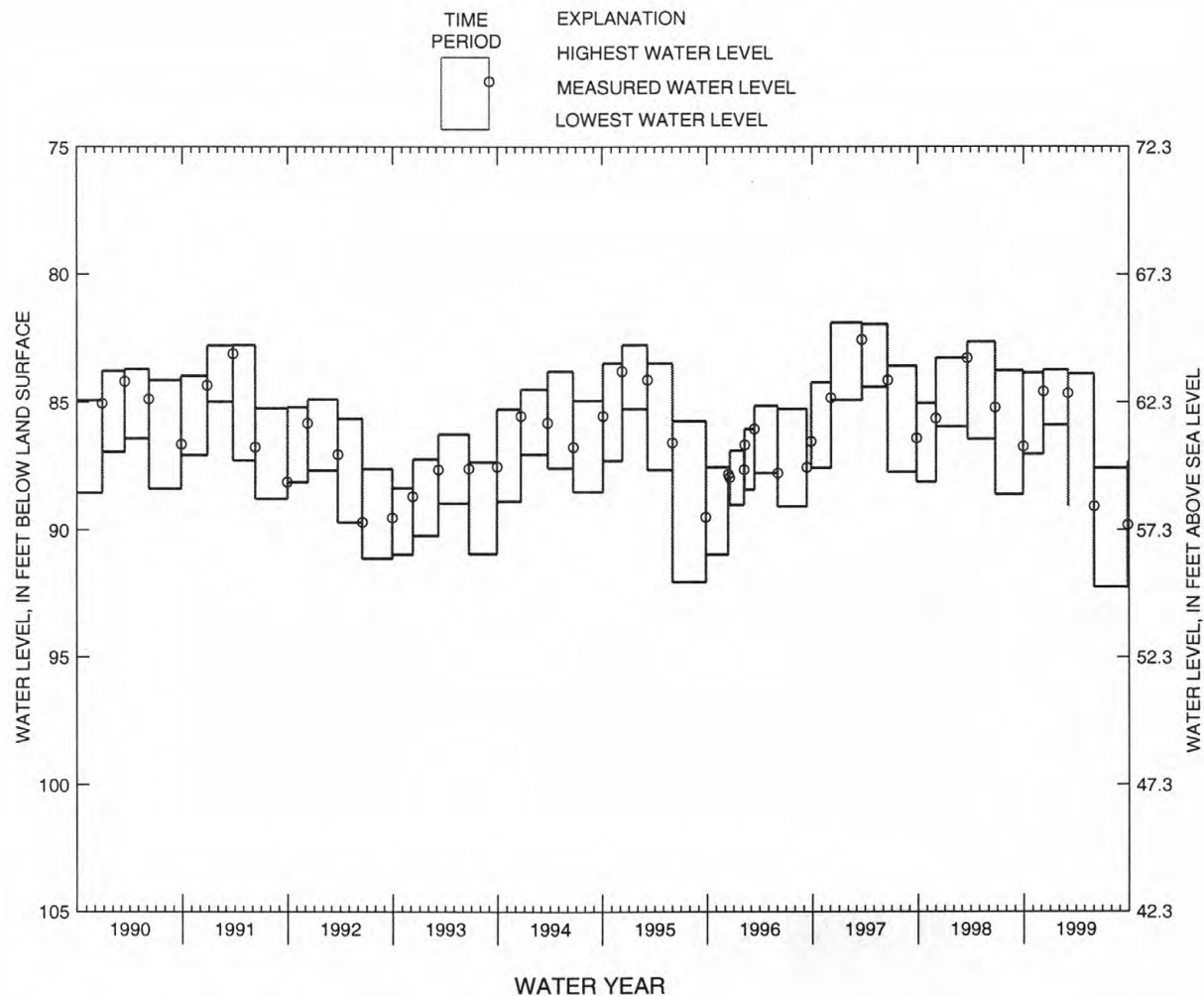
PERIOD OF RECORD.--Oct. 1961 to current year. Records for 1961 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1998 TO DEC. 9, 1998	83.84	87.02	DEC. 9, 1998	84.56
DEC. 9, 1998 TO MAR. 5, 1999	83.73	85.88	MAR. 5, 1999	84.64
MAR. 5, 1999 TO JUNE 3, 1999	83.89	---	JUNE 3, 1999	89.06
JUNE 3, 1999 TO SEPT. 28, 1999	87.57	92.25	SEPT. 28, 1999	89.80

## NJ-WRD WELL NO. 23-0228



## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-0229. Site I.D., 402015074275702. Local I.D., Forsgate 4 Obs. NJ Permit Number, 28-04252.

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.

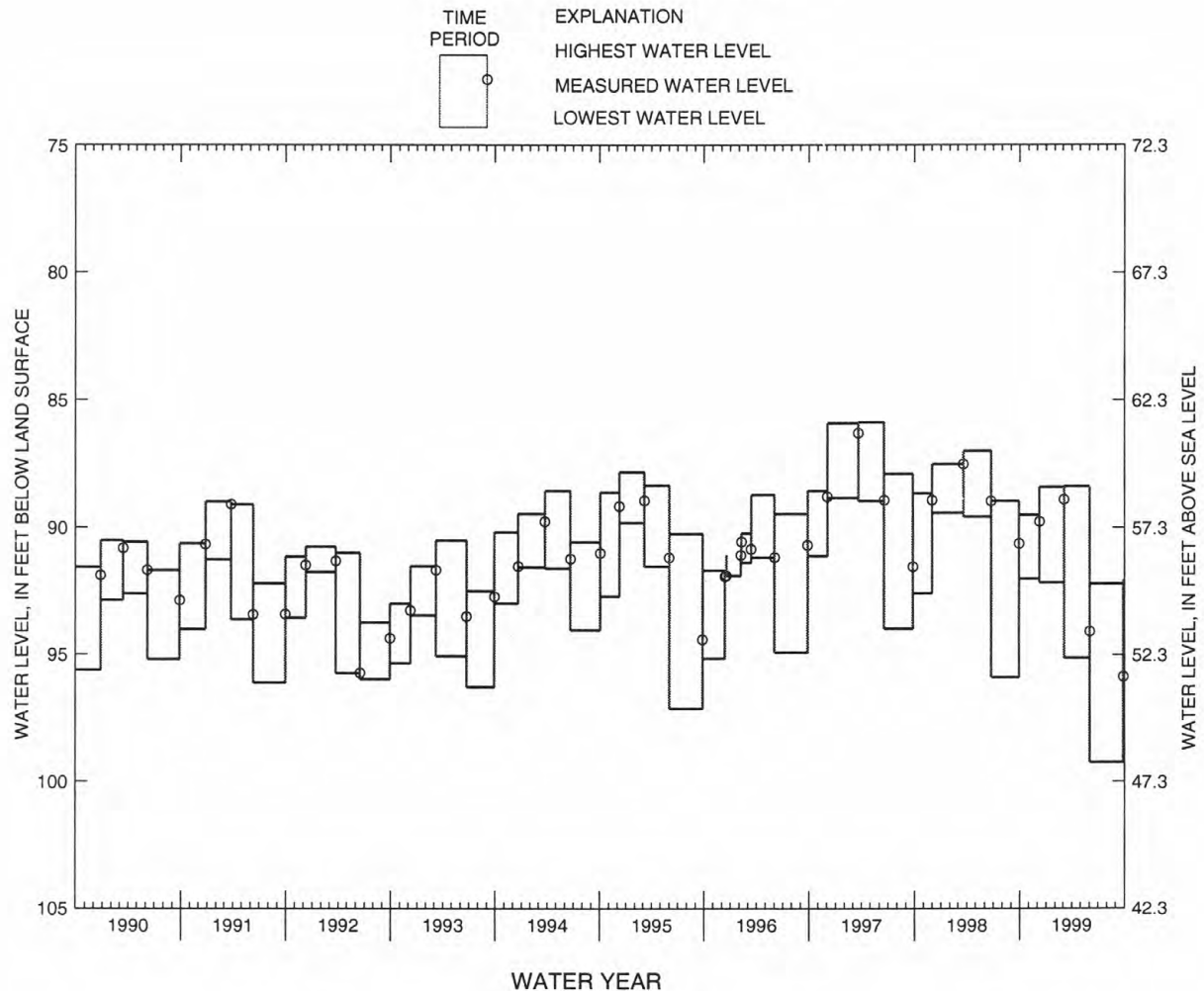
PERIOD OF RECORD.--Apr. 1965 to current year. Records for 1965 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1998 TO DEC. 9, 1998	89.50	92.01	DEC. 9, 1998	89.76
DEC. 9, 1998 TO MAR. 5, 1999	88.41	92.16	MAR. 5, 1999	88.90
MAR. 5, 1999 TO JUNE 3, 1999	88.39	95.14	JUNE 3, 1999	94.09
JUNE 3, 1999 TO SEPT. 28, 1999	92.21	99.24	SEPT. 28, 1999	95.88

## NJ-WRD WELL NO. 23-0229



## GROUND-WATER LEVELS

## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-0273. Site I.D., 401932074352901. Local I.D., Plainsboro Pond Obs.

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.

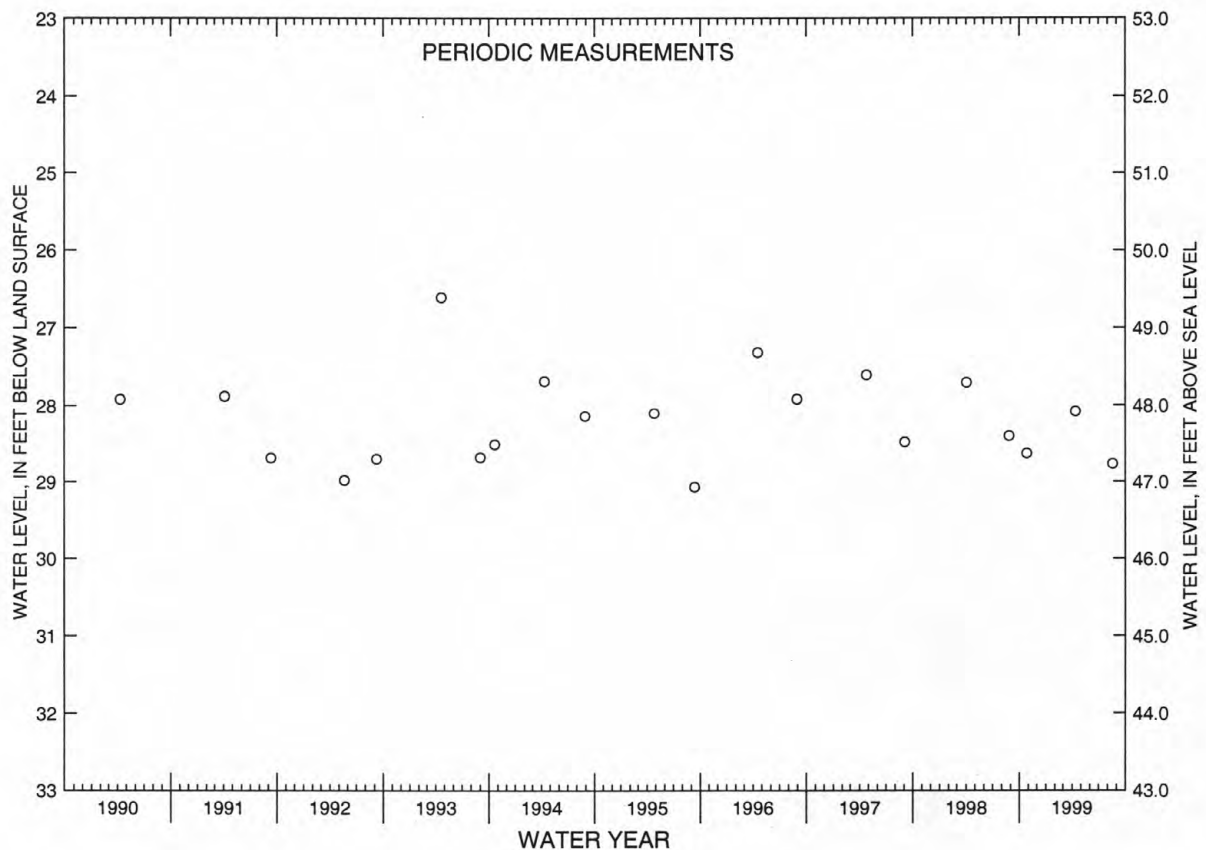
PERIOD OF RECORD.--Dec. 1970 to Nov. 1984, Apr. 1987 to Sept. 1987, Apr. 1990 to current year. Records for 1970 to 1984, and 1987 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 27	28.63	APR 13	28.08	AUG 20	28.77

## NJ-WRD WELL NO. 23-0273



## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-0291. Site I.D., 402109074301301. Local I.D., Forsgate 1 Obs. NJ Permit Number, 28-04249.

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.

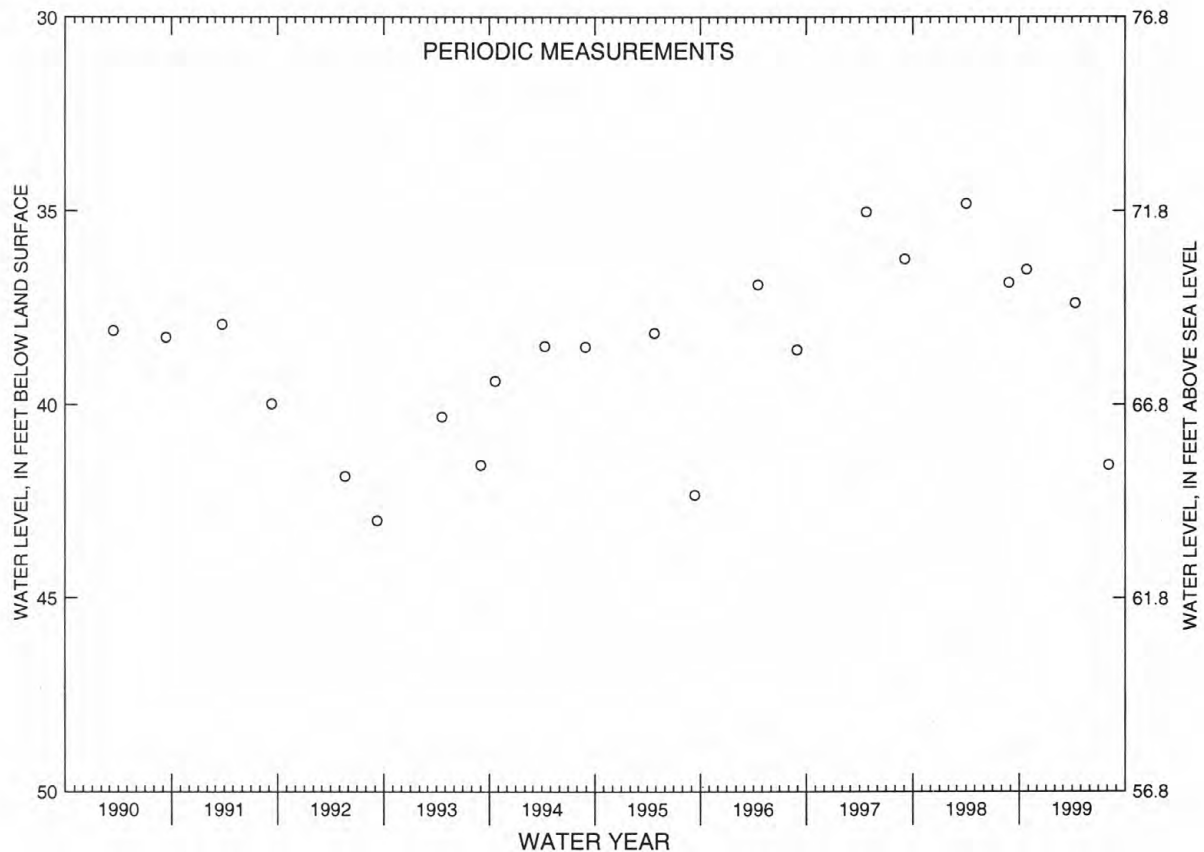
PERIOD OF RECORD.--Apr. 1965 to current year. Records for 1965 to 1975 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 27	36.52	APR 13	37.39	AUG 6	41.55

## NJ-WRD WELL NO. 23-0291



## GROUND-WATER LEVELS

## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-0292. Site I.D., 402109074301302. Local I.D., Forsgate 2 Obs. Permit Number, 28-04250.

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.

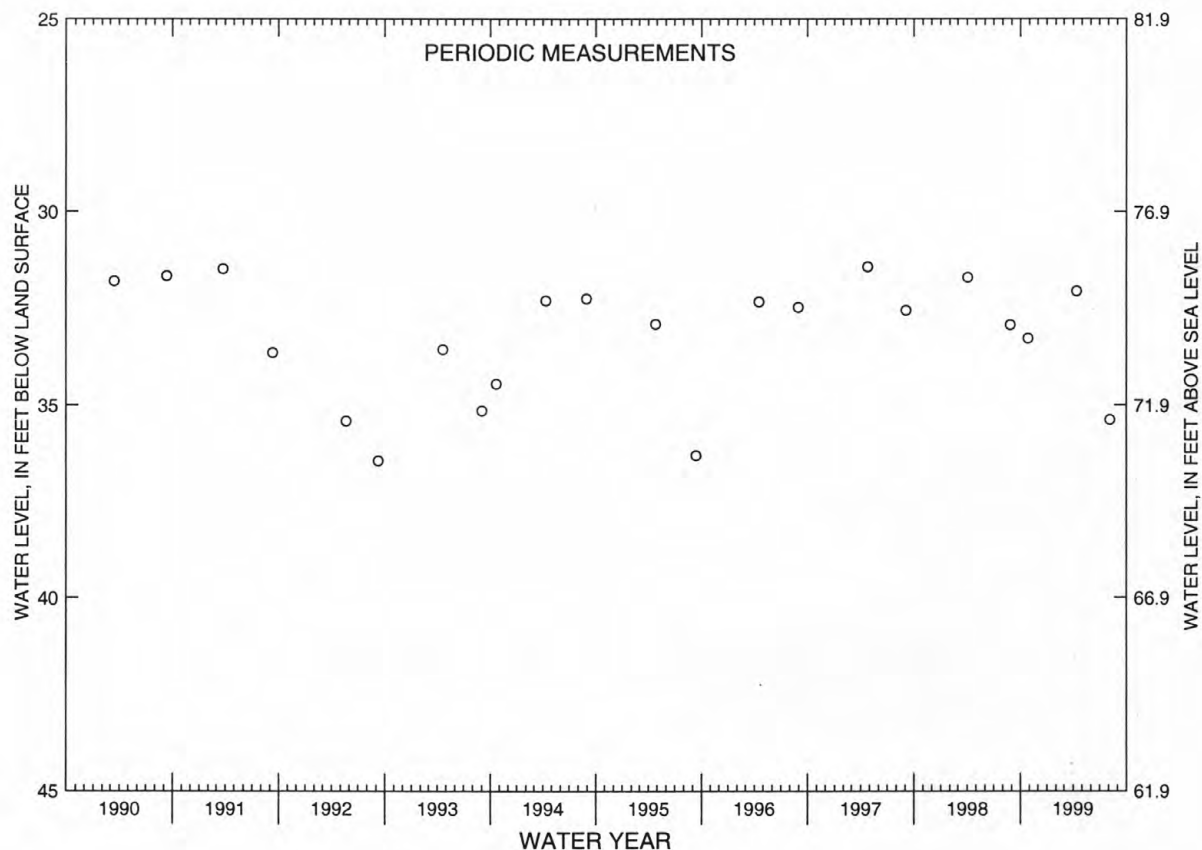
PERIOD OF RECORD.--October 1961 to current year. Records for 1961 to 1983 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 27	33.28	APR 13	32.06	AUG 6	35.38

NJ-WRD WELL NO. 23-0292





## GROUND-WATER LEVELS

145

## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-0344. Site I.D., 402558074201301. Local I.D., SWD 2 Obs.

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.

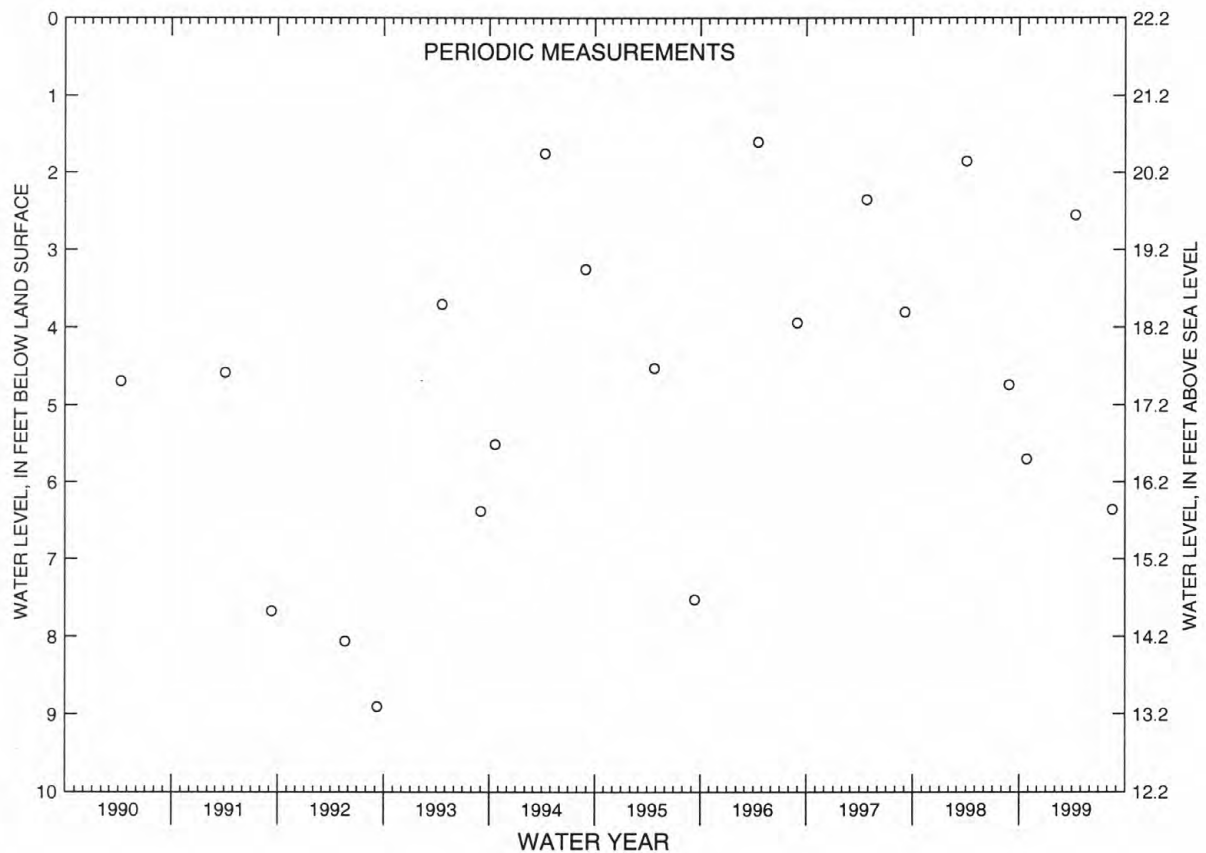
PERIOD OF RECORD.--Nov. 1968 to current year. Records for 1968 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 27	5.70	APR 13	2.55	AUG 20	6.36

## NJ-WRD WELL NO. 23-0344



## GROUND-WATER LEVELS

## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-0351. Site I.D., 402608074195701. Local I.D., SWD 1 Obs.

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.

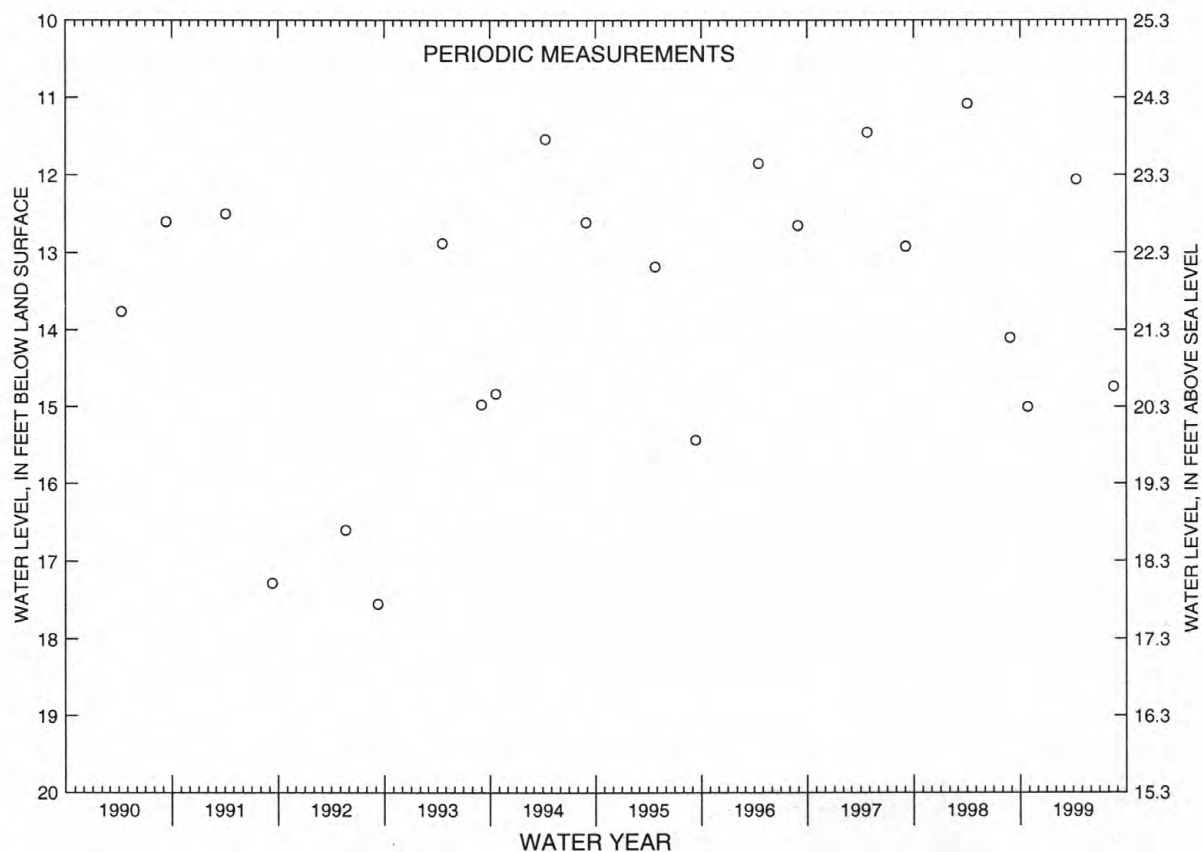
PERIOD OF RECORD.--Nov. 1968 to current year. Records for 1968 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.08 ft below land surface, Apr. 3, 1998; lowest, 27.20 ft below land surface, Dec. 16, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 27	14.10	APR 13	12.06	AUG 20	14.74

NJ-WRD WELL NO. 23-0351



## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-0365. Site I.D., 402623074212701. Local I.D., Duh Say 4 Obs.

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.

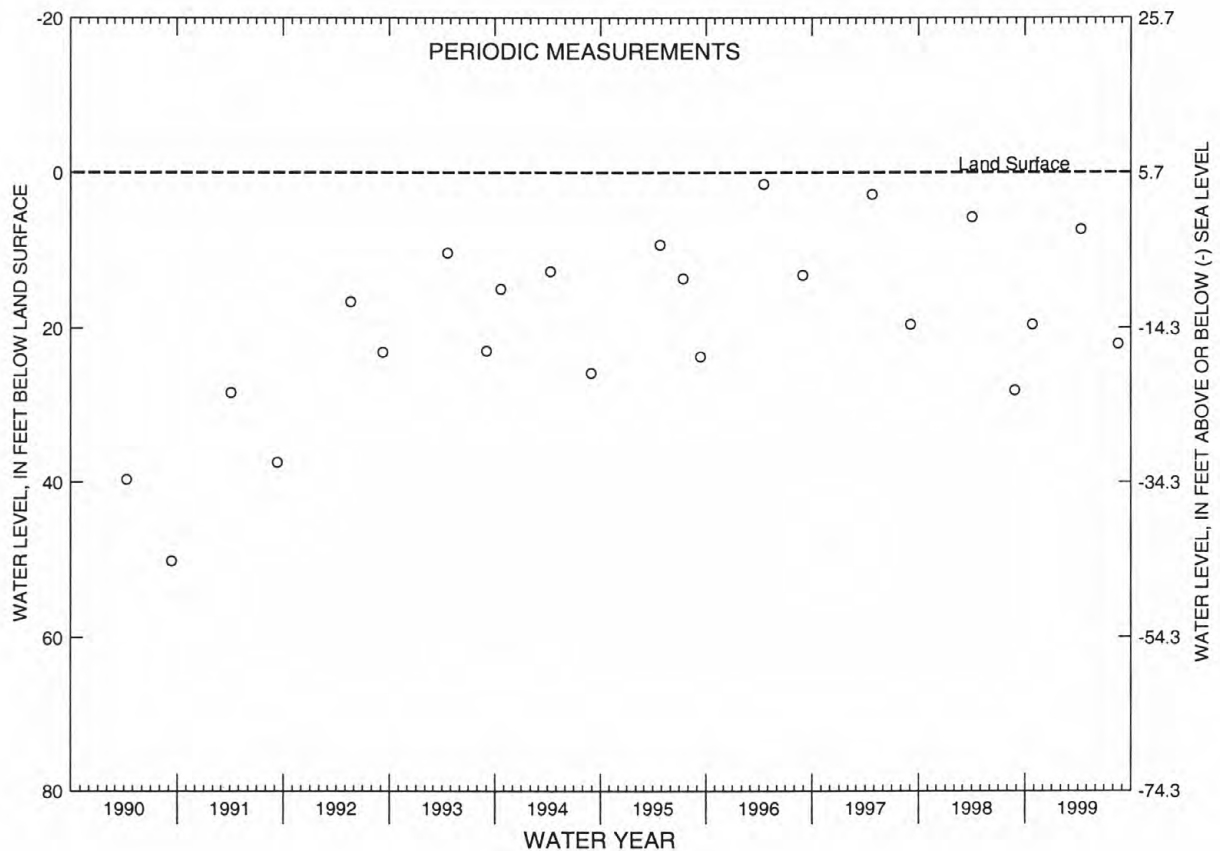
PERIOD OF RECORD.--Jan. 1936 to Nov. 1984, May 1986 to current year. Records for 1936 to 1984 and 1986 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 27	19.55	APR 13	7.35	AUG 20	22.08

## NJ-WRD WELL NO. 23-0365



## GROUND-WATER LEVELS

## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-0439. Site I.D., 402633074220001. Local I.D., SRWD 2 Obs. NJ Permit Number, 28-05987.

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.

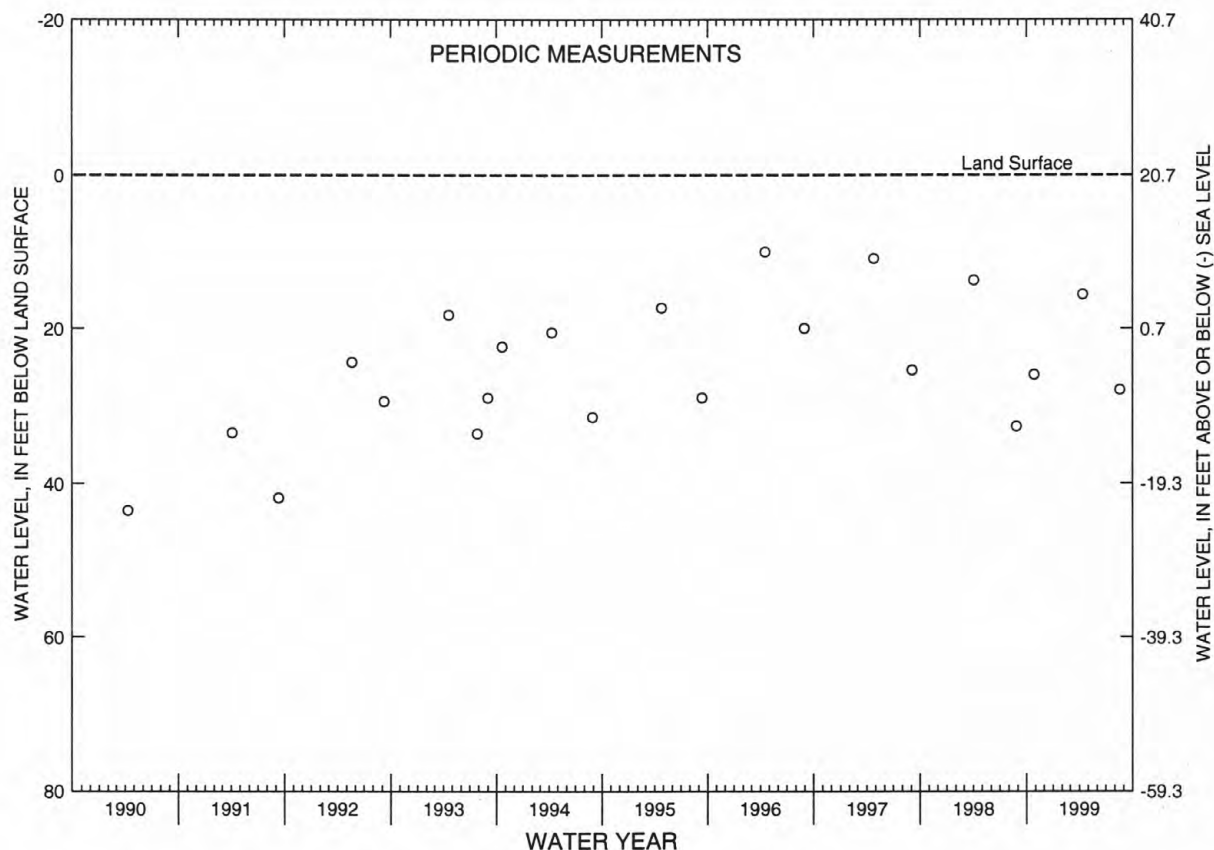
PERIOD OF RECORD.--January 1968 to current year. Records for 1968 to 1975 and 1988 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 27	25.98	APR 13	15.56	AUG 20	27.93

## NJ-WRD WELL NO. 23-0439



## GROUND-WATER LEVELS

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## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-0482. Site I.D., 403242074161701. Local I.D., American Cyanamid 1 Obs.

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.

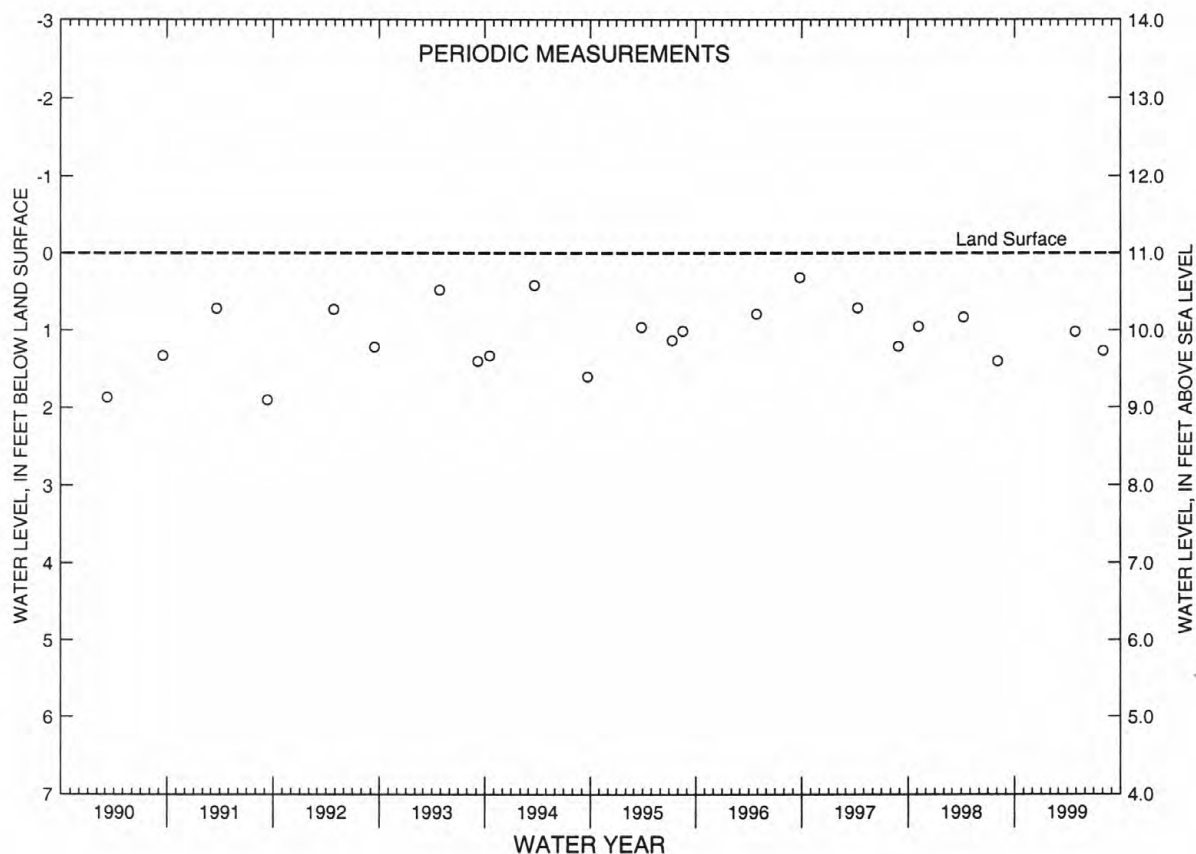
PERIOD OF RECORD.--Sept. 1950 to current year. Records for 1950 to 1982 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
APR 29	1.02	AUG 3	1.27

## NJ-WRD WELL NO. 23-0482



## GROUND-WATER LEVELS

## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-1165. Site I.D., 403119074290301. Local I.D., Rutgers Golf 13 Obs. NJ Permit Number, 25-33677-1.

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.--Submersible logger pressure transducer--30-minute recording interval. Digital water-level recorder--60-minute punch, May 1992 to Dec. 1997. Periodic measurements, June 1991 to May 1992.

DATUM.--Land surface is 58.8 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 3.81 ft above land surface.

REMARKS.--Water level is affected by pumping of nearby irrigation well.

PERIOD OF RECORD.--June 1991 to Dec. 1997, and Dec. 1998 to current year.

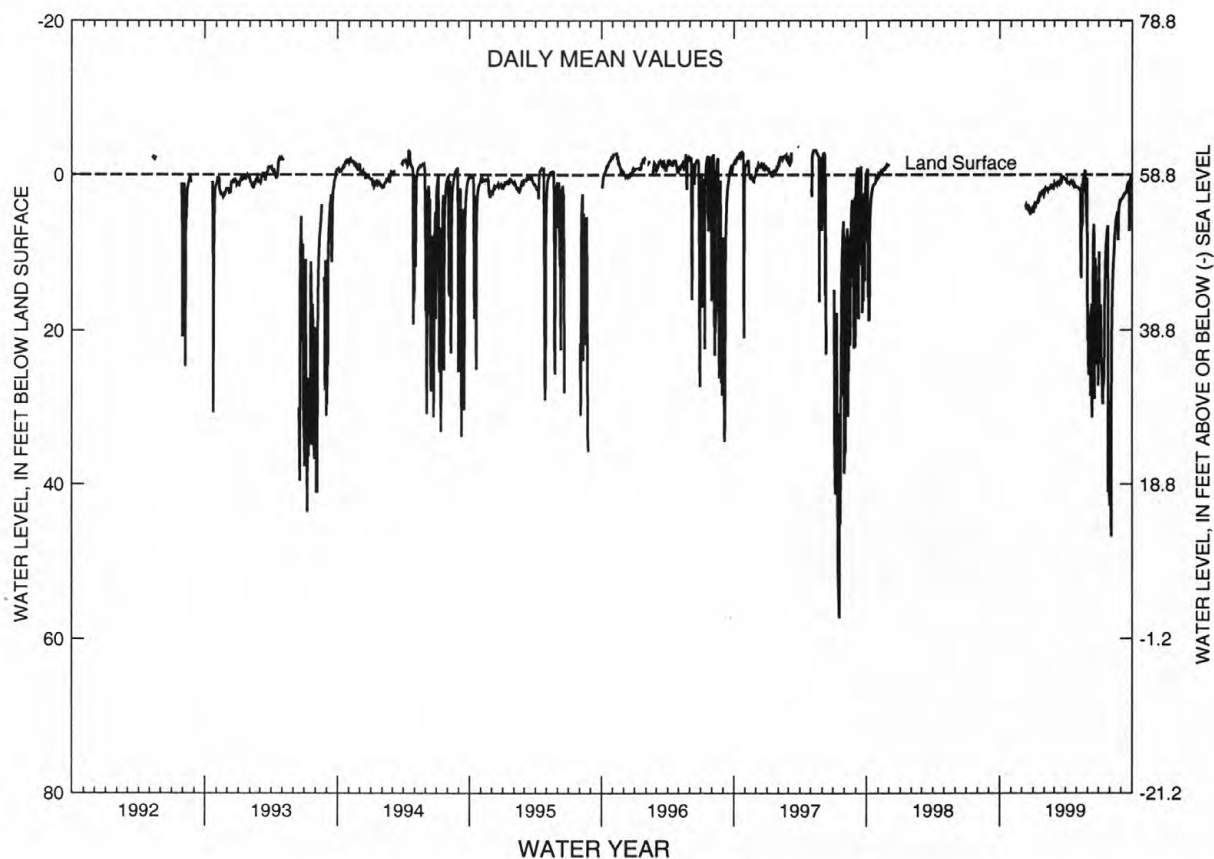
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.72 ft above land surface, many days between Mar. 12 and May 1, 1997; lowest, 58.29 ft below land surface, July 18, 1997.

WATER LEVEL, IN FEET ABOVE (-) OR BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	4.05	1.92	1.49	1.04	1.64	18.66	24.21	46.85	3.03
10	---	---	3.87	3.61	1.95	.94	1.14	1.95	24.59	25.73	12.34	2.49
15	---	---	4.24	3.24	1.88	1.02	.99	2.75	12.84	24.63	7.62	2.30
20	---	---	4.59	2.64	1.34	.94	1.11	.29	28.91	10.97	5.24	1.16
25	---	---	4.79	2.20	1.53	.37	1.53	-.58	23.22	7.00	5.26	1.46
EOM	---	---	4.68	2.63	1.42	.68	1.64	12.97	27.20	41.27	3.36	-.04
MEAN	---	---	4.41	3.20	1.75	.89	1.14	2.87	20.28	20.48	13.63	2.08

WTR YR 1999 MEAN 7.24 HIGH -.58 MAY 25 LOW 46.85 AUG 5

NJ-WRD WELL NO. 23-1165





## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-1330. Site I.D., 403135074274401. Local I.D., Rutgers MW-12A. NJ Permit number, 25-52624.

LOCATION.--Lat 40°31'35", long 74°27'44", Hydrologic Unit 02030105, near the intersection of Davidson Ave. and Titsworth Ave., Rutgers University, Piscataway Township.

Owner: Rutgers University.

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

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 80 ft, screened 60 to 80 ft.

INSTRUMENTATION.--Submersible logger pressure transducer--30 minute recording interval.

DATUM.--Land surface is 90.86 ft above sea level.

Measuring point: Top edge of base of manhole cover, at land surface.

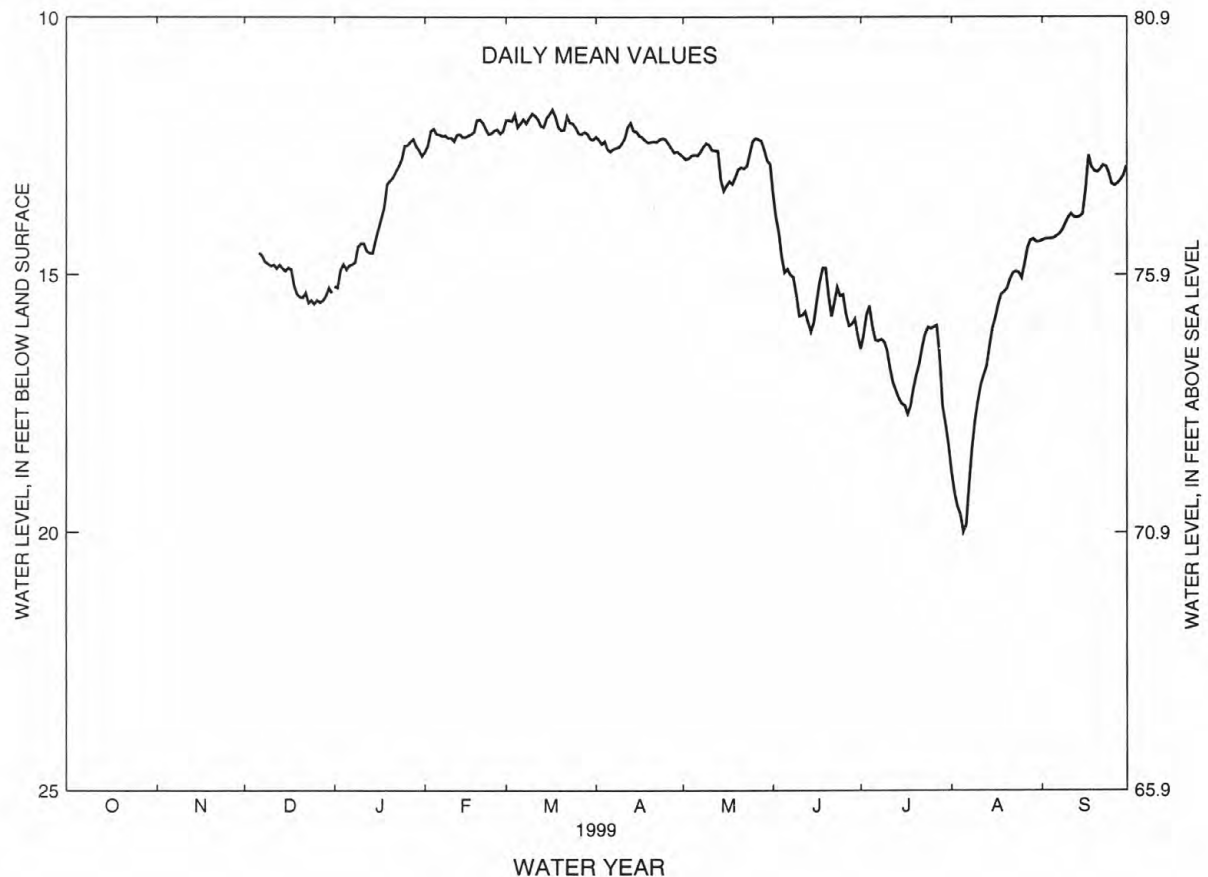
PERIOD OF RECORD.--Dec. 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.77 ft below land surface, Mar. 17, 1999; lowest, 20.18 ft below land surface, Aug. 5, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	14.51	14.91	12.28	12.14	12.57	12.69	14.96	16.00	19.99	14.29
10	---	---	14.84	14.41	12.35	11.88	12.46	12.49	15.80	16.47	17.46	13.89
15	---	---	14.94	14.34	12.34	11.96	12.23	13.38	15.92	17.50	16.03	13.82
20	---	---	15.44	13.19	12.00	12.20	12.43	12.97	15.40	16.95	15.27	13.01
25	---	---	15.57	12.51	12.21	12.15	12.38	12.41	15.39	16.04	15.06	13.24
EOM	---	---	15.36	12.71	12.22	12.39	12.67	12.86	16.18	18.30	14.36	12.90
MEAN	---	---	15.12	13.81	12.27	12.08	12.42	12.77	15.32	16.72	16.52	13.56
WTR YR 1999	MEAN 14.08 HIGH 11.80 MAR 17 LOW 19.99 AUG 5											

## NJ-WRD WELL NO. 23-1330



## GROUND-WATER LEVELS

## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-1331. Site I.D., 403135074274402. Local I.D., Rutgers MW-12B. NJ Permit number, 25-52625

LOCATION.--Lat 40°31'35", long 74°27'44", Hydrologic Unit 02030105, near the intersection of Davidson Ave. and Titsworth Ave., Rutgers University, Piscataway Township.  
Owner: Rutgers University.

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

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 50 ft, screened 30 to 50 ft.

INSTRUMENTATION.--Submersible logger pressure transducer--30 minute recording interval.

DATUM.--Land surface is 89.28 ft above sea level.

Measuring point: Top edge of base of manhole cover, at land surface.

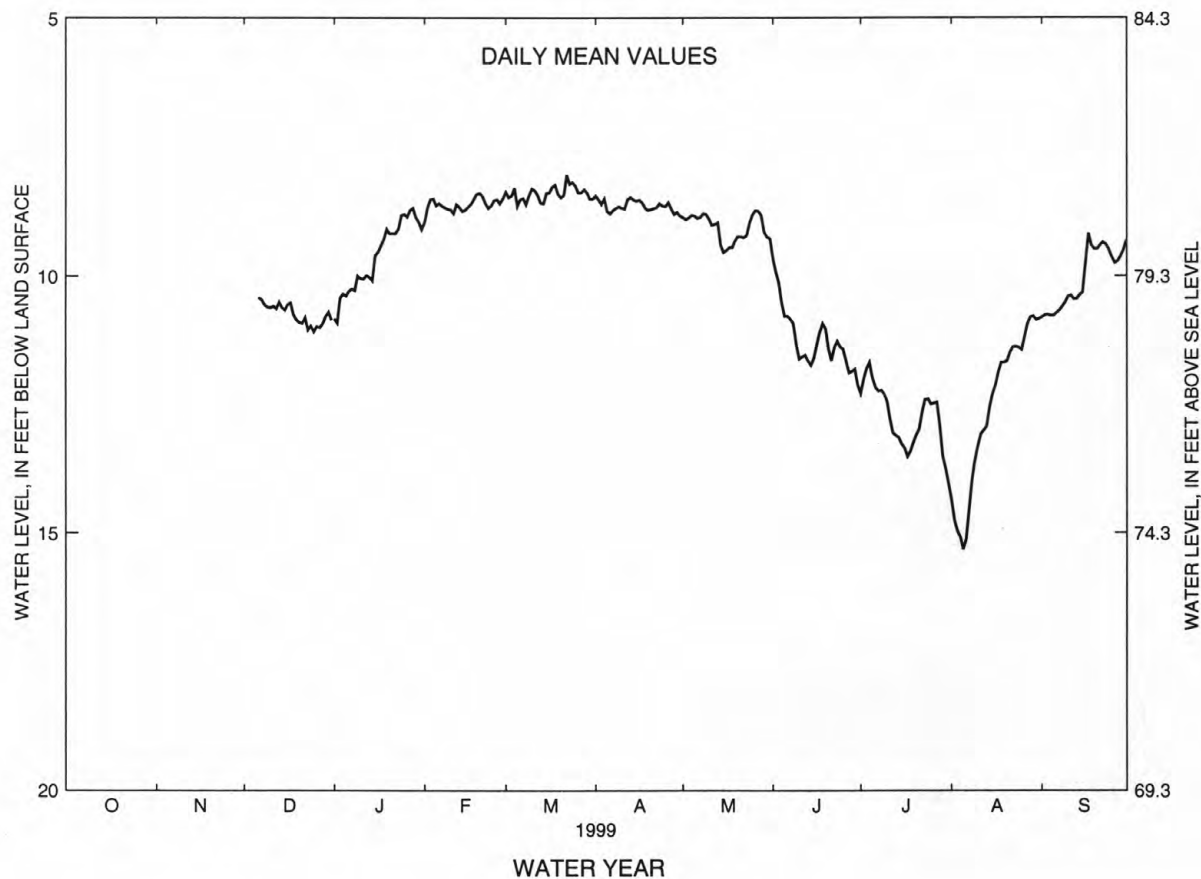
PERIOD OF RECORD.--Dec. 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.93 ft below land surface, Mar. 22, 1999; lowest, 15.45ft below land surface, Aug. 5, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	10.36	10.38	8.64	8.65	8.75	8.84	10.78	11.97	15.32	10.77
10	---	---	10.61	10.05	8.72	8.31	8.69	8.90	11.61	12.44	13.32	10.40
15	---	---	10.66	9.61	8.73	8.40	8.55	9.55	11.60	13.28	12.30	10.32
20	---	---	10.90	9.18	8.40	8.48	---	9.24	11.42	13.10	11.65	9.48
25	---	---	11.08	8.81	8.54	8.26	8.66	8.82	11.42	12.50	11.43	9.63
EOM	---	---	10.85	9.10	8.51	8.51	8.84	9.28	12.13	14.04	10.83	9.32
MEAN	---	---	10.73	9.63	8.62	8.40	8.64	9.07	11.23	12.75	12.59	10.04
WTR YR 1999	MEAN 10.19 HIGH 8.05 MAR 22 LOW 15.32 AUG 5											

NJ-WRD WELL NO. 23-1331



## GROUND-WATER LEVELS

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## MIDDLESEX COUNTY

NJ-WRD Well Number, 23-1332. Site I.D., 403135074274403. Local I.D., Rutgers MW-12C. NJ Permit number, 25-52623.

LOCATION.--Lat 40°31'35", long 74°27'44", Hydrologic Unit 02030105, near the intersection of Davidson Ave. and Titsworth Ave., Rutgers University, Piscataway Township.

Owner: Rutgers University.

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

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 25 ft, screened 10 to 25 ft.

INSTRUMENTATION.--Submersible logger pressure transducer--30 minute recording interval.

DATUM.--Land surface is 89.87 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 3.16 ft above land surface.

PERIOD OF RECORD.--Dec. 1998 to current year.

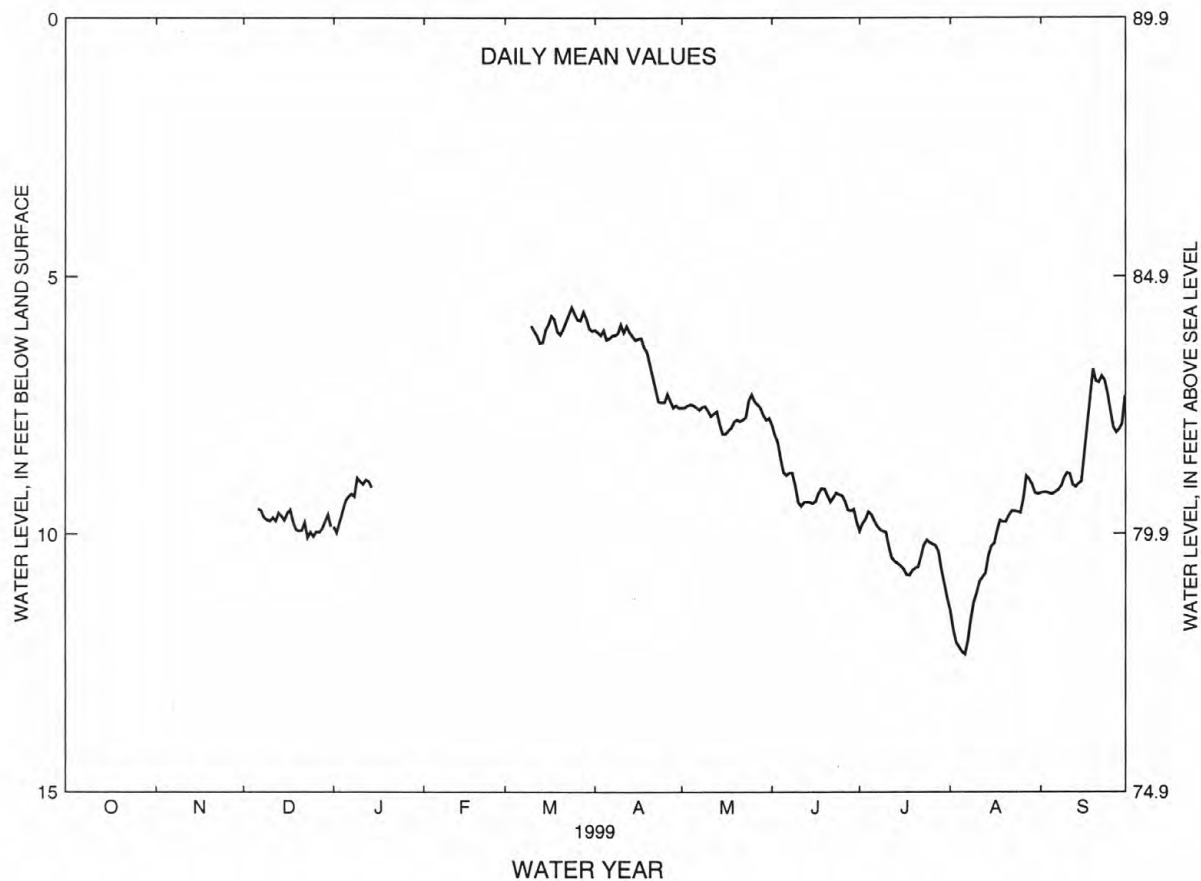
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.48 ft below land surface, Mar. 21, 1999; lowest, 12.40 ft below land surface, Aug. 6, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	9.50	9.36	---	---	6.22	7.50	8.81	9.62	12.28	9.23
10	---	---	9.75	8.99	---	5.95	5.93	7.61	9.39	9.97	11.15	8.82
15	---	---	9.74	---	---	6.03	6.23	8.06	9.41	10.62	10.24	8.99
20	---	---	9.94	---	---	6.12	---	7.78	9.26	10.66	9.77	7.03
25	---	---	10.05	---	---	5.72	7.44	7.29	9.26	10.17	9.59	7.60
EOM	---	---	9.86	---	---	6.05	7.55	7.75	9.77	11.25	9.23	7.31
MEAN	---	---	9.77	---	---	5.95	6.53	7.66	9.13	10.31	10.44	8.33

WTR YR 1999 HIGH 5.59 MAR 24 LOW 12.33 AUG 6

## NJ-WRD WELL NO. 23-1332

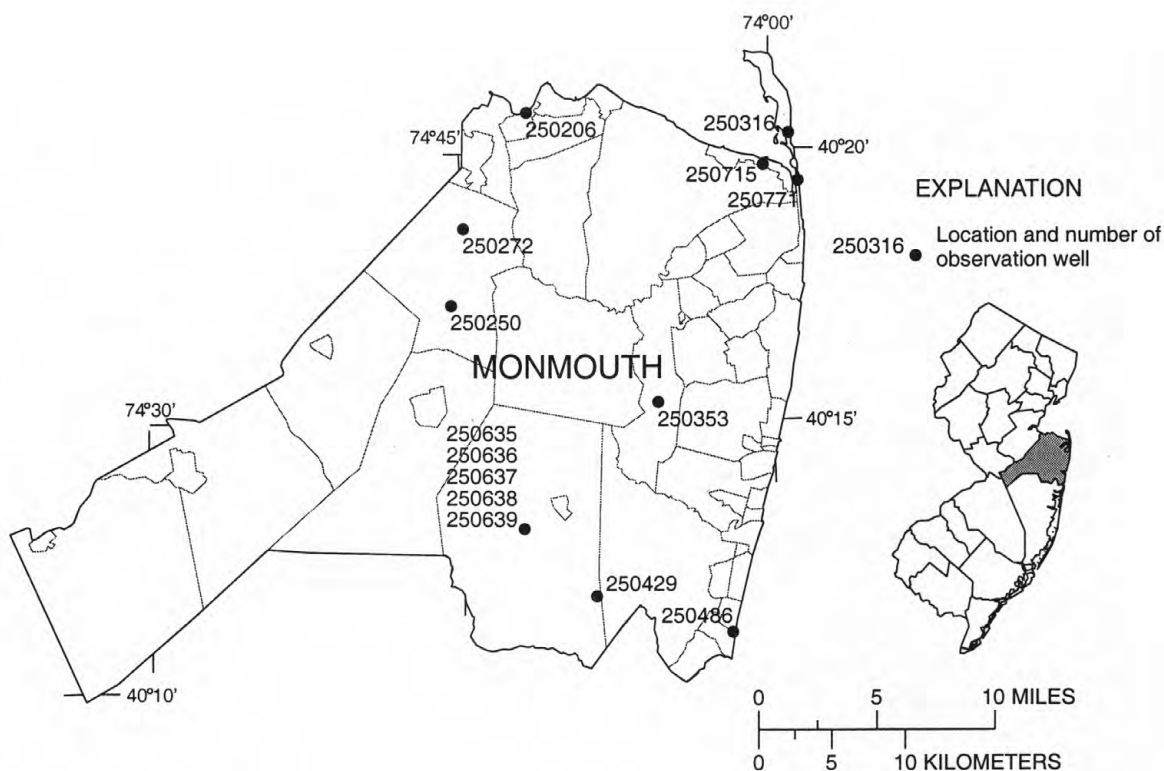


## MONMOUTH COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
250206	KEYPORT 4 OBS	KEYPORT BORO	249	ODBG	MAXMIN
250250	VILLAGE 215 OBS	MARLBORO TWP	215	EGLS	MANUAL
250272	MARLBORO 1 OBS	MARLBORO TWP	680	FRNG	DAILY
250316	SANDY HOOK SP1 OBS	MIDDLETOWN TWP	397	ODBG	MANUAL
250353	FORT MONMOUTH 1-NCO OBS	TINTON FALLS BORO	327	MLRW	DAILY
250429	ALLAIRE STATE PARK C OBS	HOWELL TWP	633	EGLS	MAXMIN
250486	DOE-SEA GIRT OBS	SEA GIRT BORO	614	MLRW	DAILY
250635	HOWELL TWP 1 OBS	HOWELL TWP	1360	MRPA	DAILY
250636	HOWELL TWP 2 OBS	HOWELL TWP	100	VNCN	DAILY
250637	HOWELL TWP 3 OBS	HOWELL TWP	324	MLRW	DAILY
250638	HOWELL TWP 4 OBS	HOWELL TWP	499	EGLS	DAILY
250639	HOWELL TWP 5 OBS	HOWELL TWP	907	MRPAU	DAILY
250715	AHWD B OBS	ATLANTIC HIGHLANDS BORO	360	EGLS	DAILY
250771	SANDY HOOK 2 OBS	SEA BRIGHT BORO	278	EGLS	DAILY

## Aquifer names

- EGLS - Englishtown aquifer system
- FRNG - Farrington aquifer
- MLRW - Wenonah-Mount Laurel aquifer
- MRPA - Potomac-Raritan-Magothy aquifer
- MRPAU - Upper Potomac-Raritan-Magothy aquifer
- ODBG - Old Bridge aquifer
- VNCN - Vincentown aquifer



## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0206. Site I.D., 402626074114204. Local I.D., Keyport 4 Obs.

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.

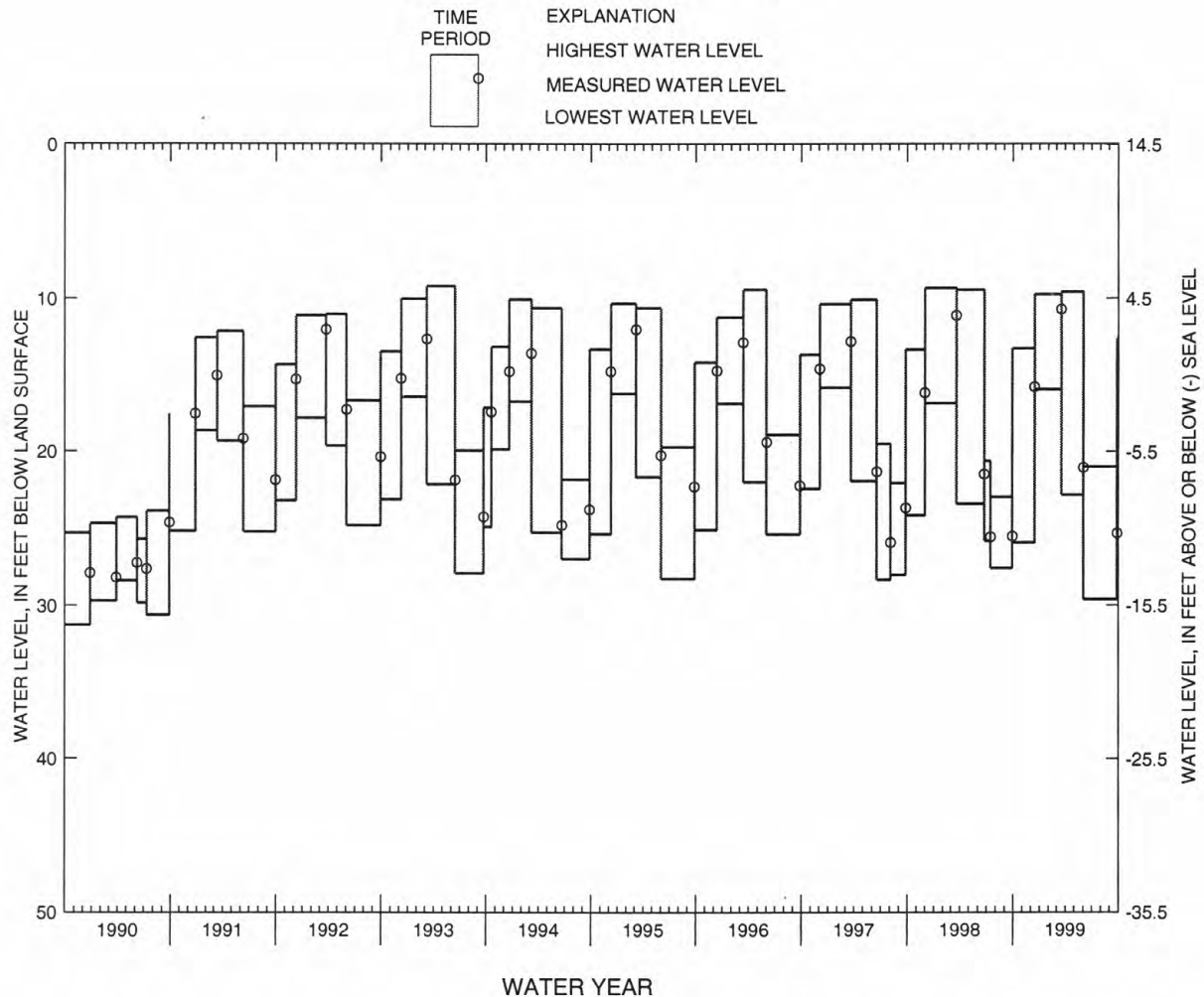
PERIOD OF RECORD.--June 1978 to current year.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1998 TO DEC. 15, 1998	13.26	25.94	DEC. 15, 1998	15.77
DEC. 15, 1998 TO MAR. 18, 1999	9.74	15.92	MAR. 18, 1999	10.71
MAR. 18, 1999 TO JUNE 3, 1999	9.57	22.84	JUNE 3, 1999	21.05
JUNE 3, 1999 TO SEPT. 28, 1999	20.99	29.63	SEPT. 28, 1999	25.34

## NJ-WRD WELL NO. 25-0206



## GROUND-WATER LEVELS

## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0250. Site I.D., 401906074151401. Local I.D., Village 215 Obs. NJ Permit Number, 29-04437.

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.

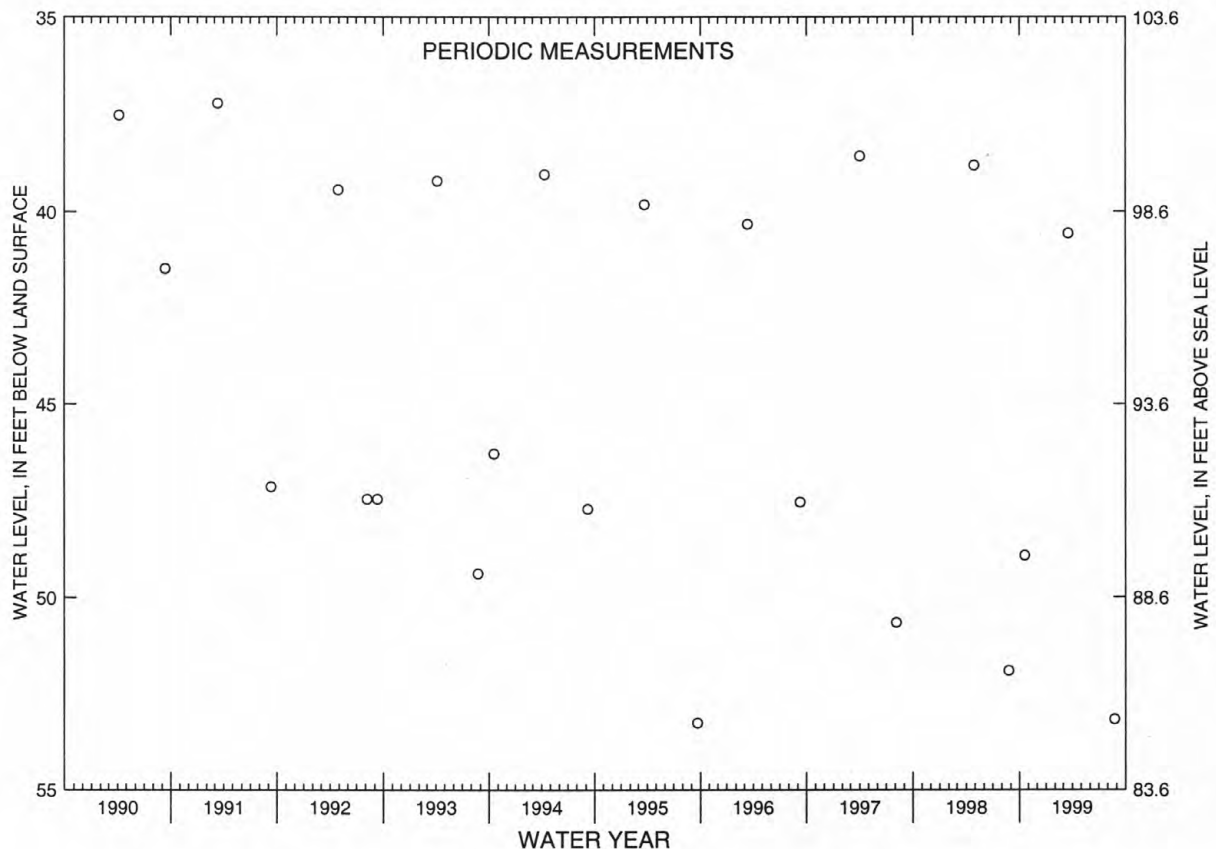
PERIOD OF RECORD.--Apr. 1971 to Sept. 1984, May 1986 to current year. Records for 1971 to 1976 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 19	48.92	MAR 18	40.57	AUG 25	53.18

## NJ-WRD WELL NO. 25-0250





## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0272. Site I.D., 402208074145201. Local I.D., Marlboro 1 Obs. NJ Permit Number, 29-06527.

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.--Submersible logger pressure transducer--60 minute recording interval. Digital water-level recorder, Jan. 1973 to May 1998.

DATUM.--Land surface is 116.93 ft above sea level.

Measuring point: Top of hole in well seal, 2.54 ft above land surface.

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

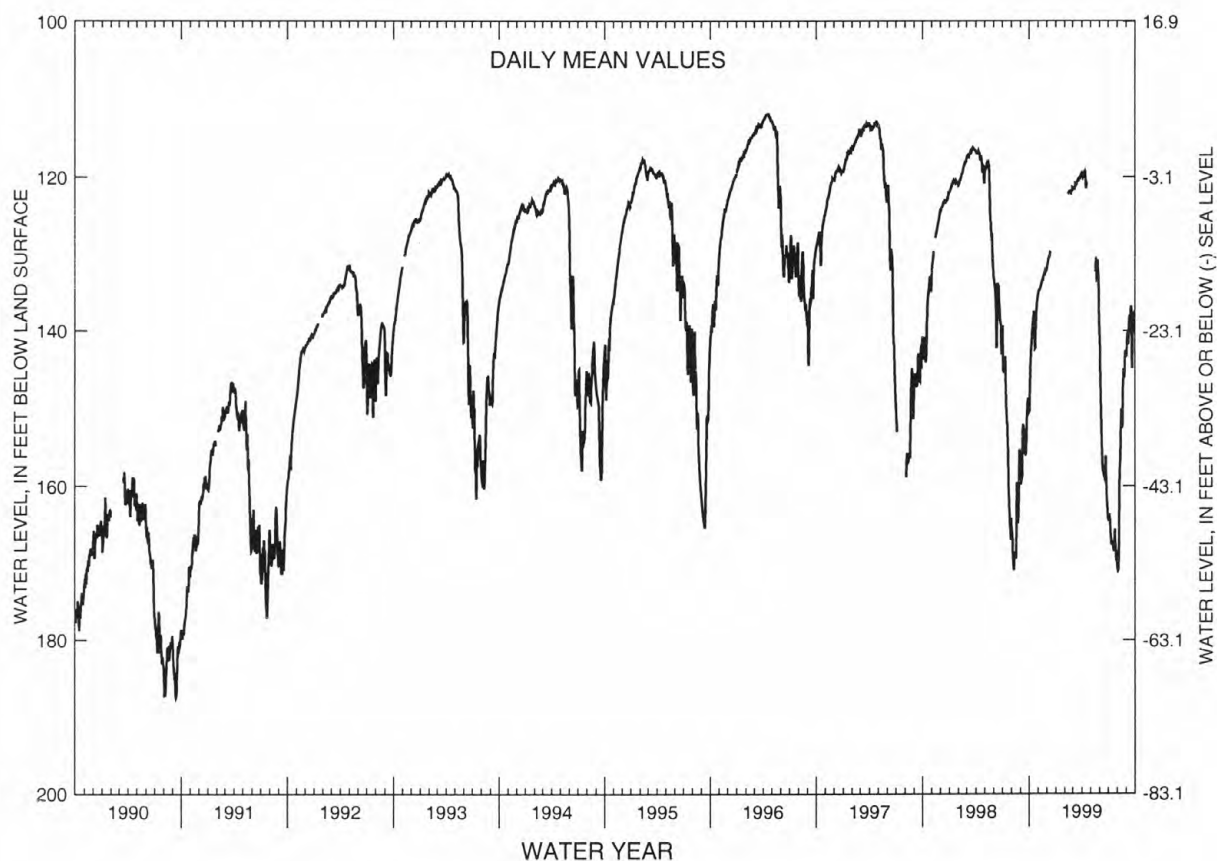
PERIOD OF RECORD.--Jan. 1973 to current year. Records for 1973 to 1977 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	145.68	134.71	131.07	---	---	121.70	119.74	---	147.31	163.74	170.85	141.12
10	141.22	134.34	130.31	---	---	121.00	119.61	---	155.31	166.21	158.04	141.21
15	138.62	133.46	---	---	122.07	120.74	120.70	---	158.05	167.18	151.50	139.36
20	140.64	132.82	---	---	121.97	120.50	---	130.42	158.99	168.23	151.83	137.32
25	138.17	132.38	---	---	121.77	120.25	---	131.15	159.76	166.83	145.03	138.91
EOM	135.54	132.06	---	---	121.58	119.75	---	138.15	163.75	169.64	143.22	138.65
MEAN	140.99	133.52	---	---	---	120.73	---	---	155.26	166.75	154.89	139.92
WTR YR 1999	HIGH 119.27 APR 13 LOW 170.94 AUG 4											

## NJ-WRD WELL NO. 25-0272



## GROUND-WATER LEVELS

## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0316. Site I.D., 402536073590501. Local I.D., Sandy Hook SP 1 Obs. NJ Permit Number, 29-04299.

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.

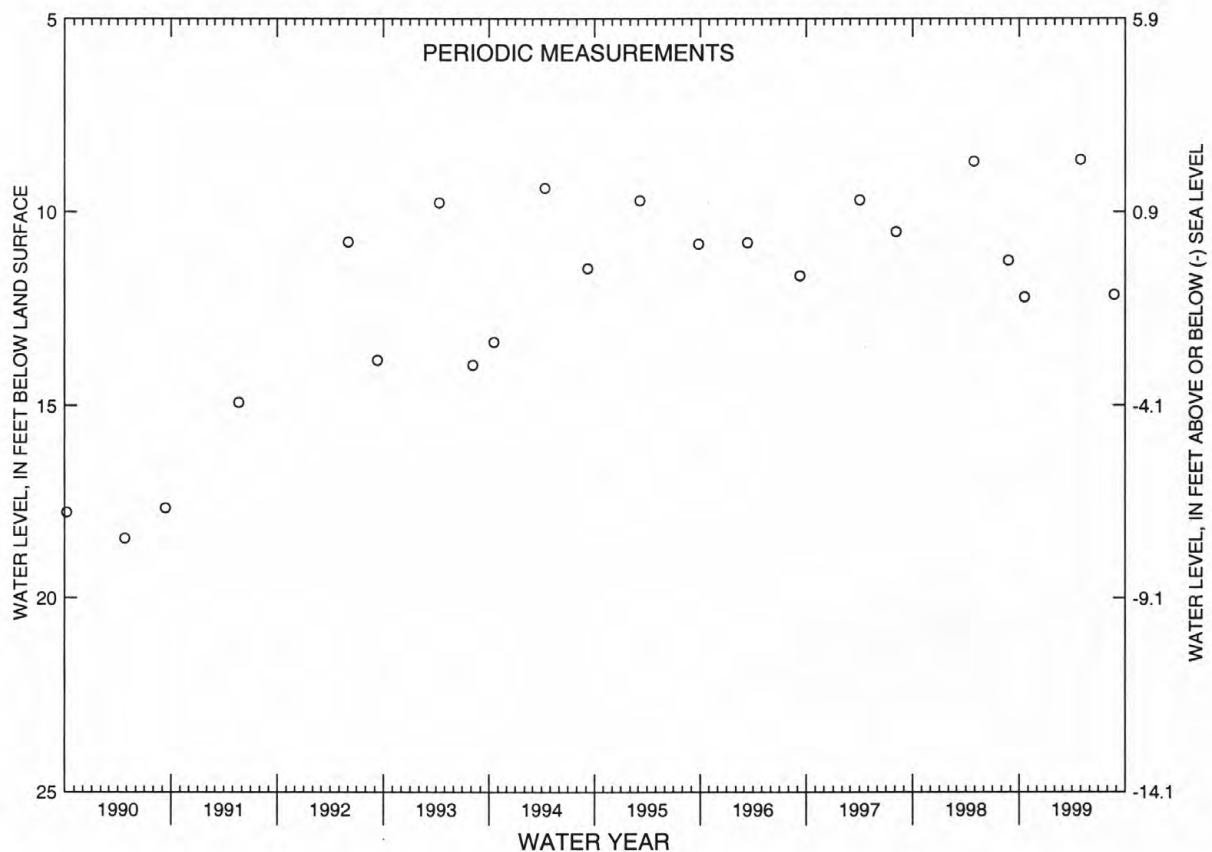
PERIOD OF RECORD.--May 1965 to Dec. 1984, Aug. 1988 to current year. Records for 1965 to 1976 and 1988 to 1992 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.64 ft below land surface, Apr. 30, 1999; lowest, 20.12 ft below land surface, between Sept. 7 and Nov. 2, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 19	12.21	APR 30	8.64	AUG 25	12.15

NJ-WRD WELL NO. 25-0316



## GROUND-WATER LEVELS

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## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0353. Site I.D., 401542074053001. Local I.D., Fort Monmouth 1-NCO Obs.

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.

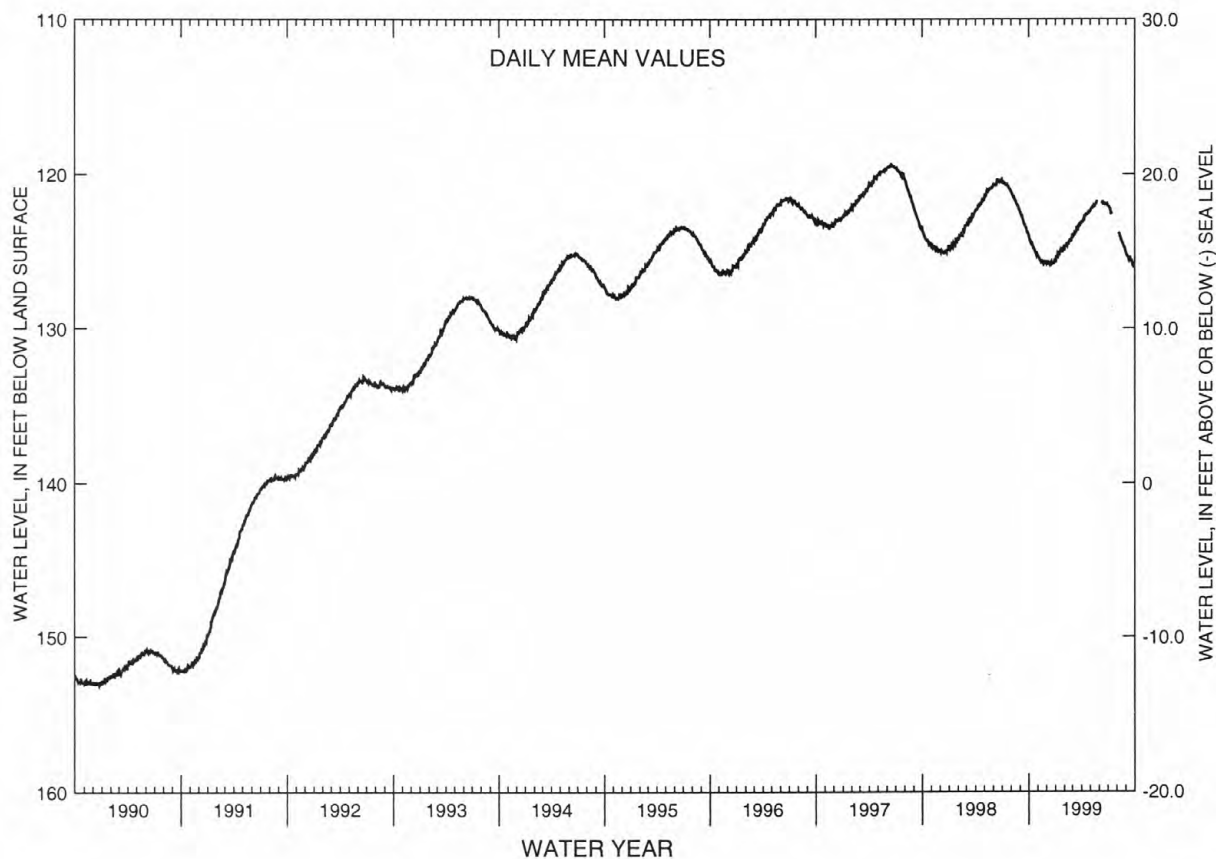
PERIOD OF RECORD.--Feb. 1985 to current year. Records for 1985 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	124.33	125.44	125.82	125.40	124.69	124.03	123.10	122.24	---	122.12	---	125.32
10	124.42	125.68	125.88	125.27	124.60	123.83	122.83	122.13	121.86	122.33	123.94	125.44
15	124.71	125.59	125.85	125.08	124.56	123.52	122.68	122.12	121.80	122.62	124.18	125.75
20	124.90	125.72	125.85	125.01	124.30	123.56	122.63	121.93	121.97	---	124.50	125.66
25	125.15	125.83	125.82	124.87	124.26	123.31	122.54	---	121.93	---	124.75	125.95
EOM	125.28	125.81	125.65	125.00	124.06	123.23	122.46	---	122.06	---	125.08	125.96
MEAN	124.75	125.65	125.79	125.16	124.48	123.62	122.74	---	121.91	---	124.42	125.60
WTR YR 1999	MEAN 124.22 HIGH 121.72 MAY 24 LOW 126.06 SEP 28											

## NJ-WRD WELL NO. 25-0353



## GROUND-WATER LEVELS

## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0429. Site I.D., 400832074082101. Local I.D., Allaire State Park C Obs. NJ Permit Number, 29-04140.

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.

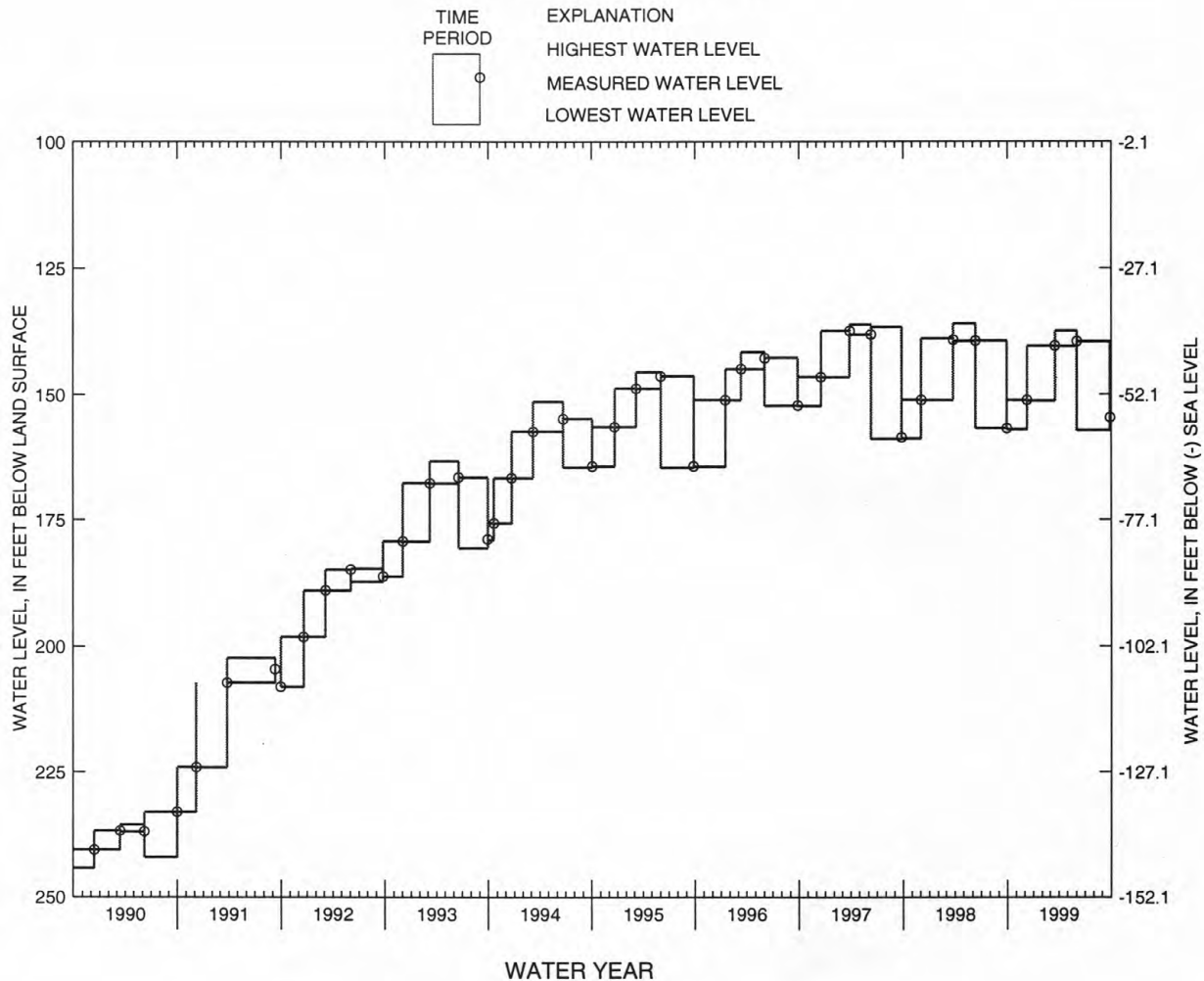
PERIOD OF RECORD.--Feb. 1964 to current year. Records for 1964 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 136.01 ft below land surface, between Mar. 25 and June 11, 1998; lowest, 249.89 ft below land surface, between June 24 and Sept. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1998 TO DEC. 10, 1998	151.16	157.02	DEC. 10, 1998	151.16
DEC. 10, 1998 TO MAR. 18, 1999	140.38	151.26	MAR. 18, 1999	140.38
MAR. 18, 1999 TO JUNE 3, 1999	137.38	140.45	JUNE 3, 1999	139.51
JUNE 3, 1999 TO SEPT. 28, 1999	139.51	157.14	SEPT. 28, 1999	154.55

NJ-WRD WELL NO. 25-0429



## GROUND-WATER LEVELS

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## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0486. Site I.D., 400711074020201. Local I.D., DOE - Sea Girt Obs.

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, 3.00 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping. Well damaged by construction equipment, Oct. 1997; repaired June 1998.

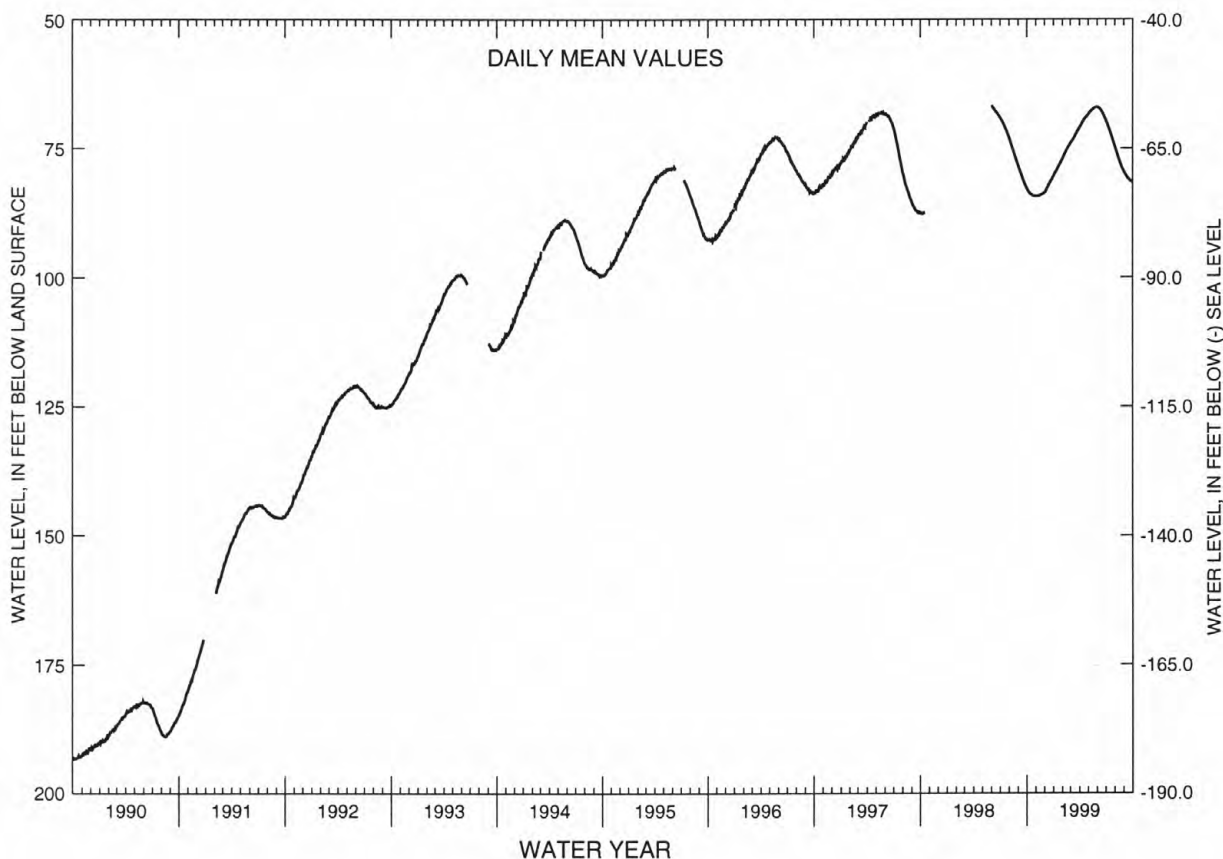
PERIOD OF RECORD.--May 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 66.60 ft below land surface, June 3, 1998; lowest, 195.60 ft below land surface, Sept. 17, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	83.21	84.29	83.39	79.97	76.57	73.71	70.71	68.17	67.08	70.04	75.27	79.88
10	83.65	84.26	82.77	79.49	75.93	73.35	70.19	67.84	67.29	70.76	76.18	80.34
15	83.92	84.18	82.21	78.97	75.43	72.81	69.67	67.55	67.66	71.59	77.05	80.75
20	84.13	84.04	81.67	78.42	74.89	72.26	69.24	67.32	68.15	72.46	77.87	81.08
25	84.24	83.89	81.18	77.87	74.47	71.74	68.91	67.11	68.73	73.34	78.60	81.32
EOM	84.30	83.68	80.49	77.22	74.19	71.16	68.56	67.03	69.34	74.37	79.35	81.51
MEAN	83.82	84.10	82.13	78.84	75.53	72.66	69.72	67.58	67.88	71.83	77.12	80.67
WTR YR 1999 MEAN 76.00 HIGH 67.03 MAY 29 LOW 84.30 OCT 31												

## NJ-WRD WELL NO. 25-0486



## GROUND-WATER LEVELS

## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0635. Site I.D., 401105074120201. Local I.D., Howell Twp 1 Obs. NJ Permit Number, 29-18402-9.

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.

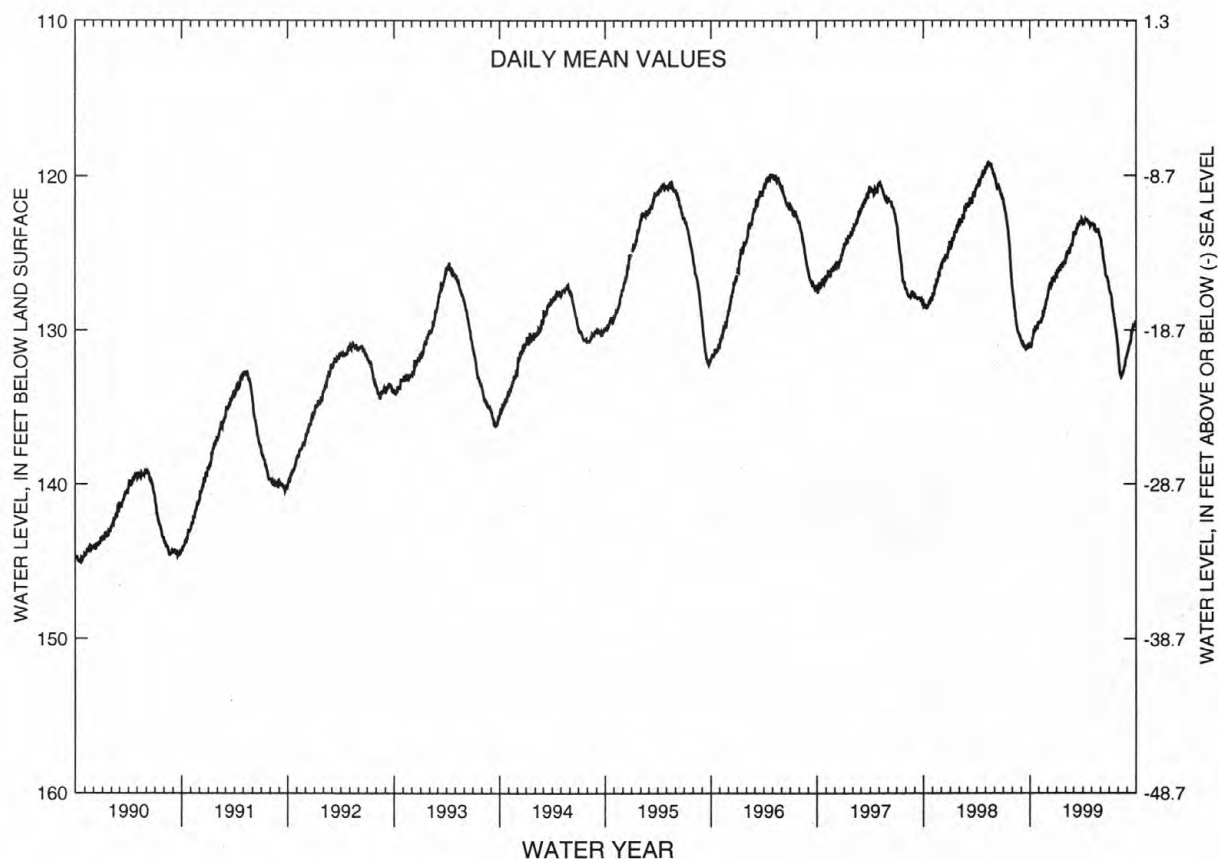
PERIOD OF RECORD.--Dec. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 119.12 ft below land surface, May. 11, 1998; lowest, 150.32 ft below land surface, Sept. 2, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	131.07	129.43	127.38	126.22	125.17	123.88	123.06	123.09	124.54	127.57	132.30	131.36
10	130.48	129.40	127.19	126.00	124.98	123.44	122.88	123.22	125.18	127.91	133.02	130.87
15	130.10	128.92	126.96	125.82	124.96	123.07	122.88	123.54	125.74	128.82	132.90	130.57
20	129.78	128.57	126.74	125.87	124.49	123.22	123.02	123.60	126.50	129.47	132.68	129.98
25	129.78	128.37	126.71	125.65	124.28	123.00	123.19	123.52	126.63	130.10	132.27	129.68
EOM	129.52	127.92	126.46	125.73	123.83	123.01	123.17	123.99	127.13	131.15	131.72	129.40
MEAN	130.23	128.90	126.92	125.93	124.77	123.29	122.99	123.44	125.70	128.97	132.43	130.45
WTR YR 1999 MEAN 127.02 HIGH 122.77 MAR 28 LOW 133.07 AUG 12												

NJ-WRD WELL NO. 25-0635





## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0636. Site I.D., 401105074120202. Local I.D., Howell Twp 2 Obs. NJ Permit Number, 29-18404-5

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.--Vincetown 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.

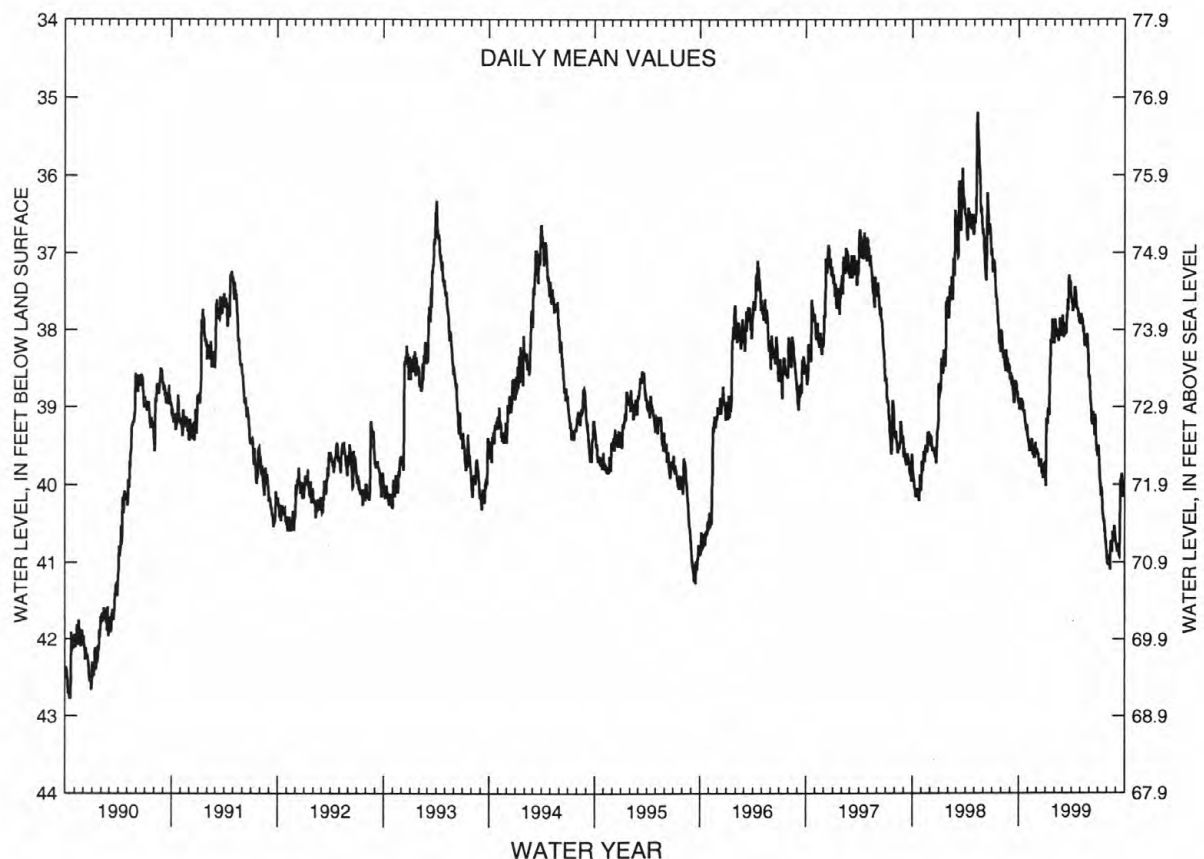
PERIOD OF RECORD.--Dec. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 35.15 ft below land surface, May. 12, 1998; lowest, 56.09 ft below land surface, Apr. 29, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.00	39.50	39.62	39.18	37.96	38.10	37.74	37.82	38.88	39.62	41.03	40.82
10	38.89	39.55	39.73	39.02	38.04	37.92	37.62	37.91	39.19	39.99	40.96	40.80
15	38.98	39.41	39.78	38.81	38.15	37.80	37.51	38.13	39.06	40.08	40.72	40.90
20	39.09	39.51	39.85	38.14	37.85	37.75	37.70	38.09	39.37	40.41	40.87	39.92
25	39.23	39.66	39.89	37.86	38.01	37.32	37.84	38.05	39.48	40.60	40.74	40.03
EOM	39.37	39.56	39.90	38.18	37.91	37.59	37.89	38.64	39.64	40.86	40.69	40.00
MEAN	39.08	39.52	39.74	38.66	38.00	37.74	37.68	38.07	39.16	40.20	40.82	40.42
WTR YR 1999	MEAN 39.10 HIGH 37.29 MAR 24 LOW 41.10 AUG 13											

## NJ-WRD WELL NO. 25-0636



## GROUND-WATER LEVELS

## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0637. Site I.D., 401105074120203. Local I.D., Howell Twp 3 Obs. NJ Permit Number, 29-18400-2.

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.

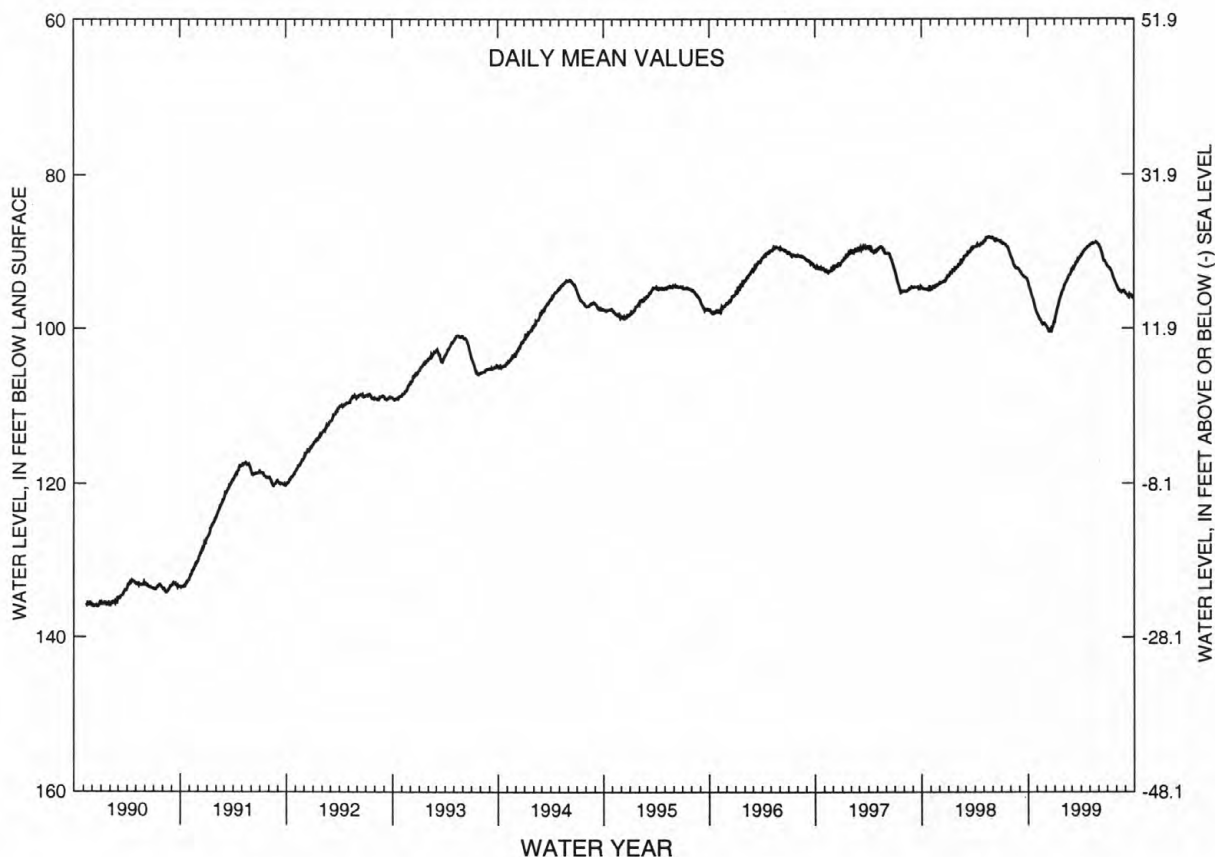
PERIOD OF RECORD.--Dec. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 88.08 ft below land surface, May 21, 1998; lowest, 140.65 ft below land surface, Oct. 6-7, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	94.50	98.27	99.82	98.49	94.43	92.41	90.51	89.14	89.38	92.01	94.53	95.56
10	95.04	98.74	100.16	97.58	94.03	92.05	90.11	88.98	89.81	92.15	94.97	95.72
15	95.76	98.96	100.36	96.84	93.68	91.52	89.88	89.00	90.41	92.48	95.09	95.98
20	96.25	99.34	100.26	96.19	93.17	91.46	89.68	88.90	91.17	93.00	95.33	95.64
25	97.06	99.46	100.05	95.52	92.91	91.08	89.50	88.82	91.35	93.55	95.27	95.80
EOM	97.85	99.56	99.28	95.13	92.59	90.75	89.36	89.08	91.77	94.10	95.26	96.06
MEAN	95.88	98.95	99.97	96.86	93.69	91.63	89.92	89.01	90.44	92.77	94.99	95.72
WTR YR 1999	MEAN 94.16 HIGH 88.81 MAY 24 LOW 100.36 DEC 15											

NJ-WRD WELL NO. 25-0637



## GROUND-WATER LEVELS

165

## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0638. Site I.D., 401105074120204. Local I.D., Howell Twp 4 Obs. NJ Permit Number, 29-18401-1.

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.

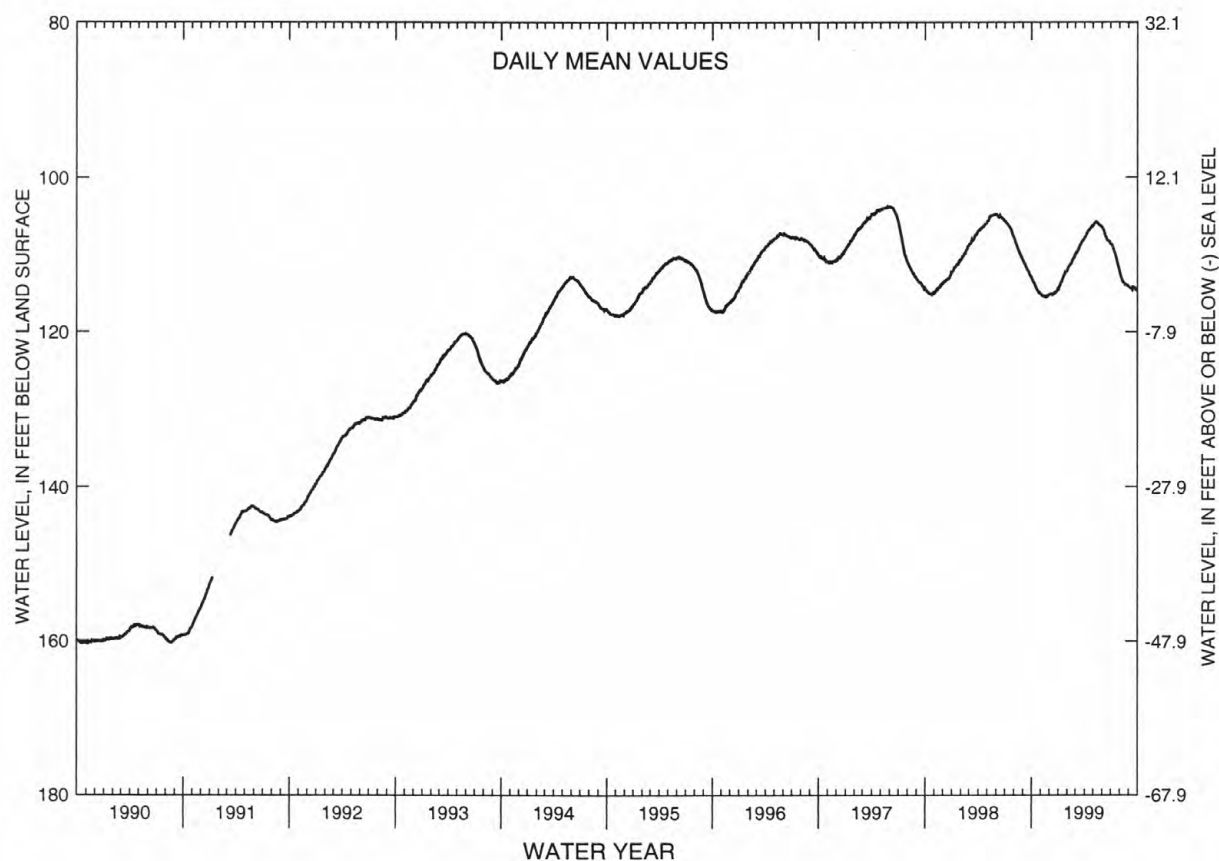
PERIOD OF RECORD.--Dec. 1987 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	113.31	115.17	115.10	114.04	111.67	109.76	107.67	106.04	106.64	108.66	112.67	114.22
10	113.63	115.33	115.11	113.63	111.34	109.43	107.29	105.79	107.08	109.02	113.23	114.33
15	114.05	115.36	115.09	113.28	111.12	108.98	106.97	105.83	107.64	109.67	113.55	114.54
20	114.47	115.40	115.00	112.73	110.62	108.68	106.76	105.95	108.13	110.29	113.83	114.21
25	114.81	115.35	114.83	112.28	110.38	108.24	106.51	106.14	108.23	111.07	113.91	114.36
EOM	115.00	115.19	114.47	112.17	110.07	107.98	106.35	106.37	108.47	111.90	114.09	114.53
MEAN	114.12	115.29	114.95	113.16	111.06	108.95	107.03	106.04	107.54	109.93	113.42	114.32
WTR YR 1999	MEAN	111.32	HIGH	105.76	MAY 13	LOW	115.45	NOV 19				

## NJ-WRD WELL NO. 25-0638



## GROUND-WATER LEVELS

## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0639. Site I.D., 401105074120205. Local I.D., Howell Twp 5 Obs. NJ Permit Number, 29-18403-7.

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.

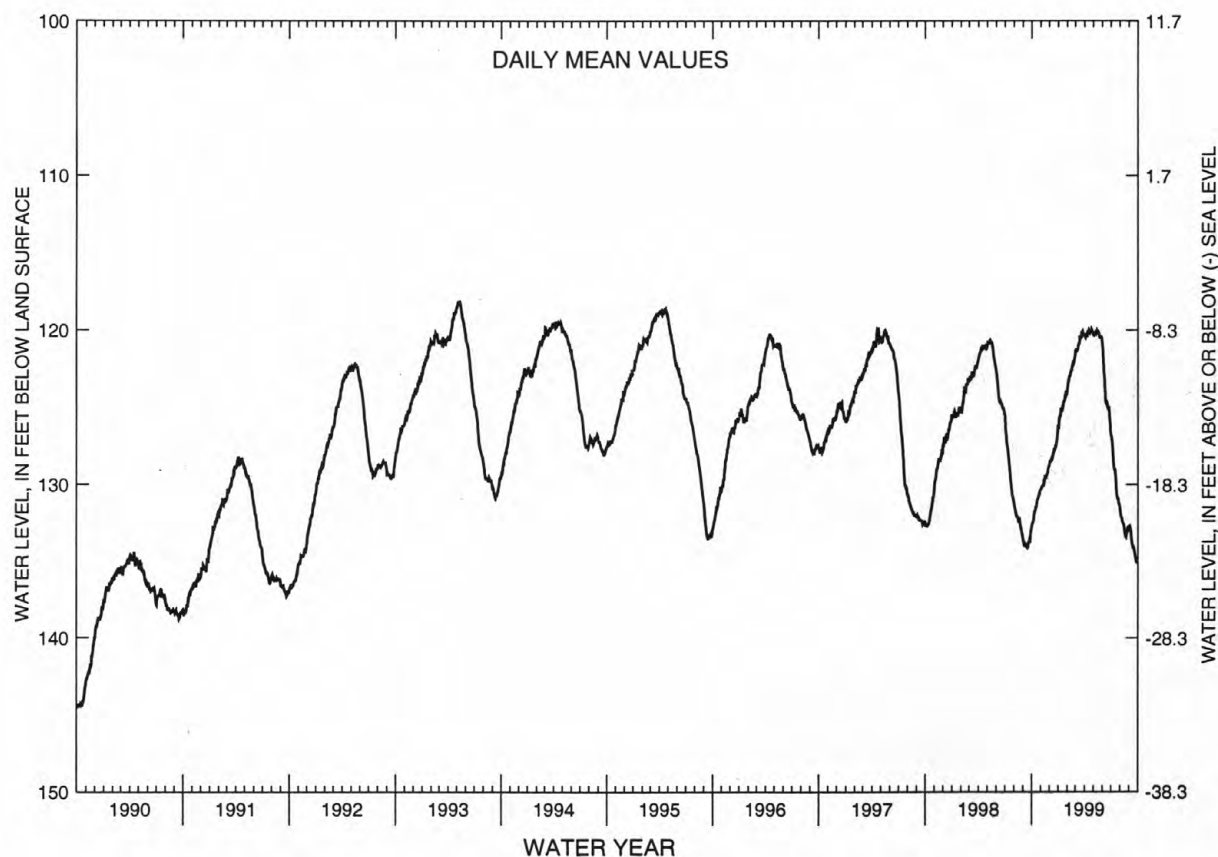
PERIOD OF RECORD.--Mar. 1988 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	132.38	130.12	128.48	125.71	123.33	121.40	120.44	120.24	122.22	127.16	132.10	132.84
10	131.74	130.02	128.36	125.28	122.88	120.99	120.18	120.12	123.79	128.59	132.46	133.56
15	131.47	129.51	127.99	124.94	122.61	120.53	120.05	120.16	124.64	129.03	132.77	134.16
20	130.98	129.36	127.70	124.63	122.10	120.45	120.14	120.18	125.07	130.54	133.36	134.34
25	130.68	129.18	127.35	124.22	121.85	120.07	120.10	120.45	125.28	130.86	133.18	134.85
EOM	130.33	128.74	126.45	124.04	121.46	120.38	120.24	120.66	126.65	131.41	132.86	135.01
MEAN	131.41	129.61	127.79	124.94	122.59	120.69	120.18	120.28	124.16	129.36	132.67	133.96
WTR YR 1999	MEAN 126.50	HIGH 119.98	APR 26	LOW 135.13	SEP 27							

NJ-WRD WELL NO. 25-0639



## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0715. Site I.D., 402426074001901. Local I.D., AHWD B Obs. NJ Permit Number, 29-25384.

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 228.8 ft above sea level.

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

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

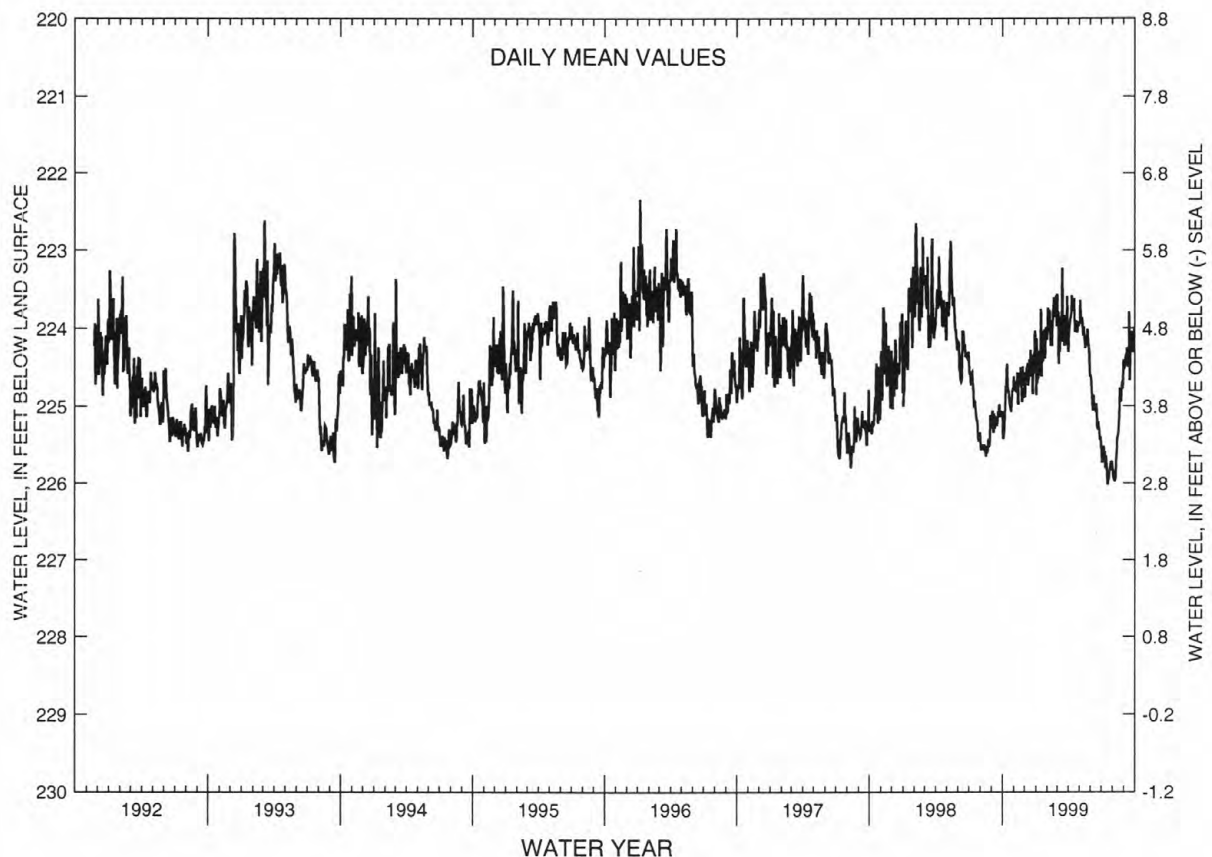
PERIOD OF RECORD.--Aug. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 221.79 ft below land surface, Mar. 14, 1993; lowest, 226.39 ft below land surface, July 18, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	225.36	224.73	224.68	224.71	224.00	224.46	223.95	223.85	224.88	225.57	225.90	224.38
10	224.74	224.73	224.56	224.42	224.14	223.94	223.58	224.00	224.86	225.59	225.83	224.25
15	224.66	224.60	224.54	223.75	224.08	223.23	223.74	224.12	225.06	225.71	225.39	224.41
20	224.95	224.50	224.57	224.43	223.62	224.23	223.98	224.14	225.31	225.93	225.03	224.28
25	225.07	224.87	224.56	224.33	223.64	224.06	224.06	224.12	225.30	225.80	224.93	224.30
EOM	224.81	224.57	224.57	224.08	223.73	224.26	223.95	224.61	225.54	225.75	224.42	223.99
MEAN	224.94	224.73	224.54	224.35	223.88	223.98	223.89	224.09	225.09	225.75	225.34	224.32
WTR YR 1999	MEAN 224.58 HIGH 223.23 MAR 15 LOW 226.02 JUL 18											

## NJ-WRD WELL NO. 25-0715



## GROUND-WATER LEVELS

## MONMOUTH COUNTY

NJ-WRD Well Number, 25-0771. Site I.D., 402350073583901. Local I.D., Sandy Hook 2 Obs. NJ Permit Number, 29-36217.

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, 4.4 ft above land surface

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

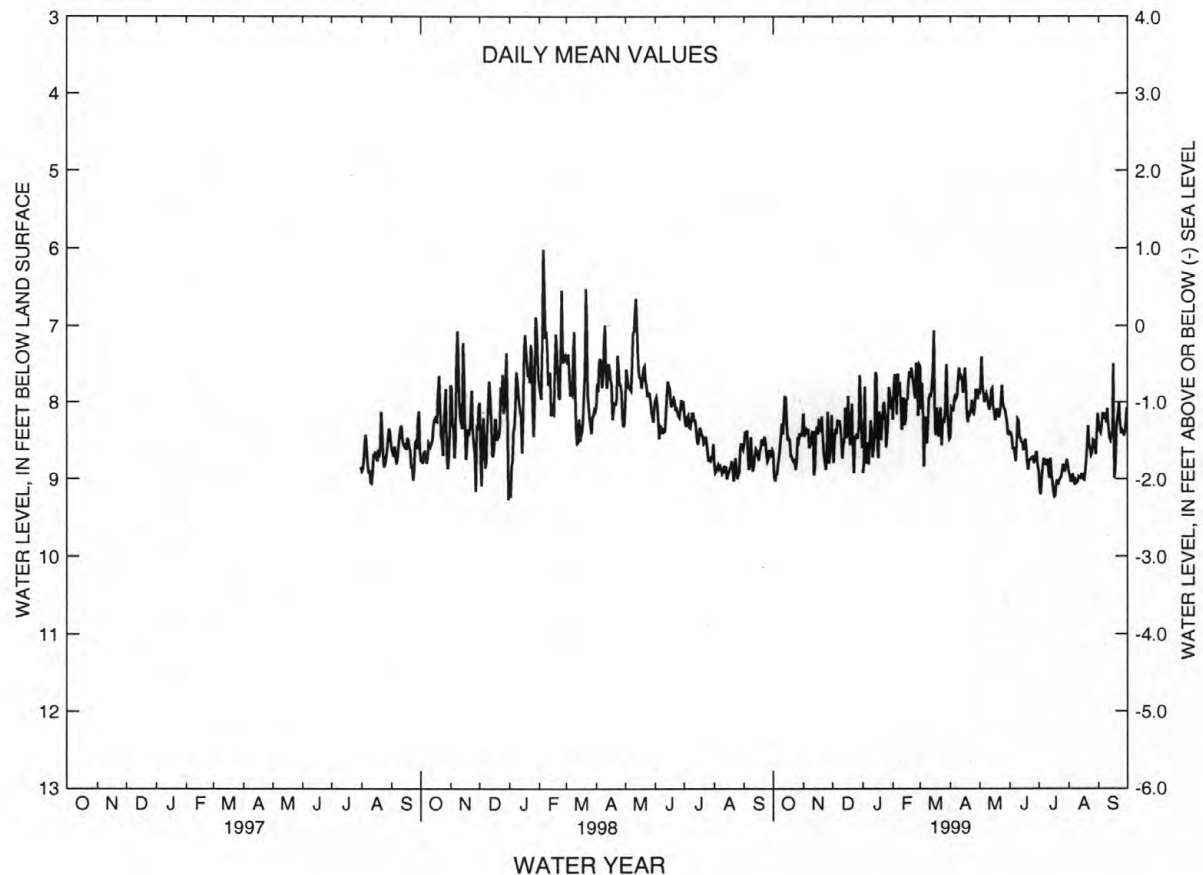
PERIOD OF RECORD.--July 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.63 ft below land surface, Feb. 24, 1998; lowest, 10.83 ft below land surface, Dec. 31, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.93	8.39	8.42	8.80	8.16	8.84	7.98	7.89	8.60	8.85	8.93	8.14
10	8.28	8.39	8.51	8.37	8.36	7.95	7.55	8.04	8.24	8.76	9.04	8.08
15	8.29	8.32	8.47	7.66	7.97	7.06	7.71	8.05	8.63	9.02	8.94	8.37
20	8.71	8.19	8.36	8.50	7.55	8.45	8.12	8.15	8.88	9.01	8.55	8.22
25	8.78	8.58	8.47	8.59	7.49	8.24	8.15	8.02	8.70	8.90	8.66	8.36
EOM	8.37	8.17	8.60	7.94	7.51	8.48	7.83	8.42	8.83	8.81	8.15	8.07
MEAN	8.57	8.47	8.39	8.33	7.87	8.12	7.94	8.02	8.61	8.94	8.80	8.31
WTR YR 1999	MEAN 8.37 HIGH 7.06 MAR 15 LOW 9.23 JUL 17											

NJ-WRD WELL NO. 25-0771



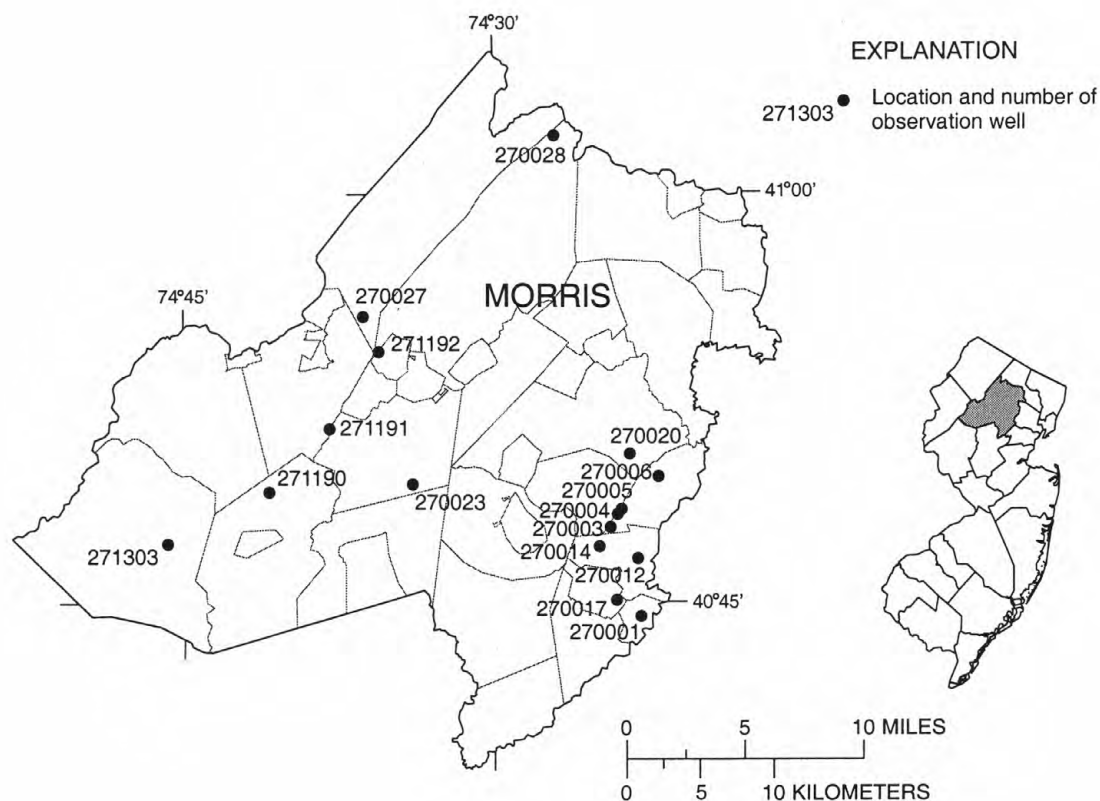


## MORRIS COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
270001	RECREATION FLD OBS	CHATHAM BORO	150	SFDF	MANUAL
270003	W B DRIVER 2 OBS	EAST HANOVER TWP	108	SFDF	MANUAL
270004	CLEMENS OBS	EAST HANOVER TWP	110	SFDF	MANUAL
270005	SANDOZ OBS	EAST HANOVER TWP	123	SFDF	MANUAL
270006	GREEN ACRES OBS	EAST HANOVER TWP	104	SFDF	MANUAL
270012	BRIARWOOD SCHOOL OBS	FLORHAM PARK BORO	110	SFDF	DAILY
270014	EXXON OBS	FLORHAM PARK BORO	120	SFDF	MANUAL
270017	MBWD 4 OBS	MADISON BORO	100	SFDF	MANUAL
270020	TROY MEADOWS 1 OBS	PARSIP-TROY HILLS TWP	89	SFDF	MAXMIN
270023	MT FREEDOM 2 OBS	RANDOLPH TWP	218	PCMB	MANUAL
270027	BERKSHIRE VALLEY 9 OBS	JEFFERSON TWP	98	SFDF	DAILY
270028	GREEN POND 5 OBS	ROCKAWAY TWP	120	SFDF	DAILY
271190	BLACK RIVER 10 OBS	CHESTER TWP	200	PCMB	DAILY
271191	ROXBURY 1 OBS	ROXBURY TWP	154	SFDF	DAILY
271192	MORRIS MAINT YD 22 OBS	WHARTON BORO	100	SFDF	DAILY
271303	DREW UNIVERSITY FARM OBS	WASHINGTON TWP	118	LSVL	DAILY

## Aquifer names

- LSVL - Leithsville Formation
- PCMB - Precambrian Erathem
- SFDF - Stratified drift



## GROUND-WATER LEVELS

## MORRIS COUNTY

NJ-WRD Well Number, 27-0001. Site I.D., 404432074225301. Local I.D., Recreation Fld Obs. NJ Permit Number, 25-14164.

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.

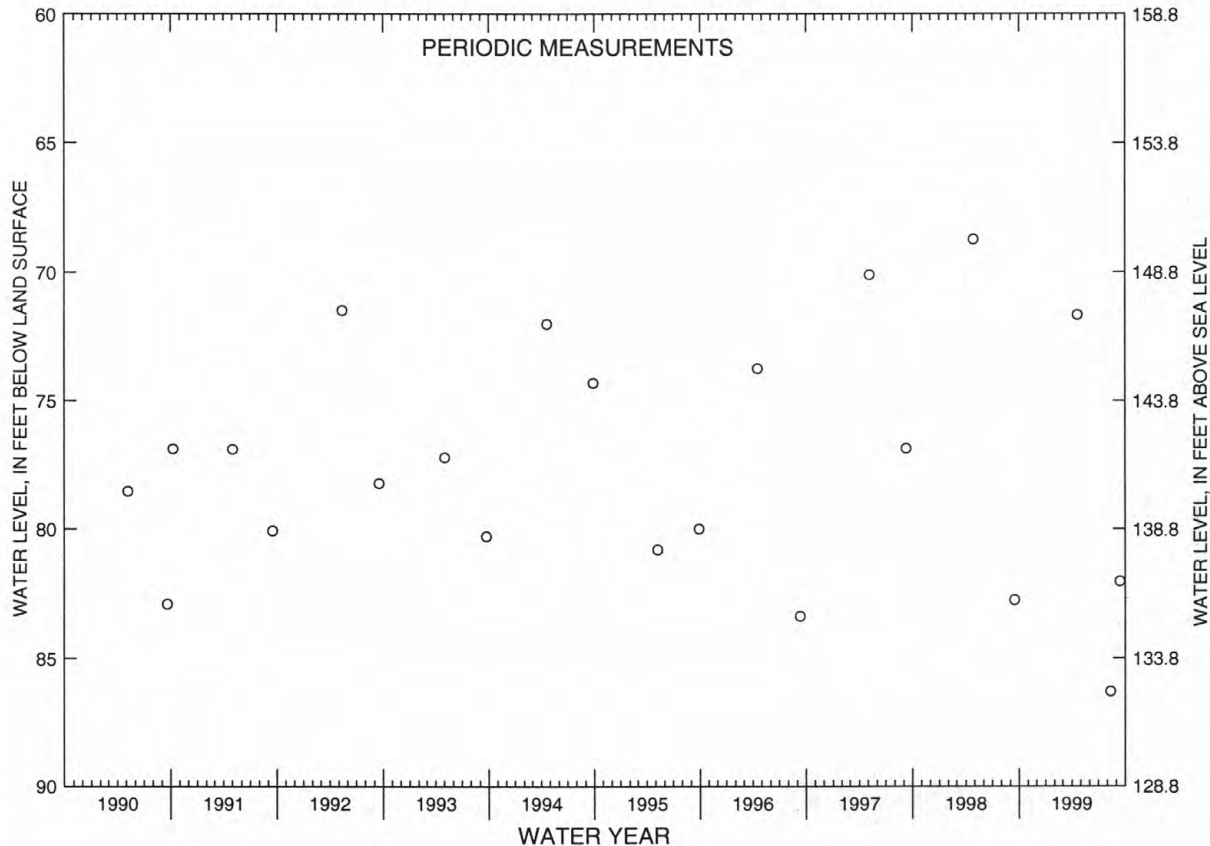
PERIOD OF RECORD.--Mar. 1967 to current year. Records for 1967 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 21	71.66	AUG 13	86.30	SEP 14	82.03

NJ-WRD WELL NO. 27-0001



## GROUND-WATER LEVELS

171

## MORRIS COUNTY

NJ-WRD Well Number, 27-0003. Site I.D., 404748074241901. Local I.D., W B Driver 2 Obs. NJ Permit Number, 25-13653.

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.

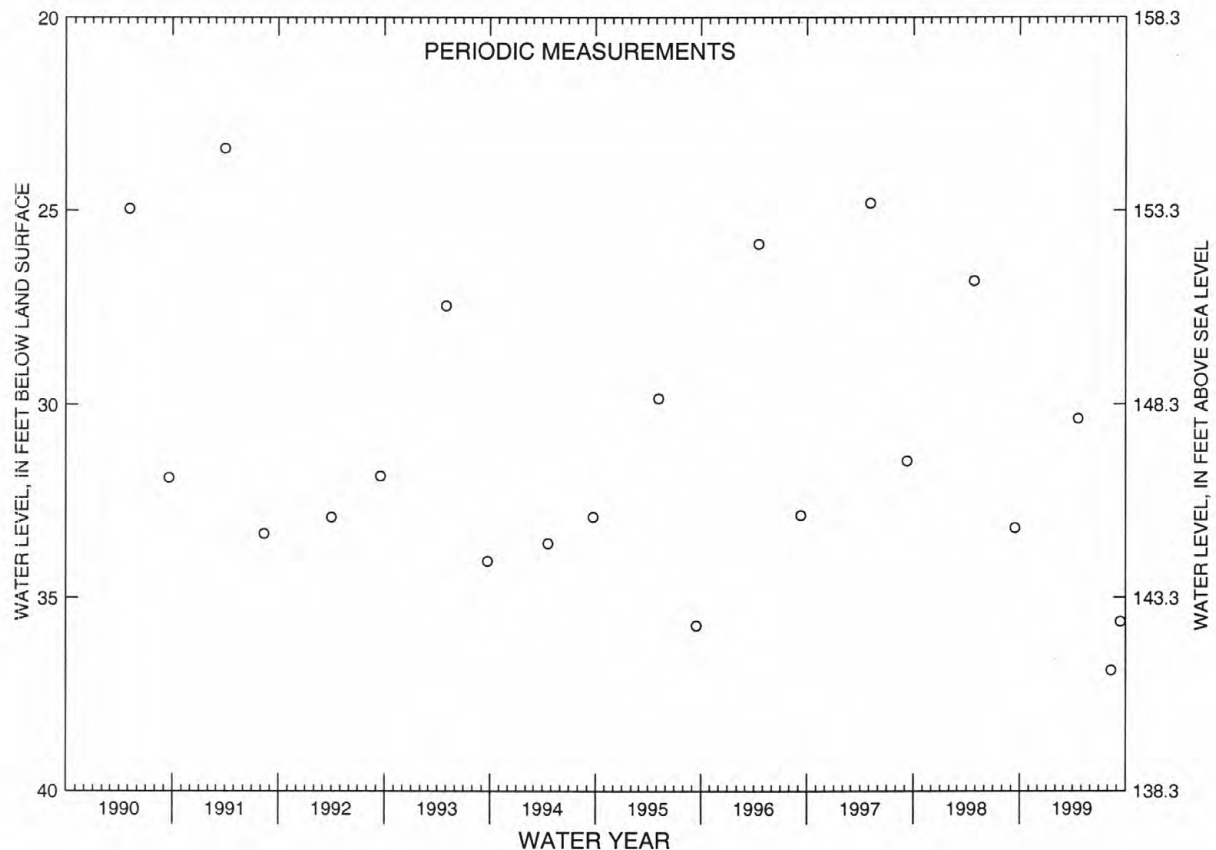
PERIOD OF RECORD.--Mar. 1966 to current year. Records for 1966 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.56 ft below land surface, Apr. 10, 1967; lowest, 36.88 ft below land surface, Aug. 13, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 21	30.37	AUG 13	36.88	SEP 14	35.62

## NJ-WRD WELL NO. 27-0003



## GROUND-WATER LEVELS

## MORRIS COUNTY

NJ-WRD Well Number, 27-0004. Site I.D., 404816074235901. Local I.D., Clemens Obs.

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.

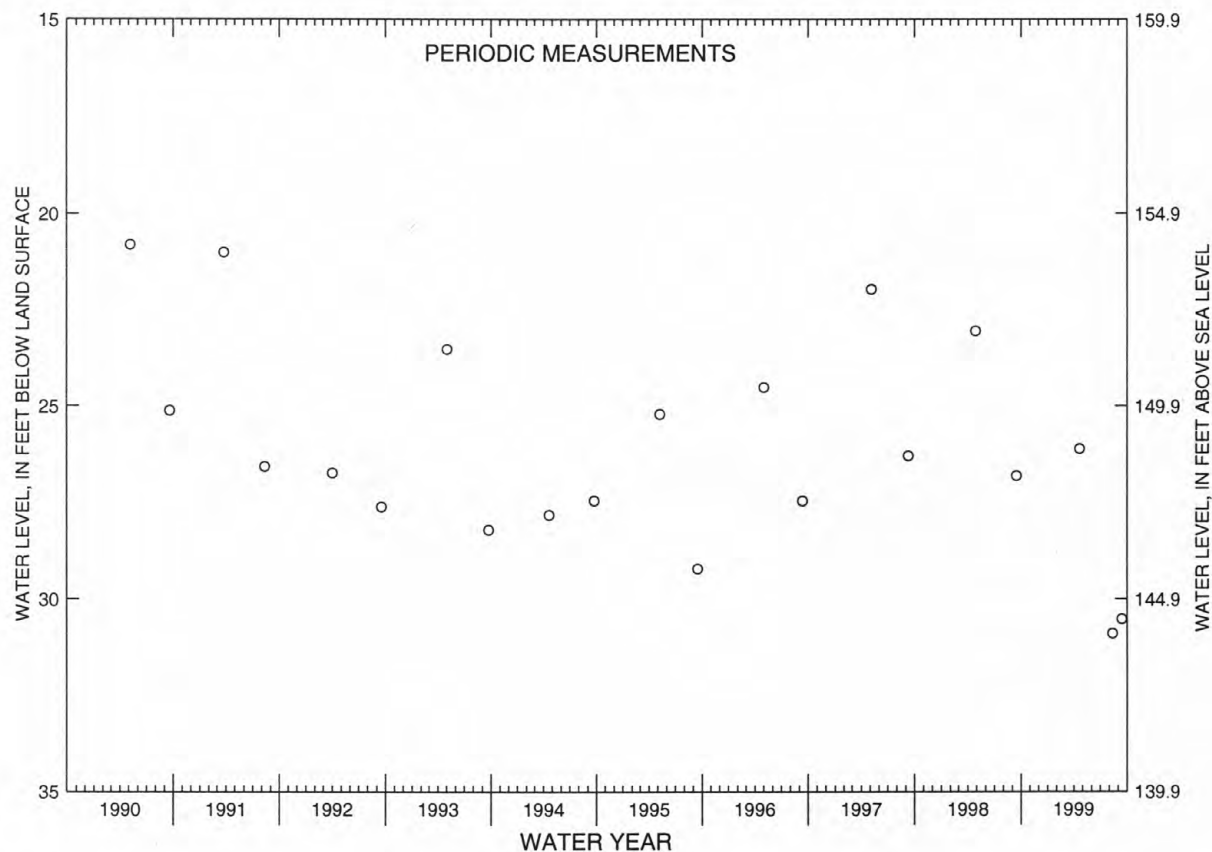
PERIOD OF RECORD.--May 1966 to Sept. 1984, Apr. 1987 to current year. Records for 1966 to 1984 and 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.33 ft below land surface, May 7, 1967; lowest, 30.89 ft below land surface, Aug. 13, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 21	26.12	AUG 13	30.89	SEP 14	30.51

NJ-WRD WELL NO. 27-0004



## GROUND-WATER LEVELS

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## MORRIS COUNTY

NJ-WRD Well Number, 27-0005. Site I.D., 404826074234701. Local I.D., Sandoz Obs.

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.

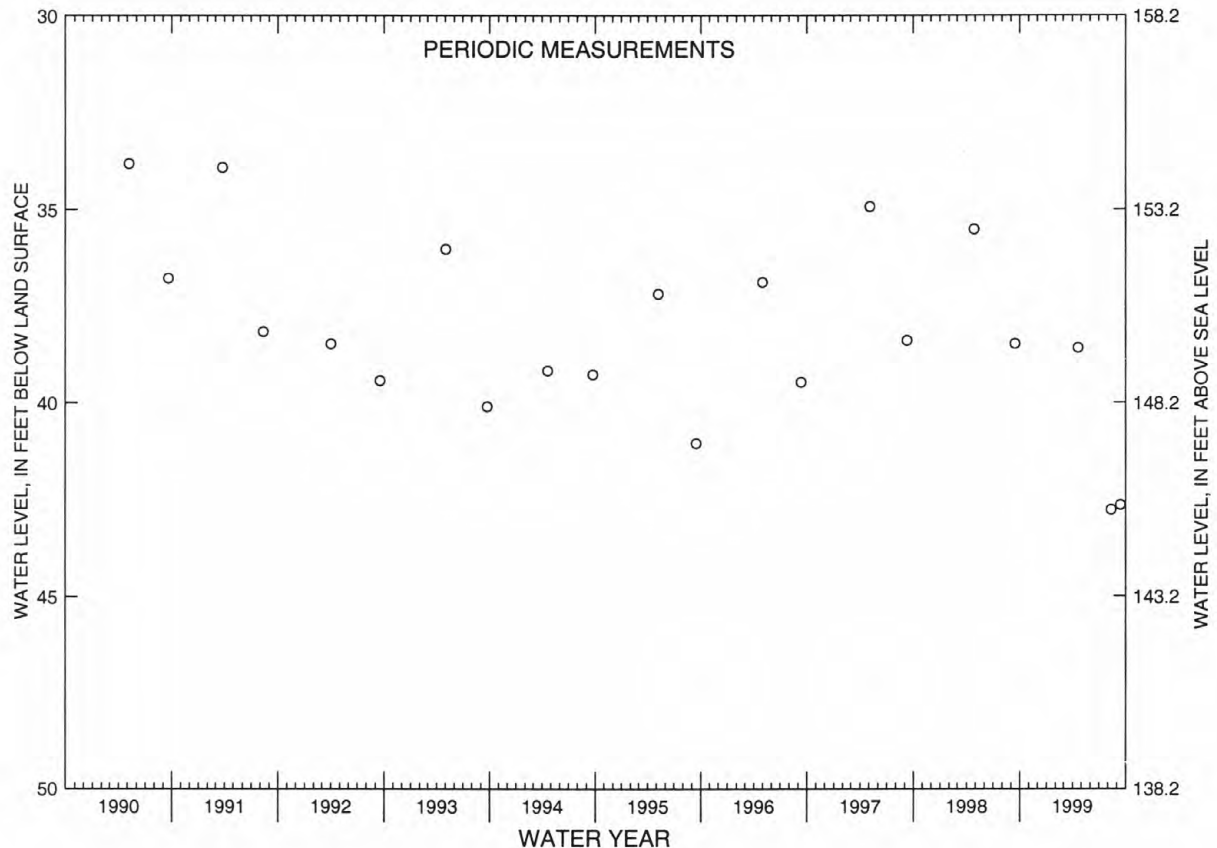
PERIOD OF RECORD.--Feb. 1966 to current year. Records for 1966 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.17 ft below land surface, Jan. 15, 1968; lowest, 42.78 ft below land surface, Aug. 13, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 21	38.57	AUG 13	42.78	SEP 14	42.65

## NJ-WRD WELL NO. 27-0005



## GROUND-WATER LEVELS

## MORRIS COUNTY

NJ-WRD Well Number, 27-0006. Site I.D., 404937074220001. Local I.D., Green Acres Obs.

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.

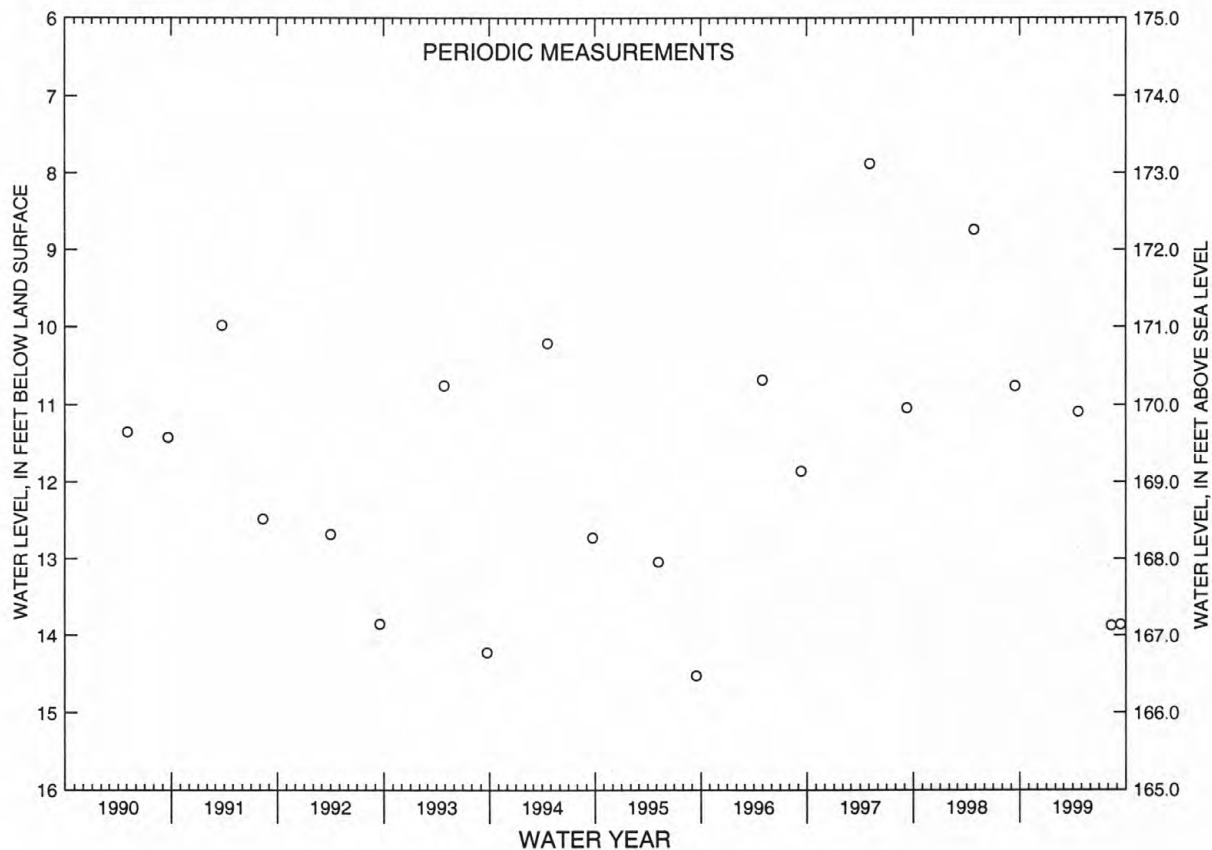
PERIOD OF RECORD.--Mar. 1967 to current year.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 21	11.09	AUG 13	13.87	SEP 14	13.86

## NJ-WRD WELL NO. 27-0006





## GROUND-WATER LEVELS

175

## MORRIS COUNTY

NJ-WRD Well Number, 27-0012. Site I.D., 404639074230001. Local I.D., Briarwood School Obs. NJ Permit Number, 25-14149.

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.

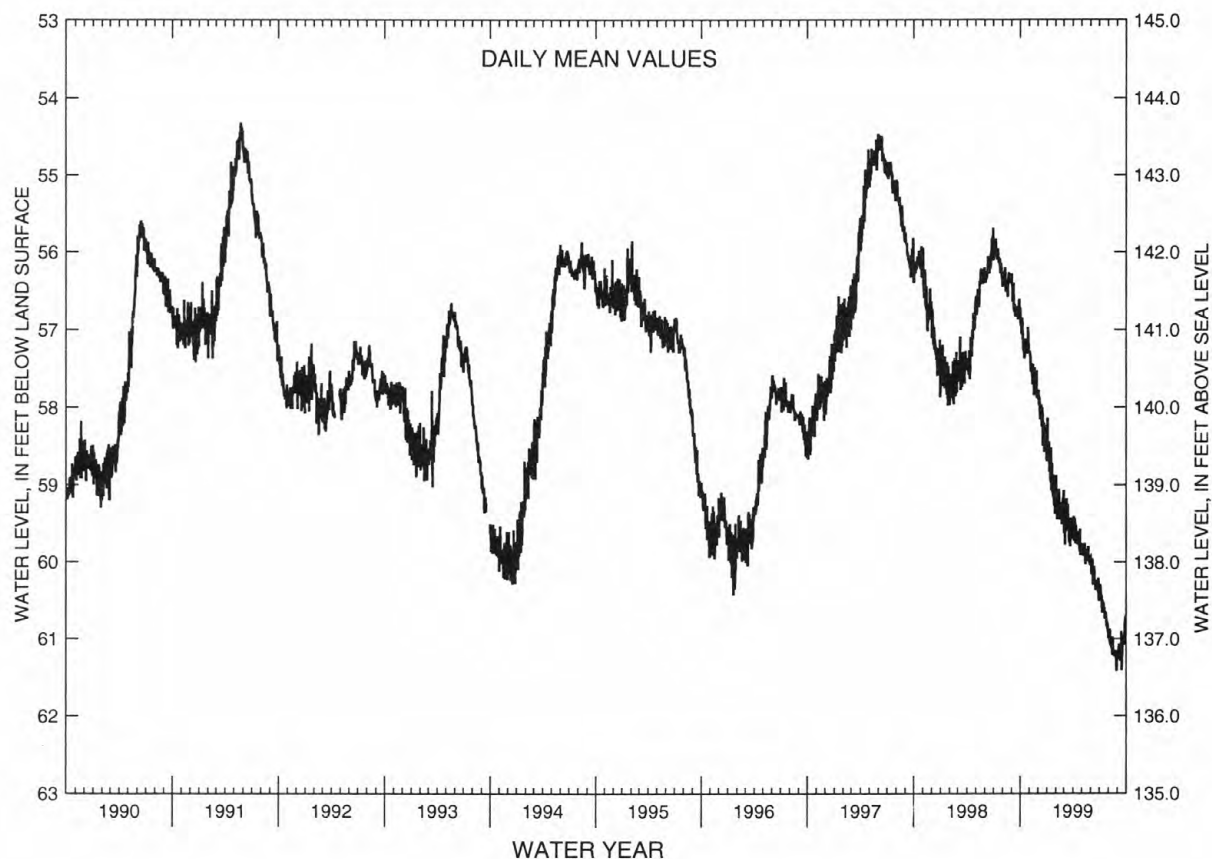
PERIOD OF RECORD.--Mar. 1967 to current year. Records for 1967 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.17 ft below land surface, June 3, 1968; lowest, 61.51 ft below land surface, Sept. 17, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	56.92	57.34	57.98	58.70	59.45	59.78	59.73	59.87	60.16	60.32	60.87	61.17
10	57.06	57.53	58.06	58.82	59.37	59.18	59.76	59.90	60.30	60.46	61.08	61.08
15	57.37	57.53	58.17	58.52	59.33	59.25	59.66	59.97	60.24	60.53	61.21	61.23
20	57.21	57.49	58.36	59.10	59.34	59.66	59.71	59.95	60.29	60.72	61.19	61.04
25	57.21	57.82	58.46	59.23	59.18	59.65	59.76	59.99	60.32	60.73	61.20	61.00
EOM	57.27	57.81	58.68	59.38	59.07	59.52	59.87	59.95	60.51	60.91	61.32	60.72
MEAN	57.13	57.59	58.19	58.89	59.28	59.48	59.67	59.89	60.20	60.59	61.11	61.10
WTR YR 1999	MEAN 59.43 HIGH 56.73 OCT 1 LOW 61.42 AUG 30											

## NJ-WRD WELL NO. 27-0012



## GROUND-WATER LEVELS

## MORRIS COUNTY

NJ-WRD Well Number, 27-0014. Site I.D., 404703074245201. Local I.D., Exxon Obs. NJ Permit Number, 25-14150

LOCATION.--Lat 40°47'05", long 74°24'52", Hydrologic Unit 02030103, near the Exxon wastewater treatment plant, Elm St., 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.

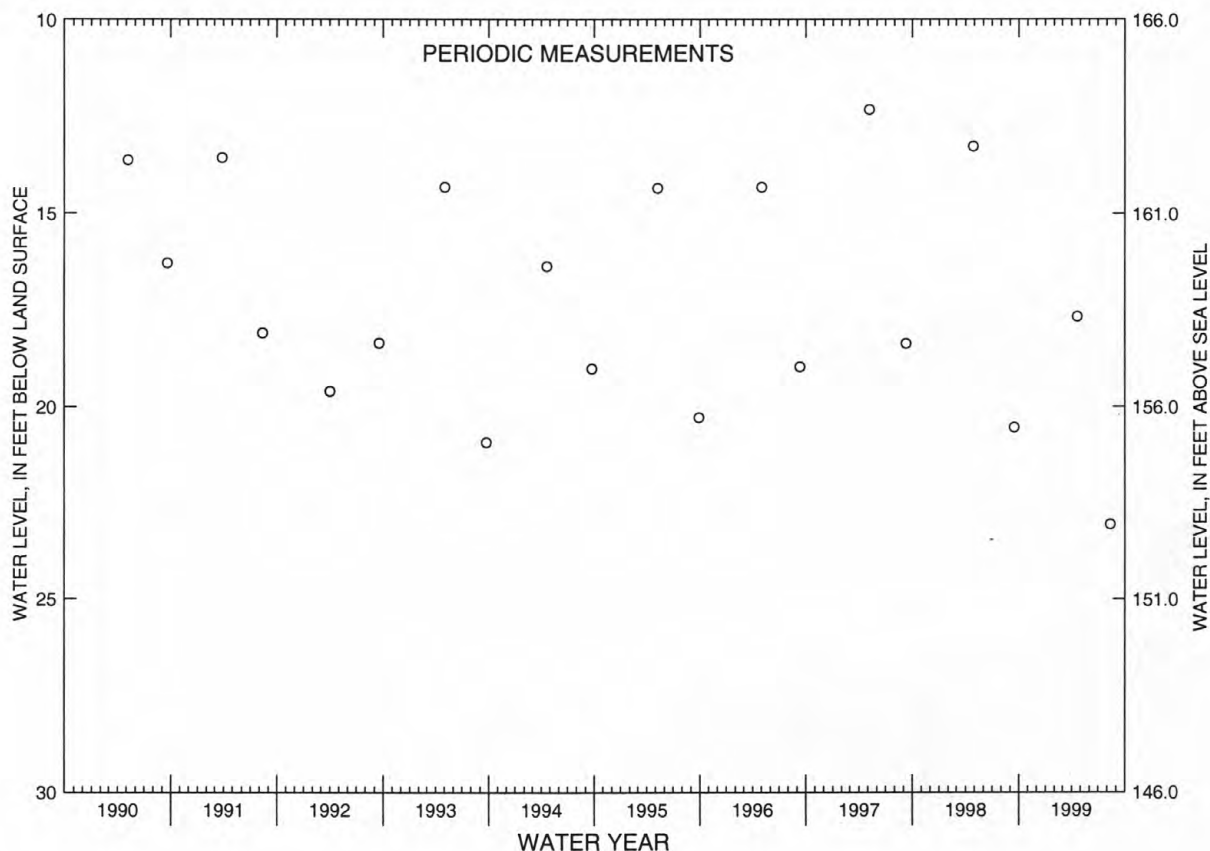
PERIOD OF RECORD.--May 1967 to current year. Records for 1967 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.15 ft above land surface, May 8, 1967; lowest, 23.05 ft below land surface, Aug. 13, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
APR 21	17.68	AUG 13	23.05

## NJ-WRD WELL NO. 27-0014



## GROUND-WATER LEVELS

177

## MORRIS COUNTY

NJ-WRD Well Number, 27-0017. Site I.D., 404510074240201. Local I.D., MBWD 4 Obs.

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.

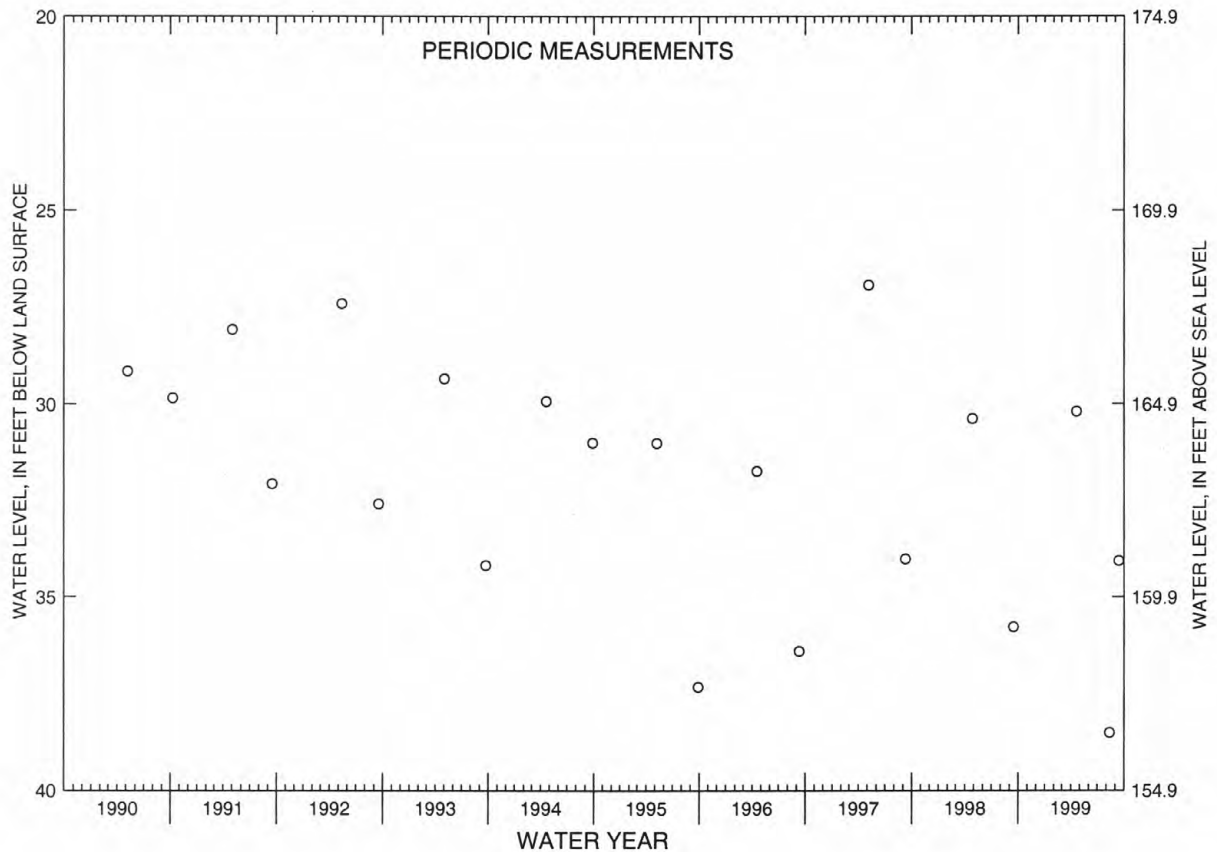
PERIOD OF RECORD.--Apr. 1955 to current year. Records for 1955 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.50 ft below land surface, Apr. 30, 1955; lowest, 38.53 ft below land surface, Aug. 13, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 21	30.19	AUG 13	38.53	SEP 14	34.06

## NJ-WRD WELL NO. 27-0017



## GROUND-WATER LEVELS

## MORRIS COUNTY

NJ-WRD Well Number, 27-0020. Site I.D., 405027074232301. Local I.D., Troy Meadows 1 Obs.

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.

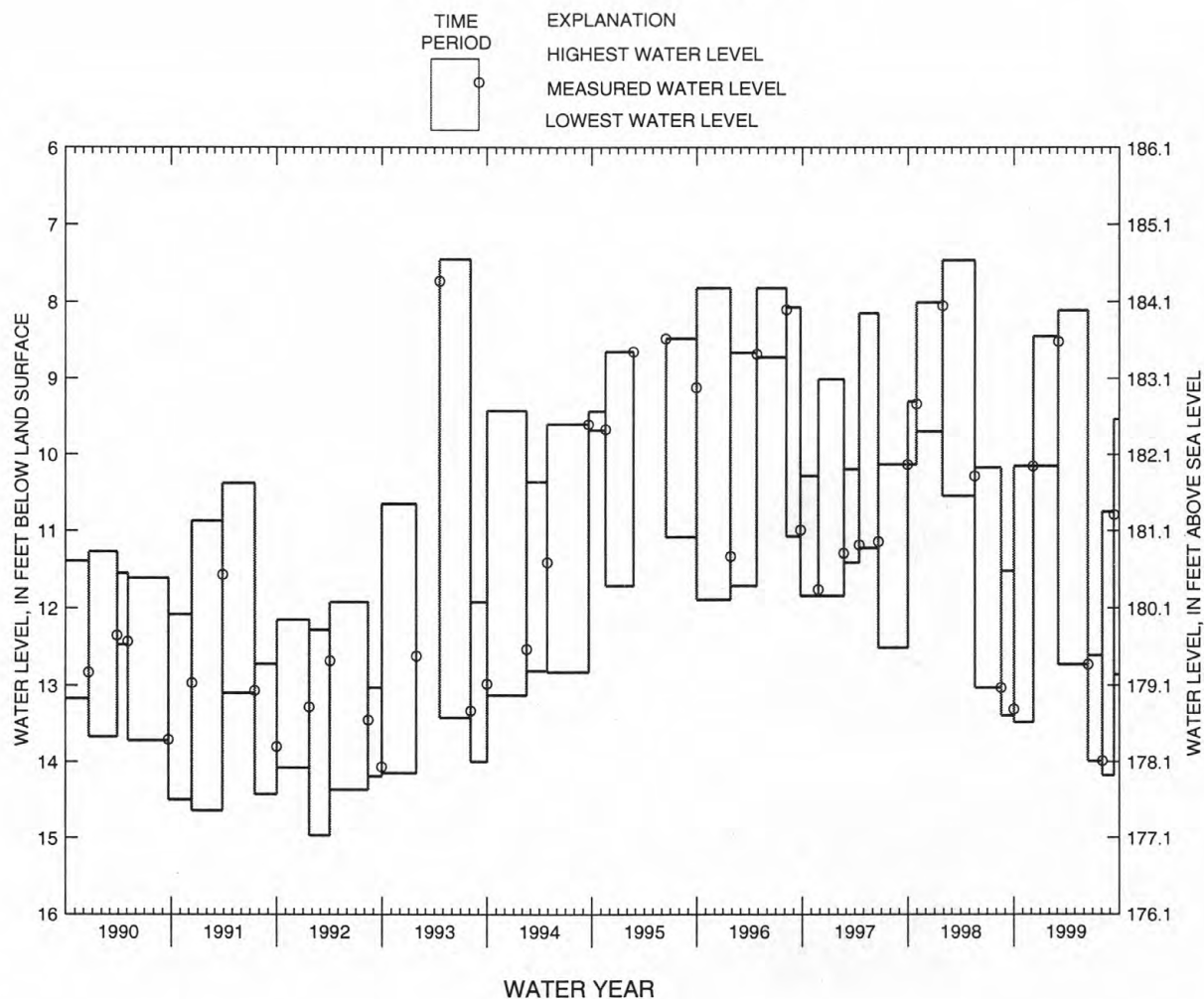
PERIOD OF RECORD.--Dec. 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD		HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
OCT.	1, 1998 TO DEC. 7, 1998	10.15	13.48	DEC. 7, 1998	10.15
DEC.	7, 1998 TO MAR. 4, 1999	8.45	10.15	MAR. 4, 1999	8.52
MAR.	4, 1999 TO JUNE 15, 1999	8.11	12.73	JUNE 15, 1999	12.73
JUNE	15, 1999 TO AUG. 4, 1999	12.61	13.99	AUG. 4, 1999	13.99
AUG.	4, 1999 TO SEPT. 14, 1999	10.75	14.18	SEPT. 14, 1999	10.79

## NJ-WRD WELL NO. 27-0020



## GROUND-WATER LEVELS

179

## MORRIS COUNTY

NJ-WRD Well Number, 27-0023. Site I.D., 404921074335601. Local I.D., Mt Freedom 2 Obs.

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.

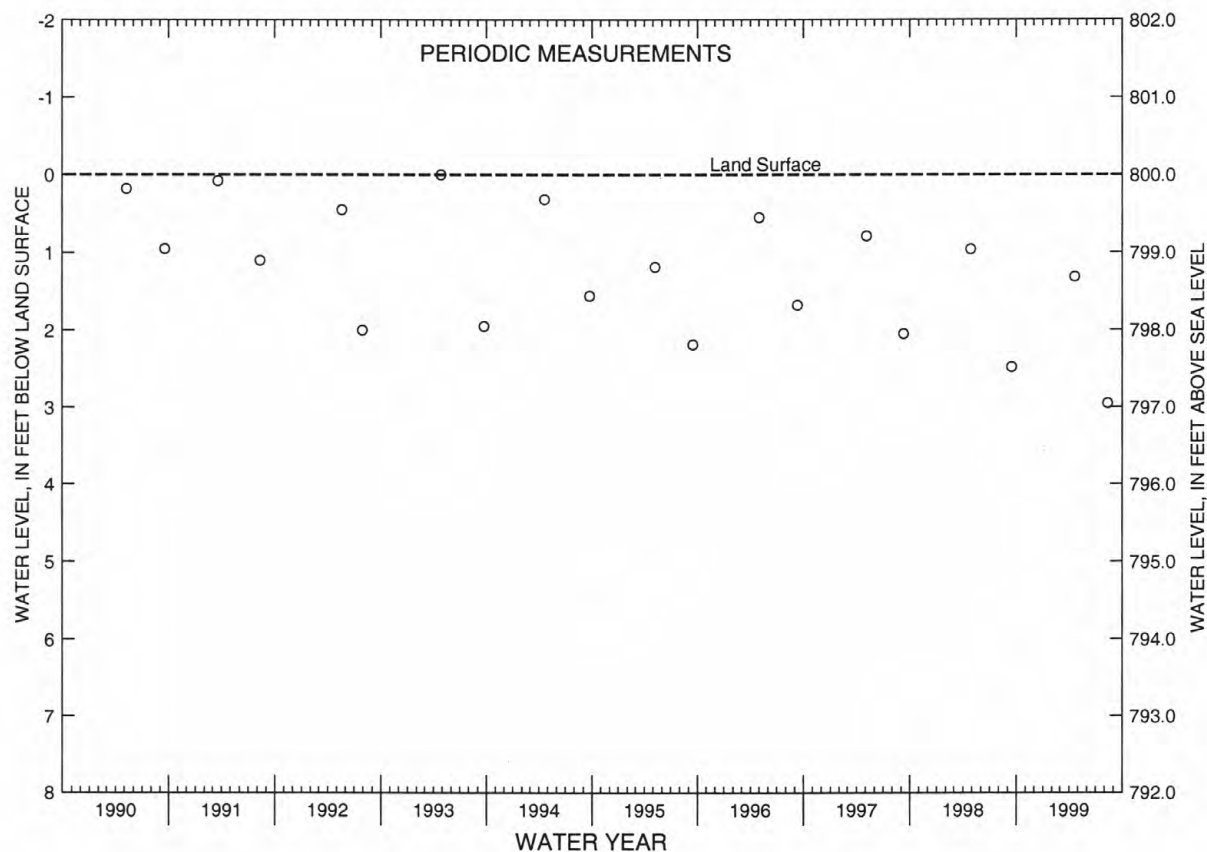
PERIOD OF RECORD.--Jan. 1964 to current year. Records for 1964 to 1975 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
APR 21	1.32	AUG 13	2.95

## NJ-WRD WELL NO. 27-0023



## GROUND-WATER LEVELS

## MORRIS COUNTY

NJ-WRD Well Number, 27-0027. Site I.D., 405531074361901. Local I.D., Berkshire Valley 9 Obs.

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-DEP.

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.

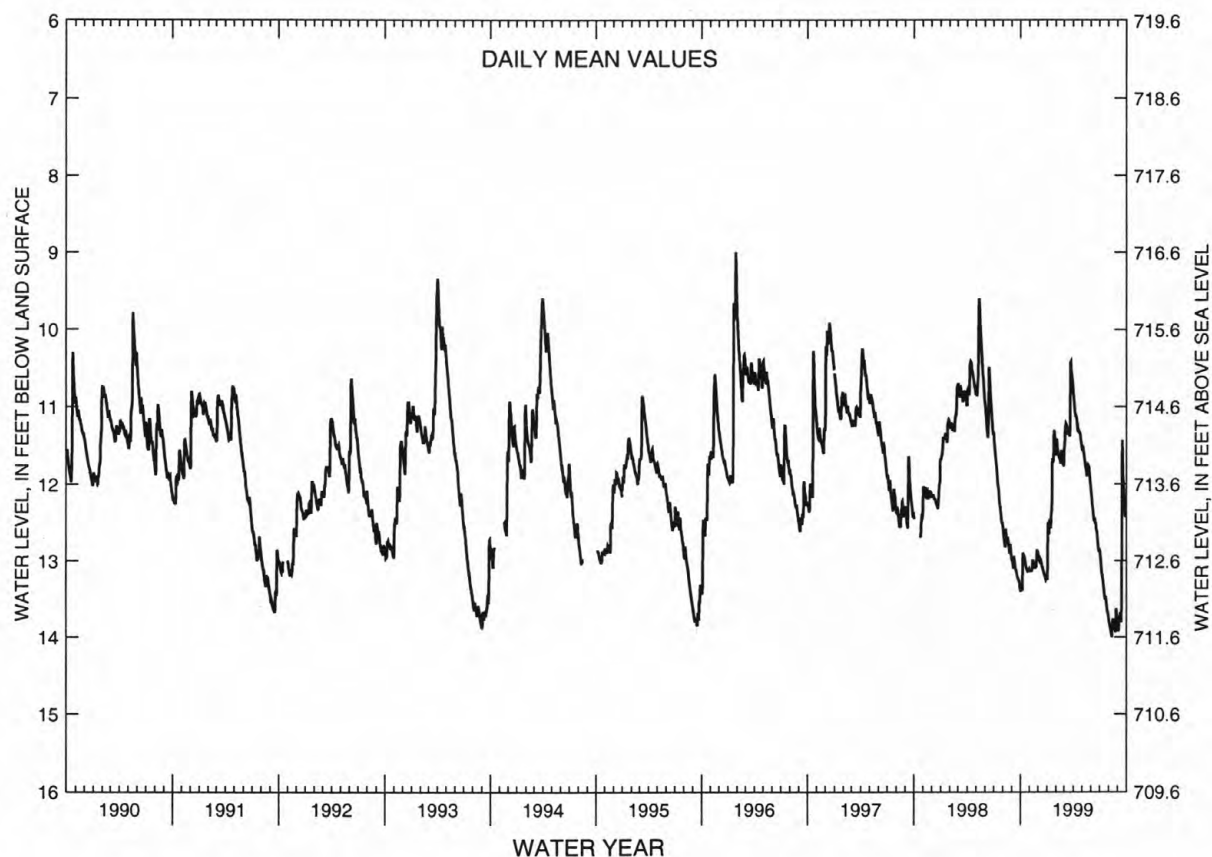
PERIOD OF RECORD.--Nov. 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.93 ft below land surface, Jan. 28, 1996; lowest, 14.01 ft below land surface, Aug. 13, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.37	13.13	13.00	12.50	11.48	11.26	10.98	11.53	12.21	12.97	13.84	13.93
10	12.90	13.14	12.98	12.46	11.64	11.25	11.12	11.67	12.40	13.19	13.94	13.70
15	12.95	13.02	13.08	12.50	11.69	11.34	11.24	11.81	12.46	13.34	13.79	13.81
20	13.07	13.09	13.14	11.67	11.58	11.37	11.33	11.74	12.59	13.51	13.90	11.80
25	13.11	13.09	13.21	11.33	11.73	10.49	11.35	11.77	12.74	13.57	13.94	12.21
EOM	13.11	12.88	13.19	11.58	11.73	10.73	11.50	12.01	12.85	13.71	13.77	12.33
MEAN	13.12	13.05	13.09	12.16	11.63	11.10	11.21	11.74	12.49	13.33	13.84	12.96
WTR YR 1999	MEAN 12.49 HIGH 10.42 MAR 24 LOW 14.00 AUG 13											

NJ-WRD WELL NO. 27-0027





## GROUND-WATER LEVELS

181

## MORRIS COUNTY

NJ-WRD Well Number, 27-0028. Site I.D., 410207074270001. Local I.D., Green Pond 5 Obs.

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-DEP.

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.

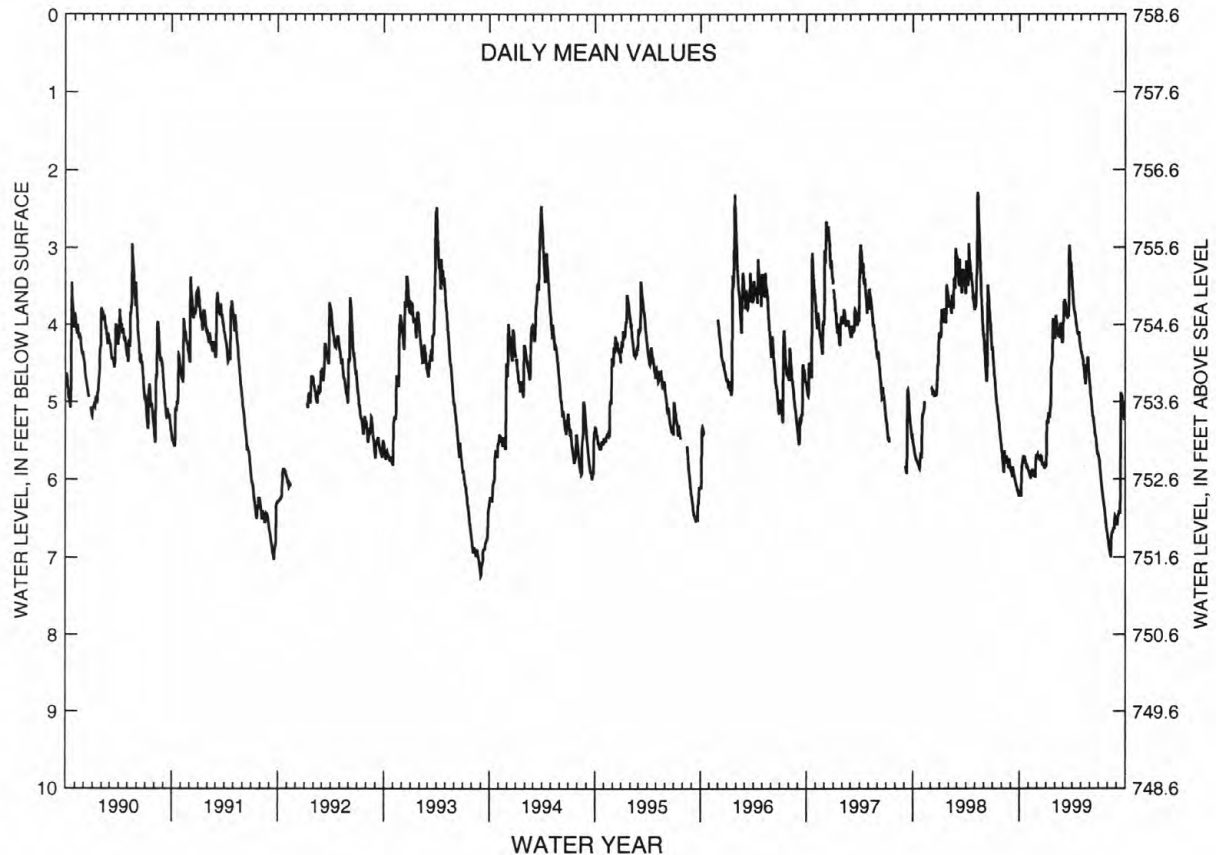
PERIOD OF RECORD.--Nov. 1981 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.18	5.93	5.71	5.25	3.94	3.73	3.68	4.37	4.93	5.75	6.81	6.59
10	5.84	5.99	5.71	5.14	4.09	3.73	3.83	4.48	5.12	5.97	6.94	6.42
15	5.70	5.88	5.76	5.12	4.13	3.87	3.98	4.68	5.24	6.16	6.74	6.43
20	5.73	5.92	5.81	4.51	3.99	3.89	4.10	4.52	5.43	6.31	6.68	4.96
25	5.82	5.98	5.84	3.92	4.19	3.13	4.11	4.43	5.55	6.48	6.64	5.09
EOM	5.87	5.69	5.79	4.16	4.19	3.38	4.28	4.70	5.66	6.67	6.51	5.15
MEAN	5.89	5.90	5.76	4.82	4.08	3.61	3.93	4.53	5.26	6.17	6.72	5.79
WTR YR 1999	MEAN 5.22 HIGH 2.97 MAR 23 LOW 7.00 AUG 13											

## NJ-WRD WELL NO. 27-0028



## GROUND-WATER LEVELS

## MORRIS COUNTY

NJ-WRD Well Number, 27-1190. Site I.D., 404934074400501. Local I.D., Black River 10 Obs. NJ Permit Number, 25-33678-9.

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.

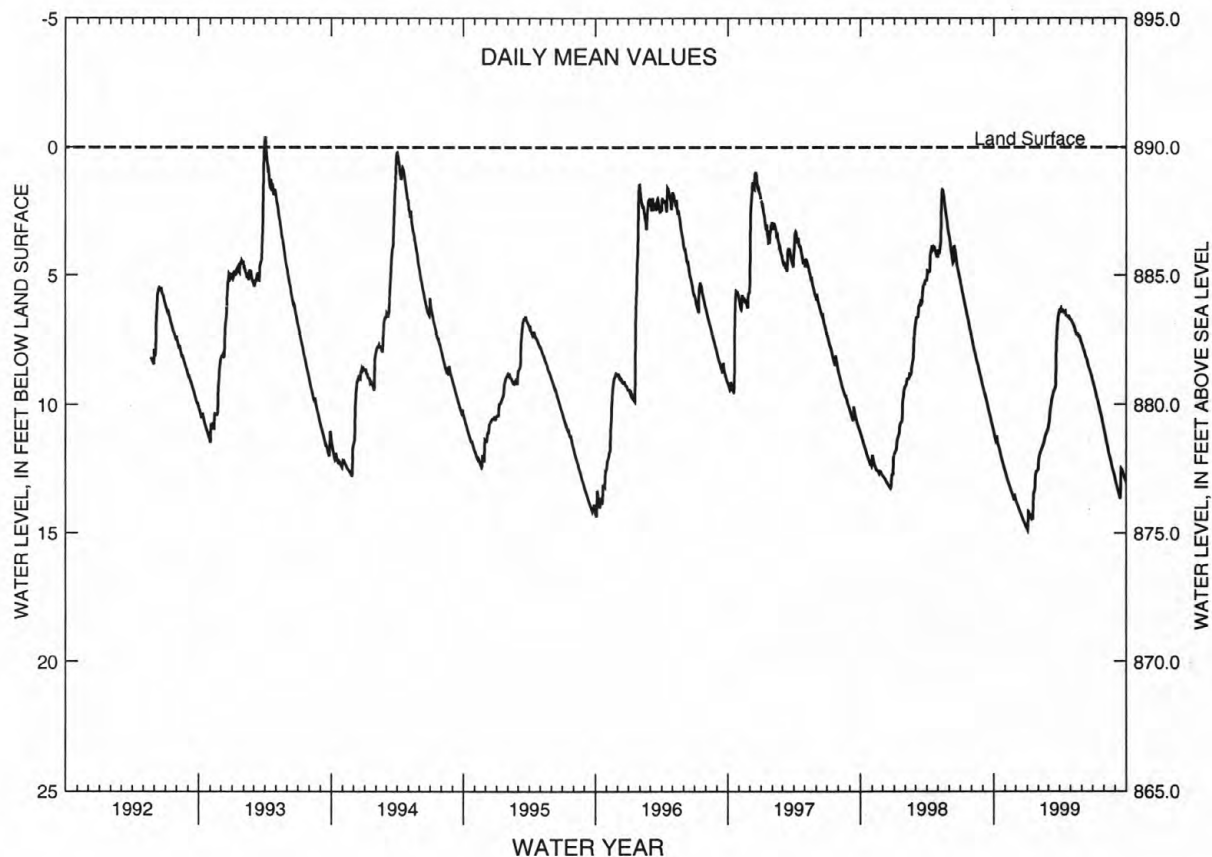
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.46 ft above land surface, Apr. 2, 1993; lowest, 14.93 ft below land surface, Jan. 3, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.30	12.77	13.88	14.17	11.94	10.35	6.39	6.80	7.86	9.27	11.20	13.12
10	11.30	13.01	14.08	14.29	11.74	9.80	6.43	6.97	8.07	9.56	11.56	13.38
15	11.64	13.22	14.26	14.46	11.53	9.50	6.42	7.21	8.26	9.84	11.90	13.66
20	11.93	13.43	14.44	13.39	11.21	9.33	6.58	7.24	8.55	10.16	12.19	12.53
25	12.21	13.64	14.62	12.67	11.03	7.11	6.61	7.35	8.74	10.46	12.50	12.74
EOM	12.52	13.68	14.82	12.54	10.92	6.39	6.72	7.62	9.03	10.86	12.81	12.85
MEAN	11.75	13.20	14.29	13.77	11.55	8.95	6.48	7.16	8.32	9.93	11.92	13.01
WTR YR 1999	MEAN 10.86 HIGH 6.30 APR 4 LOW 14.88 JAN 2											

## NJ-WRD WELL NO. 27-1190



## MORRIS COUNTY

NJ-WRD Well Number, 27-1191. Site I.D., 405123074375701. Local I.D., Roxbury 1 Obs. NJ Permit Number, 25-33680-1.

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 and by the stage of the Lamington River.

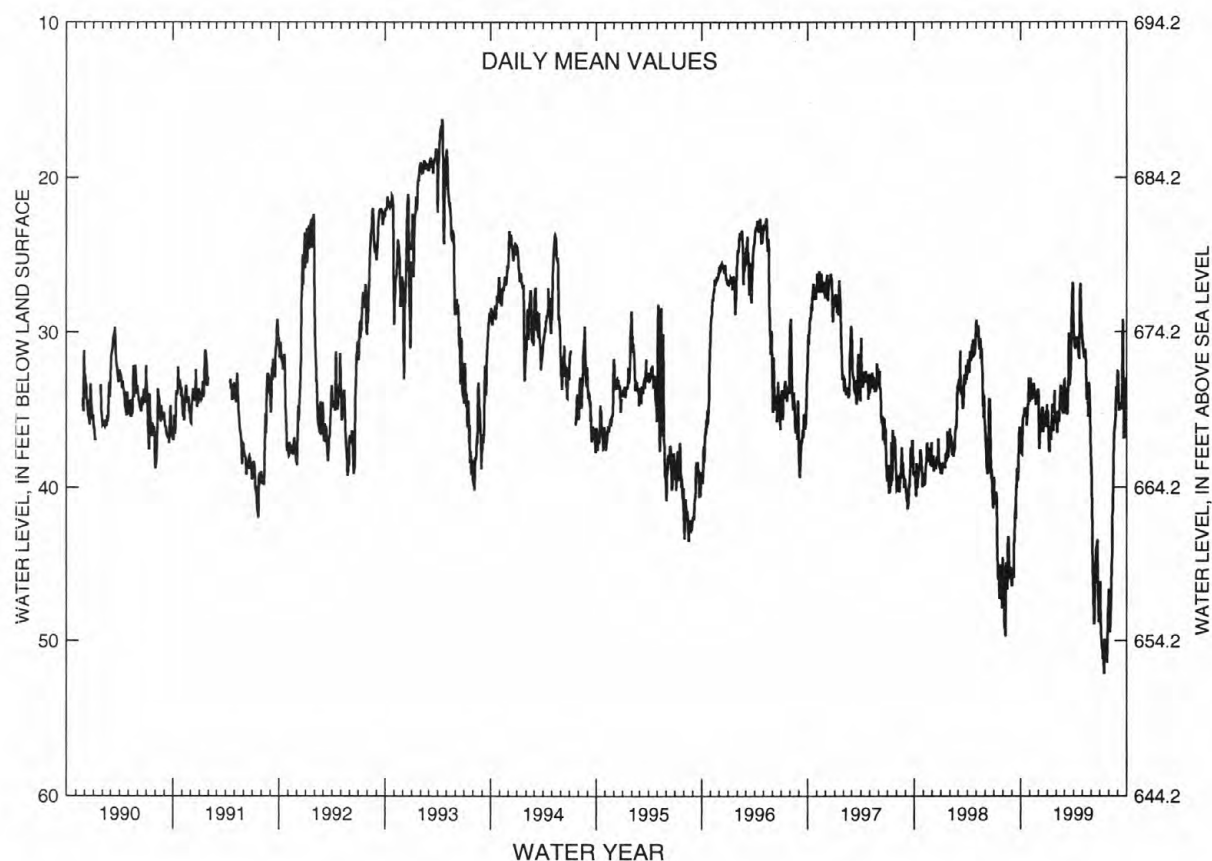
PERIOD OF RECORD.--Nov. 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.14 ft below land surface, Apr. 17, 1993; lowest, 52.32 ft below land surface, July 16, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	37.82	33.68	37.05	36.61	35.98	35.05	30.90	31.06	41.88	48.90	49.48	34.50
10	35.44	34.30	35.88	36.25	35.61	35.32	30.48	31.55	47.84	50.60	46.79	34.58
15	34.90	33.32	34.81	36.40	33.63	31.31	30.87	32.76	46.08	51.57	41.54	34.88
20	34.93	34.08	35.95	35.57	34.27	32.99	31.66	34.20	44.35	51.13	36.51	29.54
25	34.90	34.51	35.72	34.67	34.46	29.42	26.87	33.26	46.19	51.03	35.44	35.54
EOM	34.17	33.69	34.69	35.21	33.14	28.68	29.65	37.42	47.52	47.67	33.17	33.00
MEAN	35.51	33.96	35.71	35.80	34.78	32.15	30.11	33.03	45.11	49.88	41.07	33.97
WTR YR 1999	MEAN 36.79	HIGH 26.81	MAR 29	LOW 52.16	JUL 16							

## NJ-WRD WELL NO. 27-1191



## GROUND-WATER LEVELS

## MORRIS COUNTY

NJ-WRD Well Number, 27-1192. Site I.D., 405414074354201. Local I.D., Morris Maint Yd 22 Obs. NJ Permit Number, 25-34668-7.

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 and by the stage of the Rockaway River.

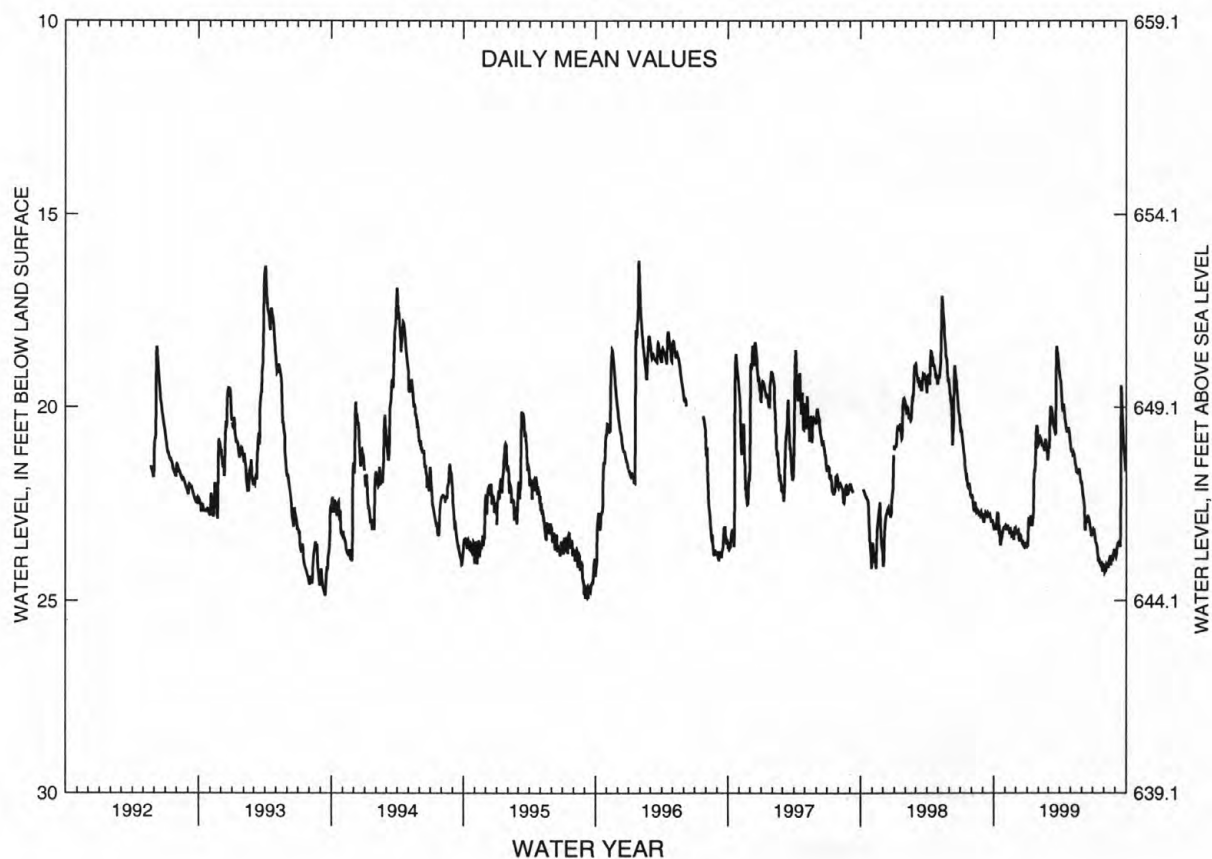
PERIOD OF RECORD.--Apr. 1991 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.11	23.13	23.21	22.86	20.80	20.46	19.49	21.15	22.37	23.21	24.24	23.72
10	22.79	23.17	23.48	22.81	20.90	20.05	20.06	21.22	23.20	23.52	24.08	23.48
15	23.30	23.18	23.43	23.03	21.00	20.49	20.30	21.50	22.96	23.82	23.96	23.61
20	23.53	23.28	23.44	21.67	20.88	20.69	20.61	21.61	22.94	24.03	24.09	19.96
25	23.24	23.43	23.59	20.74	21.09	18.54	20.53	21.64	23.16	23.99	23.98	21.07
EOM	23.09	23.21	23.60	20.84	21.29	19.15	20.92	21.92	23.26	24.12	23.76	21.59
MEAN	23.15	23.20	23.43	22.21	20.98	19.94	20.19	21.49	22.86	23.75	24.01	22.22
WTR YR 1999 MEAN 22.30 HIGH 18.41 MAR 24 LOW 24.27 AUG 3												

## NJ-WRD WELL NO. 27-1192



## GROUND-WATER LEVELS

185

## MORRIS COUNTY

NJ-WRD Well Number, 27-1303. Site I.D., 404712074454701. Local I.D., Drew University Farm Obs. NJ Permit Number, 25-35149.

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.

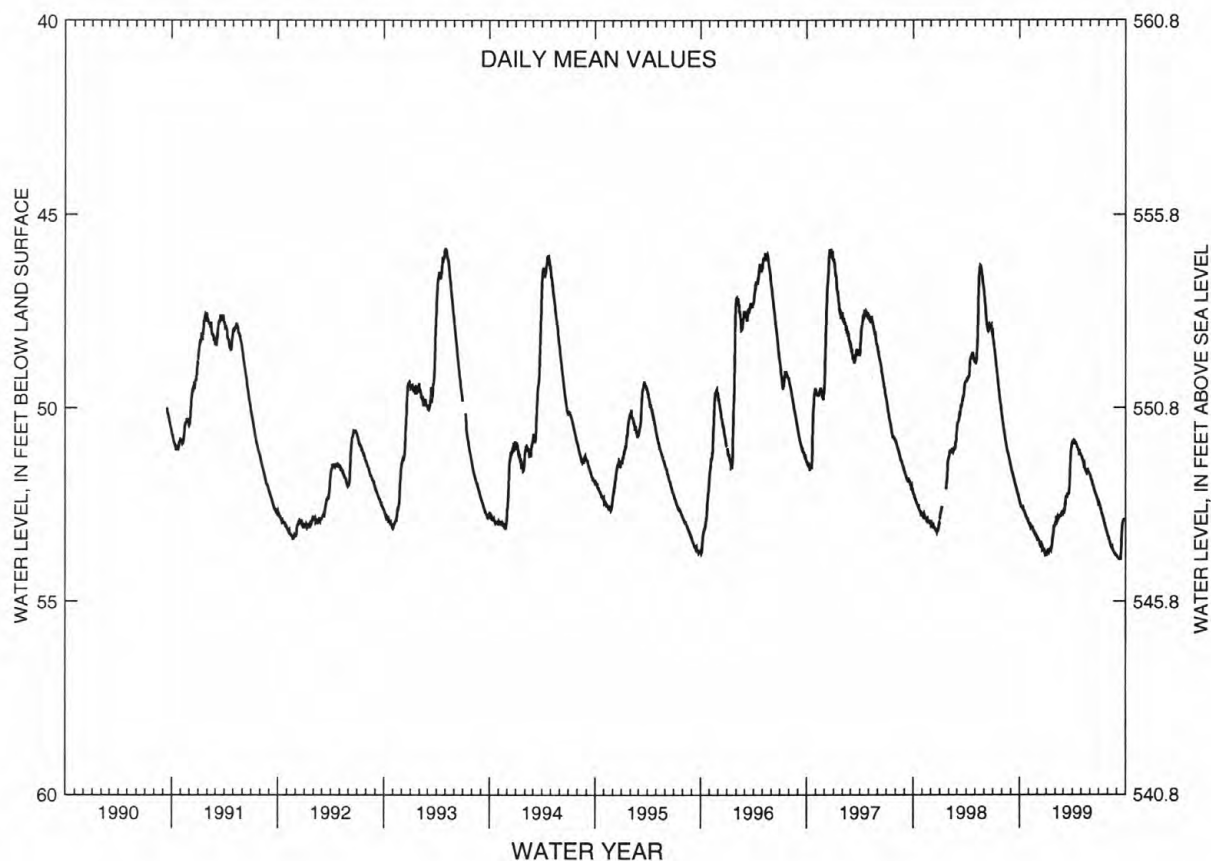
PERIOD OF RECORD.--Sept. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.83 ft below land surface, Dec. 19, 24, 1997; lowest, 53.93 ft below land surface, Sept. 11-12, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	52.51	53.01	53.40	53.73	52.92	52.66	50.93	51.31	51.85	52.51	53.36	53.86
10	52.56	53.09	53.48	53.69	52.84	52.29	50.94	51.44	51.98	52.65	53.50	53.89
15	52.65	53.11	53.54	53.61	52.80	52.20	50.93	51.58	52.09	52.79	53.62	53.91
20	52.72	53.17	53.64	53.56	52.74	52.20	51.03	51.67	52.21	52.95	53.68	53.11
25	52.82	53.29	53.71	53.26	52.65	51.45	51.11	51.65	52.31	53.08	53.75	52.90
EOM	52.94	53.32	53.78	53.03	52.63	50.93	51.22	51.71	52.45	53.26	53.81	52.88
MEAN	52.67	53.14	53.56	53.51	52.80	52.04	50.99	51.52	52.09	52.83	53.59	53.49
WTR YR 1999	MEAN 52.69 HIGH 50.84 APR 8 LOW 53.91 SEP 11											

## NJ-WRD WELL NO. 27-1303

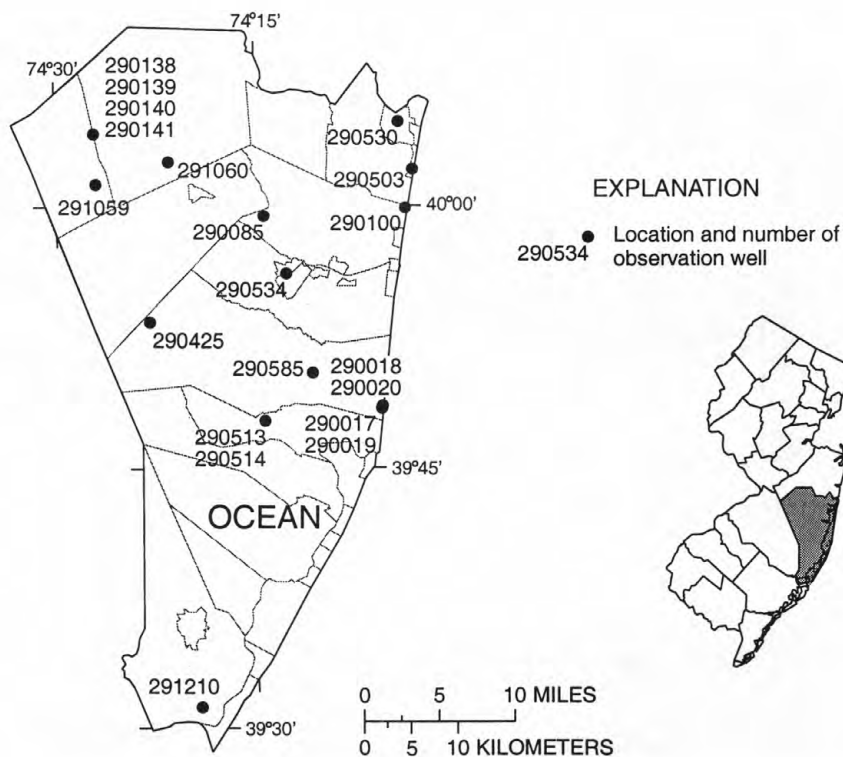


## OCEAN COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
290017	ISLAND BEACH 1 OBS	LACEY TWP	397	CKKD	MAXMIN
290018	ISLAND BEACH 2 OBS	LACEY TWP	474	PNPN	MANUAL
290019	ISLAND BEACH 3 OBS	LACEY TWP	2760	MRPA	MAXMIN
290020	ISLAND BEACH 4 OBS	LACEY TWP	12	CKKD	MANUAL
290085	TOMS RIVER 84 OBS	DOVER TWP	1480	MRPA	DAILY
290100	NORMANDY 3	DOVER TWP	1480	MRPAU	DAILY
290138	COLLIERS MILLS 1 OBS	JACKSON TWP	427	EGLS	DAILY
290139	COLLIERS MILLS 2 OBS	JACKSON TWP	171	VNCN	MAXMIN
290140	COLLIERS MILLS 3 OBS	JACKSON TWP	267	MLRW	MAXMIN
290141	COLLIERS MILLS 4 OBS	JACKSON TWP	71	CKKD	MAXMIN
290425	WEBBS MILLS 2 OBS	LACEY TWP	348	PNPN	MANUAL
290503	MANTOLOKING 6 OBS	MANTOLOKING BORO	906	EGLS	DAILY
290513	GARDEN ST PKY 1 OBS	OCEAN TWP	21	CKKD	MANUAL
290514	GARDEN ST PKY 2 OBS	OCEAN TWP	316	CKKD	MANUAL
290530	PPWD 6 OBS	PT PLEASANT BORO	790	EGLS	MANUAL
290534	TOMS RIVER 2 OBS	SOUTH TOMS RIVER BORO	1150	EGLS	DAILY
290585	DOE-FORKED RIVER OBS	LACEY TWP	422	PNPN	DAILY
291059	FORT DIX RLF-30 OBS	PLUMSTED TWP	75	CKKD	DAILY
291060	LNAS-EC OBS	JACKSON TWP	38	CKKD	DAILY
291210	GREAT BAY BLVD 1 OBS	LITTLE EGG HARBOR TWP	880	PNPN	DAILY

## Aquifer names

- CKKD - Kirkwood-Cohansey aquifer system
- EGLS - Englishtown aquifer system
- MLRW - Wenonah-Mount Laurel aquifer
- MRPA - Potomac-Raritan-Magothy aquifer
- MRPAU - Upper Potomac-Raritan-Magothy aquifer
- PNPN - Piney Point aquifer
- VNCN - Vincentown aquifer





## OCEAN COUNTY

NJ-WRD Well Number, 29-0017. Site I.D., 394829074053501. Local I.D., Island Beach 1 Obs.

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.

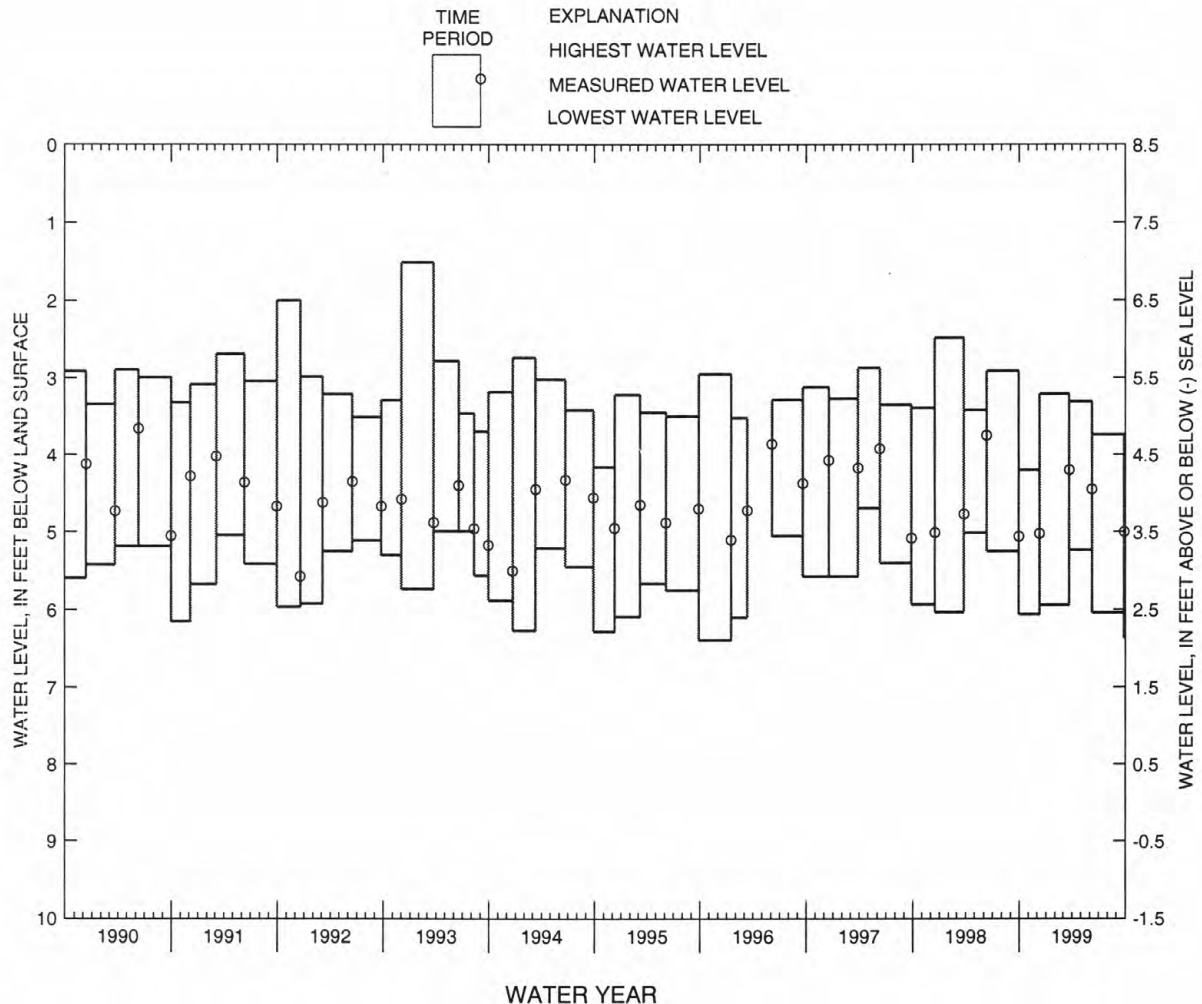
PERIOD OF RECORD.--July 1962 to current year. Records for 1962 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1998 TO DEC. 10, 1998	4.20	6.06	DEC. 10, 1998	5.02
DEC. 10, 1998 TO MAR. 22, 1999	3.21	5.94	MAR. 22, 1999	4.20
MAR. 22, 1999 TO JUNE 9, 1999	3.31	5.23	JUNE 9, 1999	4.45
JUNE 9, 1999 TO SEPT. 28, 1999	3.74	6.04	SEPT. 28, 1999	5.00

## NJ-WRD WELL NO. 29-0017



## GROUND-WATER LEVELS

## OCEAN COUNTY

NJ-WRD Well Number, 29-0018. Site I.D., 394829074053502. Local I.D., Island Beach 2 Obs.

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.

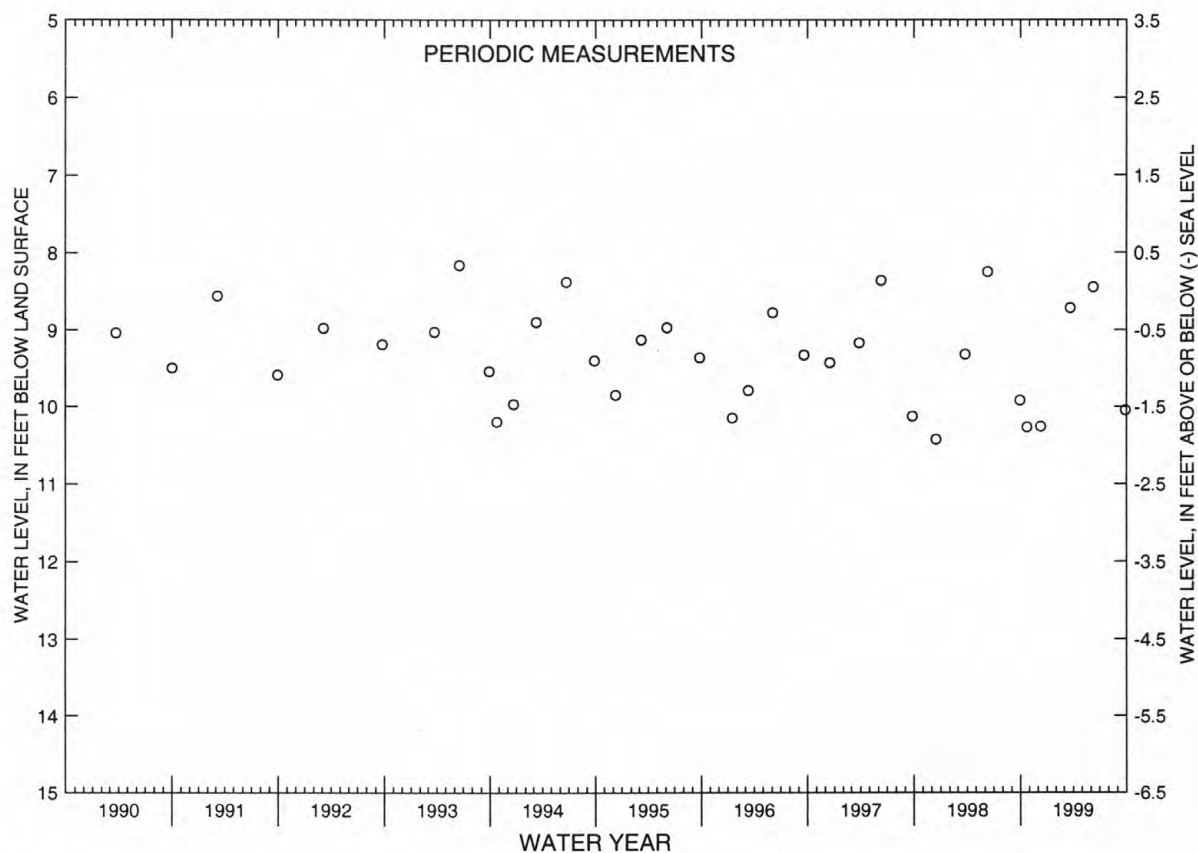
PERIOD OF RECORD.--July 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.93 ft below land surface, June 7, 1963; lowest, 10.43 ft below land surface, Dec. 16, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 23	10.27	MAR 22	8.73	SEP 28	10.05
DEC 10	10.26	JUN 9	8.45		

NJ-WRD WELL NO. 29-0018



## OCEAN COUNTY

NJ-WRD Well Number, 29-0019. Site I.D., 394829074053503. Local I.D., Island Beach 3 Obs.

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.

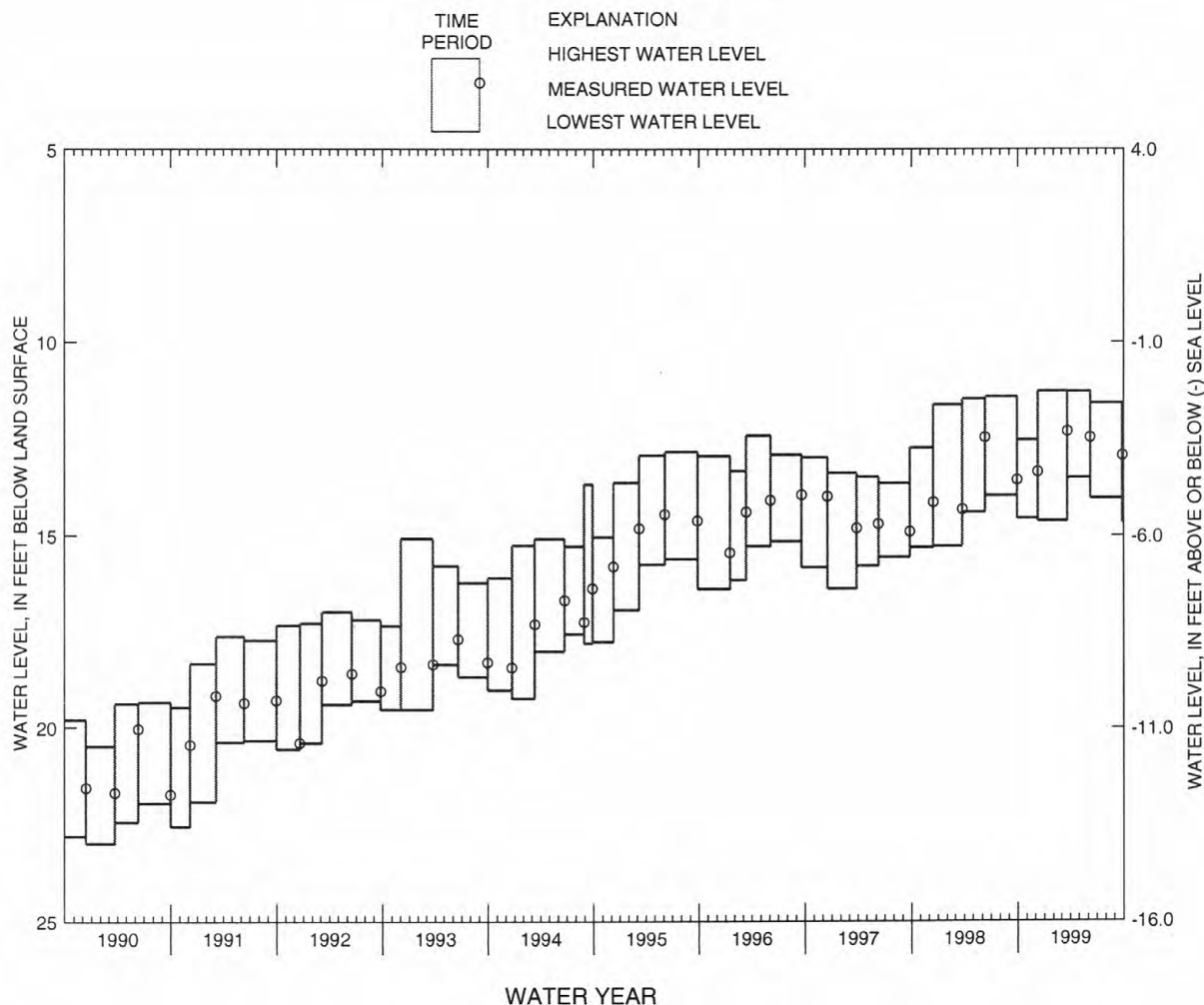
PERIOD OF RECORD.--Nov. 1968 to current year. Records for 1968 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1998 TO DEC. 10, 1998	12.53	14.55	DEC. 10, 1998	13.35
DEC. 10, 1998 TO MAR. 22, 1999	11.27	14.61	MAR. 22, 1999	12.31
MAR. 22, 1999 TO JUNE 9, 1999	11.28	13.50	JUNE 9, 1999	12.47
JUNE 9, 1999 TO SEPT. 28, 1999	11.58	14.03	SEPT. 28, 1999	12.93

NJ-WRD WELL NO. 29-0019



## GROUND-WATER LEVELS

## OCEAN COUNTY

NJ-WRD Well Number, 29-0020. Site I.D., 394829074053504. Local I.D., Island Beach 4 Obs.

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.

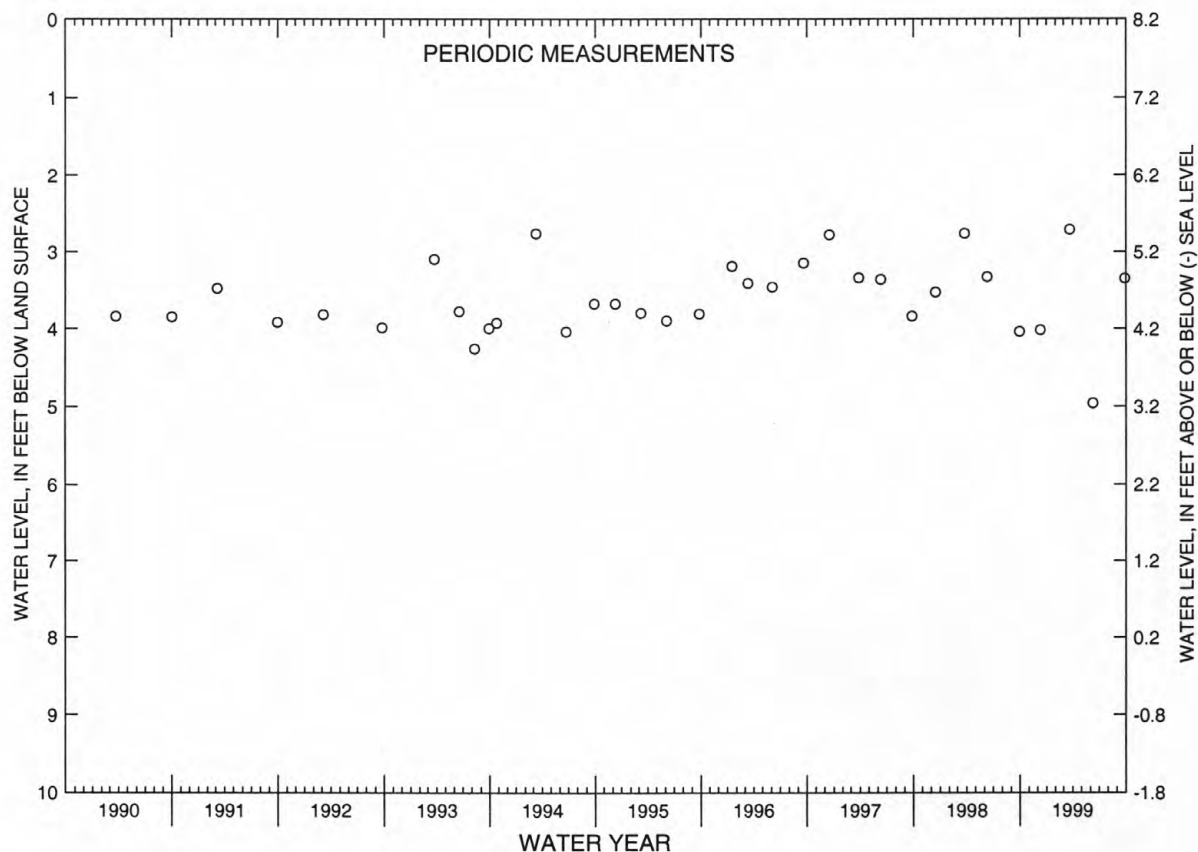
PERIOD OF RECORD.--May 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.42 ft below land surface, June 24, 1964; lowest, 4.96 ft below land surface, June 9, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
DEC 10	4.02	JUN 9	4.96
MAR 22	2.71	SEP 28	3.35

NJ-WRD WELL NO. 29-0020



## GROUND-WATER LEVELS

191

## OCEAN COUNTY

NJ-WRD Well Number, 29-0085. Site I.D., 395930074142101. Local I.D., Toms River 84 Obs.

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.

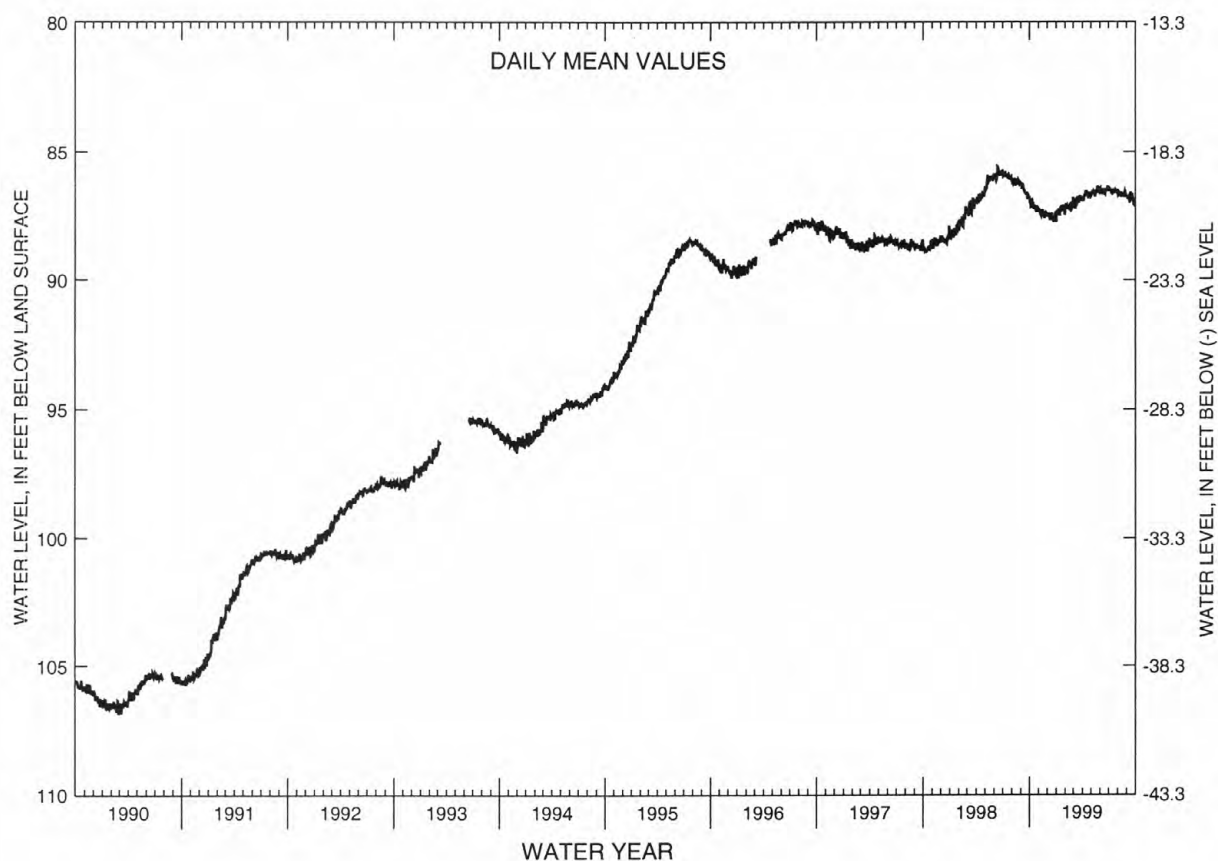
PERIOD OF RECORD.--July 1968 to current year. Records for 1968 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	87.02	87.28	87.51	87.43	87.19	87.18	86.91	86.60	86.63	86.47	86.61	86.80
10	86.90	87.48	87.63	87.33	87.17	86.96	86.70	86.58	86.63	86.46	86.67	86.74
15	87.10	87.25	87.61	87.18	87.24	86.75	86.61	86.71	86.48	86.60	86.63	86.93
20	87.12	87.36	87.68	87.20	87.03	87.00	86.68	86.55	86.67	86.57	86.70	86.81
25	87.25	87.54	87.69	87.17	87.13	86.85	86.73	86.37	86.46	86.47	86.74	86.89
EOM	87.20	87.50	87.55	87.46	86.89	86.91	86.78	86.55	86.47	86.56	86.75	86.87
MEAN	87.10	87.40	87.55	87.31	87.13	86.93	86.71	86.57	86.53	86.54	86.66	86.83
WTR YR 1999	MEAN 86.94 HIGH 86.34 MAY 24 LOW 87.75 DEC 23											

## NJ-WRD WELL NO. 29-0085



## GROUND-WATER LEVELS

## OCEAN COUNTY

NJ-WRD Well Number 29-0100. Site I.D., 395956074034402. Local I.D., Normandy 3 Obs. NJ Permit Number, 33-00360.

LOCATION.--Lat 39°59'56", long 74°03'44", Hydrologic Unit 02040301, near the intersection of Rt. 35 (north) and 2nd Ave., Dover Township.  
Owner: New Jersey - American Water Company.

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

WELL CHARACTERISTICS.-- Drilled artesian unused public-supply well, diameter 4 in., depth 1,479 ft, screened 1,428 to 1,479 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, June to Jan. 1999.

DATUM.-- Land surface is 8 ft above sea level, from topographic map.  
Measuring point: Top of shelter shelf, 3.30 ft above land surface.

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

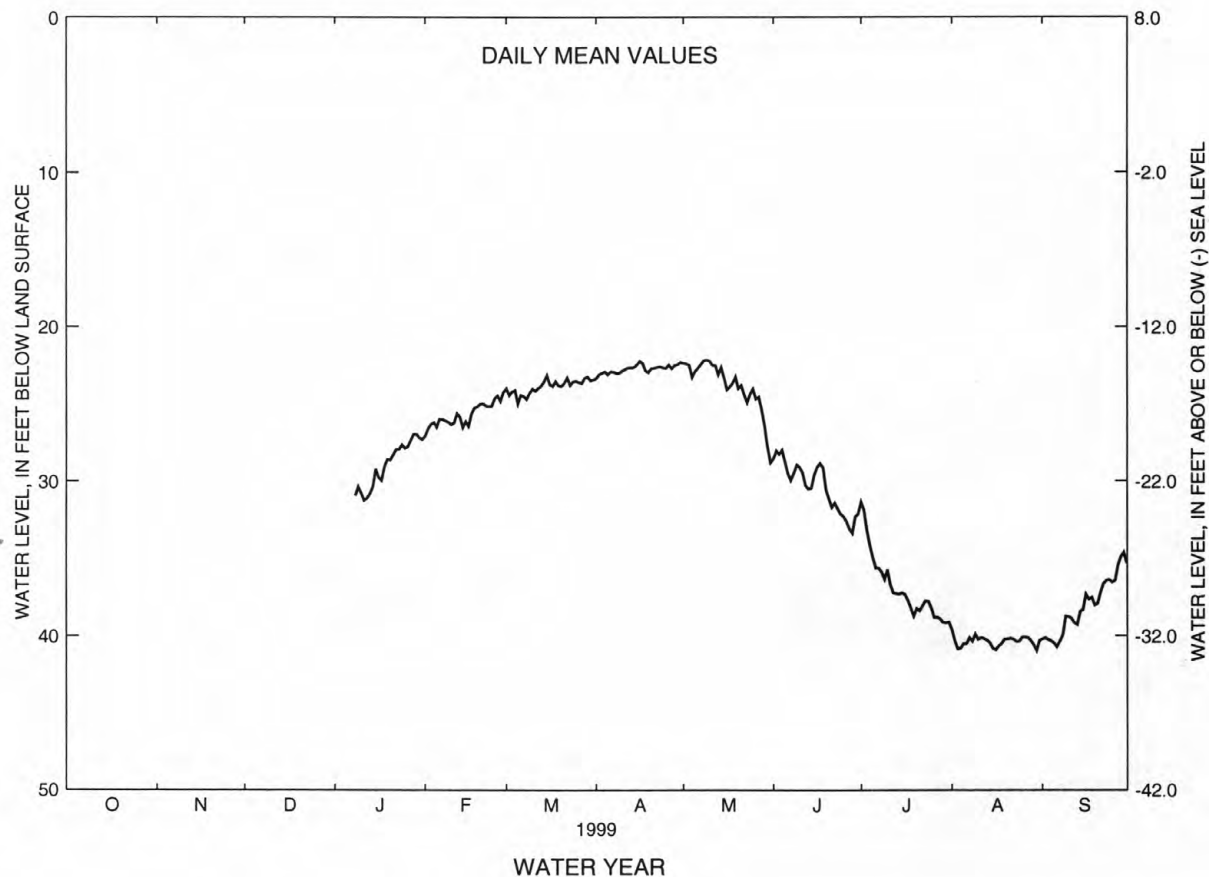
PERIOD OF RECORD.--June 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.51 ft below land surface, Apr. 16, 1999; lowest, 44.23 ft below land surface, Aug. 19, 1998.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	26.52	25.00	23.13	22.92	28.79	34.94	40.51	40.49
10	---	---	---	30.76	26.36	24.05	22.87	22.22	29.14	35.73	40.25	38.76
15	---	---	---	29.23	26.16	23.17	22.48	23.34	29.63	37.23	40.82	38.30
20	---	---	---	28.65	25.02	23.86	22.73	24.01	31.16	38.25	40.22	37.93
25	---	---	---	27.88	24.66	23.54	22.70	24.05	32.30	38.22	40.11	36.53
EOM	---	---	---	27.33	24.26	23.45	22.33	28.83	32.14	39.13	40.33	35.29
MEAN	---	---	---	29.01	25.72	23.88	22.75	23.80	30.37	36.94	40.37	38.08
WTR YR 1999	MEAN 30.17 HIGH 22.16 MAY 9 LOW 40.97 AUG 30											

NJ-WRD WELL NO. 29-0100





## GROUND-WATER LEVELS

193

## OCEAN COUNTY

NJ-WRD Well Number, 29-0138. Site I.D., 400416074270101. Local I.D., Colliers Mills 1 Obs.

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.

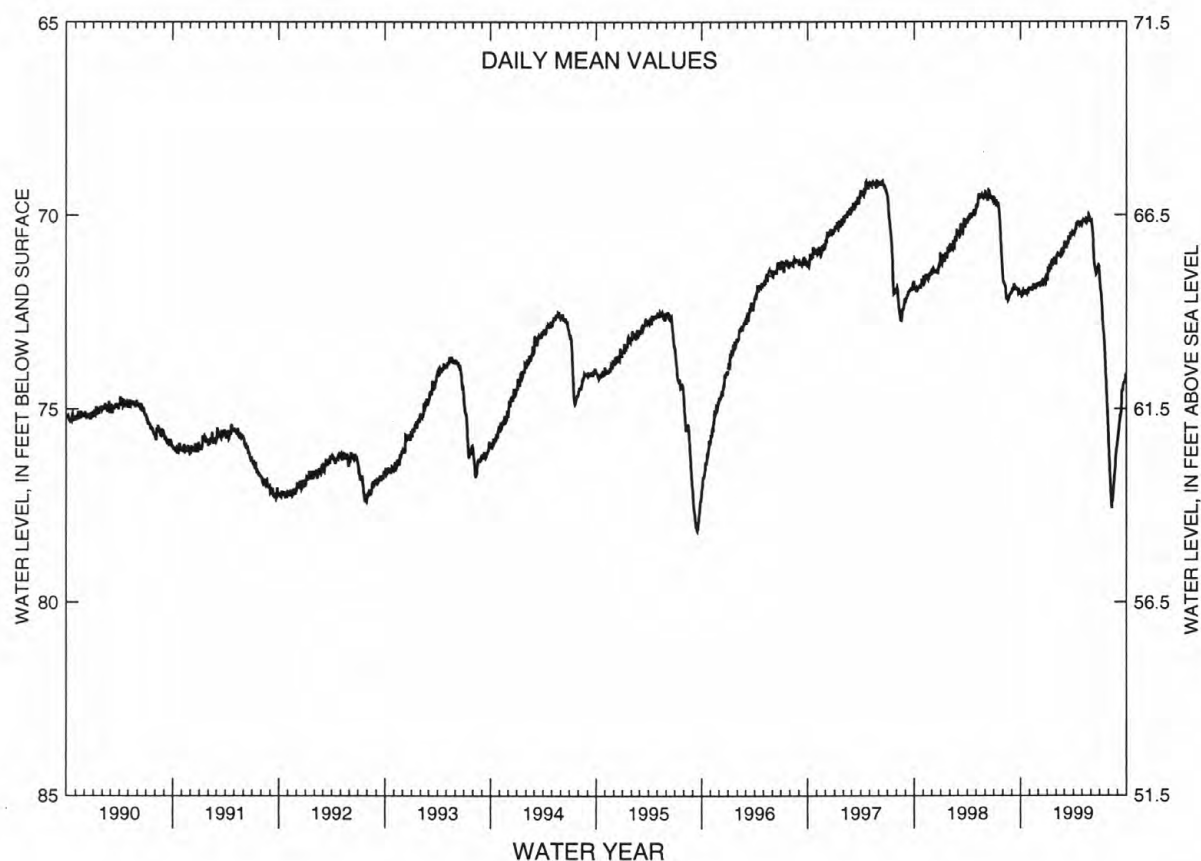
PERIOD OF RECORD.--Feb. 1964 to current year. Records for 1964 to 1976 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	72.06	71.88	71.79	71.44	71.09	70.87	70.50	70.15	70.28	71.96	76.40	75.62
10	71.93	71.94	71.82	71.34	71.05	70.72	70.32	70.15	70.88	72.37	77.27	75.19
15	71.98	71.77	71.77	71.19	71.06	70.54	70.22	70.21	71.36	73.00	77.39	75.00
20	71.95	71.81	71.77	71.19	70.89	70.65	70.23	70.13	71.51	73.62	76.97	74.49
25	71.97	71.87	71.74	71.13	70.91	70.52	70.24	70.01	71.34	74.48	76.48	74.31
EOM	71.89	71.82	71.61	71.29	70.76	70.51	70.26	70.17	71.46	75.53	75.96	74.09
MEAN	71.98	71.86	71.73	71.29	70.99	70.64	70.29	70.14	71.03	73.28	76.71	74.90
WTR YR 1999	MEAN 72.08 HIGH 70.00 MAY 24 LOW 77.58 AUG 13											

## NJ-WRD WELL NO. 29-0138



## GROUND-WATER LEVELS

## OCEAN COUNTY

NJ-WRD Well Number, 29-0139. Site I.D., 400416074270102. Local I.D., Colliers Mills 2 Obs. NJ Permit Number, 28-04784.

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.

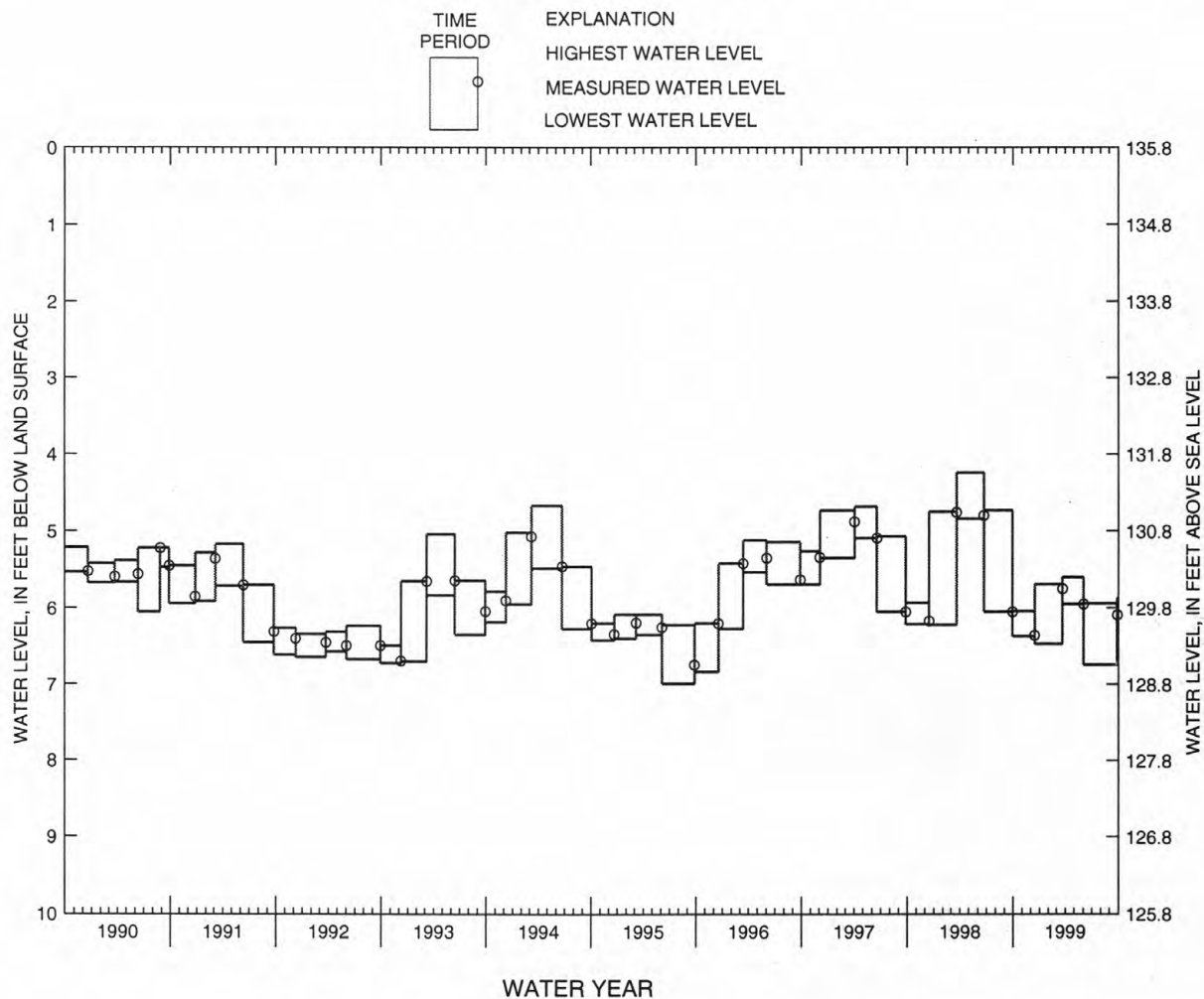
PERIOD OF RECORD.--Jan. 1964 to current year. Records for 1964 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1998 TO DEC. 15, 1998	6.04	6.37	DEC. 15, 1998	6.36
DEC. 15, 1998 TO MAR. 22, 1999	5.69	6.47	MAR. 22, 1999	5.75
MAR. 22, 1999 TO JUNE 3, 1999	5.60	5.95	JUNE 3, 1999	5.95
JUNE 3, 1999 TO SEPT. 28, 1999	5.94	6.74	SEPT. 28, 1999	6.09

## NJ-WRD WELL NO. 29-0139



## OCEAN COUNTY

NJ-WRD Well Number, 29-0140. Site I.D., 400416074270103. Local I.D., Colliers Mills 3 Obs. NJ Permit Number, 28-04785

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.

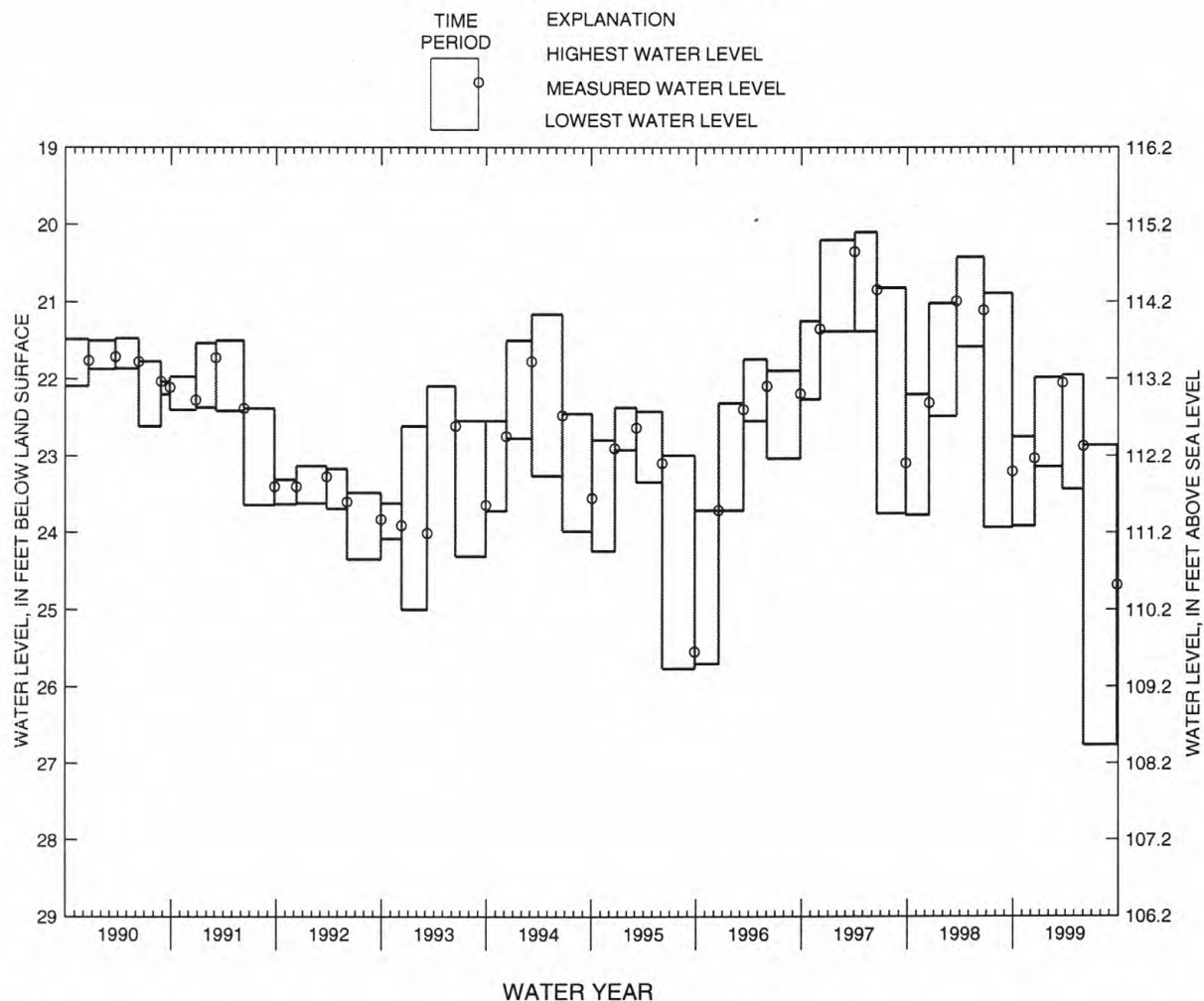
PERIOD OF RECORD.--Jan. 1964 to current year. Records for 1964 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.72 ft below land surface, May 9, 1964; lowest, 26.76 ft below land surface, between June 3 and Sept. 28, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1998 TO DEC. 15, 1998	22.75	23.91	DEC. 15, 1998	23.03
DEC. 15, 1998 TO MAR. 22, 1999	21.98	23.14	MAR. 22, 1999	22.05
MAR. 22, 1999 TO JUNE 3, 1999	21.95	23.43	JUNE 3, 1999	22.87
JUNE 3, 1999 TO SEPT. 28, 1999	22.86	26.76	SEPT. 28, 1999	24.68

## NJ-WRD WELL NO. 29-0140



## GROUND-WATER LEVELS

## OCEAN COUNTY

NJ-WRD Well Number, 29-0141. Site I.D., 400416074270104. Local I.D., Colliers Mills 4 Obs.

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.

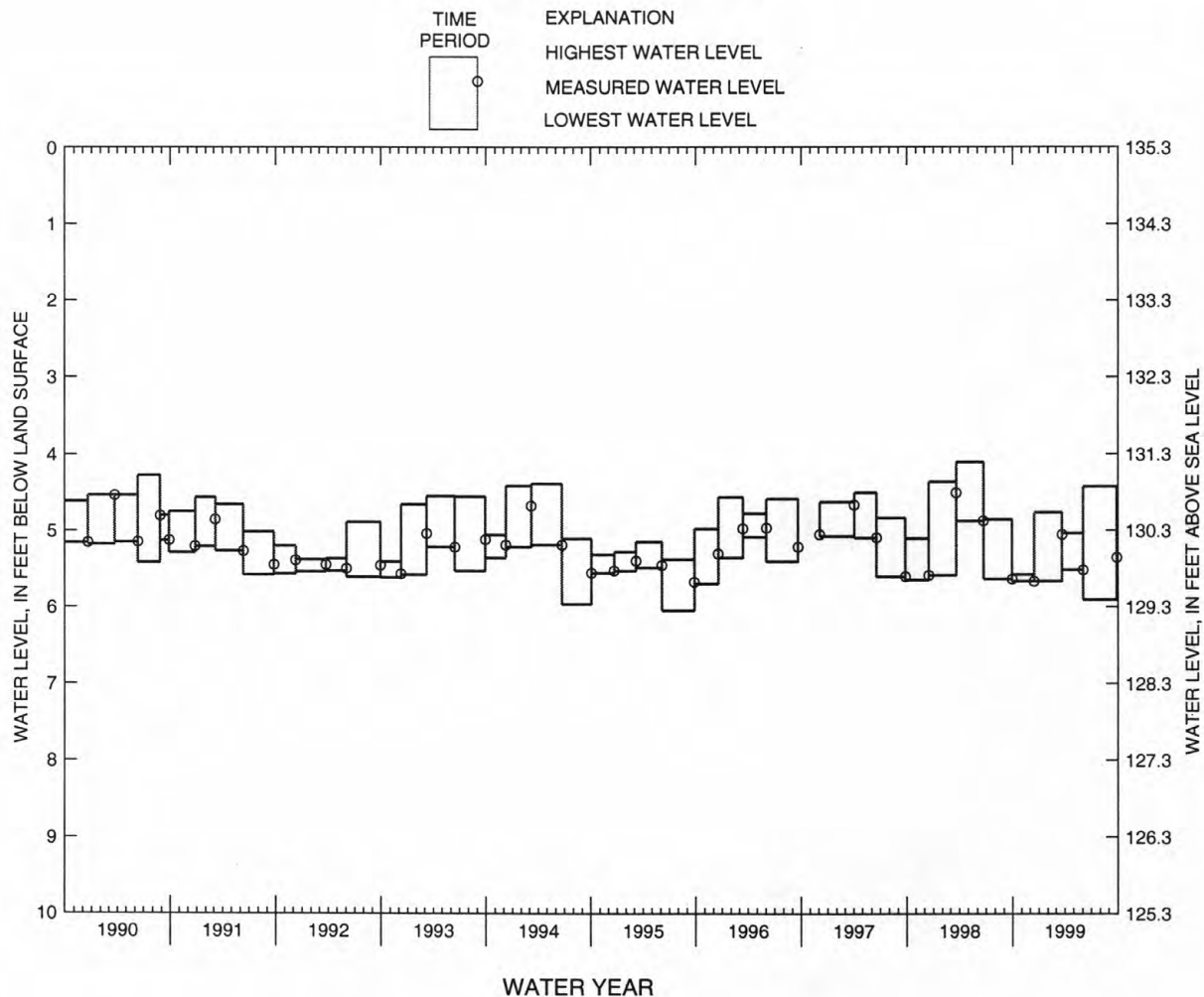
PERIOD OF RECORD.--Mar. 1964 to current year. Records for 1964 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1998 TO DEC. 15, 1998	5.58	5.67	DEC. 15, 1998	5.67
DEC. 15, 1998 TO MAR. 22, 1999	4.77	5.67	MAR. 22, 1999	5.06
MAR. 22, 1999 TO JUNE 3, 1999	5.04	5.52	JUNE 3, 1999	5.52
JUNE 3, 1999 TO SEPT. 28, 1999	4.43	5.91	SEPT. 28, 1999	5.36

## NJ-WRD WELL NO. 29-0141



## OCEAN COUNTY

NJ-WRD Well Number, 29-0425. Site I.D., 395323074225501. Local I.D., Webbs Mills 2 Obs.

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.

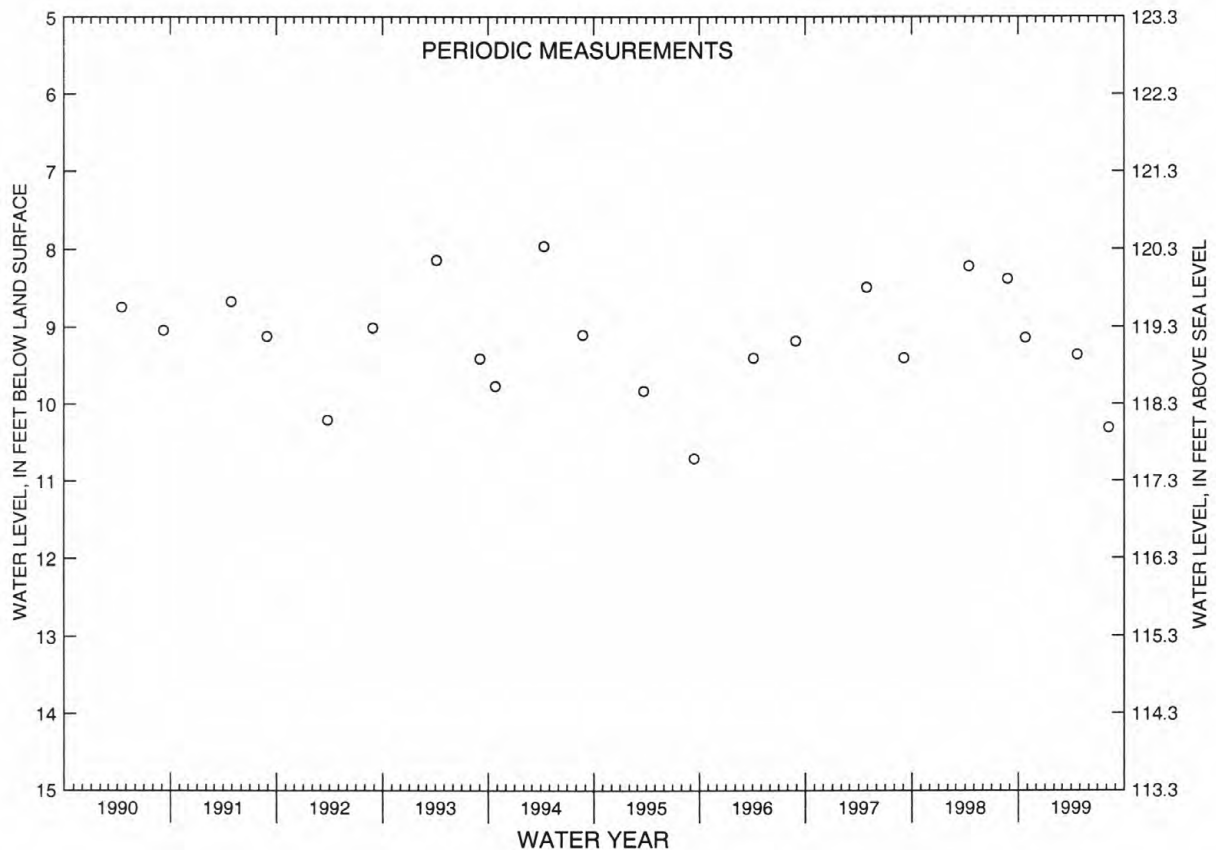
PERIOD OF RECORD.--Feb. 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 26	9.14	APR 23	9.36	AUG 10	10.31

## NJ-WRD WELL NO. 29-0425



## GROUND-WATER LEVELS

## OCEAN COUNTY

NJ-WRD Well Number, 29-0503. Site I.D., 400210074031001. Local I.D., Mantoloking 6 Obs. NJ Permit Number, 29-01325.

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.

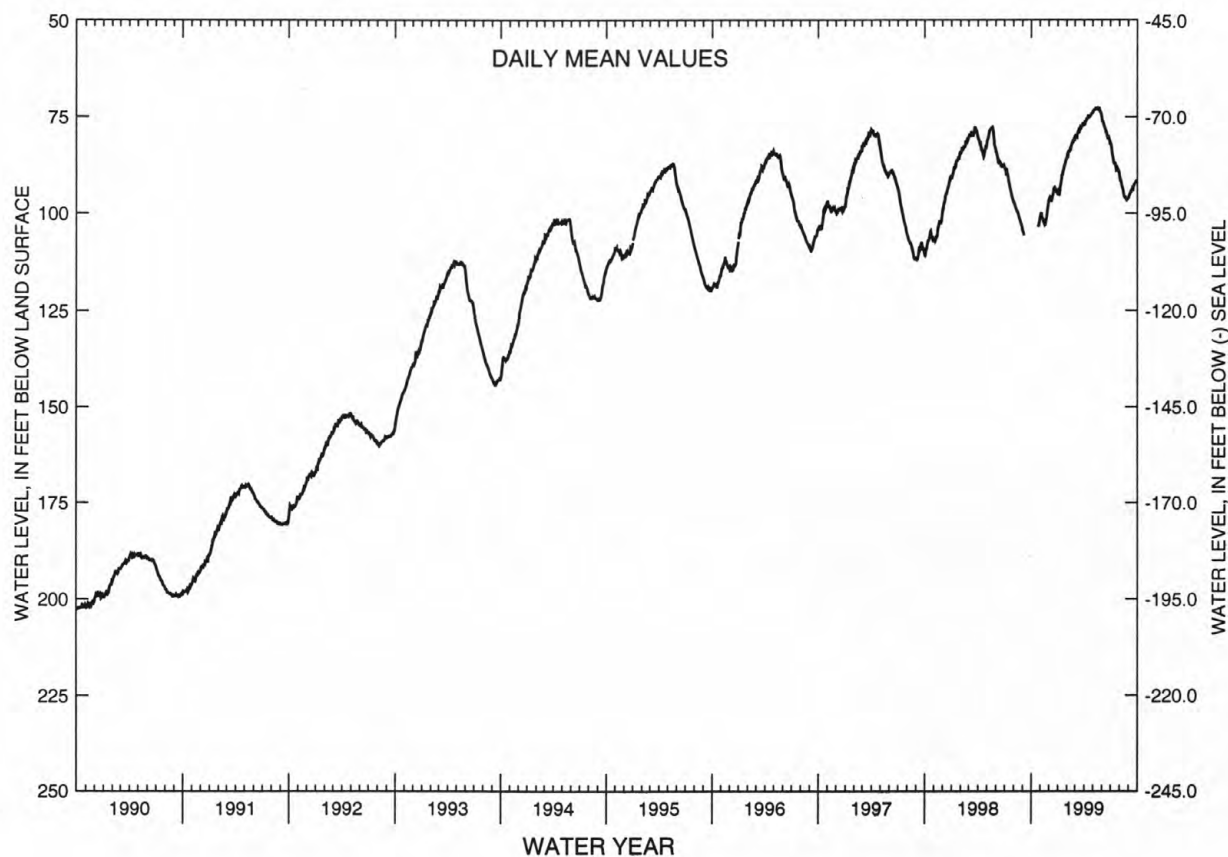
PERIOD OF RECORD.--Oct. 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 72.31 ft below land surface, May 19, 1999; lowest, 207.49 ft below land surface, Oct. 31, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	99.97	96.27	95.56	84.78	80.56	76.68	73.28	76.26	82.99	91.43	95.25
10	---	101.52	96.85	92.87	83.90	79.18	75.67	73.08	77.45	85.43	93.06	94.21
15	---	102.24	95.14	89.95	82.88	77.97	75.08	72.93	78.74	87.06	94.63	93.85
20	---	102.36	93.44	88.95	81.58	78.22	74.97	72.92	79.98	88.31	96.00	92.85
25	103.45	99.75	93.93	87.53	80.93	77.40	74.65	73.18	80.39	88.25	96.57	92.19
EOM	101.59	96.94	94.92	86.10	80.35	77.24	74.00	74.36	81.92	89.39	96.21	91.52
MEAN	---	100.85	95.11	90.62	82.87	78.53	75.35	73.26	78.62	86.50	94.28	93.66
WTR YR 1999 MEAN 86.74 HIGH 72.73 MAY 19 LOW 103.45 OCT 25												

NJ-WRD WELL NO. 29-0503





## GROUND-WATER LEVELS

199

## OCEAN COUNTY

NJ-WRD Well Number, 29-0513. Site I.D., 394742074142001. Local I.D., Garden St Pky 1 Obs.

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.

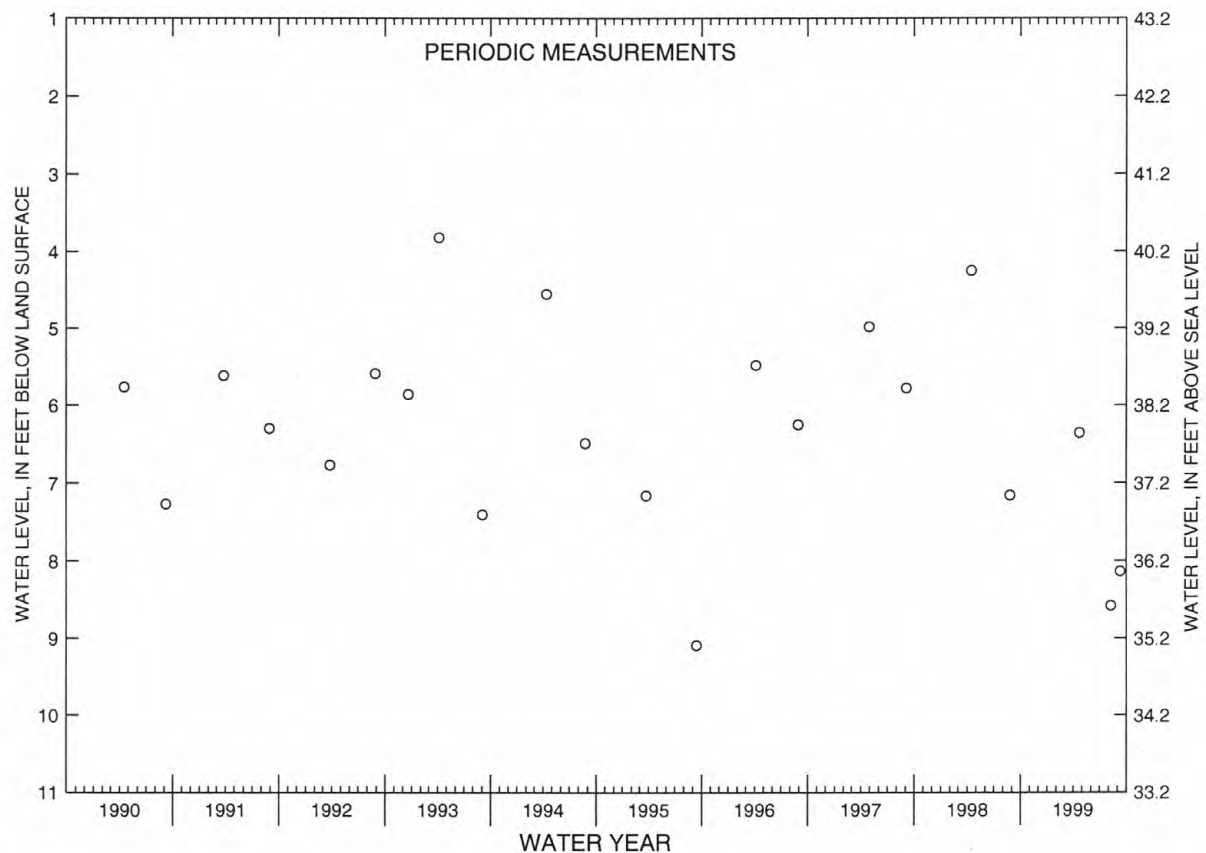
PERIOD OF RECORD.--May 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 23	6.36	AUG 10	8.58	SEP 10	8.14

## NJ-WRD WELL NO. 29-0513



## GROUND-WATER LEVELS

## OCEAN COUNTY

NJ-WRD Well Number, 29-0514. Site I.D., 394742074142002. Local I.D., Garden St Pky 2 Obs.

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.

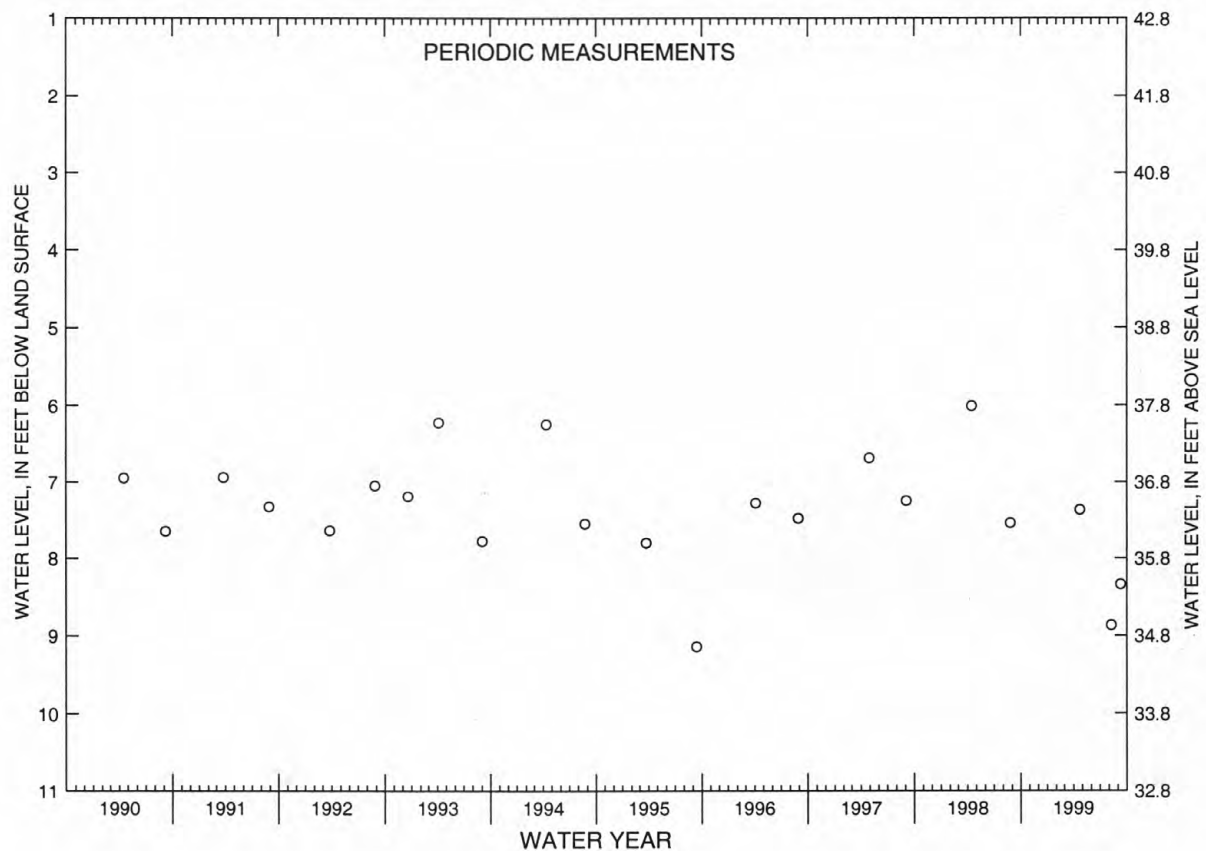
PERIOD OF RECORD.--Feb. 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
APR 23	7.37	AUG 10	8.87	SEP 10	8.34

NJ-WRD WELL NO. 29-0514



## GROUND-WATER LEVELS

201

## OCEAN COUNTY

NJ-WRD Well Number, 29-0530. Site I.D., 400454074041301. Local I.D., PPWD 6 Obs. NJ Permit Number, 29-04530.

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.

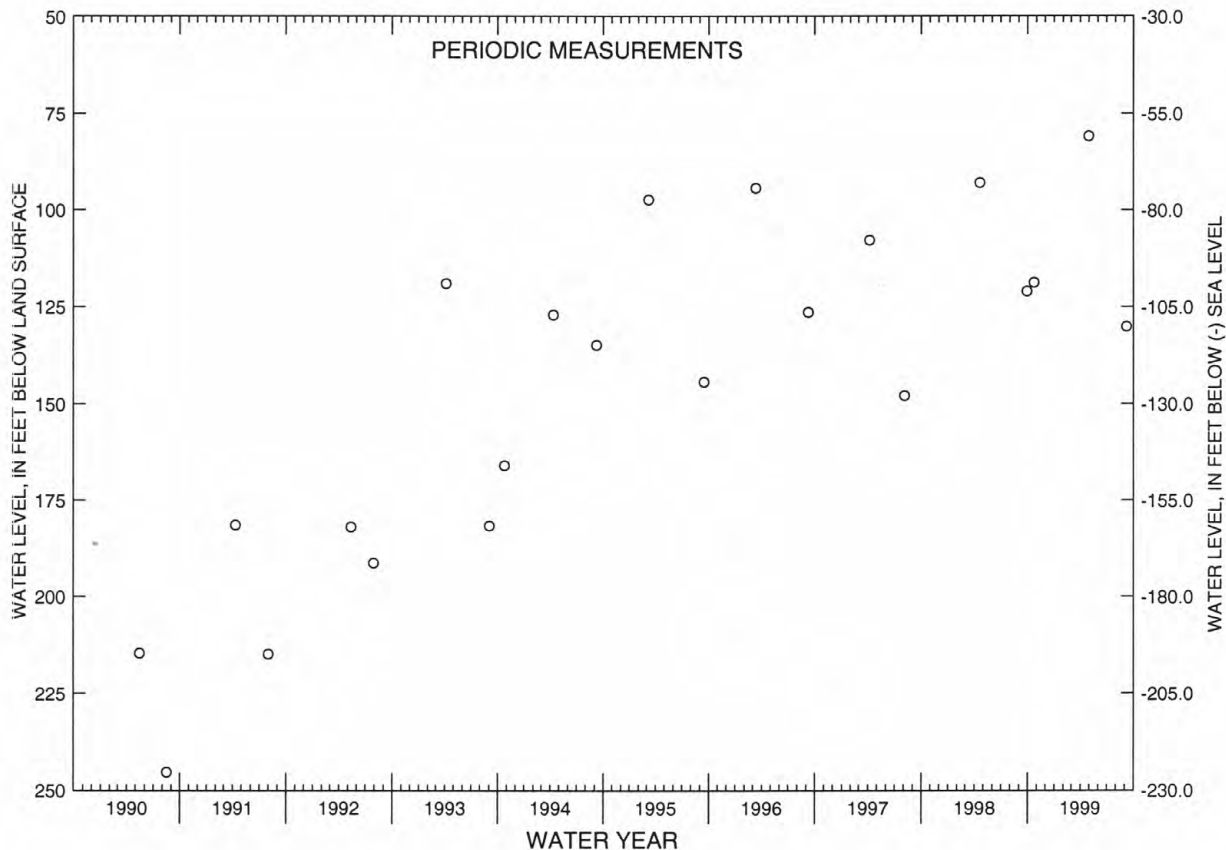
PERIOD OF RECORD.--Sept. 1988 to current year. Records for 1988 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 80.90 ft below land surface, Apr. 30, 1999; lowest, 250.66 ft below land surface, Aug 17, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
OCT 23	118.81	APR 30	80.90	SEP 9	130.08

## NJ-WRD WELL NO. 29-0530



## GROUND-WATER LEVELS

## OCEAN COUNTY

NJ-WRD Well Number, 29-0534. Site I.D., 395609074124001. Local I.D., Toms River 2 Obs. NJ Permit Number, 33-01117.

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.

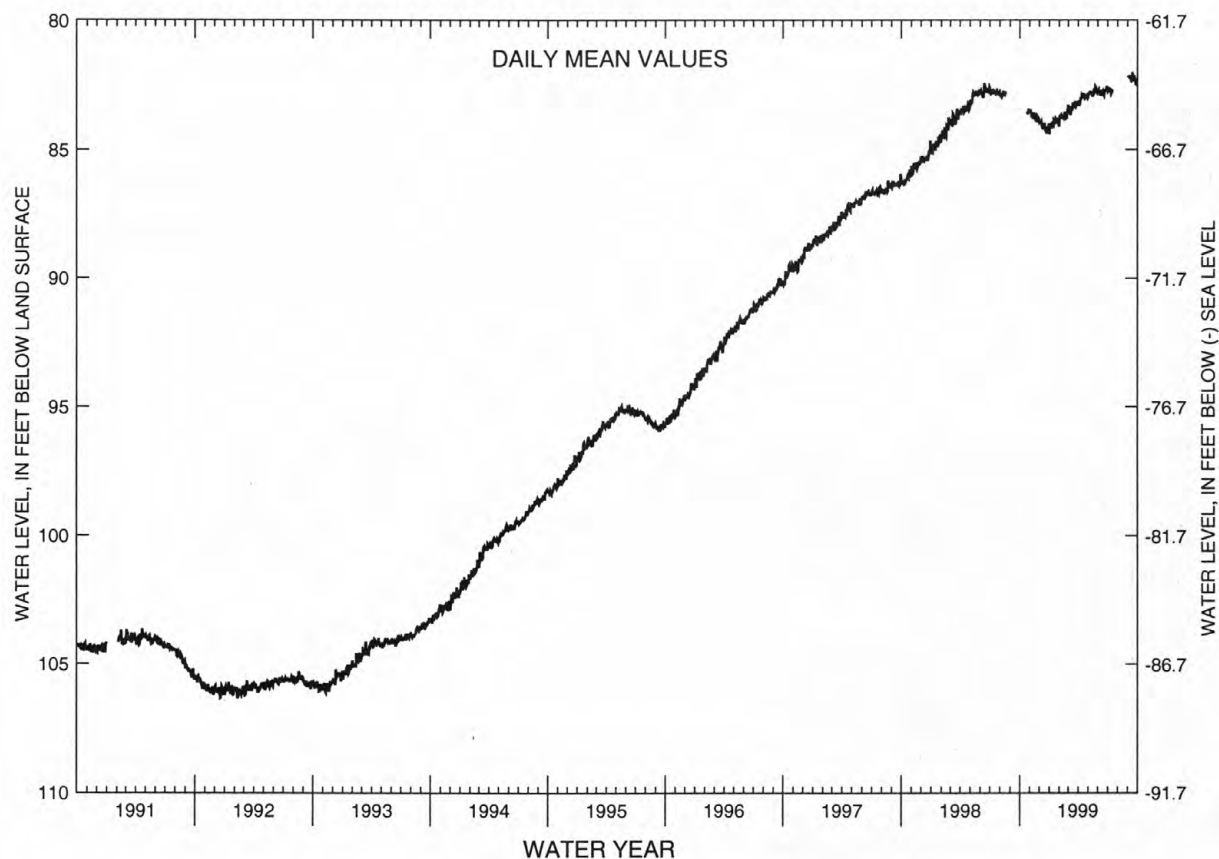
PERIOD OF RECORD.--Dec. 1965 to current year. Records for 1965 to 1976 and 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	83.57	83.98	84.14	83.79	83.63	83.23	82.81	82.85	82.67	---	82.20
10	---	83.76	84.13	84.03	83.74	83.41	83.00	82.81	82.88	82.63	---	82.17
15	---	83.57	84.18	83.87	83.80	83.18	82.90	82.91	82.74	82.75	---	82.34
20	---	83.70	84.25	83.91	83.59	83.40	82.95	82.74	82.90	---	---	82.25
25	83.57	83.91	84.30	83.83	83.65	83.23	82.98	82.58	82.68	---	---	82.30
EOM	83.48	83.91	84.21	84.10	83.40	83.26	83.01	82.78	82.67	---	---	82.34
MEAN	---	83.72	84.11	84.00	83.70	83.35	83.00	82.78	82.76	---	---	82.26
WTR YR 1999	HIGH 82.01 SEP 16 LOW 84.40 JAN 2											

NJ-WRD WELL NO. 29-0534



## GROUND-WATER LEVELS

203

## OCEAN COUNTY

NJ-WRD Well Number, 29-0585. Site I.D., 395028074104401. Local I.D., DOE-Forked River Obs.

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.

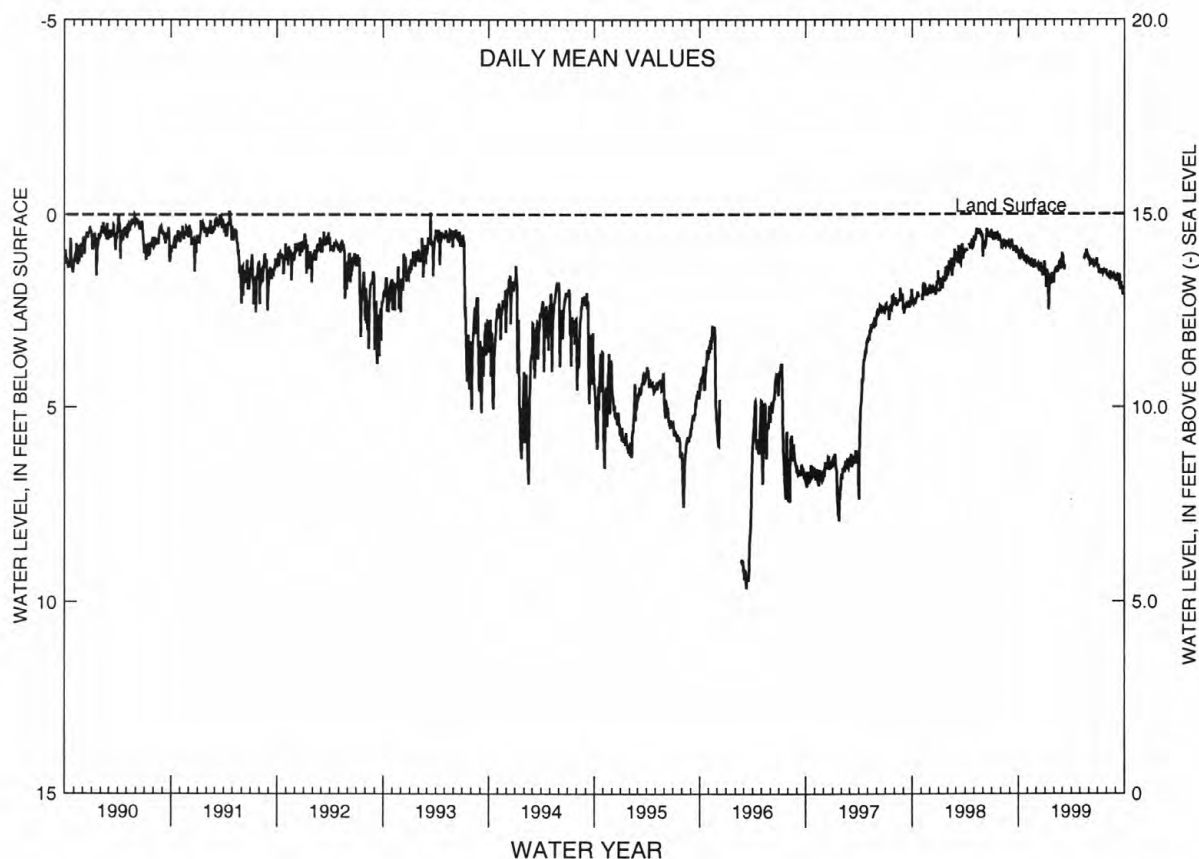
PERIOD OF RECORD.--Apr. 1984 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.12	1.17	1.35	1.89	1.52	1.39	---	---	1.28	1.31	1.54	1.69
10	.95	1.31	1.43	1.53	1.45	---	---	---	1.30	1.42	1.62	1.55
15	1.02	1.15	1.42	1.73	1.47	---	---	1.17	1.22	1.48	1.52	1.85
20	1.07	1.20	1.51	1.72	1.23	---	---	1.06	1.36	1.48	1.61	1.93
25	1.19	1.38	1.53	1.61	1.28	---	---	.97	1.21	1.44	1.65	1.88
EOM	1.14	1.35	1.43	1.78	1.09	---	---	1.14	1.32	1.50	1.70	1.96
MEAN	1.09	1.26	1.39	1.71	1.38	---	---	---	1.24	1.46	1.59	1.79
WTR YR 1999 HIGH .92 MAY 24 LOW 2.47 JAN 13												

## NJ-WRD WELL NO. 29-0585



## GROUND-WATER LEVELS

## OCEAN COUNTY

NJ-WRD Well Number, 29-1059. Site I.D., 400120074265401. Local I.D., Fort Dix RLF-30 Obs. NJ Permit Number, 28-16707-4.

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.

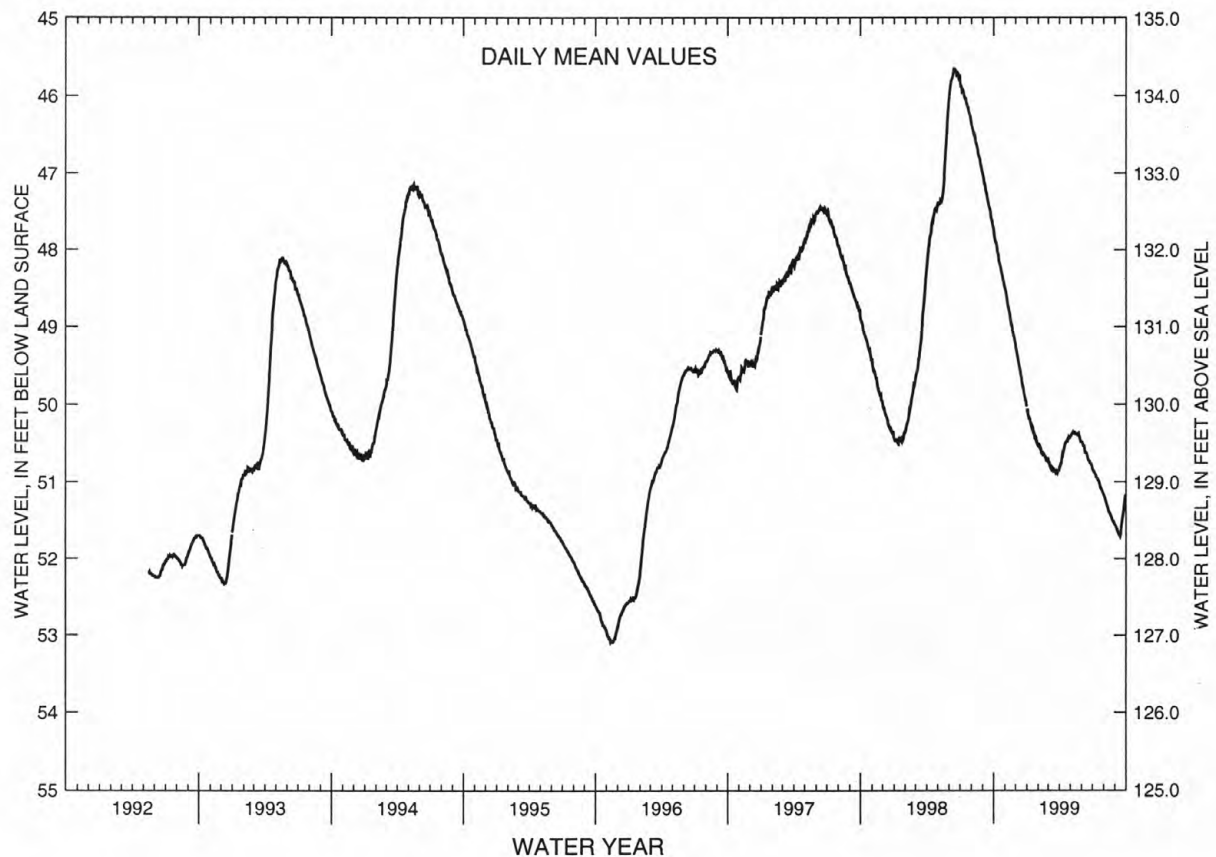
PERIOD OF RECORD.--May 1992 to current year. Records for 1992 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.63 ft below land surface, June 15, 1998; lowest, 53.09 ft below land surface, Nov. 11-12, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	47.87	48.59	49.37	50.16	50.57	50.81	50.78	50.38	50.54	50.87	51.22	51.60
10	47.96	48.75	49.50	50.22	50.63	50.80	50.65	50.37	50.62	50.92	51.31	51.66
15	48.13	48.85	49.64	50.29	50.66	50.82	50.53	50.39	50.64	50.97	51.39	51.71
20	48.23	48.97	49.78	50.38	50.68	50.88	50.48	50.40	50.73	51.02	51.44	51.54
25	48.34	49.13	49.90	50.45	50.71	50.88	50.45	50.42	50.76	51.10	51.50	51.37
EOM	48.48	49.23	50.03	50.53	50.69	50.84	50.42	50.49	50.83	51.16	51.56	51.17
MEAN	48.13	48.87	49.65	50.31	50.64	50.83	50.57	50.40	50.66	50.99	51.38	51.54
WTR YR 1999 MEAN 50.33 HIGH 47.74 OCT 1 LOW 51.71 SEP 15												

NJ-WRD WELL NO. 29-1059





## OCEAN COUNTY

NJ-WRD Well Number, 29-1060. Site I.D., 400232074213201. Local I.D., LNAS-EC Obs.

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.--Submersible logger pressure transducer--60-minute recording interval. Digital water-level recorder--60-minute punch, May 1992 to Feb. 1999.

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

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

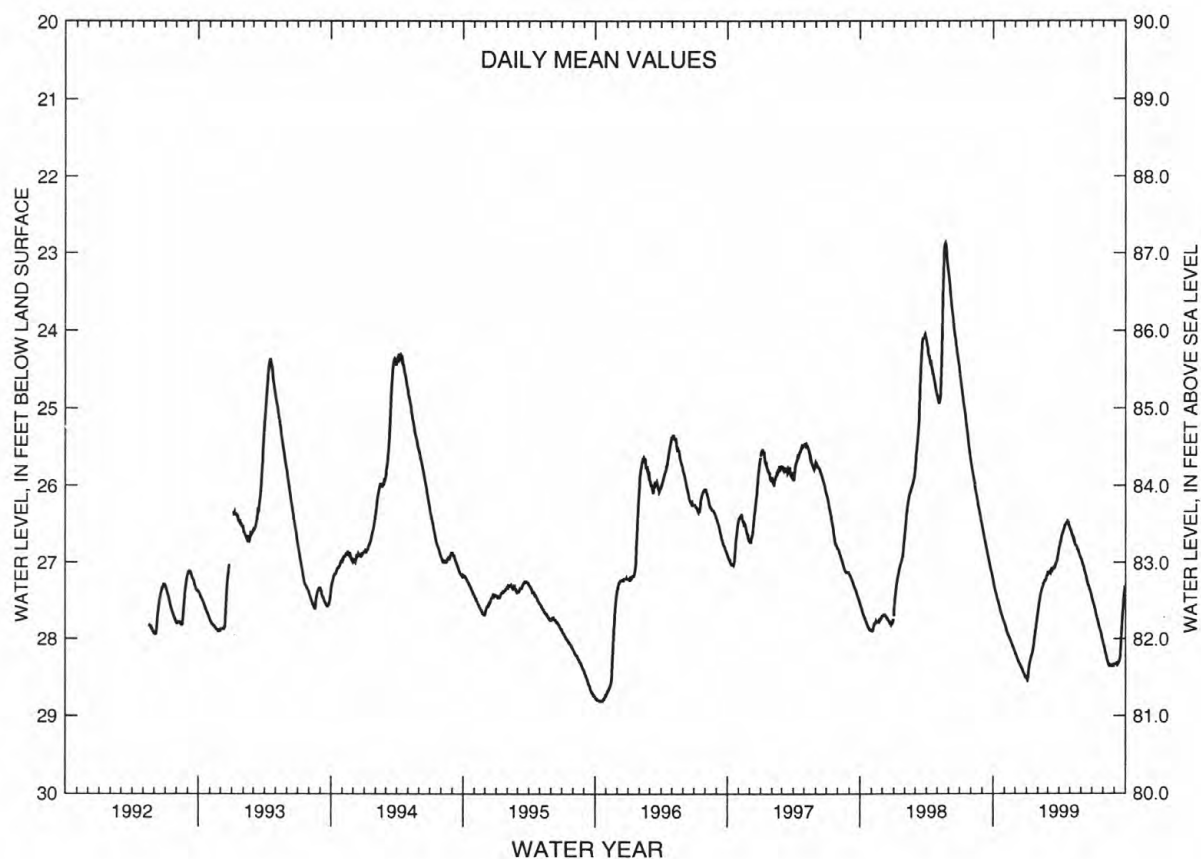
PERIOD OF RECORD.--May 1992 to current year. Records for 1992 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.86 ft below land surface, May. 23, 1998; lowest 28.81 ft below land surface, Oct. 13-21, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.34	27.86	28.24	28.49	27.52	27.15	26.73	26.62	27.03	27.54	28.13	28.33
10	27.43	27.94	28.30	28.30	27.39	27.09	26.63	26.70	27.11	27.63	28.24	28.32
15	27.52	27.99	28.35	28.21	27.31	27.07	26.54	26.77	27.19	27.73	28.33	28.29
20	27.61	28.05	28.40	28.08	27.24	27.06	26.49	26.81	27.30	27.83	28.35	27.97
25	27.70	28.11	28.46	27.90	27.18	26.99	26.49	26.87	27.36	27.91	28.36	27.57
EOM	27.78	28.18	28.52	27.69	27.13	26.84	26.56	26.95	27.46	28.04	28.34	27.31
MEAN	27.53	27.99	28.36	28.16	27.34	27.05	26.58	26.76	27.20	27.75	28.28	28.04
WTR YR 1999	MEAN 27.59 HIGH 26.47 APR 23 LOW 28.54 JAN 3											

## NJ-WRD WELL NO. 29-1060



## GROUND-WATER LEVELS

## OCEAN COUNTY

NJ-WRD Well Number 29-1210. Site I.D., 393115074191001. Local I.D., Great Bay Blvd. 1 Obs. NJ Permit Number, 36-20855.

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 Sheephead 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. Digital water-level recorder, May-July 1997.

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.

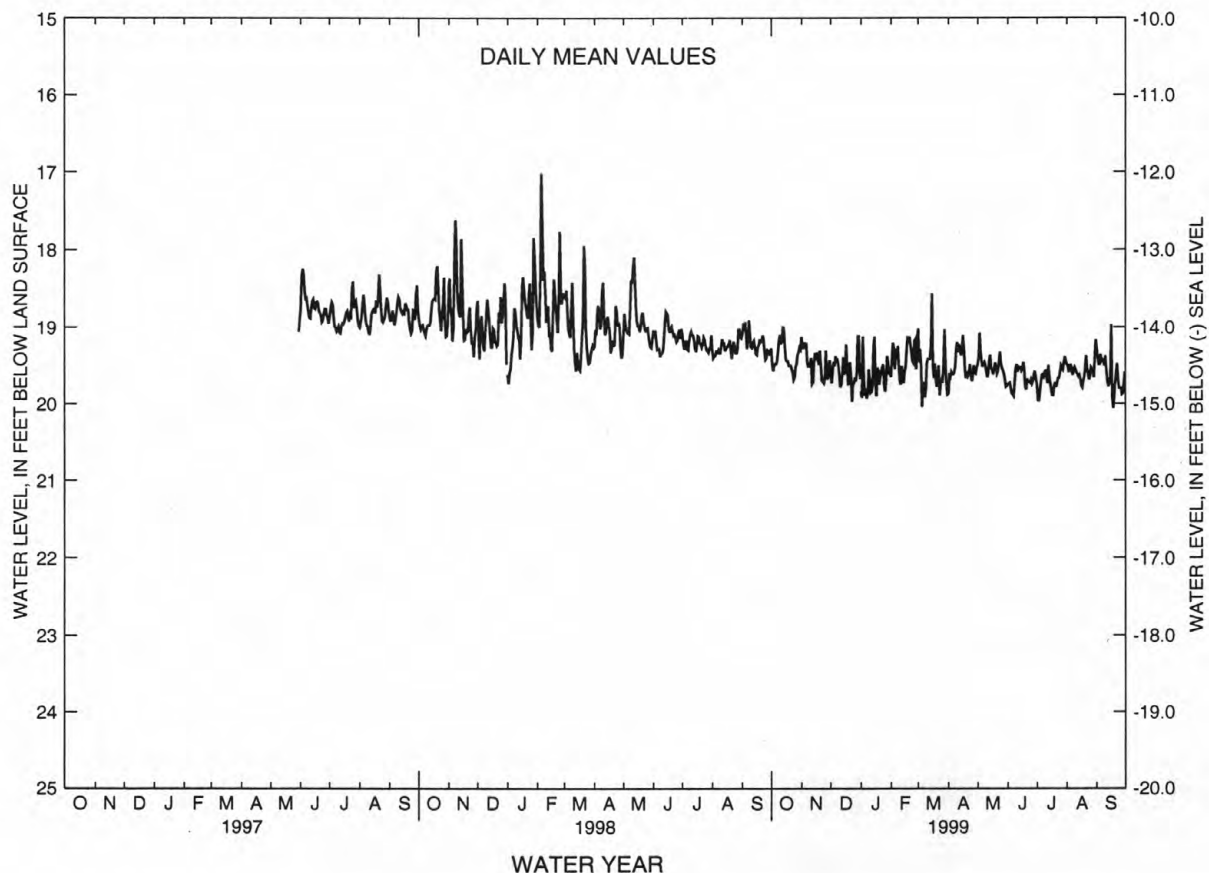
PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.05 ft below land surface, Feb. 5, 1998; lowest, 20.45 ft below land surface, Jan. 2, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.48	19.24	19.51	19.89	19.55	20.04	19.62	19.45	19.87	19.73	19.49	19.36
10	19.10	19.48	19.65	19.67	19.69	19.46	19.20	19.59	19.49	19.56	19.56	19.38
15	19.25	19.34	19.62	19.13	19.58	18.57	19.30	19.54	19.57	19.74	19.68	19.66
20	19.50	19.31	19.67	19.75	19.13	19.78	19.58	19.52	19.82	19.73	19.54	19.73
25	19.65	19.66	19.73	19.77	19.18	19.69	19.71	19.48	19.69	19.60	19.64	19.80
EOM	19.29	19.43	19.68	19.59	19.13	19.88	19.53	19.77	19.67	19.44	19.17	19.59
MEAN	19.39	19.46	19.56	19.65	19.40	19.55	19.51	19.52	19.67	19.68	19.58	19.62
WTR YR 1999	MEAN 19.55	HIGH 18.57	MAR 15	LOW 20.06	SEP 18							

NJ-WRD WELL NO. 29-1210

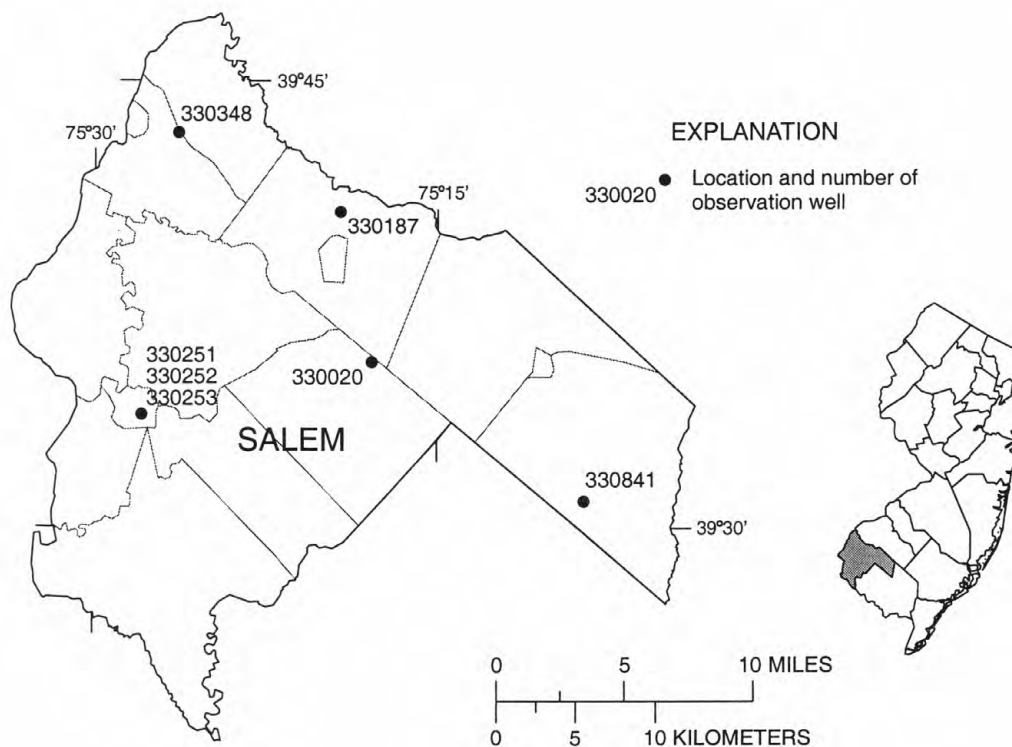


## SALEM COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
330020	HORNER OBS	ALLOWAY TWP	283	MLRW	MANUAL
330187	POINT AIRY OBS	PIESGROVE TWP	672	MRPAL	DAILY
330251	SALEM 1 OBS	SALEM CITY	709	MRPAM	MAXMIN
330252	SALEM 2 OBS	SALEM CITY	96	MLRW	MAXMIN
330253	SALEM 3 OBS	SALEM CITY	340	MRPAU	MAXMIN
330348	PENNS GROVE 14 OBS	CARNEYS POINT TWP	18	MRPAU	MANUAL
330841	PARVIN SP 1 OBS (OW A)	PITTSBURG TWP	1020	MRPAU	DAILY

## Aquifer names

- MLRW - Wenonah-Mount Laurel aquifer
- MRPAL - Lower Potomac-Raritan-Magothy aquifer
- MRPAM - Middle Potomac-Raritan-Magothy aquifer
- MRPAU - Upper Potomac-Raritan-Magothy aquifer



## GROUND-WATER LEVELS

## SALEM COUNTY

NJ-WRD Well Number, 33-0020. Site I.D., 393534075175201. Local I.D., Horner Obs.

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.

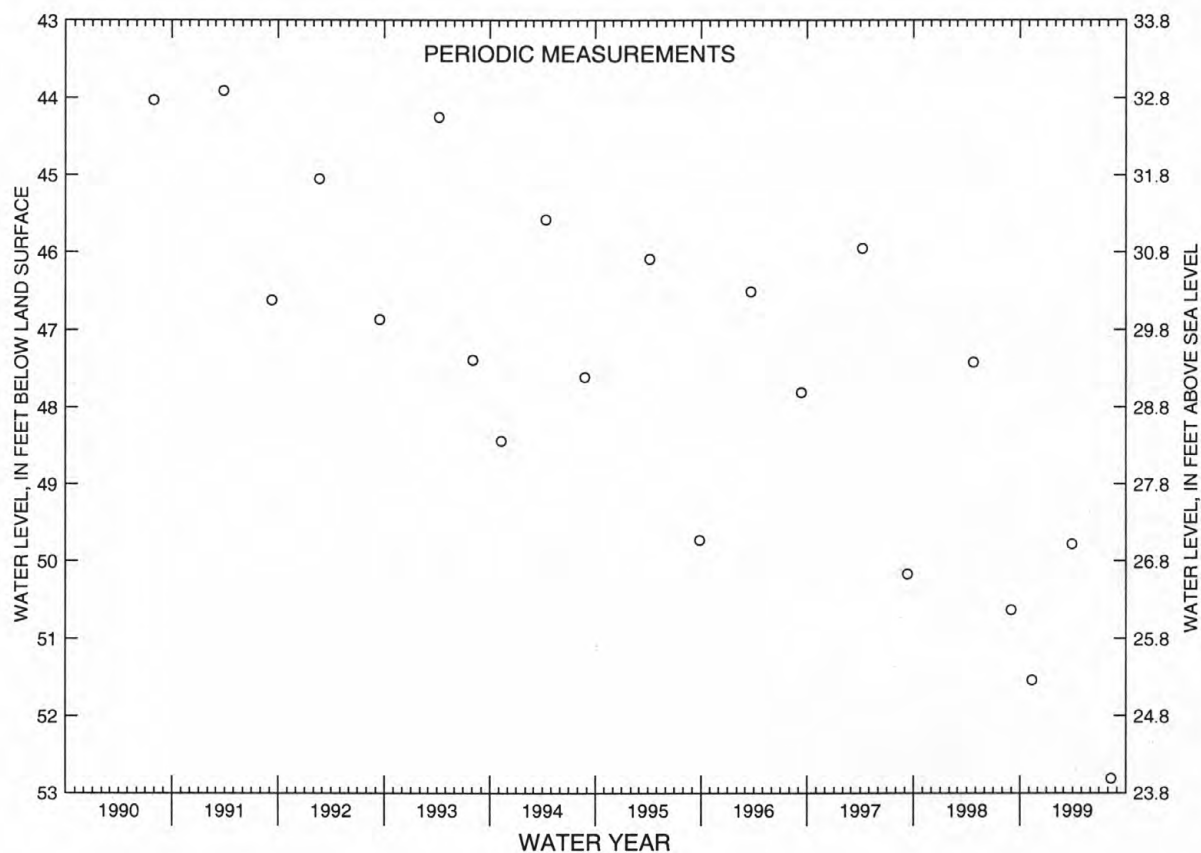
PERIOD OF RECORD.--June 1959 to current year. Records for 1959 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 38.32 ft below land surface, Apr. 25, 1961; lowest, 52.82 ft below land surface, Aug. 12, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level	Date	Water Level
NOV 12	51.54	MAR 30	49.78	AUG 12	52.82

NJ-WRD WELL NO. 33-0020



## SALEM COUNTY

NJ-WRD Well Number, 33-0187. Site I.D., 394037075191501. Local I.D., Point Airy Obs.

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.

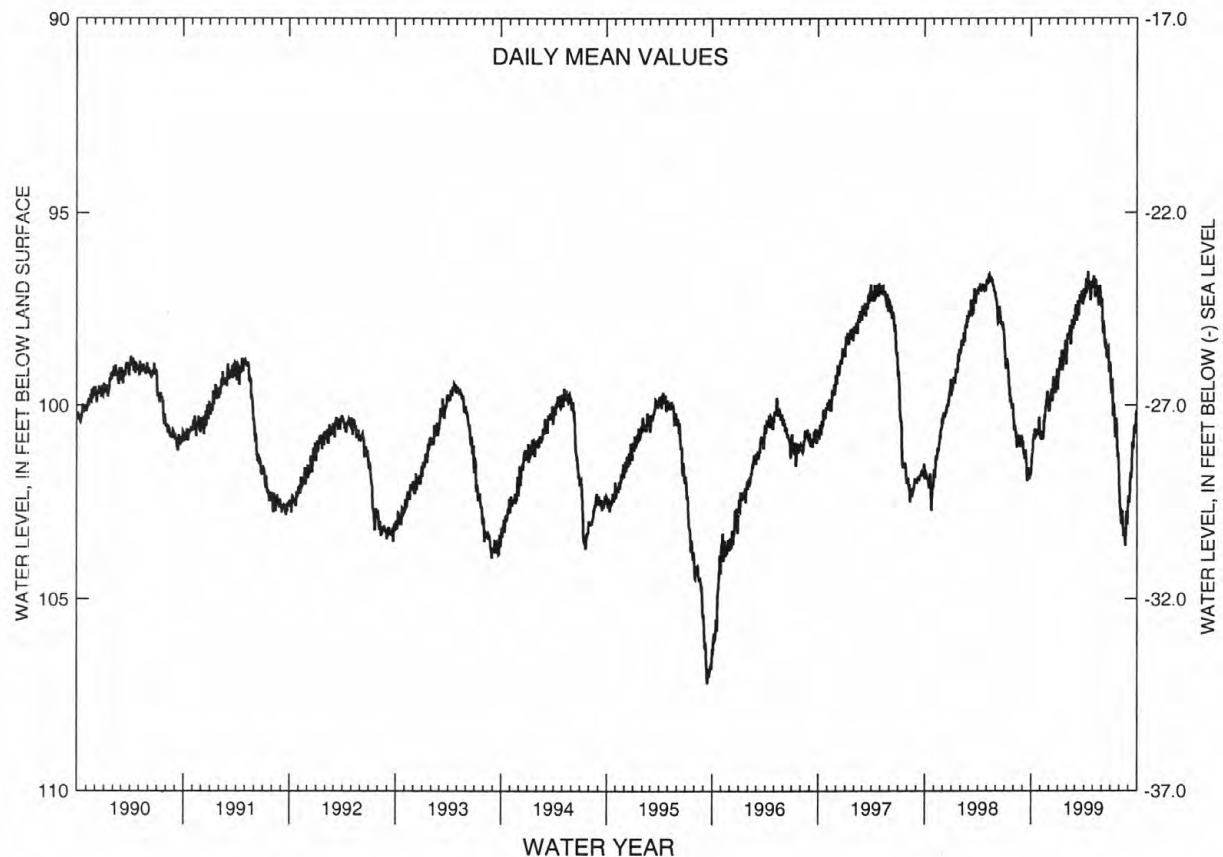
PERIOD OF RECORD.--Feb. 1959 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	101.25	100.86	100.00	99.22	98.19	97.62	97.18	96.69	97.79	99.57	102.70	102.53
10	100.78	100.90	99.62	98.97	98.10	97.37	96.94	97.20	97.93	99.57	102.88	101.74
15	100.67	100.41	99.72	98.57	98.42	97.54	96.64	96.95	98.42	99.98	103.22	101.50
20	100.71	100.05	99.53	98.87	97.82	97.33	96.77	96.92	98.77	100.61	103.33	101.10
25	100.74	99.86	99.69	98.64	97.70	97.03	97.28	97.05	98.46	100.86	103.17	100.56
EOM	100.54	99.95	99.16	98.94	97.82	97.11	96.80	97.35	98.89	101.55	102.83	100.14
MEAN	100.85	100.39	99.63	98.86	98.09	97.39	96.93	96.99	98.28	100.23	102.96	101.43
WTR YR 1999	MEAN 99.35 HIGH 96.52 APR 16 LOW 103.64 AUG 23											

## NJ-WRD WELL NO. 33-0187



## GROUND-WATER LEVELS

## SALEM COUNTY

NJ-WRD Well Number, 33-0251. Site I.D., 393348075275701. Local I.D., Salem 1 Obs.

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.

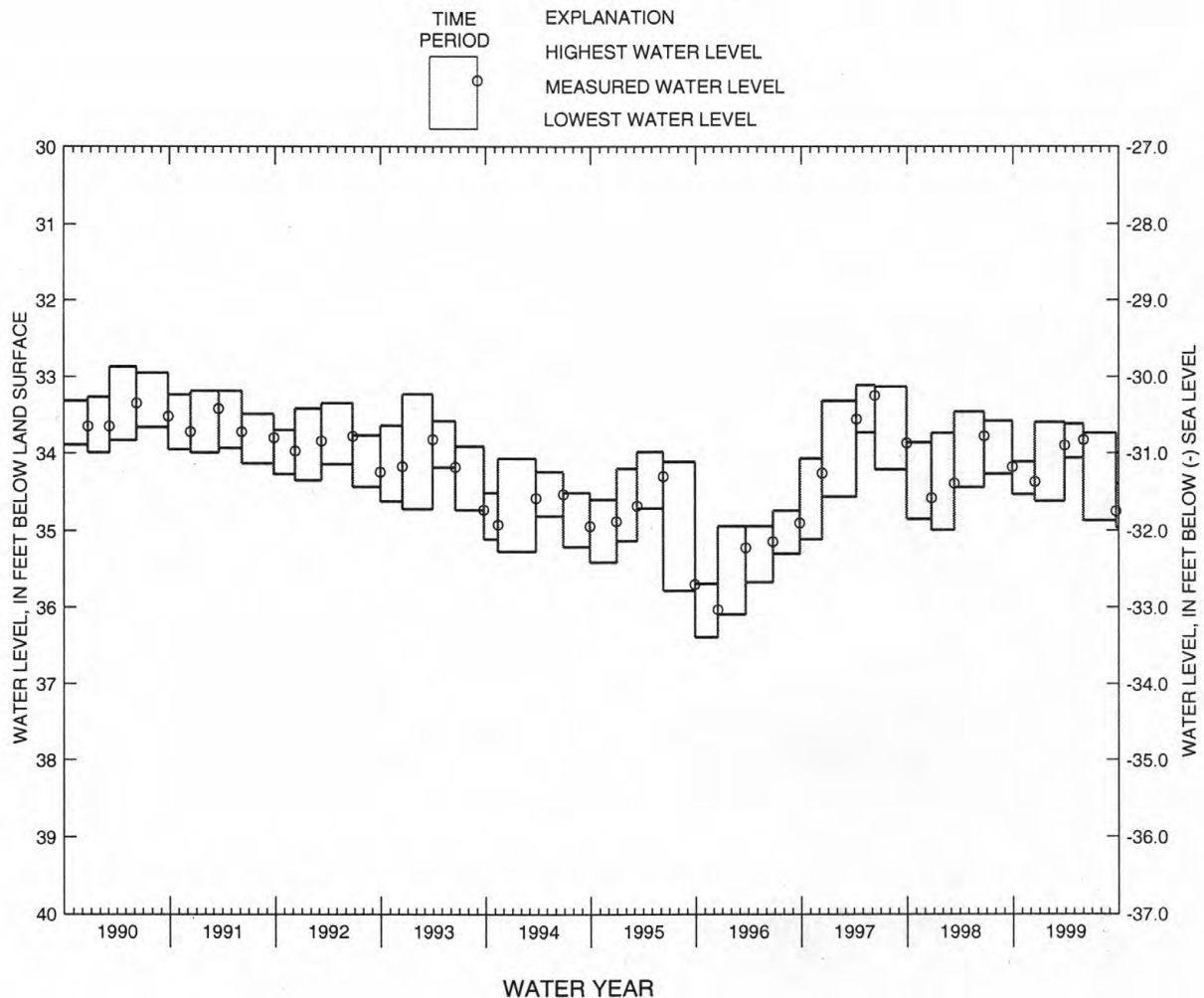
PERIOD OF RECORD.--Nov. 1965 to July 1970, Oct. 1972 to Aug. 1975, Oct. 1976 to current year. Records for 1965 to 1970 and for 1972 to 1980 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1998 TO DEC. 16, 1998	34.11	34.53	DEC. 16, 1998	34.37
DEC. 16, 1998 TO MAR. 29, 1999	33.60	34.62	MAR. 29, 1999	33.90
MAR. 29, 1999 TO JUNE 2, 1999	33.62	34.06	JUNE 2, 1999	33.83
JUNE 2, 1999 TO SEPT. 23, 1999	33.74	34.87	SEPT. 23, 1999	34.75

NJ-WRD WELL NO. 33-0251





## SALEM COUNTY

NJ-WRD Well Number, 33-0252. Site I.D., 393348075275702. Local I.D., Salem 2 Obs.

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.

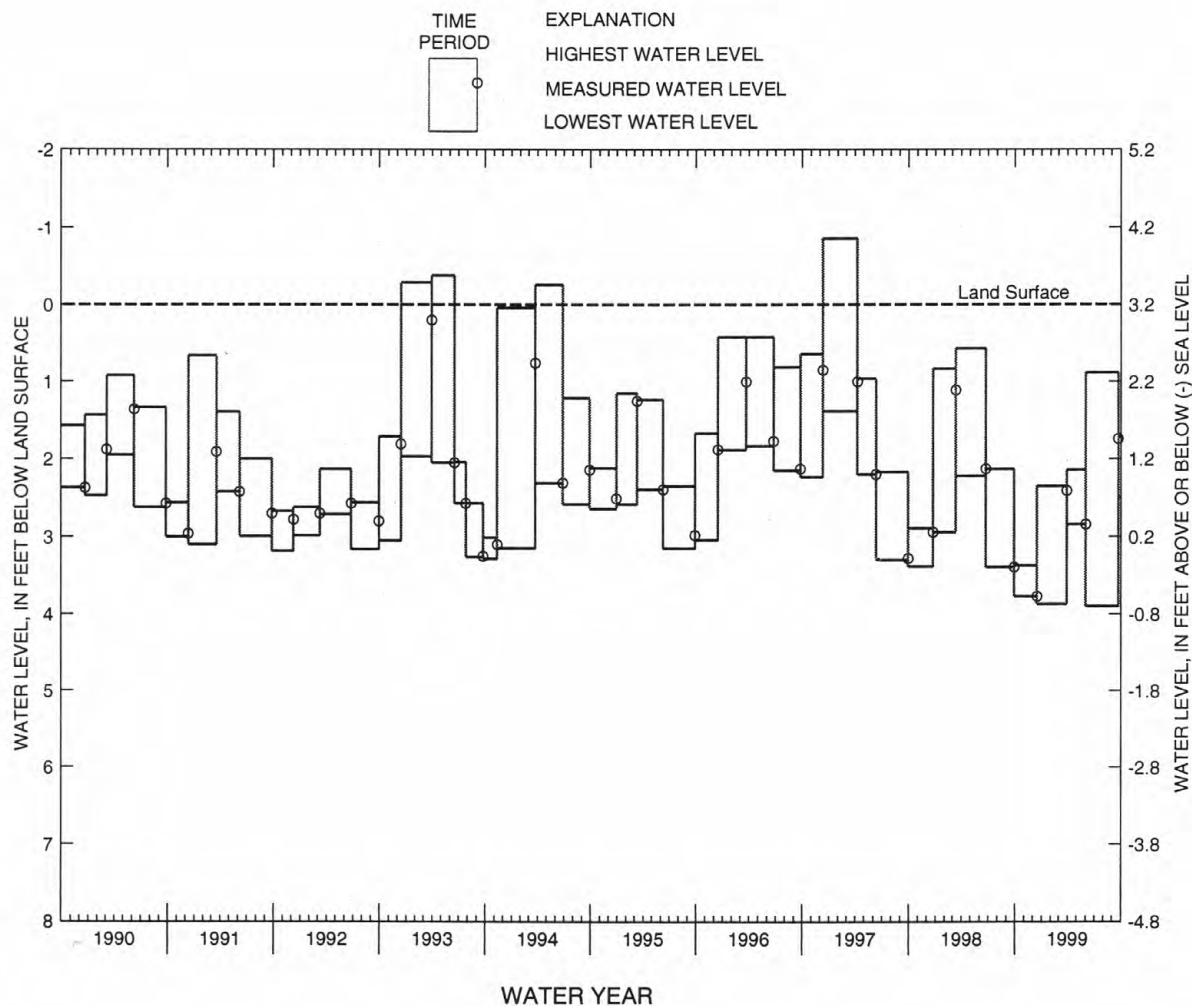
PERIOD OF RECORD.--Nov. 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1998 TO DEC. 16, 1998	3.37	3.77	DEC. 16, 1998	3.77
DEC. 16, 1998 TO MAR. 29, 1999	2.35	3.87	MAR. 29, 1999	2.41
MAR. 29, 1999 TO JUNE 2, 1999	2.14	2.84	JUNE 2, 1999	2.84
JUNE 2, 1999 TO SEPT. 23, 1999	0.88	3.90	SEPT. 23, 1999	1.74

## NJ-WRD WELL NO. 33-0252



## GROUND-WATER LEVELS

## SALEM COUNTY

NJ-WRD Well Number, 33-0253. Site I.D., 393348075275703. Local I.D., Salem 3 Obs.

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.

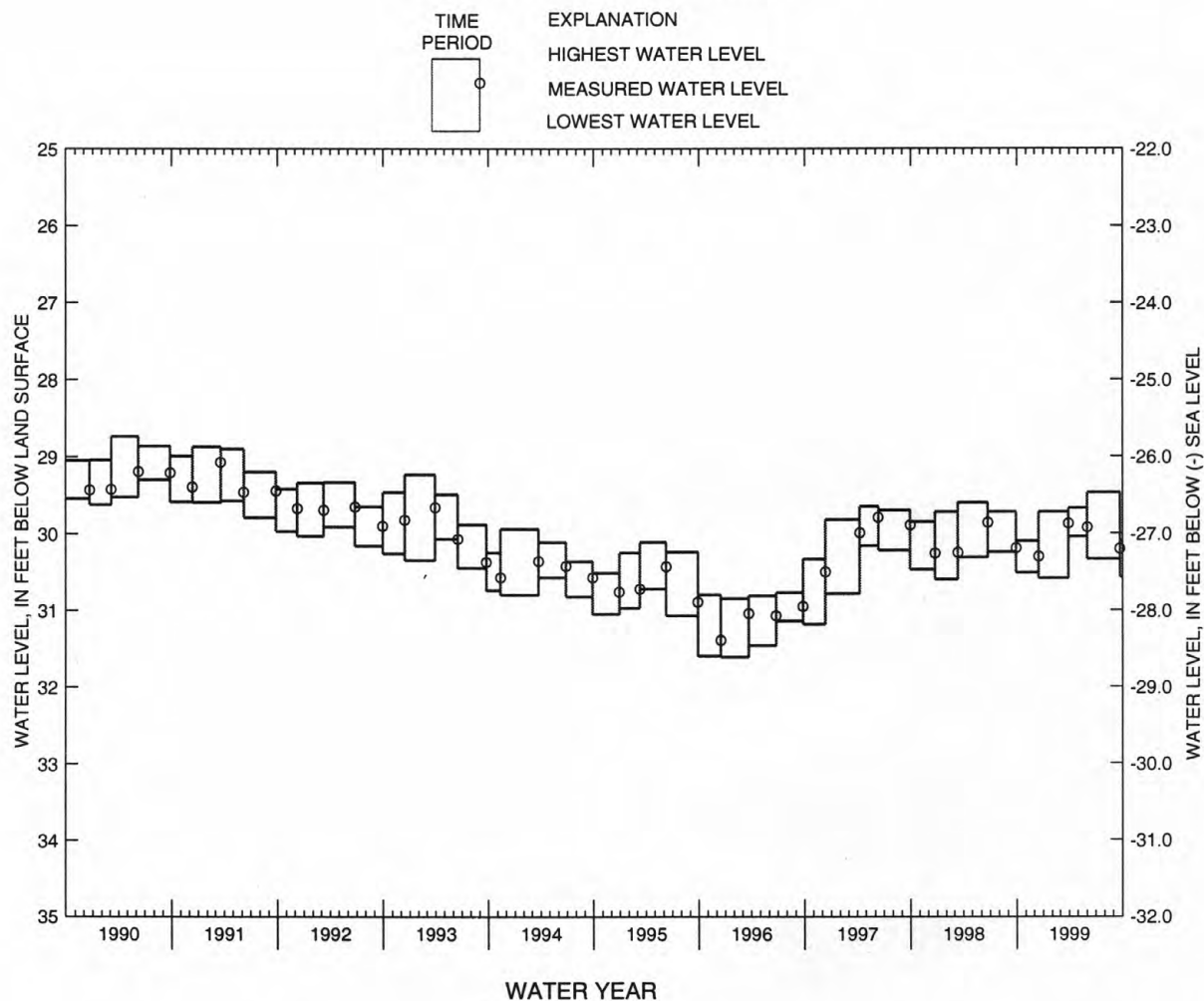
PERIOD OF RECORD.--Nov. 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1998 TO DEC. 16, 1998	30.10	30.51	DEC. 16, 1998	30.30
DEC. 16, 1998 TO MAR. 29, 1999	29.72	30.58	MAR. 29, 1999	29.87
MAR. 29, 1999 TO JUNE 2, 1999	29.67	30.04	JUNE 2, 1999	29.92
JUNE 2, 1999 TO SEPT. 23, 1999	29.47	30.33	SEPT. 23, 1999	30.20

## NJ-WRD WELL NO. 33-0253



## GROUND-WATER LEVELS

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## SALEM COUNTY

NJ-WRD Well Number, 33-0348. Site I.D., 394317075261901. Local I.D., Penns Grove 14 Obs.

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.

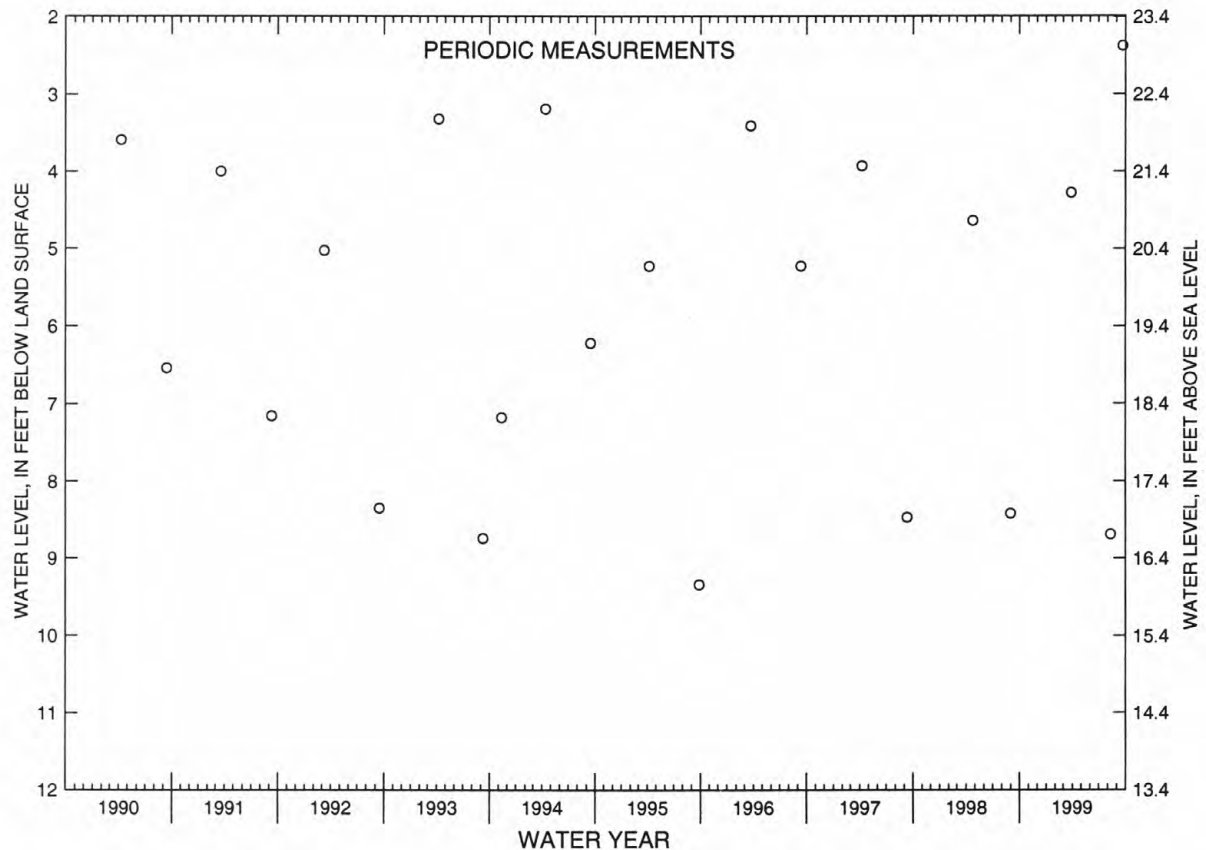
PERIOD OF RECORD.--June 1959 to Mar. 1975, Feb. 1977 to current year. Records for 1959 to 1975 and 1977 to 1989 are unpublished and are available in files of the New Jersey District Office.

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	Date	Water Level
MAR 29	4.28	AUG 12	8.69	SEP 23	2.38

## NJ-WRD WELL NO. 33-0348



## GROUND-WATER LEVELS

## SALEM COUNTY

NJ-WRD Well Number 33-0841. Site I.D., 393055075083501. Local I.D., Parvin SP 1 Obs (OW A). NJ Permit Number, 35-17766.

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

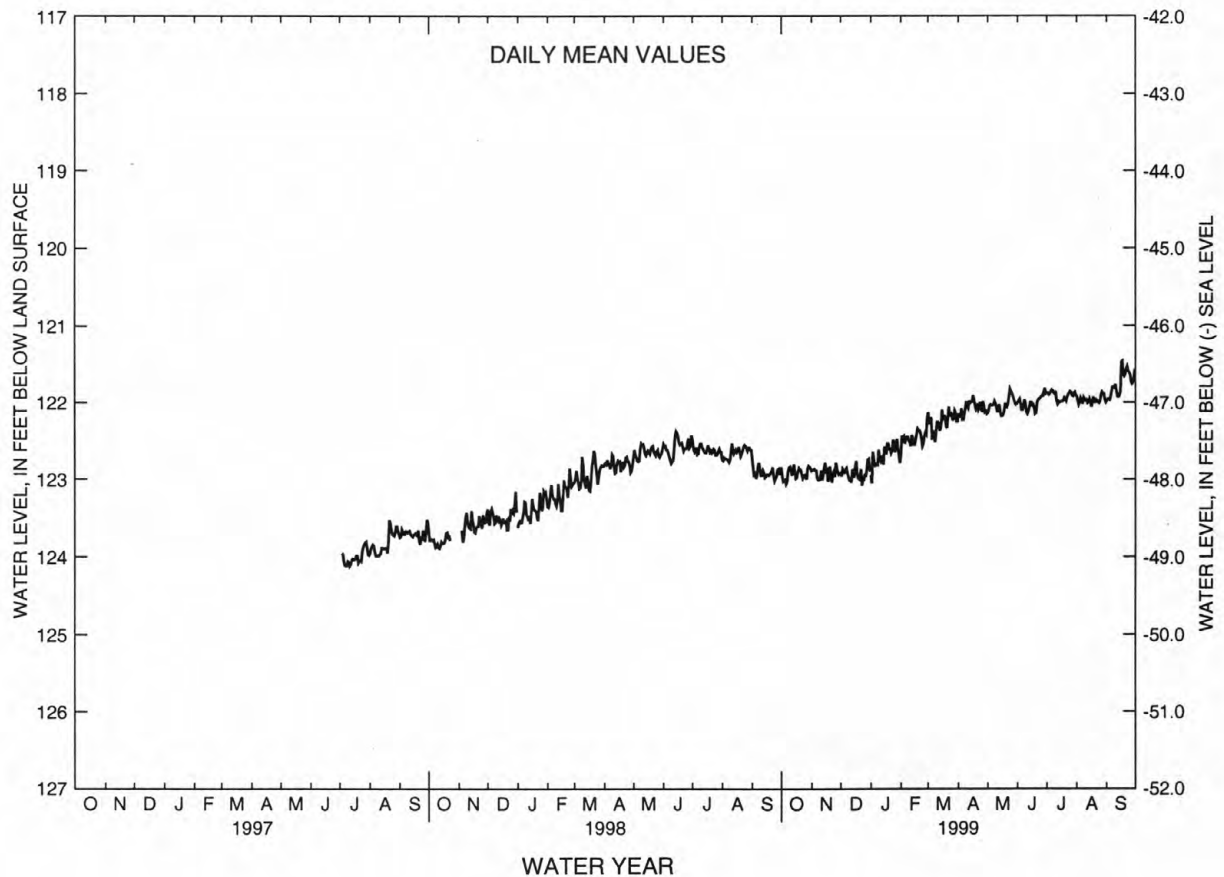
PERIOD OF RECORD.--July 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 121.19 ft below land surface, Sept. 16, 1999; lowest, 124.14 ft below land surface, July 6-8, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	123.01	122.89	122.91	122.84	122.54	122.49	122.23	122.04	122.10	121.86	121.95	121.93
10	122.84	123.00	123.01	122.73	122.52	122.26	122.06	122.07	122.13	121.86	121.98	121.77
15	122.91	122.79	122.98	122.58	122.55	122.10	121.99	122.18	122.00	121.99	122.00	121.87
20	122.88	122.84	123.00	122.61	122.37	122.34	122.05	122.02	122.14	121.95	122.00	121.64
25	122.95	122.97	123.02	122.56	122.44	122.17	122.11	121.86	121.93	121.86	121.99	121.63
EOM	122.86	122.93	122.90	122.79	122.20	122.25	122.15	122.02	121.89	121.91	122.00	121.57
MEAN	122.93	122.92	122.92	122.69	122.46	122.25	122.07	122.03	122.01	121.92	121.97	121.75
WTR YR 1999 MEAN 122.33 HIGH 121.46 SEP 17 LOW 123.08 DEC 23												

NJ-WRD WELL NO. 33-0841

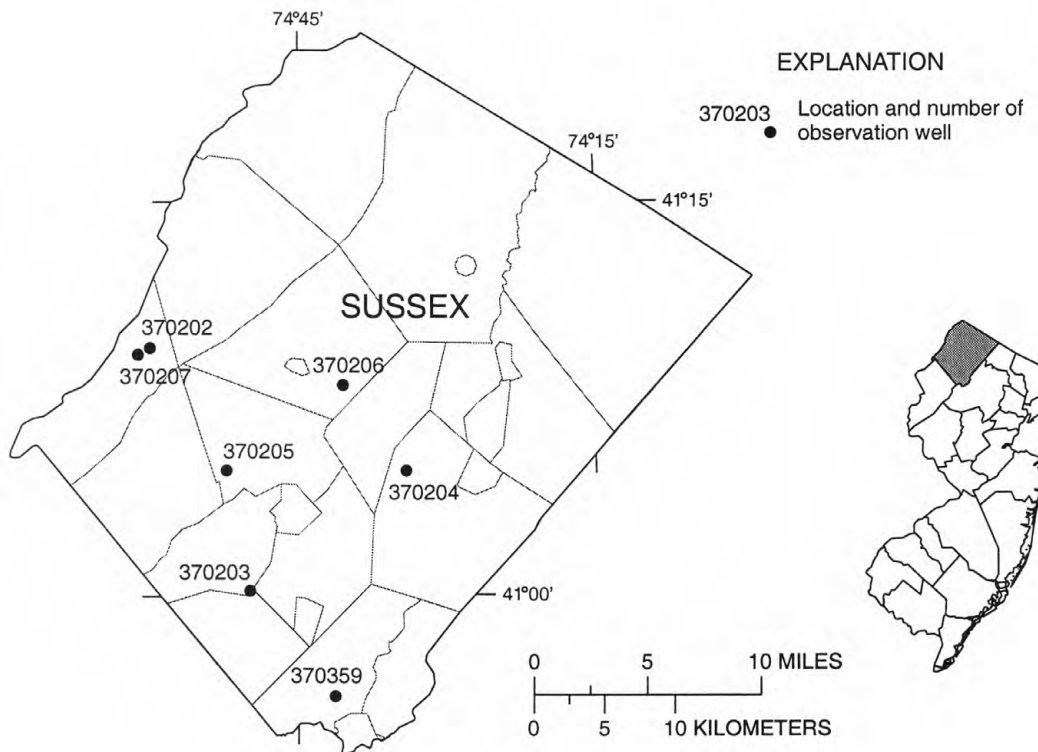


## SUSSEX COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
370202	TAYLOR OBS	WALPACK TWP	95	BDVL	DAILY
370203	WHITTINGHAM 19 OBS	FREDON TWP	500	ALNN	DAILY
370204	SPARTA TWP 6 OBS	SPARTA TWP	143	SFDF	DAILY
370205	SWARTSWOOD PARK 5 OBS	HAMPTON TWP	148	ALNN	DAILY
370206	FAIRGROUNDS 7 OBS	FRANKFORD TWP	80	SFDF	DAILY
370207	WALPACK TWP 4 OBS	WALPACK TWP	55	SFDF	DAILY
370359	BYRAM TWP PW-1 OBS	BYRAM TWP	100	PCMB	DAILY

## Aquifer names

- ALNN - Allentown Dolomite
- BDVL - Bossardville Limestone
- PCMB - Precambrian Erathem
- SFDF - Stratified drift



## GROUND-WATER LEVELS

## SUSSEX COUNTY

NJ-WRD Well Number, 37-0202. Site I.D., 410914074540401. Local I.D., Taylor Obs.

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.

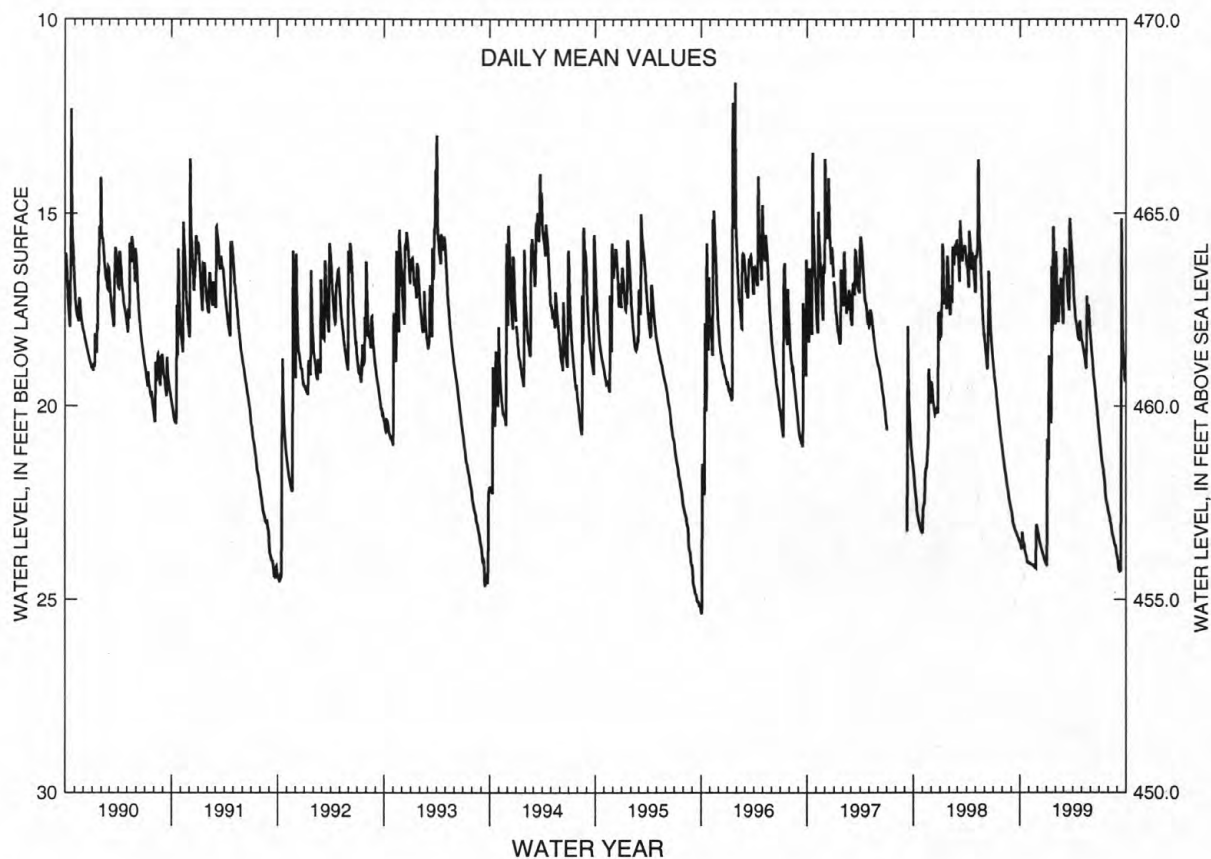
PERIOD OF RECORD.--June 1988 to current year. Records for 1988 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.63	24.06	23.36	20.89	16.49	15.96	17.09	18.38	18.52	20.96	22.80	24.07
10	23.32	24.09	23.55	18.69	17.71	16.19	17.64	18.62	18.96	21.31	23.00	24.20
15	23.56	24.10	23.70	20.37	16.90	17.15	17.91	18.88	19.39	21.59	23.25	24.27
20	23.79	24.14	23.84	17.15	16.69	17.52	18.19	17.15	19.78	21.90	23.42	17.70
25	23.94	24.18	23.97	15.35	17.62	15.55	17.86	17.37	20.14	22.40	23.59	18.87
EOM	24.04	23.15	24.08	17.79	17.74	16.25	18.10	18.06	20.55	22.61	23.82	19.15
MEAN	23.70	23.95	23.70	19.13	17.17	16.36	17.68	18.23	19.39	21.69	23.24	21.20
WTR YR 1999	MEAN 20.48 HIGH 15.13 MAR 22 LOW 24.27 SEP 15											

NJ-WRD WELL NO. 37-0202





## SUSSEX COUNTY

NJ-WRD Well Number, 37-0203. Site I.D., 410005074473801. Local I.D., Whittingham 19 Obs. NJ Permit Number, 21-07796-1.

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.

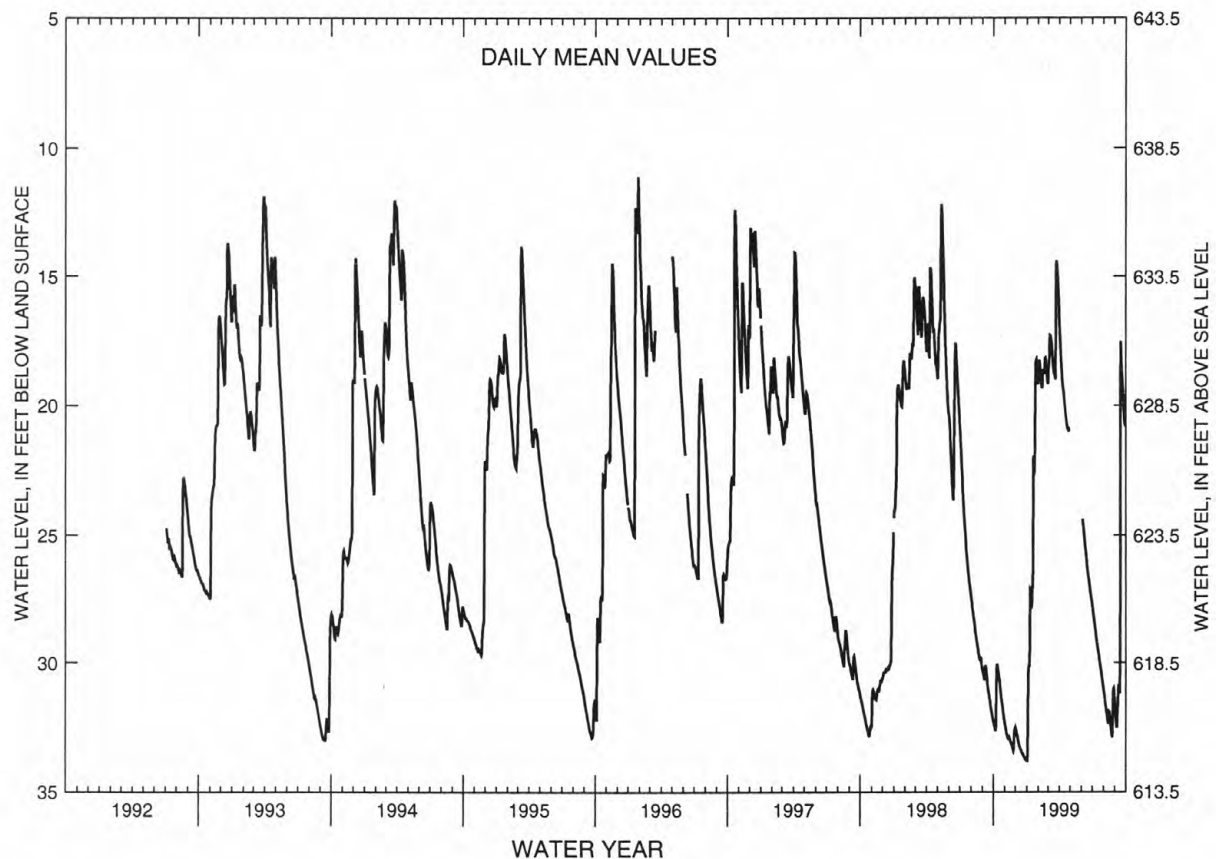
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.76 ft below land surface, Jan. 28, 1996; lowest, 34.10 ft below land surface, Jan. 1-2, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.53	32.65	32.80	30.50	18.33	17.52	18.22	---	24.52	28.20	31.44	32.33
10	30.19	32.94	33.16	27.11	19.13	17.59	19.27	---	25.23	28.79	32.01	31.49
15	30.41	32.96	33.38	27.75	18.62	18.59	19.92	---	25.95	29.34	32.10	31.20
20	30.98	33.17	33.54	22.18	18.18	18.94	20.57	---	26.61	29.83	32.37	18.47
25	31.60	33.42	33.68	18.41	18.75	14.51	20.89	---	27.14	30.31	32.91	19.87
EOM	32.24	32.52	33.81	19.07	19.18	16.48	---	---	---	30.92	31.31	20.80
MEAN	31.43	32.92	33.32	25.46	18.74	17.30	19.60	---	26.07	29.39	31.89	25.83
WTR YR 1999	MEAN 26.67 HIGH 14.39 MAR 24 LOW 33.84 JAN 1											

## NJ-WRD WELL NO. 37-0203



## GROUND-WATER LEVELS

## SUSSEX COUNTY

NJ-WRD Well Number, 37-0204. Site I.D., 410431074395801. Local I.D., Sparta Twp 6 Obs. NJ Permit Number, 22-28915.

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.--Digital water-level recorder--60-minute punch. Periodic measurements, Aug. 1991 to May 1998.

DATUM.--Land surface is 621.7 ft above sea level.

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

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

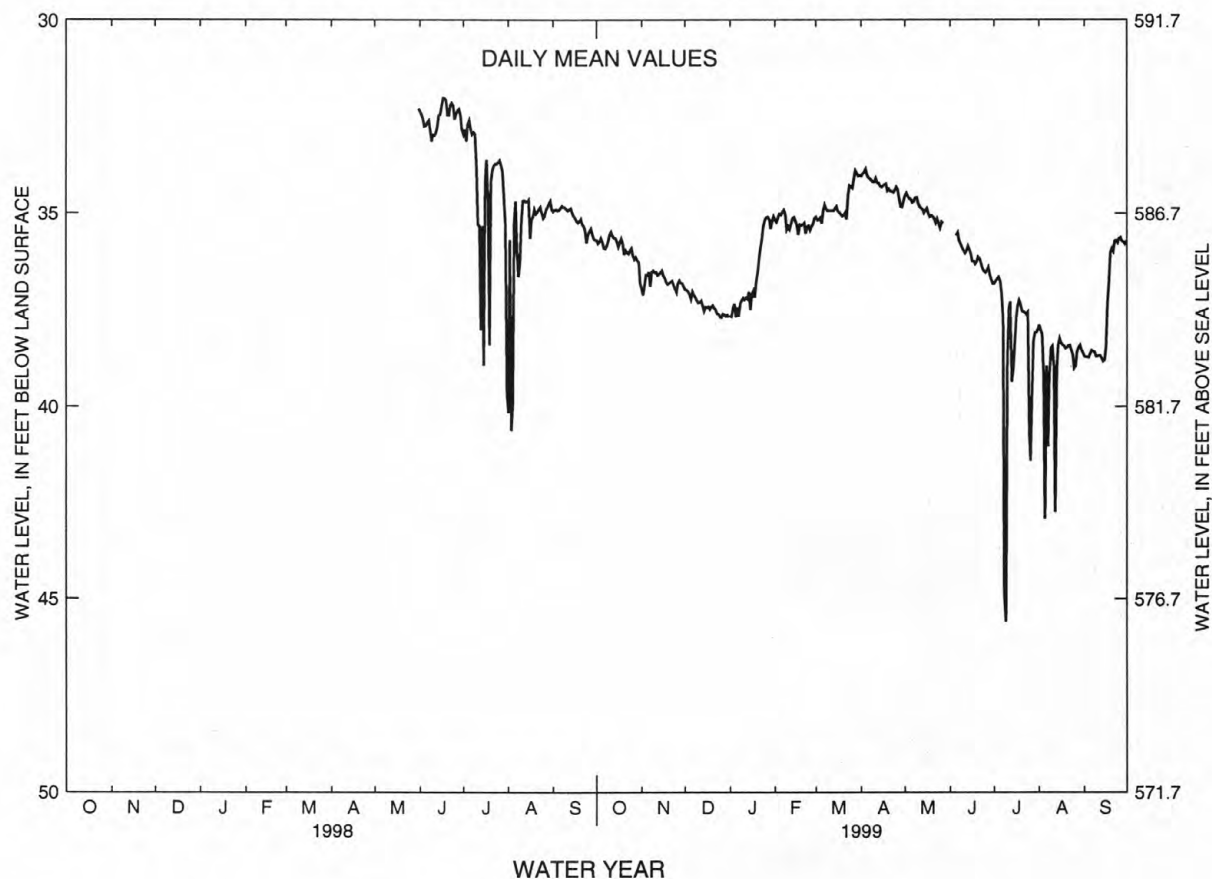
PERIOD OF RECORD.--Aug. 1991 to Sept. 1993, May 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.84 ft below land surface, June 19, 1998; lowest, 47.16 ft below land surface, July 9, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.76	36.61	37.22	37.68	35.05	35.27	34.01	34.64	35.58	36.76	42.92	38.64
10	35.55	36.54	37.32	37.20	35.35	34.94	34.19	34.74	35.97	38.79	38.45	38.70
15	35.74	36.49	37.43	37.50	35.21	34.83	34.32	34.93	36.06	38.42	38.25	38.80
20	36.08	36.81	37.39	36.56	35.30	35.06	34.37	35.09	36.14	37.53	38.48	35.92
25	35.92	37.05	37.68	35.18	35.44	34.30	34.32	35.38	36.54	40.72	39.01	35.66
EOM	36.82	36.90	37.68	35.09	35.14	34.02	34.68	---	36.83	38.02	38.61	35.73
MEAN	35.89	36.74	37.39	36.61	35.25	34.76	34.29	34.90	36.18	38.42	38.92	37.41
WTR YR 1999	MEAN 36.43 HIGH 33.86 APR 4 LOW 45.59 JUL 9											

NJ-WRD WELL NO. 37-0204



## GROUND-WATER LEVELS

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## SUSSEX COUNTY

NJ-WRD Well Number, 37-0205. Site I.D., 410449074483301. Local I.D., Swartswood Park 5 Obs. NJ Permit Number, 21-07722-3.

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.

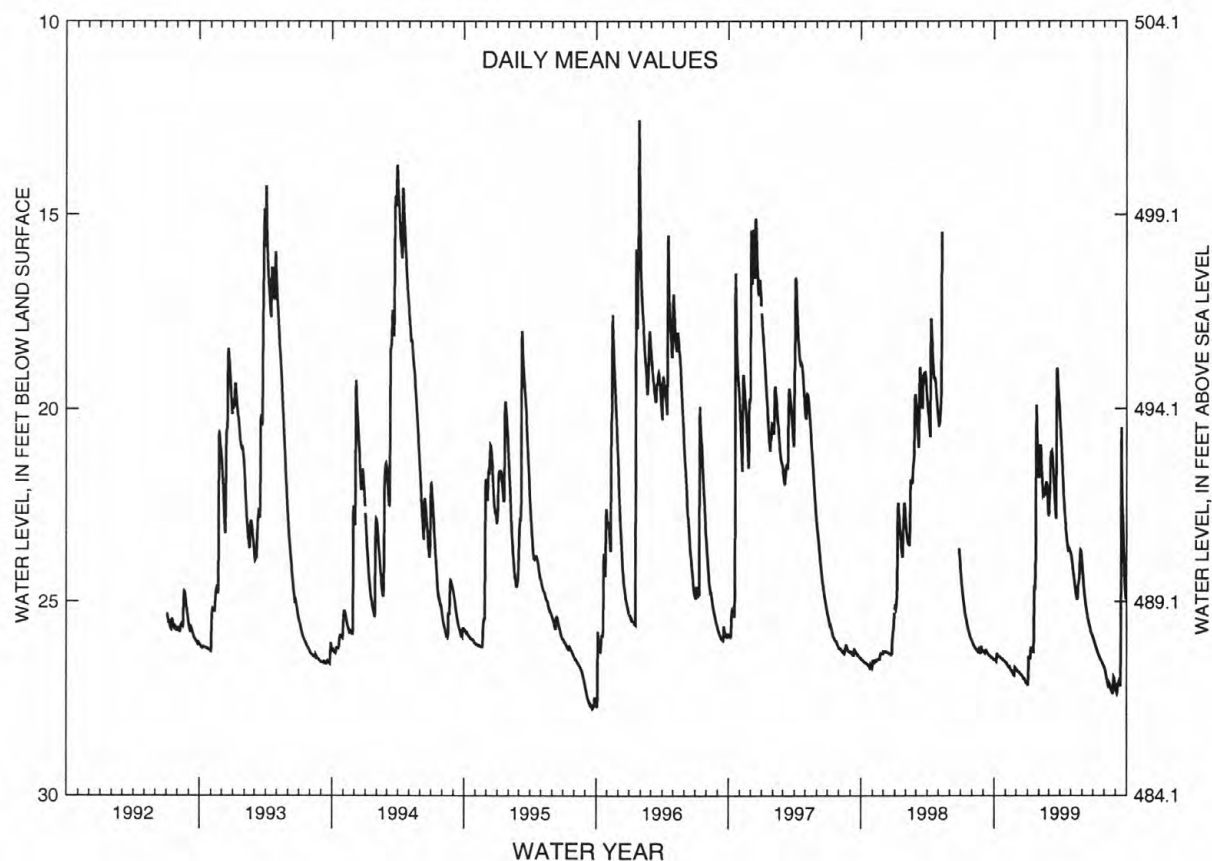
PERIOD OF RECORD.--Apr. 1991 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.52	26.61	26.81	26.43	20.94	21.45	21.07	24.02	24.61	26.05	26.85	27.38
10	26.37	26.69	26.84	26.18	21.84	21.15	22.06	24.43	25.03	26.20	27.09	27.09
15	26.41	26.75	26.90	26.29	22.16	21.97	22.89	24.82	25.35	26.34	27.11	27.20
20	26.46	26.82	26.97	24.61	21.97	22.78	23.43	24.66	25.58	26.45	27.29	22.53
25	26.50	26.91	27.04	19.91	22.33	19.15	23.65	24.04	25.79	26.56	27.40	24.01
EOM	26.55	26.75	27.11	21.62	22.78	20.14	23.74	23.93	25.90	26.68	27.14	24.94
MEAN	26.47	26.73	26.93	24.71	21.91	21.15	22.57	24.29	25.25	26.34	27.09	25.34
WTR YR 1999	MEAN 24.92 HIGH 18.95 MAR 24 LOW 27.40 AUG 25											

## NJ-WRD WELL NO. 37-0205



## SUSSEX COUNTY

NJ-WRD Well Number, 37-0206. Site I.D., 410804074424401. Local I.D., Fairgrounds 7 Obs. NJ Permit Number, 22-28916-0.

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 80 ft, screened 59 to 80 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements Apr. 1991 to July 1992.

DATUM.--Land surface is 528.5 ft above sea level.

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

REMARKS.--Removal of land in the area surrounding the well during the fall of 1998 resulted in the lowering of land surface at this site by 5 feet. The removal of a section of casing resulted in a new measuring point 6.2 feet lower than the previous one. Water-level data prior to the change, including extremes and well and screen depths, have to correspond to the new land surface.

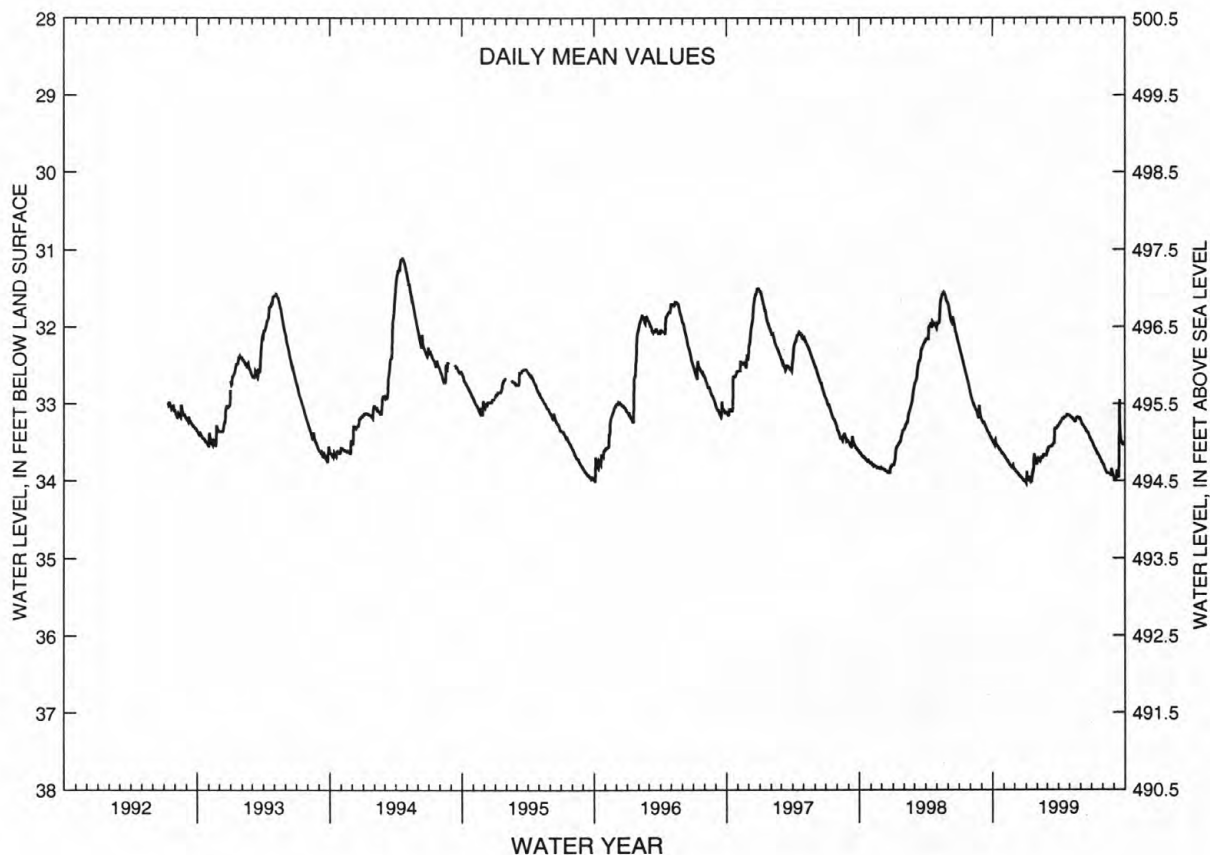
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.11 ft below land surface, Apr. 17, 19-20, 1994; lowest, 34.04 ft below land surface, Jan. 3, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.51	33.69	33.87	33.93	33.71	33.57	33.26	33.17	33.26	33.51	33.81	33.97
10	33.50	33.73	33.90	33.94	33.74	33.56	33.22	33.19	33.29	33.57	33.87	33.86
15	33.55	33.76	33.93	34.01	33.70	33.54	33.19	33.22	33.33	33.61	33.90	33.96
20	33.58	33.80	33.96	33.88	33.66	33.51	33.17	33.19	33.37	33.65	33.91	33.43
25	33.62	33.83	33.99	33.65	33.67	33.32	33.14	33.17	33.41	33.71	33.93	33.52
EOM	33.65	33.85	34.01	33.78	33.66	33.29	33.15	33.20	33.47	33.76	33.94	33.49
MEAN	33.56	33.76	33.94	33.90	33.70	33.48	33.20	33.19	33.33	33.62	33.88	33.69
WTR YR 1999	MEAN 33.60 HIGH 32.95 SEP 17 LOW 34.03 JAN 2											

## NJ-WRD WELL NO. 37-0206



## GROUND-WATER LEVELS

221

## SUSSEX COUNTY

NJ-WRD Well Number, 37-0207. Site I.D., 410928074522801. Local I.D., Walpack Twp. 4 Obs. NJ Permit Number, 21-07721-5.

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.

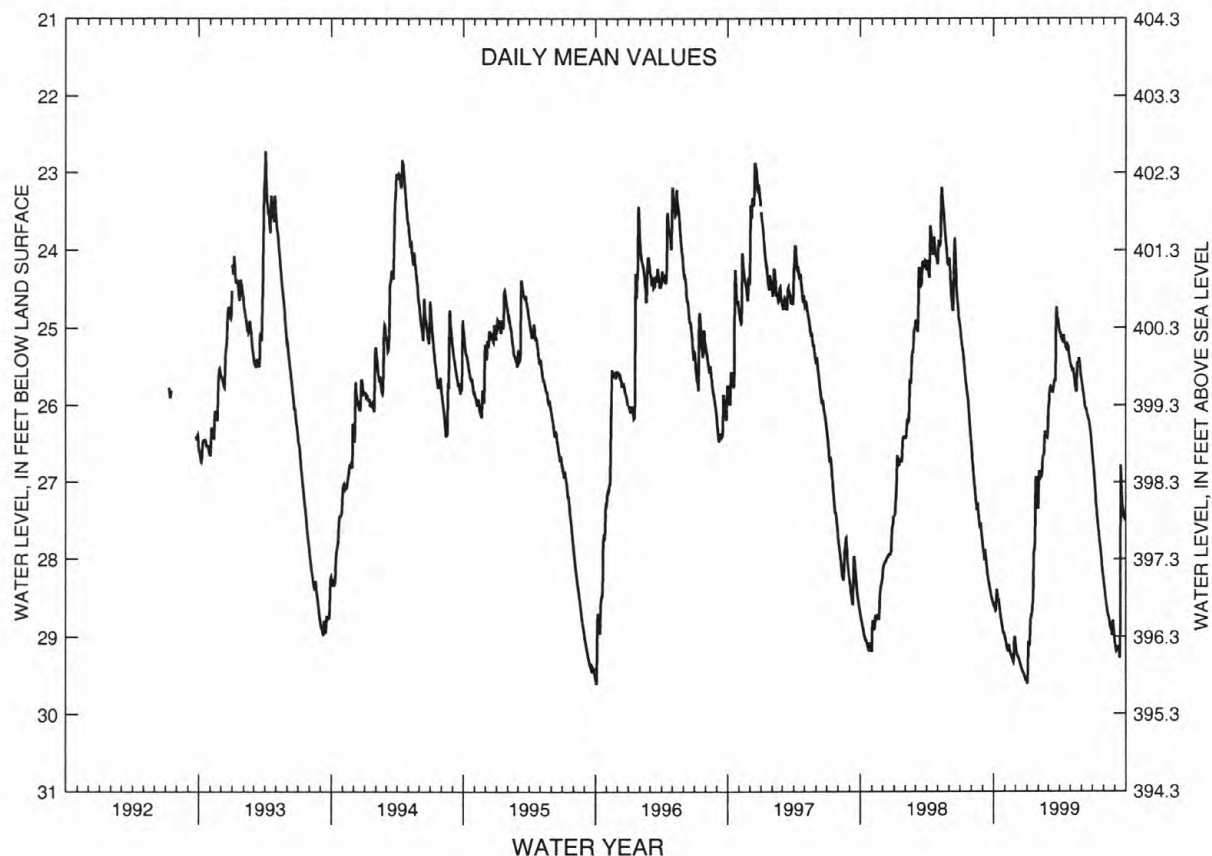
PERIOD OF RECORD.--Apr. 1991 to current year.

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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.63	29.08	29.24	29.11	26.89	25.82	25.12	25.50	25.81	26.81	28.43	29.18
10	28.40	29.19	29.28	28.91	26.93	25.78	25.13	25.54	25.97	27.16	28.62	29.14
15	28.51	29.17	29.37	28.70	26.66	25.78	25.17	25.75	26.06	27.47	28.73	29.28
20	28.70	29.26	29.44	27.93	26.35	25.68	25.26	25.53	26.17	27.70	28.89	27.07
25	28.86	29.33	29.51	27.04	26.39	24.80	25.23	25.40	26.29	27.94	28.99	27.41
EOM	28.96	29.05	29.58	27.32	26.35	25.01	25.41	25.63	26.55	28.22	29.01	27.37
MEAN	28.68	29.16	29.38	28.36	26.70	25.53	25.19	25.56	26.07	27.46	28.71	28.28
WTR YR 1999	MEAN 27.43 HIGH 24.73 MAR 24 LOW 29.61 JAN 2											

## NJ-WRD WELL NO. 37-0207



## GROUND-WATER LEVELS

222

## SUSSEX COUNTY

NJ-WRD Well Number, 37-0359. Site I.D, 405613074430901. Local I.D., Byram Twp PW-1 Obs.

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.

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

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

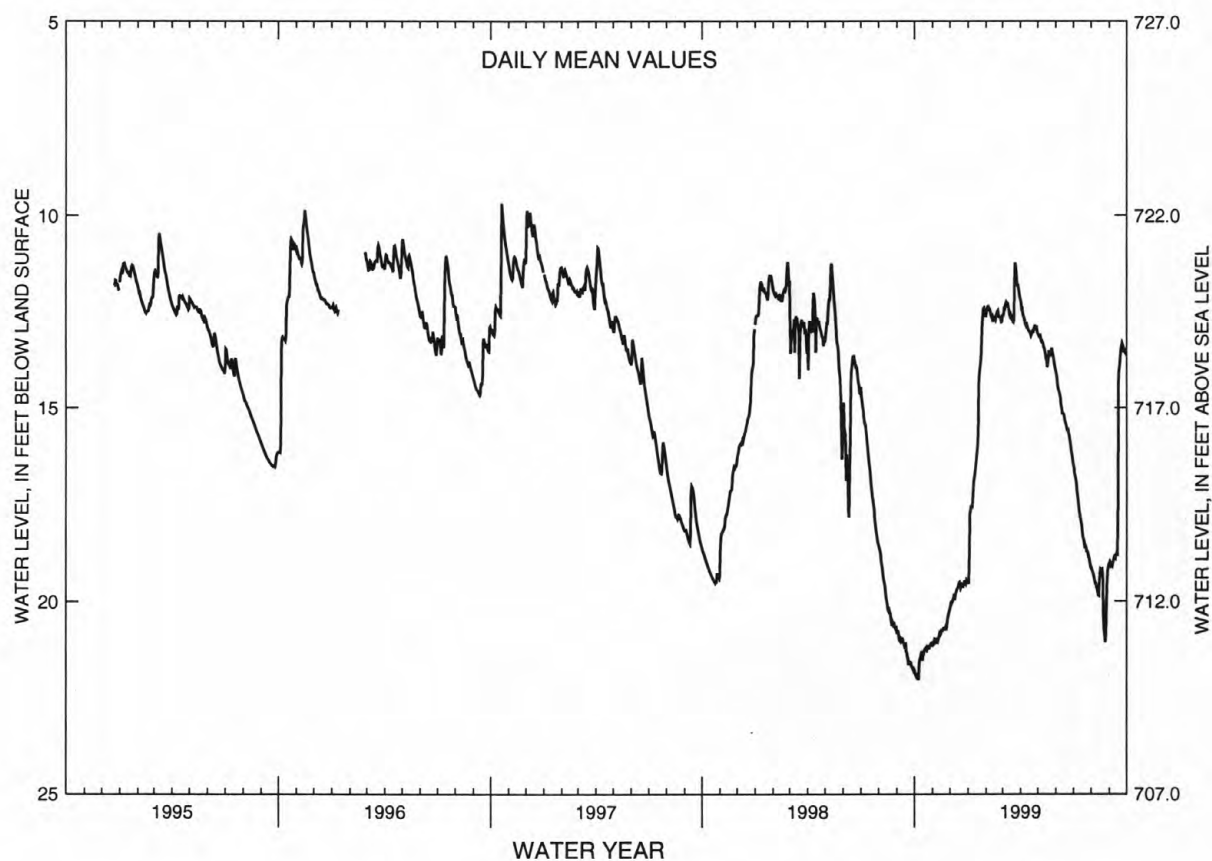
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.64 ft below land surface, Oct. 20, 1996; lowest, 22.22 ft below land surface, Oct. 8, 1998.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.98	20.97	20.02	17.67	12.47	12.46	12.56	13.12	14.51	16.86	19.32	19.07
10	21.52	21.03	19.85	17.05	12.62	12.27	12.83	13.33	14.95	17.54	19.65	18.83
15	21.54	20.84	19.63	---	12.69	12.57	12.99	13.73	15.20	18.00	19.51	18.77
20	21.25	20.69	19.61	14.13	12.48	12.77	13.08	13.50	15.59	18.53	19.19	13.67
25	21.22	20.66	19.56	12.78	12.63	11.48	12.90	13.44	15.87	18.72	21.06	13.38
EOM	21.08	20.24	19.51	12.63	12.75	12.13	13.05	14.00	16.41	19.13	19.05	13.45
MEAN	21.45	20.79	19.72	15.44	12.58	12.24	12.83	13.51	15.24	17.99	19.63	16.39

WTR YR 1999 MEAN 16.53 HIGH 11.23 MAR 23 LOW 22.04 OCT 8

## NJ-WRD WELL NO. 37-0359

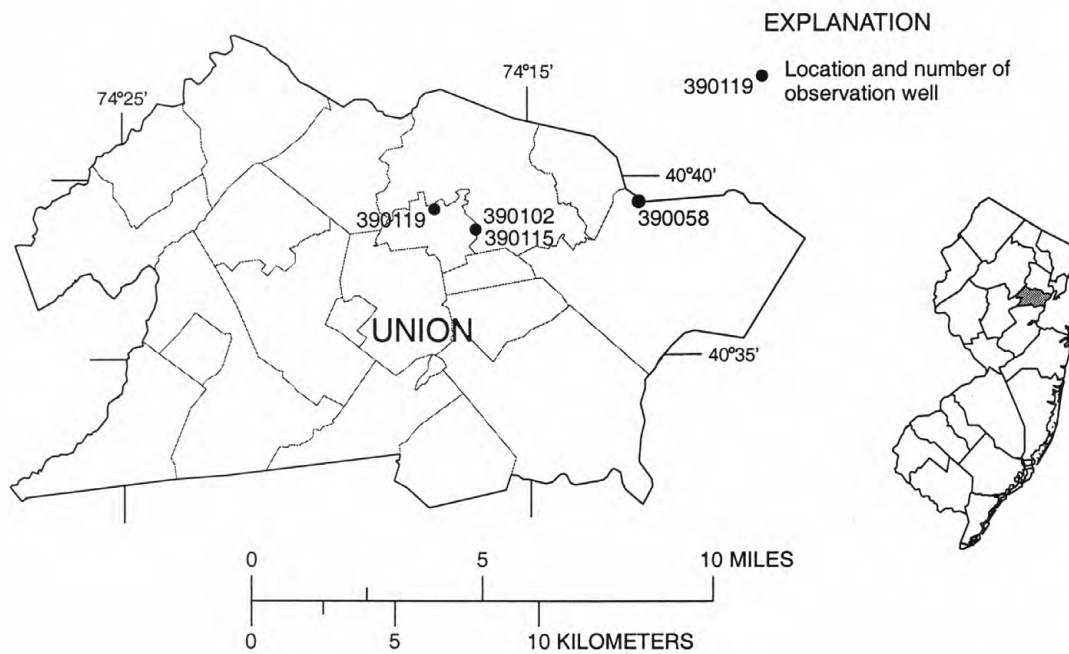




## UNION COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
390058	SCHWEITZER OBS	ELIZABETH CITY	660	PSSC	MANUAL
390102	WHITE LAB 3 OBS	KENILWORTH BORO	251	PSSC	MANUAL
390115	WHITE LAB 4 OBS	KENILWORTH BORO	251	PSSC	MANUAL
390119	UNION COUNTY PARK OBS	KENILWORTH BORO	290	PSSC	DAILY

Aquifer names  
PSSC - Passaic Formation



## UNION COUNTY

NJ-WRD Well Number, 39-0058. Site I.D., 404111074121701. Local I.D., Schweitzer Obs.

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.

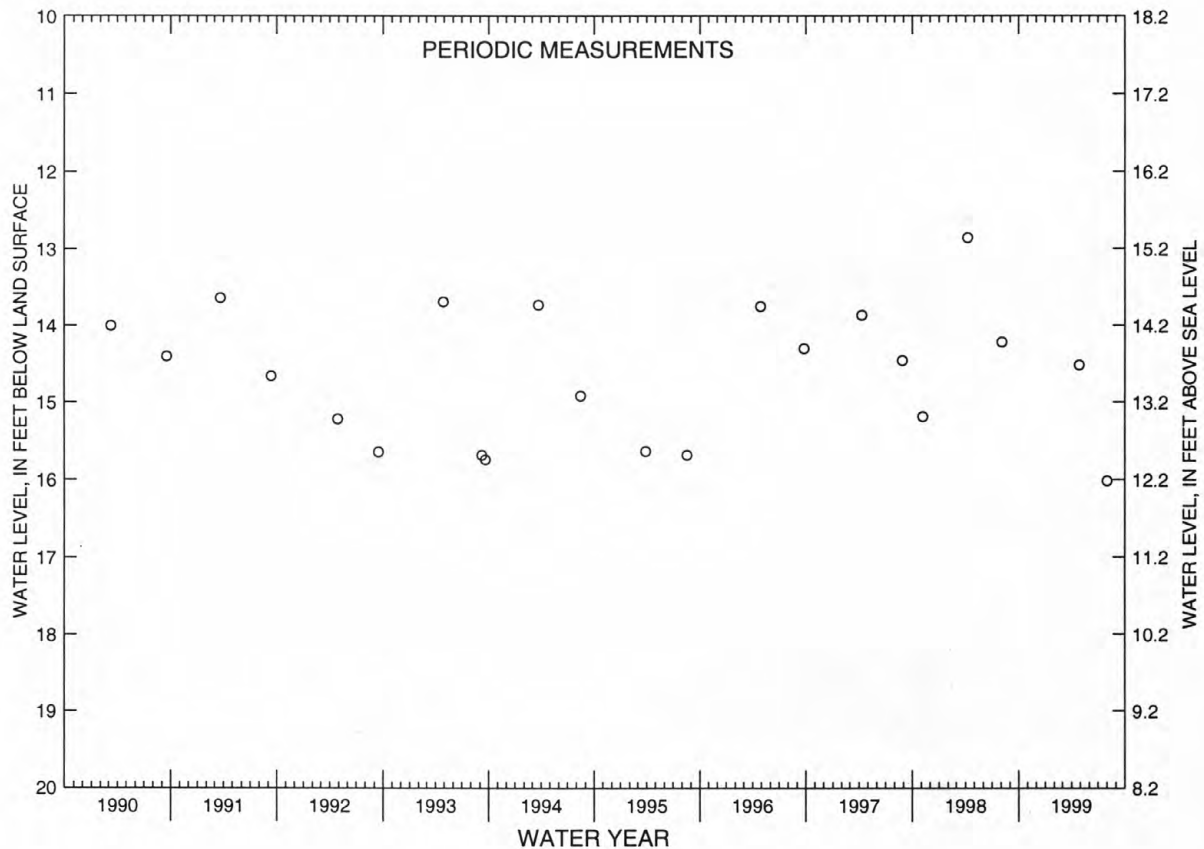
PERIOD OF RECORD.--Apr. 1956 to current year. Records for 1956 to 1982 and 1985 to 1989 are unpublished and are available if files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
APR 28	14.52	AUG 2	16.02

## NJ-WRD WELL NO. 39-0058



## GROUND-WATER LEVELS

225

## UNION COUNTY

NJ-WRD Well Number, 39-0102. Site I.D., 404027074164401. Local I.D., White Lab 3 Obs.

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.

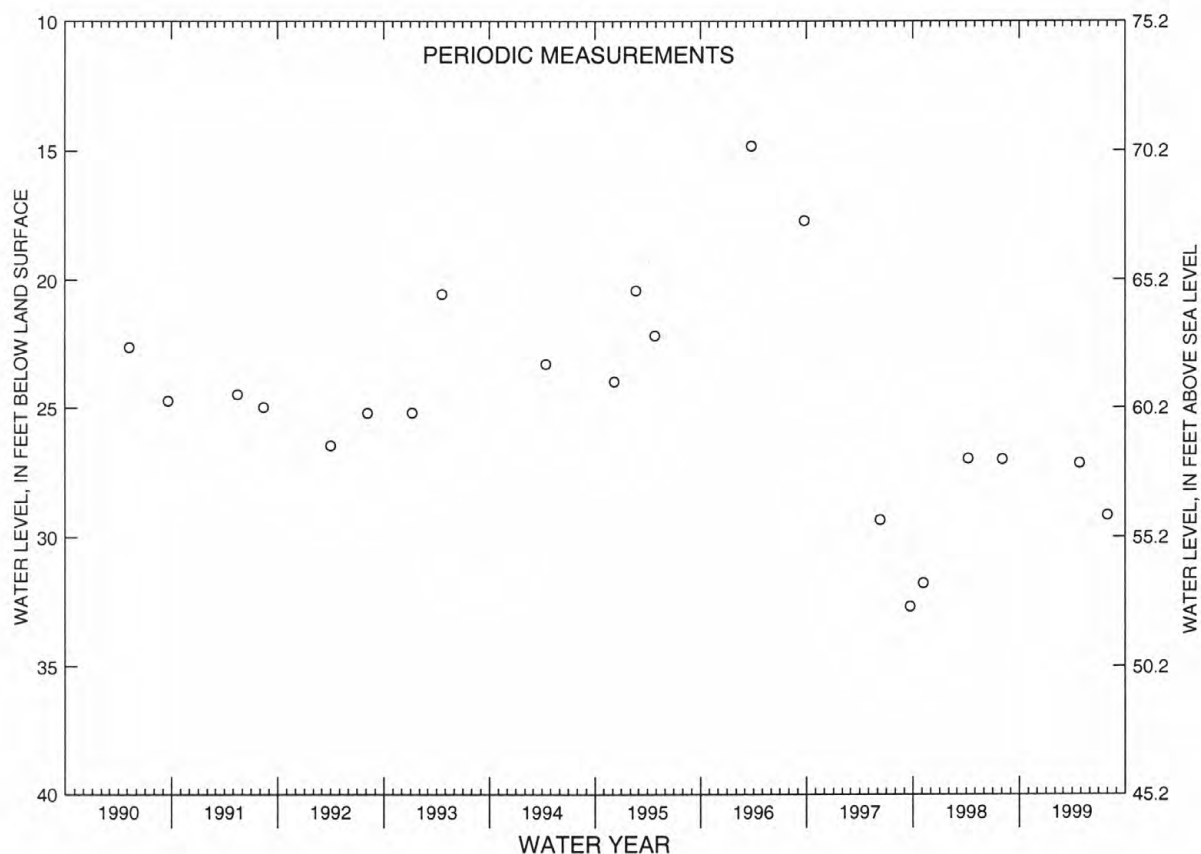
PERIOD OF RECORD.--Sept. 1952 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
APR 28	27.15	AUG 2	29.16

## NJ-WRD WELL NO. 39-0102



## UNION COUNTY

NJ-WRD Well Number, 39-0115. Site I.D., 404044074162101. Local I.D., White Lab 4 Obs.

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.

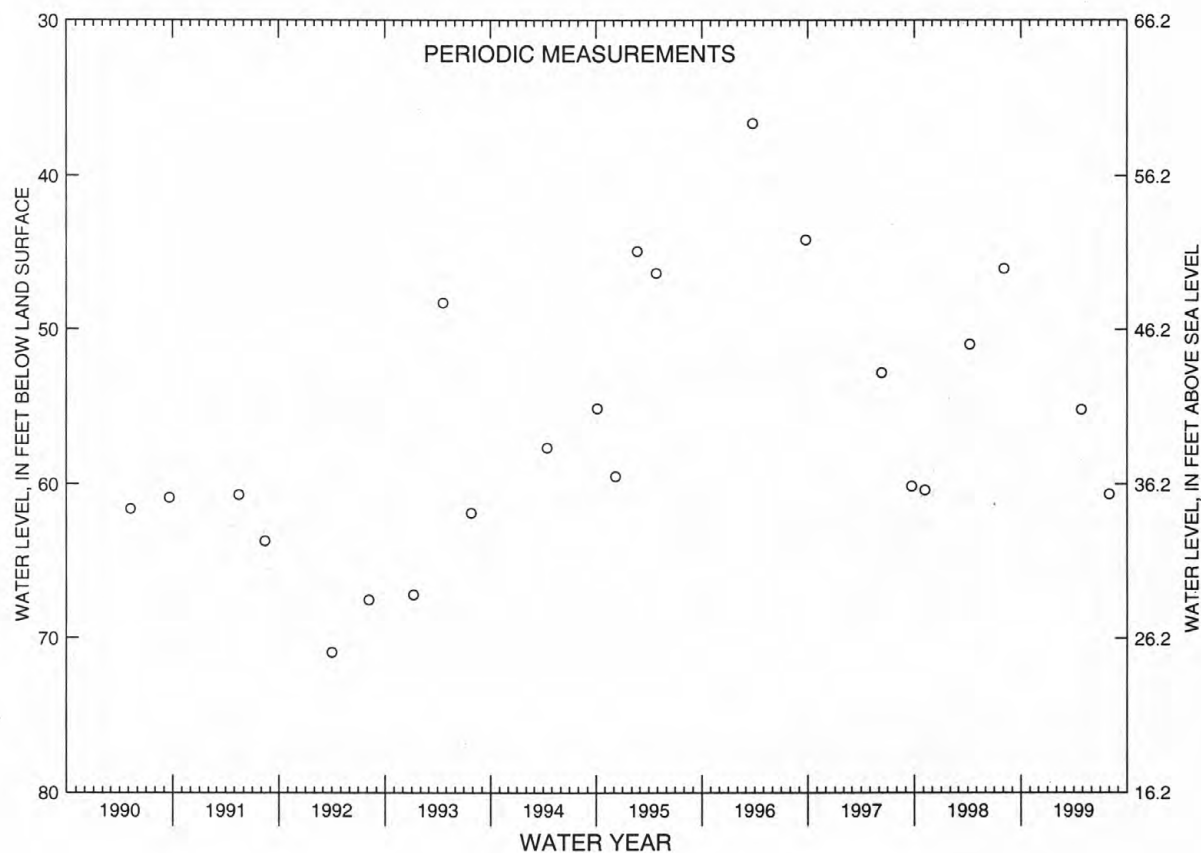
PERIOD OF RECORD.--Apr. 1952 to current year. Records for 1952 to 1989 are unpublished and are available in files of the New Jersey District Office.

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 1998 TO SEPTEMBER 1999  
MEASURED WATER LEVELS

Date	Water Level	Date	Water Level
APR 28	55.17	AUG 2	60.65

## NJ-WRD WELL NO. 39-0115



## GROUND-WATER LEVELS

227

## UNION COUNTY

NJ-WRD Well Number, 39-0119. Site I.D., 404106074171901. Local I.D., Union County Park Obs.

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.

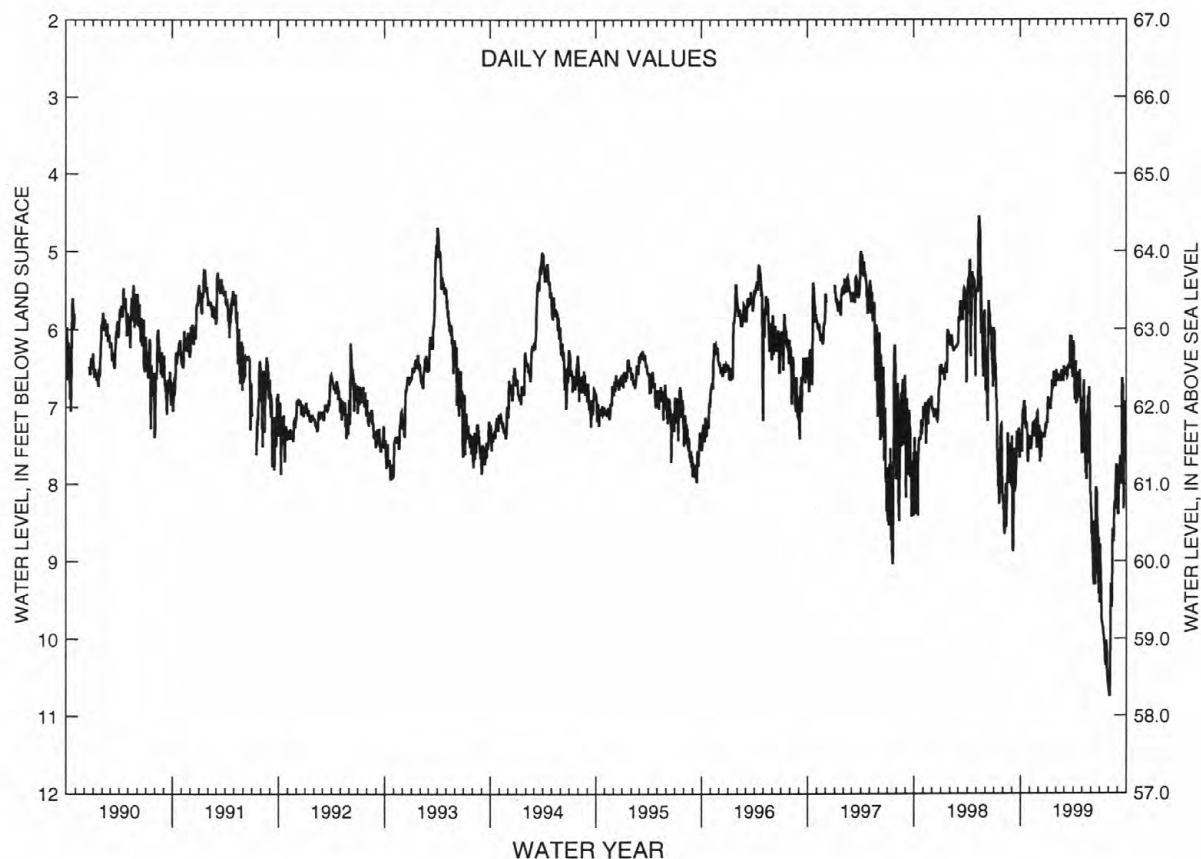
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.06 ft below land surface, June 2, 1952; lowest, 16.05 ft below land surface, June 29, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.39	7.49	7.26	6.90	6.58	6.59	6.30	6.91	8.62	9.06	10.74	8.34
10	7.02	7.49	7.32	6.91	6.63	6.51	6.46	7.01	9.21	9.79	9.56	7.68
15	6.93	7.19	7.36	6.93	6.65	6.50	6.87	7.86	9.05	9.94	8.68	7.68
20	7.28	7.17	7.36	6.68	6.53	6.50	6.75	7.08	8.26	10.24	8.61	6.89
25	7.37	7.20	7.33	6.54	6.64	6.10	6.52	7.48	8.52	10.03	8.32	7.23
EOM	7.38	7.07	7.20	6.73	6.60	6.33	7.22	8.13	9.03	10.60	8.01	6.93
MEAN	7.29	7.30	7.34	6.83	6.61	6.43	6.70	7.31	8.75	9.90	9.08	7.56

WTR YR 1999 MEAN 7.60 HIGH 6.08 MAR 24 LOW 10.75 AUG 6

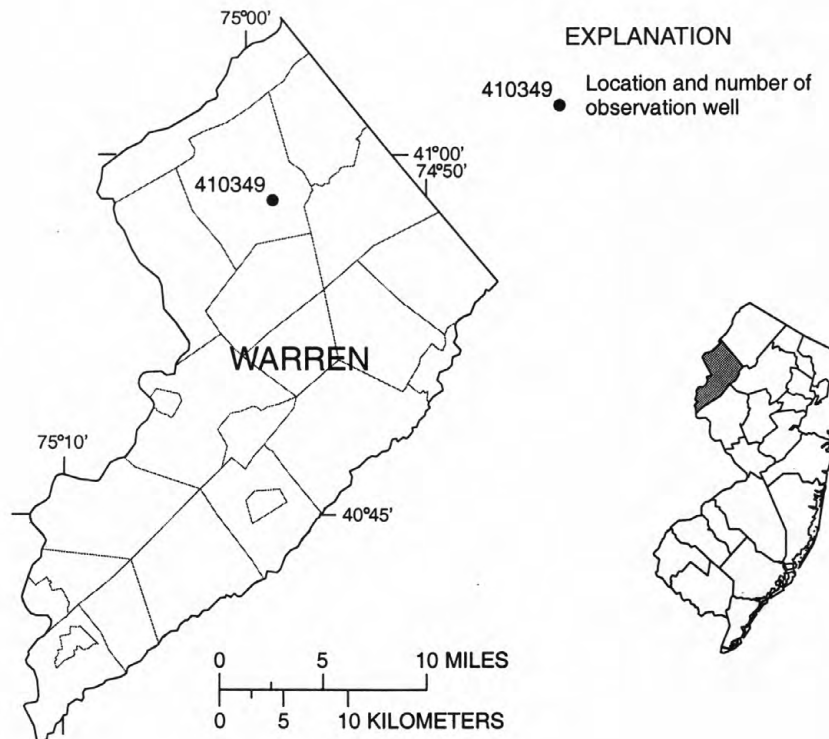
## NJ-WRD WELL NO. 39-0119



## WARREN COUNTY

NJ-WRD well number	Local identifier	Township	Well depth	Aquifer	Type of data
410349	BLAIRSTOWN 1 OBS	BLAIRSTOWN TWP	294	MRBG	DAILY

Aquifer names  
MRBG - Martinsburg Shale





## GROUND-WATER LEVELS

229

## WARREN COUNTY

NJ-WRD Well Number, 41-0349. Site I.D., 405808074583001. Local I.D., Blairstown 1 Obs.

LOCATION.--Lat 40°58'08", long 74°58'30", Hydrologic Unit 02040105, in the Limestone Ridge and Marsh Preserve, Cedar Lake Rd., Blairstown Township.

Owner: State of New Jersey - DEP.

AQUIFER.--Martinsburg Shale of Ordovician age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 294 ft, open hole 41 to 294 ft.

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

DATUM.--Land surface is 460 ft above sea level from topographic map.

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

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.78 ft below land surface, Sept. 16, 1999; lowest, 6.09 ft below land surface, Aug. 7, 1999.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	---	6.01	5.84
10	---	---	---	---	---	---	---	---	---	---	6.02	5.70
15	---	---	---	---	---	---	---	---	---	5.91	5.76	5.76
20	---	---	---	---	---	---	---	---	---	5.92	5.92	5.12
25	---	---	---	---	---	---	---	---	---	5.95	5.93	5.35
EOM	---	---	---	---	---	---	---	---	---	5.95	5.81	5.34
MEAN	---	---	---	---	---	---	---	---	---	5.93	5.91	5.47
WTR YR 1999	HIGH 4.19 SEP 17 LOW 6.04 AUG 12											

## NJ-WRD WELL NO. 41-0349

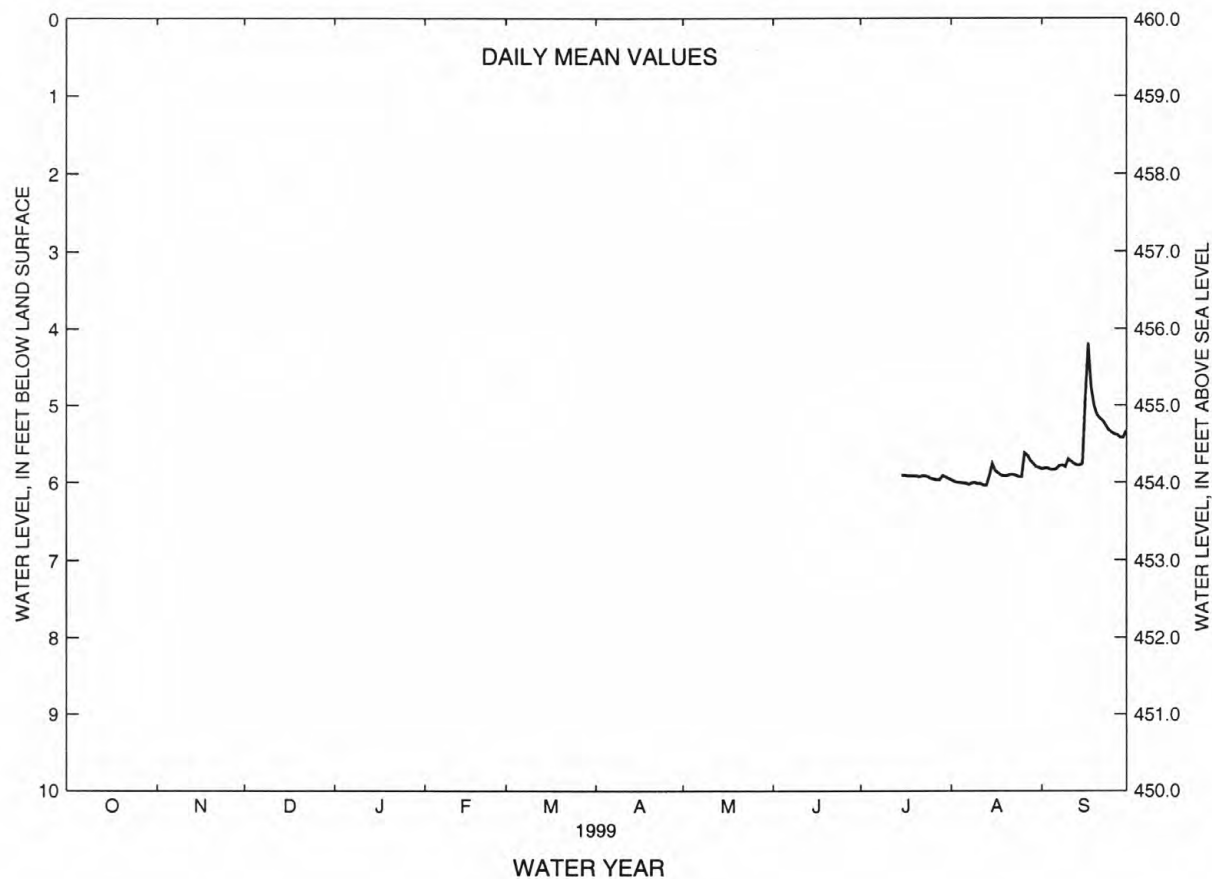


Table 2. Discontinued observation wells for which ground-water-level data are available

[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 <sup>1</sup>
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
01-710	US GEOLOGICAL SURVEY	ACOW2 OBS	391726	742221	1993-96	122KRKDL
01-711	US GEOLOGICAL SURVEY	ACOW1 OBS	391955	742507	1987-91	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

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 <sup>1</sup>
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
15-297	HUNTSMAN POLYPROPYLENE CORP	SHELL 6 OBS/SEALED	394942	751317	1962-96	211MRPAU
15-379	MANTUA TWP MUA	EWG 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
27-015	MORRISTOWN AIRPORT	MORRISTOWN ARPT. 2 OBS	404743	742522	1960-75, 77-97	112SFDF
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

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 <sup>1</sup>
27-304	US ARMY - PICATINNY ARSENAL	PICATINNY CAF 5 OBS	405629	743409	1984,87-93	112SFDF
27-321	ROCKAWAY RIVER C C	GEONICS 2	405344	742740	1985-90	112SFDF
27-322	DOVER TOWN WD	DTWD TW 2	405314	743250	1985-89	112SFDF
27-323	MOUNTAIN LAKES WD	CRANE RD (GEONICS 1)	405253	742708	1985-89,1997-98	112SFDF
27-324	ST CLAIRE'S HOSPITAL	POCONO RD (GEONICS 2)	405334	742828	1985-89,1997-98	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
27-1866	DOVER WATER COMMISSION	MOOSE LODGE 1S OBS	405308	743232	1997-98	112SFDF
27-1867	STATE OF NJ - DEP	ROC MW 18-S OBS	405434	743011	1997-98	112SFDF
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

<sup>1</sup>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

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## CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	$2.54 \times 10^1$	millimeter
	$2.54 \times 10^{-2}$	meter
foot (ft)	$3.048 \times 10^{-1}$	meter
mile (mi)	$1.609 \times 10^0$	kilometer
<i>Area</i>		
acre	$4.047 \times 10^3$	square meter
	$4.047 \times 10^{-1}$	square hectometer
	$4.047 \times 10^{-3}$	square kilometer
square mile (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometer
<i>Volume</i>		
gallon (gal)	$3.785 \times 10^0$	liter
	$3.785 \times 10^0$	cubic decimeter
	$3.785 \times 10^{-3}$	cubic meter
million gallons (Mgal)	$3.785 \times 10^3$	cubic meter
	$3.785 \times 10^{-3}$	cubic hectometer
cubic foot (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeter
	$2.832 \times 10^{-2}$	cubic meter
cubic-foot-per-second day [(ft <sup>3</sup> /s) d]	$2.447 \times 10^3$	cubic meter
	$2.447 \times 10^{-3}$	cubic hectometer
acre-foot (acre-ft)	$1.233 \times 10^3$	cubic meter
	$1.233 \times 10^{-3}$	cubic hectometer
	$1.233 \times 10^{-6}$	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liter per second
	$2.832 \times 10^1$	cubic decimeter per second
	$2.832 \times 10^{-2}$	cubic meter per second
gallon per minute (gal/min)	$6.309 \times 10^{-2}$	liter per second
	$6.309 \times 10^{-2}$	cubic decimeter per second
	$6.309 \times 10^{-5}$	cubic meter per second
million gallons per day (Mgal/d)	$4.381 \times 10^1$	cubic decimeter per second
	$4.381 \times 10^{-2}$	cubic meter per second
<i>Mass</i>		
ton (short)	$9.072 \times 10^{-1}$	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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