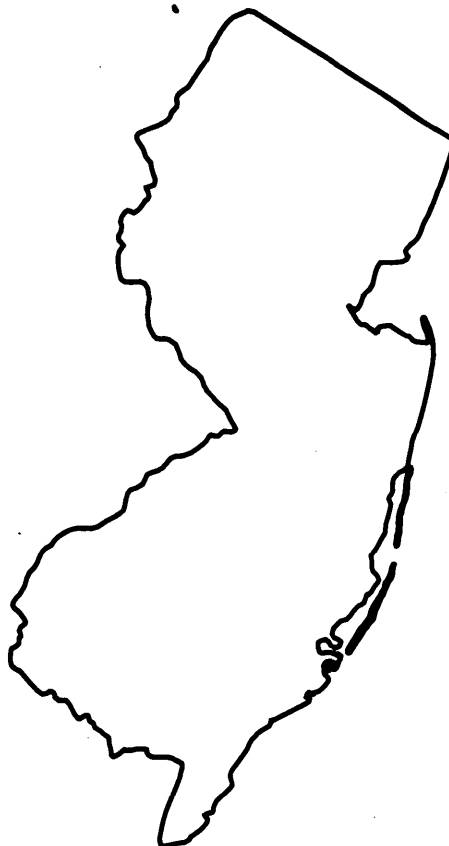




Water Resources Data New Jersey Water Year 1992

Volume 2. Ground-Water Data

by W.R. Bauersfeld, W.D. Jones, and C.E. Gurney



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-92-2
Prepared in cooperation with the New Jersey Department
of Environmental Protection and Energy and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

GEOLOGICAL SURVEY

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PREFACE

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

Hydrologic data for New Jersey are contained in 2 volumes:

Volume 1. Surface-Water Data

Volume 2. Ground-Water Data

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

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Jobs Point Obs	01-578	32
Margate Firehouse 1 Obs	01-834	33
Burke Ave TW Obs	01-702	149
Galen Hall Obs	01-037	34
Oceanville 1 Obs	01-180	35
FAA Pomona Obs	01-703	36
FAA Intermediate Obs	01-775	149,155
FAA Shallow Obs	01-776	149,155
Scholler 1 Obs	01-256	37
<u>BERGEN COUNTY</u>		
Wallington 2 Obs	03-286	38
Wallington 1 Obs	03-284	39
Wallington 3 Obs	03-288	40
Saddle River 17 Obs	03-289	149
<u>BURLINGTON COUNTY</u>		
Mount Obs	05-570	149
Atsion 1 Obs	05-407	149
Atsion 2 Obs	05-408	149
Atsion 3 Obs	05-409	149
Penn SF Shallow Obs	05-628	149
Penn SF Deep Obs	05-630	149
Coyle Airport Obs	05-676	149,156
Butler Place 1 Obs	05-683	41
Butler Place 2 Obs	05-684	42
Lebanon SF 23-D Obs	05-689	43
Medford 1 Obs	05-258	44
Medford 2 Obs	05-259	149
Medford 5 Obs	05-261	45
Medford 4 Obs	05-262	46
Campbell 1 Obs	05-274	149,156
Willingboro 2 Obs	05-645	47
Willingboro 1 Obs	05-063	149
Rhodia 1 Obs	05-440	48
<u>CAMDEN COUNTY</u>		
New Brooklyn Park 1 Obs	07-476	49
New Brooklyn Park 2 Obs	07-477	50
New Brooklyn Park 3 Obs	07-478	51
Winslow 5 Obs	07-503	52
Elm Tree 2 Obs	07-412	53
Elm Tree 3 Obs	07-413	54
Hutton Hill 1 Obs	07-117	55
Hutton Hill 2 Obs	07-118	149,157
Egbert Obs	07-283	149
Petty Is Obs	07-354	149,157
<u>CAPE MAY COUNTY</u>		
West Cape May 1 Obs	09-150	56
Traffic Circle Obs	09-020	150
Coast Guard 800 Obs	09-302	57
Canal 5 Obs	09-048	150,158
Higbee Beach 3 Obs	09-049	58
Airport Rio Grande Obs	09-304	59
M-1 N Wildwood 800 Obs	09-337	60

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Airport 7 Obs	09-060	150,158
Rio Grande 23 Obs	09-071	150
Rio Grande Obs-HB 1992.....	09-333	61
Nummy Island 2 Obs	09-079	62
Wetlands 1 Obs	09-292	63
Wetlands 2 Obs	09-293	64
Wetlands 3 Obs	09-294	150
Wetlands 4 Obs	09-295	150
Oyster 800 Obs	09-306	65
Oyster Lab 4 Obs	09-089	66
Cape May County Park 8 Obs	09-099	67
<u>CUMBERLAND COUNTY</u>		
Heislerville 1 Obs	11-118	150
Heislerville 2 Obs	11-119	150
Jones Island 2 Obs	11-096	68
Jones Island 1 Obs	11-097	150,159
Sheppards 2 Obs	11-073	150
Ragovin 2100 Obs	11-137	69
Fair Grounds 3 Obs	11-163	150
Vocational School 2 Obs	11-042	70
Vocational School 1 Obs	11-043	150
Vocational School 3 Obs	11-044	150,159
Natural Area 1 Obs	11-237	151
Rutgers R&D1 Shallow Obs.....	11-692	151
Rutgers R&D2 Med Obs.....	11-693	151
Rutgers R&D3 Deep Obs	11-694	151
<u>ESSEX COUNTY</u>		
Christ Church 2 Obs	13-095	151
Ballentine 8 Obs.....	13-017	151
Canoe Brook 30 Obs.....	13-013	151,160
Neutral Zone Obs.....	13-014	151,160
East Orange 28 Obs	13-094	71
East Orange Shallow Obs	13-096	72
<u>GLOUCESTER COUNTY</u>		
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Malaga 1	15-804	147
Ferrucci 10	15-793	146
Dase 1	15-734	146,148
Moore 2.....	15-763	146
Dump North.....	15-745	146
Duffield 2	15-1016	147
Scafonas D	15-764	146
Corona 1	15-812	147
PP1	15-792	146
Dean 1	15-754	146
1965 Well.....	15-198	146
RW 1	15-760	146
Elk 1	15-810	147
Carpenter 126.....	15-846	147
Shoemaker 1	15-811	147
Aura Orchards.....	15-726	146,148
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GROUND-WATER LEVEL RECORDS

	NJ-WRD WELL NUMBER	PAGE
<u>GLOUCESTER COUNTY--Continued</u>		
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USGS GSC Obs-1 Shallow	15-1054	147
USGS GSC Obs-2 Med	15-1055	152
USGS GSC Obs-3 Deep	15-1056	152
Chillari 1	15-801	147
Mesiano 1	15-759	146
Smith 5	15-796	146
USGS TPE Obs-1 Shallow	15-1057	147
USGS TPE Obs-2 Med-Deep	15-1058	152
USGS TPE Obs-3 Deep	15-1059	152
USGS TPE OBS-4 Med-Shal	15-1063	152
Frimair Irr	15-1037	147
USGS WTMUA Obs-1 Shallow	15-1051	147
USGS WTMUA Obs-2 Med	15-1052	151
USGS WTMUA Obs-3 Deep	15-1053	151
WTMUA Monitoring 1 Obs	15-1033	73
Mantua Shallow Obs	15-741	74
Mantua Deep Obs	15-742	75
Stefka 1 Obs	15-712	76
Stefka 2 Obs	15-713	77
Stefka 3 Obs	15-727	151
Stefka 4 Obs	15-728	78
Shell Chemical 5 Obs	15-296	79
Shell 6 Obs	15-297	151,161
Deptford Deep Obs	15-671	80
Eagle Point 3 Obs	15-323	81
<u>HUNTERDON COUNTY</u>		
Hunter Rd TB 3 Obs	19-249	82
W Amwell Fire TB 2 Obs	19-250	83
Corsalo Rd TB 1 Obs	19-251	84
Bird Obs	19-002	85
Environmental Ctr 1 Obs	19-276	86
Readington School 11 Obs	19-270	87
<u>MERCER COUNTY</u>		
Civil Defense Obs	21-028	152,161
Bristol-Myers 100 Obs	21-289	88
Cranston Farms 15 Obs	21-364	89
Washington Crossing Pk 14 Obs	21-366	90
Princeton 2-Chill Pl Obs	21-359	91
Honey Branch 10 Obs	21-088	152
AT&T North Obs	21-365	92
<u>MIDDLESEX COUNTY</u>		
Plainsboro Pond Obs	23-273	152
Forsgate 3 Obs	23-228	93
Forsgate 4 Obs	23-229	94
Test Well 5 Obs	23-796	95
Test Well 9 Obs	23-800	96
Forsgate 1 Obs	23-291	152
Forsgate 2 Obs	23-292	152
Morrell 1 Obs	23-104	97
Runyon 1 Obs	23-194	152
Fischer Obs	23-070	98

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SWD 2 Obs	23-344	152
SWD 1 Obs	23-351	152
Duh Say 4 Obs	23-365	152,162
SRWD 2 Obs	23-439	152
Rutgers Golf 13 Obs	23-1165	99
Test 1 Obs	23-482	152
<u>MONMOUTH COUNTY</u>		
DOE-Sea Girt Obs	25-486	100
Allaire State Park C Obs	25-429	101
Howell Twp 1 Obs	25-635	102
Howell Twp 2 Obs	25-636	103
Howell Twp 3 Obs	25-637	104
Howell Twp 4 Obs	25-638	105
Howell Twp 5 Obs	25-639	106
Fort Monmouth 1-NCO Obs	25-353	107
Village 215 Obs	25-250	152,162
Marlboro 1 Obs	25-272	108
AHWD B Obs	25-715	109
Keyport 4 Obs	25-206	110
<u>MORRIS COUNTY</u>		
Recreation Fld Obs	27-001	153
MBWD 4 Obs	27-017	153
Madison 8 Obs	27-1197	153
Briarwood School Obs	27-012	111
Esso Six Inch Obs	27-014	153,163
Drew University Farm Obs	27-1303	112
W B Driver 2 Obs	27-003	153,163
Test 2 Obs	27-015	153
Clemens Obs	27-004	153
Sandoz Chem Co Obs	27-005	153
Mt Freedom 2 Obs	27-023	153
Black River 10 Obs	27-1190	113
Green Acres Obs	27-006	153
Troy Meadows 1 Obs	27-020	114
Roxbury 1 Obs	27-1191	115
Int Pipe Obs	27-022	153
Morris Maint Yd 22 Obs	27-1192	116
Picatinny LF 1 Obs	27-250	117
Picatinny LF 2 Obs	27-251	118
Berkshire Valley 9 Obs	27-027	119
Picatinny Caf 1 Obs	27-242	120
Picatinny Caf 4 Obs	27-245	121
Picatinny 9C Obs	27-095	122
Picatinny Caf 5 Obs	27-304	123
Green Pond 5 Obs	27-028	124
<u>OCEAN COUNTY</u>		
Garden St Pky 1 Obs	29-513	153
Garden St Pky 2 Obs	29-514	153,164
Island Beach 1 Obs	29-017	125
Island Beach 2 Obs	29-018	153
Island Beach 3 Obs	29-019	126
Island Beach 4 Obs	29-020	153

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Webbs Mills 2 Obs	29-425	153,164
Toms River 2 Obs	29-534	128
Toms River Chem 84 Obs	29-085	129
Mantoloking 6 Obs	29-503	130
Colliers Mills 1 Obs	29-138	131
Colliers Mills 2 Obs	29-139	132
Colliers Mills 3 Obs	29-140	133
Colliers Mills 4 Obs	29-141	134
PPWD 6 Obs	29-530	153
<u>SALEM COUNTY</u>		
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Salem 2 Obs	33-252	136
Salem 3 Obs	33-253	137
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USGS Coles Farm Obs-1	33-680	153
USGS Coles Farm Obs-2	33-681	153
Point Airy Obs	33-187	138
Penns Grove 14 Obs	33-348	153,165
<u>SUSSEX COUNTY</u>		
Whittingham 19 Obs	37-203	139
Sparta Twp 6 Obs	37-204	154
Swartswood Park 5 Obs	37-205	140
Fairgrounds 7 Obs	37-206	141
Taylor Obs	37-202	142
Walpack Twp 4 Obs	37-207	143
<u>UNION COUNTY</u>		
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White Lab 4 Obs	39-115	154
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MCWD 5	01-376	168
VCWD 9	01-598	168
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Bayshore 3	01-040	168
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Higbee Beach 3 Obs	09-049	169
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LTMUA 3	09-057	169
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Cape May C-3	09-212	169
MW-1 CCMUA Sewage Obs	09-332	169
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Rio Grande Obs-HB 1992	09-333	170
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WATER RESOURCES DATA - NEW JERSEY, 1992

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains 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 wells. This volume contains records for water quality at 178 wells and water levels at 225 wells. Locations of these sites are shown on figures 11 and 12. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

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

Prior to introduction of this series and for several water years concurrent with it, water-resources data for New Jersey were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Part 1B." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado, 80225.

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-92-2." 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. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc.

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. A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

COOPERATION

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

New Jersey Department of Environmental Protection and Energy, Scott A. Weiner, Commissioner.

County of Gloucester, Robert V. Scolpino, Director of Planning.

Pinelands Commission, Terrance D. Moore, Executive Director.

Atlantic Highlands Water Department, Frank Dougherty, Superintendent.

Washington Township Municipal Utilities Authority, Paul R. DeCosta, Superintendent.

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow

Streamflow for the 1992 water year was below normal throughout the State, ranging from 80 percent of normal in the northeastern part of the State to 65 percent of normal in the southern part. Streamflow was below normal at the beginning of the year and declined steadily for the remainder of the year. Streamflow was below normal at many stations during most months. Total precipitation for the water year ranged from 34.43 inches, 85.5 percent of the updated 30-year (1961-90) mean, at Atlantic City to 33.36 inches, 75.8 percent of the 30-year mean, at Newark. Figure 1 shows monthly precipitation at three National Weather Service sites compared with the updated 30-year means. Combined contents of 13 major water-supply reservoirs was below average at the beginning of the year and above average at the end of the year (see figure 2).

Water year 1992 began with streamflow below normal throughout the State. Streamflow declined steadily through October, November, and December. A devastating storm on October 30 caused severe coastal flooding and beach erosion. Damage was due primarily to high winds and high tides. Precipitation was minimal--less than 0.1 inch. Some tides were the highest of record. Another storm on November 12 again caused coastal flooding and was accompanied by more than 1 inch of precipitation, but this storm was not as severe as the October 30 storm. Above-normal precipitation was recorded in December, but streamflow remained below normal. January precipitation was very low, averaging less than 50 percent of normal. Another storm, on January 5, again caused flooding in coastal communities. Precipitation continued to be below normal through May. Snowfall during winter months was less than 10 inches in the northern part of the State and less than 5 inches in the southern part. Streamflow remained below normal from January through May. June began with heavy precipitation. At Greenwood Lake, 2.6 inches of precipitation was recorded on June 1. Another storm occurred on June 5 to 6. At Canoe Brook, in northern New Jersey, 5.75 inches of rainfall was recorded on June 5. These storms resulted in the peak discharges recorded for the year at most gaging stations throughout the State. Precipitation in June averaged more than 160 percent of normal. Flooding was reported throughout the State, but was most severe in the Passaic and Raritan River Basins. Reservoirs, which were very low before the storms, were nearly full by the end of June. The high precipitation in June and near-normal precipitation in July resulted in above-normal streamflow throughout July. Precipitation in August was about normal except in the coastal area, where recorded rainfall was 160 percent of normal. Some flooding was reported in Monmouth and Ocean Counties from storms on August 1, 18, and 29. Tornadoes were reported in the South Amboy area on August 1. In September, precipitation was again about normal, except in the Atlantic City area, where recorded rainfall was 172 percent of normal. This high rainfall was primarily the result of Hurricane Danielle, which passed near the coast on September 26. Inland communities were less seriously affected. Streamflow at the end of the water year was about normal.

Streamflow at the index station for northern New Jersey (South Branch Raritan River near High Bridge) averaged 88.1 ft³/s for the water year; this flow is 72.2 percent of the 1918-92 average. Streamflow at the index station for southern New Jersey (Great Egg Harbor River at Folsom) averaged 61.6 ft³/s for the water year; this flow is 71.8 percent of the 1926-92 average. The observed annual mean discharge of the Delaware River at Trenton was 8,308 ft³/s, which is 71.6 percent of the 1913-92 average. The Delaware River is highly regulated by reservoirs and diversions. The natural flow at Trenton (adjusted for upstream storage and diversion) was 87.0 percent of normal for the year. Monthly mean discharge at each of these index gaging stations during the current water year and the long-term normal (1961-90, updated this year) monthly discharge are shown in figure 3. Annual mean discharge at each of these index gaging stations and the mean annual discharge for the period of record are shown in figure 4.

Combined usable storage in 13 major water-supply reservoirs in New Jersey increased from 46.3 billion gallons (57.6 percent of capacity) on October 1, 1991, to 62.1 billion gallons (77.3 percent of capacity) on September 30, 1992. Storage in Wanaque Reservoir increased from 12.1 billion gallons (40.9 percent of capacity) on October 1, 1991, to 18.8 billion gallons (63.3 percent of capacity) on September 30, 1992. Pumped storage in Round Valley Reservoir, the largest capacity reservoir in the State, increased from 51.8 billion gallons (94.2 percent of capacity) on October 1, 1991, to 52.0 billion gallons (94.5 percent of capacity) on September 30, 1992.

Water Quality

Below-normal precipitation at the beginning of the water year caused decreased dilution and, in turn, increased concentrations of dissolved solids in streams in the northern part of the State. By the end of the year, low streamflows had resulted in above-normal concentrations of dissolved solids. Dilution of dissolved solids generally results in an improvement in water quality because concentrations of undesirable substances, such as trace elements, organic compounds, nutrients, bacteria, and nuisance aquatic organisms, usually also are diluted. The degree of dilution is apparent when monthly mean values of specific conductance, which is related directly to dissolved-solids concentration, for water year 1992 are compared with mean specific-conductance values for an earlier period. Monthly mean specific-conductance values for the Delaware River at Trenton, a large drainage area in central New Jersey and parts of New York and Pennsylvania, in 1992 are

compared with the monthly mean values for 1969-91 in figure 5. Specific-conductance values were above the historical average for the first 2 months of the year, reflecting below-normal streamflow; however, normal streamflow in December and January caused monthly mean specific conductance to approximate the historical monthly means for the previous 22 years. The mean monthly specific conductance for February was above the historical mean monthly value as a result of below-average streamflow. The mean monthly specific-conductance values for most of the remainder of water year 1992 were about equal to the mean of the historical monthly mean values, but in September, the specific conductance was above the historical mean as a result of low streamflow.

The monthly mean values of the temperature of the water flowing past the continuous-monitoring station on the Delaware River at Trenton, N.J., in water year 1992 were about equal to the historical monthly mean values (fig. 6). The largest differences between the historical (1966-91) monthly mean water temperatures and those for water year 1992 occurred in March, April, and June.

The monthly median extremes of concentrations of dissolved oxygen in the Delaware River at Trenton during the 1992 water year were within the range of historical (1966-91) extreme values (fig. 7). The monthly median of the daily minimum concentrations was lowest (7.0 milligrams per liter) in July and August, when the monthly mean water temperature was highest for the year. The monthly median of the daily maximum concentrations was highest (15.5 milligrams per liter) in February, when the monthly mean water temperature was 3°C, the minimum for the year.

Ground-Water Levels

Ground-water levels fluctuate in response to such factors as recharge from precipitation, discharge of ground water to streams, changes in atmospheric pressure, evapotranspiration, and ground-water withdrawals from wells. In addition, tidal fluctuations affect water levels in aquifers near oceans, bays, and estuaries. When recharge to the ground-water system exceeds discharge, water levels rise; conversely, when discharge from wells, to surface-water bodies, or to the atmosphere through evapotranspiration exceeds recharge, water levels decline. Records of water levels in wells, therefore, are useful in evaluating seasonal and long-term changes in ground-water storage and local and regional effects of pumping from wells (Rooney, 1971, p. 20).

Changes in ground-water levels during the 1992 water year were determined from a statewide network of observation wells. Ground-water levels in many water-table observation wells ranged from average to below average throughout most of the year and were lower than during the previous water year. Water levels in observation wells that tap the heavily pumped confined aquifers in the southern part of the Coastal Plain continued to undergo long-term net declines, whereas water levels rose dramatically in the confined aquifers in the northern part of the Coastal Plain (Monmouth, eastern Middlesex, and northern Ocean Counties). The greatest water-level decline in an observation well in the 1992 water year occurred in the New Brooklyn Park 3 observation well screened in the Wenonah-Mount Laurel aquifer in Camden County (NJ-WRD well number 07-0478), where the previous record low was exceeded by 4.1 feet. The water level in this well has declined a total of 33.9 feet since April 1983. Other aquifers in the southern New Jersey Coastal Plain in which water levels fell below previous lows of record include the Potomac-Raritan-Magothy aquifer system, the Piney Point aquifer, the Atlantic City 800-foot sand of the Kirkwood Formation, and the Kirkwood-Cohansey aquifer system.

Long-term declines in water levels reversed in several observation wells screened in the deep confined aquifers in the northern part of the Coastal Plain (Monmouth, eastern Middlesex, and northern Ocean Counties). Water levels in these wells began to rise near the beginning of the 1991 water year and continued to rise during the 1992 water year. This trend resulted, in part, from the substitution of surface water for the ground water previously used for public supply in parts of Middlesex and Monmouth Counties. In addition, some public-water-supply systems shifted their withdrawals from the deeper confined aquifers to the shallower confined aquifers and the unconfined aquifer. Since October 1, 1990, water levels have risen from 5 to 58 feet in several observation wells screened in the Potomac-Raritan-Magothy aquifer system; the water level in the Allaire State Park C observation well (NJ-WRD well number 25-0429) screened in the Englishtown aquifer system has risen more than 48 feet; and the water level in the DOE-Sea Girt observation well (NJ-WRD well number 25-0486) screened in the Wenonah-Mount Laurel aquifer has risen more than 64 feet.

Water-level hydrographs included in this report illustrate the data presented in the tables. Monthly water levels in two water-table observation wells in 1992 are compared with monthly extremes and long-term averages in figure 8. These two wells are the Lebanon State Forest 23-D well (NJ-WRD well number 05-0689) in Burlington County and the Bird well (NJ-WRD well number 19-0002) in Hunterdon County. For further comparison, 20-year water-level hydrographs of two wells in the Coastal Plain--one in an unconfined aquifer (NJ-WRD well number 05-0689) and one in a confined aquifer (NJ-WRD well number 07-0413)--are presented in figure 9. In addition, multiyear hydrographs that include the water-level data for the 1992 water year are provided with the tabular data for most of the wells in this report.

SALTWATER-MONITORING NETWORK

The usability of the ground water of the Coastal Plain of New Jersey depends primarily on its chemical quality. In nearshore areas, actual or potential saltwater contamination of ground water is of paramount importance, and chloride concentration is an excellent index of the extent and degree of saltwater contamination. The presence of high concentrations of chloride alone is not definitive proof of active saltwater encroachment. It may represent a natural static condition common in shallow deposits bordering saline creeks, bays, and marshes. In the deep formations, saline ground water may be residual water trapped in the sediments. Saltwater encroachment in these areas can be proven only by periodic sampling that shows an increase in chloride concentration with time. Because saltwater encroachment is indicated by changes in chloride concentration rather than by actual concentration, the establishment of a chloride-concentration value as a limit that can be used to indicate encroachment is difficult; however, concentrations of chloride less than 10 ppm (parts per million) generally do not indicate encroachment (Seaber, 1963, p. 5).

The U.S. Geological Survey established a saltwater-monitoring network in the Coastal Plain of New Jersey in the 1940's to document and evaluate the movement of saline water into freshwater aquifers that serve as sources of water supply. Water samples are collected mainly from public-supply and industrial wells and, to a lesser extent, from U.S. Geological Survey observation wells. Sampling is concentrated along the coastal area from Raritan Bay to Cape May and along the Delaware River from Cape May County to Gloucester County. In the 1992 water year, samples of water were collected from 156 wells in 8 counties. The results of analysis of the water samples collected from these Saltwater-Monitoring-Network wells are presented in tables in the section of this report titled "Quality of Ground Water."

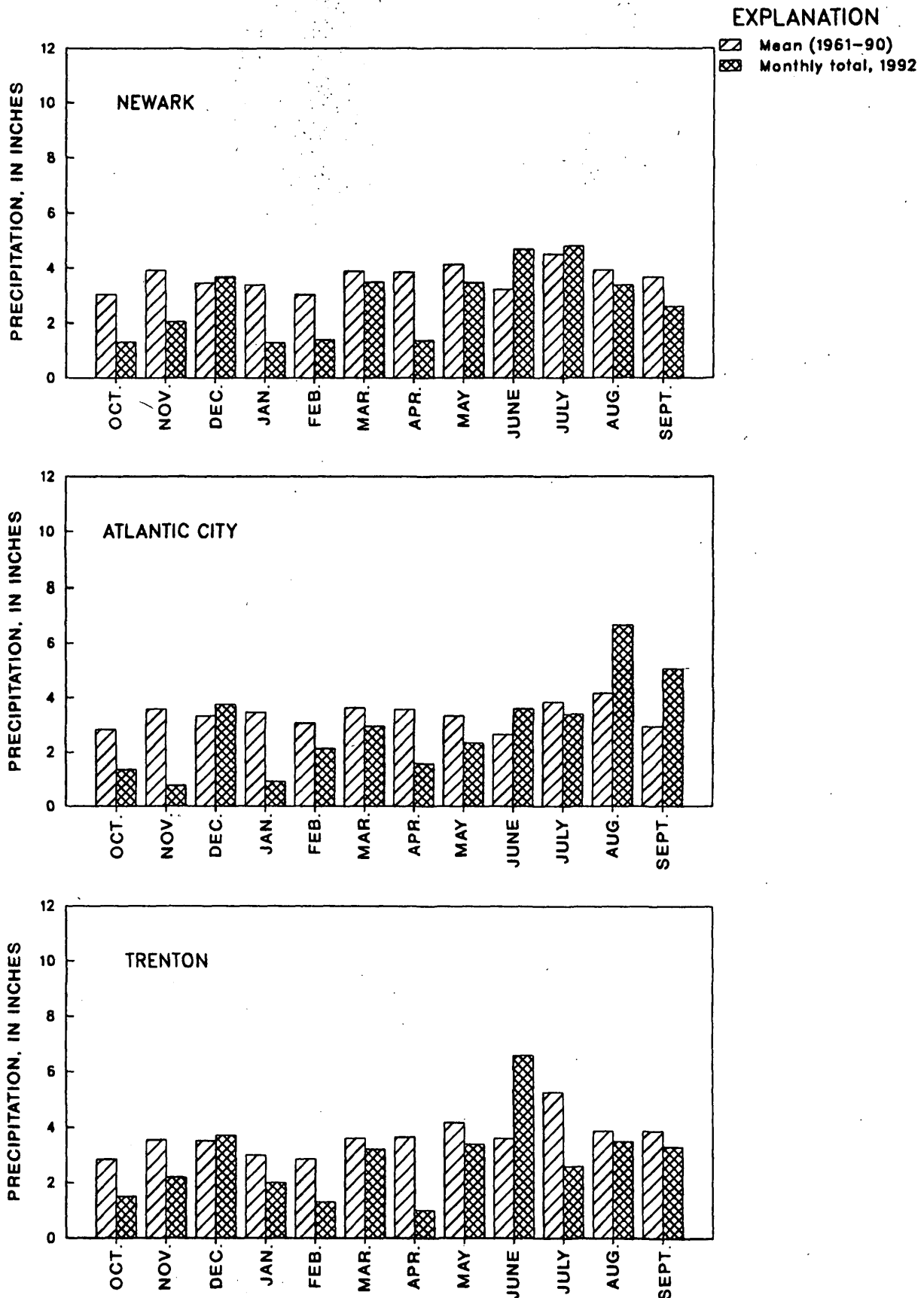
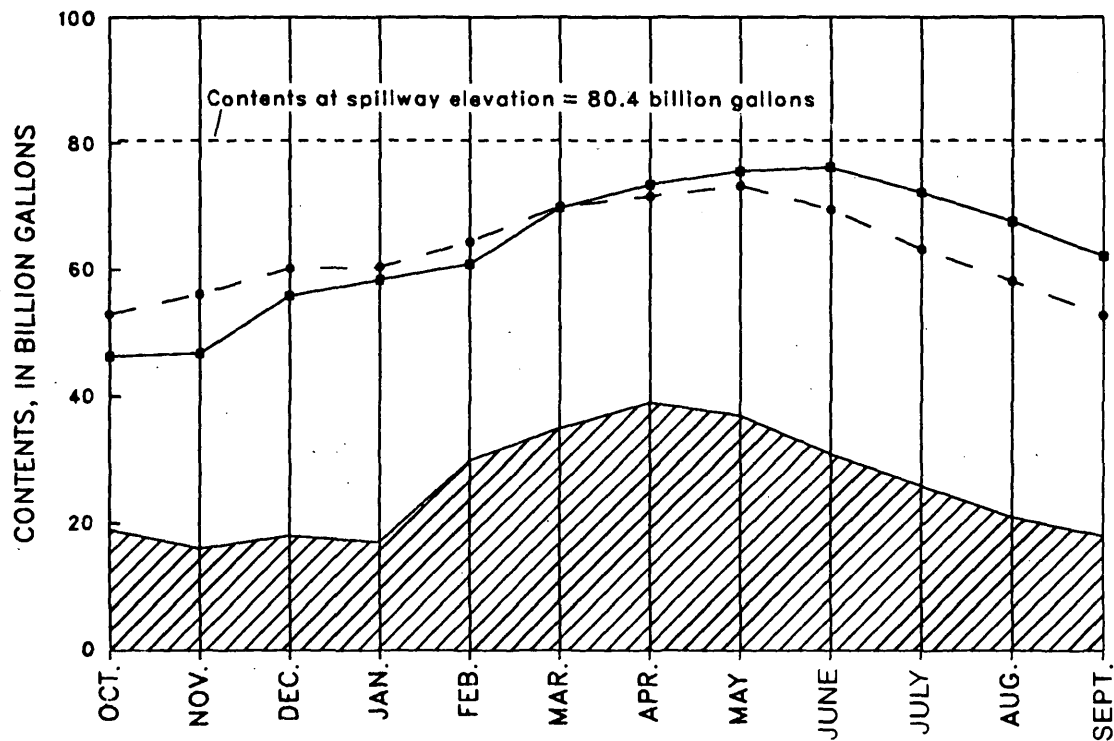
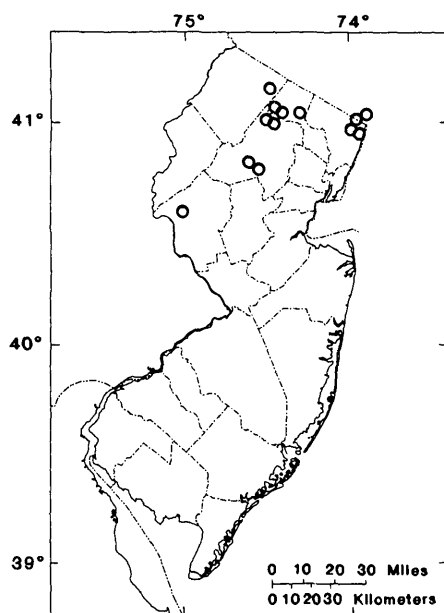


Figure 1.--Monthly precipitation at three National Weather Service locations.

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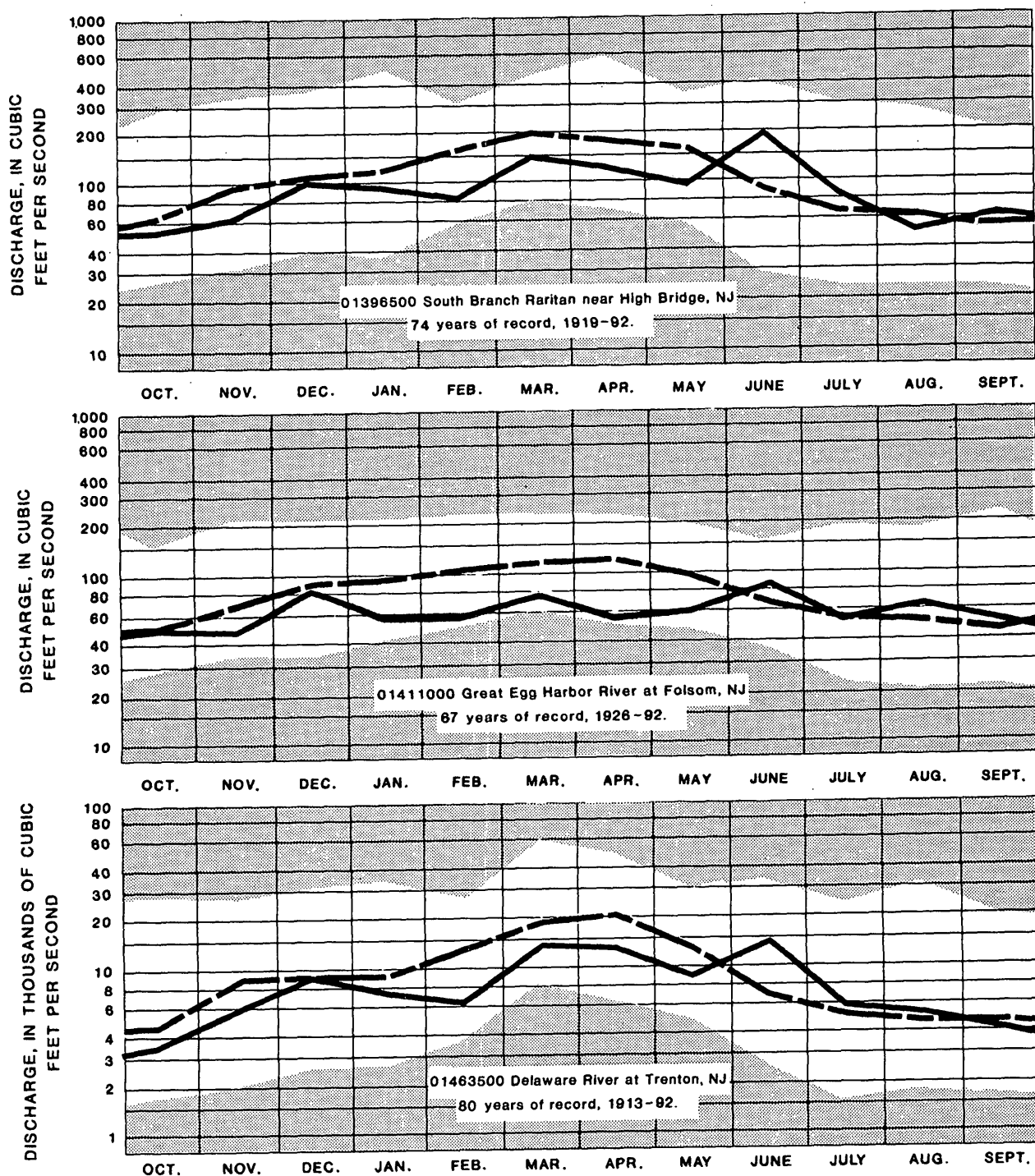


EXPLANATION
 - - Average contents, 1961-90
 — Month-end contents, 1992 water year
 Shaded area indicates lowest monthly contents for reference period



Map showing location of reservoirs

Figure 2.--Combined usable storage in 13 major water-supply reservoirs.



Unshaded area.--Indicates range between highest and lowest mean recorded for the month, prior to 1992 water year.

Broken line.--Indicates normal (median of the monthly means) for the standard reference period, 1961-90.

Solid line.--Indicates observed monthly mean flow for the 1992 water year.

Figure 3.--Monthly mean discharge at index gaging stations.

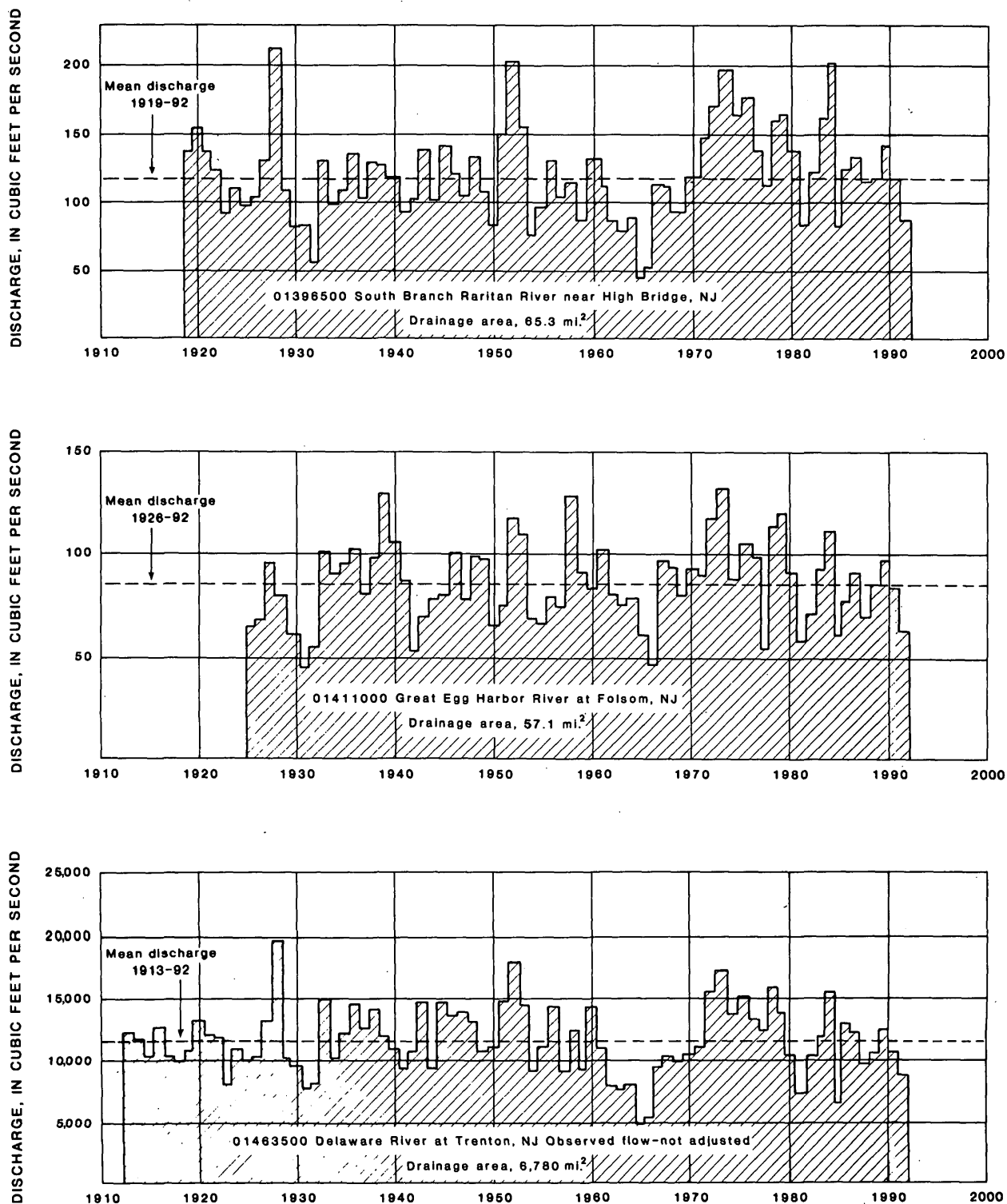
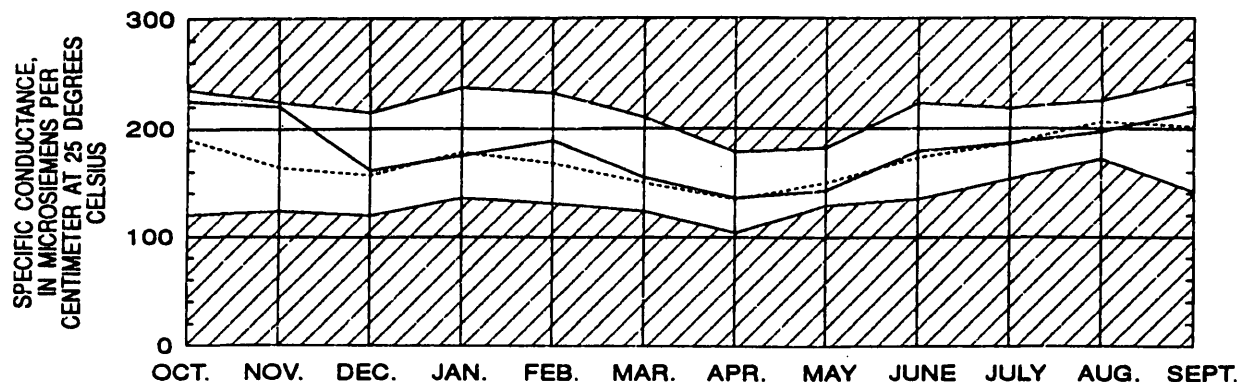


Figure 4.--Annual mean discharge at index gaging stations.

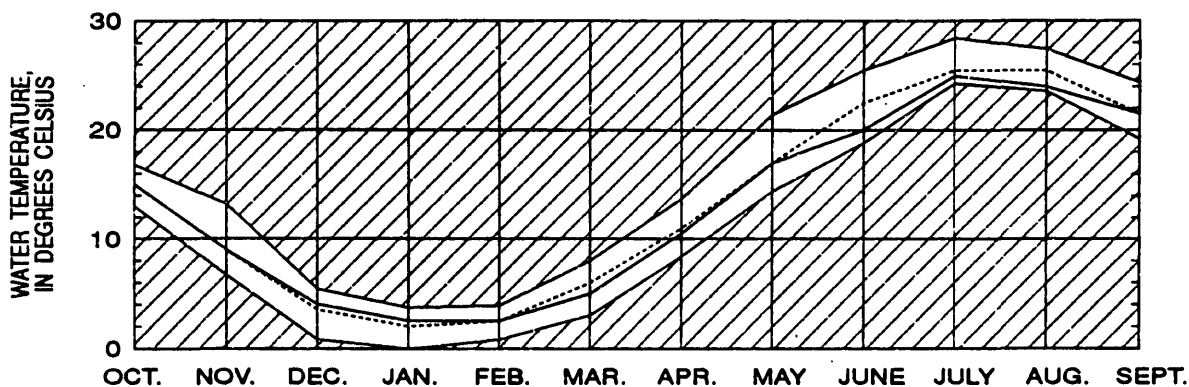


Unshaded area.--Indicates the range between the highest monthly mean of daily values and the lowest monthly mean of daily values, water years 1969-91.

Solid line.--Indicates the monthly mean values for water year 1992.

Broken line.-- Indicates the mean of monthly mean values for water years 1969-91.

Figure 5.--Monthly mean specific conductance at Delaware River at Trenton, New Jersey.



Unshaded area.--Indicates the range between the highest monthly mean of daily values and the lowest monthly mean of daily values, water years 1966-91.

Solid line.--Indicates the monthly mean values for water year 1992.

Broken line.-- Indicates the mean of monthly mean values for water years 1966-91.

Figure 6.--Monthly mean water temperature at Delaware River at Trenton, New Jersey.

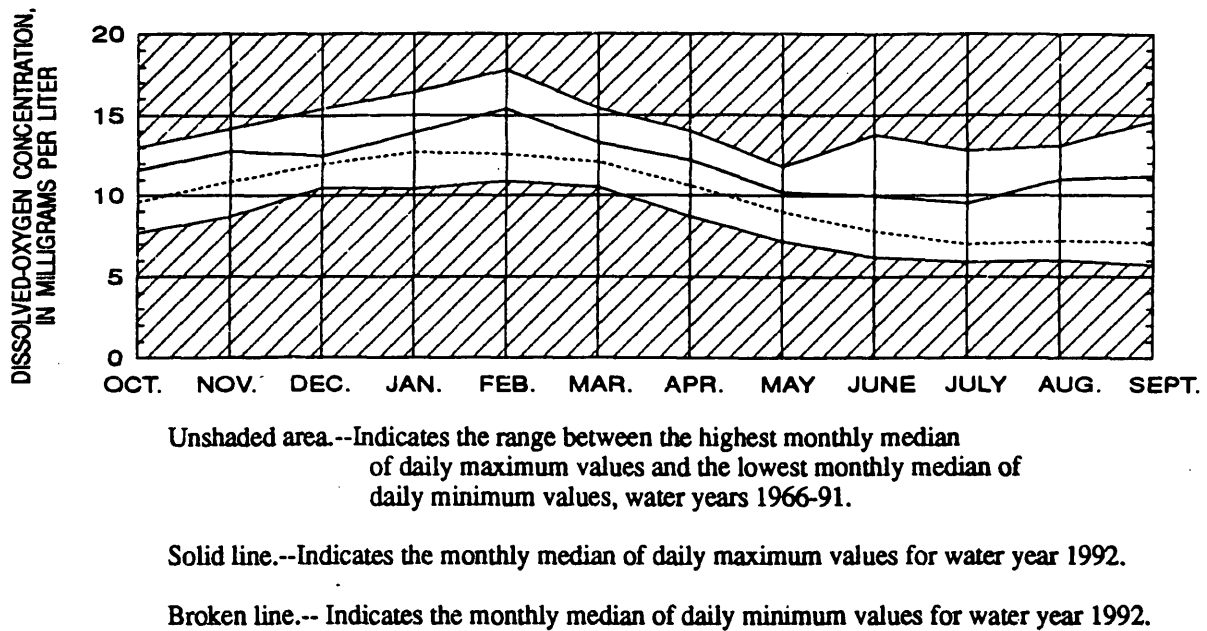
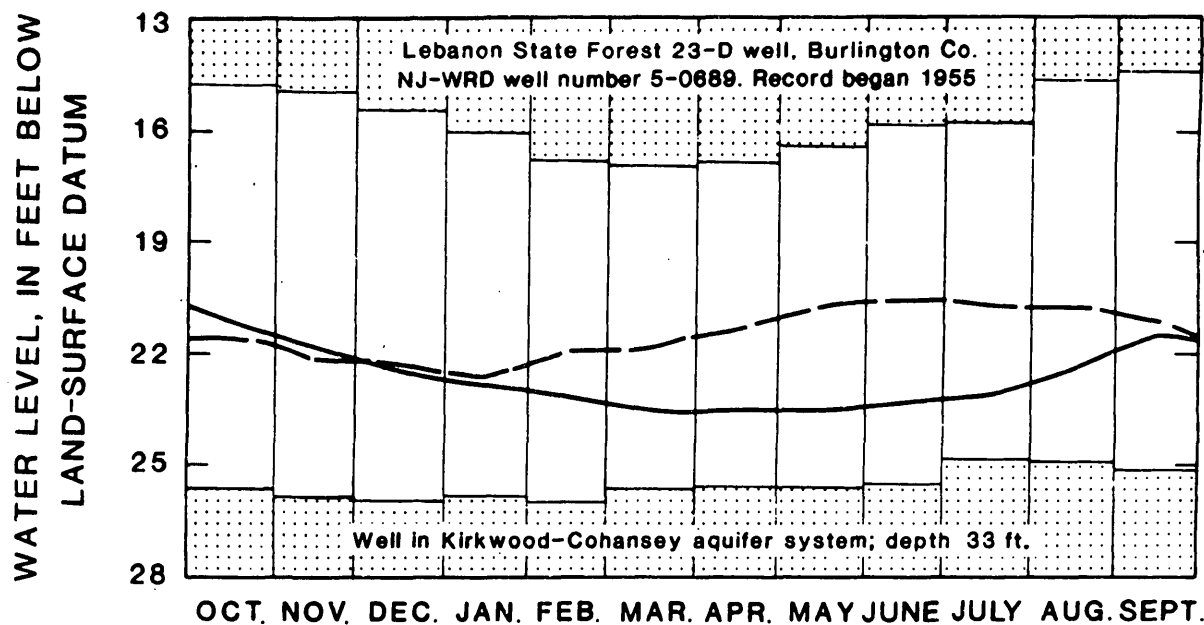
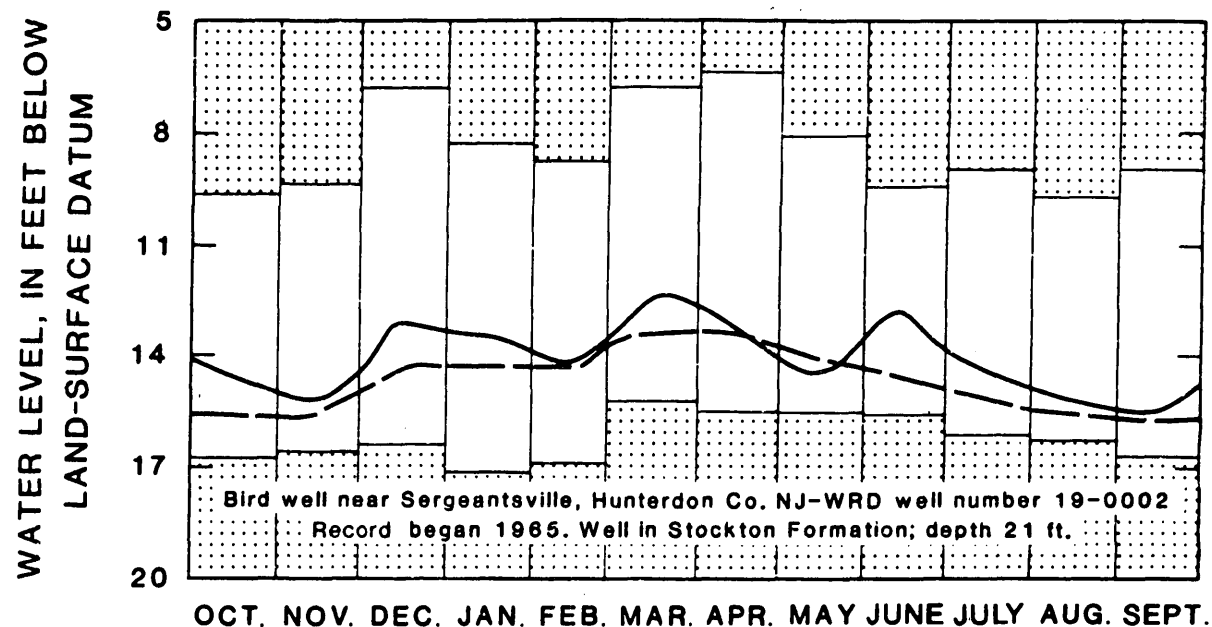


Figure 7.--Monthly medians of maximum and minimum daily dissolved-oxygen concentrations at Delaware River at Trenton, New Jersey.



Unshaded area--Indicates range between highest and lowest recorded monthly water levels, prior to current year

Dashed line--Indicates average of monthly mean water levels, prior to current year

Solid line--Indicates monthly mean water level for the current year

Figure 8.--Monthly ground-water levels at key water-table observation

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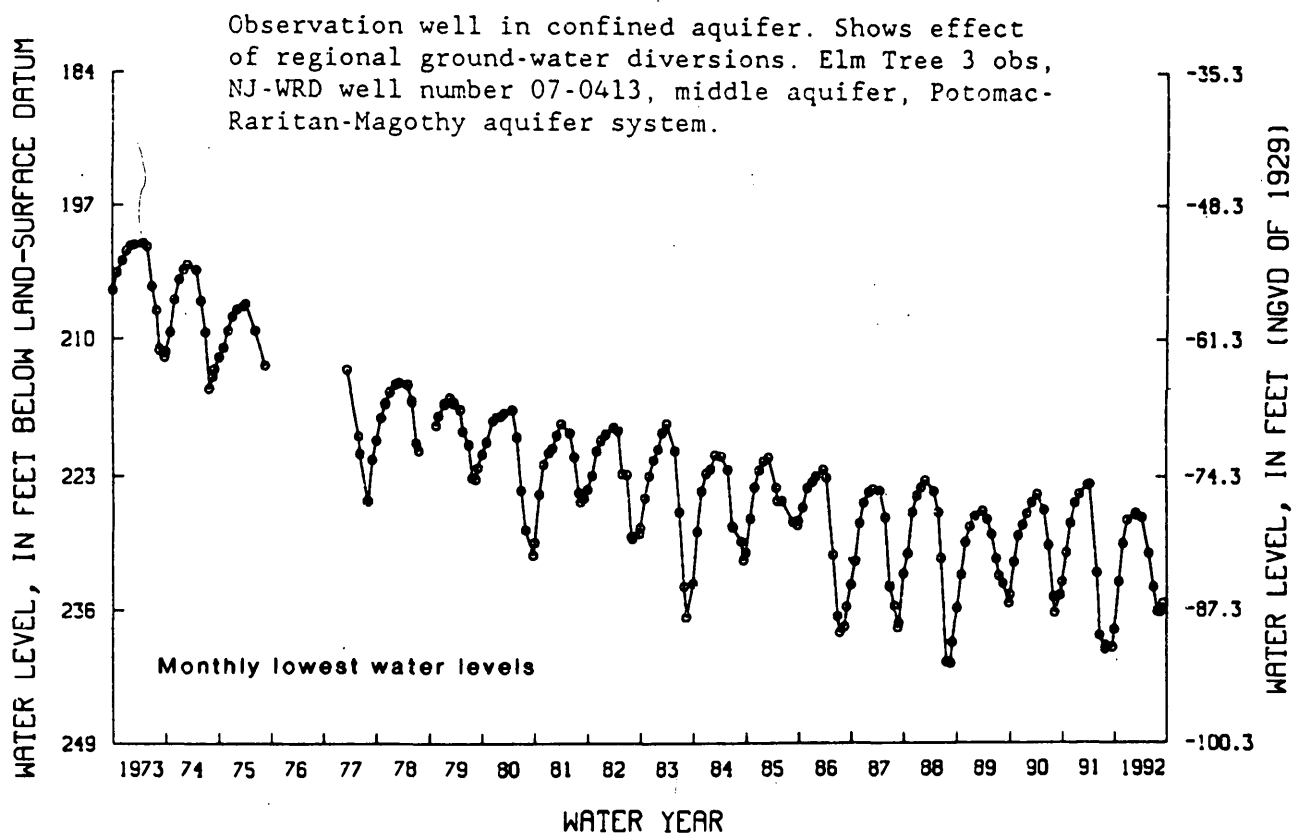
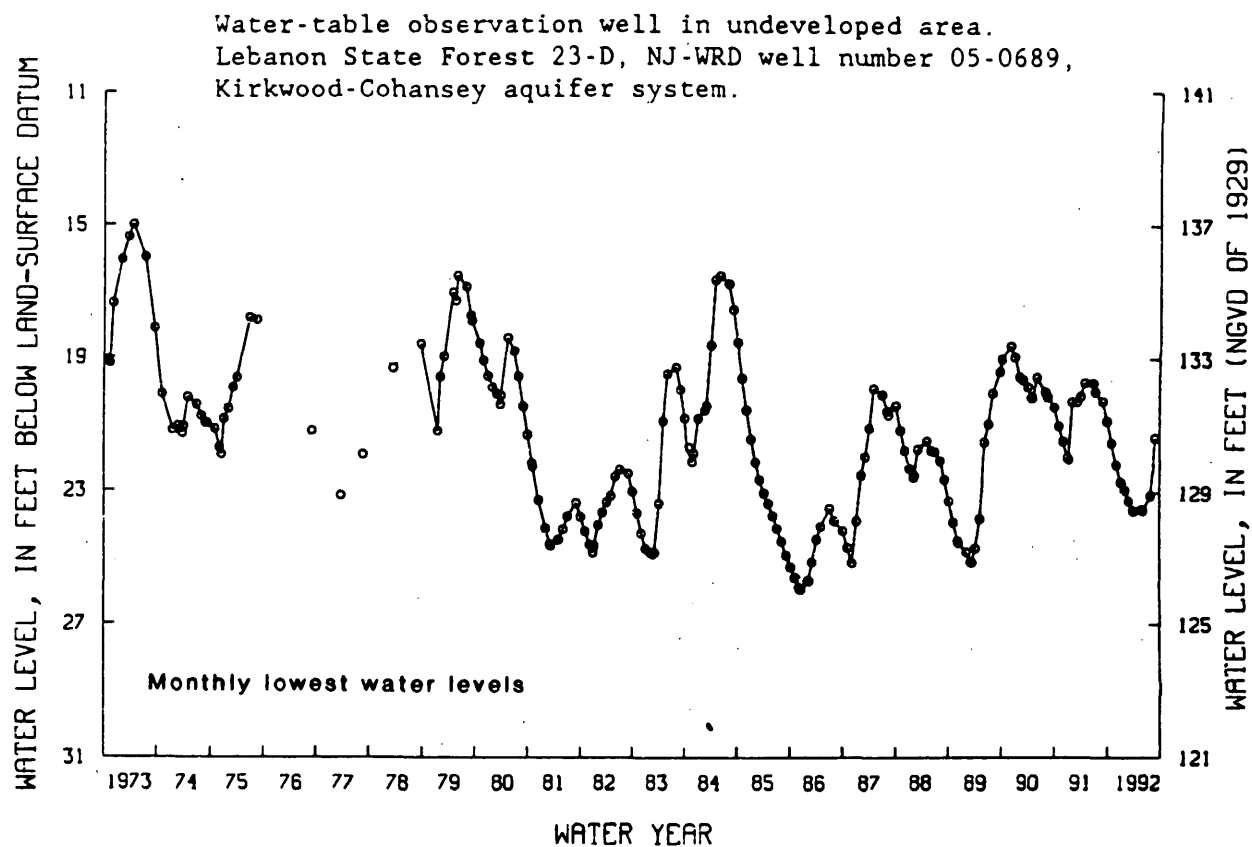


Figure 9.--Twenty-year water-level hydrographs of one artesian and one water-table observation well.

EXPLANATION OF THE RECORDS

The ground-water data in this report are for the water year that began October 1, 1991, and ended September 30, 1992. A calendar of the water year is provided on the inside of the front cover. The data include ground-water levels and ground-water quality. The locations of the wells where data was collected are shown in figures 11 and 12. 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 usually is assigned when a well is first established and is retained for that well indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. Generally the "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells.

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 or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the well will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure below.)

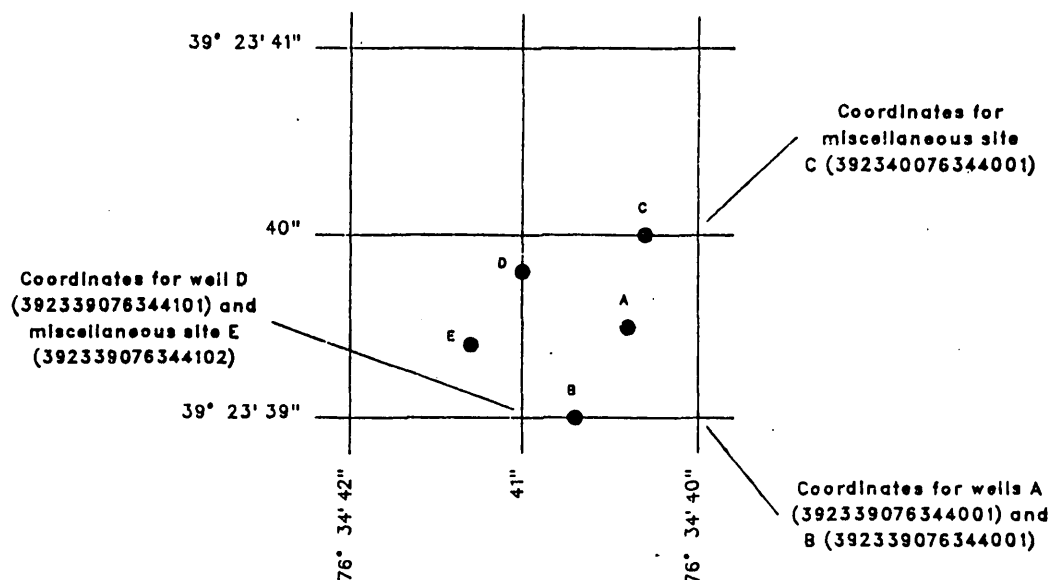


Figure 10...System for numbering wells and miscellaneous sites (latitude and longitude)

Records of Ground-Water Levels

Water-level data from a national network of observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in New Jersey are shown in figure 11.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number 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 being used now in the ground-water level descriptions, wells sampled for water quality analyses, and on the corresponding location maps in this report.

Water-level records are obtained from direct measurements with a steel tape, from the punched tape of a water-level recorder, from a pressure transducer and data logger or from a water-level extremes recorder. 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.

Most water-level measurements in this report are given in feet with reference to land-surface datum (l.s.d.). Land-surface datum is a datum plane that is approximately at land surface at each well. The altitude of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with water-level recorders are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. All measurements published herein are reported to a hundredth of a foot.

Data Presentation

Each well record consists of three parts, the station description, the data table of water levels observed during the current water year, and a graph of the water levels for the current water year or other selected period. The description of the well is presented first through use of descriptive headings preceding the tabular data. 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; the distance and direction from a geographic point of reference; and the owner's name.

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 screen or open hole segment, open hole or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

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 collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The altitude of the land-surface datum is described in feet above National Geodetic Vertical Datum of 1929 (NGVD of 1929); 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 should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

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, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of 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 feet above or below land-surface datum or NGVD of 1929. For wells equipped with recorders, only abbreviated tables are published. Mean daily water-levels are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level. A hydrograph for a selected period of record follows each water-level table.

Records of Ground-Water Quality

Records of ground-water quality in this report usually consist of only one set of measurements for the water year. Because ground-water movement is normally slow compared to surface water, frequent measurements are not necessary for monitoring purposes. More frequent measurements may be necessary for studying ground-water problems, trends, or processes. Locations of wells for which water-quality data are published are shown in figure 12.

Data Collection and Computation

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

In ground-water observation wells, water in the casing may not be representative of aquifer water quality. To collect samples representative of aquifer water, samples are collected only after at least three casing volumes of water have been pumped from the well and measurements of temperature, specific conductance, and pH have stabilized during the pumping.

Data Presentation

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

Remark Codes

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

<u>PRINTED OUTPUT</u>	<u>REMARK</u>
E	Estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.
*	Laboratory determination (used when field determination is otherwise expected or indicated in column heading).

CURRENT WATER RESOURCES PROJECTS IN NEW JERSEY

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

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

Data Base Development and Determination of Confinement for Public Supply Wells in New Jersey

Development of a Geographical Information System Data Base, Gloucester County, New Jersey

Flood Characteristics of New Jersey Streams

Geohydrology at Picatinny Arsenal in Morris County, New Jersey

Geophysical Characteristics of Aquifers in New Jersey

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

Ground-Water Data Collection Network

Ground-Water Resources and Saltwater Intrusion of Cape May County

Hydrologic Controls on Well-Contributing Areas in New Jersey

Hydrology of Surficial Aquifer Systems

Interpretation of Water Quality in New Jersey Streams, 1976-1986

Investigation of Optimal Recharge to Augment Ground-Water Supply in Peninsular Cape May County, New Jersey

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

Land Subsidence Related to Ground-Water Withdrawals in the Coastal Plain Aquifer of New Jersey

Mercury Distribution, Sources and Mobility in the Kirkwood-Cohansey Aquifer System, New Jersey Coastal Plain

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

Multispecies Transport in Ground Water

New Jersey Water Use Program

Nonpoint-Source Ground-Water Contamination, Coastal Plain of Long Island, New York, and of Southern New Jersey

Optimal Withdrawals from a Coastal Aquifer in Cape May County Subject to Saltwater Encroachment: Numerical Analysis and Case Study

Optimization of Ground-Water-Withdrawal Strategies for the Coastal Plain Aquifer System of New Jersey

Pesticide Vulnerability of Public Ground-Water Supplies

Relation of Agricultural Pesticide Usage to Presence of these Pesticides in Surficial Waters Used for Water Supply

Quality of Water Data Collection Network

Regionalization of Low Flows for New Jersey Streams

Relation Between Land Use and Ground-Water Quality in Franklin Township, Gloucester County, New Jersey

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

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

Review of Remedial Investigation for the Vineland Chemical Superfund Site

Somerset County Flood-Monitoring Network

Spatial Analysis of Statewide Water-Quality Data

Surface Water Data Collection Network

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

Transport of Organic Contaminants Transport and Plume Delineation of Contaminant in Fractured Bedrock of the Passaic Formation, Rutgers University Busch Campus, New Brunswick, New Jersey

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

Baehr, A.L., Fischer, J.M., Lahvis, Matthew, Baker, R.J., and Smith, N.P., 1991, A method to estimate microbial degradation rates for hydrocarbons based on gas transport in the unsaturated zone at a gasoline spill site in Galloway Township, N.J.: Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting, March 11-15, 1992, Monterey, California, Water-Resources Investigations Report 91-4034, p. 250-255.

Baker, R.J., Fischer, J.M., Smith, N.P., Koehnlein, S.A., and Baehr, A.L., 1991, Gas chromatography methods for determining the composition of vapor phase in gasoline contaminated soils: Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting, March 11-15, 1991, Monterey, California, Water-Resources Investigations Report 91-4034, p. 280-286.

Barton, Cynthia, and Kozinski, Jane, 1991, Hydrogeology of the region of Greenwich Township, Gloucester County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 90-4198, 77 p., 11 pls.

Barton, G.J., and Ivahnenko, Tamara, 1992, Hydrogeologic, geophysical, and ground-water-quality reconnaissance at and near the Ciba-Geigy Superfund Site, Ocean County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 91-4048, 84 p., 10 pls.

Bauersfeld, W.R., Moshinsky, E.W., and Pustay, E.A., 1992, Water resources data, New Jersey, 1991--Volume 1 - Surface-Water Data: U.S. Geological Survey Water-Data Report NJ-91-1, 512 p.

Bauersfeld, W.R., Jones, W.D., and Pustay, E.A., 1992, Water resources data, New Jersey, 1991--Volume 2 - Ground-Water Data: U.S. Geological Survey Water-Data Report NJ-91-2, 190 p.

Bauersfeld, W.R., and Schopp, R.D., 1991, New Jersey floods and droughts: in National Water Summary, 1988-89--Floods and droughts: U.S. Geological Survey Water-Supply Paper 2375, p. 401-405.

Brown, G.A., and Zapacza, O.S., 1990, Results of test drilling in Howell Township, Monmouth County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 90-4062, 42 p.

- Bruell, C.J., Gilbert, C.D., and Baehr, A.L., 1991, Non-Fickian vapor transport in sand columns contaminated with volatile organic compounds: Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting, March 11-15, 1992, Monterey, California.
- Cho, H.J., Jaffe, P.R., and Smith, J.A., 1991, Design of a field experiment to study the dynamics of trichloroethylene vapors in the unsaturated zone during an infiltration event: Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting, March 11-15, 1992, Monterey, California.
- Fischer, J.M., Baehr, A.L., and Smith, N.P., 1991, An investigation of the transport and microbial degradation of hydrocarbons in the subsurface at a gasoline spill site in Galloway Twp., New Jersey: Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting, March 11-15, 1992, Monterey, California.
- Fulton, J.L., 1990, Application of a distributed-routing rainfall-runoff model to flood-frequency estimation in Somerset County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 89-4210, 78 p.
- Gibs, Jacob, 1990, Well-purging criteria for sampling purgeable organic compounds: *Ground Water*, v. 28, no. 1, January-February 1990, p. 68-78.
- Gibs, Jacob, Brown, G.A., and Turner, K.S., 1991, Use of a multi-level sampler to determine vertical concentration gradients of volatile aromatic hydrocarbons in ground water, Galloway Township, New Jersey: Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting, March 11-15, 1992, Monterey, California.
- Gronberg, J.M., Pucci, A.A., Jr., and Birkelo, B.A., 1991, Hydrogeologic framework of the Potomac-Raritan-Magothy aquifer system, northern Coastal Plain of New Jersey: U.S. Geological Survey Water-Resources Investigations Report 90-4016, 37 p., 8 pls.
- Hay, L.E., and Campbell, J.P., 1990, Water-quality trends in New Jersey streams: U.S. Geological Survey Water-Resources Investigations Report 90-4046, 297 p.
- Hill, M.C., Lennon, G.P., Brown, G.A., Hebson, C.S., and Rheume, S.J., 1992, Geohydrology of, and simulation of ground-water flow in, the valley-fill deposits in the Ramapo River Valley, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 90-4151, 92 p.
- Horn, M.A., and Bratton, Lisa, 1991, Ground-water withdrawals from Coastal Plain aquifers for public supply and self-supplied industrial use in Middlesex and Monmouth Counties, New Jersey, 1901-85: U.S. Geological Survey Water-Resources Investigations Report 90-4083, 50 p.
- Kozinski, Jane, Lacombe, P.J., Hochreiter, J.J., Jr., and Lewis, J.C., 1990, Geophysical and chemical investigations of ground water at five industrial or waste-disposal sites in Logan Township, Gloucester County, New Jersey, 1983-87: U.S. Geological Survey Water-Resources Investigations Report 90-4004, 131 p.
- Lacombe, P.J., 1990, Types of surface- and borehole-geophysical equipment and methods used in hydrologic and geologic investigations in New Jersey: in Brown, J.O., and Kroll, R.L., comp., *Aspects of ground water in New Jersey: Seventh annual meeting of the Geological Association of New Jersey: Field guide and proceedings*, October 26-27, 1990, p. L1-L4.
- Lewis, J.C., and Hochreiter, J.J., Jr., 1990, History of ground-water contamination and summary of ground-water investigations through 1985 at four industrial sites, Logan Township, New Jersey: U.S. Geological Survey Open-File Report 90-102, 39 p.
- Lewis, J.C., Hochreiter, J.J., Jr., Barton, G.J., Kozinski, Jane, and Spitz, F.J., 1991, Hydrogeology of, and ground-water quality in, the Potomac-Raritan-Magothy aquifer system in the Logan Township region, Gloucester and Salem Counties, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 90-4142, 92 p., 11 pls.
- McAuley, S.D., Nicholson, R.S., Barringer, J.L., and Blyskun, G.J., 1992, Plan to evaluate the hydrogeology of the valley-fill and carbonate-rock aquifers near Long Valley in the New Jersey Highlands: New Jersey Geological Survey Open-File Report 92-3, 24 p.
- McDonald, C.L., Gibs, Jacob, Ehlke, T.A., and Koehnlein, S.A., 1992, Preservation of volatile aromatic hydrocarbons with silver salts: Proceedings of Water Quality Technology Conference, American Water Works Association, November 11-15, 1990, San Diego, California, p. 995-1008.

- Nicholson, R.S., 1990, Progress in the evaluation of a carbonate-rock aquifer near Long Valley in the New Jersey Highlands: in Brown, J.O., and Kroll, R.L., comp., *Aspects of ground water in New Jersey: Seventh annual meeting of the Geological Association of New Jersey: Field guide and proceedings*, October 26-27, 1990, p. N25-N31.
- Pucci, A.A., Jr., Ehlke, T.A., and Owens, J.P., 1992, Confining unit effects on water quality in the New Jersey Coastal Plain: *Ground Water*, v. 30, no. 3, May-June 1992, p. 415-427.
- Pucci, A.A., Jr., and Owens, J.P., in press, Geochemical variations in pore squeezed ground-water samples from the Freehold, New Jersey, corehole, in *Proceedings of the 1988 U.S. Geological Survey Workshop on Geology and Geohydrology of the Atlantic Coastal Plain: U.S. Geological Survey Circular 1058*.
- Pucci, A.A., Jr., Pope, D.A., and Gronberg, J.M., in press, Hydrogeology, ground-water flow model, and saltwater intrusion of the Potomac-Raritan-Magothy aquifer system in the northern Coastal Plain of New Jersey.
- Qualls, C.L., and Horn, M.A., 1990, New Jersey water supply and use: in U.S. Geological Survey Water-Supply Paper 2350, p. 367-374.
- Sargent, B.P., Fusillo, T.V., Storck, D.A., and Smith, J.A., 1990, Assessment of contamination of ground water and surface water in the area of Building 24, Picatinny Arsenal, New Jersey, 1986-87: U.S. Geological Survey Water-Resources Investigations Report 90-4057, 120 p.
- Schopp, R.D., and Burns, R.J., 1991, Local flood warning systems in New Jersey: *Proceedings of the Fifteenth Annual Conference of the Association of State Floodplain Managers*, June 10-14, 1991, Denver, Colorado, p. 172-175.
- Smith, J.A., Cho, H.J., Jaffe, P.R., MacLeod, C.L., and Koehnlein, S.A., 1992, Sampling and analysis of unsaturated-zone water for trichloroethene: A comparison of four methods: *Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting*, March 11-15, 1992, Monterey, California.
- Smith, J.A., and Jaffe, P.R., 1991, Comparison of tetrachloromethane sorption to an alkylammonium-clay and alkyldiammonium-clay, *Environmental Science and Technology*, submitted.
- Smith, J.A., Jaffe, P.R., and Chiou, C.T., 1990, Effect of 10 quaternary ammonium cations on tetrachloromethane sorption to clay: *Environmental Science and Technology*, v. 24, no. 8, p. 1167-1172.
- Smith, J.A., Tuck, D.M., Jaffe, P.R., and Mueller, R.T., 1992, Effects of surfactant on the mobility of nonpolar organic contaminants in porous media: in *Organic Substances and Sediments in Water*, R. Backer, ed., Lewis Publishers (Chelsea, MI), p. 201-230.
- Szabo, Zoltan, 1990, Uranium, radium, and radon in ground water from the rock aquifers of the Piedmont province and the Kirkwood-Cohansey aquifer system of the Coastal Plain province, New Jersey: in Brown, J.O., and Kroll, R.L., comp., *Aspects of ground water in New Jersey: Seventh annual meeting of the Geological Association of New Jersey: Field guide and proceedings*, October 26-27, 1990, p. H1-H11.
- Szabo, Zoltan, Zapecza, O.S., and Nawyn, J.P., 1989, Effects of ground-water geochemistry on the distribution of dissolved uranium and radium-226 in Newark basin, New Jersey: in *Proceedings of the October 1989 Conference: Ground Water in the Piedmont*.
- Titus, E.O., Clawges, R.M., and Qualls, C.L., 1990, Estimated demand for agricultural water for irrigation use in New Jersey, 1990: U.S. Geological Survey Open-File Report 90-156, 23 p.
- Vowinkel, E.F., 1991, Comparison of relations between shallow-ground-water quality and land use in two New Jersey Coastal Plain aquifer systems: *Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting*, March 11-15, 1992, Monterey, California.
- Vowinkel, E.F., and Siwiew, S.F., 1991, Plan to evaluate the effects of hydrogeologic conditions and human activities on water quality in the Coastal Plain of New York and New Jersey: U.S. Geological Survey Water-Resources Investigations Report 91-4091, 42 p.
- Zapecza, O.S., 1989, Hydrogeologic framework of the New Jersey Coastal Plain, Regional aquifer-system analysis--northern Atlantic Coastal Plain: U.S. Geological Survey Professional Paper 1404-B, 49 p. (Supersedes Open-File report 84-730.)

Zapeczka, O.S., 1990, An overview of New Jersey ground-water hydrology: in Brown, J.O., and Kroll, R.L., comp., Aspects of ground water in New Jersey: Seventh annual meeting of the Geological Association of New Jersey: Field guide and proceedings, October 26-27, 1990, p. B1-B22.

ACCESS TO WATSTORE DATA

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

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

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

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

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch and 3-1/2 inch floppy disk; and, as noted in the introduction, on CD-ROM discs. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (See address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

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.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warm-blooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C plus or minus 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C plus or minus 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as Gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C plus or minus 1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Continuing-record station is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.
2. When water temperature records include observations taken one or more times daily.

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

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

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

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

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

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

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

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

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 now in the ground-water level descriptions, wells sampled for water-quality analyses, and on the corresponding location maps in this report.

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

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

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

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

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

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

Solute is any substance that is dissolved in water.

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

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

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

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

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

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

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

SELECTED REFERENCES

- Anderson, P.W., and George, J.R., 1966, Water-quality characteristics of New Jersey streams: U.S. Geological Survey Water-Supply Paper 1819-G, 48 p.
- Ayers, M.A., and Pustay, E.A., 1988, New Jersey ground-water quality: in National Water Summary 1986, U.S. Geological Survey Water Supply Paper 2325, p. 369-376.
- Bauersfeld, W.R., and Schopp, R.D., 1991, New Jersey floods and droughts: in National Water Summary, 1988-89--Floods and droughts: U.S. Geological Survey Water-Supply Paper 2375, p. 401-405.
- Fusillo, T.V., Hochreiter, J.J., Jr., and Lord, D.G., 1984, Water-quality data for the Potomac-Raritan-Magothy aquifer system in southwestern New Jersey, 1923-83: U.S. Geological Survey Open-File Report 84-737, 127 p, 1 plate.
- Gillespie, B.D., and Schopp, R.D., 1982, Low-flow characteristics and flow duration of New Jersey streams: U.S. Geological Survey Open-File Report 81-1110, 164 p.
- Heath, R.C., 1983, Basic ground-water hydrology: U.S. Geological Survey Water-Supply Paper 2220, 84 p.
- Hem, J.D., 1985, Study and interpretation of the chemical characteristics of natural water, 3d ed.: U.S. Geological Survey Water-Supply Paper 2254, 263 p.
- Langbein, W.B., and Iseri, K.T., 1960, General introduction of hydrologic definitions: U.S. Geological Survey Water-Supply Paper 1541-A, 29 p.
- Lohman, S.W., and others, 1972, Definitions of selected ground-water terms-revisions and conceptual refinements: U.S. Geological Survey Water-Supply Paper 1988, 21 p.
- Luzier, J.E., 1980, Digital-simulation and projection of head changes in the Potomac-Raritan-Magothy aquifer system, Coastal Plain, New Jersey: U.S. Geological Survey Water-Resources Investigations 80-11, 72 p.
- Rantz, S.E., and others, 1982, Measurement and computation of streamflow; Volume 1. Measurement of stage and discharge, Volume 2. Computation of Discharge: U.S. Geological Survey Water-Supply Paper 2175, 631 p.
- Rooney, J.G., 1971, Ground-water resources, Cumberland County, New Jersey: New Jersey Department of Environmental Protection Special Report 34, 83 p.
- Schaefer, F.L., 1983, Distribution of chloride concentrations in the principal aquifers of the New Jersey Coastal Plain, 1977-81: U.S. Geological Survey Water-Resources Investigations Report 83-4061, 56 p.
- Schaefer, F.L., 1987, Selected literature on the water resources of New Jersey by the U.S. Geological Survey, through 1986: U.S. Geological Survey Open-File Report 87-767, 45 p.
- Schopp, R.D., and Bauersfeld, W.R., 1986, New Jersey surface-water resources: in National Water Summary 1985 - Hydrologic events and surface-water resources, U.S. Geological Survey Water-Supply Paper 2300, p. 335-340.
- Seaber, P.R., 1963, Chloride concentrations of water from wells in the Atlantic Coastal Plain of New Jersey, 1923-61: New Jersey Division of Water Policy and Supply, Special Report 22, 250 p.
- U.S. Geological Survey, 1976, Surface-water supply of the United States, 1966-70, Part 1. North Atlantic Slope basins, Volume 2. Basins from New York to Delaware: U.S. Geological Survey Water-Supply Paper 2102, 985 p., (most recent volume).

- ____ 1977, Ground-water levels in the United States, 1973-74, Northeastern States: U.S. Geological Survey Water-Supply Paper 2164, 126 p., (most recent volume).
- Vickers, A.A., and McCall, J.E., 1968, Surface water supply of New Jersey, streamflow records 1961-65: New Jersey Division of Water Policy and Supply, Special Report 31, 351 p., (most recent volume).
- Vowinkel, E.F., 1984, Ground-water withdrawals from the Coastal Plain of New Jersey, 1956-80: U.S. Geological Survey Open-File Report 84-226, 32 p.
- Walker, R.L., 1983, Evaluation of water levels in major aquifers of the New Jersey Coastal Plain, 1978: U.S. Geological Survey Water-Resources Investigations 82-4077, 56 p.

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

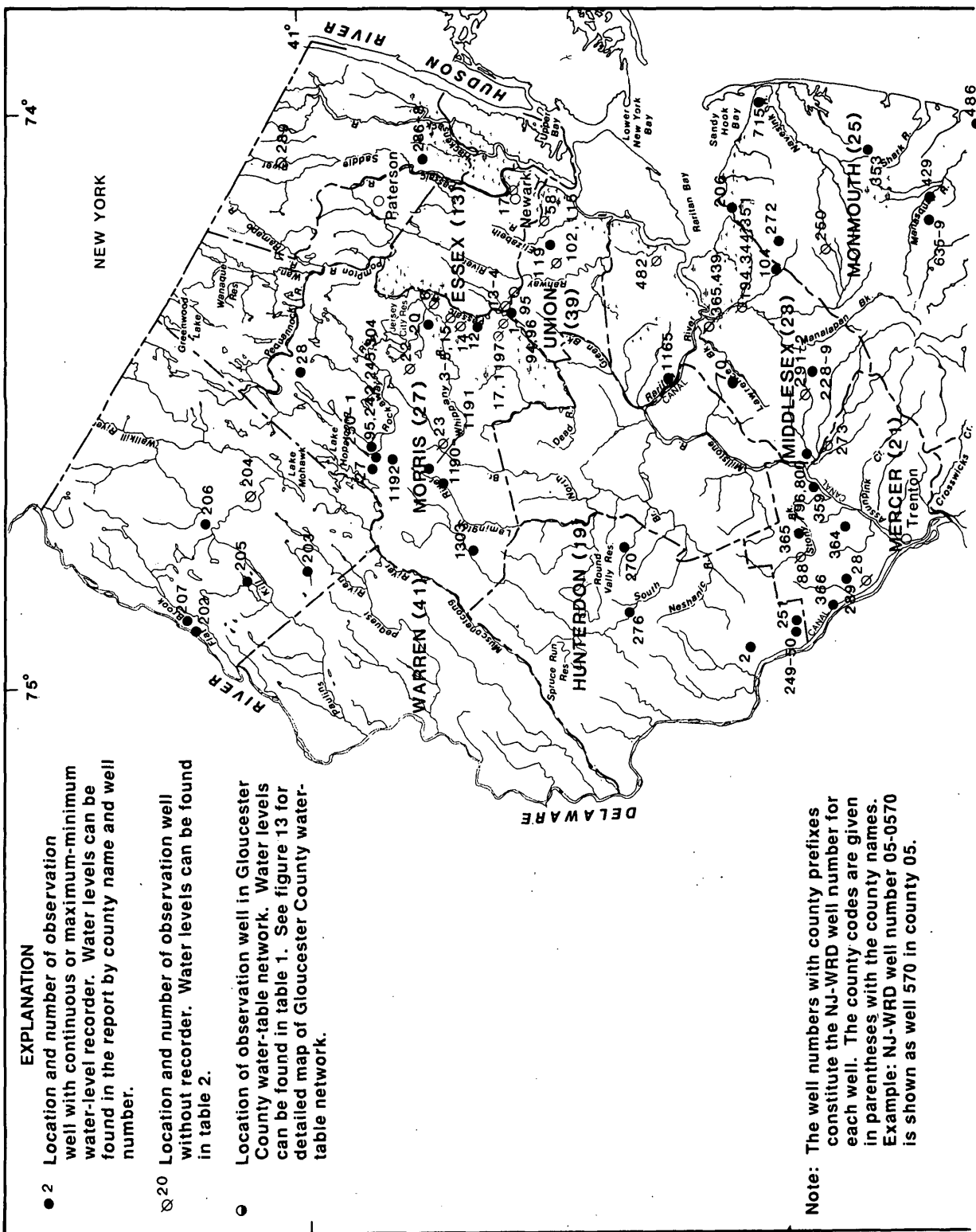
The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficken, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. Scott Keys and L. M. McCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W. Scott Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.
- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and Warren E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 pages.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F. A. Kilpatrick and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.

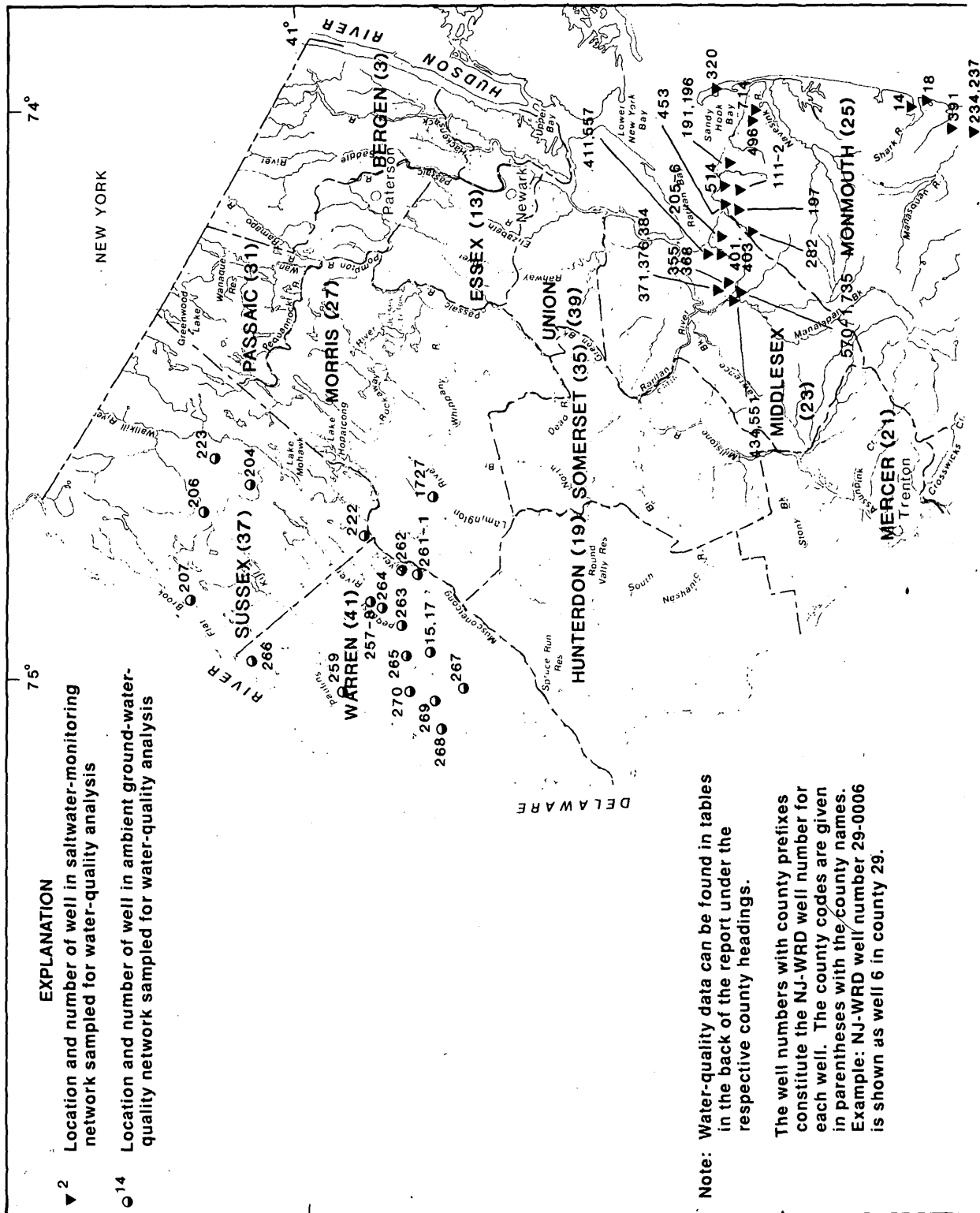
- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. *Fluorometric procedures for dye tracing*, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F. A. Kilpatrick, R. E. Rathburn, N. Yotsukura, G. W. Parker, and L. L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. *Levels of streamflow gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 27 pages.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programmed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. *Regression modeling of ground-water flow*, by Richard L. Cooley and Richard L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction*, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by Eliezer J. Wexler: USGS--TWRI Book 3, Chapter B7. 1992. 90 pages.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. J. Fishman and L. C. Friedman: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R. L. Wershaw, M. J. Fishman, R. R. Grabbe, and L. E. Lowe: USGS--TWRI Book 5, Chapter A3. 1987. 80 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L. J. Britton and P. E. Greeson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S. A. Leake and D. E. Prudic: USGS--TWRI Book 6, Chapter A2. 1991. 68 pages.
- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

WATER RESOURCES DATA-NEW JERSEY, 1992



WATER RESOURCES DATA-NEW JERSEY, 1992



GROUND-WATER LEVELS

ATLANTIC COUNTY

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

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

Owner: U.S. Geological Survey.

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

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

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, May 1977 to Feb. 1984.

DATUM.--Land-surface datum is 10.00 ft above National Geodetic Vertical Datum of 1929.

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

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

PERIOD OF RECORD.--Oct. 1959 to June 1975, May 1977 to current year. Records for 1975 and 1977 to 1980 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.10 ft below land-surface datum, Apr. 13, 1961; lowest, 79.51 ft below land-surface datum, Sept. 3, 1991.

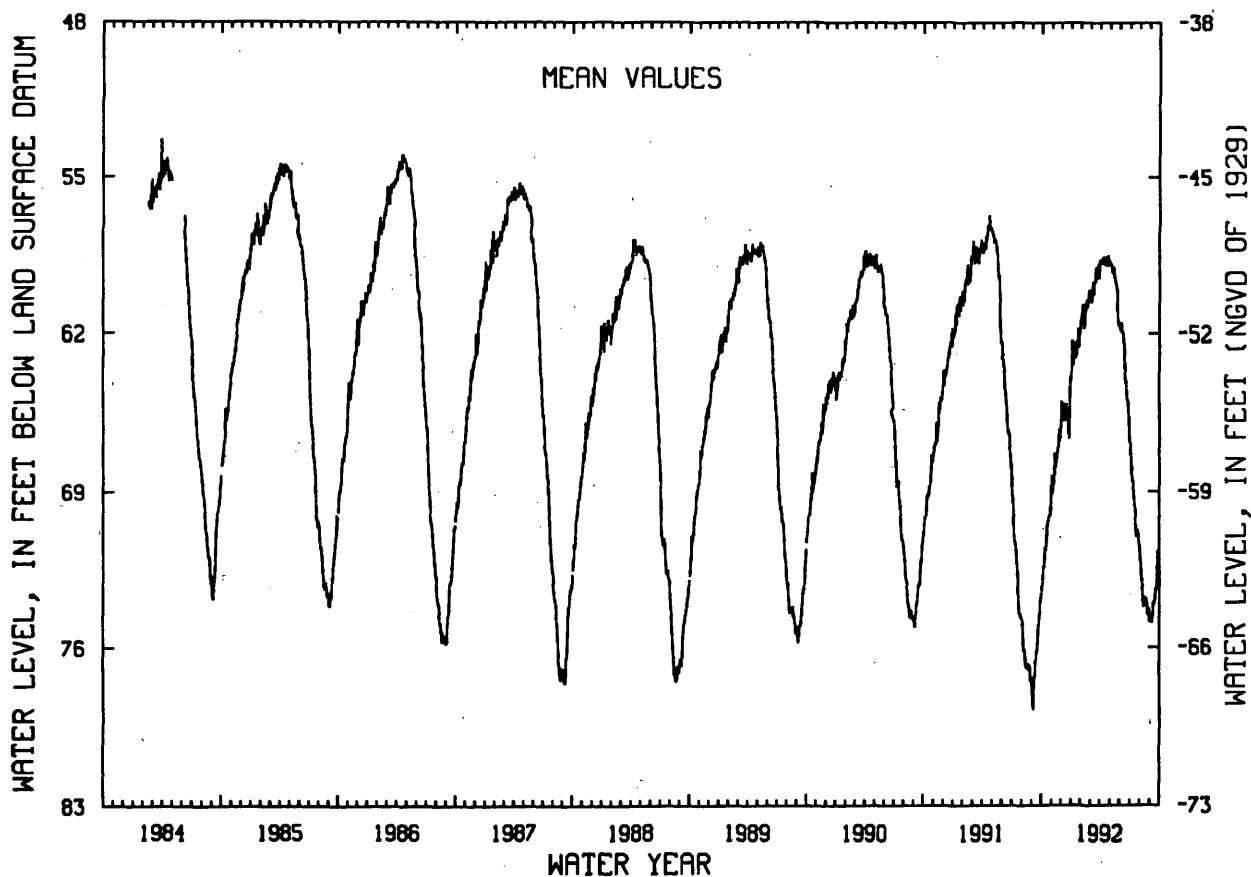
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	72.61	68.87	65.78	62.83	61.44	60.61	58.80	58.90	61.57	67.65	72.73	74.47
10	71.94	67.28	65.20	62.76	61.78	59.70	58.74	59.30	61.99	68.51	73.69	74.50
15	71.42	67.62	65.54	62.95	60.78	59.70	58.88	59.44	63.05	69.53	73.74	73.97
20	70.51	67.08	65.18	62.32	60.74	59.16	58.90	59.79	64.05	70.74	73.79	73.37
25	70.05	66.64	66.24	62.52	60.18	59.54	58.54	60.85	64.88	70.72	74.57	71.71
EOM	68.27	65.81	63.85	61.47	60.24	58.99	58.74	61.50	66.72	71.46	74.85	71.60
MEAN	71.17	67.50	65.41	62.58	60.89	59.70	58.77	59.82	63.42	69.51	73.70	73.60

WTR YR 1992 MEAN 65.53 HIGH 57.55 APR 17 LOW 75.62 AUG 31

NJ-WRD WELL NO.01-0578



GROUND-WATER LEVELS

33

ATLANTIC COUNTY

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

LOCATION.--Lat 39°20'17", long 74°30'02", Hydrologic Unit 02040302, behind Margate Firehouse no. 2, Fremont Ave., Margate City.

Owner: U.S. Geological Survey.

AQUIFER.--Piney Point aquifer of Eocene age.

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

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

DATUM.--Land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 2.00 ft above land-surface datum.

REMARKS.--Water level affected by tidal fluctuation.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.05 ft below land-surface datum, June 2, 1988; lowest, 35.41 ft below land-surface datum, Jan. 19, 1992.

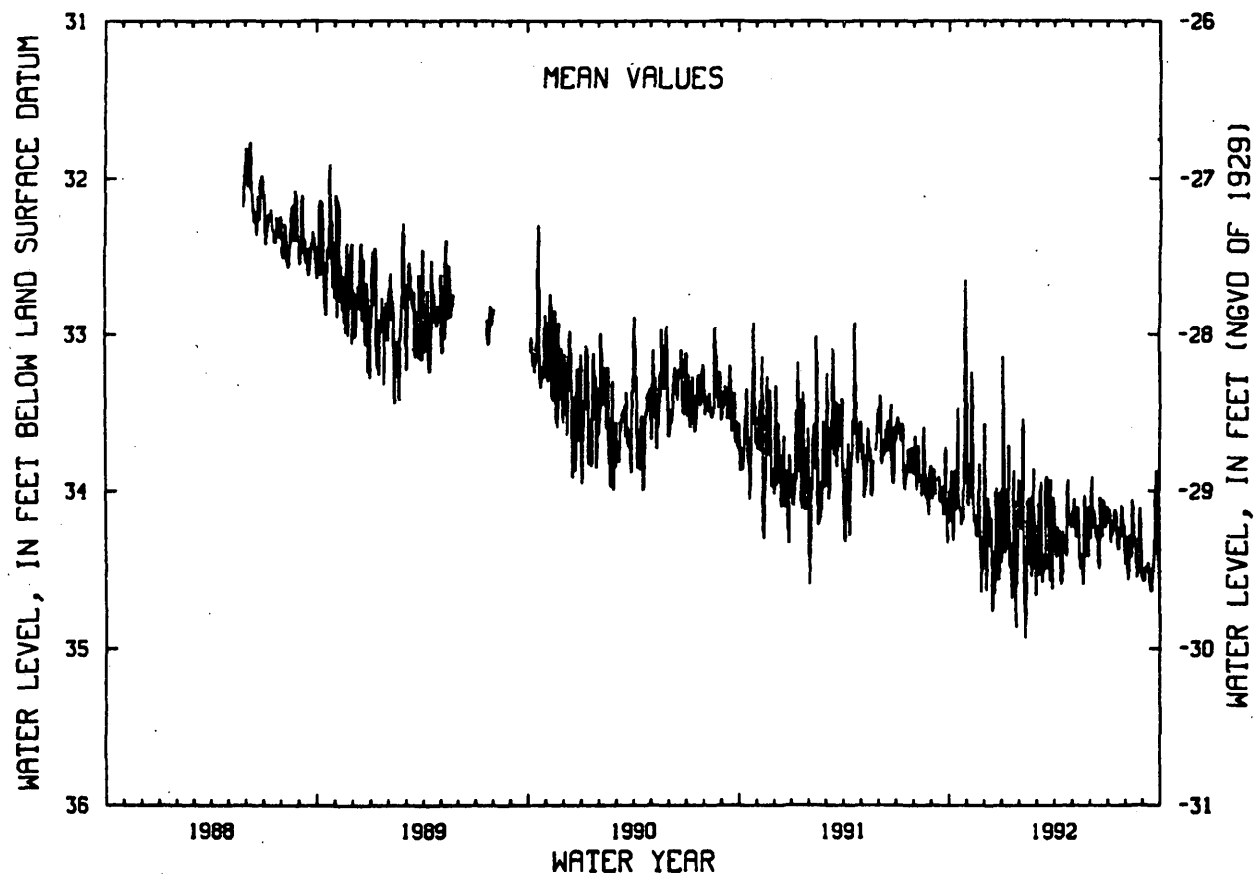
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.97	34.09	34.63	33.57	34.24	34.53	34.31	34.11	34.02	34.12	34.45	34.52
10	34.15	33.24	34.04	33.99	34.93	34.01	34.37	34.29	34.13	34.26	34.28	34.50
15	33.97	34.15	34.76	34.48	34.21	34.41	34.56	34.36	34.22	34.12	34.06	34.63
20	34.10	34.28	34.63	34.38	34.32	33.91	34.39	34.50	34.04	34.35	34.35	34.46
25	34.17	34.36	34.30	34.86	34.04	34.57	34.01	34.03	34.06	34.27	34.52	33.87
EOM	32.65	34.31	34.14	33.93	34.31	34.12	34.16	34.18	34.20	34.22	34.55	34.56
MEAN	33.96	34.06	34.30	34.23	34.23	34.30	34.29	34.26	34.20	34.22	34.37	34.46

WTR YR 1992 MEAN 34.24 HIGH 32.00 OCT 31 LOW 35.41 JAN 19

NJ-WRD WELL NO.01-0834



GROUND-WATER LEVELS

ATLANTIC COUNTY

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

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

Owner: Atlantic City Municipal Utilities Authority.

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

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

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, May 1977 to July 1980.

DATUM.--Land-surface datum is 9.54 ft above National Geodetic Vertical Datum of 1929.

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

REMARKS.--Water level affected by tidal fluctuation and nearby pumping. Water level affected by USGS aquifer test, Aug. 16-23, 1985. Well damaged by construction equipment in Aug. 1987 and rehabilitated Nov. 1987.

PERIOD OF RECORD.--Jan. 1949 to Aug. 1975, May 1977 to current year. Records for 1949 to 1975 are unpublished and are available in files of New Jersey District Office.

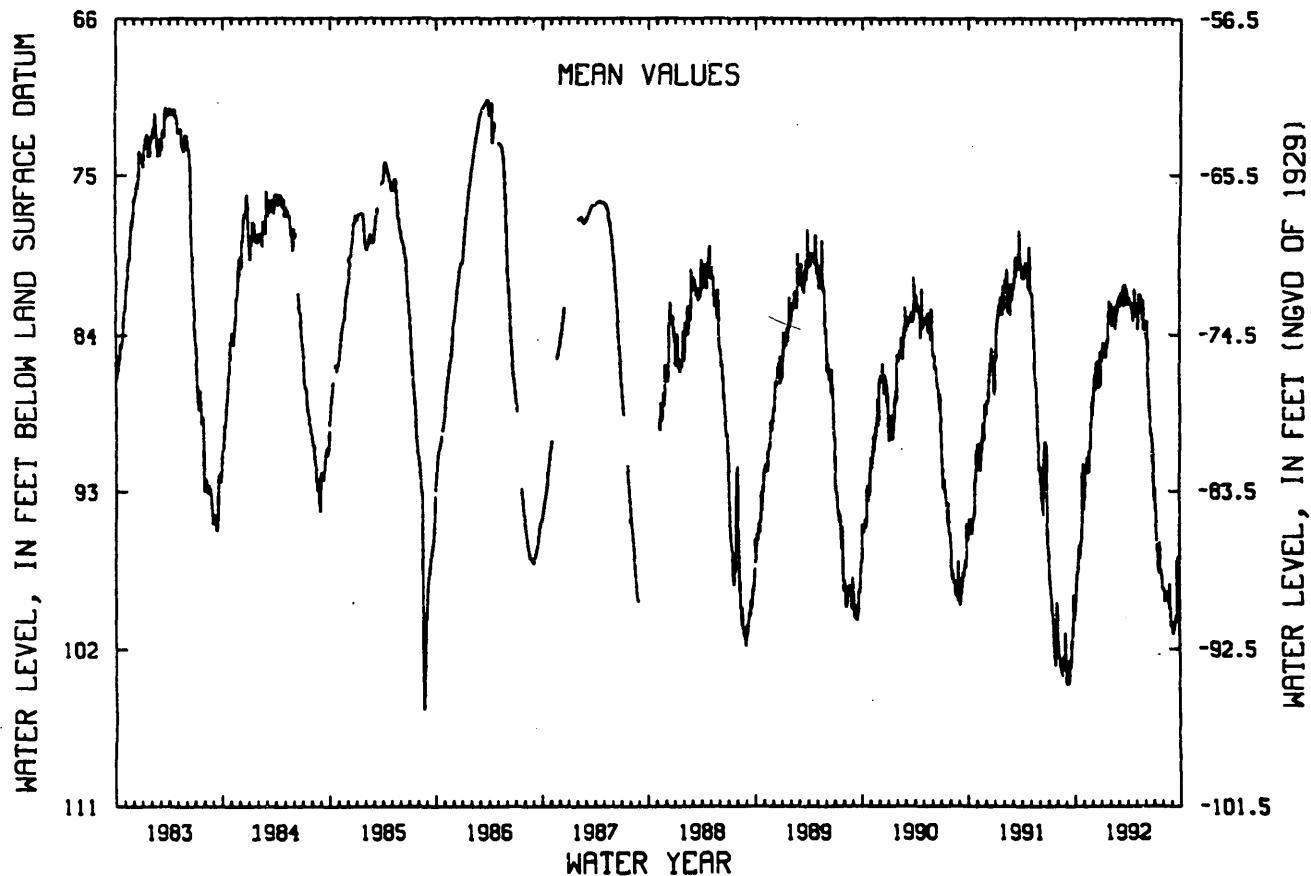
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.58 ft below land-surface datum, Mar. 7, 1962; lowest, 105.70 ft below land-surface datum, Aug. 22, 1985. (see remarks)

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	99.30	93.72	88.10	85.33	83.20	81.95	82.11	82.83	83.70	93.53	98.54	100.41
10	98.01	91.97	86.82	84.53	83.51	82.05	81.93	83.48	83.34	94.13	99.33	101.04
15	97.31	91.11	87.02	84.74	82.88	82.28	82.27	81.63	86.73	96.16	98.85	100.64
20	96.87	91.78	85.55	85.30	82.92	81.16	82.59	81.71	88.85	97.27	98.84	100.51
25	95.94	90.63	85.67	84.75	82.80	81.06	83.04	82.98	89.82	96.39	99.72	96.83
EOM	91.44	87.95	84.98	82.06	82.44	81.85	81.77	83.65	90.56	97.69	100.66	97.40
MEAN	97.11	91.49	86.72	84.77	82.88	81.91	82.22	82.53	86.81	95.47	99.04	99.65
WTR YR 1992	MEAN 89.24 HIGH 80.89 MAR 25 LOW 101.28 SEP 8											

NJ-WRD WELL NO.01-0037



ATLANTIC COUNTY

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

LOCATION.--Lat 39°27'54", long 74°27'01", Hydrologic Unit 02040302, at 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.

DATUM.--Land-surface datum is 27 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of bushing, 2.30 ft above land-surface datum.

REMARKS.--Water level 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 New Jersey District Office.

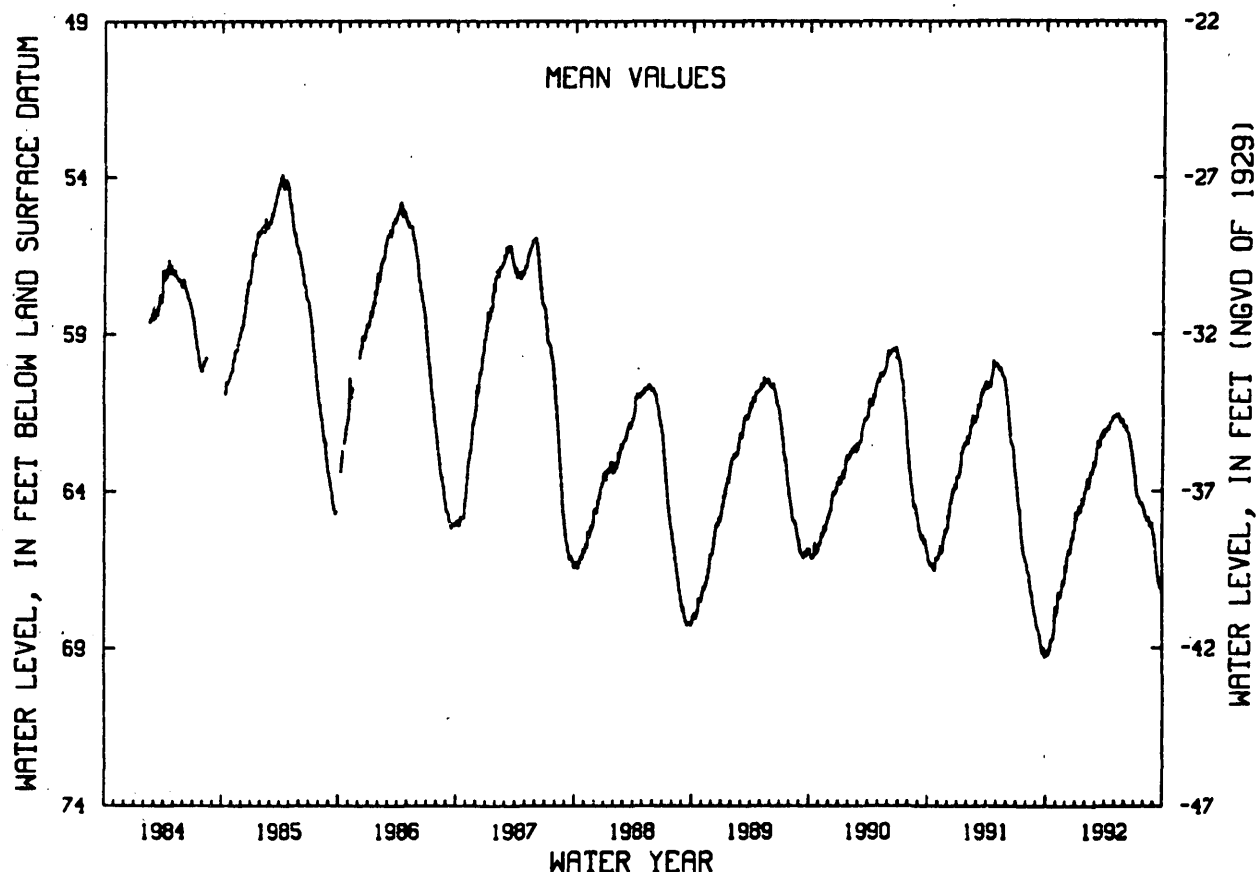
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 33.62 ft below land-surface datum, Apr. 13, 1961; lowest, 69.38 ft below land-surface datum, Sept. 30, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	69.18	67.95	66.59	64.73	63.94	63.06	62.08	61.61	61.96	63.46	64.69	65.51
10	69.16	67.40	66.09	64.73	63.94	62.53	62.00	61.55	62.11	64.00	64.81	65.99
15	69.00	67.41	66.03	64.65	63.66	62.59	61.98	61.63	62.18	64.18	64.84	66.57
20	68.80	67.25	65.92	64.58	63.41	62.26	61.79	61.77	62.39	64.32	64.94	66.93
25	68.65	66.98	65.57	64.46	63.25	62.33	61.65	61.72	62.75	64.41	65.13	66.94
EQM	67.70	66.86	65.29	64.08	63.15	62.12	61.63	61.88	63.12	64.46	65.23	67.24
MEAN	68.85	67.39	65.96	64.63	63.61	62.54	61.88	61.68	62.35	64.07	64.90	66.39
WTR YR 1992	MEAN 64.53 HIGH 61.38 MAY 13 LOW 69.34 OCT 1											

NJ-WRD WELL NO.01-0180



GROUND-WATER LEVELS

ATLANTIC COUNTY

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

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

Owner: U.S. Geological Survey

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

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

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

DATUM.--Land-surface datum is 38 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 1.75 ft above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.74 ft below land-surface datum, Mar. 18, 1986; lowest, 85.75 ft below land-surface datum, Sept. 30, Oct. 1, 1991.

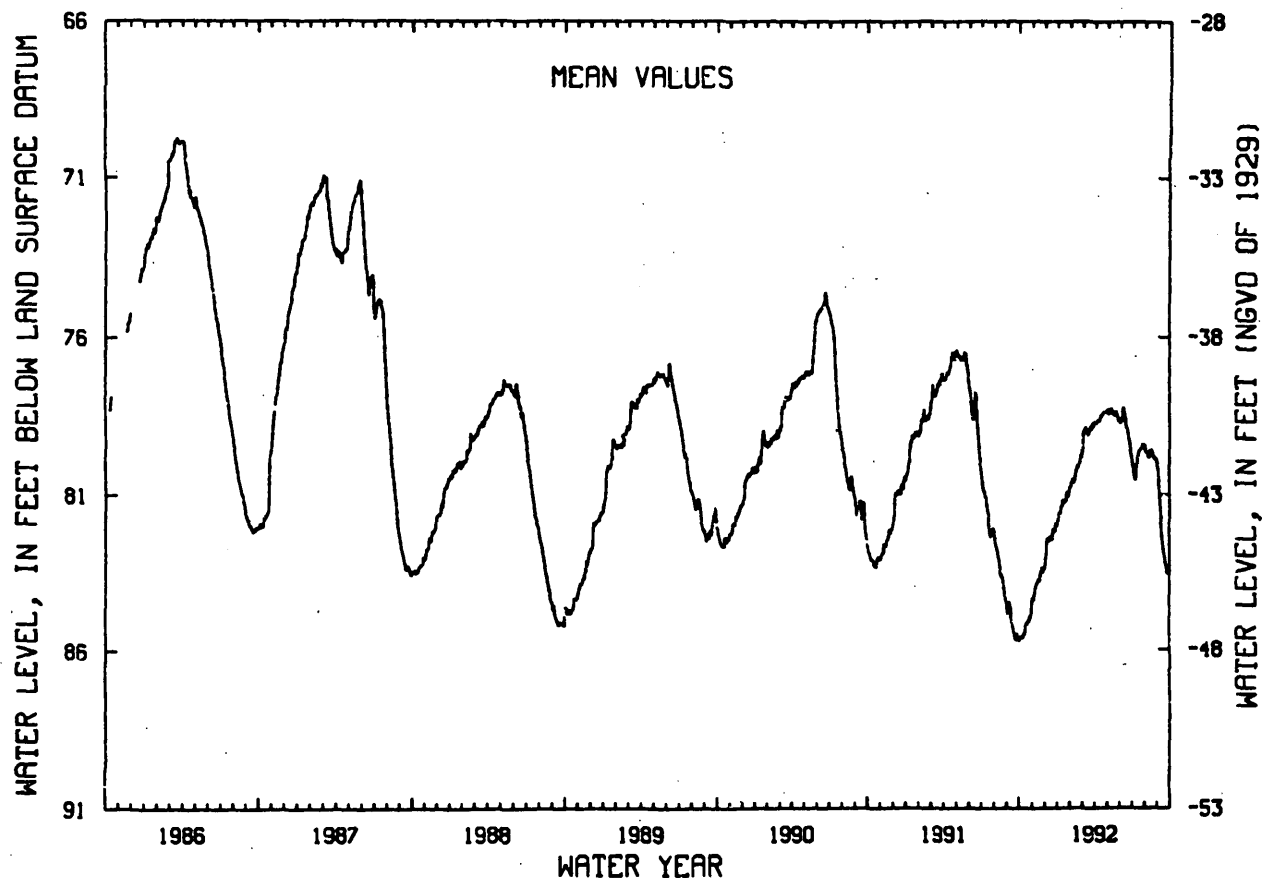
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	85.62	84.41	82.90	81.58	80.63	79.02	78.72	78.32	78.65	80.12	79.64	80.74
10	85.60	83.98	82.43	81.37	80.64	78.96	78.67	78.28	78.29	80.54	79.81	81.86
15	85.42	83.81	82.37	81.24	80.36	79.06	78.61	78.38	78.58	79.78	79.59	82.70
20	85.20	83.69	82.46	81.23	80.09	78.95	78.46	78.49	78.94	79.56	79.64	83.17
25	85.08	83.38	82.14	81.05	79.95	78.94	78.36	78.42	79.35	79.47	79.85	83.54
EQM	84.55	83.37	82.01	80.78	79.78	78.73	78.37	78.61	79.79	79.42	79.98	83.56
MEAN	85.31	83.83	82.43	81.31	80.31	79.03	78.55	78.41	78.89	79.82	79.72	82.33

WTR YR 1992 MEAN 80.83 HIGH 78.19 JUN 10,11 LOW 85.75 OCT 1

NJ-WRD WELL NO.01-0703



ATLANTIC COUNTY

393333074442401. Local I.D., Scholler 1 Obs. NJ-WRD Well Number, 01-0256.

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

DATUM.--Land-surface datum is 93.19 ft above National Geodetic Vertical Datum of 1929.

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

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--Apr. 1962 to current year. Records for 1962 to 1975 are unpublished and are available in files of New Jersey District Office.

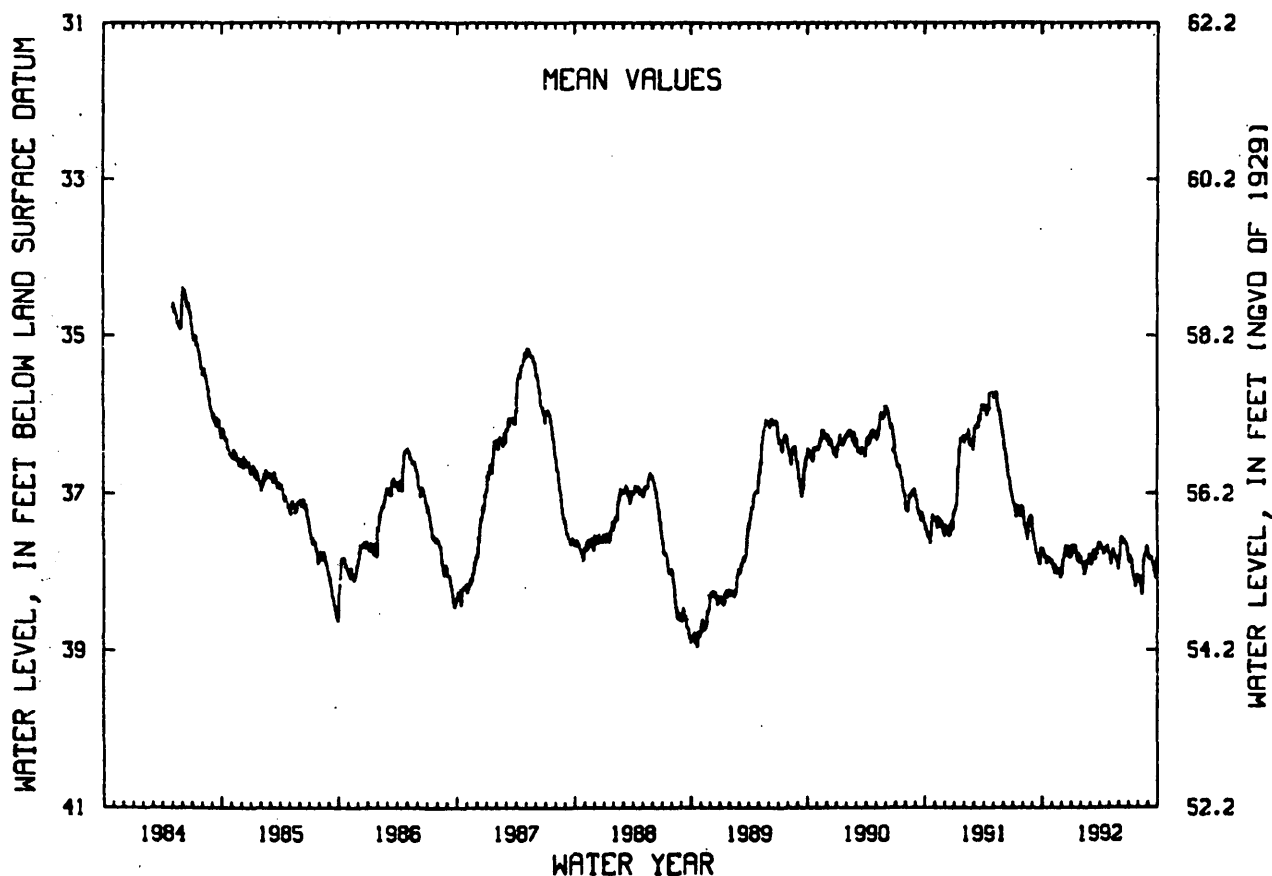
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.18 ft below land-surface datum, Mar. 20, 1963; lowest, 39.56 ft below land-surface datum, Sept. 13, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	37.76	37.95	37.92	37.65	37.89	37.91	37.66	37.83	37.70	37.81	38.09	37.84
10	37.81	37.97	37.75	37.67	38.04	37.81	37.72	37.76	37.55	37.86	38.18	37.82
15	37.88	37.97	37.70	37.75	37.97	37.80	37.77	37.77	37.58	38.05	38.24	37.90
20	37.83	38.01	37.80	37.83	37.86	37.73	37.71	37.83	37.59	38.13	37.81	38.00
25	37.85	38.00	37.77	37.85	37.87	37.77	37.66	37.87	37.64	38.14	37.76	38.07
EOM	37.85	38.05	37.81	37.80	37.80	37.64	37.76	37.87	37.79	38.09	37.76	37.85
MEAN	37.82	37.98	37.79	37.78	37.90	37.78	37.71	37.82	37.65	38.00	37.98	37.89
WTR YR 1992	MEAN 37.84 HIGH 37.52 JUN 9-10 LOW 38.32 AUG 12-13											

NJ-WRD WELL NO.01-0256



BERGEN COUNTY

405053074060401. Local I.D., Wallington 2 Obs. NJ-WRD Well Number, 03-0286.

LOCATION---Lat 40°50'53", long 74°06'04", Hydrologic Unit 02030103, at the baseball field off Lackawanna Ave., Wallington Borough.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS---Drilled observation well, diameter 3 in., depth 126 ft, open hole 49 to 126 ft.

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

DATUM---Land-surface datum is 80 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 2.00 ft above land-surface datum.

REMARKS---Water level affected by nearby pumping.

PERIOD OF RECORD---Nov. 1989 to Mar. 1992 (discontinued).

EXTREMES FOR PERIOD OF RECORD---Highest water level, 22.61 ft below land-surface datum, June 4, 1990; lowest, 30.22 ft below land-surface datum, Mar. 6, 1992.

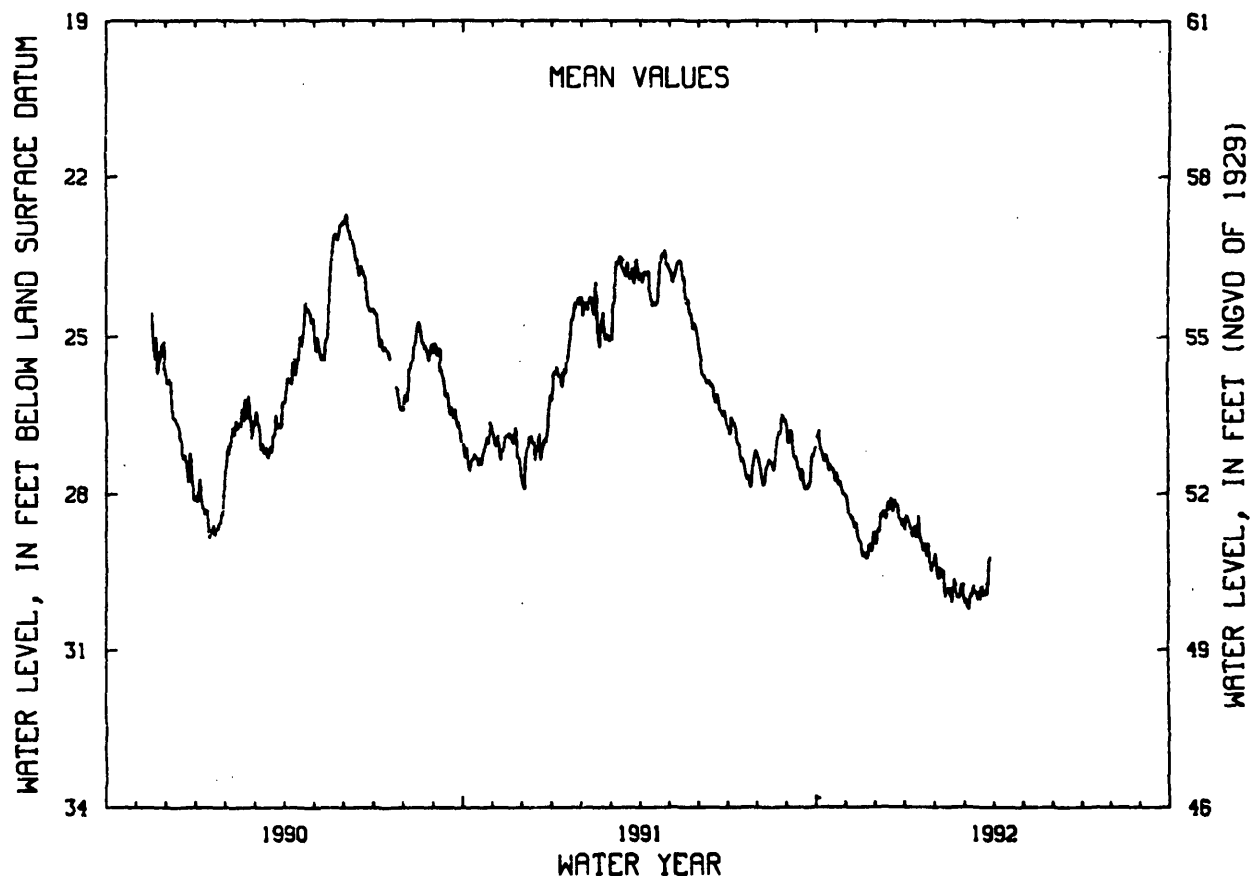
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.12	28.41	28.72	28.61	29.41	30.19	---	---	---	---	---	---
10	27.34	28.55	28.38	28.61	29.98	29.85	---	---	---	---	---	---
15	27.43	28.89	28.31	28.70	29.96	29.97	---	---	---	---	---	---
20	27.75	29.20	28.23	28.96	29.76	29.78	---	---	---	---	---	---
25	27.75	28.96	28.47	29.30	29.96	29.94	---	---	---	---	---	---
EOM	28.03	28.74	28.68	29.14	29.84	---	---	---	---	---	---	---
MEAN	27.49	28.79	28.42	28.89	29.77	29.88	---	---	---	---	---	---

WTR YR 1992 HIGH 26.71 OCT 3 LOW 30.22 MAR 6

NJ-WRD WELL NO.03-0286



BERGEN COUNTY

405106074055701. Local I.D., Wallington 1 Obs. NJ-WRD Well Number, 03-0287.

LOCATION.--Lat 40°51'06", Long 74°06'10", Hydrologic Unit 02030103, near the corner of Lackawanna Ave. and Spring Street, Wallington Borough.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS.--Drilled observation well, diameter 3 in., depth 184 ft, open hole 39 to 184 ft.

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

DATUM.--Land-surface datum is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--June 1989 to Mar. 1992 (discontinued). Records for 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.92 ft below land-surface datum, May 28, 1990; lowest, 18.33 ft below land-surface datum, Mar. 4-5, 1992.

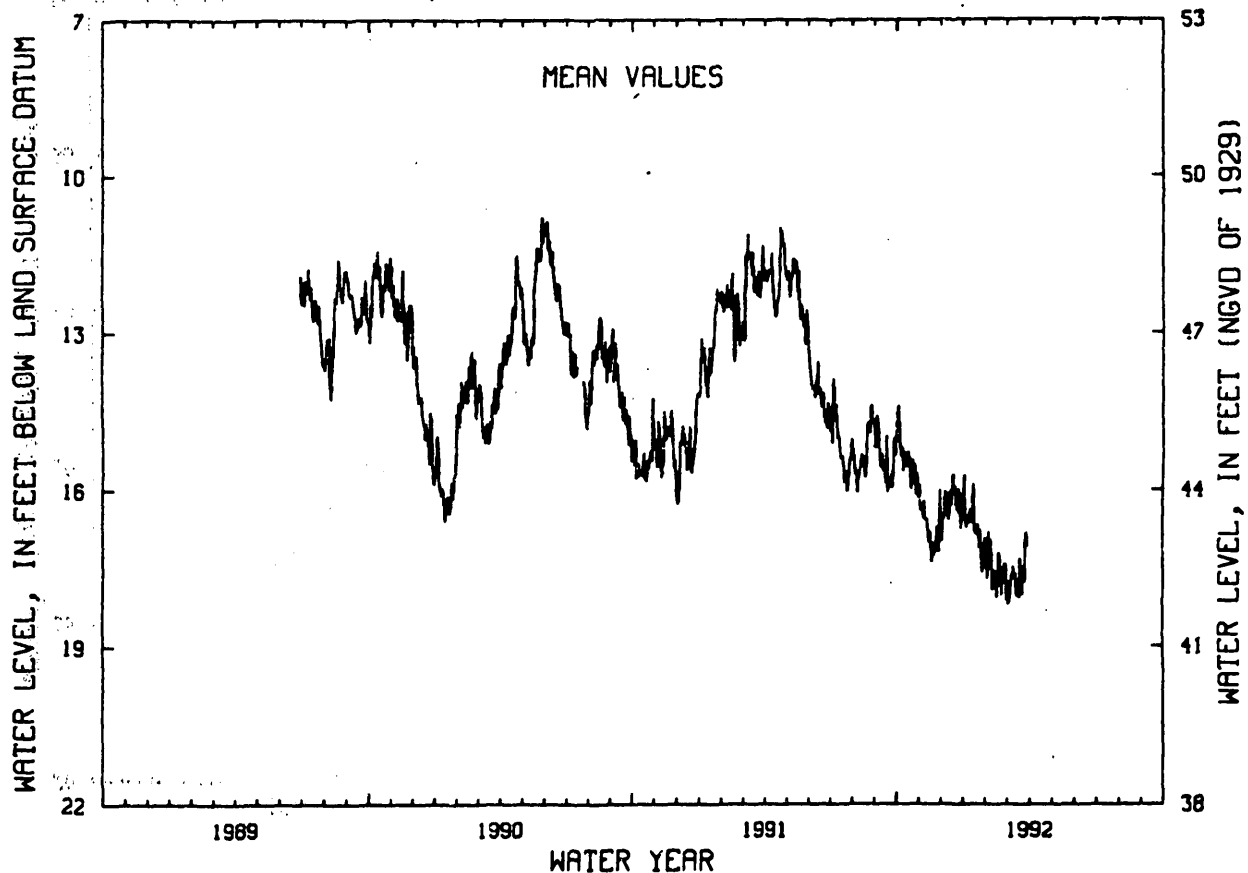
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.31	16.41	16.41	16.72	17.20	18.12	---	---	---	---	---	---
10	15.48	16.56	16.34	16.38	17.92	17.47	---	---	---	---	---	---
15	15.27	16.81	16.29	16.47	18.05	18.05	---	---	---	---	---	---
20	15.97	17.26	15.93	16.69	17.41	17.50	---	---	---	---	---	---
25	15.59	16.70	16.45	17.28	17.68	17.79	---	---	---	---	---	---
EOM	15.90	16.66	16.29	16.98	17.77	---	---	---	---	---	---	---
MEAN	15.47	16.73	16.28	16.72	17.57	17.68	---	---	---	---	---	---

WTR YR 1992 HIGH 13.68 OCT 3 LOW 18.33 MAR 4-5

NJ-WRD WELL NO.03-0287



GROUND-WATER LEVELS

BERGEN COUNTY

405107074060901. Local I.D., Wallington 3 Obs. NJ-WRD Well Number, 03-0288.

LOCATION---Lat 40°51'05", long 74°05'57", Hydrologic Unit 02030103, at the Mount Pleasant Ave. Little League Baseball Field, Wallington Borough.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS---Drilled observation well, diameter 3 in., depth 179 ft, open hole 55 to 179 ft.

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

DATUM---Land-surface datum is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 2.60 ft above land-surface datum.

REMARKS---Water level affected by nearby pumping.

PERIOD OF RECORD---June 1989 to Mar. 1992 (discontinued). Records for 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD---Highest water level measured, 34.97 ft below land-surface datum, Sept. 8, 1989; lowest, 43.20 ft below land-surface datum, Mar. 18, 1992.

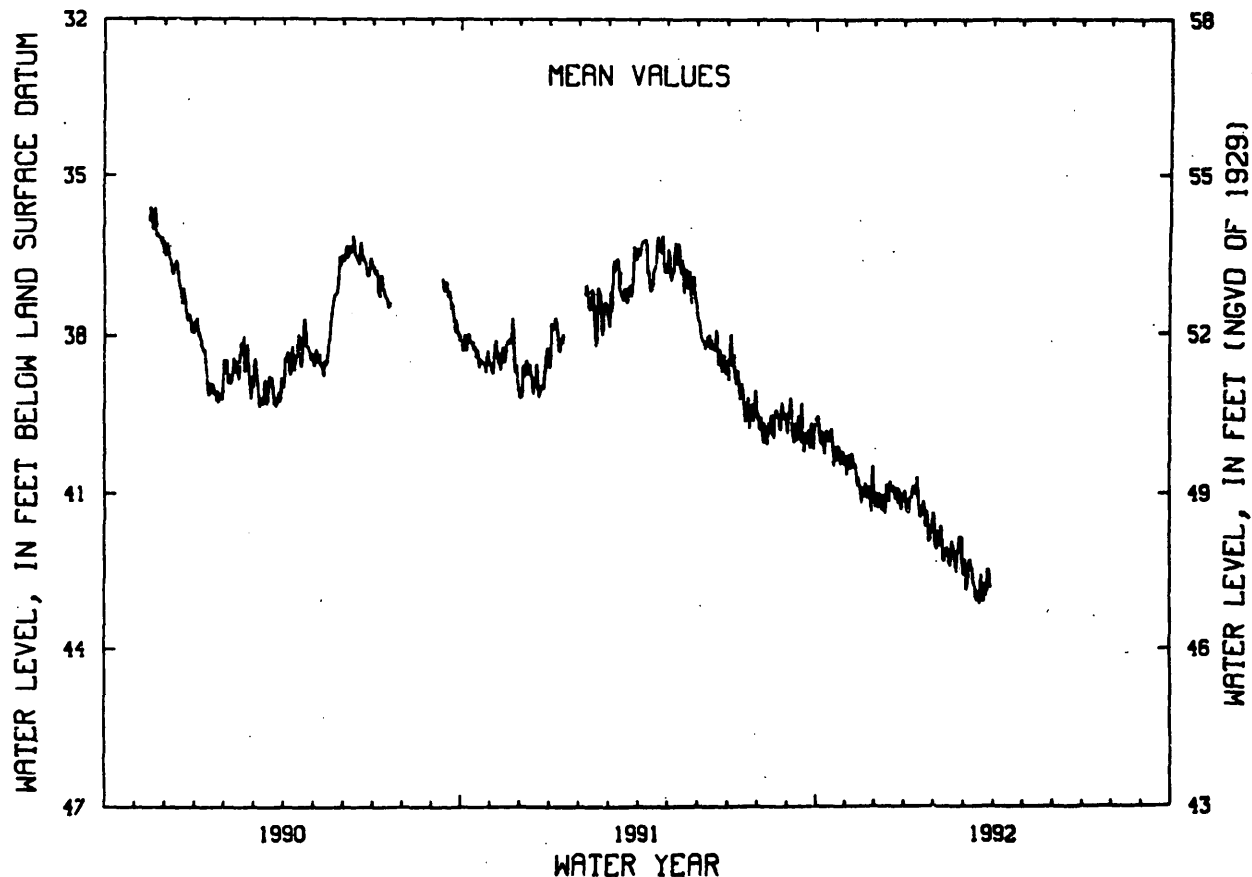
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.96	40.31	41.23	41.37	41.94	42.80	---	---	---	---	---	---
10	40.01	40.45	41.24	40.84	42.28	42.44	---	---	---	---	---	---
15	39.90	40.81	41.13	41.18	42.36	43.06	---	---	---	---	---	---
20	40.46	41.06	40.84	41.14	42.10	42.74	---	---	---	---	---	---
25	40.15	40.85	41.17	41.68	42.02	42.95	---	---	---	---	---	---
EOB	40.27	40.97	41.08	41.56	42.27	---	---	---	---	---	---	---
MEAN	40.04	40.73	41.06	41.28	42.07	42.69	---	---	---	---	---	---

WTR YR 1992 HIGH 39.17 OCT 3 LOW 43.20 MAR 18

NJ-WRD WELL NO.03-0288



BURLINGTON COUNTY

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

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

Owner: U.S. Geological Survey.

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

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

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

DATUM.--Land-surface datum is 140.66 ft above National Geodetic Vertical Datum of 1929.

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

PERIOD OF RECORD.--Oct. 1964 to July 1975, Mar. 1977 to current year. Records for 1964 to 1975 and 1977 are unpublished and are available in files of New Jersey District Office.

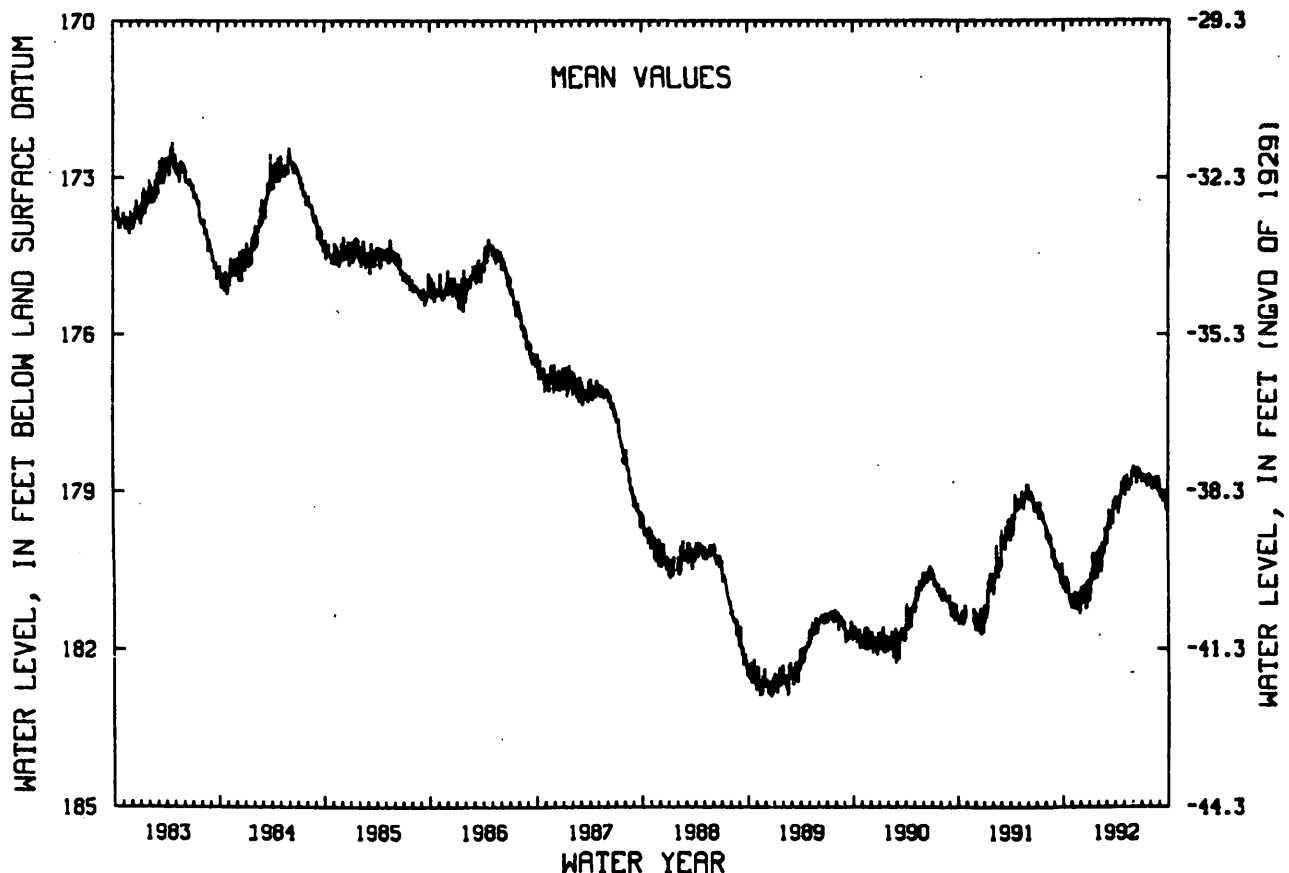
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 143.20 ft below land-surface datum, Feb. 25, 1965; lowest, 182.96 ft below land-surface datum, Dec. 22-23, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	180.73	181.17	181.15	180.56	180.20	179.97	179.19	178.90	178.61	178.70	178.84	179.10
10	180.81	181.06	180.99	180.48	180.54	179.61	179.25	178.81	178.70	178.73	178.80	178.99
15	180.81	181.12	180.93	180.49	180.14	179.61	179.29	178.89	178.85	178.70	178.93	179.19
20	180.97	181.14	181.24	180.52	180.05	179.46	179.17	178.98	178.70	178.88	178.78	179.16
25	181.10	181.08	180.95	180.52	180.01	179.62	178.83	---	178.58	178.85	178.92	179.31
EOM	180.96	181.16	181.10	180.15	179.75	179.21	178.91	178.68	178.74	178.75	178.87	179.20
MEAN	180.88	181.12	180.98	180.55	180.12	179.59	179.13	178.85	178.66	178.78	178.85	179.11
WTR YR 1992	MEAN 179.74 HIGH 178.48 JUN 4 LOW 181.37 NOV 27											

NJ-WRD WELL NO.05-0683



BURLINGTON COUNTY

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

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

Owner: U.S. Geological Survey.

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

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

INSTRUMENTATION.--Water-level extremes recorder, Mar. 1977 to current year. Water-level recorder, May 1965 to Apr. 1975.

DATUM.--Land-surface datum is 140.82 ft above National Geodetic Vertical Datum of 1929.

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

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

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

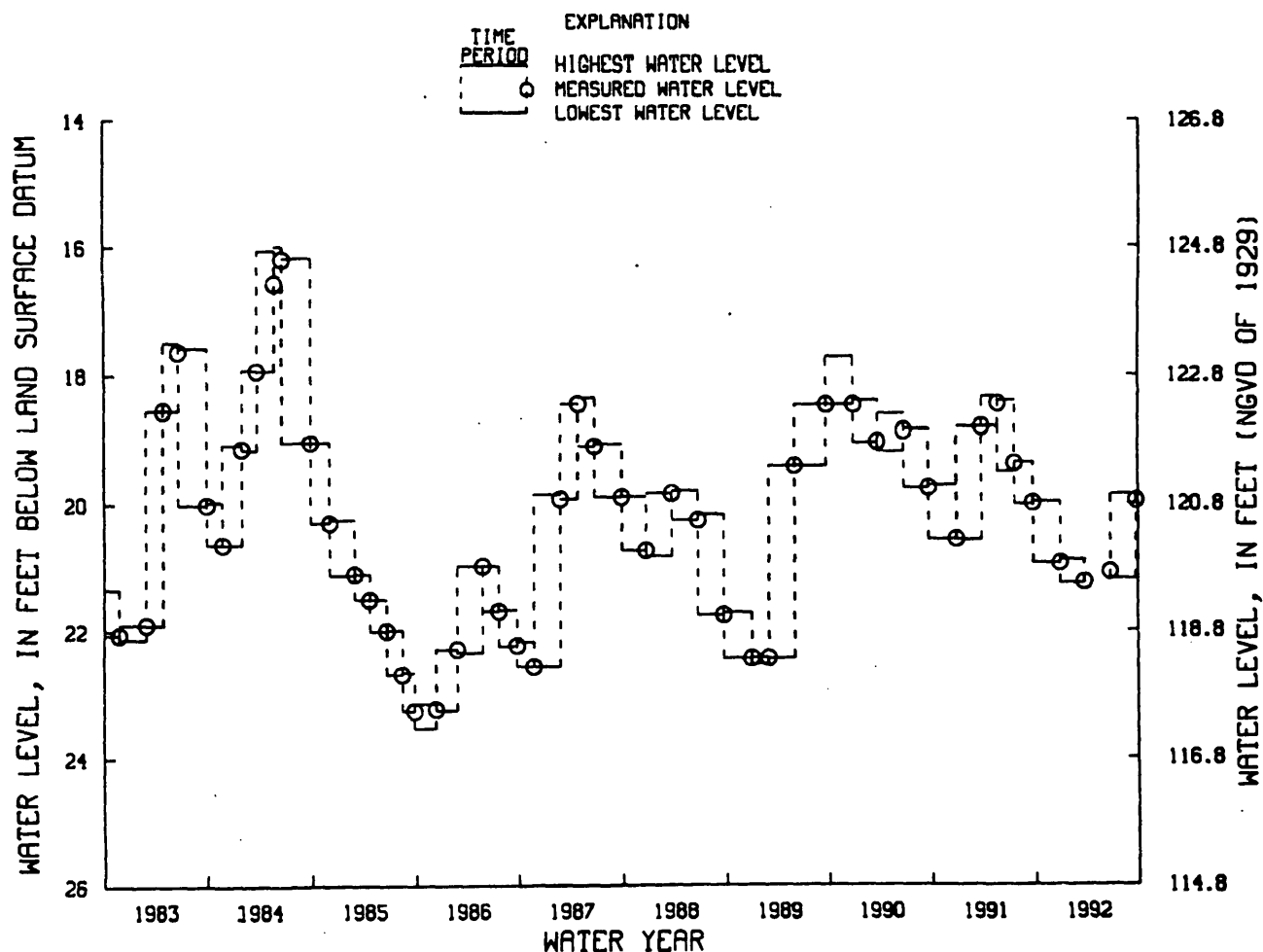
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES

MEASURED WATER LEVEL

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 25, 1991 TO DEC. 30, 1991	19.97	20.94	DEC. 30, 1991	20.94
DEC. 30, 1991 TO MAR. 25, 1992	20.89	21.26	MAR. 25, 1992	21.24
MAR. 25, 1992 TO JUNE 24, 1992	---	---	JUNE 24, 1992	21.08
JUNE 24, 1992 TO SEPT. 23, 1992	19.85	21.19	SEPT. 23, 1992	19.95

NJ-WRD WELL NO. 05-0684



GROUND-WATER LEVELS

43

BURLINGTON COUNTY

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

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

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

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

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

DATUM.--Land-surface datum is 152.02 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of 8 inch casing, 0.70 ft above land-surface datum.

PERIOD OF RECORD.--Sept. 1955 to current year. Records for 1955 to 1975 are unpublished and are available in files of New Jersey District Office.

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

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

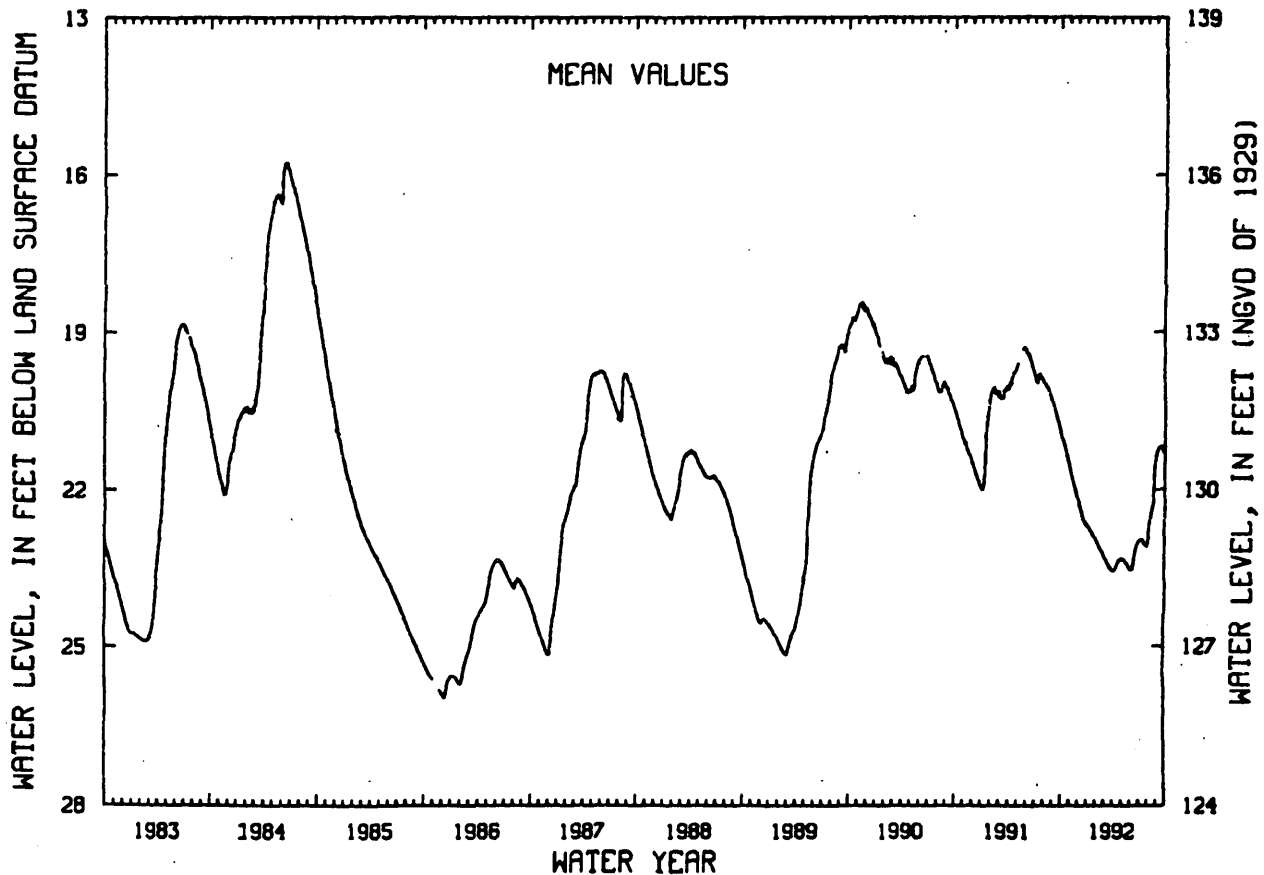
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.94	21.62	22.28	22.68	22.99	23.30	23.56	23.34	23.54	22.97	22.94	21.26
10	21.05	21.73	22.37	22.71	23.06	23.34	23.55	23.34	23.55	22.96	22.61	21.19
15	21.15	21.85	22.46	22.78	23.10	23.40	23.51	23.37	23.36	22.96	22.42	21.19
20	21.27	21.96	22.58	22.82	23.16	23.45	23.43	23.42	23.20	23.03	22.28	21.22
25	21.39	22.06	22.62	22.88	23.21	23.51	23.36	23.44	23.07	23.05	21.74	21.29
EOB	21.50	22.16	22.68	22.92	23.24	23.53	23.34	23.50	23.01	23.09	21.37	21.31

MEAN 21.18 21.85 22.46 22.79 23.10 23.41 23.47 23.39 23.32 23.01 22.31 21.24

WTR YR 1992 MEAN 22.63 HIGH 20.86 OCT 1 LOW 23.57 APR 5-9

NJ-WRD WELL NO.05-0689



GROUND-WATER LEVELS

BURLINGTON COUNTY

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

LOCATION.--Lat 39°55'24", long 74°50'25", Hydrologic Unit 02040202, at Medford Public Shooting Grounds, Medford Township.

Owner: U.S. Geological Survey.

AQUIFER.--Upper aquifer, Potomac-Raritan-Magothy aquifer system 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.

DATUM.--Land-surface datum is 70.77 ft above National Geodetic Vertical Datum of 1929.

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

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 85.22 ft below land-surface datum, Feb. 16-19, 1964; lowest, 144.81 ft below land-surface datum, Aug. 17-18, 1988.

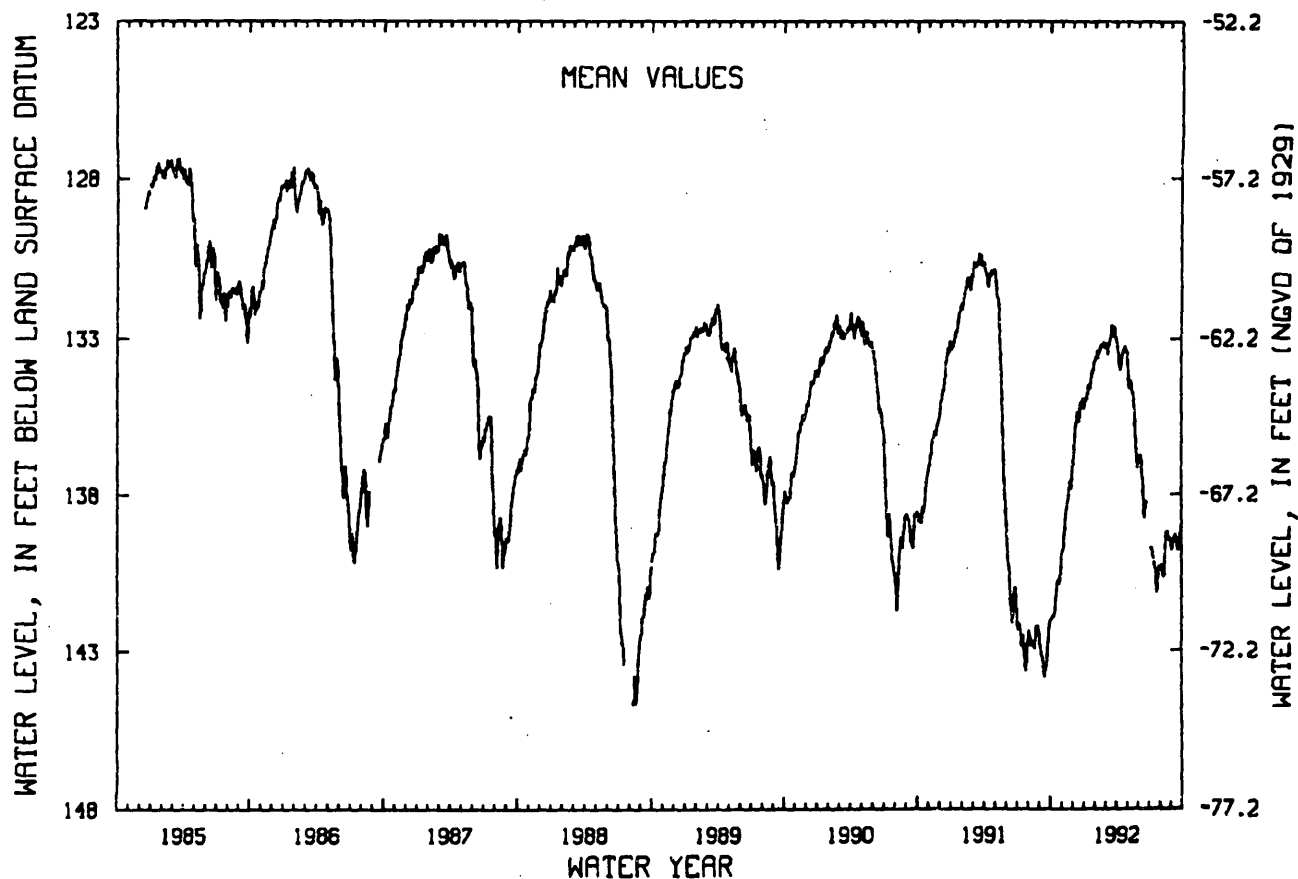
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	141.99	139.74	136.82	134.96	133.60	133.27	133.19	134.12	136.93	---	140.37	139.75
10	141.88	139.00	135.84	134.76	133.64	133.38	133.89	134.35	136.93	139.80	140.56	139.39
15	141.45	138.45	135.40	134.63	133.39	133.04	133.92	134.65	137.79	140.16	139.94	139.36
20	140.82	138.08	135.66	134.46	133.21	132.63	133.43	135.01	138.45	140.59	139.22	139.70
25	140.86	137.58	135.13	134.12	133.25	132.91	133.24	136.25	138.24	140.84	139.38	139.68
EOM	140.13	137.37	135.20	133.72	133.16	132.93	133.37	136.98	---	140.34	139.42	138.95
MEAN	141.29	138.56	135.72	134.55	133.38	133.02	133.48	135.03	137.59	140.32	139.88	139.51

WTR YR 1992 MEAN 136.82 HIGH 132.54 MAR 22 LOW 142.06 OCT 4

NJ-WRD WELL NO.05-0258



BURLINGTON COUNTY

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

LOCATION.--Lat 39°55'25", long 74°50'25", Hydrologic Unit 02040202, at Medford Public Shooting Grounds, Medford Township.

Owner: U.S. Geological Survey.

AQUIFER.--Middle aquifer, Potomac-Raritan-Magothy aquifer system 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.

DATUM.--Land-surface datum is 72.60 ft above National Geodetic Vertical Datum of 1929.

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

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 94.46 ft below land-surface datum, Mar. 1, 1968; lowest, 136.57 ft below land-surface datum, Aug. 23, 1988.

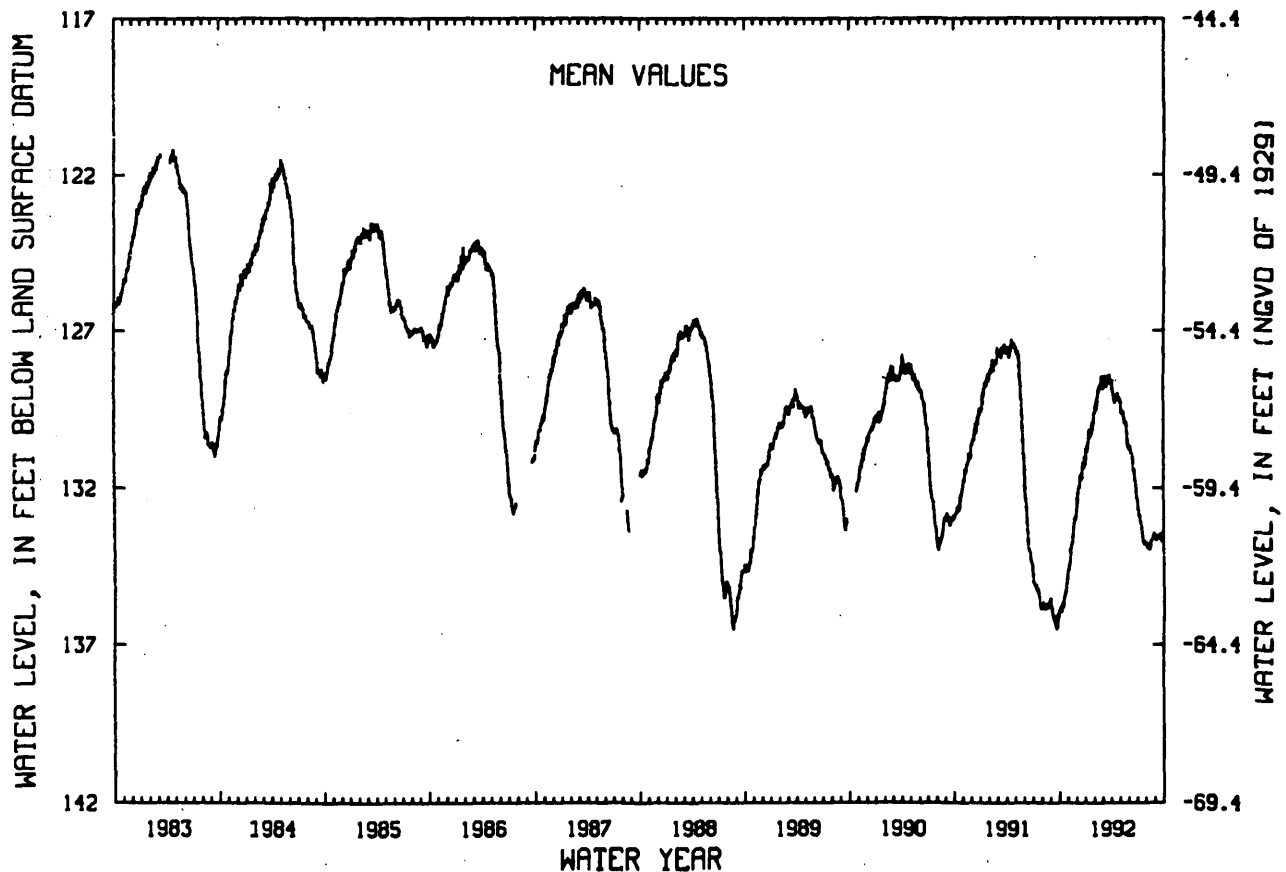
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	135.85	134.55	132.38	130.76	129.45	128.86	128.82	129.40	130.72	132.71	133.83	133.67
10	135.83	134.12	131.97	130.56	129.53	128.64	129.10	129.57	130.83	132.95	133.84	133.52
15	135.69	133.79	131.67	130.35	129.02	128.71	129.26	129.75	131.10	133.12	133.94	133.57
20	135.44	133.43	131.70	130.27	128.79	128.55	129.19	129.95	131.45	133.52	133.64	133.57
25	135.23	132.99	131.30	130.15	128.72	128.67	128.99	130.12	131.81	133.81	133.55	133.66
EOM	134.73	132.74	131.26	129.61	128.55	128.58	129.22	130.62	132.29	133.74	133.47	133.36
MEAN	135.52	133.74	131.73	130.41	129.07	128.65	129.05	129.82	131.28	133.24	133.73	133.55

WTR YR 1992 MEAN 131.66 HIGH 128.27 MAR 27 LOW 136.04 OCT 1

NJ-WRD WELL NO.05-0261



GROUND-WATER LEVELS

BURLINGTON COUNTY

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

LOCATION---Lat 39°55'24", long 74°50'25", Hydrologic Unit 02040202, at Medford Public Shooting Grounds, Medford Township.

Owner: U.S. Geological Survey.

AQUIFER---Lower aquifer, Potomac-Raritan-Magothy aquifer system 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.

DATUM---Land-surface datum is 72.32 ft above National Geodetic Vertical Datum of 1929.

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

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

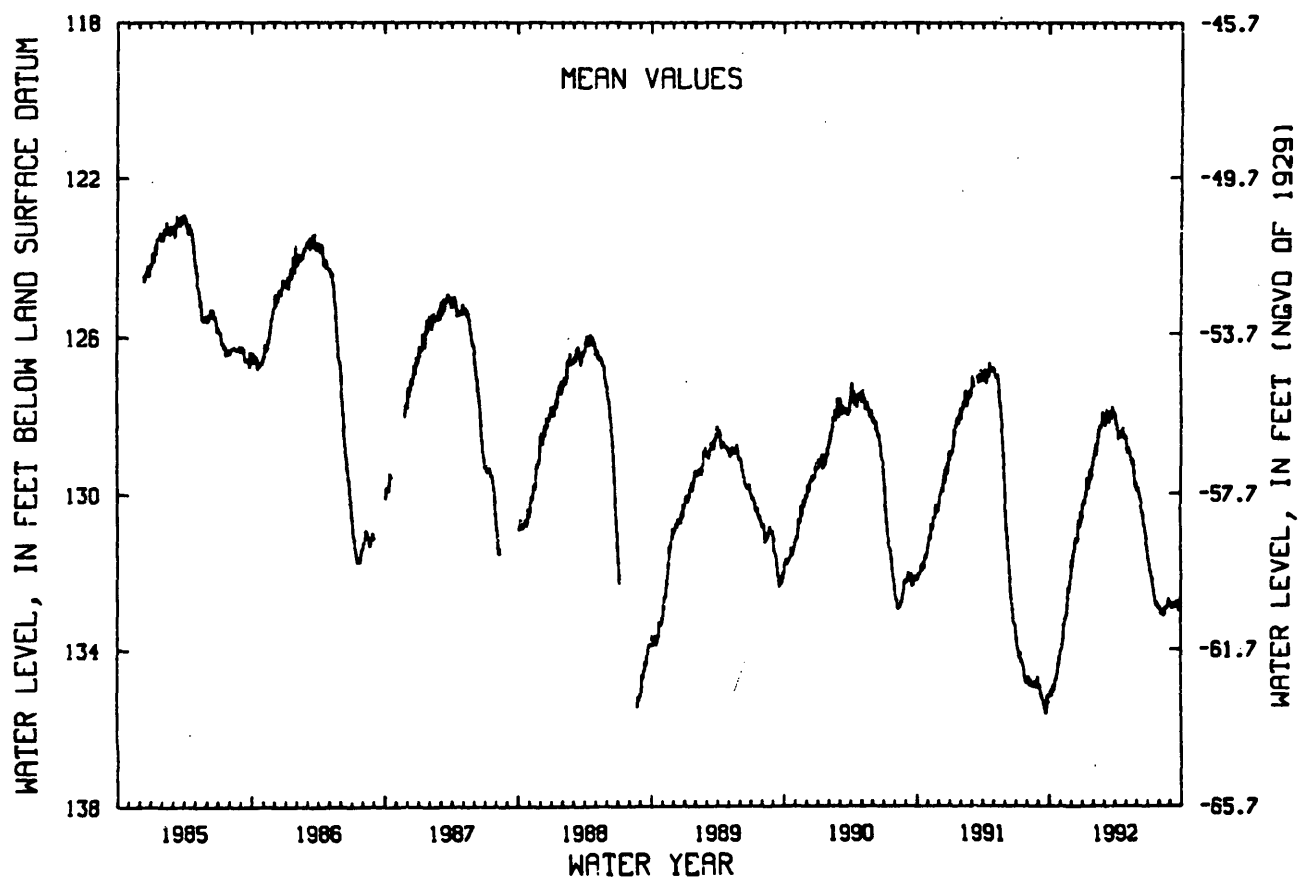
EXTREMES FOR PERIOD OF RECORD---Highest water level, 94.24 ft below land-surface datum, Mar. 13, 1968; lowest, 135.69 ft below land-surface datum, Sept. 22, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	135.08	133.95	131.89	130.19	128.95	128.26	128.13	128.72	129.87	131.72	133.00	132.95
10	135.06	133.53	131.49	130.00	129.03	128.04	128.37	128.86	130.02	132.03	132.99	132.81
15	134.94	133.23	131.20	129.82	128.52	128.12	128.55	129.06	130.24	132.20	133.13	132.90
20	134.78	132.89	131.21	129.71	128.31	127.99	128.53	129.26	130.50	132.58	132.92	132.86
25	134.52	132.47	130.80	129.61	128.19	128.09	128.33	129.31	130.89	132.87	132.85	132.96
EOM	134.09	132.21	130.74	129.09	128.00	127.92	128.56	129.74	131.34	132.87	132.76	132.71
MEAN	134.80	133.18	131.23	129.87	128.56	128.06	128.37	129.09	130.40	132.31	132.95	132.84
WTR YR 1992 MEAN 130.98 HIGH 127.63 MAR 27 LOW 135.29 OCT 1												

NJ-WRD WELL NO.05-0262



BURLINGTON COUNTY

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

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

Owner: Willingboro Municipal Utilities Authority.

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

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

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

DATUM.--Land-surface datum is 40.30 ft above National Geodetic Vertical Datum of 1929.

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

REMARKS.--Water level 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 New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.79 ft below land-surface datum, June 21, 1967; lowest, 86.22 ft below land-surface datum, July 18, 1988.

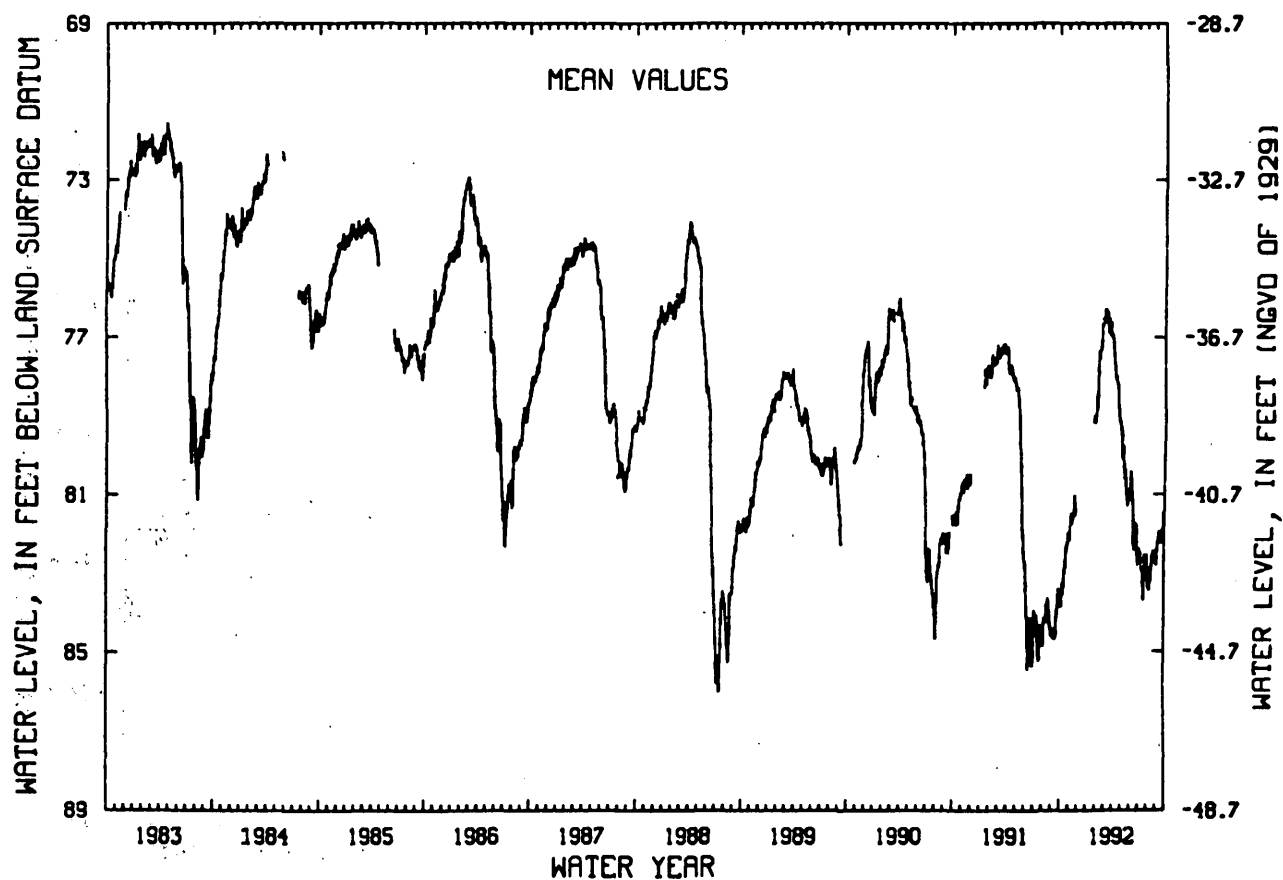
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	83.80	82.03	---	---	78.86	76.57	77.10	79.82	80.80	82.41	82.99	82.81
10	83.86	81.74	---	---	78.81	76.47	77.63	79.75	80.85	82.55	83.32	82.23
15	83.27	81.74	---	---	77.54	76.39	78.11	80.62	81.64	82.77	83.07	82.21
20	83.08	81.54	---	---	77.35	76.52	78.18	80.80	82.26	83.09	82.63	82.17
25	82.95	81.10	---	79.16	77.06	76.89	79.17	81.29	82.06	83.08	82.43	81.99
EOM	82.26	---	---	79.11	76.52	77.00	79.35	80.98	82.30	82.76	82.52	81.82
MEAN	83.24	81.71	---	---	77.85	76.62	78.08	80.43	81.48	82.79	82.88	82.19

WTR YR 1992 MEAN 80.70 HIGH 75.99 MAR 11 LOW 84.04 OCT 10

NJ-WRD WELL NO.05-0645



BURLINGTON COUNTY

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

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

Owner: Toll Brothers Corp.

AQUIFER.--Middle aquifer, Potomac-Raritan-Magothy aquifer system 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, Apr. 1977 to current year. Water-level recorder, Dec. 1968 to Mar. 1975.

DATUM.--Land-surface datum is 71.65 ft above National Geodetic Vertical Datum of 1929.

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

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 86.55 ft below land-surface datum, Dec. 31, 1969; lowest, 108.81 ft below land-surface datum, between July 18 and Sept. 30, 1991.

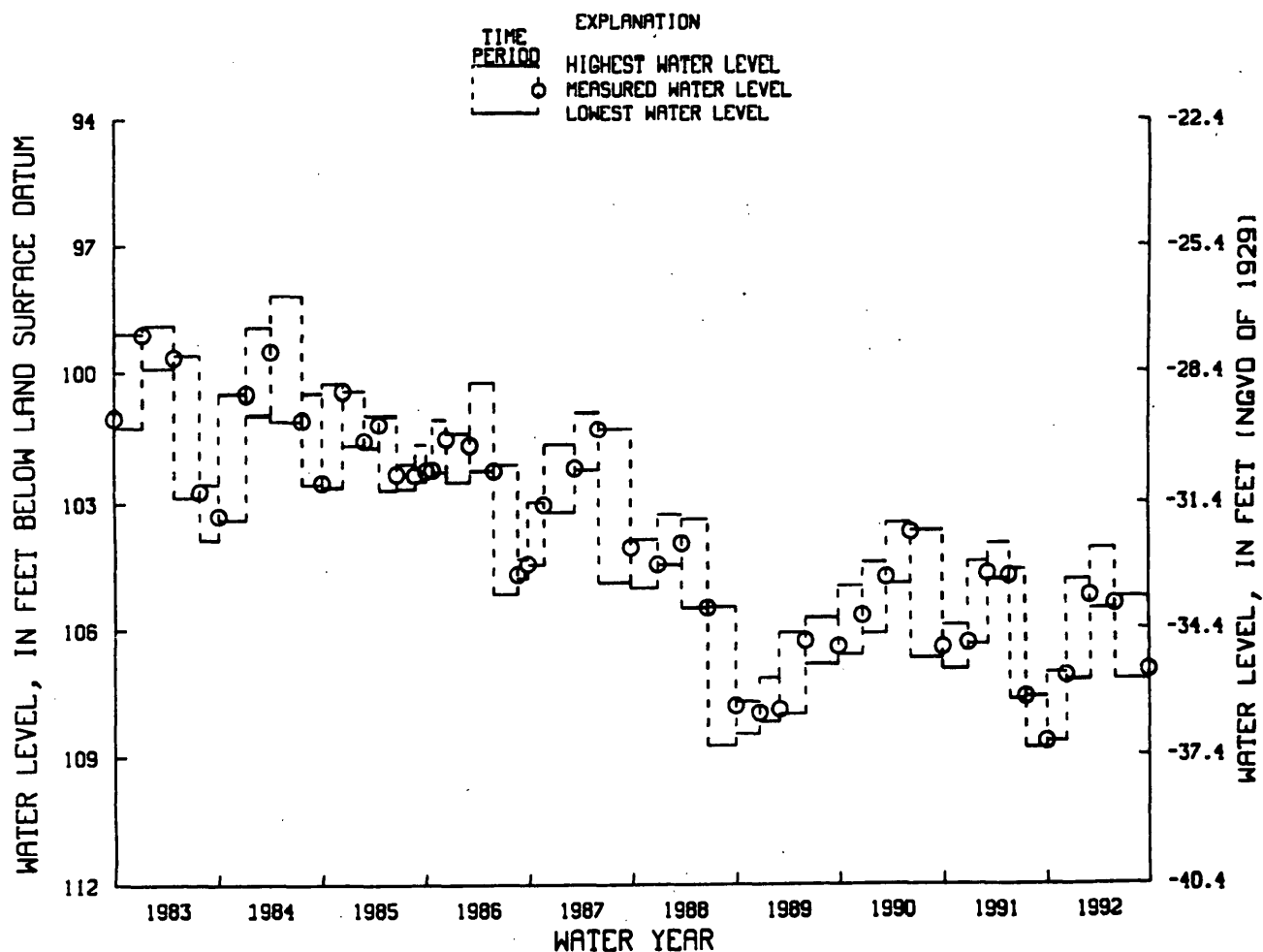
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES

MEASURED WATER LEVEL

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 30, 1991 TO DEC. 10, 1991	107.05	108.67	DEC. 10, 1991	107.12
DEC. 10, 1991 TO MAR. 6, 1992	104.83	107.22	MAR. 6, 1992	105.21
MAR. 6, 1992 TO JUNE 2, 1992	104.08	105.52	JUNE 2, 1992	105.41
JUNE 2, 1992 TO SEPT. 28, 1992	105.25	107.21	SEPT. 28, 1992	106.99

NJ-WRD WELL NO. 05-0440



CAMDEN COUNTY

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

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

Owner: U.S. Geological Survey.

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

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

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

DATUM.--Land-surface datum is 111.13 ft above National Geodetic Vertical Datum of 1929.

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

PERIOD OF RECORD.--Feb. 1963 to Aug. 1975, Feb. 1977 to current year. Records for 1963 to 1975 and 1977 to 1981 are unpublished and are available in files of New Jersey District Office.

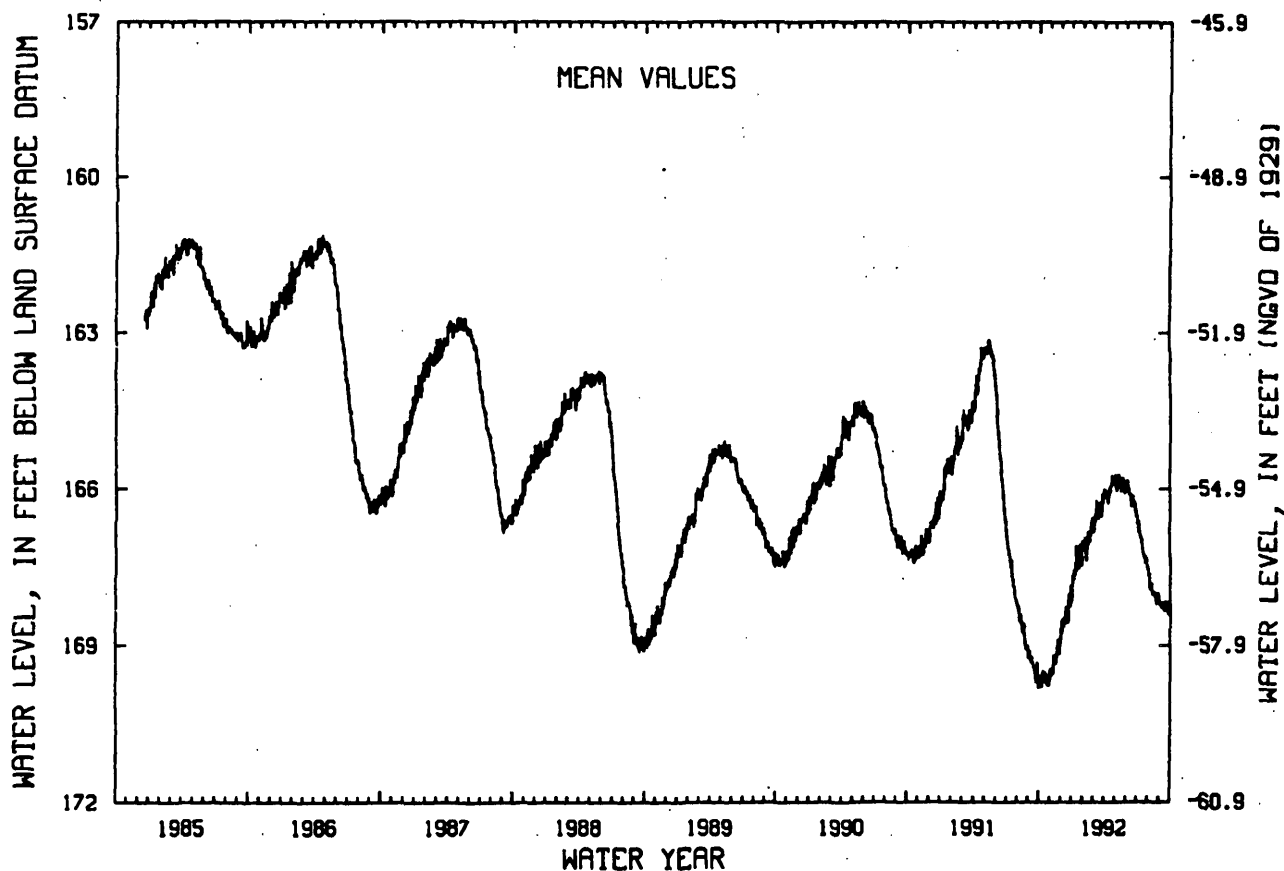
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 120.16 ft below land-surface datum, Mar. 6, 1963; lowest, 169.86 ft below land-surface datum, Sept. 30, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	169.65	169.57	168.79	167.58	167.07	166.82	166.09	165.86	165.90	166.64	167.77	168.27
10	169.68	169.35	168.51	167.43	167.38	166.46	166.12	165.78	166.01	166.83	167.83	168.17
15	169.61	169.28	168.36	167.38	166.99	166.49	166.16	165.91	166.14	166.95	168.04	168.33
20	169.70	169.18	168.55	167.38	166.90	166.35	166.05	166.06	166.12	167.29	168.02	168.26
25	169.73	169.00	168.17	167.35	166.86	166.53	165.75	165.90	166.25	167.41	168.17	168.37
EOB	169.48	168.94	168.17	167.01	166.60	166.11	165.86	165.92	166.53	167.53	168.12	168.26
MEAN	169.65	169.27	168.39	167.47	166.98	166.47	166.02	165.90	166.16	167.06	167.96	168.24
WTR YR 1992	MEAN 167.47 HIGH 165.66 MAY 2 LOW 169.84 OCT 9											

NJ-WRD WELL NO.07-0476



GROUND-WATER LEVELS

CAMDEN COUNTY

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

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

Owner: U.S. Geological Survey.

AQUIFER.--Upper aquifer, Potomac-Raritan-Magothy aquifer system 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.

DATUM.--Land-surface datum is 111.13 ft above National Geodetic Vertical Datum of 1929.

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

PERIOD OF RECORD.--Jan. 1963 to Aug. 1975, Mar. 1977 to current year. Records for 1963 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 131.54 ft below land-surface datum, Mar. 6, 1963; lowest, 196.26 ft below land-surface datum, Sept. 21-22, 1991.

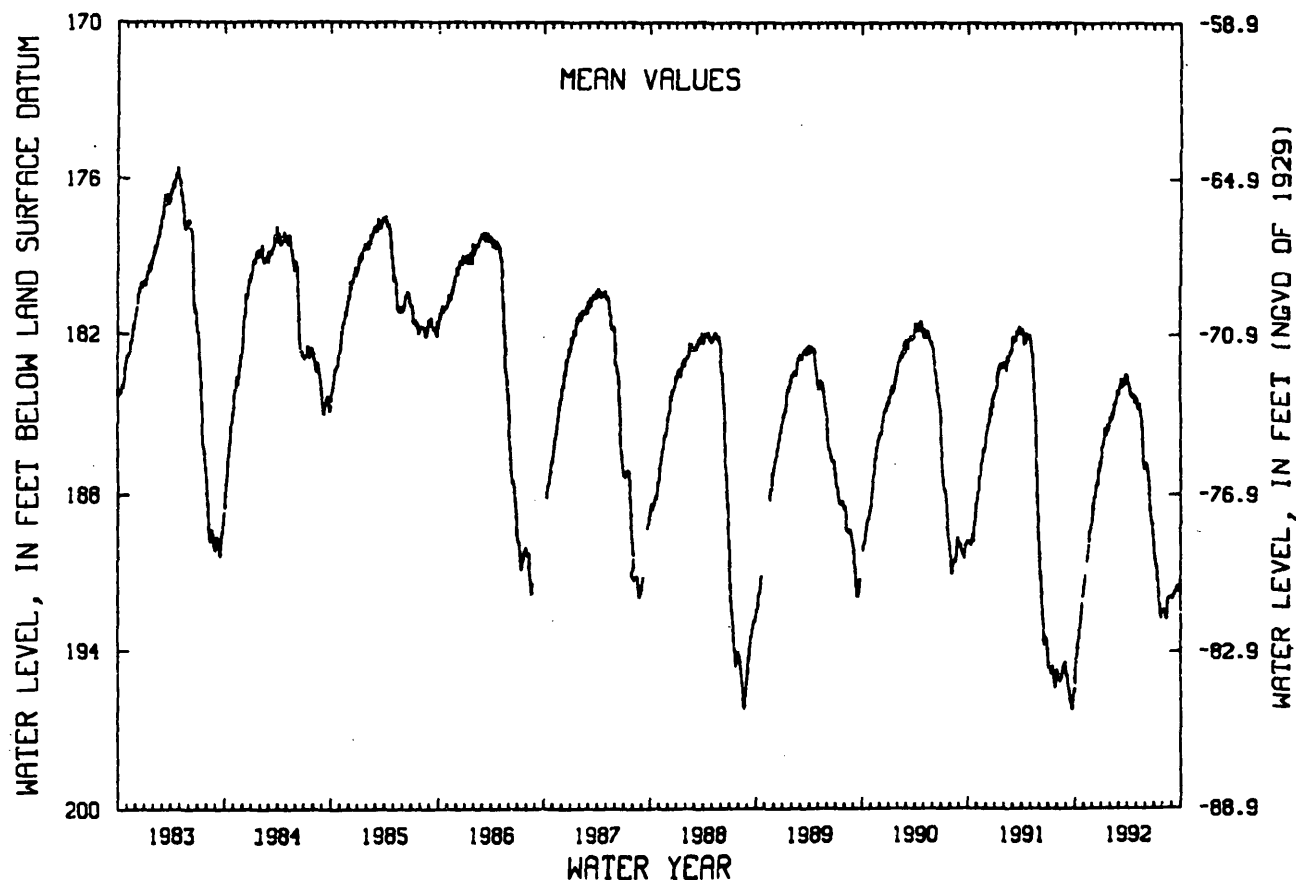
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	194.51	191.39	188.58	186.20	185.09	184.19	183.71	184.51	186.81	190.52	192.38	191.96
10	193.87	---	188.11	185.93	185.14	183.88	183.97	184.61	186.98	190.79	192.53	191.69
15	193.43	190.34	187.67	185.64	184.70	183.84	184.21	184.80	187.80	191.43	192.62	191.62
20	192.91	189.86	187.60	185.58	184.48	183.74	184.32	185.28	188.84	192.13	191.96	191.50
25	192.39	189.37	187.09	185.54	184.33	183.86	184.21	186.44	189.06	192.73	191.88	191.65
EOM	191.70	188.98	186.90	185.08	184.05	183.51	184.51	186.91	189.73	192.46	191.87	191.30
MEAN	193.41	190.27	187.70	185.80	184.70	183.85	184.09	185.30	188.02	191.54	192.25	191.65

WTR YR 1992 MEAN 188.19 HIGH 183.40 MAR 27 LOW 195.36 OCT 1

NJ-WRD WELL NO.07-0477



CAMDEN COUNTY

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

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

Owner: U.S. Geological Survey.

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

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

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

DATUM---Land-surface datum is 111.45 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of 6 inch coupling, 2.10 ft above land-surface datum.

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

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

EXTREMES FOR PERIOD OF RECORD---Highest water level, 58.53 ft below land-surface datum, Dec. 18, 1962; lowest, 103.53 ft below land-surface datum, Sept. 25, 1992.

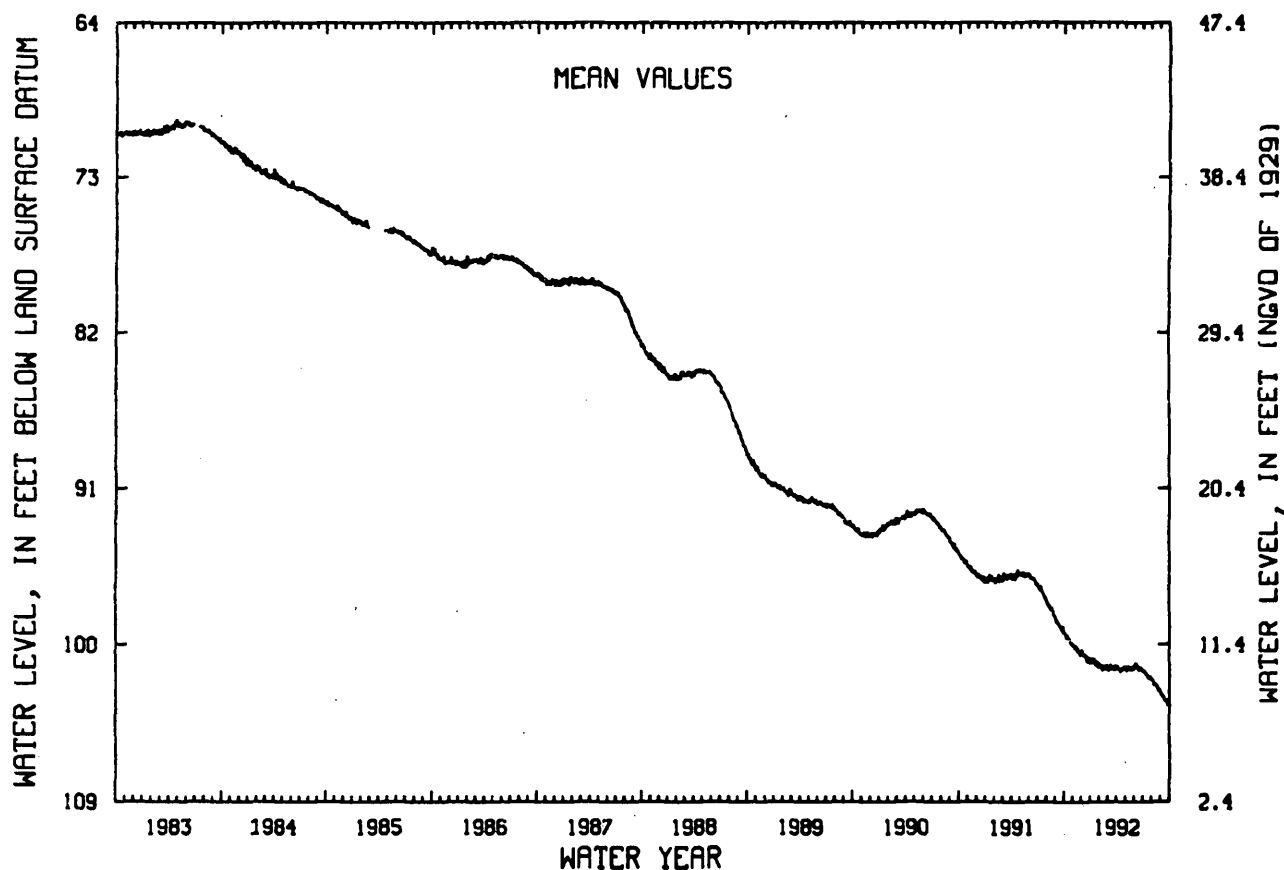
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	99.41	100.17	100.52	100.81	101.18	101.50	101.31	101.36	101.23	101.51	102.12	102.93
10	99.61	100.21	100.56	100.91	101.51	101.33	101.44	101.25	101.20	101.62	102.24	102.99
15	99.67	100.28	100.62	100.95	101.35	101.35	101.52	101.34	101.32	101.70	102.41	103.23
20	99.76	100.40	101.00	101.17	101.28	101.27	101.47	101.45	101.29	101.92	102.38	103.27
25	99.98	100.39	100.84	101.16	101.39	101.50	101.27	101.31	101.33	101.86	102.67	103.52
EOB	99.95	100.58	101.04	101.11	101.20	101.29	101.38	101.35	101.51	102.00	102.75	103.44
MEAN	99.68	100.29	100.71	101.06	101.30	101.35	101.39	101.36	101.32	101.75	102.39	103.16

WTR YR 1992 MEAN 101.31 HIGH 99.32 OCT 3 LOW 103.53 SEP 25

NJ-WRD WELL NO.07-0478



GROUND-WATER LEVELS

CAMDEN COUNTY

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

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

Owner: Winslow Water Company.

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

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

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

DATUM---Land-surface datum is 173.26 ft above National Geodetic Vertical Datum of 1929.

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

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

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

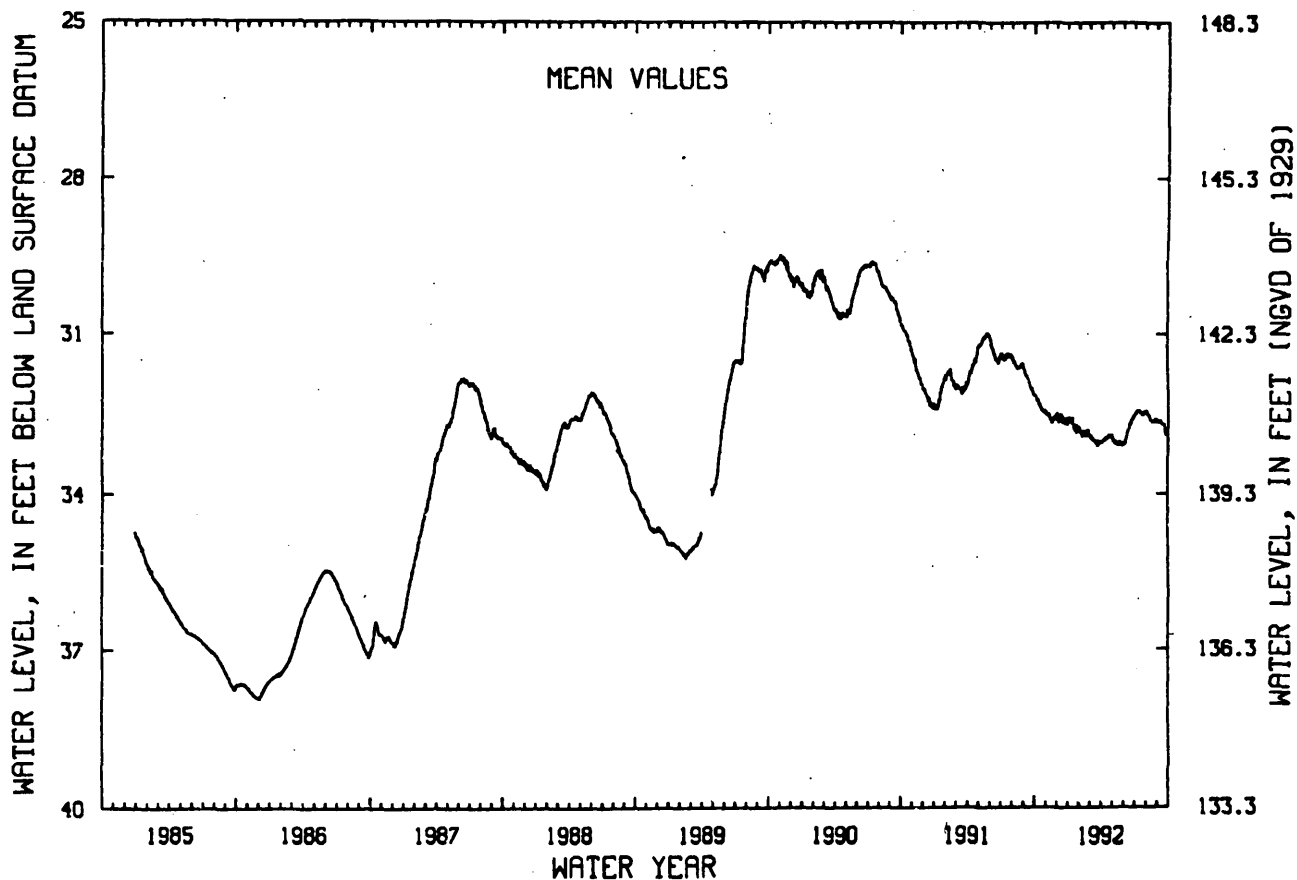
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.17	32.49	32.63	32.56	32.83	32.93	33.02	32.97	33.03	32.47	32.47	32.63
10	32.21	32.48	32.64	32.56	32.90	32.92	32.98	33.01	32.94	32.43	32.52	32.63
15	32.29	32.60	32.54	32.67	32.80	32.99	32.96	33.05	32.81	32.42	32.61	32.68
20	32.39	32.60	32.64	32.74	32.89	33.02	32.94	33.07	32.68	32.47	32.64	32.73
25	32.44	32.58	32.67	32.81	32.83	33.07	32.89	33.03	32.60	32.49	32.59	32.86
EOM	32.42	32.50	32.68	32.72	32.86	33.02	32.90	33.03	32.54	32.43	32.62	32.90
MEAN	32.31	32.55	32.59	32.68	32.84	32.98	32.95	33.01	32.81	32.46	32.57	32.72

WTR YR 1992 MEAN 32.70 HIGH 32.10 OCT 1 LOW 33.10 MAR 24, MAY 29-30

NJ-WRD WELL NO.07-0503



CAMDEN COUNTY

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

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

Owner: New Jersey - American Water Company.

AQUIFER.--Lower aquifer, Potomac-Raritan-Magothy aquifer system 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, Feb. 1977 to Dec. 1984.

DATUM.--Land-surface datum is 148.68 ft above National Geodetic Vertical Datum of 1929.

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

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

PERIOD OF RECORD.--Mar. 1964 to June 1975, Feb. 1977 to current year. Records for 1964 to 1975 are unpublished and are available in files of New Jersey District Office.

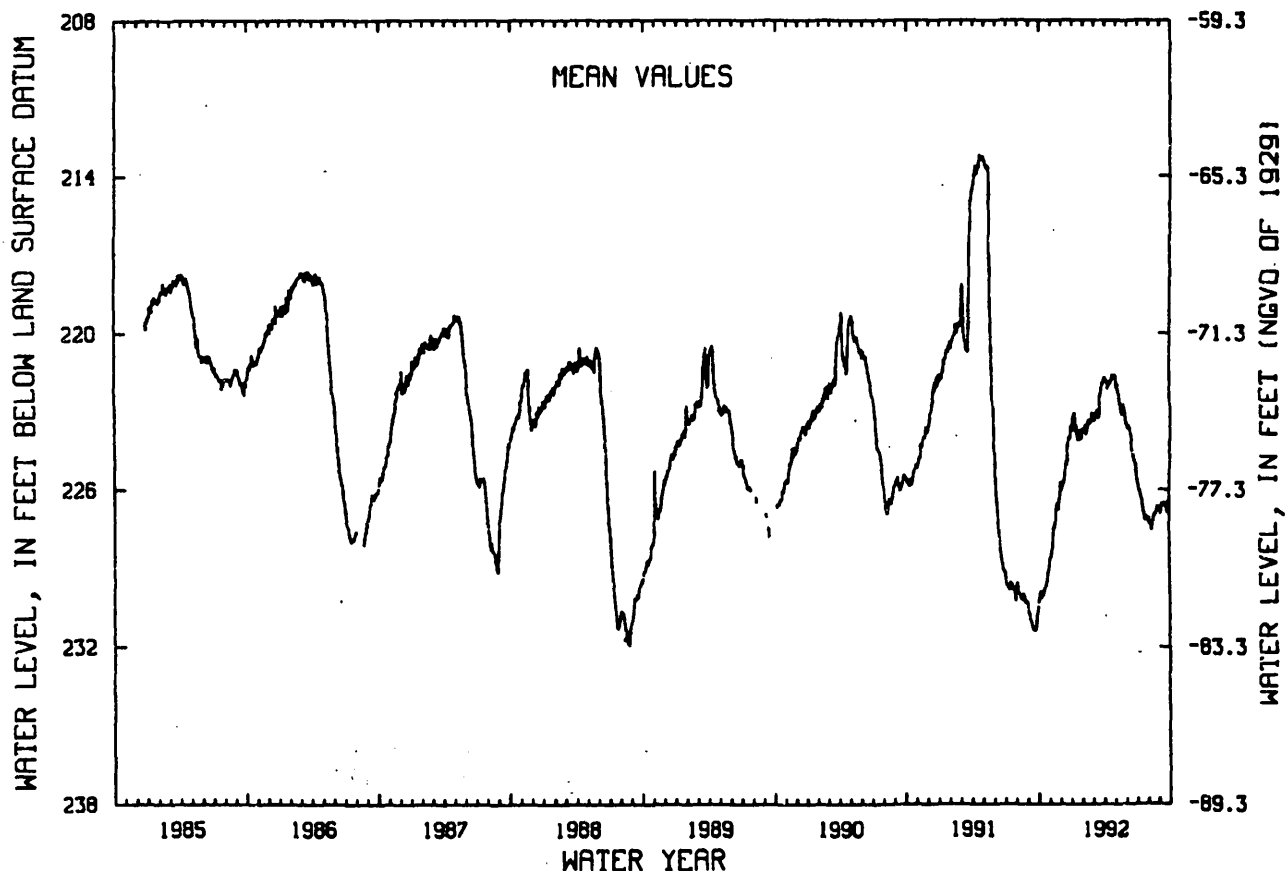
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 142.28 ft below land-surface datum, Mar. 3, 1964; lowest, 232.01 ft below land-surface datum, Aug. 22, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	229.93	228.57	226.03	223.16	223.64	223.35	221.73	221.87	223.57	225.79	227.16	226.94
10	230.04	227.99	225.72	223.19	223.88	223.10	221.88	222.10	223.67	226.05	227.27	226.51
15	229.94	227.48	225.46	223.85	223.47	223.16	222.03	222.78	224.06	226.35	227.38	226.58
20	229.70	226.75	224.94	223.96	223.36	222.74	221.90	223.03	224.58	226.80	226.93	226.62
25	229.38	226.62	224.08	223.98	223.28	222.35	221.57	222.90	224.93	227.18	226.87	226.78
EOM	228.77	226.36	223.77	223.64	223.07	221.83	221.67	223.40	225.28	227.09	226.72	226.39
MEAN	229.71	227.47	225.02	223.68	223.48	222.80	221.82	222.55	224.25	226.44	227.08	226.64
WTR YR 1992	MEAN 225.09 HIGH 221.52 MAY 2 LOW 230.39 OCT 1											

NJ-WRD WELL NO.07-0412



CAMDEN COUNTY

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

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

Owner: New Jersey - American Water Company.

AQUIFER.--Middle aquifer, Potomac-Raritan-Magothy aquifer system 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.

DATUM.--Land-surface datum is 148.73 ft above National Geodetic Vertical Datum of 1929.

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

PERIOD OF RECORD.--Dec. 1963 to Apr. 1975, Mar. 1977 to current year. Records for 1963 to 1975 and 1977 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 174.21 ft below land-surface datum, Feb. 6, 1964; lowest, 241.24 ft below land-surface datum, Aug. 20, 1988.

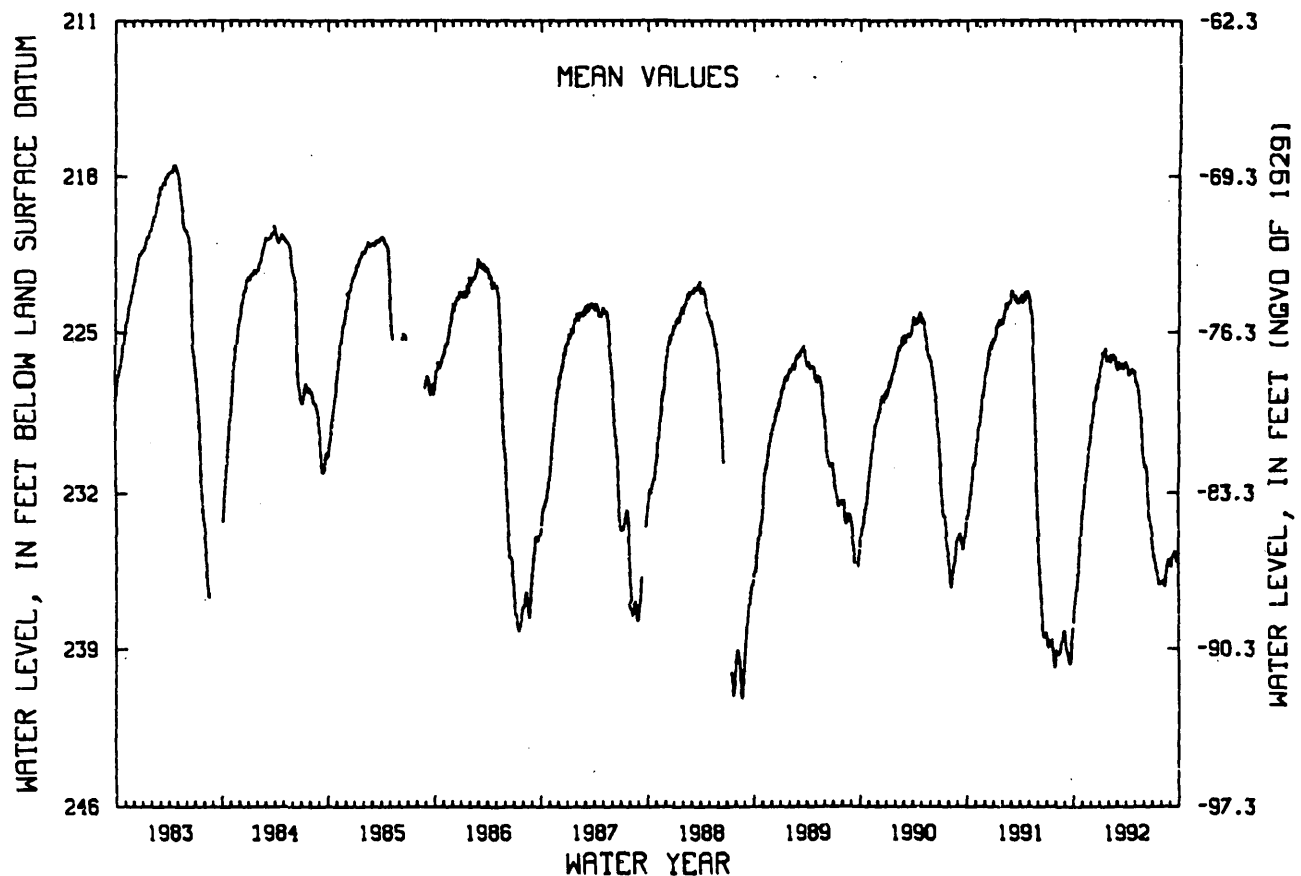
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	237.14	232.77	229.07	226.58	226.17	226.67	226.41	226.92	230.82	234.51	236.01	235.35
10	236.61	232.05	228.47	226.24	226.36	226.51	226.57	227.25	230.88	234.92	235.95	234.88
15	236.27	231.33	228.02	226.06	226.14	226.54	226.91	227.59	231.38	235.25	236.21	234.76
20	235.59	230.66	227.93	225.90	226.01	226.45	226.89	228.17	232.57	235.61	235.55	234.76
25	234.50	230.00	227.45	226.04	226.22	226.65	226.65	229.06	233.32	236.13	235.13	235.09
EOM	233.34	229.57	227.21	226.12	226.33	226.39	226.74	230.44	233.72	236.04	235.13	234.64
MEAN	235.81	231.32	228.10	226.25	226.16	226.52	226.68	228.05	231.92	235.30	235.71	234.93

WTR YR 1992 MEAN 230.58 HIGH 225.61 JAN 23 LOW 237.94 OCT 1

NJ-WRD WELL NO.07-0413



CAMDEN COUNTY

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

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

Owner: New Jersey - American Water Company.

AQUIFER.--Upper aquifer, Potomac-Raritan-Magothy aquifer system 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.

DATUM.--Land-surface datum is 157.61 ft above National Geodetic Vertical Datum of 1929.

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

PERIOD OF RECORD.--Aug. 1967 to Apr. 1975, Feb. 1977 to current year. Records for 1967 to 1975 are unpublished and are available in files of New Jersey District Office.

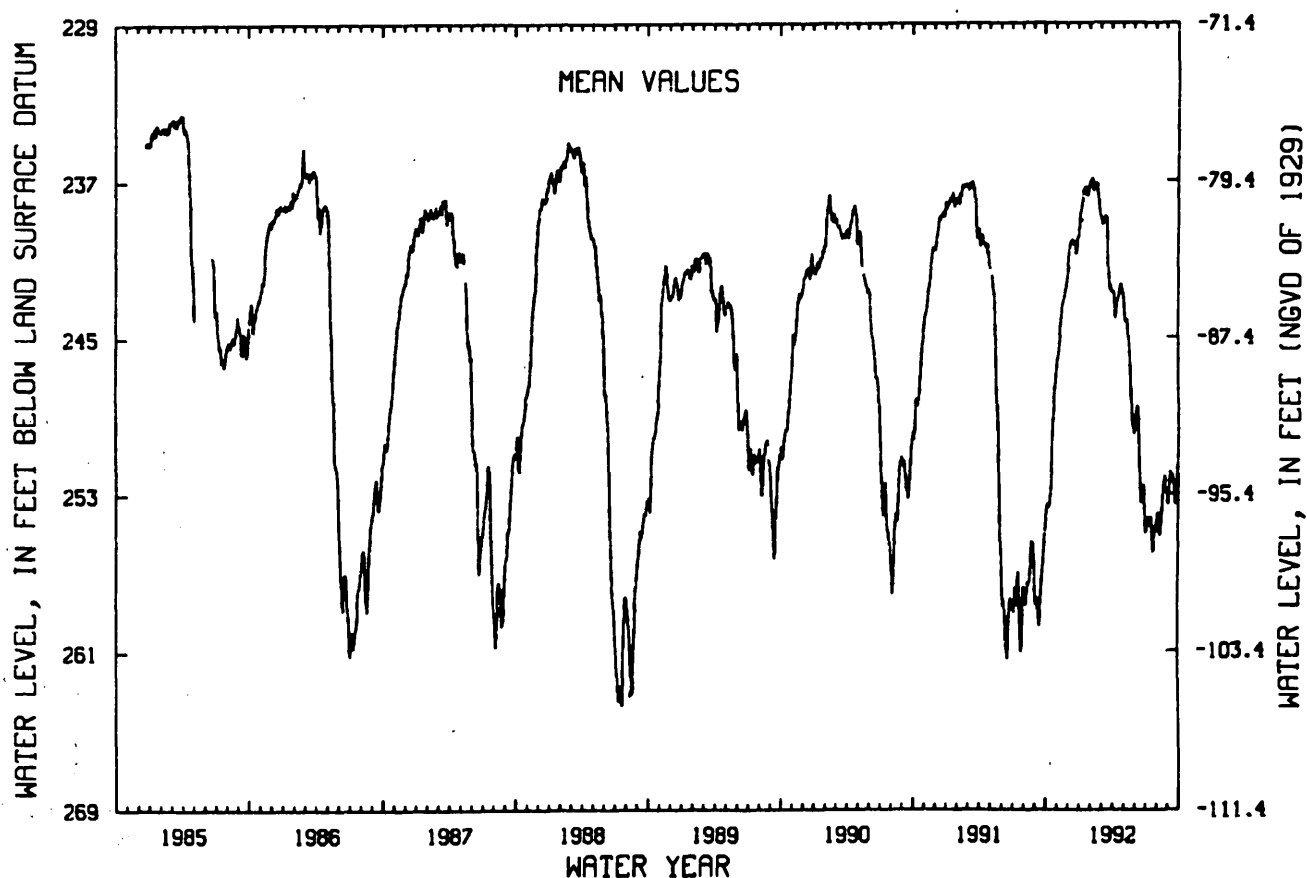
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 200.77 ft below land-surface datum, Mar. 23, 1968; lowest, 263.74 ft below land-surface datum, July 20, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	253.63	246.00	240.76	238.68	236.96	239.20	242.79	243.73	249.15	254.83	253.95	252.78
10	253.67	244.79	240.17	238.08	237.52	239.01	244.03	244.18	248.66	254.35	254.87	251.99
15	252.91	243.64	240.15	237.60	237.10	238.80	243.10	244.70	251.18	254.69	254.25	252.17
20	249.60	242.99	240.18	237.30	237.17	240.74	242.70	245.89	253.46	254.87	252.55	253.13
25	248.05	242.59	240.77	237.75	238.45	242.58	242.31	249.18	252.64	255.51	252.25	252.99
EOB	246.70	241.99	239.84	237.09	238.70	242.71	242.75	249.93	254.14	254.94	252.94	251.46
MEAN	251.23	243.98	240.42	237.97	237.50	240.26	242.92	245.87	251.17	254.80	253.60	252.56
WTR YR 1992	MEAN 246.05 HIGH 236.87 FEB 7 LOW 256.08 JUL 22-23											

NJ-WRD WELL NO.07-0117



CAPE MAY COUNTY

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

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

Owner: U.S. Geological Survey.

AQUIFER---Cohansey Sand of Miocene age.

WELL CHARACTERISTICS---Drilled artesian observation well, diameter 6 in., depth 293 ft, screened 283 to 293 ft. INSTRUMENTATION---Water-level extremes recorder, May 1977 to current year. Water-level recorder, July 1957 to Dec. 1972.

DATUM---Land-surface datum is 6.60 ft above National Geodetic Vertical Datum of 1929.

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

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

PERIOD OF RECORD---July 1957 to current year. Periodic manual measurements, Feb. 1973 to Sept. 1976.

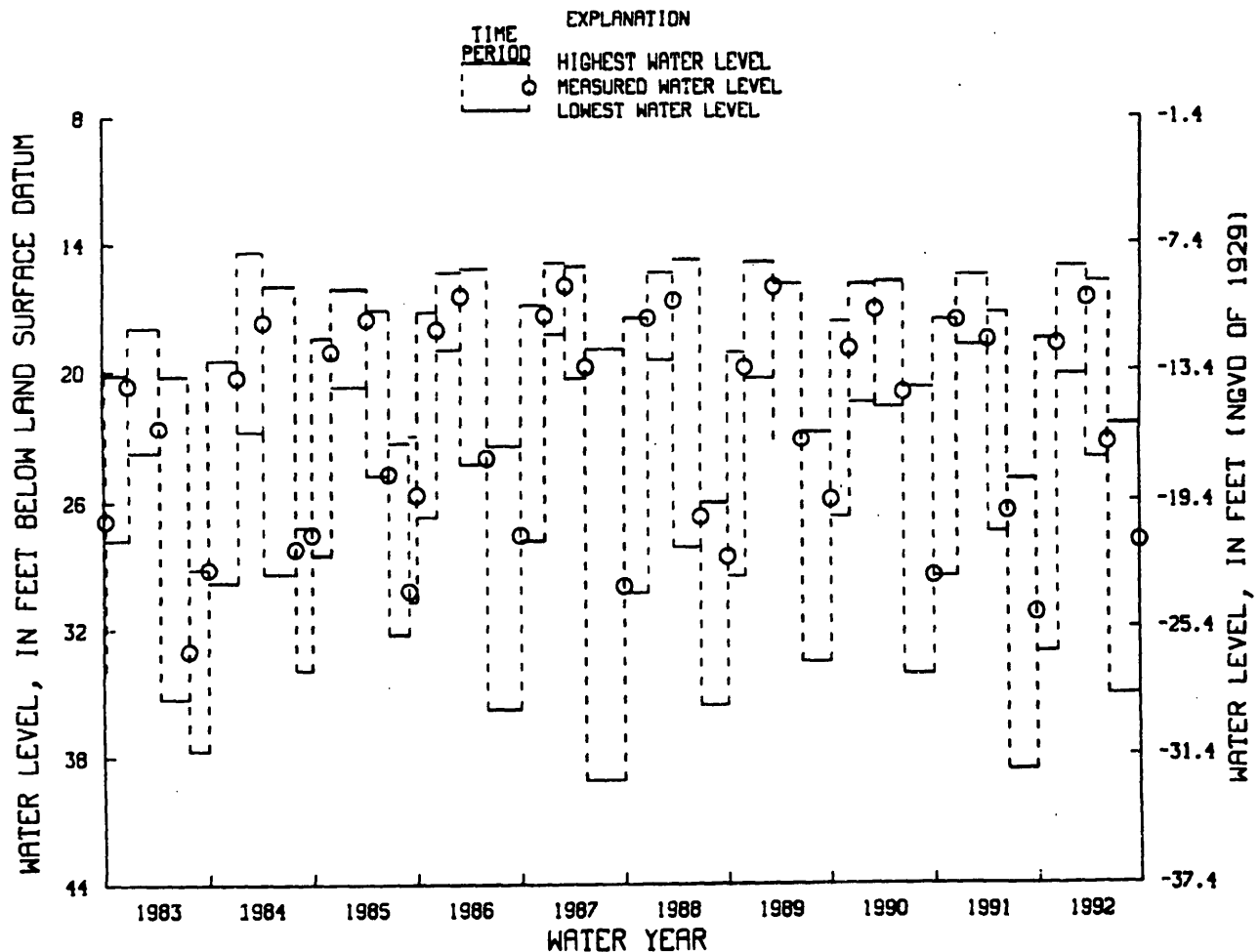
Records for 1957 to 1982 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD---Highest water level, 14.38 ft below land-surface datum, between Jan. 10 and Apr. 10, 1984; lowest, 41.30 ft below land-surface datum, Sept. 3, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES				MEASURED WATER LEVEL	
PERIOD		HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1991 TO DEC. 11, 1991		18.51	33.10	DEC. 11, 1991	18.76
DEC. 11, 1991 TO MAR. 24, 1992		15.07	20.18	MAR. 24, 1992	16.58
MAR. 24, 1992 TO JUNE 10, 1992		15.79	23.95	JUNE 10, 1992	23.21
JUNE 10, 1992 TO SEPT. 30, 1992		22.45	35.14	SEPT. 30, 1992	27.90

NJ-WRD WELL NO. 09-0150



CAPE MAY COUNTY

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

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

Owner: U. S. Geological Survey.

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

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

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

DATUM.--Land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

REMARKS.--Water level 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 datum, Apr. 21, 1991; lowest, 19.88 ft below land-surface datum, Nov. 12, 1990.

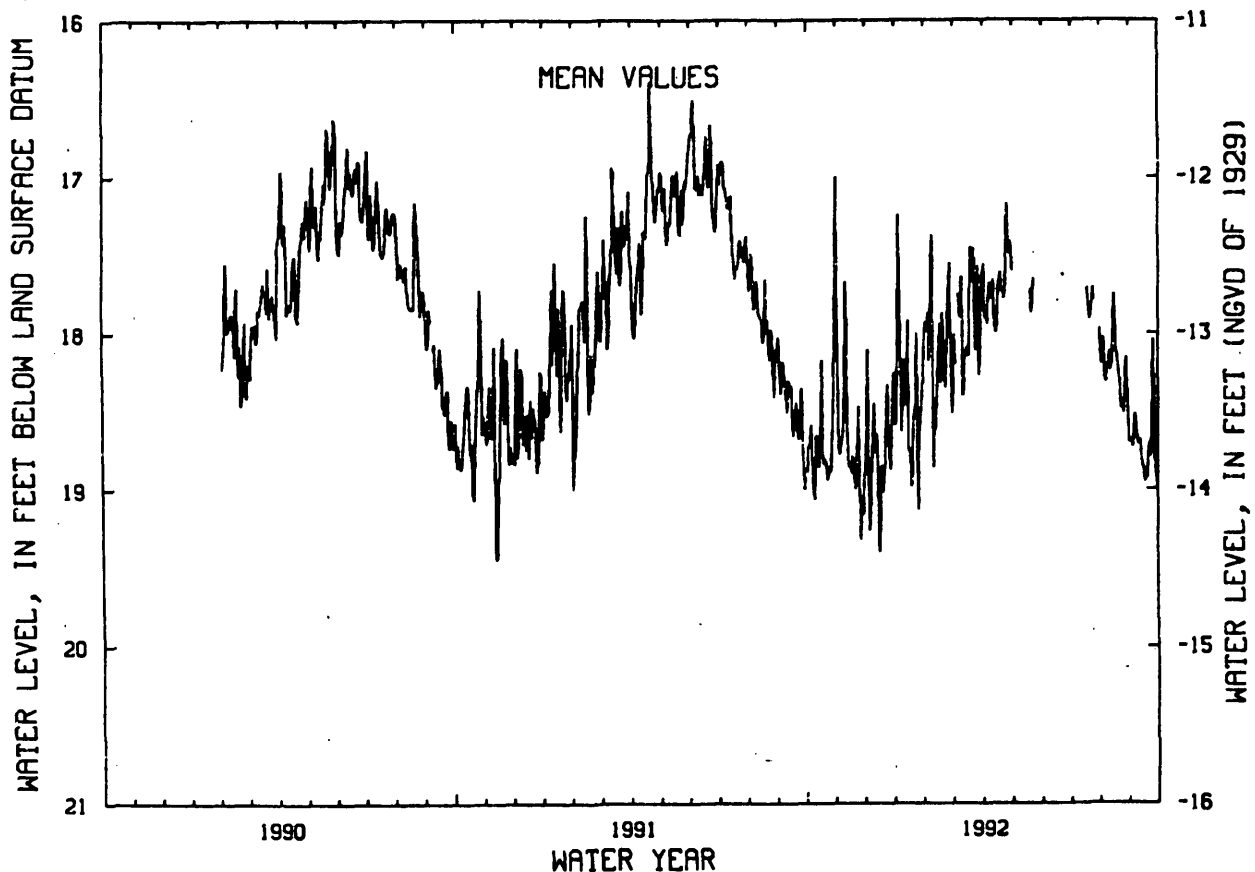
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.68	18.78	19.26	17.66	18.18	18.20	17.90	---	---	---	18.16	18.63
10	18.93	17.67	18.45	18.17	18.86	17.65	17.78	---	---	---	18.13	18.71
15	18.76	18.84	19.35	18.73	18.11	18.13	17.99	---	---	---	17.75	18.86
20	18.81	18.98	18.99	18.62	18.14	17.45	17.72	17.72	---	17.86	18.22	18.82
25	18.86	18.98	18.63	19.13	17.69	18.11	17.39	---	---	17.79	18.51	18.04
EOB	17.00	18.93	18.26	17.97	18.14	17.65	17.44	---	---	17.97	18.70	19.01
MEAN	18.67	18.70	18.75	18.40	18.08	17.94	17.69	---	---	---	18.24	18.72

WTR YR 1992 HIGH 16.20 JAN 4 LOW 19.73 NOV 26

NJ-WRD WELL NO.09-0302



CAPE MAY COUNTY

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

LOCATION.--Lat 38°58'04", long 74°57'42", Hydrologic Unit 02040206, on the north bank of 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, May 1977 to current year. Water-level recorder, June 1965 to Sept. 1975.

DATUM.--Land-surface datum is 6.00 ft above National Geodetic Vertical Datum of 1929.

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

REMARKS.--Water level affected by tidal fluctuation and nearby pumping. Water-quality data for 1992 are available elsewhere in this report.

PERIOD OF RECORD.--June 1965 to Sept. 1975, May 1977 to current year. Records for 1975 and 1977 to 1980 are unpublished and are available in files of New Jersey District Office.

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

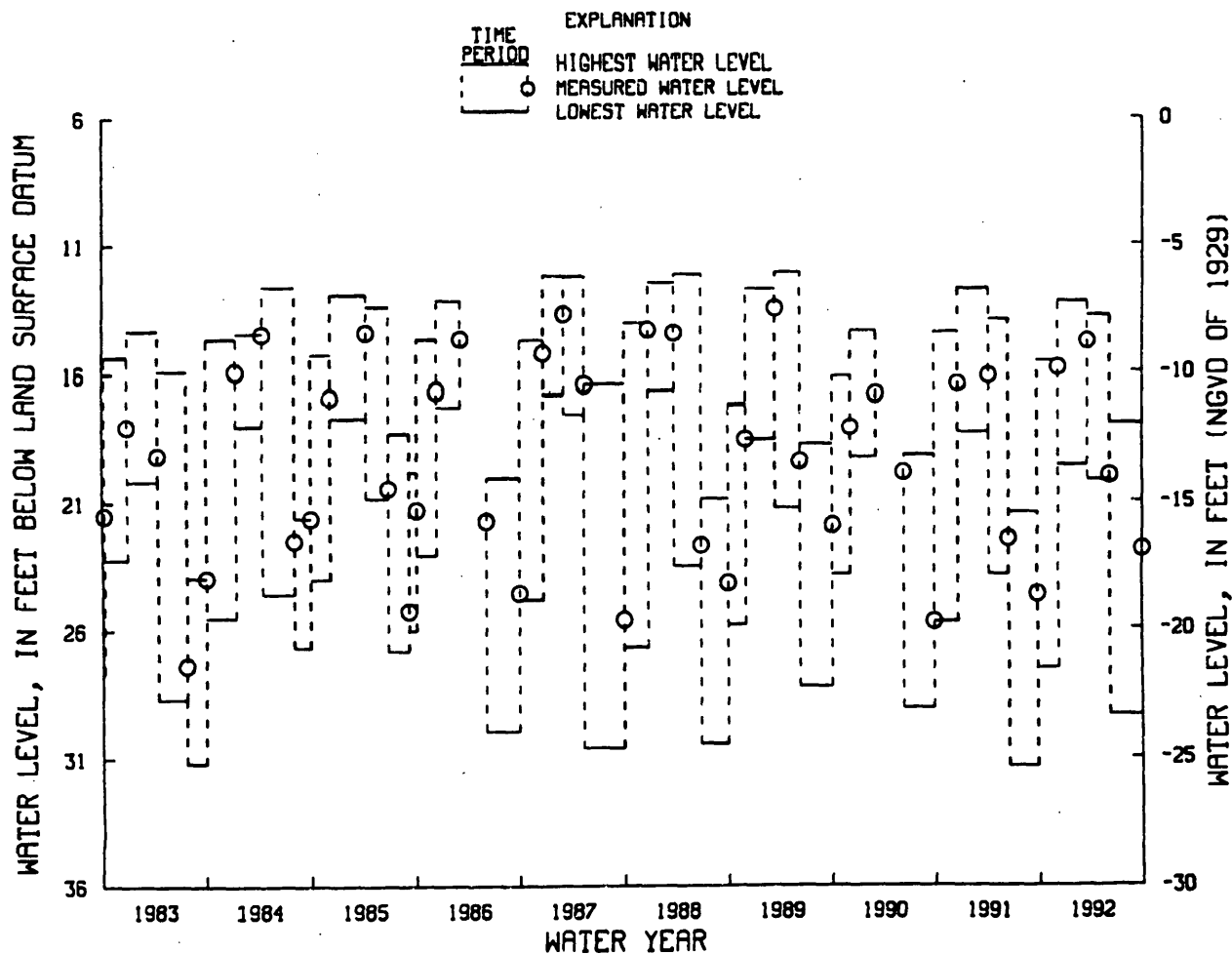
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES

MEASURED WATER LEVEL

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1991 TO DEC. 11, 1991	15.59	27.55	DEC. 11, 1991	15.86
DEC. 11, 1991 TO MAR. 24, 1992	13.26	19.61	MAR. 24, 1992	14.83
MAR. 24, 1992 TO JUNE 10, 1992	13.81	20.18	JUNE 10, 1992	20.00
JUNE 10, 1992 TO SEPT. 30, 1992	17.91	29.35	SEPT. 30, 1992	22.89

NJ-WRD WELL NO. 09-0049



CAPE MAY COUNTY

390002074541002. Local I.D., Airport Rio Grande Obs. NJ-WRD Well Number, 09-0304.

LOCATION...Lat 39°00'02", long 74°54'10", Hydrologic Unit 02040302, at Cape May County Airport, Lower Township.

Owner: U. S. Geological Survey.

AQUIFER...Rio Grande water-bearing zone of the Kirkwood Formation of Miocene age.

WELL CHARACTERISTICS...Drilled artesian observation well, diameter 4 in., depth 510 ft, screened 495 to 505 ft.

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

DATUM...Land-surface datum is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 4.65 ft above land-surface datum.

REMARKS...Water level affected by nearby pumping.

PERIOD OF RECORD...Feb. 1990 to Oct. 1992 (discontinued).

EXTREMES FOR PERIOD OF RECORD...Highest water level, 32.21 ft below land-surface datum, Mar. 18, 1990; lowest, 47.52 ft below land-surface datum, Sept. 3, 1991.

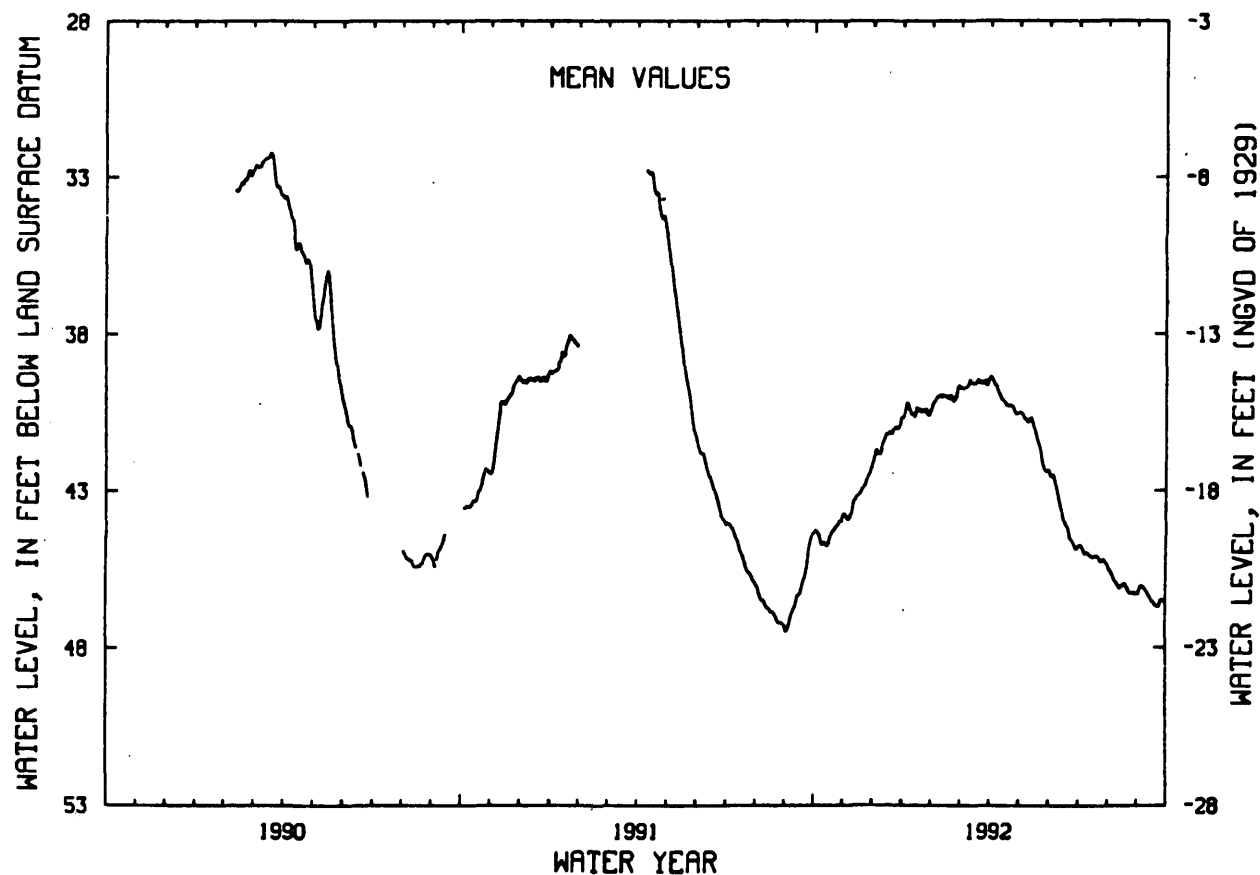
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.38	43.93	41.85	40.22	40.00	39.76	39.55	40.55	42.51	44.82	45.66	46.04
10	44.72	43.51	41.50	40.53	40.02	39.58	39.87	40.79	43.02	44.98	45.94	46.20
15	44.75	43.16	41.21	40.45	40.03	39.57	40.13	40.79	43.73	45.11	46.06	46.46
20	44.30	42.92	41.16	40.43	40.02	39.50	40.31	41.35	44.20	45.07	46.03	46.67
25	44.09	42.58	41.01	40.57	39.95	39.59	40.35	42.02	44.62	45.28	46.27	46.52
EOM	43.75	42.15	40.68	40.22	39.66	39.43	40.54	42.35	44.87	45.35	46.30	46.58
MEAN	44.35	43.16	41.29	40.45	39.98	39.59	40.05	41.24	43.69	45.07	46.00	46.40

WTR YR 1992 MEAN 42.62 HIGH 39.34 APR 1 LOW 46.75 SEP 24

NJ-WRD WELL NO.09-0304



GROUND-WATER LEVELS

CAPE MAY COUNTY

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

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

Owner: U.S. Geological Survey.

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

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

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

DATUM.--Land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

REMARKS.--Water level affected by tidal fluctuation and nearby pumping. Water-quality data for 1992 are available elsewhere in this report.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.12 ft below land-surface datum, July 16, 1992; lowest, 33.33 ft below land-surface datum, Aug. 31, Sept. 13, 1992.

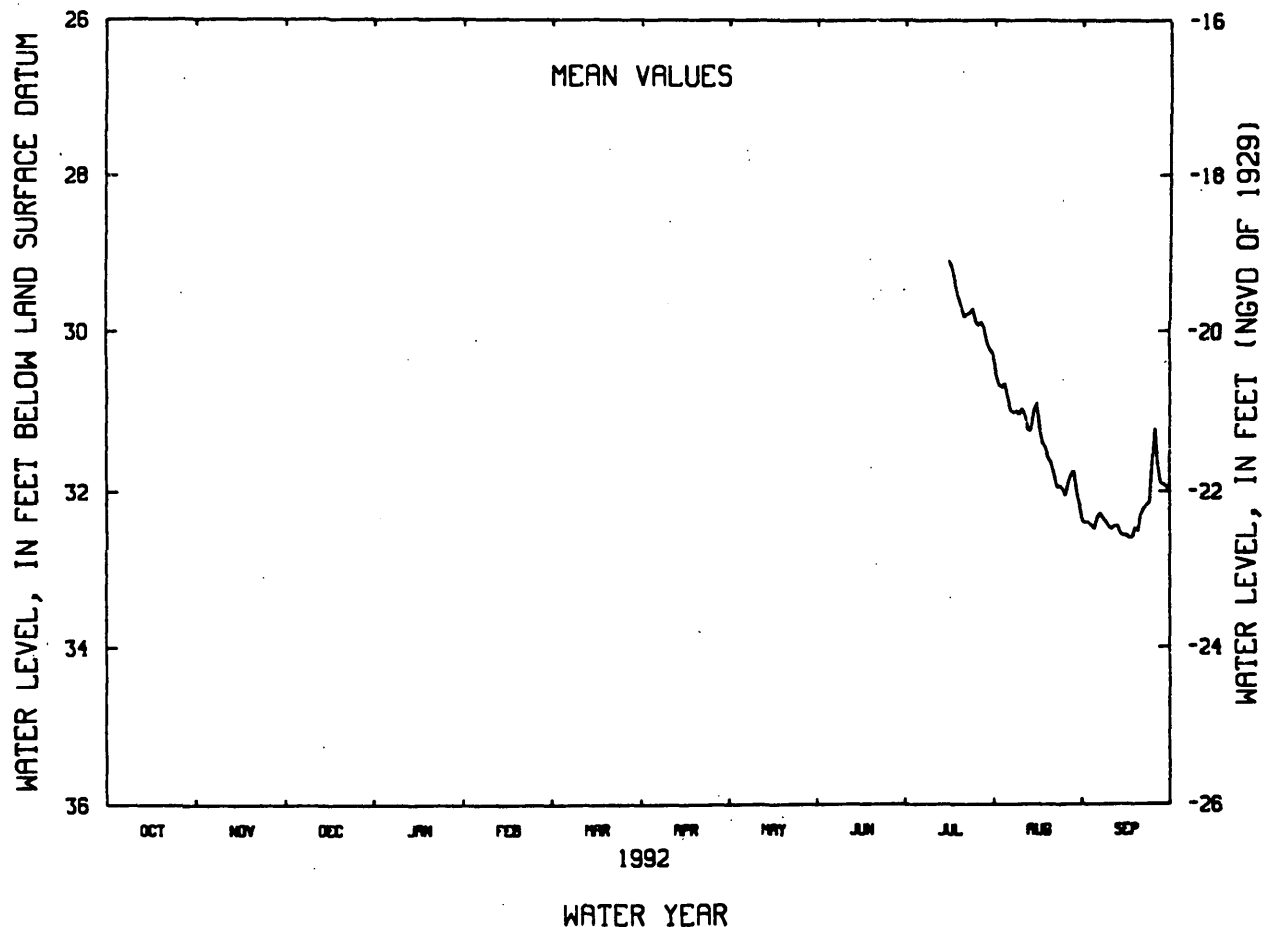
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	---	30.80	32.34
10	---	---	---	---	---	---	---	---	---	---	30.94	32.48
15	---	---	---	---	---	---	---	---	---	---	30.87	32.56
20	---	---	---	---	---	---	---	---	---	29.68	31.62	32.31
25	---	---	---	---	---	---	---	---	---	29.87	32.05	31.19
EOY	---	---	---	---	---	---	---	---	---	30.27	32.39	31.98
MEAN	---	---	---	---	---	---	---	---	---	---	31.36	32.26

WTR YR 1992 HIGH 28.12 JUL 16 LOW 33.33 AUG 31, SEP 13

NJ-WRD WELL NO.09-0337



CAPE MAY COUNTY

390156074533401. Local I.D., Rio Grande Obs-HB 1992. NJ-WRD Well Number, 09-0333.

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

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

AQUIFER.--Holly Beach water-bearing zone of the Cape May Formation of Pleistocene age.

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

INSTRUMENTATION.--Digital data logger with differential pressure transducer--60 minute recording interval.

DATUM.--Land-surface datum is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of outer protective casing, 3.60 ft. above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.39 ft below land-surface datum, Aug. 25-27, 1992; lowest, 13.47 ft below land-surface datum, Aug. 11-14, 1992.

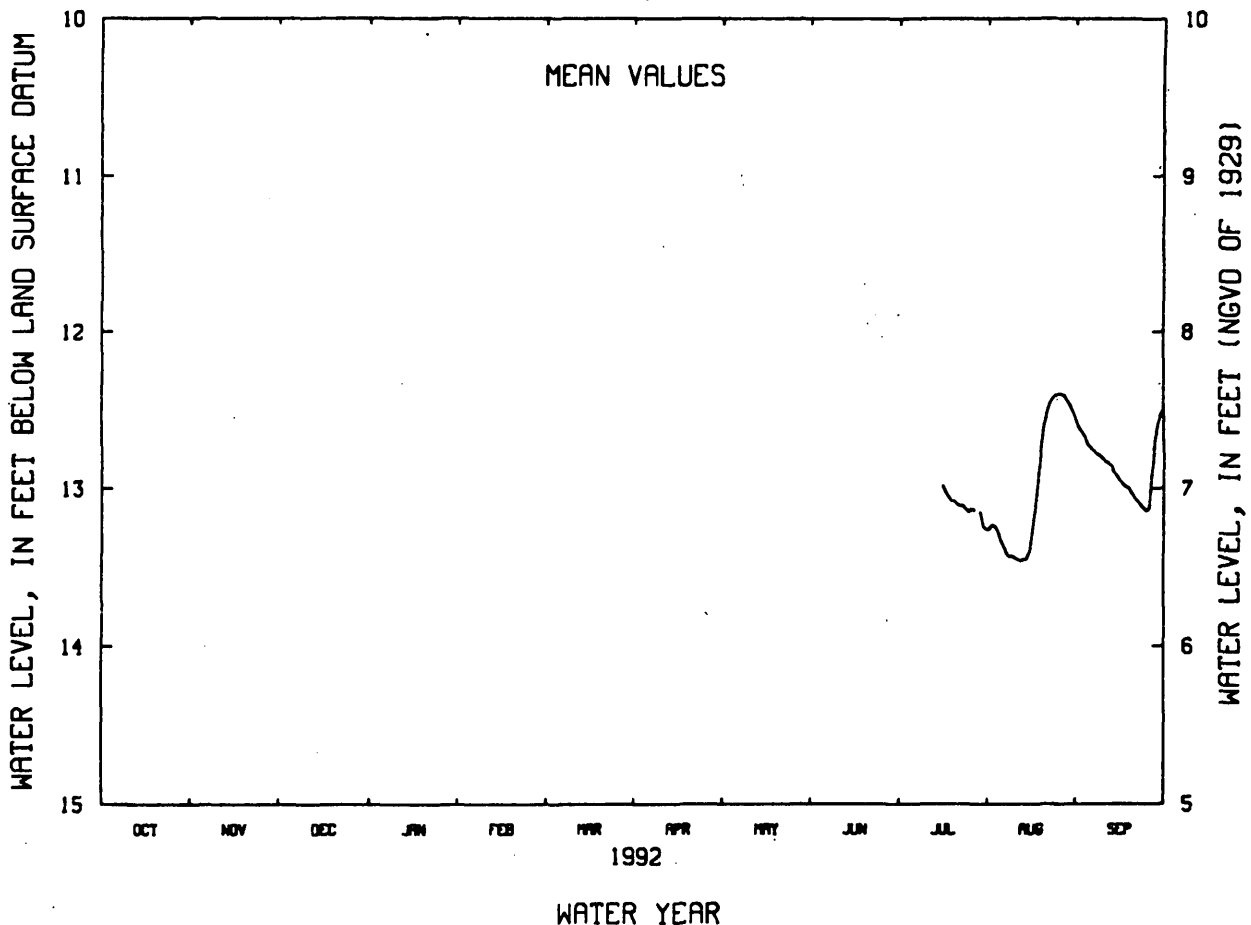
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	---	13.33	12.74
10	---	---	---	---	---	---	---	---	---	---	13.44	12.83
15	---	---	---	---	---	---	---	---	---	---	13.40	12.95
20	---	---	---	---	---	---	---	---	---	13.08	12.61	13.06
25	---	---	---	---	---	---	---	---	---	13.15	12.40	13.13
EQM	---	---	---	---	---	---	---	---	---	13.26	12.56	12.50
MEAN	---	---	---	---	---	---	---	---	---	---	12.98	12.86

WTR YR 1992 HIGH 12.39 AUG 25-27 LOW 13.47 AUG 11-14

NJ-WRD WELL NO.09-0333



CAPE MAY COUNTY

390210074473001. Local I.D., Nummy Island 2 Obs. NJ-WRD Well Number, 09-0079.

LOCATION.--Lat 39°02'10", long 74°47'30", Hydrologic Unit 02040302, on Nummy Island, Ocean Drive, (County Rt. 619) Middle Township.

Owner: Lee Haller.

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

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 876 ft, screened 833 to 876 ft.

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

DATUM.--Land-surface datum is 1 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 4.10 ft above land-surface datum. Recorder shelf before

Jan. 22, 1992 was 2.90 ft above land-surface datum.

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

PERIOD OF RECORD.--Feb. 1990 to Oct. 1992 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.81 ft below land-surface datum, Mar. 14, 1991; lowest, 52.15 ft below land-surface datum, Aug. 31, 1992.

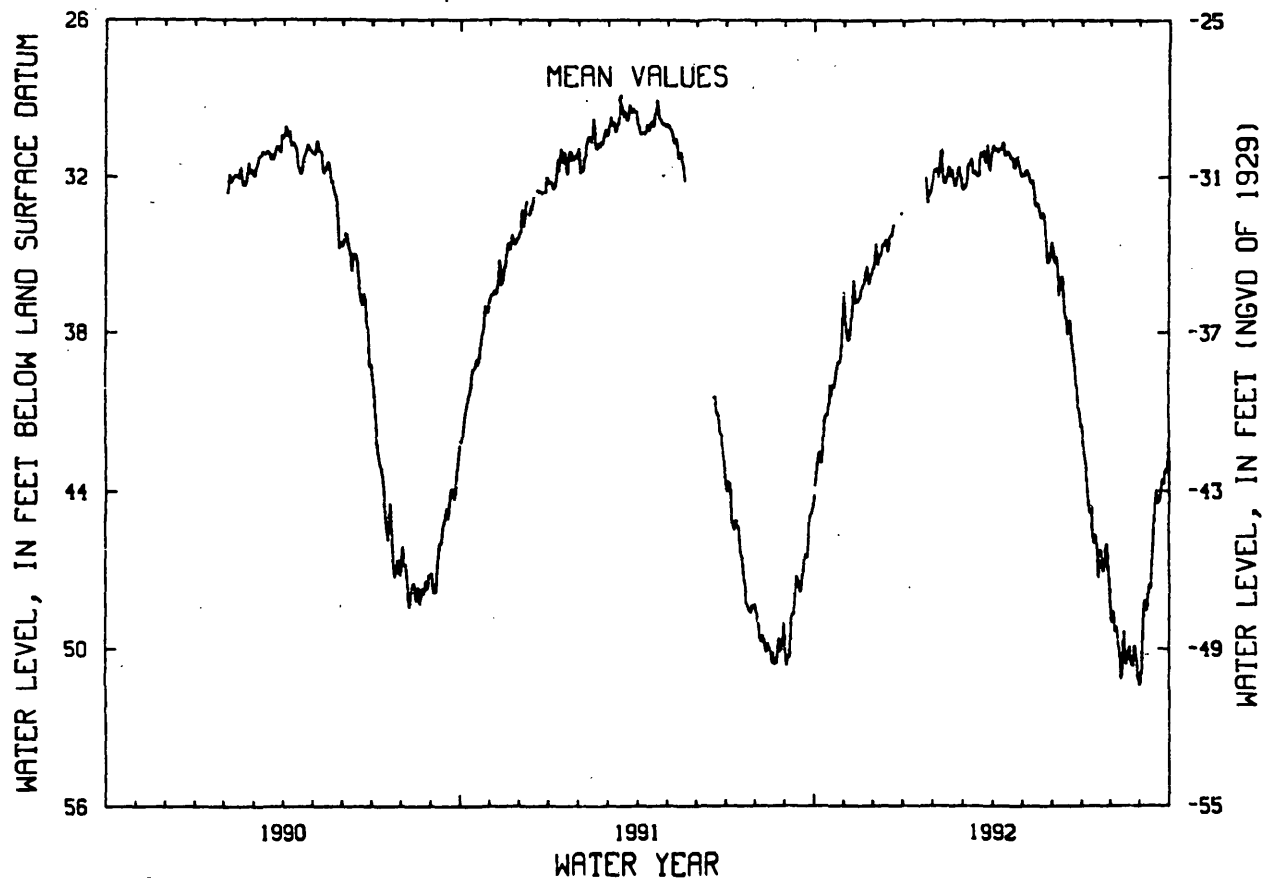
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	42.49	38.28	35.38	---	32.00	32.27	30.87	31.75	35.06	42.80	49.28	48.11
10	41.88	36.01	34.56	---	32.23	31.32	30.87	32.22	36.03	44.82	50.03	47.51
15	40.89	36.78	34.86	---	31.69	31.90	31.08	33.06	37.39	45.98	49.30	45.23
20	39.97	36.17	34.17	---	32.11	31.04	31.30	33.42	37.53	46.80	50.02	44.40
25	39.15	35.98	---	33.00	31.70	31.46	31.39	33.84	39.36	46.94	50.33	43.75
EOM	36.45	35.51	---	31.77	32.09	31.11	31.94	34.79	41.02	47.91	51.36	42.13
MEAN	40.71	36.65	34.56	---	31.85	31.61	31.15	33.09	37.45	45.26	50.05	45.86

WTR YR 1992 MEAN 37.98 HIGH 29.56 MAR 19 LOW 52.15 AUG 31

NJ-WRD WELL NO.09-0079



CAPE MAY COUNTY

390337074462301. Local I.D., Wetlands 1 Obs. NJ-WRD Well Number, 09-0292.

LOCATION.--Lat 39°03'37", long 74°46'23", Hydrologic Unit 02040302, at the Wetlands Institute, County Rt. 657 (Stone Harbor Blvd.), Middle Township.

Owner: U.S. Geological Survey.

AQUIFER.--Cohansey Sand of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 266 ft, screened 251 to 261 ft.

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

DATUM.--Land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 3.90 ft above land-surface datum.

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

PERIOD OF RECORD.--Sept. 1988 to Oct. 1992 (discontinued). 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, 2.21 ft above land-surface datum, Jan. 4, 1992; lowest, 7.65 ft below land-surface datum, Sept. 9, 1992.

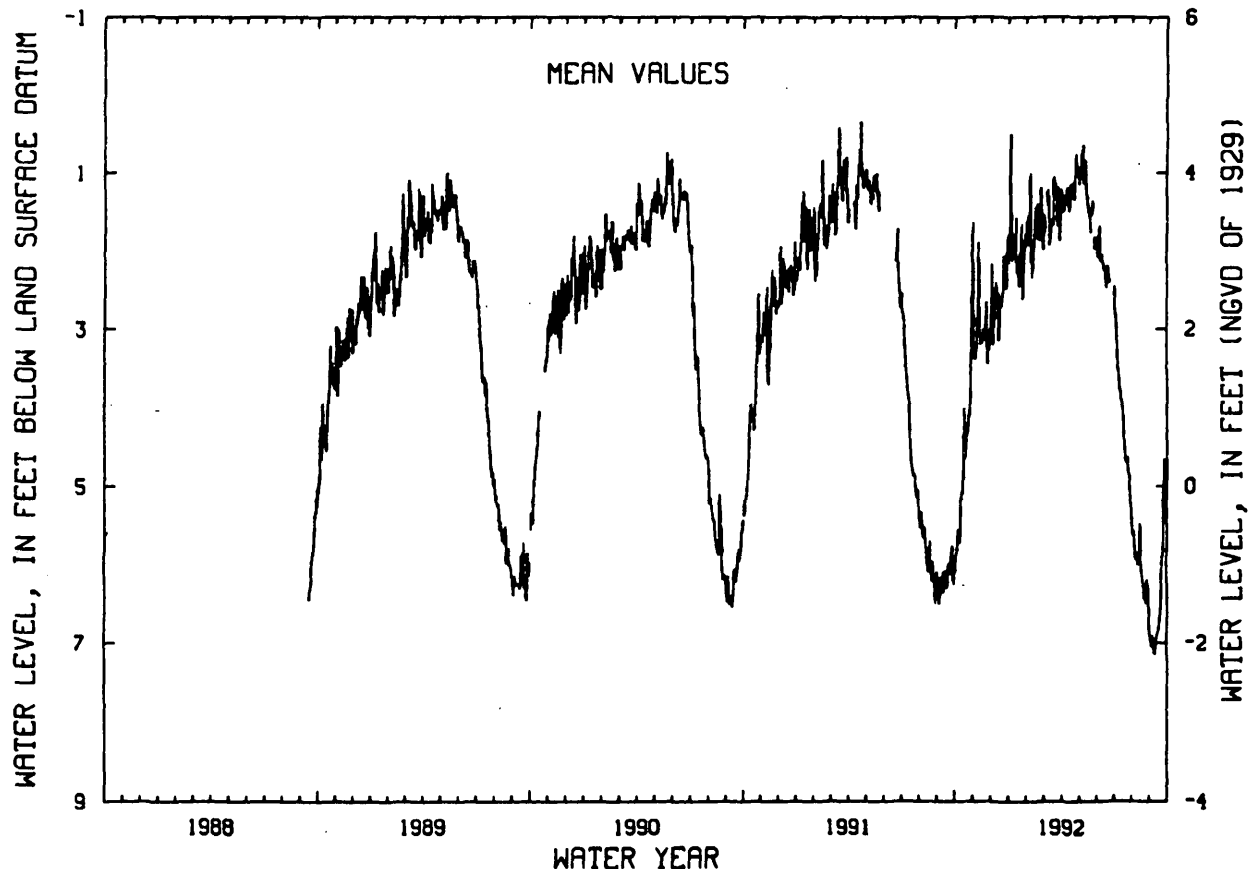
WATER LEVEL, IN FEET ABOVE (-) OR BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.70	3.39	3.20	1.30	1.93	1.72	1.47	.87	1.81	2.91	5.73	6.94
10	5.52	1.90	2.41	1.80	2.35	1.22	1.36	1.13	2.06	3.66	5.85	7.13
15	4.88	3.15	3.15	2.28	1.63	1.69	1.47	1.28	2.21	3.97	5.48	6.85
20	4.47	3.14	2.68	2.13	1.70	1.06	1.28	1.55	2.19	4.55	6.17	6.31
25	4.11	3.21	2.33	2.62	1.22	1.69	1.00	1.36	---	4.77	6.50	4.65
EOM	1.64	3.05	1.81	1.67	1.84	1.32	.97	1.82	---	5.23	6.85	5.41
MEAN	4.70	3.05	2.58	1.95	1.68	1.51	1.26	1.29	2.15	4.02	6.04	6.42

WTR YR 1992 MEAN 3.09 HIGH -2.21 JAN 4 LOW 7.65 SEP 9

NJ-WRD WELL NO.09-0292



CAPE MAY COUNTY

390337074462302. Local I.D., Wetlands 2 Obs. NJ-WRD Well Number, 09-0293.

LOCATION.--Lat 39°03'37", long 74°46'23", Hydrologic Unit 02040302, at the Wetlands Institute, County Rt. 657 (Stone Harbor Blvd.), Middle Township.

Owner: U.S. Geological Survey.

AQUIFER.--Cape May Formation, estuarine sand facies.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 170 ft, screened 155 to 165 ft.

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

DATUM.--Land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 3.10 ft above land-surface datum.

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

PERIOD OF RECORD.--Sept. 1988 to May 1992 (discontinued). 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, 1.71 ft below land-surface datum, Jan. 4, 1992; lowest, 7.27 ft below land-surface datum, Nov. 14, 1990.

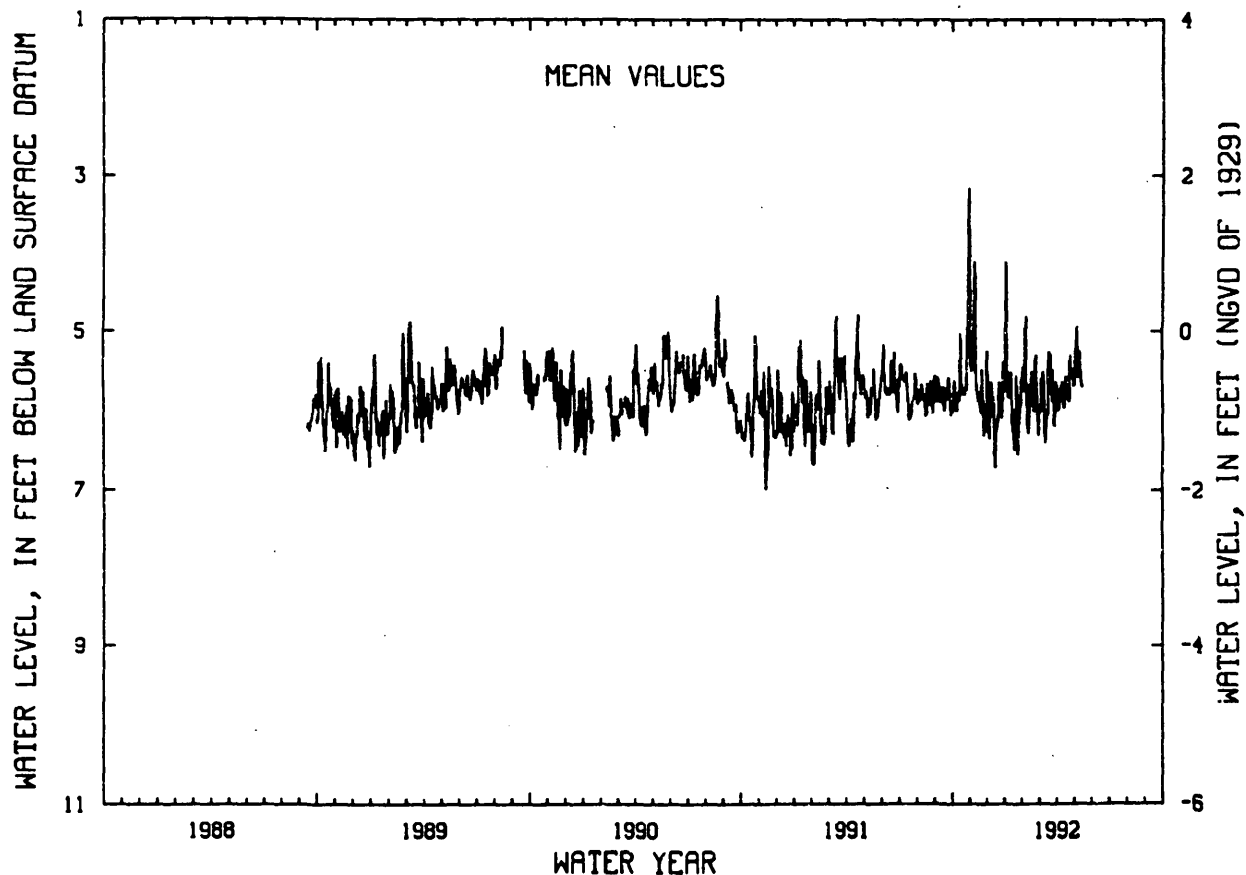
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.71	5.48	6.25	4.73	5.75	5.99	5.97	5.43	---	---	---	---
10	5.96	4.11	5.62	5.61	6.21	5.49	5.78	5.56	---	---	---	---
15	5.79	5.76	6.52	6.15	5.88	6.17	5.96	5.59	---	---	---	---
20	5.74	5.97	6.19	6.18	5.73	5.26	5.66	---	---	---	---	---
25	5.69	5.96	5.83	6.55	5.34	5.88	5.62	---	---	---	---	---
EOM	3.16	6.11	5.38	5.70	5.99	5.78	5.47	---	---	---	---	---
MEAN	5.58	5.54	5.97	5.80	5.72	5.83	5.72	---	---	---	---	---

WTR YR 1992 HIGH 1.71 JAN 4 LOW 6.98 JAN 19

NJ-WRD WELL NO.09-0293



CAPE MAY COUNTY

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

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

Owner: U. S. Geological Survey.

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

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

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

DATUM.--Land-surface datum is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 3.64 ft above land-surface datum.

REMARKS.--Water level 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 datum, May 15, 1991; lowest, 24.82 ft below land-surface datum, Sept. 28, 1992.

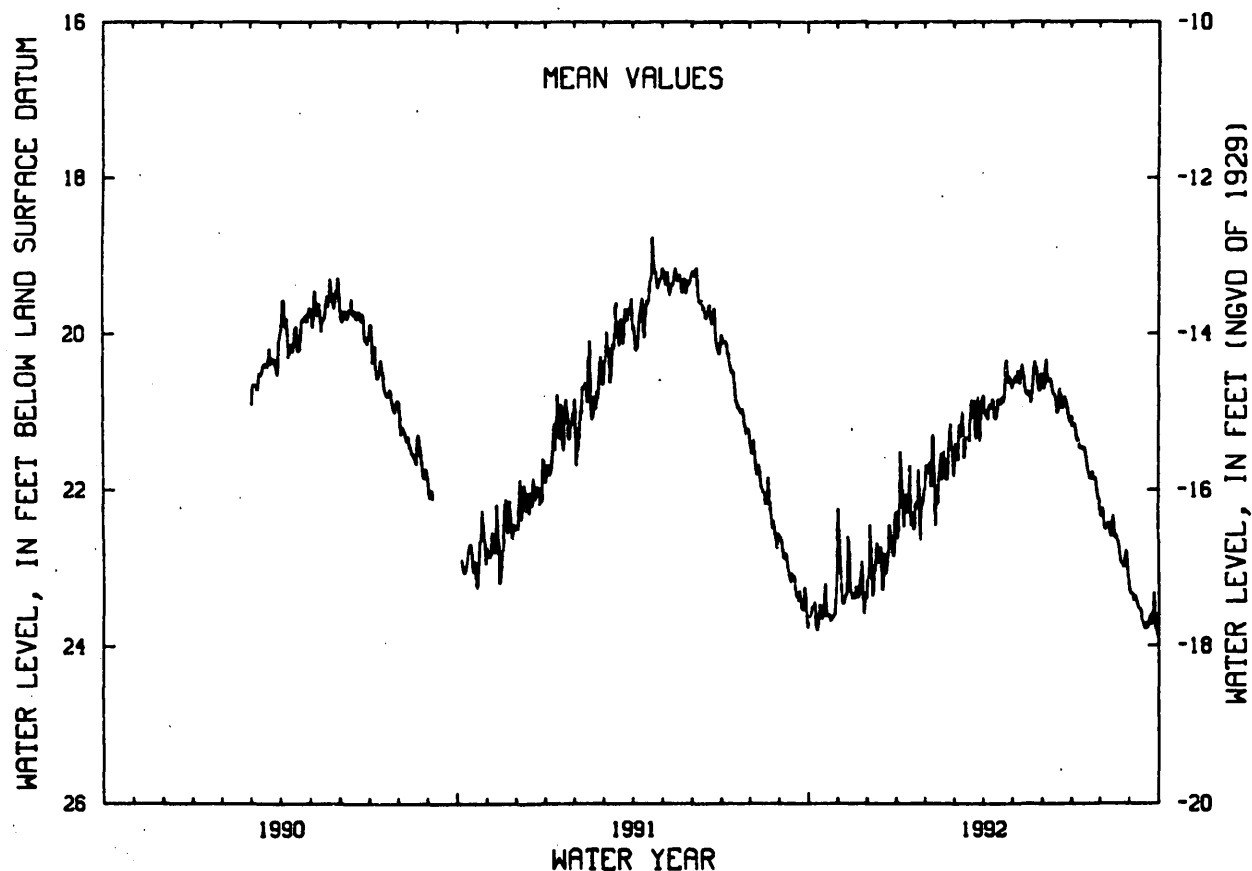
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.49	23.46	23.36	21.83	21.96	21.59	21.05	20.57	20.46	21.16	22.36	23.38
10	23.68	22.60	22.68	22.06	22.46	21.07	20.96	20.65	20.59	21.41	22.42	23.52
15	23.52	23.33	23.28	22.46	21.66	21.35	21.08	20.72	20.79	21.46	22.33	23.75
20	23.61	23.37	22.98	22.19	21.74	20.86	20.91	20.76	20.71	21.80	22.70	23.68
25	23.62	23.32	22.69	22.64	21.33	21.35	20.45	20.37	20.81	21.87	23.00	23.32
EQM	22.24	23.15	22.34	21.68	21.55	20.86	20.58	20.56	21.10	22.11	23.29	23.91
MEAN	23.48	23.25	22.83	22.17	21.71	21.25	20.85	20.62	20.77	21.58	22.64	23.59

WTR YR 1992 MEAN 22.06 HIGH 19.04 JUN 6 LOW 24.82 SEP 28

NJ-WRD WELL NO.09-0306



CAPE MAY COUNTY

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

LOCATION---Lat 39°04'25", Long 74°54'46", Hydrologic Unit 02040206, at the Rutgers Oyster Laboratory near Green Creek, Middle Township.

Owner: U.S. Geological Survey.

AQUIFER---Cohansey Sand of Miocene age.

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

INSTRUMENTATION---Water-level extremes recorder, May 1977 to current year. Water-level recorder, Aug. 1957 to Aug. 1975.

DATUM---Land-surface datum is 7.37 ft above National Geodetic Vertical Datum of 1929.

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

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

PERIOD OF RECORD---Aug. 1957 to current year. Periodic manual measurements, Sept. 1975 to Apr. 1977.

Records for 1957 to 1982 are unpublished and are available in files of New Jersey District Office.

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

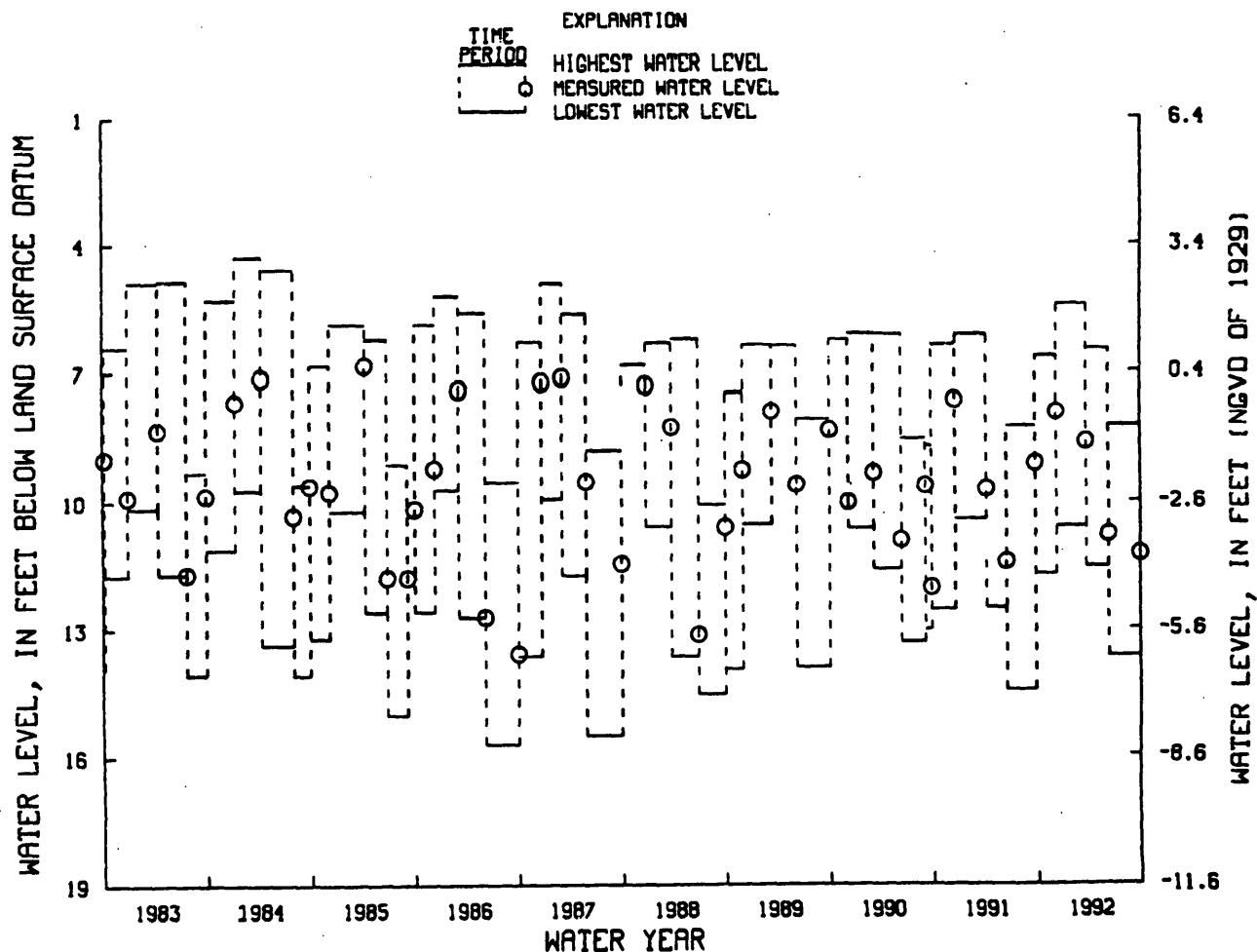
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES

MEASURED WATER LEVEL

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1991 TO DEC. 11, 1991	6.66	11.72	DEC. 11, 1991	7.90
DEC. 11, 1991 TO MAR. 24, 1992	5.44	10.59	MAR. 24, 1992	8.60
MAR. 24, 1992 TO JUNE 10, 1992	6.49	11.55	JUNE 10, 1992	10.78
JUNE 10, 1992 TO SEPT. 30, 1992	8.22	13.66	SEPT. 30, 1992	11.24

NJ-WRD WELL NO. 09-0089



GROUND-WATER LEVELS

67

CAPE MAY COUNTY

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

LOCATION.--Lat 39°06'11"N, long 74°48'38"W, Hydrologic Unit 02040302, at the Cape May County Park on 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.

DATUM.--Land-surface datum is 10.73 ft above National Geodetic Vertical Datum of 1929.

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

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

PERIOD OF RECORD.--Oct. 1957 to current year. Periodic manual measurements, Jan. 1959 to Dec. 1960 and from Nov. 1968 to Nov. 1986. 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 datum, Apr. 5, 1958; lowest, 22.01 ft below land-surface datum, July 9, 1988.

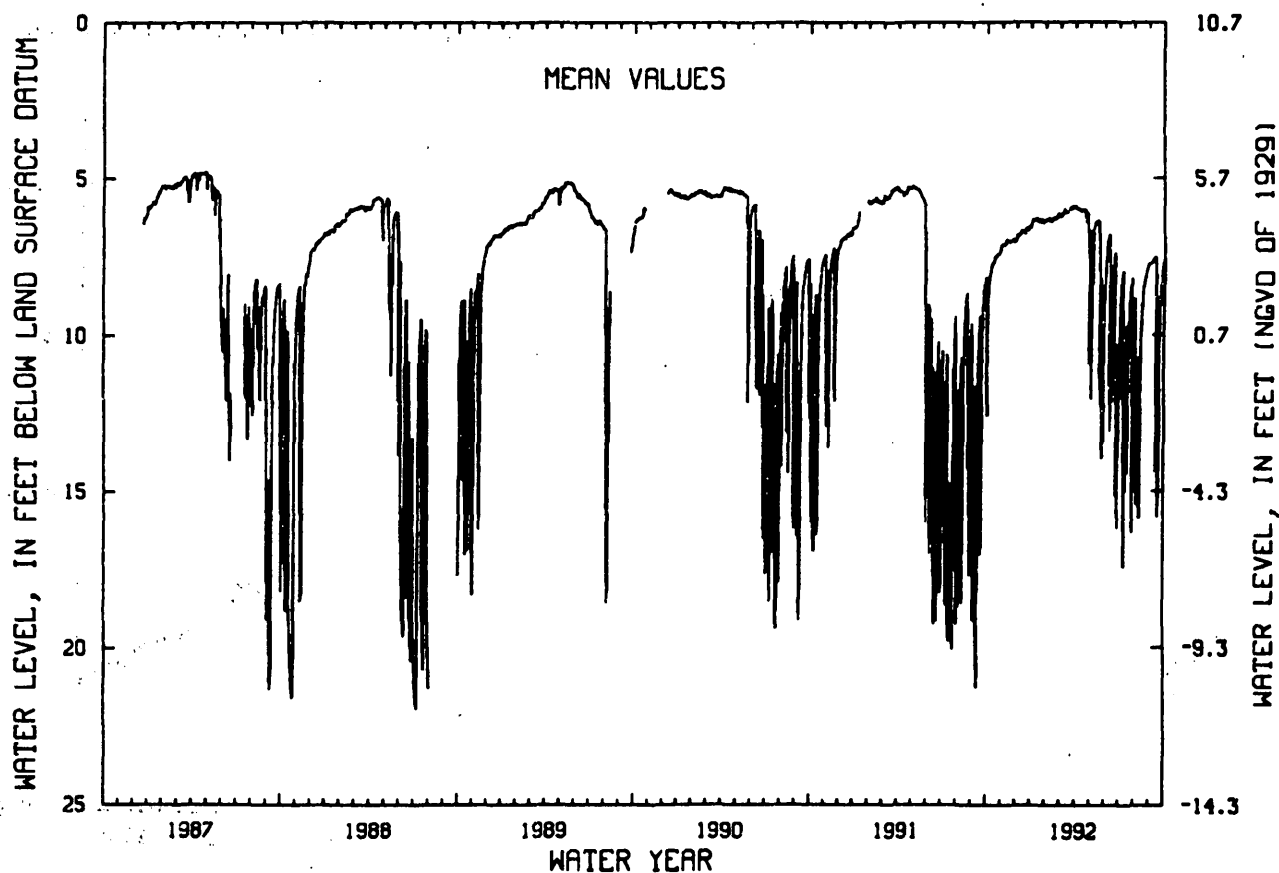
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.53	7.14	6.86	6.33	6.33	6.22	5.95	12.07	7.22	8.56	14.41	7.67
10	7.87	7.04	6.76	6.32	6.38	6.08	5.99	6.67	6.80	14.10	13.10	7.56
15	7.69	7.01	6.69	6.35	6.33	6.09	6.05	6.41	7.95	15.02	10.05	14.37
20	7.51	7.03	6.76	6.39	6.27	6.00	6.03	6.38	7.67	10.47	8.36	15.55
25	7.43	6.98	6.64	6.38	6.24	6.01	6.25	11.46	11.85	8.46	7.96	8.24
EOM	7.16	7.02	6.59	6.33	6.16	5.93	10.91	9.51	12.97	11.17	7.72	7.63
MEAN	7.95	7.05	6.73	6.38	6.29	6.06	6.26	8.63	9.57	11.16	10.24	8.90

WTR YR 1992 MEAN 7.95 HIGH 5.86 MAR 27 LOW 18.52 JUL 13

NJ-WRD WELL NO.09-0099



CUMBERLAND COUNTY

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

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

Owner: Cumberland County.

AQUIFER.--Piney Point aquifer of Eocene age.

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

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

DATUM.--Land-surface datum is 10.10 ft above National Geodetic Vertical Datum of 1929.

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

REMARKS.--Water level affected by tidal fluctuation. Well was pumped on Sept. 22, 1986. After pumping, the water level did not return to its previous level. Therefore, the screen may have been partially clogged prior to the pumping on Sept. 22, 1986.

PERIOD OF RECORD.--Mar. 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.99 ft below land-surface datum, Mar. 22, 1977; lowest, 42.87 ft below land-surface datum, Sept. 24, 1992.

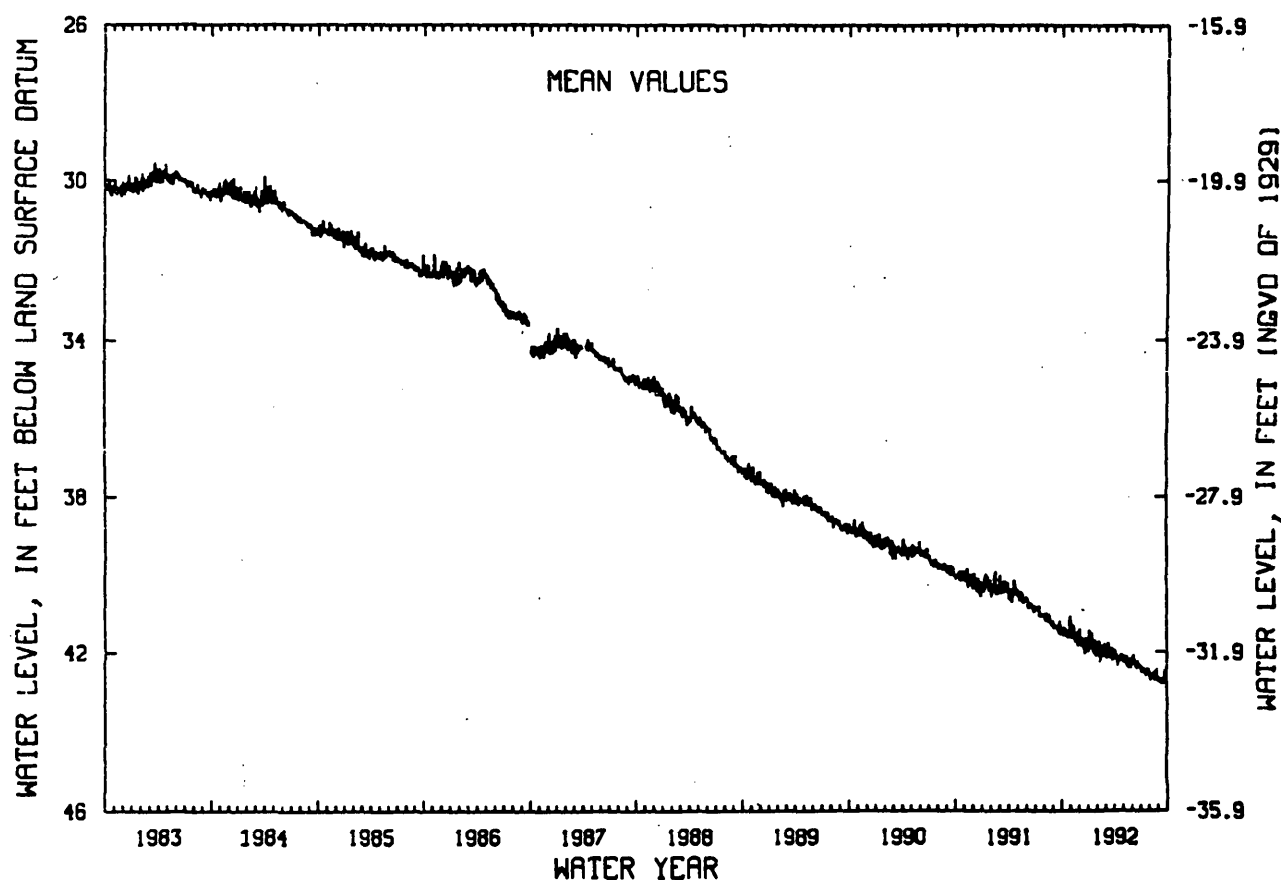
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	41.41	41.65	41.84	41.52	41.93	42.13	42.09	42.17	42.11	42.37	42.62	42.76
10	41.50	41.37	41.68	41.68	42.25	41.90	42.16	42.20	42.25	42.47	42.58	42.68
15	41.46	41.64	41.82	41.85	41.97	42.06	42.27	42.26	42.28	42.42	42.55	42.80
20	41.59	41.67	42.01	41.88	41.96	41.92	42.21	42.37	42.24	42.53	42.59	42.76
25	41.60	41.66	41.83	42.05	41.97	42.21	42.07	42.25	42.29	42.56	42.66	42.59
EOB	41.08	41.75	41.95	41.80	41.97	41.99	42.14	42.20	42.37	42.45	42.62	42.75
MEAN	41.49	41.61	41.78	41.84	41.97	42.04	42.15	42.24	42.29	42.47	42.60	42.71

WTR YR 1992 MEAN 42.10 HIGH 40.87 OCT 31 LOW 42.87 SEP 24

NJ-WRD WELL NO.11-0096



CUMBERLAND COUNTY

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

LOCATION.--Lat 39°25'14", long 74°52'17", Hydrologic Unit 02040302, in wooded area off Harriet Ave., 1.5 mi. southeast of Milmay, Maurice River Township.

Owner: Sam DeRosa.

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

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 5 in., depth 2,093 ft, perforated casing 2,083 to 2,093 ft.

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

DATUM.--Land-surface datum is 85 ft above National Geodetic Vertical Datum of 1929, by altimeter.

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

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 1974, the density of water was 1.011 grams per milliliter at 20 deg. C and a plus 17 foot correction was needed to obtain the equivalent freshwater head. The well was pumped on Feb. 3, 1988. After pumping, the water-level did not return to its previous level. Therefore, the perforated area may have been partially clogged prior to the pumping on Feb. 3, 1988.

PERIOD OF RECORD.--Oct. 1974 to Apr. 1975, Feb. 1977 to current year. Records for 1974 to 1975 and 1977 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 115.82 ft below land-surface datum, Apr. 3, 1975; lowest, 137.49 ft below land-surface datum, Sept. 24, 1992.

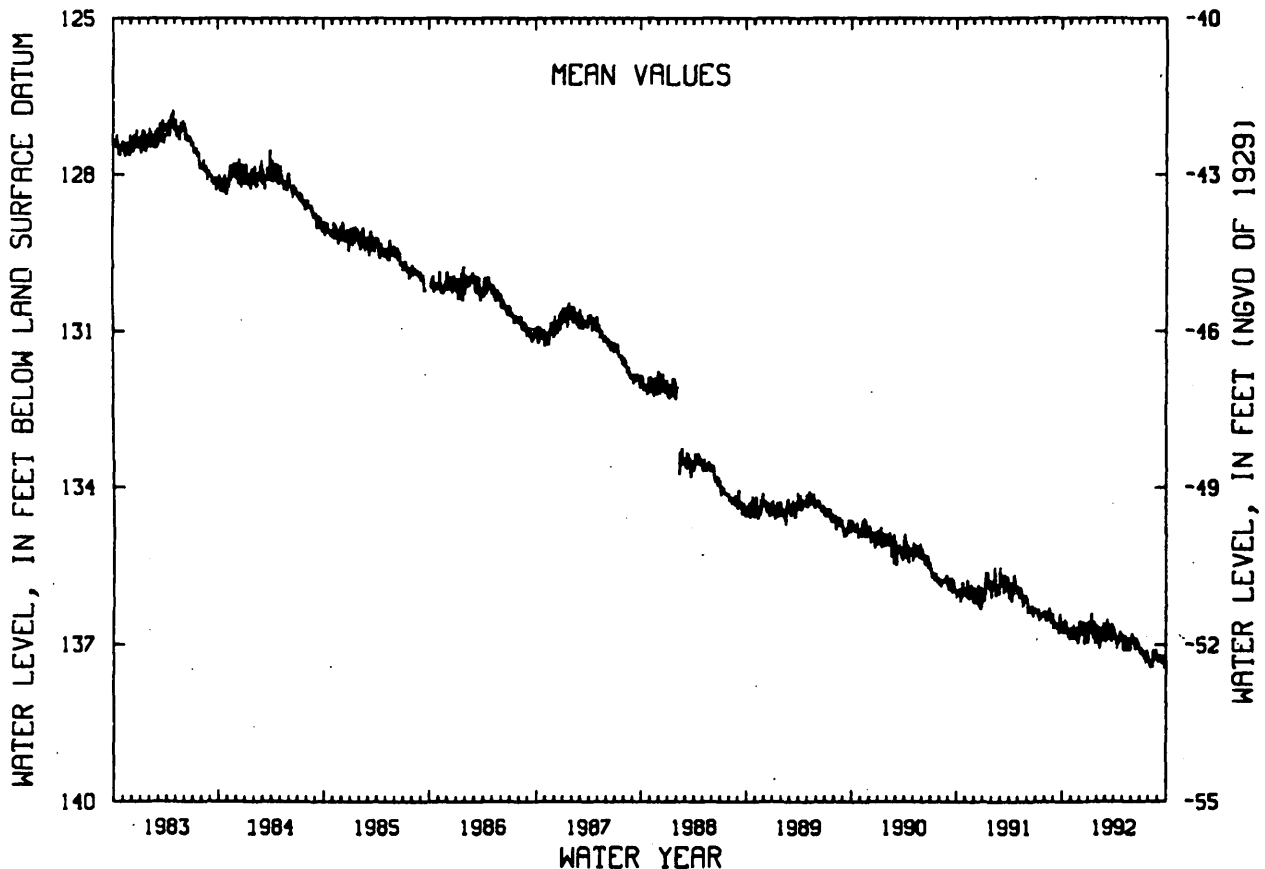
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	136.63	136.85	136.81	136.56	136.73	136.93	136.77	136.94	136.84	137.08	137.36	137.29
10	136.68	136.74	136.69	136.57	137.08	136.70	136.89	136.88	136.87	137.12	137.29	137.20
15	136.65	136.79	136.69	136.66	136.82	136.77	137.00	136.99	136.93	137.12	137.36	137.35
20	136.75	136.82	136.97	136.75	136.80	136.72	136.95	137.12	136.87	137.27	137.14	137.31
25	136.83	136.76	136.78	136.83	136.83	136.94	136.75	136.97	136.93	137.26	137.25	137.39
EOM	136.68	136.85	136.95	136.63	136.67	136.69	136.89	136.95	137.08	137.18	137.22	137.29
MEAN	136.70	136.80	136.74	136.72	136.80	136.78	136.87	136.97	136.95	137.17	137.27	137.28

WTR YR 1992 MEAN 136.92 HIGH 136.27 JAN 14 LOW 137.49 SEP 24

NJ-WRD WELL NO.11-0137



GROUND-WATER LEVELS

CUMBERLAND COUNTY

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

LOCATION.--Lat 39°27'32", long 75°09'29", Hydrologic Unit 02040206, next to the Cumberland County Vocational and Technical School on 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.

DATUM.--Land-surface datum is 81.77 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 2.92 ft above land-surface datum.

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

PERIOD OF RECORD.--Mar. 1972 to current year. Periodic manual measurements, Mar. 1972 to June 1987. 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 datum, Apr. 21, 1972; lowest, 8.39 ft below land-surface datum, Sept. 2, 1992.

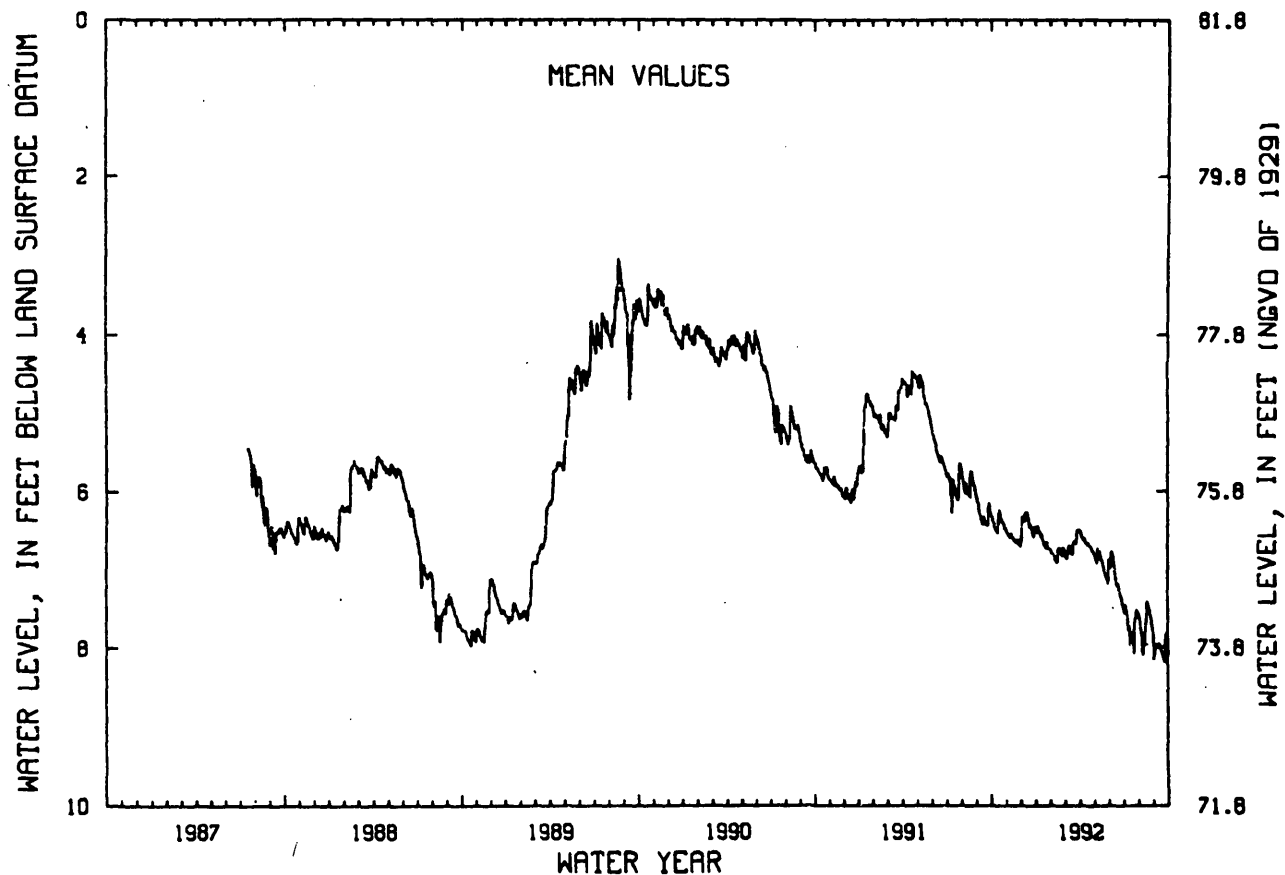
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.40	6.56	6.34	6.44	6.81	6.86	6.56	6.88	6.91	7.47	7.71	7.97
10	6.49	6.58	6.28	6.52	6.90	6.80	6.63	6.74	6.88	7.76	8.10	7.97
15	6.46	6.60	6.32	6.63	6.90	6.76	6.67	6.87	7.11	7.98	7.88	8.01
20	6.34	6.65	6.47	6.70	6.76	6.65	6.69	6.97	7.19	7.85	7.44	8.10
25	6.40	6.66	6.54	6.71	6.84	6.68	6.71	7.09	7.33	7.63	7.58	8.18
EOB	6.47	6.71	6.51	6.74	6.77	6.49	6.78	7.03	7.47	7.62	7.79	7.82
MEAN	6.40	6.61	6.42	6.62	6.81	6.71	6.65	6.93	7.11	7.69	7.71	8.01

WTR YR 1992 MEAN 6.97 HIGH 6.20 OCT 17 LOW 8.39 SEP 2

NJ-WRD WELL NO.11-0042



GROUND-WATER LEVELS

71

ESSEX COUNTY

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

LOCATION.--Lat 40°44'55", long 74°20'32", Hydrologic Unit 02030103, at East Orange Water Company, JFK Blvd. and Parsonage Hill Rd., Millburn Township.

Owner: State of New Jersey - NJGS.

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.

DATUM.--Land-surface datum is 184.7 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 2.65 ft above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--Apr. 1991 to current year. Periodic manual measurements, Apr. 1991 to Apr. 1992.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 51.47 ft below land-surface datum, Aug. 13, 1991; lowest, 64.29 ft below land-surface datum, Sept. 5, 1992.

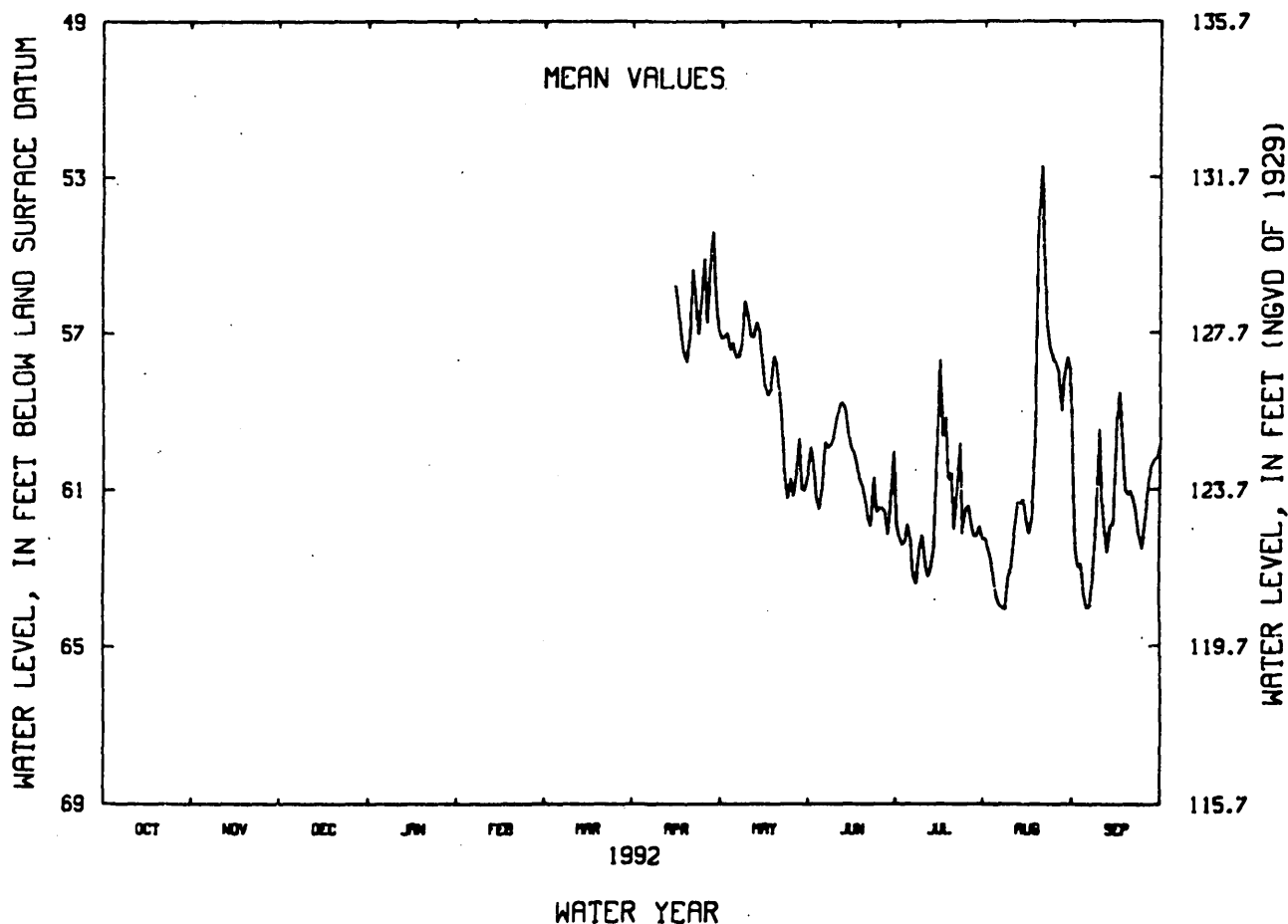
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	57.25	60.97	61.89	63.74	64.05
10	---	---	---	---	---	---	---	56.53	59.18	62.14	63.00	61.24
15	---	---	---	---	---	---	55.78	57.64	59.90	59.87	61.78	59.26
20	---	---	---	---	---	---	57.13	57.80	61.22	60.59	52.71	61.05
25	---	---	---	---	---	---	55.08	60.70	61.46	61.51	57.78	61.80
EOY	---	---	---	---	---	---	56.90	60.63	60.02	62.27	60.64	59.86
MEAN	---	---	---	---	---	---	---	58.45	60.50	61.67	60.22	61.55

WTR YR 1992 HIGH 52.22 AUG 21 LOW 64.29 SEP 5

NJ-WRD WELL NO.13-0094



ESSEX COUNTY

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

LOCATION...Lat 40°44'55", long 74°20'32", Hydrologic Unit 02030103, at East Orange Water Company, JFK Blvd. and Parsonage Hill Rd., Millburn Township.

Owner: State of New Jersey - NJGS.

AQUIFER...Stratified drift of Pleistocene age.

WELL CHARACTERISTICS...Drilled observation well, diameter 6 in., depth 84 ft, screened 79 to 84 ft.

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

DATUM...Land-surface datum is 184.7 ft above National Geodetic Vertical Datum of 1929.

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

REMARKS... Water level affected by nearby pumping.

PERIOD OF RECORD...Apr. 1991 to current year. Periodic manual measurements, Apr. 1991 to Apr. 1992.

EXTREMES FOR PERIOD OF RECORD...Highest water level, 51.20 ft below land-surface datum, Aug. 13, 1991; lowest, 64.35 ft below land-surface datum, Sept. 5, 1992.

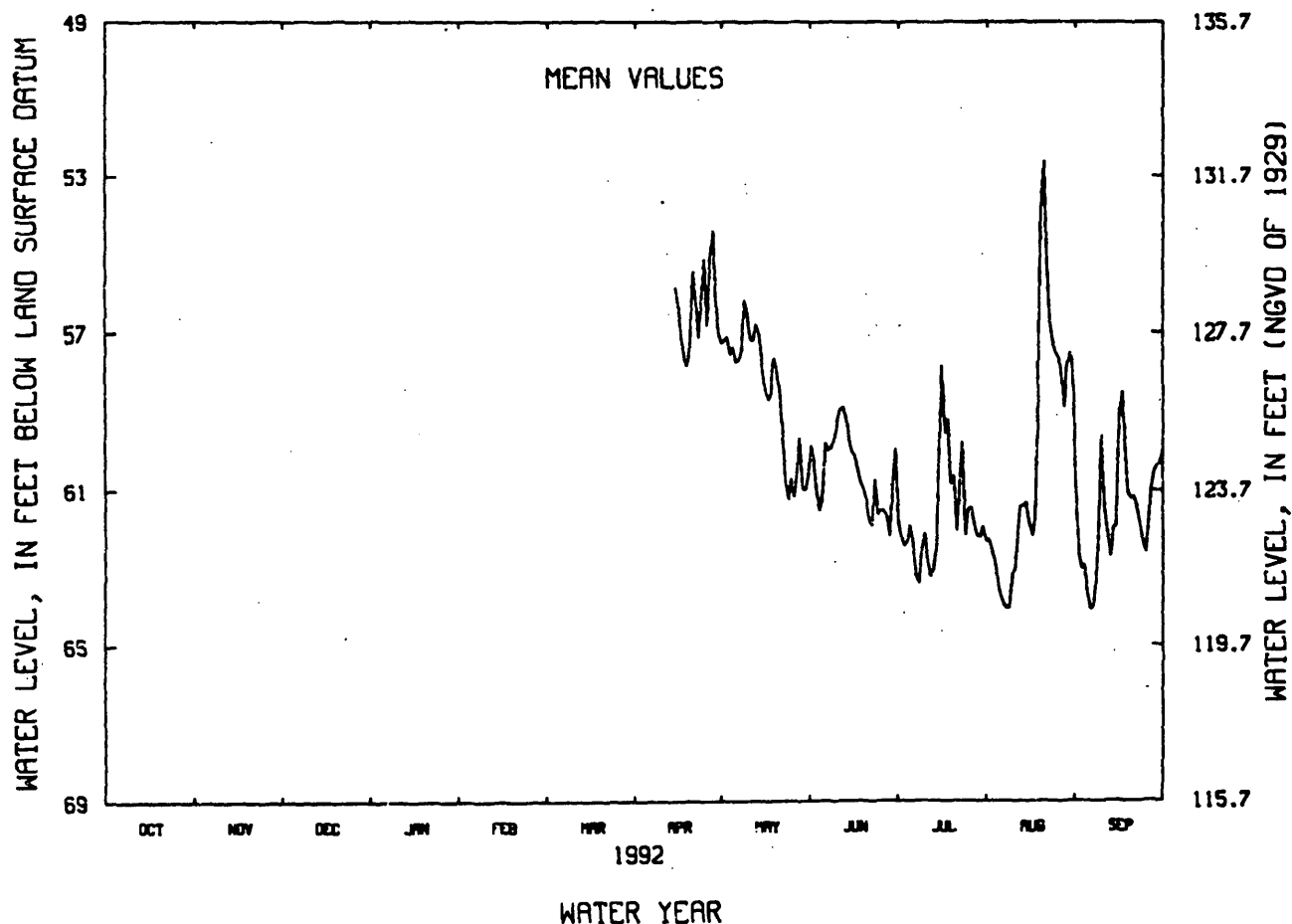
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	57.33	60.96	61.90	63.73	64.07
10	---	---	---	---	---	---	---	56.60	59.23	62.11	63.01	61.35
15	---	---	---	---	---	---	55.86	57.73	59.97	59.87	61.86	59.13
20	---	---	---	---	---	---	57.19	57.83	61.23	60.61	52.60	61.14
25	---	---	---	---	---	---	55.13	60.67	61.49	61.48	57.57	61.89
EOM	---	---	---	---	---	---	57.00	60.59	59.91	62.29	60.72	59.98
MEAN	---	---	---	---	---	---	---	58.49	60.52	61.67	60.16	61.61

WTR YR 1992 HIGH 52.13 AUG 21 LOW 64.35 SEP 5

NJ-WRD WELL NO.13-0096



GLOUCESTER COUNTY

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

LOCATION.--Lat 39°43'54", Long 75°02'59", Hydrologic Unit 02040202, next to the Washington Township MUA Water Tank at the intersection of White Birches Rd. and Rt. 655 (Fries Mill Rd.), Washington Township.

Owner: Washington Township Municipal Utilities Authority.

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

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 54 ft, screened 44 to 54 ft.

INSTRUMENTATION.--Digital data logger with differential pressure transducer--60 minute recording interval.

Daily mean recorded from Aug. 1989 to April 21, 1992; water level recorded hourly April 22, 1992 to present.

DATUM.--Land-surface datum is 150 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of steel outer casing 2.50 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.14 ft below land-surface datum, Aug. 2, 1989; lowest, 17.36 ft below land-surface datum, Feb. 14, 1992.

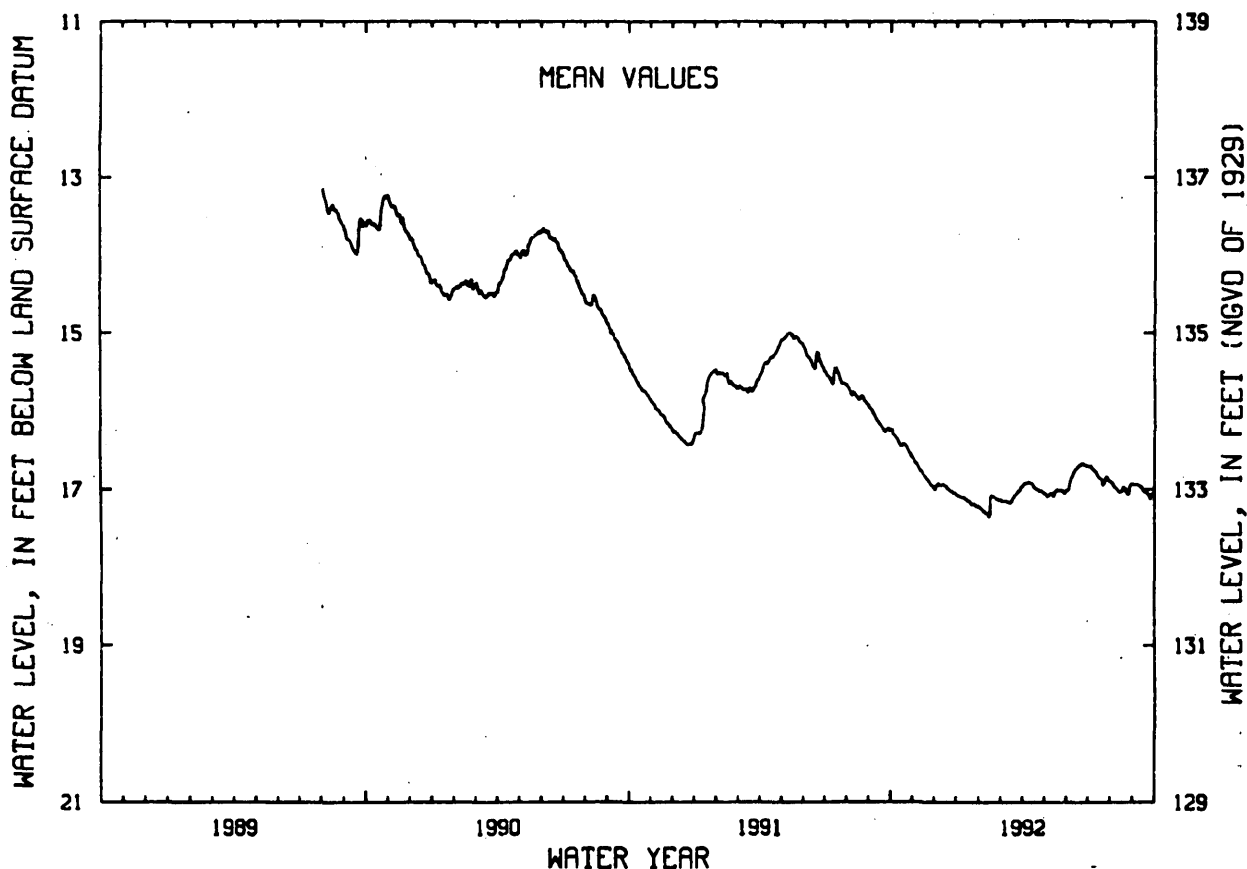
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.30	16.66	16.95	17.10	17.27	17.16	16.93	17.07	17.01	16.70	16.94	16.94
10	16.35	16.74	16.96	17.11	17.32	17.16	16.92	17.07	16.84	16.76	17.00	16.95
15	16.45	16.80	16.95	17.15	17.33	17.18	16.93	17.09	16.74	16.83	17.04	17.02
20	16.42	16.87	17.00	17.18	17.10	17.12	16.99	17.01	16.69	16.87	16.97	17.03
25	16.49	16.93	17.03	17.20	17.13	17.06	17.03	17.02	16.67	16.88	17.06	17.13
EOY	16.59	16.98	17.07	17.22	17.14	16.98	17.03	17.06	16.70	16.90	16.92	17.04
MEAN	16.41	16.80	16.99	17.15	17.21	17.12	16.97	17.05	16.79	16.82	16.99	17.01

WTR YR 1992 MEAN 16.94 HIGH 16.24 OCT 2 LOW 17.36 FEB 14

NJ-WRD WELL NO.15-1033



GLOUCESTER COUNTY

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

LOCATION...Lat 39°46'52", long 75°10'04", Hydrologic Unit 02040202, at the Township of Mantua Road Dept. off Main Street (County Rt. 553), Mantua Township.

Owner: U.S. Geological Survey.

AQUIFER...Upper aquifer, Potomac-Raritan-Magothy aquifer system 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 datum is 82 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 4.00 ft above land-surface datum.

REMARKS...Water level affected by nearby pumping.

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

EXTREMES FOR PERIOD OF RECORD...Highest water level, 121.20 ft below land-surface datum, Feb. 20, 1988; lowest, 139.83 ft below land-surface datum, June 16, 1991.

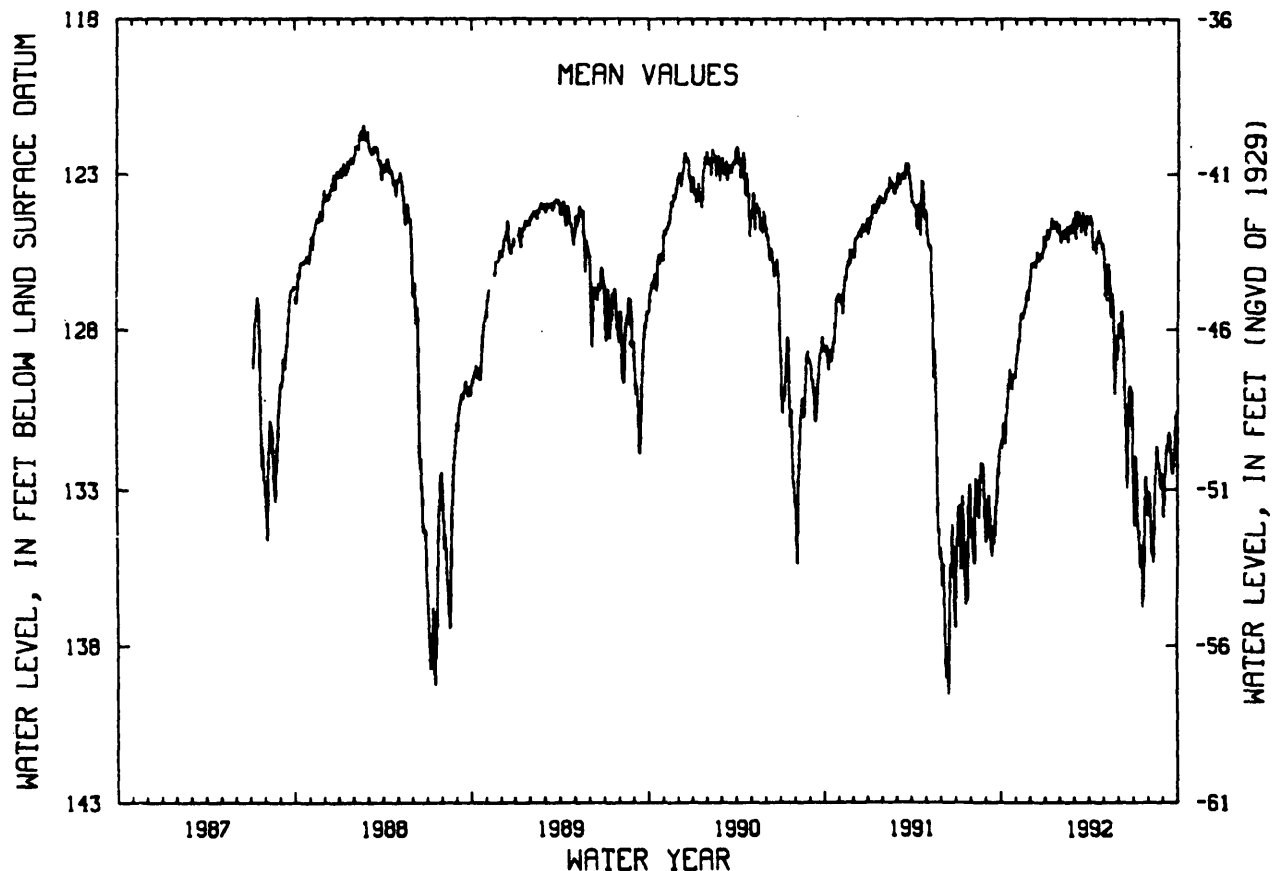
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	131.45	128.73	126.01	124.78	124.91	125.09	124.53	126.57	128.04	132.29	133.64	132.53
10	131.50	127.83	125.94	124.94	125.10	124.26	125.22	125.90	128.24	133.80	134.99	131.61
15	130.11	127.65	125.56	124.65	124.85	124.68	125.57	127.61	130.52	135.47	132.90	131.46
20	129.14	127.29	125.83	124.60	124.84	124.34	124.91	127.48	131.43	135.39	131.83	132.50
25	129.80	126.77	125.65	124.84	124.92	124.98	125.19	129.36	129.81	133.51	132.52	131.78
EOY	129.46	126.47	125.39	124.90	124.56	124.55	125.43	128.14	132.23	133.83	132.89	130.73
MEAN	130.32	127.66	125.72	124.77	124.86	124.56	125.07	127.35	129.69	133.99	133.15	131.86

WTR YR 1992 MEAN 128.27 HIGH 123.86 MAR 8 LOW 137.00 JUL 22

NJ-WRD WELL NO.15-0741



GLOUCESTER COUNTY

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

LOCATION.--Lat 39°46'52", long 75°10'04", Hydrologic Unit 02040202, at the Township of Mantua Road Dept. off Main Street (County Rt. 553), Mantua Township.

Owner: U.S. Geological Survey.

AQUIFER.--Lower aquifer, Potomac-Raritan-Magothy aquifer system 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 datum is 84 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 4.20 ft above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

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

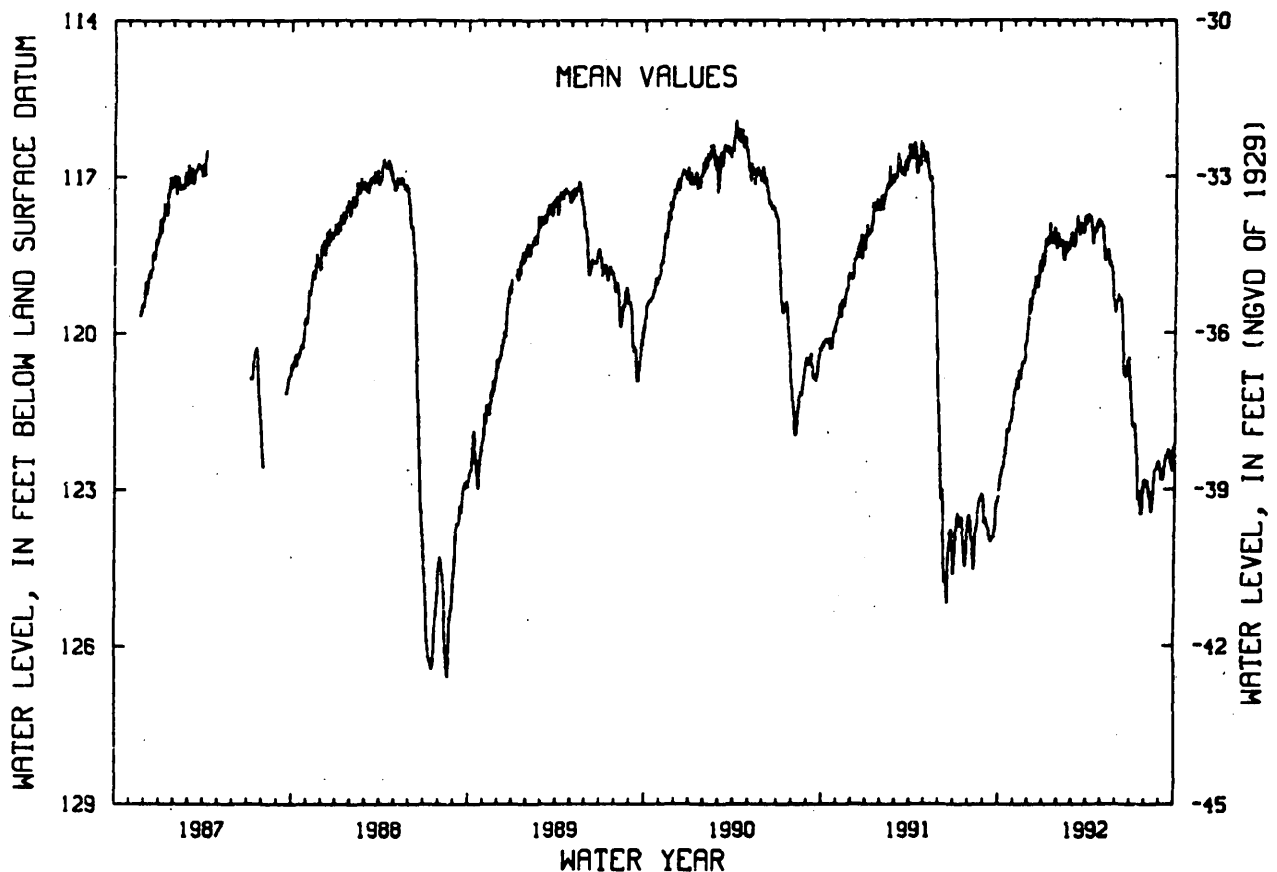
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 115.89 ft below land-surface datum, Apr. 4, 1990; lowest, 126.62 ft below land-surface datum, Aug. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	122.73	121.05	119.60	118.20	118.32	118.31	117.78	118.35	119.29	121.80	122.88	122.82
10	122.52	121.01	119.22	118.15	118.61	117.93	117.97	118.55	119.37	121.85	123.18	122.41
15	122.11	120.90	118.98	118.12	118.38	118.01	118.07	118.58	120.36	122.77	123.29	122.35
20	121.90	120.55	119.10	118.16	118.33	117.94	118.02	118.73	120.83	123.06	122.63	122.45
25	121.69	120.22	118.76	118.22	118.30	118.09	117.82	119.32	120.54	123.36	122.52	122.56
EOM	121.23	119.81	118.71	118.09	118.13	117.83	117.88	119.45	120.89	122.84	122.60	122.18
MEAN	122.11	120.67	119.05	118.23	118.33	118.03	117.94	118.74	120.10	122.52	122.87	122.47
WTR YR 1992	MEAN 120.10 HIGH 117.63 MAR 11, 27 LOW 123.54 JUL 23											

NJ-WRD WELL NO.15-0742



GROUND-WATER LEVELS

GLOUCESTER COUNTY

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

LOCATION.--Lat 39°48'08", long 75°17'24", Hydrologic Unit 02040202, near the intersection of Swedesboro and Tomlin Station roads, next to Pargey Creek, on land owned by Mr. William Stefka, Greenwich Township.

Owner: U.S. Geological Survey.

AQUIFER.--Lower aquifer, Potomac-Raritan-Magothy aquifer system 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 datum is 6.50 ft above National Geodetic Vertical Datum of 1929.

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

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.80 ft below land-surface datum, May 16, 1989; lowest, 19.03 ft below land-surface datum, Sept. 24, 1992.

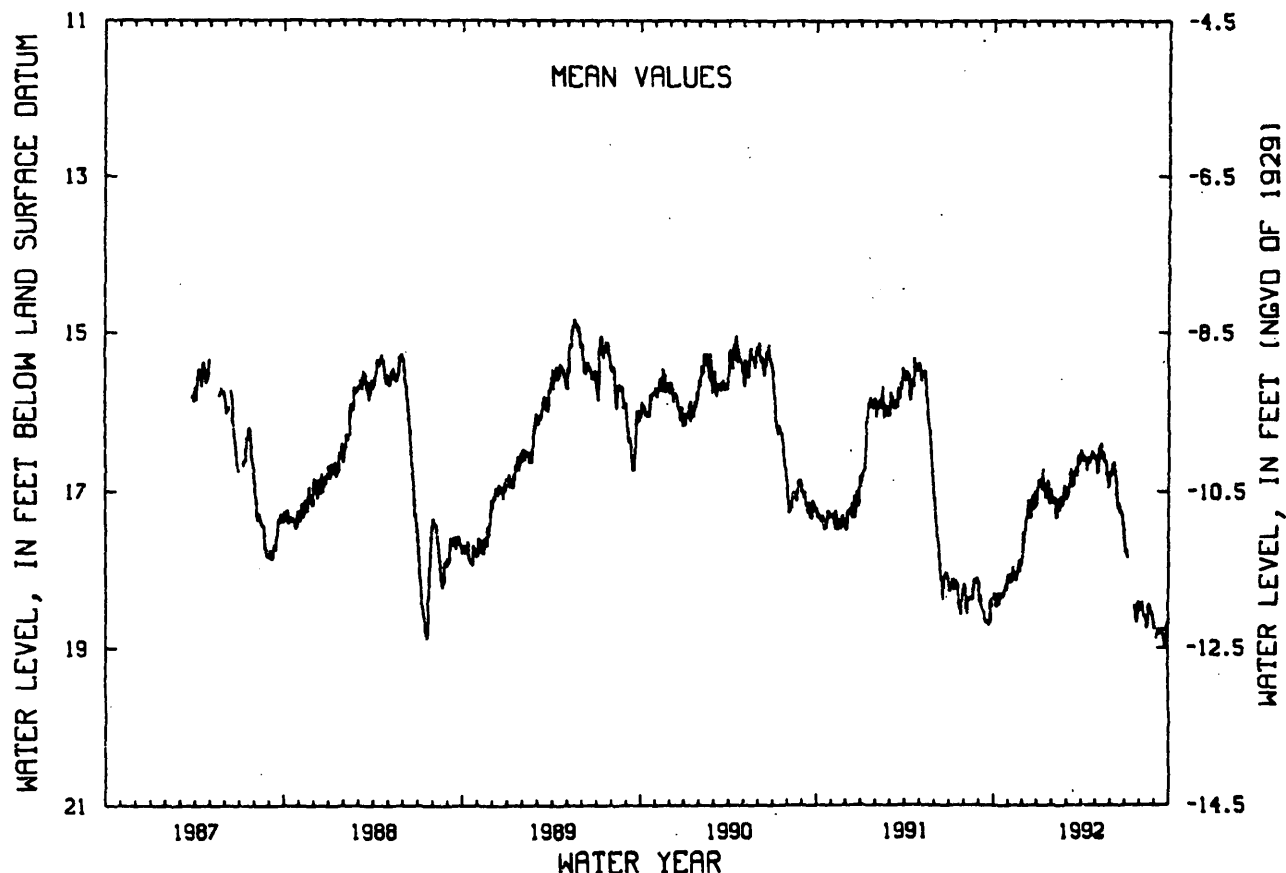
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.37	18.17	17.66	16.86	17.12	17.03	16.54	16.72	16.71	17.76	18.48	18.87
10	18.39	18.06	17.35	16.84	17.35	16.86	16.57	16.42	16.66	---	18.57	18.76
15	18.37	18.05	17.20	16.92	17.19	16.89	16.66	16.54	16.95	---	18.66	18.81
20	18.35	18.07	17.31	17.00	17.11	16.76	16.62	16.61	17.16	---	18.56	18.86
25	18.25	17.93	17.17	17.08	17.09	16.80	16.48	16.78	17.24	18.58	18.52	18.97
EOB	18.09	17.88	17.19	16.97	16.99	16.53	16.54	16.82	17.49	18.40	18.67	18.70
MEAN	18.32	18.04	17.31	16.97	17.13	16.83	16.57	16.63	17.00	---	18.56	18.80

WTR YR 1992 MEAN 17.50 HIGH 16.35 MAY 13 LOW 19.03 SEP 24

NJ-WRD WELL NO.15-0712



GLOUCESTER COUNTY

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

LOCATION.--Lat 39°48'08", long 75°17'24", Hydrologic Unit 02040202, near the intersection of Swedesboro and Tomlin Station roads, next to Pargey Creek, on land owned by Mr. William Stefka, Greenwich Township.

Owner: U.S. Geological Survey.

AQUIFER.--Middle aquifer, Potomac-Raritan-Magothy aquifer system 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 datum is 5.64 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 3.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.53 ft below land-surface datum, May 16, 1989; lowest, 14.07 ft below land-surface datum, Sept. 24, 1992.

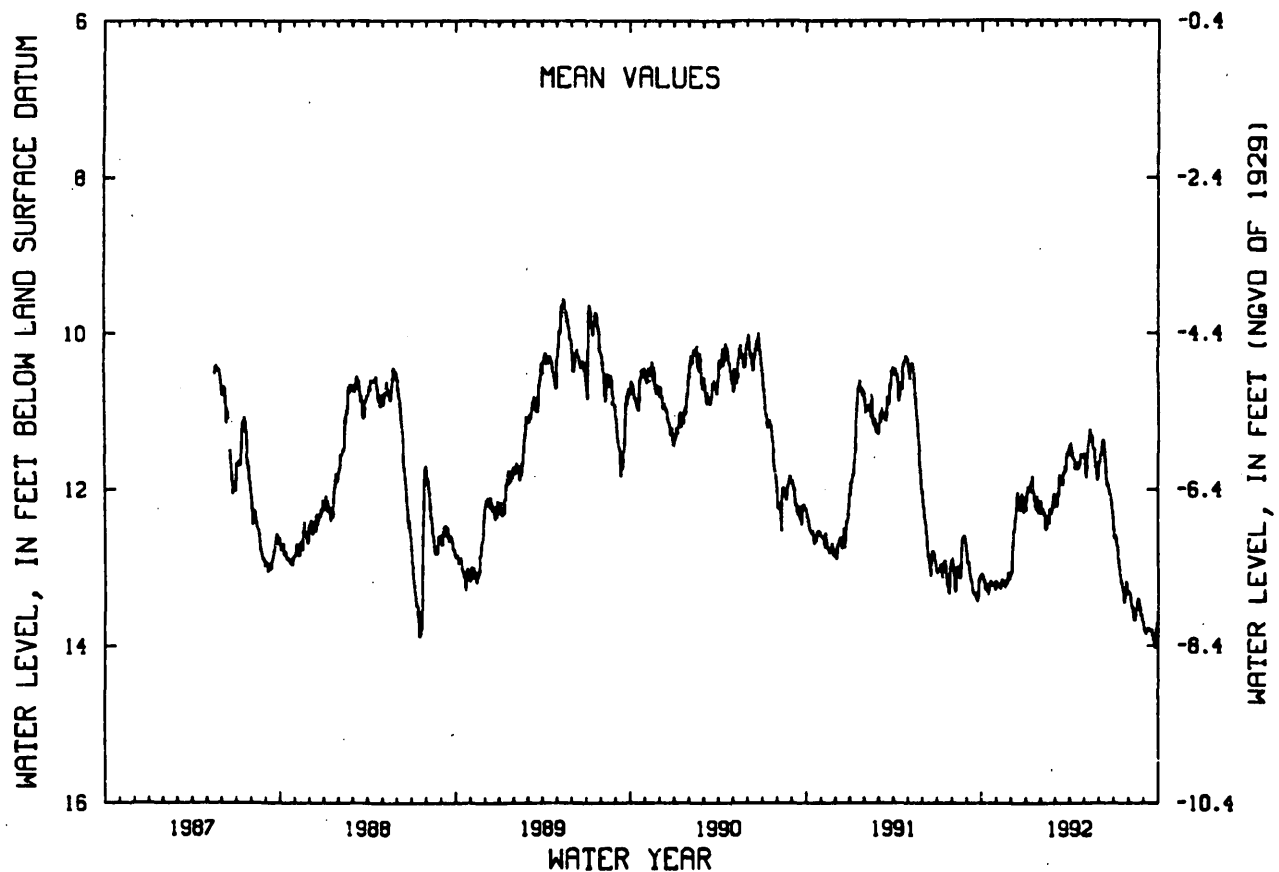
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.16	13.25	12.71	11.98	12.32	12.20	11.51	11.75	11.54	12.60	13.43	13.85
10	13.26	13.18	12.37	11.91	12.52	11.98	11.62	11.39	11.41	12.83	13.56	13.78
15	13.30	13.18	12.14	12.05	12.40	11.89	11.72	11.38	11.71	13.12	13.63	13.81
20	13.21	13.21	12.23	12.14	12.30	11.81	11.73	11.46	11.93	13.29	13.40	13.93
25	13.22	13.11	12.27	12.28	12.24	11.76	11.55	11.70	12.07	13.32	13.56	13.98
EOM	13.18	13.09	12.29	12.15	12.13	11.46	11.56	11.76	12.36	13.30	13.69	13.72
MEAN	13.22	13.19	12.34	12.10	12.31	11.88	11.61	11.56	11.80	13.04	13.53	13.83

WTR YR 1992 MEAN 12.53 HIGH 11.19 MAY 13 LOW 14.07 SEP 24

NJ-WRD WELL NO.15-0713



GLOUCESTER COUNTY

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

LOCATION.--Lat 39°48'08", long 75°17'24", Hydrologic Unit 02040202, near the intersection of Swedesboro and Tomlin Station roads, next to Pargey Creek, on land owned by Mr. William Stefka, Greenwich Township.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 56 ft, screened 46 to 56 ft.

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

DATUM.--Land-surface datum is 4.46 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 3.20 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.17 ft below land-surface datum, May 16, 1989; lowest, 12.77 ft below land-surface datum, Sept. 24, 1992.

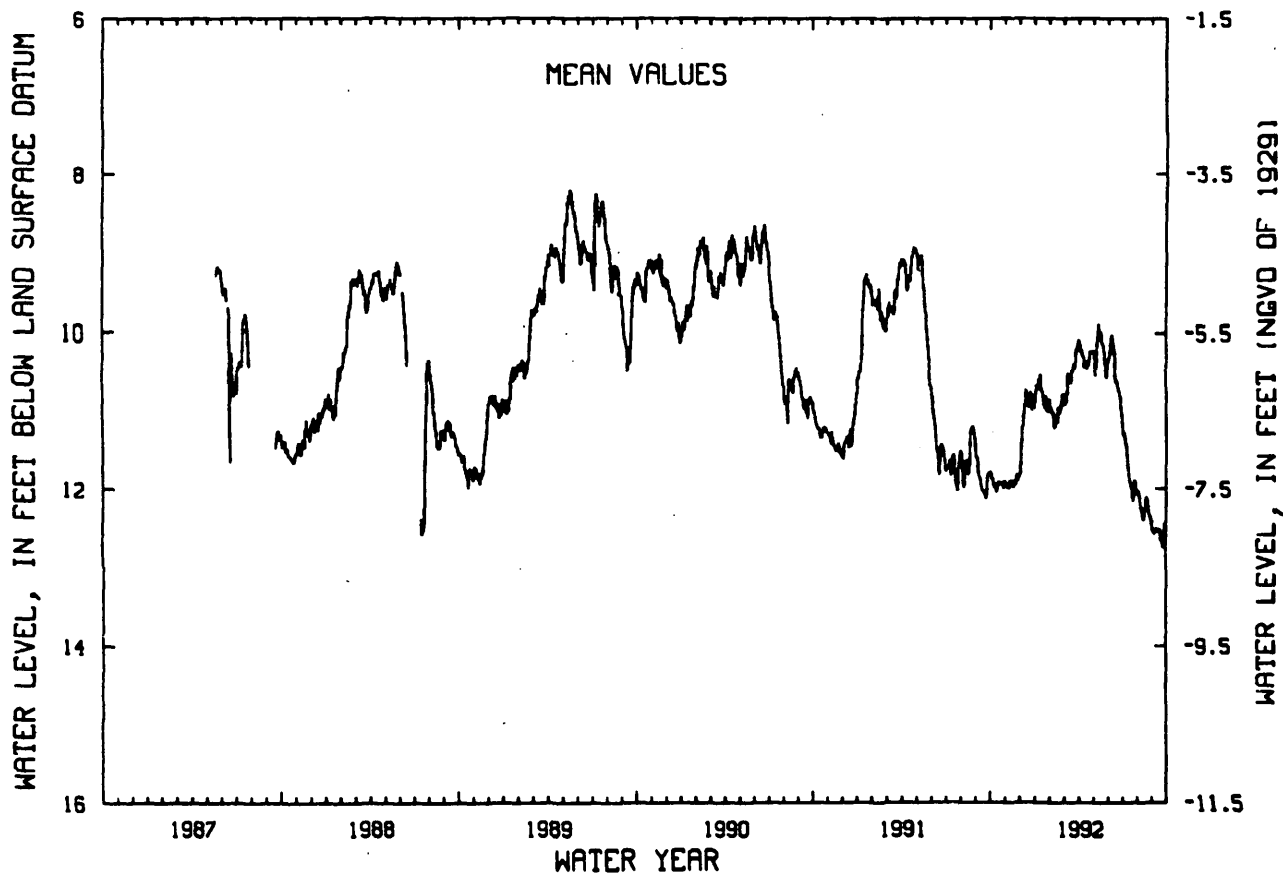
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.87	11.97	11.39	10.68	11.02	10.91	10.18	10.43	10.24	11.30	12.13	12.57
10	11.97	11.93	11.04	10.59	11.22	10.69	10.30	10.08	10.06	11.52	12.27	12.51
15	12.01	11.91	10.80	10.76	11.13	10.58	10.42	10.04	10.35	11.84	12.36	12.54
20	11.93	11.94	10.91	10.85	11.00	10.50	10.44	10.12	10.60	12.00	12.11	12.66
25	11.94	11.83	10.94	10.98	10.95	10.46	10.23	10.37	10.76	12.05	12.29	12.72
EOM	11.90	11.84	10.98	10.86	10.83	10.13	10.23	10.49	11.05	12.02	12.40	12.43
MEAN	11.93	11.92	11.03	10.80	11.02	10.57	10.29	10.24	10.47	11.75	12.24	12.55

WTR YR 1992 MEAN 11.23 HIGH 9.86 MAY 13 LOW 12.77 SEP 24

NJ-WRD WELL NO.15-0728



GLOUCESTER COUNTY

394942075131701. Local I.D., Shell Chemical 5 Obs. NJ-WRD Well Number, 15-0296.

LOCATION.--Lat 39°49'42", long 75°13'17", Hydrologic Unit 02040202, near the interchange of Mantua Grove Rd. and I-295, West Deptford Township.

Owner: Huntsman Polypropylene Corp.

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

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 327 ft, screened 321 to 326 ft.

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

DATUM.--Land-surface datum is 20.76 ft above National Geodetic Vertical Datum of 1929.

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

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

PERIOD OF RECORD.--June 1962 to current year. Records for 1962 to 1977 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.75 ft below land-surface datum, Dec. 6, 1962; lowest, 42.50 ft below land-surface datum, Aug. 15, 1986.

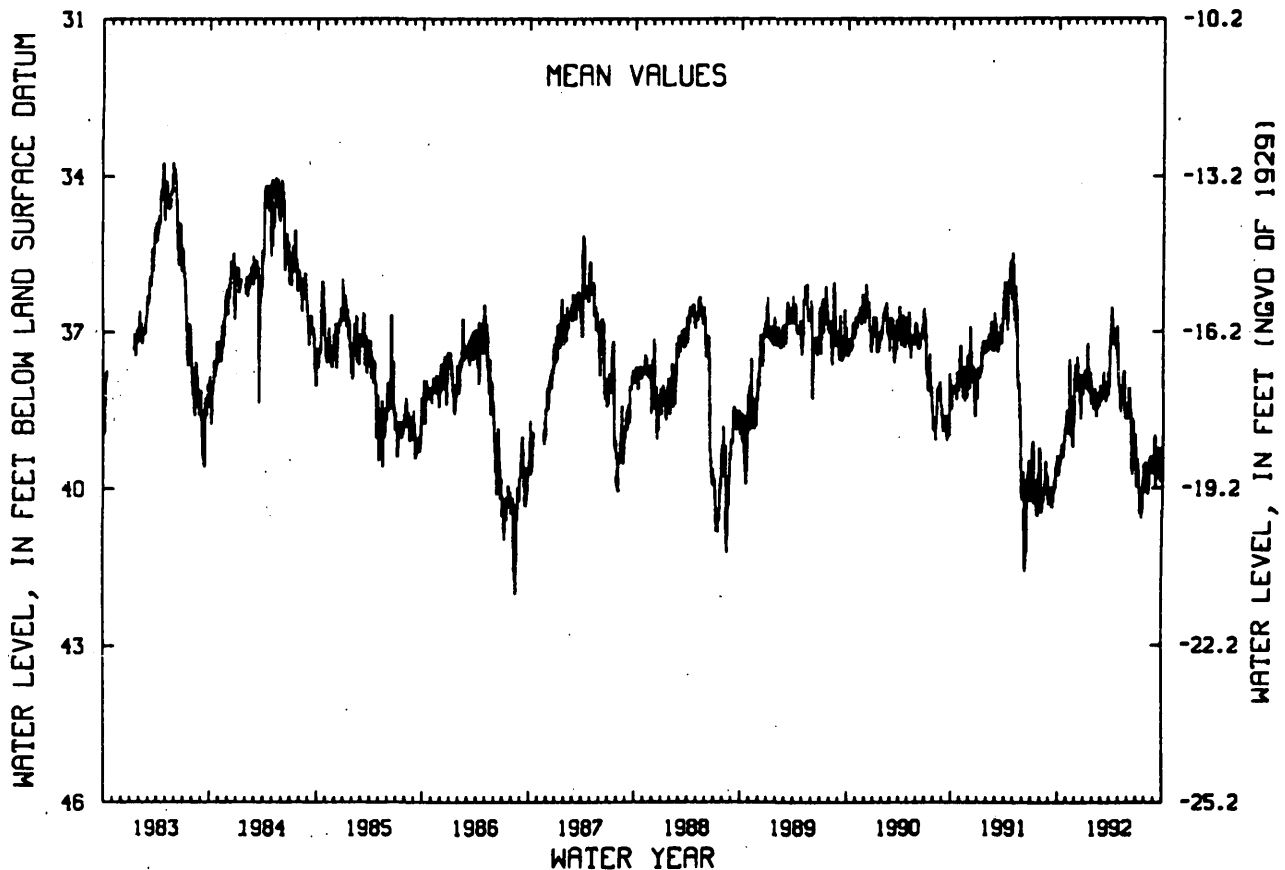
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.76	38.85	38.14	37.78	38.38	38.24	36.88	38.23	38.30	39.46	39.58	39.96
10	39.46	37.97	37.81	37.91	38.64	37.86	36.90	38.06	38.50	39.96	40.05	39.72
15	39.16	38.57	38.32	37.64	38.33	38.24	37.10	38.40	39.52	40.49	39.66	39.30
20	39.41	39.00	38.54	37.95	38.26	38.04	37.05	37.76	39.04	40.25	39.42	39.76
25	38.88	38.59	37.98	38.40	38.19	38.22	37.05	38.69	39.01	39.94	39.63	39.69
EOM	38.58	37.79	38.07	38.13	38.29	37.55	37.87	38.57	39.65	40.04	39.44	39.42
MEAN	39.25	38.52	38.03	38.00	38.32	38.11	37.11	38.30	38.92	39.97	39.67	39.55

WTR YR 1992 MEAN 38.65 HIGH 36.14 APR 8 LOW 40.83 JUL 22

NJ-WRD WELL NO.15-0296



GLOUCESTER COUNTY

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

LOCATION.--Lat 39°49'57", Long 75°05'30", Hydrologic Unit 02040202, at N.J. Dept. of Transportation facility off N.J. Rt. 41, Deptford Township.

Owner: U.S. Geological Survey.

AQUIFER.--Lower aquifer, Potomac-Raritan-Magothy aquifer system 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 datum is 35 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 3.55 ft above land-surface datum.

REMARKS.--Water level 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 New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 96.22 ft below land surface datum, Mar. 2, 1991; lowest 115.36 ft below land surface datum, July 19, 1988.

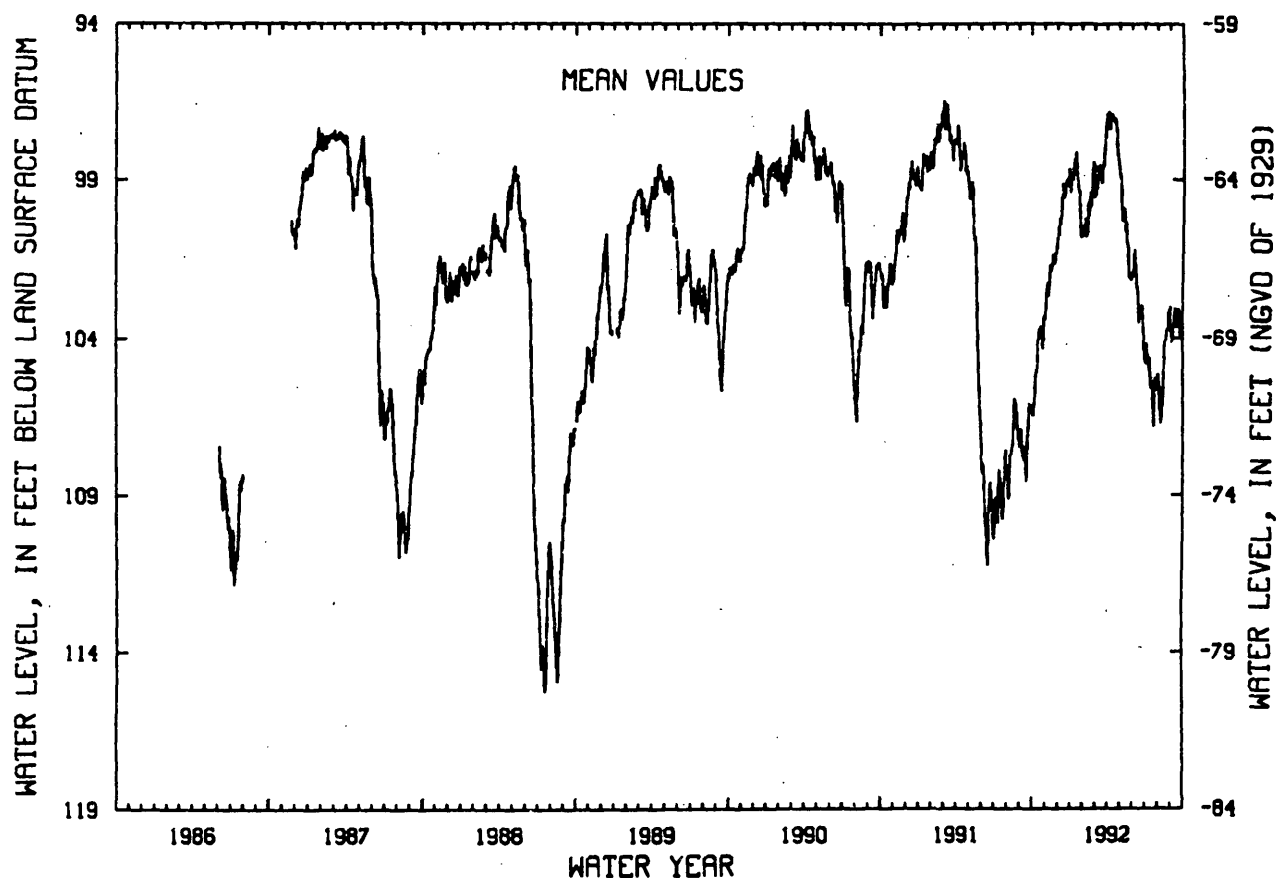
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	106.49	103.11	---	98.90	100.52	99.07	96.97	99.85	101.66	104.37	105.84	104.15
10	105.62	102.41	100.34	98.34	100.85	98.89	96.95	100.20	102.02	104.80	106.43	103.57
15	105.01	101.94	99.15	98.43	99.98	98.80	97.08	100.65	102.70	105.44	105.46	103.49
20	103.94	101.81	99.42	99.24	99.85	98.56	97.16	101.06	103.09	105.87	104.09	103.15
25	103.76	101.73	99.05	100.10	98.41	97.92	98.25	102.18	103.03	105.59	103.75	103.79
EOM	103.67	101.21	99.28	100.81	98.77	96.89	98.72	102.09	104.24	105.65	103.08	104.06
MEAN	104.88	102.18	99.65	99.27	99.84	98.50	97.42	100.74	102.72	105.24	104.87	103.57

WTR YR 1992 MEAN 101.59 HIGH 96.65 APR 4 LOW 107.01 JUL 22

NJ-WRD WELL NO.15-0671



GLOUCESTER COUNTY

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

LOCATION.--Lat 39°52'35", Long 75°09'50", Hydrologic Unit 02040202, at the Coastal Eagle Point Oil Company, West Deptford Township.

Owner: Coastal Eagle Point Oil Company.

AQUIFER.--Lower aquifer, Potomac-Raritan-Magothy aquifer system 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.

DATUM.--Land-surface datum is 20.96 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of casing, 3.00 ft above land-surface datum.

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

PERIOD OF RECORD.--Nov. 1949 to current year. Periodic manual measurements, Oct. 1976 to Mar. 1981.

Records for 1975 to 1981 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 37.70 ft below land-surface datum, Nov. 25, 1950; lowest, 87.30 ft below land-surface datum, June 28, 1963.

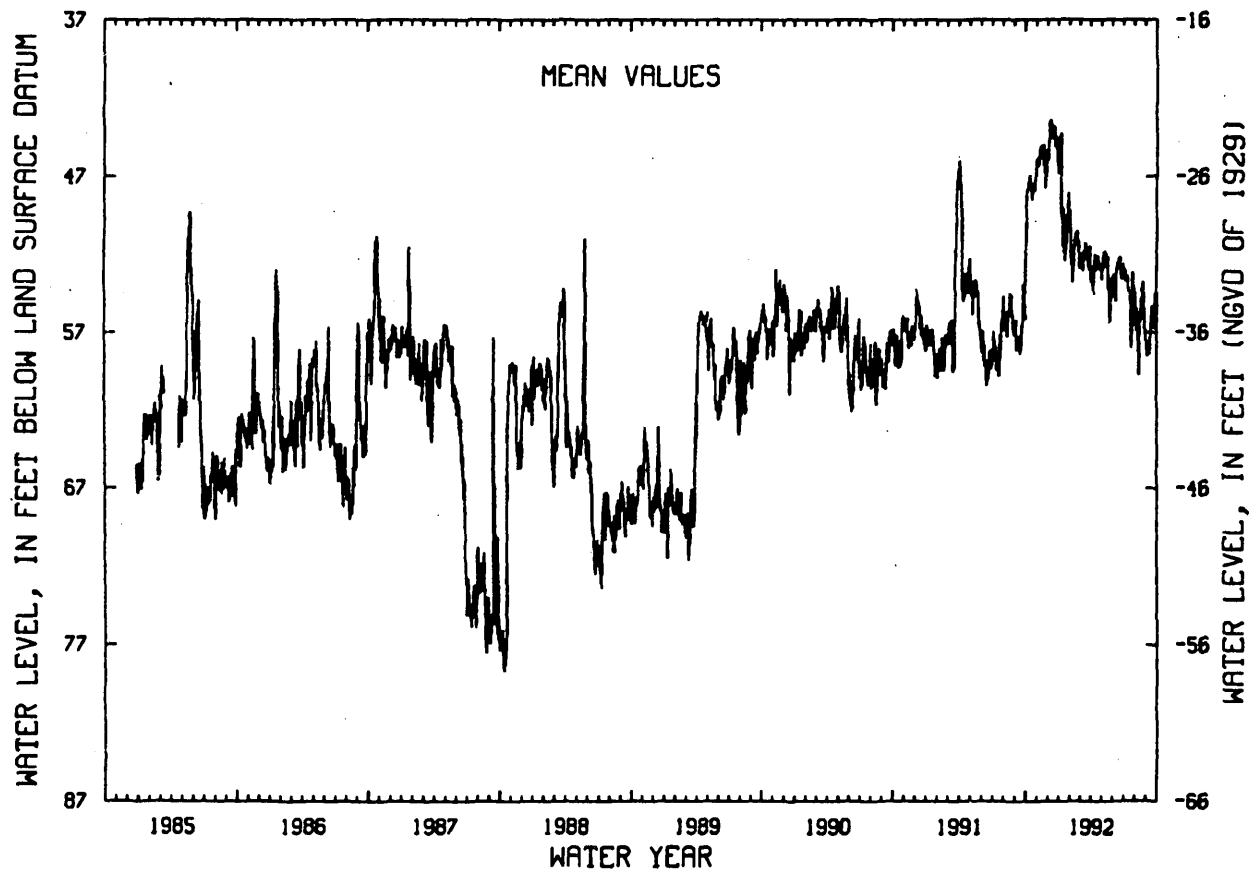
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.50	46.05	44.51	44.58	52.65	51.97	52.95	52.98	53.43	53.02	55.46	58.53
10	47.78	45.22	43.40	49.32	53.78	51.97	54.53	52.50	54.99	53.63	57.01	58.20
15	47.18	45.50	44.61	51.63	51.15	52.01	52.94	52.47	52.52	54.06	56.49	56.64
20	48.50	45.01	43.81	52.15	50.90	52.02	52.23	52.17	52.20	55.50	56.17	56.43
25	47.60	47.73	44.50	49.50	51.09	52.74	52.53	56.38	53.06	57.28	53.73	54.69
EOY	45.91	45.27	46.43	49.12	52.86	51.47	52.62	54.30	52.57	54.06	57.24	54.32
MEAN	48.14	45.93	44.58	49.11	51.57	52.23	52.85	53.35	53.26	54.48	56.07	56.82

WTR YR 1992 MEAN 51.52 HIGH 42.37 DEC 7 LOW 61.11 AUG 13

NJ-WRD WELL NO.15-0323



HUNTERDON COUNTY

402141074535801. Local I.D., Hunter Rd TB 3 Obs. NJ-WRD Well Number, 19-0249.

LOCATION.--Lat 40°21'41", long 74°53'58", Hydrologic Unit 02040105, At the intersection of Hunter Rd. and Rt. 518, West Amwell Township.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS.--Drilled observation well, diameter 3 in., depth 63.5 ft, open hole 11.5 to 63.5 ft.

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

DATUM.--Land-surface datum is 430 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 2.85 ft above land-surface datum.

PERIOD OF RECORD.--Nov. 1989 to Feb. 1992 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.27 ft below land-surface datum, Mar. 28, 1991; lowest, 15.18 ft below land-surface datum, Oct. 8-9, 1990.

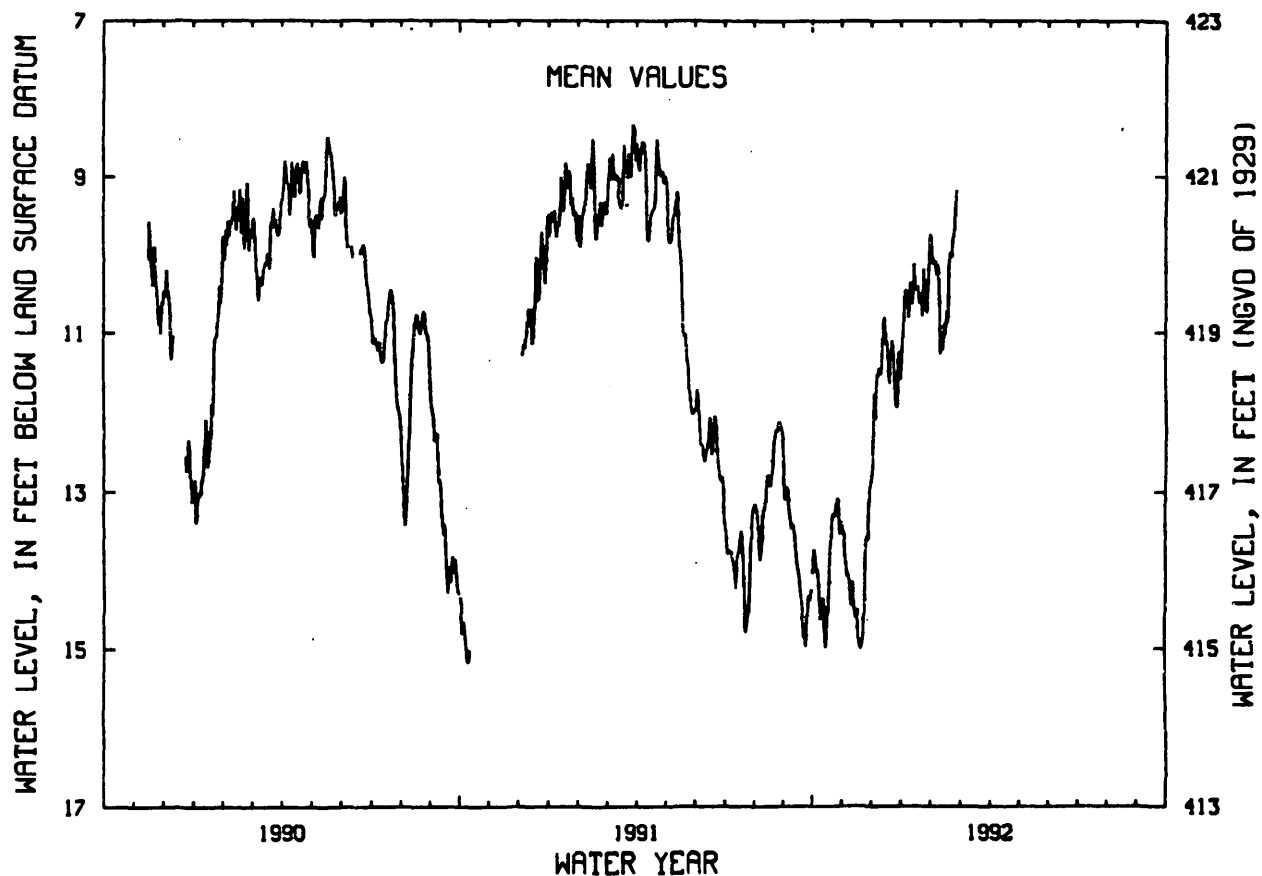
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.02	14.08	12.07	10.46	10.08	---	---	---	---	---	---	---
10	14.56	14.33	11.50	10.36	11.27	---	---	---	---	---	---	---
15	14.86	14.60	10.91	10.42	11.02	---	---	---	---	---	---	---
20	13.62	14.97	11.62	10.52	9.98	---	---	---	---	---	---	---
25	13.24	13.58	11.55	10.55	9.66	---	---	---	---	---	---	---
EOM	13.39	12.92	11.57	9.74	---	---	---	---	---	---	---	---
MEAN	13.92	14.15	11.53	10.53	10.34	---	---	---	---	---	---	---

WTR YR 1992 HIGH 9.07 FEB 26 LOW 15.01 OCT 14, NOV 19-20

NJ-WRD WELL NO.19-0249



HUNTERDON COUNTY

402146074535102. Local I.D., West Amwell Fire TB 2 Obs. NJ-WRD Well Number, 19-0250.

LOCATION.--Lat 40°21'46", long 74°53'51", Hydrologic Unit 02040105, At the West Amwell Fire House, Rt. 518 West Amwell Township.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS.--Drilled observation well, diameter 3 in., depth 428 ft, open hole 12 to 428 ft.

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

DATUM.--Land-surface datum is 445 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 3.20 ft above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--June 1989 to Feb. 1992 (discontinued). Records for 1989 are unpublished and are available in files of the New Jersey District Office.

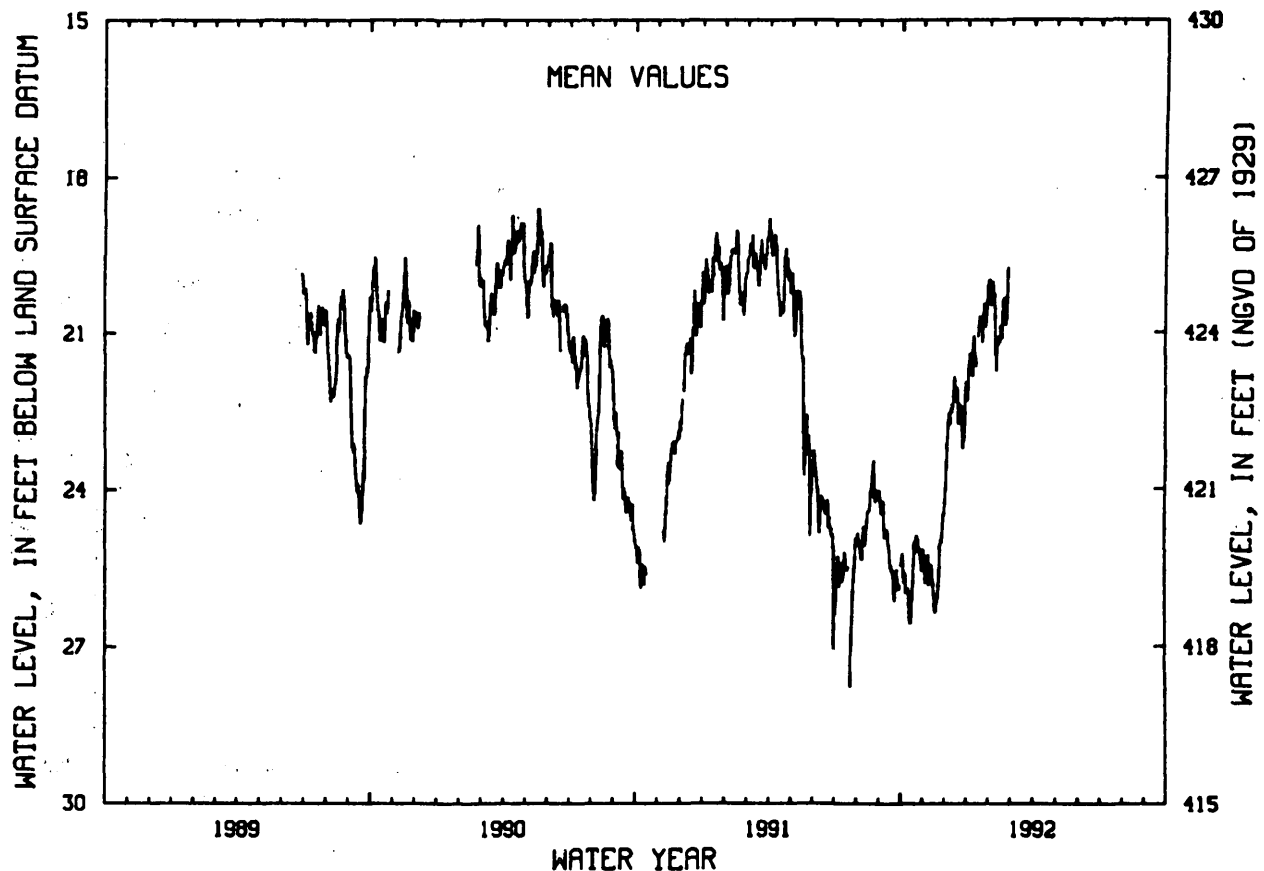
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 18.30 ft below land-surface datum, May 18, 1990; lowest, 28.47 ft below land-surface datum, July 23, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.78	25.67	22.98	21.40	20.01	...	...	...	...	...	...	...
10	25.96	25.73	22.37	21.07	21.74	...	...	...	...	...	...	...
15	26.56	25.81	22.13	21.00	21.20	...	...	...	...	...	...	...
20	25.01	26.01	22.76	20.80	20.33	...	...	...	...	...	...	...
25	24.96	25.08	22.83	20.86	20.32	...	...	...	...	...	...	...
EOM	25.34	24.52	22.27	19.79	...	...	...	...	...	...	...	...
MEAN	25.59	25.52	22.64	21.12	20.69	...	...	...	...	...	...	...
WTR YR 1992 HIGH 19.43 FEB 26 LOW 27.22 OCT 14												

NJ-WRD WELL NO.19-0250



HUNTERDON COUNTY

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

LOCATION.--Lat 40°21'51", long 74°52'53", Hydrologic Unit 02040105, Along Rt. 518, 1100 ft east of intersection with Corsalo Rd., West Amwell Township.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS.--Drilled observation well, diameter 3 in., depth 299 ft, open hole 21.5 to 299 ft.

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

DATUM.--Land-surface datum is 405 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 2.60 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.20 ft below land-surface datum, Mar. 28, 1991; lowest, 7.81 ft below land-surface datum, Oct. 14, 1991.

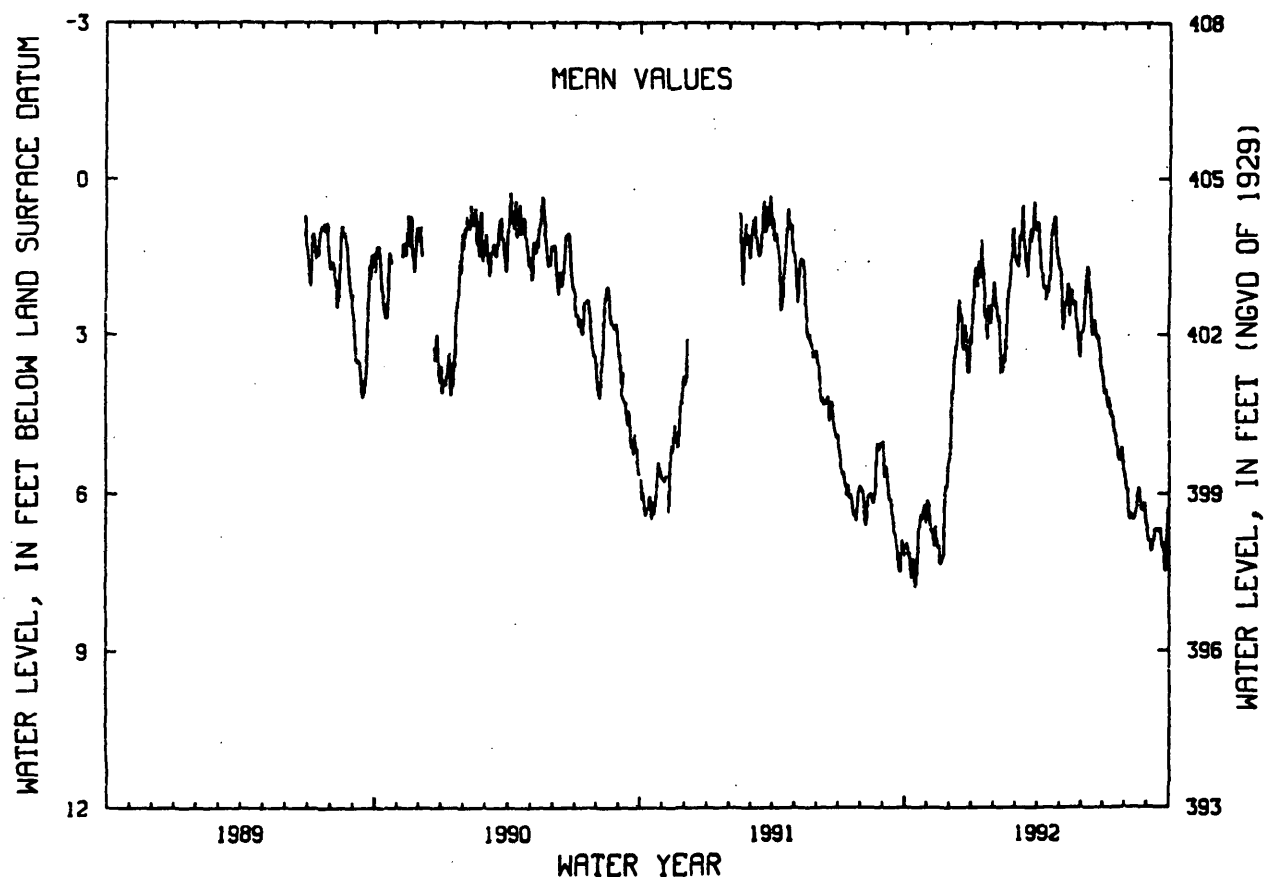
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.16	6.71	4.18	1.73	2.54	1.62	1.43	2.38	2.83	4.01	6.14	7.05
10	7.47	6.80	3.29	1.60	3.71	.94	2.10	2.37	1.75	4.23	6.42	6.87
15	7.70	7.05	2.48	1.68	3.51	1.38	2.13	2.49	2.50	4.51	6.40	6.71
20	6.67	7.26	3.29	2.59	2.13	1.45	1.30	2.43	2.71	5.03	5.94	6.97
25	6.39	5.86	3.37	2.76	1.46	1.18	.73	2.68	3.02	5.33	6.27	7.47
EOM	6.13	5.33	3.19	2.00	1.10	.85	1.55	3.21	3.66	5.59	6.58	6.27
MEAN	6.94	6.61	3.35	2.22	2.44	1.22	1.51	2.48	2.73	4.70	6.25	6.86

WTR YR 1992 MEAN 3.94 HIGH .25 MAR 27 LOW 7.81 OCT 14

NJ-WRD WELL NO.19-0251



HUNTERDON COUNTY

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

LOCATION.--Lat 40°26'44", long 74°56'36", Hydrologic Unit 02040105, near U.S. Post Office, Sergeantsville, Delaware Township

Owner: Phillip Fleming.

AQUIFER.--Stockton Formation of Triassic age.

WELL CHARACTERISTICS.--Dug water-table observation well, diameter 36 in., depth 21 ft, lined with stone.

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

DATUM.--Land-surface datum is 342.08 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 1.50 ft above land-surface datum.

PERIOD OF RECORD.--June 1965 to July 1970, May 1977 to current year. Periodic manual measurements, Sept. 1970 to Sept. 1976. Records for 1965 to 1976 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.37 ft below land-surface datum, Apr. 18, 1983; lowest, 17.04 ft below land-surface datum, Jan. 26-28, 1981.

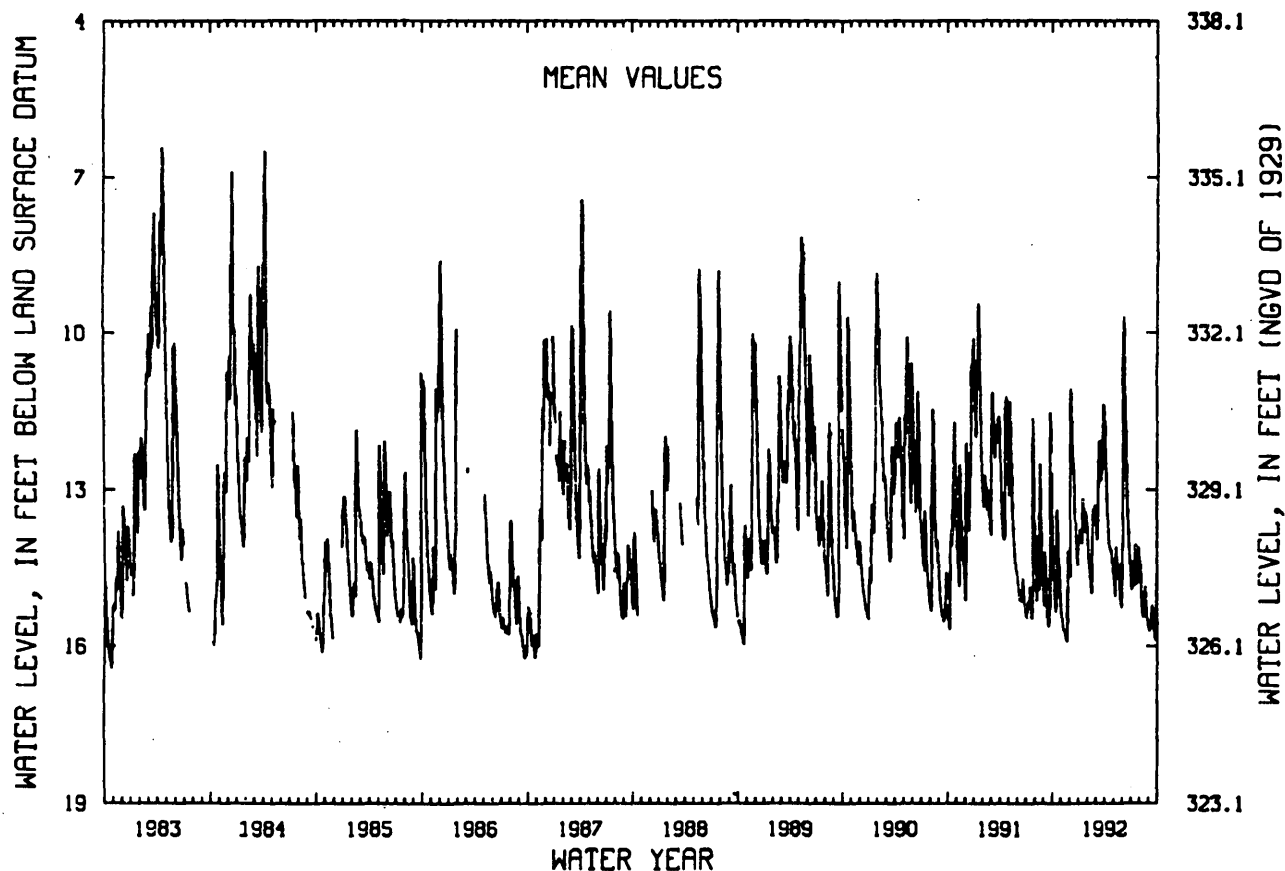
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.98	15.45	11.12	13.91	14.32	13.77	12.22	14.85	13.99	14.88	14.67	15.67
10	14.94	15.68	12.04	13.91	14.76	13.53	13.20	14.57	10.38	14.51	15.28	15.51
15	15.33	15.73	12.57	13.87	15.00	12.09	13.87	14.35	11.94	14.85	15.45	15.24
20	13.39	15.87	13.39	13.38	13.48	12.82	14.10	14.50	13.17	14.21	14.86	15.65
25	14.23	14.46	14.01	13.63	13.64	12.61	14.17	14.97	13.95	14.65	15.30	15.89
EOB	15.09	14.47	14.16	13.72	13.30	11.47	14.58	15.26	14.56	14.27	15.64	14.58
MEAN	14.38	15.35	13.09	13.71	14.13	12.77	13.49	14.73	12.75	14.55	15.14	15.51

WTR YR 1992 MEAN 14.13 HIGH 9.68 JUN 7 LOW 15.92 NOV 22

NJ-WRD WELL NO.19-0002



HUNTERDON COUNTY

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

LOCATION.--Lat 40°34'38", Long 74°51'39", Hydrologic Unit 02030105, at the Hunterdon County Arboretum, Rt. 31, Clinton Township.

Owner: State of New Jersey - NJGS.

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.

DATUM.--Land-surface datum is 170.4 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 1.45 ft above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--Mar. 1991 to current year. Periodic manual measurements, Mar. 1991 to May 1992.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.24 ft below land-surface datum, June 5-6, 1992; lowest, 11.23 ft below land-surface datum, Aug. 27, 1992.

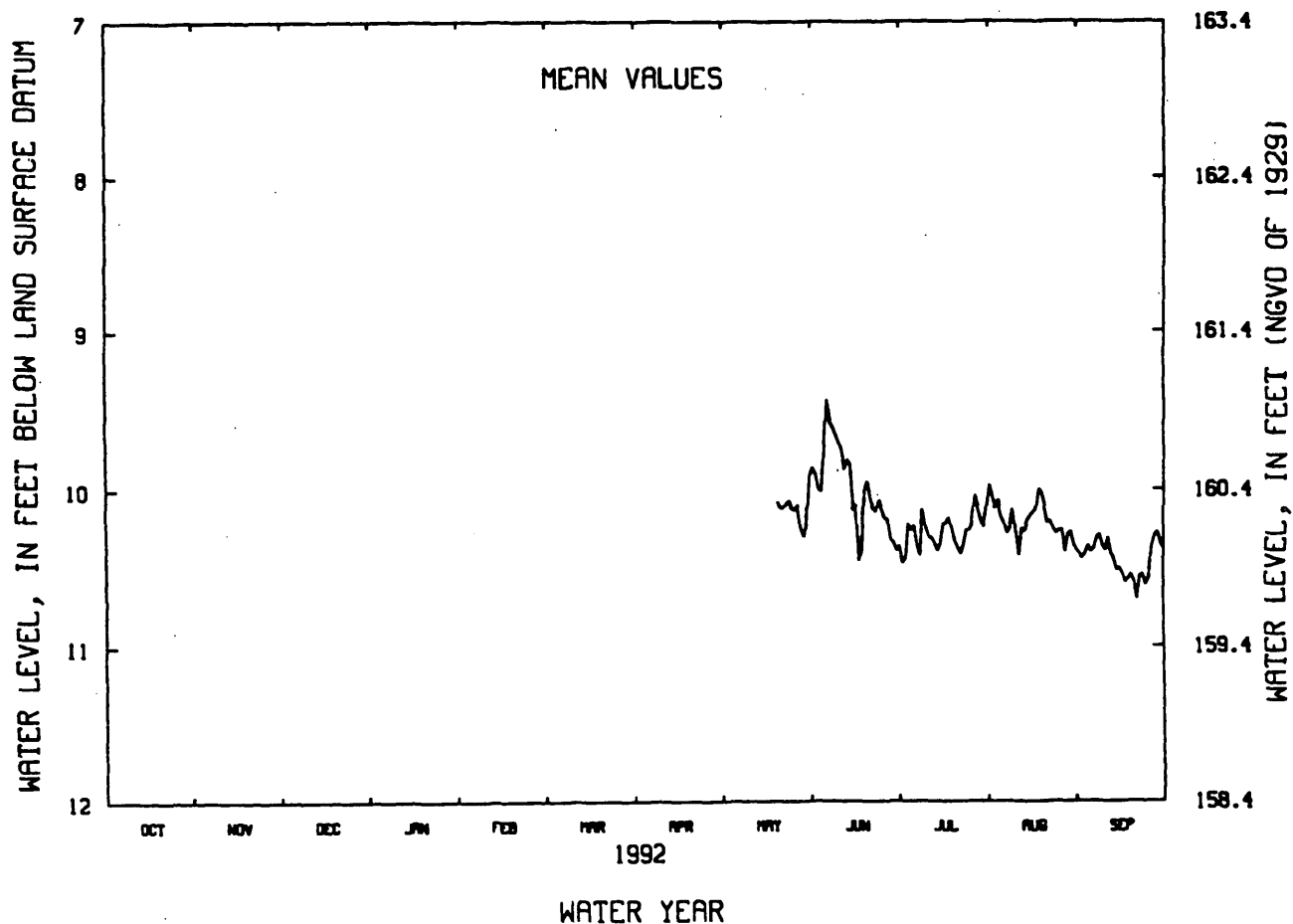
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	9.75	10.26	10.17	10.40
10	---	---	---	---	---	---	---	---	9.70	10.24	10.27	10.39
15	---	---	---	---	---	---	---	---	10.13	10.35	10.17	10.50
20	---	---	---	---	---	---	---	10.08	9.95	10.33	10.11	10.59
25	---	---	---	---	---	---	---	10.12	10.12	10.26	10.26	10.57
EOM	---	---	---	---	---	---	---	9.92	10.39	10.12	10.39	10.38
MEAN	---	---	---	---	---	---	---	---	9.99	10.28	10.21	10.45

WTR YR 1992 HIGH 9.24 JUN 5-6 LOW 11.23 AUG 27

NJ-WRD WELL NO.19-0276



HUNTERDON COUNTY

403517074452501. Local I.D., Readington School 11 Obs. NJ-WRD Well Number, 19-0270.

LOCATION.--Lat 40°35'17", long 74°45'25", Hydrologic Unit 02030105, behind Readington School, on Readington Rd. (County Rd. 620), Readington Township.

Owner: State of New Jersey.

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

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 101 ft, open hole 50 to 101 ft.

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

DATUM.--Land-surface datum is 224.99 ft above National Geodetic Vertical Datum of 1929.

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

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.79 ft below land-surface datum, May 18, 1990; lowest, 25.37 ft below land-surface datum, Nov. 21-22, 1991.

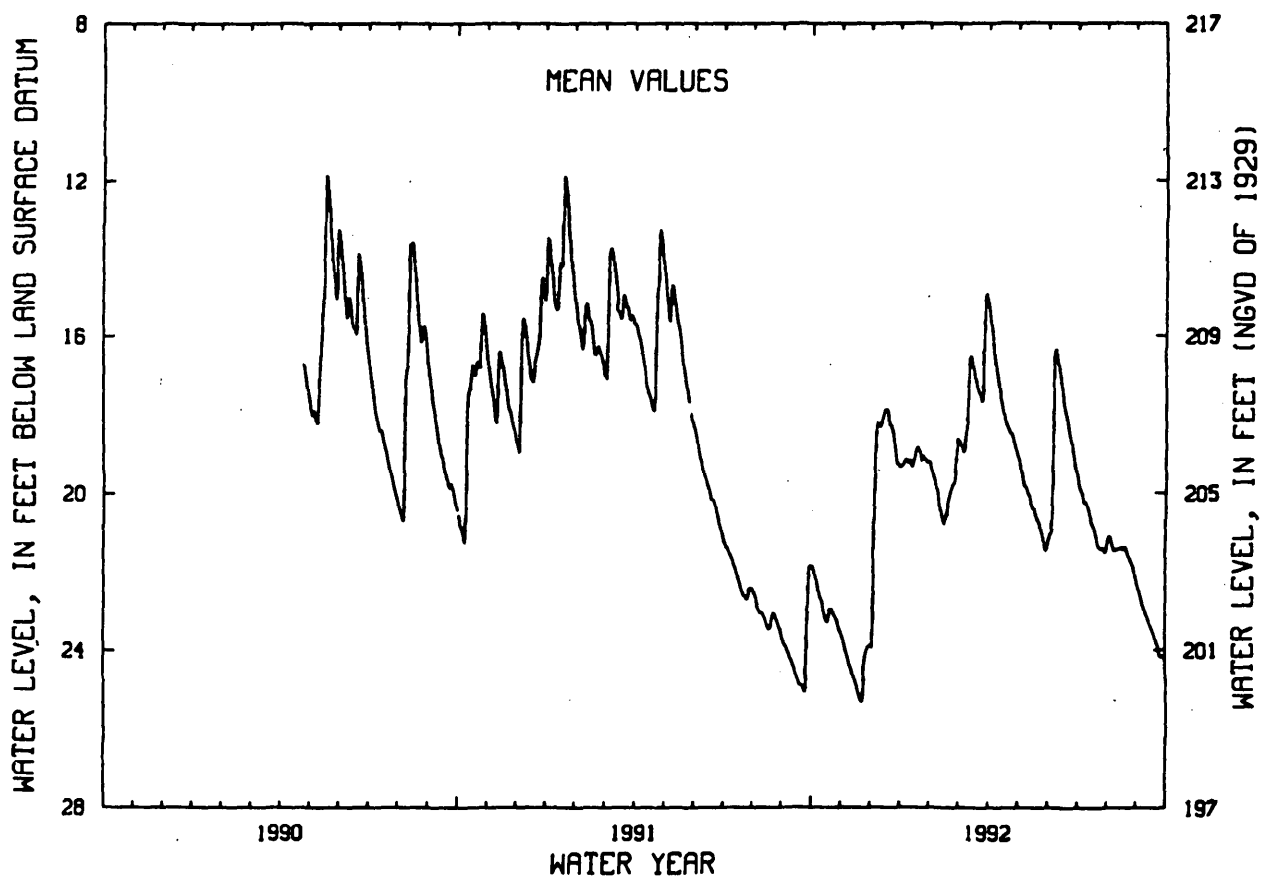
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.19	24.04	18.92	19.17	19.73	18.86	16.06	19.50	20.97	19.97	21.19	22.69
10	22.71	24.43	18.32	19.16	20.41	18.20	17.03	19.89	16.46	20.25	21.46	23.04
15	23.20	24.85	17.88	19.11	20.79	16.62	17.83	20.31	17.36	20.64	21.39	23.39
20	22.96	25.26	18.28	18.94	20.06	17.30	18.30	20.62	18.10	21.05	21.39	23.73
25	23.16	24.18	18.81	19.14	19.73	17.68	18.51	20.95	18.78	21.41	21.70	24.18
EOM	23.57	23.89	19.36	19.23	18.64	15.10	18.98	21.45	19.48	21.52	22.22	24.26
MEAN	22.86	24.44	19.03	19.15	19.93	17.33	17.53	20.32	18.45	20.71	21.51	23.40

WTR YR 1992 MEAN 20.39 HIGH 14.89 MAR 29 LOW 25.37 NOV 21-22

NJ-WRD WELL NO.19-0270



MERCER COUNTY

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

LOCATION.--Lat 40°17'53", long 74°48'35", Hydrologic Unit 02040105, Scotch Rd., about 1.1 mi. north of I-95, interchange 3, Hopewell Township.

Owner: Bristol-Myers Squibb Company.

AQUIFER.--Lockatong Formation of Triassic 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 datum is 215 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 1.65 ft above land-surface datum. Recorder shelf before

July 1, 1992 was 5.90 ft above land-surface datum.

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

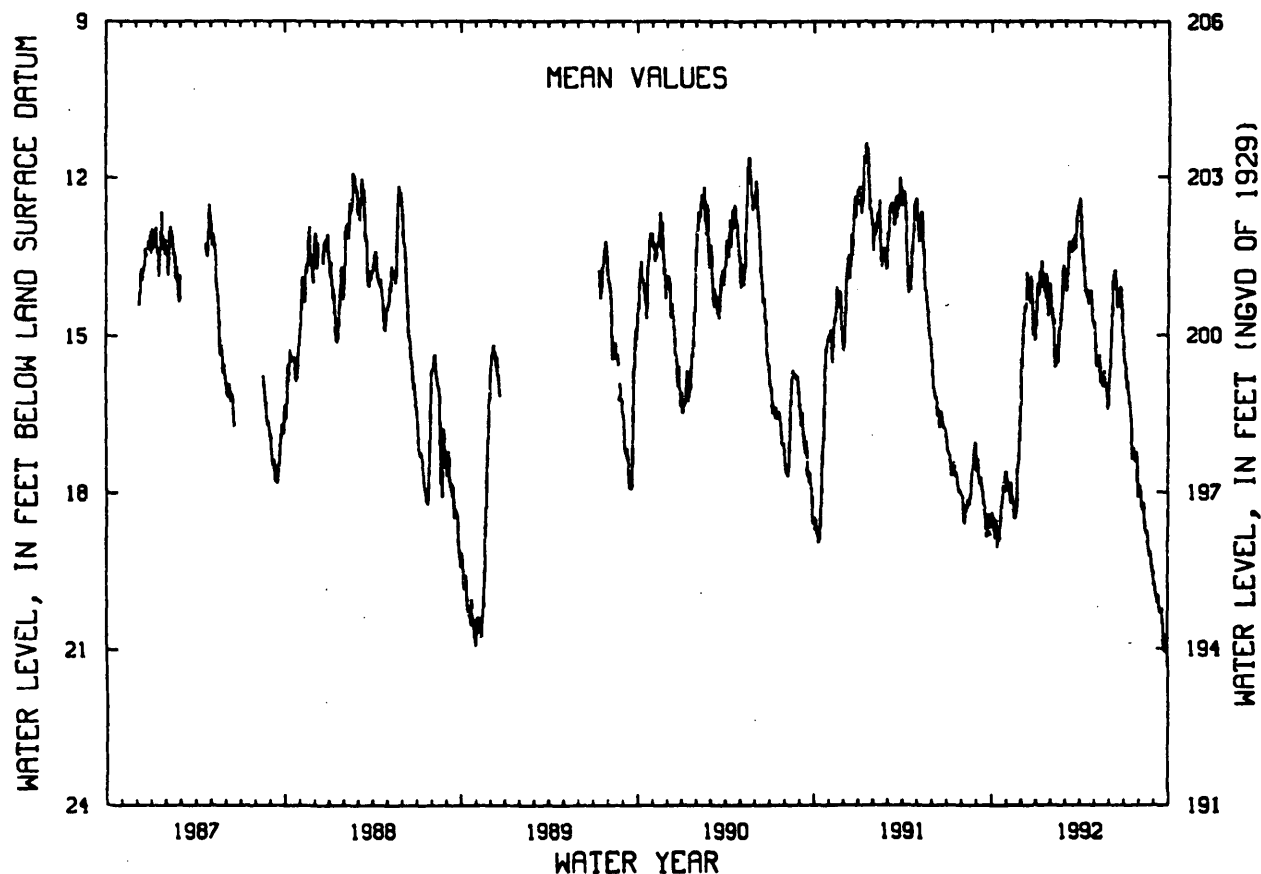
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.22 ft below land-surface datum, Jan. 17, 1991; lowest, 21.62 ft below land-surface datum, Sept. 30, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.52	17.95	15.61	14.09	14.61	14.14	12.87	15.17	15.50	15.61	18.06	19.93
10	18.74	18.00	14.53	13.84	15.62	13.69	13.75	15.48	14.01	16.08	18.20	19.95
15	18.95	18.22	13.98	13.93	15.41	13.27	14.23	15.78	13.92	16.37	18.72	20.29
20	18.64	18.42	14.43	14.04	14.89	13.34	14.40	15.98	14.17	17.16	18.85	20.48
25	18.07	17.48	14.54	14.38	14.35	13.38	14.20	15.88	14.22	17.40	19.14	20.95
EOM	17.60	16.55	15.10	14.06	13.80	12.49	14.72	16.18	15.03	17.82	19.48	21.40
MEAN	18.45	17.88	14.68	14.18	14.79	13.42	13.87	15.67	14.57	16.62	18.68	20.34
WTR YR 1992	MEAN 16.10 HIGH 12.36 APR 2 LOW 21.62 SEP 30											

NJ-WRD WELL NO.21-0289



MERCER COUNTY

401804074432601. Local I.D., Cranston Farms 15 Obs. NJ-WRD Well Number, 21-0364.

LOCATION.--Lat 40°18'04", long 74°43'26", Hydrologic Unit 02040105, 1200 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 datum is 123.2 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 2.30 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.73 ft below land-surface datum, May 22, 1990; lowest, 32.05 ft below land-surface datum, Sept. 25, 1992.

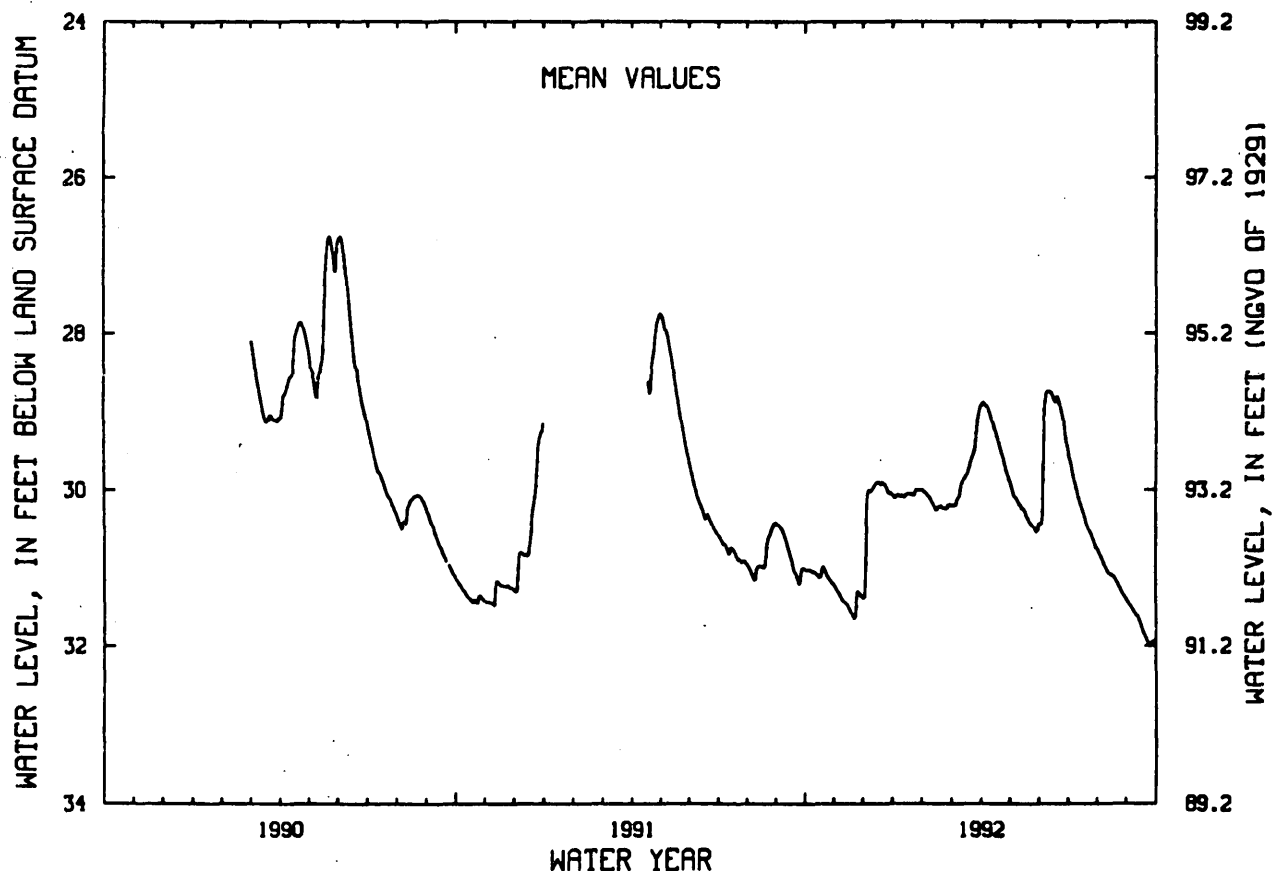
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.03	31.33	30.08	30.06	30.07	30.20	28.90	30.03	30.36	29.70	30.87	31.51
10	31.06	31.44	30.00	30.06	30.17	30.07	29.00	30.14	28.75	29.98	31.00	31.61
15	31.12	31.51	29.90	30.05	30.26	29.85	29.20	30.25	28.78	30.20	31.09	31.74
20	31.00	31.63	29.92	30.05	30.22	29.71	29.40	30.36	28.81	30.39	31.15	31.90
25	31.13	31.30	29.98	29.99	30.24	29.51	29.62	30.46	29.01	30.56	31.28	32.01
EOM	31.23	31.38	30.06	30.00	30.19	28.98	29.83	30.51	29.42	30.75	31.40	32.00
MEAN	31.08	31.43	30.11	30.05	30.17	29.77	29.26	30.25	29.19	30.20	31.10	31.75

WTR YR 1992 MEAN 30.36 HIGH 28.72 JUN 11-13 LOW 32.05 SEP 25

NJ-WRD WELL NO.21-0364



MERCER COUNTY

401834074515501. Local I.D., Washington Crossing Pk 14 Obs. NJ-WRD Well Number, 21-0366.

LOCATION.--Lat 40°18'37", Long 74°51'15", Hydrologic Unit 02040105, off Brick Yard Rd., in Washington Crossing State Park, Hopewell Township.

Owner: State of New Jersey - NJGS.

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.

DATUM.--Land-surface datum is 183.3 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 2.10 ft above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--Apr. 1991 to current year. Periodic manual measurements, Apr. 1991 to Apr. 1992.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.07 ft below land-surface datum, Apr. 17, 1992; lowest, 78.88 ft below land-surface datum, Sept. 20, 1992.

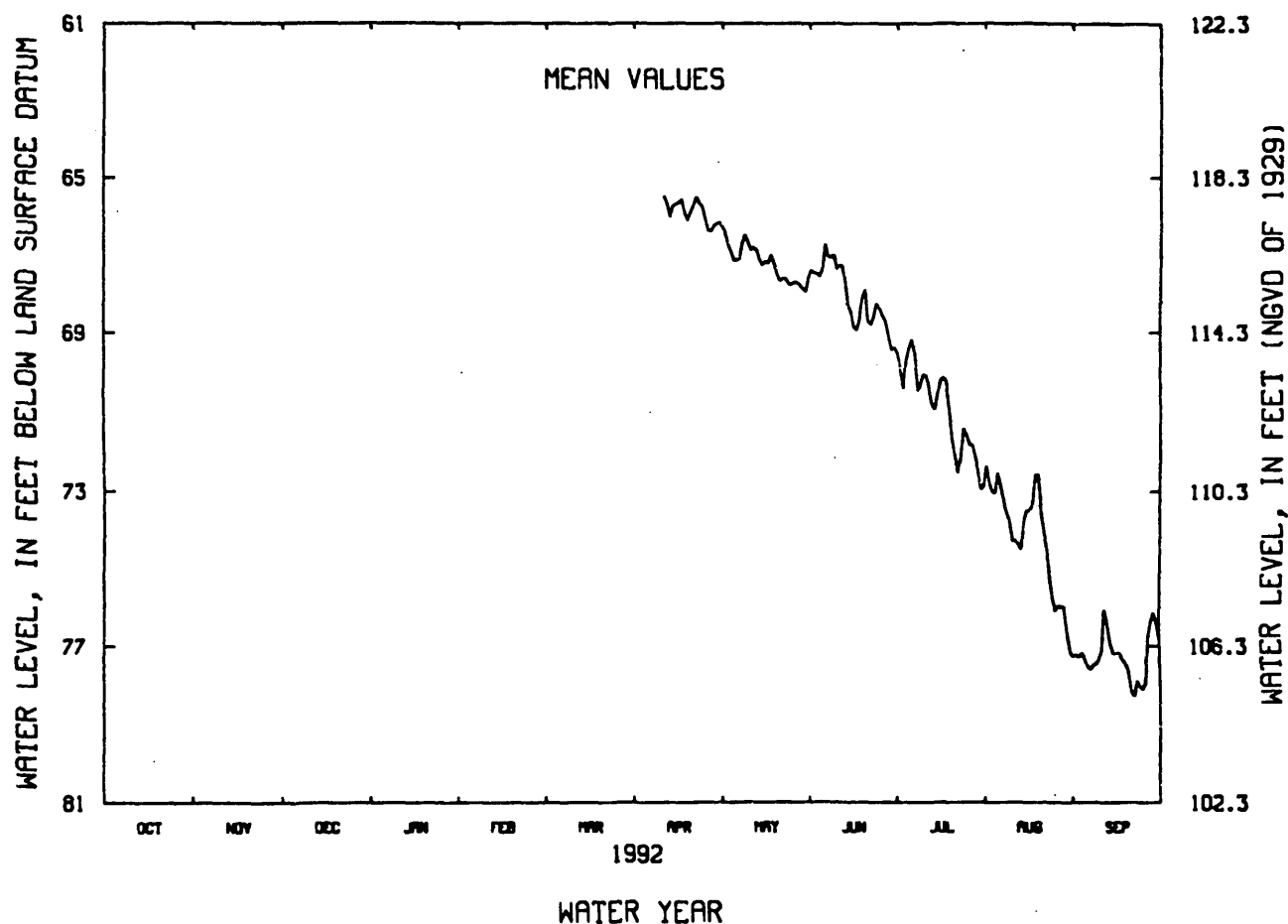
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	67.14	67.38	69.39	72.54	77.53
10	---	---	---	---	---	---	---	66.66	67.36	70.08	74.28	77.09
15	---	---	---	---	---	---	65.69	67.27	68.46	70.52	73.52	77.18
20	---	---	---	---	---	---	65.90	67.47	67.90	71.65	73.61	78.17
25	---	---	---	---	---	---	66.08	67.78	68.34	71.55	76.09	77.95
EOM	---	---	---	---	---	---	66.16	67.61	69.40	72.87	77.26	76.83
MEAN	---	---	---	---	---	---	---	67.22	68.06	70.91	74.26	77.26

WTR YR 1992 HIGH 65.07 APR 17 LOW 78.88 SEP 20

NJ-WRD WELL NO.21-0366



MERCER COUNTY

402032074392501. Local I.D., Princeton 2-Chill Pl Obs. NJ-WRD Well Number, 21-0359.

LOCATION.--Lat 40°20'32", long 74°39'25", Hydrologic Unit 02030105, Princeton University, Main Campus, Princeton Township.

Owner: U.S. Geological Survey.

AQUIFER.--Stockton Formation of Triassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 3 in., depth 439 ft, open hole 28 to 439 ft.

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

DATUM.--Land-surface datum is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--Nov. 1989 to Feb. 1992 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.29 ft below land-surface datum, Jan. 31, 1990; lowest, 27.98 ft below land-surface datum, Feb. 12, 1990.

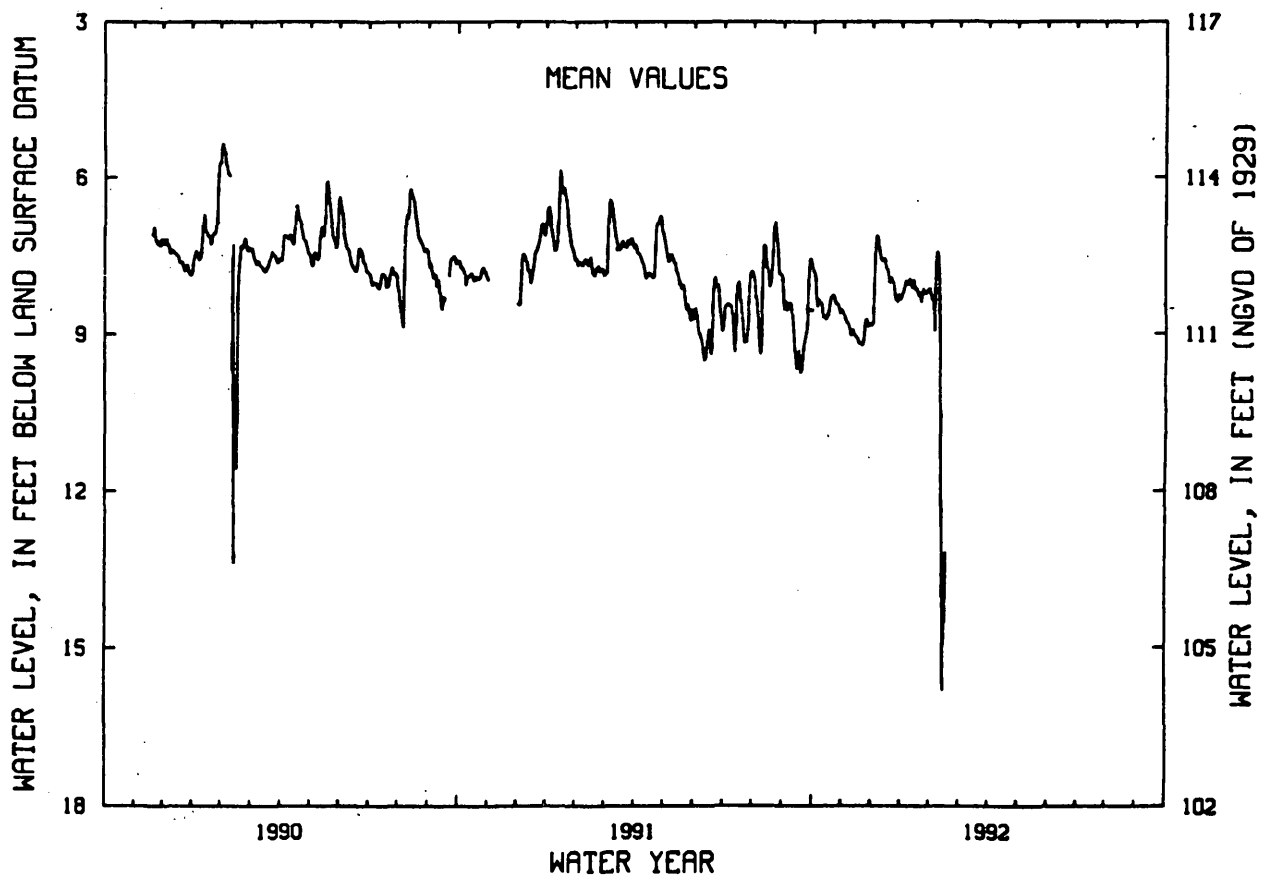
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.47	8.80	7.17	8.04	8.96	---	---	---	---	---	---	---
10	8.46	8.96	7.57	7.96	8.17	---	---	---	---	---	---	---
15	8.65	9.08	7.69	8.17	14.52	---	---	---	---	---	---	---
20	8.31	9.20	8.02	8.21	---	---	---	---	---	---	---	---
25	8.43	8.78	8.26	8.24	---	---	---	---	---	---	---	---
EOY	8.57	8.83	8.35	8.14	---	---	---	---	---	---	---	---
MEAN	8.41	8.94	7.90	8.15	---	---	---	---	---	---	---	---

WTR YR 1992 HIGH 7.00 DEC 6 LOW 22.26 FEB 13

NJ-WRD WELL NO.21-0359



MERCER COUNTY

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

LOCATION.--Lat 40°21'38", long 74°43'58", Hydrologic Unit 02030105, AT&T, Carter Rd., Hopewell Township.

Owner: AT&T.

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

WELL CHARACTERISTICS.--Drilled well, depth 99 ft.

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

DATUM.--Land-surface datum is 231 ft above National Geodetic Vertical Datum of 1929, by altimeter.

Measuring point: Top edge of recorder shelf, 3.00 ft above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

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

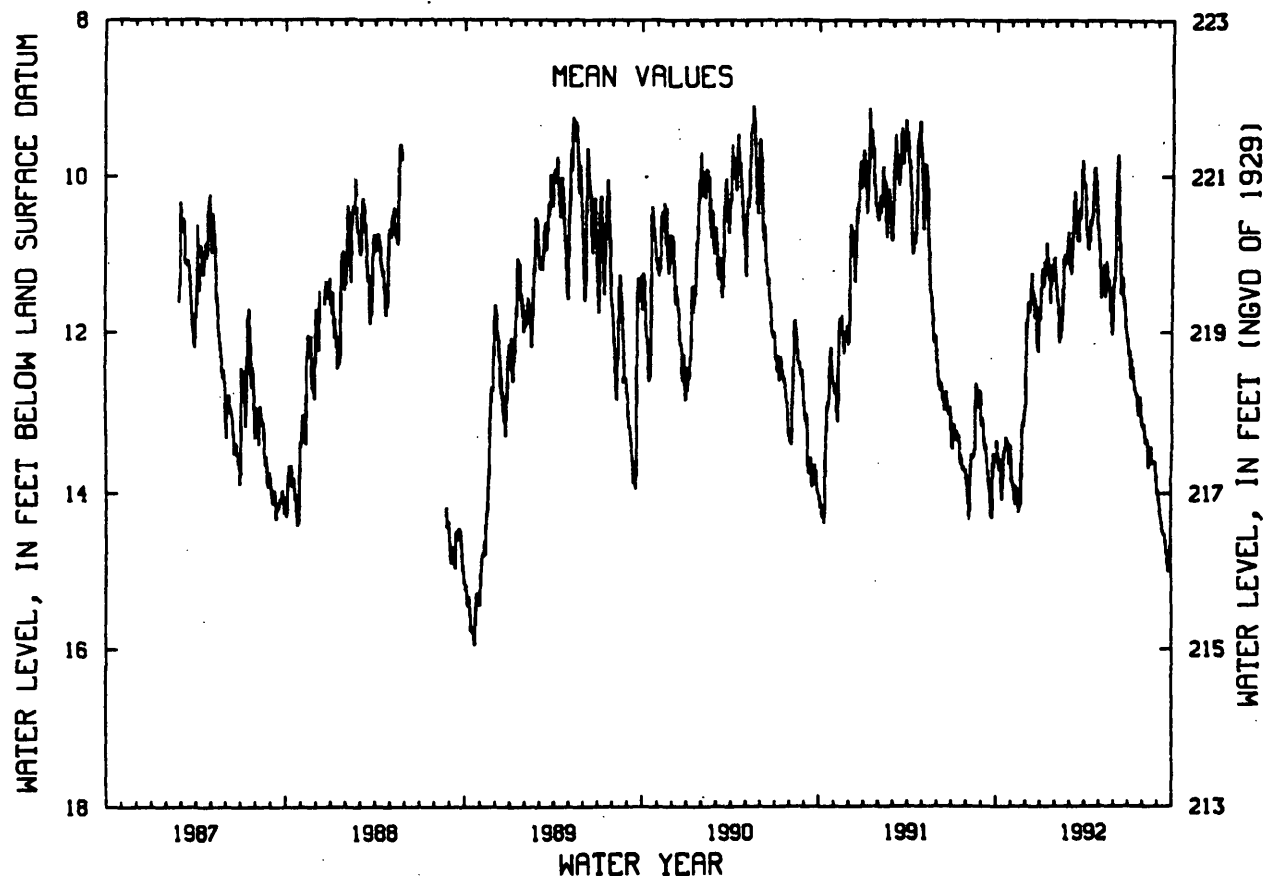
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.90 ft below land-surface datum, May 17, 1990; lowest, 16.07 ft below land-surface datum, Oct. 21, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.60	13.85	11.94	11.22	11.56	11.17	10.53	11.29	11.09	12.24	13.29	14.12
10	13.61	14.00	11.76	11.10	12.13	10.62	10.94	11.37	10.09	12.45	13.34	14.33
15	13.96	13.97	11.46	11.15	11.98	10.54	10.60	11.56	11.07	12.55	13.65	14.52
20	13.48	14.12	11.75	11.22	11.07	10.79	9.96	11.32	11.29	12.76	13.57	14.72
25	13.33	13.11	12.13	11.35	11.06	10.54	10.17	11.73	11.72	12.97	13.60	14.98
EOM	13.39	12.98	11.86	11.05	10.90	10.06	10.64	11.82	12.10	13.14	13.77	14.70
MEAN	13.55	13.76	11.84	11.26	11.42	10.59	10.44	11.42	11.15	12.65	13.49	14.48
WTR YR 1992	MEAN 12.17 HIGH 9.66 MAR 27 LOW 15.10 SEP 24											

NJ-WRD WELL NO.21-0365



MIDDLESEX COUNTY

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

LOCATION...Lat 40°20'15", long 74°27'57", Hydrologic Unit 02030105, Hanover Lane at Rossmoor, Monroe Township.

Owner: Monroe Township Municipal Utilities Authority.

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

WELL CHARACTERISTICS...Drilled artesian observation well, diameter 6 in., depth 138 ft, screened 128 to 138 ft.

INSTRUMENTATION...Water-level extremes recorder, Jan. 1977 to current year. Water-level recorder, Oct. 1961 to

Aug. 1967, Aug. 1968 to Aug. 1975.

DATUM...Land-surface datum is 147.34 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 1.40 ft below land-surface datum.

REMARKS...Water level affected by nearby pumping.

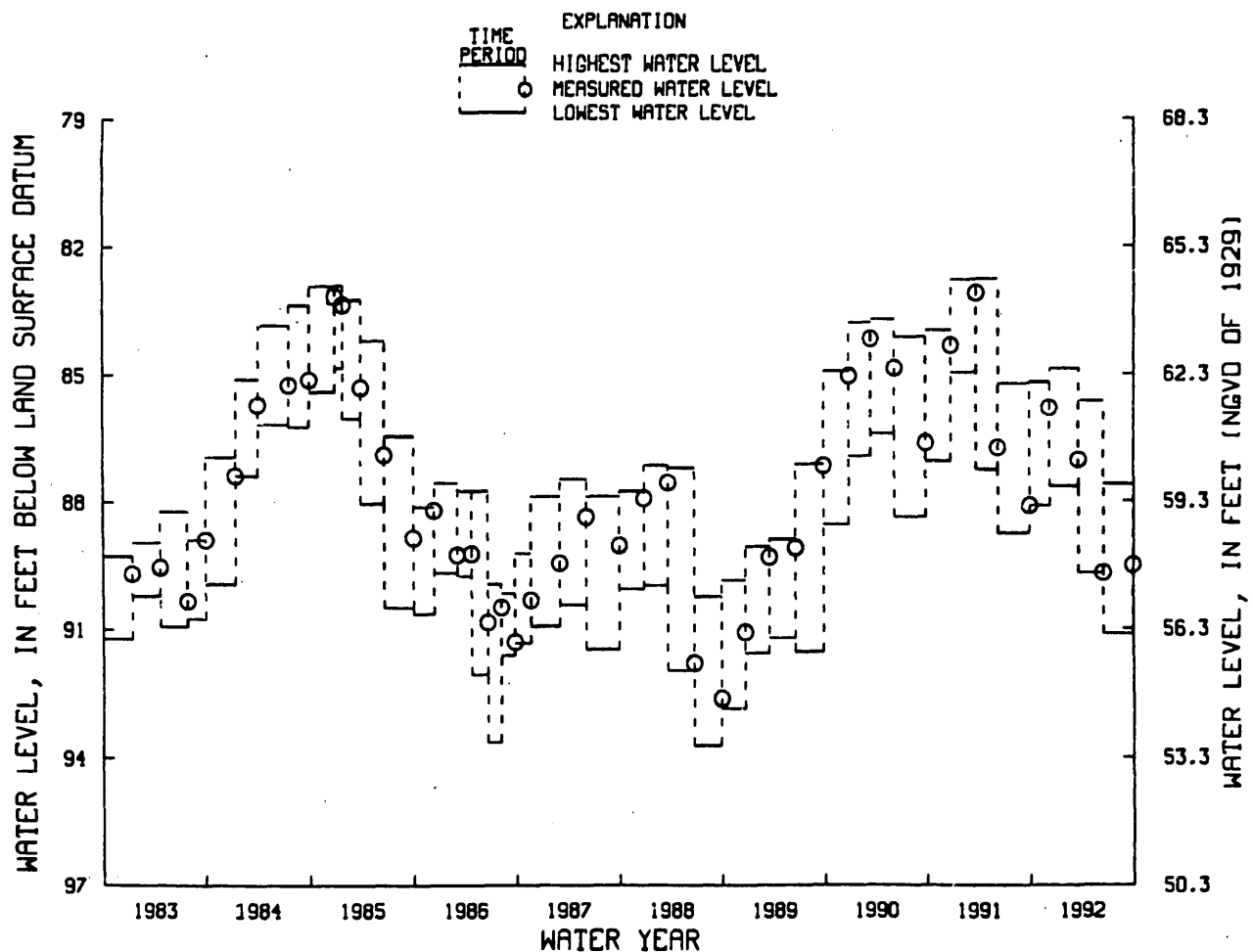
PERIOD OF RECORD...Oct. 1961 to Aug. 1967, Aug. 1968 to Aug. 1975, Jan. 1977 to current year. Records for 1961 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD...Highest water level, 70.32 ft below land-surface datum, May 6, 1962; lowest, 93.72 ft below land-surface datum, between June 22 and Sept. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 30, 1991 TO DEC. 10, 1991	85.20	88.12	DEC. 10, 1991	85.81
DEC. 10, 1991 TO MAR. 23, 1992	84.88	87.66	MAR. 23, 1992	87.04
MAR. 23, 1992 TO JUNE 17, 1992	85.64	89.69	JUNE 17, 1992	89.69
JUNE 17, 1992 TO SEPT. 28, 1992	87.60	91.12	SEPT. 28, 1992	89.51

NJ-WRD WELL NO. 23-0228



MIDDLESEX COUNTY

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

LOCATION.--Lat 40°20'15", long 74°27'57" Hydrologic Unit 02030105, Hanover Lane at Rossmoor, Monroe Township.

Owner: Monroe Township Municipal Utilities Authority.

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

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 330 ft screened 319 to 330 ft.

INSTRUMENTATION.--Water-level extremes recorder, Jan. 1977 to current year. Water-level recorder, Apr. 1965 to Aug. 1967, Aug. 1968 to Aug. 1975.

DATUM.--Land-surface datum is 147.34 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 1.50 ft below land-surface datum.

REMARKS.--Water level affected by nearby pumping.

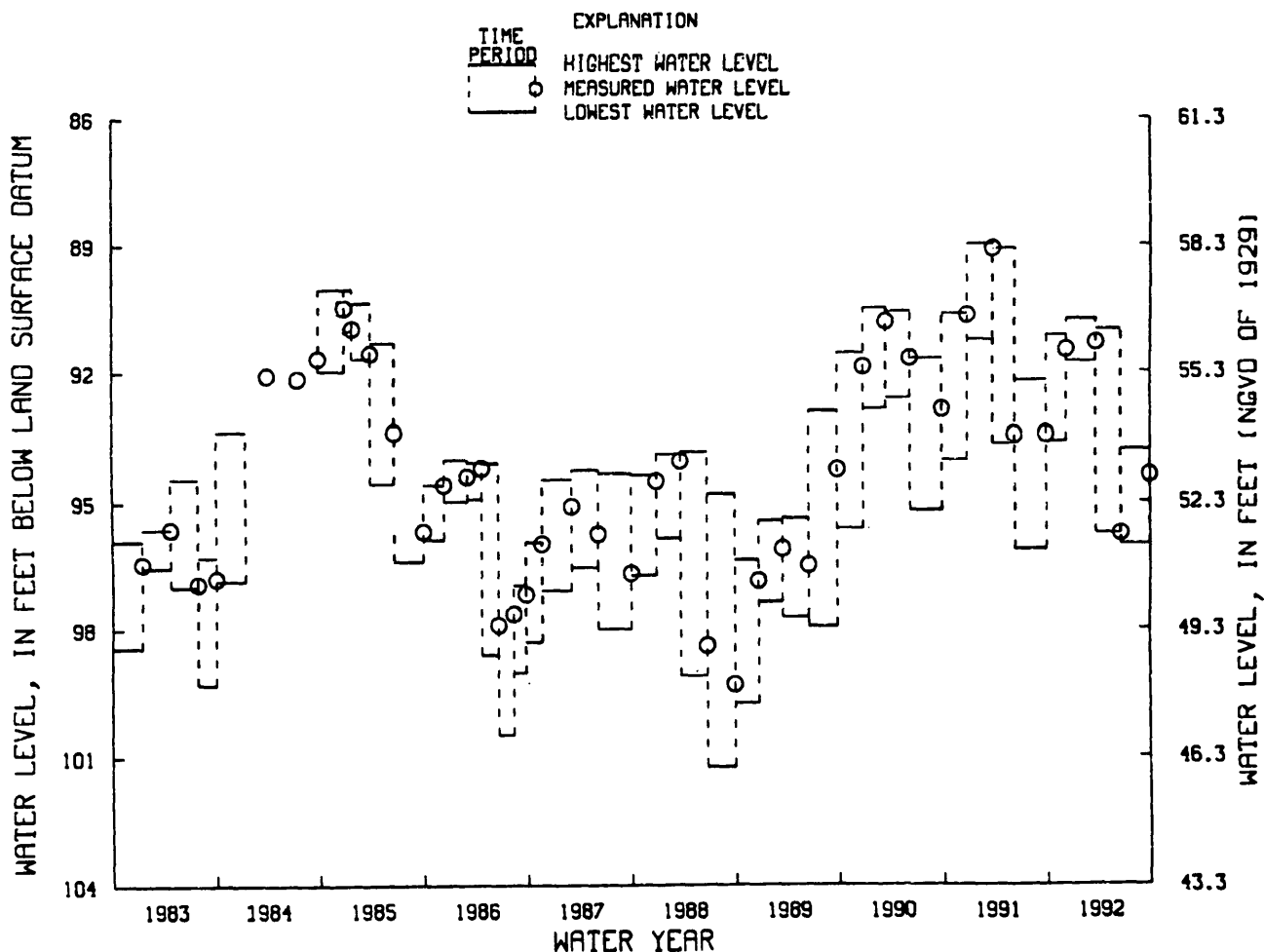
PERIOD OF RECORD.--Apr. 1965 to Aug. 1967, Aug. 1968 to Aug. 1975, Jan. 1977 to current year. Records for 1965 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 80.09 ft below land-surface datum, July 16, 1973; lowest, 101.23 ft below land-surface datum, between June 22 and Sept. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 30, 1991 TO DEC. 10, 1991	91.14	93.57	DEC. 10, 1991	91.48
DEC. 10, 1991 TO MAR. 23, 1992	90.76	91.76	MAR. 23, 1992	91.31
MAR. 23, 1992 TO JUNE 17, 1992	91.00	95.75	JUNE 17, 1992	95.75
JUNE 17, 1992 TO SEPT. 28, 1992	93.76	96.00	SEPT. 28, 1992	94.37

NJ-WRD WELL NO. 23-0229



MIDDLESEX COUNTY

402058074355901. Local I.D., Test Well 5 Obs. NJ-WRD Well Number, 23-0796.

LOCATION.--Lat 40°20'58", long 74°35'59", Hydrologic Unit 02030105, at the Plasma Physics Laboratory, James Forrester Campus, Princeton University, Plainsboro Township.
 Owner: Princeton University.

AQUIFER.--Stockton Formation of Triassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 60 ft, open hole 20 to 60 ft.

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

DATUM.--Land-surface datum is 96.7 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 4.10 ft above land-surface datum.

REMARKS.--Water level affected by large drainage pipelines at the perimeter of the Tokamak Fusion Test Reactor building. Water level affected by aquifer test, Mar. 31-Apr. 4, 1986.

PERIOD OF RECORD.--Mar. 1986 to Feb. 1992 (discontinued). Records for 1986 to 1989 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 18.17 ft below land-surface datum, May 17, 1989; lowest, 26.59 ft below land-surface datum, Apr. 4, 1986 (see remarks).

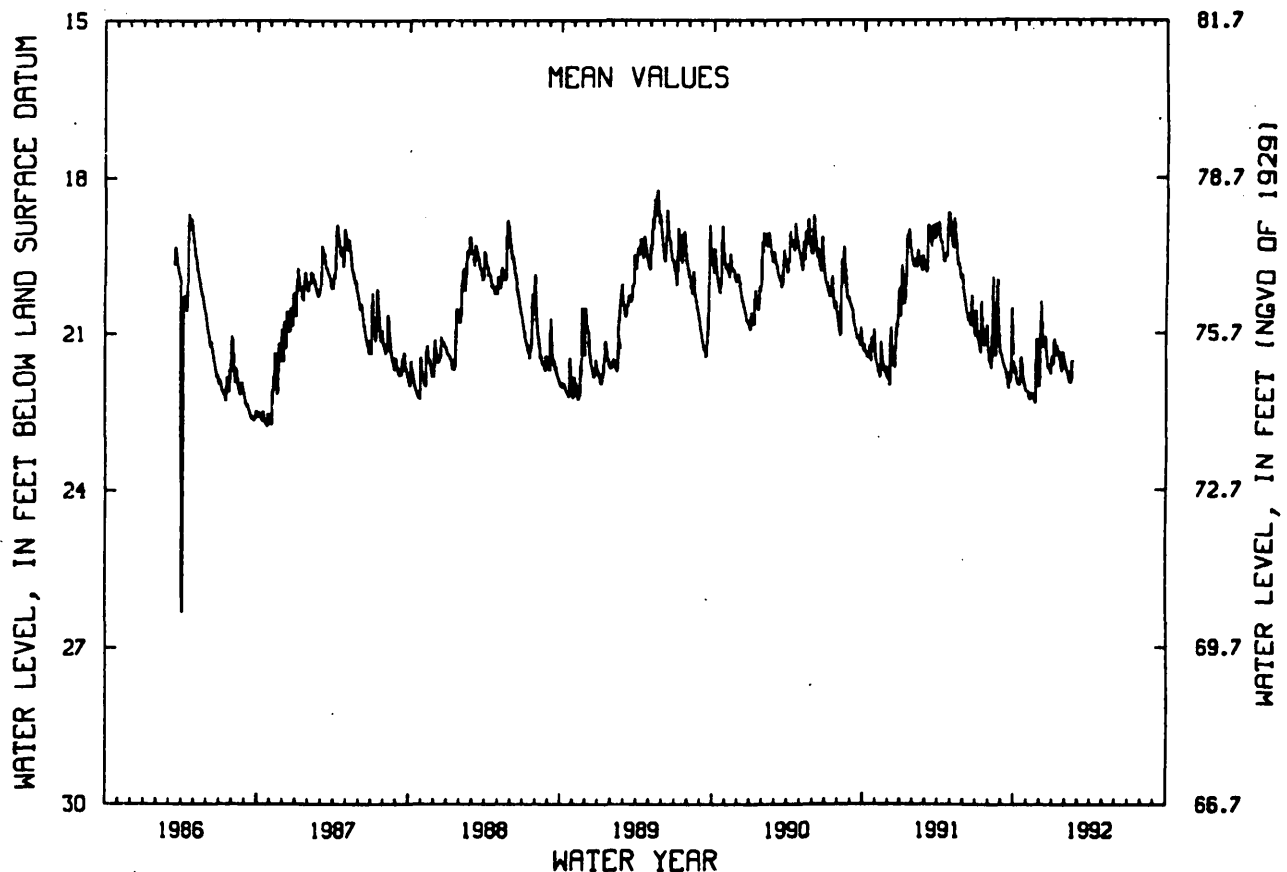
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.80	22.20	20.67	21.11	21.76	...	...	...	...	...	...	...
10	21.97	22.22	21.13	21.33	21.90	...	...	...	...	...	...	...
15	22.00	22.22	21.08	21.36	21.94	...	...	...	...	...	...	...
20	21.56	22.35	21.62	21.62	21.55	...	...	...	...	...	...	...
25	21.95	21.37	21.68	21.37	...	...	...	...	...	...	...	...
EOM	22.12	22.02	21.47	21.61	...	...	...	...	...	...	...	...
MEAN	21.85	22.06	21.36	21.46	21.76	...	...	...	...	...	...	...

WTR YR 1992 HIGH 20.27 DEC 4 LOW 22.38 NOV 20

NJ-WRD WELL NO.23-0796



GROUND-WATER LEVELS

MIDDLESEX COUNTY

402058074355902. Local I.D., Test Well 9 Obs. NJ-WRD Well Number, 23-0800.

LOCATION.--Lat 40°20'58", long 74°35'59", Hydrologic Unit 02030105, at the Plasma Physics Laboratory, James Forrester Campus, Princeton University, Plainsboro Township.

Owner: Princeton University.

AQUIFER.--Stockton Formation of Triassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 110 ft, open hole 90 to 110 ft.

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

DATUM.--Land-surface datum is 96.8 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 2.95 ft above land-surface datum.

REMARKS.--Water level affected by large drainage pipelines at the perimeter of the Tokamak Fusion Test Reactor building. Water level affected by aquifer test, Mar. 31-Apr. 4, 1986.

PERIOD OF RECORD.--Mar. 1986 to Feb. 1992 (discontinued). Records for 1986 to 1989 are unpublished and are available in files of New Jersey District Office.

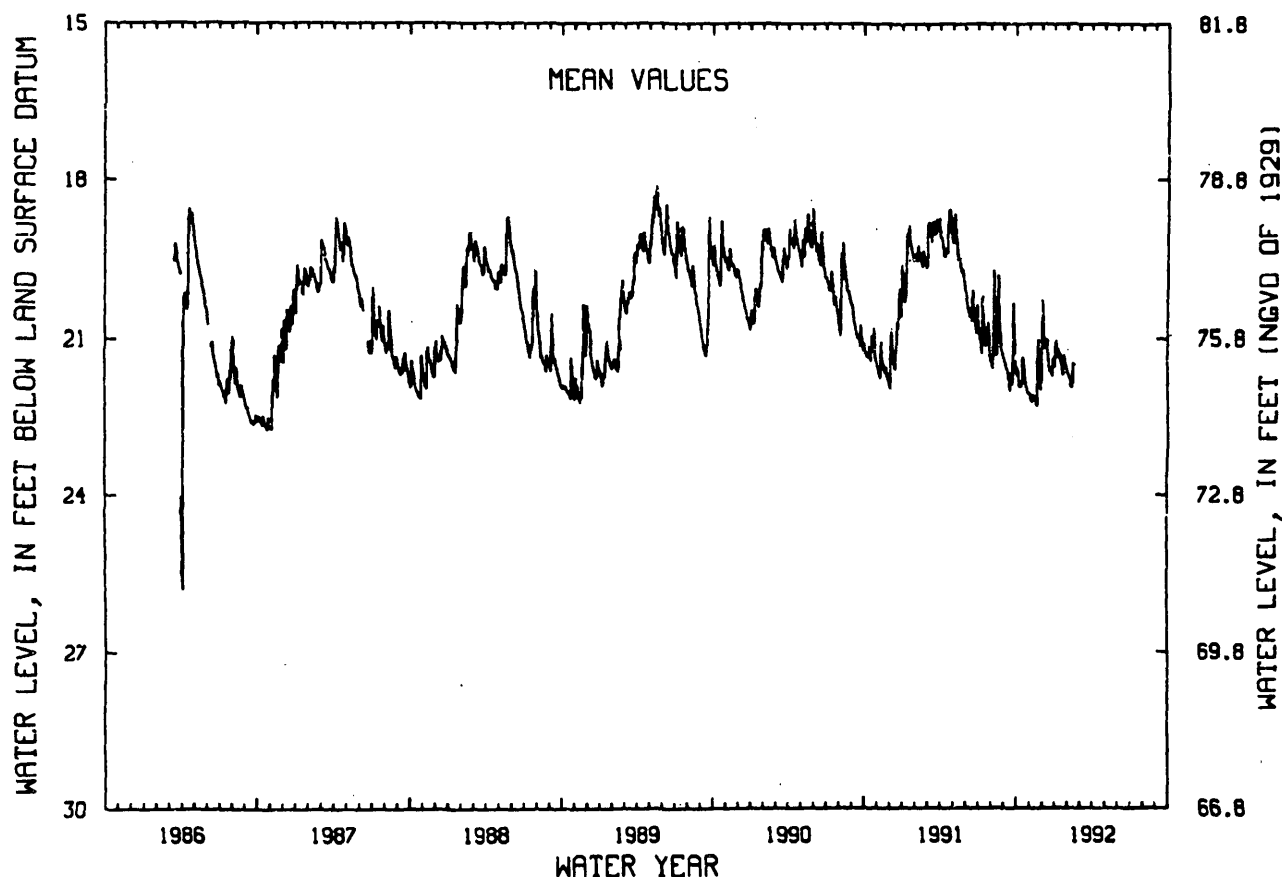
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 18.07 ft below land-surface datum, May 17, 1989; lowest, 26.06 ft below land-surface datum, Apr. 4, 1986 (see remarks).

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.72	22.16	20.62	21.03	21.73	...	...	...	...	...	...	...
10	21.92	22.17	21.03	21.27	21.89	...	...	...	...	...	...	...
15	21.94	22.17	21.00	21.30	21.92	...	...	...	...	...	...	...
20	21.49	22.31	21.57	21.59	21.52	...	...	...	...	...	...	...
25	21.91	21.30	21.60	21.33	...	...	...	...	...	...	...	...
EOB	22.06	21.98	21.41	21.59	...	...	...	...	...	...	...	...
MEAN	21.79	22.00	21.29	21.41	21.73	...	...	...	...	...	...	...
WTR YR 1992 HIGH 20.17 DEC 4 LOW 22.34 NOV 20												

NJ-WRD WELL NO.23-0800



MIDDLESEX COUNTY

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

LOCATION.--Lat 40°21'43", long 74°18'49", Hydrologic Unit 02030105, on the north side of Texas Rd., about .4 mi. east of Rt. 9, Old Bridge Township

OWNER: Olympia and York Bridge Development Corp.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Dug water-table observation well, diameter 17 in., depth 11 ft, cased with precast concrete rings.

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

DATUM.--Land-surface datum is 76.75 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top inside edge of concrete ring, .20 ft above land-surface datum.

REMARKS.--Well depth was 6 ft before deepening in Sept. 1932.

PERIOD OF RECORD.--Oct. 1923 to July 1975, Jan. 1985 to current year. Periodic manual measurements Aug. 1975

to Dec. 1984. Records for 1973 to 1985 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.97 ft below land-surface datum, Sept. 19, 1989; lowest, 10.40 ft below land surface datum, Oct. 13, 1953. Well was dry, Aug. to Sept. 1932, before deepening.

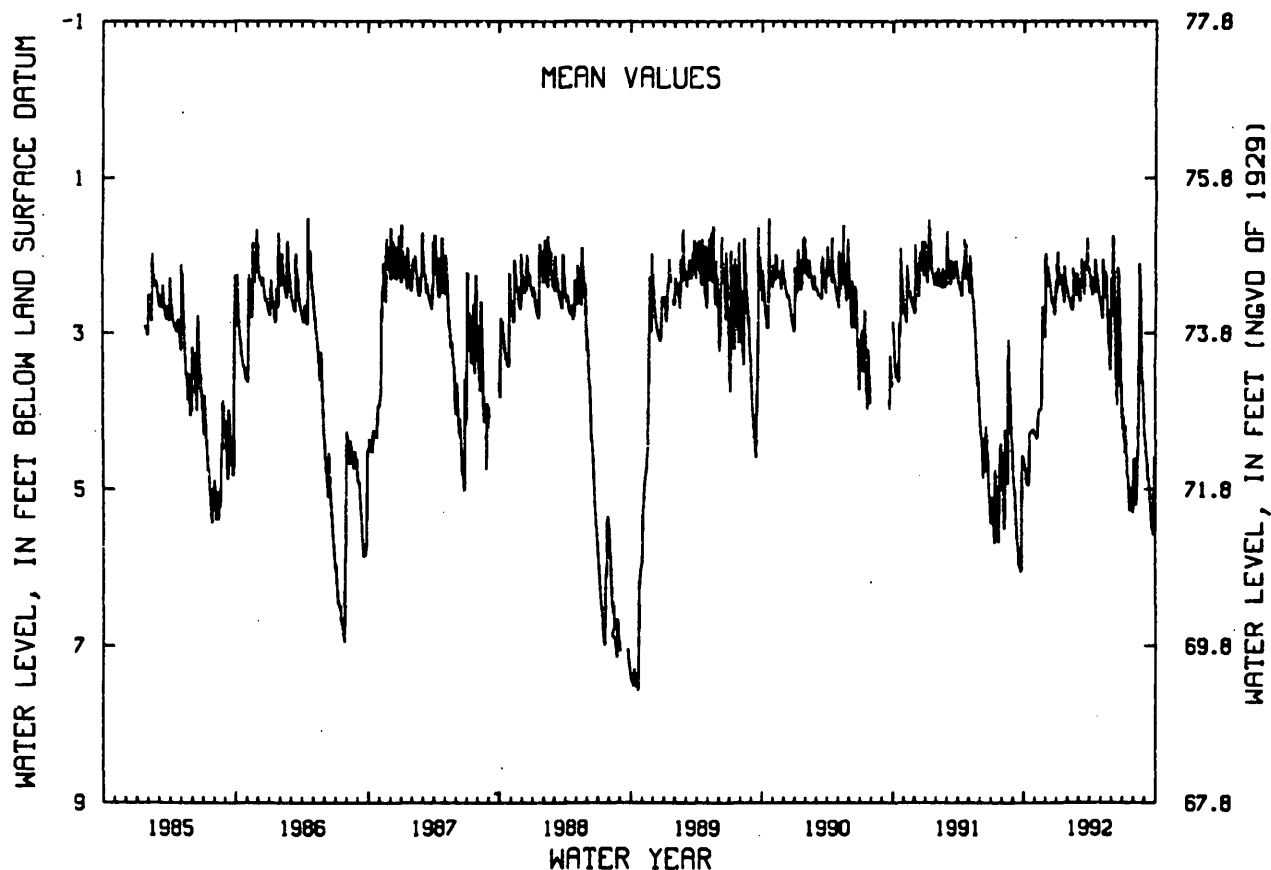
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.74	4.31	2.17	1.95	2.57	2.55	2.35	2.75	2.32	4.12	4.82	4.56
10	4.91	4.33	2.13	2.22	2.66	2.41	2.51	2.10	2.61	4.18	4.97	4.88
15	4.95	3.99	2.39	2.28	2.64	2.37	2.46	2.53	3.50	4.80	4.13	5.10
20	4.30	3.97	2.61	2.52	2.36	2.18	2.16	2.57	2.15	5.08	2.60	5.45
25	4.26	2.79	2.70	2.24	2.51	2.09	2.40	3.13	2.96	4.99	3.48	5.58
EOM	4.25	3.01	2.38	2.44	2.36	2.18	2.58	2.99	3.81	5.25	4.12	4.67
MEAN	4.57	3.80	2.46	2.34	2.48	2.28	2.35	2.69	2.90	4.72	4.01	4.95

WTR YR 1992 MEAN 3.30 HIGH 1.11 JUN 5 LOW 5.61 SEP 24

NJ-WRD WELL NO.23-0104



MIDDLESEX COUNTY

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

LOCATION.--Lat 40°25'55", long 74°27'19", Hydrologic Unit 02030105, 32 Beaver Dam Dr. and Hardenburg Lane, East Brunswick Township.

Owner: Abe Weiss.

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

WELL CHARACTERISTICS.--Dug water-table observation well, diameter 54 in., depth 21 ft, lined with concrete blocks.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Jan. 1977 to Apr. 1985.

DATUM.--Land-surface datum is 73.00 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of angle iron at bottom of shelter doors, 1.70 ft above land-surface datum.

REMARKS.--Well deepened Oct. 29, 1965 from 17 to 21 ft.

PERIOD OF RECORD.--June 1936 to Apr. 1975, Jan. 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.88 ft below land-surface datum, Apr. 26-27, 1939; lowest, 19.11 ft below land-surface datum, between July 24 and Oct. 6, 1981; well was dry many times from 1963 to 1965 before deepening.

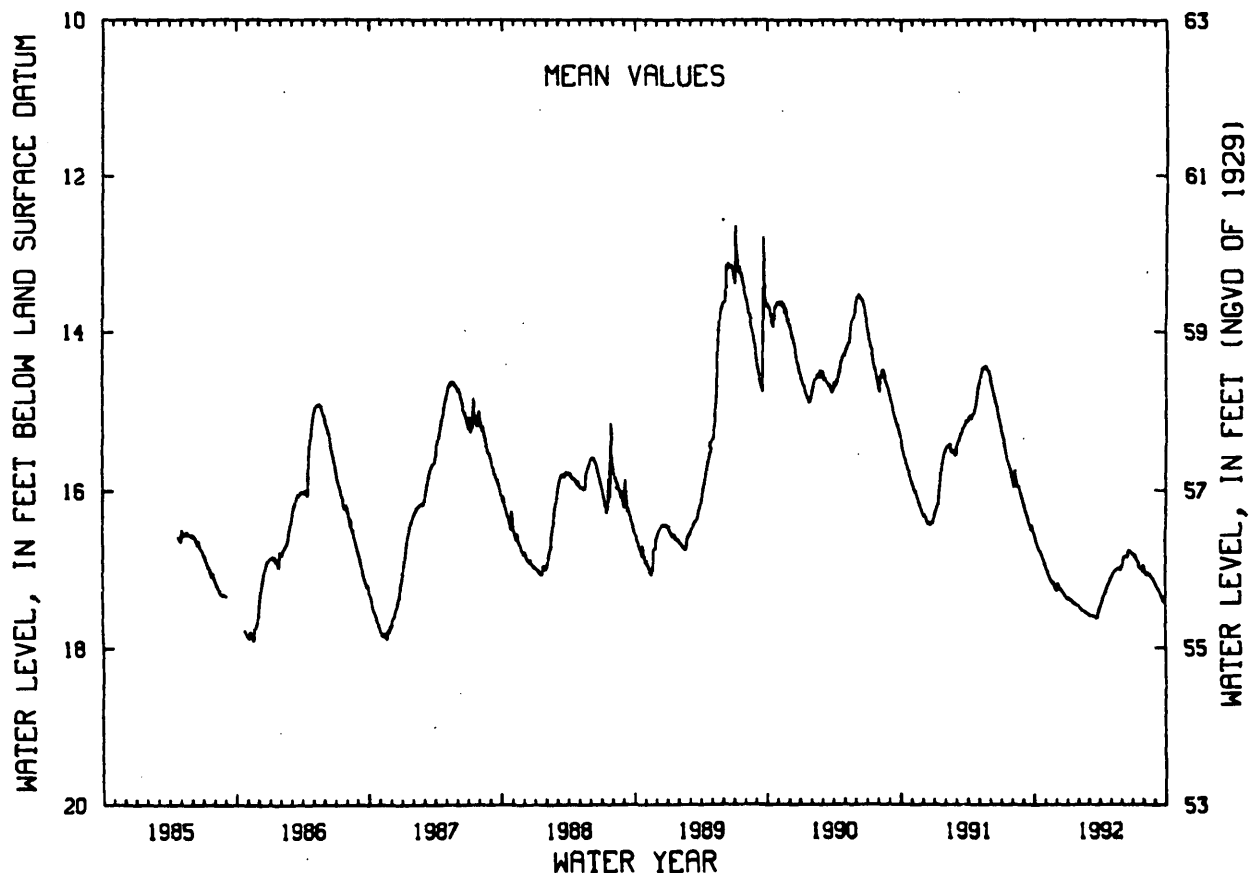
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.60	17.00	17.19	17.37	17.49	17.60	17.46	17.11	16.98	16.82	17.01	17.21
10	16.69	17.06	17.24	17.38	17.52	17.60	17.40	17.07	16.85	16.83	17.07	17.25
15	16.76	17.12	17.27	17.41	17.54	17.61	17.33	17.03	16.84	16.90	17.07	17.30
20	16.80	17.17	17.31	17.44	17.55	17.62	17.27	17.01	16.80	16.95	17.07	17.35
25	16.86	17.19	17.33	17.45	17.57	17.62	17.20	17.00	16.77	16.99	17.12	17.41
EOM	16.93	17.26	17.37	17.46	17.58	17.52	17.16	17.01	16.80	17.04	17.16	17.42
MEAN	16.75	17.11	17.28	17.42	17.53	17.60	17.33	17.05	16.85	16.91	17.07	17.30

WTR YR 1992 MEAN 17.18 HIGH 16.54 OCT 1 LOW 17.63 MAR 25

NJ-WRD WELL NO.23-0070



MIDDLESEX COUNTY

403119074290301. Local I.D., Rutgers Golf 13 Obs. NJ-WRD Well Number, 23-1165.

LOCATION.--Lat 40°31'08", long 74°28'12", Hydrologic Unit 02030105, at Rutgers University Golf Course, Piscataway Township.

Owner: State of New Jersey.

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

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 200 ft, open hole 50 to 200 ft.

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

DATUM.--Land-surface datum is 58.8 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 3.85 ft above land-surface datum.

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

PERIOD OF RECORD.--June 1991 to current year. Periodic manual measurements, June 1991 to May 1992.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.40 ft above land-surface datum, May 18, 1992; lowest, 37.38 ft below land-surface datum, Aug. 8, 1992.

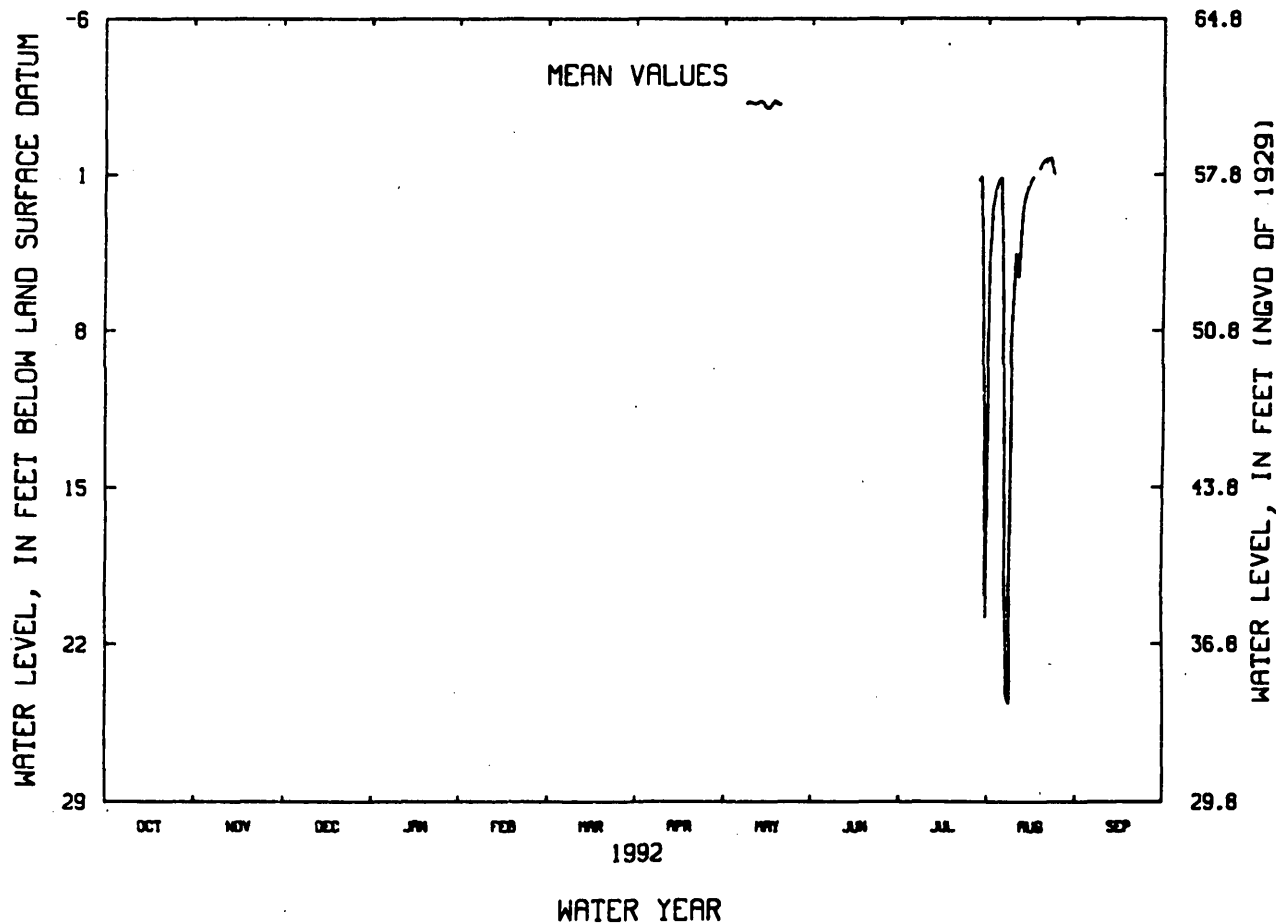
WATER LEVEL, IN FEET ABOVE (-) OR BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	---	1.13	---
10	---	---	---	---	---	---	---	-2.25	---	---	4.55	---
15	---	---	---	---	---	---	---	-2.02	---	---	1.34	---
20	---	---	---	---	---	---	---	-2.17	---	---	.34	---
25	---	---	---	---	---	---	---	---	---	---	---	---
EOM	---	---	---	---	---	---	---	---	---	20.82	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	4.48	---

WTR YR 1992 HIGH -2.40 MAY 18 LOW 37.38 AUG 8

NJ-WRD WELL NO.23-1165



MONMOUTH COUNTY

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

LOCATION.--Lat 40°07'11", long 74°02'02", Hydrologic Unit 02040301, at the National Guard Camp, Sea Girt, Sea Girt Borough.

Owner: State of New Jersey.

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

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 614 ft, perforated casing 604 to 614 ft.

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

DATUM.--Land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 3.20 ft above land-surface datum.

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

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 120.83 ft below land-surface datum, June 1, 1992; lowest, 195.60 ft below land-surface datum, Sept. 17, 1988.

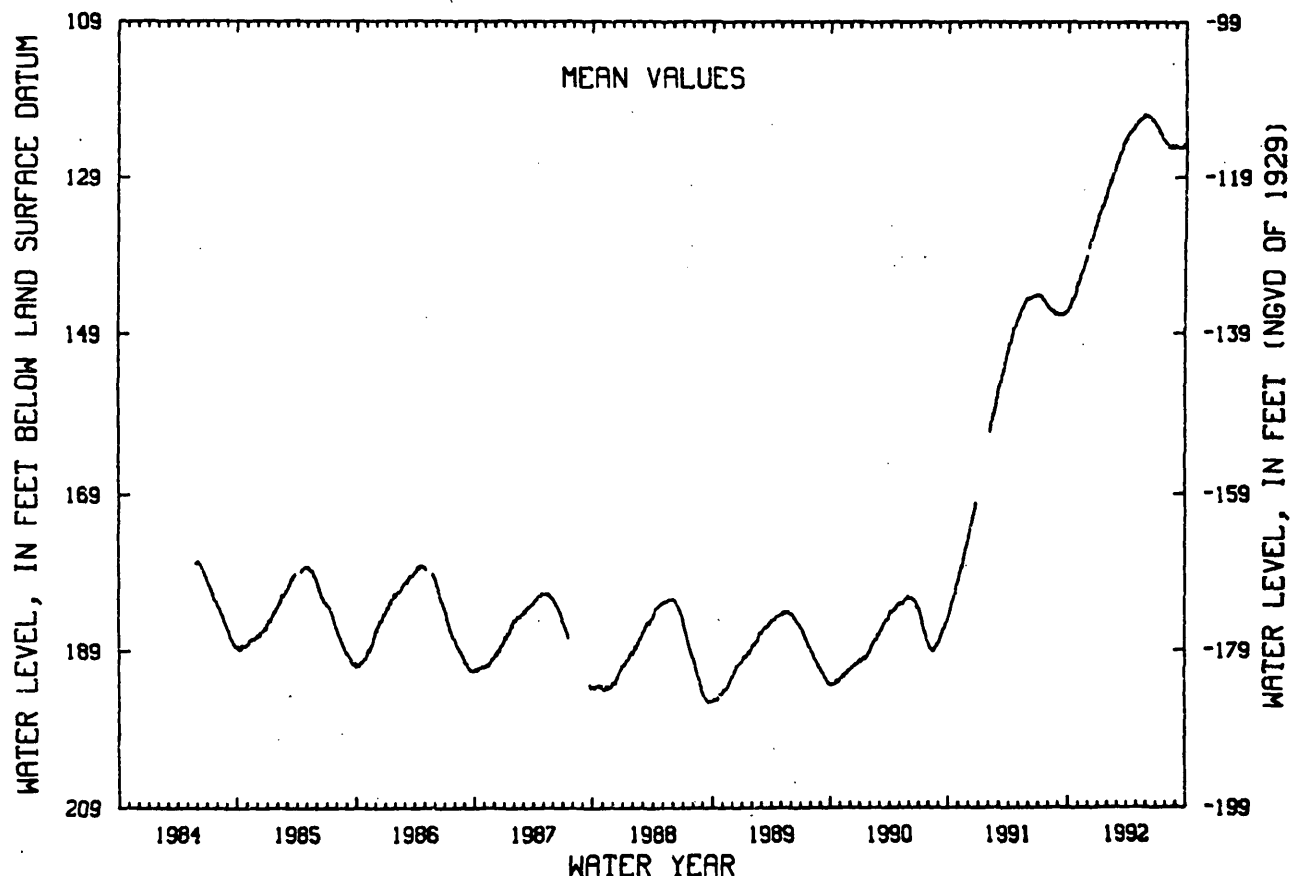
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	145.94	142.58	---	133.65	129.97	126.74	123.57	121.74	121.03	122.55	124.83	125.14
10	145.69	141.68	137.53	133.29	129.67	125.95	123.24	121.60	121.13	123.05	125.05	125.15
15	145.13	141.25	136.97	132.70	128.89	125.54	123.11	121.39	121.35	123.37	125.14	125.23
20	144.61	140.63	136.40	132.33	128.13	124.72	122.72	121.36	121.55	123.86	124.98	125.04
25	144.11	139.78	135.40	131.66	127.56	124.53	122.31	120.93	121.88	124.25	125.18	124.80
EOM	142.50	139.23	134.60	130.60	127.06	123.93	122.08	121.07	122.28	124.57	125.02	124.77
MEAN	144.88	141.10	136.54	132.65	128.81	125.42	122.94	121.41	121.47	123.49	124.99	125.04

WTR YR 1992 MEAN 129.00 HIGH 120.83 JUN 1 LOW 146.41 OCT 1

NJ-WRD WELL NO.25-0486



MONMOUTH COUNTY

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

LOCATION.--Lat 40°08'34", long 74°08'34", Hydrologic Unit 02040301, about 1.3 mi. southeast of Lower Squankum off County Rt. 21, in Allaire State Park, Howell Township.

Owner: U.S. Geological Survey.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 633 ft, screened 623 to 633 ft.

INSTRUMENTATION.--Water-level extremes recorder, Feb. 1977 to current year. Water-level recorder, Jan. 1964 to July 1975.

DATUM.--Land-surface datum is 97.93 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 1.64 ft above land-surface datum.

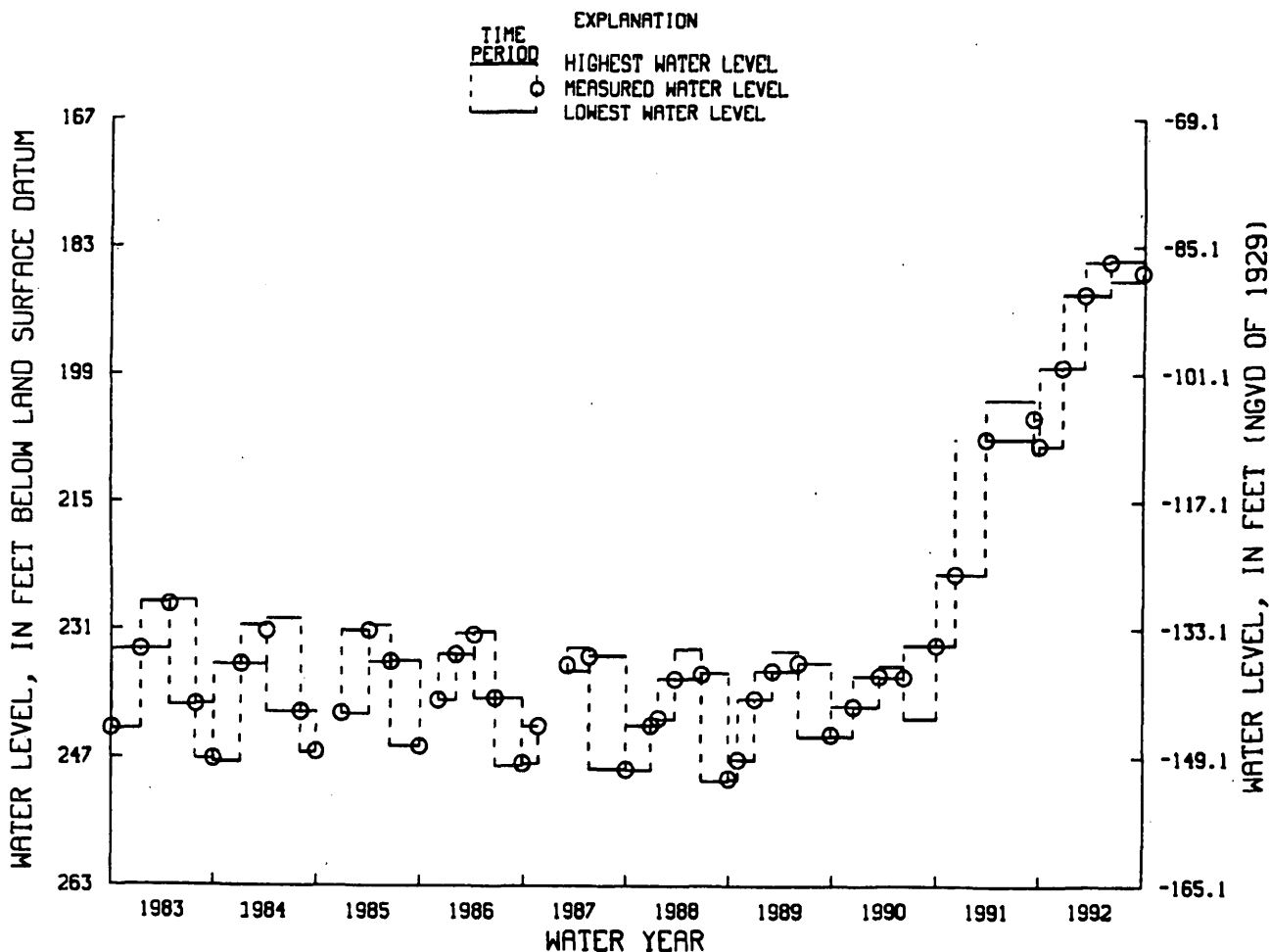
PERIOD OF RECORD.--Jan. 1964 to July 1975, Feb. 1977 to current year. Records for 1964 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 141.05 ft below land-surface datum, Apr. 8, 1964; lowest, 249.89 ft below land-surface datum, between June 24 and Sept. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES				MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL	
SEPT. 30, 1991 TO DEC. 20, 1991	198.17	208.03	DEC. 20, 1991	198.18	
DEC. 20, 1991 TO MAR. 6, 1992	189.02	198.18	MAR. 6, 1992	189.02	
MAR. 6, 1992 TO JUNE 3, 1992	184.89	189.03	JUNE 3, 1992	184.89	
JUNE 3, 1992 TO SEPT. 24, 1992	184.70	187.29	SEPT. 24, 1992	186.26	

NJ-WRD WELL NO. 25-0429



MONMOUTH COUNTY

401105074120201. Local I.D., Howell Twp 1 Obs. NJ-WRD Well Number, 25-0635.

LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5000 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 1360 ft, screened 1226 to 1240, 1280 to 1290 and 1320 to 1330 ft.

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

DATUM.--Land-surface datum is 111.3 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 2.10 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 130.76 ft below land-surface datum, May 13, 1992; lowest, 150.32 ft below land-surface datum, Sept. 2, 1988.

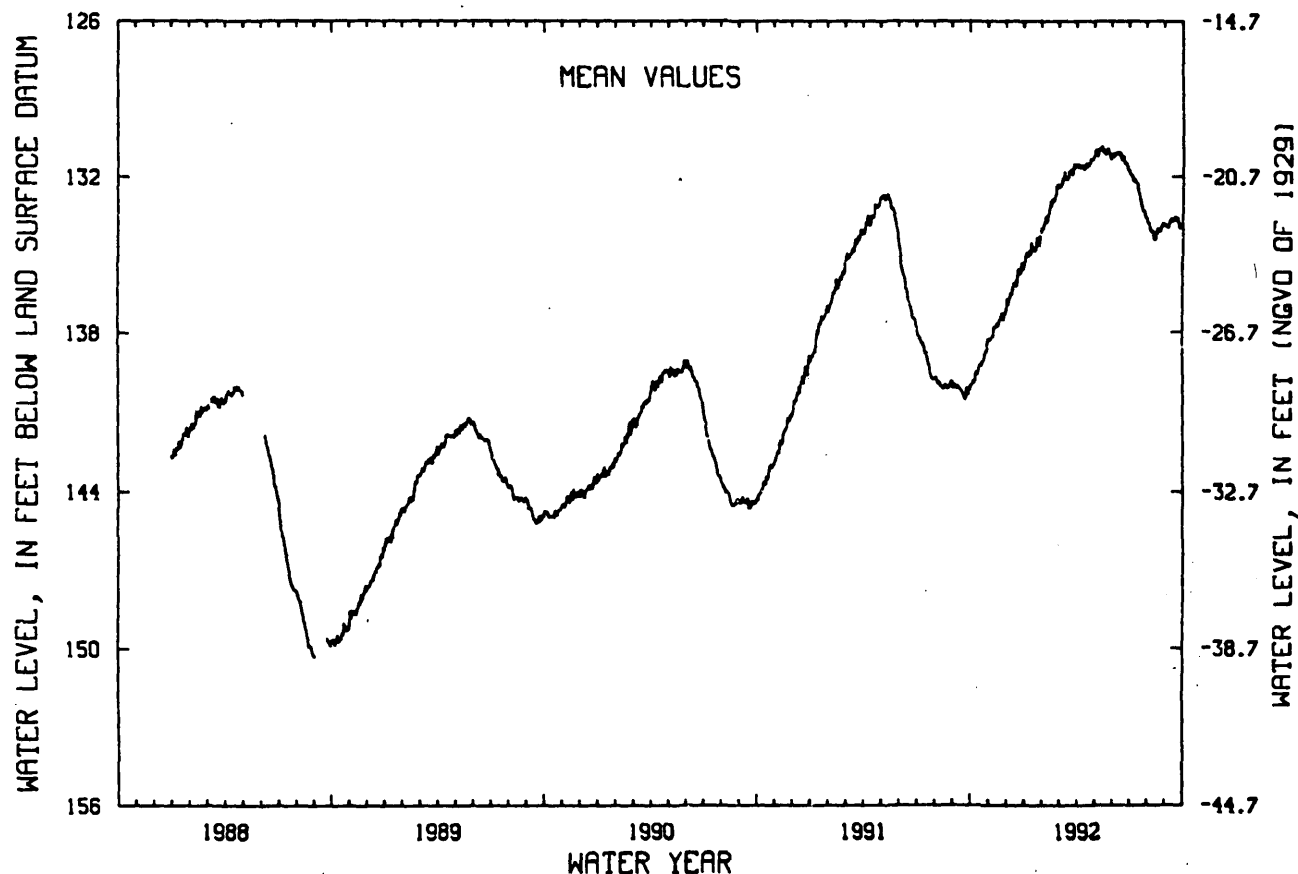
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	139.86	138.29	136.94	134.94	133.80	132.37	131.58	131.05	131.14	131.95	133.94	133.99
10	139.65	137.98	136.52	134.84	133.78	132.05	131.61	130.91	131.06	132.13	134.13	133.65
15	139.36	137.75	136.16	134.79	133.14	132.04	131.64	130.99	131.12	132.22	134.45	133.68
20	139.19	137.58	136.17	134.74	132.88	131.79	131.61	131.15	131.20	132.84	134.04	133.69
25	138.95	137.35	135.67	134.61	132.69	131.93	131.28	131.04	131.48	133.37	133.96	133.99
EOM	138.39	137.25	135.58	134.01	132.28	131.55	131.22	131.02	131.75	133.59	133.81	134.03
MEAN	139.32	137.78	136.19	134.79	133.21	131.97	131.52	131.06	131.30	132.60	134.04	133.78

WTR YR 1992 MEAN 133.97 HIGH 130.76 MAY 13 LOW 140.23 OCT 1

NJ-WRD WELL NO.25-0635



MONMOUTH COUNTY

401105074120202. Local I.D., Howell Twp 2 Obs. NJ-WRD Well Number, 25-0636.

LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5000 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 artesian observation well, diameter 4 in., depth 100 ft, screened 85 to 95 ft.

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

DATUM.--Land-surface datum is 111.9 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 1.20 ft above land-surface datum.

REMARKS.--Water level affected by stage of Manasquan Reservoir and by nearby pumping.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 37.22 ft below land-surface datum, Apr. 27, 1991; lowest, 56.09 ft below land-surface datum, Apr. 29, 1988.

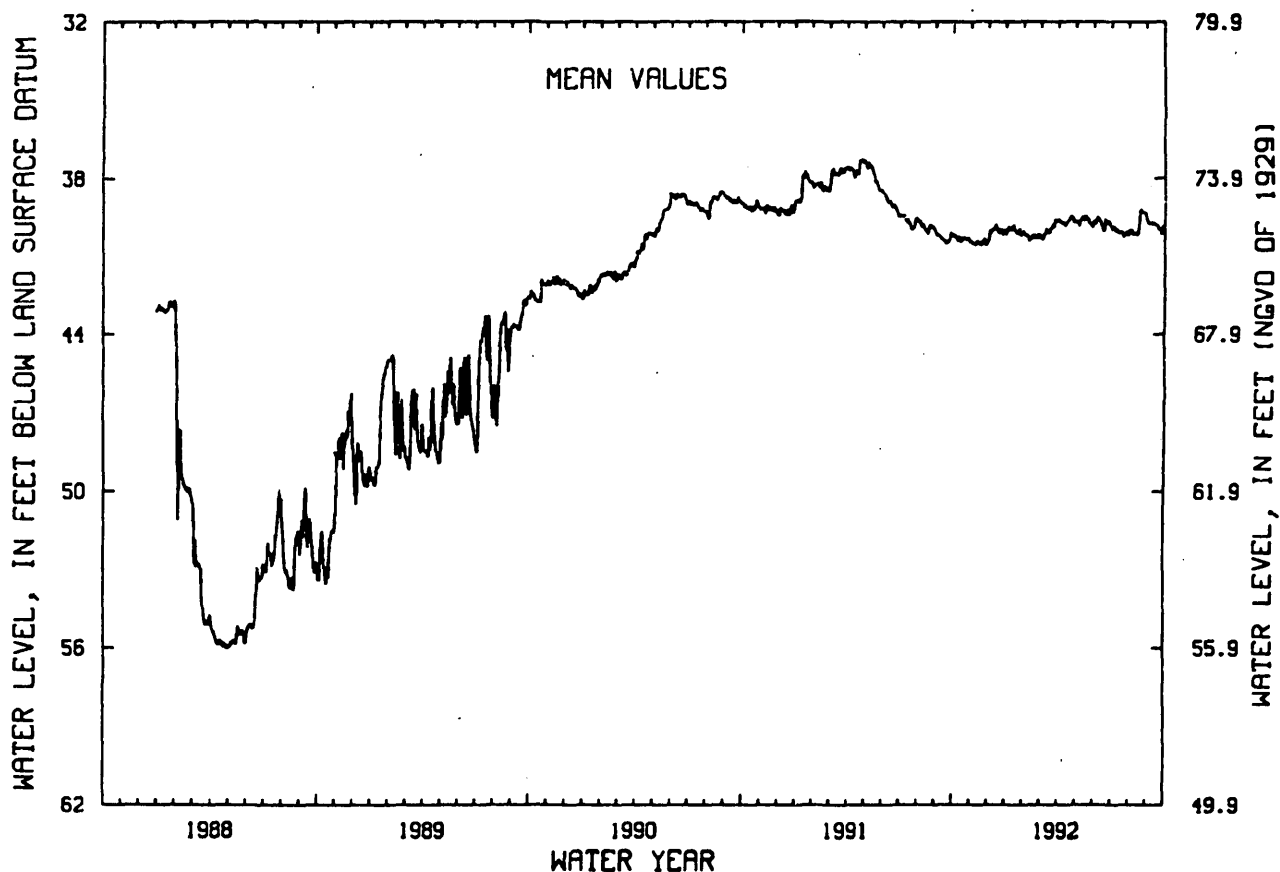
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	40.28	40.55	40.14	39.89	40.20	40.35	39.64	39.77	39.70	39.90	40.09	39.79
10	40.35	40.52	39.96	39.89	40.43	40.13	39.75	39.58	39.60	40.01	40.12	39.75
15	40.40	40.52	39.89	39.99	40.35	40.06	39.77	39.61	39.87	40.10	40.15	39.80
20	40.34	40.50	40.11	40.09	40.24	39.94	39.63	39.56	39.57	40.14	39.21	39.97
25	40.33	40.44	40.12	40.14	40.32	39.90	39.47	39.77	39.64	40.15	39.32	40.14
EOM	40.42	40.46	40.18	40.05	40.21	39.60	39.66	39.76	39.85	40.15	39.60	39.95
MEAN	40.33	40.50	40.05	40.04	40.26	40.02	39.65	39.67	39.73	40.08	39.75	39.84

WTR YR 1992 MEAN 39.99 HIGH 39.17 AUG 19 LOW 40.62 NOV 9

NJ-WRD WELL NO.25-0636



MONMOUTH COUNTY

401105074120203. Local I.D., Howell Twp 3 Obs. NJ-WRD Well Number, 25-0637.

LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5000 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 datum is 111.9 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 1.80 ft above land-surface datum.

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

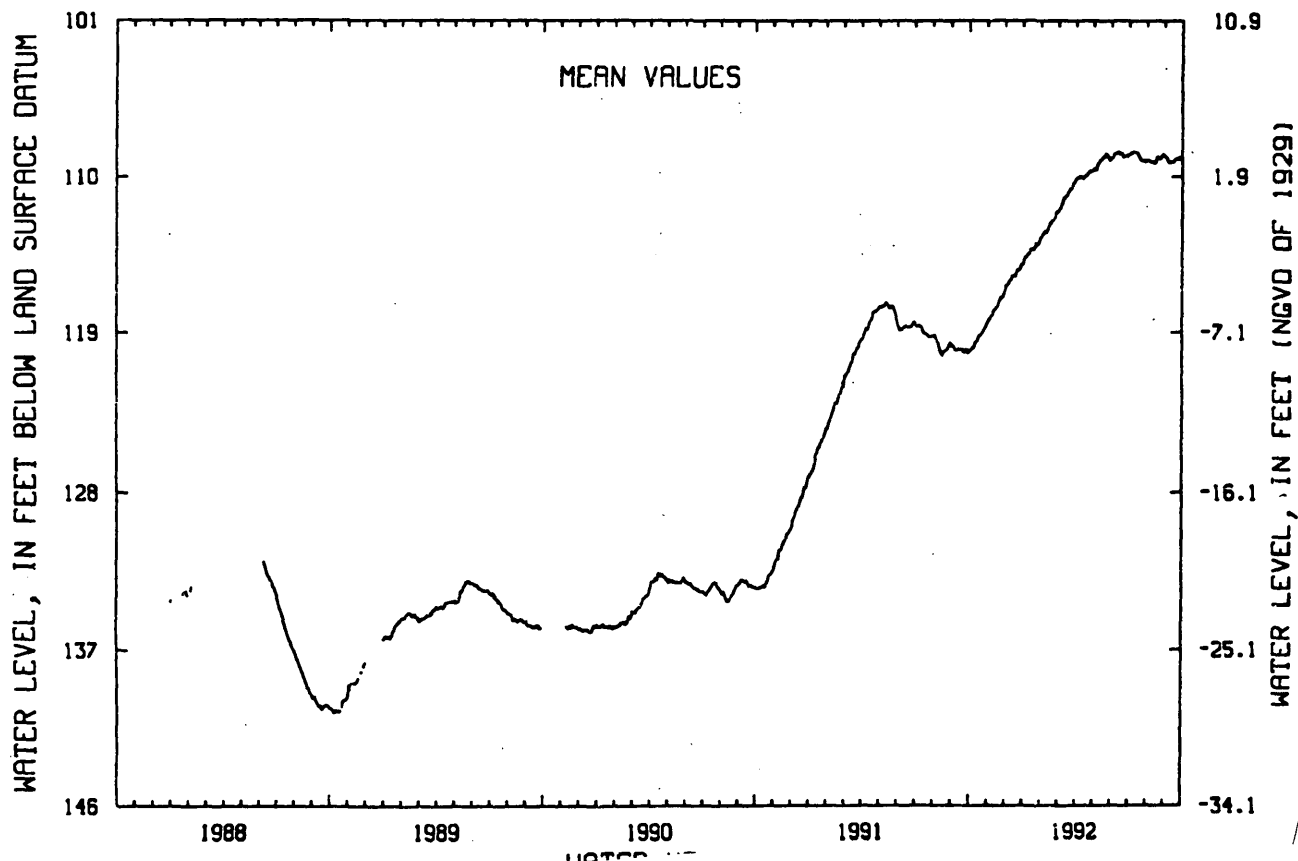
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 108.52 ft below land-surface datum, June 14-15, July 15-16, 1992; lowest, 140.65 ft below land-surface datum, Oct. 6-7, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	119.98	118.26	116.33	114.68	113.29	111.89	110.03	109.56	108.84	108.59	109.08	109.06
10	119.74	117.92	115.98	114.47	113.23	111.45	109.99	109.24	108.61	108.55	109.14	109.16
15	119.45	117.65	115.74	114.27	112.83	111.13	110.03	109.06	108.53	108.56	109.23	109.14
20	119.17	117.38	115.76	114.13	112.53	110.83	109.91	108.87	108.61	108.88	108.87	108.99
25	118.94	116.97	115.40	113.91	112.33	110.69	109.66	108.72	108.80	109.10	108.86	109.03
EOY	118.55	116.77	115.16	113.51	111.99	110.21	109.67	108.98	108.75	109.08	108.77	108.99
MEAN	119.39	117.61	115.79	114.28	112.81	111.12	109.92	109.11	108.73	108.79	108.99	109.02
WTR YR 1992	MEAN 112.14 HIGH 108.52 JUN 14-15, JUL 15-16 LOW 120.21 OCT 1											

NJ-WRD WELL NO.25-0637



MONMOUTH COUNTY

401105074120204. Local I.D., Howell Twp 4 Obs. NJ-WRD Well Number, 25-0638.

LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5000 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 datum is 112.1 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 1.80 ft above land-surface datum.

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

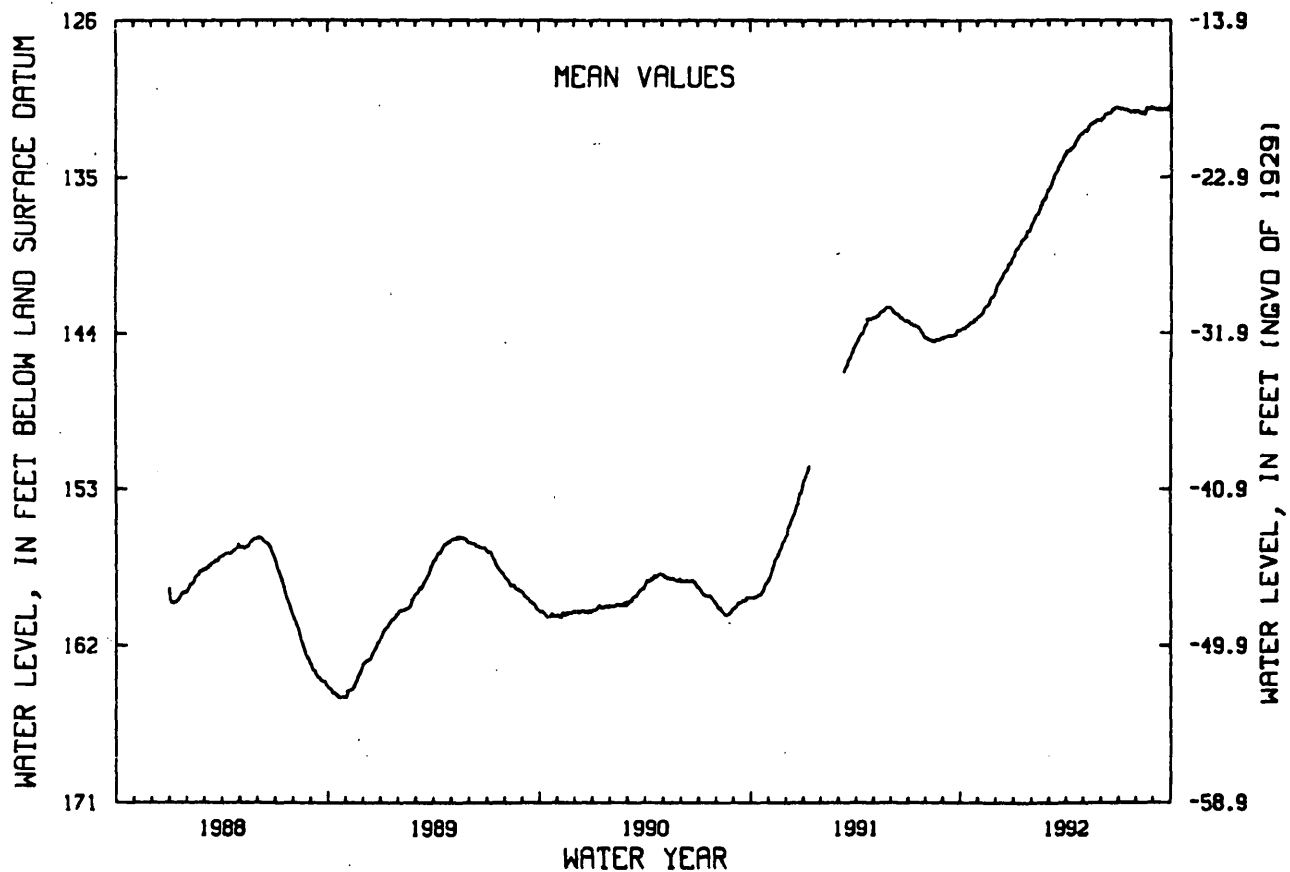
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 130.92 ft below land-surface datum, Sept. 29, 1992; lowest, 165.02 ft below land-surface datum, Oct. 21, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	143.77	143.01	141.22	139.21	137.41	135.56	133.50	132.33	131.59	131.06	131.24	131.11
10	143.73	142.81	140.89	138.97	137.20	135.11	133.39	132.14	131.36	131.09	131.31	131.09
15	143.59	142.48	140.54	138.64	136.83	134.72	133.23	131.92	131.32	131.14	131.40	131.13
20	143.40	142.31	140.40	138.51	136.39	134.37	132.90	131.83	131.15	131.21	131.02	131.07
25	143.33	141.94	140.01	138.11	136.14	134.11	132.59	131.69	131.03	131.25	131.05	131.16
EOM	143.13	141.76	139.65	137.77	135.72	133.66	132.49	131.76	131.03	131.28	131.02	130.94
MEAN	143.52	142.48	140.58	138.67	136.78	134.69	133.09	131.99	131.30	131.16	131.18	131.07
WTR YR 1992 MEAN 135.55 HIGH 130.92 SEP 29 LOW 143.86 OCT 1												

NJ-WRD WELL NO.25-0638



MONMOUTH COUNTY

401105074120205. Local I.D., Howell Twp 5 Obs. NJ-WRD Well Number, 25-0639.

LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5000 ft east of the intersection of Georgia Tavern Rd. and Peskin Rd., Howell Township.

Owner: U.S. Geological Survey.

AQUIFER.--Upper aquifer, Potomac-Raritan-Magothy aquifer system 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 datum is 111.7 ft above National Geodetic Vertical Datum of 1929.

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

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

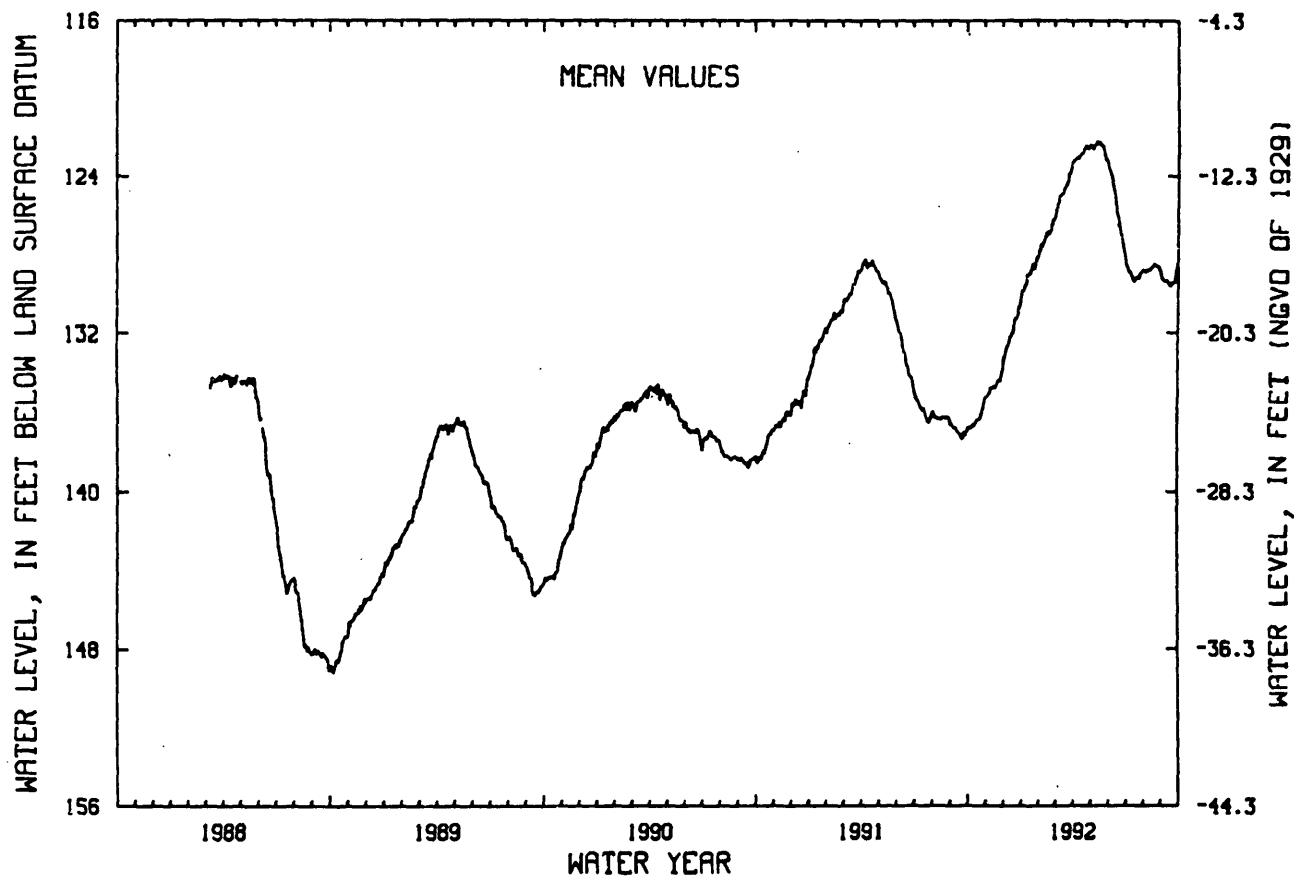
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 122.16 ft below land-surface datum, May 13-14, 1992; lowest, 149.23 ft below land-surface datum, Oct. 6-7, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	136.73	135.16	133.32	129.92	127.81	126.01	123.18	122.50	123.75	128.63	128.83	129.34
10	136.67	134.85	132.70	129.56	127.61	125.35	123.05	122.39	124.35	128.92	128.80	129.34
15	136.55	134.67	132.20	129.15	127.18	124.92	122.91	122.30	125.23	129.29	128.73	129.58
20	136.34	134.62	132.00	128.91	126.86	124.62	122.79	122.37	126.14	129.20	128.49	129.48
25	136.11	134.27	131.29	128.73	126.74	124.41	122.43	122.65	127.00	129.20	128.60	129.27
EOM	135.41	134.02	130.74	128.14	126.23	123.63	122.56	123.16	127.89	128.87	128.85	128.44
MEAN	136.39	134.69	132.18	129.25	127.21	124.94	122.89	122.52	125.43	128.97	128.71	129.28
WTR YR 1992	MEAN 128.55 HIGH 122.16 MAY 13-14 LOW 137.03 OCT 1											

NJ-WRD WELL NO.25-0639



MONMOUTH COUNTY

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

LOCATION.--Lat 40°15'42", long 74°05'30", Hydrologic Unit 02030104, at Training Center, Wyckoff Rd. and Wayside Rd., Tinton Falls Borough.

Owner: U.S. Army.

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

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 3.5 in., depth 327 ft, screened 321 to 327 ft.

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

DATUM.--Land surface datum is 140 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 1.50 ft above land surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level 133.15 ft below land surface datum, June 20, 1992; lowest, 155.63 ft below land surface datum Dec. 22-23, 1988.

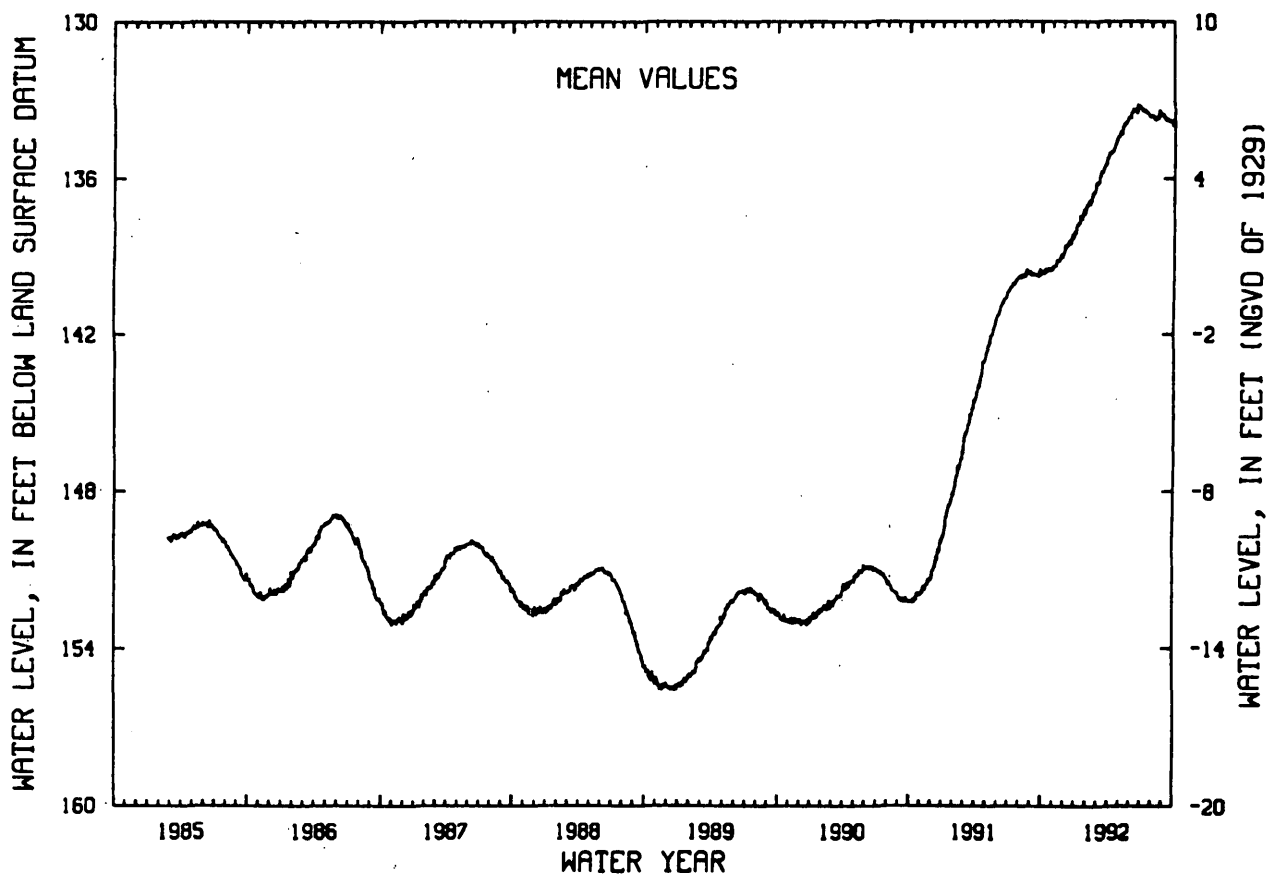
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	139.61	139.41	138.71	137.78	136.93	136.18	135.01	134.23	133.41	133.35	133.67	133.75
10	139.59	139.28	138.55	137.67	137.02	135.89	134.95	134.02	133.35	133.39	133.66	133.72
15	139.56	139.17	138.40	137.53	136.73	135.76	134.88	133.93	133.38	133.46	133.71	133.81
20	139.51	139.10	138.51	137.48	136.51	135.56	134.68	133.86	133.15	133.57	133.42	133.83
25	139.53	138.93	138.24	137.33	136.41	135.52	134.40	133.65	133.18	133.65	133.56	133.97
EOY	139.57	138.91	138.16	137.04	136.14	135.14	134.36	133.57	133.33	133.64	133.59	133.83
MEAN	139.53	139.17	138.44	137.57	136.68	135.71	134.77	133.92	133.34	133.50	133.60	133.78

WTR YR 1992 MEAN 135.83 HIGH 133.15 JUN 20 LOW 139.70 OCT 1

NJ-WRD WELL NO.25-0353



MONMOUTH COUNTY

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

LOCATION.--Lat 40°22'08", long 74°14'52", Hydrologic Unit 02030105, on the west side of NJ Rt. 79, 0.9 mi. south of Morganville, Marlboro Township.

Owner: Marlboro Township Municipal Utilities Authority.

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

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 680 ft, screened 670 to 680 ft.

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

DATUM.--Land-surface datum is 116.93 ft above National Geodetic Vertical Datum of 1929.

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

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--Jan. 1973 to July 1975, Mar. 1977 to current year. Records for 1973 to 1977 are unpublished and are available in files of New Jersey District Office.

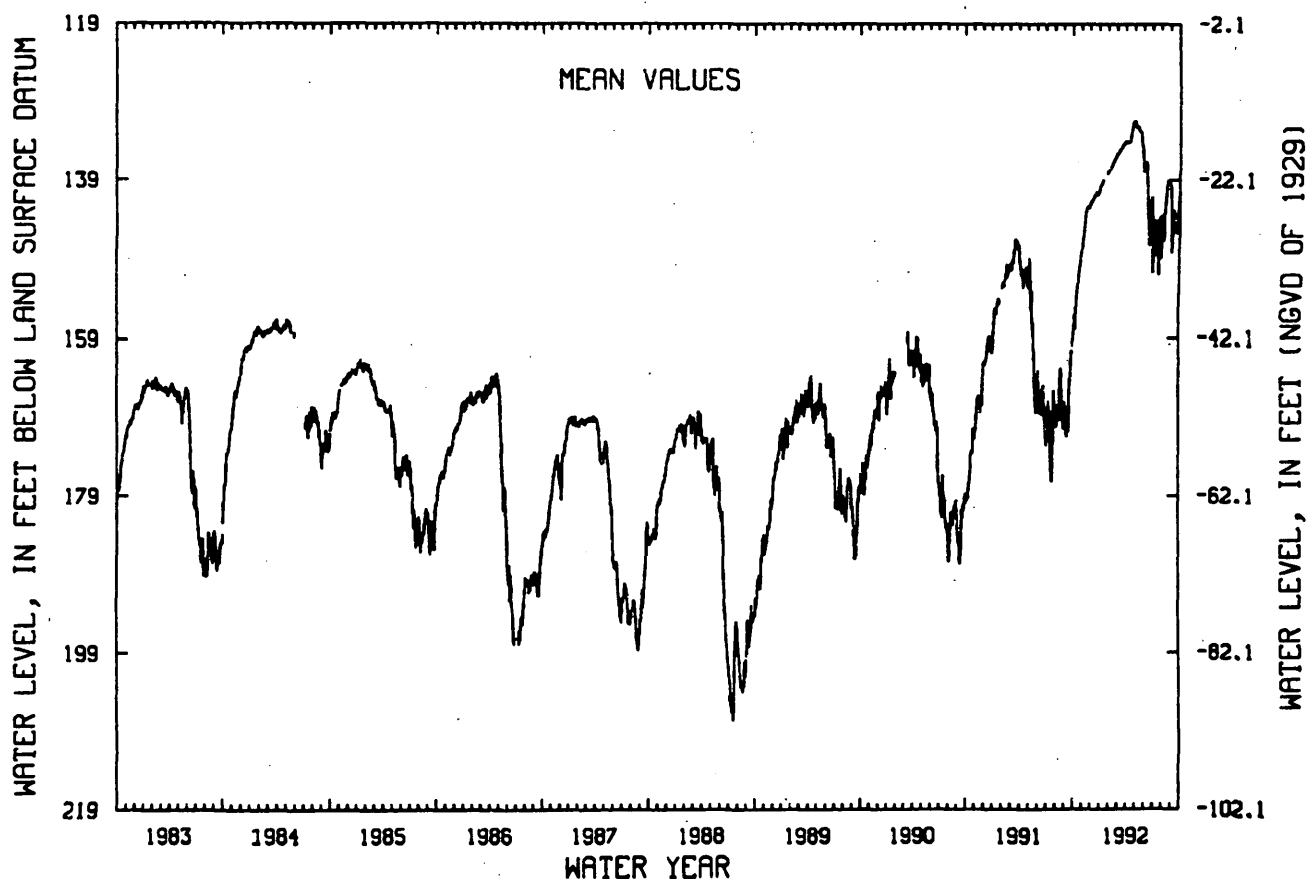
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 131.52 ft below land-surface datum, May 2-5, 1992; lowest, 207.78 ft below land-surface datum, July 16, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	158.90	147.91	141.97	139.79	137.66	135.58	134.22	132.20	136.82	149.27	143.59	148.35
10	156.54	145.53	141.47	139.38	137.43	135.22	134.22	132.21	136.88	146.08	144.44	142.91
15	155.24	143.69	141.07	---	136.76	135.01	134.02	132.65	143.13	148.67	141.49	144.67
20	152.66	142.66	140.93	---	136.35	134.63	132.81	132.85	147.31	144.23	139.43	145.71
25	150.95	142.45	140.75	---	135.99	134.58	131.70	134.53	142.32	145.61	139.11	143.28
EOM	149.32	142.31	140.59	137.80	135.56	134.04	131.55	137.70	143.08	148.70	139.77	140.51
MEAN	154.56	144.52	141.18	---	136.80	134.90	133.23	133.19	140.93	146.96	142.00	144.33
WTR YR 1992 MEAN 141.09 HIGH 131.52 MAY 2-5 LOW 160.07 OCT 1												

NJ-WRD WELL NO.25-0272



MONMOUTH COUNTY

402426074001901. Local I.D., AHWD 8 Obs. NJ-WRD Well Number, 25-0715.

LOCATION.--Lat 40°24'26", long 74°00'19", Hydrologic Unit 02030104, near the intersection of Highland Ave. and Beverot Pl., Atlantic Highlands Borough.

Owner: Atlantic Highlands Water Department.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 360 ft, screened 350 to 360 ft.

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

DATUM.--Land-surface datum is 220 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

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

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 222.80 ft below land-surface datum, Jan. 4, 1992; lowest, 225.95 ft below land-surface datum, Aug. 3, 1992.

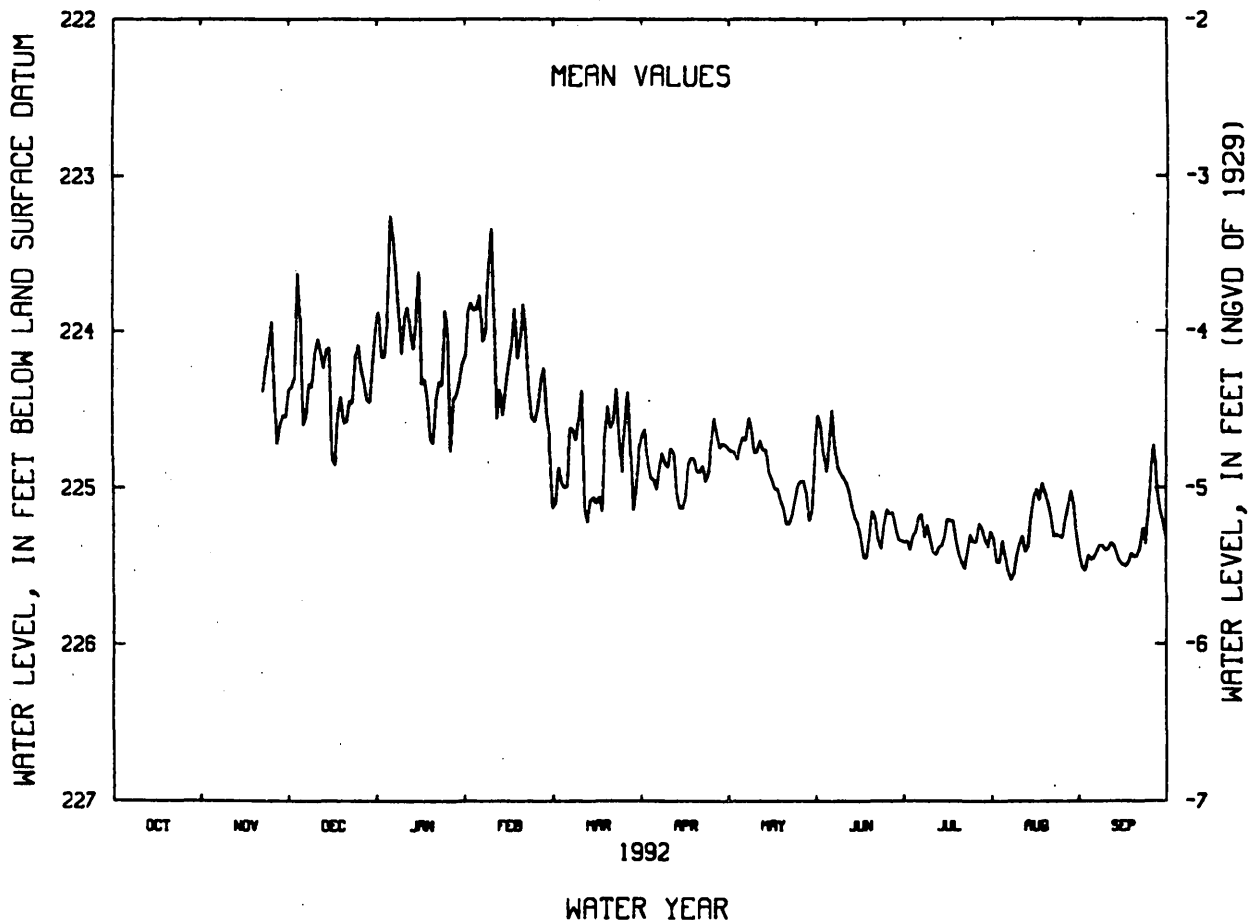
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	224.60	223.40	224.07	225.00	224.95	224.74	224.74	225.28	225.44	225.45
10	---	---	224.05	223.85	224.56	224.56	224.87	224.78	224.94	225.33	225.36	225.39
15	---	---	224.82	224.34	224.09	225.06	225.13	224.91	225.23	225.31	225.06	225.49
20	---	---	224.58	224.44	224.09	224.48	224.90	225.13	225.15	225.43	225.09	225.44
25	---	224.41	224.25	224.77	224.32	224.90	224.71	224.99	225.14	225.35	225.32	224.84
EOM	---	224.38	223.88	223.88	224.75	224.75	224.73	224.78	225.34	225.28	225.43	225.32
MEAN	---	---	224.30	224.12	224.17	224.83	224.85	224.91	225.08	225.33	225.28	225.34

WTR YR 1992 MEAN 224.81 HIGH 222.80 JAN 4 LOW 225.95 AUG 3

NJ-WRD WELL NO.25-0715



MONMOUTH COUNTY

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

LOCATION---Lat 40°26'25", Long 74°11'45", Hydrologic Unit 02030104, at the Benjamin C. Terry Park, Myrtle Ave. Keyport Borough.

Owner: Keyport Borough Water Department.

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

WELL CHARACTERISTICS---Drilled artesian observation well, diameter 8 in., depth 249 ft, screened 225 to 249 ft.

INSTRUMENTATION---Water-level extremes recorder. Digital water-level recorder, June 1978 to Nov. 1987.

DATUM---Land-surface datum is 14.47 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 2.47 ft above land-surface datum.

REMARKS---Water level affected by tidal fluctuation.

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

EXTREMES FOR PERIOD OF RECORD---Highest water level, 11.01 ft below land-surface datum, between Mar. 23 and June 2, 1992; lowest, 35.22 ft below land-surface datum, between June 20 and Sept. 28, 1988.

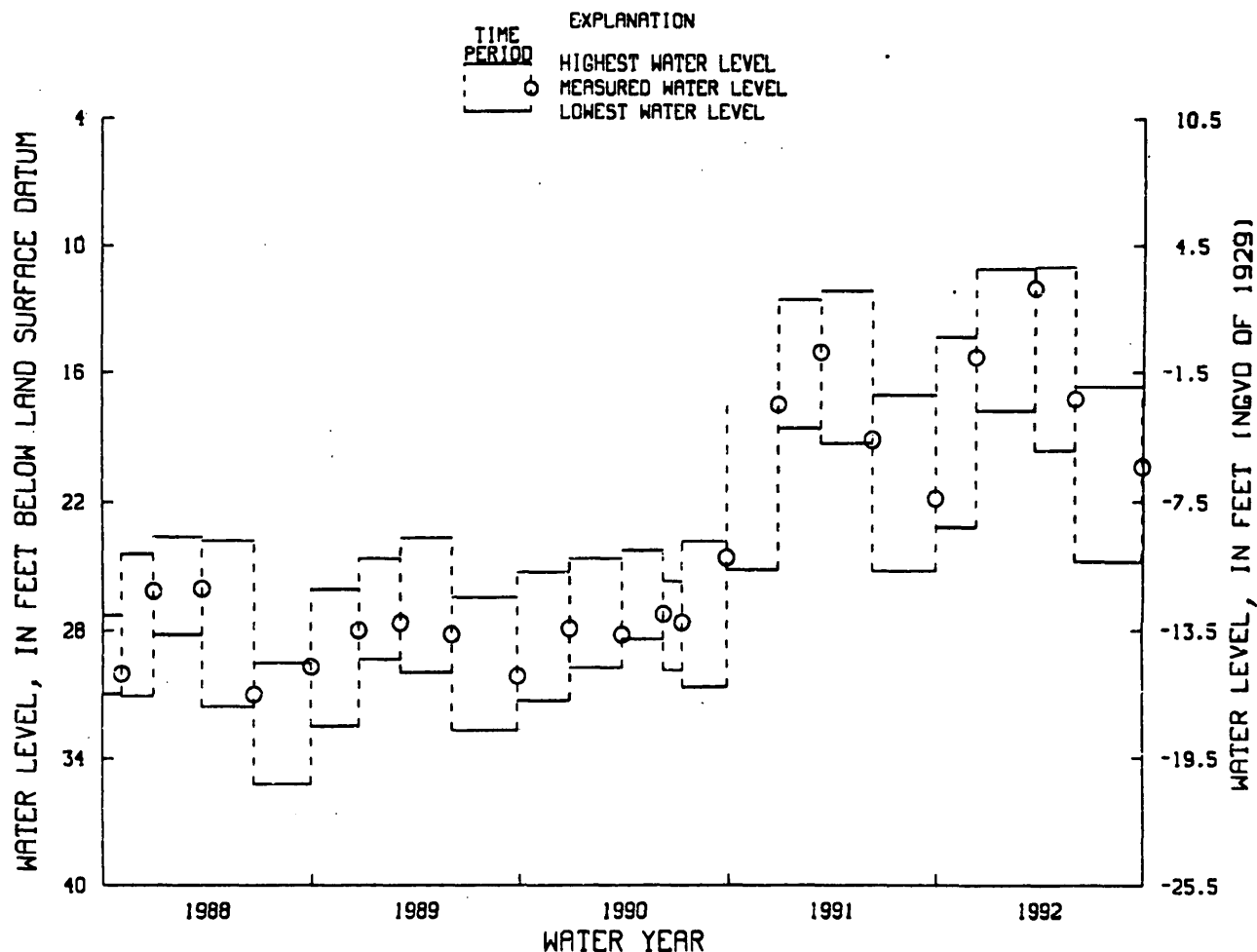
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES

MEASURED WATER LEVEL

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 30, 1991 TO DEC. 10, 1991	14.33	23.21	DEC. 10, 1991	15.29
DEC. 10, 1991 TO MAR. 23, 1992	11.10	17.84	MAR. 23, 1992	12.03
MAR. 23, 1992 TO JUNE 2, 1992	11.01	19.65	JUNE 2, 1992	17.27
JUNE 2, 1992 TO SEPT. 28, 1992	16.69	24.80	SEPT. 28, 1992	20.35

NJ-WRD WELL NO. 25-0206



MORRIS COUNTY

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

LOCATION---Lat 40°46'39", long 74°23'00", Hydrologic Unit 02030103, at Briarwood School, Florham Park Borough.

Owner: U.S. Geological Survey.

AQUIFER---Stratified drift of Pleistocene age.

WELL CHARACTERISTICS---Drilled observation well, diameter 6 in., depth 110 ft, screened 100 to 110 ft.

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

DATUM---Land-surface datum is 198 ft above National Geodetic Vertical Datum of 1929, by altimeter.

Measuring point: Top edge of recorder shelf, 3.00 ft above land-surface datum.

PERIOD OF RECORD---Mar. 1967 to May 1975, Apr. 1977 to current year. Records for 1967 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD---Highest water level, 34.17 ft below land-surface datum, June 3, 1968; lowest, 59.71 ft below land-surface datum, May 4, 1989.

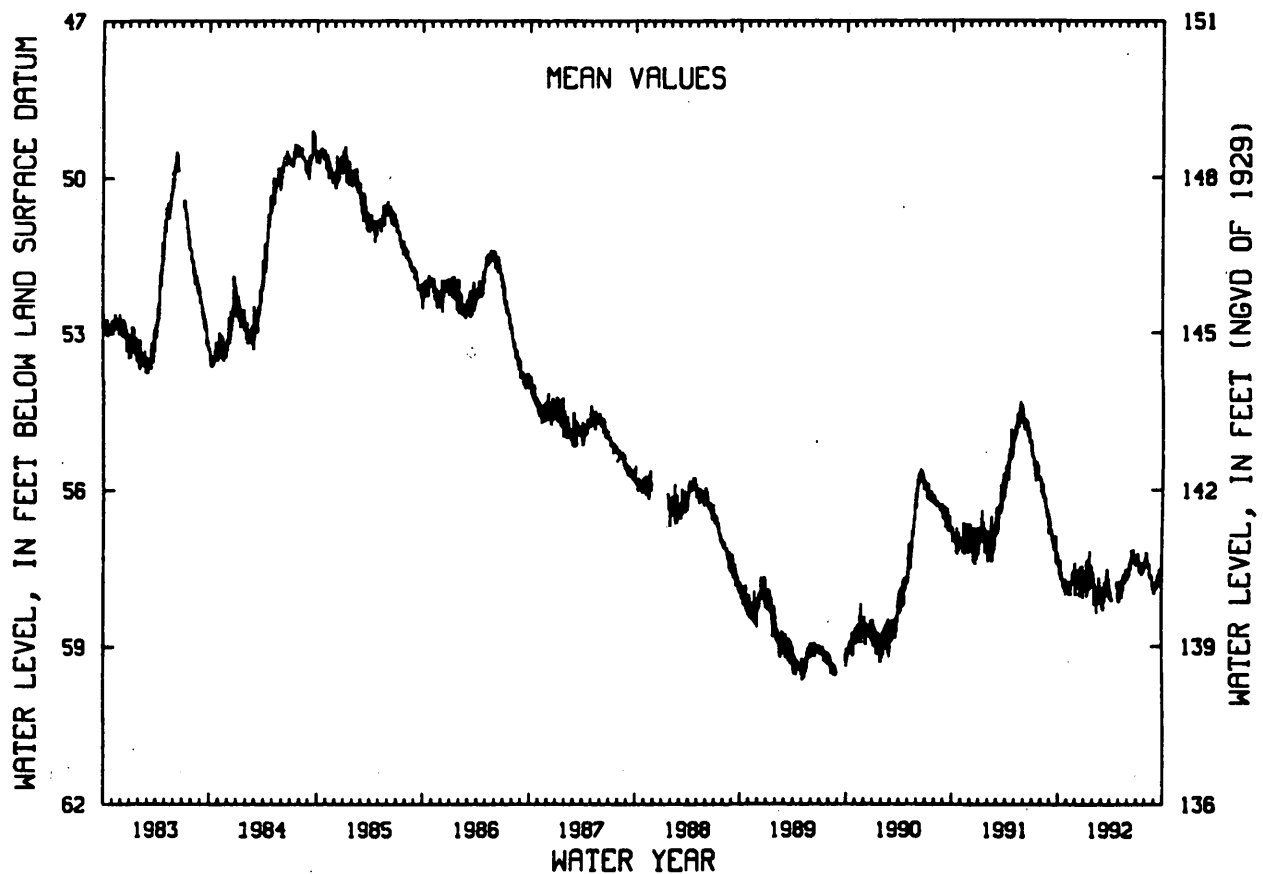
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	57.38	57.93	58.02	57.69	57.81	58.05	58.07	58.15	57.65	57.33	57.48	58.00
10	57.38	57.76	57.83	57.67	58.17	58.05	58.07	57.98	57.64	57.37	57.27	57.82
15	57.57	57.85	57.84	58.06	57.97	58.14	---	58.07	57.43	57.36	57.46	57.74
20	57.86	57.77	57.78	57.57	58.14	58.00	---	57.82	57.22	57.49	57.61	57.78
25	57.81	57.78	57.95	57.91	57.93	57.87	---	57.77	57.27	57.51	57.64	57.69
EOM	57.81	57.61	58.08	57.49	58.19	57.70	57.78	57.53	57.32	57.42	57.80	57.68
MEAN	57.64	57.83	57.74	57.70	57.94	57.99	---	57.85	57.46	57.45	57.53	57.77

WTR YR 1992 MEAN 57.73 HIGH 56.80 JAN 23 LOW 58.47 FEB 17

NJ-WRD WELL NO.27-0012



MORRIS COUNTY

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

LOCATION.--Lat 40°47'12", long 74°45'47", Hydrologic Unit 02030105, near the intersection of Bartley Rd. and Rt. 24, Long Valley, Washington Township.

Owner: State of New Jersey.

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 datum is 600.8 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 1.50 ft above land-surface datum.

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

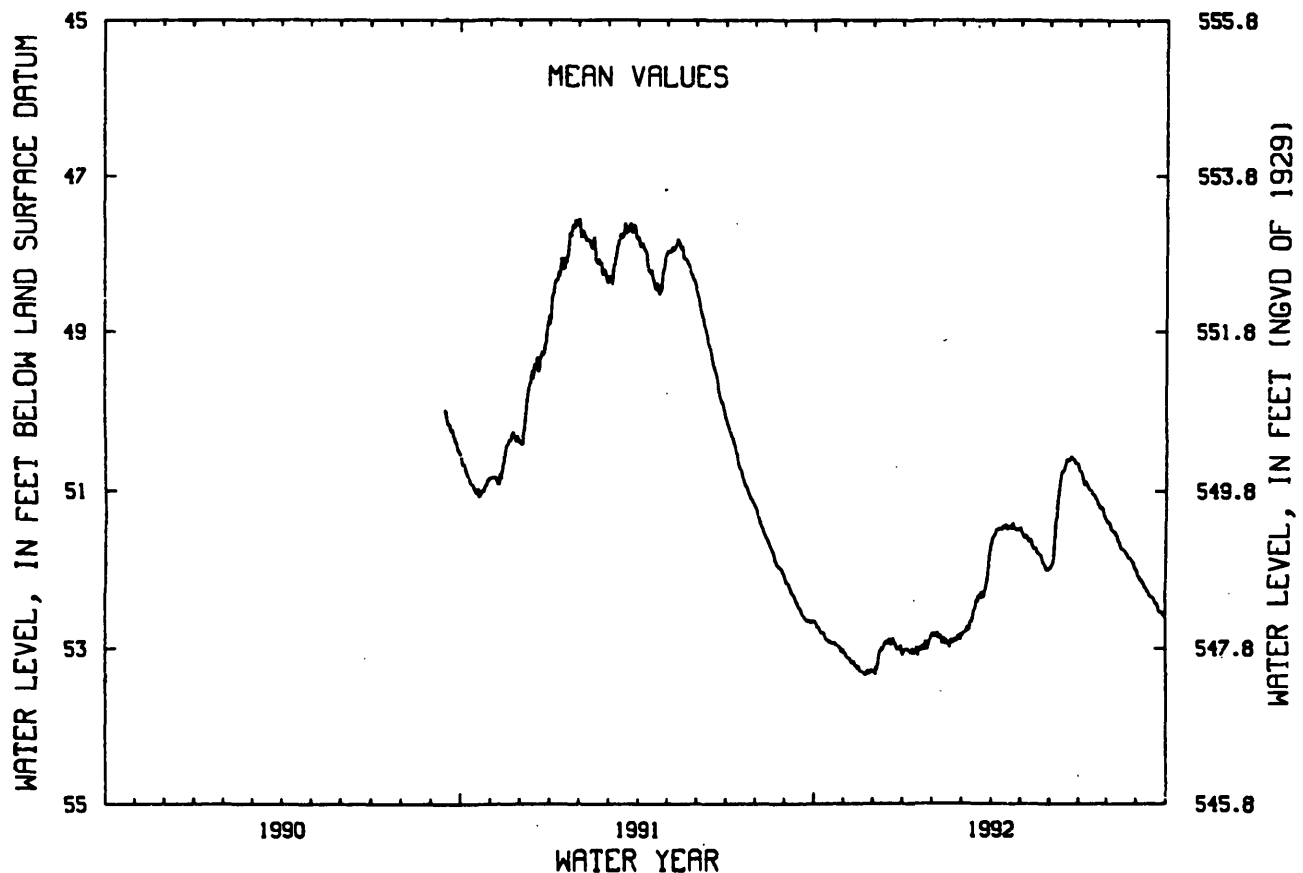
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 47.50 ft below land-surface datum, Jan. 30, 1991; lowest, 53.37 ft below land-surface datum, Nov. 22-23, Dec. 2, 1991

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	52.72	53.13	53.21	53.02	52.86	52.77	51.57	51.57	51.90	50.79	51.49	52.13
10	52.79	53.16	53.02	53.02	52.91	52.67	51.48	51.62	51.09	50.91	51.56	52.23
15	52.89	53.23	52.94	53.09	52.91	52.50	51.47	51.72	50.75	50.99	51.71	52.34
20	52.93	53.31	52.90	52.95	52.93	52.36	51.46	51.79	50.61	51.11	51.78	52.43
25	52.96	53.31	53.01	52.99	52.86	52.31	51.47	51.91	50.60	51.22	51.86	52.52
EOM	53.05	53.29	53.07	52.80	52.88	51.78	51.48	51.99	50.65	51.36	52.00	52.60
MEAN	52.87	53.23	53.02	52.98	52.88	52.46	51.50	51.73	51.01	51.03	51.69	52.33
WTR YR 1992	MEAN 52.23	HIGH 50.54	JUN 24	LOW 53.37	NOV 22-23,	DEC 2						

NJ-WRD WELL NO.27-1303



MORRIS COUNTY

404934074400501. Local I.D., Black River 10 Obs. NJ-WRD Well Number, 27-1190.

LOCATION.--Lat 40°49'34", long 74°40'05", Hydrologic Unit 02030105, at Black River Wildlife Management Area off 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.

DATUM.--Land-surface datum is 820 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

PERIOD OF RECORD.--Apr. 1991 to current year. Periodic manual measurements, Apr. 1991 to May 1992.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.45 ft below land-surface datum, June 19, 1992; lowest, 10.09 ft below land-surface datum, Sept. 30, 1992.

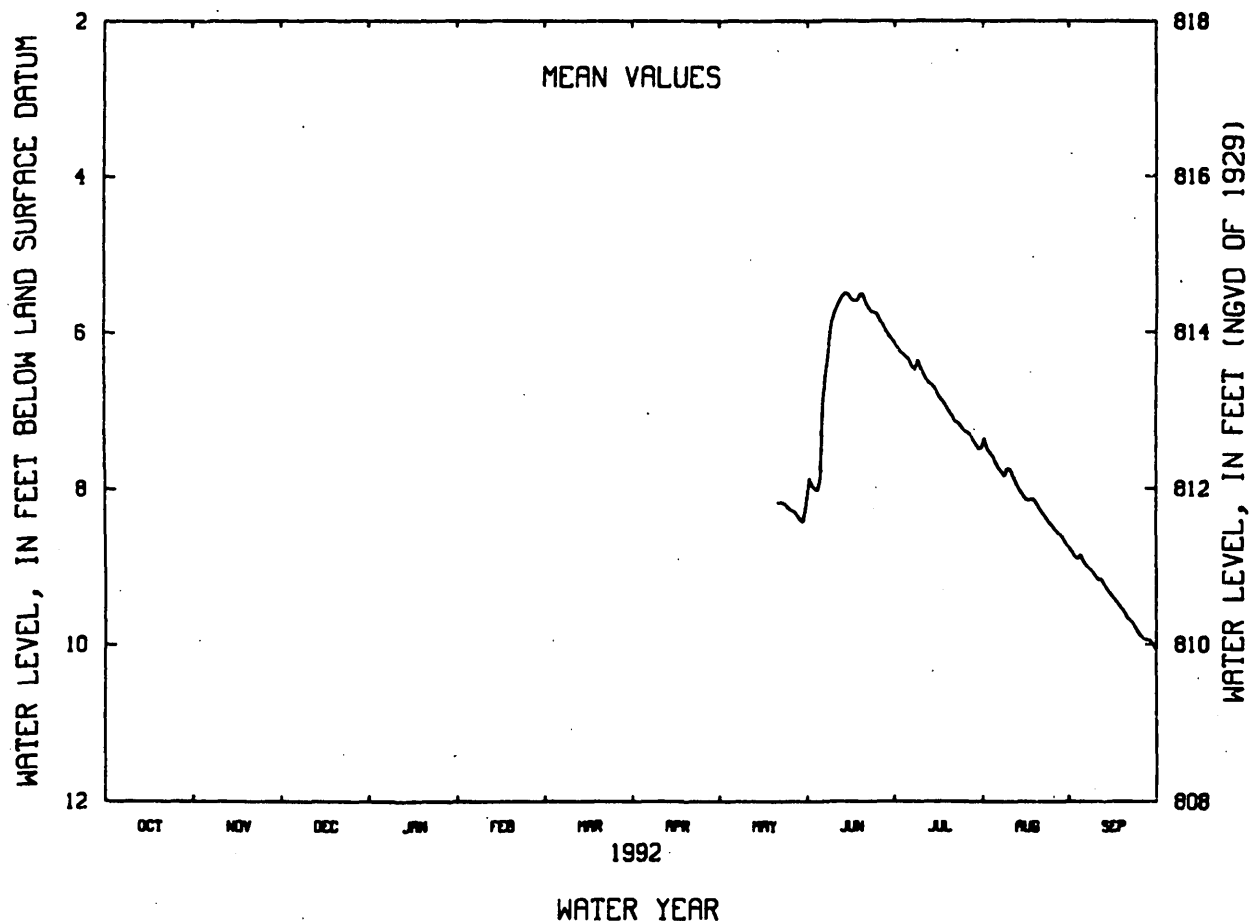
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	7.85	6.32	7.67	8.94
10	---	---	---	---	---	---	---	---	5.76	6.47	7.75	9.17
15	---	---	---	---	---	---	---	---	5.52	6.73	8.11	9.39
20	---	---	---	---	---	---	---	---	5.52	7.02	8.23	9.65
25	---	---	---	---	---	---	---	8.26	5.77	7.25	8.48	9.90
EOM	---	---	---	---	---	---	---	8.20	6.08	7.49	8.76	10.06
MEAN	---	---	---	---	---	---	---	---	6.17	6.81	8.10	9.42

WTR YR 1992 HIGH 5.45 JUN 19 LOW 10.09 SEP 30

NJ-WRD WELL NO.27-1190



MORRIS COUNTY

405027074232301. Local I.D., Troy Meadows 1 Obs. NJ-WRD Well Number, 27-0020.
 LOCATION...Lat 40°50'27", Long 74°23'23", Hydrologic Unit 02030103, on the east side of Beverwyck Rd., 0.8 mi. north of intersection with Troy Rd., Parsippany-Troy Hills Township.
 Owner: U.S. Geological Survey.
 AQUIFER...Stratified drift of Pleistocene age.
 WELL CHARACTERISTICS...Drilled observation well, diameter 6 in., depth 89 ft, screened 79 to 89 ft.
 INSTRUMENTATION...Water-level extremes recorder, Apr. 1977 to current year. Water-level recorder, Dec. 1965 to July 1970.
 DATUM...Land-surface datum is 192.07 ft above National Geodetic Vertical Datum of 1929.
 Measuring point: Front edge of cutout in recorder housing, 3.32 ft above land-surface datum.
 PERIOD OF RECORD...Dec. 1965 to July 1970, Apr. 1977 to current year. Periodic manual measurements, Dec. 1970 to Feb. 1975. Records for 1965 to 1981 are unpublished and are available in files of New Jersey District Office.
 EXTREMES FOR PERIOD OF RECORD...Highest water level, 6.00 ft below land-surface datum, Mar. 15-16, 1967 and June 15, 1968; lowest, 15.77 ft below land-surface datum, between Feb. 10 and May 31, 1978.

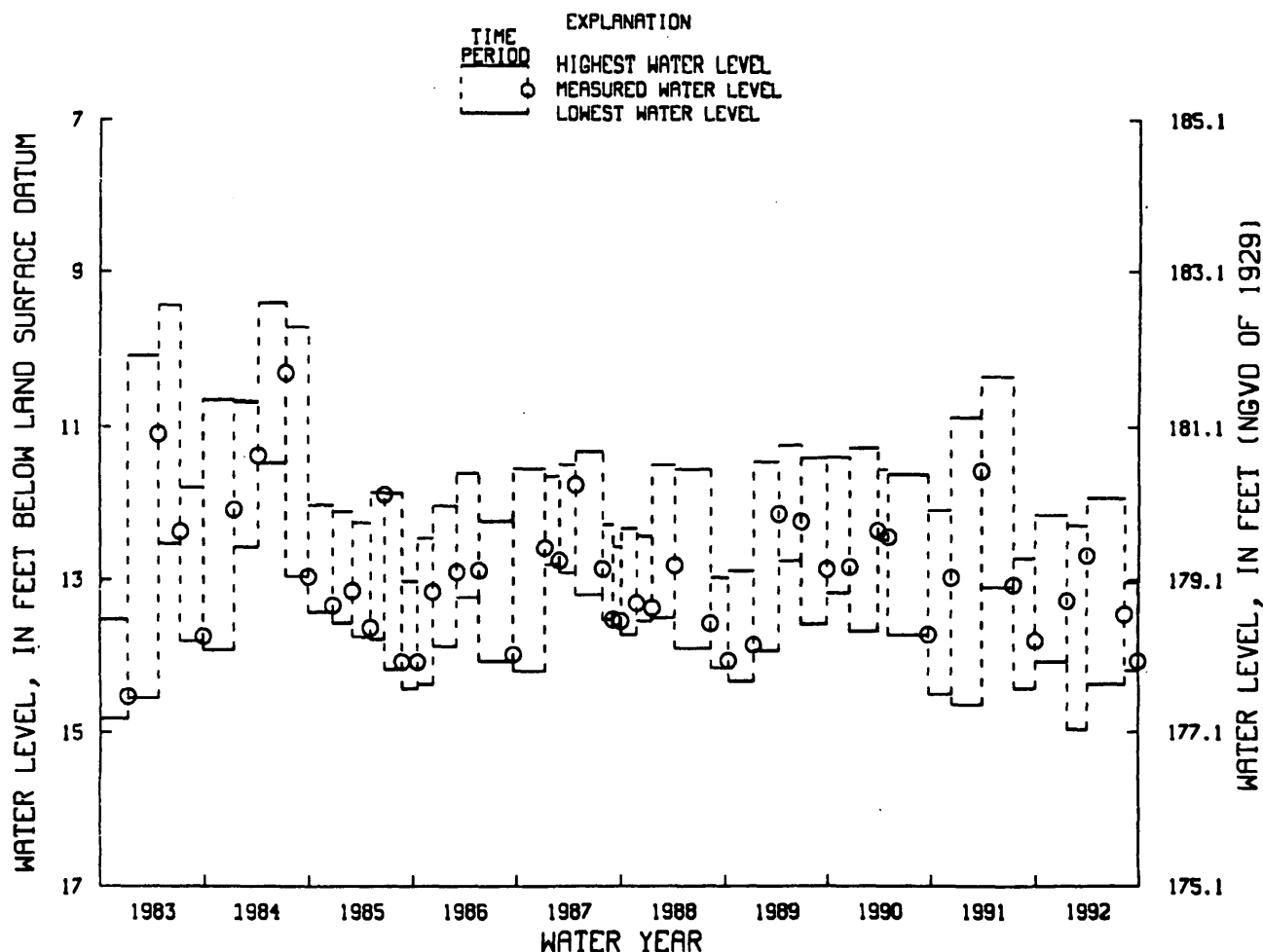
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES

MEASURED WATER LEVEL

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
OCT. 1, 1991 TO JAN. 22, 1992	12.15	14.08	JAN. 22, 1992	13.28
JAN. 22, 1992 TO APR. 2, 1992	12.28	14.97	APR. 2, 1992	12.68
APR. 2, 1992 TO AUG. 13, 1992	11.92	14.37	AUG. 13, 1992	13.45
AUG. 13, 1992 TO SEPT. 29, 1992	13.03	14.19	SEPT. 29, 1992	14.07

NJ-WRD WELL NO. 27-0020



MORRIS COUNTY

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

LOCATION:--Lat 40°51'23", long 74°37'57", Hydrologic Unit 02030105, next to Horseshoe Lake, behind Roxbury Municipal Building, off Eyland Ave., 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 datum is 704.2 ft above National Geodetic Vertical Datum of 1929.

REMARKS:--Water level affected by nearby pumping.

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

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

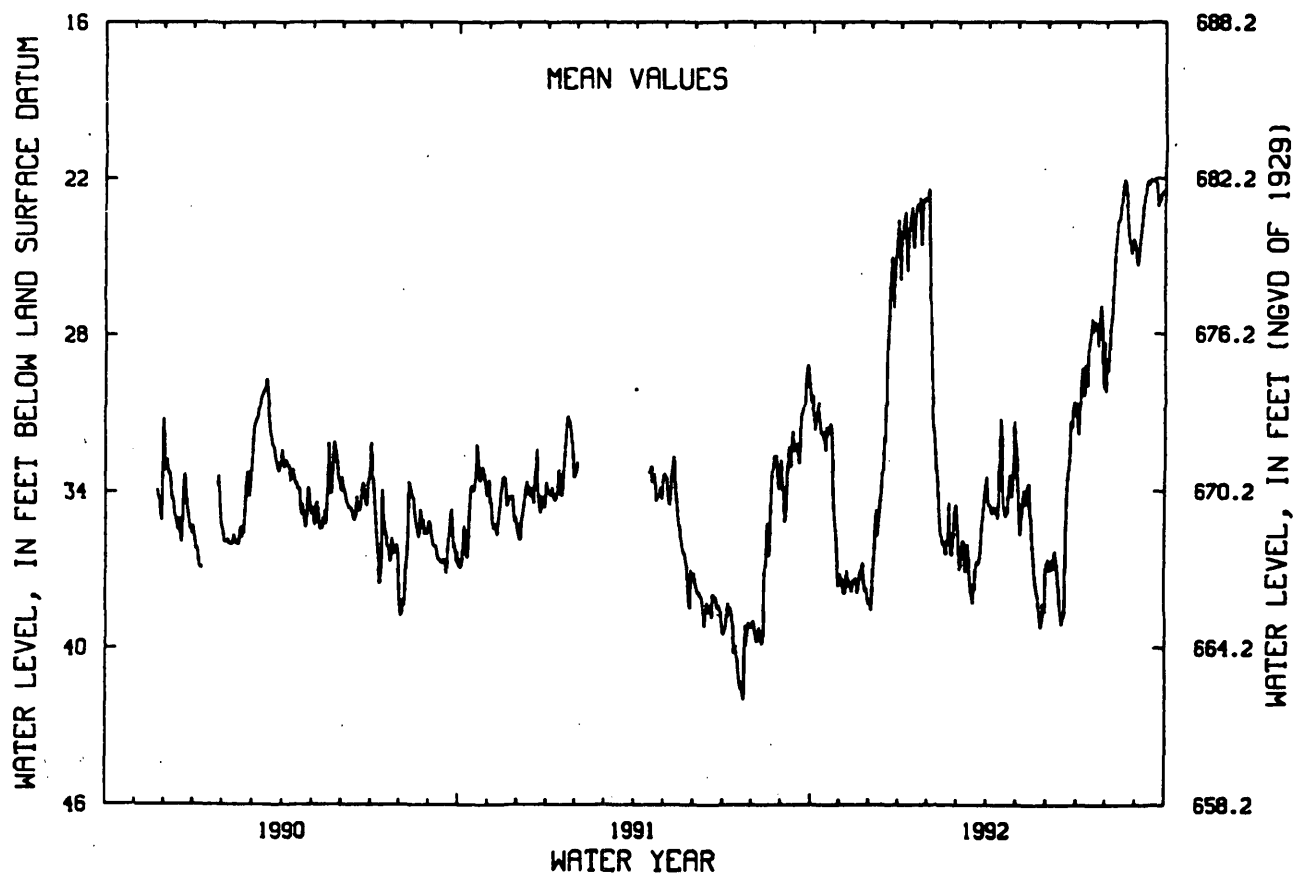
EXTREMES FOR PERIOD OF RECORD:--Highest water level, 21.93 ft below land-surface datum, Sept. 15, 1992; lowest, 42.08 ft below land-surface datum, July 23, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.12	37.90	36.27	23.31	31.74	36.80	34.66	35.69	37.02	30.02	27.89	24.37
10	31.74	37.63	34.80	23.75	34.61	37.10	34.86	34.47	36.79	29.21	24.90	22.63
15	32.44	37.44	31.95	23.91	35.91	37.44	31.26	34.86	39.13	28.18	23.56	22.02
20	31.43	37.35	26.57	22.74	35.99	37.77	35.00	37.29	35.64	27.54	22.08	22.15
25	35.32	37.65	25.68	22.75	35.97	36.47	33.37	39.24	31.41	27.32	24.52	22.82
EOM	37.17	38.31	25.90	25.93	34.53	33.66	32.17	36.79	30.77	30.19	24.74	22.50
MEAN	32.89	37.57	30.67	23.66	34.35	36.38	33.96	36.07	35.61	28.96	24.96	22.96
WTR YR 1992	MEAN 31.48 HIGH 21.93 SEP 15 LOW 39.51 MAY 25											

NJ-WRD WELL NO.27-1191



MORRIS COUNTY

405414074354201. Local I.D., Morris Maint Yd 22 Obs. NJ-WRD Well Number, 27-1192.

LOCATION.--Lat 40°54'18", long 74°35'35", Hydrologic Unit 02030103, at the Morris County Maintenance Yard, Dewey Ave., Rockaway Township.

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.

DATUM.--Land-surface datum is 669.1 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 2.10 ft above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--April 1991 to current year. Periodic manual measurements, Apr. 1991 to May 1992.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 18.38 ft below land-surface datum, June 8, 1992; lowest, 22.50 ft below land-surface datum, Sept. 25, 1992.

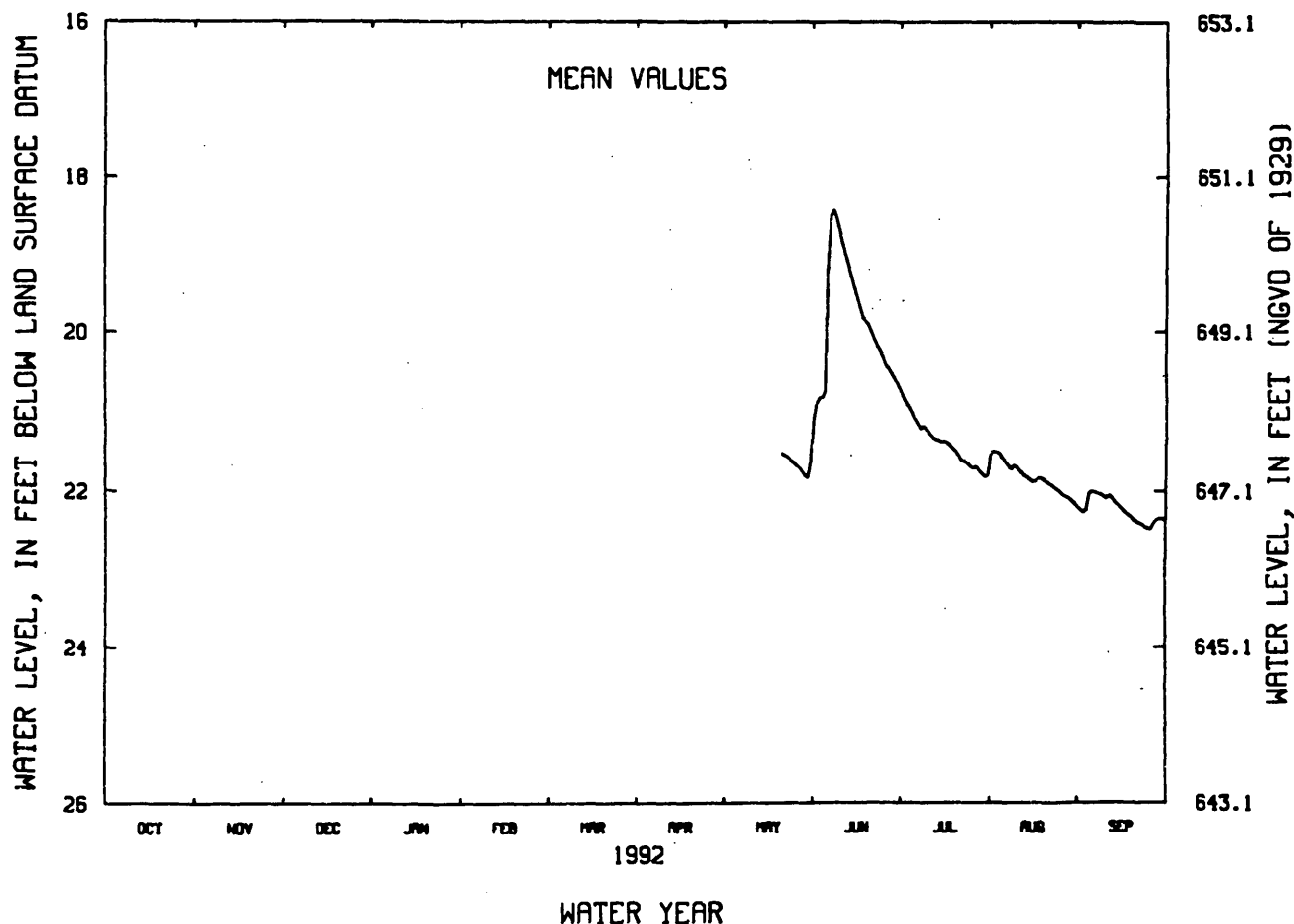
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	20.72	21.00	21.58	22.00
10	---	---	---	---	---	---	---	---	18.69	21.22	21.69	22.09
15	---	---	---	---	---	---	---	---	19.41	21.37	21.86	22.22
20	---	---	---	---	---	---	---	---	19.91	21.49	21.87	22.38
25	---	---	---	---	---	---	---	21.63	20.32	21.68	22.01	22.48
EOM	---	---	---	---	---	---	---	21.63	20.62	21.79	22.20	22.36
MEAN	---	---	---	---	---	---	---	---	19.85	21.37	21.83	22.24

WTR YR 1992 HIGH 18.38 JUN 8 LOW 22.50 SEP 25

NJ-WRD WELL NO.27-1192



MORRIS COUNTY

405509074350401. Local I.D., Picatinny LF 1 Obs. NJ-WRD Well Number, 27-0250.

LOCATION.--Lat 40°55'09", long 74°35'04", Hydrologic Unit 02030103, Picatinny Arsenal, Rockaway Township.

Owner: US Army - Picatinny Arsenal.

AQUIFER.--Leithsville Formation of Cambrian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 345 ft, screened 325 to 345 ft.

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

DATUM.--Land-surface datum is 692.85 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 3.70 ft above land-surface datum.

PERIOD OF RECORD.--Apr. 1983 to May 1984, Mar. 1989 to Dec. 1991 (discontinued). Records for 1983, 1984 and 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.54 ft below land-surface datum, May 24, 1989; lowest, 21.63 ft below land-surface datum, Nov. 17-18, 1992.

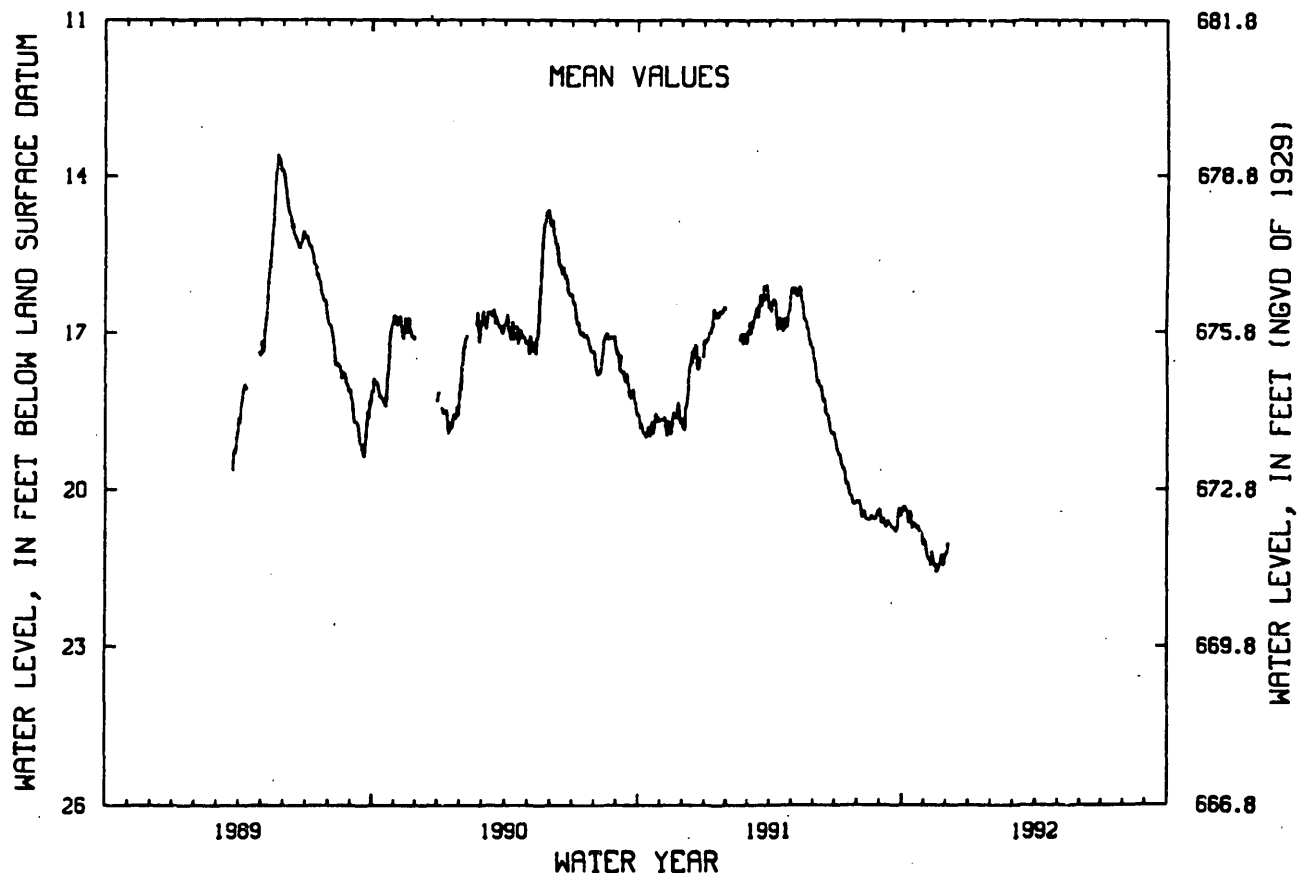
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.39	21.30	---	---	---	---	---	---	---	---	---	---
10	20.55	21.33	---	---	---	---	---	---	---	---	---	---
15	20.69	21.47	---	---	---	---	---	---	---	---	---	---
20	20.72	21.48	---	---	---	---	---	---	---	---	---	---
25	20.80	21.26	---	---	---	---	---	---	---	---	---	---
EOM	20.95	21.23	---	---	---	---	---	---	---	---	---	---
MEAN	20.64	21.34	---	---	---	---	---	---	---	---	---	---

WTR YR 1992 HIGH 20.30 OCT 3-4 LOW 21.63 NOV 17-18

NJ-WRD WELL NO.27-0250



MORRIS COUNTY

405509074350402. Local I.D., Picatinny LF 2 Obs. NJ-WRD Well Number, 27-0251.

LOCATION.--Lat 40°55'09", long 74°35'04", Hydrologic Unit 02030103, Picatinny Arsenal, Rockaway Township.

Owner: US Army - Picatinny Arsenal.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 65 ft, screened 60 to 65 ft.

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

DATUM.--Land-surface datum is 693.29 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 4.10 ft above land-surface datum.

PERIOD OF RECORD.--Apr. 1983 to Dec. 1991 (discontinued). Records for 1983 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.47 ft below land-surface datum, Apr. 20, 1983; lowest, 10.58 ft below land-surface datum, Nov. 21, 1992.

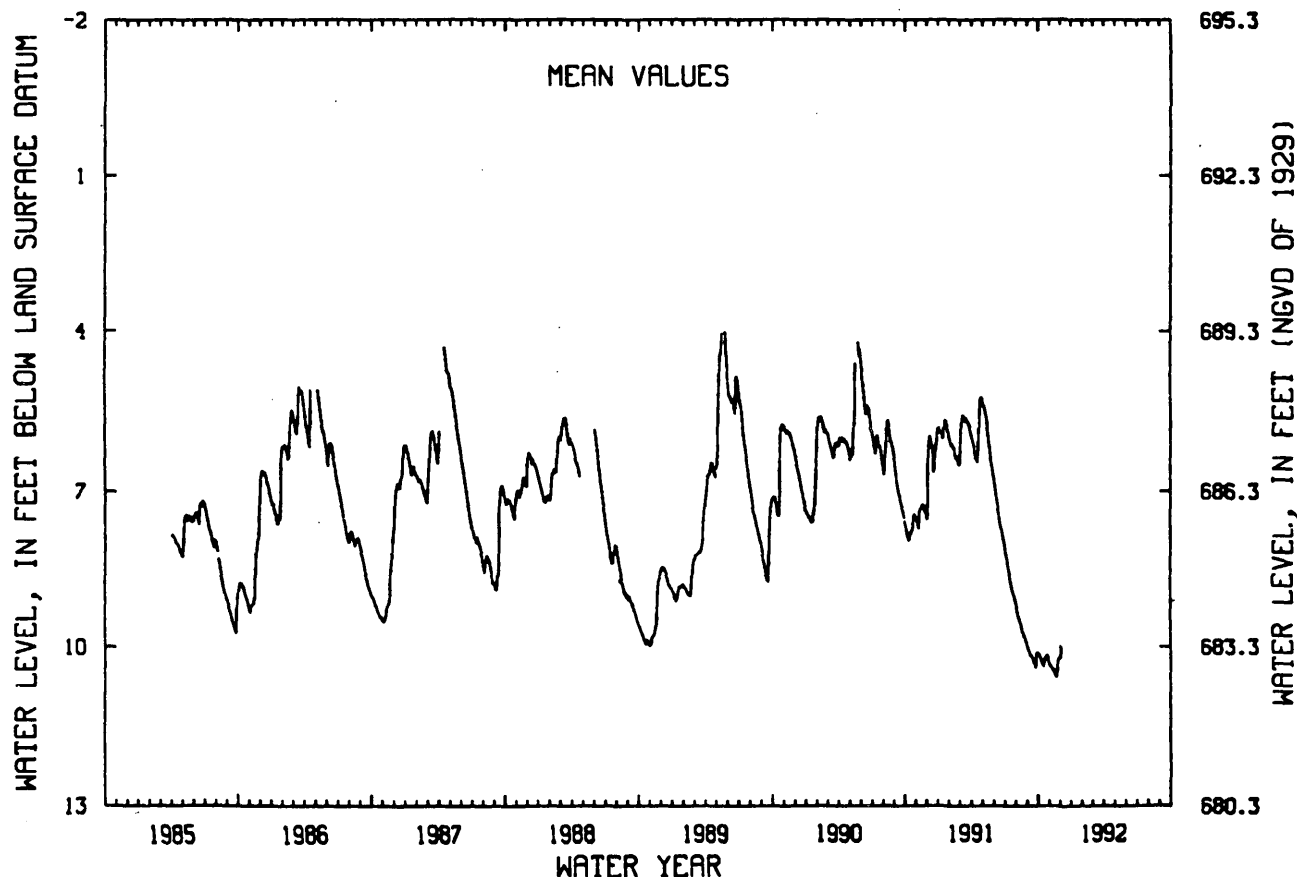
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.18	10.37	---	---	---	---	---	---	---	---	---	---
10	10.30	10.44	---	---	---	---	---	---	---	---	---	---
15	10.35	10.48	---	---	---	---	---	---	---	---	---	---
20	10.23	10.57	---	---	---	---	---	---	---	---	---	---
25	10.16	10.25	---	---	---	---	---	---	---	---	---	---
EOM	10.33	10.20	---	---	---	---	---	---	---	---	---	---
MEAN	10.24	10.39	---	---	---	---	---	---	---	---	---	---

WTR YR 1992 HIGH 9.82 DEC 3 LOW 10.58 NOV 21

NJ-WRD WELL NO.27-0251



MORRIS COUNTY

405531074361901. Local I.D., Berkshire Valley 9 Obs. NJ-WRD Well Number, 27-G027.

LOCATION.--Lat 40°55'31", long 74°36'19", Hydrologic Unit 02030103, about 1,000 ft east of the intersection of Lower Berkshire Valley Rd. and Minnisink Rd., Jefferson Township.

Owner: State of New Jersey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 98 ft, screened 78 to 98 ft.

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

DATUM.--Land-surface datum is 725.64 ft above National Geodetic Vertical Datum of 1929 (levels by Woodward-Clyde Consultants).

Measuring point: Top of 6 inch casing, 2.25 ft above land surface datum.

PERIOD OF RECORD.--Nov. 1981 to current year. Periodic manual measurements Nov. 1981 to Mar. 1985.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.25 ft below land-surface datum, May 18, 1989; lowest, 13.69 ft below land-surface datum, Sept. 18-19, 1991.

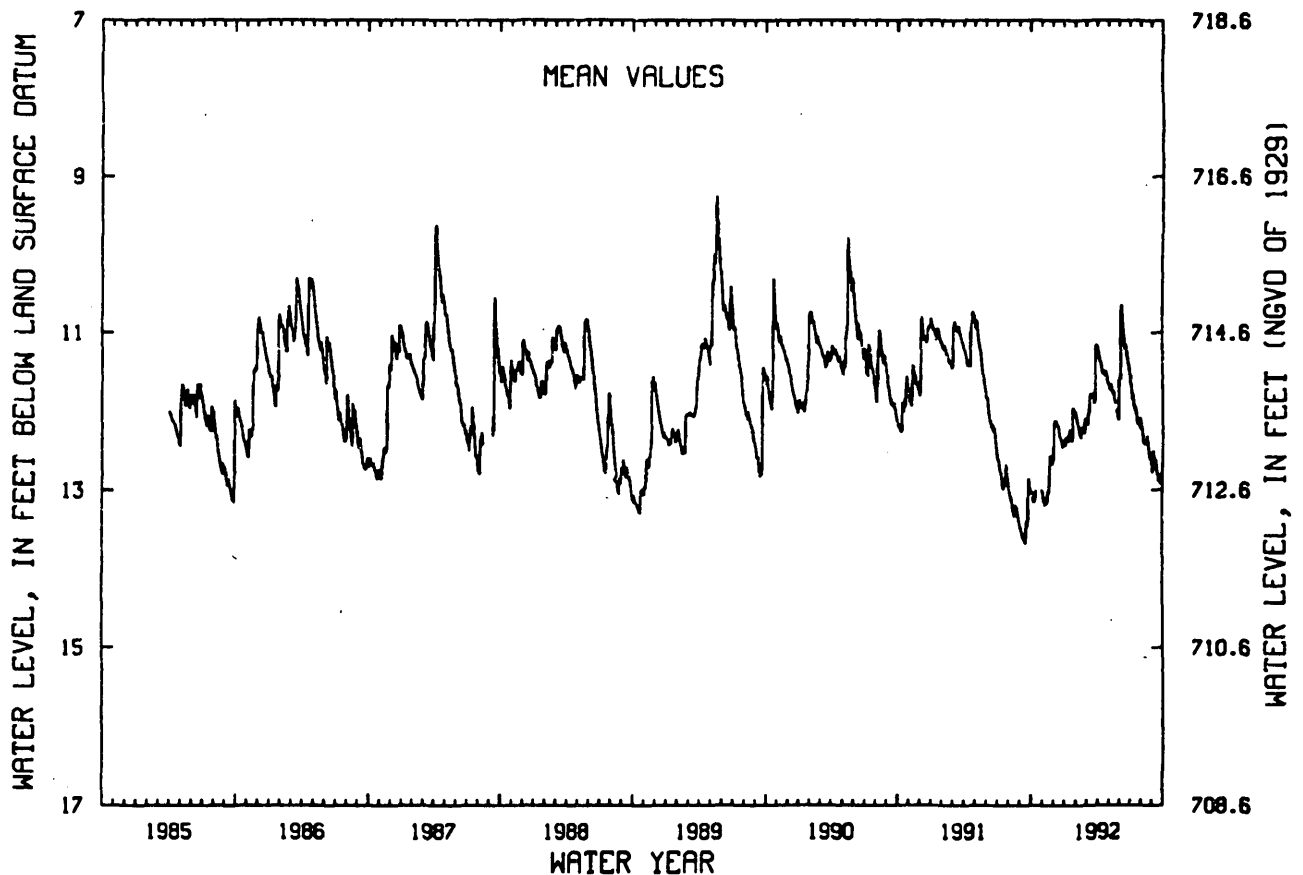
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.05	13.07	12.16	12.33	12.13	12.15	11.25	11.70	11.56	11.68	12.27	12.53
10	13.15	13.20	12.12	12.35	12.26	12.00	11.38	11.68	10.78	11.81	12.39	12.66
15	13.14	13.17	12.18	12.25	12.34	11.78	11.50	11.79	11.06	11.98	12.40	12.77
20	---	13.04	12.33	12.33	12.20	11.78	11.52	11.86	11.15	12.07	12.41	12.87
25	---	12.59	12.40	11.96	12.27	11.90	11.49	12.00	11.35	12.15	12.60	12.92
EOM	---	12.66	12.39	12.01	12.10	11.16	11.63	11.94	11.49	12.21	12.69	12.83
MEAN	---	12.96	12.30	12.26	12.20	11.81	11.43	11.82	11.19	11.95	12.42	12.75

WTR YR 1992 MEAN 12.15 HIGH 10.63 JUN 7-8 LOW 13.20 NOV 10-11

NJ-WRD WELL NO.27-0027



MORRIS COUNTY

405623074341301. Local I.D., Picatinny Caf 1 Obs. NJ-WRD Well Number, 27-0242.

LOCATION.--Lat 40°56'23", long 74°34'13", Hydrologic Unit 02030103, Picatinny Arsenal, Rockaway Township.

Owner: US Army - Picatinny Arsenal.

AQUIFER.--Hardyston Quartzite of Cambrian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 268 ft, screened 253 to 268 ft.

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

DATUM.--Land-surface datum is 702.72 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 3.00 ft above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--Jan. 1983 to May 1984, Dec. 1987 to current year. Records for 1983 to 1984 and 1987 to 1989 are unpublished and are available in the files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.59 ft below land-surface datum, Apr. 18, 1983; lowest, 18.68 ft below land-surface datum, Sept. 17, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

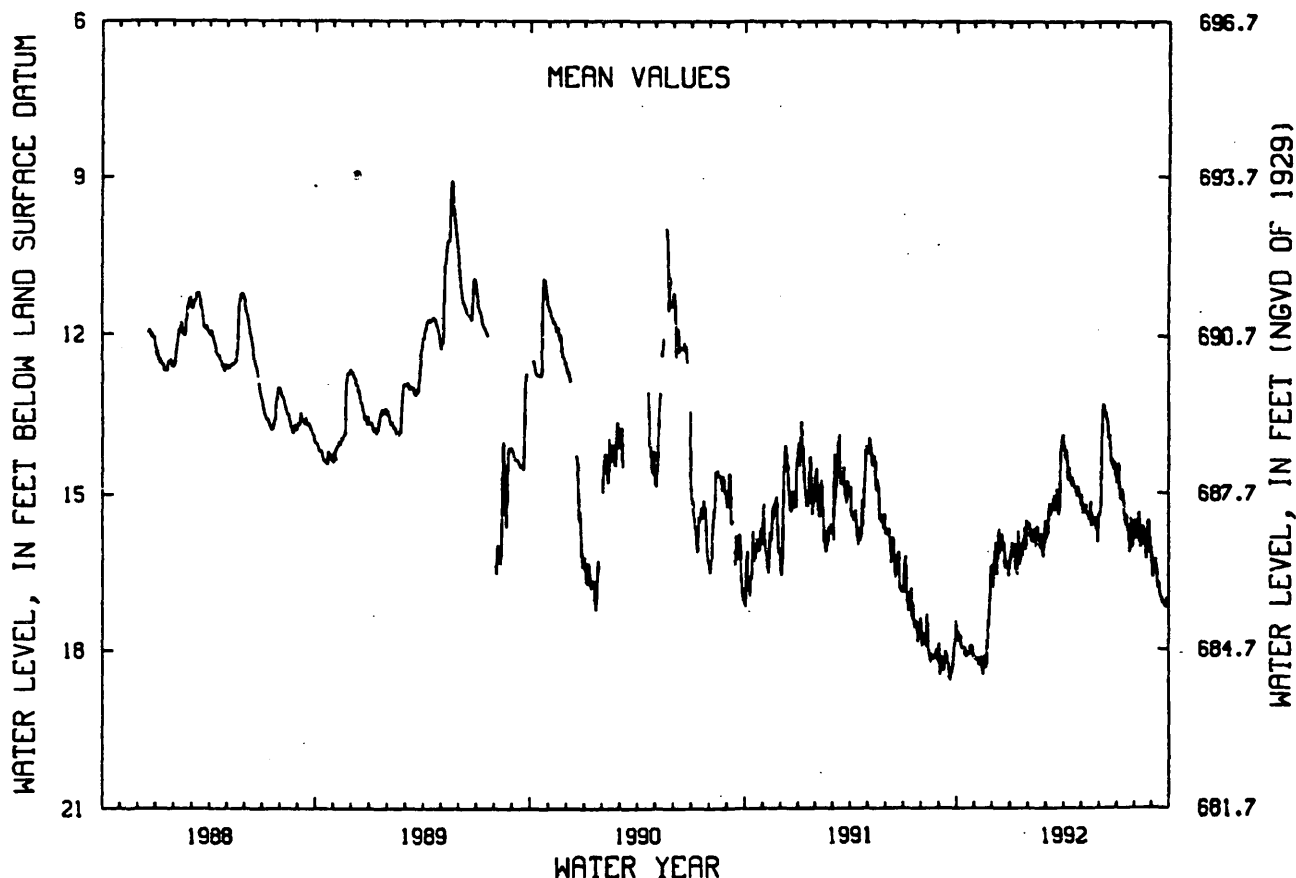
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.75	18.14	16.16	16.09	15.92	15.77	14.35	15.38	14.96	14.43	15.67	16.29
10	17.92	18.27	15.81	16.09	15.72	15.42	14.74	15.22	13.32	15.04	15.97	16.51
15	17.99	18.18	15.80	16.08	15.66	15.05	14.84	15.51	13.63	15.42	15.63	16.96
20	18.04	18.34	16.06	16.19	16.05	15.10	14.90	15.37	13.87	15.73	16.01	17.11
25	17.91	17.29	16.35	15.65	16.22	15.39	15.01	15.46	14.38	15.73	15.56	17.20
EOM	18.16	16.37	16.10	15.67	15.77	13.88	15.09	15.63	14.64	15.88	16.30	17.10

MEAN 17.96 17.88 16.19 16.06 15.87 15.16 14.66 15.43 14.16 15.35 15.84 16.82

WTR YR 1992 MEAN 15.95 HIGH 12.85 JUN 8 LOW 18.52 NOV 19-20

NJ-WRD WELL NO.27-0242



MORRIS COUNTY

405623074341304. Local I.D., Picatinny Caf. 4 Obs. NJ-WRD Well Number, 27-0245.

LOCATION.--Lat 40°56'23", long 74°34'13", Hydrologic Unit 02030103, Picatinny Arsenal, Rockaway Township.

Owner: US Army - Picatinny Arsenal.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 173 ft, screened 168 to 173 ft.

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

DATUM.--Land-surface datum is 702.91 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 3.10 ft above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--Oct. 1983 to Aug. 1984, Oct. 1987 to current year. Records for 1983 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, 8.82 ft below land-surface datum, Apr. 18, 1983; lowest, 19.41 ft below land-surface datum, Sept. 19, 1991.

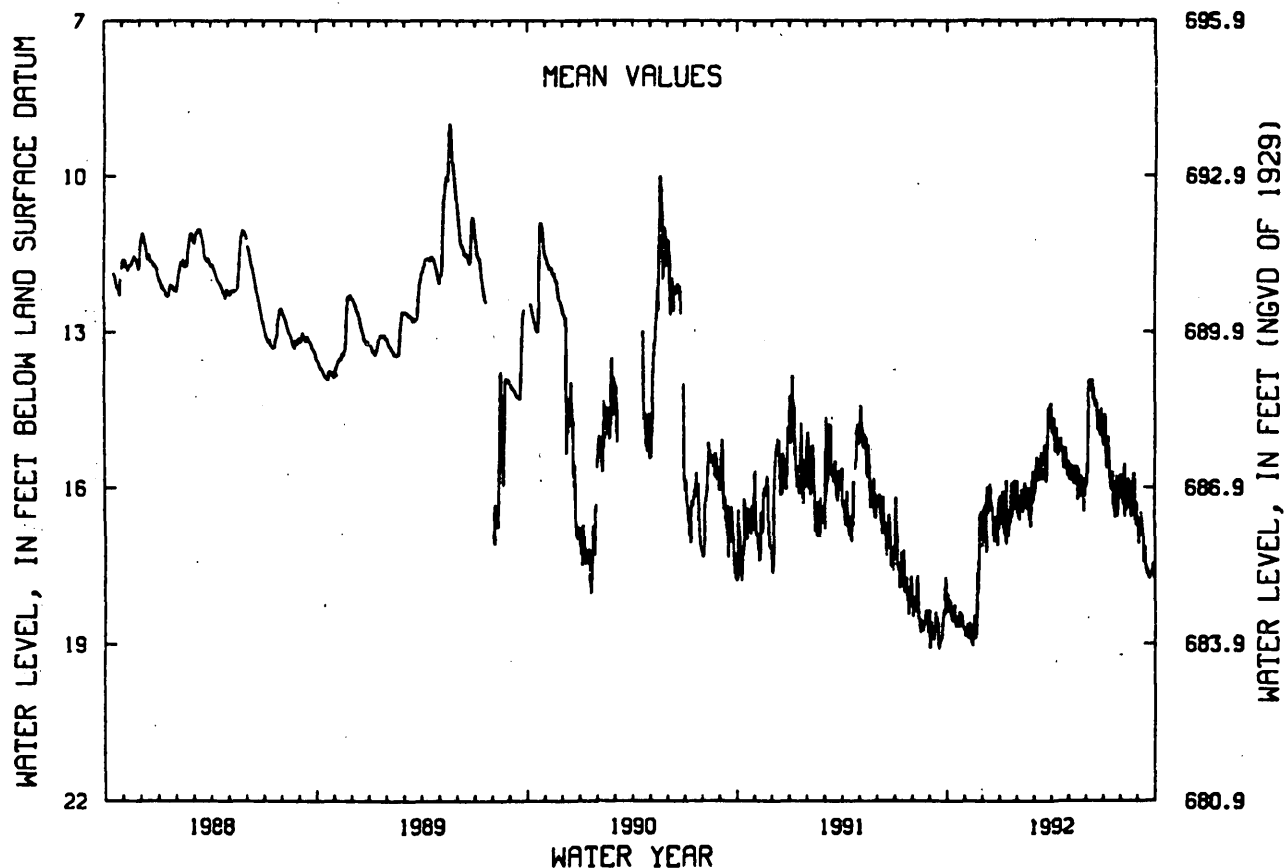
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.25	18.61	16.50	16.31	16.62	16.10	14.99	15.86	15.36	14.59	15.85	16.58
10	18.42	18.90	16.01	16.37	16.07	15.86	15.30	15.59	13.96	15.36	16.56	16.94
15	18.48	18.63	16.08	16.67	15.91	15.33	15.26	15.91	14.06	15.88	15.87	17.49
20	18.51	18.89	16.36	16.66	16.41	15.53	15.28	15.65	14.31	16.34	16.42	17.73
25	18.47	17.47	16.56	15.90	16.75	15.89	15.43	15.77	14.86	15.99	15.73	17.66
EOM	18.69	16.46	16.22	16.14	15.96	14.41	15.63	16.07	15.00	16.21	16.73	17.56
MEAN	18.47	18.30	16.53	16.45	16.26	15.52	15.14	15.88	14.64	15.70	16.14	17.29

WTR YR 1992 MEAN 16.36 HIGH 12.19 JUN 8 LOW 19.15 NOV 14

NJ-WRD WELL NO.27-0245



MORRIS COUNTY

405628074341801. Local I.D., Picatinny 9C Obs. NJ-WRD Well Number, 27-0095.

LOCATION.--Lat 40°56'28", long 74°34'18", Hydrologic Unit 02030103, Picatinny Arsenal, Rockaway Township.

Owner: US Army - Picatinny Arsenal.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 20.3 ft, screened 10 to 20.3 ft.

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

DATUM.--Land-surface datum is 702.11 ft above National Geodetic Vertical Datum of 1929.

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

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--Oct. 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, 2.88 ft below land-surface datum, May 11, 1989; lowest, 10.72 ft below land-surface datum, Aug. 18-19, 1991.

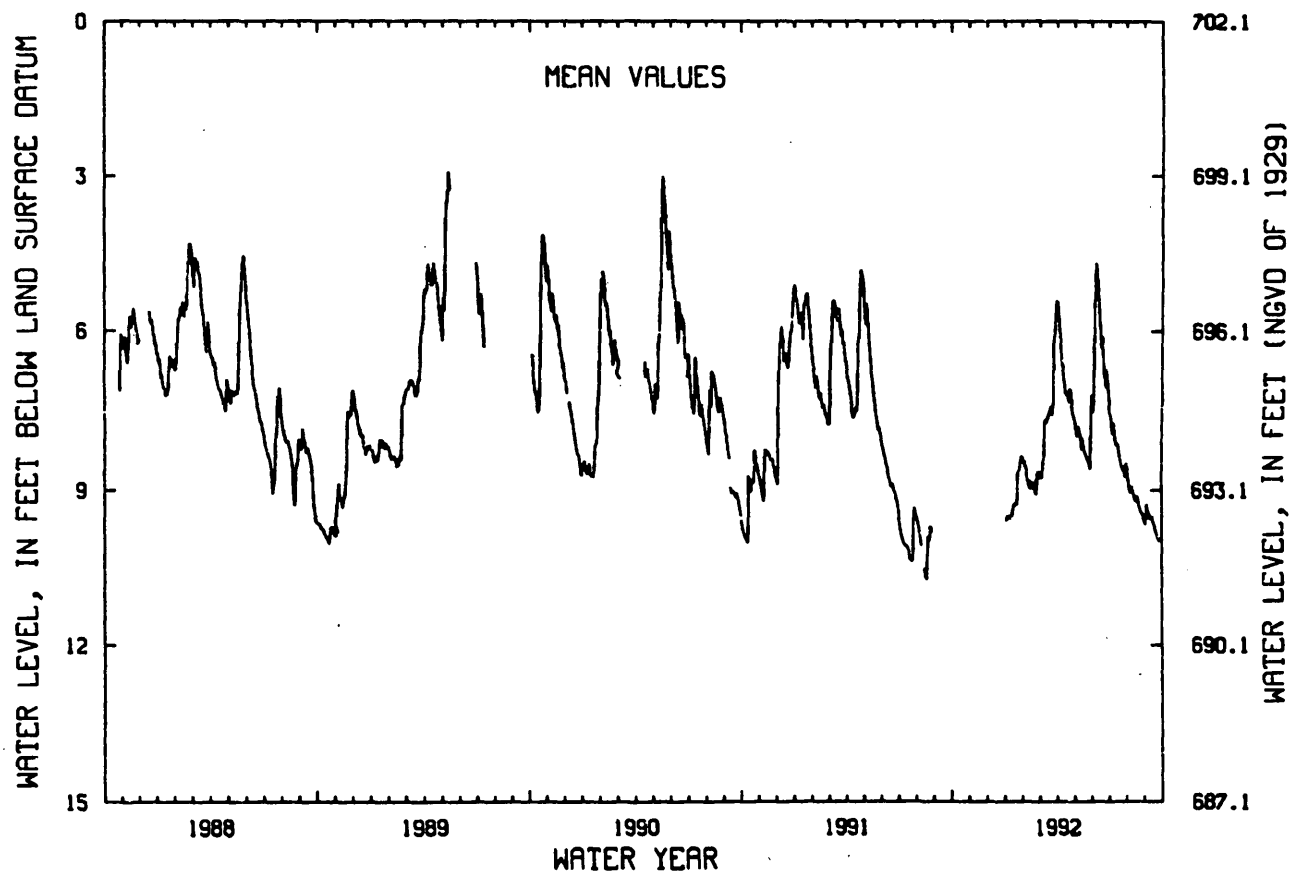
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	9.52	8.54	8.74	5.85	7.86	7.24	7.60	8.89	9.34
10	---	---	---	9.49	8.83	8.33	6.59	7.81	4.84	7.73	8.93	9.55
15	---	---	---	9.37	8.97	7.68	7.07	8.21	5.76	8.12	9.17	9.60
20	---	---	---	9.23	8.94	7.50	7.17	8.23	6.11	8.35	9.18	9.81
25	---	---	---	8.63	9.07	7.52	7.09	8.41	6.88	8.59	9.42	9.98
EOM	---	---	---	8.34	8.76	5.52	7.56	8.12	7.11	8.74	9.57	9.98
MEAN	---	---	---	---	8.78	7.64	6.74	8.09	6.26	8.12	9.14	9.68

WTR YR 1992 HIGH 4.67 JUN 9 LOW 9.99 SEP 30

NJ-WRD WELL NO.27-0095



MORRIS COUNTY

405629074340901. Local I.D., Picatinny Caf 5 Obs. NJ-WRD Well Number, 27-0304.

LOCATION.--Lat 40°56'29", long 74°34'09", Hydrologic Unit 02030103, Picatinny Arsenal, Rockaway Township.

Owner: US Army - Picatinny Arsenal.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 29 ft, screened 24 to 29 ft.

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

DATUM.--Land-surface datum is 703.24 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 3.35 ft above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--June to Sept. 1984, Oct. 1987 to current year. Records for 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, 7.47 ft below land-surface datum, May 18-20, 1989; lowest, 14.95 ft below land-surface datum, Sept. 24-25, 1991.

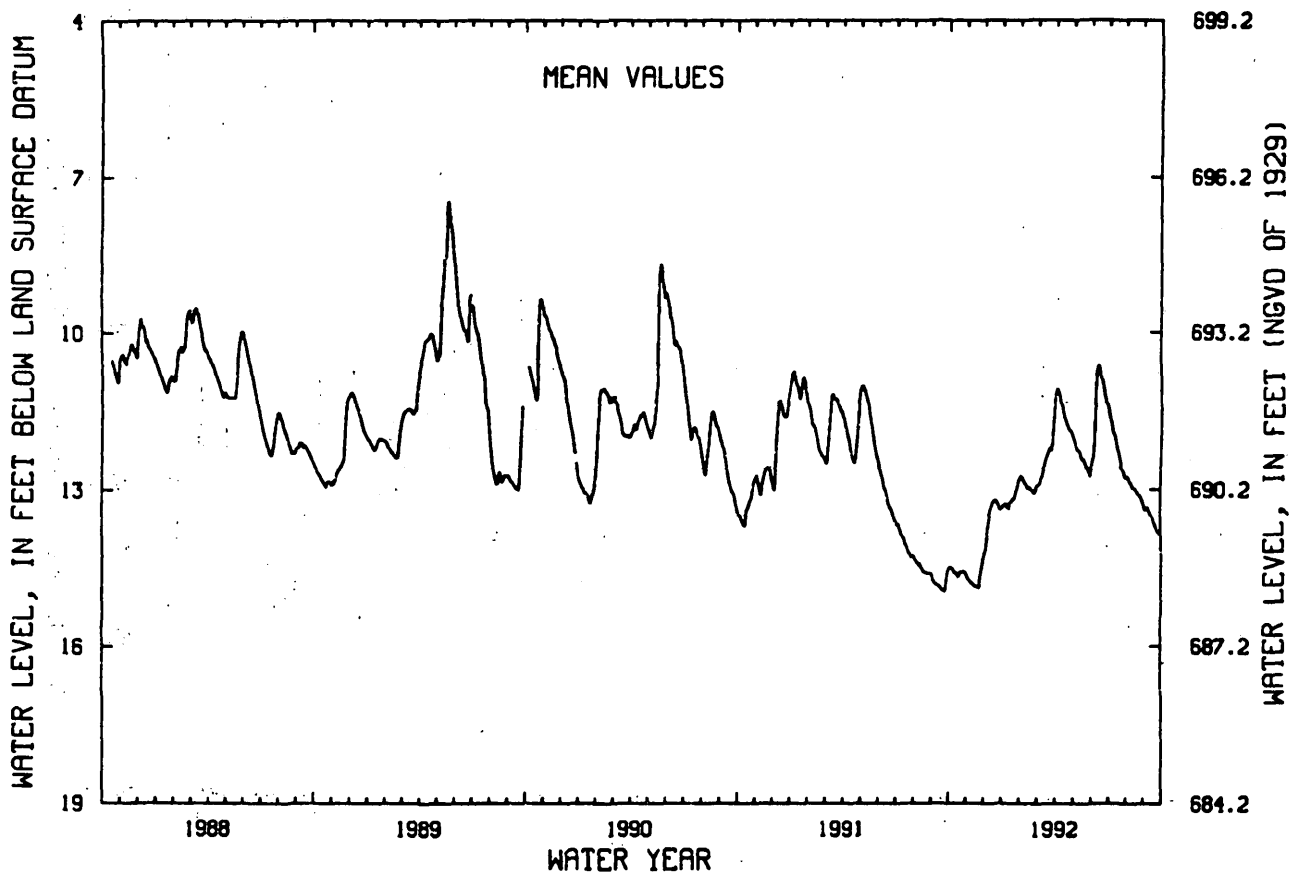
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.49	14.74	13.95	13.29	12.79	12.91	11.11	12.15	12.36	11.69	12.81	13.36
10	14.58	14.80	13.51	13.30	12.89	12.77	11.35	12.26	10.82	11.94	12.91	13.41
15	14.64	14.84	13.27	13.25	12.98	12.49	11.59	12.40	10.67	12.17	12.99	13.53
20	14.58	14.87	13.22	13.19	13.00	12.31	11.76	12.48	10.92	12.38	13.04	13.67
25	14.57	14.56	13.28	13.03	13.08	12.26	11.88	12.60	11.24	12.63	13.12	13.81
EOM	14.63	14.25	13.36	12.78	12.97	11.32	11.98	12.75	11.44	12.78	13.27	13.87
MEAN	14.57	14.71	13.49	13.18	12.93	12.44	11.55	12.40	11.31	12.20	13.00	13.57

WTR YR 1992 MEAN 12.95 HIGH 10.63 JUN 13-14 LOW 14.88 NOV 20-22

NJ-WRD WELL NO.27-0304



GROUND-WATER LEVELS

MORRIS COUNTY

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

LOCATION.--Lat 41°02'07", long 74°27'00", Hydrologic Unit 02030103, about 500 ft east of County Rt. 513 and 1.1 mi. south of the intersection with Rt. 23, Rockaway Township.

Owner: State of New Jersey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 120 ft, screened 80 to 120 ft.

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

DATUM.--Land-surface datum is 758.56 ft above National Geodetic Vertical Datum of 1929 (levels by Woodward-Clyde Consultants).

Measuring point: Top edge of recorder shelf, 1.20 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.35 ft below land-surface datum, Apr. 5, 1984; lowest, 7.05 ft below land-surface datum, Sept. 18-19, 1991.

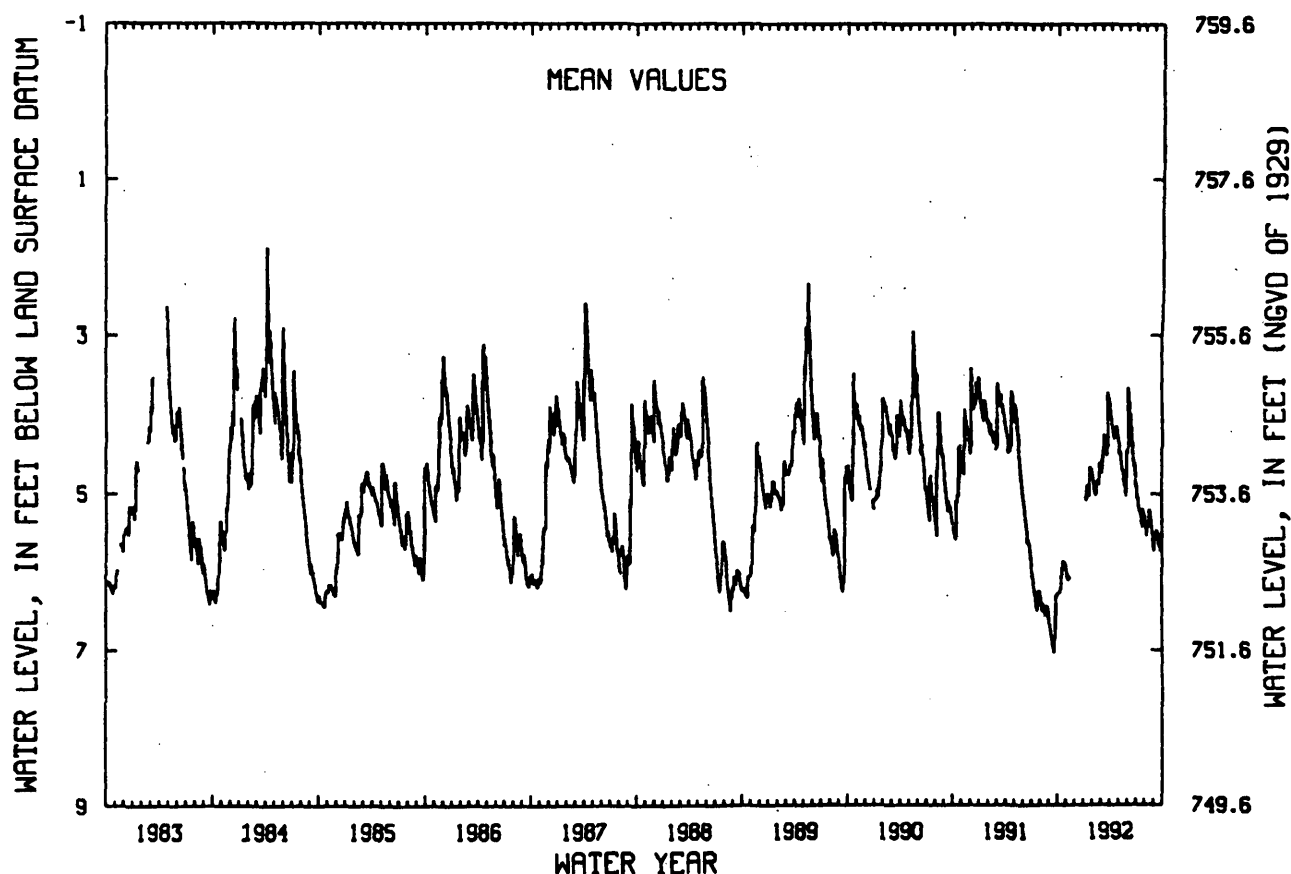
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.28	6.04	---	---	4.82	4.71	3.95	4.42	4.44	4.90	5.41	5.52
10	6.26	6.09	---	5.02	4.97	4.55	4.13	4.45	3.80	5.07	5.44	5.55
15	6.21	6.08	---	4.91	5.01	4.29	4.27	4.69	4.18	5.22	5.37	5.55
20	5.87	---	---	4.95	4.84	4.40	4.22	4.76	4.36	5.33	5.21	5.65
25	5.88	---	---	4.67	4.86	4.51	4.14	4.90	4.59	5.34	5.43	5.72
EQM	5.95	---	---	4.68	4.62	3.77	4.29	4.83	4.72	5.30	5.64	5.52
MEAN	6.08	---	---	4.86	4.84	4.36	4.14	4.66	4.29	5.16	5.40	5.59

WTR YR 1992 MEAN 5.00 HIGH 3.64 JUN 6-7 LOW 6.29 OCT 1

NJ-WRD WELL NO.27-0028



OCEAN COUNTY

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

LOCATION...Lat 39°48'29", long 74°05'35", Hydrologic Unit 02040301, in Island Beach State Park, about 6.6 mi. south of the main entrance, Lacey Township.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS...Drilled water-table observation well, diameter 6 in., depth 397 ft, screened 377 to 397 ft.

INSTRUMENTATION...Water-level extremes recorder, Feb. 1977 to current year. Water-level recorder, July 1962 to Mar. 1975.

DATUM...Land-surface datum is 8.50 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 3.40 ft above land-surface datum.

REMARKS...Water level affected by tidal fluctuation.

PERIOD OF RECORD...July 1962 to Mar. 1975, Feb. 1977 to current year. Records for 1962 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD...Highest water level, 0.05 ft below land-surface datum, Dec. 6, 1962; lowest, 6.15 ft below land-surface datum, between Oct. 1 and Dec. 7, 1990.

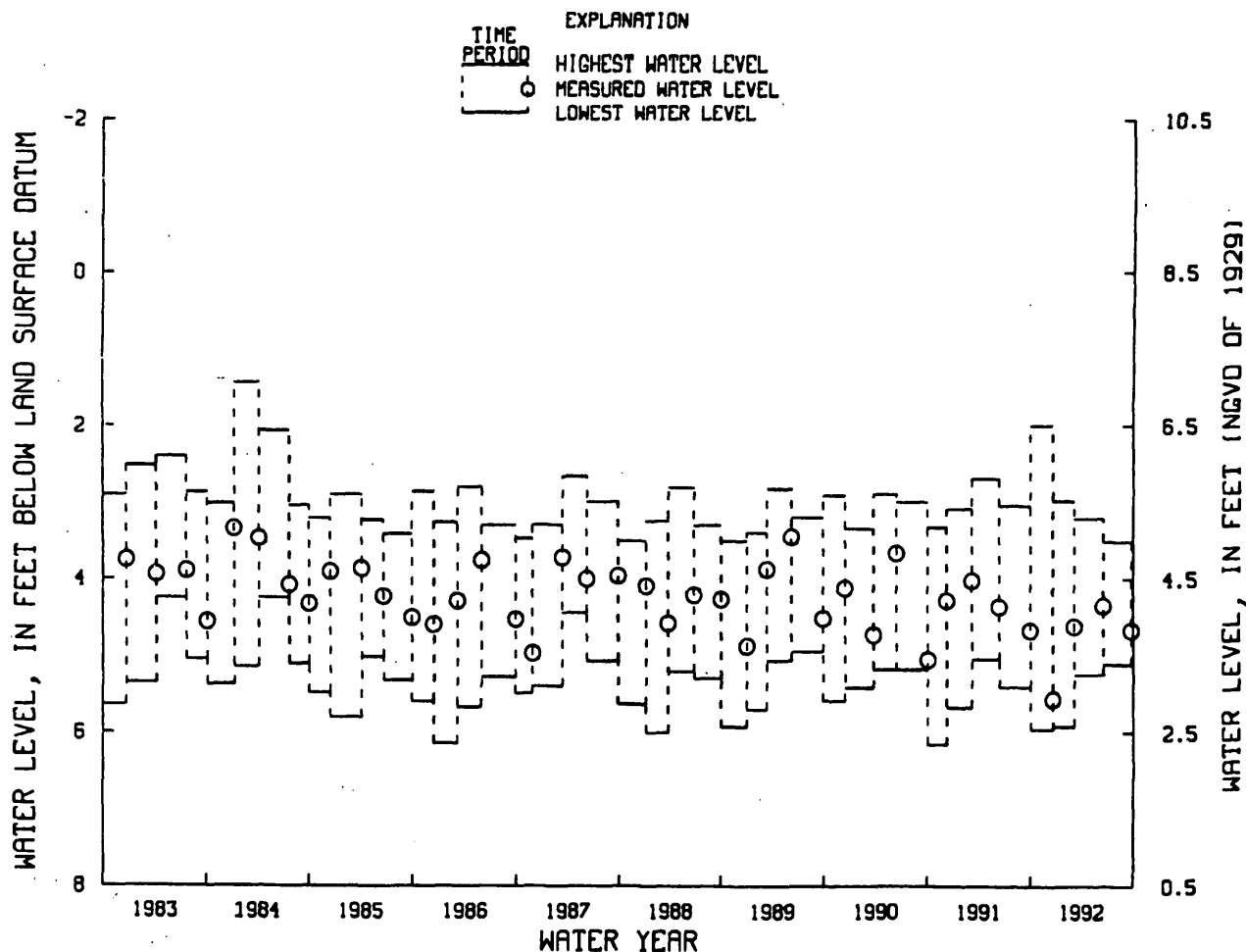
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES

MEASURED WATER LEVEL

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 30, 1991 TO DEC. 20, 1991	2.00	5.96	DEC. 20, 1991	5.57
DEC. 20, 1991 TO MAR. 6, 1992	2.98	5.92	MAR. 6, 1992	4.62
MAR. 6, 1992 TO JUNE 17, 1992	3.21	5.25	JUNE 17, 1992	4.35
JUNE 17, 1992 TO SEPT. 24, 1992	3.51	5.11	SEPT. 24, 1992	4.67

NJ-WRD WELL NO. 29-0017



OCEAN COUNTY

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

LOCATION.--Lat 39°48'29", long 74°05'35", Hydrologic Unit 02040301, in Island Beach State Park, about 6.6 mi. south of the main entrance, Lacey Township.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 2,756 ft, screened 2,736 to 2,756 ft.

INSTRUMENTATION.--Water-level extremes recorder, Feb. 1977 to current year. Water-level recorder, Nov. 1968 to Mar. 1975.

DATUM.--Land-surface datum is 9.02 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 5.11 ft above land-surface datum.

REMARKS.--Water level 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 New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.95 ft above land-surface datum, Apr. 23, 1969; lowest, 23.00 ft below land-surface datum, between Dec. 12, 1989 and Mar. 22, 1990.

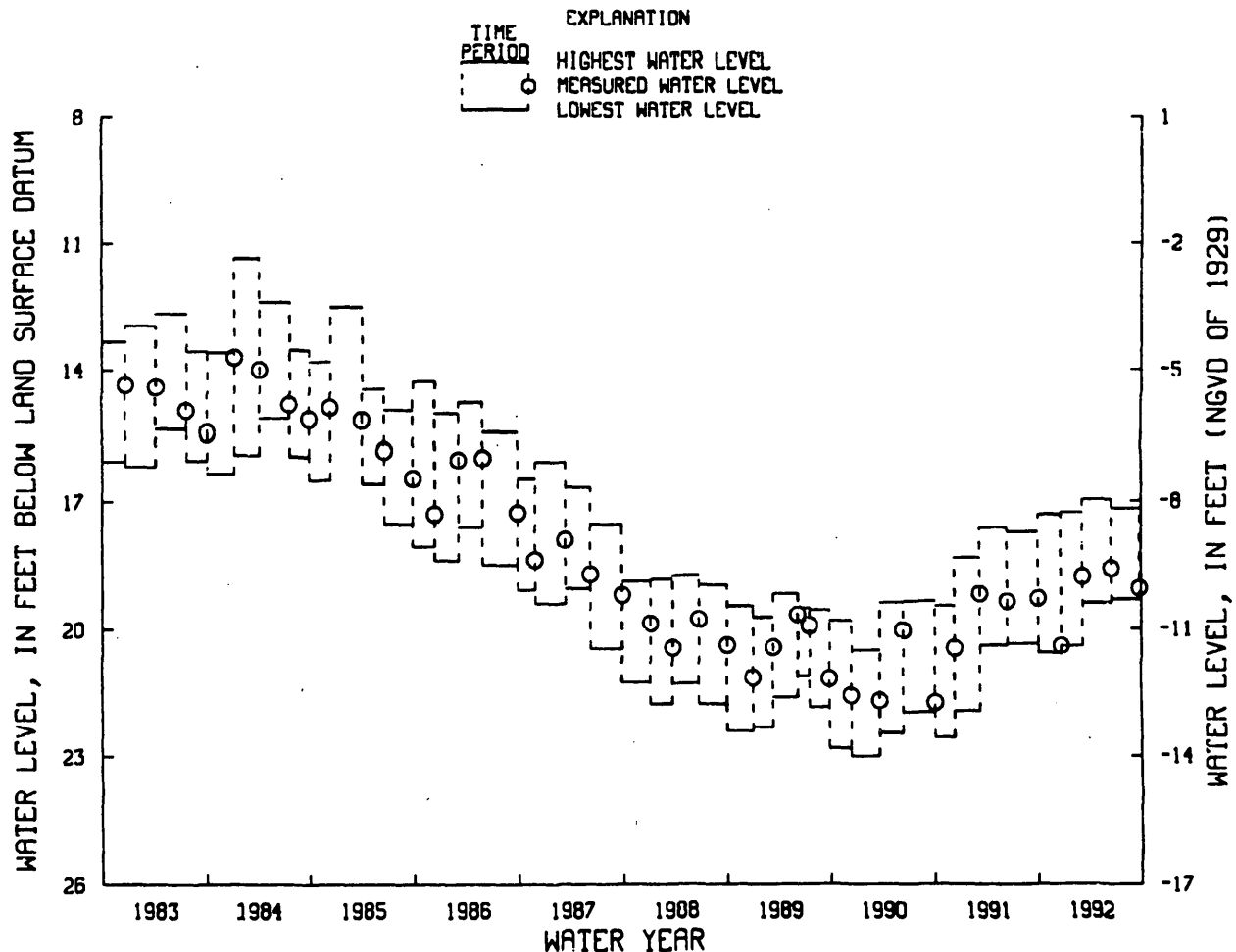
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES

MEASURED WATER LEVEL

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 30, 1991 TO DEC. 20, 1991	17.32	20.56	DEC. 20, 1991	20.40
DEC. 20, 1991 TO MAR. 6, 1992	17.27	20.40	MAR. 6, 1992	18.77
MAR. 6, 1992 TO JUNE 17, 1992	16.97	19.39	JUNE 17, 1992	18.58
JUNE 17, 1992 TO SEPT. 24, 1992	17.18	19.30	SEPT. 24, 1992	19.04

NJ-WRD WELL NO. 29-0019



OCEAN COUNTY

395028074104401. Local I.D., DOE-Forked River Obs. NJ-WRD Well Number, 29-0585.

LOCATION.--Lat 39°50'28", long 74°10'44", Hydrologic Unit 02040301, at the Forked River Game Farm, Forked River, Lacey Township.

Owner: State of New Jersey.

AQUIFER.--Piney Point aquifer of Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 422 ft, perforated casing 412 to 422 ft.

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

DATUM.--Land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 3.80 ft above land-surface datum.

REMARKS.--Water level 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 datum, June 1, 1984; lowest, 4.01 ft below land-surface datum, Sept. 11, 1992.

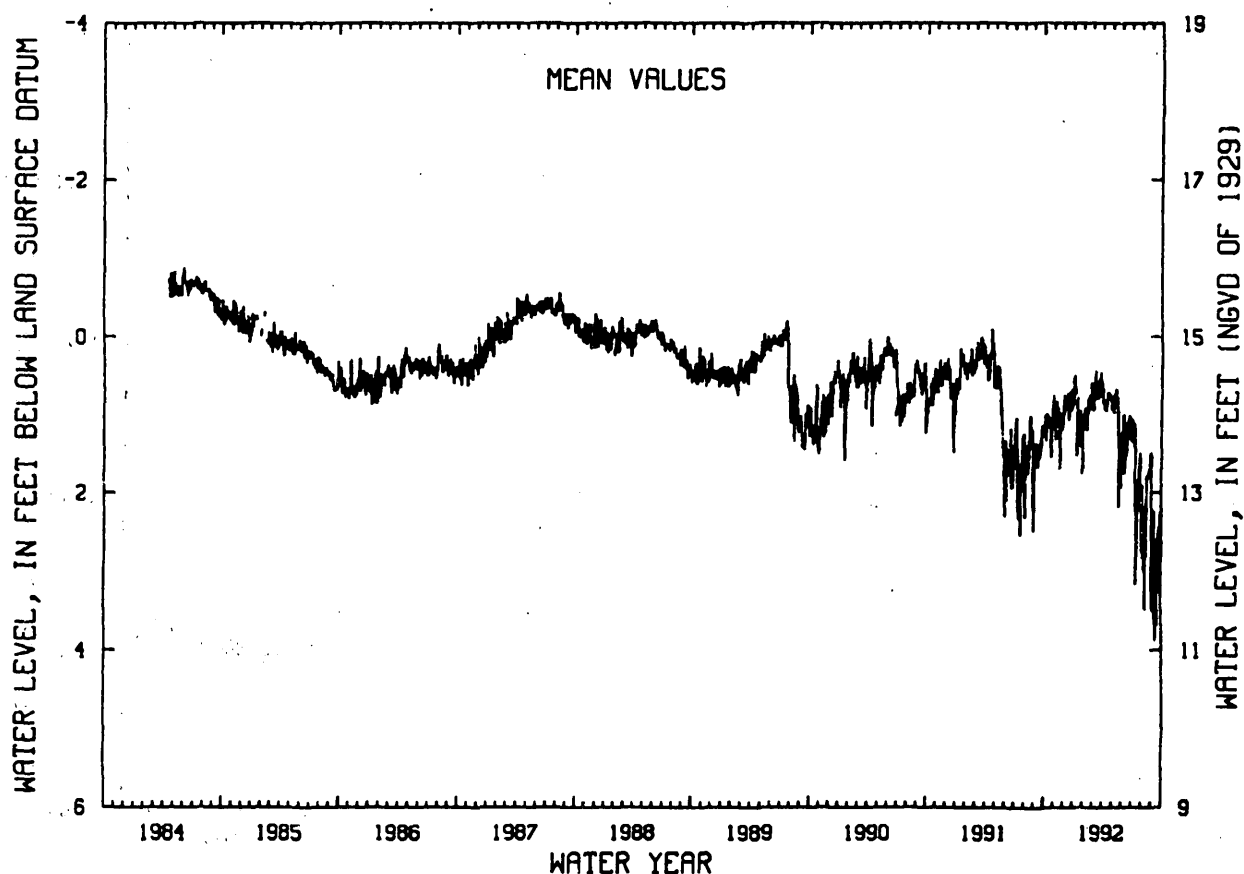
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.12	1.03	1.00	.50	1.01	.95	.82	.89	1.11	1.07	2.83	2.63
10	1.16	1.03	.88	---	1.20	.66	.87	.74	1.76	1.17	2.27	3.66
15	1.02	.96	.87	1.12	.93	.73	.89	.83	1.40	2.72	2.54	2.75
20	1.09	1.70	1.06	1.31	.82	.62	.78	.91	1.10	1.99	1.79	2.88
25	1.43	1.05	.87	1.16	.81	.77	.78	1.52	1.01	1.71	1.75	2.85
EOM	.76	1.17	.91	1.12	.72	.59	.78	1.43	1.28	2.76	1.56	2.27
MEAN	1.14	1.08	.88	1.07	.93	.71	.81	1.10	1.25	1.80	2.14	2.85

WTR YR 1992 MEAN 1.31 HIGH .36 MAR 11 LOW 4.01 SEP 11

NJ-WRD WELL NO.29-0585



OCEAN COUNTY

395609074124001. Local I.D., Toms River 2 Obs. NJ-WRD Well Number, 29-0534.

LOCATION.--Lat 39°56'09", long 74°12'40", Hydrologic Unit 02040301, about 200 ft east of Double Trouble Rd. on the north side of Jakes Branch, South Toms River Borough.

Owner: U.S. Geological Survey.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 1,146 ft, screened 1,080 to 1,146 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Feb. 1977 to Sept. 1990.

DATUM.--Land-surface datum is 18.34 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 2.63 ft above land-surface datum.

REMARKS.--The well was pumped on Feb. 5, 1988. After pumping, the water level did not return to its previous level. Therefore, the screen may have been partially clogged prior to the pumping on Feb. 5, 1988.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 48.37 ft below land-surface datum, May 28, 1966; lowest, 106.41 ft below land-surface datum, Dec. 19-20, 1992.

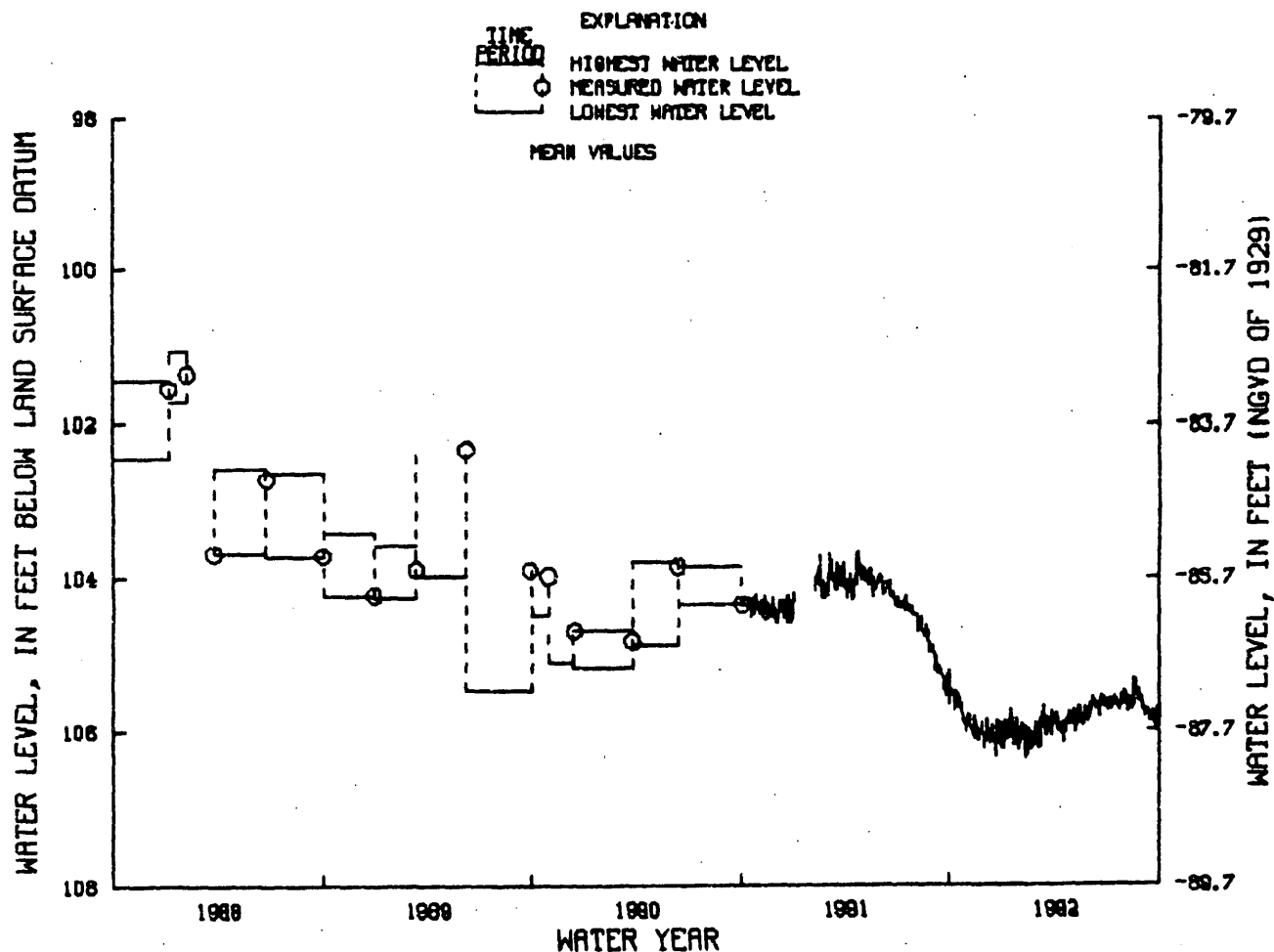
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	105.55	106.01	106.13	105.87	106.02	106.21	105.89	105.87	105.63	105.59	105.62	105.79
10	105.63	105.96	106.06	105.89	106.36	105.88	105.98	105.76	105.62	105.61	105.60	105.72
15	105.63	106.01	106.05	105.95	106.13	105.96	106.06	105.83	105.66	105.55	105.69	105.88
20	105.77	106.07	106.32	106.07	106.09	105.89	105.99	105.94	105.55	105.69	105.40	105.85
25	105.90	106.00	106.06	106.12	106.14	106.07	105.75	105.77	105.56	105.66	105.58	105.94
EOM	105.79	106.14	106.23	105.91	105.96	105.84	105.87	105.74	105.68	105.55	105.59	105.79
MEAN	105.69	106.01	106.07	106.03	106.10	105.96	105.92	105.82	105.66	105.63	105.57	105.79

WTR YR 1992 MEAN 105.85 HIGH 105.27 AUG 18 LOW 106.41 DEC 19-20

NJ-WRD WELL NO. 29-0534



OCEAN COUNTY

395930074142101. Local I.D., Toms River Chem 84 Obs. NJ-WRD Well Number, 29-0085.

LOCATION.--Lat 39°59'29", Long 74°14'20", Hydrologic Unit 02040301, at Toms River Plant, Ciba-Geigy Corporation, Dover Township.

Owner: Ciba-Geigy Corporation.

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

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in., depth 1,480 ft, screened 1,460 to 1,480 ft.

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

DATUM.--Land-surface datum is 66.71 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 2.70 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 62.32 ft below land-surface datum, July 19, 1968 and Feb. 9, 1969; lowest, 107.45 ft below land-surface datum, Jan. 11, 1989.

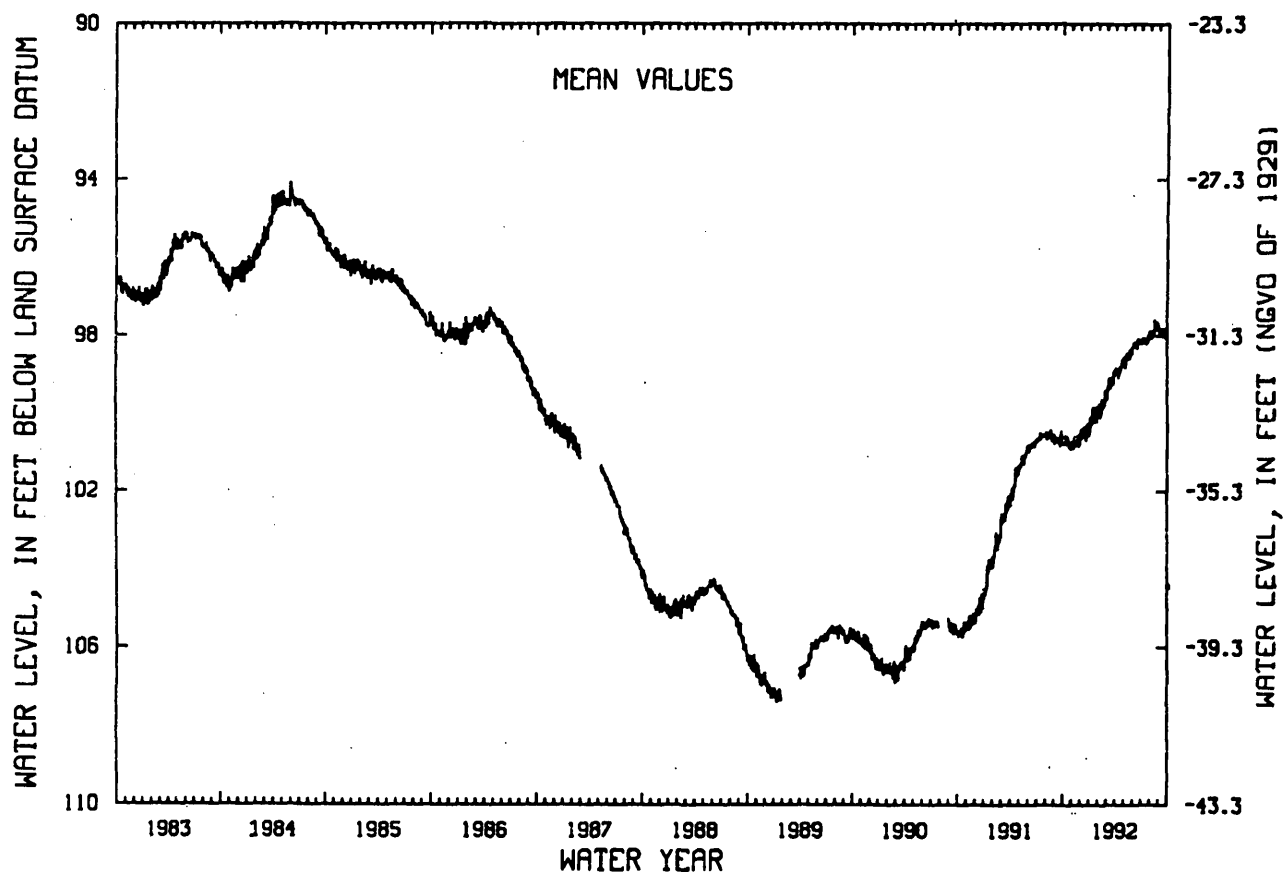
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	100.69	100.87	100.65	100.11	99.84	99.62	98.90	98.66	98.26	98.15	97.96	97.94
10	100.73	100.75	100.51	100.06	100.12	99.32	98.96	98.58	98.17	98.08	97.91	97.81
15	100.71	100.74	100.44	100.06	99.81	99.28	98.99	98.55	98.22	98.04	97.98	97.95
20	100.78	100.74	100.69	100.10	99.71	99.14	98.87	98.60	98.08	98.18	97.65	97.90
25	100.87	100.66	100.46	100.09	99.68	99.27	98.60	98.34	98.08	98.15	97.79	98.01
EOM	100.73	100.71	100.56	99.80	99.43	98.91	98.66	98.39	98.19	97.95	97.75	97.85
MEAN	100.74	100.76	100.49	100.12	99.77	99.27	98.85	98.54	98.19	98.11	97.85	97.88

WTR YR 1992 MEAN 99.22 HIGH 97.56 AUG 28 LOW 100.98 OCT 29

NJ-WRD WELL NO.29-0085



OCEAN COUNTY

400210074031001. Local I.D., Mantoloking 6 Obs. NJ-WRD Well Number, 29-0503.

LOCATION.--Lat 40°02'10", long 74°03'10", Hydrologic Unit 02040301, at the Bay Ave. water treatment plant, Mantoloking Borough.

Owner: New Jersey - American Water Company.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in., depth 906 ft, screened 845 to 906 ft.

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

DATUM.--Land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

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

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 151.41 ft below land-surface datum, May 2, 1992; lowest, 207.49 ft below land-surface datum, Oct. 31, 1987.

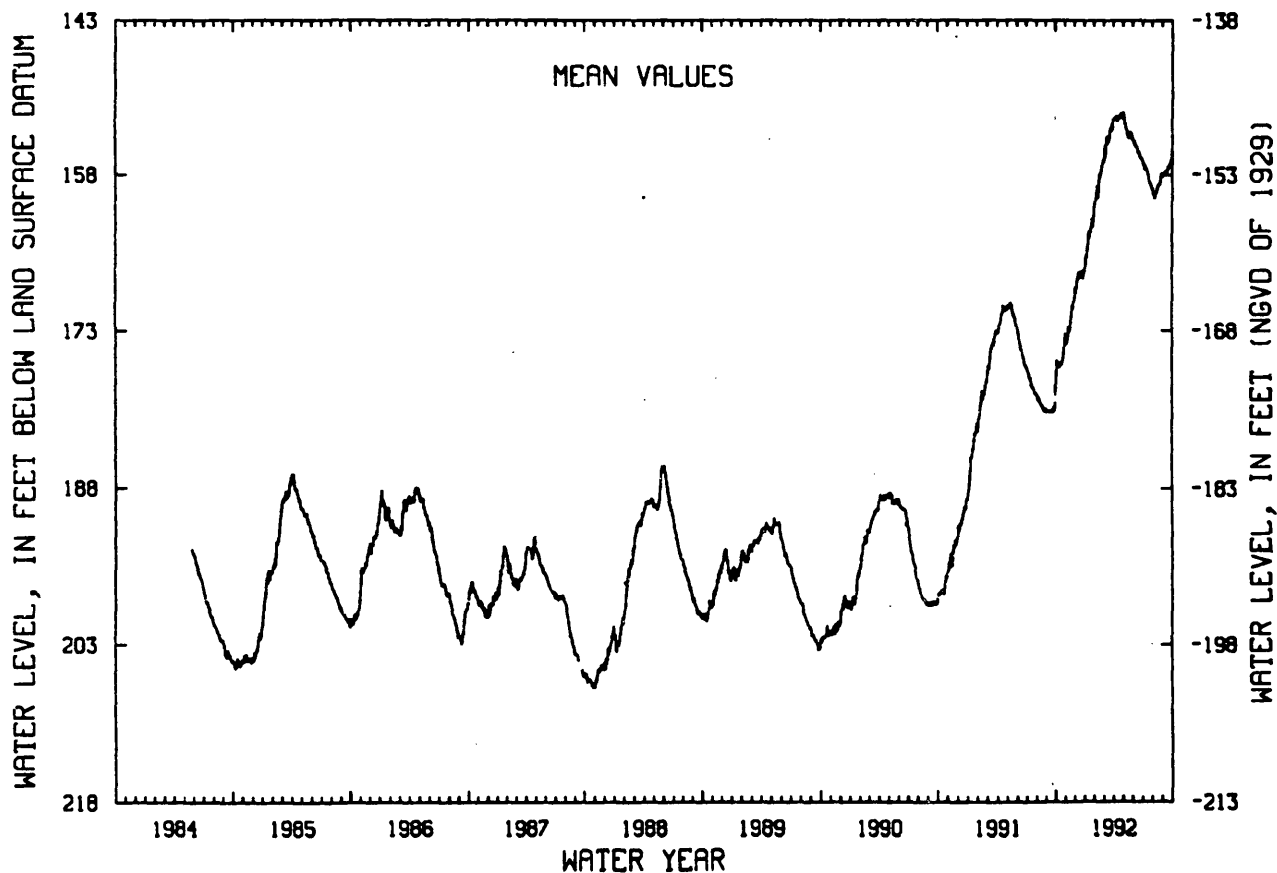
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	176.29	174.22	169.39	165.69	160.42	155.15	152.49	152.52	154.73	156.98	159.90	157.97
10	176.32	173.10	167.97	164.86	160.24	154.59	152.30	153.16	155.18	157.16	159.77	157.62
15	176.23	172.83	167.95	164.17	158.43	154.64	152.71	153.97	155.57	157.50	159.21	157.69
20	176.23	171.84	167.72	163.12	157.87	153.68	152.45	154.37	155.75	158.33	158.93	157.29
25	175.67	170.76	167.57	163.08	157.02	153.75	152.06	153.85	156.29	158.93	158.58	156.80
EOM	173.23	169.91	167.16	161.13	156.60	152.86	152.03	154.43	156.66	159.23	158.08	155.58
MEAN	176.07	172.37	168.01	164.06	158.67	154.51	152.37	153.56	155.60	157.92	159.13	157.36

WTR YR 1992 MEAN 160.83 HIGH 151.41 MAY 2 LOW 179.45 OCT 1

NJ-WRD WELL NO.29-0503



OCEAN COUNTY

400416074270101. Local I.D., Colliers Mills 1 Obs. NJ-WRD Well Number, 29-0138.

LOCATION...Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.

Owner: U.S. Geological Survey.

AQUIFER...Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS...Drilled artesian observation well, diameter 6 in., depth 427 ft, screened 417 to 427 ft.

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

DATUM...Land-surface datum is 136.52 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of 6 inch coupling, 2.20 ft above land-surface datum.

PERIOD OF RECORD...Feb. 1964 to Mar. 1975, Mar. 1977 to current year. Records for 1964 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD...Highest water level, 52.02 ft below land-surface datum, Feb. 19, 1964; lowest, 77.43 ft below land-surface datum, July 25, 1992.

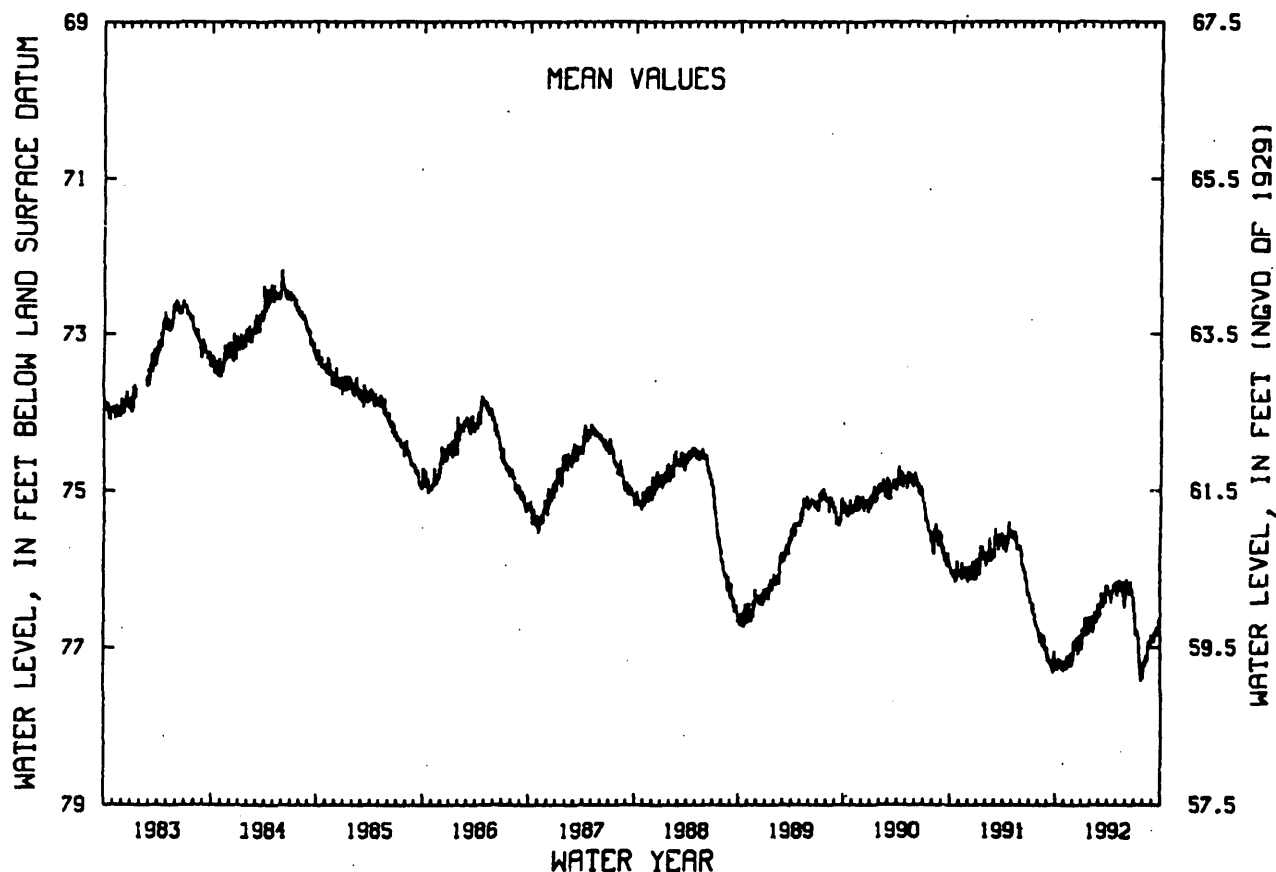
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	77.21	77.24	77.04	76.76	76.65	76.60	76.27	76.25	76.26	76.64	77.18	76.91
10	77.24	77.19	76.96	76.74	76.81	76.44	76.33	76.19	76.20	76.81	77.14	76.85
15	77.21	77.18	76.94	76.75	76.64	76.43	76.37	76.24	76.24	76.79	77.18	76.85
20	77.23	77.18	77.07	76.77	76.60	76.34	76.31	76.28	76.17	77.16	76.92	76.77
25	77.27	77.12	76.96	76.76	76.60	76.43	76.19	76.26	76.28	77.42	76.99	76.84
EQM	77.17	77.15	77.02	76.61	76.48	76.24	76.23	76.38	76.41	77.35	76.90	76.67
MEAN	77.22	77.18	76.97	76.78	76.63	76.41	76.28	76.26	76.27	76.99	77.07	76.81

WTR YR 1992 MEAN 76.74 HIGH 76.11 MAY 13, JUN 5-6 LOW 77.43 JUL 25

NJ-WRD WELL NO.29-0138



OCEAN COUNTY

400416074270102. Local I.D., Colliers Mills 2 Obs. NJ-WRD Well Number, 29-0139.

LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.

Owner: U.S. Geological Survey.

AQUIFER.--Vincentown aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 171 ft, screened 161 to 171 ft.

INSTRUMENTATION.--Water-level extremes recorder, Oct. 1976 to current year. Water-level recorder, Jan. 1964 to Aug. 1975.

DATUM.--Land-surface datum is 135.76 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 3.25 ft above land-surface datum.

PERIOD OF RECORD.--Jan. 1964 to Aug. 1975, Oct. 1976 to current year. Records for 1964 to 1981 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.92 ft below land-surface datum, between Apr. 3 and July 11, 1984; lowest, 6.77 ft below land-surface datum, between Dec. 4, 1984 and Mar. 6, 1985 and between Aug. 6 and Sept. 26, 1985.

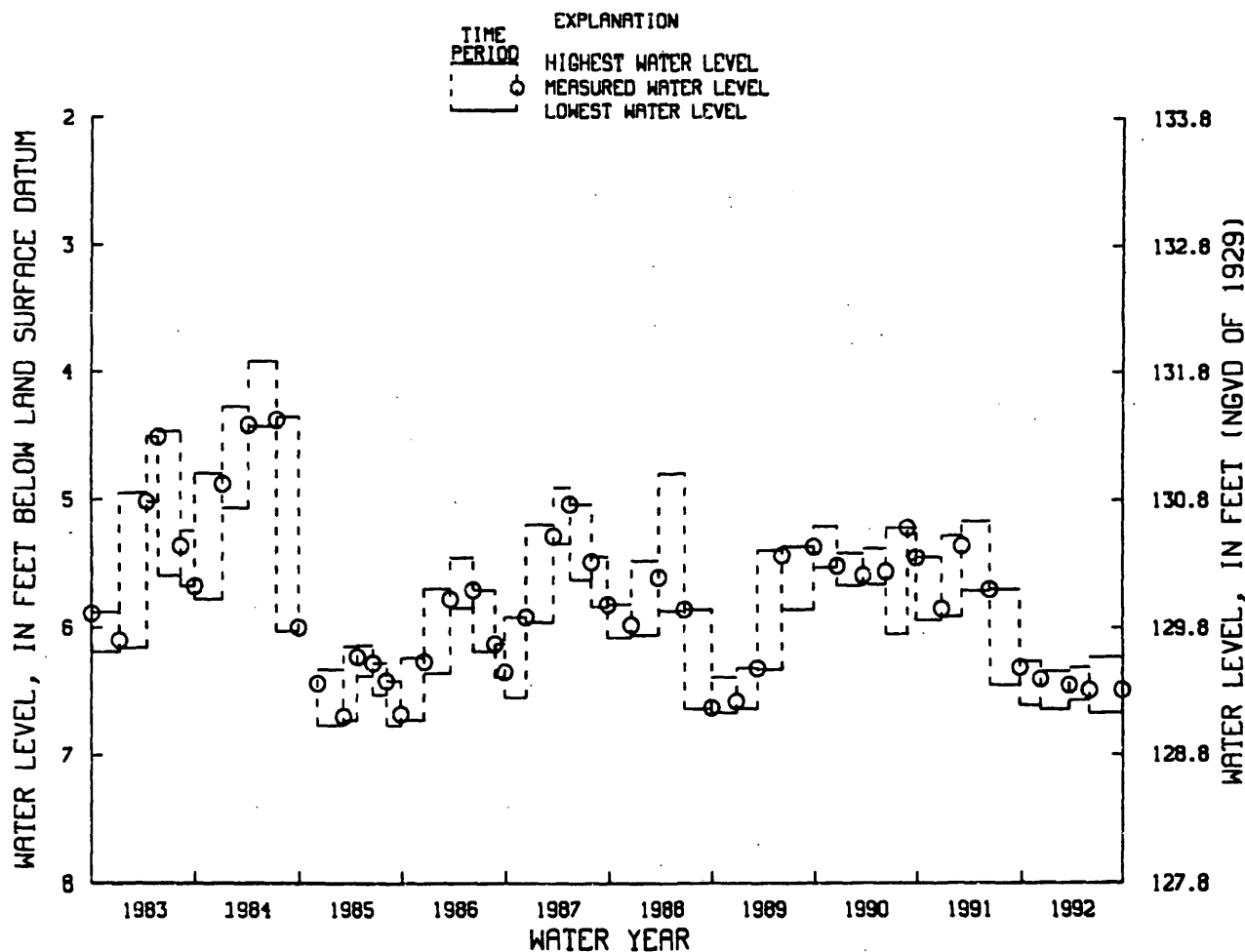
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES

MEASURED WATER LEVEL

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 25, 1991 TO DEC. 10, 1991	6.26	6.61	DEC. 10, 1991	6.40
DEC. 10, 1991 TO MAR. 23, 1992	6.34	6.64	MAR. 23, 1992	6.45
MAR. 23, 1992 TO JUNE 3, 1992	6.31	6.57	JUNE 3, 1992	6.49
JUNE 3, 1992 TO SEPT. 28, 1992	6.23	6.67	SEPT. 28, 1992	6.49

NJ-WRD WELL NO. 29-0139



OCEAN COUNTY

400416074270103. Local I.D., Colliers Mills 3 Obs. NJ-WRD Well Number, 29-0140.

LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 267 ft, screened 257 to 267 ft. INSTRUMENTATION.--Water-level extremes recorder, Oct. 1976 to current year. Water-level recorder, Jan. 1964 to July 1975.

DATUM.--Land-surface datum is 135.15 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 3.49 ft above land-surface datum.

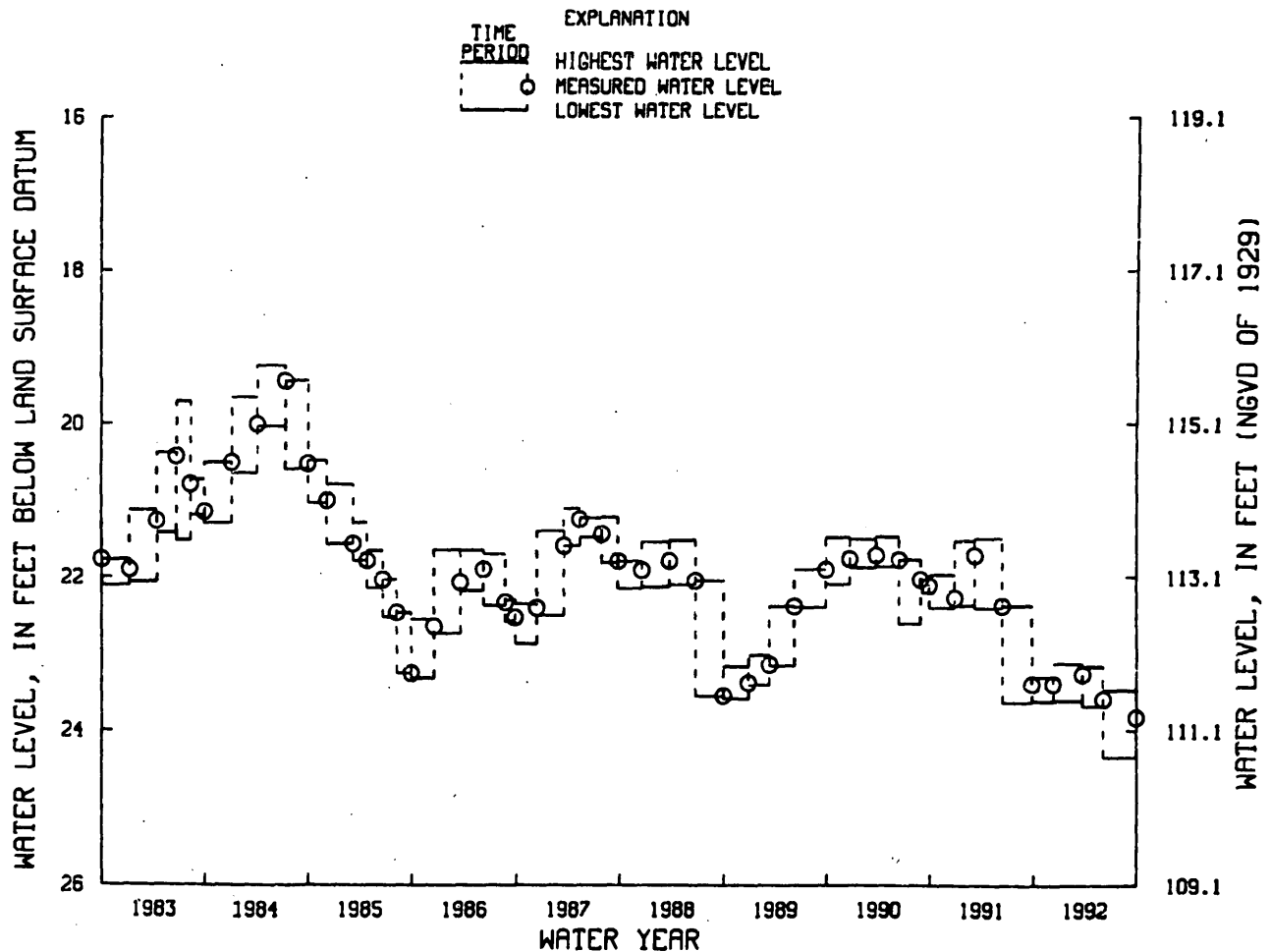
PERIOD OF RECORD.--Jan. 1964 to July 1975, Oct. 1976 to current year. Records for 1964 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.72 ft below land-surface datum, May 9, 1964; lowest, 24.35 ft below land-surface datum, between June 3 and Sept. 28, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 25, 1991 TO DEC. 10, 1991	23.31	23.63	DEC. 10, 1991	23.40
DEC. 10, 1991 TO MAR. 23, 1992	23.13	23.62	MAR. 23, 1992	23.27
MAR. 23, 1992 TO JUNE 3, 1992	23.17	23.69	JUNE 3, 1992	23.60
JUNE 3, 1992 TO SEPT. 28, 1992	23.48	24.35	SEPT. 28, 1992	23.83

NJ-WRD WELL NO. 29-0140



OCEAN COUNTY

400416074270104. Local I.D., Colliers Mills 4 Obs. NJ-WRD Well Number, 29-0141.

LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in., depth 71 ft, gravel-filled hole 46 to 71 ft.

INSTRUMENTATION.--Water-level extremes recorder, Oct. 1976 to current year. Water-level recorder, Mar. 1964 to Apr. 1975.

DATUM.--Land-surface datum is 135.31 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 2.86 ft above land-surface datum.

REMARKS.--Water level affected by stage of Colliers Mills Pond.

PERIOD OF RECORD.--Mar. 1964 to Apr. 1975, Oct. 1976 to current year. Records for 1964 to 1981 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.68 ft below land-surface datum, between Apr. 3 and July 11, 1984; lowest, 7.17 ft below land-surface datum, between Dec. 4, 1984 and Mar. 6, 1985.

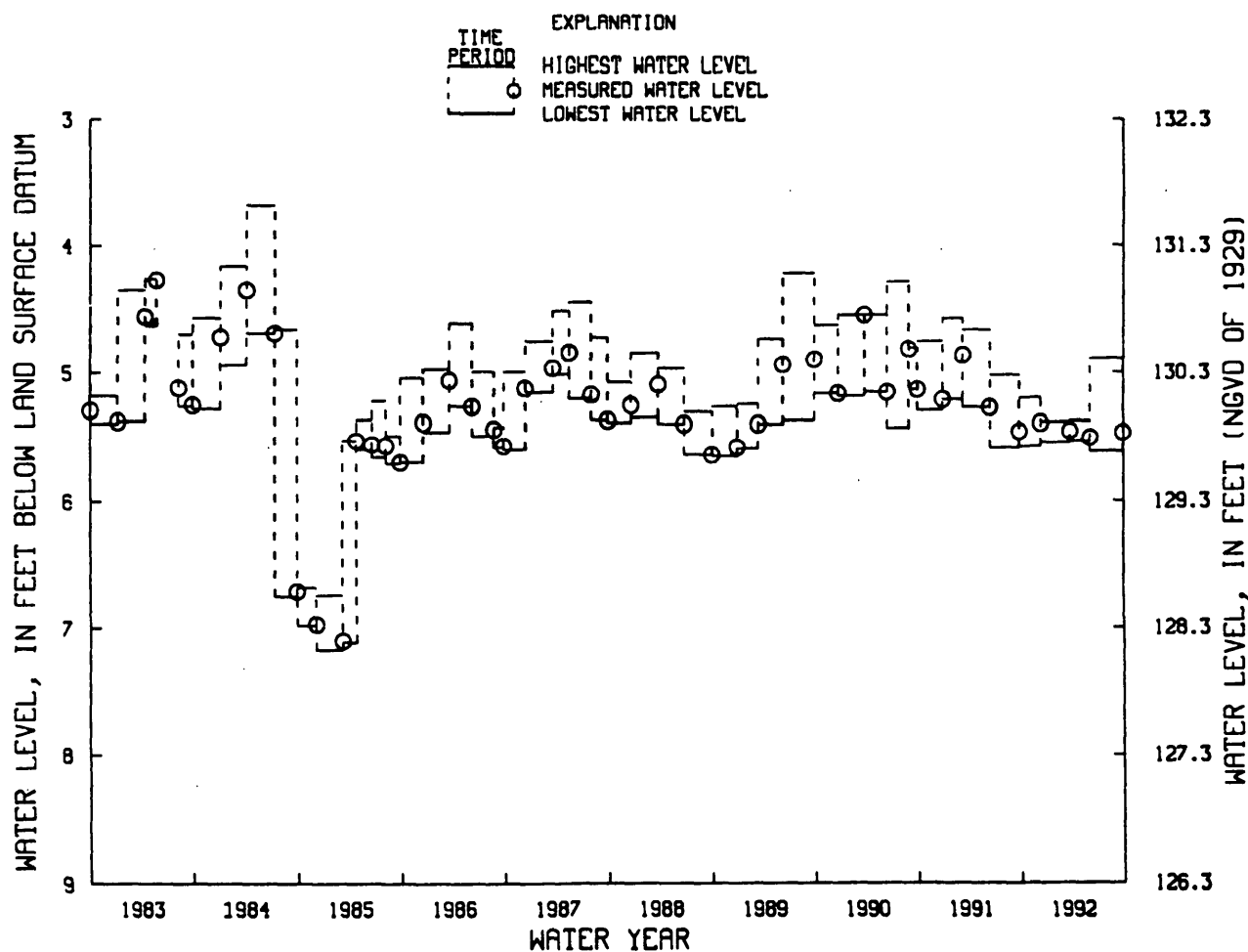
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES

MEASURED WATER LEVEL

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 25, 1991 TO DEC. 10, 1991	5.20	5.57	DEC. 10, 1991	5.39
DEC. 10, 1991 TO MAR. 23, 1992	5.38	5.54	MAR. 23, 1992	5.45
MAR. 23, 1992 TO JUNE 3, 1992	5.37	5.53	JUNE 3, 1992	5.50
JUNE 3, 1992 TO SEPT. 28, 1992	4.89	5.61	SEPT. 28, 1992	5.46

NJ-WRD WELL NO. 29-0141



SALEM COUNTY

393348075275701. Local I.D., Salem 1 Obs. NJ-WRD Well Number, 33-0251.

LOCATION.--Lat 39°33'48", long 75°27'55", Hydrologic Unit 02040206, about 300 ft south of the intersection of Elm and Magnolia Streets, Salem City.

Owner: U.S. Geological Survey.

AQUIFER.--Middle aquifer, Potomac-Raritan-Magothy aquifer system 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, May 1977 to current year. Water-level recorder, Dec. 1965 to Aug. 1975.

DATUM.--Land-surface datum is 3.00 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 2.87 ft above land-surface datum.

PERIOD OF RECORD.--Dec. 1965 to July 1970, Oct. 1972 to Aug. 1975, May 1977 to current year. Records for 1965 to 1970, 1972 to 1975, and 1977 to 1980 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.97 ft below land-surface datum, Dec. 13, 1965; lowest, 34.86 ft below land-surface datum, between Sept. 23 and Nov. 22, 1988.

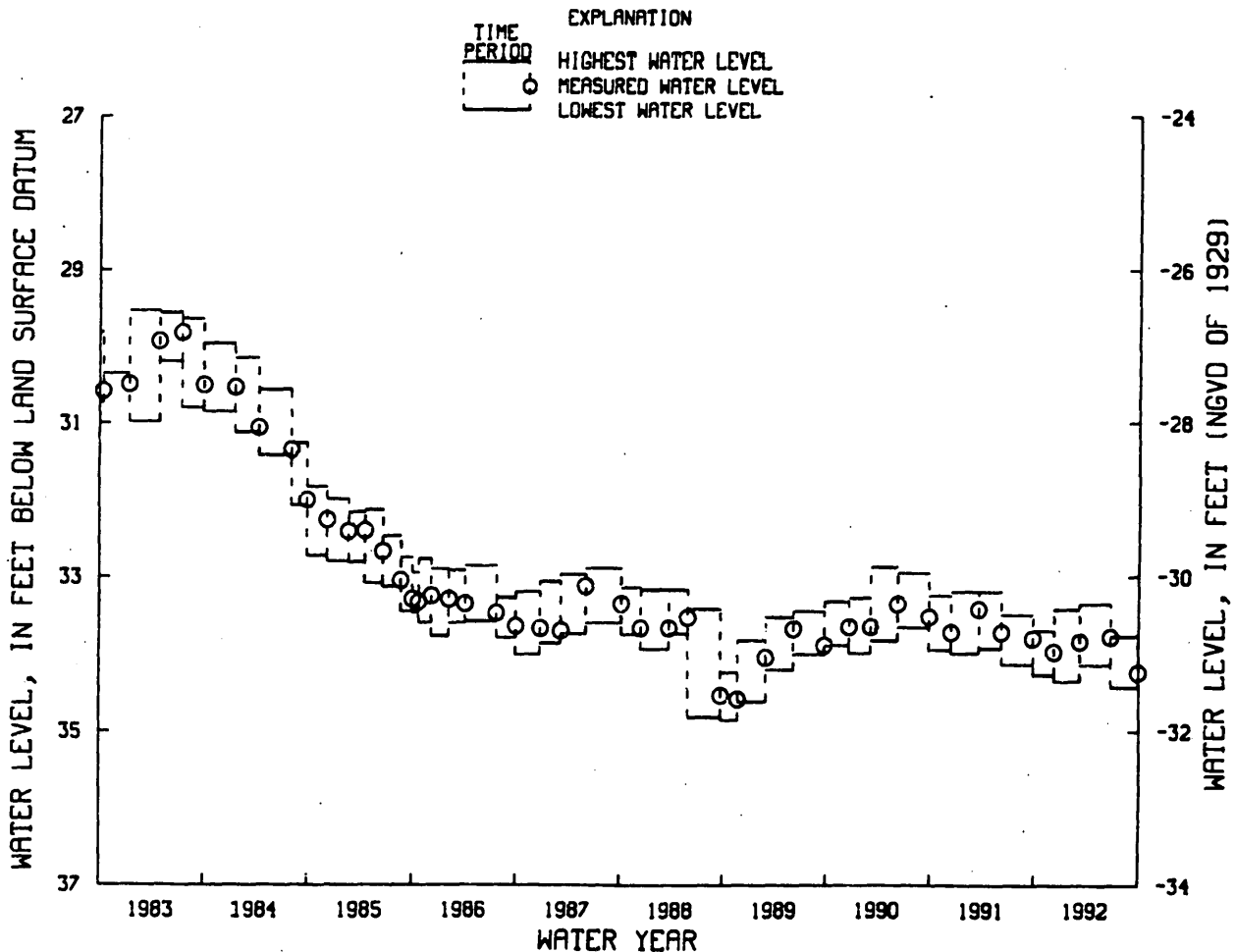
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES

MEASURED WATER LEVEL

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1991 TO DEC. 9, 1991	33.70	34.27	DEC. 9, 1991	33.97
DEC. 9, 1991 TO MAR. 9, 1992	33.42	34.35	MAR. 9, 1992	33.84
MAR. 9, 1992 TO JUNE 25, 1992	33.35	34.14	JUNE 25, 1992	33.78
JUNE 25, 1992 TO SEPT. 29, 1992	33.77	34.43	SEPT. 29, 1992	34.24

NJ-WRD WELL NO. 33-0251



SALEM COUNTY

393348075275702. Local I.D., Salem 2 Obs. NJ-WRD Well Number, 33-0252.

LOCATION.--Lat 39°33'48", long 75°27'55", Hydrologic Unit 02040206, about 300 ft south of the intersection of Elm and Magnolia Streets, Salem City.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 96 ft, screened 91 to 96 ft. INSTRUMENTATION.--Water-level extremes recorder, May 1977 to current year. Water-level recorder, Nov. 1965 to July 1975.

DATUM.--Land-surface datum is 3.25 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 2.77 ft above land-surface datum.

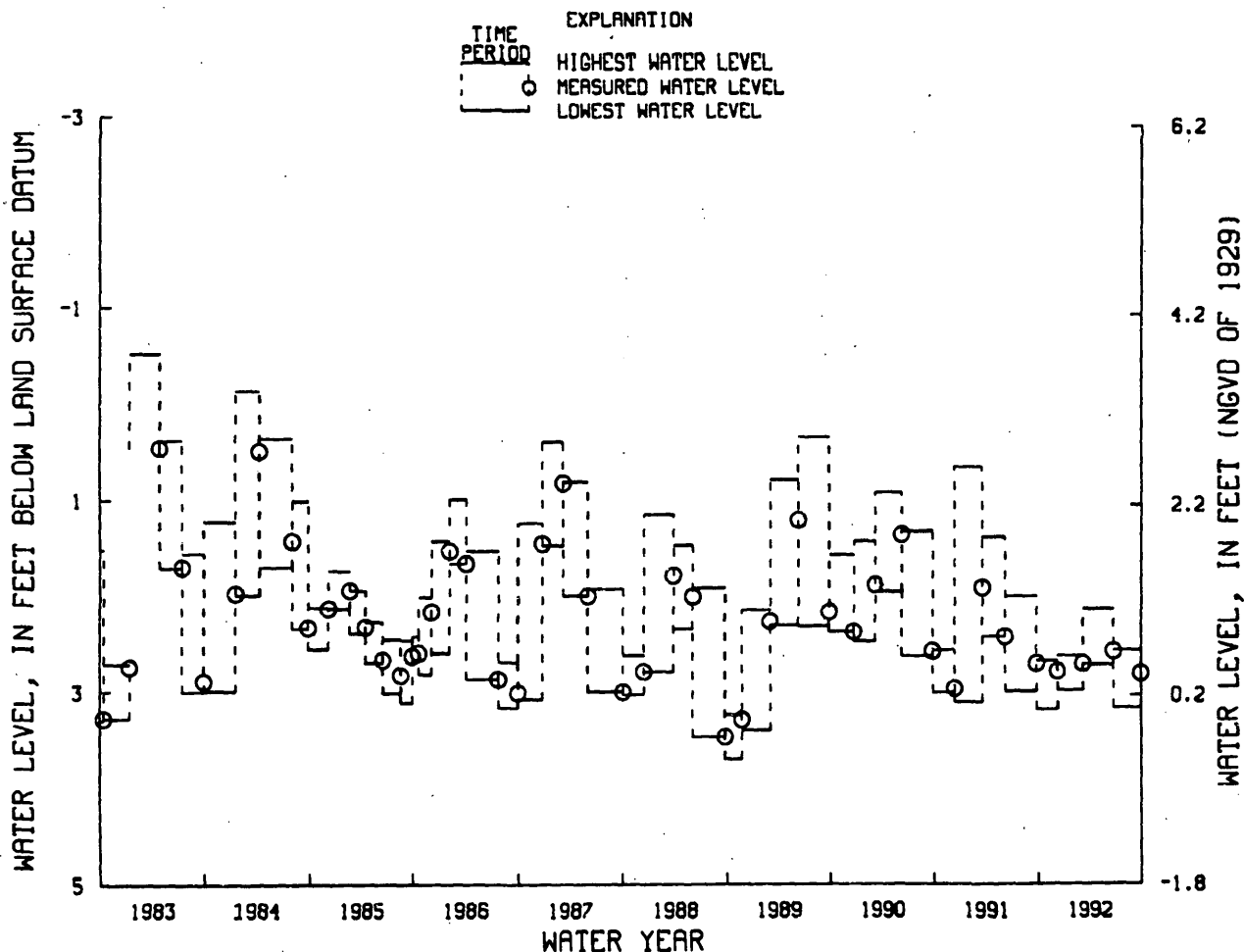
PERIOD OF RECORD.--Nov. 1965 to July 1975, May 1977 to current year. Records for 1965 to 1975 and 1977 to 1981 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.51 ft above land-surface datum, between Jan. 12 and Apr. 27, 1983; lowest, 6.45 ft below land-surface datum, Sept. 9, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES				MEASURED WATER LEVEL	
PERIOD		HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1991 TO DEC. 9, 1991		2.67	3.18	DEC. 9, 1991	2.78
DEC. 9, 1991 TO MAR. 9, 1992		2.62	2.98	MAR. 9, 1992	2.70
MAR. 9, 1992 TO JUNE 25, 1992		2.13	2.71	JUNE 25, 1992	2.57
JUNE 25, 1992 TO SEPT. 29, 1992		2.56	3.16	SEPT. 29, 1992	2.80

NJ-WRD WELL NO. 33-0252



SALEM COUNTY

393348075275703. Local I.D., Salem 3 Obs. NJ-WRD Well Number, 33-0253.

LOCATION.--Lat 39°33'48", long 75°27'55", Hydrologic Unit 02040206, about 300 ft south of the intersection of Elm and Magnolia Streets, Salem City.

Owner: U.S. Geological Survey.

AQUIFER.--Upper aquifer, Potomac-Raritan-Magothy aquifer system 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, May 1977 to current year. Water-level recorder, Nov. 1965 to Aug. 1975.

DATUM.--Land-surface datum is 3.00 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 2.30 ft above land-surface datum.

PERIOD OF RECORD.--Nov. 1965 to Aug. 1975, May 1977 to current year. Records for 1965 to 1975 and 1977 to 1981 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.28 ft below land-surface datum, Feb. 13, 1966; lowest, 30.16 ft below land-surface datum, between June 25 and Sept. 29, 1992.

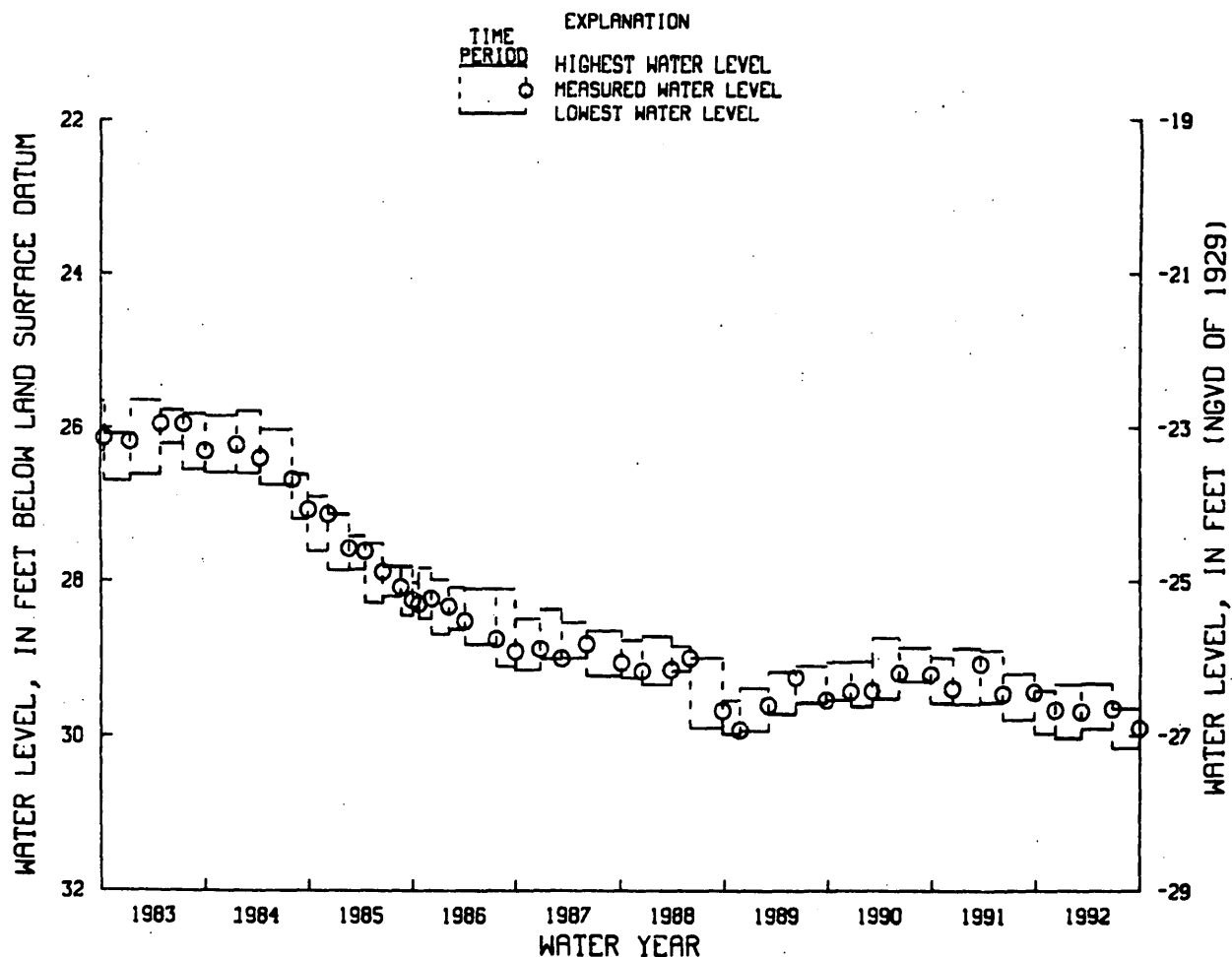
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER-LEVEL EXTREMES

MEASURED WATER LEVEL

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1991 TO DEC. 9, 1991	29.42	29.97	DEC. 9, 1991	29.67
DEC. 9, 1991 TO MAR. 9, 1992	29.34	30.03	MAR. 9, 1992	29.69
MAR. 9, 1992 TO JUNE 25, 1992	29.33	29.91	JUNE 25, 1992	29.65
JUNE 25, 1992 TO SEPT. 29, 1992	29.65	30.16	SEPT. 29, 1992	29.90

NJ-WRD WELL NO. 33-0253



SALEM COUNTY

394037075191501. Local I.D., Point Airy Obs. NJ-WRD Well Number, 33-0187.

LOCATION.--Lat 39°40'37", long 75°19'14", Hydrologic Unit 02040206, at 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 aquifer, Potomac-Raritan-Magothy aquifer system 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.

DATUM.--Land-surface datum is 72.97 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of 6 inch casing, 1.80 ft above land-surface datum.

PERIOD OF RECORD.--Feb. 1959 to Aug. 1975, Mar. 1977 to current year.

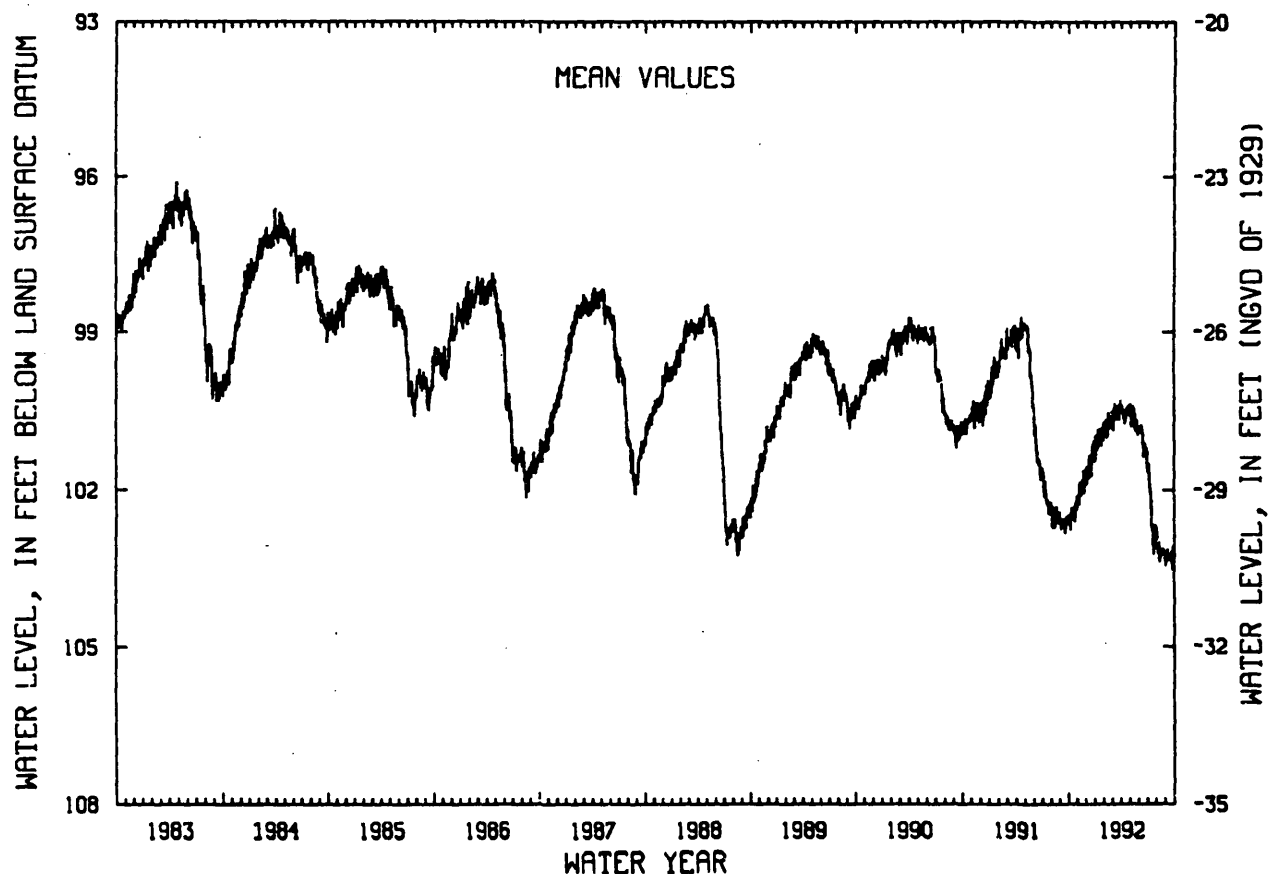
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 78.55 ft below land-surface datum, Mar. 6, 1959; lowest, 103.61 ft below land-surface datum, Sept. 24, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	102.61	102.13	101.89	100.94	100.88	100.83	100.36	100.50	100.81	101.50	103.05	103.32
10	102.54	101.97	101.64	101.05	100.91	100.55	100.56	100.36	100.74	101.97	103.02	103.24
15	102.46	102.10	101.37	100.94	100.65	100.43	100.71	100.62	100.92	102.62	103.30	103.30
20	102.53	101.98	101.74	100.80	100.81	100.48	100.45	100.81	101.09	102.94	103.20	103.24
25	102.48	101.75	101.24	100.86	100.66	100.63	100.36	100.69	101.21	102.91	103.15	103.40
EOY	102.25	101.71	101.45	100.77	100.47	100.26	100.56	100.80	101.43	102.72	103.28	103.24
MEAN	102.46	101.99	101.47	100.98	100.71	100.49	100.48	100.62	101.02	102.37	103.15	103.27
WTR YR 1992 MEAN 101.58 HIGH 100.18 MAR 22 LOW 103.61 SEP 24												

NJ-WRD WELL NO.33-0187



SUSSEX COUNTY

410005074473801. Local I.D., Whittingham 19 Obs. NJ-WRD Well Number, 37-0203.

LOCATION.--Lat 41°00'10", long 74°47'28", 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.

DATUM.--Land-surface datum is 648.5 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 2.30 ft above land-surface datum.

PERIOD OF RECORD.--Apr. 1991 to current year. Periodic manual measurements Apr. 1991 to July 1992.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 18.78 ft below land-surface datum, Apr. 2, 1991; lowest, 29.12 ft below land-surface datum, Sep. 27, 1991.

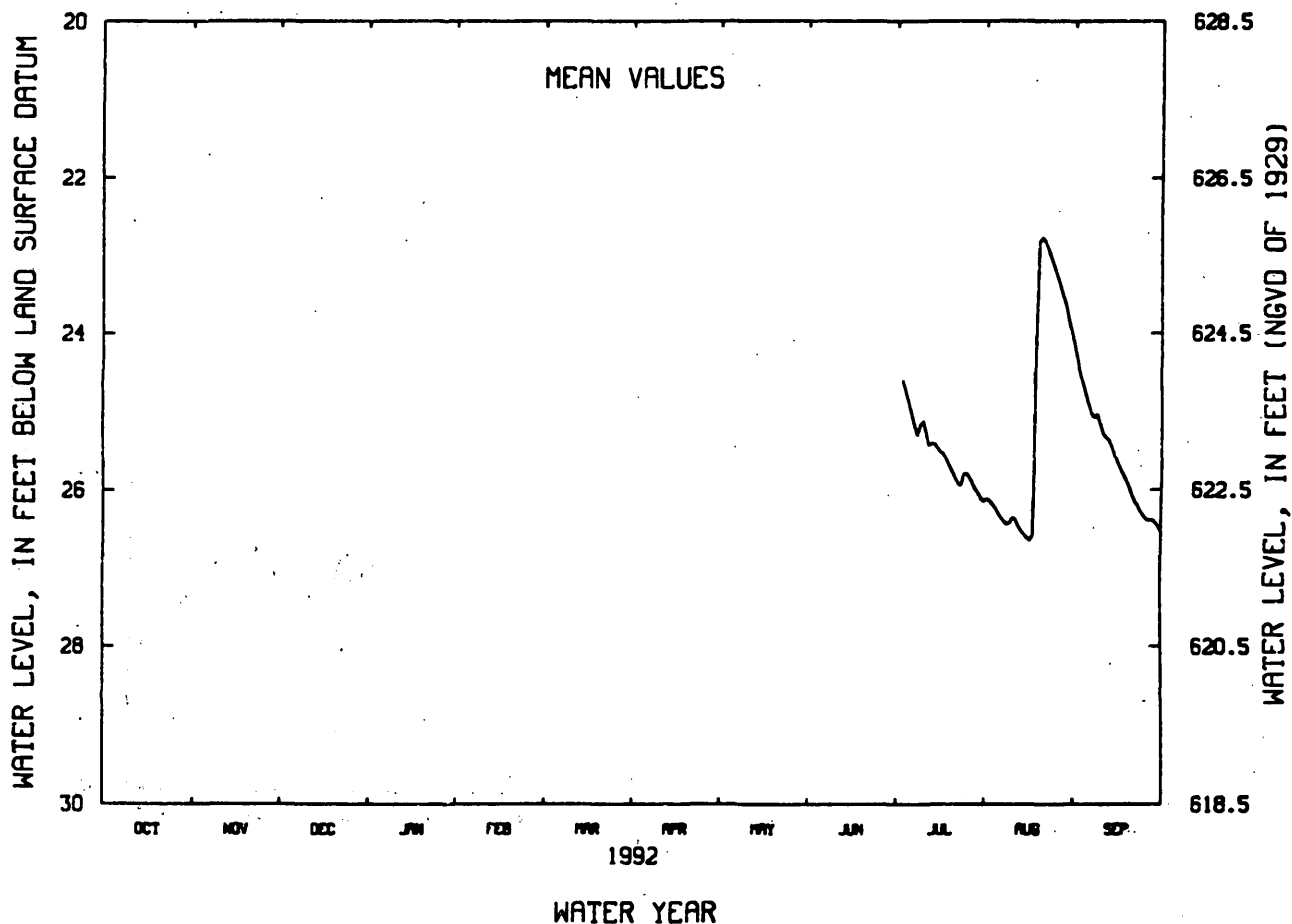
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	24.88	26.30	24.92
10	---	---	---	---	---	---	---	---	---	25.13	26.36	25.29
15	---	---	---	---	---	---	---	---	---	25.47	26.61	25.65
20	---	---	---	---	---	---	---	---	---	25.77	22.77	26.07
25	---	---	---	---	---	---	---	---	---	25.80	23.26	26.38
EOM	---	---	---	---	---	---	---	---	---	26.15	24.15	26.53
MEAN	---	---	---	---	---	---	---	---	---	25.54	25.04	25.64

WTR YR 1992 HIGH 22.71 AUG 19 LOW 26.78 AUG 17

NJ-WRD WELL NO.37-0203



GROUND-WATER LEVELS

SUSSEX COUNTY

410449074483301. Local I.D., Swartswood Park 5 Obs. NJ-WRD Well Number, 37-0205.

LOCATION.--Lat 41°04'49", long 74°48'33", Hydrologic Unit 02040105, in Swartswood State Park, 700 ft. from the intersection of County Rt. 622 and Chandler Rd., Hampton Township.

Owner: State of New Jersey.

AQUIFER.--Allentown Dolomite of Cambrian 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.

DATUM.--Land-surface datum is 514.1 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 2.55 ft above land-surface datum.

PERIOD OF RECORD.--Apr. 1991 to current year. Periodic manual measurements Apr. 1991 to July 1992.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.30 ft below land-surface datum, Apr. 2, 1991; lowest, 26.11 ft below land-surface datum, Sept. 30, 1992.

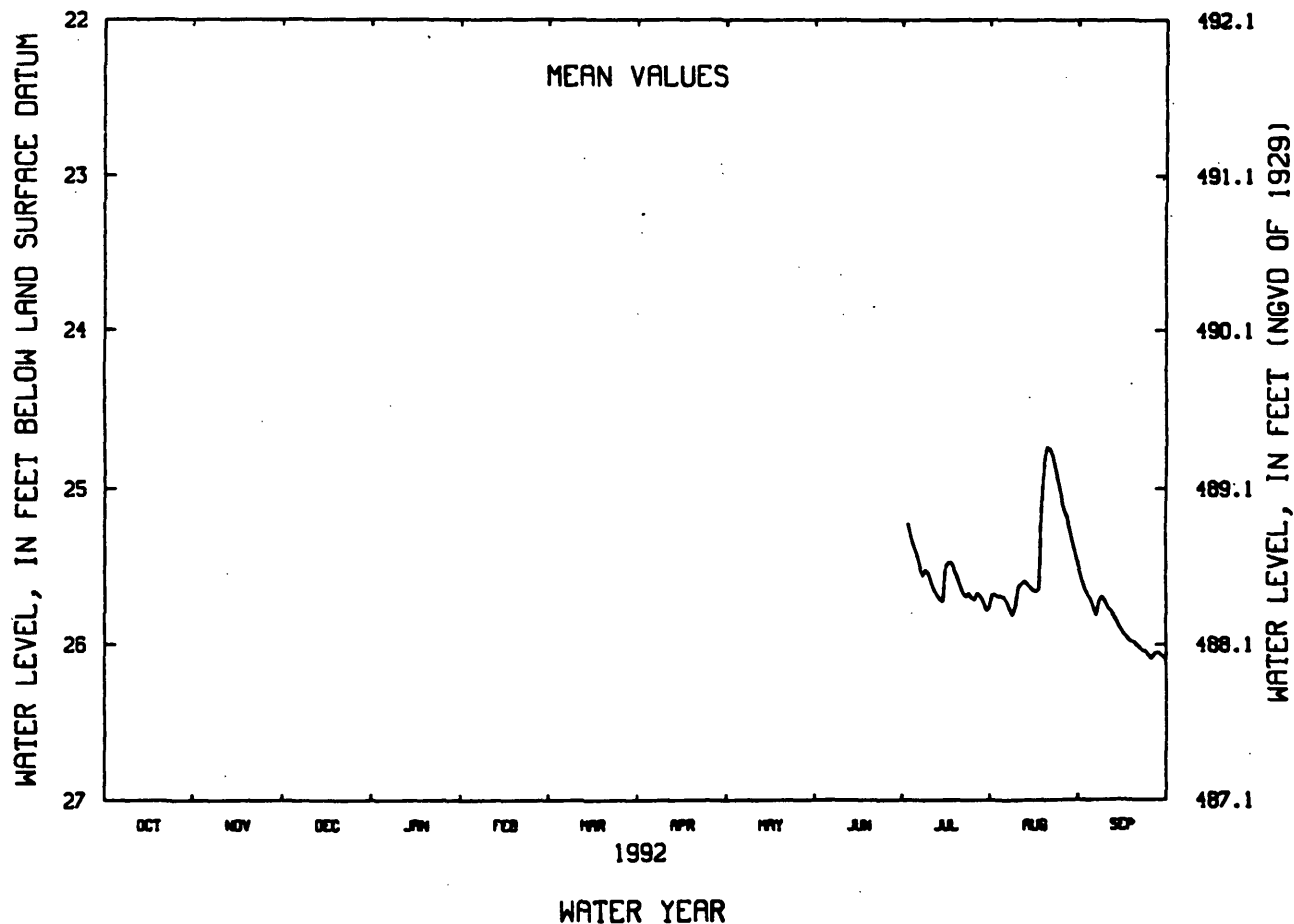
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	...	...	...	...	...	...	...	...	...	25.37	25.70	25.76
10	...	...	...	...	...	...	...	...	...	25.54	25.63	25.76
15	...	...	...	...	...	...	...	...	...	25.72	25.65	25.91
20	...	...	...	...	...	...	...	...	...	25.56	24.74	26.00
25	...	...	...	...	...	...	...	...	...	25.70	25.06	26.09
EOM	...	...	...	...	...	...	...	...	...	25.76	25.51	26.10
MEAN	...	...	...	...	...	...	...	...	...	25.59	25.41	25.89

WTR YR 1992 HIGH 24.73 AUG 20-21 LOW 26.11 SEP 30

NJ-WRD WELL NO.37-0205



SUSSEX COUNTY

410804074424401. Local I.D., Fairgrounds 7 Obs. NJ-WRD Well Number, 37-0206.

LOCATION.--Lat 41°08'04", long 74°42'44", Hydrologic Unit 02020007, at Sussex County Fairgrounds, Frankford Township.

Owner: State of New Jersey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 84 ft, screened 64 to 84 ft.

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

DATUM.--Land-surface datum is 533.5 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 3.90 ft above land-surface datum.

REMARKS.--Water-quality data for 1992 are available elsewhere in this report.

PERIOD OF RECORD.--Apr. 1991 to current year. Periodic manual measurements Apr. 1991 to July 1992.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 37.40 ft below land-surface datum, Apr. 2, 1991; lowest, 38.55 ft below land-surface datum, Aug. 23, 1991.

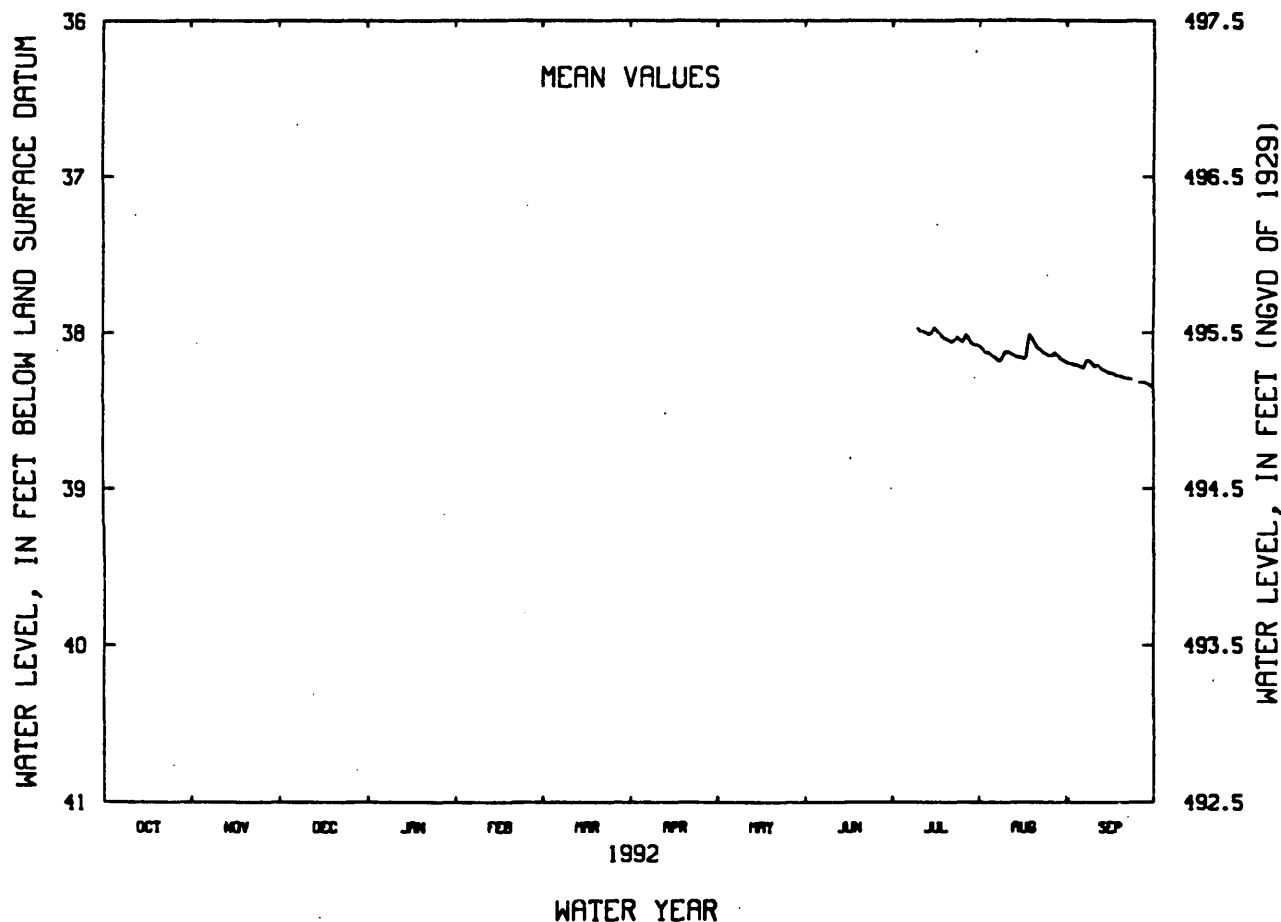
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	---	38.15	38.22
10	---	---	---	---	---	---	---	---	---	37.97	38.12	38.22
15	---	---	---	---	---	---	---	---	---	38.00	38.16	38.26
20	---	---	---	---	---	---	---	---	---	38.04	38.07	38.29
25	---	---	---	---	---	---	---	---	---	38.05	38.15	38.32
EOM	---	---	---	---	---	---	---	---	---	38.08	38.19	38.35
MEAN	---	---	---	---	---	---	---	---	---	38.03	38.13	38.26

WTR YR 1992 HIGH 37.96 JUL 15-16 LOW 38.35 SEP 30

NJ-WRD WELL NO.37-0206



SUSSEX COUNTY

410914074540401. Local I.D., Taylor Obs. NJ-WRD Well Number, 37-0202.

LOCATION.--Lat 41°09'14", long 74°53'04", Hydrologic Unit 02040104, near Walpack Center, Delaware Water Gap National Recreation Area, Walpack Township.

Owner: National Park Service.

AQUIFER.--Bossardville Limestone of Silurian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 95 ft, open hole 42 to 95 ft.

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

DATUM.--Land-surface datum is 480 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top edge of recorder shelf, 3.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.28 ft below land-surface datum, Oct. 20, 1989; lowest, 24.53 ft below land-surface datum, Oct. 15, 1991.

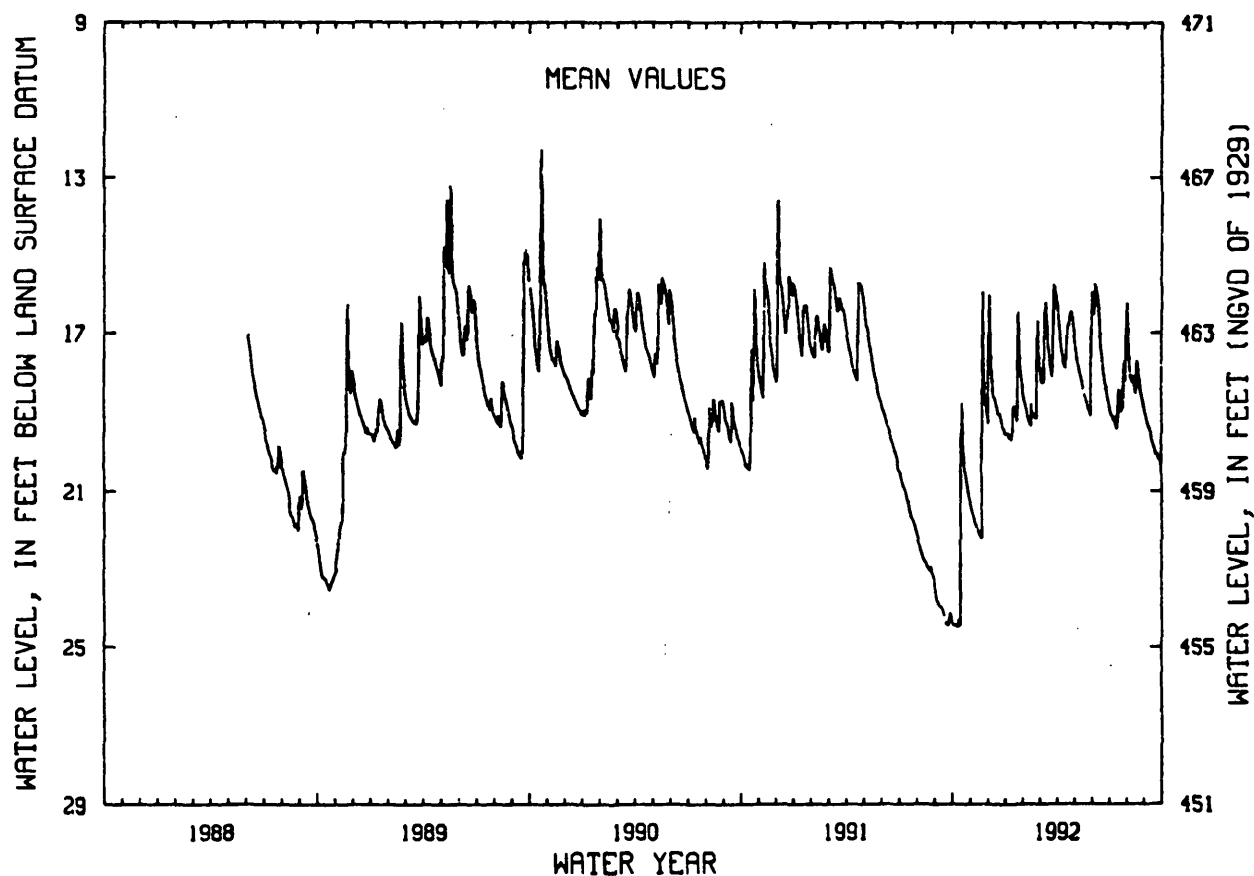
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.46	21.56	16.53	19.52	18.78	18.08	16.72	17.45	16.54	19.06	17.53	19.20
10	24.49	21.84	18.33	19.62	19.16	18.16	17.41	17.87	16.05	19.14	18.20	19.44
15	23.68	22.03	18.71	18.92	19.33	16.71	17.80	18.25	16.92	19.29	18.37	19.71
20	19.76	22.20	19.05	19.04	19.04	17.58	16.85	18.57	17.72	18.67	17.68	20.00
25	20.65	17.82	19.21	16.89	19.15	18.08	16.52	18.86	18.32	18.87	18.39	20.19
EOM	21.23	19.02	19.52	18.24	17.27	16.08	16.79	17.06	18.70	16.93	18.88	20.33
MEAN	22.33	20.70	18.60	18.87	18.73	17.29	16.99	18.15	17.13	18.77	18.03	19.71

WTR YR 1992 MEAN 18.78 HIGH 15.09 NOV 22 LOW 24.53 OCT 15

NJ-WRD WELL NO.37-0202



SUSSEX COUNTY

410928074522801. Local I.D.; Walpack Twp. 4 Obs. NJ-WRD Well Number, 37-0207.

LOCATION.--Lat 41°09'28", long 74°52'28", Hydrologic Unit 02040104, off Main St., about 800 ft. east of Flat Brook, Walpack Center, Walpack Township.

Owner: State of New Jersey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 55 ft, screened 46 to 55 ft.

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

DATUM.--Land-surface datum is 425.3 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 3.40 ft above land-surface datum.

REMARKS.--Water-quality data for 1992 are available elsewhere in this report.

PERIOD OF RECORD.--April 1991 to current year. Periodic manual measurements April 1991 to July 1992.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.82 ft below land-surface datum, Apr. 2, 1991; lowest, 28.32 ft below land-surface datum, Aug. 20, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	25.72	---	---
15	---	---	---	---	---	---	---	---	---	25.90	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	26.44
EOB	---	---	---	---	---	---	---	---	---	---	---	26.51
MEAN	---	---	---	---	---	---	---	---	---	---	---	---

WTR YR 1992 HIGH 25.70 JUL 10 LOW 26.61 SEP 30

GROUND-WATER LEVELS

UNION COUNTY

404106074171901. Local I.D., Union County Park Obs. NJ-WRD Well Number, 39-0119.

LOCATION.--Lat 40°41'06", long 74°17'19", Hydrologic Unit 02030104, at Galloping Hill Golf Course, Kenilworth.

Owner: Union County Park Commission.

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

WELL CHARACTERISTICS.--Drilled artesian observation well, depth 290 ft.

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

DATUM.--Land-surface datum is 69.00 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 2.30 ft above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--June 1943 to current year. Periodic manual measurements, Aug. 1976 to Apr. 1984. Records for 1975 to 1983 are unpublished and are available in files of New Jersey District Office.

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

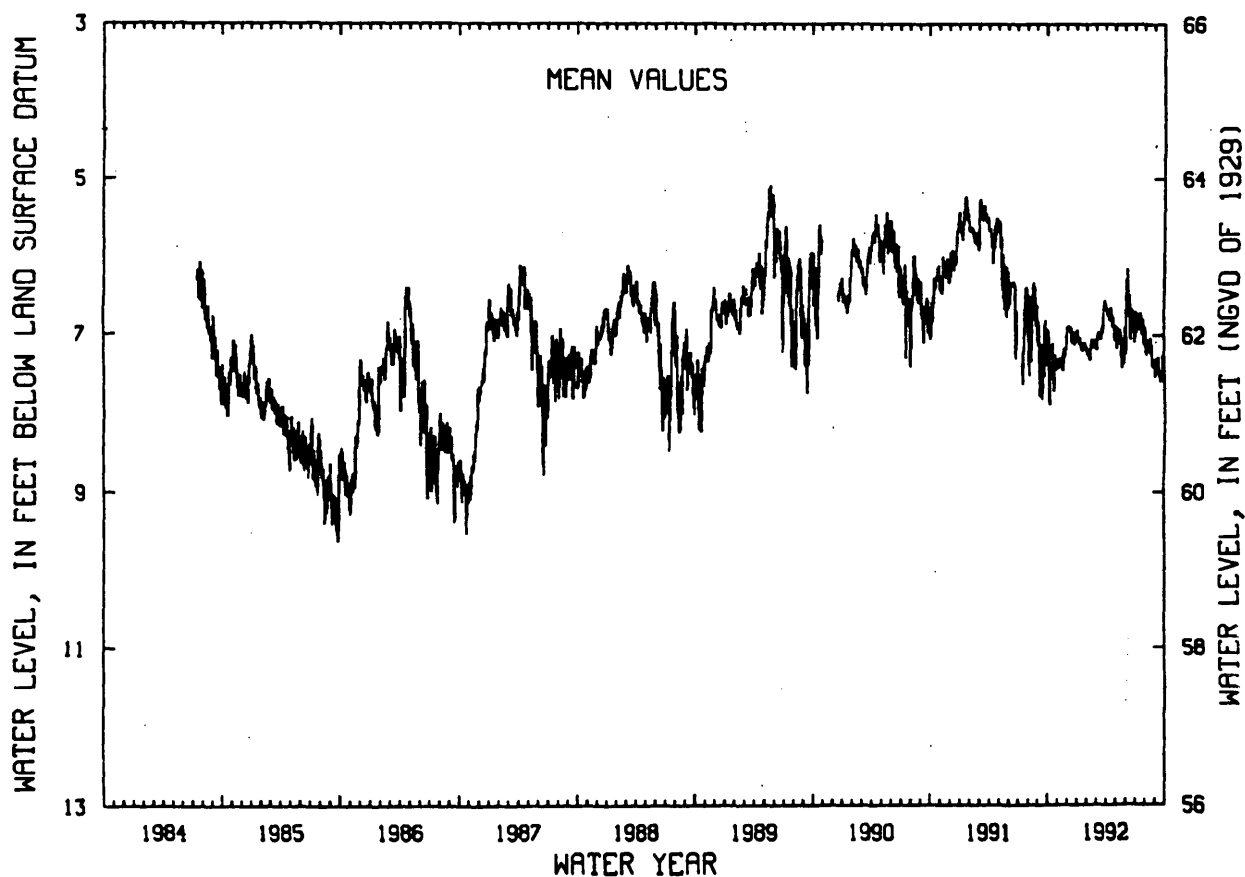
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

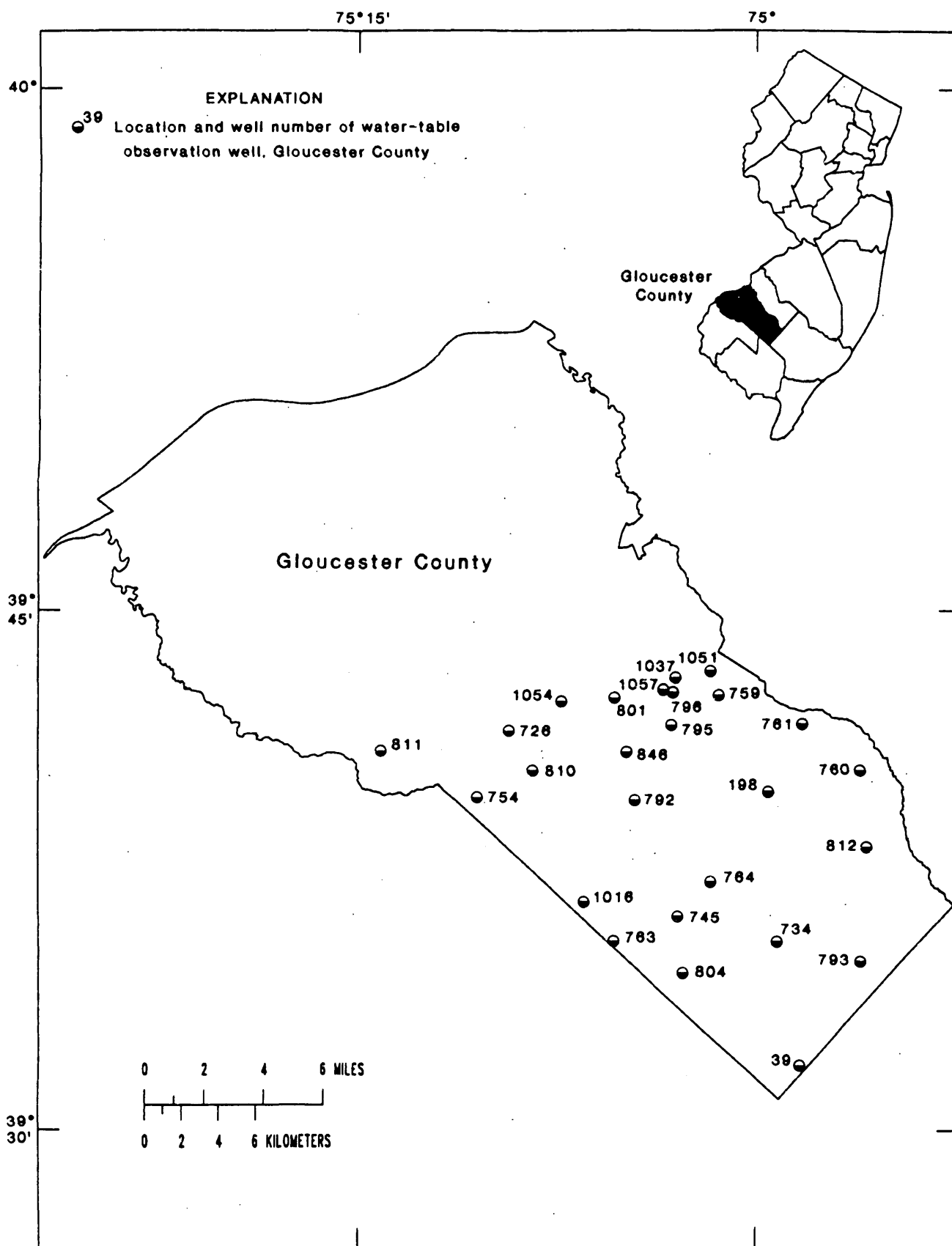
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.10	7.32	6.94	6.96	7.20	7.15	6.67	6.93	7.01	6.72	7.20	7.46
10	7.87	7.36	6.90	7.06	7.25	7.05	6.76	6.91	6.46	6.84	7.06	7.47
15	7.15	7.39	6.92	7.09	7.28	6.99	6.80	7.10	6.63	6.83	7.17	7.51
20	7.10	7.42	7.10	7.12	7.10	7.03	6.66	7.25	6.71	6.73	7.09	7.53
25	7.41	7.16	7.00	7.13	7.12	6.98	6.80	7.08	6.72	6.96	7.39	7.52
EOM	7.43	7.17	7.01	7.14	7.08	6.58	6.89	7.09	6.93	6.99	7.40	7.51
MEAN	7.26	7.32	6.99	7.08	7.16	6.96	6.74	7.09	6.72	6.88	7.18	7.42

WTR YR 1992 MEAN 7.07 HIGH 6.13 JUN 8 LOW 8.33 SEP 19

NJ-WRD WELL NO.39-0119





Base from U.S. Geological Survey 1:24,000 quadrangles
Universal Transverse Mercator projection, Zone 18

Figure 13.--Locations of ground-water wells in the Gloucester County water-table network.

Table 1.--Water levels at manually measured wells in the
Gloucester County water-table network

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE DATUM (FT.)	SCREEN INTERVAL (FT.*)	DATE OF MEASUREMENT	WATER LEVEL (FT.*)
15-0039	CIFALOGGIO, SYLVESTER	1	393148	745822	1986-P	110	75-123	11-12-91 5-12-92	9.99 10.05
15-0198	LESHAY BROS	1965 WELL	393944	745934	1986-P	126	93-141	11-12-91 5-14-92	10.89 10.25
† 15-0726	SMITH, JOHN	AURA ORCHARDS	394130	750921	1986-P	140	52-62	11-12-91 5-12-92	15.07 12.62
† 15-0734	DASE, DENNIS	DASE 1	393523	745912	1986-P	138	100-110	11- 8-91 5-12-92	19.66 21.07
15-0745	FRANKLIN TWP SANITARY LANDFILL	DUMP NORTH	393608	750257	1986-P	124	15-35	11-12-91 5-12-92	27.75 24.86
15-0754	DEAN, GEORGE	DEAN 1	393934	751033	1986-P	143	48-58	11-12-91 5-12-92	15.60 14.11
15-0759	MESIANO, JIM	MESIANO 1	394232	750126	1986-P	159	130-135	11-12-91 5-14-92	39.53 40.35
15-0760	WILLIAMS, RONALD	RW 1	394020	745611	1986-P	115	25-30	11-12-91 5-14-92	17.31 15.98
15-0761	LUCAS, HARRY	LUCAS IRR 1	394142	745818	1986-P	130	33-38	11-12-91 5-14-92	13.72 13.87
15-0763	MOORE, EAYRE	MOORE 2	393525	750521	1986-P	109	55-60	11-12-91 5-12-92	21.02 20.48
15-0764	SCAFONIS, FELIX	SCAFONIS D	393708	750143	1986-P	130	44-49	11-12-91 5-12-92	21.21 21.18
15-0792	THE PLANT PLACE INC	PP 1	393928	750434	1986-P	110	65-75	11-12-91 5-14-92	12.78 12.39
15-0793	FERRUCCI, MARY	FERRUCCI 10	393448	745606	1986-P	110	100-150	11-12-91 5-14-92	12.27 12.25
15-0795	SMITH, FRED	SMITH-1965	394140	750312	1986-P	150	90-100	11-12-91 5-14-92	15.55 15.24
15-0796	SMITH, FRED	SMITH 5	394238	750308	1986-P	160	85-90	11-12-91 5-14-92	19.71 19.67

Altitudes of land surface are from USGS topographic maps.

* - below land surface datum.

† - a hydrograph for this site is located at the end of table 1.

Aquifer unit: 121CKKD - Kirkwood-Cohansey aquifer system

Table 1.--Water levels at manually measured wells in the
Gloucester County water-table network--Continued

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE DATUM (FT.)	SCREEN INTERVAL (FT.)*	DATE OF MEASUREMENT	WATER LEVEL (FT.)*
15-0801	CHILLARI, JOE	CHILLARI 1	394227	750522	1986-P	144	80-85	11-12-91 5-14-92	15.50 15.70
15-0804	FRANKLIN TWP BOARD OF EDUCATION	MALAGA 1	393428	750244	1986-P	110	95-100	11-12-91 5-12-92	31.75 30.97
15-0810	ELK TWP MUA	ELK 1	394021	750827	1986-P	144	58-63	11-12-91 5-12-92	15.64 14.75
15-0811	SHOEMAKER, G	SHOEMAKER 1	394055	751412	1986-P	140	27-32	11-12-91 5-12-92	20.15 19.83
15-0812	CORONA PUMPS	CORONA 1	393805	745554	1986-P	123	100-110	11-12-91 5-14-92	29.17 28.23
15-0846	US GEOLOGICAL SURVEY	CARPENTER 126	394053	750453	1987-P	126	9-10	11-12-91 5-14-92	7.22 5.42
15-1016	DUFFIELD, CLAUDE	DUFFIELD 2	393633	750630	1986-P	129	50-60	11-12-91 5-12-92	25.48 25.23
15-1037	DILLNER, PETER	FRIMAIR IRR	394303	750303	1989-P	150	72-77	11-12-91 5-14-92	19.86 23.58
15-1051	US GEOLOGICAL SURVEY	WTMUA OBS-1 SHALLOW	394314	750145	1991-P	155	22-27	10-29-91 11- 8-91 5-11-92 9-14-92	13.34 13.50 14.49 14.88
15-1054	US GEOLOGICAL SURVEY	GSC OBS-1 SHALLOW	394221	750722	1991-P	155	31-36	11- 8-91 5-11-92 9-14-92	20.99 21.98 22.98
15-1057	US GEOLOGICAL SURVEY	TPE OBS-1 SHALLOW	394242	750330	1991-P	152	22-27	10-29-91 11- 8-91 12-17-91 12-27-91 5-11-92 9-14-92	17.62 17.74 18.18 18.25 18.20 18.50

Altitudes of land surface are from USGS topographic maps

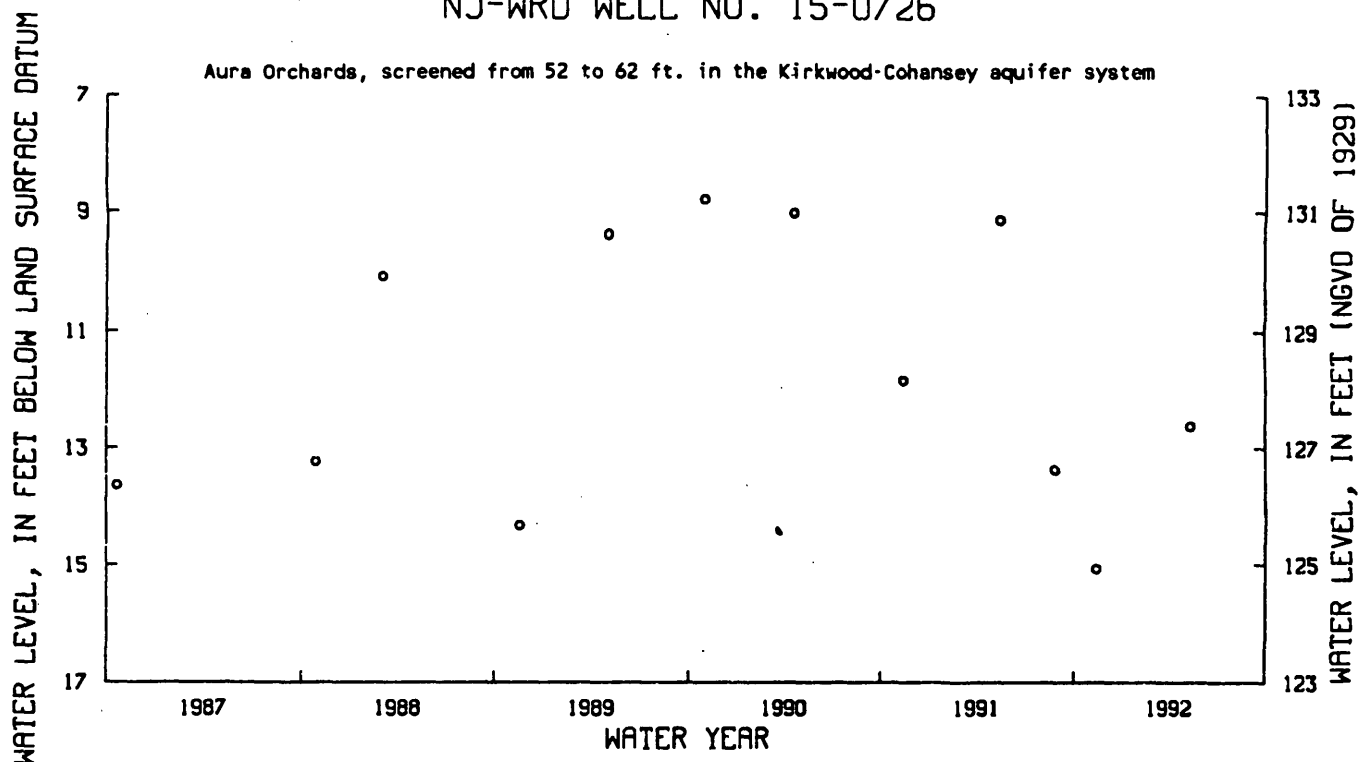
* - below land surface datum.

Aquifer unit: 121CKKD - Kirkwood-Cohansey aquifer system

Selected hydrographs showing water levels at manually measured wells in the
Gloucester County water-table network.

NJ-WRD WELL NO. 15-0726

Aura Orchards, screened from 52 to 62 ft. in the Kirkwood-Cohansey aquifer system



NJ-WRD WELL NO. 15-0734

Dase 1, screened from 100 to 110 ft. in the Kirkwood-Cohansey aquifer system

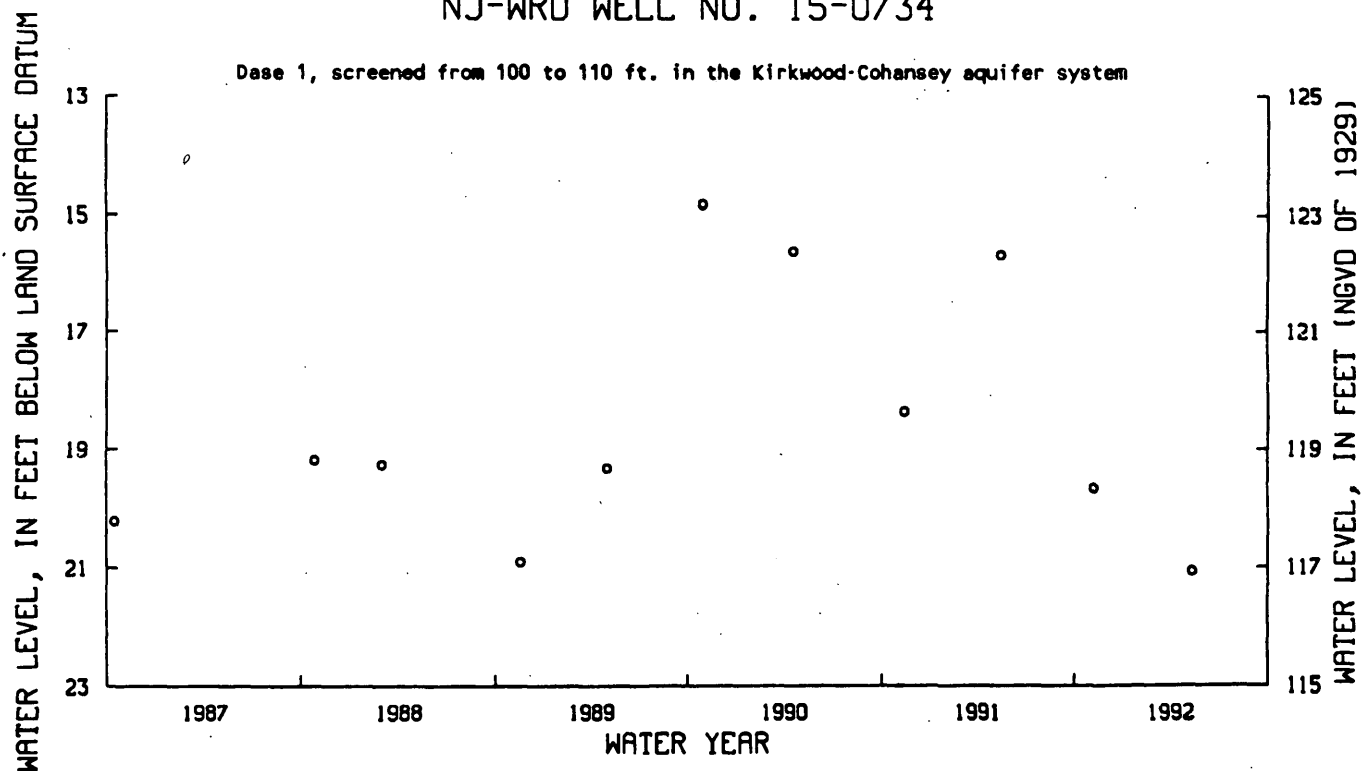


Table 2.--Water levels at manually measured observation wells

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NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	AQUIFER UNIT	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE DATUM (FT.)	OPEN OR SCREEN INTERVAL (FT.)	DATE OF MEASUREMENT	WATER LEVEL (FT.)
01-702	US GEOLOGICAL SURVEY	BURKE AVE TW OBS	392032	743008	122KRKDL	1985-P	5	740-750	11-19-91 1-22-92 4- 6-92 6- 9-92 9- 2-92	95.59 88.59 85.10 93.05 113.37
†01-775	ATLANTIC CITY MUA	FAA INTERMEDIATE OBS	392639	743232	121CKKD	1985-P	38.1	132-182	11-19-91 1-22-92 4- 6-92 6- 9-92 9- 2-92	33.08 31.27 32.57 41.00 34.27
†01-776	ATLANTIC CITY MUA	FAA SHALLOW OBS	392639	743232	121CKKD	1985-P	38.1	73- 93	11-19-91 1-22-92 4- 6-92 6- 9-92 9- 2-92	21.96 22.09 22.13 22.44 21.49
03-289	STATE OF NJ - NJGS	SADDLE RIVER 17 OBS	410155	740602	227PSSC	1991-P	148.9	165-175	4-27-92 6-16-92 9-10-92	-1.16 0.05 0.22
05-063	WILLINGBORO MUA	WILLINGBORO 1 OBS	400213	745108	211MRPAM	1966-P	45.45	284-294	4-23-92 9- 3-92	66.71 69.30
05-259	US GEOLOGICAL SURVEY	MEDFORD 2 OBS	395524	745025	211EGLS	1963-P	72.92	253-263	10-28-91 12-30-91 3-25-92 5-26-92 7-21-92 9-23-92	49.00 48.41 48.39 48.62 49.52 49.41
†05-274	CAMPBELL SOUP	CAMPBELL 1 OBS	395841	745905	211MRPAM	1972-P	40	241-262	5-26-92 9- 3-92	69.43 70.58
05-407	US GEOLOGICAL SURVEY	ATSION 1 OBS	394422	744309	124PNPN	1963-P	46.76	240-260	4- 6-92 8-27-92	-4.52 -4.63
05-408	US GEOLOGICAL SURVEY	ATSION 2 OBS	394422	744309	121CKKD	1963-P	47.52	63- 65	4- 6-92 8-27-92	3.82 3.53
05-409	US GEOLOGICAL SURVEY	ATSION 3 OBS	394422	744309	121CKKD	1963-P	47.13	14- 17	4- 6-92 8-27-92	6.36 6.05
05-570	US GEOLOGICAL SURVEY	MOUNT OBS	394106	743623	121CKKD	1955-P	63.24	25**	4-29-92	14.55
05-628	US GEOLOGICAL SURVEY	PENN SF SHALLOW OBS	394452	742819	121CKKD	1936-P	78.78	12**	10-10-91 4-29-92 8-28-92	2.98 2.34 1.27
05-630	US GEOLOGICAL SURVEY	PENN SF DEEP OBS	394513	742806	121CKKD	1963-P	104.30	41**	10-10-91 4-29-92 8-28-92	27.08 27.58 27.47
†05-676	US GEOLOGICAL SURVEY	COYLE AIRPORT OBS	394914	742546	124PNPN	1962-P	199.19	530-540	3-25-92 8-28-92	80.64 80.71
†07-118	NJ-AMERICAN WATER CO	HUTTON HILL 2 OBS	395229	745712	211MLRW	1967-P	157.53	137-147	11-12-91 4- 2-92 6- 4-92 9- 1-92	89.33 88.52 89.10 89.76
07-283	NJ-AMERICAN WATER CO	EGBERT OBS	395246	750434	211MRPAL	1963-P	23.66	445-455	4-23-92 9- 3-92	83.16 87.89
†07-354	GENERAL FOODS	PETTY IS OBS	395811	750556	211MRPAL	1950-P	11.55	78**	4-23-92 9- 3-92	8.60 8.85

Aquifer unit:

121CKKD - Kirkwood Cohansey aquifer system
 122KRKDL - Atlantic City 800-foot sand of the Kirkwood Formation
 124PNPN - Piney Point aquifer
 211MLRW - Wenonah-Mount Laurel aquifer
 211EGLS - Englishtown aquifer system
 211MRPAM - Middle aquifer, Potomac-Raritan-Magothy aquifer system
 211MRPAL - Lower aquifer, Potomac-Raritan-Magothy aquifer system
 227PSSC - Passaic Formation

* - below land surface datum. Water levels above land surface datum are listed as negative values.

** - total depth of well (extent of screen or open interval is not known).

† - a hydrograph for this site is located at the end of table 2.

Table 2.--Water levels at manually measured observation wells--Continued

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	AQUIFER UNIT	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE DATUM (FT.)	SCREEN INTERVAL (FT.)*	DATE OF MEASUREMENT	WATER LEVEL (FT.)*
#09-020	US GEOLOGICAL SURVEY	TRAFFIC CIRCLE OBS	385616	745800	112HLBC	1967-P	9.12	15- 20	3-19-92 3-24-92 9-30-92	4.32 4.37 3.96
#09-048	US GEOLOGICAL SURVEY	CANAL 5 OBS	385748	745533	121CNSY	1957-P	17.48	242-252	3-24-92 4- 6-92 6-10-92 9-10-92	30.88 32.11 39.35 49.18
†09-060	US GEOLOGICAL SURVEY	AIRPORT 7 OBS	390056	745426	121CNSY	1963-P	13.11	242-257	3-24-92 9-10-92	23.30 33.06
09-071	WILDWOOD WD	RIO GRANDE 23 OBS	390138	745348	122KRKDU	1990-P	8	473-523	11- 6-91 12-11-91 1-16-92 3- 6-92 5- 1-92 6-10-92 6-11-92 7-21-92 9-17-92	48.68 55.63 53.23 58.02 57.89 67.95 72.11 69.65 70.88
#09-080	US GEOLOGICAL SURVEY	CAPE MAY 42 OBS	390213	745056	121CNSY	1957-P	13.67	242-252	3-18-92 9-10-92	13.30 21.10
#09-081	US GEOLOGICAL SURVEY	CAPE MAY 23 OBS	390211	745055	112HLBC	1957-P	14.90	23- 26	3-18-92 9-10-92	8.41 10.18
09-294	US GEOLOGICAL SURVEY	WETLANDS 3 OBS	390337	744623	112ESRNS	1988-P	5	105-115	11- 1-91 1-16-92 3- 6-92 5- 1-92 6-11-92 7-21-92 9-17-92	4.04 6.58 5.93 5.74 5.95 6.07 5.70
09-295	US GEOLOGICAL SURVEY	WETLANDS 4 OBS	390337	744623	112HLBC	1988-P	5	80- 90	11- 1-91 1-16-92 3- 6-92 5- 1-92 6-11-92 7-21-92 9-17-92	3.83 6.41 5.52 5.56 5.77 5.85 5.52
11-043	CUMBERLAND COUNTY	VOCATIONAL SCHOOL 1 OBS	392732	750929	121CKKD	1972-P	82.14	133-138	12- 9-91 2-20-92 4-23-92 6-25-92 9-17-92	6.76 7.21 7.18 7.65 8.43
†11-044	CUMBERLAND COUNTY	VOCATIONAL SCHOOL 3 OBS	392732	750929	124PNPN	1972-P	81.95	361-376	12- 9-91 2-20-92 4-23-92 6-25-92 9-17-92	78.88 79.21 79.39 79.58 80.09
11-073	CUMBERLAND COUNTY	SHEPPARDS 2 OBS	392508	751846	121CKKD	1973-P	37.35	35- 40	3- 9-92 9-17-92	5.04 5.47
†11-097	CUMBERLAND COUNTY	JONES ISLAND 1 OBS	391829	751208	121CKKD	1972-P	10.10	166-171	12- 9-91 2-20-92 4-23-92 9-17-92	8.86 8.85 8.81 9.21
11-118	CUMBERLAND COUNTY	HEISLERVILLE 1 OBS	391350	750018	121CKKD	1972-P	6.22	36- 41	3-24-92 9-10-92	3.08 3.30
11-119	CUMBERLAND COUNTY	HEISLERVILLE 2 OBS	391350	750018	121CKKD	1972-P	5.98	125-135	3-24-92 9-10-92	2.33 2.61
11-163	CUMBERLAND COUNTY	FAIR GROUNDS 3 OBS	392526	750643	124PNPN	1973-P	80	463-473	3- 9-92 9-17-92	75.93 76.61

Aquifer unit:

- 112ESRNS - Cape May Formation, estuarine sand facies
- 112HLBC - Holly Beach water-bearing zone
- 121CKKD - Kirkwood-Cohansey aquifer system
- 121CNSY - Cohansey Sand
- 122KRKDU - Rio Grande water-bearing zone of the Kirkwood Formation
- 124PNPN - Piney Point aquifer

* - below land surface datum.

- Water-quality data for this site is available elsewhere in this report.

† - a hydrograph for this site is located at the end of table 2.

Table 2.--Water levels at manually measured observation wells--Continued

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NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	AQUIFER UNIT	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE DATUM (FT.)	OPEN OR SCREEN INTERVAL (FT.)*	DATE OF MEASUREMENT	WATER LEVEL (FT.)*
11-237	CUMBERLAND COUNTY	NATURAL AREA 1 OBS	392920	745700	121CKKD	1972-P	88	76- 81	3-24-92 6-30-92 8-26-92	9.48 10.40 9.70
11-692	US GEOLOGICAL SURVEY	RUTGERS R&D 1 SHALLOW OBS	393104	751222	121CKKD	1991-P	119.62	33- 38	10-29-91 11- 8-91 11-20-91 12- 9-91 12-20-91 12-23-91 2-20-92 3- 9-92 5-11-92 6-25-92 9-15-92	25.01 25.17 25.33 25.59 25.73 25.73 26.34 26.51 26.59 26.73 27.25
11-693	US GEOLOGICAL SURVEY	RUTGERS R&D 2 MED OBS	393104	751222	121CKKD	1991-P	119.67	73- 78	11- 8-91 11-20-91 12- 9-91 12-20-91 12-23-91 2-20-92 3- 9-92 5-11-92 6-25-92 9-15-92	25.24 25.50 25.65 25.78 25.80 26.40 26.58 26.66 26.78 27.32
11-694	US GEOLOGICAL SURVEY	RUTGERS R&D 3 DEEP OBS	393104	751222	121CKKD	1991-P	119.95	105-110	11- 8-91 11-20-91 12- 9-91 12-20-91 12-23-91 2-20-92 3- 9-92 5-11-92 6-25-92 9-15-92	25.59 25.63 26.00 26.15 26.15 26.76 26.93 27.01 27.15 27.66
13-013	NJ-AMERICAN WATER CO	CANOE BROOK 30 OBS	404452	742116	112SFDF	1950-P	170	130**	5-13-92 8-13-92	71.18 75.60
†13-014	EAST ORANGE WD	NEUTRAL ZONE OBS	404454	742021	112SFDF	1926-P	179.37	64**	5-20-92 7-31-92	52.89 56.67
†13-017	WALSH BROS INC	BALLENTINE 8 OBS	404401	740834	227PSSC	1949-P	12.79	95-875	4-27-92 9-16-92	18.73 20.61
13-095	STATE OF NJ	CHRIST CHURCH 2 OBS	404347	741933	112SFDF	1991-P	276.9	180-200	4-14-92 7-31-92	118.48 119.74
†15-297	HUNTSMAN CORP	SHELL 6 OBS	394942	751317	211MRPAU	1970-P	20.50	113-118	11-13-91 1-30-92 4-17-92 6-25-92 9- 4-92	33.22 31.64 32.40 31.93 33.21
15-727	US GEOLOGICAL SURVEY	STEFKA 3 OBS	394808	751724	211MRPAM	1987-P	5.06	195-205	11-13-91 1-30-92 4-17-92	13.36 12.40 11.94
15-1052	US GEOLOGICAL SURVEY	USGS WTMUA OBS-2 MED	394314	750145	121CKKD	1991-P	155	60- 65	10-29-91 11- 8-91 5-11-92 9-14-92	13.35 13.49 14.49 14.33
15-1053	US GEOLOGICAL SURVEY	USGS WTMUA OBS-3 DEEP	394314	750145	121CKKD	1991-P	155	92- 97	10-29-91 11- 8-91 5-11-92 9-14-92	13.37 13.52 14.51 14.35

Aquifer unit:

- 112SFDF - Stratified drift
- 121CKKD - Kirkwood-Cohansey aquifer system
- 211MRPAU - Upper aquifer, Potomac-Raritan-Magothy aquifer system
- 211MRPAM - Middle aquifer, Potomac-Raritan-Magothy aquifer system
- 227PSSC - Passaic Formation

* - below land surface datum. ** - total depth of well (extent of screen or open interval is not known).

† - a hydrograph for this site is available at the end of table 2.

Table 2.--water levels at manually measured observation wells--Continued

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	AQUIFER UNIT	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE DATUM (FT.)	OPEN OR SCREEN INTERVAL (FT.)*	DATE OF MEASUREMENT	WATER LEVEL (FT.)*
15-1055	US GEOLOGICAL SURVEY	USGS GSC OBS-2 MED	394221	750722	121CKKD	1991-P	155	61- 66	11- 8-91 5-11-92 9-14-92	21.38 22.56 23.33
15-1056	US GEOLOGICAL SURVEY	USGS GSC OBS-3 DEEP	394221	750722	121CKKD	1991-P	155	79- 84	11- 8-91 5-11-92 9-14-92	21.11 22.29 23.06
15-1058	US GEOLOGICAL SURVEY	USGS TPE OBS-2 MED-DEEP	394242	750330	121CKKD	1991-P	152	70- 75	10-29-91 11- 8-91 12-17-91 12-27-91 5-11-92 9-14-92	17.13 17.26 17.70 17.77 17.69 17.98
15-1059	US GEOLOGICAL SURVEY	USGS TPE OBS-3 DEEP	394242	750330	121CKKD	1991-P	152	95-100	10-29-91 11- 8-91 12-17-91 12-27-91 5-11-92 9-14-92	17.92 18.05 18.48 18.55 18.47 18.76
15-1063	US GEOLOGICAL SURVEY	USGS TPE OBS-4 MED-SHAL	394242	750330	121CKKD	1991-P	155.78	35- 40	10-29-91 11- 8-91 12-17-91 12-27-91 5-11-92 9-14-92	18.37 18.50 18.94 19.00 18.95 19.22
†21-028	STATE OF NJ	CIVIL DEFENSE OBS	401553	745012	231LCKG	1964-P	122.99	33-300	3-30-92 7-24-92	16.45 20.07
21-088	US GEOLOGICAL SURVEY	HONEY BRANCH 10 OBS	402128	744613	227PSSC	1968-P	179.50	20-150	3-27-92 4-13-92 7-24-92 9-16-92	24.80 25.17 27.50 33.65
23-194	PERTH AMBOY WD	RUNYON 1 OBS	402536	742018	211FRNG	1934-P	18.30	201-281	5-21-92 9- 9-92	26.05 35.26
23-273	STATE OF NJ	PLAINSBORO POND OBS	401932	743529	211MRPAM	1970-P	76	70- 75	5-21-92 9- 9-92	28.98 28.70
23-291	MONROE TWP MUA	FORS_GATE 1 OBS	402109	743013	211FRNG	1965-P	106.79	192-203	5-21-92 9- 9-92	41.84 42.99
23-292	MONROE TWP MUA	FORS_GATE 2 OBS	402109	743012	211ODBG	1961-P	106.89	93-104	5-21-92 9- 9-92	35.41 36.44
23-344	SAYREVILLE WD	SWD 2 OBS	402558	742013	211ODBG	1968-P	22.19	31- 37	5-21-92 9- 9-92	8.06 8.90
23-351	SAYREVILLE WD	SWD 1 OBS	402605	741959	211ODBG	1968-P	35.27	76- 82	5-21-92 9- 9-92	16.60 17.55
†23-365	DUHERNAL WC	DUH SAY 4 OBS	402633	742120	211FRNG	1932-P	5.70	148-160	5-21-92 9- 9-92	16.59 23.13
23-439	SOUTH RIVER WD	SRWD 2 OBS	402633	742200	211FRNG	1968-P	20.69	121-126	5-21-92 9- 9-92	24.33 29.42
23-482	AMERICAN CYANAMID CO	TEST 1 OBS	403242	741617	211FRNG	1950-P	11.00	44- 76	4-27-92 9-16-92	0.73 1.22
†25-250	GORDONS CRNR WC	VILLAGE 215 OBS	401918	741529	211EGLS	1971-P	138.60	185-215	4-29-92 8- 7-92 9-11-92	39.43 47.45 47.45

Aquifer unit:

121CKKD - Kirkwood-Cohansey aquifer system
 211EGLS - Englishtown aquifer system
 211ODBG - Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system
 211FRNG - Farrington aquifer, Potomac-Raritan-Magothy aquifer system
 211MRPAM - Middle aquifer, Potomac-Raritan-Magothy aquifer system
 227PSSC - Passaic Formation
 231LCKG - Lockatong Formation

* - below land surface datum.

† - a hydrograph for this site is available at the end of table 2.

Table 2.--Water levels at manually measured observation wells--Continued

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	AQUIFER UNIT	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE DATUM (FT.)	OPEN OR SCREEN INTERVAL (FT.)*	DATE OF MEASUREMENT	WATER LEVEL (FT.)*
27-001	US GEOLOGICAL SURVEY	RECREATION FLD OBS	404432	742252	112SFDF	1967-P	218.80	140-150	5-14-92 9-17-92	71.48 78.23
†27-003	US GEOLOGICAL SURVEY	W B DRIVER 2 OBS	404748	742419	112SFDF	1966-P	178.26	99-108	4- 1-92 9-17-92	32.93 31.86
27-004	US GEOLOGICAL SURVEY	CLEMENS OBS	404816	742359	112SFDF	1966-P	174.91	100-110	4- 1-92 9-17-92	26.74 27.62
27-005	US GEOLOGICAL SURVEY	SANDOZ CHEM CO OBS	404826	742347	112SFDF	1966-P	188.25	113-123	4- 1-92 9-17-92	38.46 39.42
27-006	US GEOLOGICAL SURVEY	GREEN ACRES OBS	404937	742200	112SFDF	1967-P	181	94-104	4- 1-92 9-17-92	12.68 13.85
†27-014	US GEOLOGICAL SURVEY	ESSO SIX INCH OBS	404705	742452	112SFDF	1967-P	176	110-120	4- 1-92 9-17-92	19.60 18.36
27-015	MORRISTOWN ARPT	TEST 2 OBS	404743	742522	112SFDF	1960-P	180.60	51- 62	4- 1-92 9-17-92	4.36 5.95
27-017	MADISON BORO WD	MBWD 4 OBS	404508	742402	112SFDF	1958-P	194.90	100**	5-14-92 9-17-92	27.43 32.58
27-022	INT PIPE AND CERAMIC	INT PIPE OBS	405209	742638	112SFDF	1963-P	353.05	146-155	6-22-92 9-17-92	80.17 88.96
27-023	RANDOLPH TWP WD	MT FREEDOM 2 OBS	404921	743356	400PCMB	1964-P	800	11-218	5-20-92 7-29-92	0.45 2.00
27-1197	STATE OF NJ-NJGS	MADISON 8 OBS	404513	742454	112SFDF	1991-P	246.6	142-161	5-14-92 9-17-92	73.60 75.51
29-018	US GEOLOGICAL SURVEY	ISLAND BEACH 2 OBS	394829	740535	124PNPN	1962-P	8.50	468-474	3- 6-92 9-24-92	8.98 9.19
29-020	US GEOLOGICAL SURVEY	ISLAND BEACH 4 OBS	394829	740535	121CKKD	1962-P	8.19	9- 12	3- 6-92 9-24-92	3.82 3.99
†29-425	US GEOLOGICAL SURVEY	WEBBS MILLS 2 OBS	395322	742252	124PNPN	1962-P	128.27	348**	3-25-92 8-28-92	10.21 9.01
29-513	US GEOLOGICAL SURVEY	GARDEN ST PKY 1 OBS	394744	741418	121CKKD	1962-P	44.25	18- 21	3-25-92 8-28-92	6.77 5.59
†29-514	US GEOLOGICAL SURVEY	GARDEN ST PKY 2 OBS	394744	741418	121CKKD	1962-P	43.82	306-316	3-25-92 8-28-92	7.64 7.05
29-530	PT PLEASANT WD	PPWD 6 OBS	400454	740413	211EGLS	1988-P	20	730-790	5-13-92 7-30-92	181.93 191.40
†33-020	HORNER, EPHRAIM	HORNER OBS	393534	751752	211MLRW	1959-P	76.75	283**	2-20-92 9-16-92	45.05 46.87
†33-348	STATE OF NJ	PENNS GROVE 14 OBS	394317	752619	211MRPAU	1959-P	25.40	18**	3- 9-92 9-16-92	5.03 8.35
33-680	US GEOLOGICAL SURVEY	USGS COLES FARM OBS-1	393818	751324	121CKKD	1991-P	142	27- 32	10-29-91 11- 8-91 1-10-92 3- 9-92 5-11-92 9-15-92	17.14 17.27 17.67 17.82 17.15 18.25
33-681	US GEOLOGICAL SURVEY	USGS COLES FARM OBS-2	393818	751324	121CKKD	1991-P	142	40- 45	10-27-91 11- 8-91 1-10-92 3- 9-92 5-11-92 9-15-92	17.40 17.53 17.69 17.84 17.16 18.27

Aquifer unit:

- 112SFDF - Stratified drift
- 121CKKD - Kirkwood-Cohansey aquifer system
- 124PNPN - Piney Point aquifer
- 211MLRW - Wenonah-Mount Laurel aquifer
- 211EGLS - Englishtown aquifer system
- 211MRPAU - Upper aquifer, Potomac-Raritan-Magothy aquifer system
- 400PCMB - Precambrian Erathem

* - below land surface datum.

** - total depth of well (extent of screen or open interval is not known).

† - a hydrograph for this site is available at the end of table 2.

Table 2.--Water levels at manually measured observation wells--Continued

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	AQUIFER UNIT	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE DATUM (FT.)	OPEN OR SCREEN INTERVAL (FT.)*	DATE OF MEASUREMENT	WATER LEVEL (FT.)*
#37-204	STATE OF NJ	SPARTA TWP 6 OBS	410449	743932	112SFDF	1991-P	621.7	123-143	4-20-92 8-18-92	34.76 35.31
39-058	SCHWEITZER, P J	SCHWEITZER OBS	404113	741216	227BRCKS	1956-P	28.23	660**	4-27-92 9-16-92	15.22 15.64
39-102	SCHERING CORP	WHITE LAB 3 OBS	404027	741644	227BRCKS	1952-P	85.22	49-251	4- 1-92 8- 7-92	26.46 25.20
39-115	SCHERING CORP	WHITE LAB 4 OBS	404043	741618	227BRCKS	1952-P	96.20	47-251	4- 1-92 8- 7-92	70.94 67.52

Aquifer unit:

112SFDF - Stratified drift

227BRCKS - Brunswick Group sedimentary rocks

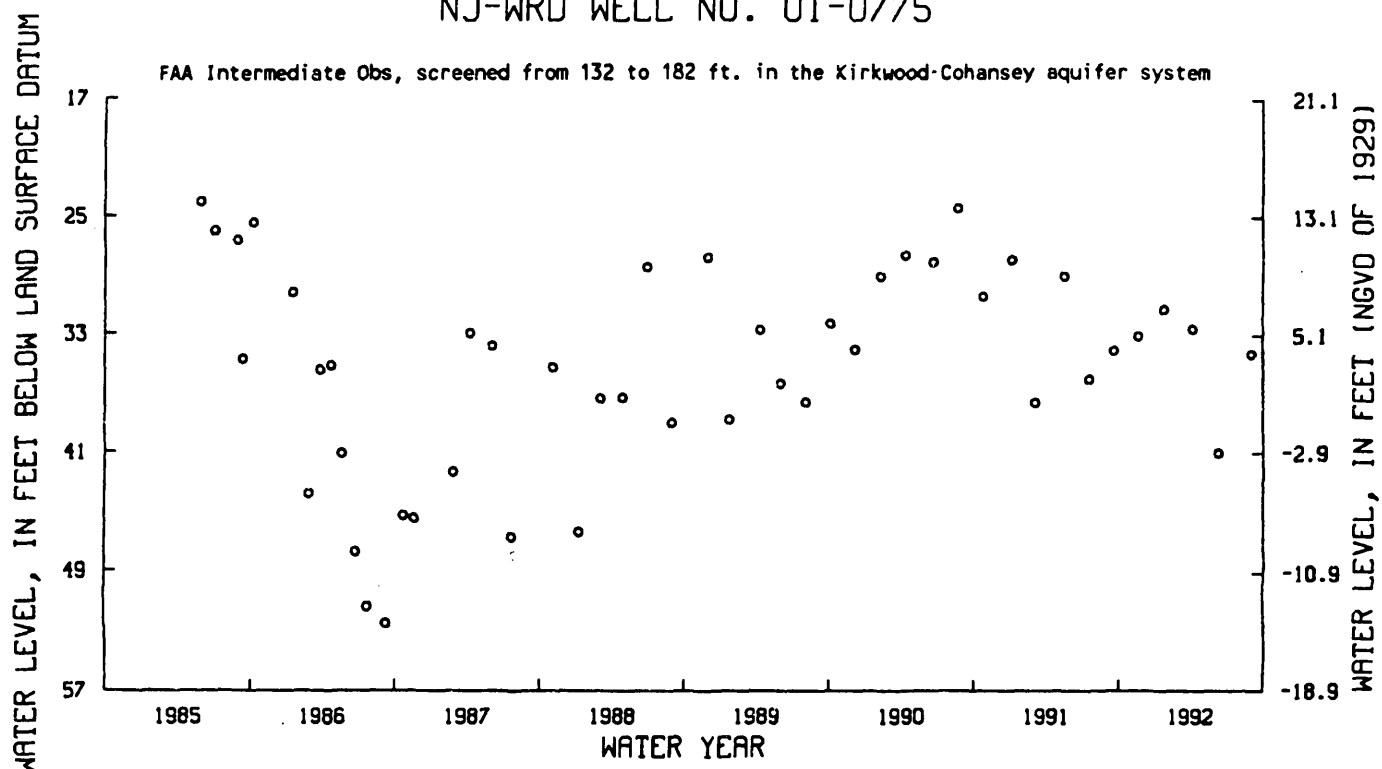
* - below land surface datum.

** - total depth of well (extent of screen or open interval is not known).

- Water-quality data for this site is available elsewhere in this report.

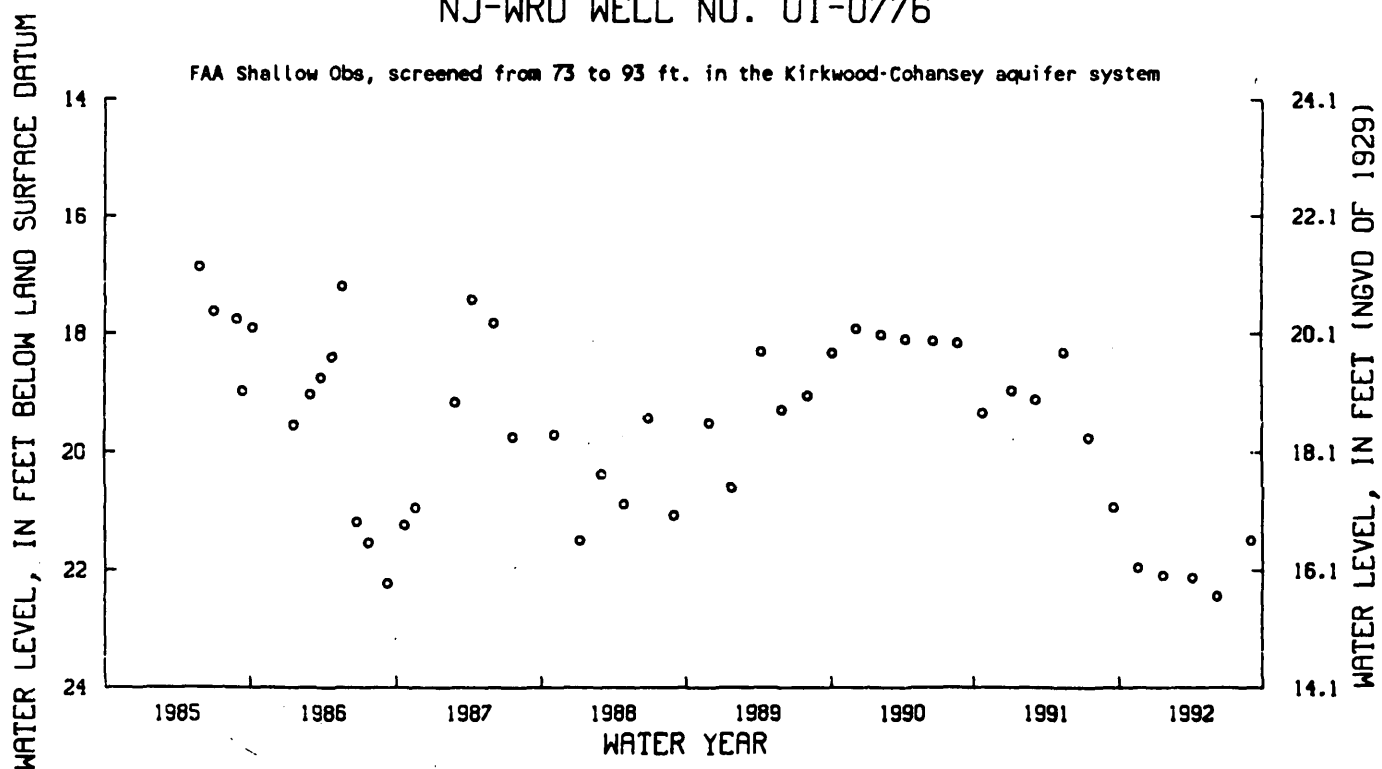
NJ-WRD WELL NO. 01-0775

FAA Intermediate Obs, screened from 132 to 182 ft. in the Kirkwood-Cohansey aquifer system



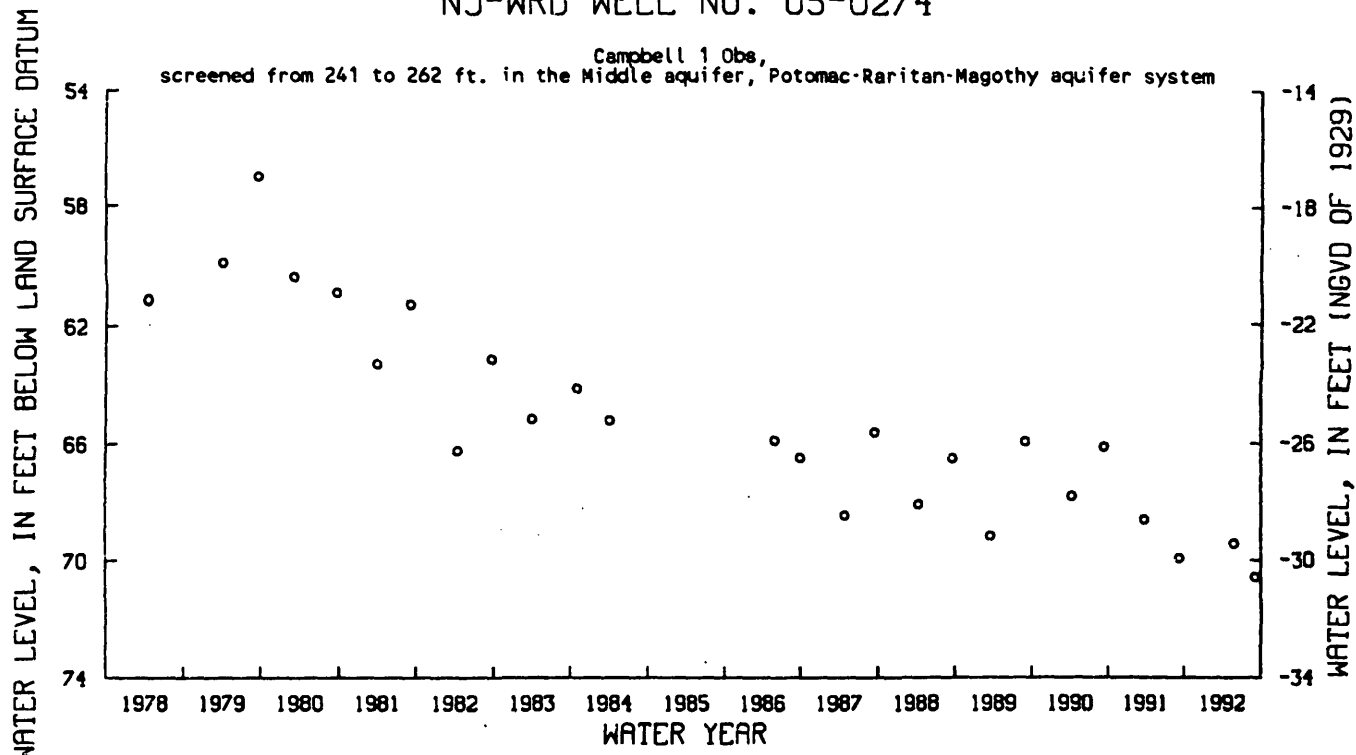
NJ-WRD WELL NO. 01-0776

FAA Shallow Obs, screened from 73 to 93 ft. in the Kirkwood-Cohansey aquifer system

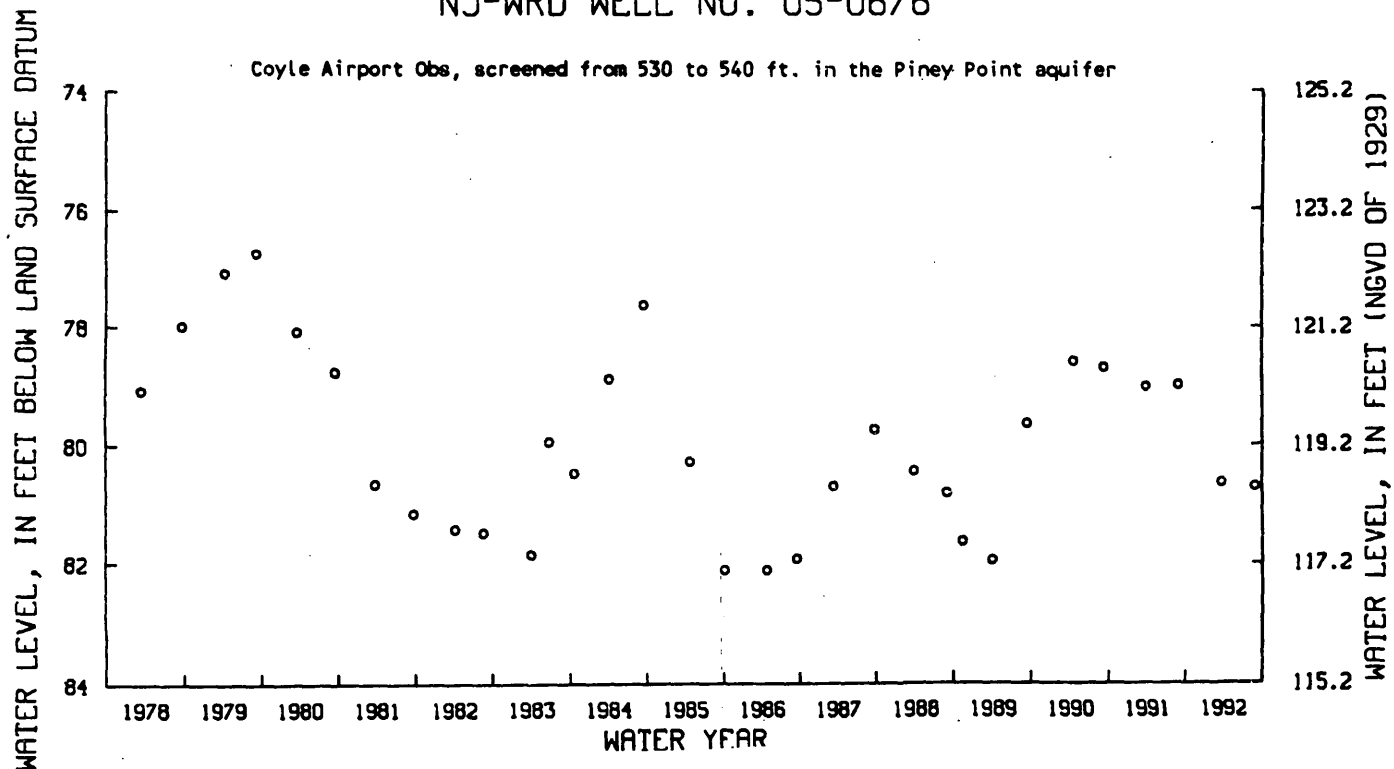


Selected hydrographs showing water levels at manually measured observation wells in
Burlington County.

NJ-WRD WELL NO. 05-0274

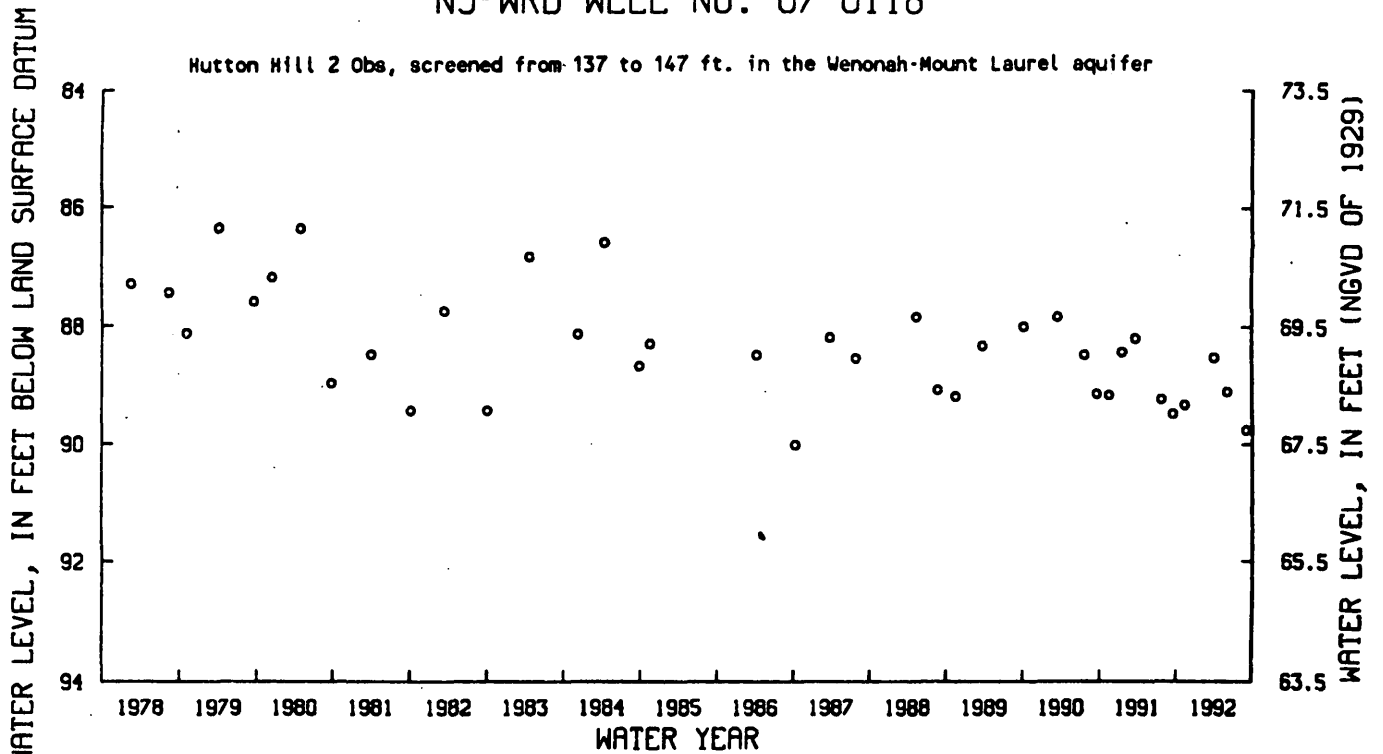


NJ-WRD WELL NO. 05-0676



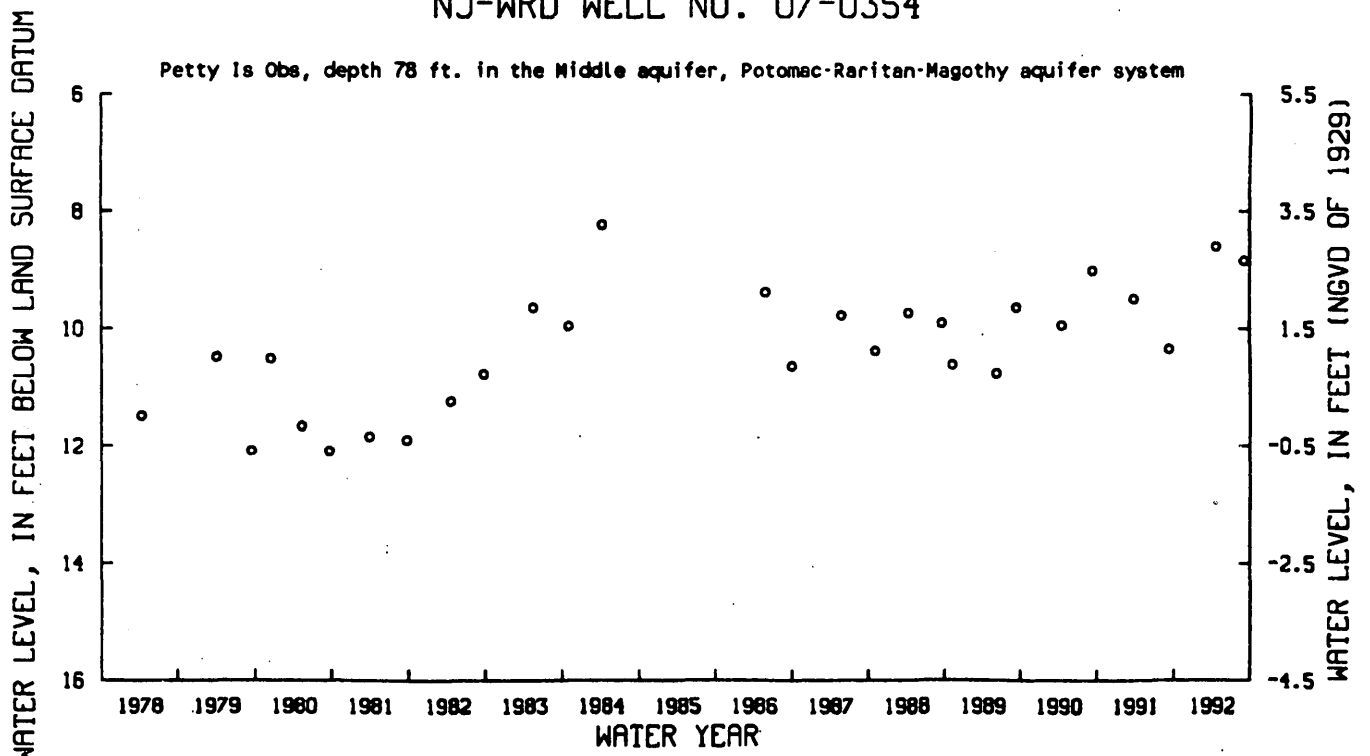
NJ-WRD WELL NO. 07-0118

Hutton Hill 2 Obs, screened from 137 to 147 ft. in the Wenonah-Mount Laurel aquifer

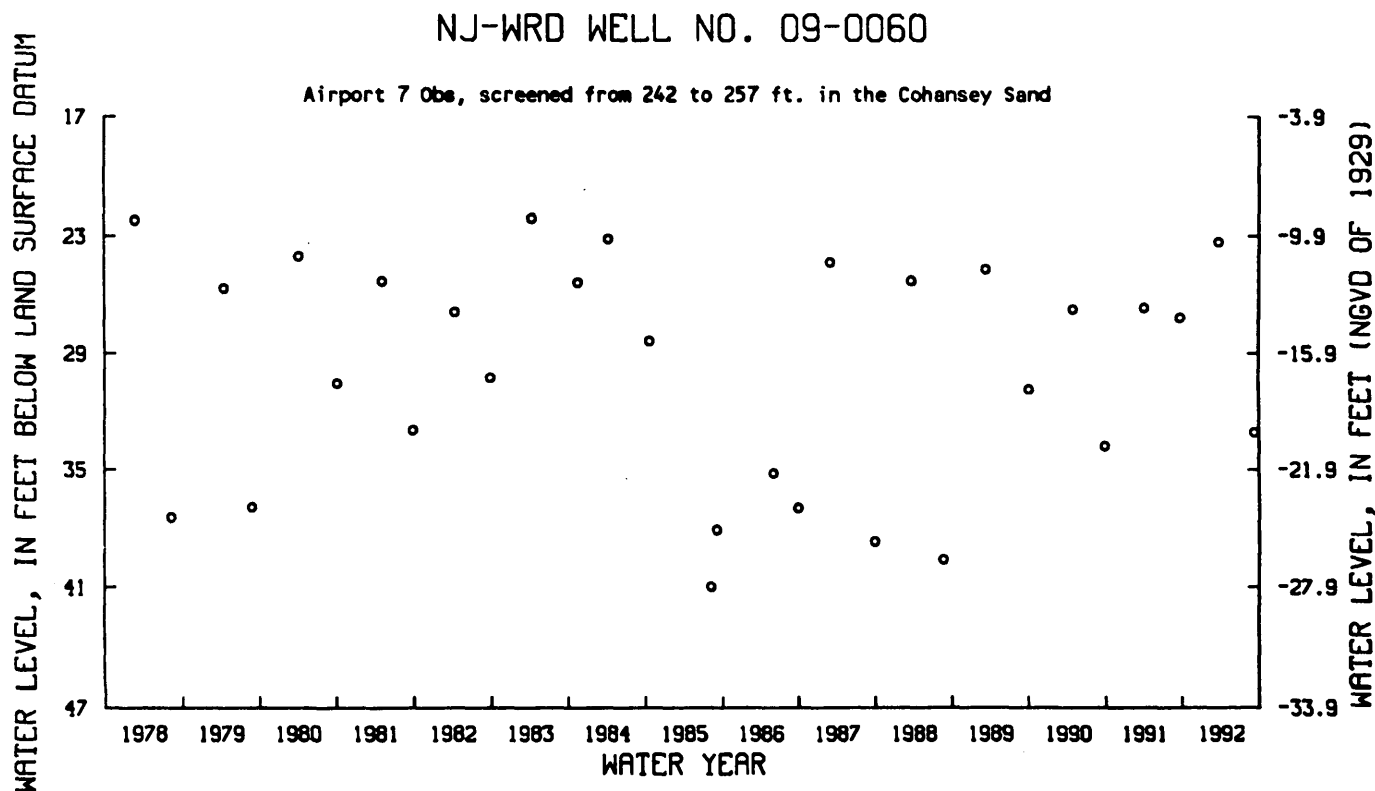
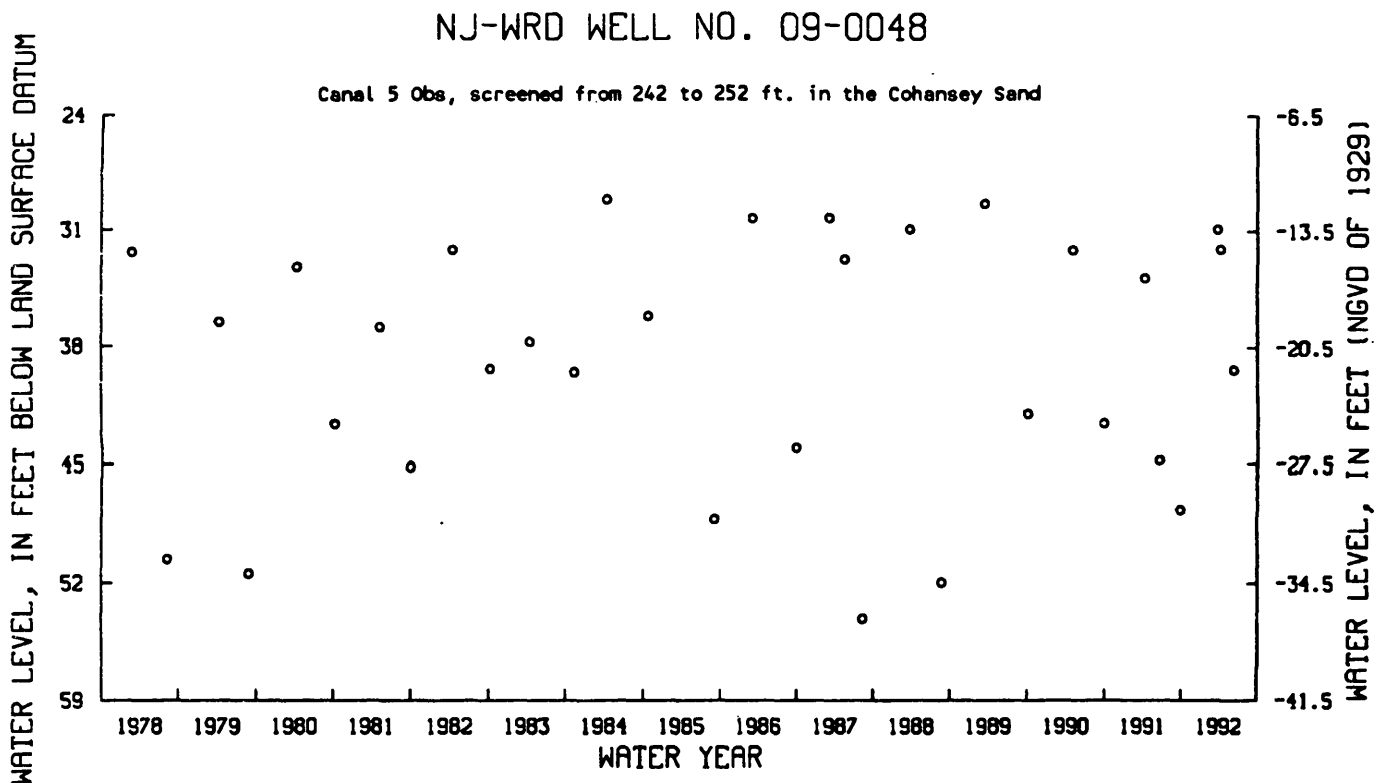


NJ-WRD WELL NO. 07-0354

Petty Is Obs, depth 78 ft. in the Middle aquifer, Potomac-Raritan-Magothy aquifer system

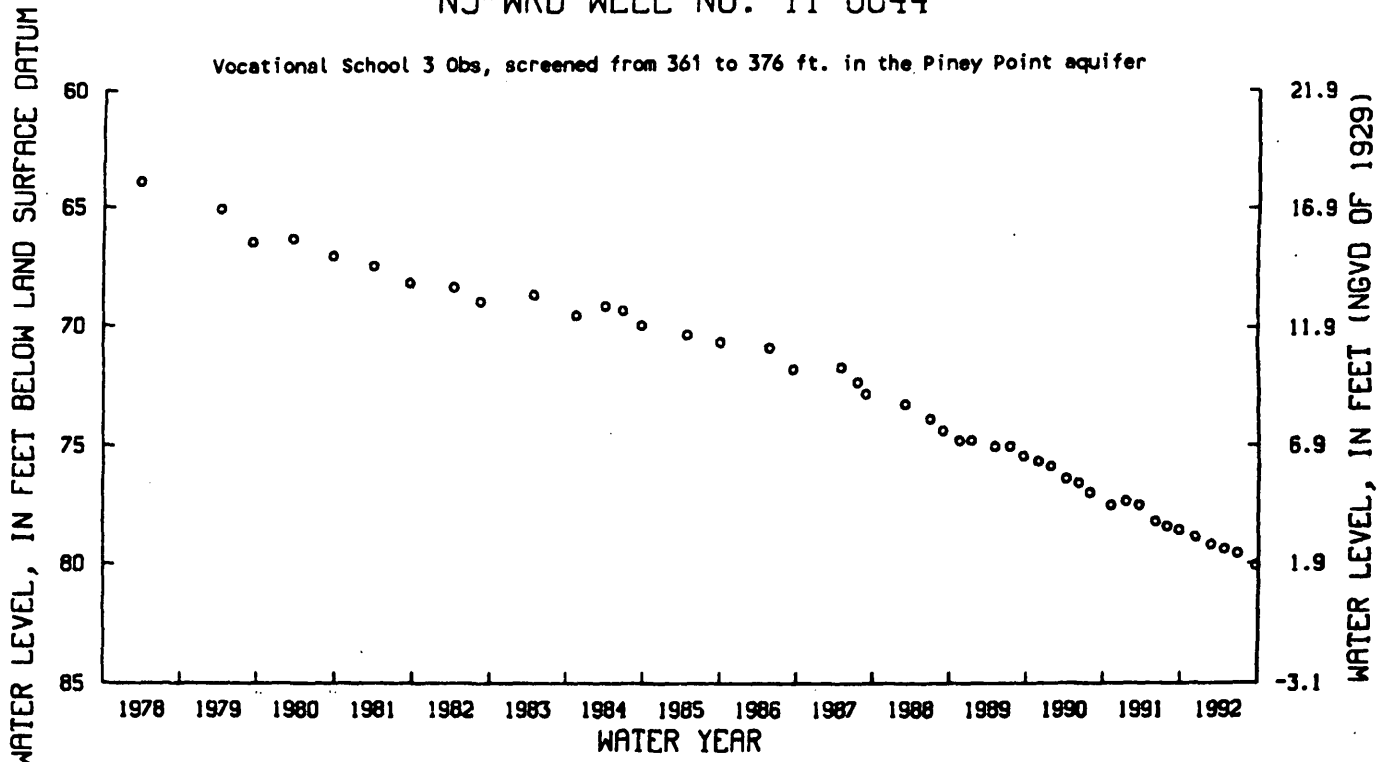


Selected hydrographs showing water levels at manually measured observation wells in
Cape May County.



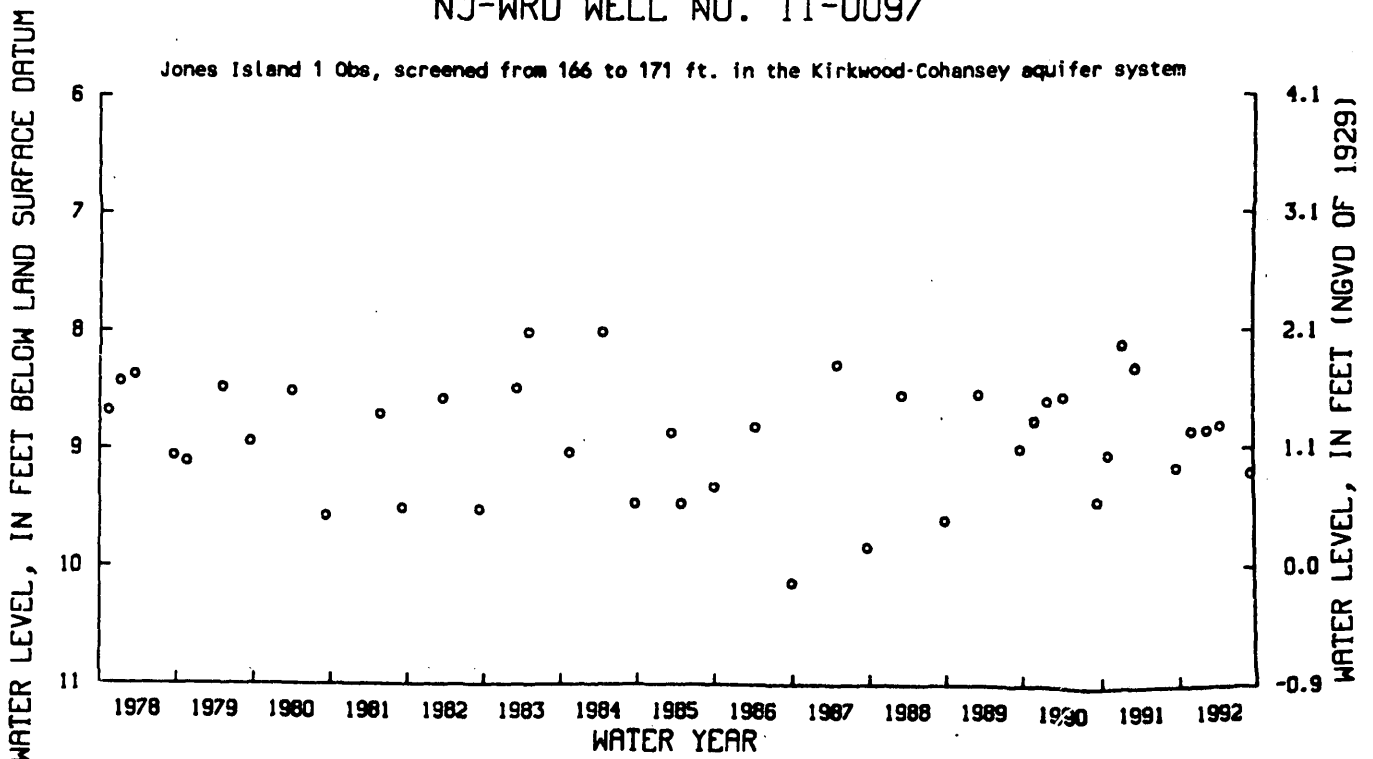
NJ-WRD WELL NO. 11-0044

Vocational School 3 Obs, screened from 361 to 376 ft. in the Piney Point aquifer

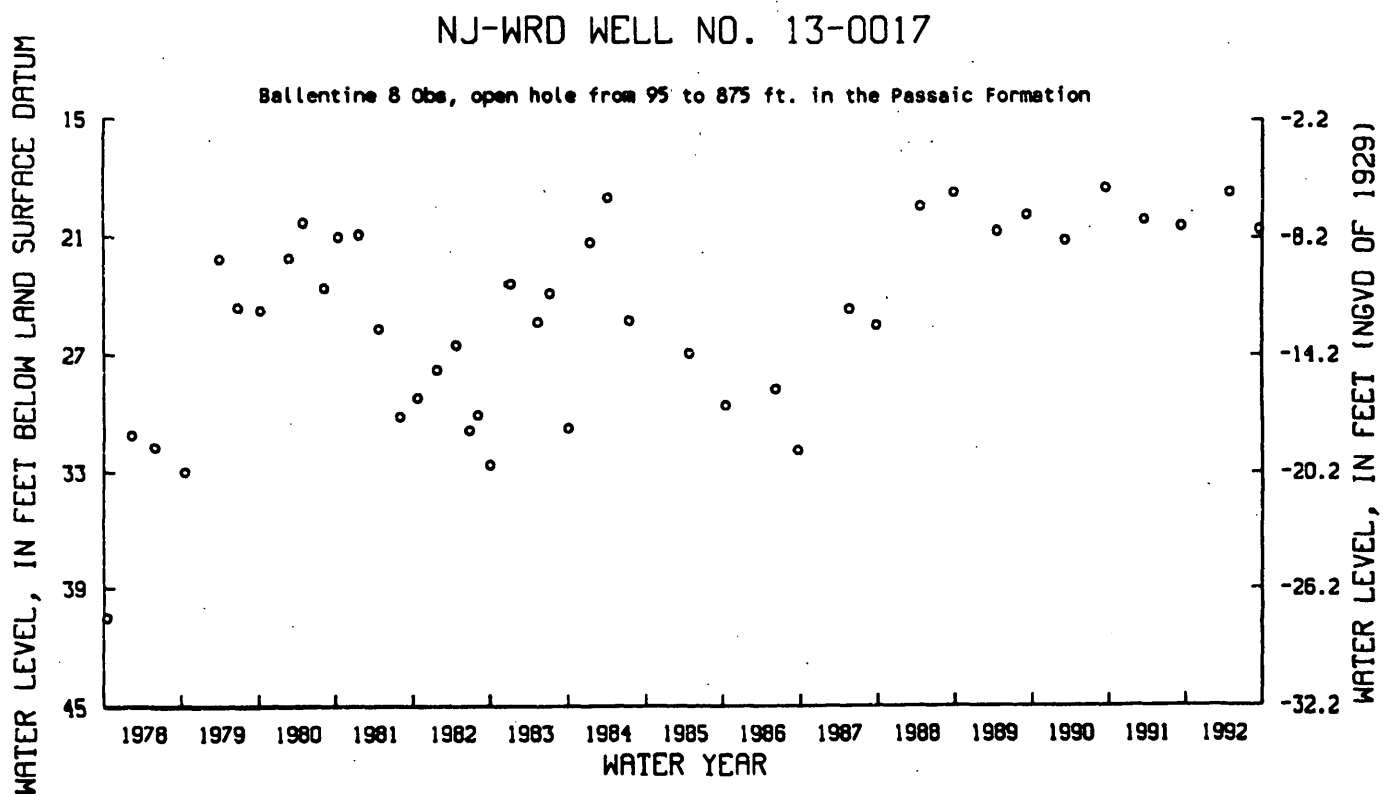
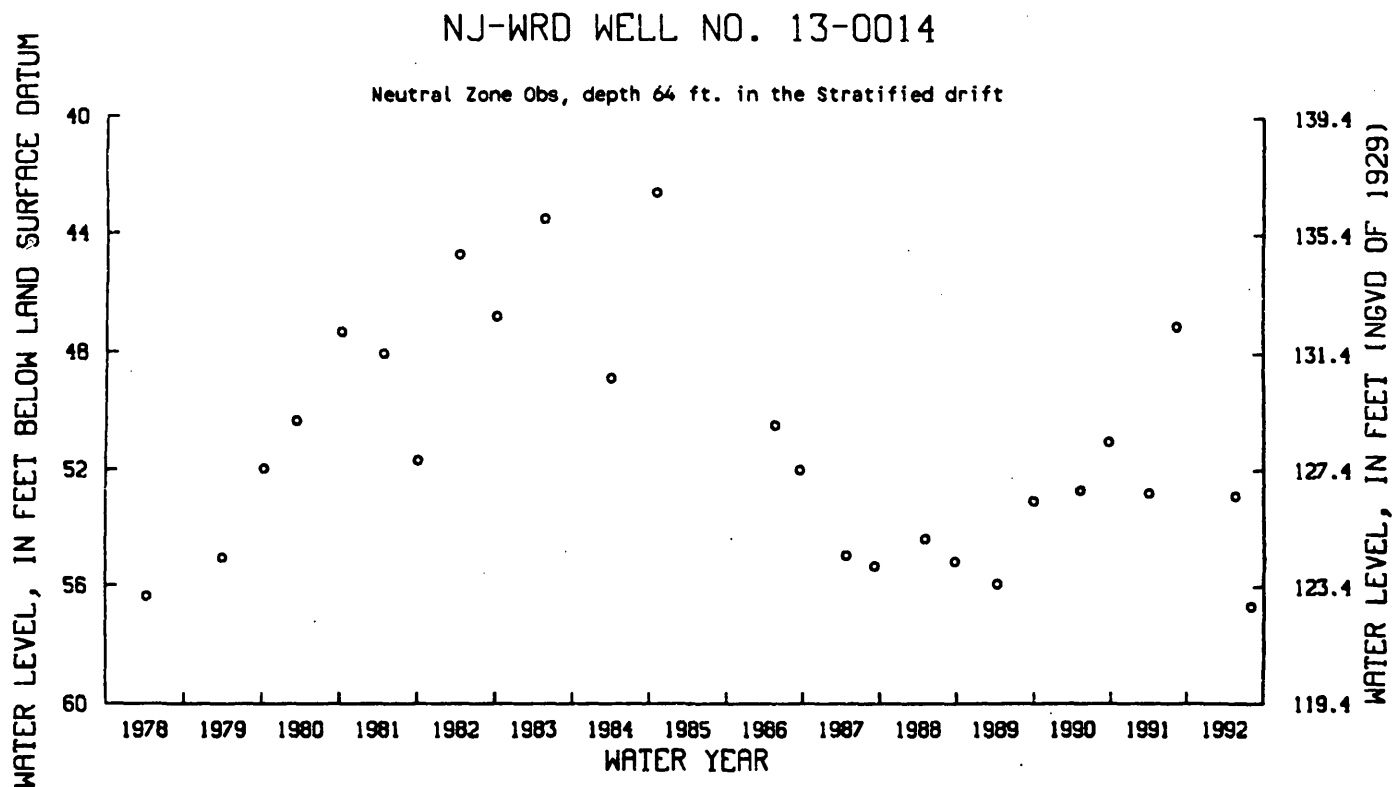


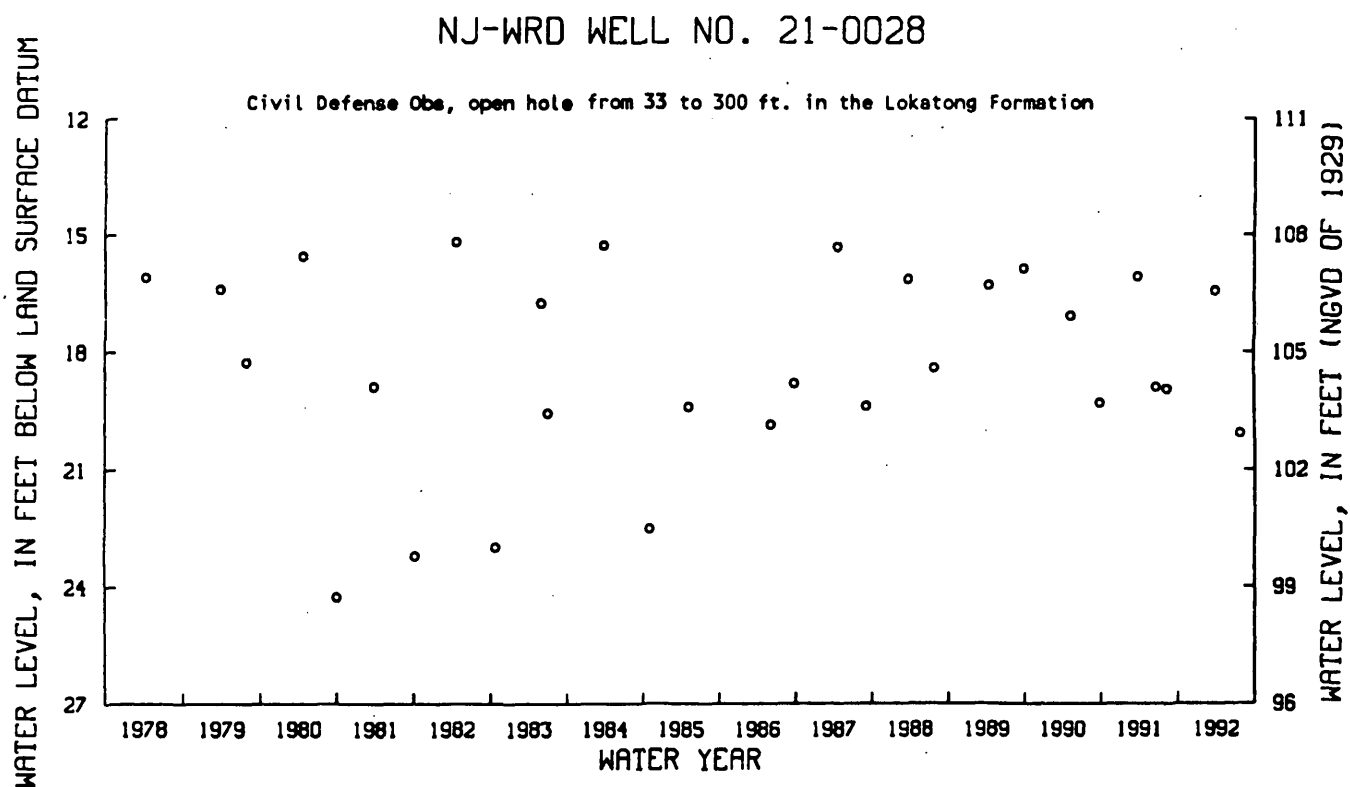
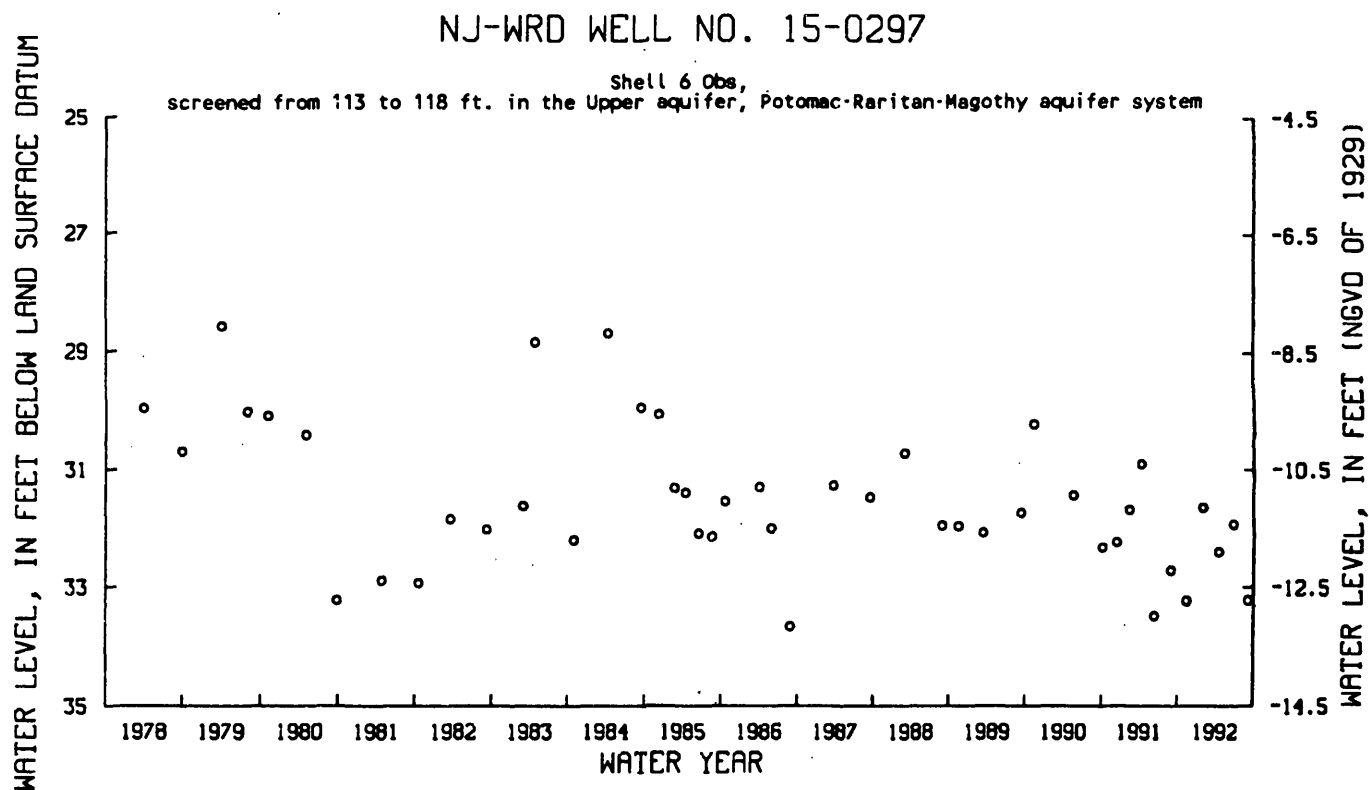
NJ-WRD WELL NO. 11-0097

Jones Island 1 Obs, screened from 166 to 171 ft. in the Kirkwood-Cohansey aquifer system

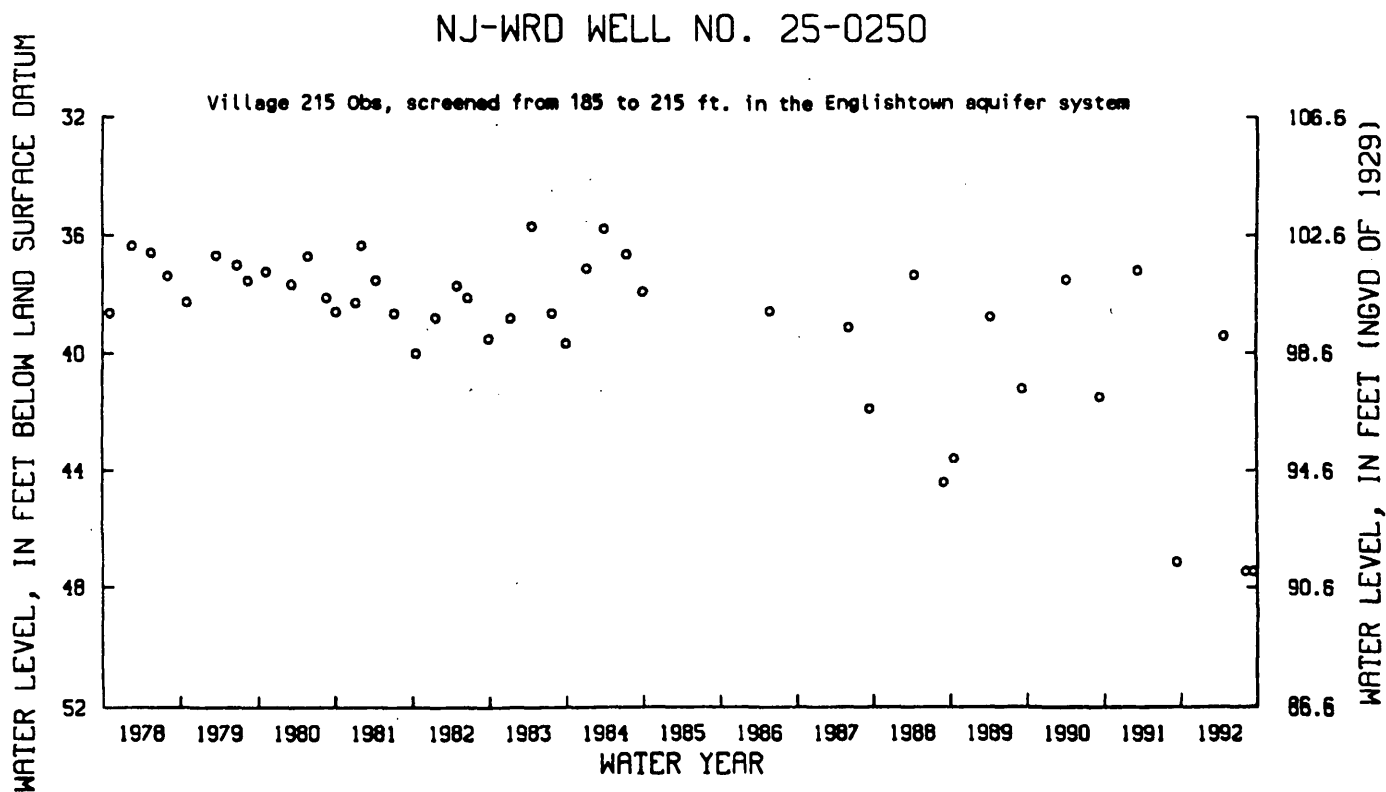
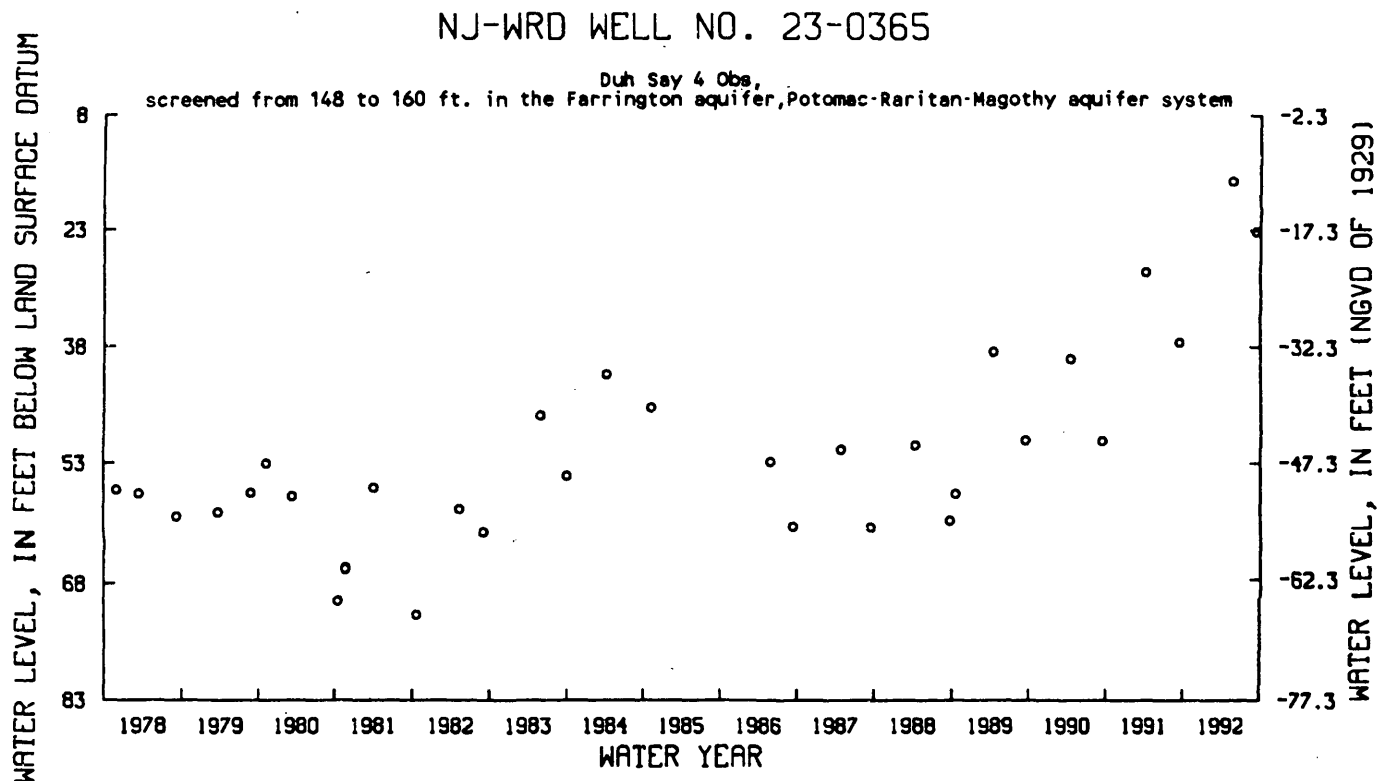


Selected hydrographs showing water levels at manually measured observation wells in
Essex County.



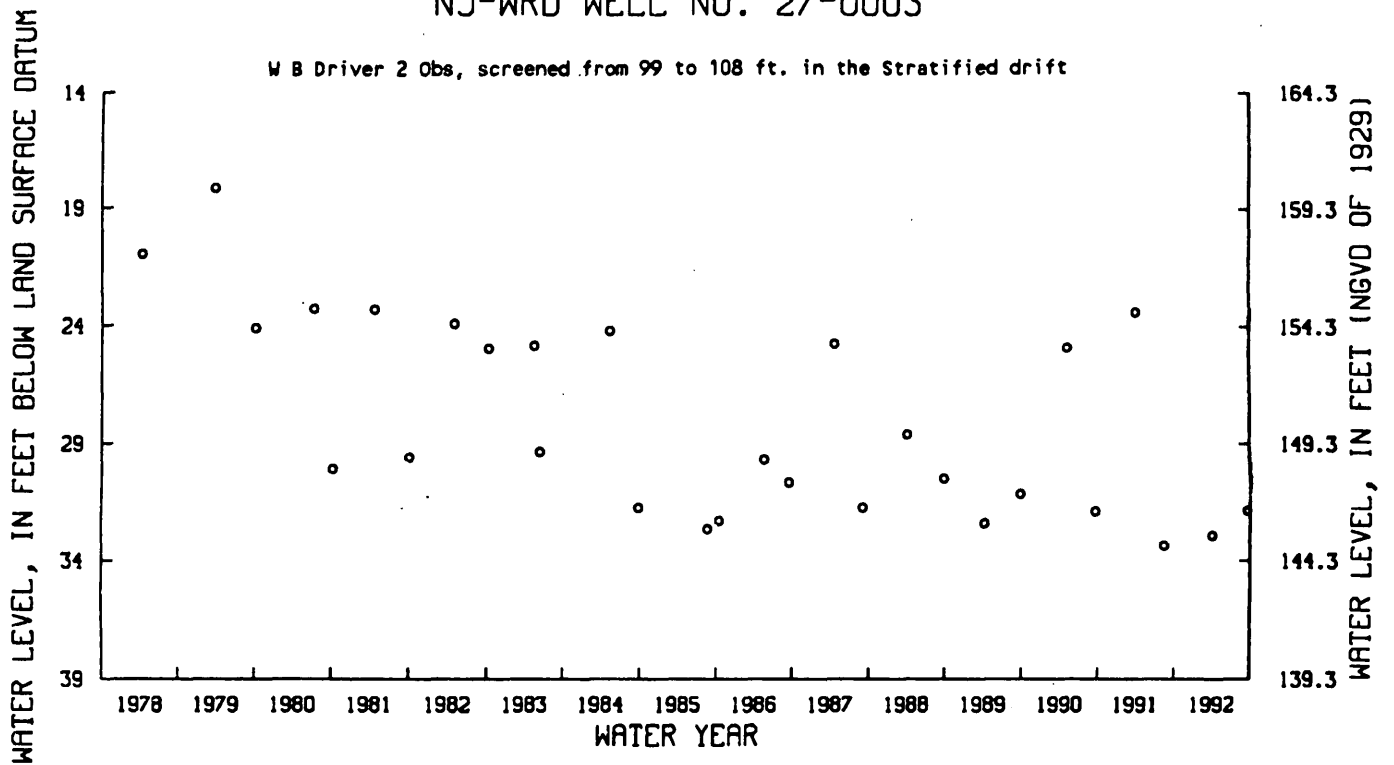


Selected hydrographs showing water levels at manually measured observation wells in
Middlesex and Monmouth Counties.



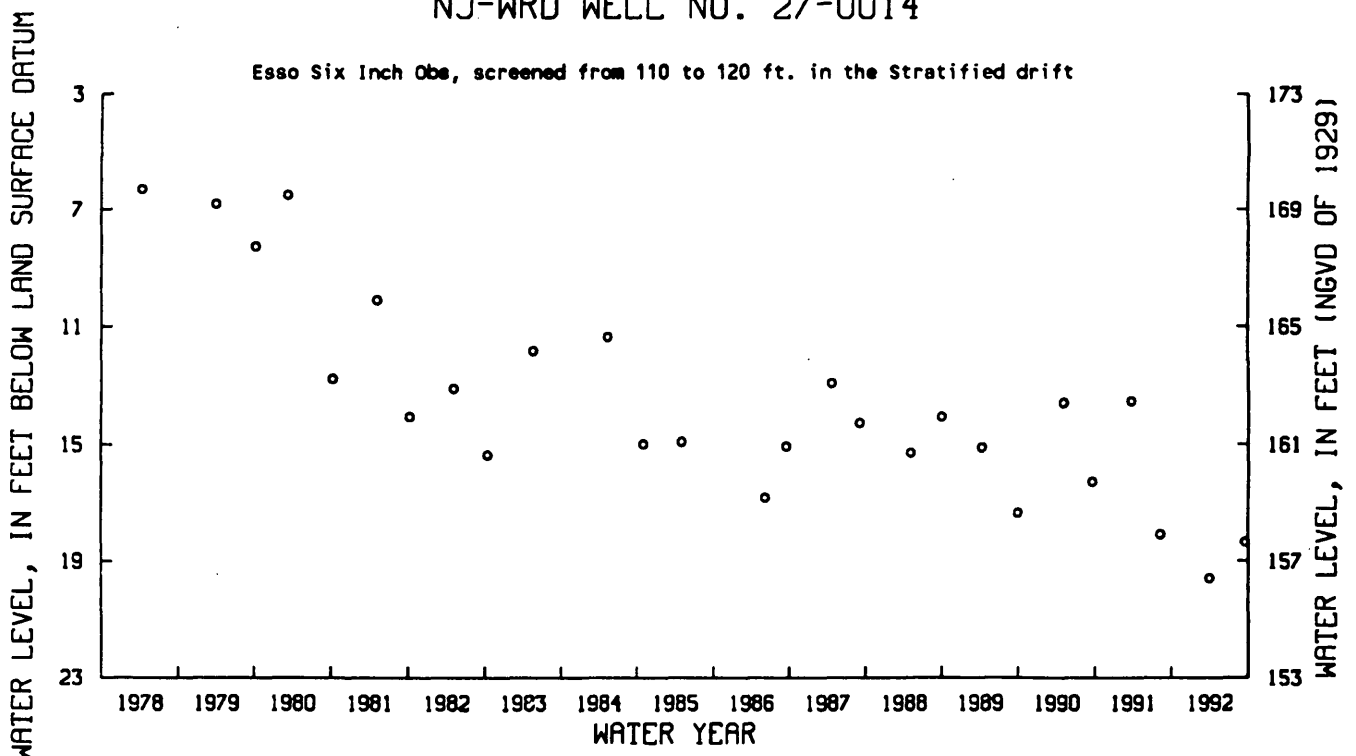
NJ-WRD WELL NO. 27-0003

W B Driver 2 Obs, screened from 99 to 108 ft. in the Stratified drift



NJ-WRD WELL NO. 27-0014

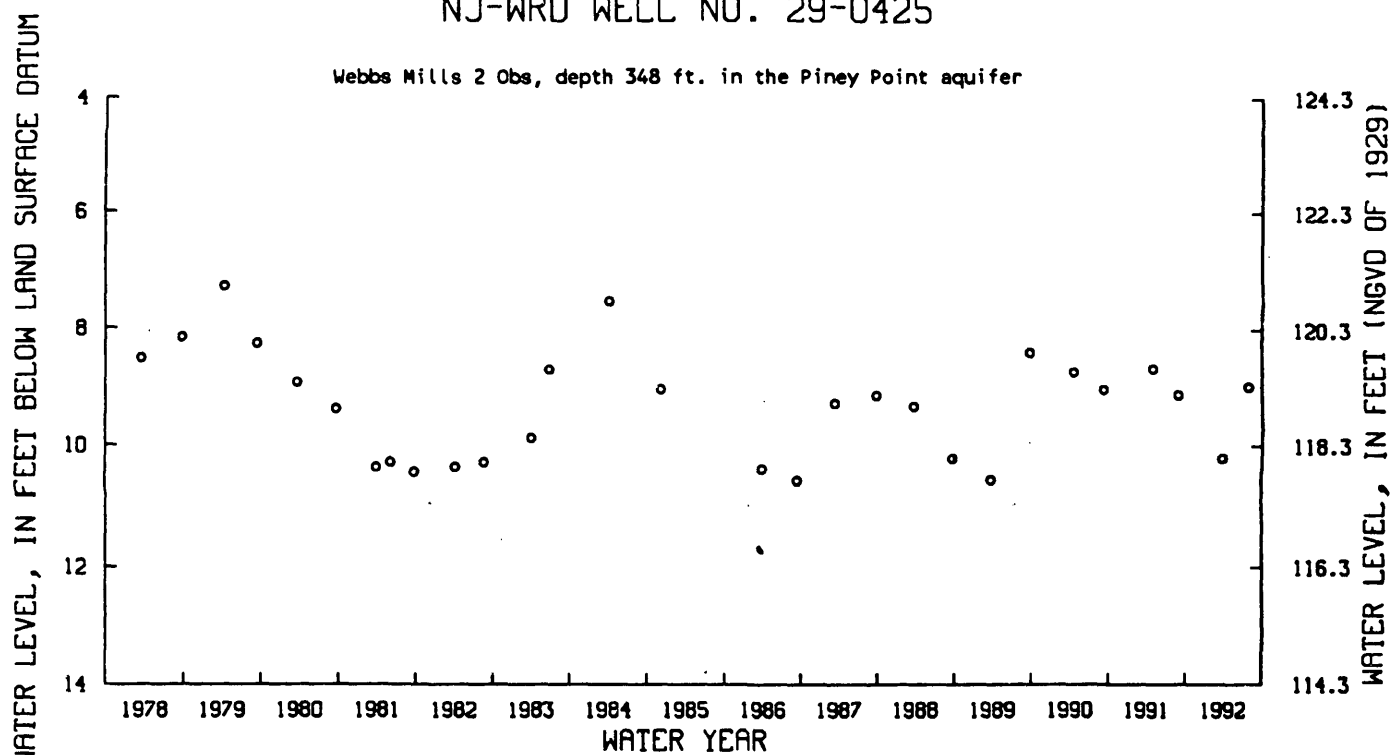
Esso Six Inch Obs, screened from 110 to 120 ft. in the Stratified drift



Selected hydrographs showing water levels at manually measured observation wells in
Ocean County.

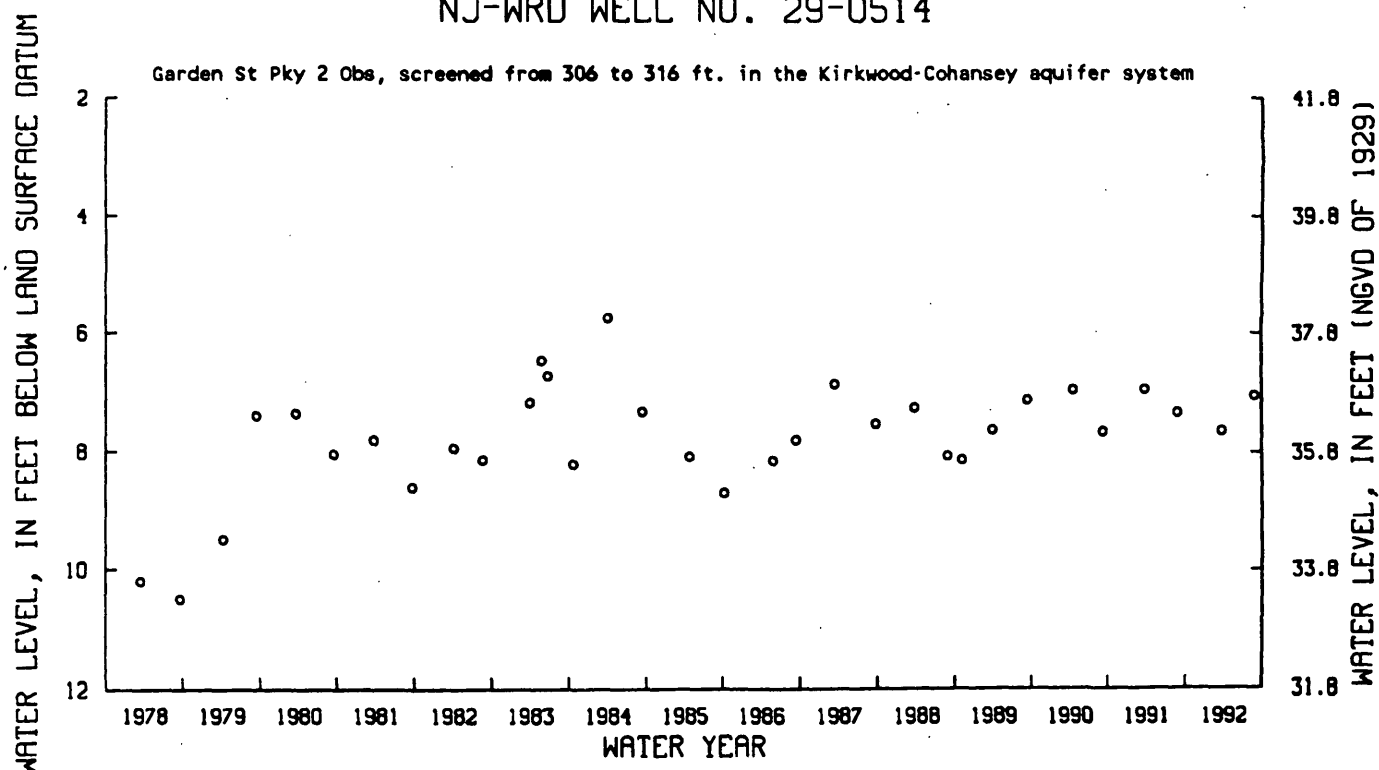
NJ-WRD WELL NO. 29-0425

Webbs Mills 2 Obs, depth 348 ft. in the Piney Point aquifer



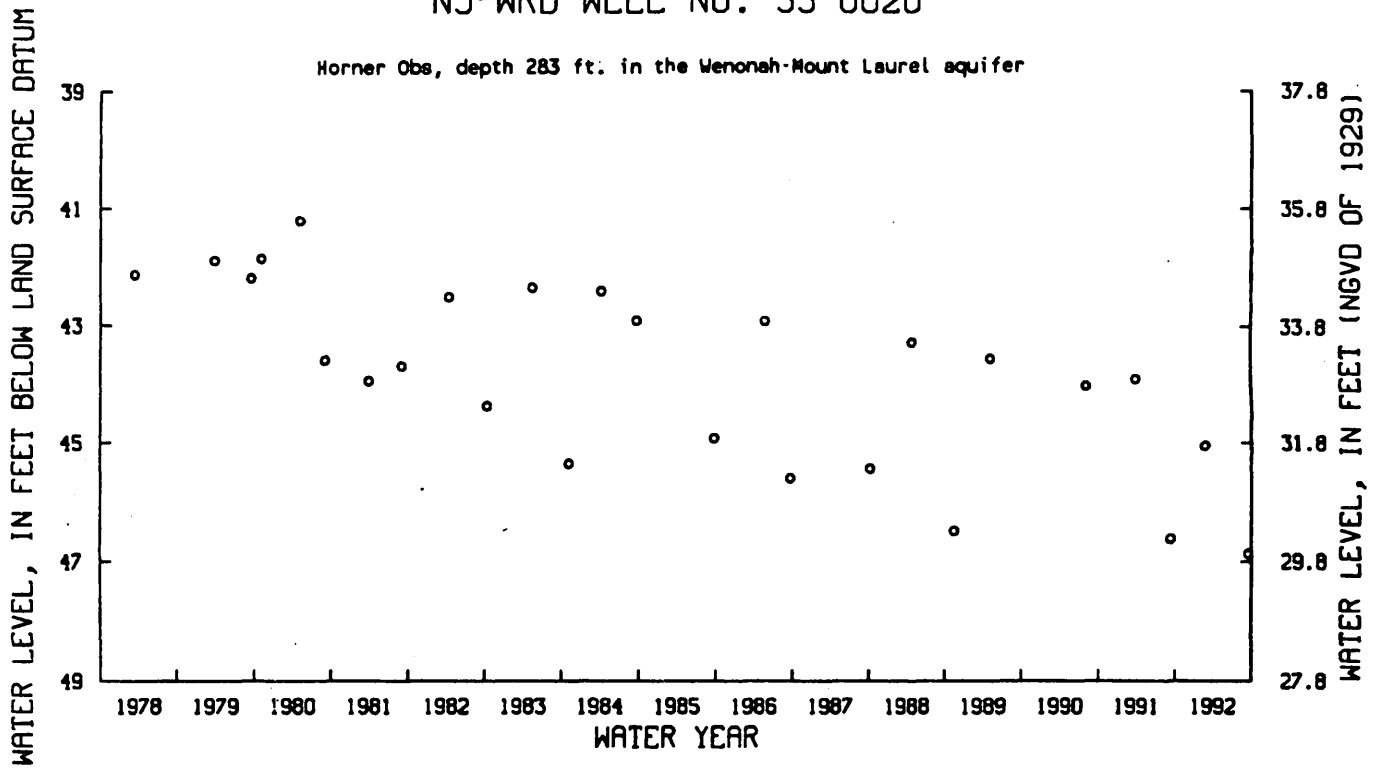
NJ-WRD WELL NO. 29-0514

Garden St Pky 2 Obs, screened from 306 to 316 ft. in the Kirkwood-Cohansey aquifer system



NJ-WRD WELL NO. 33-0020

Horner Obs, depth 283 ft. in the Wenonah-Mount Laurel aquifer



NJ-WRD WELL NO. 33-0348

Penns Grove 14 Obs, depth 18 ft. in the Upper aquifer, Potomac-Raritan-Magothy aquifer system

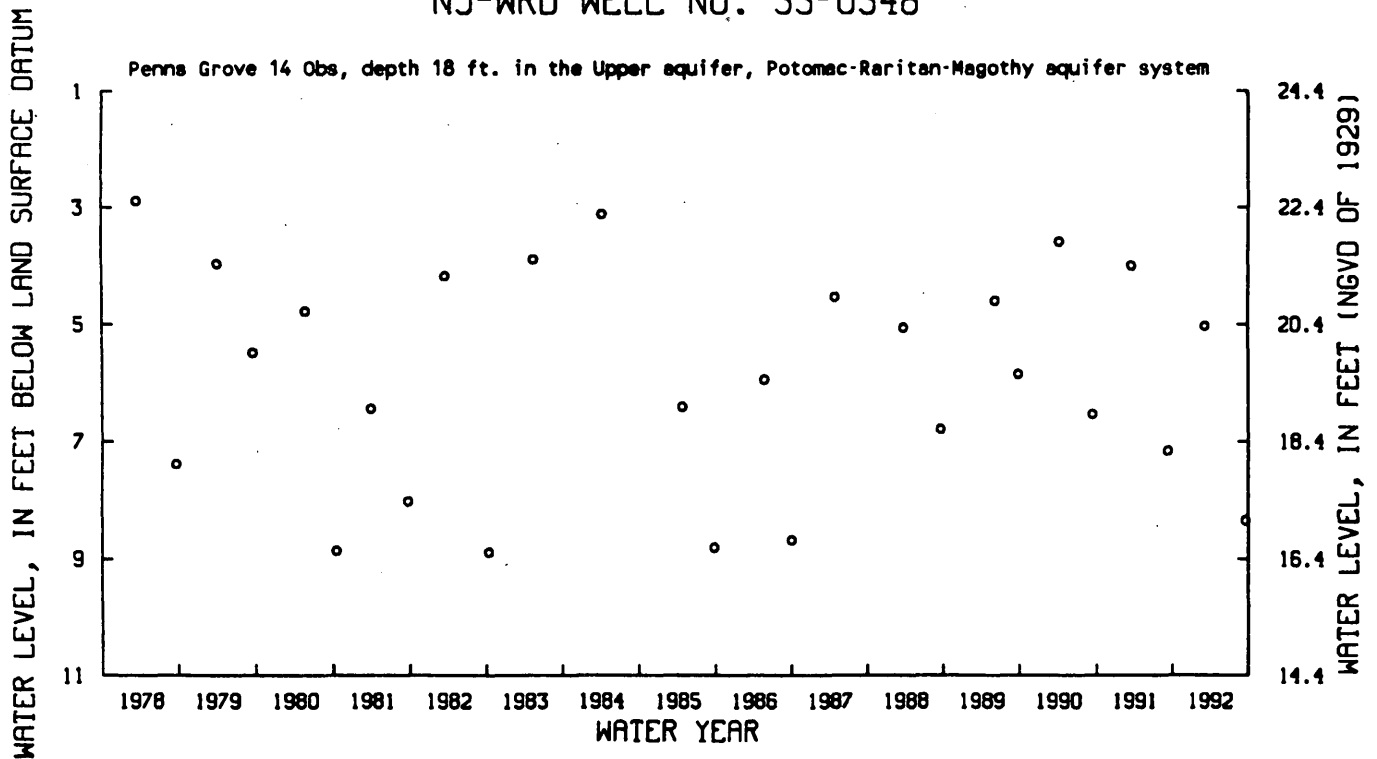


Table 3.--Discontinued observation wells
for which ground-water-level data are available.

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	PERIOD OF RECORD	AQUIFER UNIT
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
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
07-030	SO JRSY PORT CM	NY SHIP 5A	395447	750711	1950-86	211MRPAU
07-322	NJ/AMERICAN WATER CO	OAKLYN TEST	395359	750445	1963-86	211MRPAU
09-011	CAPE MAY CITY WD	CMCWD 1 OBS	385612	745457	1967-86	121CNSY
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
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
15-097	HERCULES CHEM	GIBBSTOWN TH 8/TW8	395000	751636	1953-89	211MRPAM
15-279	HUNTSMAN POLYPROPYLENE CORP	SHELL OBS 7	394857	751250	1962-86	211MRPAL
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
21-358	US GEOLOGICAL SURVEY	PRINCETON 1-BRICK RD OBS	402023	743919	1989-90	231SCKN
23-159	DUHERNAL WC	DUHERNAL OBS 5	402353	742152	1939-86	211O0BG
23-180	DUHERNAL WC	DUHERNAL OBS 1	402438	742129	1938-86	211O0BG
23-181	PERTH AMBOY WD	RUNYON 123	402442	742136	1955-86	211O0BG
23-265	CHEVRON OIL CO	11	403211	741612	1950-86	211FRNG
23-270	AMER CYANAMID	TEST 2	403231	741616	1950-86	211FRNG
23-306	PHELPS DODGE CO	PHELPS DODGE 3	402147	742847	1969-87	211FRNG
23-433	STATE OF NJ	SO RIVER 4	402555	742133	1968-86	211O0BG
23-516	NOVAK	HULSART	402123	741849	1936-84	211EGLS

Data available in the files of the New Jersey District Office.

Aquifer unit:

112SFDF	- Stratified drift	211MRPAM	- Middle aquifer, Potomac-Raritan-Magothy aquifer system
112HLBC	- Holly Beach water-bearing zone	211MRPAL	- Lower aquifer, Potomac-Raritan-Magothy aquifer system
112ESRNS	- Cape May Formation, estuarine sand facies	211O0BG	- Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system (Mercer, Middlesex, Monmouth Counties)
121CNSY	- Cohansey Sand	211FRNG	- Farrington aquifer, Potomac-Raritan-Magothy aquifer system (Mercer, Middlesex, Monmouth Counties)
121CKKD	- Kirkwood-Cohansey aquifer system	227BRCKS	- Brunswick Group sedimentary rocks
211MLRW	- Wenonah-Mount Laurel aquifer	231SCKN	- Stockton Formation
211EGLS	- Englishtown aquifer system	374LSVL	- Leithsville Formation
211MRPAU	- Upper aquifer, Potomac-Raritan-Magothy aquifer system	400PCMB	- Precambrian Erathem

Table 3.--Discontinued observation wells
for which ground-water-level data are available--Continued.

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	PERIOD OF RECORD	AQUIFER UNIT
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
27-321	ROCKAWAY RIVER C C	GEONICS 2	405344	742740	1985-90	112SFDF
27-322	DOVER TOWN WD	DTWD TW 2	405314	743250	1985-89	112SFDF
27-323	MOUNTAIN LAKES WD	CRANE RD (GEONICS 1)	405253	742708	1985-89	112SFDF
27-324	ST CLARES HOSPITAL	POCONO RD (GEONICS 2)	405334	742828	1985-89	112SFDF
27-325	BOONTON TOWNSHIP	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
27-1123	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
27-1126	US GEOLOGICAL SURVEY	BLACK RIVER 4 OBS	404809	744155	1989-91	374LSVL
27-1127	US ARMY - PICATINNY ARSENAL	PICATINNY SB1-1 OBS	405458	743455	1989-91	400PCMB
27-1128	US ARMY - PICATINNY ARSENAL	PICATINNY SB1-2 OBS	405458	743455	1989-91	112SFDF
27-1129	US ARMY - PICATINNY ARSENAL	PICATINNY SB1-3 OBS	405458	743455	1989-91	112SFDF
27-1130	US ARMY - PICATINNY ARSENAL	PICATINNY SB2-1 OBS	405509	743509	1989-91	112SFDF
27-1131	US ARMY - PICATINNY ARSENAL	PICATINNY SB2-2 OBS	405509	743509	1989-91	112SFDF
27-1132	US ARMY - PICATINNY ARSENAL	PICATINNY SB3-1 OBS	405517	743515	1989-91	374LSVL
27-1133	US ARMY - PICATINNY ARSENAL	PICATINNY SB2-3 OBS	405509	743509	1989-91	374LSVL
27-1134	US ARMY - PICATINNY ARSENAL	PICATINNY SB3-2 OBS	405517	743515	1989-91	112SFDF
27-1135	US ARMY - PICATINNY ARSENAL	PICATINNY SB3-3 OBS	405517	743515	1989-91	112SFDF
27-1164	US GEOLOGICAL SURVEY	BLACK RIVER 5 OBS	404809	744155	1989-91	112SFDF
27-1183	US GEOLOGICAL SURVEY	KENVIL NEWCRETE 7 OBS	405330	743638	1989-90	112SFDF
27-1302	STATE OF NJ	JENKINSON FARM 1 OBS	404452	744931	1989-91	374LSVL
29-486	WHITING BIBLE CHURCH	CRAMMER OBS	395714	742234	1952-90	121CKKD
29-532	PT PLEASANT WD	PPWD 3	400459	740359	1986-88	211EGLS
31-011	WANAQUE WD	HASKELL OBS	410209	741708	1965-82	112SFDF
33-279	DARETOWN FIRE CO	GARRISON	393622	751531	1959-86	211MLRW
33-342	STATE OF NJ	PENNS GROVE 24	394236	752724	1942-87	211MRPAU
39-133	HATFIELD WIRE	HATFIELD OBS	403726	741623	1959-87	227BRCKS
41-013	HOFFMAN-LAROCHE	HOF LAR 4	405050	750332	1960-85	112SFDF

Data available in the files of the New Jersey District Office.

Aquifer unit:

112SFDF - Stratified drift	211MRPAM - Middle aquifer, Potomac-Raritan-Magothy aquifer system
112HLBC - Holly Beach water-bearing zone	211MRPAL - Lower aquifer, Potomac-Raritan-Magothy aquifer system
112ESRNS - Cape May Formation, estuarine sand facies	211O0BG - Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system (Mercer, Middlesex, Monmouth Counties)
121CNSY - Cohansey Sand	211FRNG - Farrington aquifer, Potomac-Raritan-Magothy aquifer system (Mercer, Middlesex, Monmouth Counties)
121CKKD - Kirkwood-Cohansey aquifer system	227BRCKS - Brunswick Group sedimentary rocks
211MLRW - Wenonah-Mount Laurel aquifer	374LSVL - Leithsville Formation
211EGLS - Englishtown aquifer system	400PCMB - Precambrian Erathem
211MRPAU - Upper aquifer, Potomac-Raritan-Magothy aquifer system	

QUALITY OF GROUND WATER - SALTWATER MONITORING NETWORK
WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
ATLANTIC COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
01-367	LONGPORT WD	LONGPORT 2	391859	743122	10	750 - 800	122KRKDL
01-582	NJ/AMERICAN WATER CO	NJWC 5	391906	743629	15	79 - 99	121CKKD
01-589	NJ/AMERICAN WATER CO	NJWC 9	391924	743550	19	129 - 159	121CKKD
01-353	NJ/AMERICAN WATER CO	SHORE-KIRKLIN	392001	743522	10	56 - 71	121CKKD
01-376	MARGATE CITY WD	MCWD 5	392008	743017	10	741 - 791	122KRKDL
01-598	VENTNOR CITY WD	VCWD 9	392030	742852	8	740 - 800	122KRKDL
01-549	NJ/AMERICAN WATER CO	SHORE-MILL RD	392157	743317	25	117 - 152	121CKKD
01-040	BRIGANTINE WD	BAYSHORE 3	392342	742328	10	706 - 766	122KRKDL
01-013	NJ/AMERICAN WATER CO	SHORE-ABSECON 1	392554	743027	22	178 - 205	121CKKD

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	WATER TEMPER- ATURE (DEG C)	SPE- CIFIC CONDUCT- -ANCE (US/CM)	PH (STAND- ARD UNITS)	SODIUM DIS- SOLVED (MG/L AS NA)	CHLORIDE DIS- SOLVED (MG/L AS CL)
01-367	LONGPORT WD	LONGPORT 2	8-27-92	19.0	179	7.4	26	7.9
01-582	NJ/AMERICAN WATER CO	NJWC 5	8-13-92	14.0	142	4.9	14	22
01-589	NJ/AMERICAN WATER CO	NJWC 9	8-13-92	13.0	676	4.4	81	190
01-353	NJ/AMERICAN WATER CO	SHORE-KIRKLIN	8-13-92	14.0	129	5.2	14	19
01-376	MARGATE CITY WD	MCWD 5	8-27-92	19.0	171	7.3	17	8.9
01-598	VENTNOR CITY WD	VCWD 9	8-27-92	19.0	150	7.4	22	5.4
01-549	NJ/AMERICAN WATER CO	SHORE-MILL RD	8-13-92	13.0	134	4.9	13	17
01-040	BRIGANTINE WD	BAYSHORE 3	8-27-92	19.0	195	7.1	25	16
01-013	NJ/AMERICAN WATER CO	SHORE-ABSECON 1	8-13-92	13.0	53	4.8	3.8	6.5

Aquifer unit:

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

QUALITY OF GROUND WATER - SALTWATER MONITORING NETWORK
WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
CAPE MAY COUNTY

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NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
#09-150	US GEOLOGICAL SURVEY	WEST CAPE MAY 1 OBS	385607	745556	6.60	283 - 293	121CNSY
09-011	CAPE MAY CITY WD	CMCWD 1 OBS	385612	745457	7.28	281 - 321	121CNSY
#09-020	US GEOLOGICAL SURVEY	TRAFFIC CIRCLE OBS	385616	745800	9.12	15 - 20	112HLBC
09-027	CAPE MAY CITY WD	CMCWD 3	385643	745533	7	277 - 306	121CNSY
09-018	US COAST GUARD	USCG 2	385652	745327	11	295 - 325	121CNSY
09-036	CAPE MAY CITY WD	CMCWD 2/CMCWD 4 (NEW)	385701	745528	10	174 - 282	121CNSY
09-043	CAPE MAY CITY WD	CMCWD 5	385724	745521	15	246 - 276	121CNSY
09-326	US GEOLOGICAL SURVEY	MW-1 NEW ENGLAND RD OBS	385734	745650	14	40 - 50	112HLBC
#09-048	US GEOLOGICAL SURVEY	CANAL 5 OBS	385748	745533	17.48	242 - 252	121CNSY
#09-049	US GEOLOGICAL SURVEY	HIGBEE BEACH 3 OBS	385804	745742	6	241 - 250	121CNSY
09-278	CHANNEL APARTMENTS	CHANNEL APTS	385851	745638	20	31 - 41	112HLBC
09-052	LOWER TWP MUA	LTMUA 1	385851	745715	18	241 - 262	121CNSY
09-054	LOWER TWP MUA	LTMUA 2	385905	745625	14	212 - 247	121CNSY
09-057	LOWER TWP MUA	LTMUA 3	385919	745518	20	262 - 302	121CNSY
09-210	CAPE MAY COUNTY	CAPE MAY C-1	385946	745725	11.03	216 - 221	121CKKD
09-212	CAPE MAY COUNTY	CAPE MAY C-3	385946	745725	11.41	45 - 50	112HLBC
09-332	US GEOLOGICAL SURVEY	MW-1 CMCMA SEWAGE OBS	385954	745112	9	40 - 45	112HLBC
#09-337	NORTH WILDWOOD CITY	M-1 N WILDWOOD 800 OBS	390012	744720	10	910 - 960	122KRD
09-327	CAPE MAY COUNTY	MW-1 AIRPORT 1986 OBS	390015	745446	20	13 - 33	112HLBC
09-329	LOWER TWP MUA	MW-6 1987 LOWER TWP MUA	390018	745606	14.20	8 - 18	112HLBC
09-331	US GEOLOGICAL SURVEY	AIRPORT OBS HLBC NW RNWY	390043	745450	21	39 - 49	112HLBC
09-338	HEREFORD INLET MARINA	HEREFD/BISHOP 2-1986 PVC	390124	744801	5	276 - 296	121CNSY
09-213	CAPE MAY COUNTY	CAPE MAY F-41	390128	745639	12.23	203 - 208	121CKKD
09-217	CAPE MAY COUNTY	CAPE MAY F-42	390128	745639	13.17	96 - 100	112ESRNS
09-218	CAPE MAY COUNTY	CAPE MAY F-43	390128	745639	12.76	46 - 50	112CPMY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	WATER TEMPER- ATURE (DEG C)	SPE- CIFIC CONDUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	SODIUM DIS- SOLVED (MG/L AS NA)	CHLORIDE DIS- SOLVED (MG/L AS CL)
09-150	US GEOLOGICAL SURVEY	WEST CAPE MAY 1 OBS	4-7-92	15.0	1,810	8.0	360	390
09-011	CAPE MAY CITY WD	CMCWD 1 OBS	4-15-92	15.5	3,340	7.3	510	1,100
09-020	US GEOLOGICAL SURVEY	TRAFFIC CIRCLE OBS	3-19-92	12.5	1,900	6.5	250	580
09-027	CAPE MAY CITY WD	CMCWD 3	9-10-92	15.0	889	7.5	140	180
09-018	US COAST GUARD	USCG 2	9-10-92	15.5	368	7.8	61	43
09-036	CAPE MAY CITY WD	CMCWD 2/CMCWD 4 (NEW)	9-10-92	15.0	863	7.5	120	180
09-043	CAPE MAY CITY WD	CMCWD 5	9-10-92	14.5	292	7.6	31	19
09-326	US GEOLOGICAL SURVEY	MW-1 NEW ENGLAND RD OBS	7-27-92	15.0	491	8.0	33	32
09-048	US GEOLOGICAL SURVEY	CANAL 5 OBS	4-6-92	15.5	294	7.8	22	17
09-049	US GEOLOGICAL SURVEY	HIGBEE BEACH 3 OBS	4-7-92	15.5	268	8.0	46	13
09-278	CHANNEL APARTMENTS	CHANNEL APTS	9-2-92	12.5	371	6.9	69	31
09-052	LOWER TWP MUA	LTMUA 1	8-12-92	15.0	256	7.9	33	14
09-054	LOWER TWP MUA	LTMUA 2	8-12-92	15.0	252	7.9	25	18
09-057	LOWER TWP MUA	LTMUA 3	8-13-92	15.5	197	7.8	17	8.7
09-210	CAPE MAY COUNTY	CAPE MAY C-1	3-17-92	14.0	182	7.9	--	10
09-212	CAPE MAY COUNTY	CAPE MAY C-3	3-17-92	15.0	4,290	6.9	810	1,400
09-332	US GEOLOGICAL SURVEY	MW-1 CMCMA SEWAGE OBS	7-28-92	15.0	52,000	6.9	11,000	22,000
09-337	NORTH WILDWOOD CITY	M-1 N WILDWOOD 800 OBS	4-16-92	19.0	560	8.7	95	85
09-327	CAPE MAY COUNTY	MW-1 AIRPORT 1986 OBS	6-23-92	15.0	307	5.8	20	34
09-329	LOWER TWP MUA	MW-6 1987 LOWER TWP MUA	6-23-92	14.5	172	4.5	5.6	9.7
09-331	US GEOLOGICAL SURVEY	AIRPORT OBS HLBC NW RNWY	7-28-92	14.0	116	5.7	7.0	8.7
09-338	HEREFORD INLET MARINA	HEREFD/BISHOP 2-1986 PVC	6-23-92	15.0	1,680	7.2	170	470
09-213	CAPE MAY COUNTY	CAPE MAY F-41	3-17-92	17.0	178	8.0	12	10
09-217	CAPE MAY COUNTY	CAPE MAY F-42	3-17-92	16.5	1,240	7.4	160	370
09-218	CAPE MAY COUNTY	CAPE MAY F-43	3-17-92	16.5	3,680	6.8	390	730

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

Aquifer unit:

- 112HLBC - Holly Beach water-bearing zone
- 112ESRNS - Cape May Formation, estuarine sand facies
- 112CPMY - Cape May Formation
- 121CNSY - Cohansey Sand
- 121CKKD - Kirkwood-Cohansey aquifer system
- 122KRD - Atlantic City 800-foot sand of the Kirkwood Formation

QUALITY OF GROUND WATER - SALTWATER MONITORING NETWORK
WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
CAPE MAY COUNTY--Continued

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
09-067	WILDWOOD WD	RIO GRANDE 38	390135	745352	10	461 - 590	122KRKDU
09-072	WILDWOOD WD	RIO GRANDE 31	390138	745350	10	108 - 135	112ESRNS
09-074	WILDWOOD WD	RIO GRANDE 29	390139	745349	8	191 - 231	121CNSY
#09-333	US GEOLOGICAL SURVEY	RIO GRANDE OBS-HB 1992	390156	745334	20	28 - 38	112HLBC
#09-081	US GEOLOGICAL SURVEY	CAPE MAY 23 OBS	390211	745055	14.90	23 - 26	112HLBC
09-208	US GEOLOGICAL SURVEY	BSR-6	390212	745557	6.92	98 - 108	112ESRNS
#09-080	US GEOLOGICAL SURVEY	CAPE MAY 42 OBS	390213	745056	13.67	242 - 252	121CNSY
09-132	STONE HARBOR WD	SHWD 4	390301	744545	10	830 - 880	122KRKDL
09-334	CAPE MAY COUNTY MUA	MW-1 TRANSFER STATION	390310	745104	18	14 - 19	112HLBC
09-192	RUTGERS UNIVERSITY	RUTGERS OYSTER LAB	390425	745446	7	64 - 71	112ESRNS
09-097	US GEOLOGICAL SURVEY	BDWLL DCH 31ES	390527	745024	18.54	117 - 121	112ESRNS
09-098	US GEOLOGICAL SURVEY	BDWLL DCH 31HB	390527	745024	18.50	21 - 25	112HLBC
#09-099	US GEOLOGICAL SURVEY	CAPE MAY COUNTY PK 8 OBS	390611	744838	10.73	214 - 230	121CNSY
09-320	US GEOLOGICAL SURVEY	BD-24ES COUNTY PARK	390611	744838	10.73	93 - 95	112ESRNS
09-321	US GEOLOGICAL SURVEY	BD-24HB COUNTY PARK	390611	744838	10.73	20 - 22	112HLBC
09-008	AVALON WD	AVALON WD 3	390621	744248	10	845 - 925	122KRKDL
09-335	US GEOLOGICAL SURVEY	BD-10HB-1992 TICK RD OBS	390636	745129	13	10 - 20	112HLBC
09-281	SOIL CONSERVATION SERVICE	BD-21CH	390710	745134	11	176 - 181	121CNSY
09-282	SOIL CONSERVATION SERVICE	BD-21ES	390710	745134	11	90 - 95	112ESRNS
09-322	US GEOLOGICAL SURVEY	BD-21HB	390710	745134	11	20 - 24	112HLBC
09-336	CAPE MAY COUNTY MUA	MW (NORTH) SWAINTON	390727	744722	20	25*	112HLBC
09-126	SEA ISLE CITY WD	SICWD 5	390747	744241	7	736 - 802	122KRKDL
09-323	NOVASACK, WALTER	MW-2 GRACETOWN RD 1989	391107	744607	30	5 - 25	121CKKD
09-106	NJ/AMERICAN WATER CO	SHORE DIV 7	391343	743755	8	760 - 810	122KRKDL
09-342	ACTION SUPPLY	1990 ROOSEVELT BLVD	394539	743828	5	62 - 72	121CKKD
09-124	NJ/AMERICAN WATER CO	SHORE DIV 13	391712	743340	8	774 - 840	122KRKDL
09-256	TUCKAHOE FIRE CO	TUCKAHOE FIRE CO	391719	744514	25	138 - 158	121CNSY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	WATER TEMPER- ATURE (DEG C)	SPE- CIFIC CONDUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	SODIUM DIS- SOLVED (MG/L AS NA)	CHLORIDE DIS- SOLVED (MG/L AS CL)
09-067	WILDWOOD WD	RIO GRANDE 38	8-12-92	16.5	520	8.2	73	77
09-072	WILDWOOD WD	RIO GRANDE 31	8-12-92	13.5	192	7.7	7.9	12
09-074	WILDWOOD WD	RIO GRANDE 29	8-12-92	14.0	240	7.5	13	36
09-333	US GEOLOGICAL SURVEY	RIO GRANDE OBS-HB 1992	7-28-92	13.5	152	6.3	7.4	13
09-081	US GEOLOGICAL SURVEY	CAPE MAY 23 OBS	3-18-92	16.0	309	5.2	50	91
09-208	US GEOLOGICAL SURVEY	BSR-6	3-18-92	13.0	2,320	7.3	710	1,300
09-080	US GEOLOGICAL SURVEY	CAPE MAY 42 OBS	3-18-92	14.0	153	7.2	8.3	12
09-132	STONE HARBOR WD	SHWD 4	8-26-92	20.0	359	8.7	66	39
09-334	CAPE MAY COUNTY MUA	MW-1 TRANSFER STATION	6-23-92	14.0	154	4.9	11	15
09-192	RUTGERS UNIVERSITY	RUTGERS OYSTER LAB	8-12-92	15.0	795	7.8	90	170
09-097	US GEOLOGICAL SURVEY	BDWLL DCH 31ES	8-25-92	15.0	137	7.3	5.8	8.3
09-098	US GEOLOGICAL SURVEY	BDWLL DCH 31HB	8-25-92	15.5	123	5.4	3.6	6.4
09-099	US GEOLOGICAL SURVEY	CAPE MAY COUNTY PK 8 OBS	3-19-92	13.5	167	8.8	8.9	9.3
09-320	US GEOLOGICAL SURVEY	BD-24ES COUNTY PARK	3-19-92	14.0	192	8.3	5.8	8.7
09-321	US GEOLOGICAL SURVEY	BD-24HB COUNTY PARK	3-19-92	14.0	193	8.4	7.1	9.8
09-008	AVALON WD	AVALON WD 3	8-26-92	20.5	326	8.5	54	40
09-335	US GEOLOGICAL SURVEY	BD-10HB-1992 TICK RD OBS	7-29-92	14.0	89	5.2	5.1	9.3
09-281	SOIL CONSERVATION SERVICE	BD-21CH	4- 8-92	14.5	153	7.9	13	8.7
09-282	SOIL CONSERVATION SERVICE	BD-21ES	4- 8-92	14.5	159	8.2	5.2	10
09-322	US GEOLOGICAL SURVEY	BD-21HB	4- 8-92	14.5	122	6.2	5.2	9.1
09-336	CAPE MAY COUNTY MUA	MW (NORTH) SWAINTON	6-24-92	14.0	155	5.7	7.7	9.4
09-126	SEA ISLE CITY WD	SICWD 5	8-26-92	19.5	237	8.4	31	15
09-323	NOVASACK, WALTER	MW-2 GRACETOWN RD 1989	6-24-92	13.5	115	5.1	8.4	17
09-106	NJ/AMERICAN WATER CO	SHORE DIV 7	8-13-92	19.0	206	7.9	30	12
09-342	ACTION SUPPLY	1990 ROOSEVELT BLVD	6-25-92	14.0	140	5.7	14	23
09-124	NJ/AMERICAN WATER CO	SHORE DIV 13	8-13-92	19.0	201	7.8	30	10
09-256	TUCKAHOE FIRE CO	TUCKAHOE FIRE CO	4- 9-92	14.0	72	6.3	4.0	4.7

* - Total depth of well (extent of open or screen interval is not known).

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

Aquifer unit:

112HLBC - Holly Beach water-bearing zone	121CNSY - Cohansey Sand
112ESRNS - Cape May Formation, estuarine sand facies	122KRKDU - Rio Grande water-bearing zone of the Kirkwood Formation
121CKKD - Kirkwood-Cohansey aquifer system	122KRKDL - Atlantic City 800-foot sand of the Kirkwood Formation

QUALITY OF GROUND WATER - SALTWATER MONITORING NETWORK
WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
CUMBERLAND COUNTY

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NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
11-324	EAST PT W ASSOC	1	391138	750117	5	242 - 262	121CKKD
11-035	PORT NORRIS BD ED	BOARD OF EDUC	391450	750205	10	227 - 242	121CKKD
11-054	GANDYS BEACH WC	GANDYS BEACH	391618	751354	5	378 - 402	124PNPN
11-327	MYERS, H	1	391619	751357	5	399 - 409	124PNPN
11-337	COVE RD WATER ASSOC	1	391622	751414	5	373 - 393	124PNPN
11-038	J S MORIE INC	J S MORIE 2	391658	750015	10	175 - 205	121CKKD
11-056	MONEY IS MARINA	POLLINO 1	391704	751415	4	350 - 370	124PNPN
11-370	SOBUSIAK, WALTER	SOBUSIAK 1	391938	751923	5	350*	124PNPN

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	WATER TEMPER- ATURE (DEG C)	SPE- CIFIC CONDUCT- -ANCE (US/CM)	PH (STAND- ARD UNITS)	SODIUM DIS- SOLVED (MG/L AS NA)	CHLORIDE DIS- SOLVED (MG/L AS CL)
11-324	EAST PT W ASSOC	1	9-15-92	--	196	7.5	11	2.9
11-035	PORT NORRIS BD ED	BOARD OF EDUC	9-11-92	15.5	137	7.3	2.7	3.4
11-054	GANDYS BEACH WC	GANDYS BEACH	9-11-92	14.5	4,360	7.4	210	620
11-327	MYERS, H	1	9-11-92	17.0	981	8.0	110	210
11-337	COVE RD WATER ASSOC	1	9-15-92	21.0	640	8.0	100	55
11-038	J S MORIE INC	J S MORIE 2	9-15-92	15.5	135	6.8	7.3	4.2
11-056	MONEY IS MARINA	POLLINO 1	9-11-92	18.0	776	8.3	140	87
11-370	SOBUSIAK, WALTER	SOBUSIAK 1	9-15-92	14.0	1,150	8.0	170	200

* - Total depth of well (extent of open or screen interval is not known).

Aquifer unit:

121CKKD - Kirkwood-Cohansey aquifer system
124PNPN - Piney Point aquifer

QUALITY OF GROUND WATER - SALTWATER MONITORING NETWORK
WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

GLOUCESTER COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
15-001	CLAYTON WD	CWD 3	393913	750517	133	746 - 800	211MRPAU
15-060	GLASSBORO WD	GWD 3	394206	750758	150	562 - 612	211MRPAU
15-385	PITMAN WD	PWD P4	394345	750804	125	520*	211MRPAU
15-130	SOUTH JERSEY WC	SJWC 3	394408	751330	35	234 - 265	211MRPAU
15-236	SWEDESBO RO WD	SBWD 3	394434	751843	75	241 - 312	211MRPAM
15-137	PURELAND WATER CO	PURE 2(3-1973)	394535	752054	29	158 - 208	211MRPAM
15-191	MANTUA TWP MUA	MTMUA 2	394629	750859	72	336 - 368	211MRPAU
15-192	MANTUA TWP MUA	MTMUA 5	394635	751116	80	315 - 337	211MRPAU
15-194	MANTUA TWP MUA	MTMUA 4	394732	751037	10	230 - 265	211MRPAU
15-166	PENNS GROVE WSC	BRIDGEPORT 2	394755	752108	5	65 - 85	211MRPAM
15-284	HUNTSMAN POLYPROPYLENE CO	SHELL 4	394919	751256	30	127 - 157	211MRPAU
15-210	PAULSBORO WD	6-1973	394921	751417	15	185 - 227	211MRPAM
15-207	NATIONAL PK WD	NPWD 2	395156	751053	30	241 - 282	211MRPAL

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	WATER TEMPER- ATURE (DEG C)	SPE- CIFIC CONDUCT- -ANCE (US/CM)	PH (STAND- ARD UNITS)	SODIUM DIS- SOLVED (MG/L AS NA)	CHLORIDE DIS- SOLVED (MG/L AS CL)
15-001	CLAYTON WD	CWD 3	8-26-92	21.5	1,060	8.3	230	160
15-060	GLASSBORO WD	GWD 3	8-26-92	19.0	745	8.2	170	75
15-385	PITMAN WD	PWD P4	8-26-92	17.0	588	8.2	130	54
15-130	SOUTH JERSEY WC	SJWC 3	9- 1-92	15.0	1,030	8.2	200	180
15-236	SWEDESBO RO WD	SBWD 3	8-27-92	15.0	339	7.2	39	38
15-137	PURELAND WATER CO	PURE 2(3-1973)	8-27-92	14.5	239	6.4	24	26
15-191	MANTUA TWP MUA	MTMUA 2	8-25-92	15.0	424	8.1	84	33
15-192	MANTUA TWP MUA	MTMUA 5	8-25-92	17.0	543	8.1	110	57
15-194	MANTUA TWP MUA	MTMUA 4	8-25-92	16.0	443	8.0	86	42
15-166	PENNS GROVE WSC	BRIDGEPORT 2	9- 1-92	14.0	181	5.1	11	18
15-284	HUNTSMAN POLYPROPYLENE CO	SHELL 4	9- 2-92	15.0	374	7.4	22	23
15-210	PAULSBORO WD	6-1973	9- 2-92	15.0	243	5.6	23	30
15-207	NATIONAL PK WD	NPWD 2	9- 1-92	14.0	333	6.8	45	30

* - Total depth of well (extent of open or screen interval is not known).

Aquifer unit:

- 211MRPAU - Upper aquifer, Potomac-Raritan-Magothy aquifer system
- 211MRPAM - Middle aquifer, Potomac-Raritan-Magothy aquifer system
- 211MRPAL - Lower aquifer, Potomac-Raritan-Magothy aquifer system

QUALITY OF GROUND WATER - SALTWATER MONITORING NETWORK
WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MIDDLESEX COUNTY

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NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
23-735	PERTH AMBOY WD	RUNYON 8R	402524	741940	10	70 - 85	21100BG
23-571	PERTH AMBOY WD	PERTH AMBOY 7	402531	741932	15	67 - 82	21100BG
23-570	PERTH AMBOY WD	PERTH AMBOY 6	402538	741950	15	60 - 80	21100BG
23-551	SOUTH RIVER WD	SRWD 6	402548	742155	47	155 - 208	211FRNG
23-434	SOUTH RIVER WD	SRWD 2	402556	742141	20	173 - 198	211FRNG
23-355	SAYREVILLE WD	SWD A	402614	741950	30	72 - 82	21100BG
23-368	SAYREVILLE WD	SWD I	402626	741936	58	83 - 94	21100BG
23-371	HERCULES POWDER	HERCULES 5	402638	742022	48	182 - 228	211FRNG
23-376	HERCULES POWDER	HERCULES 3	402649	742025	40.80	180 - 220	211FRNG
23-205	OLD BRIDGE MUA	LAWRENCE HAR 8	402700	741454	60	193 - 213	21100BG
23-206	OLD BRIDGE MUA	LAWRENCE HAR 9	402700	741454	60	360 - 395	211FRNG
23-384	HERCULES POWDER	HERCULES 1REBT	402705	742023	54.30	170 - 225	211FRNG
23-401	SAYREVILLE WD	MORGAN P	402744	741628	44	254 - 288	211FRNG
23-403	SAYREVILLE WD	SWD Q-1973	402745	741631	40	78 - 136	21100BG
23-557	SOUTH AMBOY WD	SAWD 9A	402820	741629	20	48 - 58	21100BG
23-411	SOUTH AMBOY WD	SAWD 8	402822	741630	10	209 - 234	211FRNG

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	WATER TEMPER- ATURE (DEG C)	SPE- CIFIC CONDUCT- -ANCE (US/CM)	PH (STAND- ARD UNITS)	SODIUM DIS- SOLVED (MG/L AS NA)	CHLORIDE DIS- SOLVED (MG/L AS CL)
23-735	PERTH AMBOY WD	RUNYON 8R	9- 4-92	12.5	426	3.8	19	35
23-571	PERTH AMBOY WD	PERTH AMBOY 7	9- 4-92	12.0	248	3.8	7.7	13
23-570	PERTH AMBOY WD	PERTH AMBOY 6	9- 4-92	12.5	378	3.8	22	45
23-551	SOUTH RIVER WD	SRWD 6	9- 3-92	12.5	72	5.7	4.4	10
23-434	SOUTH RIVER WD	SRWD 2	9- 3-92	13.5	92	5.8	5.8	11
23-355	SAYREVILLE WD	SWD A	9-14-92	13.5	205	4.2	16	31
23-368	SAYREVILLE WD	SWD I	9-14-92	--	--	3.8	8.0	13
23-371	HERCULES POWDER	HERCULES 5	9-11-92	13.0	8,630	5.4	1,300	2,700
23-376	HERCULES POWDER	HERCULES 3	9-11-92	13.0	7,510	5.5	1,100	2,200
23-205	OLD BRIDGE MUA	LAWRENCE HAR 8	9-24-92	12.5	152	5.1	10	32
23-206	OLD BRIDGE MUA	LAWRENCE HAR 9	9-24-92	13.0	63	6.2	2.4	2.1
23-384	HERCULES POWDER	HERCULES 1REBT	9-11-92	13.5	1,880	5.8	180	510
23-401	SAYREVILLE WD	MORGAN P	9-14-92	13.0	82	6.0	2.5	8.2
23-403	SAYREVILLE WD	SWD Q-1973	9-14-92	13.5	222	4.2	16	29
23-557	SOUTH AMBOY WD	SAWD 9A	9-15-92	13.0	208	4.3	13	30
23-411	SOUTH AMBOY WD	SAWD 8	9-15-92	13.5	121	6.0	3.3	19

Aquifer unit:

21100BG - Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system
211FRNG - Farrington aquifer, Potomac-Raritan-Magothy aquifer system

QUALITY OF GROUND WATER - SALTWATER MONITORING NETWORK
WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MONMOUTH COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
25-234	MANASQUAN WD	MWD 3	400712	740328	15	118*	121CKKD
25-237	MANASQUAN WD	MWD 5	400714	740329	15	97 - 117	121CKKD
25-391	SPRING LK HT WD	SPRING LK HGT4	400928	740211	20	485 - 561	211MLRW
25-018	BELMAR BORO WD	BWD 2 ELEC(10)	401038	740146	20	581*	211EGLS
25-014	AVON WD	AWD 1	401138	740125	28	424 - 504	211MLRW
25-714	ATLAN HIGH WD	AHWD 6	402424	740144	80	198 - 248	211EGLS
25-496	ATLAN HIGH WD	AHWD 4	402441	740233	15	510 - 543	21100BG
25-282	BAYSHORE SEW AU	BAYSHORE 1	402507	741344	20	245 - 260	21100BG
25-111	SHORELANDS WC INC	W KEANSBURG 1	402532	740932	59	326 - 366	21100BG
25-197	KEYPORT BORO WD	KEYPORT 7	402535	741214	35	304 - 354	21100BG
25-112	SHORELANDS WC INC	W KEANSBURG 2	402537	740933	43.50	312 - 352	21100BG
25-191	KEANSBURG MUA	KWD 6	402620	740741	10	302 - 362	21100BG
25-196	KEANSBURG MUA	KWD 3	402628	740744	12	308 - 348	21100BG
25-453	UNION BEACH WD	UBWD 3 1977	402632	741051	10	480 - 532	211FRNG
25-514	INT FLAVOR FRAG	IFF-2R	402641	740911	14	266 - 312	21100BG
25-320	NATIONAL PARK SERVICE	FT HANCOCK 5A	402705	735959	14	838 - 878	211FRNG

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	WATER TEMPER- ATURE (DEG C)	SPE- CIFIC CONDUCT- -ANCE (US/CM)	PH (STAND- ARD UNITS)	SODIUM DIS- SOLVED (MG/L AS NA)	CHLORIDE DIS- SOLVED (MG/L AS CL)
25-234	MANASQUAN WD	MWD 3	9-22-92	13.5	101	4.4	7.6	14
25-237	MANASQUAN WD	MWD 5	9-22-92	13.5	65	4.9	6.1	10
25-391	SPRING LK HT WD	SPRING LK HGT4	9-22-92	19.0	202	7.8	7.2	4.5
25-018	BELMAR BORO WD	BWD 2 ELEC(10)	9-21-92	22.0	202	7.4	13	22
25-014	AVON WD	AWD 1	9-17-92	17.0	--	7.9	2.6	7.7
25-714	ATLAN HIGH WD	AHWD 6	9-11-92	13.5	194	6.9	2.8	5.6
25-496	ATLAN HIGH WD	AHWD 4	9-11-92	16.5	101	6.5	1.4	1.6
25-282	BAYSHORE SEW AU	BAYSHORE 1	9-10-92	13.0	98	5.9	1.8	3.2
25-111	SHORELANDS WC INC	W KEANSBURG 1	9-16-92	13.5	67	6.0	1.4	1.5
25-197	KEYPORT BORO WD	KEYPORT 7	9-11-92	13.5	167	6.2	12	33
25-112	SHORELANDS WC INC	W KEANSBURG 2	9-16-92	14.0	70	6.1	1.4	1.5
25-191	KEANSBURG MUA	KWD 6	9-10-92	14.0	708	6.1	47	180
25-196	KEANSBURG MUA	KWD 3	9-10-92	14.0	891	6.0	59	240
25-453	UNION BEACH WD	UBWD 3 1977	9-24-92	14.5	84	6.5	2.6	2.3
25-514	INT FLAVOR FRAG	IFF-2R	9-17-92	14.0	67	6.1	1.4	1.5
25-320	NATIONAL PARK SERVICE	FT HANCOCK 5A	9-11-92	19.0	119	6.4	5.4	5.4

* Total depth of well (extent of open or screen interval is not known).

Aquifer unit:

121CKKD - Kirkwood-Cohansey aquifer system	21100BG - Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system
211MLRW - Wenonah-Mount Laurel aquifer	211FRNG - Farrington aquifer, Potomac-Raritan-Magothy aquifer system
211EGLS - Englishtown aquifer system	

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992--Continued

MORRIS COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	1,2-DI- CHLORO- BENZENE TOTAL (UG/L)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L)	1,2- TRANS DI- CHLORO- ETHENE TOTAL (UG/L)	1,2,4- TRI- CHLORO- BENZENE TOTAL (UG/L)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L)	NAPHTH- ALENE TOTAL (UG/L)
27-1727	09-30-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.2	<0.2

NJ-WRD WELL NUMBER	DATE	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	VINYL CHLO- RIDE TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L)	STYRENE TOTAL (UG/L)	1,1-DI CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L)	2,2-DI CHLORO- PRO- PANE WAT, WH TOTAL (UG/L)
27-1727	09-30-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

NJ-WRD WELL NUMBER	DATE	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L)	1,2,4- TRI- METHYL BENZENE WAT, WH REC (UG/L)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L)	N- PROPYL- BENZENE WATER WHOLE REC (UG/L)	1,3,5- TRI- METHYL BENZENE WAT, WH REC (UG/L)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L)	PARA- CHLORO- TOLUENE WATER, WHOLE, TOTAL (UG/L)	N- BUTYL- BENZENE WATER WHOLE REC (UG/L)	SEC BUTYL BENZENE WATER WHOLE REC (UG/L)
27-1727	09-30-92	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.20

NJ-WRD WELL NUMBER	DATE	TERT- BUTYL BENZENE WATER WHOLE REC (UG/L)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L)	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (UG/L)	1,1,1,2 TETRA- CHLORO- ETHANE, WAT, WH TOTAL (UG/L)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (UG/L)
27-1727	09-30-92	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<1.0

Aquifer unit:

374LSVL - Leithsville Formation

QUALITY OF GROUND WATER - SALTWATER MONITORING NETWORK
WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
OCEAN COUNTY

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NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
29-009	BEACH HAVEN WD	BHWD 8	393346	741430	5	572 - 656	122KRD
29-111	HARVEY CEDARS WD	HCWD 4	394134	740832	9	465 - 500	122KRD
29-002	BARNEGAT LT WD	BLWD 3	394522	740636	7	597 - 654	124PNPN
29-510	OCEAN TWP MUA	INDIAN SURF 3	394613	741215	8	126 - 151	121CKKD
29-756	ISLAND BEACH ST PARK	TREATMENT PLT	395048	740519	5	297 - 331	121CKKD
29-022	SHORE WATER CO	SWC 1	395422	740458	7	175 - 200	121CKKD
29-023	SHORE WATER CO	SWC 2	395423	740458	7	490 - 527	124PNPN
29-935	SEASIDE PARK WD	EAST-REP (8)	395450	740455	10	474 - 514	124PNPN
29-809	OCEAN GATE BORO WD	OGBWD 4	395527	740826	10	330 - 370	124PNPN
29-515	PINE BEACH WU	PBWU 1	395558	741013	30	135 - 197	121CKKD
29-537	SEASIDE HGTS WD	SHWD 2	395636	740439	4	400 - 430	124PNPN
29-538	SEASIDE HGTS WD	SHWD 1R	395636	740439	5	144 - 175	121CKKD
29-115	ISL HGTS WD	IHW 8	395639	740854	12	115 - 292	124PNPN
29-815	SEASIDE HGTS WD	SHWD 6	395643	740443	7	129 - 149	121CKKD
29-058	TOMS RIVER WC	TRWC 21	395715	741231	10	46 - 56	121CKKD
29-626	TOMS RIVER WC	TRWC 30	395721	741230	9	1,700 - 1,875	211MRPA
29-452	LAVALLETTE WD	LWD 3	395741	740437	7	1,120 - 1,180	211EGLS
29-453	LAVALLETTE WD	LWD 4	395808	740416	5	1,358 - 1,515	211MRPA
29-070	NJ/AMERICAN WATER CO	MONTEREY 1	395905	740359	5	1,375 - 1,495	211MRPA
29-504	NJ/AMERICAN WATER CO	MANTOLOKING 7	400210	740310	5	1,263 - 1,368	211MRPA
29-006	NJ/AMERICAN WATER CO	BAY HEAD 6	400405	740244	10	778 - 818	211EGLS
29-531	PT PLEASANT WD	PPWD 5	400454	740414	18	1,256 - 1,342	211MRPA
29-532	PT PLEASANT WD	PPWD 3	400459	740359	10	748 - 798	211EGLS
29-579	PT PLEASANT BCH WD	PPBWD 11	400512	740251	5	130 - 143	121CKKD
29-807	PT PLEASANT BCH WD	PPBWD 12	400536	740251	5	108 - 132	121CKKD

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	WATER TEMPER- ATURE (DEG C)	SPE- CIFIC CONDUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	SODIUM DIS- SOLVED (MG/L AS NA)	CHLORIDE DIS- SOLVED (MG/L AS CL)
29-009	BEACH HAVEN WD	BHWD 8	8-19-92	17.5	65	6.6	5.6	3.1
29-111	HARVEY CEDARS WD	HCWD 4	8-19-92	16.5	69	6.6	4.1	2.6
29-002	BARNEGAT LT WD	BLWD 3	8-19-92	19.0	366	8.6	70	7.7
29-510	OCEAN TWP MUA	INDIAN SURF 3	8-20-92	13.0	62	4.4	3.5	6.3
29-756	ISLAND BEACH ST PARK	TREATMENT PLT	8-17-92	14.0	67	6.4	6.2	2.2
29-022	SHORE WATER CO	SWC 1	8-17-92	14.0	54	5.8	5.9	5.2
29-023	SHORE WATER CO	SWC 2	8-17-92	16.5	291	8.9	61	2.9
29-935	SEASIDE PARK WD	EAST-REP (8)	7-28-92	16.0	244	8.6	49	1.7
29-809	OCEAN GATE BORO WD	OGBWD 4	8-11-92	13.5	167	7.6	14	3.7
29-515	PINE BEACH WU	PBWU 1	8-11-92	12.5	70	4.4	4.4	7.3
29-537	SEASIDE HGTS WD	SHWD 2	7-28-92	15.5	224	8.7	43	4.2
29-538	SEASIDE HGTS WD	SHWD 1R	7-28-92	14.5	1,250	6.3	150	340
29-115	ISL HGTS WD	IHW 8	8-11-92	14.0	72	6.1	8.5	5.5
29-815	SEASIDE HGTS WD	SHWD 6	7-28-92	14.0	1,420	5.9	170	440
29-058	TOMS RIVER WC	TRWC 21	8-11-92	13.5	204	5.4	25	46
29-626	TOMS RIVER WC	TRWC 30	8-11-92	26.0	123	7.5	3.2	1.5
29-452	LAVALLETTE WD	LWD 3	7-30-92	21.5	346	8.5	70	2.3
29-453	LAVALLETTE WD	LWD 4	7-30-92	24.0	184	7.7	26	1.1
29-070	NJ/AMERICAN WATER CO	MONTEREY 1	8-21-92	24.0	172	7.5	17	1.5
29-504	NJ/AMERICAN WATER CO	MANTOLOKING 7	8-21-92	25.0	161	7.3	9.0	0.9
29-006	NJ/AMERICAN WATER CO	BAY HEAD 6	8-21-92	21.0	208	8.1	12	0.8
29-531	PT PLEASANT WD	PPWD 5	7-30-92	25.0	143	7.1	3.5	1.4
29-532	PT PLEASANT WD	PPWD 3	7-30-92	20.5	193	8.2	6.3	0.8
29-579	PT PLEASANT BCH WD	PPBWD 11	7-30-92	14.0	1,610	6.5	110	490
29-807	PT PLEASANT BCH WD	PPBWD 12	7-30-92	14.0	1,800	6.5	89	610

Aquifer unit:

121CKKD - Kirkwood-Cohansey aquifer system
122KRD - Atlantic City 800-foot sand of
the Kirkwood Formation

124PNPN - Piney Point aquifer
211EGLS - Englishtown aquifer system
211MRPA - Potomac-Raritan-Magothy aquifer system

QUALITY OF GROUND WATER - SALTWATER MONITORING NETWORK
WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
SALEM COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
33-364	PUBLIC SERV E-G	PW 5	392743	753158	17	765 - 840	211MRPAM
33-457	PUBLIC SERV E-G	PSEG 6	392751	753207	20	1,115 - 1,135	211MRPA
33-108	US ARMY	FINNS POINT	393641	753322	7	290 - 319	211MRPAM
33-686	PENNSVILLE TWP WD	PTWD 4A RPL	393749	753149	10	110 - 130	211MRPAU
33-354	WOODSTOWN WD	WWD 2	393904	751946	45	670 - 705	211MRPAM
33-362	WOODSTOWN WD	WWD 3	393926	751927	60	692 - 712	211MRPAM
33-459	RICHMAN ICE CRM	1A	393928	752147	25	414 - 457	211MRPAM
33-118	PENNSVILLE TWP WD	PTWD 1	393958	753045	8	213 - 238	211MRPAM
33-119	PENNSVILLE TWP WD	PTWD 2	394009	753043	7	210 - 230	211MRPAM
33-122	ATL CITY ELEC	DEEPWATER 3R	394045	753018	10	165 - 235	211MRPAM
33-123	ATL CITY ELEC	DEEPWATER 2	394047	753027	10	158 - 235	211MRPAM
33-125	ATL CITY ELEC	DEEPWATER 5	394051	753030	10	149 - 219	211MRPAM
33-345	PENNS GROVE WSC	PGWSC 2B/RF1A	394241	752711	10	45 - 58	211MRPAU
33-346	PENNS GROVE WSC	LAYNE 1	394256	752718	19	317 - 357	211MRPAL
33-083	B F GOODRICH CO	9 (PW-1)	394547	752535	10	93 - 133	211MRPAM
33-085	B F GOODRICH CO	6 (PW-2)	394556	752530	10	109 - 129	211MRPAM
33-086	B F GOODRICH CO	4 (PW-3)	394557	752523	13	169 - 189	211MRPAL

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	WATER TEMPER- ATURE (DEG C)	SPE- CIFIC CONDUCT- -ANCE (US/CM)	PH (STAND- ARD UNITS)	SODIUM DIS- SOLVED (MG/L AS NA)	CHLORIDE DIS- SOLVED (MG/L AS CL)
33-364	PUBLIC SERV E-G	PW 5	9-10-92	20.0	405	8.1	87	25
33-457	PUBLIC SERV E-G	PSEG 6	9-10-92	19.0	883	8.3	--	200
33-108	US ARMY	FINNS POINT	9-10-92	13.0	585	7.8	110	110
33-686	PENNSVILLE TWP WD	PTWD 4A RPL	9- 9-92	14.5	158	6.8	9.0	11
33-354	WOODSTOWN WD	WWD 2	9-10-92	17.0	1,140	8.2	230	230
33-362	WOODSTOWN WD	WWD 3	9-10-92	17.0	885	8.2	180	150
33-459	RICHMAN ICE CRM	1A	9- 9-92	15.0	395	8.1	86	19
33-118	PENNSVILLE TWP WD	PTWD 1	9- 9-92	14.5	435	7.4	72	64
33-119	PENNSVILLE TWP WD	PTWD 2	9- 9-92	15.0	545	7.3	42	87
33-122	ATL CITY ELEC	DEEPWATER 3R	9-10-92	15.0	487	7.2	76	73
33-123	ATL CITY ELEC	DEEPWATER 2	9-10-92	16.0	668	7.0	86	130
33-125	ATL CITY ELEC	DEEPWATER 5	9-10-92	17.0	450	7.3	61	76
33-345	PENNS GROVE WSC	PGWSC 2B/RF1A	9- 9-92	14.5	176	--	8.7	13
33-346	PENNS GROVE WSC	LAYNE 1	9- 9-92	14.5	980	7.5	190	220
33-083	B F GOODRICH CO	9 (PW-1)	9- 9-92	14.5	448	--	31	51
33-085	B F GOODRICH CO	6 (PW-2)	9- 9-92	14.5	302	6.1	21	36
33-086	B F GOODRICH CO	4 (PW-3)	9- 9-92	14.0	1,200	7.2	210	270

Aquifer unit:

- 211MRPA - Potomac-Raritan-Magothy aquifer system
- 211MRPAU - Upper aquifer, Potomac-Raritan-Magothy aquifer system
- 211MRPAM - Middle aquifer, Potomac-Raritan-Magothy aquifer system
- 211MRPAL - Lower aquifer, Potomac-Raritan-Magothy aquifer system

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992--Continued

SUSSEX COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	METHYL- BROMIDE TOTAL (UG/L)	METHYL- CHLORIDE TOTAL (UG/L)	METHYL- ETHYLENE CHLORIDE TOTAL (UG/L)	TETRA- CHLORO- ETHYLENE TOTAL (UG/L)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHYLENE TOTAL (UG/L)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2,2- TETRA- CHLORO- ETHANE TOTAL (UG/L)
37-204	09-25-92	--	--	--	--	--	--	--	--	--	--
37-206	09-24-92	--	--	--	--	--	--	--	--	--	--
37-207	09-30-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-222	09-24-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-223	09-16-92	--	--	--	--	--	--	--	--	--	--

NJ-WRD WELL NUMBER	DATE	1,2-DI- CHLORO- BENZENE TOTAL (UG/L)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L)	1,2- TRANS DI- CHLORO- ETHYLENE TOTAL (UG/L)	1,2,4- TRI- CHLORO- BENZENE TOTAL (UG/L)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L)	NAPHTH- ALENE TOTAL (UG/L)
37-204	09-25-92	--	--	--	--	--	--	--	--	--
37-206	09-24-92	--	--	--	--	--	--	--	--	--
37-207	09-30-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.2	<0.2
37-222	09-24-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.2	<0.2
37-223	09-16-92	--	--	--	--	--	--	--	--	--

NJ-WRD WELL NUMBER	DATE	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	VINYL CHLORIDE TOTAL (UG/L)	TRI- CHLORO- ETHYLENE TOTAL (UG/L)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L)	CIS-1,2- DI- CHLORO- ETHYLENE WATER TOTAL (UG/L)	STYRENE TOTAL (UG/L)	1,1-DI- CHLORO- PROPENE, WAT, WH TOTAL (UG/L)	2,2-DI- CHLORO- PROPANE WAT, WH TOTAL (UG/L)
37-204	09-25-92	--	--	--	--	--	--	--	--	--
37-206	09-24-92	--	--	--	--	--	--	--	--	--
37-207	09-30-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-222	09-24-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-223	09-16-92	--	--	--	--	--	--	--	--	--

NJ-WRD WELL NUMBER	DATE	1,3-DI- CHLORO- PROPANE WAT, WH TOTAL (UG/L)	1,2,4- TRI- METHYL BENZENE WAT, WH REC (UG/L)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L)	N- PROPYL- BENZENE WATER WHOLE REC (UG/L)	1,3,5- TRI- METHYL BENZENE WAT, WH REC (UG/L)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L)	PARA- CHLORO- TOLUENE WATER, WHOLE, REC (UG/L)	N- BUTYL- BENZENE WATER WHOLE REC (UG/L)	SEC BUTYL BENZENE WATER WHOLE REC (UG/L)
37-204	09-25-92	--	--	--	--	--	--	--	--	--
37-206	09-24-92	--	--	--	--	--	--	--	--	--
37-207	09-30-92	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.20
37-222	09-24-92	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.20
37-223	09-16-92	--	--	--	--	--	--	--	--	--

NJ-WRD WELL NUMBER	DATE	TERT- BUTYL BENZENE WATER WHOLE REC (UG/L)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L)	123-TRI- CHLORO- PROPANE WATER WHOLE TOTAL (UG/L)	1,1,1,2- TETRA- CHLORO- ETHANE, WAT, WH TOTAL (UG/L)	1,2,3- TRI- CHLORO- BENZENE WAT, WH REC (UG/L)	1,2- DIBROMO- ETHANE WATER WHOLE TOTAL (UG/L)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT REC (UG/L)
37-204	09-25-92	--	--	--	--	--	--	--	--	--
37-206	09-24-92	--	--	--	--	--	--	--	--	--
37-207	09-30-92	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<1.0
37-222	09-24-92	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<1.0
37-223	09-16-92	--	--	--	--	--	--	--	--	--

- Water-level data for this well are available elsewhere in this report.
 * - Total depth of well (extent of open or screen interval is not known).

Aquifer unit:

112SFDF - Stratified drift

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WARREN COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	OPEN INTERVAL (FT.)	AQUIFER UNIT
41-015	NJ FISH GAME	P2	405007	745659	470	90 - 110	112SFDF
41-017	NJ FISH GAME	P4	405017	745648	455	150 - 215	360KTTN
41-257	PEQUEST WATER COMPANY	PEQUEST WC 2	405453	745150	540	265 - 495	374LSVL
41-258	PEQUEST WATER COMPANY	PEQUEST WC 3	405459	745134	540	180 - 502	374LSVL
41-259	KNOWLTON PRESBYTERIAN PARSONAGE	KNOWLTON PRESB PARSONAGE	405710	750103	590	50 - 135	361MRBG
41-260	HACKETTSTOWN MUA	HMUA 3/NEW 5	405112	744852	550	66 - 143	371ALNN
41-261	HACKETTSTOWN MUA	HMUA 4	405113	744853	550	17 - 37	112SFDF
41-262	STATE OF NJ	STEPHENS STATE PK CMPGRD	405227	744827	645	105 - 120	112SFDF
41-263	INDEPENDENCE TWP	INDEP TWP MUN BLD 3030	405222	745407	535	128*	112SFDF
41-264	PRYSLAK FARMS	PRYSLAK FARMS ALPANO	405359	745225	530	212 - 214	112SFDF
41-265	LIBERTY TOWNSHIP	LIBERTY TWP ELEM SCHOOL	405200	745718	760	69 - 135	400PCMB
41-266	NATIONAL PARK SERVICE	VAN CAMPEN FARM HOUSE	410422	745751	650	100 - 172	350HGFL
41-267	OXFORD TOWNSHIP	FURNACE LAKE RECR AREA	404737	750044	620	52 - 150	400PCMB
41-268	WARREN COUNTY MUA	PEQUEST RIVER SEWER AUTH	404915	750451	300	50 - 252	367RCKB
41-269	WHITE TOWNSHIP	WHITE TWP RD DEPT GARAGE	404952	750159	400	53 - 448	400PCMB
41-270	FOUR SISTERS WINERY	FOUR SISTERS WINERY	405147	750056	405	50 - 270	361MRBG

NJ-WRD WELL NUMBER	DATE	TEMPER- ATURE WATER (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE IT-FLD (MG/L AS HCO3)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3
41-015	09-22-92	10.5	612	7.3	300	66	33	7.9	1.2	334	278
41-017	09-22-92	10.0	607	7.5	300	66	33	7.4	1.1	310	255
41-257	09-23-92	11.5	601	7.6	290	59	34	12	1.6	278	232
41-258	09-23-92	11.0	586	7.6	280	58	33	11	1.6	264	214
41-259	09-16-92	11.0	237	6.5	110	35	4.4	3.5	0.40	67	55
41-260	08-26-92	11.0	355	7.7	190	40	21	9.6	0.60	184	151
41-261	09-09-92	12.0	414	7.7	210	46	23	13	0.70	212	176
41-262	09-14-92	10.5	346	8.0	190	40	21	3.9	0.60	202	166
41-263	08-27-92	12.0	251	8.1	140	30	16	5.2	0.90	152	123
41-264	09-21-92	11.0	487	7.8	240	51	28	6.8	1.0	245	202
41-265	09-29-92	10.5	408	7.6	220	49	23	3.5	0.90	192	162
41-266	09-17-92	11.0	229	8.1	110	26	12	3.3	0.80	128	104
41-267	08-27-92	11.5	106	6.8	42	9.2	4.3	3.7	1.3	37	31
41-268	09-09-92	12.5	584	7.4	290	69	28	17	1.9	308	250
41-269	09-10-92	15.0	268	8.0	130	35	9.8	4.8	1.3	116	94
41-270	09-16-92	12.0	388	7.8	180	47	15	13	0.30	190	156

NJ-WRD WELL NUMBER	DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
41-015	09-22-92	25	19	<0.1	10	336	<0.01	2.20	<0.01	<0.2	0.01
41-017	09-22-92	26	22	<0.1	10	329	<0.01	2.50	<0.01	<0.2	<0.01
41-257	09-23-92	43	33	0.1	10	330	<0.01	<0.05	<0.01	<0.2	<0.01
41-258	09-23-92	49	28	0.1	9.8	320	<0.01	<0.05	<0.01	<0.2	<0.01
41-259	09-16-92	27	4.1	<0.1	9.3	133	<0.01	3.70	<0.01	<0.2	<0.01
41-260	08-26-92	19	16	<0.1	12	210	<0.01	0.38	<0.01	<0.2	0.01
41-261	09-09-92	22	28	<0.1	12	251	<0.01	0.52	0.02	<0.2	0.02
41-262	09-14-92	15	15	<0.1	12	208	<0.01	0.17	<0.01	<0.2	0.01
41-263	08-27-92	16	1.0	0.2	9.5	155	<0.01	0.42	<0.01	<0.2	<0.01
41-264	09-21-92	24	25	<0.1	9.5	271	<0.01	1.10	<0.01	<0.2	0.06
41-265	09-29-92	18	13	0.2	15	220	<0.01	0.71	<0.01	<0.2	0.07
41-266	09-17-92	7.4	0.50	<0.1	7.9	121	<0.01	<0.05	<0.01	<0.2	0.01
41-267	08-27-92	14	3.1	<0.1	19	80	<0.01	0.43	<0.01	3.7	0.01
41-268	09-09-92	38	36	<0.1	13	368	<0.01	3.00	0.02	<0.2	0.01
41-269	09-10-92	35	4.2	<0.1	14	166	<0.01	1.00	0.01	<0.2	<0.01
41-270	09-16-92	39	16	<0.1	14	238	<0.01	<0.05	0.09	<0.2	<0.01

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992--Continued

WARREN COUNTY - - Continued

NJ-WRD WELL NUMBER	DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)
41-015	09-22-92	<10	<1	16	<1.0	<1	7	<3	<1	<1	<0.1
41-017	09-22-92	<10	<1	17	<1.0	<1	3	<3	1	<1	<0.1
41-257	09-23-92	20	<1	28	<1.0	<1	1	240	<1	45	<0.1
41-258	09-23-92	<10	<1	26	<1.0	<1	2	58	<1	35	<0.1
41-259	09-16-92	<10	<1	3	<1.0	<1	11	<3	<1	<1	<0.1
41-260	08-26-92	10	<1	11	<1.0	1	3	<3	<1	<1	<0.1
41-261	09-09-92	<10	<1	12	<1.0	<1	4	<3	<1	<1	<0.1
41-262	09-14-92	<10	<1	9	<1.0	<1	1	<3	<1	<1	<0.1
41-263	08-27-92	<10	<1	11	<1.0	<1	<1	7	<1	2	<0.1
41-264	09-21-92	<10	<1	9	<1.0	<1	1	9	<1	3	0.2
41-265	09-29-92	<10	<1	7	<1.0	<1	5	9	<1	<1	<0.1
41-266	09-17-92	<10	<1	91	<1.0	<1	26	<3	<1	<1	<0.1
41-267	08-27-92	<10	2	9	<1.0	2	2	3	<1	<1	<0.1
41-268	09-09-92	<10	<1	38	<1.0	<1	<1	6	<1	<1	<0.1
41-269	09-10-92	<10	<1	7	<1.0	<1	4	6	<1	<1	<0.1
41-270	09-16-92	<10	2	100	<1.0	<1	<1	42	<1	12	<0.1

NJ-WRD WELL NUMBER	DATE	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L)	URANIUM -238 WATER DISSOLV (PCI/L)	URANIUM -234 WATER DISSOLV (PCI/L)	URANIUM -235 WATER, DISS (PCI/L)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L)
41-015	09-22-92	<1.0	10	<1	3.2	1.0	--	--	--	0.2	<0.2
41-017	09-22-92	<1.0	10	<1	2.3	<0.6	--	--	--	0.3	<0.2
41-257	09-23-92	<1.0	3	<1	5.4	4.7	--	--	--	0.3	<0.2
41-258	09-23-92	<1.0	25	<1	4.6	4.6	--	--	--	0.2	<0.2
41-259	09-16-92	<1.0	4	<1	0.9	<0.6	--	--	--	0.3	--
41-260	08-26-92	<1.0	<3	<1	1.3	1.0	--	--	--	0.2	--
41-261	09-09-92	<1.0	<3	<1	1.8	<0.6	--	--	--	0.4	--
41-262	09-14-92	<1.0	18	<1	1.6	0.7	--	--	--	0.2	--
41-263	08-27-92	<1.0	<3	<1	2.0	0.8	--	--	--	0.2	--
41-264	09-21-92	<1.0	<3	<1	2.9	1.2	--	--	--	0.3	--
41-265	09-29-92	<1.0	61	<1	--	--	--	--	--	0.4	<0.2
41-266	09-17-92	<1.0	8	<1	2.1	1.8	--	--	--	0.1	--
41-267	08-27-92	<1.0	57	<1	2.6	0.9	--	--	--	0.2	<0.2
41-268	09-09-92	<1.0	55	<1	4.0	1.2	--	--	--	0.4	<0.2
41-269	09-10-92	<1.0	190	<1	40	86	35	52	1.4	0.2	--
41-270	09-16-92	<1.0	16	<1	1.9	5.6	--	--	--	0.1	--

[illegible]

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992--Continued

WARREN COUNTY--Continued

[illegible][illegible][illegible]

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992--Continued

WARREN COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	2,2-DI CHLORO- PRO- PANE WAT, WH TOTAL (UG/L)	1,3-DI- CHLORO- PROPANE WAT, WH TOTAL (UG/L)	1,2,4- TRI- METHYL BENZENE WAT, WH REC (UG/L)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L)	N- PROPYL- BENZENE WATER WHOLE REC (UG/L)	1,3,5- TRI- METHYL BENZENE WAT, WH REC (UG/L)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L)	PARA- CHLORO- TOLUENE WATER, WHOLE, TOTAL (UG/L)	N- BUTYL- BENZENE WATER WHOLE REC (UG/L)	SEC BUTYL BENZENE WATER WHOLE REC (UG/L)
41-015	09-22-92	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.20
41-017	09-22-92	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.20
41-257	09-23-92	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.20
41-258	09-23-92	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.20
41-259	09-16-92	--	--	--	--	--	--	--	--	--	--
41-260	08-26-92	--	--	--	--	--	--	--	--	--	--
41-261	09-09-92	--	--	--	--	--	--	--	--	--	--
41-262	09-14-92	--	--	--	--	--	--	--	--	--	--
41-263	08-27-92	--	--	--	--	--	--	--	--	--	--
41-264	09-21-92	--	--	--	--	--	--	--	--	--	--
41-265	09-29-92	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.20
41-266	09-17-92	--	--	--	--	--	--	--	--	--	--
41-267	08-27-92	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.20
41-268	09-09-92	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.20
41-269	09-10-92	--	--	--	--	--	--	--	--	--	--
41-270	09-16-92	--	--	--	--	--	--	--	--	--	--

NJ-WRD WELL NUMBER	DATE	TERT- BUTYL BENZENE WATER WHOLE REC (UG/L)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L)	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (UG/L)	1,1,1,2 TETRA- CHLORO- ETHANE, WAT, WH TOTAL (UG/L)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT REC (UG/L)
41-015	09-22-92	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<1.0
41-017	09-22-92	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<1.0
41-257	09-23-92	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<1.0
41-258	09-23-92	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<1.0
41-259	09-16-92	--	--	--	--	--	--	--	--	--
41-260	08-26-92	--	--	--	--	--	--	--	--	--
41-261	09-09-92	--	--	--	--	--	--	--	--	--
41-262	09-14-92	--	--	--	--	--	--	--	--	--
41-263	08-27-92	--	--	--	--	--	--	--	--	--
41-264	09-21-92	--	--	--	--	--	--	--	--	--
41-265	09-29-92	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<1.0
41-266	09-17-92	--	--	--	--	--	--	--	--	--
41-267	08-27-92	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<1.0
41-268	09-09-92	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<1.0
41-269	09-10-92	--	--	--	--	--	--	--	--	--
41-270	09-16-92	--	--	--	--	--	--	--	--	--

* - Total depth of well (extent of open or screen interval is not known).

Aquifer units:

112SFDF - Stradified Drift
 350HGFL - High Falls Formation
 360KTTN - Kittatinny Limestone
 361MRBG - Martinsburg Shale
 367RCKB - Rickenbach Dolomite
 371ALNN - Allentown Dolomite
 374LSVL - Leithsville Formation
 400PCMB - Precambrian Erathem

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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