

REFERENCE

**USGS**

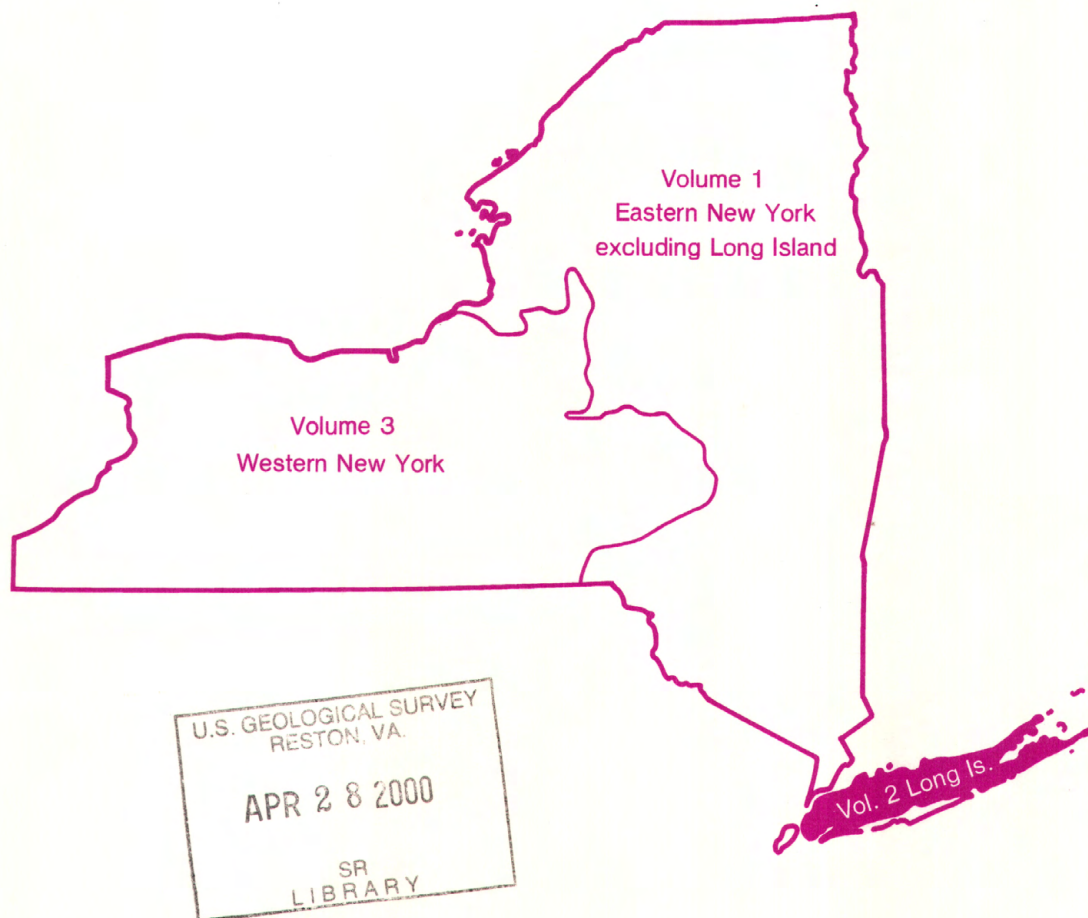
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# Water Resources Data New York Water Year 1999

## Volume 2. Long Island

Water-Data Report NY-99-2



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

Prepared in cooperation with local agencies



# CALENDAR FOR WATER YEAR 1999

1998

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

1999

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



# Water Resources Data New York Water Year 1999

## Volume 2. Long Island

By A.G. Spinello, R. Busciolano, G. Peña-Cruz, and R.B. Winowitch

Water-Data Report NY-99-2





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U.S. DEPARTMENT OF THE INTERIOR  
BRUCE BABBITT, Secretary

U.S. Geological Survey  
Charles G. Groat, Director

For information on the water program in New York write to  
District Chief, Water Resources Division  
U.S. Geological Survey  
425 Jordan Road  
Troy, New York 12180

or

For information on the water program in Long Island write to  
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U.S. Geological Survey  
2045 Route 112, Bldg. 4  
Coram, New York 11727-3085

or access the USGS on the world wide web:

<http://www.usgs.gov> or <http://www.dnyalb.er.usgs.gov>  
or <http://ny.usgs.gov>

2000



**NEW YORK DISTRICT  
OFFICE LOCATIONS AND ADDRESSES**



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Troy, NY 12180-8349  
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FAX (518)285-5601

**Ithaca Subdistrict Office:**

U.S. Geological Survey  
Water Resources Division  
30 Brown Road  
Ithaca, NY 14850-1572  
(607)266-0217  
FAX (607)266-0521

**Coram Subdistrict Office:**

U.S. Geological Survey  
Water Resources Division  
2045 Route 112, Bldg. 4  
Coram, NY 11727-3085  
(631)736-0783  
FAX (631)736-4283

**Potsdam Field Office:**

U.S. Geological Survey  
Water Resources Division  
22 Depot Street, Box U  
Potsdam, NY 13676  
(315)265-4410  
FAX (315)265-2166



## PREFACE

This volume of the annual hydrologic data report of New York 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 quality of water 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 York are contained in 3 volumes:

- Volume 1. Eastern New York excluding Long Island
- Volume 2. Long Island
- Volume 3. Western New York.

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 collection, processing, and tabulation of the data:

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S.A. Terracciano	S.L. Waunsch

Jo-Ann Pitt typed the text of the report.

This report was prepared in cooperation with local agencies under the general supervision of L.G. Moore, District Chief, New York.



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SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

NOTE—Data for partial-record stations and miscellaneous sites for surface-water discharge are published in separate sections of the data report. See references at the end of this list for page numbers for these sections.

[Letter after station name designates type of data: (d) discharge, (e) contents and/or elevation, (c) chemical, (b) biological, (m) microbiological, (t) water temperature, (s) sediment]

<u>SURFACE WATER SITES ON LONG ISLAND</u>	Station number	Page
Alley Creek near Oakland Gardens (c,d) .....	01302050	50
Gabblers Creek at Little Neck (c,d) .....	01302125	52
Glen Cove Creek at Glen Cove (d) .....	01302500	54
Mill Neck Creek at Mill Neck (d) .....	01303000	56
Cold Spring Brook at Cold Spring Harbor (d) .....	01303500	58
Nissequogue River near Smithtown (d) .....	01304000	60
Peconic River at Riverhead (d) .....	01304500	62
Carmans River at Yaphank (d) .....	01305000	64
Swan River at East Patchogue (d) .....	01305500	66
Connetquot Brook at Central Islip (d) .....	01306440	68
Connetquot Brook near Central Islip (d) .....	01306460	70
Connetquot River near Oakdale (d) .....	01306500	72
Sampawams Creek at Babylon (d) .....	01308000	74
Carlls River at Babylon (d) .....	01308500	76
Massapequa Creek at Massapequa (d) .....	01309500	78
Bellmore Creek at Bellmore (d) .....	01310000	80
East Meadow Brook at Freeport (d) .....	01310500	82
Reynolds Channel at Point Lookout (e) .....	01310740	84
Pines Brook at Malverne (d) .....	01311000	87
Valley Stream at Valley Stream (d) .....	01311500	89
Conselyeas Pond Tributary at Rosedale (d) .....	01311810	91
* * * * *		
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## DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

The following continuous-record surface-water discharge stations on Long Island have been discontinued. Daily streamflow records were collected and published for the period of record, expressed in water years, shown for each station. Discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only)]

Station name	Station number	Drainage area (sq mi)	Period of record
Patchogue River at Patchogue (d)	01306000	About 13.5	1948-69, 1974-76
Champlin Creek at Islip (d)	01307000	About 6.5	1945-69
Penataquit Creek at Bay Shore (d)	01307500	About 5	1945-76
Santapogue Creek at Lindenhurst (d)	01309000	About 7	1947-69
Seaford Creek at Massapequa (d)	01309680	About 3.3	1992-95

## DISCONTINUED LOW-FLOW PARTIAL-RECORD STATIONS

The following low-flow partial-record stations on Long Island, New York, have been discontinued. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site. Where "Drainage area" column is blank, drainage area was not available at time of publication.

[Symbols after drainage area designate: \*, operated as a continuous-record gaging station; <sup>b</sup>, about]

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
Whitney Lake Outlet at Manhasset, N.Y.	01302200	--	1953-98
Roslyn Brook at Roslyn, N.Y.	01302300	--	1953-98
Island Swamp Brook at Lattingtown, N.Y.	01302800	--	1953-98
Mill Creek near Huntington, N.Y.	01303600	--	1953-98
Stony Hollow Run at Centerport, N.Y.	01303700	--	1953-98
Fresh Pond Outlet at Fort Salonga, N.Y.	01303742	--	1977-98
Northeast Branch Nissequogue River near East Hauppauge, N.Y.	01303790	--	1972-87, 1989-98
Northeast Branch Nissequogue River at Smithtown, N.Y.	01303800	--	1948-49, 1951-76, 1979-98
Northeast Branch Nissequogue River near Hauppauge, N.Y.	01303850	--	1972-98
Northeast Branch Nissequogue River near Smithtown, N.Y.	01303900	--	1953-98
Nissequogue River near Hauppauge, N.Y.	01303941	--	1972-98
Nissequogue River at Smithtown, N.Y.	01304010	--	1974-98
Stony Brook at Stony Brook, N.Y.	01304051	--	1977-98
Unnamed tributary to Conscience Bay at Setauket, N.Y.	01304060	--	1977-98
Unnamed tributary to Setauket Harbor at East Setauket, N.Y.	01304065	--	1977-98
Unnamed tributary to Port Jefferson Harbor at Port Jefferson, N.Y.	01304070	--	1977-98
Wading River at Wading River, N.Y.	01304100	--	1953-62, 1964-83, 1985-86, 1989-98
Fresh Pond Outlet, at Baiting Hollow, N.Y.	01304150	--	1977-98
Little River near Riverhead, N.Y.	01304530	--	1952-98
White Brook at Riverhead, N.Y.	01304560	--	1953-69, 1973-98

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
Big Fresh Pond Outlet at North Sea, N.Y.	01304600	--	1951-69, 1971-98
Mill Creek at Noyack, N.Y.	01304630	--	1958-98
Ligonee Brook at Sag Harbor, N.Y.	01304660	--	1953-69, 1973-98
Poxabogue Pond Outlet at Sagaponack, N.Y.	01304730	--	1953-78, 1980-86, 1988-98
Weesuck Creek at East Quogue, N.Y.	01304745	--	1974-98
Quantuck Creek at Quogue, N.Y.	01304760	--	1953-69, 1974-98
Aspatuck Creek near Westhampton Beach, N.Y.	01304780	--	1959-88, 1990-98
Beaverdam Creek at Westhampton Beach, N.Y.	01304800	--	1953-88, 1990-98
Speonk River at Speonk, N.Y.	01304820	--	1974-98
Seatuck Creek at Eastport, N.Y.	01304860	--	1953-98
Little Seatuck Creek at Eastport, N.Y.	01304900	--	1955-69, 1974-98
Mud Creek at East Patchogue, N.Y.	01305300	--	1957-69, 1977-98
Patchogue River near Patchogue, N.Y.	01305800	--	1945-50, 1952-98
Patchogue River at Patchogue, N.Y.	01306000	13.5 <sup>b</sup>	1956-69*, 1970-73, 1974-76*, 1977-98
Green Creek at West Sayville, N.Y.	01306400	--	1953-98
Lake Ronkonkoma Inlet at Lake Ronkonkoma, N.Y.	01306405	--	1948-49, 1953-54, 1977-79, 1981-86, 1988-89, 1991-98
Connetquot Brook near Oakdale, N.Y.	01306470	--	1968, 1973-98
Rattlesnake Brook near Oakdale, N.Y.	01306700	--	1954-69, 1971-98
Champlin Creek at Islip, N.Y.	01307000	6.5 <sup>b</sup>	1958-69*, 1970-86, 1991-98
Pardees Ponds Outlet at Islip, N.Y.	01307300	--	1958-72, 1974-97
Awixa Creek at Islip, N.Y.	01307400	--	1958-98
Penataquit Creek at Bay Shore, N.Y.	01307500	5 <sup>b</sup>	1955-76*, 1977-98
Cascade Lakes Outlet at Brightwaters, N.Y.	01307600	--	1958-98
Sampawams Creek near Deer Park, N.Y.	01307920	--	1965-66, 1973-98
Sampawams Creek near North Babylon, N.Y.	01307950	--	1967, 1971-98
Sampawams Creek below Hawleys Lake, at Babylon, N.Y.	01308200	--	1953-67, 1969-98
Carlls River at Park Avenue, Babylon, N.Y.	01308600	--	1968-85, 1987-98
Santapogue Creek at Lindenhurst, N.Y.	01309000	7 <sup>b</sup>	1957-69*, 1970-98
Santapogue Creek at State Highway 27A, Lindenhurst, N.Y.	01309100	--	1953-69, 1971-98
Neguntatogue Creek at Lindenhurst, N.Y.	01309200	--	1948-50, 1952-98
Strongs Creek at Lindenhurst, N.Y.	01309250	--	1953-69, 1971-98
Amityville Creek at Amityville, N.Y.	01309350	--	1953-98
Carman Creek at Amityville, N.Y.	01309400	--	1949, 1953-69, 1971-88, 1990-98
Massapequa Creek at South Farmingdale, N.Y.	01309454	--	1962-65, 1973-78, 1980-98
Massapequa Creek at Southern State Parkway, at South Farmingdale, N.Y.	01309476	--	1962-65, 1973-98
Massapequa Creek at North Massapequa, N.Y.	01309490	--	1962, 1964, 1973-98
Seaford Creek at Seaford, N.Y.	01309700	--	1953-98
Seamans Creek at Seaford, N.Y.	01309800	--	1953-67, 1971-81, 1983-98
Bellmore Creek tributary near North Wantagh, N.Y.	01309970	--	1973-98
Bellmore Creek tributary at North Wantagh, N.Y.	01309980	--	1973-98
Newbridge Creek at Merrick, N.Y.	01310100	--	1963-98
Cedar Swamp Creek at Merrick, N.Y.	01310200	--	1953-62, 1965-98
East Meadow Brook near Westbury, N.Y.	01310470	--	1973-98

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
East Meadow Brook at Uniondale, N.Y.	01310475	--	1973-98
East Meadow Brook at East Meadow, N.Y.	01310488	--	1973-98
East Meadow Pond Outlet at Freeport, N.Y.	01310510	--	1975-80, 1986, 1990-98
Freeport Creek at Freeport, N.Y.	01310515	--	1975-80, 1986, 1990-98
Milburn Creek at Baldwin, N.Y.	01310600	--	1953-98
Parsonage Creek at Baldwin, N.Y.	01310700	--	1953-69, 1971-81, 1983-84, 1986-88, 1991-98
South Pond Outlet at Rockville Centre, N.Y.	01310800	--	1953-93, 1995-98
Motts Creek at Valley Stream, N.Y.	01311200	--	1954-98
Valley Stream, below West Branch, at Valley Stream, N.Y.	01311700	--	1953-98





WATER RESOURCES DATA - NEW YORK, 1999  
Volume 2.—Long Island

## INTRODUCTION

Water-resources data for the 1999 water year for New York consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; stage and water quality of estuaries; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 20 gaging stations; tide stage at 1 gaging station; and water levels at 467 observation wells. Also included are data for 7 low-flow partial record stations. Locations of these sites are shown on pages 3-6. Additional water data were collected at various sites not involved in the systematic data collection program, and are published as miscellaneous measurements and analyses. These data together with the data in Volumes 1 and 3 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65, and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the U.S. Geological Survey, Branch of Information Services, Box 25286, Denver, Colorado 80225-0286.

Since the 1961 water year, streamflow data and since the 1964 water year, water-quality data have been released by the Geological Survey in annual reports on a State-boundary basis. These reports provided rapid release of water data in each state shortly after the end of the water year. Through 1970 the data were also released in the water-supply paper series mentioned above.

Streamflow and water-quality data beginning with the 1971 water year, and ground-water data beginning with the 1975 water year are published only in reports on a State-boundary basis. Beginning with the 1975 water year, these Survey reports carry 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 NY-99-2." 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 through the 1994 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM).

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 (518) 285-5600. A limited number of CD-ROM discs for water years 1990-94 will be available for sale by the U.S. Geological Survey, Branch of Information Services, Box 25286, Denver, Colorado 80225-0286.

## COOPERATION

The U.S. Geological Survey and organizations of the State of New York and other agencies have had cooperative programs for the systematic collection of water records since 1900. Organizations that assisted in collecting the data included in Volume 2 through cooperative agreements with the U.S. Geological Survey are:

County of Nassau, Department of Public Works, John M. Waltz, Commissioner.

County of Suffolk, Department of Health Services, Clare B. Bradley, M.D., MPH, Acting Commissioner

New York City Department of Environmental Protection, Joel A. Miele, Commissioner

Suffolk County Water Authority, Michael A. LoGrande, Chairman.

Town of Hempstead, Department of Conservation & Waterways, Ronald W. Masters, Acting Commissioner.

The following organizations aided in collecting records:

Nassau County Department of Health, Nassau County Department of Public Works, Suffolk County Department of Health Services, and Suffolk County Water Authority.

## SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow and ground-water levels on Long Island were normal or slightly above normal in October (the beginning of the 1999 water year), declined in November and December, then returned to normal or slightly above from January through June. Levels decreased to below normal in July and August and increased to normal in September (figs. 1-4).

Almost all maximum peak discharges for the 1999 water year occurred on January 3. This storm caused Pines Brook at Malverne (62 years of record) and Conselyeas Pond Tributary at Rosedale (6 years of record) to reach new record peaks. Runoff was lower than in the previous water year at all stations, and runoff for the water year ranged from normal to below normal. The maximum monthly mean discharge for the 1999 water year at most stations occurred in January, and most minimum monthly mean discharges occurred in July. Precipitation for the 1999 water year at Brookhaven National Laboratory was 46.69 in., which was 1.79 in. below normal.

The maximum water level for the 1999 water year at the tide-stage gage on Reynolds Channel at Point Lookout was recorded on March 15, while a new record minimum water level was reached on January 2. Maximum monthly mean water levels for the 1999 water year at this station occurred in August, and minimum monthly mean water levels occurred in January.

Water levels in most wells screened in the upper glacial aquifer were near or slightly above normal at the beginning of the water year but began a short decline until December, then a small rise until March or April, and a sharp decline for the remainder of the water year to below normal levels. Water levels at most wells screened in the Magothy and Lloyd aquifers showed similar trends but had greater local variability as a result of differences in local pumping rates.

Record-low water levels were measured in eight wells screened in the upper glacial and Lloyd aquifers scattered throughout Long Island's four counties. Record-high water levels were measured in six wells screened in the upper glacial aquifer in Kings, Queens, and Suffolk Counties.

Two synoptic ground-water samplings were conducted during the 1999 water year. The first was done under the New York State pesticide monitoring program, which sampled 91 wells screened in the shallow surficial aquifer of Nassau and Suffolk Counties. Wells with known pesticide contamination and in areas where contamination was probable were analyzed for 47 pesticides by methods with detection limits ranging from 0.001 to 0.2 µg/L. The second, which was done under the Brooklyn-Queens aquifer study, sampled 43 wells representing three aquifers and three streams in Kings and Queens Counties. Samples were analyzed for 275 organic and inorganic constituents to assess ground-water quality for future potable water supply.



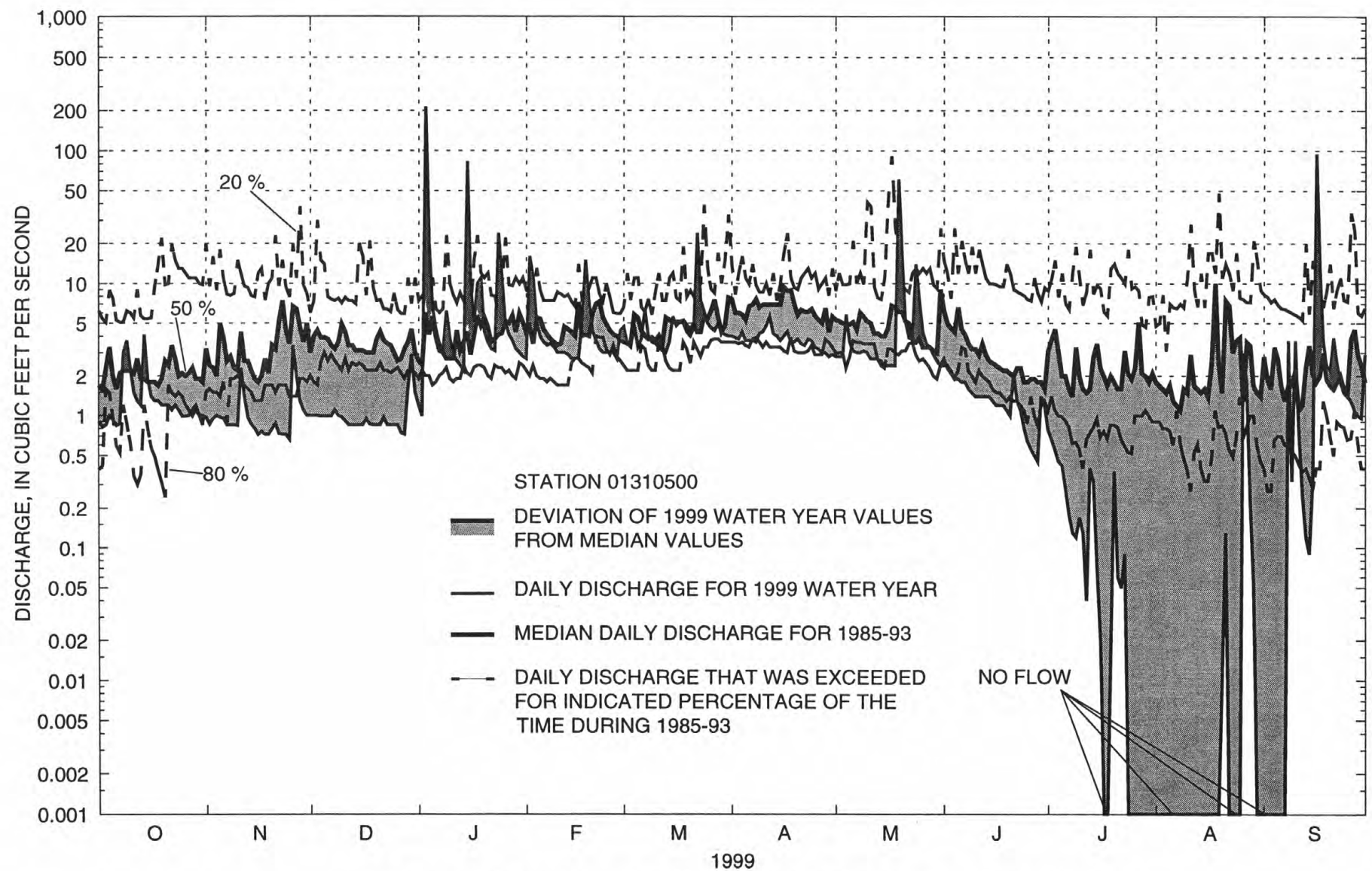


Figure 1.--Discharge data, East Meadow Brook at Freeport, Water year 1999

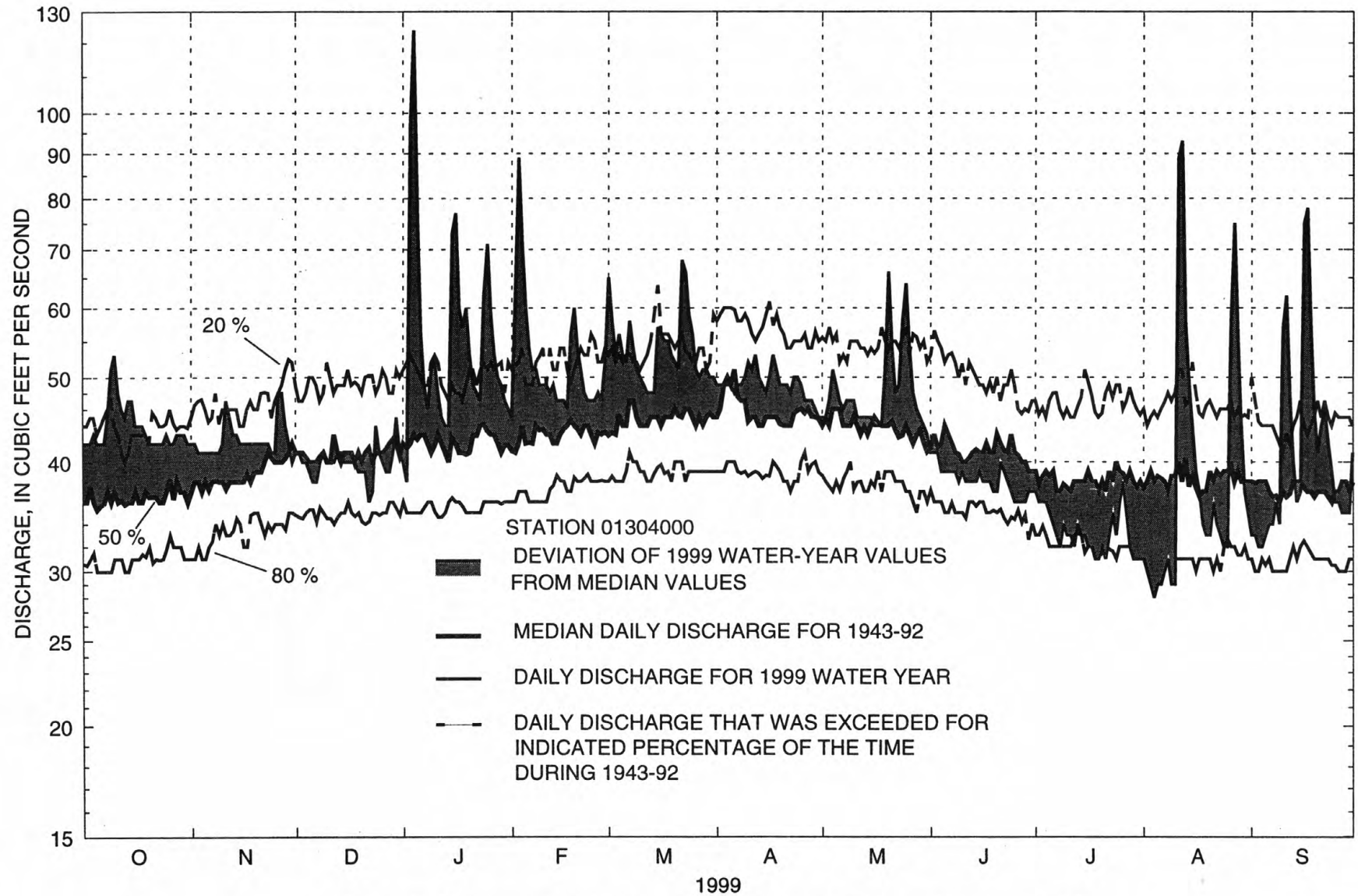


Figure 2.--Discharge data, Nissequogue River near Smithtown, Water year 1999



Figure 3.--Hydrograph of water-table observation well S4271 at Riverhead, N.Y., 1950-99

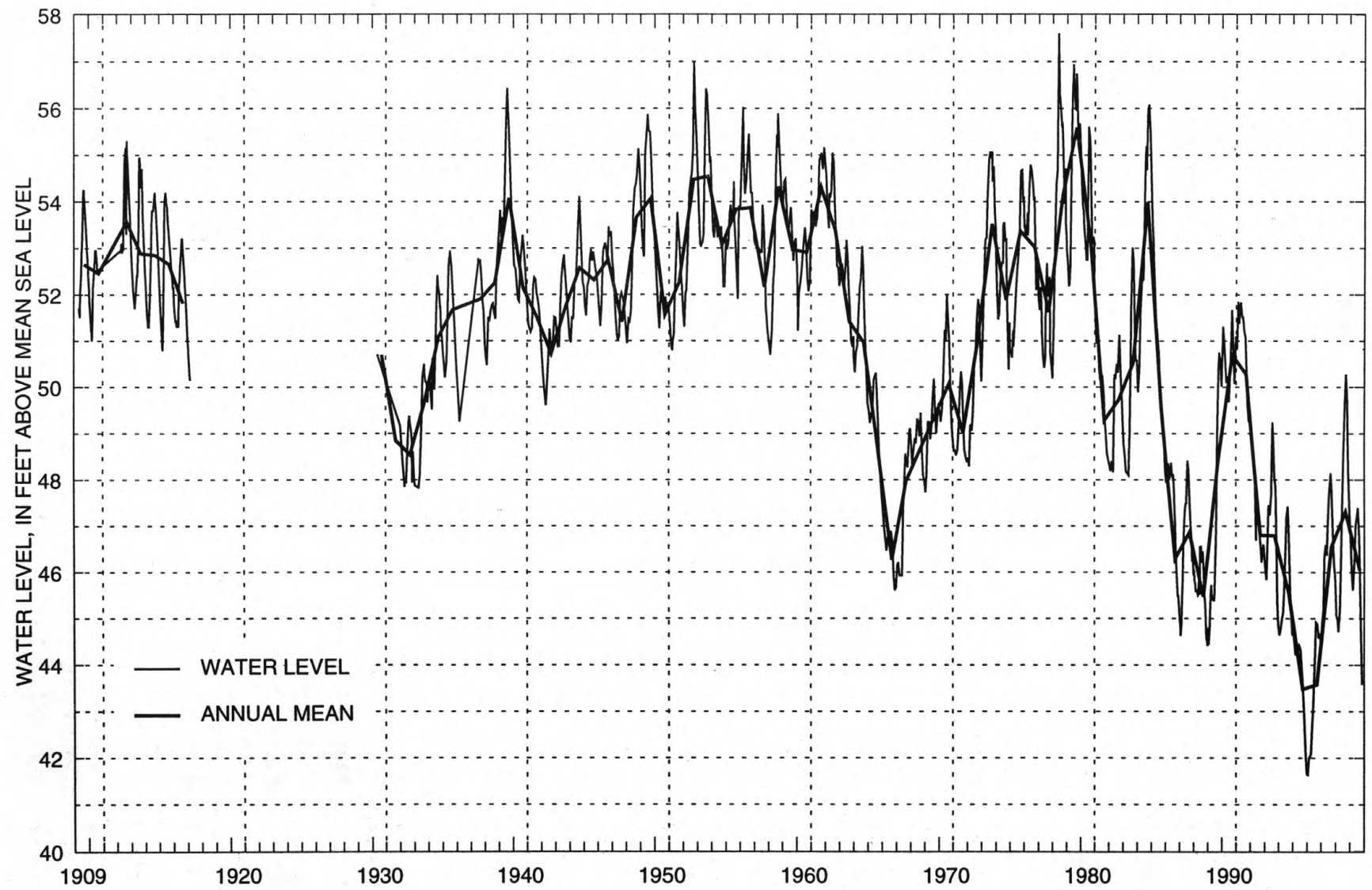


Figure 4.--Hydrograph of water-table observation well N1259 at Plainedge, N.Y., 1909-99



## SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins—the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives: (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO<sub>2</sub> emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO<sub>2</sub> and NO<sub>x</sub> scheduled to begin in 2000.

Data from the network, as well as information about individual sites, are available through the world wide web at:

<http://nadp.nrel.colostate.edu/NADP>

The National Water-Quality Assessment Program (NAWQA) of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources, provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends, and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 53 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies.

Additional information about the NAWQA Program is available through the world wide web at:

[http://www.rvares.er.usgs.gov/nawqa/nawqa\\_home.html](http://www.rvares.er.usgs.gov/nawqa/nawqa_home.html)

Radiochemical Programs is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

## EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1999 water year that began October 1, 1998, and ended September 30, 1999. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface water, and ground-water level data. The locations of the stations and wells where the data were collected are shown in figures 6A, B, C, 7A, B, C, and 8A, B, C. 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 data station, whether streamsite or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station 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. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for well.

### Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indentation in a "List of Stations" in the front of the report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations, miscellaneous sites, and other stations; therefore, the station number for a partial-record station or a miscellaneous site indicates downstream-order position in a list made up of all types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 01300500 includes the 2-digit part number "01" plus the 6-digit downstream order number "300500". The part number designates the major river basin. (In a few instances where no gaps were left in the 8-digit numbering sequence, one or two digits were added (making a 9- or 10-digit station number) and (or) a latitude-longitude number was used for identification.)

### 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 6 digits denotes the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells within a 1-second grid. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, the true latitude and longitude will be listed in the LOCATION paragraph of the station description. See figure 1.

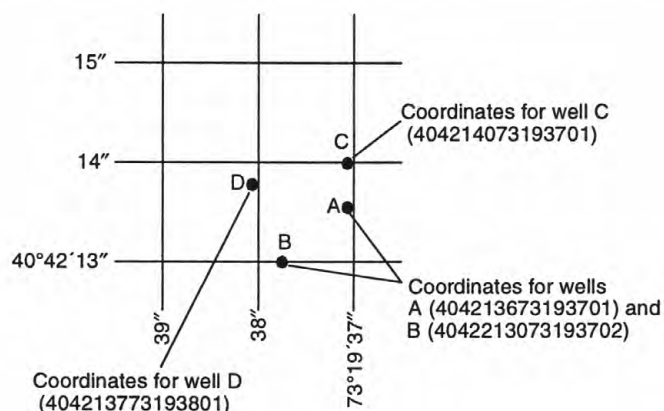


Figure 5. System for numbering wells (latitude and longitude).

A local well-numbering system is also used. It is a 2-part identifier, assigned by the New York State Department of Environmental Conservation, consisting of the abbreviation of county name and the serial number of the well within the county.

### Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Locations of all gaging stations and observation wells in this report are shown in figures 6A, B, C, and 7A, B, C.



### Data Collection and Computation

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water Resources Investigations, Book 3, Chapter A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed. If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.



For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge of contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

### **Data Presentation**

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

### **Station Manuscript**

The manuscript provides, under various headings, descriptive information, such as station location; period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

**LOCATION.**—Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for some stations, were determined and used by the U.S. Army Corps of Engineers or other agencies.

**DRAINAGE AREA.**—Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

**PERIOD OF RECORD.**—This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

**REVISED RECORDS.**—Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised, "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

**GAGE.**—The type of gage in current use, the datum of the current gage referred to sea level (see Definition of Terms), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

**REMARKS.**—All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented at the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

**COOPERATION.**—Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

**AVERAGE DISCHARGE.**—The discharge value given is the arithmetic mean of the water-year mean discharges. Only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless.

**EXTREMES FOR PERIOD OF RECORD.**—Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

**EXTREMES FOR CURRENT YEAR.**—Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

**REVISIONS.**—If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possible, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District office to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by a revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

#### **Data Table of Daily Mean Values**

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month, the line headed "MEAN" gives the average flow in cubic feet per second for the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second for square mile (line headed "CFSM"); or in inches (line headed "IN."); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

#### **Statistics of Monthly Mean Data**

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") or monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS \_\_\_\_-\_\_\_\_, BY WATER YEAR (wy)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

#### **Summary Statistics**

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS \_\_\_\_-\_\_\_\_," will consist of all the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistics, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.



The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

**ANNUAL TOTAL.**—The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

**ANNUAL MEAN.**—The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes. At least 5 complete years of record must be available before this statistic is published for the designated period.

**HIGHEST ANNUAL MEAN.**—The maximum annual mean discharge occurring for the designated period.

**LOWEST ANNUAL MEAN.**—The minimum annual mean discharge occurring for the designated period.

**HIGHEST DAILY MEAN.**—The maximum daily mean discharge for the year or for the designated period.

**LOWEST DAILY MEAN.**—The minimum daily mean discharge for the year or for the designated period.

**ANNUAL 7-DAY MINIMUM.**—The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

**INSTANTANEOUS PEAK FLOW.**—The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

**INSTANTANEOUS PEAK STAGE.**—The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

**INSTANTANEOUS LOW FLOW.**—The minimum instantaneous discharge occurring for the water year or for the designated period.

**ANNUAL RUNOFF (AC-FT).**—Indicates the depth, in acre-feet, to which the drainage area would be covered if all the runoff for the year were uniformly distributed on it.

**ANNUAL RUNOFF (CFSM).**—Indicates the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area for the year.

**ANNUAL RUNOFF (INCHES).**—Indicates the depth to which the drainage area would be covered if all the runoff for the year were uniformly distributed on it.



10 PERCENT EXCEEDS.—The discharge that is exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.—The discharge that is exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.—The discharge that is exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

### Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

### Accuracy of the Records

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good," within 10 percent, and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft<sup>3</sup>/s, to tenths between 1.0 and 10 ft<sup>3</sup>/s, to whole numbers between 10 and 1,000 ft<sup>3</sup>/s, and to 3 significant figures above 1,000 ft<sup>3</sup>/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where large adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

### Other Records Available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. also, most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

### Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

#### Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently.

#### Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, unless otherwise footnoted under "REMARKS." Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites. Data for precipitation-quality stations appears next. The table of ground-water quality follows ground-water level records. Data for quality of ground water is listed alphabetically by county, and is identified by well number.

#### On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are detailed in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. These references are listed in the PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS section of this report. These methods are consistent with ASTM standards and generally follow ISO standards.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the

turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals, depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Historical and current (1999) dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

### **Water Temperatures**

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures and (or) maximum and minimum temperatures for each day are published.

### **Sediment**

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge. Methods used in the computation of sediment records are described in the TWRI



Book 3, Chapters C1 and C3. These methods are consistent with ASTM standards and generally follow ISO standards.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

### Laboratory Measurements

Samples for indicator bacteria and daily samples for specific conductance are analyzed locally. Sediment samples are analyzed in the Geological Survey laboratory in Arvada, Colo. Methods used to analyze sediment samples and to compute sediment records are described in the TWRI Book 5, Chapters C1. Methods used by the U.S. Geological Survey laboratories are given in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

### Methylene Blue Active Substances

MBAS determinations made from January 1, 1970 through August 29, 1993, at the National Water Quality Laboratory in Denver (Analyzing Agency Code 80020) are positively biased. These data can be corrected by using the following equation, if concentrations of dissolved nitrate plus nitrite, as nitrogen, and dissolved chloride, determined concurrently with the MBAS data, are applied:

$$\text{MBASCOR} = \text{M} - 0.0088\text{N} - 0.00019\text{C}$$

where:

MBASCOR = corrected MBAS concentration, in mg/L;

M = reported MBAS concentration, in mg/L;

N = dissolved nitrate plus nitrite, as nitrogen, concentration, in mg/L; and

C = dissolved chloride concentration, in mg/L.

The detection limit of the new method is 0.02 mg/L, whereas the detection limit for the old method was 0.01 mg/L. A detection limit of 0.02 mg/L should be used with corrected MBAS data from January 1, 1970 through August 29, 1993.

### Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.



**LOCATION.**—See Data Presentation under “Records of Stage and Water Discharge;” same comments apply.

**DRAINAGE AREA.**—See Data Presentation under “Records of Stage and Water Discharge;” same comments apply.

**PERIOD OF RECORD.**—This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

**INSTRUMENTATION.**—Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

**REMARKS.**—Remarks provide added information pertinent to the collection, analysis, or computation of the records.

**COOPERATION.**—Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

**EXTREMES.**—Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

**REVISIONS.**—If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey’s computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency’s STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of the U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial record stations and miscellaneous sampling sites are published in a separate table following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

#### **Remark Codes**

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

#### **PRINTED OUTPUT**

#### **REMARK**

E	Estimated value
>	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)

### Quality-Control Data

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

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

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

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

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

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

**REFERENCE SAMPLES.**--Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties. All reference solutions were supplied by either the NWQL or the Ocala Water Quality Service Unit and analyzed for by the NWQL.

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

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

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

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

### **Dissolved Trace-Element Concentrations**

Note.—Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ( $\mu\text{g/L}$ ) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's and 100's of nanograms per liter ( $\text{ng/L}$ ). Data above the  $\mu\text{g/L}$  level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994. Full implementation of the protocols took place during the 1995 water year.

### **Records of Ground-Water Levels**

Although over 950 wells are measured at annual or more frequent intervals, only ground-water level data from a basic network of 467 observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 1.

### **Data Collection and Computation**

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet in reference to sea level. National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum in reference to National Geodetic Vertical Datum of 1929 is given in each well description. Water levels in wells equipped with recording gages are reported as mean daily values, and the extremes are instantaneous values selected from the digital record. Water levels in wells not equipped with recording gages are read periodically or measured periodically with a weighted tape by U.S. Geological Survey personnel and (or) an observer.

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 in 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. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot.

### **Data Presentation**

Most well records consist 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), a landline location designation, 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 (if a name exists) and geologic age the aquifer(s) open to the well.

**WELL CHARACTERISTICS.**—This entry describes the well in terms of depth, diameter, casing depth and (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 elevation 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 elevation of the land-surface datum is described in feet above (or below) sea level, it is reported with a precision depending on the method of determination.

**REMARKS.**—This entry describes factors that may influence the water level in a well or the measurement of the water level. It 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 published records for the well. It reports the month and year of the start of publication 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) sea level and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published, generally, only water-level means 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 of water levels follows the data table for some wells. The current year and the previous 9 years of record are plotted in feet above (or below) sea level. If the period of record is less than 10 years, the water levels for the entire record are plotted.

A hydrograph of water levels follows the data table for some wells. The current year and the previous 9 years of record are plotted in feet above (or below) sea level. If the period of record is less than 10 years, the water levels for the entire record are plotted.



### Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the change.

### Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as part of a special study. As a result, the records for this year, by themselves, do not provide a balanced view of Long Island ground-water quality.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey TWRI publications referred to in the "On-site Measurements and Sample Collection" and the "Laboratory Measurements" sections in this data report. In addition, the TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

### Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

### SELECTED RECENT U.S. GEOLOGICAL SURVEY PUBLICATIONS RELEVANT TO LONG ISLAND, NEW YORK

- Alley, W.M., Reilly, T.E., Franke, O.L., 1999, Sustainability of ground-water resources: U.S. Geological Survey Circular 1186, 79 p.
- Brown, C.J., Coates, J.D., and Schoonen, M.A.A., 1999, Localized sulfate-reducing zones in a coastal plain aquifer: *Ground Water*, v. 37, no. 4, p. 505-516.
- Brown, C.J., Walter, D.A., and Colabufo, Steven, 1999, Iron in the aquifer system of Suffolk County, New York, 1990-98: U.S. Geological Survey Water-Resources Investigations Report 99-4126, 10 p.
- Buxton, H.T., and Smolensky, D.A., 1999, Simulation of the effects of development of the ground-water flow system of Long Island, New York: U.S. Geological Survey Water-Resources Investigations Report 98-4069, 57 p.
- Buxton, H.T., Smolensky, D.A., and Shernoff, P.K., 1999, Feasibility of using ground water as a supplemental supply for Brooklyn and Queens, New York: U.S. Geological Survey Water-Resources Investigations Report 98-4070, 33 p.

- Childress, C.J.O., Foreman, W.T., Connor, B.F., and Maloney, T.J., 1999, New reporting procedures based on long-term method detection levels and some considerations for interpretations of water-quality data provided by the U.S. Geological Survey National Water Quality Laboratory: U.S. Geological Survey Open-File Report 99-193, 19 p.
- Kontis, A.L., 1999, Simulation of freshwater-saltwater interfaces in the Brooklyn-Queens aquifer system, Long Island, New York: U.S. Geological Survey Water-Resources Investigations Report 98-4067, 26 p.
- Lumia, Richard, 1998, Flood of January 19-20, 1996 in New York State: U.S. Geological Survey Water-Resources Investigations Report 98-4252, 61 p.
- Misut, P.E. and Monti, Jack, Jr., 1999, Simulation of ground-water flow and pumpage in Kings and Queens Counties, Long Island, New York: U.S. Geological Survey Water-Resources Investigations Report 98-4071, 50 p.
- Patton, C.J., and Gilroy, E.J., 1999, U.S. Geological Survey nutrient preservation experiment--Experimental design, statistical analysis, and interpretation of analytical results: U.S. Geological Survey Water-Resources Investigations Report 98-4118, 73 p.
- Phillips, P.J., Eckhardt, D.A., Terracciano, S.A., and Rosenmann, Larry, 1999, Pesticides and their metabolites in wells of Suffolk County, 1998: U.S. Geological Survey Water-Resources Investigations Report 99-4095, 12 p.
- Phillips, P.J., Eckhardt, D.A., Thurman, E.M., and Terracciano, S.A., 1999, Ratios of metolachlor to its metabolites in ground water, tile-drain discharge, and surface water in selected areas of New York State, *in* Morganwalp, D.W., and Buxton, H.T., eds., USGS Toxic Substances Hydrology Program--Proceedings of the Technical Meeting, Charleston, South Carolina, March 8-12, 1999: USGS Water-Resources Investigations Report 99-4018B, p. 383-393.
- Schubert, C.E., 1999, Ground-water flow paths and traveltime to three small embayments within the Peconic Estuary, eastern Suffolk County, New York: U.S. Geological Survey Water-Resources Investigations Report 98-4181, 41 p.
- Scorca, M.P., Dorsch, W.R. and Paquette, D.E., 1999, Stratigraphy and hydrologic conditions at the Brookhaven National Laboratory and vicinity, Suffolk County, New York, 1994-97: U.S. Geological Survey Water-Resources Investigations Report 99-4086, 55 p.
- Solley, W.B., Pierce, R.R., and Perlman, H.A., 1998, Estimated use of water in the United States in 1995: U.S. Geological Survey Circular 1200, 71 p.
- U.S. Geological Survey, 1999, Contaminants and marine geology in the New York Bight; modern sediment dynamics and a legacy for the future: U.S. Geological Survey Fact Sheet FS 114-99, 2 p.
- U.S. Geological Survey, 1999, The quality of our nations' waters--Nutrients and pesticides: U.S. Geological Survey Circular 1225, 82 p.
- U.S. Geological Survey, 1999, The quality of our nations' waters--Nutrients and pesticides--A summary: U.S. Geological Survey Fact Sheet FS 116-99, 4 p.
- U.S. Geological Survey, 1999, [U.S. Geological Survey Programs in] New York: U.S. Geological Survey Fact Sheet FS 033-99, 4 p.

## ACCESS TO USGS WATER DATA

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

<http://water/usgs.gov>

Some water-quality and ground-water data are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources division District offices. (See address on the back of the title page.)

## DEFINITION OF TERMS

Terms related to streamflow, 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.

**Acid neutralizing capacity (ANC)** is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

**Acre-foot (AC-FT, acre-ft)** is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters.

**Adenosine triphosphate (ATP)** is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

**Algae** are mostly aquatic single-celled, colonial, or multicelled plants containing chlorophyll and lacking roots, stems, and leaves.

**Algal growth potential (AGP)** is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

**Alkalinity** is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

**Annual runoff** is the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

**Acre-foot (AC-FT, acre-ft)** is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters.

**Cubic foot per second per square mile [CFSM, (ft<sup>3</sup>/s)/mi<sup>2</sup>]** is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.

**Inch (IN., in.)** as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it.

**Aroclor** is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type and the last two digits represent the weight percent of the hydrogen substituted chlorine.

**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 that 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 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 that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that 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 concen-



trations are expressed as number of colonies per 100 mL of sample.

**Enterococcus bacteria** are commonly found in the feces of humans and other warm-blooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis*, *Streptococcus feacium*, *Streptococcus avium*, and their variants.

**Escherichia coli** (*E. coli*) are bacteria present in the intestine and feces of warm-blooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium. Their concentrations are expressed as number of colonies per 100 mL of sample.

**Base flow** is flow in a channel sustained by groundwater discharge in the absence of direct runoff.

**Bed material** is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

**Benthic organisms** (invertebrates) are the group of animals inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

**Biochemical oxygen demand** (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

**Biomass** is the amount of living matter present at any given time, expressed as mass per unit area or volume of habitat.

**Ash mass** is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter ( $\text{g}/\text{m}^3$ ), and periphyton and benthic organisms in grams per square meter ( $\text{g}/\text{m}^2$ ).

**Dry mass** refers to the mass of residue present after drying in an oven at 105 °C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash, and sediment in the

sample. Dry mass is expressed in the same units as ash mass.

**Organic mass** or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass.

**Wet mass** is the mass of living matter plus contained water.

**Biomass pigment ratio** is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

**Bottom material:** See "Bed material."

**Cells/volume** refers to the number of plankton cells or natural units counted using a microscope and grid or counting cell. Results are generally reported as cells or units per milliliter.

**Cells volume (biovolume)** determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume ( $\mu\text{m}^3$ ) is determined by obtaining critical cell measurements on cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

sphere  $\frac{4}{3} \pi r^3$  cone  $\frac{1}{3} \pi r^2 h$  cylinder  $\pi r^2 h$ .

From cell volume, total algal biomass expressed as biovolume ( $\mu\text{m}^3/\text{mL}$ ) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes over all species.

**Chemical oxygen demand** (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes.

**Chlorophyll** refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.



**Colloid** is any substance with particles in such a fine state of subdivision dispersed in a medium (for example, water) that they do not settle out; but not in so fine a state of subdivision that they can be said to be truly dissolved.

**Color unit** is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

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

**Contents** is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

**Continuous-record station** is a site that meets either of the following conditions:

1. Stage or streamflow are recorded at some interval on a continuous basis. The recording interval is usually 15 minutes, but may be less or more frequent.
1. Water-quality, sediment, or other hydrologic measurements are recorded at least daily.

**Control** designates a feature in the channel downstream from a gaging station that physically influences the water-surface elevation and thereby determines the stage-discharge relation at the station. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

**Control structure** as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

**Cubic foot per second** (CFS, ft<sup>3</sup>/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second, 448.8 gallons per minute, or 0.02832 cubic meters per second.

**Cubic foot per second-day** (CFS-DAY, Cfs-day, [(ft<sup>3</sup>/s)/d]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, 646,317 gallons, or 2,447 cubic meters.

**Daily record** is a summary of streamflow, sediment, or water-quality values computed from data collected with sufficient frequency to obtain reliable estimates of daily mean values.

**Daily record station** is a site for which daily records of streamflow, sediment, or water-quality values are computed.

**Datum**, as used in this report, is an elevation above mean sea level to which all gage height readings are referenced.

**Diel** is of or pertaining to a 24-hour period of time; a regular daily cycle.

**Discharge**, or flow, is the volume of water (or more broadly, volume of fluid including solid- and dissolved-phase material), that passes a given point in a given period of time.

**Annual 7-day minimum** is the lowest mean discharge for 7 consecutive days in a year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

**Instantaneous discharge** is the discharge at a particular instant of time.

**Mean discharge** (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

**Dissolved** refers to that material in a representative water sample that passes through a 0.45-micrometer 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 oxygen** (DO) content of water in equilibrium with air is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved solids, with small temperature changes having the more significant offset. Photosynthesis and respiration may cause diurnal variations in dissolved-oxygen concentration in water from some streams.

**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 that 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 0.4926 to reflect the change. Alternatively, alkalinity

concentration (as mg/L  $\text{CaCO}_3$ ) can be converted to carbonate concentration by multiplying by 0.60.

**Diversity index** is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = - \sum_{i=1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

where  $n_i$  is the number of individuals per taxon,  $n$  is the total number of individuals, and  $s$  is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

**Drainage area** of a site on a stream is that area, measured in a horizontal plane, that has a common outlet at the site for its surface runoff. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

**Drainage basin** is a part of the Earth's surface that is occupied by a drainage system with a common outlet for its surface runoff (see "Drainage area").

**Dry weight** refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue.

**Flow-duration percentiles** are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

**Gage datum** is the elevation of the zero point of the reference gage from which gage height is determined as compared to sea level (see "Datum"). This elevation is established by a system of levels from known benchmarks, by approximation from topographic maps, or by geographical positioning system.

**Gage height** (G.H.) is the water-surface elevation referenced to the gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

**Gaging station** is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

**Gas chromatography/flame ionization detector** (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

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

**Hardness** of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate ( $\text{CaCO}_3$ ).

**High tide** is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA web site:

<http://www.co-ops.nos.noaa.gov/tideglos.html>

**Hydrologic benchmark station** is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

**Hydrologic unit** is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the U.S. Geological Survey. Each hydrologic unit is identified by an 8-digit number.

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

**Lipid** is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

**Low tide** is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA web site:

<http://www.co-ops.nos.noaa.gov/tideglos.html>

**Macrophytes** are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that are usually arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumi-

nation through the water and sediment deposition along the shoreline.

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

**Membrane filter** is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

**Metamorphic stage** refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

**Methylene blue active substances (MBAS)** are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

**Micrograms per gram (UG/G,  $\mu\text{g/g}$ )** is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

**Micrograms per kilogram (UG/KG,  $\mu\text{g/kg}$ )** is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

**Micrograms per liter (UG/L,  $\mu\text{g/L}$ )** is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter.

**Microsiemens per centimeter (US/CM,  $\mu\text{S/cm}$ )** is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

**Milligrams per liter (MG/L,  $\text{mg/L}$ )** is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in  $\text{mg/L}$  and is based on the mass of dry sediment per liter of water-sediment mixture.

**Miscellaneous site**, or miscellaneous station, is a site where streamflow, sediment, and/or water-quality data are

collected once, or more often on a random or discontinuous basis.

**Most probable number (MPN)** is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

**Multiple-plate samplers** are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

**Nanograms per liter (NG/L,  $\text{ng/L}$ )** is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

**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 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. See NOAA web site: <http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88>

**Nekton** are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

**Nephelometric turbidity unit (NTU)** is the measurement for reporting turbidity that is based on use of a standard suspension of Formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

**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.

**Organic carbon (OC)** is a measure of organic matter present in aqueous solution, suspension, or bottom sediments. May be reported as dissolved organic carbon (DOC), suspended organic carbon (SOC), or total organic carbon (TOC).

**Organism** is any living entity.

**Organism count/area** refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter ( $\text{m}^2$ ), acre,



or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

**Organism count/volume** refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

**Total organism count** is the total number of organisms collected and enumerated in any particular sample.

**Organochlorine compounds** are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

**Parameter Code** is a 5-digit number used in the U.S. Geological Survey computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

**Partial-record station** is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

**Particle size** is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, Sedigraph) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

**Particle-size classification** used in this report agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation
Silt	0.004 - 0.062	Sedimentation
Sand	0.062 - 2.0	Sedimentation/sieve
Gravel	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

**Percent composition or percent of total** is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, or volume.

**Periodic station** is a site where stage, discharge, sediment, chemical, or other hydrologic measurements are made one or more times during a year, but at a frequency insufficient to develop a daily record.

**Periphyton** is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

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

**pH** of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

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

**Plankton** is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL of sample).

**Phytoplankton** is the plant part of the plankton. They are usually microscopic, and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae.

**Blue-green algae (Cyanophyta)** are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.



**Diatoms** are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

**Euglenoids** (*Euglenophyta*) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark.

**Fire algae** (*Pyrrhophyta*) are a group of algae that are free-swimming unicells characterized by a red pigment spot.

**Green algae** have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

**Zooplankton** is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

**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.

**Polychlorinated naphthalenes** (PCN's) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCB's) and have been identified in commercial PCB preparations.

**Primary productivity** is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

**Primary productivity (carbon method)** is expressed as milligrams of carbon per area per unit time [ $\text{mg C}/(\text{m}^2/\text{time})$ ] for periphyton and macrophytes or per volume [ $\text{mg C}/(\text{m}^3/\text{time})$ ] for phytoplankton. Carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-

14). The carbon-14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

**Primary productivity (oxygen method)** is expressed as milligrams of oxygen per area per unit time [ $\text{mg O}/(\text{m}^2/\text{time})$ ] for periphyton and macrophytes or per volume [ $\text{mg O}/(\text{m}^3/\text{time})$ ] for phytoplankton. Oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

**Radioisotopes** are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

**Recoverable from bottom material** is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

**Recurrence interval**, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or non-exceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For

example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day 10-year low flow ( $7Q_{10}$ ) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the non-exceedances of the  $7Q_{10}$  occur less than 10 years after the previous non-exceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous non-exceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the  $7Q_{10}$ .

**Replicate samples** are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

**River mile** is the distance of a point on a river measured in miles from the river's mouth along the low-water channel.

**River mileage** is the linear distance along the meandering path of a stream channel determined in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council.

**Runoff in inches** (IN., in.) is the depth, in inches, to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

**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 the United States and Canada, formerly called Sea Level Datum of 1929. See: [http://www.co-ops.nos.noaa.gov/glossary/gloss\\_n.html#NGVD](http://www.co-ops.nos.noaa.gov/glossary/gloss_n.html#NGVD)

**Sediment** is solid material that is transported by, suspended in, or deposited from water. It originates mostly from disintegrated rocks; it also includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

**Bed load** is the sediment that is transported in a stream by rolling, sliding, or skipping along or very close to the bed. In this report, bed load is considered to

consist of particles in transit from the bed to an elevation equal to the top of the bed-load sampler nozzle (usually within 0.25 ft of the streambed).

**Bed-load discharge** (tons per day) is the quantity of sediment moving as bed load, reported as dry weight, that passes a cross section in a given time.

**Suspended sediment** is the sediment that is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

**Suspended-sediment concentration** is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The entire sample is used for the analysis.

**Mean concentration of suspended sediment** is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

**Suspended-sediment discharge** (tons/day) is the quantity of sediment moving in suspension, reported as dry weight, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge ( $\text{ft}^3/\text{s}$ ) x 0.0027.

**Suspended-sediment load** is a term that refers to material in suspension. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration.

**Total sediment discharge** (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, reported as dry weight, that passes a cross section in a given time.

**Total sediment load** or total load is a term that refers to the total sediment (bed load plus suspended-sediment load) that is in transport. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with total sediment discharge.

**Seven-day 10-year low flow** ( $7Q_{10}$ ,  $7Q_{10}$ ) is the minimum flow averaged over 7 consecutive days that is expected to occur on average, once in any 10-year period. The  $7Q_{10}$  has a 10-percent chance of occurring in any given year.

**Sodium adsorption ratio** (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil.

Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

**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.

**Stable isotope ratio** (per MILL/MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific waters, to evaluate mixing of different waters, as an aid in determining reaction rates, and other chemical or hydrologic processes.

**Stage:** See "Gage height."

**Stage-discharge relation** is the relation between the water-surface elevation, termed stage (gage height), and the volume of water flowing in a channel per unit time.

**Streamflow** is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

**Substrate** is the physical surface upon which an organism lives.

**Artificial substrate** is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

**Natural substrate** refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

**Surface area** of a lake or impoundment is that area encompassed by the boundary of the lake or impoundment as shown on USGS topographic maps, or on other available

maps or photographs. The computed surface areas reflect the water levels of the lakes or impoundments at the times when the information for the maps or photographs was obtained.

**Surficial bed material** is the top 0.1 to 0.2 ft of the bed material that is sampled using U.S. Series Bed-Material Samplers.

**Suspended** (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

**Suspended, recoverable** is the amount of a given constituent that is in solution after the part of a representative suspended-sediment sample that is retained on a 0.45-micrometer membrane filter 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 the 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 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.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

**Suspended, total** is the total amount of a given constituent in the part of a representative suspended-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

**Synoptic Studies** are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution



for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

**Taxonomy** is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	<i>Hexagenia</i>
Species	<i>Hexagenia limbata</i>

**Time-weighted average** is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

**Tons per acre-foot** is the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

**Tons per day (T/DAY, tons/d)** is the rate representing a mass of 1 ton of a constituent in streamflow passing a cross section in 1 day. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

**Total** is the total amount of a given constituent in a representative 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 suspended-sediment mixture and that the analytical method determined all of the constituent in the sample.)

**Total discharge** is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other

than water, this term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

**Total in bottom material** is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. 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 in bottom material."

**Total length** (fish) is the straight-line distance from the anterior point of a fish specimen's snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

**Total load** refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

**Total recoverable** is the amount of a given constituent that is in solution after a representative 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.

**Turbidity** is a measurement of the collective optical properties of a water sample that cause light to be scattered and absorbed rather than transmitted in straight lines; the higher the intensity of scattered light, the higher the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU) or Formazin turbidity units (FTU) depending on the method and equipment used.

**Volatile organic compounds (VOC's)** are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOC's are manmade chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).



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

**Water table** is the surface of a ground-water body at which the water is at atmospheric pressure.

**Water-table aquifer** is an unconfined aquifer within which is found the water table.

**Water year** in U.S. Geological Survey reports dealing with surface-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, 1999, is called the "1999 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.)

**Weighted average** is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

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

**Wet weight** refers to the weight of animal tissue or other substance including its contained water.

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

## PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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

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

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

#### Section D. Water Quality

- 1-D1. *Water temperature—influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J.F. Ficke, and G. F. Smoot: USGS-TWRI book 1, chap. D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS-TWRI book 1, chap. D2. 1976. 24 pages.

### Book 2. Collection of Environmental Data

#### Section D. Surface Geophysical Methods

- 2-D1. *Application of surface geophysics to ground-water investigations*, by A.A. R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS-TWRI book 2, chap. D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS-TWRI book 2, chap. D2. 1988. 86 pages.

#### Section E. Subsurface Geophysical Methods

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

#### Section F. Drilling and Sampling Methods

- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS-TWRI book 2, chap. F1. 1989. 97 pages.

### Book 3. Applications of Hydraulics

#### Section A. Surface-Water Techniques

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS-TWRI book 3, chap. A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS-TWRI book 3, chap. A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS-TWRI book 3, chap. A3. 1968. 60 pages.

- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS-TWRI book 3, chap. A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS-TWRI book 3, chap. A6. 1968. 13 pages.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS-TWRI book 3, chap. A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS-TWRI book 3, chap. A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS-TWRI book 3, chap. A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS-TWRI book 3, chap. A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G.F. Smoot and C.E. Novak: USGS-TWRI book 3, chap. A11. 1969. 22 pages.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS-TWRI book 3, chap. A12. 1986. 34 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS-TWRI book 3, chap. A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS-TWRI book 3, chap. A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS-TWRI book 3, chap. A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS-TWRI book 3, chap. A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS-TWRI book 3, chap. A17. 1985. 38 pages.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS-TWRI book 3, chap. A18. 1989. 52 pages.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS-TWRI book 3, chap. A19. 1990. 31 pages.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS-TWRI book 3, chap. A20. 1993. 38 pages.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS-TWRI book 3, chap. A21. 1995. 56 pages.

#### **Section B. Ground-Water Techniques**

- 3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS-TWRI book 3, chap. B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS-TWRI book 3, chap. B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS-TWRI book 3, chap. B3. 1980. 106 pages.
- 3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS-TWRI book 3, chap. B4. 1990. 232 pages.

- 3-B4. *Supplement 1. Regression modeling of ground-water flow --Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley: USGS-TWRI book 3, chap. B4. 1993. 8 pages.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS-TWRI book 3, chap. B5. 1987. 15 pages.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS-TWRI book 3, chap. B6. 1987. 28 pages.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS-TWRI book 3, chap. B7. 1992. 190 pages.

#### **Section C. Sedimentation and Erosion Techniques**

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS-TWRI book 3, chap. C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H.P. Guy and V.W. Norman: USGS-TWRI book 3, chap. C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS-TWRI book 3, chap. C3. 1972. 66 pages.

#### **Book 4. Hydrologic Analysis and Interpretation**

##### **Section A. Statistical Analysis**

- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS-TWRI book 4, chap. A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS-TWRI book 4, chap. A2. 1968. 15 pages.

##### **Section B. Surface Water**

- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS-TWRI book 4, chap. B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS-TWRI book 4, chap. B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS-TWRI book 4, chap. B3. 1973. 15 pages.

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

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

#### **Book 5. Laboratory Analysis**

##### **Section A. Water Analysis**

- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman, editors: USGS-TWRI book 5, chap. A1. 1989. 545 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS-TWRI book 5, chap. A2. 1971. 31 pages.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS-TWRI book 5, chap. A3. 1987. 80 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greenson, editors: USGS-TWRI book 5, chap. A4. 1989. 363 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS-TWRI book 5, chap. A5. 1977. 95 pages.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS-TWRI book 5, chap. A6. 1982. 181 pages.

##### **Section C. Sediment Analysis**



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

## **Book 6. Modeling Techniques**

### **Section A. Ground Water**

- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS-TWRI book 6, chap. A1. 1988. 586 pages.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS-TWRI book 6, chap. A2. 1991. 68 pages.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS-TWRI book 6, chap. A3. 1993. 136 pages.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS-TWRI book 6, chap. A4. 1992. 108 pages.
- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS-TWRI book 6, chap. A5. 1993. 243 pages.
- 6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler. 1996. 125 pages.

## **Book 7. Automated Data Processing and Computations**

### **Section C. Computer Programs**

- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS-TWRI book 7, chap. C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS-TWRI book 7, chap. C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS-TWRI book 7, chap. C3. 1981. 110 pages.

## **Book 8. Instrumentation**

### **Section A. Instruments for Measurement of Water Level**

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

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

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

## **Book 9. Handbooks for Water-Resources Investigations**

### **Section A. National Field Manual for the Collection of Water-Quality Data**

- 9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A1. 1998. 47 p.
- 9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A2. 1998. 94 p.

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

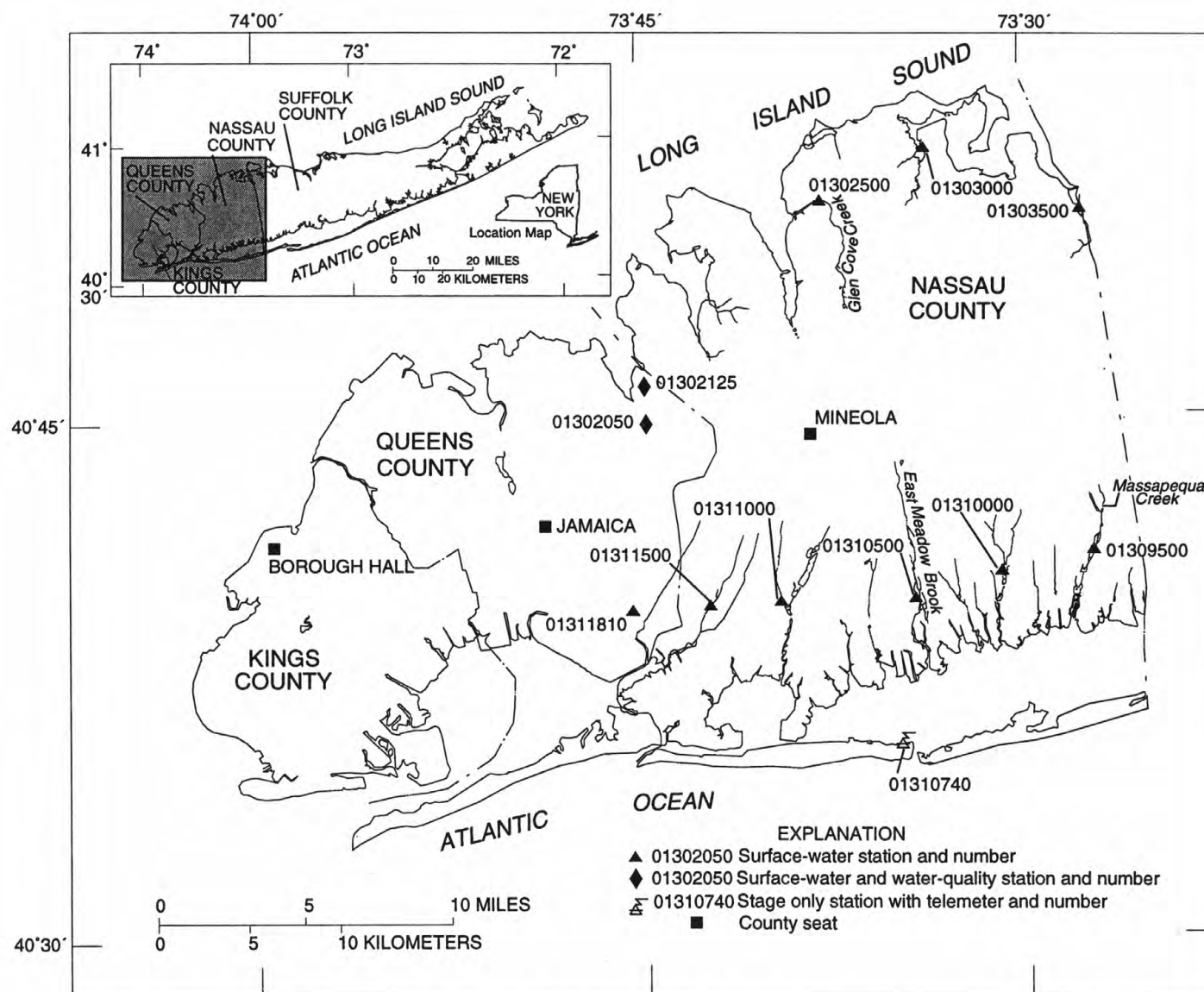


FIGURE 6A.--LOCATION OF SURFACE-WATER DATA COLLECTION STATIONS



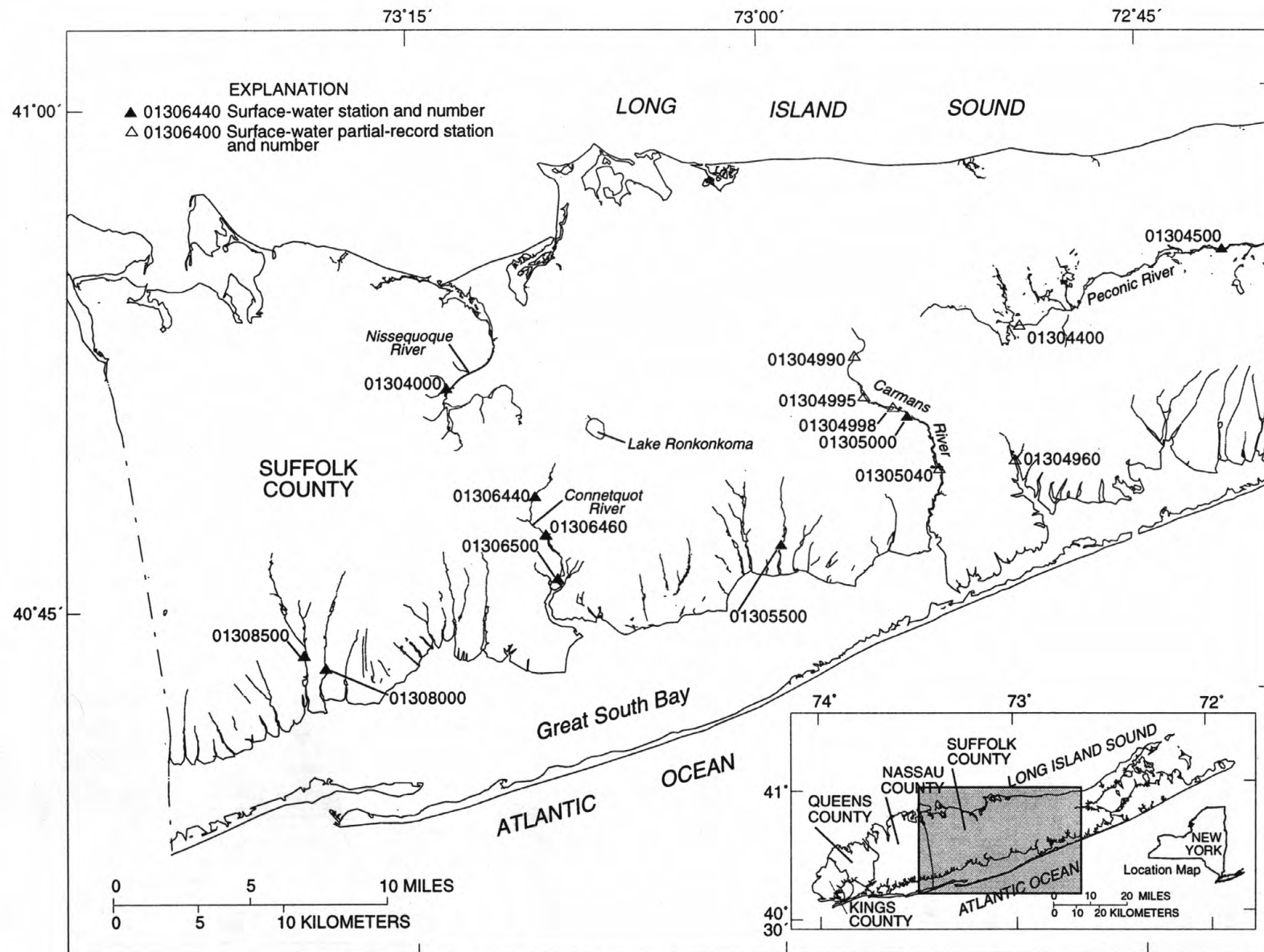


FIGURE 6B.--LOCATION OF SURFACE-WATER DATA COLLECTION STATIONS

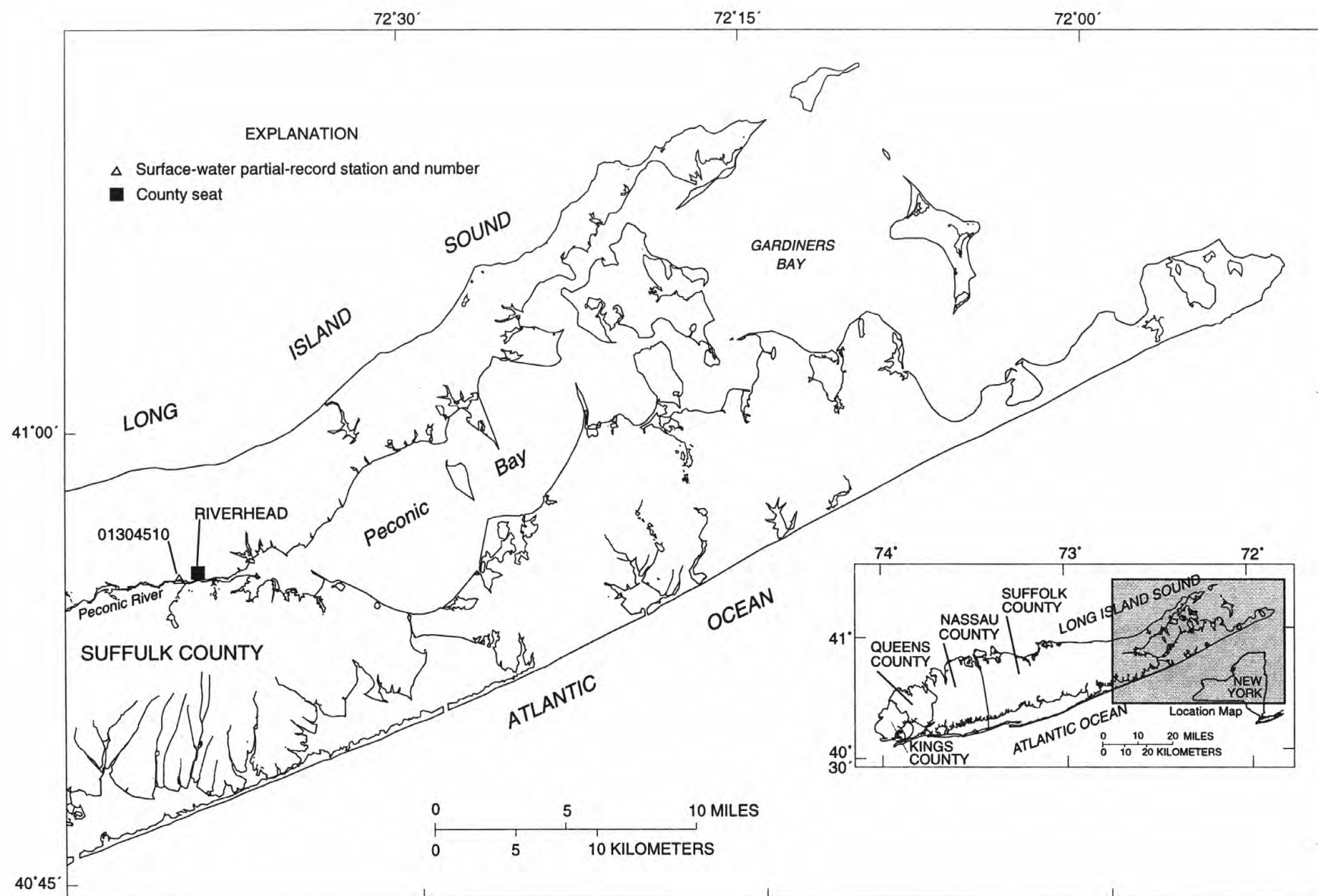


FIGURE 6C.--LOCATION OF SURFACE-WATER DATA COLLECTION SATATIONS

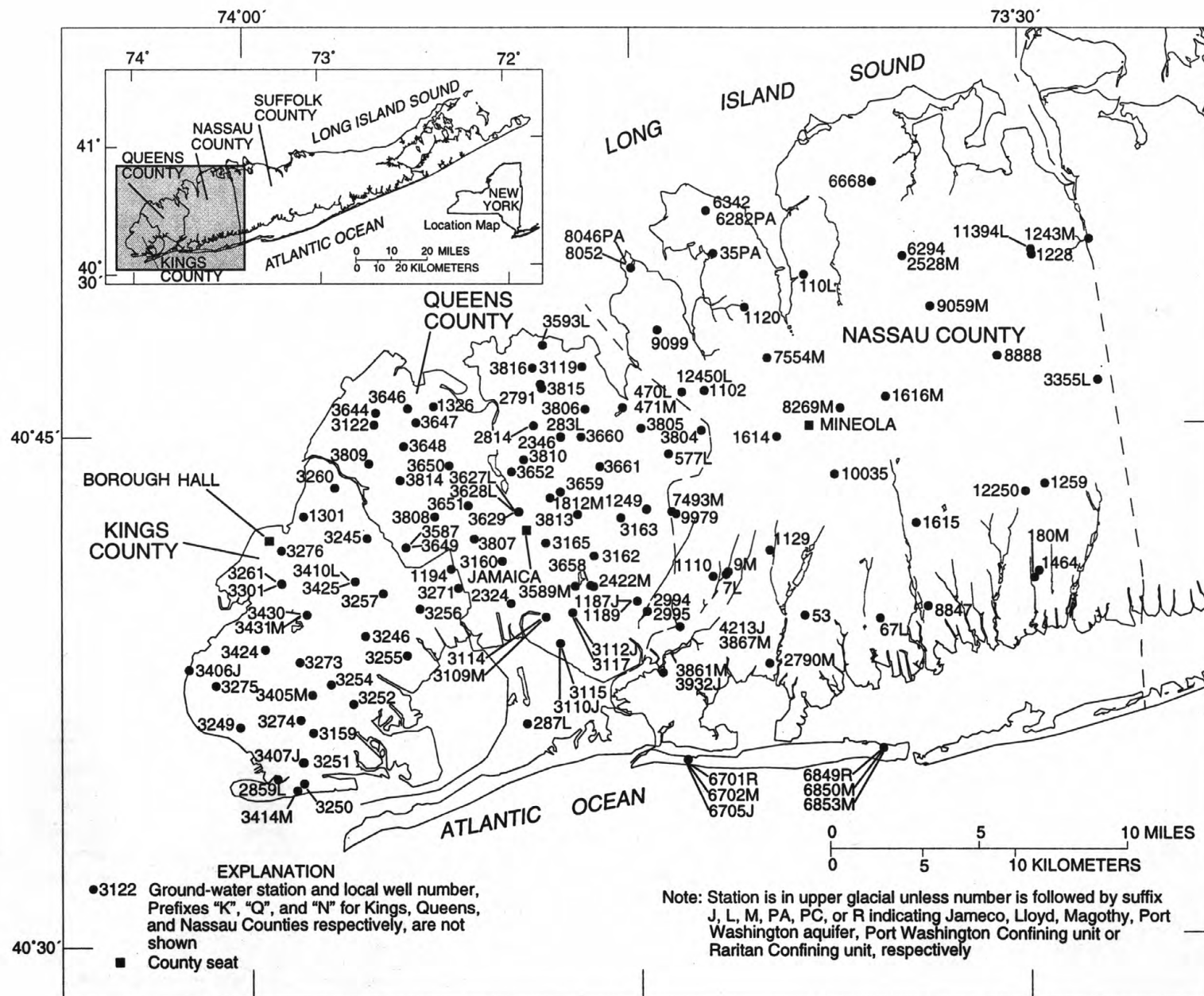


FIGURE 7A.--LOCATION OF WATER-LEVEL DATA COLLECTION STATIONS

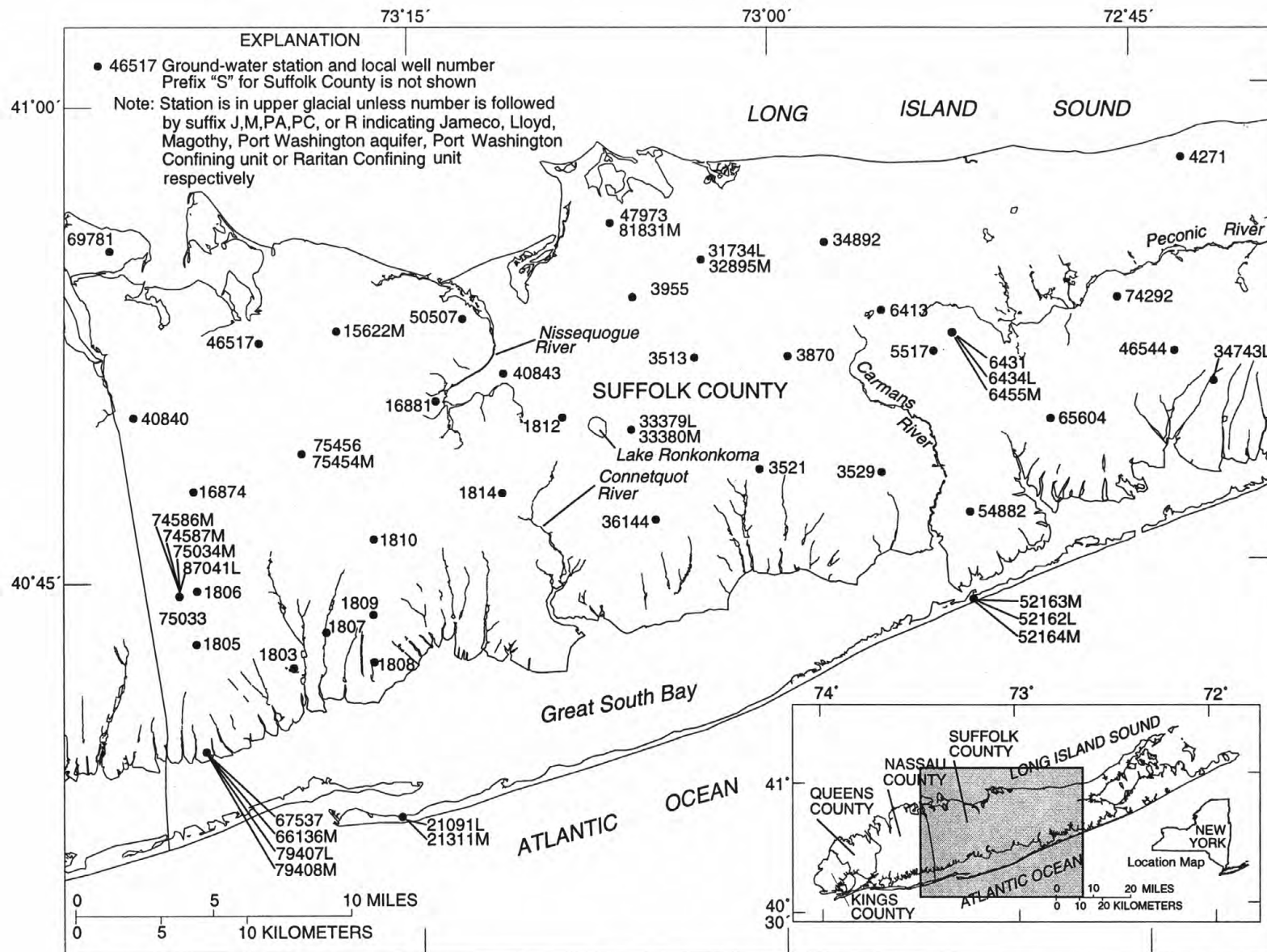


FIGURE 7B.--LOCATION OF WATER-LEVEL DATA COLLECTION STATIONS



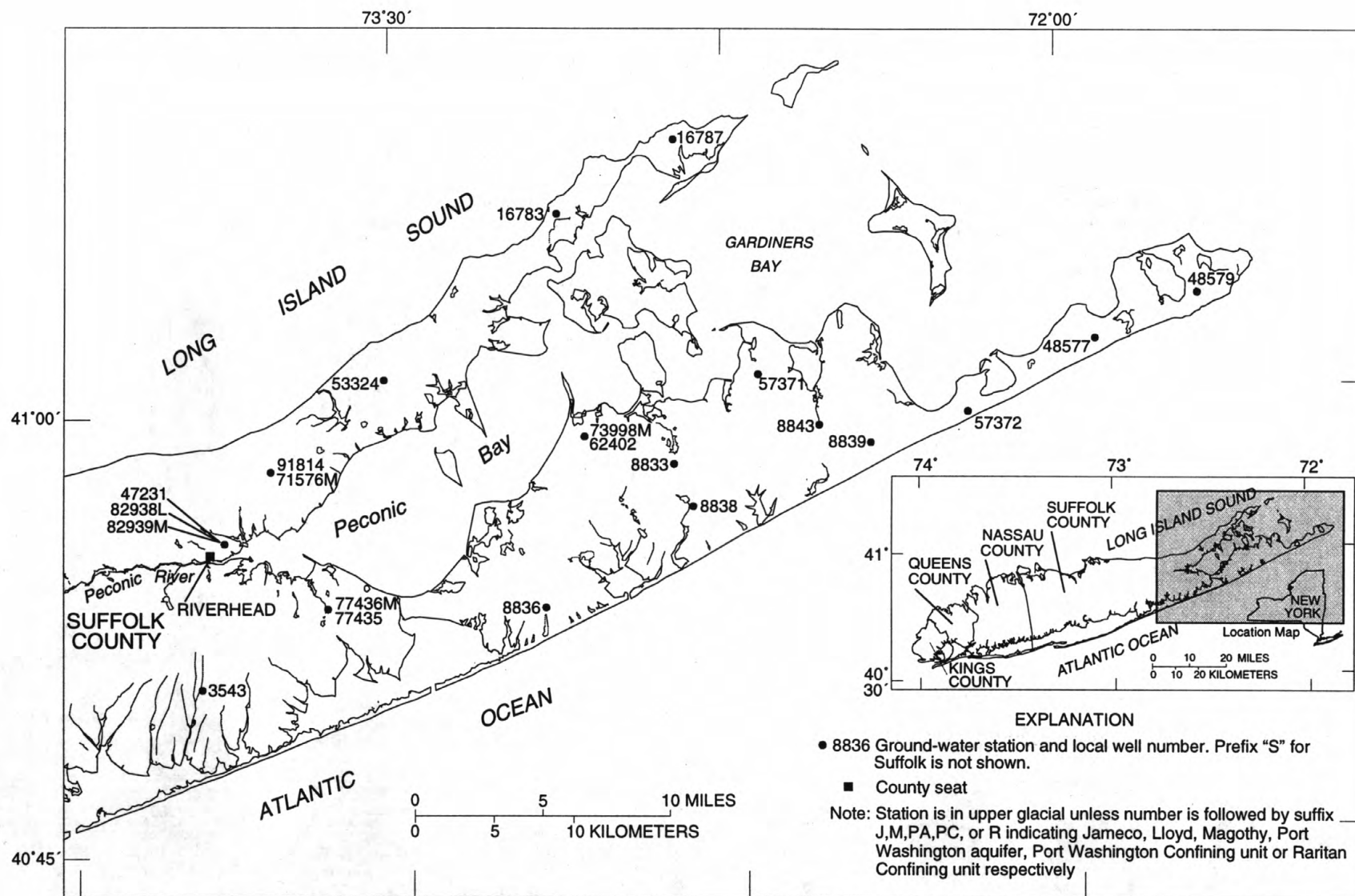


FIGURE 7C.--LOCATION OF WATER-LEVEL DATA COLLECTION STATIONS



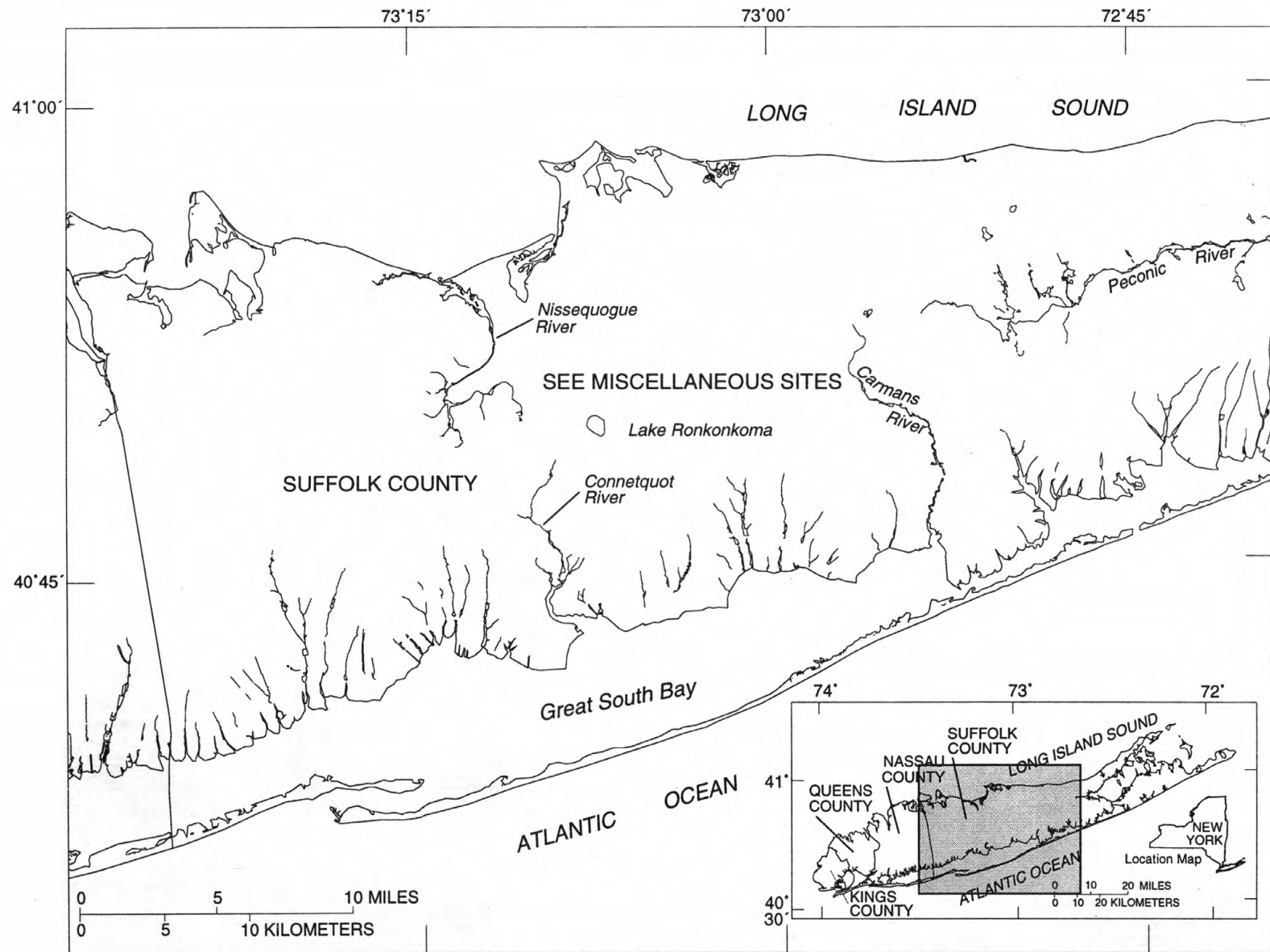


FIGURE 8B.--LOCATION OF QUALITY OF GROUND-WATER DATA COLLECTION STATIONS

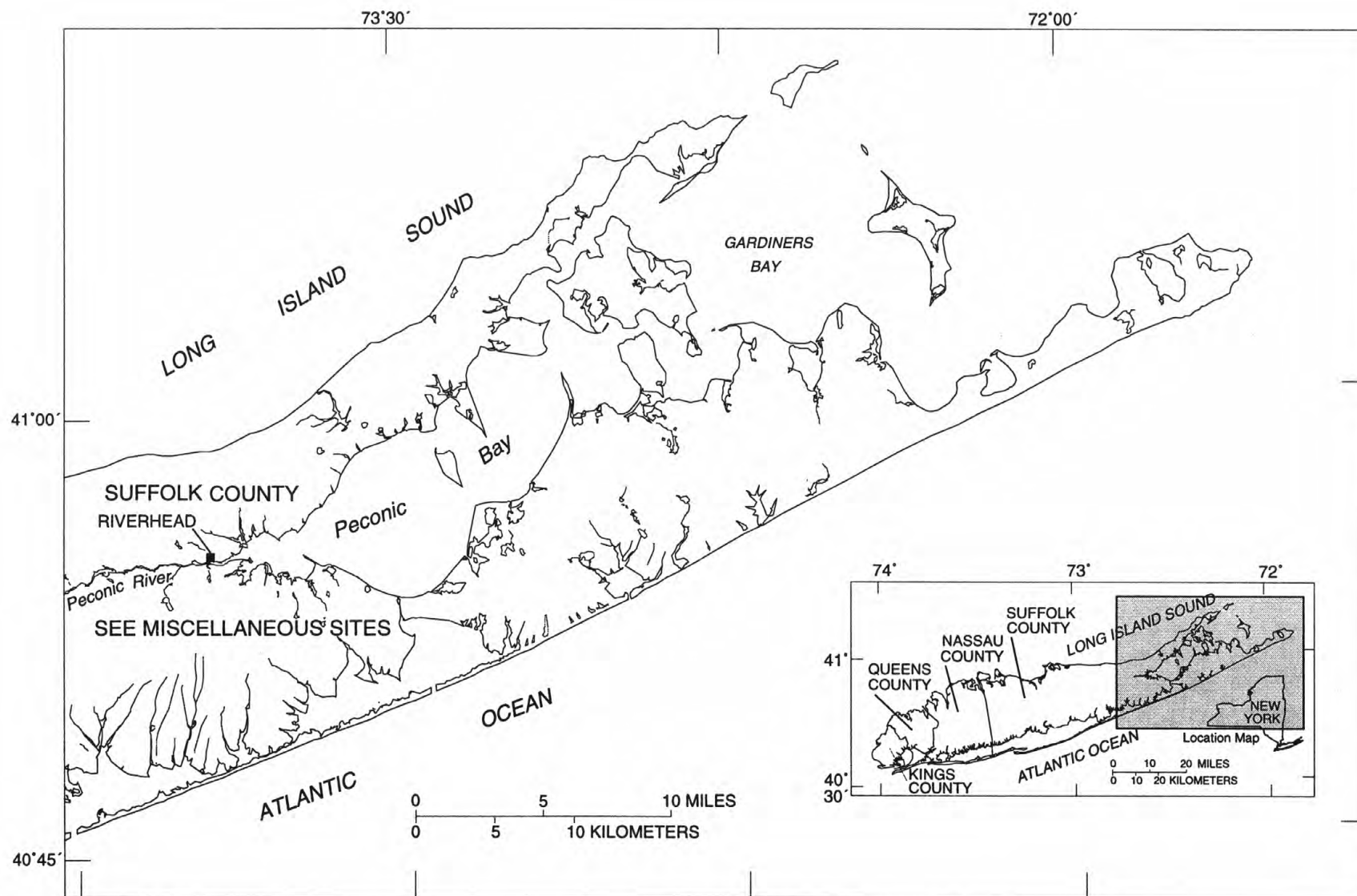


FIGURE 8C.--LOCATION OF QUALITY OF GROUND-WATER DATA COLLECTION STATIONS



## SURFACE-WATER SITES ON LONG ISLAND

## 01302050 ALLEY CREEK NEAR OAKLAND GARDENS, NY

LOCATION.—Lat 40°45'21", long 73°44'47", Queens County, Hydrologic Unit 02030201, on right bank just upstream from Cross Island Parkway entrance ramp, at upstream side of 8- x 9-foot concrete culvert in Alley Pond Park, about 4.0 mi northeast of Oakland Gardens.

DRAINAGE AREA.—About 1.6 mi<sup>2</sup>.

PERIOD OF RECORD.—June 1993 to current year.

GAGE.—Water-stage recorder. Datum of gage is 5.26 ft above sea level.

REMARKS.—Records fair except those for estimated daily discharges, which are poor. Water-quality data included in this report.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 354 ft<sup>3</sup>/s, Oct. 19, 1996, gage height, 5.09 ft, from rating curve extended above 60 ft<sup>3</sup>/s; maximum gage height, 6.17 ft, Oct. 19, 1996, result of high tide; minimum discharge, 0.66 ft<sup>3</sup>/s, for part or all of many days 1995-97.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 211 ft<sup>3</sup>/s, Jan 3, gage height, 3.68 ft; minimum, 0.92 ft<sup>3</sup>/s, Aug. 9, gage height, 0.23 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.4	1.4	1.3	1.2	2.1	1.3	1.6	1.3	1.5	1.2	1.2
2	1.2	1.4	1.3	1.3	e4.0	1.3	1.3	1.6	1.3	1.3	1.1	1.1
3	1.2	1.4	1.3	24	1.6	1.6	1.3	1.6	1.3	1.3	1.0	1.1
4	1.3	1.4	1.4	1.3	1.5	2.0	1.8	2.4	1.3	1.3	1.0	1.2
5	1.3	1.4	1.6	e1.3	1.3	1.1	1.7	1.5	1.3	1.2	1.2	1.5
6	1.4	1.4	1.4	e1.3	1.3	1.6	1.7	1.4	1.3	1.1	1.2	1.3
7	1.6	1.4	1.4	e1.3	1.3	1.9	1.7	1.5	1.2	1.1	1.2	1.3
8	2.7	1.4	1.6	e1.3	1.6	1.1	1.7	1.9	1.1	1.2	1.3	1.5
9	1.9	1.4	1.7	e2.0	1.4	1.1	2.2	1.5	1.1	1.3	1.1	1.3
10	1.4	1.4	1.6	e1.4	1.3	1.1	1.7	1.4	1.4	1.3	1.3	e2.7
11	1.4	2.0	1.6	1.3	1.3	1.1	2.0	1.4	1.4	1.3	2.6	1.3
12	1.5	1.3	1.6	1.3	1.3	1.1	1.8	1.4	1.4	1.3	1.3	1.1
13	1.4	1.3	1.6	1.3	1.5	1.1	1.6	1.6	1.3	1.3	1.1	1.1
14	2.2	1.3	1.6	1.8	1.4	2.0	1.6	1.6	1.4	1.3	2.5	1.1
15	1.5	1.3	1.6	6.1	1.4	3.0	1.8	1.4	1.3	1.1	1.3	1.7
16	1.3	1.3	1.6	1.5	1.4	1.9	2.3	1.6	1.3	1.1	1.2	13
17	1.3	1.4	1.8	1.3	1.4	1.4	1.6	1.6	1.4	1.1	1.1	1.4
18	1.3	1.4	1.7	4.9	3.7	1.2	1.4	1.6	1.4	1.1	1.0	1.0
19	1.3	1.4	1.6	1.6	1.5	1.1	1.4	e5.4	1.3	1.9	1.0	1.0
20	1.3	1.4	1.6	1.3	1.4	1.1	1.9	2.1	1.3	1.2	3.0	1.0
21	1.3	1.6	1.5	1.3	1.4	2.0	1.5	1.3	1.9	1.1	1.9	2.5
22	1.3	1.6	1.5	1.2	1.4	3.8	1.7	1.3	1.3	1.0	1.2	1.3
23	1.3	1.6	1.4	1.3	1.4	1.5	2.1	1.9	1.3	1.0	1.1	1.1
24	1.3	1.6	1.4	4.3	1.3	1.5	1.7	4.7	1.3	1.0	1.0	1.0
25	1.3	1.6	1.4	1.7	1.3	1.4	1.6	1.5	1.3	1.0	1.0	1.0
26	1.3	3.1	1.4	1.4	1.4	1.4	1.6	1.3	1.3	1.0	2.5	1.0
27	1.3	1.5	1.4	1.3	1.4	1.5	1.6	1.3	1.3	1.0	1.4	1.1
28	1.4	1.4	1.4	1.4	2.8	1.9	1.6	1.3	1.2	1.1	1.2	1.1
29	1.4	1.4	2.7	1.4	---	1.3	1.6	1.3	1.5	1.3	1.1	1.1
30	1.3	1.3	1.3	1.4	---	1.3	1.6	1.3	1.3	1.3	1.1	2.2
31	1.3	---	1.3	1.5	---	1.3	---	1.3	---	1.3	1.3	---
TOTAL	44.2	44.8	47.7	77.1	45.2	48.8	50.4	54.6	39.8	37.4	42.5	51.3
MEAN	1.43	1.49	1.54	2.49	1.61	1.57	1.68	1.76	1.33	1.21	1.37	1.71
MAX	2.7	3.1	2.7	24	4.0	3.8	2.3	5.4	1.9	1.9	3.0	13
MIN	1.2	1.3	1.3	1.2	1.2	1.1	1.3	1.3	1.1	1.0	1.0	1.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1999, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999
MEAN	1.51	1.41	1.73	1.77	1.53	1.57	1.51
MAX	2.91	1.83	2.30	2.49	1.98	1.99	1.87
(WY)	1997	1998	1997	1999	1998	1998	1997
MIN	.97	.98	1.02	1.18	.93	1.07	1.04
(WY)	1995	1994	1996	1997	1996	1995	1995

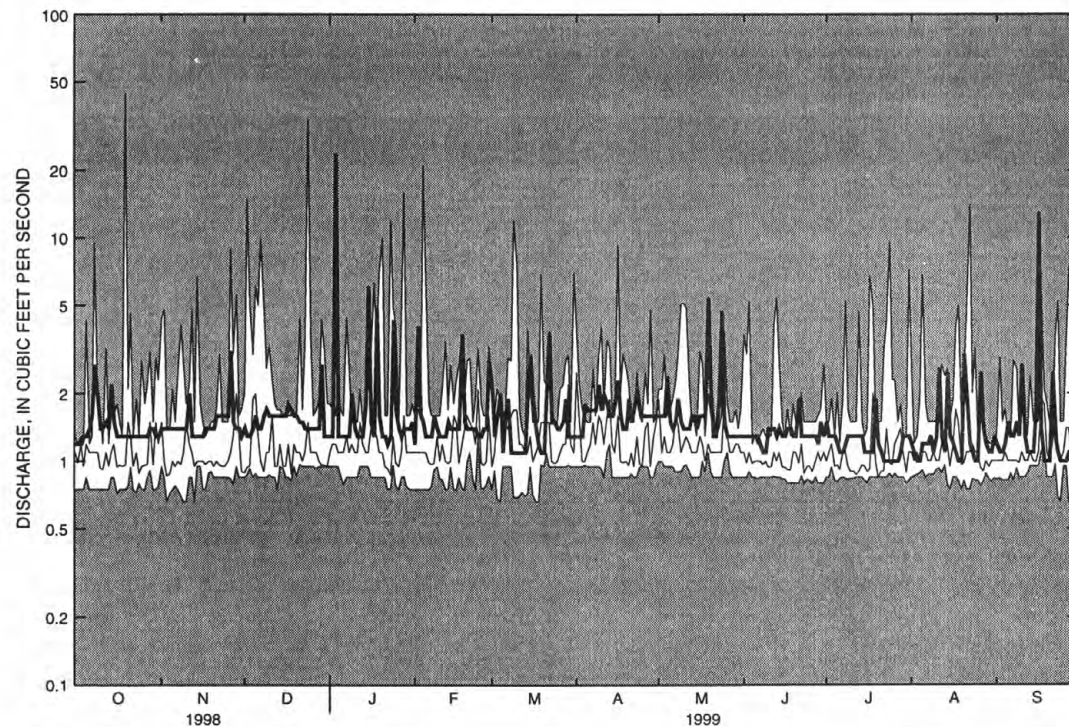
# SURFACE-WATER SITES ON LONG ISLAND

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## 01302050 ALLEY CREEK NEAR OAKLAND GARDENS, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1993 - 1999	
ANNUAL TOTAL	619.4		583.8		1.49	
ANNUAL MEAN	1.70		1.60		1.76	
HIGHEST ANNUAL MEAN					1.26	
LOWEST ANNUAL MEAN					1.26	
HIGHEST DAILY MEAN	12	Jan 23	24	Jan 3	44	Oct 19 1996
LOWEST DAILY MEAN	1.1	Mar 16	1.0	Jul 22	.66	Sep 24 1995
ANNUAL SEVEN-DAY MINIMUM	1.2	Mar 25	1.0	Jul 21	.73	Sep 27 1995
10 PERCENT EXCEEDS	2.2		1.9		2.0	
50 PERCENT EXCEEDS	1.5		1.4		1.2	
90 PERCENT EXCEEDS	1.2		1.1		.85	

e Estimated



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

## SURFACE-WATER SITES ON LONG ISLAND

## 01302125 GABBLERS CREEK AT LITTLE NECK, NY

LOCATION.—Lat 40°46'25", long 73°44'39", Queens County, Hydrologic Unit 02030201, on left bank just downstream from Sandyhill Road, at downstream side of 3-ft concrete culvert in Udalls Park Preserve, in Little Neck

DRAINAGE AREA.—About 2.2 mi<sup>2</sup>.

PERIOD OF RECORD.—December 1998 to September 1999.

GAGE.—Water-stage recorder. Datum of gage is 9.00 ft above sea level, from topographic map.

REMARKS.—Records poor. Water-quality data included in this report.

EXTREMES FOR CURRENT PERIOD.—December 1998 to September 1999: Maximum discharge, during period Dec. to Sept., 70 ft<sup>3</sup>/s, Jan. 3, gage height, 3.35 ft, from flood marks, from rating curve extended above 30 ft<sup>3</sup>/s; minimum 0.06 ft<sup>3</sup>/s, part or all of each day July 26, 27, 29, 31, Sept. 1-6; minimum gage height 0.33 ft, Sept. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

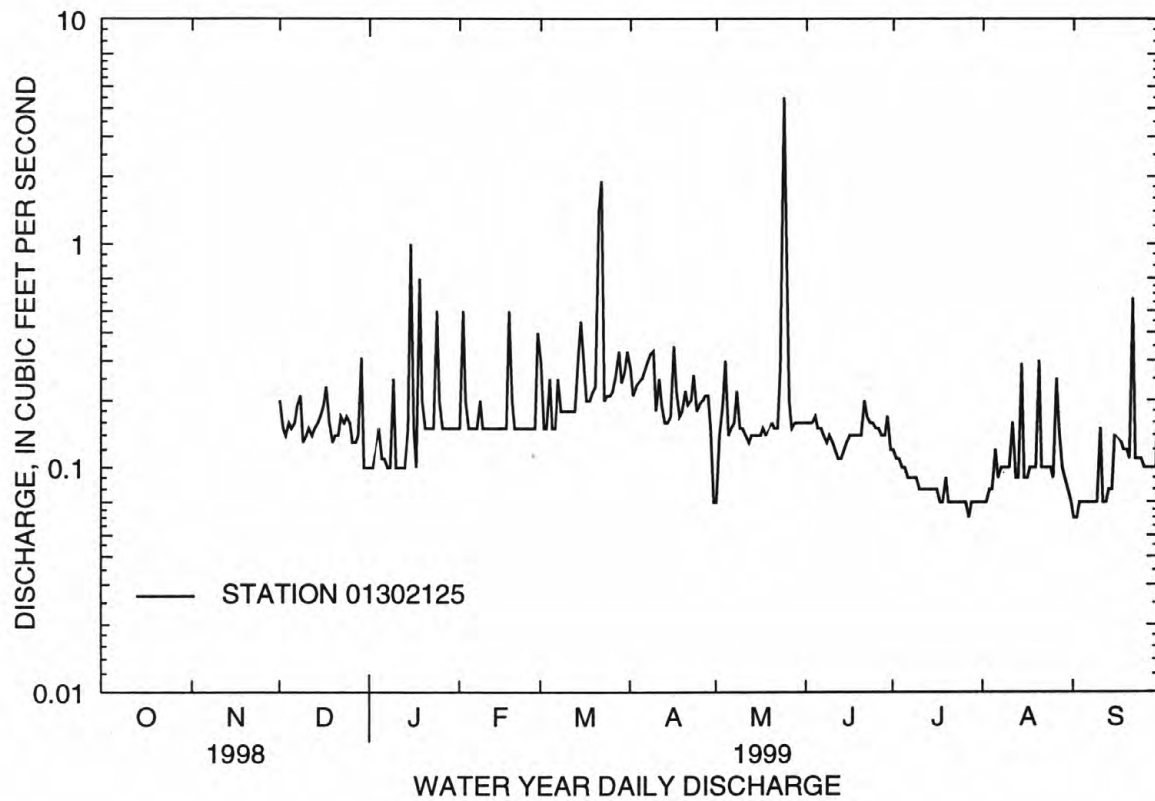
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	e.20	.10	e.15	e.30	.28	.07	.16	.12	.07	e.06
2	---	---	.15	.10	e.50	e.15	.21	.14	.16	.11	.07	.06
3	---	---	.14	e9.0	e.20	e.15	.23	.19	.16	.11	.08	.07
4	---	---	.16	e.15	e.15	e.25	.24	.30	.17	.10	.08	.07
5	---	---	.15	.11	e.15	e.15	.25	.14	.15	.10	.12	.07
6	---	---	.16	.11	e.15	e.15	.27	.15	.15	.09	.09	.07
7	---	---	.19	e.10	e.15	e.25	.30	.16	.14	.09	.10	.07
8	---	---	.21	e.10	e.20	e.18	.32	.22	.13	.09	.10	.07
9	---	---	.13	e.25	e.15	e.18	.33	.15	.14	.09	.10	.07
10	---	---	.14	e.10	e.15	e.18	.18	.15	.13	.08	.10	.15
11	---	---	.15	e.10	e.15	e.18	.25	.14	.12	.08	.16	.07
12	---	---	.14	e.10	e.15	.18	.19	.13	.11	.08	.09	.07
13	---	---	.15	e.10	e.15	.18	.16	.14	.11	.08	.09	.08
14	---	---	.16	e.15	e.15	.31	.16	.14	.12	.08	.29	.08
15	---	---	.17	e1.0	e.15	.45	.17	.14	.13	.08	.09	.14
16	---	---	.19	e.15	e.15	.28	.35	.14	.14	.08	.09	7.9
17	---	---	.23	e.10	e.15	.20	.22	.15	.14	.07	.10	.13
18	---	---	.16	e.70	e.50	.20	.17	.14	.14	.07	.10	.12
19	---	---	.13	e.20	e.20	.22	.18	5.6	.14	.09	.10	.12
20	---	---	.14	e.15	e.15	.23	.22	.16	.14	.07	e.30	.11
21	---	---	.14	e.15	e.15	1.4	.19	.15	.20	.07	e.10	.57
22	---	---	.17	e.15	e.15	1.9	.20	.15	.17	.07	e.10	.11
23	---	---	.16	e.15	e.15	.20	.26	.28	.16	.07	e.10	.11
24	---	---	.17	e.50	e.15	.21	.18	e4.5	.16	.07	e.10	.11
25	---	---	.16	e.20	e.15	.21	.19	e1.0	.15	.07	e.09	.10
26	---	---	.13	e.15	e.15	.22	.20	e.20	.15	.07	e.25	.10
27	---	---	.13	e.15	e.15	.26	.21	.15	.14	.06	e.15	.10
28	---	---	.14	e.15	e.40	.33	.21	.16	.14	.07	e.10	.10
29	---	---	.31	e.15	---	.24	.15	.16	.17	.07	e.09	.10
30	---	---	.10	e.15	---	.27	.07	.16	.12	.07	e.08	.32
31	---	---	.10	e.15	---	.33	---	.16	---	.07	e.07	---
TOTAL	---	---	4.96	14.92	5.30	9.94	6.54	15.62	4.34	2.52	3.55	11.30
MEAN	---	---	.16	.48	.19	.32	.22	.50	.14	.081	.11	.38
MAX	---	---	.31	9.0	.50	1.9	.35	5.6	.20	.12	.30	7.9
MIN	---	---	.10	.10	.15	.15	.07	.07	.11	.06	.07	.06

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 1999, BY WATER YEAR (WY)

MEAN	---	---	.16	.48	.19	.32	.22	.50	.14	.081	.11	.38
MAX	---	---	.16	.48	.19	.32	.22	.50	.14	.081	.11	.38
(WY)	---	---	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	---	---	.16	.48	.19	.32	.22	.50	.14	.081	.11	.38
(WY)	---	---	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999

e Estimated

## 01302125 GABBLERS CREEK AT LITTLE NECK, NY (continued)





## SURFACE-WATER SITES ON LONG ISLAND

## 01302500 GLEN COVE CREEK AT GLEN COVE, NY

LOCATION.—Lat 40°51'48", long 73°38'05", Nassau County, Hydrologic Unit 02030201, on right bank just downstream from Glen Cove Road, at 8- by 10-foot concrete culvert in Pratt Park, one block west of post office, in Glen Cove.

DRAINAGE AREA.—About 11 mi<sup>2</sup>.

PERIOD OF RECORD.—October 1938 to current year. Prior to October 1967, published as Cedar Swamp Creek.

REVISED RECORDS (WATER YEARS).—WSP 971: 1939-42. WDR NY-86-2: 1960 (M).

GAGE.—Water-stage recorder and concrete control. Datum of gage is 15.68 ft above sea level. Prior to Oct. 31, 1977, at datum 0.15 ft higher. Prior to June 17, 1965, at datum 0.19 ft higher.

REMARKS.—No estimated daily discharges. Records good except those above 200 ft<sup>3</sup>/s, which are fair.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 728 ft<sup>3</sup>/s, Sept. 12, 1960, gage height, 7.12 ft, from rating curve extended above 110 ft<sup>3</sup>/s on basis of step backwater method; minimum, 2.1 ft<sup>3</sup>/s, Oct. 15, 1967; minimum gage height, 0.52 ft, Oct. 22, 1959, Oct. 15, 1967.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 508 ft<sup>3</sup>/s, Jan. 3, gage height, 5.57 ft, from rating curve extended above 110 ft<sup>3</sup>/s on basis of step-backwater method; minimum discharge, 3.4 ft<sup>3</sup>/s, Sept. 25-29, gage height, 0.73 ft; minimum gage height 0.70 ft July 28, 31, Aug. 1-3, 6, 7, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

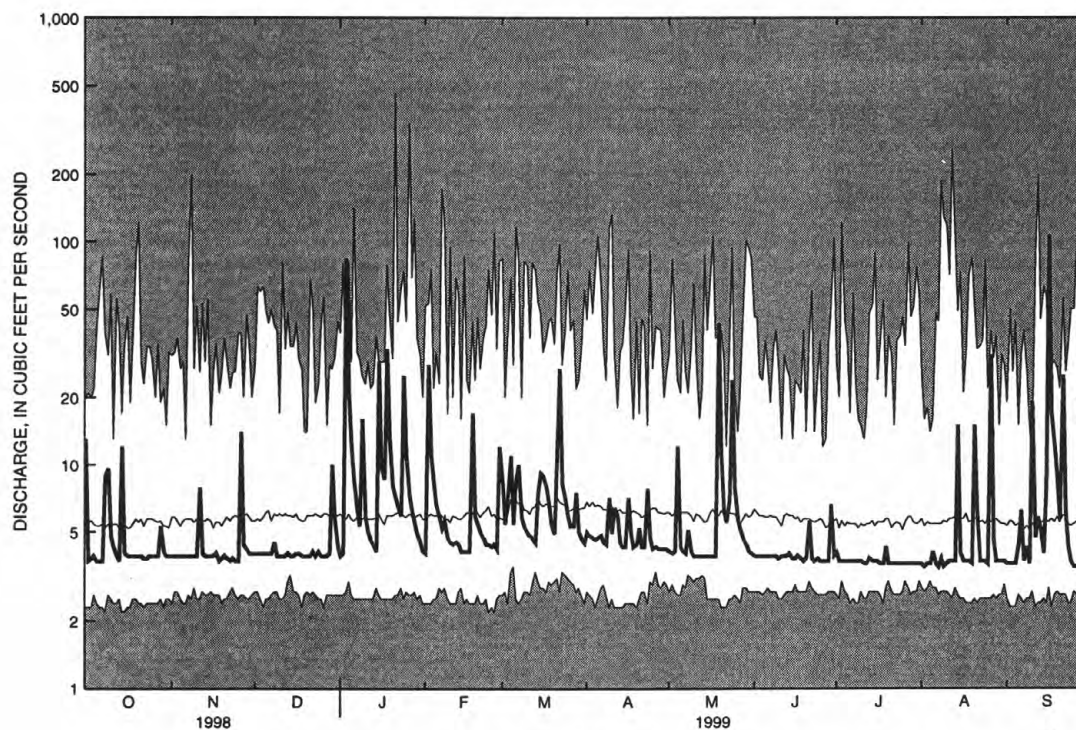
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	3.9	4.0	3.9	4.0	8.4	5.0	4.1	3.9	4.0	3.6	3.6
2	3.7	3.9	4.0	4.0	28	5.4	4.8	4.0	3.9	3.7	3.5	3.6
3	3.8	3.9	4.0	84	11	7.1	4.7	4.1	3.9	3.7	3.6	3.6
4	3.9	3.9	4.0	21	8.3	11	4.6	12	3.9	3.7	3.6	3.6
5	3.7	3.9	4.0	12	6.6	5.4	4.7	4.3	3.9	3.7	4.1	4.4
6	3.7	3.9	4.0	8.6	5.8	8.6	4.8	4.1	3.9	3.7	3.6	6.2
7	3.7	3.9	4.0	6.3	5.2	10	4.5	4.0	3.9	3.7	3.5	3.7
8	8.8	3.9	4.5	5.3	5.6	5.8	4.4	5.1	3.9	3.7	3.8	4.3
9	9.6	3.9	3.9	16	4.7	5.3	7.1	4.1	3.9	3.7	3.5	3.6
10	4.8	3.9	3.9	5.8	4.5	5.0	4.9	3.9	3.8	3.7	3.6	19
11	4.3	7.9	3.9	5.0	4.4	4.8	6.4	3.9	3.9	3.6	3.7	4.7
12	3.9	4.0	3.9	4.6	4.5	4.7	5.9	3.9	3.9	3.6	3.7	5.8
13	3.7	3.9	4.0	4.4	4.4	4.5	4.5	3.9	3.9	3.8	3.7	5.2
14	12	3.9	3.9	4.1	4.1	7.4	4.3	3.9	4.0	3.7	15	4.0
15	4.0	3.9	3.9	29	4.1	9.2	4.3	3.9	3.8	3.7	4.0	8.1
16	3.9	3.9	4.0	9.7	4.1	8.9	7.1	3.9	3.8	3.7	3.7	107
17	3.9	4.0	4.0	8.6	4.1	8.0	4.9	3.9	3.9	3.6	3.7	17
18	3.9	3.7	3.9	33	17	6.8	4.3	3.9	3.8	3.6	3.7	12
19	3.9	3.8	3.9	13	5.8	5.4	4.4	43	3.7	4.3	3.6	8.7
20	3.9	3.9	3.9	8.0	5.4	4.9	5.2	11	3.8	3.6	15	5.7
21	3.9	3.8	3.9	7.2	5.0	9.9	4.3	6.3	5.6	3.6	6.2	25
22	3.8	3.7	4.1	6.5	4.7	27	4.3	5.5	3.8	3.6	3.7	6.1
23	3.8	3.8	3.9	5.9	4.4	8.2	7.8	7.0	3.7	3.6	3.7	4.3
24	3.9	3.7	4.1	25	4.4	7.0	4.7	24	3.8	3.6	3.7	3.7
25	3.9	3.7	3.9	11	4.3	5.9	4.2	7.9	3.7	3.6	3.6	3.5
26	3.9	14	3.9	7.3	4.4	5.3	4.3	5.7	3.7	3.6	31	3.5
27	3.9	4.4	3.9	6.2	4.2	5.3	4.2	5.1	3.7	3.6	4.6	3.6
28	5.3	4.2	4.0	5.5	12	7.5	4.2	4.7	3.7	3.6	3.7	3.5
29	4.1	4.0	10	4.9	---	5.0	4.2	4.4	6.6	3.6	3.7	3.5
30	3.9	4.0	5.7	4.5	---	4.7	4.2	4.1	3.9	3.6	3.7	12
31	3.9	---	4.3	4.1	---	4.5	---	4.0	---	3.6	3.7	---
TOTAL	150.4	131.2	131.3	374.4	185.0	226.9	147.2	213.6	119.6	114.1	167.5	302.5
MEAN	4.85	4.37	4.24	12.1	6.61	7.32	4.91	6.89	3.99	3.68	5.40	10.1
MAX	13	14	10	84	28	27	7.8	43	6.6	4.3	31	107
MIN	3.7	3.7	3.9	3.9	4.0	4.5	4.2	3.9	3.7	3.6	3.5	3.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1999, BY WATER YEAR (WY)

MEAN	6.35	6.94	7.16	7.74	7.73	8.42	8.12	7.46	6.66	6.77	7.23	6.73
MAX	11.7	15.4	12.7	29.8	16.2	14.7	23.5	21.2	16.0	19.1	20.5	13.7
(WY)	1990	1978	1997	1979	1941	1980	1983	1989	1984	1984	1955	1975
MIN	3.18	3.23	3.48	3.27	3.48	4.32	3.90	3.87	3.07	3.14	3.25	2.84
(WY)	1966	1966	1966	1970	1967	1981	1966	1965	1971	1970	1965	1967

## 01302500 GLEN COVE CREEK AT GLEN COVE, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1939 - 1999	
ANNUAL TOTAL	2737.9		2263.7		7.27	
ANNUAL MEAN	7.50		6.20		4.22	
HIGHEST ANNUAL MEAN					12.8	
LOWEST ANNUAL MEAN					4.22	
HIGHEST DAILY MEAN	82	Mar 9	107	Sep 16	455	Jan 21 1979
LOWEST DAILY MEAN	3.7	Oct 2	3.5	Aug 2	2.2	Oct 8 1967
ANNUAL SEVEN-DAY MINIMUM	3.8	Nov 18	3.6	Jul 27	2.3	Oct 2 1967
10 PERCENT EXCEEDS	13		9.4		11	
50 PERCENT EXCEEDS	4.9		4.0		5.7	
90 PERCENT EXCEEDS	3.9		3.7		3.5	



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
 SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

## SURFACE-WATER SITES ON LONG ISLAND

## 01303000 MILL NECK CREEK AT MILL NECK, NY

LOCATION.—Lat 40°53'15", long 73°33'15", Nassau County, Hydrologic Unit 02030201, on right bank at Beaver Lake, 30 ft upstream from Feeks Lane (Cleft Road) bridge in Mill Neck, and 1.5 mi southwest of Bayville.

DRAINAGE AREA.—About 11.5 mi<sup>2</sup>.

PERIOD OF RECORD.—January 1937 to current year.

REVISED RECORDS.—WSP 1141: Drainage area.

GAGE.—Water-stage recorder and steel sheet-piling control. Datum of gage is 6.49 ft above sea level.

REMARKS.—No estimated daily discharges. Records good. Slight regulation by ponds above station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 137 ft<sup>3</sup>/s, Sept. 12, 1960, gage height, 1.60 ft; maximum gage height, 4.85 ft, Sept. 21, 1938, result of hurricane wave; minimum discharge, 0.09 ft<sup>3</sup>/s, Dec. 11, 1941, result of freeze up; minimum gage height, 0.14 ft, Sept. 8, 1939, result of wind action.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 32 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 3	1530	*105	*1.32	Sept. 16	1430	74	1.08
May 19	2030	40	0.75				

Minimum discharge, 4.3 ft<sup>3</sup>/s, July 8; gage height, 0.20 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

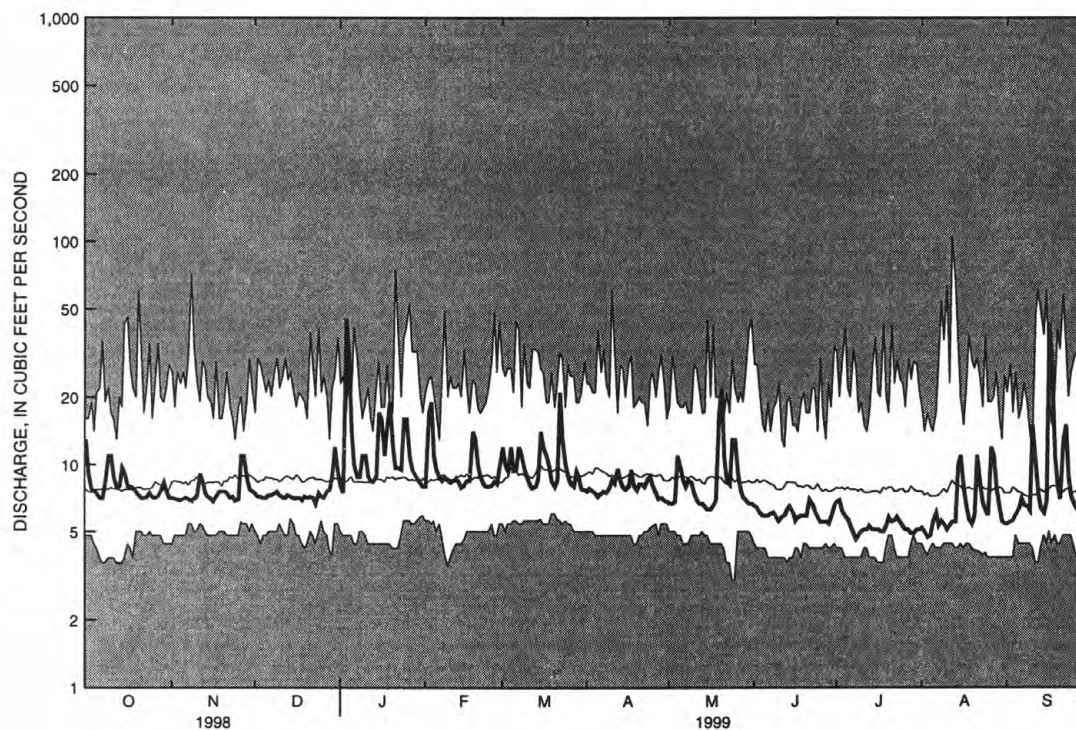
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	7.1	7.4	8.0	8.0	12	7.6	6.7	6.5	6.8	5.2	5.4
2	9.2	7.0	7.2	7.5	17	10	7.8	6.7	6.4	6.9	5.0	5.5
3	7.7	7.0	7.2	45	19	9.4	7.6	6.8	6.1	6.2	4.7	5.6
4	7.6	6.9	7.1	30	11	12	7.5	11	5.9	5.9	4.8	5.9
5	7.4	7.0	7.1	14	9.5	9.4	7.2	9.6	5.9	5.7	5.5	6.3
6	7.1	7.1	7.3	10	8.7	9.5	7.4	8.5	5.9	5.3	6.0	7.0
7	7.1	7.0	7.3	8.8	8.5	12	7.6	8.0	6.0	4.9	5.3	6.6
8	8.4	6.9	7.4	8.8	8.7	11	7.5	8.5	6.1	4.6	5.6	6.5
9	11	7.0	7.6	11	8.5	9.6	7.9	8.3	5.8	4.8	5.4	6.2
10	11	7.2	7.3	11	8.3	8.7	8.6	7.4	5.6	5.0	5.1	15
11	8.8	9.1	7.1	8.9	8.5	8.2	8.3	7.0	5.8	5.1	5.3	10
12	7.9	8.4	7.1	8.5	8.6	7.9	9.6	6.7	5.9	5.1	5.5	7.4
13	8.0	7.5	7.3	8.4	8.4	8.0	8.5	6.7	6.3	5.3	5.5	6.4
14	9.7	7.2	7.2	8.8	7.9	8.7	7.9	6.5	6.5	5.1	9.9	6.1
15	9.1	7.0	7.1	17	8.1	14	7.7	6.3	6.1	5.1	11	6.8
16	8.0	6.8	7.1	16	8.5	12	8.0	6.3	5.6	5.1	7.7	43
17	8.0	7.2	7.1	11	8.5	11	9.5	6.5	5.8	5.0	6.5	29
18	7.9	7.6	6.9	15	14	10	8.1	6.8	5.9	5.0	5.7	11
19	7.6	7.6	7.2	19	13	8.5	7.7	17	5.9	5.3	5.4	8.1
20	7.3	7.6	7.1	12	10	8.0	8.2	22	5.9	5.8	5.9	7.0
21	7.1	7.5	7.2	9.7	8.8	8.5	8.2	11	7.0	5.5	11	13
22	7.1	7.1	7.1	9.7	8.2	21	8.0	8.6	6.7	5.6	8.1	15
23	7.2	7.2	6.7	9.5	8.0	13	8.6	8.2	6.2	5.8	6.7	8.8
24	7.5	6.9	7.5	16	8.0	10	8.8	13	5.8	5.5	6.2	7.2
25	7.2	7.0	7.2	16	8.1	8.9	8.0	13	5.5	5.3	5.9	6.6
26	7.1	11	7.1	11	8.4	8.2	7.4	9.0	5.5	5.1	12	6.3
27	7.2	11	7.6	9.6	8.2	8.0	7.0	7.7	5.5	5.1	11	6.3
28	7.6	8.7	7.7	9.1	9.8	9.3	7.1	7.1	5.4	4.9	7.9	6.3
29	8.3	7.8	9.0	8.7	---	8.7	6.9	6.9	5.8	4.9	6.4	6.3
30	7.6	7.6	12	8.3	---	7.8	6.8	6.7	6.5	5.1	5.5	9.1
31	7.1	---	9.2	8.0	---	7.7	---	6.7	---	5.1	5.4	---
TOTAL	252.8	228.0	232.4	394.3	270.2	311.0	237.0	271.2	179.8	165.9	207.1	289.7
MEAN	8.15	7.60	7.50	12.7	9.65	10.0	7.90	8.75	5.99	5.35	6.68	9.66
MAX	13	11	12	45	19	21	9.6	22	7.0	6.9	12	43
MIN	7.1	6.8	6.7	7.5	7.9	7.7	6.8	6.3	5.4	4.6	4.7	5.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1999, BY WATER YEAR (WY)

	MEAN	8.28	9.11	9.20	9.22	9.31	9.91	9.65	9.17	8.46	8.33	8.49	8.31
MAX	12.9	12.3	14.5	16.4	13.4	13.8	14.9	13.9	14.1	17.9	15.7	13.3	
(WY)	1956	1978	1974	1979	1979	1953	1980	1984	1984	1984	1955	1960	
MIN	5.22	5.48	5.20	5.36	5.66	6.59	5.19	5.45	4.53	4.10	4.54	4.64	
(WY)	1966	1967	1967	1967	1968	1966	1966	1965	1966	1966	1966	1965	

## 01303000 MILL NECK CREEK AT MILL NECK, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1937 - 1999	
ANNUAL TOTAL	3310.5		3039.4		8.96	
ANNUAL MEAN	9.07		8.33		12.1	
HIGHEST ANNUAL MEAN					5.59	
LOWEST ANNUAL MEAN					105	
HIGHEST DAILY MEAN	37	Jan 24	45	Jan 3	Aug 12 1955	
LOWEST DAILY MEAN	6.3	Jan 4	4.6	Jul 8	May 24 1995	
ANNUAL SEVEN-DAY MINIMUM	6.6	Jul 24	5.0	Jul 6	Oct 7 1966	
10 PERCENT EXCEEDS	12		11		12	
50 PERCENT EXCEEDS	7.8		7.5		8.3	
90 PERCENT EXCEEDS	6.8		5.5		5.8	



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
 SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.



## 01303500 COLD SPRING BROOK AT COLD SPRING HARBOR, NY

LOCATION.—Lat 40°51'26", long 73°27'15", Nassau County, Hydrologic Unit 02030201, on left bank 270 ft upstream from State Highway 25A, at Cold Spring Harbor Fish Hatchery, and 1.0 mi southwest of village of Cold Spring Harbor.

DRAINAGE AREA.—About 7.3 mi<sup>2</sup>.

PERIOD OF RECORD.—July 1950 to current year.

REVISED RECORDS.—WDR NY-81-2: 1954 (M), 1962-63 (M), 1971 (M), 1978-79, 1980 (M).

GAGE.—Water-stage recorder and concrete control. Datum of gage is 5.38 ft above sea level.

REMARKS.—No estimated daily discharges. Records good except those above 100 ft<sup>3</sup>/s, which are poor. Flow occasionally regulated at outlet of pond 40 ft above station. Diversion from this pond by Cold Spring Harbor Fish Hatchery bypasses station, except during the 1979 water year.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 181 ft<sup>3</sup>/s, Jan. 21, 1979, gage height, 1.99 ft, result of regulation, from rating curve extended above 80 ft<sup>3</sup>/s; maximum gage height, 5.34 ft, Aug. 31, 1954, backwater from high tide, from high-water mark; minimum discharge, 0.20 ft<sup>3</sup>/s, part or all of each day Jan. 24-27, 1967, gage height, 0.07 ft.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 88 ft<sup>3</sup>/s, Jan. 3, gage height, 1.35 ft; maximum gage height, 2.30 ft, Jan. 3, backwater from high tide; minimum discharge, 0.39 ft<sup>3</sup>/s, Sept. 17-19; gage height, 0.10 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

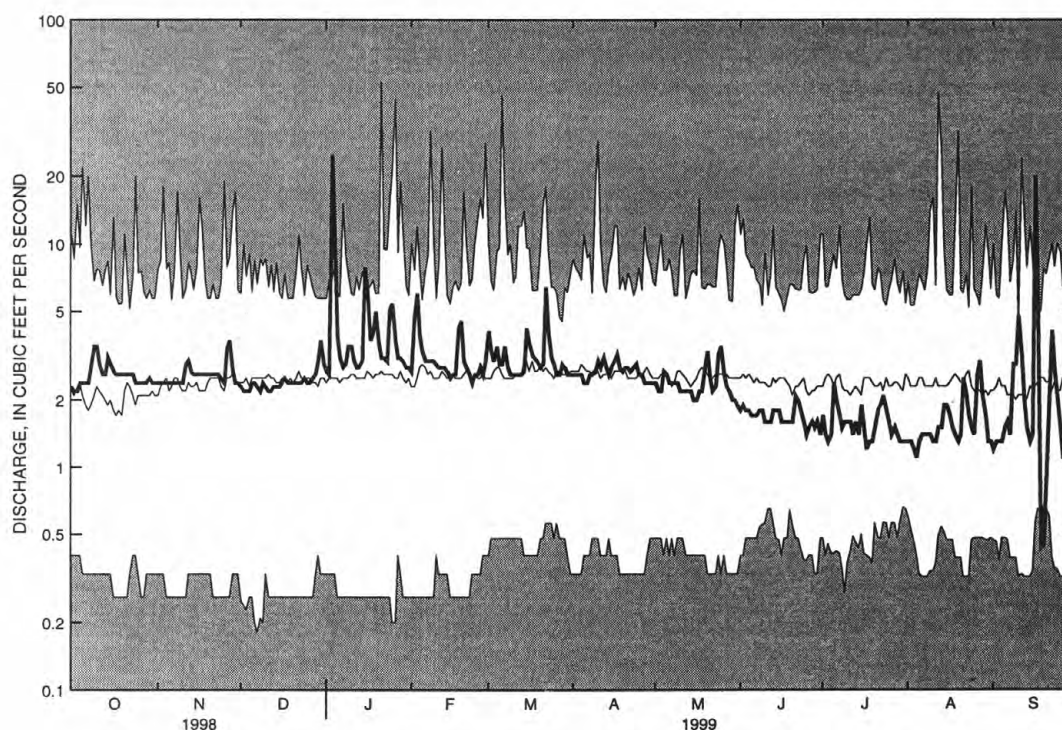
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.4	2.3	2.7	2.7	4.1	2.6	2.4	1.8	1.7	1.3	1.2
2	2.2	2.4	2.2	2.6	4.8	3.3	2.6	2.2	1.9	1.4	1.3	1.3
3	2.2	2.4	2.2	2.5	6.0	3.0	2.6	2.2	1.8	1.3	1.2	1.3
4	2.4	2.4	2.2	8.4	3.9	3.5	2.6	2.7	1.8	1.4	1.1	1.3
5	2.4	2.4	2.4	3.9	3.3	2.9	2.4	2.6	1.7	2.4	1.3	1.5
6	2.4	2.4	2.4	3.1	3.0	2.9	2.4	2.4	1.7	2.0	1.4	1.6
7	2.4	2.4	2.3	2.8	3.0	3.5	2.6	2.4	1.7	1.7	1.4	1.4
8	2.8	2.4	2.2	2.9	3.0	2.8	2.6	2.4	1.8	1.5	1.4	2.9
9	3.5	2.4	2.4	3.5	3.0	2.6	2.7	2.4	1.8	1.6	1.4	2.9
10	3.5	2.4	2.3	3.5	2.9	2.6	3.0	2.2	1.6	1.6	1.3	4.8
11	2.9	2.9	2.2	3.0	2.8	2.6	2.8	2.2	1.6	1.6	1.3	3.2
12	2.6	3.0	2.2	2.8	2.8	2.6	3.1	2.2	1.6	1.4	1.5	2.0
13	2.6	2.7	2.3	2.8	2.8	2.6	2.8	2.2	1.8	1.6	1.5	1.5
14	3.1	2.6	2.3	3.0	2.7	2.7	2.6	2.2	1.8	1.4	1.9	1.3
15	2.9	2.6	2.3	7.8	2.5	4.2	2.8	2.0	1.8	1.9	1.9	1.4
16	2.7	2.6	2.4	6.2	2.6	3.6	3.0	2.0	1.6	1.5	1.7	20
17	2.6	2.6	2.5	3.7	2.6	3.2	3.2	2.2	1.6	1.2	1.5	5.7
18	2.6	2.6	2.4	4.0	4.2	3.1	2.8	2.2	1.6	1.3	1.4	.43
19	2.6	2.6	2.4	5.0	4.5	3.0	2.7	2.8	1.6	1.3	1.3	.44
20	2.6	2.6	2.4	3.6	3.0	2.8	2.8	3.3	1.6	1.5	1.4	.76
21	2.6	2.6	2.4	3.1	2.8	2.9	2.8	2.5	2.1	1.8	2.5	1.8
22	2.6	2.6	2.4	3.1	2.6	6.4	2.7	2.2	2.0	1.9	2.1	4.1
23	2.6	2.6	2.4	3.0	2.4	4.1	2.8	2.3	1.8	2.1	1.7	2.7
24	2.4	2.5	2.5	5.1	2.6	3.1	2.9	3.2	1.6	1.8	1.5	2.1
25	2.4	2.4	2.4	5.4	2.6	2.9	2.6	3.5	1.4	1.6	1.4	1.5
26	2.4	3.4	2.4	3.7	2.8	2.6	2.6	2.6	1.5	1.4	2.6	1.1
27	2.4	3.7	2.5	3.1	2.6	2.6	2.4	2.3	1.6	1.5	3.0	1.1
28	2.4	2.7	2.6	3.1	3.0	2.9	2.4	2.2	1.5	1.4	2.1	1.1
29	2.5	2.4	3.0	3.0	---	2.8	2.4	2.0	1.6	1.3	1.7	1.3
30	2.4	2.4	3.7	2.8	---	2.6	2.4	2.0	1.4	1.3	1.3	2.0
31	2.4	---	2.9	2.8	---	2.6	---	1.9	---	1.3	1.3	---
TOTAL	80.4	78.1	75.5	138.5	87.5	97.1	80.7	73.9	50.7	48.7	49.7	75.73
MEAN	2.59	2.60	2.44	4.47	3.12	3.13	2.69	2.38	1.69	1.57	1.60	2.52
MAX	3.5	3.7	3.7	25	6.0	6.4	3.2	3.5	2.1	2.4	3.0	20
MIN	2.2	2.4	2.2	2.6	2.4	2.6	2.4	1.9	1.4	1.2	1.1	.43

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1999, BY WATER YEAR (WY)

MEAN	2.40	2.59	2.56	2.79	2.83	2.85	2.85	2.69	2.54	2.50	2.59	2.42
MAX	6.02	6.35	5.95	8.56	6.85	6.56	7.25	6.60	6.37	6.17	6.11	6.35
(WY)	1980	1980	1980	1979	1979	1979	1980	1979	1979	1979	1979	1979
MIN	.38	.30	.29	.27	.29	.46	.45	.41	.67	.63	.59	.63
(WY)	1966	1967	1967	1967	1967	1967	1966	1967	1967	1968	1988	1965

## 01303500 COLD SPRING BROOK AT COLD SPRING HARBOR, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1950 - 1999	
ANNUAL TOTAL	974.4		936.53		2.63	
ANNUAL MEAN	2.67		2.57		6.32	
HIGHEST ANNUAL MEAN					.51	
LOWEST ANNUAL MEAN					1979	
HIGHEST DAILY MEAN	15	Jan 24	25	Jan 3	53	Jan 21 1979
LOWEST DAILY MEAN	1.6	Aug 8	.43	Sep 18	.18	Dec 7 1983
ANNUAL SEVEN-DAY MINIMUM	1.7	Aug 8	1.3	Jul 29	.22	Dec 3 1983
10 PERCENT EXCEEDS	3.5		3.3		4.3	
50 PERCENT EXCEEDS	2.4		2.4		2.5	
90 PERCENT EXCEEDS	2.0		1.4		.86	



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
 SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

## 01304000 NISSEQUOGUE RIVER NEAR SMITHTOWN, NY

LOCATION.—Lat 40°50'58", long 73°13'29", Suffolk County, Hydrologic Unit 02030201, on left bank 0.5 mi downstream from New Mill Pond, 1.0 mi southwest of Smithtown, and 1.5 mi southwest of Village of Smithtown Branch.

DRAINAGE AREA.—About 27 mi<sup>2</sup>.

PERIOD OF RECORD.—October 1943 to current year.

REVISED RECORDS.—WSP1141: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 9.59 ft above sea level.

REMARKS.—No estimated daily discharges. Records excellent. Occasional regulation caused by cleaning of fish screens and trash racks at outlet of New Mill Pond on main stream and ponds on tributaries above station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 952 ft<sup>3</sup>/s, Jan. 22, 1979, gage height, 3.22 ft, result of dam failure; minimum, 16 ft<sup>3</sup>/s, June 5, 6, 1967; minimum gage height, 0.46 ft, Feb. 9, 1951.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 165 ft<sup>3</sup>/s, Jan. 3, gage height, 1.33 ft; minimum, 28 ft<sup>3</sup>/s, Aug. 4, 5, 10, gage height, 0.60 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

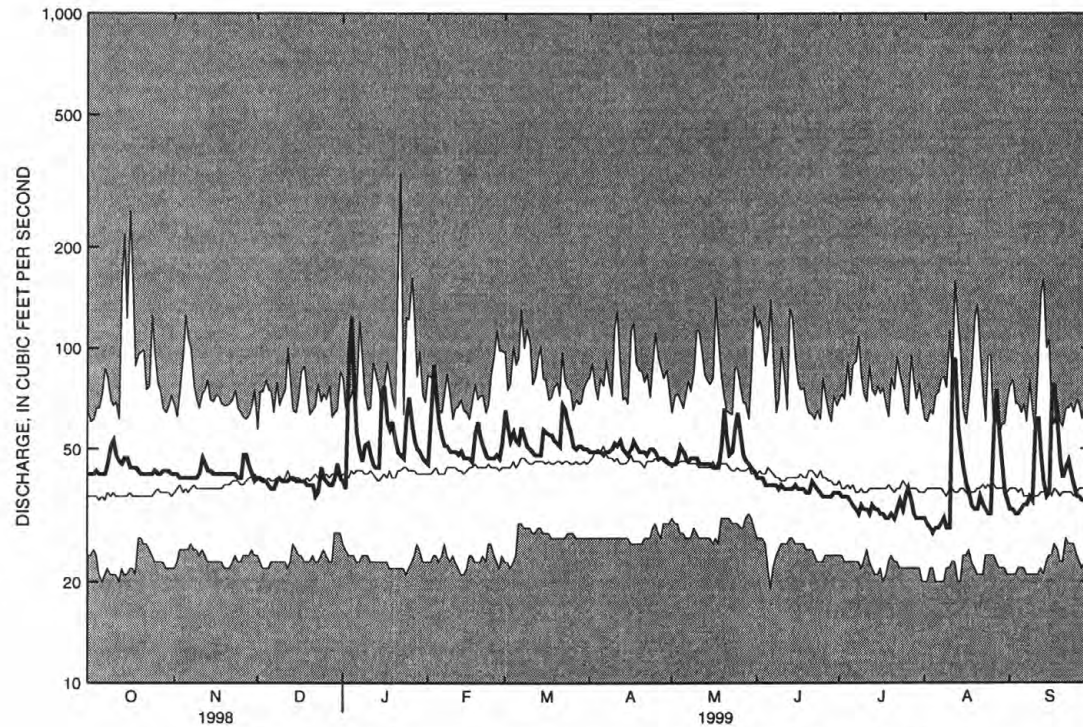
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	42	41	40	45	65	49	45	41	37	31	33
2	42	42	41	38	63	58	49	45	41	36	30	33
3	42	41	40	97	89	53	49	47	41	36	29	32
4	43	41	40	124	71	56	49	51	39	36	28	32
5	42	41	39	76	60	53	49	49	39	35	29	33
6	42	41	38	56	54	52	48	47	39	34	29	34
7	42	41	38	49	51	58	49	46	39	33	30	34
8	45	41	40	46	51	54	49	47	39	32	31	36
9	51	41	41	51	49	51	50	47	38	34	29	35
10	53	42	40	52	49	50	52	47	39	33	29	57
11	48	47	40	48	49	49	51	45	38	33	89	62
12	46	45	40	45	48	48	53	45	38	32	93	48
13	45	43	41	44	49	48	50	45	38	34	58	40
14	47	43	41	44	47	48	49	45	38	33	50	36
15	47	42	40	73	47	57	48	45	39	33	44	37
16	44	42	40	77	47	56	50	44	38	32	39	75
17	44	42	40	60	46	55	53	44	38	32	37	78
18	44	42	40	57	56	55	51	44	38	31	34	57
19	43	42	39	60	60	53	49	51	37	31	33	46
20	42	42	39	53	54	52	49	66	37	32	33	41
21	42	42	39	49	51	51	49	54	40	31	36	44
22	42	42	36	48	48	68	48	48	39	33	34	46
23	42	42	37	47	47	66	50	49	38	35	33	42
24	42	41	44	62	47	59	50	58	37	33	32	39
25	43	41	41	71	47	56	49	64	36	36	32	36
26	42	48	40	59	48	51	47	54	36	38	58	36
27	42	48	39	53	47	50	47	48	36	35	75	35
28	43	44	39	50	52	51	47	46	36	32	56	35
29	43	42	41	49	---	51	46	45	37	31	44	35
30	43	40	45	47	---	50	45	44	37	31	37	41
31	42	---	41	46	---	50	---	43	---	31	35	---
TOTAL	1360	1273	1240	1771	1472	1674	1474	1498	1146	1035	1277	1268
MEAN	43.9	42.4	40.0	57.1	52.6	54.0	49.1	48.3	38.2	33.4	41.2	42.3
MAX	53	48	45	124	89	68	53	66	41	38	93	78
MIN	42	40	36	38	45	48	45	43	36	31	28	32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1999, BY WATER YEAR (WY)

	MEAN	38.6	40.5	42.4	44.1	45.0	47.2	48.4	46.4	43.2	39.9	39.6	38.4
MAX	76.1	70.0	63.8	75.5	66.2	70.1	73.7	71.3	69.2	70.4	59.0	55.3	
(WY)	1991	1956	1991	1979	1979	1979	1983	1998	1984	1984	1984	1984	
MIN	23.5	24.3	24.0	23.3	23.4	29.2	27.3	30.8	25.6	22.4	22.1	24.2	

## 01304000 NISSEQUOGUE RIVER NEAR SMITHTOWN, NY (continued)

(WY)	1967	1967	1967	1967	1967	1966	1966	1966	1966	1966	1966	1966
SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR					FOR 1999 WATER YEAR			WATER YEARS 1944 - 1999			
ANNUAL TOTAL	19407					16488						
ANNUAL MEAN	53.2					45.2			42.8			
HIGHEST ANNUAL MEAN									58.9			
LOWEST ANNUAL MEAN									27.0			
HIGHEST DAILY MEAN	131					124			334			
LOWEST DAILY MEAN	36					28			19			
ANNUAL SEVEN-DAY MINIMUM	39					29			21			
10 PERCENT EXCEEDS	69					56			56			
50 PERCENT EXCEEDS	49					44			41			
90 PERCENT EXCEEDS	41					33			31			



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
 SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.



## SURFACE-WATER SITES ON LONG ISLAND

## 01304500 PECONIC RIVER AT RIVERHEAD, NY

LOCATION.—Lat 40°54'49", long 72°41'14", Suffolk County, Hydrologic Unit 02030202, on right bank 200 ft downstream from Long Island Power Authority dam, 0.4 mi west of Riverhead, and 1.2 mi upstream from outlet of Sweezy Pond.

DRAINAGE AREA.—About 75 mi<sup>2</sup>.

PERIOD OF RECORD.—June 1942 to current year.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 6.54 ft above sea level.

REMARKS.—No estimated daily discharges. Records good. Flow regulated by ponds above station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 225 ft<sup>3</sup>/s, Jan. 30, 1978, gage height, 1.20 ft, result of regulation; maximum gage height, 2.09 ft, Mar. 29, 1984, backwater from high tide; minimum discharge, 1.4 ft<sup>3</sup>/s, Jan. 9, 1966, Jan. 31, 1967, Dec. 6, 1969, Jan. 27, 1972, Dec. 10, 11, 1977, result of freezeup; minimum gage height, 0.10 ft, Jan. 31, 1967, Dec. 6, 1969, Jan. 27, 1972.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 77 ft<sup>3</sup>/s, Mar. 16, gage height, 0.68 ft; minimum, 14 ft<sup>3</sup>/s, Aug. 5, 6, gage height, 0.29 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

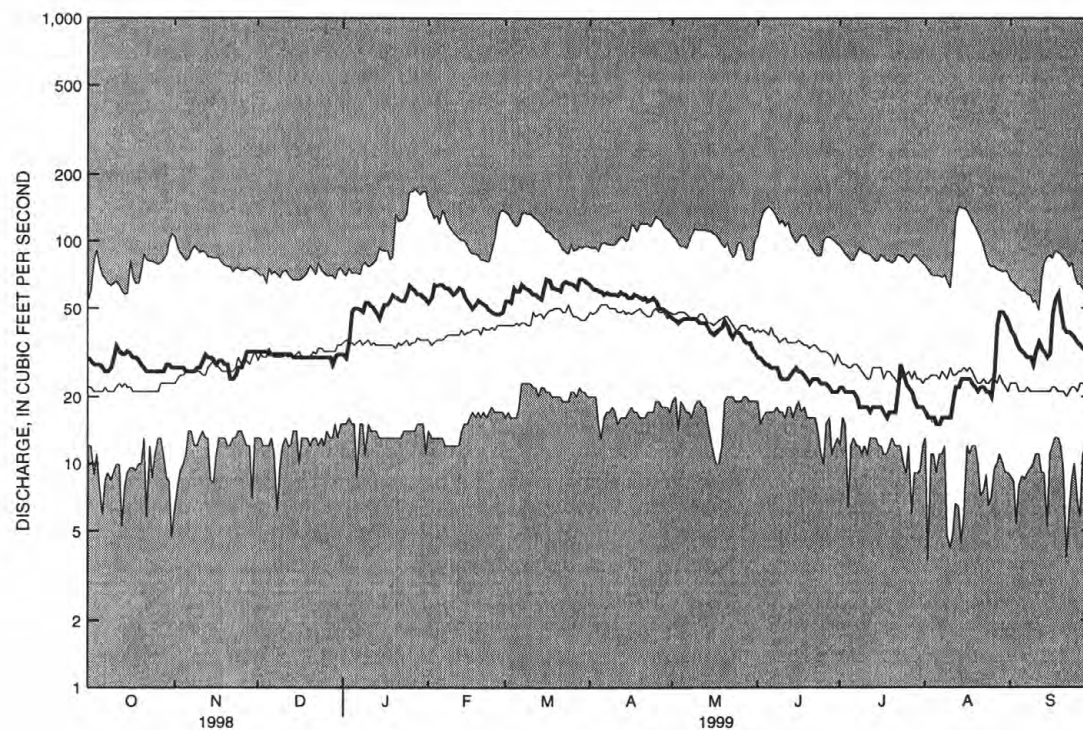
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	27	32	31	53	54	64	45	30	22	17	40
2	29	27	32	30	56	54	62	44	30	22	16	38
3	28	27	32	36	64	53	61	43	29	21	16	35
4	28	27	32	48	63	62	60	44	28	21	16	33
5	28	26	31	50	64	60	60	45	28	21	15	32
6	27	26	31	50	64	60	58	45	27	21	15	31
7	26	26	31	49	62	64	59	45	27	20	16	30
8	26	26	31	48	62	62	58	45	27	18	16	30
9	27	27	31	53	60	61	58	45	25	18	16	28
10	30	27	31	53	58	60	58	44	24	18	16	32
11	34	29	31	51	59	58	57	43	24	18	19	35
12	32	31	31	50	62	58	59	43	24	17	22	33
13	31	30	31	48	61	56	58	43	25	18	22	32
14	31	30	30	45	57	55	58	41	26	18	24	30
15	32	29	30	49	54	62	56	39	27	18	24	31
16	31	28	30	52	52	68	56	38	26	18	24	47
17	30	29	30	52	50	67	58	39	26	17	24	54
18	30	29	30	54	52	62	57	40	25	16	23	58
19	29	28	30	57	54	62	56	41	24	17	22	48
20	28	28	30	56	53	61	55	44	23	17	21	41
21	27	24	30	55	52	60	56	42	24	17	22	39
22	26	24	30	54	51	65	54	39	24	21	22	39
23	26	25	30	54	49	66	55	37	24	28	21	38
24	26	27	30	58	48	65	56	39	23	25	21	37
25	26	27	30	63	47	65	54	39	23	23	20	35
26	26	29	30	61	47	64	50	38	23	22	26	34
27	26	32	30	60	47	62	50	36	22	21	42	33
28	26	32	28	58	48	68	49	35	21	19	48	32
29	28	32	30	58	---	68	48	35	21	18	48	32
30	28	32	31	56	---	67	46	33	21	18	46	32
31	27	---	31	55	---	65	---	32	---	18	43	---
TOTAL	879	841	947	1594	1549	1914	1686	1261	751	606	743	1089
MEAN	28.4	28.0	30.5	51.4	55.3	61.7	56.2	40.7	25.0	19.5	24.0	36.3
MAX	34	32	32	63	64	68	64	45	30	28	48	58
MIN	26	24	28	30	47	53	46	32	21	16	15	28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1999, BY WATER YEAR (WY)

	MEAN	26.4	30.6	34.7	39.2	42.6	48.4	51.5	46.6	40.1	30.3	28.5	25.6
MAX	69.6	80.6	63.8	106	105	109	96.4	96.3	104	84.7	83.4	62.6	
(WY)	1990	1990	1984	1979	1979	1979	1984	1958	1984	1984	1989	1954	
MIN	12.5	13.3	13.2	14.7	16.4	22.8	17.1	18.7	17.1	13.5	10.8	11.1	
(WY)	1967	1967	1967	1966	1967	1966	1966	1966	1986	1966	1966	1966	

## 01304500 PECONIC RIVER AT RIVERHEAD, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1942 - 1999	
ANNUAL TOTAL	18810		13860		37.0	
ANNUAL MEAN	51.5		38.0		67.9	
HIGHEST ANNUAL MEAN					16.1	
LOWEST ANNUAL MEAN					1984	
HIGHEST DAILY MEAN	111	May 13	68	Mar 16	173	Jan 27 1979
LOWEST DAILY MEAN	24	Nov 21	15	Aug 5	3.7	Aug 2 1944
ANNUAL SEVEN-DAY MINIMUM	26	Oct 22	16	Aug 2	5.8	Aug 9 1966
10 PERCENT EXCEEDS	83		60		62	
50 PERCENT EXCEEDS	43		32		32	
90 PERCENT EXCEEDS	28		21		17	



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
 SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

## SURFACE-WATER SITES ON LONG ISLAND

## 01305000 CARMANS RIVER AT YAPHANK, NY

LOCATION.—Lat 40°49'09", long 72°54'04", Suffolk County, Hydrologic Unit 02030202, on left bank 50 ft upstream from Long Island Railroad Bridge, 0.6 mi northeast of Yaphank Station, and 0.7 mi southeast of Yaphank.

DRAINAGE AREA.—About 71 mi<sup>2</sup>.

PERIOD OF RECORD.—June 1942 to current year.

REVISED RECORDS.—WSP 1141: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 17.95 ft above sea level. Prior to Feb. 2, 1967, at datum 1.00 ft higher.

REMARKS.—No estimated daily discharges. Records good. Some regulation by two lakes above station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 143 ft<sup>3</sup>/s, Aug. 11, 1989, gage height, 2.09 ft; minimum, 2.8 ft<sup>3</sup>/s, Feb. 24, 1967, gage height, 0.73 ft.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 76 ft<sup>3</sup>/s, Jan. 3, gage height, 1.74 ft; minimum, 18 ft<sup>3</sup>/s, Aug. 2-4; minimum gage height, 1.14 ft, Aug. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

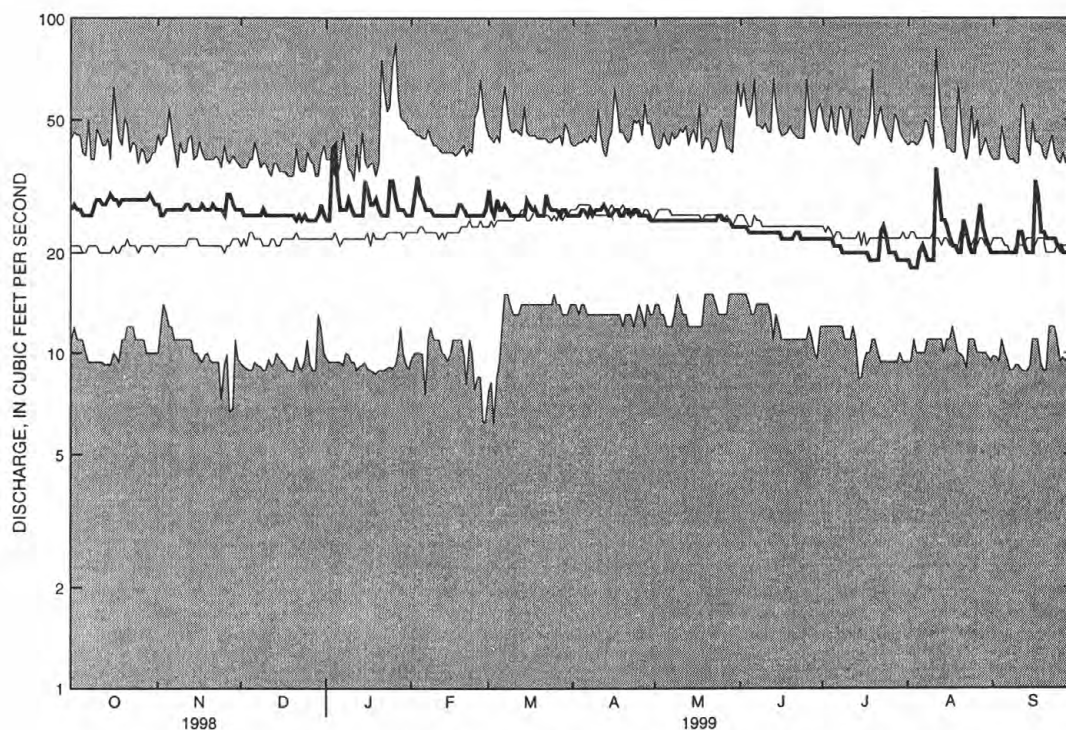
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	28	27	25	26	31	26	25	24	22	19	20
2	28	26	26	25	30	27	26	25	24	22	18	20
3	27	26	26	41	34	26	26	25	24	22	18	20
4	27	27	26	42	30	29	27	25	23	22	18	20
5	26	27	26	31	29	27	27	25	23	21	20	20
6	26	27	26	27	27	27	26	25	23	21	21	20
7	26	27	26	27	27	28	27	25	23	21	20	20
8	26	27	26	27	27	27	26	25	23	20	19	20
9	28	27	27	29	26	26	27	25	23	20	19	20
10	29	27	26	27	26	26	27	25	23	20	19	23
11	29	28	26	26	26	26	27	25	23	20	36	23
12	28	28	26	26	26	26	28	25	23	20	31	21
13	28	27	26	26	26	26	27	25	23	20	25	20
14	29	27	26	26	26	26	26	25	23	20	25	20
15	30	27	26	33	26	29	26	25	23	20	24	20
16	29	27	26	31	26	28	27	25	22	20	22	33
17	29	28	26	28	26	27	27	25	22	20	21	30
18	28	27	26	28	28	27	26	25	22	19	21	23
19	29	27	26	29	28	26	26	25	22	19	20	23
20	29	27	26	27	27	26	27	25	22	19	20	22
21	29	28	25	26	26	26	27	25	23	19	25	22
22	29	27	26	26	26	30	26	25	23	23	23	22
23	29	27	25	26	26	28	27	25	22	24	21	22
24	29	27	26	33	26	27	27	26	22	22	20	21
25	29	26	25	33	26	27	26	26	22	20	20	21
26	29	30	25	29	26	27	26	25	22	20	24	20
27	29	30	25	27	26	26	26	25	22	20	28	20
28	29	28	25	27	27	27	26	25	22	19	24	20
29	30	27	26	27	---	27	25	24	22	19	22	20
30	29	27	28	26	---	26	25	24	22	19	21	21
31	28	---	26	26	---	26	---	24	---	19	20	---
TOTAL	877	819	804	887	756	838	793	774	680	632	684	647
MEAN	28.3	27.3	25.9	28.6	27.0	27.0	26.4	25.0	22.7	20.4	22.1	21.6
MAX	30	30	28	42	34	31	28	26	24	24	36	33
MIN	26	26	25	25	26	26	25	24	22	19	18	20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1999, BY WATER YEAR (WY)

	21.8	22.2	22.7	23.6	24.6	26.0	27.0	26.4	25.2	23.5	23.1	22.0
MEAN	21.8	22.2	22.7	23.6	24.6	26.0	27.0	26.4	25.2	23.5	23.1	22.0
MAX	38.6	37.9	35.0	42.6	44.0	45.4	42.5	41.8	49.2	46.6	40.9	38.8
(WY)	1980	1956	1980	1979	1979	1979	1984	1984	1984	1984	1984	1984
MIN	10.9	10.6	9.48	9.35	9.74	13.7	13.1	14.1	12.8	10.5	10.5	10.6
(WY)	1967	1967	1967	1967	1967	1967	1966	1966	1995	1966	1966	1966

## 01305000 CARMANS RIVER AT YAPHANK, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1942 - 1999	
ANNUAL TOTAL	11400		9191		24.0	
ANNUAL MEAN	31.2		25.2		37.7	
HIGHEST ANNUAL MEAN					12.9	
LOWEST ANNUAL MEAN					84	
HIGHEST DAILY MEAN	67	Jun 13	42	Jan 4	84	Jan 26 1978
LOWEST DAILY MEAN	18	Jan 1	18	Aug 2	6.2	Feb 28 1967
ANNUAL SEVEN-DAY MINIMUM	19	Jan 1	19	Jul 29	7.4	Feb 25 1967
10 PERCENT EXCEEDS	38		29		34	
50 PERCENT EXCEEDS	32		26		23	
90 PERCENT EXCEEDS	25		20		16	



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
 SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.



## STREAMS ON LONG ISLAND

## 01305500 SWAN RIVER AT EAST PATCHOGUE, NY

LOCATION.—Lat 40°46'01", long 72°59'39", Suffolk County, Hydrologic Unit 02030202, on left bank 94 ft downstream from Montauk Highway in East Patchogue, 200 ft downstream from outlet of Swan Lake, and 1.2 mi upstream from mouth.

DRAINAGE AREA.—About 8.6 mi<sup>2</sup>.

PERIOD OF RECORD.—October 1946 to current year.

REVISED RECORDS.—WSP 1622: Drainage area. WDR NY-81-2: 1952-77 (M), 1978 1979-80 (M).

GAGE.—Water-stage recorder and concrete control. Datum of gage is 2.84 ft above sea level.

REMARKS.—No estimated daily discharges. Records fair. Flow regulated at outlet of Swan Lake.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 77 ft<sup>3</sup>/s, Aug. 24, 1990, gage height, 2.71 ft; minimum, 0.06 ft<sup>3</sup>/s, Sept. 2, 1964, gage height, 0.02 ft, result of regulation.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 54 ft<sup>3</sup>/s, Jan. 3, gage height, 2.02 ft; minimum, 2.3 ft<sup>3</sup>/s, Aug. 1, (result of regulation).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

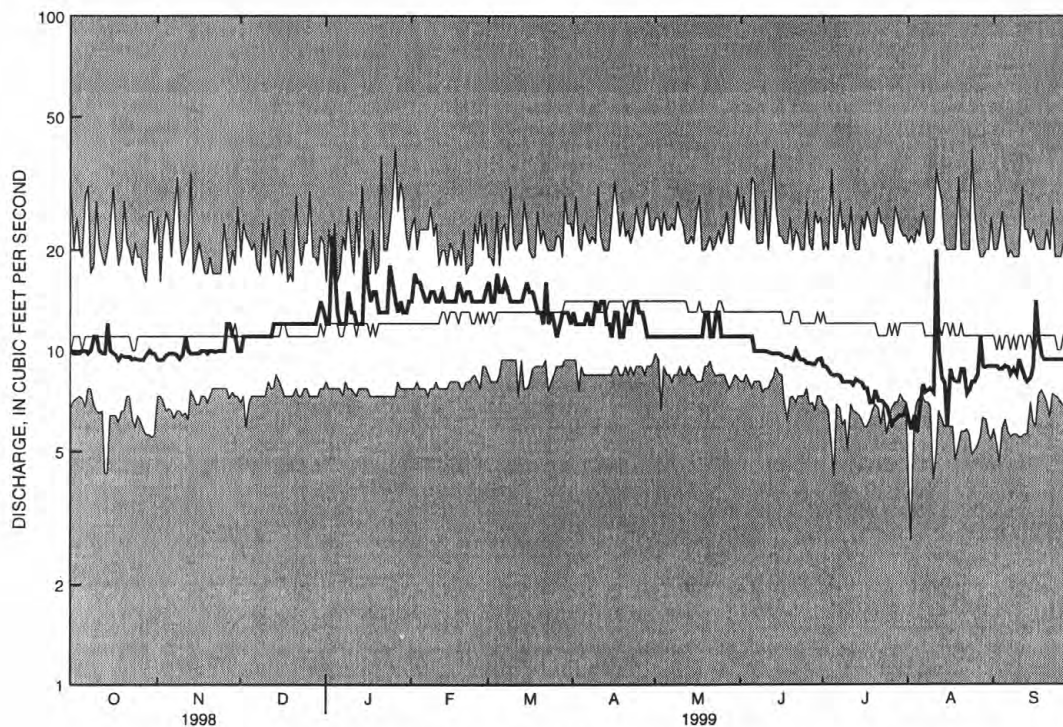
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	9.4	10	12	14	16	13	11	11	9.0	6.2	9.0
2	9.8	9.4	11	12	17	14	12	11	11	9.0	5.8	9.0
3	9.8	9.4	11	22	16	14	12	11	11	8.8	6.4	8.8
4	9.8	9.7	11	17	16	17	12	11	11	8.5	5.7	8.8
5	10	9.8	11	13	15	15	12	11	11	8.4	6.6	9.0
6	10	9.8	11	12	14	15	13	11	10	8.5	7.9	8.9
7	9.8	9.8	11	12	14	16	12	11	10	8.4	7.5	8.5
8	10	9.7	11	12	15	15	12	11	10	8.1	7.6	8.8
9	11	9.5	11	15	15	14	14	11	10	8.1	7.7	8.5
10	11	9.7	11	13	14	14	13	11	10	8.1	7.5	9.4
11	10	11	11	13	14	14	14	11	9.9	8.1	20	8.7
12	9.8	10	11	12	15	14	14	11	9.8	7.9	9.9	8.3
13	9.8	9.8	12	12	14	14	12	11	9.8	8.2	8.3	8.1
14	12	9.8	12	12	14	15	12	11	9.8	8.1	8.1	8.3
15	10	9.8	12	20	14	16	11	11	9.8	8.0	5.9	9.0
16	9.8	9.8	12	16	14	15	13	11	9.7	7.7	8.8	14
17	9.7	10	12	14	14	15	13	11	9.6	7.7	8.2	11
18	9.4	10	12	15	16	14	11	11	9.6	7.0	8.1	9.7
19	9.7	9.8	12	15	15	13	11	13	9.5	7.0	8.1	9.4
20	9.6	10	12	13	14	13	13	13	9.4	7.6	8.8	9.4
21	9.6	10	12	13	15	12	12	11	10	7.1	8.8	9.4
22	9.6	9.9	12	13	15	16	12	11	9.6	7.1	7.4	9.4
23	9.4	10	12	13	14	12	14	13	9.4	7.0	7.6	9.4
24	9.5	10	12	18	14	13	14	13	9.4	6.8	8.1	9.4
25	9.4	10	12	16	14	12	13	11	9.2	6.4	8.1	9.4
26	9.4	12	12	14	14	11	13	11	9.2	6.0	8.5	9.4
27	9.4	12	12	13	14	12	12	11	9.1	6.2	11	9.4
28	9.7	11	12	14	15	13	11	11	9.1	6.3	9.0	9.4
29	10	11	13	13	---	13	11	11	9.4	6.4	8.9	9.4
30	9.8	10	14	13	---	13	11	11	9.5	6.4	9.0	9.3
31	9.8	---	13	14	---	12	---	11	---	6.7	9.0	---
TOTAL	306.6	302.1	363	436	409	432	372	349	295.8	234.6	258.5	278.5
MEAN	9.89	10.1	11.7	14.1	14.6	13.9	12.4	11.3	9.86	7.57	8.34	9.28
MAX	12	12	14	22	17	17	14	13	11	9.0	20	14
MIN	9.4	9.4	10	12	14	11	11	11	9.1	6.0	5.7	8.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1999, BY WATER YEAR (WY)

	MEAN	11.2	11.3	11.6	12.2	12.7	13.4	14.1	13.8	13.2	12.1	11.7	11.1
MAX	17.3	17.8	16.4	18.6	18.3	19.6	21.7	21.5	21.6	20.7	20.1	19.7	
(WY)	1980	1956	1984	1979	1973	1984	1984	1984	1984	1979	1984	1984	
MIN	7.26	7.67	7.64	7.64	8.03	9.49	8.85	9.19	8.01	7.25	6.16	7.30	
(WY)	1989	1966	1967	1967	1967	1966	1966	1995	1981	1995	1995	1995	

## 01305500 SWAN RIVER AT EAST PATCHOGUE, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1947 - 1999	
ANNUAL TOTAL	5481.0		4037.1		12.4	
ANNUAL MEAN	15.0		11.1		18.5	
HIGHEST ANNUAL MEAN					8.59	
LOWEST ANNUAL MEAN					1984	
HIGHEST DAILY MEAN	40	Jun 13	22	Jan 3	40	Jan 26 1978
LOWEST DAILY MEAN	9.4	Jan 4	5.7	Aug 4	2.7	Aug 2 1997
ANNUAL SEVEN-DAY MINIMUM	9.5	Oct 21	6.2	Jul 29	5.5	Aug 18 1995
10 PERCENT EXCEEDS	21		14		16	
50 PERCENT EXCEEDS	14		11		12	
90 PERCENT EXCEEDS	9.8		8.1		8.9	



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
 SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

## 01306440 CONNETQUOT BROOK AT CENTRAL ISLIP, NY

LOCATION.—Lat 40°47'33", long 73°09'58", Suffolk County, Hydrologic Unit 02030202, 200 ft downstream from culvert on Veterans Memorial Highway, 2.0 mi northeast of Central Islip, and 3.8 mi upstream from gaging station 01306499.

AINAGE AREA.—About 12 mi<sup>2</sup>.

PERIOD OF RECORD.—Occasional low-flow measurements, water years 1968, 1971-78. May 1979 to current year.

AGE.—Water-stage recorder and Parshall flume. Datum of gage is 29.93 ft above sea level.

REMARKS.—No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 40 ft<sup>3</sup>/s, Aug. 4, 1979, gage height, 1.56 ft; minimum, 0.30 ft<sup>3</sup>/s, part or all of each day Sept. 3-17, 1995, gage height, 0.11 ft.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 24 ft<sup>3</sup>/s, Jan. 3, gage height, 1.20 ft; minimum, 1.8 ft<sup>3</sup>/s, Aug. 3, 4, 7, 9, 10, gage height, 0.24 ft

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

## DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	6.2	5.2	4.6	6.8	9.2	8.0	6.4	5.1	3.5	2.1	3.0
2	7.9	6.1	5.2	4.5	10	8.1	8.0	6.2	5.0	3.4	2.1	2.9
3	7.9	6.1	5.2	11	11	8.0	8.0	6.1	5.0	3.3	1.9	2.9
4	7.9	6.1	5.2	11	9.4	8.9	8.0	6.5	4.9	3.3	1.9	2.9
5	7.7	6.1	5.0	7.8	9.0	8.0	7.8	6.1	4.8	3.2	2.2	3.0
6	7.6	6.1	5.0	6.9	8.5	8.1	7.6	6.1	4.7	3.1	2.2	2.9
7	7.5	6.0	5.0	6.5	8.2	8.7	7.6	6.1	4.6	3.1	2.0	3.0
8	7.9	5.9	5.0	6.0	8.1	8.0	7.5	6.1	4.5	3.0	2.2	3.3
9	8.1	5.9	5.0	6.8	8.0	7.9	7.7	6.1	4.4	2.9	2.0	3.1
10	8.2	5.9	4.8	5.8	7.8	7.7	7.6	6.0	4.3	2.9	1.9	5.5
11	7.7	6.5	4.7	5.2	7.5	7.5	7.5	5.9	4.4	2.8	6.1	4.1
12	7.0	6.3	4.6	5.1	7.6	7.4	7.9	5.9	4.4	2.7	3.3	3.8
13	7.0	6.0	4.6	5.0	7.6	7.1	7.5	5.9	4.3	3.0	3.2	3.6
14	7.3	5.9	4.6	5.0	7.5	7.3	7.4	5.9	4.4	2.7	3.8	3.5
15	7.2	5.9	4.6	7.9	7.5	8.4	7.3	5.8	4.3	2.7	3.4	3.7
16	7.0	5.9	4.6	7.0	7.5	8.2	7.5	5.6	4.2	2.6	3.2	7.4
17	7.0	5.9	4.8	7.1	7.5	8.3	7.7	5.6	4.2	2.6	3.2	5.6
18	6.8	5.9	4.6	8.0	8.9	8.3	7.3	5.5	4.2	2.5	3.1	5.1
19	6.8	5.9	4.6	8.0	8.4	8.0	7.1	6.7	4.1	2.5	3.1	4.9
20	6.8	5.9	4.5	7.4	8.0	8.0	7.3	8.3	4.1	2.5	3.1	4.7
21	6.8	5.9	4.4	7.0	7.7	8.0	7.1	6.6	4.3	2.4	3.1	5.2
22	6.6	5.8	4.6	7.0	7.4	9.9	7.0	6.0	4.0	2.7	2.9	4.9
23	6.6	5.5	4.4	6.9	7.3	8.8	7.2	6.6	3.8	2.6	2.9	4.7
24	6.6	5.4	4.5	9.1	7.2	8.6	7.1	7.5	3.7	2.5	2.8	4.5
25	6.6	5.2	4.4	8.5	7.2	8.4	7.0	7.1	3.6	2.4	2.8	4.4
26	6.5	6.1	4.4	7.8	7.3	8.2	7.0	5.9	3.6	2.4	3.7	4.3
27	6.4	6.0	4.4	7.7	7.1	8.0	6.8	5.9	3.5	2.3	3.6	4.2
28	6.6	5.5	4.4	7.5	7.9	8.2	6.7	5.8	3.5	2.3	3.2	4.1
29	6.8	5.4	4.8	7.2	---	8.0	6.6	5.6	3.5	2.2	3.1	4.1
30	6.5	5.2	5.4	7.0	---	8.0	6.6	5.3	3.4	2.2	3.1	4.6
31	6.3	---	4.9	6.9	---	8.0	---	5.2	---	2.1	3.0	---
TOTAL	221.7	176.5	147.4	219.2	223.9	253.2	221.4	190.3	126.8	84.4	90.2	123.9
MEAN	7.15	5.88	4.75	7.07	8.00	8.17	7.38	6.14	4.23	2.72	2.91	4.13
MAX	8.2	6.5	5.4	11	11	9.9	8.0	8.3	5.1	3.5	6.1	7.4
MIN	6.3	5.2	4.4	4.5	6.8	7.1	6.6	5.2	3.4	2.1	1.9	2.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1999, BY WATER YEAR (WY)

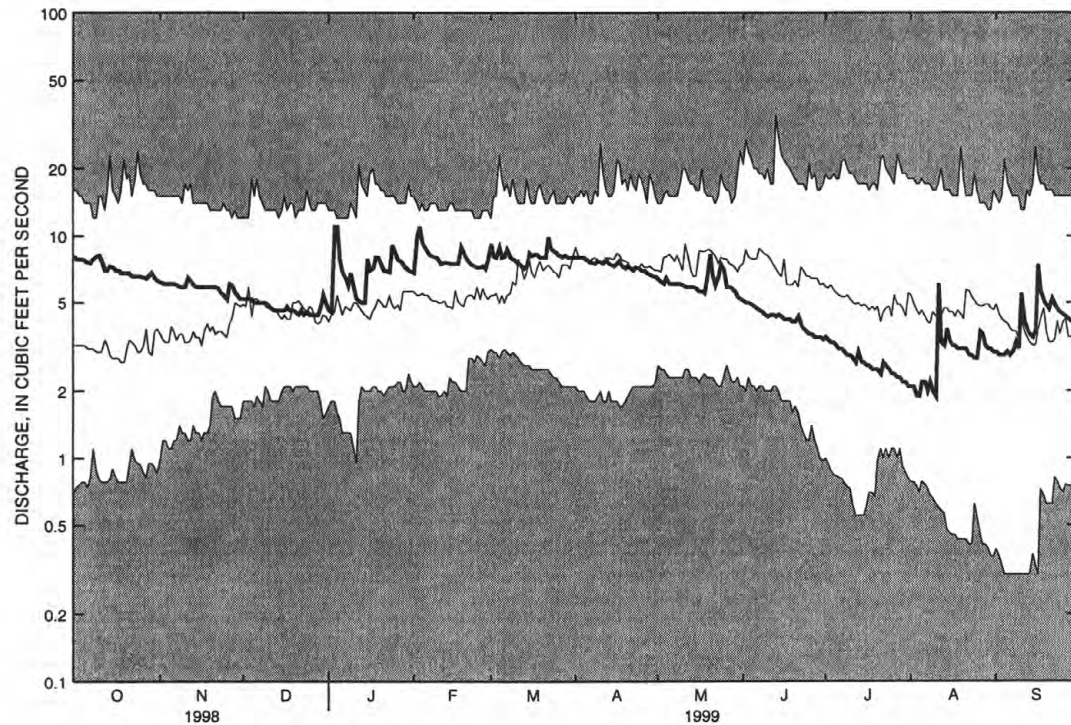
	5.15	5.37	5.97	5.87	6.17	7.09	8.24	7.98	7.78	5.96	5.58	5.12
MEAN	14.3	14.0	13.4	14.7	13.1	15.0	14.9	14.7	17.8	18.8	15.6	16.0
MAX	(WY)	1991	1991	1991	1991	1991	1991	1984	1984	1984	1984	1984
MIN	.93	1.69	1.98	2.16	2.53	2.67	1.95	2.33	1.99	.94	.62	.55
(WY)	1989	1982	1996	1989	1989	1995	1995	1995	1988	1988	1988	1995

# SURFACE-WATER SITES ON LONG ISLAND

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## 01306440 CONNETQUOT BROOK AT CENTRAL ISLIP, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1978 - 1999	
ANNUAL TOTAL	3401.2		2078.9		6.23	
ANNUAL MEAN	9.32		5.70		12.3	
HIGHEST ANNUAL MEAN					2.17	
LOWEST ANNUAL MEAN					35	
HIGHEST DAILY MEAN	35	Jun 13	11	Jan 3	35	Jun 13 1998
LOWEST DAILY MEAN	4.2	Jan 4	1.9	Aug 3	.30	Sep 4 1995
ANNUAL SEVEN-DAY MINIMUM	4.4	Dec 21	2.1	Aug 1	.30	Sep 4 1995
10 PERCENT EXCEEDS	15		8.0		12	
50 PERCENT EXCEEDS	8.7		5.9		5.3	
90 PERCENT EXCEEDS	5.0		2.9		2.1	



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.



## 01306460 CONNETQUOT BROOK NEAR CENTRAL ISLIP, NY

LOCATION.—Lat 40°46'19", long 73°09'33", Suffolk County, Hydrologic Unit 02030202, 200 ft upstream from bridge on dirt road in Connetquot River State Park Preserve, and 1.8 mi upstream from gaging station 01306499.

DRAINAGE AREA.—About 18 mi<sup>2</sup>.

PERIOD OF RECORD.—Occasional low-flow measurements, water years 1968, 1973-77. November 1977 to current year.

GAGE.—Water-stage recorder and wooden stoplog control. Datum of gage is 15.10 ft above sea level.

REMARKS.—Records good except those for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 155 ft<sup>3</sup>/s, June 13, 1998, gage height, 3.89 ft; minimum recorded, 11 ft<sup>3</sup>/s, part or all of each day Aug. 7-14, Sept. 29 to Oct. 2, 1988, Aug. 4-5, Aug. 21 to Sept. 17, 1995, but may have been less during period of estimated record, Aug. 15 to Sept. 29, 1988.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 93 ft<sup>3</sup>/s, Jan. 3, gage height, 3.32 ft; minimum, 12 ft<sup>3</sup>/s, Aug. 4, 5, 6, 7, 8, 10, 11, gage height, 2.35 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	21	19	20	22	31	25	22	20	16	13	14
2	21	21	20	20	33	27	25	21	20	16	13	14
3	20	21	20	47	42	25	24	20	20	16	13	14
4	20	21	20	e45	38	29	25	20	20	15	13	14
5	20	21	19	e30	32	27	24	20	20	15	13	14
6	20	21	19	e28	29	27	23	20	19	15	13	14
7	20	21	19	e27	27	28	23	20	19	15	13	14
8	21	21	19	e26	27	27	23	20	19	15	13	15
9	24	21	19	e25	26	26	23	20	19	14	13	14
10	23	21	19	e27	26	26	23	20	19	14	13	29
11	22	21	19	e25	25	26	23	20	19	15	33	23
12	22	21	19	e23	24	25	23	20	20	15	18	21
13	22	20	19	e21	25	24	24	20	20	15	16	19
14	23	20	19	e20	25	24	23	20	20	15	19	16
15	23	20	19	e30	24	25	22	20	20	15	16	16
16	21	20	19	e25	23	25	22	19	20	15	15	42
17	21	20	19	e25	23	27	23	19	20	15	15	35
18	21	20	19	e29	27	28	23	19	20	15	15	28
19	20	20	19	30	28	28	22	20	19	15	15	27
20	20	20	19	26	26	27	22	28	19	15	15	27
21	20	21	19	25	25	26	22	23	20	15	14	27
22	20	21	20	25	24	34	22	21	20	15	14	27
23	20	21	20	25	24	31	22	22	19	15	14	26
24	20	21	20	31	24	29	23	25	19	14	14	26
25	20	21	20	34	23	28	22	25	19	13	14	23
26	20	23	20	29	23	27	22	22	18	13	17	19
27	20	23	20	27	23	26	22	22	16	13	16	19
28	20	22	20	27	24	26	22	21	16	13	16	19
29	21	21	20	27	---	26	22	21	16	13	16	19
30	21	20	22	27	---	25	22	20	16	13	15	22
31	21	---	22	25	---	25	---	20	---	13	15	---
TOTAL	649	626	606	851	742	835	686	650	571	451	472	637
MEAN	20.9	20.9	19.5	27.5	26.5	26.9	22.9	21.0	19.0	14.5	15.2	21.2
MAX	24	23	22	47	42	34	25	28	20	16	33	42
MIN	20	20	19	20	22	24	22	19	16	13	13	14

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1999, BY WATER YEAR (WY)

MEAN	22.7	24.3	27.2	28.1	28.3	30.6	32.4	30.5	29.5	24.5	23.8	22.1
MAX	43.0	38.8	37.0	45.4	49.4	52.0	48.6	44.1	46.2	47.8	43.5	37.2
(WY)	1991	1990	1990	1979	1979	1979	1983	1979	1984	1984	1979	1984
MIN	13.0	17.1	17.9	17.8	17.4	15.5	15.5	15.7	15.1	13.5	11.5	12.3
(WY)	1989	1988	1996	1995	1995	1995	1995	1995	1995	1988	1988	1988

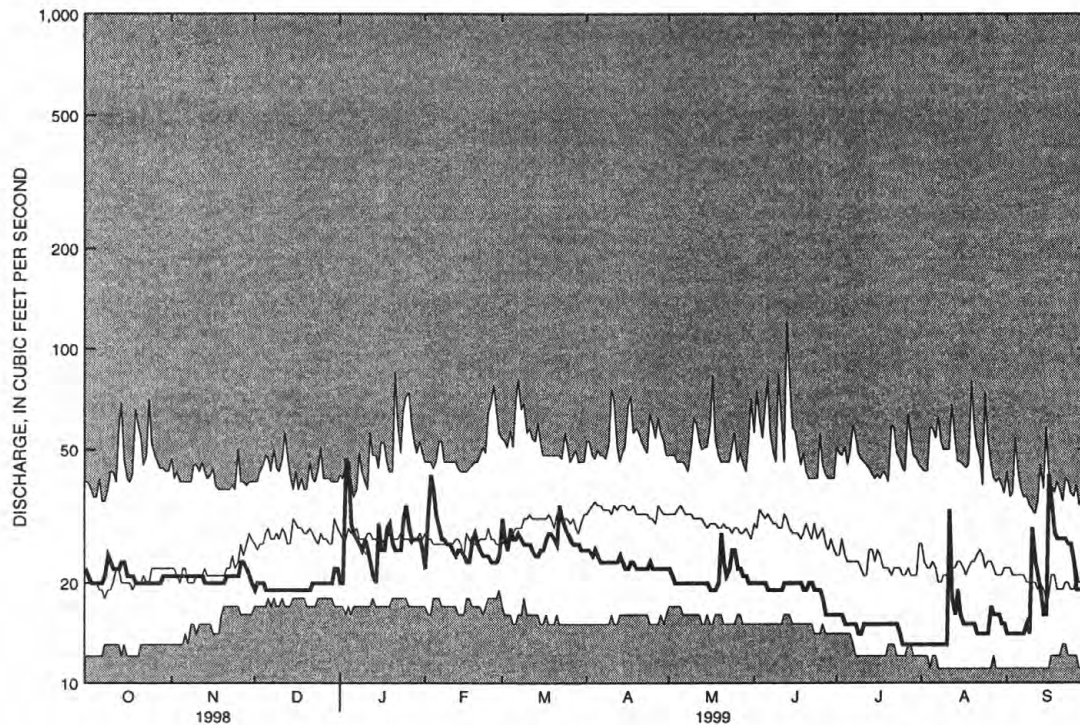
# SURFACE-WATER SITES ON LONG ISLAND

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## 01306460 CONNETQUOT BROOK NEAR CENTRAL ISLIP, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1978 - 1999	
ANNUAL TOTAL	11071		7776			
ANNUAL MEAN	30.3		21.3		26.7	
HIGHEST ANNUAL MEAN					39.8	
LOWEST ANNUAL MEAN					15.5	
HIGHEST DAILY MEAN	121	Jun 13	47	Jan 3	121	Jun 13 1998
LOWEST DAILY MEAN	19	Dec 1	13	Jul 25	11	Aug 7 1988
ANNUAL SEVEN-DAY MINIMUM	19	Dec 5	13	Jul 25	11	Aug 7 1988
10 PERCENT EXCEEDS	42		27		40	
50 PERCENT EXCEEDS	30		21		26	
90 PERCENT EXCEEDS	20		15		16	

e Estimated



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

## SURFACE-WATER SITES ON LONG ISLAND

## 01306500 CONNETQUOT RIVER NEAR OAKDALE, NY

LOCATION.—Lat 40°44'51", long 73°09'03", Suffolk County, Hydrologic Unit 02030202, on left bank just downstream from bridge on State Highway 27, 1.0 mi west of Oakdale.

DRAINAGE AREA.—About 24 mi<sup>2</sup>.

PERIOD OF RECORD.—October 1943 to current year (monthly means estimated October 1974 to September 1975).

REVISED RECORDS.—WSP 1141: Drainage area.

GAGE.—Base gage (01306499): Water-stage recorder and wooden stoplog control. Datum is 1.56 ft above sea level.

Supplementary gage (01306495): Water-stage recorder with concrete control on left bank of secondary channel 0.25 mi northeast of base gage at datum of 4.74 ft above sea level. Prior to Aug. 10, 1965, at datum 1.0 ft higher.

REMARKS.—Records fair except those for Oct., Nov., and estimated daily discharges, which are poor. Flow at both gages occasionally regulated by cleaning operations at outlets of ponds above stations. Discharge figures are those of combined flows in main and secondary channels.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 263 ft<sup>3</sup>/s, Oct. 16, 1955; minimum daily, 9.3 ft<sup>3</sup>/s, Nov. 25, 27, 1982, result of regulation.

EXTREMES FOR CURRENT YEAR.—Maximum daily discharge, 94 ft<sup>3</sup>/s, Feb. 3; minimum daily, 19 ft<sup>3</sup>/s, Aug. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e41	44	37	30	41	56	44	40	33	28	22	26
2	e32	49	31	29	58	48	43	39	36	28	21	24
3	e31	34	31	73	94	45	43	40	35	26	21	25
4	e31	39	34	91	63	59	43	41	34	26	21	24
5	e31	38	32	51	58	47	42	41	34	26	22	26
6	e31	38	34	45	53	46	41	40	33	25	22	25
7	e31	37	35	42	51	50	42	40	33	24	20	26
8	e34	34	33	40	50	46	41	40	33	23	21	28
9	e38	35	32	45	48	45	42	40	33	23	20	28
10	e39	36	e32	44	46	44	43	39	34	24	19	45
11	e39	45	e30	40	46	44	42	38	32	21	41	42
12	e37	e45	e30	38	46	44	45	38	32	22	36	32
13	e35	e34	e30	38	46	44	42	37	32	25	28	30
14	e38	e34	e30	38	44	44	41	37	32	24	36	30
15	e38	38	e28	66	44	55	40	36	32	22	31	31
16	e35	36	27	59	44	49	42	36	30	23	28	78
17	e34	36	30	47	43	48	44	36	30	22	28	63
18	e34	36	31	48	51	50	42	36	30	22	27	41
19	e34	34	30	51	51	48	40	36	29	25	26	37
20	e33	36	29	44	46	46	41	47	29	29	27	37
21	e32	37	30	43	44	44	41	40	31	26	31	39
22	e32	30	34	43	42	61	39	38	30	26	28	40
23	e32	34	29	43	42	51	41	40	29	26	27	37
24	e32	32	30	56	42	49	41	46	29	26	26	36
25	e32	31	30	60	42	47	40	46	28	25	26	35
26	e32	45	29	48	43	45	40	41	e29	26	33	35
27	e32	39	30	46	41	44	40	39	e28	25	36	35
28	34	33	30	45	45	47	40	37	e29	24	31	35
29	38	35	33	45	---	44	40	36	e29	23	29	35
30	34	37	36	43	---	44	40	25	e29	22	27	38
31	46	---	31	41	---	44	---	33	---	21	27	---
TOTAL	1072	1111	968	1472	1364	1478	1245	1198	937	758	838	1063
MEAN	34.6	37.0	31.2	47.5	48.7	47.7	41.5	38.6	31.2	24.5	27.0	35.4
MAX	46	49	37	91	94	61	45	47	36	29	41	78
MIN	31	30	27	29	41	44	39	25	28	21	19	24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1999, BY WATER YEAR (WY)

MEAN	33.7	36.1	38.1	39.4	40.6	43.7	44.4	42.5	40.2	35.8	34.6	33.0
MAX	65.2	67.4	55.2	65.1	62.3	70.3	69.7	68.7	70.4	64.3	52.1	48.6
(WY)	1956	1956	1991	1979	1979	1979	1980	1998	1998	1984	1984	1984
MIN	22.0	17.3	21.8	24.0	23.8	29.4	25.8	28.2	25.6	20.0	19.5	21.2
(WY)	1967	1983	1967	1967	1967	1966	1966	1966	1988	1966	1966	1986

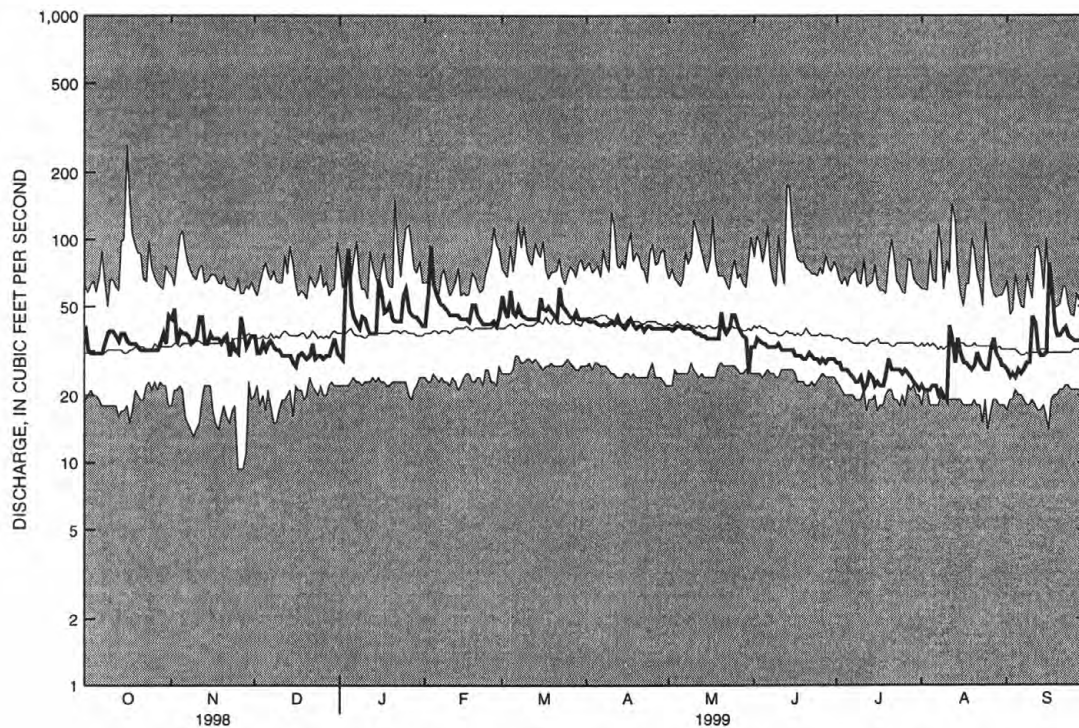
# SURFACE-WATER SITES ON LONG ISLAND

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## 01306500 CONNETQUOT RIVER NEAR OAKDALE, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1944 - 1999	
ANNUAL TOTAL	17257		13504			
ANNUAL MEAN	47.3		37.0		38.5	
HIGHEST ANNUAL MEAN					52.5	
LOWEST ANNUAL MEAN					24.9	
HIGHEST DAILY MEAN	174	Jun 13	94	Feb 3	263	Oct 16 1955
LOWEST DAILY MEAN	25	Jan 3	19	Aug 10	9.3	Nov 25 1982
ANNUAL SEVEN-DAY MINIMUM	26	Jan 1	21	Aug 4	13	Nov 22 1982
10 PERCENT EXCEEDS	68		47		52	
50 PERCENT EXCEEDS	44		36		37	
90 PERCENT EXCEEDS	31		26		27	

e Estimated



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.



## SURFACE-WATER SITES ON LONG ISLAND

## 01308000 SAMPAWAMS CREEK AT BABYLON, NY

LOCATION.—Lat 40°42'15", long 73°18'52", Suffolk County, Hydrologic Unit 02030202, on left bank at upstream side of John Street Bridge in Babylon, 180 ft downstream from Long Island Railroad, and 0.6 mi upstream from mouth.

DRAINAGE AREA.—About 23 mi<sup>2</sup>.

PERIOD OF RECORD.—October 1944 to current year (monthly means estimated December 1966 to November 1967).

REVISED RECORDS.—WSP 1141: Drainage area. WSP 1702: 1955 (M), 1956 (M). WRD NY 1974: 1970 (P).

GAGE.—Water-stage recorder and concrete control. Datum of gage is 6.36 ft above sea level. October 1944 to December 1966, water-stage recorder at site 100 ft east at datum 0.34 ft higher.

REMARKS.—No estimated daily discharges. Records fair. Flow regulated slightly by pumping operations at railroad and occasionally by ponds above station. Indeterminate effect caused by ground-water pumpage for water-supply purposes at Smith Street substation 0.2 mi northwest of gage. Prior to November 1950, slight diurnal fluctuation caused by power operations.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 254 ft<sup>3</sup>/s, June 13, 1998, gage height, 3.73 ft, from rating curve extended above 110 ft<sup>3</sup>/s; minimum, 1.1 ft<sup>3</sup>/s, Sept. 10, 1995, gage height, 0.26 ft, result of regulation; minimum gage height, 0.13 ft, June 28, 1963, datum then in use.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 88 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 3	1415	*165	*2.46	Sept. 8	0815	104	1.76
Jan. 15	1200	98	1.65	Sept. 10	1230	94	1.66

Minimum discharge, 1.5 ft<sup>3</sup>/s, Aug. 10, gage height, 0.26 ft; minimum gage height, 0.24 ft, Dec. 31, Jan. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

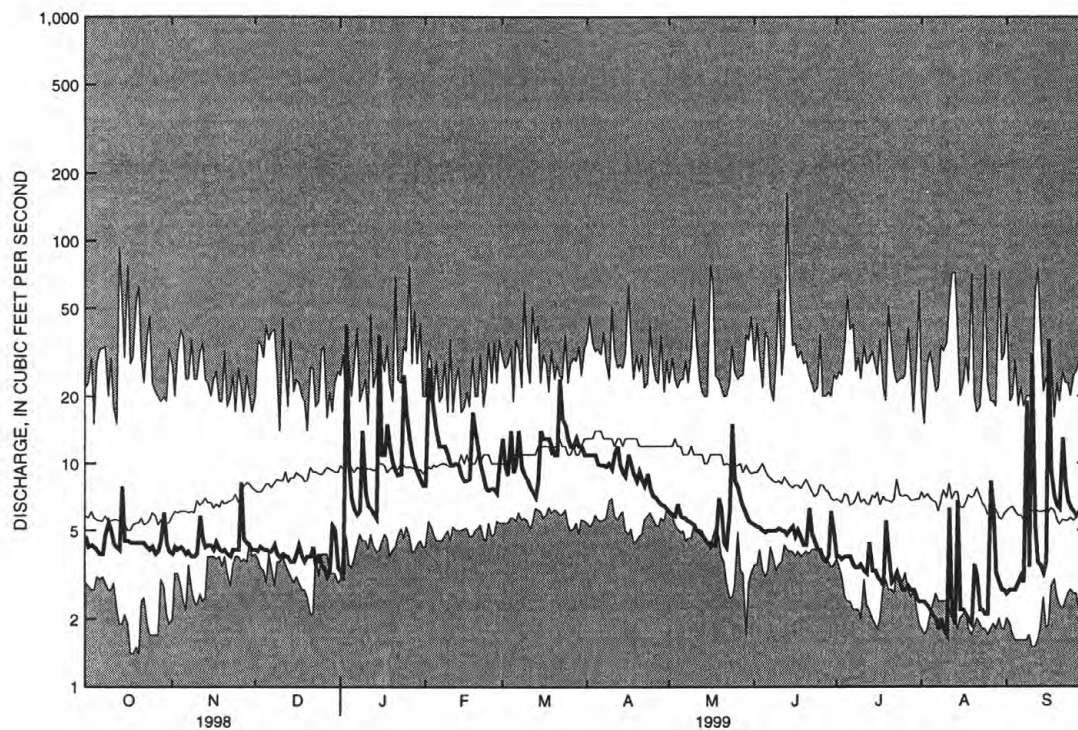
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	3.9	4.1	3.3	8.0	13	11	6.1	5.3	3.8	2.4	2.6
2	4.2	4.0	4.0	3.0	27	9.8	11	5.9	5.2	3.8	2.4	2.7
3	4.3	4.1	4.2	42	21	8.9	11	5.8	5.2	3.7	2.3	2.7
4	4.2	4.2	4.1	10	17	14	11	6.6	5.0	3.8	2.2	2.7
5	4.1	4.1	4.1	7.0	14	9.1	10	5.8	4.9	3.8	2.1	2.9
6	3.9	3.9	4.0	6.3	12	10	9.9	5.7	5.0	3.8	2.0	3.1
7	3.9	4.0	4.0	5.9	12	14	9.9	5.7	5.0	3.5	1.8	2.9
8	4.8	3.8	4.3	6.1	12	9.6	9.7	5.5	5.0	3.4	2.0	19
9	5.4	3.8	3.9	14	11	9.0	10	5.4	5.0	3.4	1.8	3.4
10	5.0	3.9	3.8	7.4	10	8.5	9.5	5.3	5.1	3.5	1.7	31
11	4.4	5.8	3.9	6.5	9.9	7.9	11	5.0	5.0	3.3	6.3	5.2
12	4.2	4.6	3.8	6.3	10	7.6	12	5.0	5.0	3.2	2.2	3.6
13	4.1	4.2	3.8	6.0	9.9	7.1	9.8	4.8	4.8	4.4	1.9	3.5
14	7.9	4.3	3.6	5.7	8.9	8.3	9.2	4.6	5.0	3.3	6.8	3.2
15	4.5	4.3	3.6	38	8.4	14	8.8	4.4	5.2	3.3	2.2	3.6
16	4.5	4.1	3.9	11	8.4	13	11	4.4	4.7	3.1	2.2	36
17	4.4	4.4	4.3	11	8.5	13	10	4.3	5.0	3.0	2.1	9.1
18	4.4	4.1	3.8	15	17	13	9.0	4.3	4.6	2.8	2.0	7.1
19	4.4	4.0	3.6	12	14	12	8.4	7.0	4.3	5.5	1.9	6.5
20	4.4	4.1	3.8	10	12	11	9.2	6.3	4.3	4.0	3.5	6.3
21	4.4	3.9	3.8	9.3	10	11	8.5	4.4	6.3	2.9	3.1	13
22	4.4	3.8	4.2	8.9	8.7	24	8.0	4.2	4.8	3.0	2.2	8.2
23	4.2	4.1	3.5	9.0	7.8	16	9.0	6.1	4.5	3.2	2.2	6.8
24	4.1	4.1	3.9	25	7.6	15	7.8	15	4.1	2.9	2.1	6.4
25	4.2	4.1	3.5	17	7.7	13	7.2	8.4	4.1	2.7	2.1	6.1
26	3.9	8.2	3.4	13	7.7	12	7.1	7.8	3.7	2.7	8.3	5.8
27	4.0	4.6	3.1	11	7.4	12	6.8	7.0	3.6	2.8	6.4	6.0
28	4.5	4.4	3.3	10	10	13	6.6	6.4	3.8	2.7	3.2	6.1
29	6.0	4.3	5.3	9.2	---	12	6.5	5.9	6.1	2.7	2.9	6.2
30	4.4	4.1	5.1	8.5	---	12	6.3	5.5	4.8	2.5	2.7	10
31	4.0	---	3.4	8.0	---	11	---	5.4	---	2.4	2.7	---
TOTAL	139.8	129.4	121.1	355.4	317.9	363.8	275.2	184.0	144.4	102.9	89.7	231.7
MEAN	4.51	4.31	3.91	11.5	11.4	11.7	9.17	5.94	4.81	3.32	2.89	7.72
MAX	7.9	8.2	5.3	42	27	24	12	15	6.3	5.5	8.3	36
MIN	3.9	3.8	3.1	3.0	7.4	7.1	6.3	4.2	3.6	2.4	1.7	2.6

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1999, BY WATER YEAR (WY)

	MEAN	7.12	8.01	9.23	10.1	10.8	12.3	13.3	11.6	10.0	8.49	7.84	7.20
MAX	22.5	19.9	14.8	19.6	16.6	20.1	23.7	20.7	24.3	21.9	20.5	16.3	
(WY)	1991	1956	1997	1978	1979	1958	1983	1989	1998	1999	1995	1986	
MIN	3.32	4.31	3.91	5.13	5.77	6.77	5.98	5.08	4.70	3.32	2.01	3.79	
(WY)	1998	1951	1999	1981	1947	1995	1966	1995	1986	1999	1995	1986	

## 01308000 SAMPAWAMS CREEK AT BABYLON, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1945 - 1999	
ANNUAL TOTAL	4221.8		2455.3		9.71	
ANNUAL MEAN	11.6		6.73		15.4	
HIGHEST ANNUAL MEAN					5.14	
LOWEST ANNUAL MEAN					164	
HIGHEST DAILY MEAN	164	Jun 13	42	Jan 3	164	Jun 13 1998
LOWEST DAILY MEAN	3.1	Dec 27	1.7	Aug 10	1.4	Oct 17 1995
ANNUAL SEVEN-DAY MINIMUM	3.6	Dec 22	1.9	Aug 4	1.6	Sep 5 1995
10 PERCENT EXCEEDS	19		12		16	
50 PERCENT EXCEEDS	9.5		5.0		8.5	
90 PERCENT EXCEEDS	4.1		2.9		4.5	



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
 SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

## SURFACE-WATER SITES ON LONG ISLAND

## 01308500 CARLLS RIVER AT BABYLON, NY

LOCATION.—Lat 40°42'31", long 73°19'44", Suffolk County, Hydrologic Unit 02030202, on left bank 130 ft downstream from outlet of Southards Pond in Babylon, and 0.9 mi upstream from mouth.

DRAINAGE AREA.—About 35 mi<sup>2</sup>.

PERIOD OF RECORD.—October 1944 to current year.

REVISED RECORDS.—WSP 1141: Drainage area. WRD NY 1972: 1947 (m), 1952 (m), 1954 (m), 1958 (m) 1960-63 (m).

GAGE.—Water-stage recorder and concrete control. Datum of gage is 10.63 ft above sea level.

REMARKS.—No estimated daily discharges. Records good. Occasional regulation at outlet of Southards Pond.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 336 ft<sup>3</sup>/s, June 13, 1998, gage height, 2.46 ft; minimum, 0.05 ft<sup>3</sup>/s, Sept. 4, 1963, July 6, 1965, Aug. 29, 1972, result of regulation; minimum gage height, 0.03 ft, July 8, 1966, Aug. 28, 1972, result of regulation.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 234 ft<sup>3</sup>/s, Jan. 3, gage height, 2.07 ft; minimum, 0.12 ft<sup>3</sup>/s, Dec. 30, gage height, 0.05 ft, result of freezeup.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	12	14	15	26	35	29	22	17	11	5.7	7.9
2	12	12	13	13	47	28	29	22	16	10	5.4	7.6
3	12	12	13	91	62	26	27	22	15	10	4.9	7.5
4	12	13	13	101	38	36	27	24	14	9.7	4.9	7.5
5	12	13	13	35	35	29	26	23	14	9.3	5.2	7.7
6	12	13	13	28	32	28	26	22	14	8.6	6.2	8.2
7	12	12	13	25	30	38	26	22	14	7.9	5.2	10
8	14	12	13	24	31	29	25	22	13	7.6	5.2	26
9	20	13	14	33	29	27	26	22	11	7.5	5.1	16
10	19	13	13	32	29	27	28	21	11	7.7	4.8	54
11	16	15	13	25	30	27	27	20	10	7.5	16	33
12	14	15	13	23	29	25	34	20	11	7.2	14	17
13	14	14	13	22	28	25	27	20	12	9.4	8.7	15
14	19	14	13	19	26	26	26	19	12	8.4	17	14
15	17	13	12	86	26	38	25	19	12	7.8	12	14
16	15	13	13	62	26	36	27	18	11	7.3	9.3	79
17	14	13	14	35	25	36	31	18	11	6.9	8.4	62
18	14	13	14	36	38	35	26	18	11	6.6	7.5	29
19	14	13	13	38	38	32	25	21	11	9.0	6.6	24
20	13	13	13	31	30	30	26	23	10	12	8.3	21
21	13	14	13	29	28	30	26	19	14	7.5	20	33
22	13	13	14	30	26	56	25	18	13	7.6	11	40
23	13	13	13	30	25	41	26	20	11	8.6	9.1	25
24	13	13	14	48	25	35	26	33	10	7.6	8.4	19
25	13	12	13	48	25	35	24	38	10	7.1	8.0	18
26	13	20	13	33	25	33	24	24	9.9	6.6	26	18
27	12	19	13	31	24	31	23	21	9.6	6.7	27	18
28	13	15	16	30	28	33	23	19	9.3	6.2	14	18
29	17	14	18	28	---	31	23	18	11	5.9	11	17
30	13	14	20	27	---	30	22	17	13	5.9	9.7	25
31	13	---	15	26	---	29	---	17	---	5.8	8.9	---
TOTAL	434	408	425	1134	861	997	785	662	360.8	246.9	313.5	691.4
MEAN	14.0	13.6	13.7	36.6	30.8	32.2	26.2	21.4	12.0	7.96	10.1	23.0
MAX	20	20	20	101	62	56	34	38	17	12	27	79
MIN	12	12	12	13	24	25	22	17	9.3	5.8	4.8	7.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1999, BY WATER YEAR (WY)

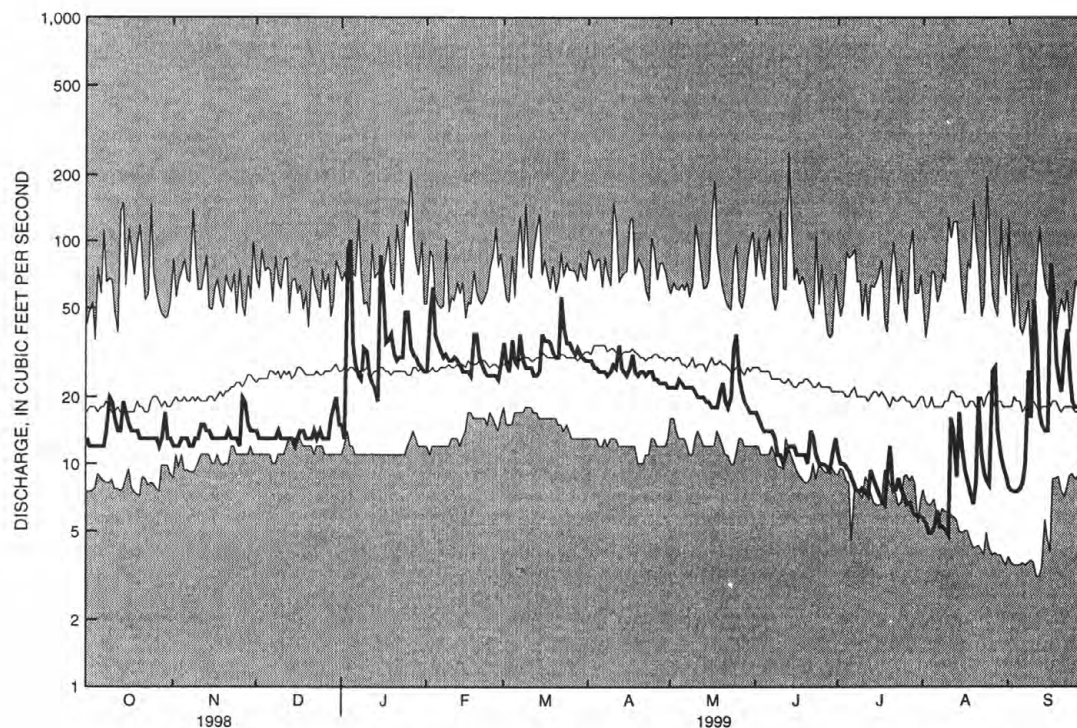
	MEAN	20.3	23.6	26.6	28.4	29.6	32.6	33.7	30.0	25.8	21.6	21.0	19.6
MAX	52.0	50.3	48.8	55.8	49.3	54.5	64.3	53.8	50.7	49.6	40.7	36.4	
(WY)	1991	1956	1978	1978	1979	1979	1983	1989	1989	1984	1990	1960	
MIN	10.5	11.3	12.3	13.6	15.1	16.9	13.2	13.7	11.2	7.96	5.22	8.30	
(WY)	1996	1966	1966	1966	1967	1995	1966	1995	1995	1999	1995	1995	

# SURFACE-WATER SITES ON LONG ISLAND

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## 01308500 CARLLS RIVER AT BABYLON, NY continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1945 - 1999	
ANNUAL TOTAL	10568		7318.6		26.0	
ANNUAL MEAN	29.0		20.1		39.9	
HIGHEST ANNUAL MEAN					13.1	
LOWEST ANNUAL MEAN					251	
HIGHEST DAILY MEAN	251	Jun 13	101	Jan 4	251	Jun 13 1998
LOWEST DAILY MEAN	12	Sep 1	4.8	Aug 10	3.1	Sep 11 1995
ANNUAL SEVEN-DAY MINIMUM	12	Sep 29	5.2	Aug 4	3.4	Sep 7 1995
10 PERCENT EXCEEDS	47		33		40	
50 PERCENT EXCEEDS	25		16		24	
90 PERCENT EXCEEDS	13		7.9		13	



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.



## 01309500 MASSAPEQUA CREEK AT MASSAPEQUA, NY

LOCATION.—Lat 40°41'20", long 73°27'19", Nassau County, Hydrologic Unit 02030202, on left bank 3,000 ft upstream from Clark Boulevard Bridge in Massapequa, and 350 ft west of Lake Shore Drive at Garfield Street in Massapequa Park.

DRAINAGE AREA.—About 38 mi<sup>2</sup>.

PERIOD OF RECORD.—June to October 1903, December 1936 to current year (monthly means estimated December 1959 to February 1961). Published as Massatayun Creek at Massapequa, December 1936 to September 1941.

REVISED RECORDS.—WSP 1141: Drainage area. WRD NY 1970: 1966-69 (M).

GAGE.—Water-stage recorder and concrete control. Datum of gage is 18.31 ft above sea level. Prior to October 1903, non-recording gage at different datum. December 1936 to March 1961, at datum 1.0 ft higher

REMARKS.—No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 510 ft<sup>3</sup>/s, July 29, 1980, gage height, 2.40 ft, from rating curve extended above 250 ft<sup>3</sup>/s; minimum, 0.32 ft<sup>3</sup>/s, part or all of each day Aug. 29 to Sept. 3, 8, 10-14, 1995, gage height, 0.56 ft; minimum gage height, 0.32 ft, Aug. 1, 1954, datum then in use.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 110 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 3	1715	*258	*1.93	Jan. 15	1400	120	1.54

Minimum discharge, 0.66 ft<sup>3</sup>/s, part or all of each day Dec. 30, Aug. 6-11, 23-26; minimum gage height, 0.58 ft, Dec. 30, Aug. 6-11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.1	1.5	1.3	4.5	8.3	6.2	3.7	2.1	1.7	.83	.97
2	1.5	1.7	1.5	1.3	18	5.7	5.8	3.7	2.0	1.7	.83	.95
3	1.5	1.7	1.5	76	9.5	5.4	5.8	3.7	2.0	1.6	.83	.97
4	1.5	1.7	1.5	14	8.0	8.7	5.8	4.7	2.0	1.5	.83	1.0
5	1.5	1.7	1.5	6.0	6.9	5.4	5.7	3.9	1.9	1.5	.83	1.3
6	1.4	1.9	1.5	4.6	6.3	6.2	5.4	3.7	1.9	1.5	.85	1.3
7	1.3	2.0	1.5	3.9	5.9	10	5.4	3.7	1.9	1.5	.71	1.2
8	2.0	2.0	1.6	3.7	5.8	5.9	5.3	3.7	1.7	1.4	.78	5.4
9	2.8	2.0	2.0	9.7	5.8	5.4	5.8	3.7	1.7	1.4	.74	1.5
10	2.5	2.0	1.8	5.1	5.6	5.4	5.6	3.7	1.7	1.5	.66	9.5
11	1.7	2.4	1.7	3.7	5.4	4.9	6.7	3.6	1.7	1.4	2.1	2.1
12	1.5	1.8	1.7	3.4	5.4	4.9	8.2	3.3	1.7	1.3	.95	1.6
13	1.5	1.7	1.7	3.3	5.4	4.9	5.7	3.3	1.7	1.5	.83	1.5
14	2.5	1.7	1.7	3.3	5.4	5.6	4.9	3.3	1.7	1.3	2.7	1.5
15	1.8	1.7	1.7	38	5.4	9.0	4.9	3.3	1.7	1.3	1.2	1.9
16	1.5	1.6	1.7	8.5	5.4	8.1	5.6	3.3	1.6	1.2	.98	35
17	1.2	1.5	1.9	6.1	5.4	8.5	5.8	3.3	1.5	1.2	1.1	5.6
18	1.1	1.5	1.9	10	16	7.8	4.7	3.3	1.5	1.2	.96	3.1
19	1.2	1.5	1.7	7.8	7.5	6.7	4.5	4.2	1.5	2.2	.77	2.5
20	1.3	1.5	1.7	5.9	6.0	6.3	4.8	4.3	1.5	1.7	1.6	2.3
21	1.5	1.7	1.7	5.4	5.5	6.3	4.6	3.5	2.3	1.3	1.7	6.2
22	1.5	1.7	1.8	5.4	5.1	18	4.5	3.3	1.6	1.4	.83	3.7
23	1.5	1.7	1.7	4.8	4.9	8.1	5.2	4.3	1.5	1.1	.74	2.2
24	1.5	1.7	1.7	21	4.9	10	4.9	16	1.5	1.1	.66	2.0
25	1.6	1.7	1.6	9.0	4.9	7.7	4.4	5.0	1.5	1.1	.66	1.9
26	1.7	3.6	1.5	6.8	4.9	7.0	4.3	3.1	1.5	.98	2.4	1.7
27	1.9	2.1	1.5	6.0	4.9	6.8	4.1	2.7	1.5	.89	2.2	1.7
28	2.1	1.7	1.5	5.4	7.2	7.4	4.0	2.4	1.5	.83	1.1	1.7
29	2.7	1.7	2.1	5.0	---	6.7	4.0	2.3	2.4	.88	1.0	1.7
30	2.3	1.6	2.0	4.9	---	6.5	3.8	2.3	1.9	.83	.96	3.6
31	2.3	---	1.4	4.5	---	6.1	---	2.3	---	.83	.96	---
TOTAL	53.5	54.9	51.8	293.8	185.9	223.7	156.4	120.6	52.2	40.84	34.29	107.59
MEAN	1.73	1.83	1.67	9.48	6.64	7.22	5.21	3.89	1.74	1.32	1.11	3.59
MAX	2.8	3.6	2.1	76	18	18	8.2	16	2.4	2.2	2.7	35
MIN	1.1	1.5	1.4	1.3	4.5	4.9	3.8	2.3	1.5	.83	.66	.95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1999, BY WATER YEAR (WY)

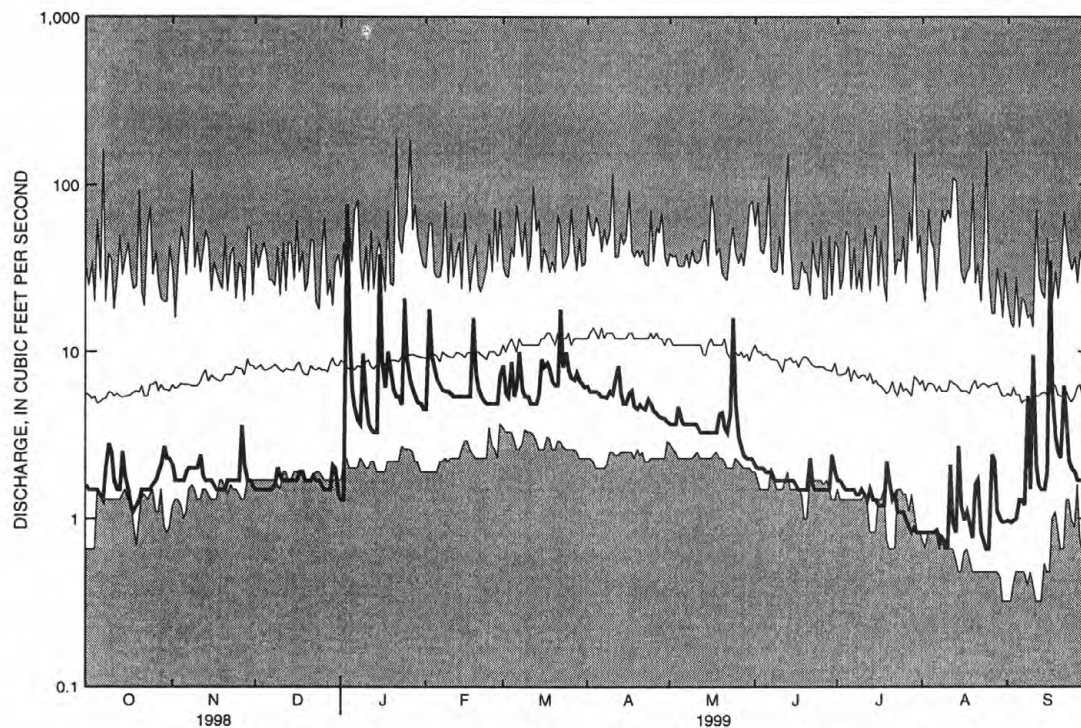
	6.98	8.28	9.05	10.4	11.1	13.2	14.3	12.4	10.3	8.20	7.88	6.69
MEAN	6.98	8.28	9.05	10.4	11.1	13.2	14.3	12.4	10.3	8.20	7.88	6.69
MAX	18.6	24.6	18.8	33.2	25.7	28.7	33.4	32.5	28.8	25.7	22.9	18.3
(WY)	1956	1956	1973	1979	1979	1939	1953	1979	1952	1984	1955	1938
MIN	1.56	1.83	1.67	2.71	3.10	3.15	2.68	2.77	1.74	1.32	.59	1.09
(WY)	1996	1999	1999	1966	1995	1995	1995	1995	1999	1999	1995	1995

# SURFACE-WATER SITES ON LONG ISLAND

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## 01309500 MASSAPEQUA CREEK AT MASSAPEQUA, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1937 - 1999	
ANNUAL TOTAL	2480.5		1375.52		9.77	
ANNUAL MEAN	6.80		3.77		19.4	
HIGHEST ANNUAL MEAN					2.27	
LOWEST ANNUAL MEAN					1973	
HIGHEST DAILY MEAN	153	Jun 13	76	Jan 3	191	Jan 21 1979
LOWEST DAILY MEAN	1.1	Oct 18	.66	Aug 10	.32	Aug 30 1995
ANNUAL SEVEN-DAY MINIMUM	1.3	Oct 16	.77	Aug 4	.37	Aug 28 1995
10 PERCENT EXCEEDS	13		6.7		19	
50 PERCENT EXCEEDS	4.5		2.0		8.0	
90 PERCENT EXCEEDS	1.6		1.1		2.8	



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.  
SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

## 01310000 BELLMORE CREEK AT BELLMORE, NY

LOCATION.—Lat 40°40'43", long 73°30'58", Nassau County, Hydrologic Unit 02030202, on right bank 40 ft east of intersection of Valentine Place and Mill Road, in Bellmore, 0.5 mi north of Sunrise Highway, and 0.5 mi northwest of Wantagh.

DRAINAGE AREA.—About 17 mi<sup>2</sup>.

PERIOD OF RECORD.—June to October 1883 (fragmentary), July to October 1903, published in Professional Paper 44, September 1937 to current year. Prior to October 1957 published as Wantagh Stream at Wantagh. October 1957 to October 1967, published as Wantagh Stream at Bellmore.

GAGE.—Base gage (01309950): Water-stage recorder. Concrete control since July 24, 1974. Datum of gage is 15.06 ft above sea level. June to October 1883, determination of flow by various methods at different site and datum. July to October 1903, nonrecording gages on two channels near present site at different datum. Sept. 23, 1937, to Aug. 1, 1958, water-stage recorder with concrete control on right bank of present secondary channel about 1,000 ft east at datum 1.88 ft higher (used as supplementary gage since Aug. 1, 1958).

Supplementary gage (01309990): Water-stage recorder with concrete control on right bank of secondary channel about 1,000 ft east of base gage at datum of 16.96 ft above sea level. Prior to July 28, 1965, at datum 2.00 ft higher. From July 28, 1965 to Oct. 6, 1965, at datum 1.00 ft higher.

REMARKS.—No estimated daily discharges. Records good. Prior to Nov. 4, 1955, flow at all stages regulated intermittently at outlet of Wantagh Reservoir, 1.0 mi above station, and prior to November 1953 by Browning Pond, 0.5 mi above station. Subsequent to Nov. 3, 1955, permanent diversion of a substantial portion of the flow through west branch of Bellmore Creek. Discharge figures given are those of combined flows to main and secondary channels.

EXTREMES FOR PERIOD OF RECORD (1903 and since 1937).—Maximum daily discharge, 162 ft<sup>3</sup>/s, Sept. 12, 1960; maximum discharge prior to beginning of diversion in November 1955, 340 ft<sup>3</sup>/s, June 1, 1952, adjusted to include flow bypassing station; maximum gage height, 2.57 ft, June 1, 1952, datum then in use; no flow July 24, 25, 1986, Aug. 11–Sept. 16, 19–21, 1995, and many days July to Sept. 1999.

EXTREMES FOR CURRENT YEAR.—Maximum daily discharge, 77 ft<sup>3</sup>/s, Jan. 3; no flow for all or part of many days during July, Aug., and Sept.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.0	2.0	2.2	3.6	5.2	4.8	2.5	1.8	1.1	.00	.12
2	1.7	2.0	2.1	2.0	13	4.0	4.7	2.5	1.8	1.1	.00	.07
3	1.6	1.9	2.0	77	6.5	3.9	4.4	2.5	1.8	1.0	.00	.01
4	1.6	1.8	2.1	8.5	5.6	5.7	4.4	3.5	1.8	.91	.00	.00
5	1.7	1.8	2.1	4.7	4.6	4.2	3.9	2.8	1.6	.88	.00	.00
6	1.6	2.0	2.1	3.9	4.4	5.1	4.0	2.6	1.6	.80	.00	.00
7	1.6	2.0	2.1	3.6	4.3	7.2	4.0	2.6	1.6	.68	.00	.00
8	3.4	1.9	2.0	3.3	4.4	4.2	3.9	2.6	1.6	.60	.00	.20
9	2.9	2.0	2.0	8.4	4.2	4.2	4.4	2.5	1.5	.55	.00	.11
10	2.4	1.9	1.8	3.7	4.1	4.1	4.0	2.6	1.5	.55	.00	2.8
11	2.8	3.1	1.8	3.5	3.8	4.2	5.4	2.4	1.5	.48	.06	.64
12	2.8	2.0	1.8	3.1	4.0	4.0	4.9	2.4	1.5	.42	.00	.48
13	2.4	2.0	1.8	3.0	3.9	4.0	4.0	2.3	1.5	.43	.00	.44
14	4.0	2.1	1.8	3.0	3.8	5.1	3.6	2.2	1.5	.45	.16	.39
15	2.9	2.0	1.8	38	3.9	6.7	3.5	2.1	1.5	.42	.00	.53
16	2.6	2.0	1.8	6.5	4.7	5.4	3.9	2.1	1.4	.42	.00	25
17	2.8	2.1	1.8	4.3	4.8	5.4	3.5	2.0	1.4	.38	.00	3.7
18	2.7	2.0	1.8	8.3	16	5.7	3.2	2.0	1.4	.35	.00	2.1
19	2.1	2.0	1.7	5.1	8.1	4.7	3.2	4.7	1.3	.35	.00	1.7
20	2.0	2.0	1.6	4.2	4.6	4.3	3.4	3.0	1.2	.38	.00	1.6
21	1.8	2.1	1.6	3.9	4.4	4.8	3.3	2.4	1.3	.38	.11	3.6
22	1.8	2.0	1.8	3.8	4.1	15	3.4	2.4	1.3	.35	.00	1.8
23	1.8	2.0	1.7	3.8	3.8	5.5	3.5	2.3	1.2	.38	.00	1.6
24	1.8	2.0	1.8	16	3.7	6.2	3.3	8.5	1.2	.37	.00	1.5
25	1.9	2.0	1.8	6.3	3.7	4.9	3.1	3.4	1.1	.43	.00	1.5
26	1.8	4.1	1.8	4.7	3.8	4.6	3.0	2.9	1.0	.37	.12	1.4
27	1.8	2.2	1.8	4.5	3.6	4.7	3.0	2.6	.97	.24	3.5	1.4
28	2.0	2.2	1.7	4.4	5.7	4.8	2.9	2.3	.91	.12	.31	1.3
29	2.2	2.1	2.2	4.1	---	4.4	2.8	2.2	1.2	.06	.26	1.2
30	2.1	2.0	2.6	3.8	---	4.3	2.6	2.1	1.3	.02	.18	2.1
31	2.0	---	2.2	3.5	---	4.4	---	2.0	---	.00	.16	---
TOTAL	69.2	63.3	59.0	255.1	145.1	160.9	112.0	85.0	42.28	14.97	4.86	57.29
MEAN	2.23	2.11	1.90	8.23	5.18	5.19	3.73	2.74	1.41	.48	.16	1.91
MAX	4.0	4.1	2.6	77	16	15	5.4	8.5	1.8	1.1	3.5	25
MIN	1.6	1.8	1.6	2.0	3.6	3.9	2.6	2.0	.91	.00	.00	.00

# SURFACE-WATER SITES ON LONG ISLAND

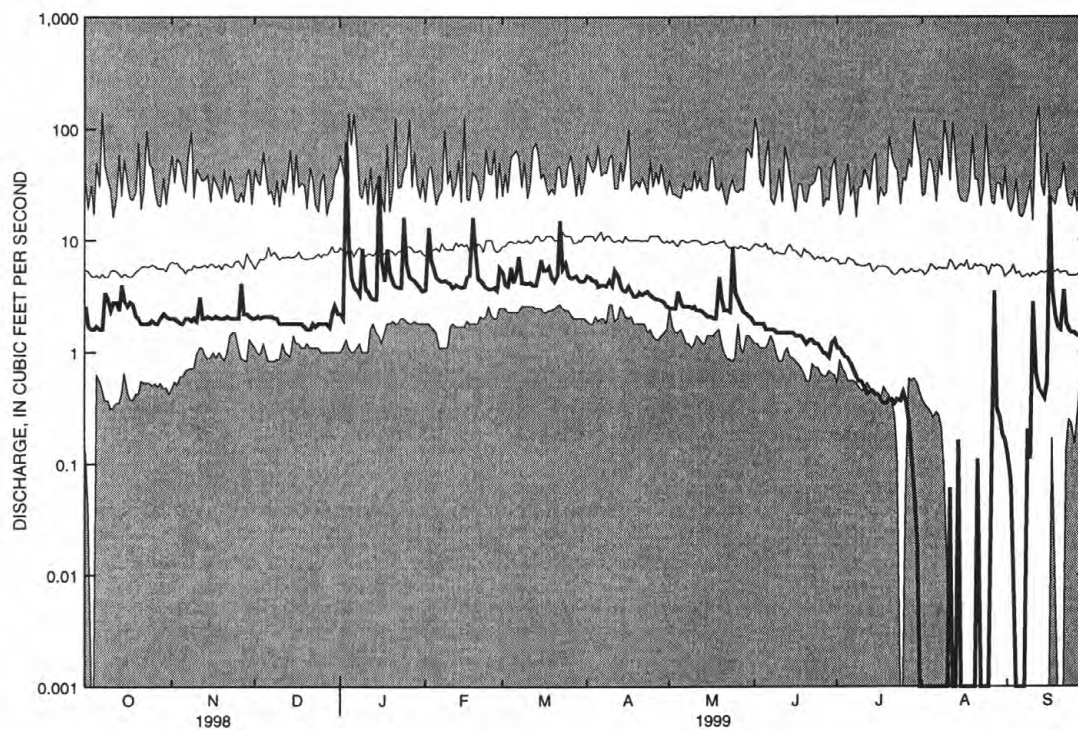
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## 01310000 BELLMORE CREEK AT BELLMORE, NY (continued)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1999, BY WATER YEAR (WY)

MEAN	6.56	7.84	8.53	9.36	10.1	11.6	11.9	10.2	8.77	7.17	7.16	6.29
MAX	18.9	24.4	20.8	21.8	19.9	24.4	26.3	23.2	26.5	19.5	21.2	23.0
(WY)	1959	1956	1978	1978	1956	1961	1953	1958	1952	1975	1961	1960
MIN	.65	1.17	1.22	2.13	2.34	2.73	2.00	1.53	.96	.48	.079	.29
(WY)	1987	1988	1996	1996	1995	1995	1995	1995	1995	1999	1995	1986

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1937 - 1999	
ANNUAL TOTAL	2025.8		1069.00			
ANNUAL MEAN	5.55		2.93		8.78	
HIGHEST ANNUAL MEAN					19.7	
LOWEST ANNUAL MEAN					1.54	
HIGHEST DAILY MEAN	53	Jun 13	77	Jan 3	162	Sep 12 1960
LOWEST DAILY MEAN	1.6	Aug 30	.00	Jul 31	.00	Jul 24 1986
ANNUAL SEVEN-DAY MINIMUM	1.7	Aug 26	.00	Jul 31	.00	Aug 11 1995
10 PERCENT EXCEEDS	10		4.7		17	
50 PERCENT EXCEEDS	3.8		2.1		7.0	
90 PERCENT EXCEEDS	1.8		.12		2.0	



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD. SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR. ZERO FLOWS ARE PLOTTED AS 0.001 DISCHARGE, WHICH MAY INCLUDE THE DAILY MINIMUM FOR PERIOD OF RECORD.



## 01310500 EAST MEADOW BROOK AT FREEPORT, NY

LOCATION.—Lat 40°39'56", long 73°34'13", Nassau County, Hydrologic Unit 02030202, on right bank 24 ft upstream from bridge on Hempstead-Babylon Turnpike and 400 ft west of Meadowbrook Parkway, in Freeport.

DRAINAGE AREA.—About 31 mi<sup>2</sup>.

PERIOD OF RECORD.—October 1851 to December 1852, June to October 1883, September and October 1885 (fragmentary). June to October 1903, published in Professional Paper 44, January 1937 to current year (monthly means estimated November 1962 to December 1963).

REVISED RECORDS.—WRD NY 1972: 1967-71 (P). WDR NY 1977: 1973-76 (P).

GAGE.—Water-stage recorder and concrete control. Datum of gage is 10.45 ft above sea level. Prior to October 1885, determinations of flow by various methods at different site and datum. June to October 1903, weir in swamp at head of Brooklyn Waterworks supply pond. January 1937 to November 1962, water-stage recorder and concrete control at site 81 ft east at datum 0.47 ft higher.

REMARKS.—No estimated daily discharges. Records good except those below 5 ft<sup>3</sup>/s, which are fair.

EXTREMES FOR PERIOD OF RECORD (1903 and since 1937).—Maximum discharge, 848 ft<sup>3</sup>/s, July 29, 1980, gage height, 3.57 ft; maximum gage height, 4.38 ft Sept. 12, 1960, datum then in use; no flow part or all of each day Aug. 26, 1971, Aug. 15-23, 1988, Aug. 9 to Sept. 22, Oct. 2-5, 1995, July 16-19, July 24 to Aug. 26, Aug. 29 to Sept. 8, 1999.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 250 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 3	1730	*759	*3.34	May 19	2000	342	2.07
Jan. 15	1315	339	2.06	Sept. 16	1300	299	1.91

No flow for part or all of July 16-19, July 24 to Aug. 26, Aug. 29 to Sept. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	.97	1.0	1.2	2.7	4.7	4.0	2.8	2.4	.78	.00	.00
2	.82	.86	1.0	.99	16	3.5	3.9	2.8	2.4	.66	.00	.00
3	.85	.95	1.0	213	11	3.3	3.8	2.8	2.2	.55	.00	.00
4	.99	1.0	.99	20	5.1	4.8	4.3	5.8	1.9	.45	.00	.00
5	.93	.97	.99	6.6	4.0	3.3	3.7	3.6	1.9	.42	.00	.00
6	.84	.95	.99	4.5	3.6	3.8	3.7	3.1	1.8	.28	.00	.00
7	.87	.85	.99	3.5	3.4	6.4	3.7	3.0	1.8	.18	.00	.00
8	3.0	.85	1.1	3.1	3.5	4.0	3.6	3.0	1.6	.13	.00	3.7
9	3.7	.85	1.0	6.2	3.3	3.6	4.2	3.1	1.5	.12	.00	.32
10	2.3	.84	.97	3.9	3.0	3.5	4.3	3.0	1.4	.17	.00	3.7
11	1.5	2.3	.91	2.9	3.0	3.3	4.8	2.7	1.4	.13	.00	.78
12	1.3	1.4	.85	2.6	3.0	3.1	5.6	2.7	1.4	.04	.00	.25
13	1.2	.97	.85	2.4	2.9	3.0	4.2	2.7	1.4	.40	.00	.12
14	4.1	.86	.85	2.2	2.7	3.6	4.0	2.6	1.4	.32	.00	.09
15	1.9	.80	.85	83	2.7	5.6	3.7	2.4	1.3	.07	.00	.33
16	1.4	.72	.85	9.9	2.7	4.8	4.0	2.4	1.2	.02	.00	95
17	1.3	.76	.94	5.0	2.7	5.1	4.3	2.4	1.2	.00	.00	13
18	1.3	.72	.86	10	15	5.0	3.6	2.4	1.2	.00	.00	3.7
19	1.2	.72	.85	11	7.3	4.3	3.6	61	1.1	.02	.00	2.4
20	1.2	.79	.85	4.3	4.4	4.0	3.8	16	1.0	.38	.01	2.2
21	1.2	.87	.85	3.6	3.7	4.6	3.5	5.2	2.1	.06	.13	3.9
22	1.1	.73	.96	3.2	3.2	24	3.4	3.9	1.3	.05	.00	2.5
23	1.2	.72	.85	3.1	3.0	7.4	3.8	3.8	1.1	.09	.00	1.8
24	1.1	.72	.85	24	3.0	6.2	3.7	14	.81	.00	.00	1.5
25	.99	.66	.85	11	3.0	5.0	3.3	7.5	.64	.00	.00	1.4
26	.99	3.4	.85	5.1	3.0	4.6	3.2	4.3	.56	.00	3.0	1.3
27	1.0	2.0	.74	4.1	2.7	4.4	3.0	3.5	.50	.00	1.8	1.1
28	1.1	1.3	.72	3.7	4.4	4.9	3.0	3.3	.45	.00	.23	1.0
29	1.2	1.1	1.6	3.2	---	4.3	2.8	2.9	1.4	.00	.05	.96
30	1.0	1.0	2.9	3.0	---	4.1	2.9	2.6	1.2	.00	.00	2.9
31	1.0	---	1.5	2.8	---	4.0	---	2.4	---	.00	.00	---
TOTAL	43.48	31.63	31.36	463.09	128.0	156.2	113.4	183.7	41.56	5.32	5.22	143.95
MEAN	1.40	1.05	1.01	14.9	4.57	5.04	3.78	5.93	1.39	.17	.17	4.80
MAX	4.1	3.4	2.9	213	16	24	5.6	61	2.4	.78	3.0	95
MIN	.82	.66	.72	.99	2.7	3.0	2.8	2.4	.45	.00	.00	.00

# SURFACE-WATER SITES ON LONG ISLAND

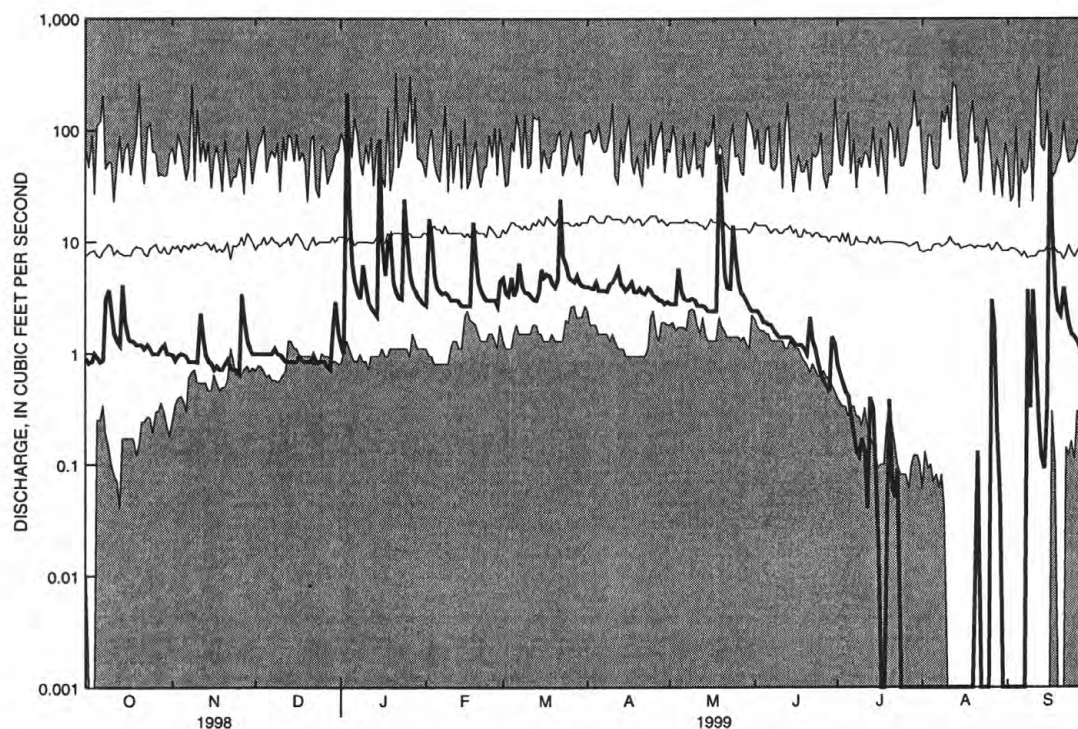
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## 01310500 EAST MEADOW BROOK AT FREEPORT, NY (continued)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1999, BY WATER YEAR (WY)

MEAN	9.73	10.8	11.6	13.0	13.7	15.5	17.0	15.4	13.3	11.6	11.2	9.93
MAX	27.4	29.6	23.8	37.0	28.9	31.7	36.2	34.2	34.3	34.7	39.7	34.0
(WY)	1956	1956	1955	1978	1949	1953	1980	1958	1984	1984	1955	1960
MIN	.57	.66	1.01	1.72	2.03	2.98	2.02	2.93	1.39	.17	.034	.28
(WY)	1996	1966	1999	1967	1967	1992	1966	1992	1999	1999	1995	1995

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1937 - 1999	
ANNUAL TOTAL	3198.90		1346.91			
ANNUAL MEAN	8.76		3.69		12.7	
HIGHEST ANNUAL MEAN					23.3	1961
LOWEST ANNUAL MEAN					2.08	1995
HIGHEST DAILY MEAN	176	Jun 13	213	Jan 3	375	Sep 12 1960
LOWEST DAILY MEAN	.66	Nov 25	.00	Jul 17	.00	Aug 26 1971
ANNUAL SEVEN-DAY MINIMUM	.74	Nov 19	.00	Jul 24	.00	Aug 15 1988
10 PERCENT EXCEEDS	16		4.8		24	
50 PERCENT EXCEEDS	5.5		1.5		11	
90 PERCENT EXCEEDS	.89		.00		1.9	



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD. SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR. ZERO FLOWS ARE PLOTTED AS 0.001 DISCHARGE, WHICH MAY INCLUDE THE DAILY MINIMUM FOR PERIOD OF RECORD.

**LOCATION.**—Lat 40° 35'36", long 73° 35'03", Nassau County, Hydrologic Unit 2030202, at Town of Hempstead East Marina, 750 ft east of Loop Parkway Bridge, in Point Lookout.

**PERIOD OF RECORD.**—December 1997 to current year. January 1974 to June 1994, in files of Town of Hempstead Department of Conservation & Waterways. Precipitation, wind speed and direction, air and water temperature, relative humidity, and barometric pressure records for March 1998 to current year are unpublished and available in files of the Geological Survey.

GAGE.—Water-stage recorder. Datum of gage is 0.00 ft above sea level.

REMARKS.—Telephone telemeter for elevation, precipitation, wind speed and direction, air and water temperature, relative humidity, and barometric pressure parameters at station. All data are collected, stored, and reported in Eastern Standard Time.

**EXTREMES FOR PERIOD OF RECORD.**—Maximum elevation, 5.64 ft, Feb. 24, 1998; minimum, -3.42 ft, Jan. 2, 1999.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—Storm tide of Sep. 27, 1985, reached an elevation of 7.3 ft, from information provided by Town of Hempstead Department of Conservation & Waterways. Storm tide of Dec. 11, 1992, reached an elevation of 7.3 ft, from high-water mark at site 4.0 mi west. Minimum elevation recorded, -4.9 ft, Jan. 11, 1978, Mar. 16, 1980, from information provided by Town of Hempstead Department of Conservation & Waterways.

**EXTREMES FOR CURRENT YEAR.**—Maximum elevation, 4.99 ft, Mar. 15; minimum, -3.42 ft, Jan. 2.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.87	1.38	.56	-.13	.67	1.49	.34	1.14	.94	.98	1.32	1.42
2	.56	.93	.32	.17	1.27	.71	.96	1.32	.94	.68	1.25	1.26
3	.52	1.02	.67	1.53	1.49	1.26	.89	1.72	.89	.56	1.17	1.23
4	.71	1.10	.93	.25	1.28	.89	.86	1.21	.68	.89	1.19	1.33
5	.71	1.02	.80	.10	.65	-.26	1.06	1.12	.80	1.04	1.32	1.57
6	.93	1.06	1.06	.60	1.50	.74	1.17	1.00	.69	1.20	1.26	1.48
7	1.05	.76	.92	.10	1.04	.30	1.01	1.07	.52	1.09	1.17	1.60
8	1.18	.84	1.00	.54	1.22	.20	1.03	1.12	.93	1.07	1.23	1.50
9	1.24	.87	.88	.84	.92	.60	1.34	1.06	1.48	1.20	1.16	1.40
10	1.42	1.09	.62	.67	.38	1.06	1.44	.93	1.44	1.20	1.20	1.64
11	1.16	1.14	.29	.18	.64	1.07	1.30	.88	1.20	1.07	1.33	1.28
12	1.60	.23	.65	.43	1.14	1.03	1.24	.98	1.23	1.03	1.22	1.08
13	1.87	.45	.60	.54	.51	1.27	1.27	1.30	1.17	1.39	1.20	1.03
14	1.73	1.06	1.24	1.66	.65	1.59	1.03	1.34	1.19	1.09	1.20	1.09
15	1.23	1.06	.67	1.51	1.10	2.08	1.35	1.09	1.02	.97	1.13	1.15
16	.97	.93	.70	.23	1.02	.33	1.54	.99	1.13	.80	1.04	2.21
17	1.10	1.15	1.43	.09	1.30	.28	1.20	.86	1.27	.71	.99	-.12
18	1.03	1.18	.72	1.03	1.43	.84	.69	.98	1.07	.75	1.06	.39
19	.64	.94	.61	.72	1.27	.36	.59	1.07	.82	1.01	1.28	1.00
20	.73	1.18	.85	.37	1.48	.35	.75	.92	.71	1.10	1.48	1.32
21	.62	.85	1.32	.68	1.28	.76	.72	.92	.87	1.06	1.71	1.34
22	.61	.56	.52	1.02	1.07	.99	.78	1.04	.91	1.13	1.37	1.45
23	.74	.43	-.01	1.02	1.04	.20	.93	1.25	.99	1.14	1.31	1.11
24	.49	.19	.68	.87	.88	.54	.70	1.50	.99	1.18	1.20	.97
25	.61	.74	.63	.14	1.59	.60	.77	1.17	1.08	1.30	1.23	1.04
26	1.09	1.33	.69	.46	1.33	.60	.86	1.10	.94	1.45	1.37	1.02
27	1.00	.22	.60	.69	.54	1.03	1.26	1.10	1.06	1.37	1.35	.97
28	1.12	.41	.79	1.30	1.55	1.48	1.19	1.09	1.23	1.32	1.22	1.04
29	.94	.82	1.68	1.19	---	.83	1.07	.98	1.21	1.47	1.02	1.24
30	.93	1.20	.97	.86	---	.39	1.35	.81	1.01	1.56	1.42	1.41
31	1.13	---	.36	1.16	---	.32	---	.84	---	1.46	1.69	---
MEAN	.98	.87	.77	.67	1.08	.77	1.02	1.09	1.01	1.11	1.26	1.22
MAX	1.87	1.38	1.68	1.66	1.59	2.08	1.54	1.72	1.48	1.56	1.71	2.21
MIN	.49	.19	-.01	-.13	.38	-.26	.34	.81	.52	.56	.99	-.12
CAL YR 1998	MEAN	1.12	MAX	3.36	MIN	-.35						
WTR YR 1999	MEAN	.99	MAX	2.21	MIN	-.26						

## SURFACE-WATER SITES ON LONG ISLAND

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## 01310740 REYNOLDS CHANNEL AT POINT LOOKOUT, N.Y (continued)

ELEVATION, IN FEET, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY HIGH-HIGH TIDES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.72	3.91	3.81	3.34	3.70	4.42	3.14	3.45	3.36	3.39	3.64	3.92
2	2.92	3.79	3.34	3.31	4.03	3.50	3.57	3.80	3.21	2.78	3.57	3.77
3	3.30	3.96	3.85	4.83	4.19	4.45	3.31	3.77	2.95	3.11	3.51	3.73
4	3.68	4.45	4.50	3.12	3.78	3.77	2.93	3.35	3.00	3.26	3.58	3.73
5	3.65	4.42	4.02	2.79	2.76	2.36	3.31	3.04	2.32	3.09	3.77	4.02
6	4.16	4.44	4.20	3.07	3.29	3.02	3.05	3.11	2.89	3.45	3.87	4.06
7	4.16	3.98	3.85	1.97	3.04	2.23	2.29	2.52	2.65	3.38	3.88	4.27
8	4.33	3.70	3.65	2.29	3.31	2.20	2.84	2.93	3.14	3.60	3.96	4.21
9	4.27	3.37	3.17	2.78	2.82	2.05	2.80	3.01	3.98	3.99	4.25	4.11
10	4.22	3.16	2.67	2.51	2.48	2.58	3.76	2.84	4.02	4.10	4.25	4.06
11	3.73	3.52	2.09	2.47	2.24	2.83	3.07	3.17	4.12	4.18	4.17	3.67
12	3.91	2.18	2.40	2.67	2.99	2.96	3.26	3.63	4.43	4.33	3.96	3.57
13	3.85	2.35	2.24	2.54	3.33	2.89	3.63	4.23	4.50	4.64	3.96	3.37
14	3.72	3.09	3.05	3.28	3.06	3.51	3.71	4.39	4.57	4.10	3.54	3.26
15	3.12	3.33	3.00	4.38	3.73	4.99	4.40	4.49	4.23	3.90	3.34	3.14
16	2.93	3.21	2.64	2.41	3.79	3.13	4.72	4.30	4.44	3.35	3.12	4.27
17	3.25	3.40	3.87	2.62	4.17	3.44	4.34	4.23	3.97	3.06	3.04	2.64
18	3.25	3.71	3.48	3.55	4.48	4.00	3.74	4.18	3.35	2.92	3.01	2.31
19	2.85	3.39	3.19	3.85	4.08	3.26	3.81	3.88	2.87	3.08	3.23	2.63
20	3.23	3.62	3.61	3.30	4.06	3.47	3.72	2.99	2.82	3.09	3.35	3.28
21	3.06	3.51	3.92	3.36	3.65	4.59	2.87	3.39	2.89	3.03	3.57	3.34
22	2.98	2.86	3.51	3.62	3.54	3.06	3.34	3.17	2.92	3.05	3.45	3.66
23	3.02	2.73	2.62	3.15	3.70	2.29	3.18	3.19	3.11	3.20	3.46	3.66
24	2.72	2.26	3.19	3.46	3.25	2.90	2.67	3.56	3.09	3.40	3.48	3.53
25	2.83	3.01	2.97	2.68	3.46	3.28	2.82	3.21	3.33	3.66	3.78	3.67
26	3.09	3.90	2.73	2.69	4.18	2.65	3.16	3.15	3.35	3.92	3.91	3.75
27	2.87	2.40	2.73	3.17	2.82	3.08	3.65	3.42	3.58	3.88	3.92	3.81
28	3.02	2.49	3.20	3.90	3.94	3.93	3.63	3.53	3.63	3.85	3.76	3.99
29	2.83	3.12	3.91	4.02	---	3.21	3.61	3.35	3.55	4.05	3.39	4.12
30	3.07	3.70	4.81	3.72	---	2.91	4.06	3.21	3.47	4.13	4.15	4.12
31	3.71	---	3.23	4.00	---	2.75	---	3.23	---	3.94	4.27	---
MEAN	3.37	3.37	3.34	3.19	3.50	3.22	3.41	3.47	3.46	3.58	3.68	3.66
MAX	4.33	4.45	4.81	4.83	4.48	4.99	4.72	4.49	4.57	4.64	4.27	4.27
MIN	2.72	2.18	2.09	1.97	2.24	2.05	2.29	2.52	2.32	2.78	3.01	2.31

CAL YR 1998 MEAN 3.54 MAX 5.64 MIN 1.82

WTR YR 1999 MEAN 3.44 MAX 4.99 MIN 1.97

ELEVATION, IN FEET, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY LOW-HIGH TIDES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.64	3.73	2.75	1.86	2.72	3.42	2.43	2.97	2.53	2.59	3.51	*---
2	2.44	3.43	2.92	2.83	3.79	2.97	2.96	2.97	2.50	2.51	3.44	3.47
3	2.55	3.76	3.45	3.65	3.31	3.52	2.83	3.55	2.47	2.47	*---	3.10
4	3.12	3.66	3.26	2.03	3.10	1.75	2.65	2.74	2.22	2.84	3.29	2.99
5	3.54	3.65	3.42	2.37	*---	1.87	2.76	2.65	*---	*---	3.23	3.27
6	3.85	3.30	3.15	2.45	3.23	2.76	2.60	2.38	2.50	3.24	2.92	3.25
7	3.84	2.71	2.75	*---	2.46	*---	*---	*---	2.45	3.24	2.81	3.51
8	3.46	2.99	*---	1.90	2.33	1.70	2.22	2.52	2.82	3.00	3.15	3.80
9	3.63	*---	3.17	2.65	1.99	1.93	2.60	2.60	3.16	3.04	2.98	3.67
10	3.21	2.82	2.52	2.06	1.53	2.33	2.77	2.81	3.65	3.17	3.42	4.05
11	*---	2.83	1.97	1.10	1.99	2.30	2.92	2.86	3.35	3.25	3.80	3.54
12	3.06	1.91	2.08	1.43	2.76	2.10	3.11	2.93	3.42	3.15	3.62	3.11
13	3.66	1.99	2.14	1.86	2.04	2.85	3.62	3.42	3.49	3.58	3.54	3.06
14	3.56	2.59	2.79	3.25	2.58	3.30	3.48	3.99	3.55	3.59	3.47	2.76
15	3.06	2.78	2.01	2.68	3.30	3.84	3.95	3.57	3.41	3.24	3.20	*---
16	2.90	2.81	2.56	2.07	3.43	2.56	4.24	3.55	3.51	3.11	2.80	2.84
17	3.11	2.99	3.05	2.25	3.80	2.88	4.01	3.29	3.52	2.99	*---	1.34
18	3.11	2.90	2.05	3.27	3.78	3.21	3.39	3.43	3.28	*---	2.61	1.02
19	2.61	2.89	2.06	2.43	4.04	3.21	3.02	3.35	*---	2.85	2.44	1.95
20	2.70	2.80	2.56	2.54	4.01	3.09	3.10	*---	2.66	2.91	2.43	2.55
21	2.30	2.20	3.19	3.11	*---	3.23	*---	2.95	2.70	2.49	2.96	2.66
22	2.36	2.40	1.13	3.26	3.15	2.91	2.73	3.06	2.43	2.39	2.43	3.28
23	2.20	1.81	2.27	*---	2.80	*---	2.89	3.07	2.46	2.30	2.67	2.75
24	1.94	1.67	*---	2.83	2.71	2.52	2.67	3.12	2.37	2.30	2.70	3.21
25	2.06	*---	2.58	2.12	3.39	2.44	2.53	3.09	2.36	2.56	2.89	3.51
26	*---	2.81	2.66	2.20	2.96	2.31	2.66	2.87	2.28	2.72	3.35	3.55
27	2.61	1.89	2.49	2.66	2.80	2.72	3.14	2.72	2.52	2.96	3.52	3.52
28	2.46	2.46	2.76	3.23	3.72	3.31	3.02	2.69	2.76	3.08	3.57	3.51
29	2.51	2.90	3.75	3.33	---	2.99	3.01	2.63	2.82	3.27	3.35	3.74
30	2.95	3.53	2.48	3.10	---	2.69	3.08	2.41	2.49	3.50	3.97	*---
31	2.62	---	2.84	3.63	---	2.69	---	2.44	---	3.54	3.88	---
MEAN	2.90	2.79	2.65	2.56	2.99	2.74	3.01	2.99	2.85	2.96	3.17	3.07
MAX	3.85	3.76	3.75	3.65	4.04	3.84	4.24	3.99	3.65	3.59	3.97	4.05
MIN	1.94	1.67	1.13	1.10	1.53	1.70	2.22	2.38	2.22	2.30	2.43	1.02

CAL YR 1998 MEAN 3.02 MAX 4.96 MIN 1.13

WTR YR 1999 MEAN 2.89 MAX 4.24 MIN 1.02

\* Only a single high tide occurred



## SURFACE-WATER SITES ON LONG ISLAND

## 01310740 REYNOLDS CHANNEL AT POINT LOOKOUT, N.Y (continued)

ELEVATION, IN FEET, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY HIGH-LOW TIDES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-.39	-1.01	-2.43	-2.44	-1.43	-.49	-2.09	-.99	-.81	-.83	-.68	-.49
2	-1.32	-1.90	*---	-2.79	-.90	-1.74	-1.18	-.52	-.77	-1.17	-.53	-.67
3	-1.87	*---	-2.45	-.76	-.54	-1.18	-1.29	-.21	-.61	-1.13	-.60	-.67
4	*---	-2.08	-2.08	-1.65	-.74	-.68	-1.19	-.57	-.88	-.72	-.44	-.59
5	-2.27	-1.98	-2.06	-2.39	-1.44	-2.30	-.57	-.39	-.64	-.53	-.72	-.45
6	-2.09	-1.78	-1.53	-1.33	-.08	-.66	-.28	-.36	-.67	-.32	-.83	-.77
7	-2.03	-1.72	-1.36	-1.30	-.42	-1.38	-.26	-.20	-.90	-.79	-1.02	*---
8	-1.48	-1.40	-1.01	-1.05	.00	-1.40	-.20	-.05	-.77	-1.17	-1.27	-1.00
9	-1.20	-1.12	-.82	-.21	-.34	-.51	.55	-.47	-.20	-.94	*---	-1.29
10	-.76	-.53	-.83	-.53	-1.23	.11	.02	-.77	-1.22	-1.51	-1.56	-.94
11	-.79	-.03	-1.23	-1.27	-.76	-.28	-.56	-1.24	*---	*---	-1.31	-1.15
12	-.14	-1.39	-.61	-1.20	-.68	-.46	-.99	-1.41	-1.60	-1.86	-1.40	-1.18
13	-.17	-1.26	-.97	-.97	-1.44	-.48	-1.23	*---	-1.80	-1.25	-1.15	-.98
14	.25	-.70	-.34	.09	*---	.03	*---	-1.29	-1.74	-1.53	-1.03	-.74
15	-.62	-.99	-1.29	*---	-1.32	*---	-1.60	-2.00	-1.72	-1.51	-.89	-.34
16	-1.14	*---	*---	-1.77	-1.54	-1.56	-1.64	-1.98	-1.25	-1.33	-.67	1.03
17	*---	-1.01	-.68	-2.11	-1.47	-2.70	-1.62	-2.03	-.92	-1.10	-.29	-1.35
18	-1.19	-.94	-.68	-1.36	-1.24	-1.97	-1.96	-1.50	-.82	-.83	-.30	-.82
19	-1.33	-1.31	-1.55	-1.22	-1.36	-2.39	-1.90	-1.10	-.91	-.45	-.09	-.37
20	-1.54	-1.03	-1.44	-2.02	-.93	-2.58	-1.53	-1.09	-.82	-.37	.33	.08
21	-1.55	-.77	-.98	-1.81	-.70	-1.76	-1.20	-.77	-.72	-.34	.46	-.21
22	-1.59	-1.43	-.42	-1.04	-.95	-.21	-1.00	-.46	-.59	-.35	-.14	-.36
23	-1.29	-1.18	-1.98	-.76	-.63	-1.58	-.77	-.33	-.65	-.57	-.41	*---
24	-1.41	-1.52	-1.22	-.67	-.92	-1.07	-1.19	-.33	-.90	-.51	*---	-1.33
25	-1.08	-.87	-1.11	-1.80	-.31	-1.27	-1.25	-.76	-.82	*---	-1.01	-1.59
26	-.37	-.09	-1.14	-1.41	-.76	-1.26	-1.24	-1.02	*---	-.47	-.96	-1.67
27	-.40	-1.34	-1.17	-1.42	-1.56	-.49	-.81	*---	-.96	-.73	-1.04	-1.66
28	-.32	-1.24	-1.16	-1.14	*---	-.83	*---	-1.05	-.60	-.80	-1.20	-1.48
29	-.44	-1.17	-.68	-1.52	---	*---	-1.24	-1.12	-.57	-.78	-1.27	-1.03
30	-.55	-1.09	-1.68	*---	---	-1.88	-.76	-1.38	-.90	-.60	-.81	-.25
31	-1.08	---	*---	-1.75	---	-2.17	---	-1.09	---	-.63	-.49	---
MEAN	-1.03	-1.17	-1.25	-1.37	-.91	-1.21	-1.03	-.91	-.92	-.87	-.74	-.80
MAX	.25	-.03	-.34	.09	.00	.11	.55	-.05	-.20	-.32	.46	1.03
MIN	-2.27	-2.08	-2.45	-2.79	-1.56	-2.70	-2.09	-2.03	-1.80	-1.86	-1.56	-1.67

CAL YR 1998 MEAN -.89 MAX 1.71 MIN -2.70

WTR YR 1999 MEAN -1.02 MAX 1.03 MIN -2.79

\* Only a single low tide occurred

ELEVATION, IN FEET, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY LOW-LOW TIDES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-1.71	-1.67	-2.76	-3.31	-2.17	-1.19	-2.37	-1.08	-1.45	-1.33	-1.01	-.95
2	-2.06	-2.23	-2.74	-3.42	-2.17	-1.87	-1.69	-1.24	-1.26	-1.34	-1.32	-.85
3	-2.29	-2.02	-2.87	-1.85	-1.08	-2.02	-1.38	-.35	-1.23	-1.91	-1.18	-.82
4	-2.08	-2.13	-2.10	-2.60	-.95	-2.11	-1.31	-.75	-1.35	-1.47	-1.11	-.79
5	-2.38	-2.20	-2.33	-2.45	-1.49	-2.93	-1.04	-.75	-1.30	-1.21	-.93	-.77
6	-2.48	-1.99	-1.64	-1.54	-.21	-1.75	-.57	-.78	-1.39	-1.18	-1.02	-.91
7	-2.24	-1.86	-1.68	-2.01	-.63	-1.66	-.57	-.64	-1.63	-1.29	-1.27	-.88
8	-1.81	-1.53	-1.27	-1.24	-.33	-1.59	-.38	-.68	-1.35	-1.23	-1.27	-1.07
9	-1.65	-1.14	-1.16	-1.75	-.76	-1.02	-.39	-.74	-1.14	-1.41	-1.55	-1.30
10	-.79	-.82	-1.47	-.81	-1.33	-.42	-.11	-1.15	-1.27	-1.80	-1.68	-1.14
11	-.91	-1.47	-1.64	-1.46	-.95	-.35	-.60	-1.34	-1.65	-1.64	-1.46	-1.22
12	-.30	-1.76	-1.38	-1.33	-1.06	-.62	-1.39	-1.71	-1.77	-1.96	-1.47	-1.33
13	-.16	-1.55	-1.12	-1.26	-1.90	-.49	-1.35	-1.63	-1.82	-1.79	-1.61	-1.32
14	-.68	-.81	-.82	-.05	-1.87	-.50	-2.05	-1.68	-1.84	-1.66	-1.36	-.90
15	-1.06	-1.36	-1.66	-.08	-1.58	-.06	-1.65	-2.09	-1.73	-1.83	-1.07	-.61
16	-1.29	-1.32	-1.66	-2.13	-1.83	-2.47	-1.72	-2.10	-2.03	-1.75	-1.07	.17
17	-1.11	-1.27	-.83	-2.49	-1.61	-2.77	-1.90	-2.06	-1.31	-1.74	-.95	-2.01
18	-1.20	-1.06	-1.81	-1.71	-1.44	-2.09	-2.33	-1.88	-1.29	-1.59	-.74	-.83
19	-1.65	-1.34	-1.72	-2.10	-1.49	-2.64	-2.36	-1.47	-1.40	-1.18	-.33	-.41
20	-1.59	-1.13	-1.48	-2.30	-1.15	-2.58	-1.83	-1.33	-1.45	-.76	-.25	-.70
21	-1.72	-1.45	-1.01	-1.85	-1.13	-2.23	-1.46	-1.32	-1.08	-.69	-.20	-.76
22	-1.62	-1.67	-2.16	-1.34	-.98	-2.01	-1.38	-1.11	-1.12	-.65	-.45	-1.05
23	-1.38	-1.53	-2.02	-1.30	-1.20	-2.11	-1.07	-.97	-.97	-.63	-.82	-1.05
24	-1.41	-1.78	-1.38	-1.29	-1.10	-1.61	-1.24	-.62	-.94	-.64	-.68	-1.52
25	-1.19	-1.01	-1.46	-2.07	-.34	-1.36	-1.52	-.82	-1.04	-.64	-1.12	-1.70
26	-.70	-.89	-1.33	-1.71	-1.84	-1.43	-1.41	-1.05	-1.13	-.64	-1.08	-1.91
27	-.55	-2.01	-1.36	-1.64	-2.09	-1.33	-1.03	-1.02	-1.13	-.78	-1.33	-2.07
28	-.39	-1.96	-1.55	-1.27	-1.01	-1.43	-1.17	-1.14	-1.03	-1.05	-1.40	-1.82
29	-1.07	-1.61	-.77	-1.69	---	-1.57	-1.35	-1.21	-.99	-.99	-1.67	-1.58
30	-1.71	-1.69	-3.04	-1.86	---	-2.26	-1.27	-1.47	-1.32	-.95	-1.35	-1.26
31	-1.10	---	-2.50	-1.92	---	-2.18	---	-1.42	---	-1.00	-.75	---
MEAN	-1.36	-1.54	-1.70	-1.74	-1.27	-1.63	-1.33	-1.21	-1.35	-1.25	-1.08	-1.11
MAX	-.16	-.81	-.77	-.05	-.21	-.06	-.11	-.35	-.94	-.63	-.20	.17
MIN	-2.48	-2.23	-3.04	-3.42	-2.17	-2.93	-2.37	-2.10	-2.03	-1.96	-1.68	-2.07

CAL YR 1998 MEAN -1.22 MAX 1.59 MIN -3.05

WTR YR 1999 MEAN -1.38 MAX .17 MIN -3.42

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.16	.15	.11	---	---	---	---	---	---	---	---
2	.07	.16	.18	.09	---	---	---	---	---	---	---	---
3	.07	.16	.20	148	---	---	---	---	---	---	---	---
4	.08	.15	.22	4.2	---	---	---	---	---	---	---	---
5	.09	.13	.21	1.1	---	---	---	---	---	---	---	---
6	.08	.11	.21	.84	---	---	---	---	---	---	---	---
7	.08	.10	.22	.70	---	---	---	---	---	---	---	---
8	14	.11	.27	.58	---	---	---	---	---	---	---	---
9	6.4	.10	.20	8.7	---	---	---	---	---	---	---	---
10	.58	.10	.19	.55	---	---	---	---	---	---	---	---
11	.17	.83	.20	.42	---	---	---	---	---	---	---	---
12	.13	.13	.19	.41	---	---	---	---	---	---	---	---
13	.11	.13	.19	.38	---	---	---	---	---	---	---	---
14	23	.13	.18	.35	---	---	---	---	---	---	---	---
15	.61	.17	.16	56	---	---	---	---	---	---	---	---
16	.32	.30	.16	1.5	---	---	---	---	---	---	---	---
17	.22	.12	.16	.92	---	---	---	---	---	---	---	---
18	.23	.11	.14	18	---	---	---	---	---	---	---	---
19	.18	.11	.14	1.7	---	---	---	---	---	---	---	---
20	.15	.14	.13	1.3	---	---	---	---	---	---	---	---
21	.17	.14	.14	.77	---	---	---	---	---	---	---	---
22	.16	.13	.15	.65	---	---	---	---	---	---	---	---
23	.18	.14	.13	1.4	---	---	---	---	---	---	---	---
24	.23	.15	.15	27	---	---	---	---	---	---	---	---
25	.17	.15	.13	2.6	---	---	---	---	---	---	---	---
26	.13	6.9	.13	1.5	---	---	---	---	---	---	---	---
27	.15	.16	.13	1.4	---	---	---	---	---	---	---	---
28	.22	.13	.14	1.2	---	---	---	---	---	---	---	---
29	.31	.13	1.4	.80	---	---	---	---	---	---	---	---
30	.21	.13	.39	.70	---	---	---	---	---	---	---	---
31	.18	---	.13	.67	---	---	---	---	---	---	---	---
TOTAL	48.77	11.61	6.72	284.54	---	---	---	---	---	---	---	---
MEAN	1.57	.39	.22	9.18	---	---	---	---	---	---	---	---
MAX	23	6.9	1.4	148	---	---	---	---	---	---	---	---
MIN	.07	.10	.13	.09	---	---	---	---	---	---	---	---

## SURFACE-WATER SITES ON LONG ISLAND

## 01311000 PINES BROOK AT MALVERNE, NY (continued)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1999, BY WATER YEAR (WY)

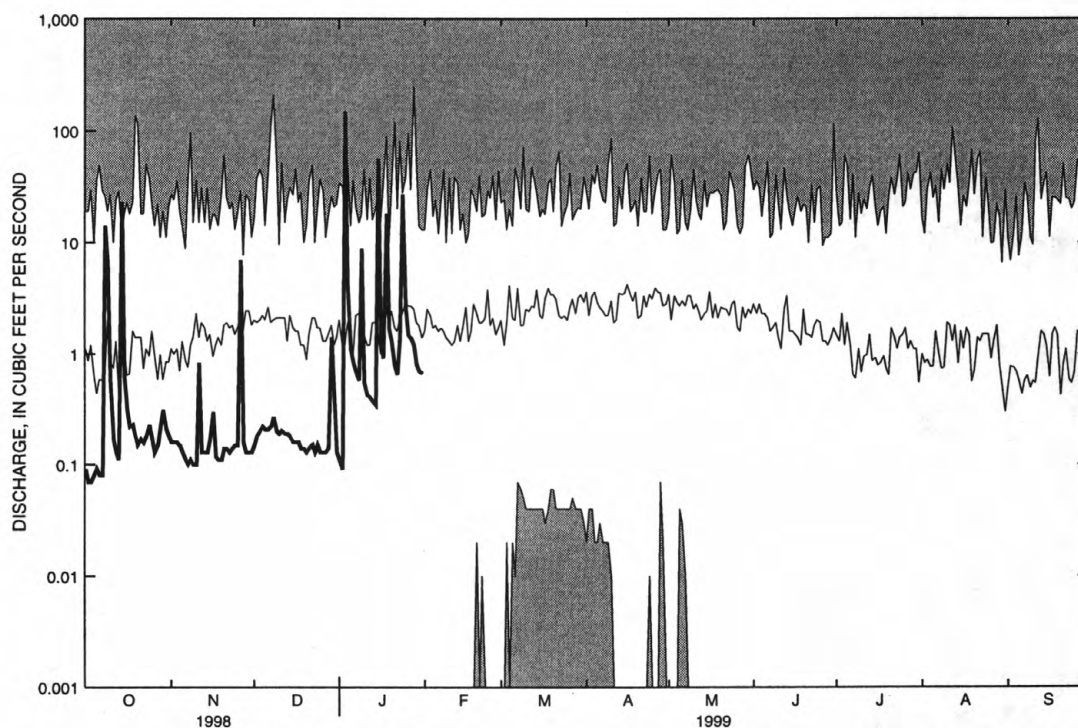
MEAN	2.60	2.96	3.31	3.67	3.62	4.30	4.63	4.17	3.54	3.17	3.01	2.65
MAX	9.44	7.53	16.1	11.8	10.9	12.3	14.1	10.3	11.8	11.0	11.7	11.2
(WY)	1939	1952	1997	1994	1949	1939	1939	1939	1984	1948	1955	1938
MIN	.000	.050	.019	.051	.099	.21	.31	.41	.027	.001	.002	.002
(WY)	1983	1966	1986	1967	1983	1981	1966	1987	1971	1966	1981	1965

## SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

WATER YEARS 1937 - 1999

ANNUAL TOTAL	1207.46		
ANNUAL MEAN	3.31		3.45
HIGHEST ANNUAL MEAN			8.37
LOWEST ANNUAL MEAN			.52
HIGHEST DAILY MEAN	80	Jan 23	247
LOWEST DAILY MEAN	.07	Oct 2	.00
ANNUAL SEVEN-DAY MINIMUM	.08	Oct 1	.00
10 PERCENT EXCEEDS	7.7		7.9
50 PERCENT EXCEEDS	1.2		1.7
90 PERCENT EXCEEDS	.13		.01



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD. SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR. ZERO FLOWS ARE PLOTTED AS 0.001 DISCHARGE, WHICH MAY INCLUDE THE DAILY MINIMUM FOR PERIOD OF RECORD.

**LOCATION.**—Lat 40°39'49", long 73°42'18", Nassau County, Hydrologic Unit 02030202, on right bank 40 ft upstream from West Valley Stream Boulevard in Valley Stream.

PERIOD OF RECORD.—1851-52, 1854, 1856-57, 1885, 1894 (fragmentary in Professional Paper 44), July 1954 to current year.  
Prior to October 1956, published at Watts Creek at Valley Stream.

REMARKS.—No estimated daily discharges. Records good. Flow regulated occasionally by cleaning operations at outlet of Valley Stream Pond above station.

**EXTREMES FOR CURRENT YEAR.**—Maximum discharge, 245 ft<sup>3</sup>/s, Jan. 3, gage height, 4.31 ft; no flow for part or all of many days during October to January, and July to September.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.10	.00	.37	2.6	.97	.53	.64	.49	.00	.00
2	.00	.00	.02	.00	8.3	.87	1.4	.57	.51	.26	.00	.00
3	.00	.00	.00	71	2.7	.70	1.1	.67	.44	.15	.00	.00
4	.00	.00	.01	5.5	.96	5.0	2.1	4.2	.37	.18	.00	.00
5	.00	.00	.02	.89	.43	.95	2.1	1.3	.29	.11	.00	.00
6	.00	.00	.00	.54	.37	.99	1.3	.94	.37	.01	.00	.00
7	.00	.00	.00	.20	.38	3.0	1.1	.76	.37	.00	.00	.00
8	2.7	.00	.00	.10	.11	.81	1.0	.46	.43	.00	.00	.66
9	2.0	.00	.00	2.5	.64	.73	1.4	.76	.19	.00	.00	.00
10	.18	.00	.00	1.2	.33	.69	1.6	.85	.20	.00	.00	9.8
11	.17	.00	.00	.39	.46	.36	1.5	.59	.06	.00	.00	.28
12	.06	.00	.00	.31	.83	.45	2.3	.61	.06	.00	.00	.00
13	.00	.00	.00	.53	.73	.55	.91	.43	.04	.21	.00	.00
14	5.8	.06	.00	.58	.78	.79	.67	.23	.25	.03	.00	.00
15	.94	.13	.00	35	1.0	2.8	.77	.25	.56	.02	.00	.00
16	.34	.00	.00	2.4	1.3	1.5	1.4	.32	.35	.02	.00	47
17	.21	.00	.00	.61	.81	1.1	2.0	.16	.15	.00	.00	3.4
18	.17	.00	.00	8.3	12	.91	.97	.42	.09	.00	.00	.64
19	.17	.00	.00	3.8	2.0	.79	.82	22	.29	.33	.00	.19
20	.17	.00	.00	.81	.90	.74	.95	5.7	.28	.36	.18	.12
21	.14	.00	.00	.49	.80	2.0	.87	1.1	.44	.00	1.8	6.8
22	.17	.00	.00	.08	.84	15	.84	.81	.24	.00	.02	1.9
23	.08	.00	.00	.11	.93	1.8	1.1	.89	.24	.00	.00	.48
24	.09	.00	.00	17	1.0	1.5	1.1	9.2	.15	.00	.00	.30
25	.07	.00	.00	2.9	.85	1.2	.71	2.5	.13	.00	.00	.29
26	.02	.69	.00	1.1	.76	1.0	.71	1.0	.14	.00	.00	.23
27	.01	.48	.00	.83	.63	1.1	.65	.60	.10	.00	.03	.09
28	.00	.17	.00	.53	3.6	1.8	.66	.48	.07	.00	.00	.15
29	.05	.10	.00	.38	---	1.1	.64	.38	2.2	.00	.00	.16
30	.00	.08	.00	.30	---	.86	.63	.45	1.4	.00	.00	1.7
31	.00	---	.00	.02	---	.75	---	.53	---	.00	.00	---
TOTAL	13.54	1.71	0.15	158.40	44.81	54.44	34.27	59.69	11.05	2.17	2.03	74.19
MEAN	.44	.057	.005	5.11	1.60	1.76	1.14	1.93	.37	.070	.065	2.47
MAX	5.8	.69	.10	71	12	15	2.3	22	2.2	.49	1.8	47
MIN	.00	.00	.00	.00	.11	.36	.63	.16	.04	.00	.00	.00

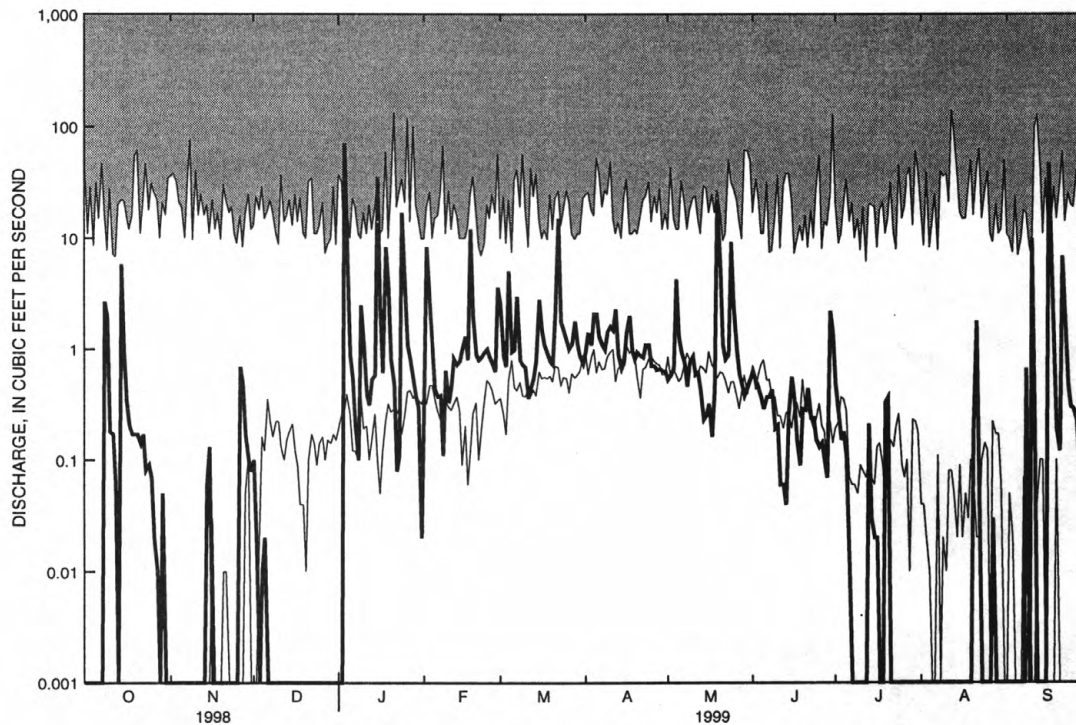
MEAN	1.55	1.81	1.79	2.20	2.02	2.37	2.85	2.42	1.88	1.59	1.91	1.72
MAX	10.8	10.9	9.18	9.40	9.91	10.2	12.0	12.3	8.43	8.32	16.8	11.6
(WY)	1959	1955	1956	1956	1955	1956	1958	1958	1956	1956	1955	1954
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1966	1966	1966	1966	1980	1981	1981	1981	1966	1966	1965	1982



## SURFACE-WATER SITES ON LONG ISLAND

## 01311500 VALLEY STREAM AT VALLEY STREAM, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1954 - 1999
ANNUAL TOTAL	965.63	456.45	
ANNUAL MEAN	2.65	1.25	1.98
HIGHEST ANNUAL MEAN			8.86
LOWEST ANNUAL MEAN			.11
HIGHEST DAILY MEAN	57 Mar 9	71 Jan 3	140 Aug 12 1955
LOWEST DAILY MEAN	.00 Sep 24	.00 Oct 1	.00 Jul 25 1963
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 29	.00 Oct 1	.00 Aug 10 1963
10 PERCENT EXCEEDS	5.9	2.0	6.1
50 PERCENT EXCEEDS	1.3	.24	.23
90 PERCENT EXCEEDS	.00	.00	.00



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD. SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR. ZERO FLOWS ARE PLOTTED AS 0.001 DISCHARGE, WHICH MAY INCLUDE THE DAILY MINIMUM FOR PERIOD OF RECORD.

## SURFACE-WATER SITES ON LONG ISLAND

91

## 01311810 CONSELYEAS POND TRIBUTARY AT ROSEDALE, NY

LOCATION.—Lat 40°39'42", long 73°45'22", Queens County, Hydrologic Unit 02030202, on right end of upstream side of reinforced-concrete bridge in Brookville Park, opposite 144th Ave. and 1,300 ft southwest of South Conduit Ave., in Rosedale.

DRAINAGE AREA.—About 10 mi<sup>2</sup>.

PERIOD OF RECORD.—August 1993 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 7.0 ft above sea level, from topographic map.

REMARKS.—Records good except those for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 246 ft<sup>3</sup>/s, Jan. 3, 1999, gage height, 5.21 ft, from rating curve extended above 110 ft<sup>3</sup>/s; no flow part of each day Jan. 9, 10, 1996, and many days July to September 1999.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 246 ft<sup>3</sup>/s, Jan. 3, gage height, 5.21 ft; no flow for part or all of many days July to September.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.17	.28	.05	e2.0	3.1	1.3	.26	.27	.29	.00	.00
2	.14	.19	.35	.06	e10	.55	1.2	.24	.19	.09	.00	.00
3	.16	.25	.28	e40	e2.0	.47	1.0	.27	.15	.11	.00	.00
4	.16	.27	.24	e2.0	e.80	3.5	.93	.44	.15	.10	.00	.00
5	.17	.30	.23	e1.0	.60	.34	.60	.13	.16	.13	.00	.00
6	.17	.29	.18	e.80	.30	1.2	.45	.12	.17	.14	.00	.00
7	.18	.24	.14	e.60	.23	3.0	.49	.13	.18	.11	.00	.00
8	.75	.28	.11	e.50	.26	.31	.43	.15	.17	.10	.00	.00
9	1.3	.31	.06	e5.0	.21	.24	.48	.18	.21	.08	.00	.00
10	.38	.29	.07	e.50	.18	.23	.71	.21	.21	.08	.00	.03
11	.10	.37	.08	e.40	.18	.29	.49	.21	.24	.07	.00	.04
12	.09	.35	.10	e.30	.18	.31	1.2	.20	.22	.03	.00	.00
13	.08	.37	.10	e.20	.26	.30	.28	.21	.23	.00	.00	.00
14	.11	.29	.10	e.20	.29	.37	.33	.21	.24	.00	.00	.00
15	.11	.28	.09	e30	.31	3.6	.21	.21	.28	.00	.00	.00
16	.10	.30	.10	e1.0	.31	2.0	.34	.20	.26	e.00	.00	38
17	.11	.28	.07	e.50	.29	1.2	.44	.22	.28	e.00	.00	1.7
18	.13	.27	.07	e10	7.0	.77	.18	.26	.31	e.00	.00	.14
19	.17	.25	.09	e2.0	.73	.55	.21	13	.60	e.00	.00	.12
20	.17	.28	.07	e1.0	.42	.49	.28	2.3	.76	e.00	.00	.11
21	.18	.30	.08	e.70	.30	.80	.21	.23	.91	.00	.68	4.8
22	.15	.26	.07	e.60	.24	13	.18	.19	.69	.00	.09	.36
23	.14	.23	.09	e2.0	.26	.71	.34	.73	.65	.00	.03	.11
24	.14	.17	.08	e20	.24	1.0	.27	8.4	.64	.00	.00	.13
25	.13	.13	.07	e2.0	.26	.78	.15	1.1	.61	.00	.00	.14
26	.15	1.3	.05	e1.5	.30	.69	.15	.36	.58	.00	.00	.20
27	.17	.29	.03	e1.0	.31	.73	.17	.23	.56	.00	.04	.17
28	.23	.18	.04	e.80	2.1	1.3	.18	.19	.55	.00	.01	.15
29	.19	.17	.05	e.70	---	1.1	.23	.24	.91	.00	.00	.15
30	.14	.17	.06	e.60	---	1.1	.23	.24	.43	.00	.00	.18
31	.14	---	.07	e.50	---	1.3	---	.25	---	.00	.00	---
TOTAL	6.46	8.83	3.50	126.51	30.56	45.33	13.66	31.31	11.81	1.33	0.85	46.53
MEAN	.21	.29	.11	4.08	1.09	1.46	.46	1.01	.39	.043	.027	1.55
MAX	1.3	1.3	.35	.40	10	13	1.3	13	.91	.29	.68	38
MIN	.08	.13	.03	.05	.18	.23	.15	.12	.15	.00	.00	.00

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1999, BY WATER YEAR (WY)

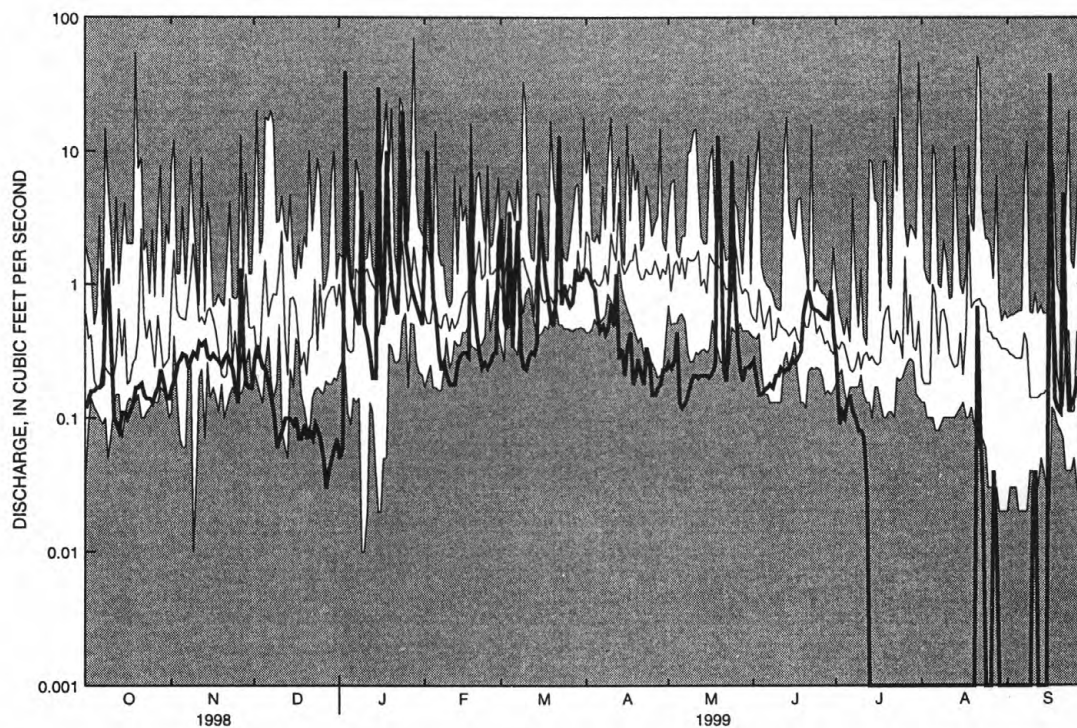
	1993	1994	1995	1996	1997	1998	1999
MEAN	1.11	.96	1.43	2.61	1.42	1.93	1.89
MAX	3.40	1.45	3.97	4.67	2.19	2.89	3.14
(WY)	1997	1998	1997	1994	1998	1998	1997
MIN	.21	.29	.11	.75	.85	.91	.46
(WY)	1999	1999	1999	1996	1996	1995	1999

## SURFACE-WATER SITES ON LONG ISLAND

## 01311810 CONSELYEAS POND TRIBUTARY AT ROSEDALE, NY (continued)

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1993 - 1999
ANNUAL TOTAL	552.99	326.68	
ANNUAL MEAN	1.52	.90	1.50
HIGHEST ANNUAL MEAN			2.42 1997
LOWEST ANNUAL MEAN			.80 1995
HIGHEST DAILY MEAN	33 Mar 9	40 Jan 3	70 Jan 28 1994
LOWEST DAILY MEAN	.03 Dec 27	.00 Jul 13	.00 Jul 13 1999
ANNUAL SEVEN-DAY MINIMUM	.05 Dec 25	.00 Jul 13	.00 Jul 13 1999
10 PERCENT EXCEEDS	2.9	1.1	2.5
50 PERCENT EXCEEDS	.42	.21	.53
90 PERCENT EXCEEDS	.10	.00	.10

e Estimated



CURRENT WATER YEAR DAILY DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD. SHADED AREAS SHOW DAILY MAXIMUM AND MINIMUM FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR. ZERO FLOWS ARE PLOTTED AS 0.001 DISCHARGE, WHICH MAY INCLUDE THE DAILY MINIMUM FOR PERIOD OF RECORD.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

### Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site. Where "Drainage area" column is blank, drainage area was not available at time of publication.

Discharge measurements made at low-flow partial-record stations during water year 1999

Station number	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Streams on Long Island						
01304400	Peconic River at Manorville, N.Y.	Lat 40°52'38", long 72°49'42", Suffolk County, at bridge on Schultz Road, 1 mi northwest of Manorville, and 8.5 mi upstream from gaging station at Riverhead	--	1948-49 1951-99	12-28-98	0.98
01304510	Peconic River at Nugent Drive, at Riverhead, N.Y.	Lat 40°55'03", long 72°40'11", Suffolk County, at bridge on Nugent Drive, at Riverhead, and 1.4 mi downstream from gaging station at Riverhead	--	1976-99	12-28-98	31
01304960	Forge River at Moriches, N.Y.	Lat 40°48'22", long 72°50'00", Suffolk County, at two culverts on State Highway 27A, at Moriches	--	1948-50 1952-99	12-28-98	6.0
01304990	Carmans River at Middle Island, N.Y.	Lat 40°51'47", long 72°56'35", Suffolk County, at culvert on East Bartlett Road, 0.75 mi south of Middle Island, and 3.0 mi upstream from gaging station at Yaphank	--	1957-99	12-29-98	2.0
01304995	Carmans River near Yaphank, N.Y.	Lat 40°50'29", long 72°56'13", Suffolk County, 25 ft downstream from Mill Road, 1.2 mi northwest of Yaphank, and 1.9 mi upstream from gaging station at Yaphank	--	1973-99	12-29-98	11
01304998	Carmans River, below Lower Lake, at Yaphank, N.Y.	Lat 40°50'07", long 72°55'01", Suffolk County, at culvert on Yaphank Avenue, at Yaphank, and 0.7 mi upstream from gaging station at Yaphank	--	1973-99	12-29-98	19
01305040	Carmans River at South Haven, N.Y.	Lat 40°48'09", long 72°53'09", Suffolk County, 75 ft upstream from culvert on State Highway 27A, at South Haven, and 2.6 mi downstream from gaging station at Yaphank	--	1973-99	12-29-98	55



## CONTINUOUS RECORDING STATIONS

404931073382101. Local number, N110.1

LOCATION.—Lat 40°49'31", long 73°38'21", Hydrologic Unit 02030201, at Jericho Water District storage garage, 27 ft south of Scudders Lane, 32 ft west of Motts Cove Road, in recorder shelter, Glenwood Landing. Owner: Jericho Water District.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 16 in., depth 519 ft, screened 445 to 515 ft.

INSTRUMENTATION.—Digital water-level recorder

DATUM.—Land-surface datum is 56.2 ft above sea level. Measuring point: Top of 4-in steel nipple, 0.44 ft above land-surface datum.

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

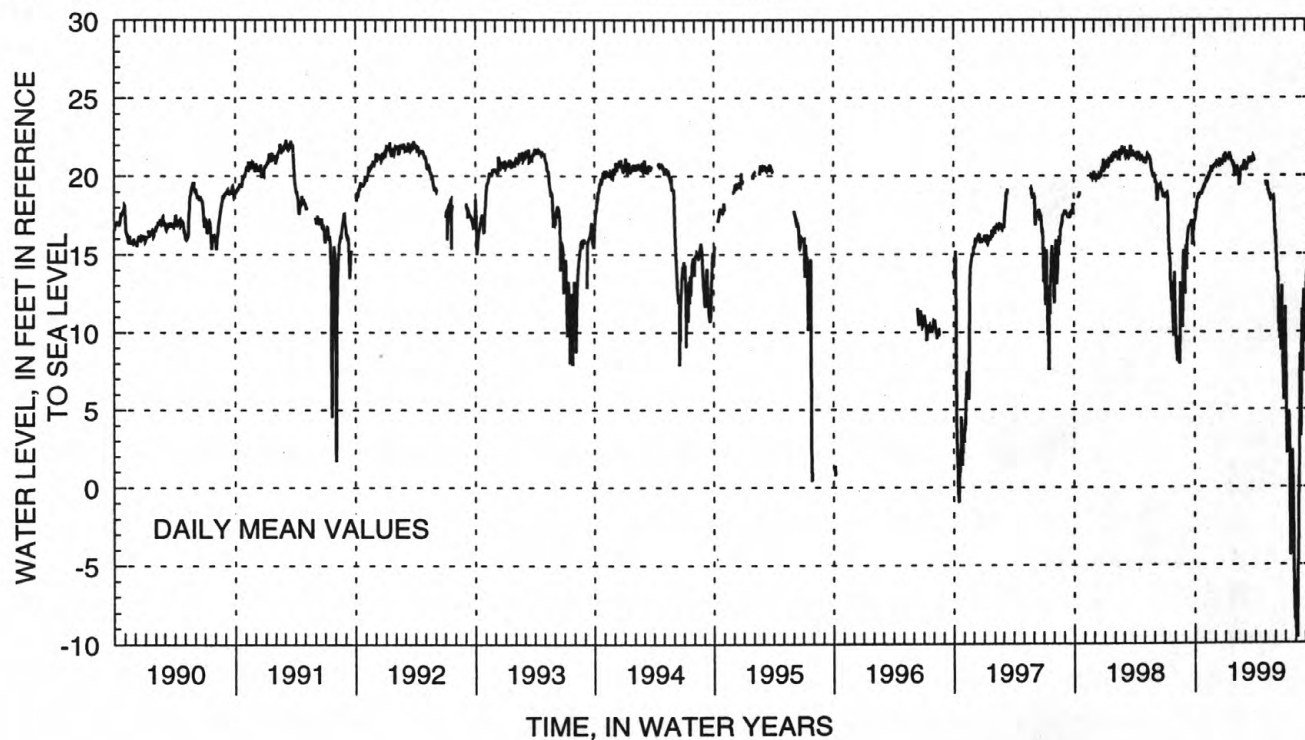
PERIOD OF RECORD.—January 1946 to current year. Unpublished records for 1946-48, 1952, 1955, 1961, 1965, 1970- 75, are available in files of the Long Island Subdistrict office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 27.99 ft above sea level, December 15, 1970; lowest recorded, 10.58 ft below sea level, August 7, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.63	19.67	20.69	21.12	20.34	20.33	---	19.68	15.19	6.59	-9.51	13.14
10	18.53	19.81	20.70	21.18	20.37	20.76	---	19.52	13.58	4.24	-4.71	14.50
15	18.78	20.18	20.79	21.48	19.66	21.18	---	18.88	10.65	2.58	7.24	14.74
20	18.92	20.39	20.82	21.00	20.52	20.81	---	18.62	9.05	-1.44	4.51	15.36
25	19.06	20.35	20.82	20.78	20.58	21.07	---	18.66	7.77	0.56	7.42	15.90
EOM	19.26	20.67	20.99	20.06	20.81	21.02	---	17.37	9.24	-8.64	11.55	16.26
MEAN	18.55	20.06	20.85	20.98	20.30	20.87	---	18.85	11.39	1.13	2.41	14.27
MAX	19.30	20.67	21.33	21.48	20.81	21.24	---	19.68	16.69	11.62	12.68	16.26
MIN	17.15	19.35	20.58	20.06	19.38	20.33	---	17.37	5.62	-8.64	-9.70	9.33

WTR YR 1999    MEAN    15.37    MAX    21.48    MIN    -9.70



## CONTINUOUS RECORDING STATIONS

403805073395301. Local number, N2790.2

LOCATION.—Lat 40°38'05", long 73°39'53", Hydrologic Unit 02030202, at Bay Park Sewage Treatment Plant, in recorder shelter, Bay Park. Owner: Nassau County Department of Public Works.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 571 ft, screened 538 to 560 ft.

INSTRUMENTATION.—Digital water-level recorder — 30-minute punch.

DATUM.—Land-surface datum is 6.0 ft above sea level. Measuring point: Base of steel recorder shelf, 3.82 ft above land-surface datum.

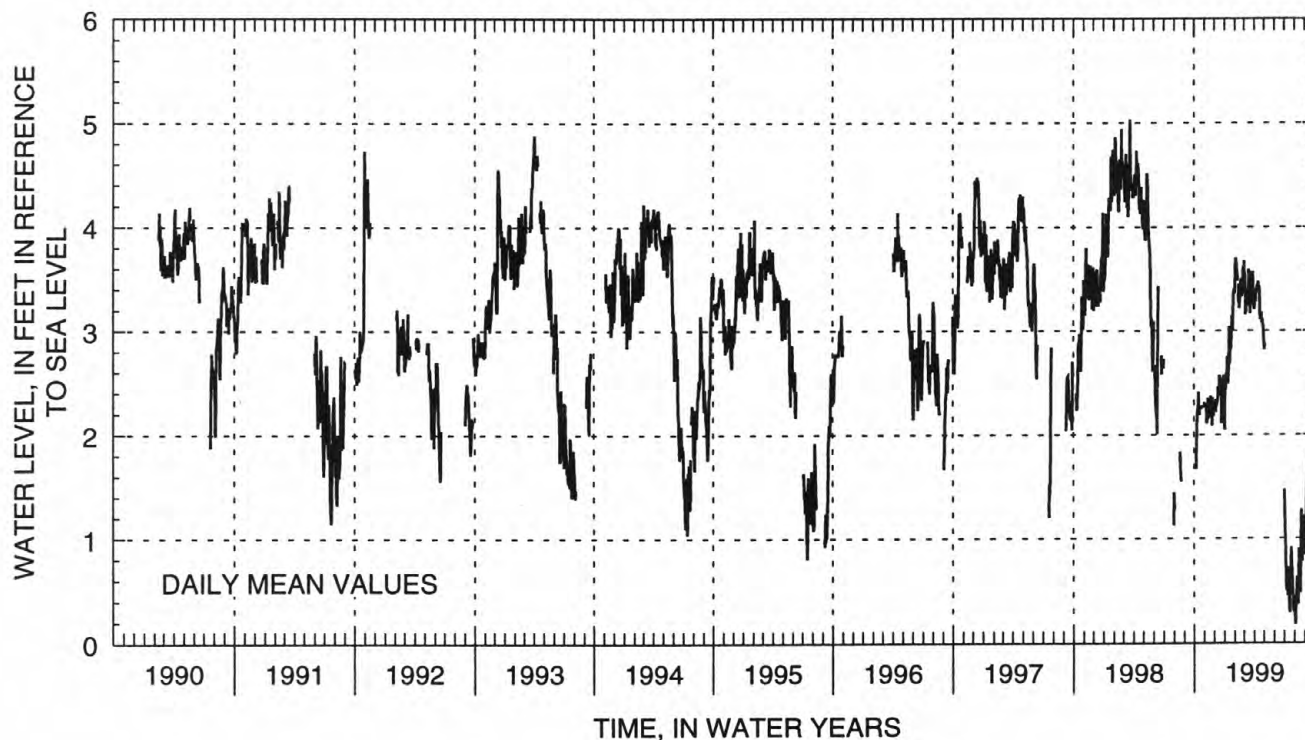
REMARKS.—Water level affected by tidal fluctuation and nearby pumping.

PERIOD OF RECORD.—February 1950 to current year. Unpublished records from February 1950 to September 1975 are available in files of the Long Island Subdistrict office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.50 ft above sea level, April 6, 1958; lowest measured, 0.36 ft below sea level, July 20, 1977.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	2.29	2.22	2.44	3.49	3.16	3.28	---	---	1.03	0.23	1.03
10	2.19	2.16	2.33	2.58	---	---	3.41	---	---	0.58	0.45	1.69
15	2.31	2.35	2.39	3.04	3.26	3.59	3.38	---	---	0.66	0.90	1.39
20	2.26	2.37	2.43	2.82	3.50	3.17	3.12	---	---	0.55	0.49	2.01
25	2.27	2.09	2.20	3.00	3.55	3.40	3.09	---	---	0.70	0.78	2.22
EOM	2.28	2.32	2.25	3.36	3.56	3.23	2.95	---	---	0.29	1.08	2.20
MEAN	2.21	2.24	2.35	2.81	3.46	3.37	3.25	---	---	0.64	0.70	1.68
MAX	2.41	2.37	2.57	3.40	3.69	3.67	3.47	---	---	1.47	1.28	2.33
MIN	1.67	2.09	2.11	2.05	3.22	3.16	2.95	---	---	0.29	0.18	0.84
WTR YR 1999	MEAN	2.26	MAX	3.69	MIN	0.18						



## CONTINUOUS RECORDING STATIONS

404418073434101. Local number, Q577.1

LOCATION.—Lat 40°44'18", long 73°43'41", Hydrologic Unit 02030201, at Creedmoor State Hospital, near the intersection of Hillside Avenue and Cross Island Parkway, in recorder shelter, Bellerose. Owner: State of New York.

UIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 12 in., depth 640 ft, screen assumed at bottom.

INSTRUMENTATION.—Digital water-level recorder.

DATUM.—Land-surface datum is 113.5 ft above sea level. Measuring point: Top of 12-in steel casing, 0.22 ft above land-surface datum.

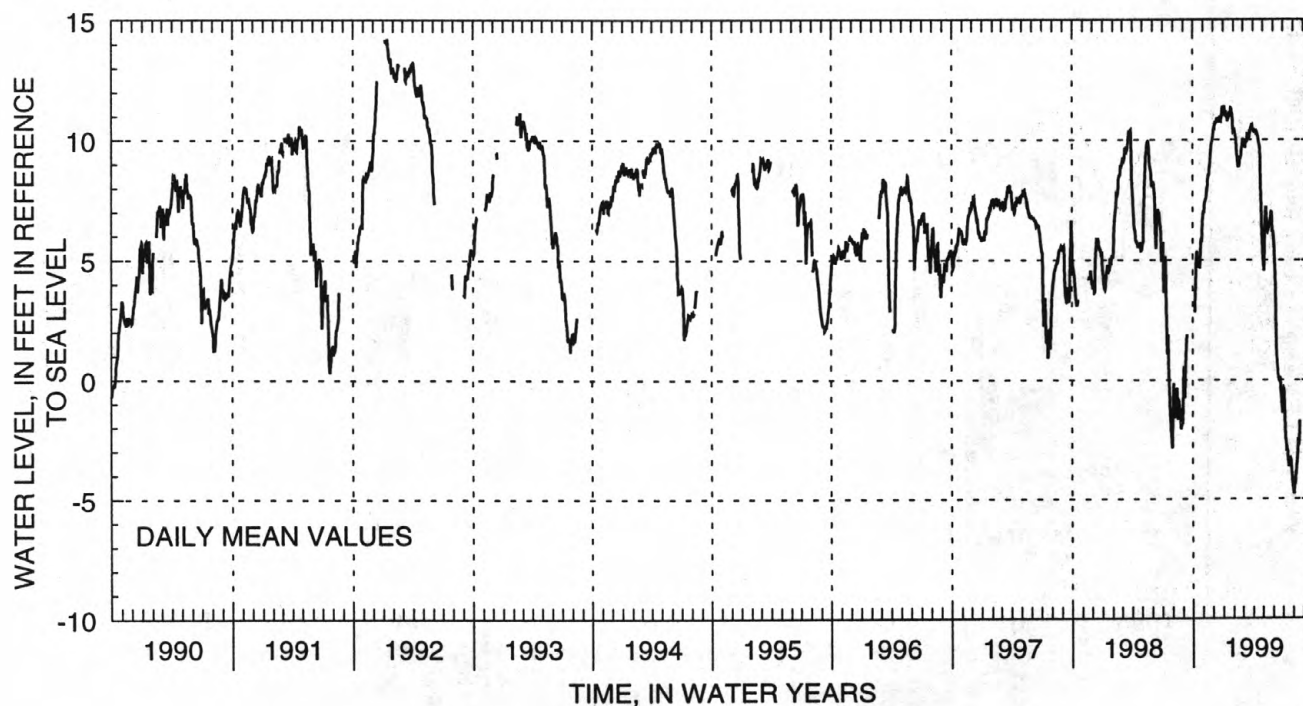
REMARKS.—Water level affected by nearby pumping.

PERIOD OF RECORD.—February 1946 to current year. Unpublished records from February 1946 to September 1975 are available in files of the Long Island Subdistrict office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level recorded, 14.34 ft above sea level, January 14, 1992; lowest measured, 18.66 ft below sea level, July 30, 1954.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	7.31	10.50	11.19	10.26	9.71	10.31	5.08	4.94	-0.52	-4.57	---
10	4.44	7.61	10.70	10.99	9.71	9.93	10.27	7.22	1.80	-2.53	-3.92	---
15	4.94	8.38	10.81	11.02	8.89	10.30	10.15	6.17	0.53	-3.00	-2.90	---
20	4.76	8.88	10.75	11.13	9.19	10.04	9.82	6.49	-0.03	-3.60	-2.53	---
25	5.70	9.61	10.81	11.30	9.56	10.47	7.53	6.94	-0.46	-3.33	---	---
EOM	6.83	10.08	11.17	10.36	9.91	10.46	5.36	6.22	-1.40	-4.42	---	---
MEAN	5.08	8.41	10.80	11.05	9.60	10.13	9.32	6.29	1.48	-2.74	-3.57	---
MAX	6.83	10.08	11.39	11.38	10.48	10.64	10.45	7.22	6.09	-0.35	-1.71	---
MIN	2.83	6.95	10.24	10.36	8.89	9.66	5.36	4.55	-1.40	-4.42	-4.75	---
WTR YR 1999	MEAN	6.27	MAX	11.39	MIN	-4.75						



## CONTINUOUS RECORDING STATIONS

404025073463801. Local number, Q2422.1

LOCATION.—Lat 40°40'25", long 73°46'38", Hydrologic Unit 02030202, at south side of 132nd Street, 140 ft west of Guy R. Brewer Boulevard, in pumping station, Springfield Gardens. Owner: City of New York.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 8 in. to 6 in., depth 370 ft, screened 342 to 362 ft.

INSTRUMENTATION.—Digital water-level recorder.

DATUM.—Land-surface datum is 21.0 ft above sea level. Measuring point: Top of 8-in steel casing, 1.21 ft above land-surface datum.

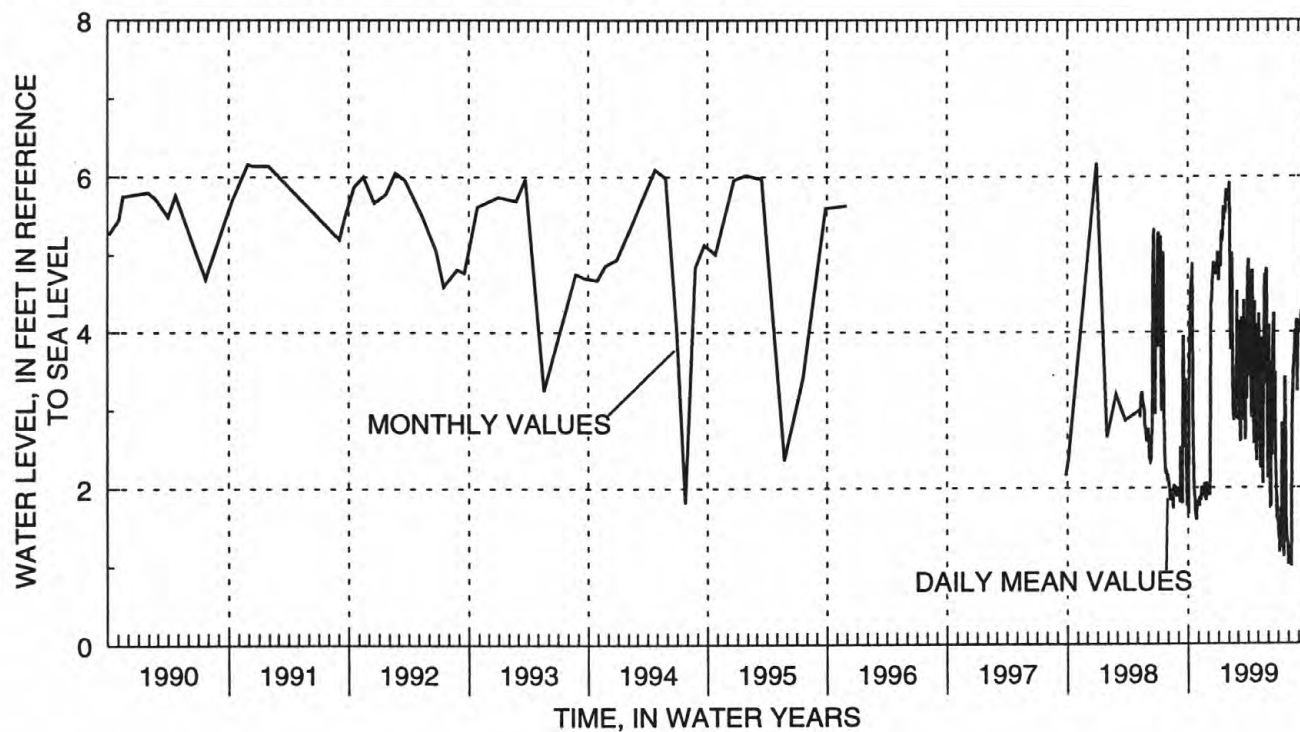
REMARKS.—Water level affected by nearby pumping

PERIOD OF RECORD.—March 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.17 ft above sea level, December 29, 1997; lowest measured, 5.65 ft below sea level, September 9, 1983.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.58	1.87	1.92	4.89	4.81	3.90	3.89	3.70	2.80	1.18	0.93	3.92
10	4.64	1.88	4.24	5.27	5.02	2.62	3.34	2.50	2.26	1.54	0.82	4.21
15	3.51	1.97	4.74	5.57	2.99	3.98	4.68	2.27	3.51	2.03	3.18	3.59
20	2.00	2.02	4.76	5.56	2.93	4.27	3.24	4.05	2.89	1.68	3.58	4.20
25	1.62	1.85	4.74	5.78	3.25	2.83	2.58	4.36	2.19	2.13	3.84	4.13
EOM	1.78	1.95	4.90	5.71	3.70	4.67	4.03	2.14	1.53	1.13	3.86	4.37
MEAN	2.80	1.92	4.06	5.37	4.02	3.47	3.66	3.26	2.73	1.68	2.61	4.10
MAX	4.79	2.04	5.04	5.80	5.92	4.67	4.92	4.72	4.16	3.13	4.16	4.53
MIN	1.59	1.77	1.92	4.65	2.90	2.62	2.42	2.01	1.53	0.99	0.82	3.47
WTR YR 1999	MEAN	3.30	MAX	5.92	MIN	0.82						





## CONTINUOUS RECORDING STATIONS

404112073500901. Local number, Q3160.1

LOCATION.—Lat 40°41'12", long 73°50'09", Hydrologic Unit 02030202, at west side of 108th Street, 196 ft south of 101st Avenue, Woodhaven. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 65 ft, screened 60 to 65 ft.

INSTRUMENTATION.—Digital water-level recorder.

DATUM.—Land-surface datum is 45.0 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.22 ft below land-surface datum.

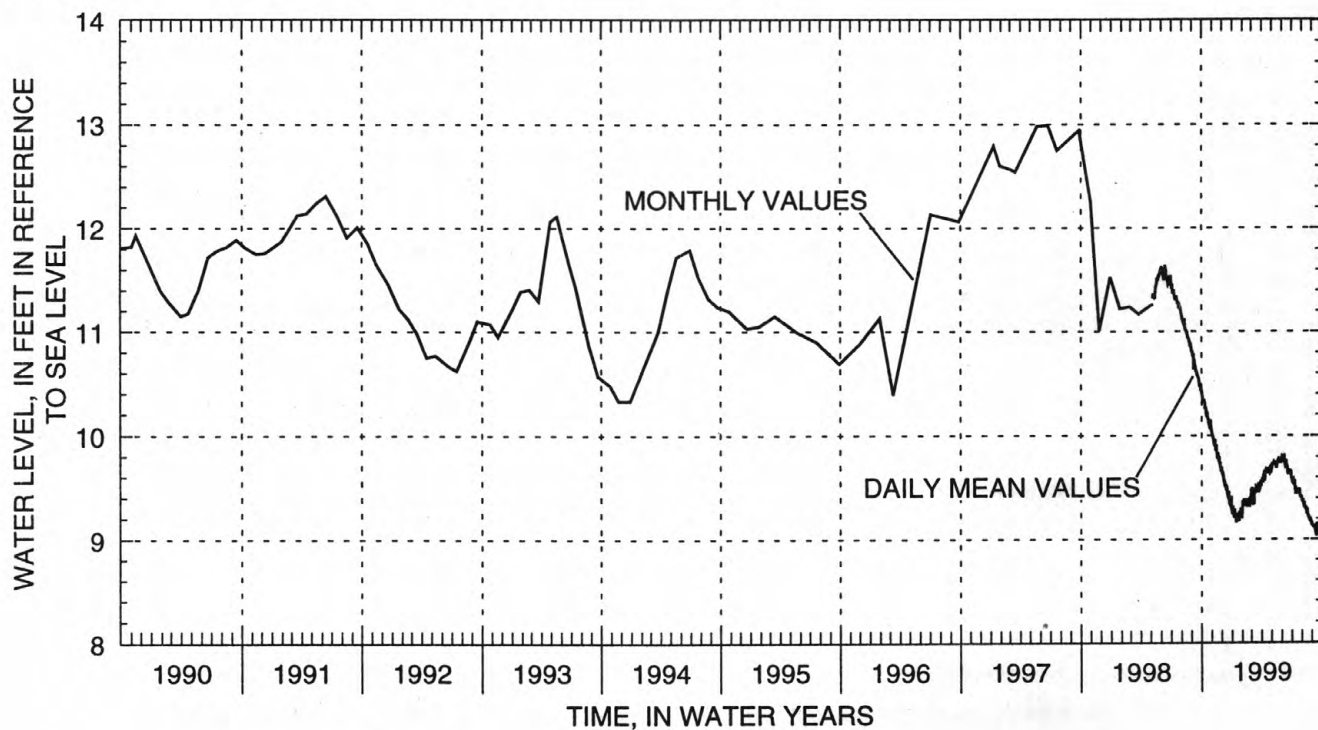
PERIOD OF RECORD.—March 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 12.99 ft above sea level, June 23, 1997; lowest measured, 6.08 ft above sea level, March 2, 1984.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.34	9.99	9.61	9.24	9.33	9.34	9.55	9.73	9.75	9.56	9.38	9.12
10	10.31	9.91	9.54	9.23	9.35	9.47	9.61	9.73	9.72	9.54	9.33	9.11
15	10.22	9.89	9.48	9.26	9.32	9.52	9.68	9.70	9.74	9.48	9.27	9.05
20	10.17	9.84	9.39	9.20	9.38	9.46	9.67	9.75	9.63	9.46	9.22	9.10
25	10.10	9.72	9.34	9.23	9.38	9.49	9.67	9.76	9.66	9.47	9.20	9.12
EOM	10.04	9.67	9.28	9.20	9.45	9.54	9.66	9.77	9.59	9.40	9.15	9.15
MEAN	10.22	9.85	9.48	9.23	9.35	9.47	9.64	9.74	9.71	9.49	9.27	9.10
MAX	10.44	10.03	9.66	9.35	9.45	9.55	9.71	9.79	9.81	9.57	9.40	9.16
MIN	10.04	9.67	9.28	9.16	9.27	9.34	9.55	9.68	9.59	9.40	9.15	9.05

WTR YR 1999    MEAN    9.55    MAX    10.44    MIN    9.05



## CONTINUOUS RECORDING STATIONS

404226073303201. Local number, Q3163.1

LOCATION.—Lat 40°42'26", long 73°45'33", Hydrologic Unit 02030202, at south side of 109th Avenue, 132 ft west of 200th Street, Saint Albans. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 66 ft, screened 61 to 66 ft.

INSTRUMENTATION.—Digital water-level recorder.

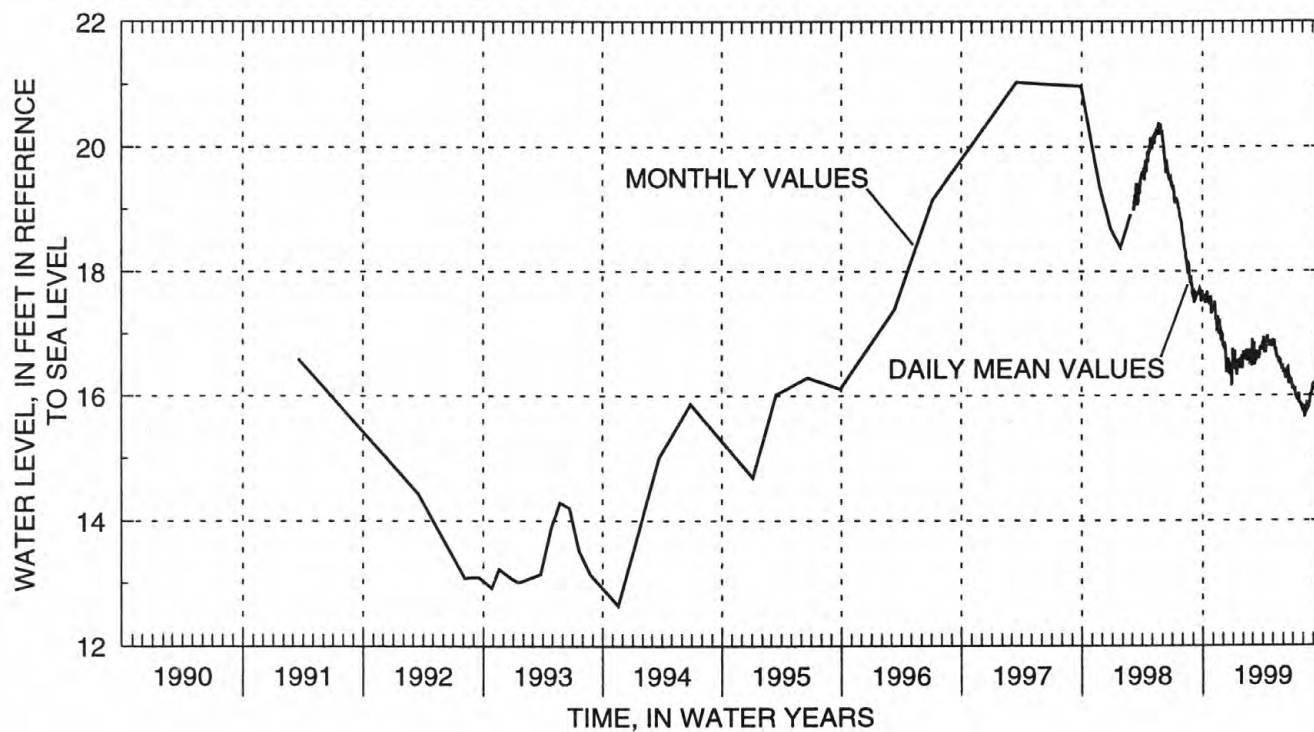
DATUM.—Land-surface datum is 50.0 ft above sea level. Measuring point: Top of 2-in PVC coupling, 1.06 ft below land-surface datum.

PERIOD OF RECORD.—March 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 21.04 ft above sea level, March 17, 1997; lowest measured, 5.93 ft below sea level, March 2, 1984.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.59	17.41	16.86	16.63	16.66	16.65	16.92	16.87	16.36	16.14	15.80	16.19
10	17.50	17.35	16.78	16.43	16.64	16.56	16.88	16.78	16.30	16.09	15.73	16.06
15	17.61	17.19	16.50	16.47	16.57	16.53	16.88	16.63	16.40	15.95	15.84	16.34
20	17.55	17.00	16.56	16.61	16.68	16.66	16.83	16.61	16.29	16.01	15.83	16.48
25	17.49	17.12	16.43	16.51	16.67	16.70	16.84	16.54	16.28	15.90	15.99	16.67
EOM	17.37	16.97	16.53	16.44	16.55	16.77	16.80	16.45	16.18	15.81	16.10	16.78
MEAN	17.53	17.22	16.58	16.52	16.63	16.68	16.84	16.68	16.34	15.99	15.86	16.37
MAX	17.67	17.51	16.92	16.76	16.71	16.84	16.94	16.90	16.47	16.16	16.10	16.78
MIN	17.35	16.91	16.18	16.34	16.51	16.53	16.69	16.45	16.18	15.81	15.68	16.06
WTR YR 1999	MEAN	16.60	MAX	17.67	MIN	15.68						



## CONTINUOUS RECORDING STATIONS

404143073482701. Local number, Q3165.1

LOCATION.—Lat 40°41'43", long 73°48'27", Hydrologic Unit 02030202, at east side of Liverpool Street, 54 ft north of 101st Avenue, Jamaica. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 65 ft, screened 60 to 65 ft.

INSTRUMENTATION.—Digital water-level recorder.

DATUM.—Land-surface datum is 41.6 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.59 ft below land-surface datum.

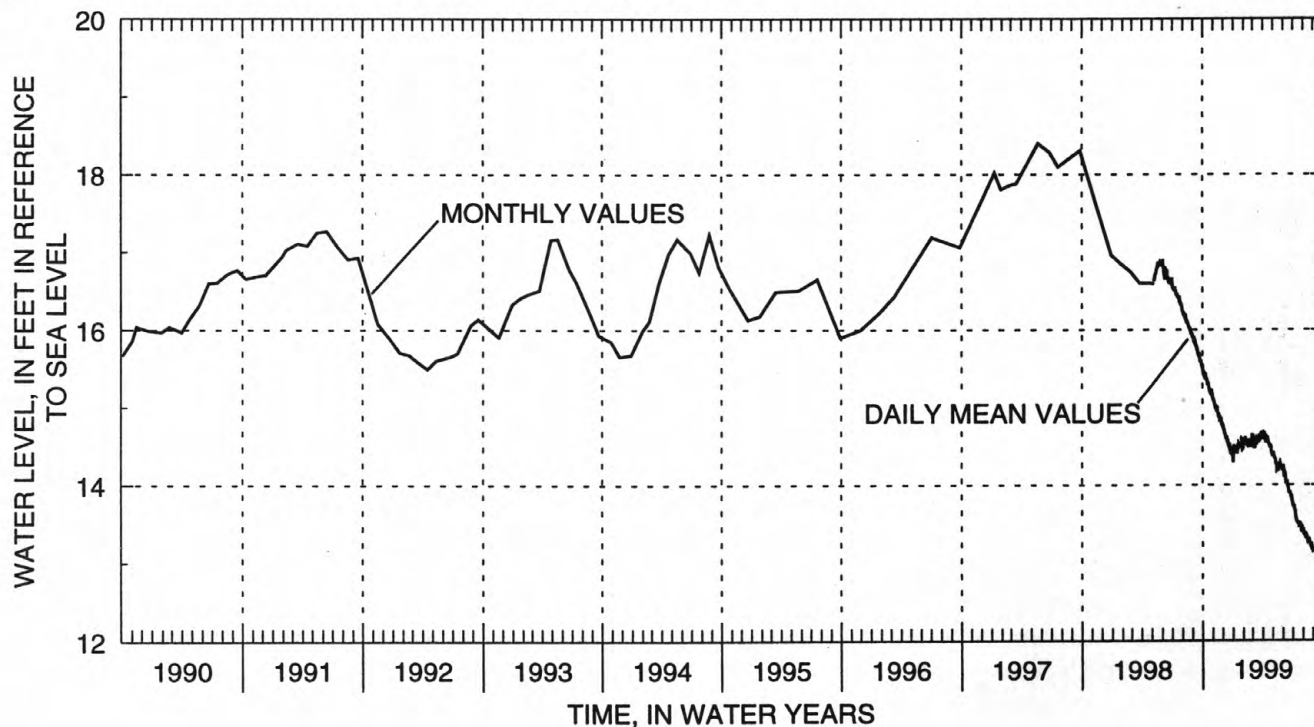
PERIOD OF RECORD.—March 1984 to current year. Unpublished records from March 1984 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 18.40 ft above sea level, May 22, 1997; lowest measured, 7.28 ft above sea level, March 2, 1984.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.42	15.08	14.71	14.45	14.56	14.48	14.58	14.39	14.12	13.73	13.40	13.14
10	15.43	14.99	14.63	14.46	14.56	14.58	14.60	14.31	14.04	13.66	13.33	13.13
15	15.33	14.99	14.56	14.50	14.52	14.61	14.60	14.19	14.04	13.53	13.29	13.07
20	15.29	14.93	14.48	14.51	14.59	14.55	14.53	14.25	13.89	13.50	13.25	13.31
25	15.20	14.81	14.41	14.53	14.55	14.62	14.48	14.27	13.88	13.50	13.23	13.29
EOM	15.14	14.78	14.36	14.45	14.62	14.64	14.38	14.21	13.78	13.43	13.17	13.29
MEAN	15.32	14.95	14.56	14.48	14.56	14.59	14.56	14.28	14.00	13.57	13.30	13.20
MAX	15.53	15.13	14.77	14.58	14.62	14.67	14.67	14.40	14.22	13.76	13.43	13.34
MIN	15.14	14.77	14.36	14.32	14.49	14.47	14.38	14.18	13.78	13.43	13.17	13.07

WTR YR 1999 MEAN 14.28 MAX 15.53 MIN 13.07



## CONTINUOUS RECORDING STATIONS

404251073512601. Local number, Q3651.1

LOCATION.—Lat 40°42'51", long 73°51'26", Hydrologic Unit 02030201, at south side of Manse Street, 45 ft east of Selfridge Street, Forest Hills. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 80 ft, screened 75 to 80 ft.

INSTRUMENTATION.—Digital water-level recorder.

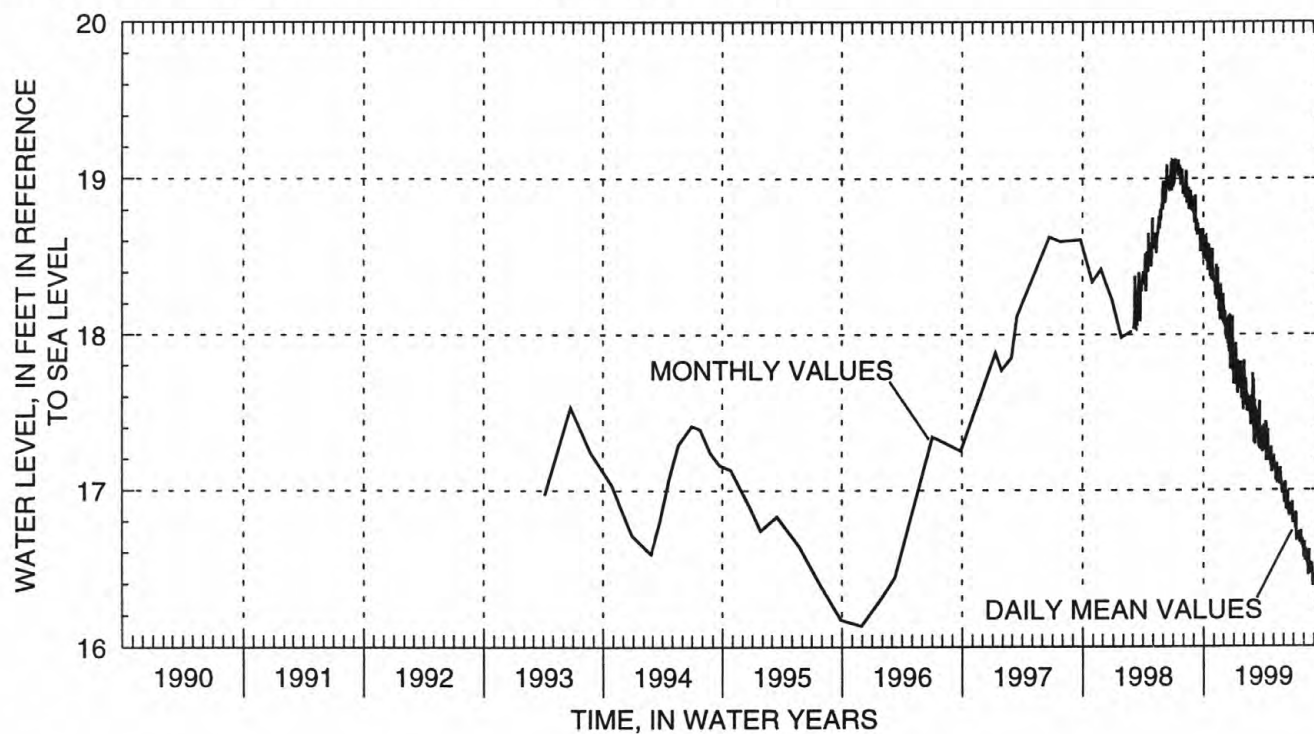
DATUM.—Land-surface datum is 51.3 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.27 ft below land-surface datum.

PERIOD OF RECORD.—April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level recorded, 19.20 ft above sea level, June 30, 1998; lowest measured, 16.13 ft above sea level, November 30, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.53	18.35	18.08	17.75	17.59	17.31	17.23	17.16	16.89	16.83	16.64	16.42
10	18.61	18.29	18.04	17.76	17.54	17.51	17.24	17.09	16.87	16.77	16.56	16.43
15	18.44	18.33	18.01	17.88	17.52	17.51	17.32	17.03	16.91	16.73	16.48	16.38
20	18.48	18.33	17.89	17.67	17.52	17.29	17.25	17.07	16.85	16.67	16.49	16.37
25	18.40	18.15	17.85	17.66	17.58	17.31	17.20	17.06	16.89	16.71	16.48	16.27
EOM	18.37	18.16	17.80	17.54	17.66	17.20	17.13	17.00	16.77	16.61	16.42	16.38
MEAN	18.49	18.26	18.00	17.73	17.58	17.39	17.27	17.10	16.91	16.73	16.53	16.37
MAX	18.65	18.37	18.18	17.95	17.81	17.60	17.39	17.21	17.03	16.83	16.66	16.53
MIN	18.35	18.10	17.80	17.54	17.42	17.20	17.13	16.98	16.77	16.61	16.40	16.23
WTR YR 1999	MEAN	17.36	MAX	18.65	MIN	16.23						





## CONTINUOUS RECORDING STATIONS

404313073475201. Local number, Q3659.1

LOCATION.—Lat 40°43'13", long 73°47'52", Hydrologic Unit 02030201, at south side of intersection of Goethals Avenue and 170th Street, south of western entrance to Saint John's University, Jamaica. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 125 ft, screened 115 to 120 ft.

INSTRUMENTATION.—Digital water-level recorder.

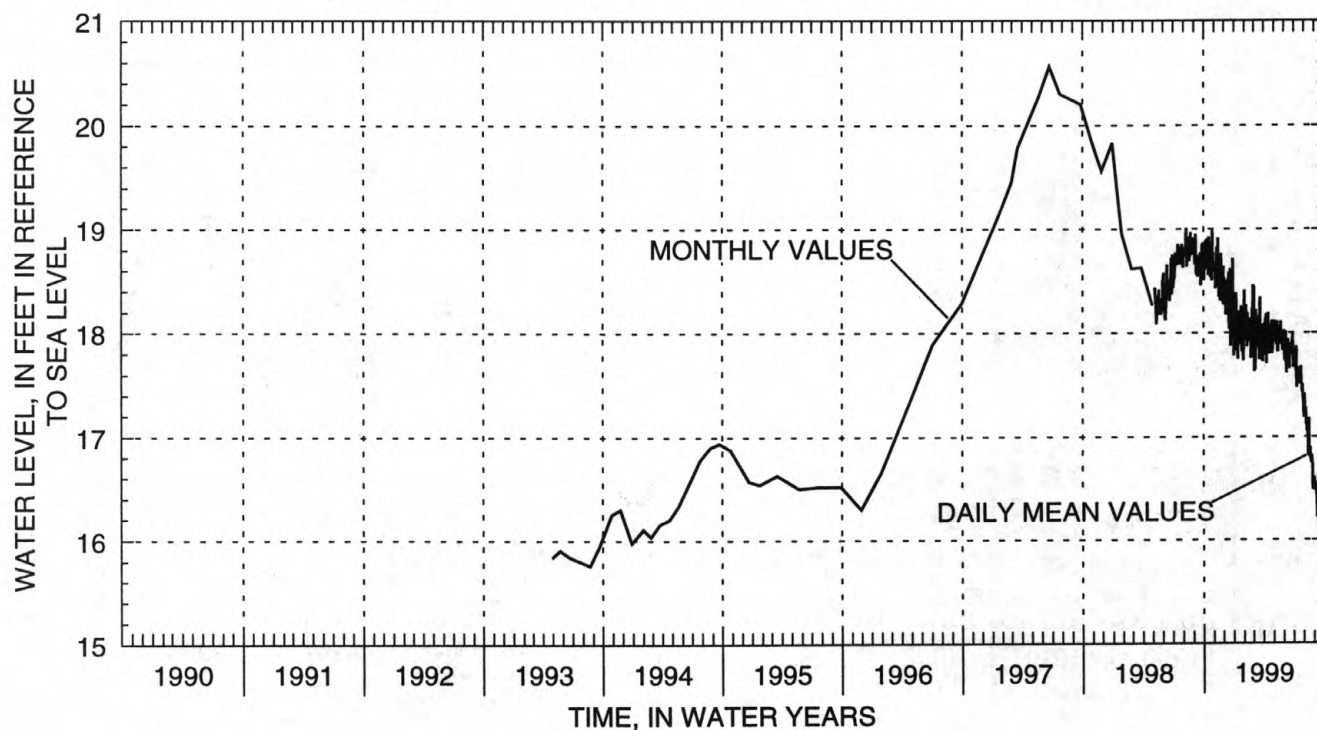
DATUM.—Land-surface datum is 91.4 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.28 ft below land-surface datum.

PERIOD OF RECORD.—April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 20.56 ft above sea level, June 23, 1997; lowest measured, 15.76 ft above sea level, August 23, 1993.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.66	18.62	18.35	17.99	17.96	17.61	17.77	18.03	17.70	17.83	17.40	16.51
10	18.88	18.53	18.32	18.06	18.00	18.21	17.89	17.95	17.63	17.75	17.14	16.49
15	18.64	18.77	18.32	18.42	18.00	18.24	18.03	17.84	17.85	17.68	16.93	16.30
20	18.75	18.76	18.18	17.99	18.08	17.83	17.96	17.98	17.75	17.57	16.85	16.21
25	18.67	18.41	18.16	17.95	18.17	17.90	17.97	17.96	17.90	17.65	16.78	16.04
EOM	18.68	18.44	18.05	17.78	18.33	17.90	17.89	17.91	17.68	17.36	16.54	16.24
MEAN	18.71	18.56	18.34	18.07	18.08	17.97	17.98	17.98	17.84	17.64	17.00	16.30
MAX	18.94	18.79	18.55	18.61	18.37	18.26	18.22	18.14	18.00	17.83	17.41	16.67
MIN	18.54	18.30	18.02	17.78	17.80	17.61	17.77	17.84	17.63	17.36	16.51	15.88
WTR YR 1999	MEAN	17.87	MAX	18.94	MIN	15.88						



## CONTINUOUS RECORDING STATIONS

403727073154601. Local number, S21091.1

LOCATION.—Lat 40°37'27", long 73°15'48", Hydrologic Unit 02030202, at Robert Moses State Park, in water treatment building, Fire Island. Owner: Long Island State Park Commission.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 1,921 ft, screened 1,918 to 1,921 ft.

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

DATUM.—Land-surface datum is 10.0 ft above sea level. Measuring point: Top of 6-in steel casing, 13.68 ft above land-surface datum.

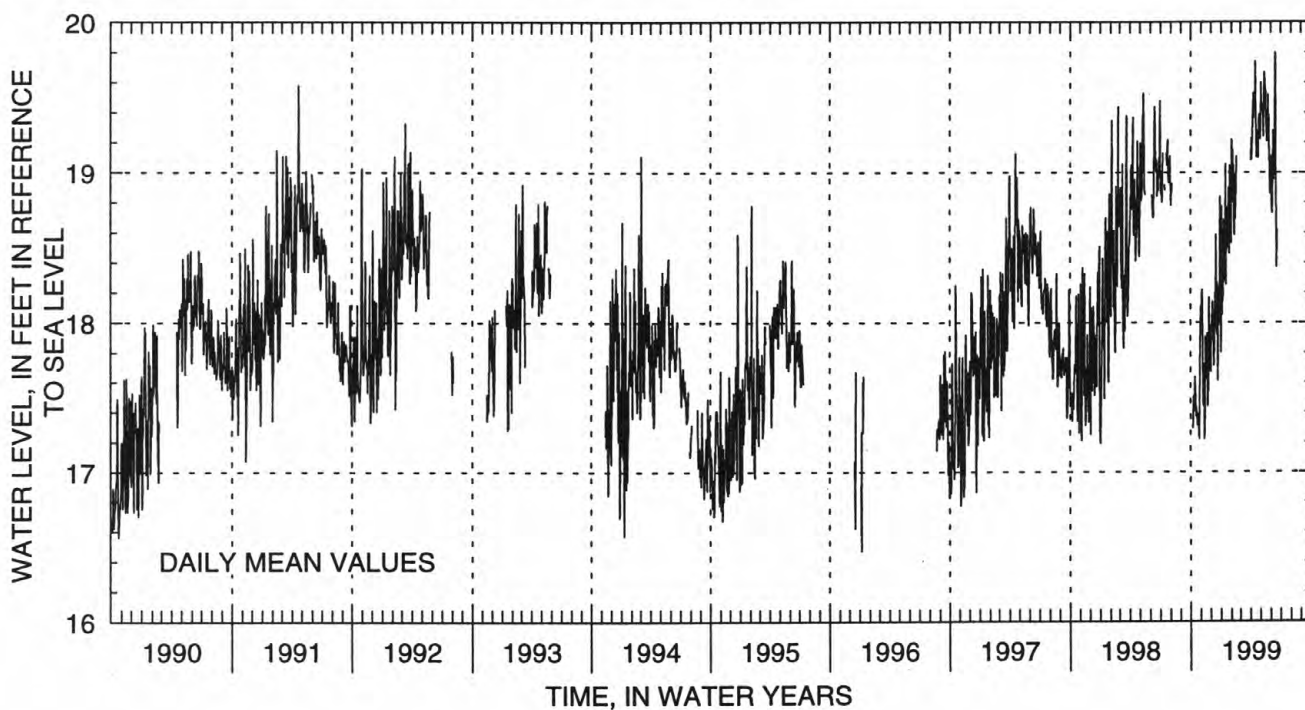
REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—September 1962 to current year. Unpublished records from September 1962 to September 1975 are available in files of the Long Island Subdistrict office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 22.10 ft above sea level, March 16, 1976; lowest measured, 15.13 ft above sea level, June 2, 1972.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	18.22	17.94	18.05	18.80	---	19.09	19.47	18.76	---	---	---
10	17.51	17.45	17.81	18.48	18.64	---	19.51	19.30	19.09	---	---	---
15	17.59	17.91	17.96	19.06	18.82	---	19.57	19.60	19.80	---	---	---
20	17.40	17.93	18.00	18.50	---	---	19.19	19.23	18.37	---	---	---
25	17.32	17.62	17.98	18.50	---	---	19.10	19.32	---	---	---	---
EOM	17.94	17.98	18.16	18.53	---	---	19.27	18.89	---	---	---	---
MEAN	17.46	17.76	18.07	18.51	18.90	---	19.31	19.36	19.00	---	---	---
MAX	17.94	18.22	18.84	19.06	19.22	---	19.74	19.67	19.80	---	---	---
MIN	17.22	17.22	17.61	17.80	18.53	---	19.08	18.86	18.37	---	---	---
WTR YR 1999	MEAN	18.53	MAX	19.80	MIN	17.22						



## CONTINUOUS RECORDING STATIONS

403727073154503. Local number, S21311.1

LOCATION.—Lat 40°37'28", long 73°15'48", Hydrologic Unit 02030202, at Robert Moses State Park, in water treatment building, Fire Island. Owner: Long Island State Park Commission.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 721 ft, screened 711 to 721 ft.

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

DATUM.—Land-surface datum is 10.0 ft above sea level. Measuring point: Top of 6-in steel casing, 20.01 ft above land-surface datum.

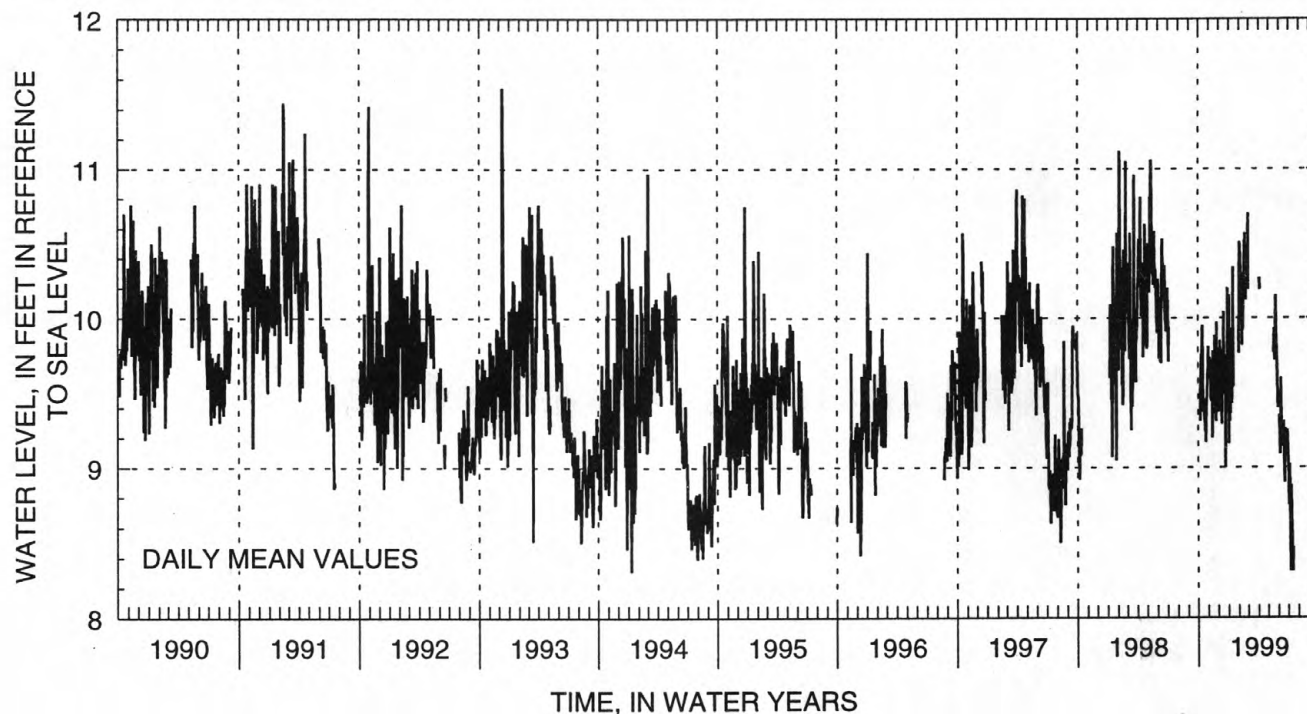
REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—November 1962 to current year. Unpublished records from November 1962 to September 1975 are available in files of the Long Island Subdistrict office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 13.04 ft above sea level, January 25, 1979; lowest measured, 5.35 ft above sea level, February 23, 1972.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	9.63	9.60	9.31	9.97	---	10.19	---	9.18	9.02	---	---
10	9.76	9.55	9.50	9.69	---	---	---	---	9.49	8.88	---	---
15	9.67	9.78	9.57	10.34	10.16	---	---	---	9.14	8.31	---	---
20	9.32	9.88	9.60	---	10.57	---	---	9.76	8.90	---	---	---
25	9.28	9.41	9.49	---	10.41	---	---	9.93	---	---	---	---
EOM	9.72	9.80	---	9.92	10.56	---	---	9.40	9.10	---	---	---
MEAN	9.51	9.58	9.61	9.63	10.24	10.44	---	9.77	9.23	8.65	---	---
MAX	9.95	9.97	10.20	10.34	10.57	10.70	---	10.15	9.60	9.05	---	---
MIN	9.17	9.20	9.00	9.16	9.77	10.19	---	9.40	8.90	8.31	---	---
WTR YR 1999	MEAN	9.56	MAX	10.70	MIN	8.31						



## CONTINUOUS RECORDING STATIONS

404935073055901. Local number, S33379.1

LOCATION.—Lat 40°49'32", long 73°05'59", Hydrologic Unit 02030202, at Duncan Avenue and Portion Road, in pumping center, in recorder shelter, Lake Ronkonkoma. Owner: Suffolk County Water Authority.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 1,305 ft, screened 1,290 to 1,300 ft.

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

DATUM.—Land-surface datum is 134.0 ft above sea level. Measuring point: Top of 4-in steel casing, 2.34 ft above land-surface datum.

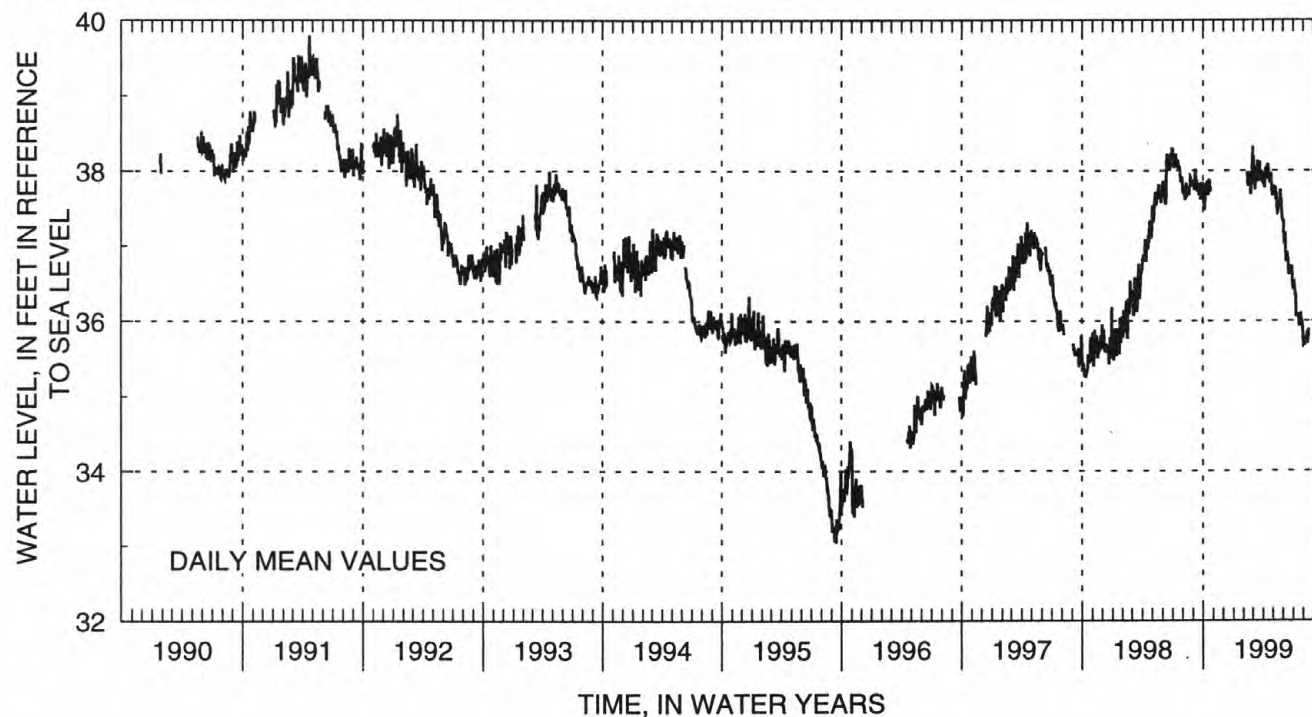
REMARKS.—Water level affected by nearby pumping.

PERIOD OF RECORD.—October 1968 to current year. Unpublished records from October 1968 to September 1975 are available in files of the Long Island Subdistrict office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 40.92 ft above sea level, June 5, 1979; lowest recorded, 33.04 ft above sea level, September 16, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	37.56	---	---	---	---	37.81	37.78	37.77	37.03	36.48	35.77	---
10	37.82	---	---	---	---	38.00	37.96	37.71	36.85	36.36	35.69	---
15	37.78	---	---	---	37.79	38.13	38.02	37.47	36.90	36.08	35.79	---
20	37.85	---	---	---	37.97	37.85	37.91	37.59	36.61	36.01	---	---
25	37.77	---	---	---	37.86	37.96	37.83	37.67	36.71	36.11	---	---
EOM	---	---	---	---	38.13	37.85	37.66	37.34	36.54	35.90	---	---
MEAN	37.72	---	---	---	37.90	37.97	37.91	37.61	36.87	36.17	35.77	---
MAX	37.88	---	---	---	38.13	38.32	38.09	37.79	37.34	36.49	35.90	---
MIN	37.47	---	---	---	37.68	37.74	37.66	37.34	36.54	35.90	35.67	---
WTR YR 1999	MEAN	37.26	MAX	38.32	MIN	35.67						





## CONTINUOUS RECORDING STATIONS

404932073055902. Local number, S33380.1

LOCATION.—Lat 40°49'32", long 73°05'59", Hydrologic Unit 02030202, at Duncan Avenue and Portion Road, in pumping center, in recorder shelter, Lake Ronkonkoma. Owner: Suffolk County Water Authority.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 855 ft, screened 840 to 850 ft.

INSTRUMENTATION.—Digital water-level recorder — 15-minute punch, changed to 30-minute on August 16, 1990.

DATUM.—Land-surface datum is 133.5 ft above sea level. Measuring point: Top of 4-in steel casing, 2.13 ft above land-surface datum.

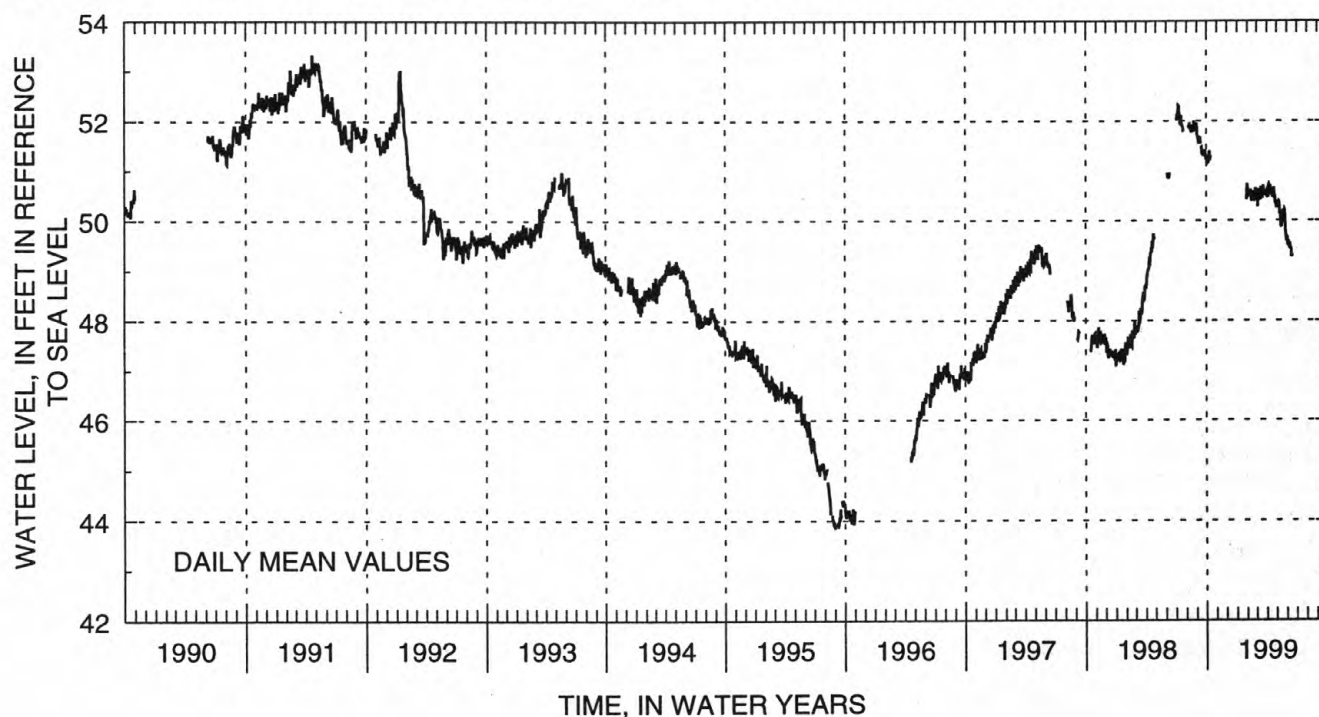
REMARKS.—Water level affected by nearby pumping.

PERIOD OF RECORD.—October 1968 to current year. Unpublished records from October 1968 to September 1975 are available in files of the Long Island Subdistrict office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 54.30 ft above sea level, April 27, 1979; lowest recorded, 43.83 ft above sea level, September 1, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.17	---	---	---	50.60	50.27	50.46	50.39	49.49	---	---	---
10	51.39	---	---	---	---	50.62	50.59	50.26	49.52	---	---	---
15	---	---	---	---	50.38	50.67	50.50	49.89	49.43	---	---	---
20	---	---	---	---	50.45	50.46	50.54	50.21	---	---	---	---
25	---	---	---	---	50.56	50.61	50.43	50.21	---	---	---	---
EOM	---	---	---	50.54	50.62	50.51	50.30	49.67	---	---	---	---
MEAN	---	---	---	---	50.53	50.52	50.55	50.11	49.49	---	---	---
MAX	---	---	---	---	50.73	50.70	50.72	50.39	49.68	---	---	---
MIN	---	---	---	---	50.38	50.27	50.30	49.66	49.27	---	---	---
WTR YR 1999	MEAN	50.39	MAX	51.39	MIN	49.27						



## PRIMARY WELLS

404059073520702. Local number, K1194.4

LOCATION.—Lat 40°40'59", long 73°52'07", Hydrologic Unit 02030202, at east side of Nichols Avenue, 100 ft north of Atlantic Avenue, New Lots. Owner: City of New York.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 2 in., depth 55 ft, screened 52 to 55 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 32.1 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.34 ft below land-surface datum.

REMARKS.—Replaced well K1194.3 in July 1970 at same location.

PERIOD OF RECORD.—November 1970 to current year. Records for November 1970 to September 1987 are unpublished and are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 14.92 ft above sea level, October 28, 1992; lowest measured, 0.83 ft below sea level, November 2, 1970.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	10.39	Jan 27	10.72	Mar 23	10.30	May 18	10.09	Jul 16	10.05	Sep 23	10.12
Nov 24	10.37	Feb 26	10.44	Apr 28	10.23	Jun 24	10.05	Aug 17	10.06		

404236073574601. Local number, K1301.1

LOCATION.—Lat 40°42'35", long 73°57'48", Hydrologic Unit 02030201, at Williamsburg Savings Bank, in basement, 84 ft north of Broadway and 178 ft west of Driggs Avenue, Williamsburg. Owner: Williamsburg Savings Bank.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled unused steel well, diameter 8 in. to 6 in., depth 92 ft, screened 72 to 92 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 52.5 ft above sea level. Measuring point: Hole in top of 4-in steel plug, 9.03 ft below land-surface datum.

PERIOD OF RECORD.—January 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.08 ft above sea level, October 2, 1978; lowest measured, 7.72 ft below sea level, January 19, 1961.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov 24	4.15	Mar 02	4.14	Apr 28	4.14	Jun 24	3.92	Aug 17	3.87	Sep 23	4.07
Jan 27	4.08	Mar 23	3.49	May 18	4.06	Jul 20	3.94				

403451073585601. Local number, K2859.1

LOCATION.—Lat 40°34'51", long 73°58'56", Hydrologic Unit 02030202, at east side of Stillwell Avenue, 689 ft north of Neptune Avenue, Coney Island. Owner: Great Bear Auto Shop.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel private supply well, diameter 4 in., depth 500 ft, screened 474 to 500 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 8.0 ft above sea level. Measuring point: Top of 2-in steel reducer at 3/4-in hole, 0.79 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—March 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.35 ft above sea level, May 18 and July 16, 1999; lowest measured, 0.20 ft above sea level, January 8, 1987.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 23	5.92	Apr 28	6.07	May 18	6.35	Jul 16	6.35	Aug 17	4.49	Sep 23	3.75

## PRIMARY WELLS

403612073573208. Local number, K3159.1

LOCATION.—Lat 40°36'12", long 73°57'32", Hydrologic Unit 02030202, at east side of East 14th Street, 52 ft north of Avenue S, Sheepshead Bay. Owner: City of New York

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 35 ft, screened 32 to 35 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 20.0 ft above sea level. Measuring point: Top of 2-in steel casing, 0.36 ft below land-surface datum.

PERIOD OF RECORD.—July 1970 to June 1976 and April 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 5.67 ft above sea level, April 11, 1989; lowest measured, 3.60 ft above sea level, July 24, 1970.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	4.08	Jan 27	4.07	Mar 23	4.74	May 18	4.63	Jul 16	4.32	Sep 23	4.11
Nov 24	4.01	Mar 02	4.31	Apr 28	4.77	Jun 24	4.57	Aug 17	4.13		

404155073552108. Local number, K3245.1

LOCATION.—Lat 40°41'55", long 73°55'21", Hydrologic Unit 02030201, at west side of Wilson Avenue, 54 ft north of Stanhope Street, Bushwick. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 24 ft, screened 21 to 24 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 24.5 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.05 ft below land-surface datum.

PERIOD OF RECORD.—June 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 11.52 ft above sea level, September 23, 1980; lowest measured, 5.80 ft above sea level, June 1, 1988.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	8.35	Jan 27	7.17	Mar 23	7.11	May 18	7.06	Jul 20	7.03	Sep 23	7.01
Nov 24	7.36	Mar 02	7.13	Apr 28	7.07	Jun 24	7.02	Aug 17	6.99		

403902073552802. Local number, K3246.2

LOCATION.—Lat 40°39'02", long 73°55'28", Hydrologic Unit 02030202, at north side of Snyder Avenue, between Kings Highway and East 56th Street, East Flatbush. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 35 ft, screened 20 to 30 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 25.5 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.16 ft below land-surface datum.

REMARKS.—Replaced well K3246.1 in November 1998 at same location.

PERIOD OF RECORD.—March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 7.85 ft above sea level, April 28, 1999; lowest measured, 7.59 ft above sea level, August 17, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 02	7.84	Apr 28	7.85	Jun 24	7.69	Jul 16	7.62	Aug 17	7.59	Sep 23	7.76
Mar 23	7.81	May 18	7.76								

## PRIMARY WELLS

403623074002101. Local number, K3249.1

LOCATION.—Lat 40°36'23", long 74°00'23", Hydrologic Unit 02030202, at east side of Bay 16th Street, 42 ft north of Benson Avenue, Bath Beach. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 34 ft, screened 31 to 34 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 31.0 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.02 ft below land-surface datum.

PERIOD OF RECORD.—April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 5.09 ft above sea level, January 24, 1991; lowest measured, 3.16 ft above sea level, May 21, 1985.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	4.00	Jan 27	3.83	Mar 23	3.91	May 18	4.01	July 16	3.95	Sep 23	4.17
Nov 24	3.87	Mar 02	4.11	Apr 28	4.01	Jun 24	3.99	Aug 17	4.03		

403442073575401. Local number, K3250.1

LOCATION.—Lat 40°34'43", long 73°57'55", Hydrologic Unit 02030202, at east side of Brighton 3rd Street, 20 ft south of Oceanview Avenue, Coney Island. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 2 in., depth 30 ft, screened 21 to 24 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 9.2 ft above sea level. Measuring point: Top of 2-in steel casing, 0.03 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—June 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 2.39 ft above sea level, February 26, 1998; lowest measured, 0.03 ft below sea level, December 30, 1980.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	1.49	Jan 27	1.76	May 18	1.71	Jul 16	1.63	Aug 17	1.71	Sep 23	2.09
Nov 24	1.39	Apr 28	1.65	Jun 27	1.54						

403520073575501. Local number, K3251.1

LOCATION.—Lat 40°35'20", long 73°57'55", Hydrologic Unit 02030202, at north side of Avenue Y, 115 ft west of East 6th Street, Brighton Beach. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 23 ft, screened 20 to 23 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 9.5 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.06 ft below land-surface datum.

PERIOD OF RECORD.—April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 3.52 ft above sea level, September 19, 1996; lowest measured, 2.14 ft above sea level, March 23, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	2.75	Jan 27	3.10	Apr 28	2.97	Jun 24	2.91	Aug 17	2.89	Sep 23	3.18
Nov 24	2.68	Mar 23	2.14	May 18	2.98	Jul 16	2.87				



## PRIMARY WELLS

403702073555808. Local number, K3252.1

LOCATION.—Lat 40°37'02", long 73°55'58", Hydrologic Unit 02030202, at east side of Hendrickson Street, 46 ft north of Quentin Avenue, Flatlands. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 30 ft, screened 27 to 30 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 12.7 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.02 ft below land-surface datum.

PERIOD OF RECORD.—June 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 2.68 ft above sea level, February 11, 1981; lowest measured, 0.68 ft above sea level, October 6, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	1.07	Jan 27	1.42	Mar 30	2.50	May 18	1.25	Jul 16	1.11	Sep 23	1.42
Nov 24	0.95	Mar 02	1.37	Apr 28	1.36	Jun 24	1.20	Aug 17	1.09		

403737073564908. Local number, K3254.1

LOCATION.—Lat 40°37'37", long 73°56'49", Hydrologic Unit 02030202, at east side of East 31st Street, 46 ft south of Avenue J, Flatbush. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 29 ft, screened 26 to 29 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 26.9 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.09 ft below land-surface datum.

PERIOD OF RECORD.—April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.91 ft above sea level, June 27, 1984; lowest measured, 4.64 ft above sea level, July 15, 1992.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	4.97	Jan 27	5.03	Mar 30	5.18	May 18	5.07	Jul 16	4.96	Sep 23	5.21
Nov 24	4.91	Mar 02	5.04	Apr 28	5.18	Jun 24	5.01	Aug 17	4.96		

403827073535202. Local number, K3255.2

LOCATION.—Lat 40°38'27", long 73°53'52", Hydrologic Unit 02030202, at south side of Avenue J, 120 ft east of Rockaway Avenue, Canarsie. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 25 ft, screened 15 to 25 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 17.0 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.42 ft below land-surface datum.

REMARKS.—Replaced well K3255.1 in June 1998 at same location.

PERIOD OF RECORD.—July 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 4.21 ft above sea level, March 23, 1999; lowest measured, 3.71 ft above sea level, November 24, 1998.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	3.78	Jan 27	4.15	Mar 23	4.21	May 18	3.94	Jul 16	3.74	Sep 23	4.01
Nov 24	3.71	Mar 02	4.15	Apr 28	4.01	Jun 24	3.86	Aug 17	3.73		

## PRIMARY WELLS

403949073532109. Local number, K3256.2

LOCATION.—Lat 40°39'49", long 73°53'21", Hydrologic Unit 02030202, at intersection of New Lots Avenue, Riverdale Avenue, and Miller Avenue, at north side of Wyckoff Triangle, East New York. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 40 ft, screened 25 to 35 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 27.0 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.38 ft below land-surface datum.

REMARKS.—Replaced well K3256.1 in June 1998 at same location.

PERIOD OF RECORD.—July 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.05 ft above sea level, March 23, 1999; lowest measured, 5.63 ft above sea level, November 24, 1998.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	5.67	Jan 27	6.03	Mar 23	6.05	May 18	5.80	Jul 16	5.70	Sep 23	5.91
Nov 24	5.63	Mar 02	6.01	Apr 28	5.88	Jun 24	5.76	Aug 17	5.64		

404017073544502. Local number, K3257.2

LOCATION.—Lat 40°40'17", long 73°54'45", Hydrologic Unit 02030202, at east side of Chester Street, 188 ft south of East New York Avenue, Brownsville. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 55 ft, screened 40 to 50 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 48.5 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.28 ft below land-surface datum.

REMARKS.—Replaced well K3257.1 in June 1998 at same location.

PERIOD OF RECORD.—July 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 11.22 ft above sea level, July 28, 1998; lowest measured, 9.94 ft above sea level, September 23, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	10.57	Jan 27	10.23	Mar 23	10.14	May 18	10.12	Aug 17	10.00	Sep 23	9.94
Nov 24	10.47	Mar 02	10.22	Apr 28	10.13	Jun 23	10.07				

404325073563508. Local number, K3260.1

LOCATION.—Lat 40°43'25", long 73°56'35", Hydrologic Unit 02030201, at west side of Monitor Avenue, 50 ft north of Driggs Avenue, Greenpoint. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 23 ft, screened 20 to 23 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 28.7 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.01 ft below land-surface datum.

PERIOD OF RECORD.—April 1980 to May 1985 and June 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 13.32 ft above sea level, April 28, 1999; lowest measured, 8.22 ft above sea level, June 15, 1992.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov 24	11.33	Mar 02	12.05	Apr 28	13.32	Jun 24	12.86	Aug 17	11.99	Sep 23	12.52
Jan 27	11.50	Mar 23	12.97	May 18	13.16	Jul 20	12.49				

## PRIMARY WELLS

404036073584008. Local number, K3261.1

LOCATION.—Lat 40°40'37", long 73°58'41", Hydrologic Unit 02030201, at east side of Lincoln Place, 122 ft north of 6th Avenue, northernmost well, Park Slope. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 45 ft, screened 42 to 45 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 64.8 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.01 ft above land-surface datum.

PERIOD OF RECORD.—April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 31.86 ft above sea level, March 16, 1984; lowest measured, 23.82 ft above sea level, September 23, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	26.78	Jan 27	25.10	Mar 23	24.37	May 18	24.18	Jul 20	24.13	Sep 23	23.82
Nov 24	26.29	Mar 02	24.62	Apr 28	24.22	Jun 24	24.17	Aug 17	24.03		

404025073515101. Local number, K3271.1

LOCATION.—Lat 40°40'25", long 73°51'51", Hydrologic Unit 02030202, at west side of Eldert Lane, 45 ft south of Sutter Avenue, East New York. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 34 ft, screened 31 to 34 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 22.4 ft above sea level. Measuring point: Top of 2-in plug in coupling, 0.02 ft above land-surface datum.

PERIOD OF RECORD.—June 1981 to October 1985 and March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.52 ft above sea level, January 27, 1999; lowest measured, 4.46 ft above sea level, December 21, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov 24	5.71	Mar 02	6.30	Apr 28	5.96	Jun 24	5.74	Aug 17	5.67	Sep 23	5.76
Jan 27	6.52	Mar 23	6.29	May 18	5.83	Jul 16	5.64				

403817073580101. Local number, K3273.1

LOCATION.—Lat 40°38'17", long 73°58'01", Hydrologic Unit 02030202, at east side of Westminster Road, 33 ft north of Dorchester Road, Flatbush. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 39 ft, screened 36 to 39 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 33.5 ft above sea level. Measuring point: Top of 2-in coupling, 0.06 ft below land-surface datum.

PERIOD OF RECORD.—June 1981 to October 1985 and May 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 9.32 ft above sea level, March 19, 1984; lowest measured, 6.67 ft above sea level, September 28, 1983.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	7.64	Jan 27	7.38	Mar 23	7.21	May 18	7.26	Jul 20	7.18	Sep 23	7.39
Nov 24	7.51	Mar 02	7.18	Apr 28	7.36	Jun 24	7.17	Aug 17	7.17		

## PRIMARY WELLS

403635073580108. Local number, K3274.1

LOCATION.—Lat 40°36'35", long 73°58'01", Hydrologic Unit 02030202, at west side of East 7th Street, 49 ft north of Avenue P, Gravesend. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 34 ft, screened 31 to 34 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 27.5 ft above sea level. Measuring point: Top of 2-in steel casing, 0.22 ft below land-surface datum.

PERIOD OF RECORD.—June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 5.88 ft above sea level, October 3, 1984; lowest measured, 3.53 ft above sea level, October 6, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	4.29	Mar 02	4.51	Apr 28	4.53	Jun 24	4.40	Aug 17	4.32	Sep 23	4.57
Nov 24	4.27	Mar 23	4.52	May 18	4.45	Jul 16	4.30				

403737074011701. Local number, K3275.1

LOCATION.—Lat 40°37'37", long 74°01'17", Hydrologic Unit 02030202, at east side of 6th Avenue, 19 ft south of 76th Street, Bay Ridge. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 76 ft, screened 73 to 76 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 67.2 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.05 ft below land-surface datum.

PERIOD OF RECORD.—June 1981 to current year. Unpublished records from June 1981 to September 1982 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.65 ft above sea level, January 5, 1984; lowest measured, 3.20 ft above sea level, April 28, 1989.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	4.69	Jan 27	4.47	Mar 23	4.24	May 18	4.39	Jul 16	4.22	Sep	4.29
Nov 24	4.53	Mar 02	4.17	Apr 28	4.22	Jun 24	4.28	Aug 17	4.41		

404135073584001. Local number, K3276.1

LOCATION.—Lat 40°41'35", long 73°58'40", Hydrologic Unit 02030201, at east side of Saint Edwards Street, 75 ft south of Myrtle Avenue, Fort Greene. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 54 ft, screened 51 to 54 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 38.0 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.02 ft below land-surface datum.

PERIOD OF RECORD.—April 1981 to current year. Unpublished records from April 1981 to September 1982 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.71 ft above sea level, January 5, 1984; lowest measured, 4.30 ft above sea level, October 1, 1985.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	5.37	Jan 27	5.40	Mar 23	5.48	May 18	5.33	Jul 20	4.99	Sep 23	5.18
Nov 24	5.43	Mar 02	5.49	Apr 28	5.52	Jun 24	5.10	Aug 17	4.95		



## PRIMARY WELLS

404037073584001. Local number, K3301.1

LOCATION.—Lat 40°40'36", long 73°58'40", Hydrologic Unit 02030201, at north side of Lincoln Place, 120 ft east of 6th Avenue, easternmost well, Park Slope. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 70 ft, screened 65 to 70 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 60.6 ft above sea level. Measuring point: Top of 2-in coupling, 1.6 ft below land-surface datum.

PERIOD OF RECORD.—March 1984 to October 1985 and June 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 20.16 ft above sea level, June 28, 1984; lowest measured, 14.51 ft above sea level, April, 11 1989.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	17.12	Jan 27	15.64	Mar 23	14.93	May 18	14.95	Jul 20	14.81	Sep 23	14.55
Nov 24	16.67	Mar 02	15.53	Apr 28	14.73	Jun 24	14.97	Aug 17	14.60		

403719073573301. Local number, K3405.1

LOCATION.—Lat 40°37'19", long 73°57'33", Hydrologic Unit 02030202, at west side of East 17th Street, 0.1 mile north of Avenue L, Midwood. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 214 ft, screened 204 to 214 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 33.5 ft above sea level. Measuring point: Top of 4-in casing, 0.01 ft below land-surface datum.

PERIOD OF RECORD.—March 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.08 ft above sea level, May 20, 1998; lowest measured, 4.83 ft above sea level, November 24, 1998 and August 17, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	4.91	Jan 27	4.98	Mar 30	5.09	May 18	5.00	Jul 16	4.85	Sep 23	5.09
Nov 24	4.83	Mar 02	5.01	Apr 28	5.09	Jun 24	4.92	Aug 17	4.83		

403806074021901. Local number, K3406.1

LOCATION.—Lat 40°38'06", long 74°02'19", Hydrologic Unit 02030201, at west side of Shore Road, north of 74th Street, at northwest corner of Promenade Park, Bay Ridge. Owner: United States Geological Survey.

AQUIFER.—Jameco (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 155 ft, screened 135 to 145 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 14.4 ft above sea level. Measuring point: Top of 4-in casing, 0.04 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—March 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 4.03 ft above sea level, September 19, 1996; lowest measured, 2.28 ft above sea level, March 14, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	2.93	Mar 23	3.21	May 18	3.34	Jul 16	3.18	Aug 17	3.34	Sep 23	2.65
Jan 27	2.99	Apr 28	2.47	Jun 24	2.70						

## PRIMARY WELLS

403520073575701. Local number, K3407.1

LOCATION.—Lat 40°35'20", long 73°57'57", Hydrologic Unit 02030202, at west side of northbound Ocean Parkway service road, 54 ft north of Avenue Y, Gravesend. Owner: United States Geological Survey.

AQUIFER.—Jameco (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 405 ft, screened 385 to 405 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 8.5 ft above sea level. Measuring point: Top of 4-in PVC casing, 0.03 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—March 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 4.03 ft above sea level, July 23, 1997; lowest measured, 1.92 ft above sea level, July 16, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	2.70	Jan 27	3.04	Apr 28	2.93	Jun 24	2.83	Aug 17	2.68	Sep 23	2.98
Nov 24	2.66	Mar 23	3.07	May 18	2.93	Jul 16	1.92				

404039073555002. Local number, K3410.1

LOCATION.—Lat 40°40'39", long 73°55'50", Hydrologic Unit 02030201, at east side of Utica Avenue, 54 ft north of Atlantic Avenue, northernmost well, Bedford-Stuyvesant. Owner: United States Geological Survey.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 360 ft, screened 330 to 350 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 61.8 ft above sea level. Measuring point: Top of 4-in PVC casing, 0.09 ft below land-surface datum.

PERIOD OF RECORD.—March 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 8.09 ft above sea level, January 7, 1997; lowest measured, 5.59 ft above sea level, August 17, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	5.78	Jan 27	6.58	Mar 23	6.26	May 18	6.11	Jul 20	5.60	Sep 23	6.04
Nov 24	5.78	Mar 02	6.42	Apr 28	6.12	Jun 24	6.02	Aug 17	5.59		

403431073581101. Local number, K3414.1

LOCATION.—Lat 40°34'31", long 73°58'11", Hydrologic Unit 02030202, at south side of Sea Breeze Avenue, 200 ft west of Ocean Parkway, Coney Island. Owner: United States Geological Survey.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 410 ft, screened 390 to 410 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 7.1 ft above sea level. Measuring point: Top of 4-in PVC casing, 0.09 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—March 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 2.52 ft above sea level, May 28, 1998; lowest measured, 1.26 ft below sea level, July 12, 1996.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	1.30	Jan 27	1.51	Apr 28	1.29	Jun 24	1.34	Aug 17	1.26	Sep 23	0.64
Nov 24	1.55	Mar 23	2.16	May 18	2.34	Jul 16	1.24				

## PRIMARY WELLS

403840073592101. Local number, K3424.1

LOCATION.—Lat 40°38'40", long 73°59'21", Hydrologic Unit 02030201, at north side of Fort Hamilton Parkway, 176 ft east of 37th Street, Borough Park. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 75 ft, screened 70 to 75 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 75.4 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.03 ft below land-surface datum.

PERIOD OF RECORD.—March 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 9.57 ft above sea level, November 24, 1998; lowest measured, 7.60 ft above sea level, March 14, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov 24	9.57	Mar 02	8.01	Apr 28	7.89	Jun 24	7.76	Aug 17	7.61	Sep 23	7.69
Jan 27	8.11	Mar 23	7.94	May 18	7.84	Jul 20	7.69				

404039073555001. Local number, K3425.1

LOCATION.—Lat 40°40'39", long 73°55'50", Hydrologic Unit 02030201, at east side of Utica Avenue, 50 ft north of Atlantic Avenue, southernmost well, Bedford-Stuyvesant. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 80 ft, screened 70 to 75 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 61.9 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.05 ft below land-surface datum.

PERIOD OF RECORD.—March 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 12.40 ft above sea level, July 28, 1998; lowest measured, 10.61 ft above sea level, November 28, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	11.95	Jan 27	11.35	Mar 23	11.11	May 18	11.10	Jul 20	10.95	Sep 23	10.85
Nov 24	11.78	Mar 02	11.21	Apr 28	11.08	Jun 24	11.05	Aug 17	11.02		

403941073574301. Local number, K3430.1

LOCATION.—Lat 40°39'41", long 73°57'43", Hydrologic Unit 02030201, at Prospect Park, west side of East Park Drive, across from Lincoln Road Exit, northernmost well, Flatbush. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 120 ft, screened 100 to 110 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 81.4 ft above sea level. Measuring point: Top of 4-in PVC casing, 0.14 ft below land-surface datum.

PERIOD OF RECORD.—July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 10.57 ft above sea level, July 28, 1998; lowest measured, 9.30 ft above sea level, August 17, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	10.06	Jan 27	9.71	Mar 23	9.58	May 18	9.46	Jul 20	9.32	Sep 23	9.35
Nov 24	9.97	Mar 02	9.62	Apr 28	9.54	Jun 24	9.40	Aug 17	9.30		

## PRIMARY WELLS

403941073574302. Local number, K3431.1

LOCATION.—Lat 40°39'41", long 73°57'43", Hydrologic Unit 02030201, at Prospect Park, west side of East Park Drive, across from Lincoln Road Exit, southernmost well, Flatbush. Owner: United States Geological Survey.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 385 ft, screened 355 to 375 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 81.3 ft above sea level. Measuring point: Top of 4-in PVC casing, 0.26 ft below land-surface datum.

PERIOD OF RECORD.—July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 12.47 ft above sea level, July 28, 1998; lowest measured, 10.70 ft above sea level, August 17, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	11.98	Jan 27	11.48	Mar 23	11.18	May 18	10.97	Jul 20	10.78	Sep 23	10.80
Nov 24	11.81	Mar 02	11.30	Apr 28	11.05	Jun 24	10.89	Aug 17	10.70		



## PRIMARY WELLS

404043073413108. Local number, N7.1

LOCATION.—Lat 40°40'43", long 73°41'31", Hydrologic Unit 02030202, at Valley Stream State Park, 150 ft west of Corona Avenue, 130 ft north of Remsen Street, Valley Stream. Owner: Long Island State Park Commission.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled unused steel well, diameter 6 in., depth 911 ft, screened 851 to 911 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 20.9 ft above sea level. Measuring point: Top of 1/4-in hole drilled in 4-in steel plug, 2.17 ft above land-surface datum.

REMARKS.—Water level affected by nearby pumping.

PERIOD OF RECORD.—March 1941 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 12.75 ft above sea level, March 9, 1941; lowest measured, 6.84 ft below sea level, August 25, 1970.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	6.31	Mar 30	9.99								

404048073412602. Local number, N9.1

LOCATION.—Lat 40°40'48", long 73°41'26", Hydrologic Unit 02030202, at Valley Stream State Park, 30 ft west of Corona Avenue, 650 ft north of Remsen Street, Valley Stream. Owner: Long Island State Park Commission.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled unused steel well, diameter 4 in. to 6 in., depth 138 ft, screened 98 to 138 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

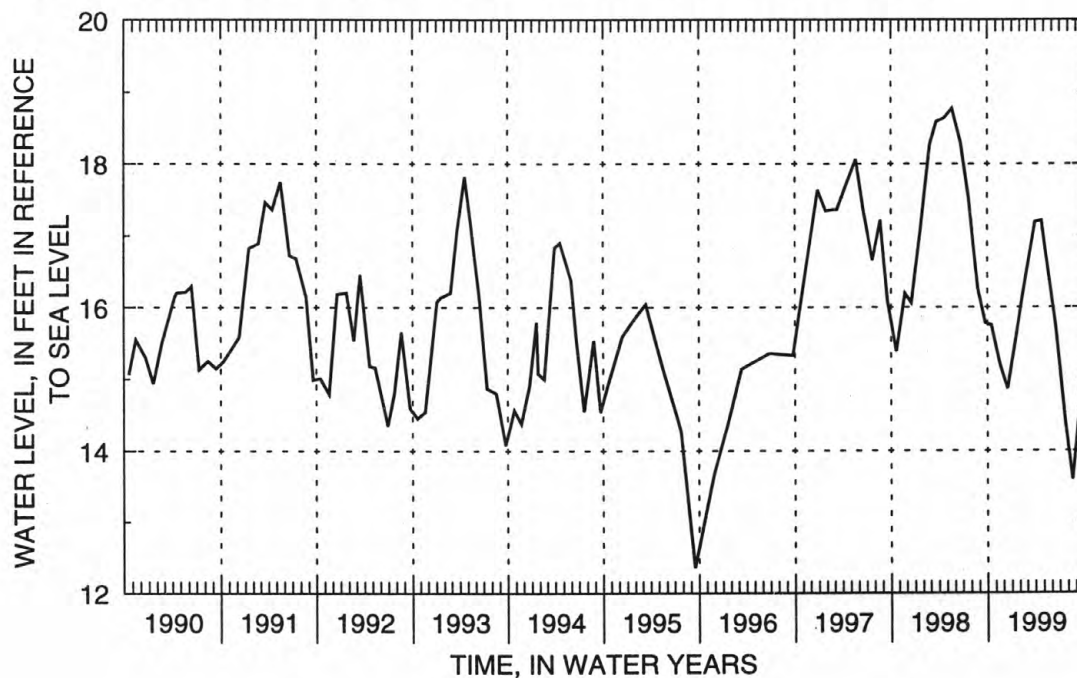
DATUM.—Land-surface datum is 22.6 ft above sea level. Measuring point: Top of 6-in steel casing, 2.08 ft above land-surface datum.

PERIOD OF RECORD.—July 1936 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 23.57 ft above sea level, September 23, 1938; lowest measured, 5.95 ft above sea level, March 22, 1983.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	15.75	Dec 16	14.86	Mar 30	17.19	May 18	16.52	Jul 21	14.44	Sep 23	14.93
Nov 18	15.19	Feb 17	16.30	Apr 23	17.21	Jun 17	15.70	Aug 18	13.59		



## PRIMARY WELLS

405010073414901. Local number, N35.1

LOCATION.—Lat 40°50'10", long 73°41'51", Hydrologic Unit 02030201, at Port Washington Water District Pumping Center, 115 ft south of Sandy Hollow Road, in recorder shelter, Port Washington. Owner: Port Washington Water District.

AQUIFER.—Port Washington (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 16 in. to 6 in., depth 387 ft, screened 287 to 387 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 13.6 ft above sea level. Measuring point: Top of steel recorder shelter flange 3.64 ft above land-surface datum.

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

PERIOD OF RECORD.—April 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 9.02 ft above sea level, January 31, 1958; lowest measured, 16.15 ft below sea level, July 29, 1954.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb 16	6.39	May 17	2.79	Jun 15	-1.10	Jul 26	-2.86	Aug 23	0.42	Sep 22	1.82
Mar 30	7.67										

403929073382908. Local number, N53.1

LOCATION.—Lat 40°39'29", long 73°38'29", Hydrologic Unit 02030202, at Rockville Centre Municipal Power Plant, in battery room, Maple Avenue and Morris Avenue, Rockville Centre. Owner: Village of Rockville Center.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 8 in., depth 50 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 26.2 ft above sea level. Measuring point: Top of 2-in steel casing, 5.24 ft below land-surface datum.

PERIOD OF RECORD.—August 1934 to current year. Unpublished records from August 1934 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 16.49 ft above sea level, April 15, 1939; lowest measured, 7.85 ft above sea level, August 30, 1966.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb 17	10.68	Apr 23	11.45	Jun 17	10.54	Jul 21	9.37	Aug 18	8.88	Sep 23	9.30
Mar 30	11.33	May 18	11.00								

403922073353501. Local number, N67.1

LOCATION.—Lat 40°39'22", long 73°35'35", Hydrologic Unit 02030202, at Freeport Power Station, in battery room, 105 ft north of Sunrise Highway (State Route 27), west of Long Beach Avenue, Freeport. Owner: Village of Freeport.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 12 in., depth 1052 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 22.0 ft above sea level. Measuring point: Top of 12-in steel casing, 1.00 ft below land-surface datum.

PERIOD OF RECORD.—December 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 15.95 ft above sea level, May 8, 1957; lowest measured, 3.76 ft below sea level, March 23, 1983.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 22	9.54	Dec 22	12.04	Mar 30	12.29	Jun 15	9.50	Aug 16	5.28	Sep 27	7.24
Nov 23	10.86	Feb 17	12.57	May 17	11.33	Jul 20	6.55				

## PRIMARY WELLS

404030073293703. Local number, N180.2

LOCATION.—Lat 40°40'30", long 73°29'37", Hydrologic Unit 02030202, at Long Island Railroad track embankment, 200 ft north of Sunrise Highway (State Route 27), west of Seaford-Oyster Bay Expressway (State Route 135), Seaford. Owner: Nassau County Department of Public Works.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled unused steel well, diameter 4 in. to 6 in., depth 723 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 16.0 ft above sea level. Measuring point: Top of 4-in steel coupling, 13.69 ft above land-surface datum.

PERIOD OF RECORD.—June 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 21.08 ft above sea level, June 6, 1952; lowest measured, 10.63 ft above sea level, July 1, 1986.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sep 16	14.43	Dec 17	14.32	Mar 30	15.99	May 18	13.32	Jul 21	11.66	Sep 23	14.13
Nov 18	14.74	Feb 17	15.61	Apr 23	14.87	Jun 17	12.16	Aug 18	11.37		

404609073421602. Local number, N1102.2

LOCATION.—Lat 40°46'09", long 73°42'16", Hydrologic Unit 02030201, at southwest corner of Community Drive and Long Island Expressway westbound service road, Lake Success. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 166 ft, screened 161 to 166 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 184.0 ft above sea level. Measuring point: Top of 4-in steel coupling, 0.32 ft below land-surface datum.

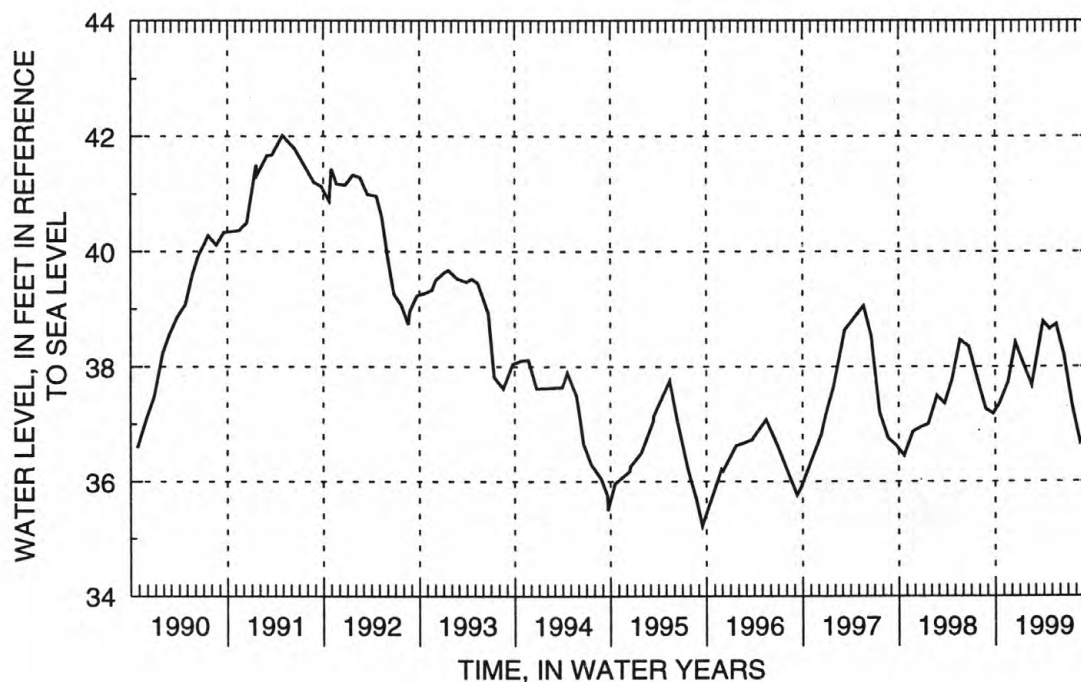
REMARKS.—Replaced well N1102.1 in March 1963 at same location, which has a period of record from October 1937 to March 1963.

PERIOD OF RECORD.—April 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 47.02 ft above sea level, April 24, 1963; lowest measured, 28.90 ft above sea level, January 19, 1983.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	37.35	Dec 16	38.41	Mar 30	38.78	May 19	38.73	Jul 20	37.28	Sep 23	36.95
Nov 18	37.73	Feb 16	37.68	Apr 23	38.65	Jun 17	38.20	Aug 17	36.68		



## PRIMARY WELLS

404039073420001. Local number, N1110.1

LOCATION.—Lat 40°40'40", long 73°42'01", Hydrologic Unit 02030202, at Valley Stream State Park, southeast corner of North Fletcher Avenue and park entrance, Valley Stream. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 1 1/4 in., depth 27 ft, screened 24 to 27 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

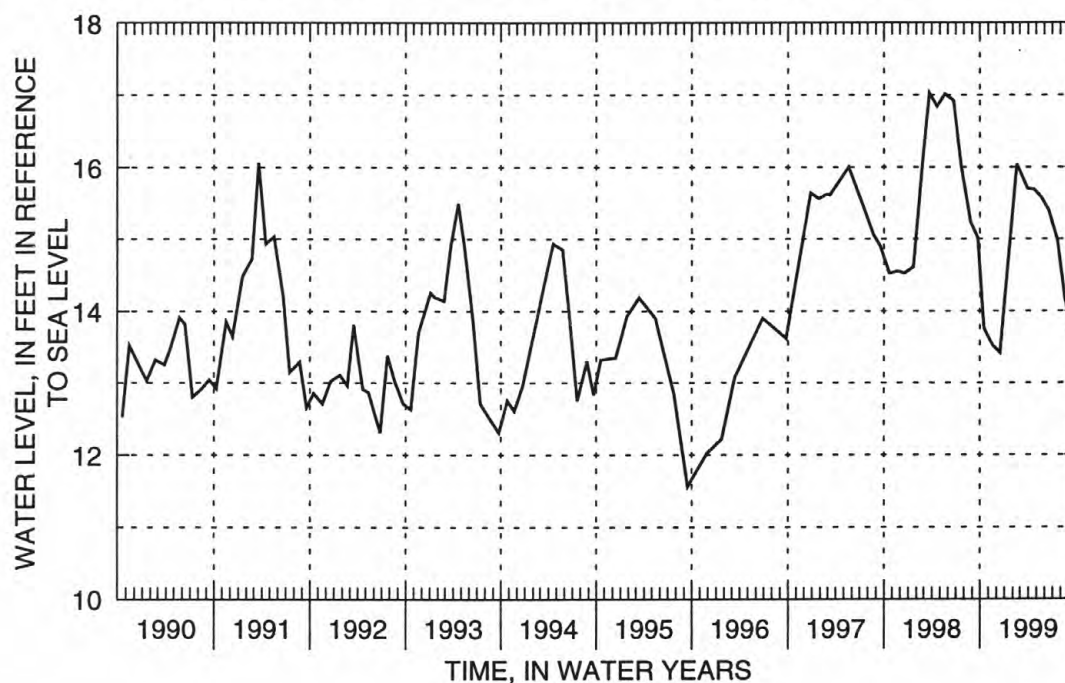
DATUM.—Land-surface datum is 31.0 ft above sea level. Measuring point: Top of 1 1/4-in steel casing, 0.80 ft below land-surface datum.

PERIOD OF RECORD.—October 1936 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 21.81 ft above sea level, September 28, 1938; lowest measured, 5.78 ft above sea level, September 15, 1981.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	13.76	Dec 16	13.42	Mar 30	15.70	May 18	15.59	Jul 21	14.98	Sep 23	13.60
Nov 18	13.52	Feb 17	16.04	Apr 23	15.69	Jun 17	15.40	Aug 18	14.16		





## PRIMARY WELLS

404835073404004. Local number, N1120.4

LOCATION.—Lat 40°48'35", long 73°40'40", Hydrologic Unit 02030201, at north side of Bonnie Heights Road, 98 ft west of Port Washington Boulevard, Flower Hill. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 4 in., depth 100 ft, screened 95 to 100 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 116.0 ft above sea level. Measuring point: Top of 4-in steel coupling, 0.15 ft above land-surface datum.

REMARKS.—Replaced well N1120.3 in March 1976 at same location.

PERIOD OF RECORD.—March 1976 to April 1984 and March 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 51.65 ft above sea level, March 16, 1976; lowest measured, 43.65 ft above sea level, September 27, 1996.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	46.83	Dec 16	46.93	Mar 30	46.84	May 19	46.80	Jul 20	46.22	Sep 23	45.28
Nov 17	46.89	Feb 16	46.95	Apr 23	46.93	Jun 17	46.58	Aug 17	46.01		

404125073394802. Local number, N1129.2

LOCATION.—Lat 40°41'25", long 73°39'48", Hydrologic Unit 02030202, at east side of Euclid Avenue, 30 ft south of Hawthorne Street, West Hempstead. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 1 1/4 in., depth 44 ft, screened 41 to 44 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 51.0 ft above sea level. Measuring point: Top of 1 1/4-in steel casing, 0.46 ft below land-surface datum.

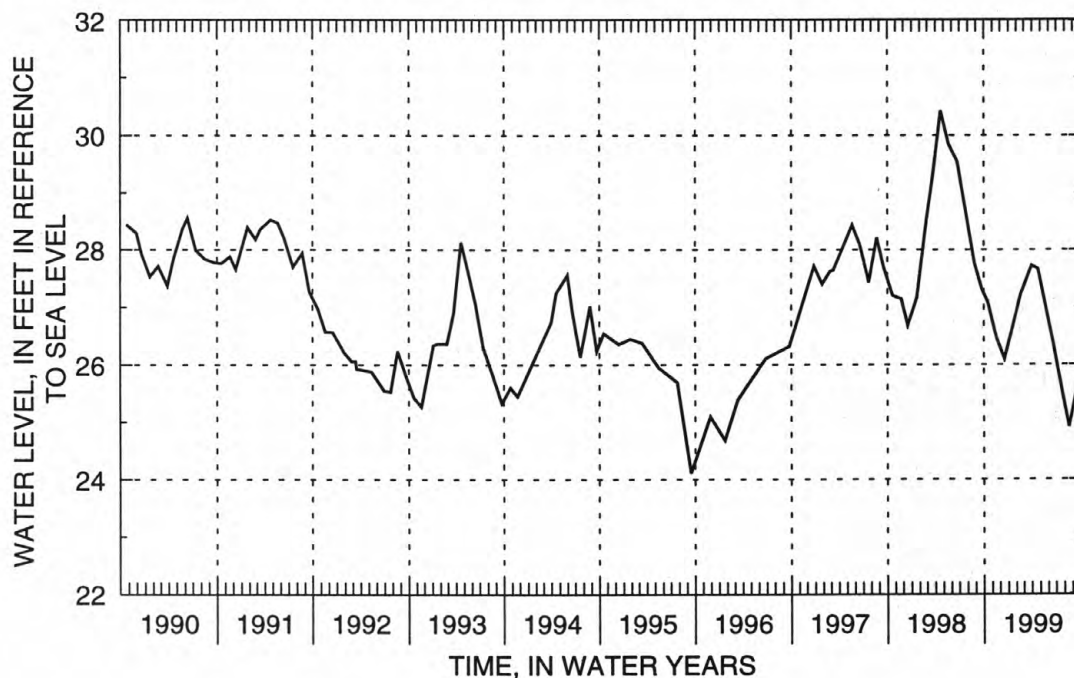
REMARKS.—Replaced well N1129.1 in October 1966 at same location, which has a period of record from August 1937 to October 1966.

PERIOD OF RECORD.—October 1966 to current year. Unpublished records from October 1966 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 30.42 ft above sea level, April 21, 1998; lowest measured, 21.49 ft above sea level, October 29, 1986.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	27.08	Dec 17	26.10	Mar 30	27.72	May 18	27.10	Jul 21	25.59	Sep 23	25.72
Nov 18	26.46	Feb 17	27.22	Apr 23	27.66	Jun 17	26.43	Aug 18	24.91		



## PRIMARY WELLS

405000073293301. Local number, N1228.3

LOCATION.—Lat 40°50'00", long 73°29'33", Hydrologic Unit 02030201, at south side of Cold Spring Road, 332 ft west of Townsend Road, Syosset. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 176 ft, screened 173 to 176 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 227.0 ft above sea level. Measuring point: Top of 4-in steel casing, 0.12 ft above land-surface datum.

REMARKS.—Replaced well N1228.2 in February 1962 at same location.

PERIOD OF RECORD.—February 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 70.69 ft above sea level, May 29, 1980; lowest measured, 52.22 ft above sea level, July 18, 1967.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	63.05	Dec 15	65.63	Mar 30	63.50	May 17	63.36	Jul 20	62.45	Sep 21	60.87
Nov 17	63.11	Feb 16	63.47	Apr 23	63.50	Jun 17	63.06	Aug 16	61.68		

405027073272602. Local number, N1243.5

LOCATION.—Lat 40°50'26", long 73°27'20", Hydrologic Unit 02030201, at south side of Stillwell Road, 98 ft west of Harbor Road, Cold Spring Harbor. Owner: Nassau County Department of Public Works.

AQUIFER.—Magothy (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 1 1/4 in., depth 28 ft, screened 25 to 28 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 64.0 ft above sea level. Measuring point: Top of 1 1/4-in steel casing, 0.92 ft below land-surface datum.

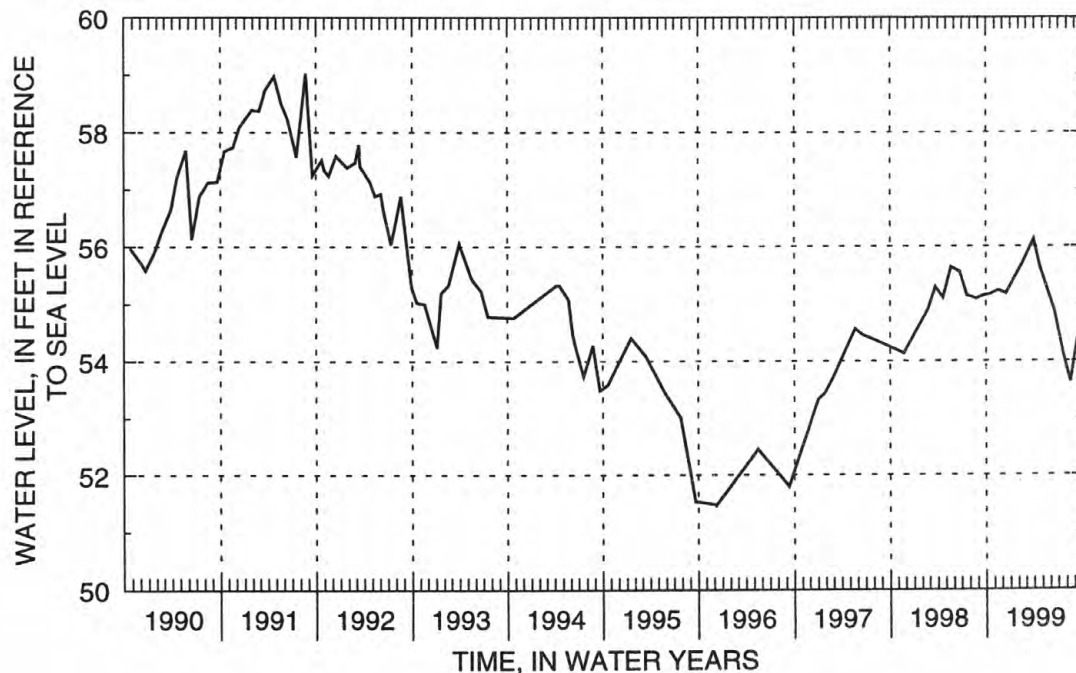
REMARKS.—Replaced well N1243.4 in September 1975 at same location, which has a period of record from November 1939 to September 1975.

PERIOD OF RECORD.—September 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 60.70 ft above sea level, March 21, 1978; lowest measured, 51.47 ft above sea level, December 8, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	55.16	Dec 15	55.17	Mar 30	56.12	May 17	55.30	Jul 20	54.11	Sep 21	54.50
Nov 17	55.23	Feb 16	55.70	Apr 23	55.62	Jun 17	54.86	Aug 16	53.63		



## PRIMARY WELLS

404317073291105. Local number, N1259.5

LOCATION.—Lat 40°43'16", long 73°29'10", Hydrologic Unit 02030202, at south side of Mary Lane, 79 ft east of Hicksville Road (State Route 107), Plainedge. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 1 1/4 in., depth 41 ft, screened 38 to 41 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 78.0 ft above sea level. Measuring point: Top of 1 1/4-in steel casing, 0.08 ft above land-surface datum.

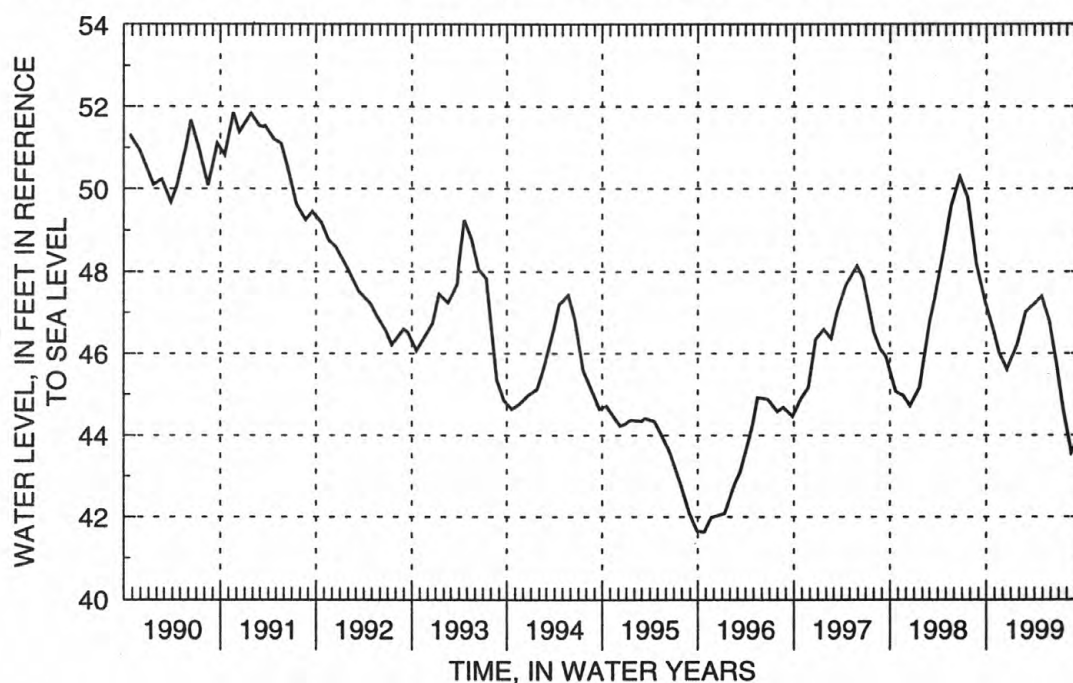
REMARKS.—Replaced well N1259.4 in June 1961 at same location.

PERIOD OF RECORD.—June 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 57.60 ft above sea level, February 21, 1978; lowest measured, 41.64 ft above sea level, October 26, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	46.53	Dec 17	45.62	Feb 26	47.02	Apr 28	47.39	Jun 25	45.65	Aug 18	43.58
Nov 19	46.01	Jan 26	46.24	Mar 30	47.20	May 27	46.78	Jul 20	44.57	Sep 28	44.13



404042073292601. Local number, N1464.1

LOCATION.—Lat 40°40'42", long 73°29'26", Hydrologic Unit 02030202, at north side of Franklin Avenue, 102 ft east of Grant Avenue, in sidewalk, Seaford. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 1 1/4 in. to 6 in., depth 42 ft, screened 32 to 42 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 28.0 ft above sea level. Measuring point: Top of 1 1/4-in steel casing extension, 0.37 ft below land-surface datum.

PERIOD OF RECORD.—May 1943 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 20.43 ft above sea level, March 25, 1975; lowest measured, 12.22 ft above sea level, January 26, 1950.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	15.22	Dec 17	15.01	Mar 30	16.81	May 18	15.61	Jul 21	14.71	Sep 23	14.93
Nov 18	14.83	Feb 17	16.25	Apr 23	17.80	Jun 17	15.20	Aug 18	14.41		

## PRIMARY WELLS

404446073392904. Local number, N1614.4

LOCATION.—Lat 40°44'46", long 73°39'29", Hydrologic Unit 02030202, at west side of Herricks Road, 135 ft north of Birchwood Drive, North Hempstead. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper Glacial (water-table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 1 1/4 in., depth 53 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 101.0 ft above sea level. Measuring point: Top of 1 1/4-in. steel casing, 1.16 ft below land-surface datum.

REMARKS.—Replaced well N 1614.3 in April 1966 at same location.

PERIOD OF RECORD.—April 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 60.85 ft above sea level, September 16, 1997; lowest measured, 48.42 ft above sea level, December 21, 1970.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	56.14	Dec 17	55.14	Feb 26	54.80	Apr 28	54.86	Jun 25	54.76	Aug 18	53.84
Nov 19	55.73	Jan 26	54.79	Mar 30	54.86	May 27	54.89	Jul 20	54.57	Sep 28	53.96

404210073340801. Local number, N1615.4

LOCATION.—Lat 40°42'10", long 73°34'08", Hydrologic Unit 02030202, at south side of Van Buren Avenue, 34 ft west of Merrick Avenue, Freeport. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 33 ft, screened 30 to 33 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 61.0 ft above sea level. Measuring point: Top of 2 in PVC coupling, 0.27 ft below land-surface datum.

REMARKS.—Replaced well N1615.3 in October 1989 at same location.

PERIOD OF RECORD.—October 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 42.45 ft above sea level, June 11, 1990; lowest measured, 34.54 ft above sea level, November 28, 1995

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	38.30	Dec 17	37.47	Feb 26	38.24	Apr 28	39.42	Jun 25	37.97	Aug 18	36.16
Nov 19	37.90	Jan 26	38.33	Mar 30	39.63	May 27	38.96	Jul 20	37.02	Sep 28	36.99



## PRIMARY WELLS

404554073351502. Local number, N1616.2

LOCATION.—Lat 40°45'54", long 73°35'15", Hydrologic Unit 02030202, at south side of Argyle Road, southern entrance, 40 ft west of Post Avenue, Old Westbury. Owner: Nassau County Department of Public Works.

AQUIFER.—Magothy (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 2 in., depth 68 ft, screened 65 to 68 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 122.5 ft above sea level. Measuring point: Top of 2-in steel casing, 0.42 ft below land-surface datum.

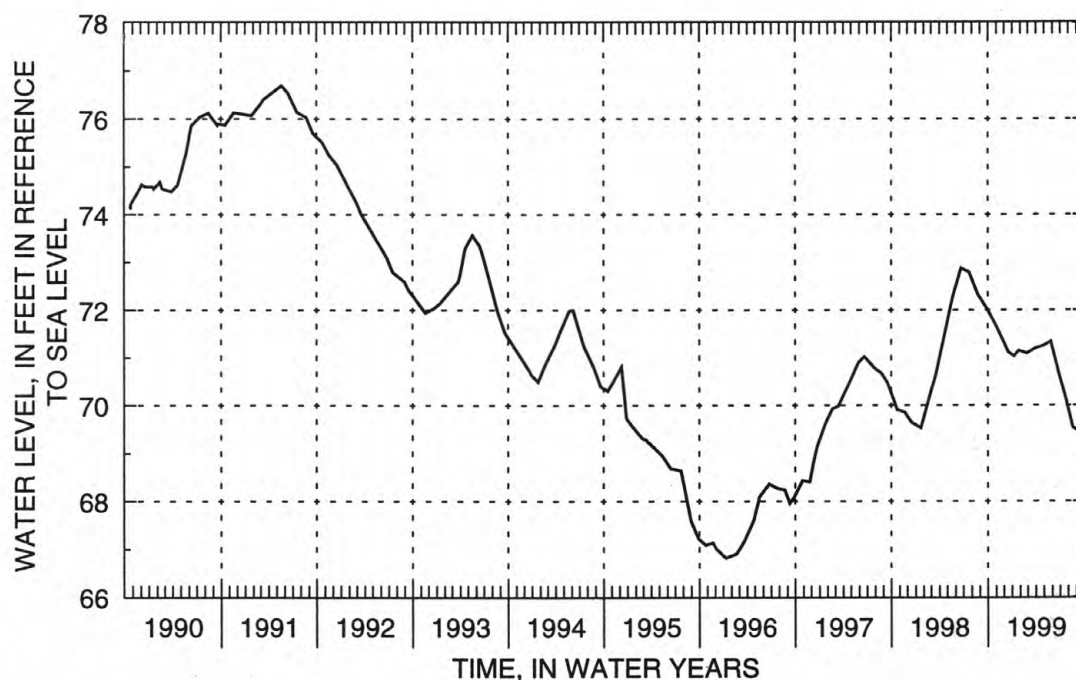
REMARKS.—Replaced well N1616.1 in October 1965 at same location, it was previously screened in upper glacial aquifer, which has a period of record from March 1913 to October 1965.

PERIOD OF RECORD.—October 1965 to current year. Unpublished record from October 1965 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 82.14 ft above sea level, June 20, 1980; lowest measured, 66.82 ft above sea level, January 11, 1996.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	71.70	Jan 08	71.03	Feb 26	71.09	Apr 28	71.25	Jun 25	70.69	Aug 18	69.54
Nov 19	71.46	Jan 26	71.15	Mar 30	71.20	May 27	71.34	Jul 20	70.19	Sep 28	69.40
Dec 17	71.12										



405101073343401. Local number, N2528.2

LOCATION.—Lat 40°50'01", long 73°34'32", Hydrologic Unit 02030201, at south side of Chicken Valley Road, 83 ft west of Wolver Hollow Road, easternmost well, Upper Brookville. Owner: Nassau County Department of Public Works.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in. to 4 in., depth 328 ft, screened 278 to 282 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 93.0 ft above sea level. Measuring point: Top of 4-in steel reducer, 0.86 ft above land-surface datum.

REMARKS.—Replaced well N2528.1 in November 1947 at same location.

PERIOD OF RECORD.—December 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 79.92 ft above sea level, July 25, 1957; lowest measured, 59.12 ft above sea level, February 24, 1967.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	66.76	Dec 15	66.25	Mar 30	66.41	May 19	66.12	Jul 20	65.31	Sep 23	64.76
Nov 17	66.50	Feb 16	66.59	Apr 23	66.40	Jun 17	65.89	Aug 17	64.78		

## PRIMARY WELLS

404619073270601. Local number, N3355.2

LOCATION.—Lat 40°46'18", long 73°27'04", Hydrologic Unit 02030202, at former site of Nassau County Sanitarium, 336 ft west of Round Swamp Road, south of Locust Road, in wooden recorder shelter, Plainview. Owner: United States Geological Survey.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in. to 8 in., depth 1,093 ft, screened 1,070 to 1,090 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 183.0 ft above sea level. Measuring point: Top of 8-in steel casing, 0.28 ft below land-surface datum.

PERIOD OF RECORD.—January 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 36.17 ft above sea level, April 10, 1957; lowest measured, 23.18 ft above sea level, April 11, 1972.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	30.99	Dec 17	32.44	Mar 30	31.82	May 18	32.40	Jul 21	29.52	Sep 23	29.42
Nov 18	31.54	Feb 17	32.90	Apr 23	33.00	Jun 17	31.32	Aug 18	28.54		

403751073440201. Local number, N3861.1

LOCATION.—Lat 40°37'51", long 73°44'01", Hydrologic Unit 02030202, at Cedarhurst Water Pollution Control Plant, 28 ft east of Arlington Place, north of Peninsula Boulevard, Cedarhurst. Owner: United States Geological Survey.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 530 ft, screened 519 to 530 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 7.0 ft above sea level. Measuring point: Top of 6-in steel casing, 2.37 ft above land-surface datum.

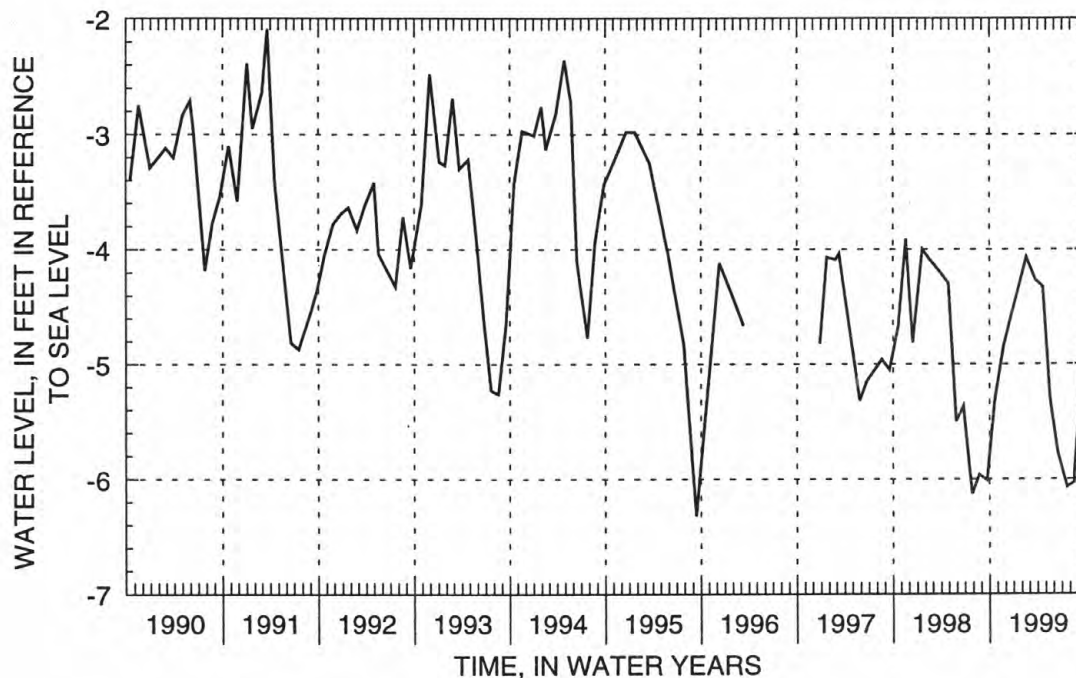
REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—April 1952 to current year. Unpublished records from April 1952 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 2.09 ft below sea level, March 20, 1991; lowest measured, 7.57 ft below sea level, August 7, 1955.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 21	-5.32	Dec 21	-4.59	Mar 24	-4.26	May 17	-5.30	Jul 20	-6.07	Sep 27	-4.70
Nov 23	-4.85	Feb 17	-4.07	Apr 20	-4.32	Jun 15	-5.77	Aug 16	-5.96		



## PRIMARY WELLS

403911073432701. Local number, N3867.2

LOCATION.—Lat 40°39'12", long 73°43'20", Hydrologic Unit 02030202, at Brook Road Park, 35 ft south of Brook Road, 41 ft east of stream, easternmost well, Green Acres. Owner: United States Geological Survey.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 517 ft, screened 505 to 517 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 7.7 ft above sea level. Measuring point: Top of 6-in steel casing, 1.54 ft above land-surface datum.

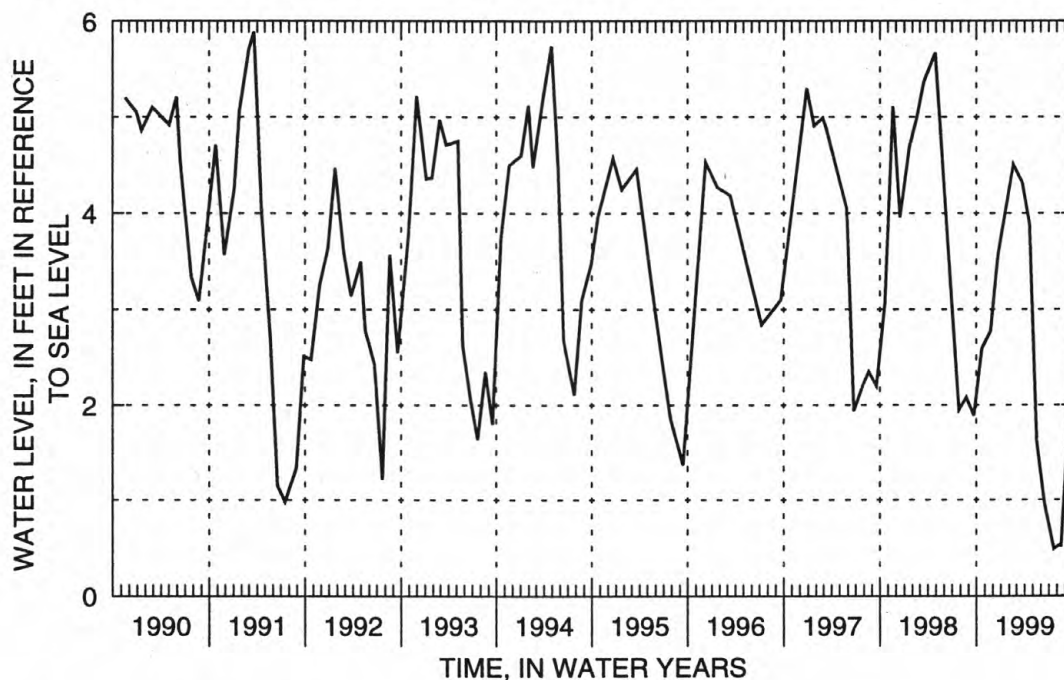
REMARKS.—Water level affected by tidal fluctuation and nearby pumping.

PERIOD OF RECORD.—January 1953 to current year. Unpublished records from January 1953 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 7.99 ft above sea level, January 28, 1953; lowest measured, 2.61 ft below sea level, July 19, 1977.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 21	2.59	Dec 21	3.56	Mar 24	4.32	May 17	1.61	Jul 20	0.49	Aug 16	0.51
Nov 23	2.77	Feb 17	4.51	Apr 20	3.89	Jun 15	0.96	Aug 16	0.54	Sep 27	2.40



403751073440202. Local number, N3932.1

LOCATION.—Lat 40°37'51", long 73°44'01", Hydrologic Unit 02030202, at Cedarhurst Water Pollution Control Plant, 37 ft east of Arlington Place, north of Peninsula Boulevard, Cedarhurst. Owner: Nassau County Department of Public Works.

AQUIFER.—Jameco (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 178 ft, screened 172 to 176 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 7.0 ft above sea level. Measuring point: Top of 4-in steel nipple, 3.24 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—June 1952 to current year. Unpublished records from June 1952 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 7.13 ft above sea level, November 10, 1975; lowest measured, 0.30 ft above sea level, September 20, 1977.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 21	2.69	Dec 21	3.46	Mar 24	3.58	May 17	2.40	Jul 20	1.61	Sep 27	2.99
Nov 23	3.05	Feb 17	3.96	Apr 20	3.57	Jun 15	1.99	Aug 16	1.73		

## PRIMARY WELLS

403911073432001. Local number, N4213.1

LOCATION.—Lat 40°39'12", long 73°43'20", Hydrologic Unit 02030202, at Brook Road Park, 34 ft south of Brook Road, 32 ft east of stream, westernmost well, Green Acres. Owner: Nassau County Department of Public Works.

AQUIFER.—Jameco (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 134 ft, screened 130 to 134 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 5.0 ft above sea level. Measuring point: Top of 6-in steel casing, 3.42 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—February 1968 to current year. Unpublished records from February 1968 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.33 ft above sea level, June 30, 1975; lowest measured, 2.40 ft below sea level, March 22, 1972.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov 23	2.43	Feb 17	4.52	Apr 20	3.62	Jun 15	0.83	Aug 16	0.26	Sep 27	2.24
Dec 21	3.62	Mar 24	4.03	May 17	1.41	Jul 20	0.32				

405125073420702. Local number, N6282.2

LOCATION.—Lat 40°51'25", long 73°42'07", Hydrologic Unit 02030201, at Helen Keller National Center for Deaf-Blind Youths and Adults, 300 ft north of Middle Neck Road, westernmost well, Sands Point. Owner: United States Geological Survey.

AQUIFER.—Port Washington (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 396 ft, screened 378 to 388 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 100.9 ft above sea level. Measuring point: Top of 6-in steel casing, 1.32 ft above land-surface datum.

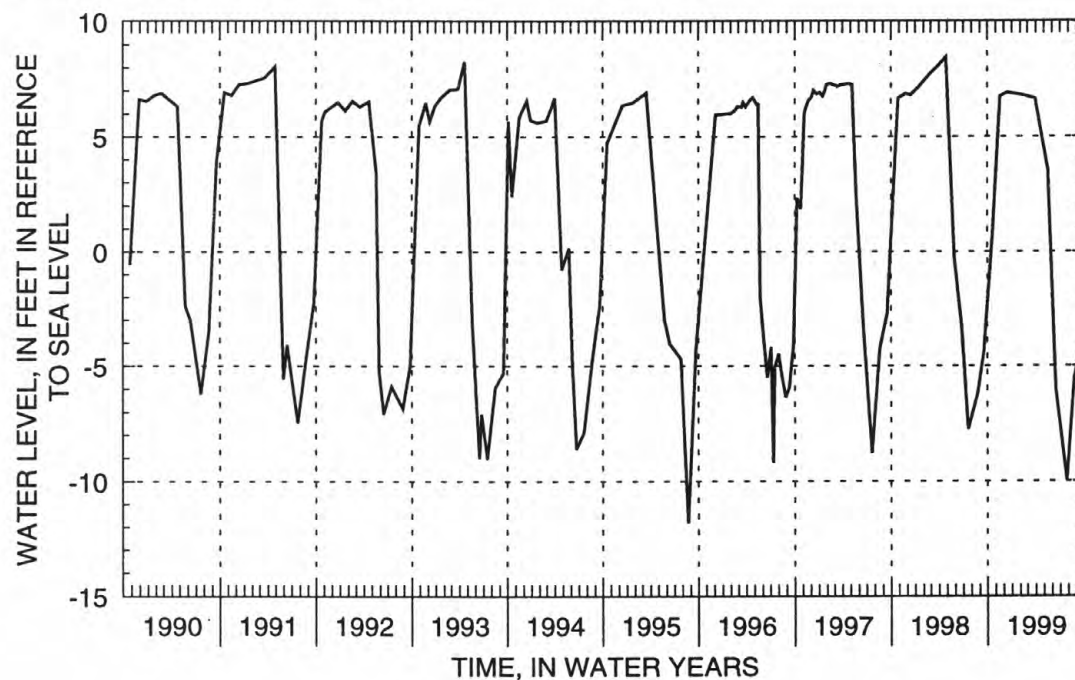
REMARKS.—Water level affected by tidal fluctuation and nearby pumping.

PERIOD OF RECORD.—August 1957 to current year. Unpublished records from August 1957 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 11.49 ft above sea level, May 31 and June 1, 1983; lowest measured, 28.36 ft below sea level, February 17, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	0.74	Dec 16	6.91	Mar 30	6.64	Jun 15	-6.02	Aug 23	-5.56	Sep 22	-3.84
Nov 18	6.75	Feb 16	6.78	May 17	3.53	Jul 26	-9.99				





## PRIMARY WELLS

405001073343205. Local number, N6294.2

LOCATION.—Lat 40°50'01", long 73°34'32", Hydrologic Unit 02030201, at south side of Chicken Valley Road, 85 ft west of Wolver Hollow Road, westernmost well, Upper Brookville. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 1 1/4 in., depth 37 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 93.0 ft above sea level. Measuring point: Top of 1 1/4-in steel casing, 0.30 ft above land-surface datum.

PERIOD OF RECORD.—September 1982 to current year. Unpublished records from September 1982 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 73.07 ft above sea level, December 18, 1984; lowest measured, 62.40 ft above sea level, January 26, 1996.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	66.76	Dec 15	66.26	Mar 30	66.55	May 19	66.24	Jul 20	65.55	Sep 23	65.00
Nov 17	66.48	Feb 16	66.80	Apr 23	66.52	Jun 17	66.04	Aug 17	64.90		

405125073420705. Local number, N6342.1

LOCATION.—Lat 40°51'25", long 73°42'07", Hydrologic Unit 02030201, at Helen Keller National Center for Deaf-Blind Youths and Adults, 300 ft north of Middle Neck Road, easternmost well, Sands Point. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 1 1/4 in., depth 185 ft, screened 183 to 185 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 97.0 ft above sea level. Measuring point: Top of 1 1/4-in steel casing, 3.99 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—August 1957 to current year. Unpublished records from August 1957 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 24.99 ft above sea level, September 14, 1984; lowest measured, 14.06 ft above sea level, February 28, 1967.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	20.78	Dec 16	19.54	Mar 30	18.59	Jun 15	19.28	Aug 23	19.03	Sep 22	19.13
Nov 18	20.00	Feb 16	18.88	May 17	18.59	Jul 26	19.26				

405212073354002. Local number, N6668.1

LOCATION.—Lat 40°52'12", long 73°35'40", Hydrologic Unit 02030201, at east side of Piping Rock Road, 58 ft south of Underhill Road, southern entrance, Matinecock. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 1 1/4 in., depth 43 ft, screened 41 to 43 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 103.0 ft above sea level. Measuring point: Top of 1 1/4-in steel casing, 0.35 ft above land-surface datum.

PERIOD OF RECORD.—April 1968 to current year. Unpublished records from April 1968 to September 1982 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 74.80 ft above sea level, February 2, 1979; lowest measured, 63.30 ft above sea level, April 22, 1968.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	68.02	Dec 15	67.66	Apr 23	70.25	Jun 17	67.93	Aug 17	66.66	Sep 23	64.93
Nov 17	67.66	Mar 30	72.63	May 19	68.75	Jul 20	67.10				

## PRIMARY WELLS

403517073430610. Local number, N6701.2

LOCATION.—Lat 40°35'17", long 73°43'06", Hydrologic Unit 02030202, at pumping center, 0.1 mi west of end of Park Street, 300 ft north of Beech Street, in easternmost recorder shelter, Atlantic Beach. Owner: United States Geological Survey.

AQUIFER.—Raritan (Confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 837 ft, screened 822 to 832 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 11.0 ft above sea level. Measuring point: Top of 4-in steel coupling, 1.06 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—August 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 9.42 ft above sea level, September 20, 1997; lowest measured, 2.57 ft below sea level, October 30, 1968.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 21	8.44	Dec 21	8.58	Apr 20	8.90	Jun 15	8.95	Aug 16	1.30	Sep 27	2.49
Nov 23	8.21	Mar 25	8.66	May 17	8.79	Jul 20	8.63				

403517073430702. Local number, N6702.1

LOCATION.—Lat 40°35'17", long 73°43'06", Hydrologic Unit 02030202, at pumping center, 0.1 mi west of end of Park Street, 300 ft north of Beech Street, in easternmost recorder shelter, Atlantic Beach. Owner: United States Geological Survey.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 677 ft, screened 666 to 677 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 11.0 ft above sea level. Measuring point: Top of 4-in steel coupling, 1.04 ft above land-surface datum.

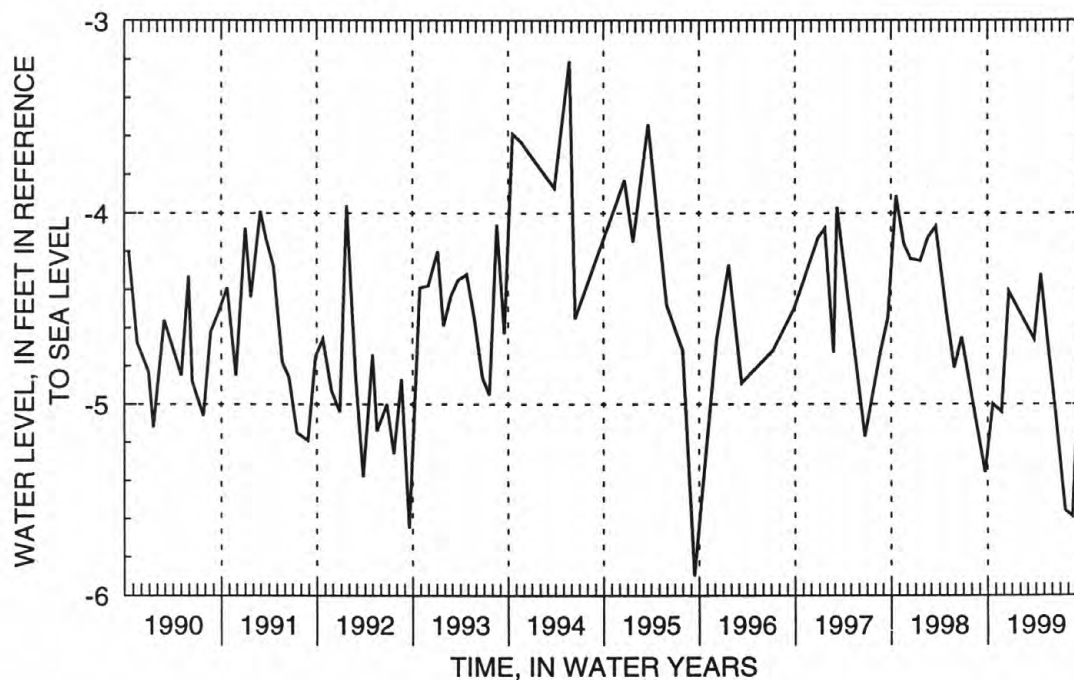
REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—September 1959 to current year. Unpublished records from September 1959 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 2.50 ft below sea level, April 13, 1961; lowest measured, 6.58 ft below sea level, November 30, 1972.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 21	-5.00	Dec 21	-4.41	Apr 20	-4.32	Jun 15	-5.06	Aug 16	-5.59	Sep 27	-4.39
Nov 23	-5.04	Mar 25	-4.66	May 17	-4.69	Jul 20	-5.56				



## PRIMARY WELLS

403517073430705. Local number, N6705.1

LOCATION.—Lat 40°35'17", long 73°43'06", Hydrologic Unit 02030202, at pumping center, 0.1 mi west of end of Park Street, 300 ft north of Beech Street, in westernmost recorder shelter, Atlantic Beach. Owner: United States Geological Survey.

AQUIFER.—Jameco (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 157 ft, screened 147 to 157 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 10.0 ft above sea level. Measuring point: Top of 4-in steel coupling, 2.45 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—February 1968 to current year. Unpublished records from February 1968 to September 1968 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 3.12 ft above sea level, March 3, 1969; lowest measured, 2.77 ft below sea level, April 5, 1973.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 21	1.26	Dec 21	1.45	Apr 20	1.36	Jun 15	1.59	Aug 16	1.57	Sep 27	1.53
Nov 23	1.17	Mar 25	1.26	May 17	1.53	Jul 20	1.48				

403533073353201. Local number, N6849.1

LOCATION.—Lat 40°35'33", long 73°35'32", Hydrologic Unit 02030202, at pumping center, north of Lido Boulevard, 0.3 mi west of Loop Parkway, in southernmost recorder shelter, Lido Beach. Owner: United States Geological Survey.

AQUIFER.—Raritan (confining unit).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 1,040 ft, screened 1,027 to 1,037 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 7.0 ft above sea level. Measuring point: Top of 6-in steel casing, 2.36 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—February 1968 to current year. Unpublished records from February 1968 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 7.08 ft above sea level, June 25, 1998; lowest measured, 3.88 ft above sea level, December 22, 1971.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 21	5.82	Dec 21	6.09	Mar 25	6.48	May 17	6.75	Jul 20	6.18	Sep 27	5.57
Nov 23	5.71	Feb 17	6.76	Apr 20	6.83	Jun 15	6.79	Aug 16	5.86		

## PRIMARY WELLS

403533073353202. Local number, N6850.2

LOCATION.—Lat 40°35'33", long 73°35'32", Hydrologic Unit 02030202, at pumping center, north of Lido Boulevard, 0.3 mi west of Loop Parkway, in northernmost recorder shelter, Lido Beach. Owner: United States Geological Survey.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 913 ft, screened 898 to 909 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 6.6 ft above sea level. Measuring point: Top of 6-in steel coupling, 2.58 ft above land-surface datum.

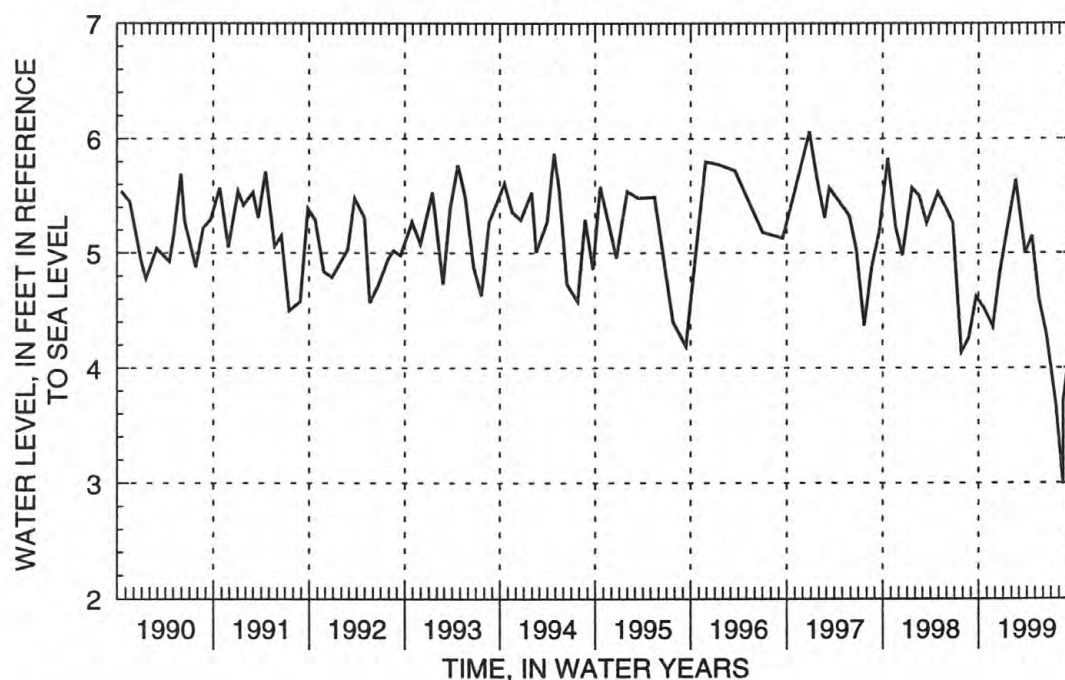
REMARKS.—Water level affected by tidal fluctuation and nearby pumping. Replaced well N6850.1 in May 1960 at same location.

PERIOD OF RECORD.—June 1960 to current year. Unpublished records from June 1960 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 8.00 ft above sea level, April 13, 1961; lowest measured, 2.69 ft above sea level, October 27, 1980.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 21	4.52	Dec 21	4.85	Mar 25	5.00	May 17	4.60	Jul 20	3.68	Sep 27	4.44
Nov 23	4.36	Feb 17	5.64	Apr 20	5.15	Jun 15	4.28	Aug 16	3.70		



403533073353205. Local number, N6853.1

LOCATION.—Lat 40°35'33", long 73°35'32", Hydrologic Unit 02030202, at pumping center, north of Lido Boulevard, 0.3 mi west of Loop Parkway, in northernmost recorder shelter, Lido Beach. Owner: United States Geological Survey.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 8 in., depth 135 ft, screened 127 to 132 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 7.0 ft above sea level. Measuring point: Top of 8-in steel casing, 1.80 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—February 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 5.17 ft above sea level, October 20, 1997; lowest measured, 2.72 ft above sea level, September 30, 1968.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 21	3.88	Dec 21	4.11	Mar 25	3.97	May 17	3.95	Jul 20	3.57	Sep 27	4.12
Nov 23	3.56	Feb 17	4.76	Apr 20	4.20	Jun 15	3.92	Aug 16	3.60		



## PRIMARY WELLS

404237073433701. Local number, N7493.1

LOCATION.—Lat 40°42'36", long 73°43'35", Hydrologic Unit 02030202, at west side of Cross Island Parkway exit ramp (Hempstead Turnpike eastbound), 21 ft south of Hempstead Turnpike, Elmont. Owner: United States Geological Survey.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 353 ft, screened 349 to 353 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

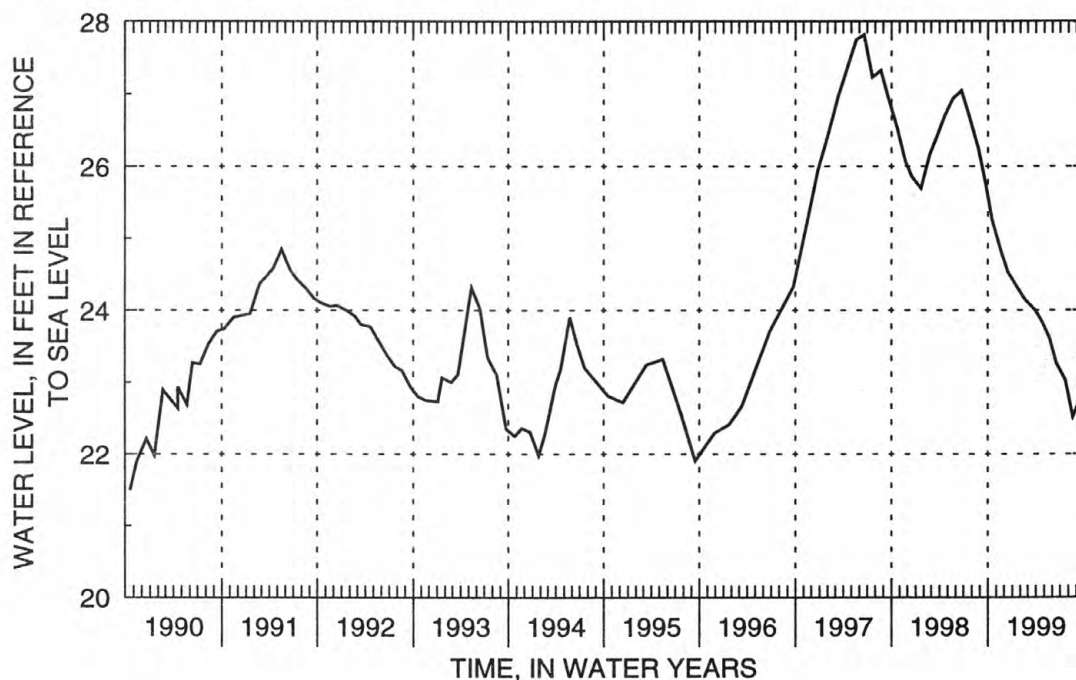
DATUM.—Land-surface datum is 75.0 ft above sea level. Measuring point: Top of 4-in steel flange, 2.59 ft above land-surface datum.

PERIOD OF RECORD.—April 1964 to current year. Unpublished records from April 1964 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 27.82 ft above sea level, June 19, 1997; lowest measured, 3.52 ft above sea level, August 8, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	25.26	Dec 16	24.52	Mar 30	23.99	May 21	23.62	Jul 21	23.03	Sep 23	22.83
Nov 18	24.83	Feb 17	24.15	Apr 23	23.84	Jun 17	23.26	Aug 18	22.52		



404705073394902. Local number, N7554.2

LOCATION.—Lat 40°47'05", long 73°39'49", Hydrologic Unit 02030202, at Christopher Morley Park, 55 ft east of Searingtown Road, just north of main entrance to park, North Hills. Owner: Port Washington Water District.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 12 in. to 6 in., depth 464 ft, screened 454 to 464 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 190.0 ft above sea level. Measuring point: Top of 2-in steel coupling, 5.57 ft above land-surface datum.

REMARKS.—Replaced well N7554.1 in May 1964 at same location.

PERIOD OF RECORD.—March 1964 to current year. Unpublished records from March 1964 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 50.62 ft above sea level, April 28, 1965; lowest measured, 21.52 ft above sea level, July 18, 1988.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	29.75	Dec 16	29.90	Mar 30	33.26	May 19	37.81	Jul 20	36.14	Sep 23	30.87
Nov 17	30.84	Feb 16	29.10	Apr 23	40.68	Jun 17	37.96	Aug 17	24.04		

## PRIMARY WELLS

404947073450301. Local number, N8046.1

LOCATION.—Lat 40°49'47", long 73°45'03", Hydrologic Unit 02030201, at south side of Pond Road, 85 ft west of Hayworth Drive, easternmost well, Kings Point. Owner: Nassau County Department of Public Works.

AQUIFER.—Port Washington (confined). Previously reported as Jameco aquifer.

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 189 ft, screened 184 to 189 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 9.3 ft above sea level. Measuring point: Top of 4-in steel casing, 2.36 ft above land-surface datum.

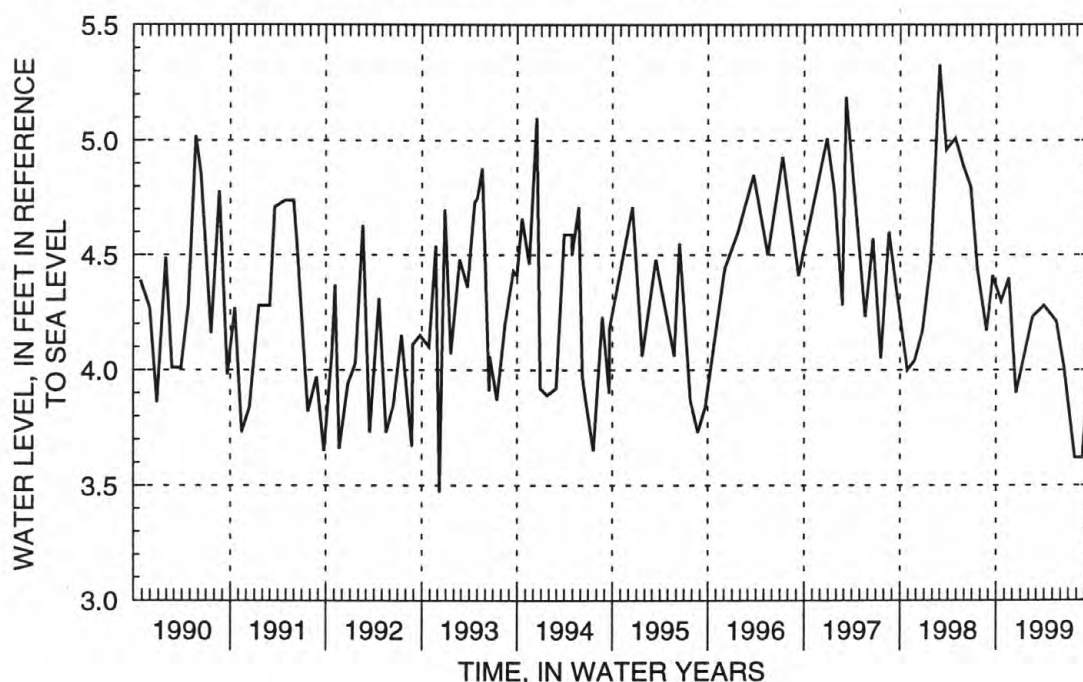
REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—May 1966 to current year. Unpublished records from May 1966 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.60 ft above sea level, February 6, 1978; lowest measured, 1.20 ft below sea level, July 19, 1966.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	4.30	Dec 16	3.90	Mar 30	4.28	Jun 15	4.01	Aug 23	3.62	Sep 22	4.06
Nov 18	4.40	Feb 16	4.23	May 17	4.21	Jul 26	3.62				



404947073450201. Local number, N8052.1

LOCATION.—Lat 40°49'47", long 73°45'03", Hydrologic Unit 02030201, at south side of Pond Road, 91 ft west of Hayworth Drive, westernmost well, Kings Point. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 94 ft, screened 90 to 94 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 12.0 ft above sea level. Measuring point: Top of 2-in steel casing, 0.65 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—May 1966 to current year. Unpublished records from May 1966 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 8.35 ft above sea level, June 20, 1974; lowest measured, 0.11 ft above sea level, July 26, 1966.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	4.98	Dec 16	4.55	Mar 30	4.64	Jun 15	4.85	Aug 23	4.46	Sep 22	4.90
Nov 18	5.05	Feb 16	4.80	May 17	5.05	Jul 26	4.44				

## PRIMARY WELLS

404535073370002. Local number, N8269.2

LOCATION.—Lat 40°45'35", long 73°37'00", Hydrologic Unit 02030202, at east side of Bacon Road, 106 ft north of Hillside Avenue, south of school entrance, Old Westbury. Owner: Nassau County Department of Public Works.

AQUIFER.—Magothy (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 4 in., depth 86 ft, screened 81 to 86 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 111.7 ft above sea level. Measuring point: Top of 4-in steel coupling, 0.15 ft below land-surface datum.

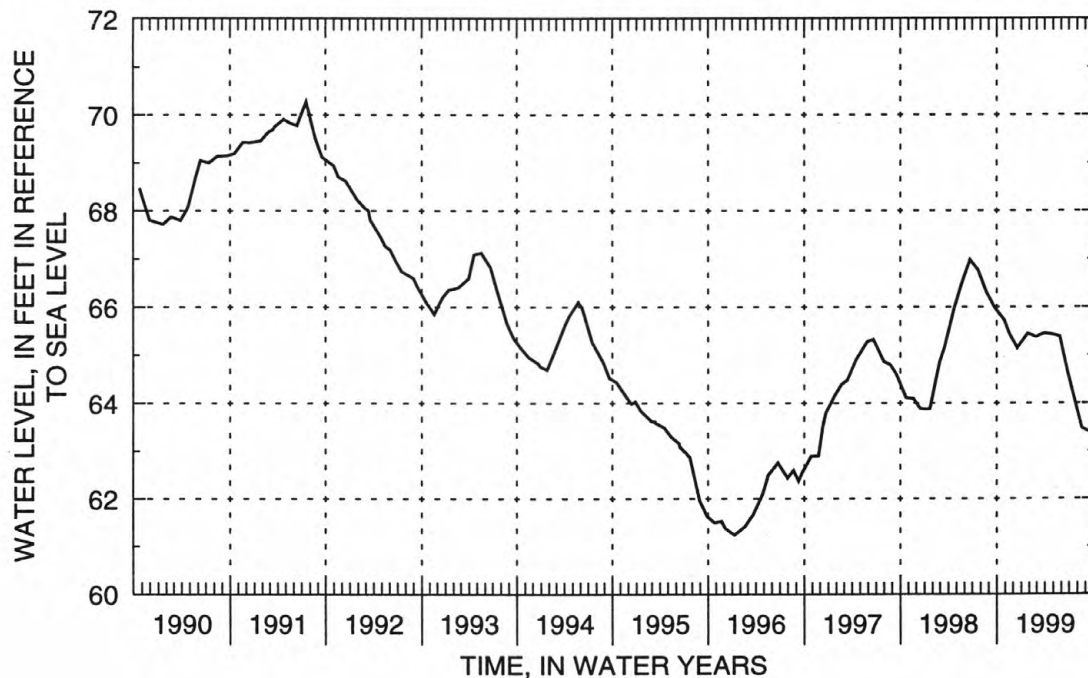
REMARKS.—Prior to April 1967, well at site (N 1258.1) was screened in the upper glacial aquifer. Well N1258.1 was replaced by well N8269.1 in April 1967, which was replaced by well N8269.2 in June 1976 at same location.

PERIOD OF RECORD.—June 1976 to current year. Unpublished records from June 1936 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 74.18 ft above sea level, May 21, 1980; lowest measured, 61.24 ft above sea level, January 11, 1996.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	65.73	Dec 17	65.15	Feb 26	65.38	Apr 28	65.43	Jun 25	64.65	Aug 18	63.48
Nov 19	65.43	Jan 26	65.45	Mar 30	65.46	May 27	65.39	Jul 20	64.11	Sep 28	63.36



## PRIMARY WELLS

403942073334401. Local number, N8847.1

LOCATION.—Lat 40°39'42", long 73°33'44", Hydrologic Unit 02030202, at north side of Bedford Avenue, 38 ft east of Babylon Turnpike, Merrick. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 1 1/4 in., depth 26 ft, screened 21 to 26 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 16.0 ft above sea level. Measuring point: Top of 1 1/4-in steel casing, 0.37 ft below land-surface datum.

REMARKS.—Replaced well N3943.2 in April 1972, which replaced well N1185.1 in June 1939 at same location.

PERIOD OF RECORD.—June 1972 to current year. Unpublished records from June 1972 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 9.62 ft above sea level, March 26, 1993; lowest measured, 1.04 ft below sea level, June 11, 1974.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	7.92	Dec 17	7.69	Mar 30	8.87	May 18	8.17	Jul 21	7.34	Sep 23	8.20
Nov 18	7.72	Feb 17	8.56	Apr 23	8.55	Jun 17	7.91	Aug 18	7.17		

404702073305601. Local number, N8888.1

LOCATION.—Lat 40°47'03", long 73°30'56", Hydrologic Unit 02030202, at north side of Miller Place, 59 ft east of Vincent Road, Hicksville. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 111 ft, screened 106 to 111 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 174.0 ft above sea level. Measuring point: Top of 4-in steel casing, 0.49 ft above land-surface datum.

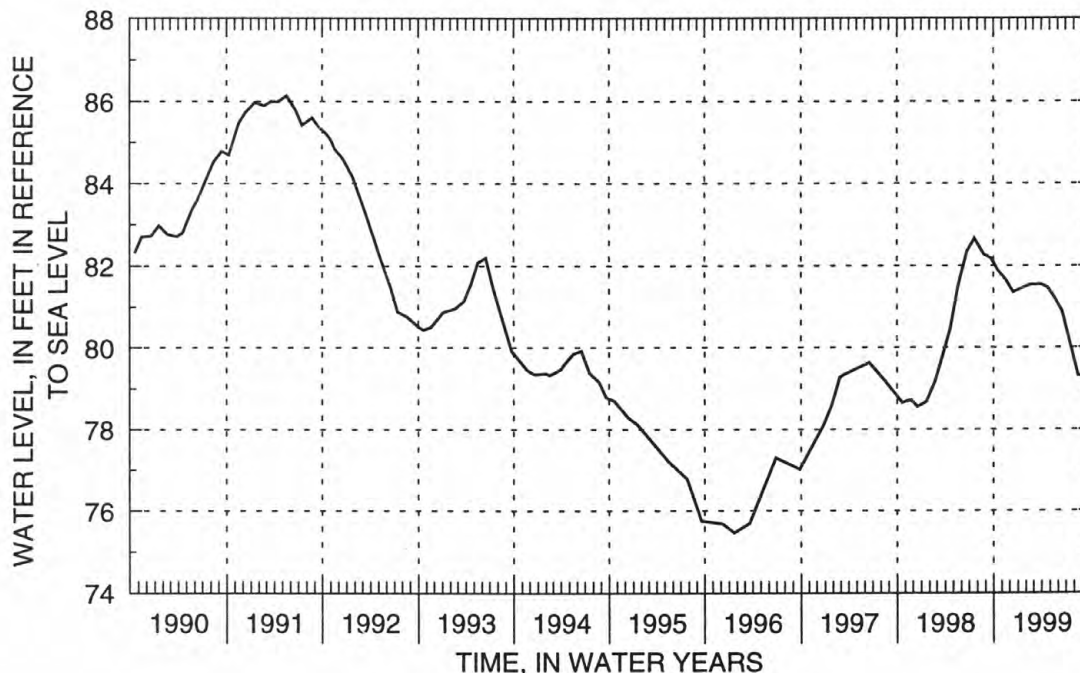
REMARKS.—Replaced well N1213.1 in October 1972 at same location.

PERIOD OF RECORD.—October 1972 to current year. Unpublished records from October 1972 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 94.22 ft above sea level, September 14, 1979; lowest measured, 75.46 ft above sea level, January 22, 1996.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	81.90	Dec 15	81.36	Mar 30	81.55	May 17	81.25	Jul 20	80.03	Sep 21	79.32
Nov 17	81.66	Feb 16	81.54	Apr 23	81.47	Jun 17	80.89	Aug 16	79.32		





## PRIMARY WELLS

404832073333203. Local number, N9059.1

LOCATION.—Lat 40°48'32", long 73°33'30", Hydrologic Unit 02030201, at west side of Fruitledge Road, 35 ft north of Cedar Swamp Road, Brookville. Owner: Nassau County Department of Public Works.

AQUIFER.—Magothy (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 175 ft, screened 170 to 175 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 228.0 ft above sea level. Measuring point: Top of 4-in steel coupling, 0.24 ft above land-surface datum.

PERIOD OF RECORD.—October 1974 to April 1984 and June 1992 to current year. Unpublished records from to are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 90.84 ft above sea level, December 5, 1979; lowest measured, 73.82 ft above sea level, March 20, 1996.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb 16	80.18	May 19	80.21	Jun 17	79.77	Jul 20	79.14	Aug 16	78.59	Sep 23	78.07
Mar 30	80.35										

404757073440401. Local number, N9099.1

LOCATION.—Lat 40°47'57", long 73°44'04", Hydrologic Unit 02030201, at west side of Middle Neck Road, 33 ft north of Preston Road, Great Neck. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 71 ft, screened 66 to 71 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 60.0 ft above sea level. Measuring point: Top of 4-in steel coupling, 0.37 ft below land-surface datum.

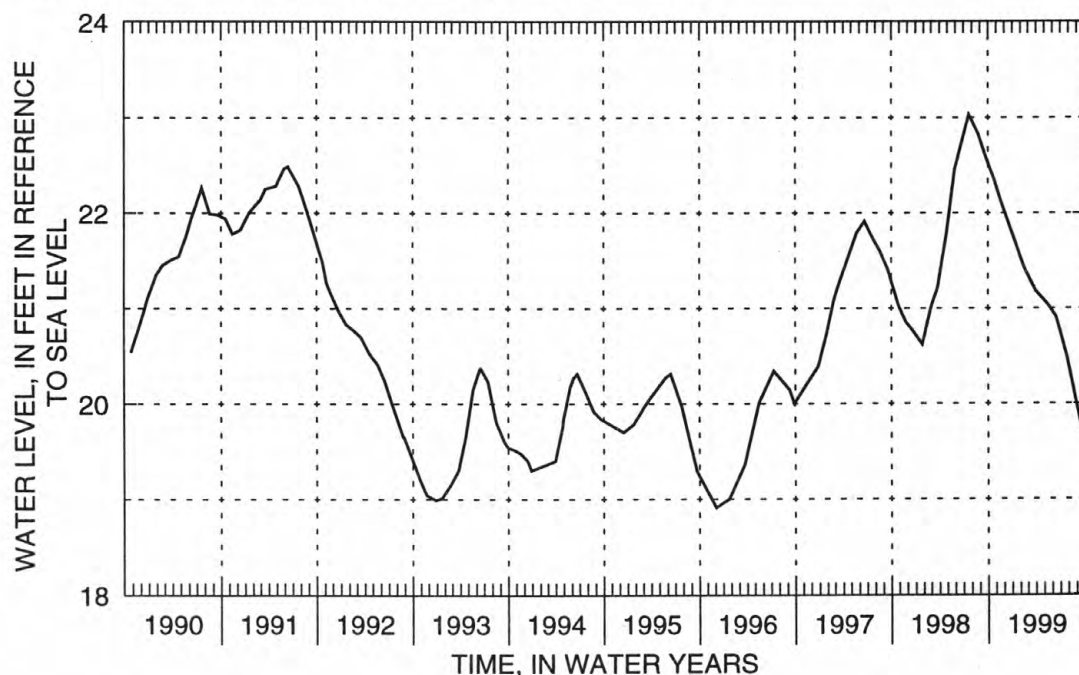
REMARKS.—Replaced well N1479.1 in February 1976 at same location, which has a period of record from September 1944 to February 1976.

PERIOD OF RECORD.—February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 24.45 ft above sea level, June 7, 1976; lowest measured, 14.90 ft above sea level, November 26, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	22.39	Dec 16	21.91	Mar 30	21.18	Jun 15	20.91	Aug 23	20.10	Sep 22	19.70
Nov 18	22.13	Feb 16	21.42	May 17	21.03	Jul 26	20.49				



## PRIMARY WELLS

404232073432501. Local number, N9979.1

LOCATION.—Lat 40°42'32", long 73°43'25", Hydrologic Unit 02030202, at west side of Wellington Road, 279 ft south of Hempstead Turnpike, Elmont. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 95 ft, screened 87 to 92 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 71.0 ft above sea level. Measuring point: Top of 4-in PVC coupling, 0.36 ft below land-surface datum.

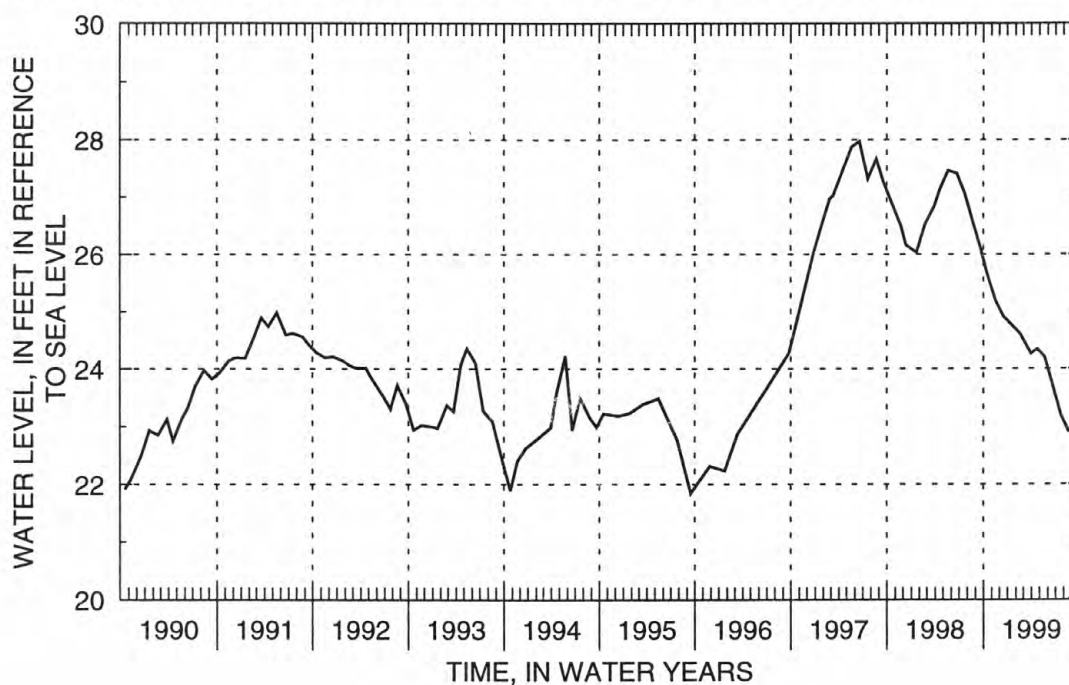
REMARKS.—Replaced well N1622.4 in June 1982 at same location.

PERIOD OF RECORD.—December 1982 to current year. Unpublished records from December 1982 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 27.97 ft above sea level, June 19, 1997; lowest measured, 5.39 ft above sea level, April 8, 1983.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 16	25.64	Dec 16	24.92	Mar 30	24.26	May 21	24.20	Jul 21	23.20	Sep 23	23.11
Nov 18	25.18	Feb 17	24.61	Apr 23	24.34	Jun 17	23.76	Aug 18	22.92		



## PRIMARY WELLS

404338073371502. Local number, N10035.1

LOCATION.—Lat 40°43'38", long 73°37'15", Hydrologic Unit 02030202, at north side of Commercial Avenue, 60 ft east of Clinton Avenue, Garden City. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 56 ft, screened 48 to 53 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 77.6 ft above sea level. Measuring point: Top of 4-in steel coupling, 0.38 ft below land-surface datum.

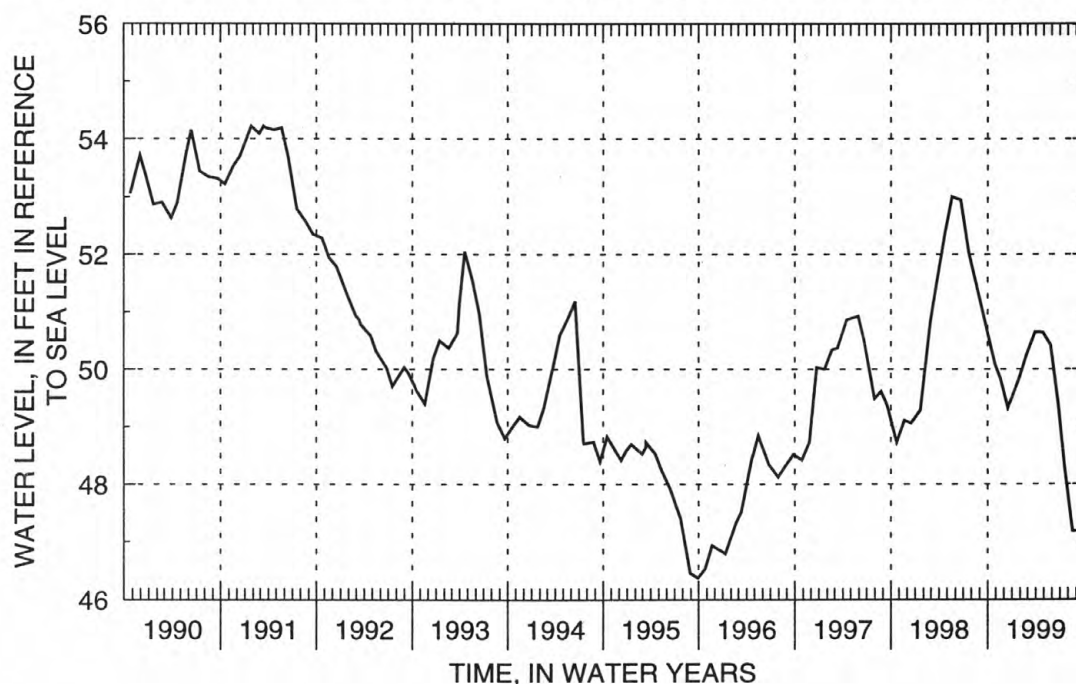
REMARKS.—Replaced well N1255.2 in October 1982 at same location.

PERIOD OF RECORD.—October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 57.04 ft above sea level, August 8, 1984; lowest measured, 46.37 ft above sea level, September 28, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	50.09	Dec 17	49.33	Feb 26	50.25	Apr 28	50.64	Jun 25	49.40	Aug 18	47.18
Nov 19	49.83	Jan 26	49.80	Mar 30	50.65	May 27	50.42	Jul 20	48.24	Sep 28	47.19



405009073293501. Local number, N11394.1

LOCATION.—Lat 40°50'09", long 73°29'35", Hydrologic Unit 02030201, at south side of Foxhunt Crescent South Road, east of Fox Court, in recharge basin #531, Oyster Bay Cove. Owner: Nassau County Department of Public Works.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 685 ft, screened 660 to 680 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 212.0 ft above sea level. Measuring point: Top of 4-in steel coupling, 0.48 ft below land-surface datum.

PERIOD OF RECORD.—August 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 63.12 ft above sea level, March 11, 1991; lowest measured, 54.52 ft above sea level, September 12, 1996.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb 16	59.13	Apr 23	59.25	Jun 17	58.16	Jul 20	57.01	Aug 16	56.62	Sep 21	57.29
Mar 30	59.10	May 17	58.67								

## PRIMARY WELLS

4043030732295501. Local number, N12250.1

LOCATION.—Lat 40°43'03", long 73°29'55", Hydrologic Unit 02030202, at east side of Emerald Lane, 87 ft south of Miller Place, Levittown. Owner: Nassau County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 49 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 71.0 ft above sea level. Measuring point: Top of 4-in PVC coupling, 0.66 ft below land-surface datum.

PERIOD OF RECORD.—April 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 51.24 ft above sea level, October 23, 1997; lowest measured, 40.03 ft above sea level, October 26, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	44.38	Dec 17	43.58	Feb 26	45.38	Apr 28	45.64	Jun 25	43.61	Aug 18	41.79
Nov 19	43.97	Jan 26	44.84	Mar 30	45.75	May 27	45.99	Jul 20	42.74	Sep 28	42.69

404607073430801. Local number, N12450.1

LOCATION.—Lat 40°46'07", long 73°43'08", Hydrologic Unit 02030201, at west side of Links Drive, south of Horace Harding Boulevard, Lake Success. Owner: Nassau County Department of Public Works.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 685 ft, screened 660 to 680 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 220.0 ft above sea level. Measuring point: Top of 4-in PVC coupling, 0.31 ft below land-surface datum

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

PERIOD OF RECORD.—March 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 14.13 ft above sea level, March 25, 1998; lowest measured, 11.10 ft below sea level, July 20, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 21	1.69	Jul 20	-11.10	Aug 17	-7.49	Sep 23	-0.11				



## PRIMARY WELLS

404451073475003. Local number, Q283.2

LOCATION.—Lat 40°44'50", long 73°47'50", Hydrologic Unit 02030201, at City of New York storage facility, 50 ft south of Underhill Avenue, west of Fresh Meadow Lane, easternmost well, Flushing. Owner: City of New York.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel abandoned public supply well, diameter 26 in., depth 409 ft, screened 309 to 352 ft and 367 to 409 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 27.0 ft above sea level. Measuring point: Top of hole cut in welded steel plate, 0.37 ft above land-surface datum.

PERIOD OF RECORD.—June 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 10.16 ft above sea level, March 31, 1998; lowest measured, 27.40 ft below sea level, September 14, 1976.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	6.71	Dec 29	9.08	Mar 03	9.12	Apr 21	9.26	Jun 22	5.09	Aug 25	2.88
Dec 01	8.23	Jan 26	9.39	Mar 23	9.19	May 21	7.68	Jul 23	2.90	Sep 29	3.75

403624073491601. Local number, Q287.1

LOCATION.—Lat 40°36'24", long 73°49'16", Hydrologic Unit 02030202, at Broad Channel School, west side of Shad Creek Road, 131 ft south of 9th Road, Broad Channel. Owner: City of New York.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel abandoned public supply well, diameter 8 in., depth 725 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 8.5 ft above sea level. Measuring point: Top of 8-in to 4-in steel reducer bushing, 0.52 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—January 1944 to current year. Unpublished records from January 1944 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 10.79 ft above sea level, January 1, 1945; lowest measured, 0.96 ft below sea level, September 5, 1969.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	6.77	Nov 24	7.06	Jun 16	7.38	Jul 30	5.40	Aug 17	4.66	Sep 28	5.14

404541073452601. Local number, Q470.1

LOCATION.—Lat 40°45'41", long 73°45'26", Hydrologic Unit 02030201, at west side of Cross Island Parkway, 325 ft south of Northern Boulevard (State Route 25A), southernmost well, Bayside. Owner: City of New York.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel abandoned public supply well, diameter 6 in., depth 379 ft, screened 347 to 375 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 13.0 ft above sea level. Measuring point: Top of 6-in steel coupling, 0.73 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—January 1934 to current year. Unpublished records from January 1934 to January 1935, January 1940 to December 1940, and July 1954 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 12.23 ft above sea level, March 26, 1998; lowest measured, 7.44 ft below sea level, July 29, 1966.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 30	11.09	Jul 29	0.53								

## PRIMARY WELLS

404541073452602. Local number, Q471.1

LOCATION.—Lat 40°45'41", long 73°45'26", Hydrologic Unit 02030201, at west side of Cross Island Parkway, 313 ft south of Northern Boulevard (State Route 25A), northernmost well, Bayside. Owner: City of New York.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 8 in., depth 118 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 23.7 ft above sea level. Measuring point: Top of steel flange, 5.22 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—March 1939 to current year. Unpublished records from March 1939 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 18.15 ft above sea level, April 3, 1991; lowest measured, 12.83 ft above sea level, April 19, 1971.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jul 29	17.61										

403958073445801. Local number, Q1187.1

LOCATION.—Lat 40°39'58", long 73°44'58", Hydrologic Unit 02030202, at south side of North Conduit Avenue, 1,775 ft west of 225th Street, westernmost well, in ravine, Rosedale. Owner: City of New York.

AQUIFER.—Jameco (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 8 in., depth 130 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 10.0 ft above sea level. Measuring point: Top of small hole in 8-in steel cap, 4.71 ft above land-surface datum.

PERIOD OF RECORD.—November 1968 to current year. Unpublished records from November 1968 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 9.14 ft above sea level, May 22, 1997; lowest measured, 2.26 ft above sea level, June 22, 1981.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 22	7.03	Mar 02	7.09	Apr 19	6.94	Jun 21	5.88	Aug 24	5.61	Sep 27	5.93
Jan 26	7.22	Mar 22	4.61	May 20	7.04	Jul 22	5.98				

403958073445802. Local number, Q1189.1

LOCATION.—Lat 40°39'58", long 73°44'58", Hydrologic Unit 02030202, at south side of North Conduit Avenue, 1,790 ft west of 225th Street, easternmost well, in ravine, Rosedale. Owner: City of New York.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 50 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 13.0 ft above sea level. Measuring point: Top of 6-in steel coupling, 14.76 ft above land-surface datum.

PERIOD OF RECORD.—November 1968 to current year. Unpublished records from November 1968 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 8.16 ft above sea level, July 22, 1997; lowest measured, 1.86 ft above sea level, December 15, 1981.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan 26	4.94	Mar 02	4.61	Mar 22	7.23	Aug 27	4.16				

## PRIMARY WELLS

404240073443401. Local number, Q1249.1

LOCATION.—Lat 40°42'40", long 73°44'34", Hydrologic Unit 02030202, at west side of 216th Street, 42 ft north of 106th Avenue, Queens Village. Owner: City of New York.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 1 1/4 in., depth 88 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 72.0 ft above sea level. Measuring point: Top of 1 1/4-in steel coupling, 0.36 ft above land-surface datum.

PERIOD OF RECORD.—October 1940 to current year. Unpublished records from October 1940 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 33.41 ft above sea level, September 26, 1946; lowest measured, 5.67 ft below sea level, March 8, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	21.97	Dec 29	20.64	Feb 26	20.58	Mar 22	20.64	May 20	20.06	Jul 22	19.39
Dec 01	21.19	Jan 08	21.00	Mar 02	20.56	Apr 19	20.23	Jun 21	19.83		

404241073443301. Local number, Q1249.2

LOCATION.—Lat 40°42'41", long 73°44'33", Hydrologic Unit 02030202, at east side of 216th Street, 85 ft north of 106th Avenue, Queens Village. Owner: City of New York.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 80 ft, screened 70 to 75 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 75.5 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.11 ft below land-surface datum.

REMARKS.—Replaced well Q1249.1 in August 1999 at same location, which has a period of record from October 1940 to July 1999.

PERIOD OF RECORD.—August 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 21.99 ft above sea level, September 27, 1999; lowest measured, 21.19 ft above sea level, August 24, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug 24	21.19	Sep 27	21.99								

404547073524401. Local number, Q1326.1

LOCATION.—Lat 40°45'47", long 73°52'44", Hydrologic Unit 02030201, at west side of 91st Street, 145 ft south of Astoria Boulevard, Jackson Heights. Owner: Fair Operating Company

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel diffusion well, diameter 6 in., depth 72 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 27.0 ft above sea level. Measuring point: Top of hole in 6-in steel cap, 0.44 ft above land-surface datum.

PERIOD OF RECORD.—July 1950 to March 1984 and June 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 19.06 ft above sea level, March 22, 1983; lowest measured, 14.50 ft above sea level, April 19, 1966.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	16.93	Dec 29	16.63	Mar 03	16.75	May 21	16.77	Jul 23	16.60	Sep 29	16.73
Dec 01	16.77	Jan 26	16.79	Mar 23	16.84	Jun 22	16.74	Aug 25	16.57		

## PRIMARY WELLS

404303073481601. Local number, Q1812.1

LOCATION.—Lat 40°43'03", long 73°48'16", Hydrologic Unit 02030202, at west side of 164th Street, 670 ft south of Goethals Avenue, at Queens General Hospital, Jamaica. Owner: Queens General Hospital.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled unused steel diffusion well, diameter 12 in., depth 250 ft, screened 195 to 245 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 115.4 ft above sea level. Measuring point: Top of coupling at end of 2-in steel extension, 0.93 ft below land-surface datum.

PERIOD OF RECORD.—January 1982 to current year. Unpublished records from January 1982 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 19.66 ft above sea level, June 23, 1997; lowest measured, 12.80 ft below sea level, December 17, 1984.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr 08	17.17										

403957073495001. Local number, Q2324.1

LOCATION.—Lat 40°39'57", long 73°49'50", Hydrologic Unit 02030202, at north side of North Conduit Avenue, 66 ft east of entrance to Aqueduct Race Track, South Ozone Park. Owner: New York Racing Association.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 2 1/2 in., depth 91 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 22.0 ft above sea level. Measuring point: Top of 2 1/2-in steel coupling, 0.04 ft above land-surface datum.

PERIOD OF RECORD.—March 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 5.33 ft above sea level, June 6, 1997; lowest measured, 3.40 ft below sea level, May 25, 1959.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	4.03	Dec 22	3.73	Feb 22	4.07	Apr 19	4.11	Jun 16	4.04	Aug 17	3.92
Nov 24	3.72	Jan 20	3.90	Mar 22	4.14	May 18	4.03	Jul 30	3.87	Sep 28	4.14



## PRIMARY WELLS

404451073475002. Local number, Q2346.1

LOCATION.—Lat 40°44'51", long 73°47'50", Hydrologic Unit 02030201, at City of New York storage facility, 55 ft south of Underhill Avenue, west of Fresh Meadow Lane, westernmost well, Flushing. Owner: City of New York.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 1 1/4 in., depth 17 ft, screened 12 to 17 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

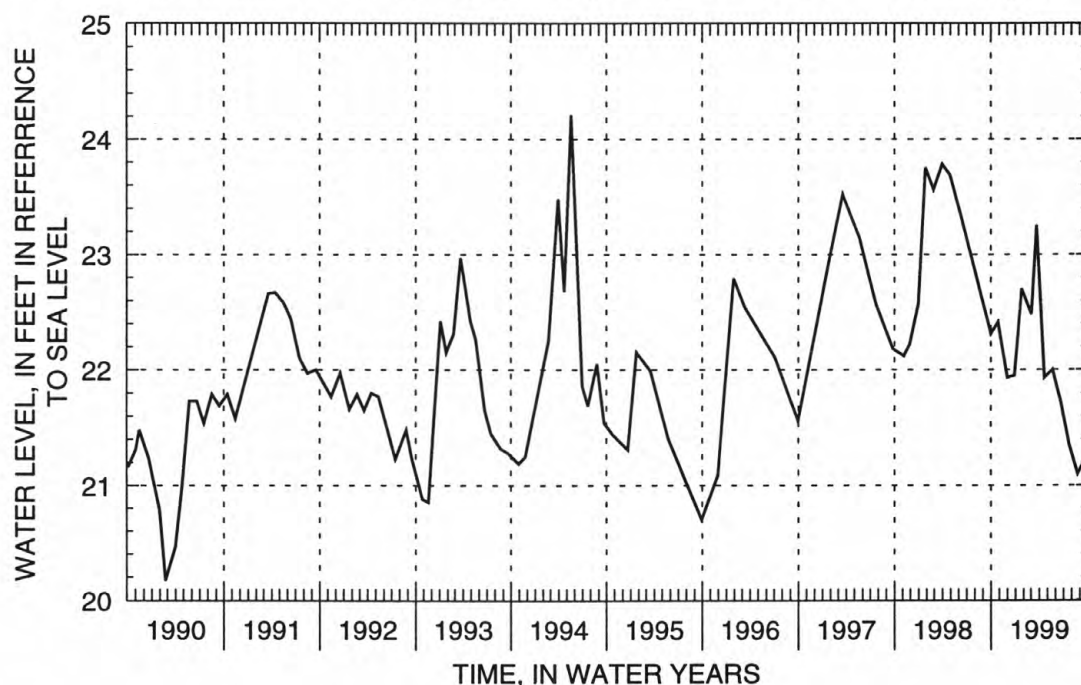
DATUM.—Land-surface datum is 29.0 ft above sea level. Measuring point: Top of 1 1/4-in steel casing, 0.98 ft above land-surface datum.

PERIOD OF RECORD.—August 1960 to current year. Unpublished records from August 1960 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 24.21 ft above sea level, May 19, 1994; lowest measured, 13.18 ft above sea level, February 25, 1983.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	22.41	Dec 29	21.95	Mar 03	22.48	Apr 21	21.93	Jun 22	21.72	Aug 25	21.10
Dec 01	21.93	Jan 26	22.70	Mar 23	23.25	May 21	22.00	Jul 23	21.36	Sep 29	21.25



404624073483501. Local number, Q2791.1

LOCATION.—Lat 40°46'24", long 73°48'35", Hydrologic Unit 02030201, at Saint Mel's Roman Catholic Church, north side of 27th Avenue, 173 ft east of 154th Street, under steel doors, Flushing. Owner: Saint Mel's Roman Catholic Church.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel public supply well, diameter 6 in., depth 76 ft, screened 68 to 76 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 90.9 ft above sea level. Measuring point: Edge of 1/4-in access hole in steel cap, 3.27 ft below land-surface datum.

PERIOD OF RECORD.—May 1981 to current year. Unpublished records from May 1981 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 58.23 ft above sea level, June 27, 1984; lowest measured, 50.17 ft above sea level, April 2, 1986.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	54.80	Jan 26	54.08	Mar 23	54.53	May 21	54.71	Jun 22	54.46	Jul 23	54.13
Dec 01	54.19	Mar 03	54.28	Apr 21	54.37						

## PRIMARY WELLS

404511073485201. Local number, Q2814.1

LOCATION.—Lat 40°45'11", long 73°48'52", Hydrologic Unit 02030201, at north side of Jasmine Avenue, 209 ft west of Parsons Boulevard, Flushing. Owner: Saint Mary's Roman Catholic Church.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel public supply well, diameter 6 in., depth 79 ft, screened 70 to 79 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 45.0 ft above sea level. Measuring point: Top of 1/2-in hole in steel reducer, 2.40 ft below land-surface datum.

PERIOD OF RECORD.—January 1982 to October 1985 and April 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 33.04 ft above sea level, October 3, 1982; lowest measured, 11.00 ft above sea level, January 12, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 23	14.09										

403940073443601. Local number, Q2994.1

LOCATION.—Lat 40°39'40", long 73°44'36", Hydrologic Unit 02030202, at west side of Brookville Boulevard, between 145th Avenue and Mayda Road, 67 ft west of blacktop walkway in park, southernmost well, Rosedale. Owner: New York City.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 2 in., depth 66 ft, screened 10 to 66 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 10.0 ft above sea level. Measuring point: Top of 2-in steel casing, 0.22 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—November 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.63 ft above sea level, March 29, 1994; lowest measured, 2.23 ft above sea level, December 20, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	4.38	Dec 22	4.18	Feb 22	4.85	Apr 17	4.77	Jun 16	4.28	Aug 17	3.75
Nov 24	4.30	Jan 20	4.88	Mar 22	5.15	May 18	4.51	Jul 30	3.82	Sep 28	4.31

403940073443501. Local number, Q2995.1

LOCATION.—Lat 40°39'40", long 73°44'35", Hydrologic Unit 02030202, at west side of Brookville Boulevard, between 145th Avenue and Mayda Road, 54 ft west of blacktop walkway in park, northernmost well, Rosedale. Owner: New York City.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 4 in., depth 100 ft, screened 10 to 83 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 11.0 ft above sea level. Measuring point: Top of 2-in steel casing, 0.90 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—November 1968 to October 1985 and June 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.29 ft above sea level, October 3, 1978; lowest measured, 2.43 ft above sea level, September 21, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	4.43	Dec 22	4.33	Feb 22	4.93	Apr 19	4.85	Jun 16	4.33	Aug 17	3.73
Nov 24	4.35	Jan 20	4.95	Mar 22	5.26	May 18	4.59	Jul 30	3.87	Sep 28	4.38

## PRIMARY WELLS

403932073482901. Local number, Q3109.1

LOCATION.—Lat 40°39'32", long 73°48'29", Hydrologic Unit 02030202, at John F. Kennedy International Airport, in grassy area at Federal Circle, 160 ft west of Federal Circle Loop Road, near Bergen Road split, just east of Van Wyck Expressway, northernmost well, South Ozone Park. Owner: New York Port Authority.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 400 ft, screened 290 to 310 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 22.7 ft above sea level. Measuring point: Top of 4-in PVC coupling, 1.30 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—December 1981 to current year. Unpublished records from December 1981 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 5.10 ft above sea level, March 29, 1994; lowest measured, 1.32 ft below sea level, September 26, 1983.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	1.76	Dec 22	2.90	Feb 22	2.96	Apr 19	2.61	Jun 16	3.01	Aug 17	2.87
Nov 24	1.42	Jan 20	3.46	Mar 22	3.08	May 18	2.82	Jul 30	2.21	Sep 29	3.16

403845073475701. Local number, Q3110.1

LOCATION.—Lat 40°38'45", long 73°47'57", Hydrologic Unit 02030202, at John F. Kennedy International Airport, east side of North Service Road, north of intersection with Van Wyck Expressway, easternmost well. Owner: New York Port Authority.

AQUIFER.—Jameco (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 356 ft, screened 306 to 326 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 10.0 ft above sea level. Measuring point: Top of 4-in coupling, 0.53 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—December 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 7.01 ft above sea level, March 22, 1991; lowest measured, 0.20 ft above sea level, September 26, 1983.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	3.92	Dec 22	4.88	Feb 22	4.39	Apr 19	4.11	Jun 16	4.29	Aug 17	4.14
Nov 24	3.60	Jan 20	4.82	Mar 22	4.53	May 18	4.17	Jul 30	3.54	Sep 28	4.53

403939073472801. Local number, Q3112.1

LOCATION.—Lat 40°39'39", long 73°47'28", Hydrologic Unit 02030202, at John F. Kennedy International Airport, east side of North Boundary Road, south of 150th Avenue, southernmost well. Owner: New York Port Authority.

AQUIFER.—Jameco (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 305 ft, screened 290 to 300 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 11.3 ft above sea level. Measuring point: Top of 4-in coupling, 0.35 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—December 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 5.70 ft above sea level, March 22, 1996; lowest measured, 1.78 ft below sea level, September 26, 1983.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	2.72	Dec 22	1.44	Feb 22	3.43	Apr 19	3.16	Jun 16	3.69	Aug 17	3.50
Nov 24	2.56	Jan 20	4.70	Mar 22	3.59	May 18	3.28	Jul 30	2.23	Sep 28	4.00

## PRIMARY WELLS

403932073482902. Local number, Q3114.1

LOCATION.—Lat 40°39'32", long 73°48'29", Hydrologic Unit 02030202, at John F. Kennedy International Airport, in grassy area at Federal Circle, 160 ft west of Federal Circle Loop Road, near Bergan Road split, just east of Van Wyck Expressway, southernmost well, South Ozone Park. Owner: New York Port Authority.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 31 ft, screened 29 to 31 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 21.0 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.26 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation and local dewatering.

PERIOD OF RECORD.—December 1981 to current year. Unpublished records from December 1981 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 4.30 ft above sea level, April 30, 1984; lowest measured, 3.62 ft below sea level, December 22, 1998

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	-2.83	Dec 22	-3.62	Feb 22	-1.84	Apr 19	-1.37	Jun 16	-0.56	Aug 17	-1.43
Nov 24	-3.51	Jan 20	-3.41	Mar 22	-1.99	May 18	-0.91	Jul 30	-1.22	Sep 29	-1.29

403845073475702. Local number, Q3115.1

LOCATION.—Lat 40°38'45", long 73°47'57", Hydrologic Unit 02030202, at John F. Kennedy International Airport, east side of North Service Road, north of intersection with Van Wyck Expressway, westernmost well. Owner: New York Port Authority.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 28 ft, screened 25 to 28 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 10.0 ft above sea level. Measuring point: Top of 4-in coupling, 0.36 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—December 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 4.79 ft above sea level, December 17, 1984; lowest measured, 3.70 ft below sea level, February 22, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	2.26	Dec 22	0.57	Feb 22	-3.70	Apr 19	-1.16	Jun 16	-0.76	Aug 17	-1.83
Nov 24	2.27	Jan 20	-0.89	Mar 22	-1.34	May 18	-1.00	Jul 30	-2.00	Sep 28	-1.87

403939073472802. Local number, Q3117.1

LOCATION.—Lat 40°39'39", long 73°47'28", Hydrologic Unit 02030202, at John F. Kennedy International Airport, east side of North Boundary Road, south of 150th Avenue, southernmost well. Owner: New York Port Authority.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 23 ft, screened 11 to 23 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 12.0 ft above sea level. Measuring point: Top of 2-in coupling, 1.00 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—December 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 5.85 ft above sea level, April 30, 1984; lowest measured, 0.57 ft above sea level, December 20, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	2.56	Dec 22	4.51	Feb 22	2.11	Apr 19	2.80	Jun 16	2.37	Aug 17	2.25
Nov 24	1.81	Jan 20	1.64	Mar 22	2.53	May 18	2.75	Jul 30	2.30	Sep 28	2.41



## PRIMARY WELLS

404654073465901. Local number, Q3119.1

LOCATION.—Lat 40°46'54", long 73°46'59", Hydrologic Unit 02030201, at south side of 18th Avenue, 44 ft west of 211th Street, Bay Terrace. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 2 in., depth 40 ft, screened 37 to 40 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 38.2 ft above sea level. Measuring point: Top of 2-in coupling, 0.01 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—September 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 21.35 ft above sea level, September 26, 1983; lowest measured, 18.06 ft above sea level, October 4, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	19.53	Jan 26	19.44	Jul 29	19.19						

404516073550201. Local number, Q3122.1

LOCATION.—Lat 40°45'16", long 73°55'02", Hydrologic Unit 02030201, at east side of 29th Street, 42 ft south of 38th Avenue, Long Island City. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 47 ft, screened 44 to 47 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 45.5 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.09 ft above land-surface datum.

PERIOD OF RECORD.—September 1980 to current year. Unpublished records from September 1980 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 15.27 ft above sea level, December 22, 1980; lowest measured, 11.72 ft above sea level, September 22, 1981.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	12.79	Dec 29	12.44	Mar 03	12.27	Apr 21	12.35	Jun 22	12.44	Aug 25	12.35
Dec 01	12.51	Jan 26	12.31	Mar 22	12.26	May 20	12.39	Jul 23	12.37	Sep 28	12.65

404119073463601. Local number, Q3162.1

LOCATION.—Lat 40°41'19", long 73°46'36", Hydrologic Unit 02030202, at east side of 172nd Street, 66 ft north of 116th Avenue, Rochdale Village. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 44 ft, screened 39 to 44 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 27.2 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.32 ft below land-surface datum.

PERIOD OF RECORD.—March 1984 to current year. Unpublished records from March 1984 to September 1987 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 15.53 ft above sea level, June 21, 1989; lowest measured, 9.62 ft above sea level, May 15, 1985.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	12.93	Dec 29	12.51	Mar 02	13.55	Apr 19	13.53	Jun 21	13.16	Aug 24	12.69
Dec 01	12.72	Jan 26	13.80	Mar 22	13.91	May 20	13.60	Jul 22	12.86	Sep 27	13.18

## PRIMARY WELLS

404138073535102. Local number, Q3587.1

LOCATION.—Lat 40°41'38", long 73°53'51", Hydrologic Unit 02030201, at north side of Cabot Road, 66 ft west of Cypress Avenue, westernmost well, Ridgewood. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 175 ft, screened 160 to 170 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 88.1 ft above sea level. Measuring point: Top of 4-in PVC casing, 0.07 ft below land-surface datum.

PERIOD OF RECORD.—March 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 14.98 ft above sea level, October 28, 1998; lowest measured, 12.74 ft above sea level, March 11, 1996.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	14.98	Dec 29	14.80	Mar 02	14.29	Apr 20	14.23	Jun 22	13.82	Aug 24	13.40
Dec 01	14.78	Jan 26	14.59	Mar 22	14.30	May 20	14.05	Jul 22	13.60	Sep 28	13.31

404026073472102. Local number, Q3589.1

LOCATION.—Lat 40°40'26", long 73°47'21", Hydrologic Unit 02030202, at east side of Stuphin Boulevard, 226 ft north of Rockaway Boulevard, Springfield Gardens. Owner: United States Geological Survey.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 320 ft, screened 310 to 320 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 22.0 ft above sea level. Measuring point: Top of 4-in PVC casing, 0.54 ft below land-surface datum.

PERIOD OF RECORD.—March 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.42 ft above sea level, May 22, 1997; lowest measured, 1.06 ft above sea level, October 28, 1998.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	1.06	Dec 29	4.60	Mar 02	2.26	Apr 19	2.01	Jun 21	1.74	Aug 24	3.86
Dec 01	1.34	Jan 26	5.46	Mar 22	2.36	May 20	3.79	Jul 22	3.06	Sep 27	4.13

404733073482901. Local number, Q3593.1

LOCATION.—Lat 40°47'33", long 73°48'29", Hydrologic Unit 02030201, at north side of 11th Avenue, 82 ft west of 154th Street, Whitestone. Owner: United States Geological Survey.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 215 ft, screened 165 to 185 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 20.8 ft above sea level. Measuring point: Top of 4-in PVC casing, 0.04 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—March 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.04 ft above sea level, February 25, 1998; lowest measured, 3.46 ft above sea level, July 29, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	4.21	Jan 26	4.56	Mar 30	5.39	Jul 29	3.46				

## PRIMARY WELLS

404239073493001. Local number, Q3627.1

LOCATION.—Lat 40°42'39", long 73°49'30", Hydrologic Unit 02030202, at eastern side of Maple Grove Cemetery, 300 ft south of maintenance building, southernmost well, Kew Gardens. Owner: United States Geological Survey.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 510 ft, screened 480 to 500 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 82.9 ft above sea level. Measuring point: Top of 4-in PVC casing, 0.03 ft below land-surface datum.

PERIOD OF RECORD.—July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 14.63 ft above sea level, March 24, 1997; lowest measured, 8.77 ft above sea level, March 22, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	10.53	Dec 29	11.19	Mar 02	10.88	Apr 19	10.53	Jun 21	9.89	Aug 24	9.45
Dec 01	10.63	Jan 26	13.09	Mar 22	8.77	May 20	10.50	Jul 22	9.29	Sep 27	9.47

404239073492901. Local number, Q3628.1

LOCATION.—Lat 40°42'39", long 73°49'29", Hydrologic Unit 02030202, at eastern side of Maple Grove Cemetery, 300 ft south of maintenance building, middle well, Kew Gardens. Owner: United States Geological Survey.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 340 ft, screened 310 to 340 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 82.7 ft above sea level. Measuring point: Top of 4-in PVC casing, 0.05 ft below land-surface datum.

PERIOD OF RECORD.—July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 15.06 ft above sea level, March 24, 1997; lowest measured, 9.90 ft above sea level, September 28, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	11.06	Dec 29	11.61	Mar 02	11.36	Apr 19	10.95	Jun 21	10.40	Aug 24	9.98
Dec 01	11.12	Jan 26	13.47	Mar 22	11.34	May 20	10.94	Jul 22	9.91	Sep 28	9.90

404239073492801. Local number, Q3629.1

LOCATION.—Lat 40°42'39", long 73°49'28", Hydrologic Unit 02030202, at eastern side of Maple Grove Cemetery, 300 ft south of maintenance building, northernmost well, Kew Gardens. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 80 ft, screened 50 to 70 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 82.8 ft above sea level. Measuring point: Top of 4-in PVC casing, 0.06 ft below land-surface datum.

PERIOD OF RECORD.—July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 21.36 ft above sea level, September 29, 1997; lowest measured, 15.34 ft above sea level, September 27, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	18.76	Dec 29	17.66	Mar 02	16.88	Apr 19	17.44	Jun 21	17.02	Aug 24	15.55
Dec 01	17.95	Jan 26	17.27	Mar 22	17.07	May 20	16.67	Jul 22	15.88	Sep 27	15.34

## PRIMARY WELLS

404537073545801. Local number, Q3644.1

LOCATION.—Lat 40°45'37", long 73°54'58", Hydrologic Unit 02030201, at east side of 42nd Street, 140 ft south of 31st Avenue, Long Island City. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 84 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 67.4 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.20 ft below land-surface datum.

PERIOD OF RECORD.—July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 29.14 ft above sea level, July 28, 1998; lowest measured, 26.43 ft above sea level, August 25, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	28.46	Dec 29	27.28	Mar 03	27.07	Apr 21	26.88	Jun 22	26.74	Aug 25	26.43
Dec 01	28.02	Jan 26	27.38	Mar 22	27.00	May 20	26.75	Jul 23	26.50		

404544073534401. Local number, Q3646.1

LOCATION.—Lat 40°45'44", long 73°53'44", Hydrologic Unit 02030201, at north side of 25th Avenue, across from intersection with 73rd Street, Jackson Heights. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 24 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 26.2 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.10 ft below land-surface datum.

PERIOD OF RECORD.—July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 19.20 ft above sea level, January 26, 1998; lowest measured, 17.64 ft above sea level, August 25, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	18.18	Dec 29	17.82	Mar 03	18.37	Apr 21	18.26	Jun 22	17.94	Aug 25	17.64
Dec 01	17.95	Jan 26	18.59	Mar 23	18.65	May 21	18.30	Jul 23	17.73	Sep 29	18.11

404519073532501. Local number, Q3647.1

LOCATION.—Lat 40°45'19", long 73°53'25", Hydrologic Unit 02030201, at east side of 77th Street, 300 ft north of Northern Boulevard, Jackson Heights. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 1 in., depth 35 ft, screened 30 to 35 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 42.0 ft above sea level. Measuring point: Top of 1-in PVC casing, 0.12 ft below land-surface datum.

PERIOD OF RECORD.—July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 23.70 ft above sea level, May 28, 1998; lowest measured, 22.16 ft above sea level, August 25, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	22.86	Dec 29	22.49	Mar 03	22.55	Apr 21	22.64	Jun 22	22.46	Aug 25	22.16
Dec 01	22.66	Jan 26	22.71	Mar 23	22.78	May 21	22.58	Jul 23	22.35	Sep 29	22.48



## PRIMARY WELLS

404437073535401. Local number, Q3648.1

LOCATION.—Lat 40°44'37", long 73°53'54", Hydrologic Unit 02030201, at east side of 66th Street, 200 ft south of intersection with 67th and 41st Avenue, Woodside. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 90 ft, screened 80 to 85 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 78.1 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.14 ft below land-surface datum.

PERIOD OF RECORD.—April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 47.52 ft above sea level, July 28, 1998; lowest measured, 42.88 ft above sea level, July 22, 1994.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	47.29	Dec 29	46.55	Mar 02	45.86	Apr 21	45.66	Jun 22	45.43	Aug 24	45.09
Dec 01	46.90	Jan 26	46.15	Mar 22	45.78	May 20	45.56	Jul 22	45.29	Sep 28	44.96

404138073535101. Local number, Q3649.1

LOCATION.—Lat 40°41'38", long 73°53'51", Hydrologic Unit 02030201, at north side of Cabot Road, 66 ft west of Cypress Avenue, easternmost well, Ridgewood. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 110 ft, screened 100 to 105 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 88.4 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.28 ft below land-surface datum.

PERIOD OF RECORD.—April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 14.55 ft above sea level, October 28, 1998; lowest measured, 9.29 ft above sea level, July 20, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	14.55	Dec 29	14.35	Mar 02	13.82	Apr 20	13.76	Jun 22	13.37	Aug 24	12.96
Dec 01	14.33	Jan 29	14.13	Mar 22	13.84	May 20	13.58	Jul 22	13.15	Sep 28	12.87

404402073520901. Local number, Q3650.1

LOCATION.—Lat 40°44'02", long 73°52'09", Hydrologic Unit 02030201, at north side of Horace Harding Boulevard exit ramp, 150 ft west of 92nd Street, Elmhurst. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 50 ft, screened 40 to 50 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 19.7 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.23 ft below land-surface datum.

PERIOD OF RECORD.—April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 10.07 ft above sea level, July 25, 1997; lowest measured, 8.59 ft above sea level, October 28, 1993.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	9.89	Dec 29	9.82	Mar 02	9.77	Apr 19	9.77	Jun 22	9.75	Sep 28	9.78
Dec 01	9.77	Jan 26	9.88	Mar 22	9.89	May 20	9.84	Jul 22	9.75		

## PRIMARY WELLS

404350073494501. Local number, Q3652.1

LOCATION.—Lat 40°43'50", long 73°49'45", Hydrologic Unit 02030201, at north side of 68th Drive, 38 ft west of 138th Street, Flushing.

Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 90 ft, screened 80 to 85 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 73.0 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.30 ft below land-surface datum.

PERIOD OF RECORD.—April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 15.76 ft above sea level, June 9, 1998; lowest measured, 10.54 ft above sea level, September 28, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	14.80	Dec 29	14.38	Mar 02	14.08	Apr 19	14.14	Jun 21	13.96	Aug 24	13.69
Dec 01	14.49	Jan 26	14.16	Mar 22	14.11	May 20	14.03	Jul 22	13.86	Sep 27	13.64

404027073464501. Local number, Q3658.1

LOCATION.—Lat 40°40'27", long 73°46'45", Hydrologic Unit 02030202, at north side of 132nd Avenue, east of 160th Street, Springfield

Gardens. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 40 ft, screened 30 to 35 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 18.4 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.30 ft below land-surface datum.

PERIOD OF RECORD.—April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.54 ft above sea level, March 25, 1998; lowest measured, 3.87 ft above sea level, December 29, 1998.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	4.59	Dec 29	3.87	Mar 01	5.37	Apr 19	5.46	Jun 21	5.09	Aug 24	3.90
Dec 01	4.20	Jan 26	5.08	Mar 22	5.65	May 20	5.39	Jul 22	4.54	Sep 27	4.47

404450073470301. Local number, Q3660.1

LOCATION.—Lat 40°44'50", long 73°47'03", Hydrologic Unit 02030201, at 53rd Avenue, in center grass median, 49 ft west of 195th

Street, Springfield Gardens. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 90 ft, screened 80 to 85 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 66.0 ft above sea level. Measuring point: Top of 2-in PVC coupling, 3.46 ft below land-surface datum.

PERIOD OF RECORD.—April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 24.00 ft above sea level, July 28, 1998; lowest measured, 18.23 ft above sea level, September 28, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	20.44	Dec 29	20.29	Mar 03	19.90	Apr 21	19.83	Jun 22	19.70	Aug 25	19.37
Dec 01	20.34	Jan 26	19.94	Mar 23	19.81	May 21	20.74	Jul 23	19.58	Sep 29	19.24

## PRIMARY WELLS

404357073462001. Local number, Q3661.1

LOCATION.—Lat 40°43'57", long 73°46'20", Hydrologic Unit 02030201, at east side of 199th Street, 250 ft north of Union Turnpike, Fresh Meadows. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 95 ft, screened 85 to 90 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 81.0 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.50 ft below land-surface datum.

PERIOD OF RECORD.—April 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 23.68 ft above sea level, September 26, 1997; lowest measured, 16.42 ft above sea level, February 22, 1994.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	23.33	Dec 29	23.09	Mar 03	22.50	Apr 21	22.32	Jun 22	22.41	Aug 25	22.16
Dec 01	22.89	Jan 26	22.58	Mar 23	22.28	May 21	22.38	Jul 23	22.31	Sep 29	22.11

404459073422401. Local number, Q3804.1

LOCATION.—Lat 40°44'59", long 73°42'24", Hydrologic Unit 02030202, at intersection of Union Turnpike, 78th Avenue, and 268th Street, near center of grass triangle, Glen Oaks. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 155 ft, screened 105 to 115 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 121.0 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.54 ft below land-surface datum.

PERIOD OF RECORD.—July 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 41.83 ft above sea level, July 30, 1998; lowest measured, 38.76 ft above sea level, September 27, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	41.31	Dec 29	40.73	Mar 02	39.46	Apr 19	40.18	Jun 21	39.88	Aug 23	38.95
Dec 01	41.01	Jan 26	40.64	Mar 22	40.35	May 21	40.02	Jul 22	39.45	Sep 27	38.76

404504073444401. Local number, Q3805.1

LOCATION.—Lat 40°45'04", long 73°44'44", Hydrologic Unit 02030201, at east side of 233rd Street, 128 ft south of West Alley Road, Alley Pond Park. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 115 ft, screened 100 to 110 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 112.0 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.27 ft below land-surface datum.

PERIOD OF RECORD.—August 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 25.86 ft above sea level, August 31, 1998; lowest measured, 24.45 ft above sea level, September 29, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	25.43	Mar 03	25.12	Apr 21	24.98	Jun 22	24.90	Aug 25	24.54	Sep 29	24.45
Dec 01	25.29	Mar 23	25.24	May 21	24.92	Jul 23	24.66				

## PRIMARY WELLS

404539073465301. Local number, Q3806.1

LOCATION.—Lat 40°45'39", long 73°46'53", Hydrologic Unit 02030201, at west side of 204th Street, 99 ft north of 42nd Avenue, Auburndale. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 80 ft, screened 70 to 80 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 84.0 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.14 ft below land-surface datum.

PERIOD OF RECORD.—July 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 23.86 ft above sea level, July 28, 1998; lowest measured, 21.97 ft above sea level, September 29, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	23.49	Dec 29	23.05	Apr 21	22.39	Jun 22	22.32	Aug 25	22.11	Sep 29	21.97
Dec 01	23.16	Mar 3	22.58	May 21	22.43	Jul 23	22.23				

404152073511301. Local number, Q3807.1

LOCATION.—Lat 40°41'52", long 73°51'13", Hydrologic Unit 02030202, at west side of Woodhaven Boulevard, 25 ft north of Park Lane South, Woodhaven. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 85 ft, screened 70 to 80 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 74.0 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.66 ft below land-surface datum.

PERIOD OF RECORD.—July 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 12.15 ft above sea level, July 22, 1999; lowest measured, 11.74 ft above sea level, September 28, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jul 22	12.15	Aug 24	11.88	Sep 28	11.74						

404232073524401. Local number, Q3808.1

LOCATION.—Lat 40°42'32", long 73°52'44", Hydrologic Unit 02030201, at west side of 73rd Place, between Cook Avenue and 69th Avenue, Middle Village. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 115 ft, screened 100 to 110 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 111.0 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.52 ft below land-surface datum.

PERIOD OF RECORD.—March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 16.78 ft above sea level, March 2, 1999; lowest measured, 15.58 ft above sea level, September 28, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 02	16.78	Apr 20	16.45	Jun 22	16.15	Jul 22	16.00	Aug 24	15.79	Sep 28	15.58
Mar 22	15.68	May 20	16.43								



## PRIMARY WELLS

404407073551501. Local number, Q3809.1

LOCATION.—Lat 40°44'07", long 73°55'15", Hydrologic Unit 02030201, at south side of 51th Street, 30 ft east of 46th Street, Maspeth.

Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 95 ft, screened 80 to 90 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 90.5 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.40 ft below land-surface datum.

PERIOD OF RECORD.—March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 11.66 ft above sea level, March 22, 1999; lowest measured, 10.41 ft above sea level, September 28, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 02	10.95	Apr 21	10.78	Jun 22	10.70	Jul 22	10.63	Aug 24	10.46	Sep 28	10.41
Mar 22	11.66	May 20	10.79								

404411073491601. Local number, Q3810.1

LOCATION.—Lat 40°44'11", long 73°49'16", Hydrologic Unit 02030201, at Queens College of the City University of New York, south of intersection with Reeves Avenue and 150th Street, opposite southwestern corner of tennis courts, Flushing. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 95 ft, screened 70 to 90 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 77.0 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.48 ft below land-surface datum.

PERIOD OF RECORD.—July 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 16.35 ft above sea level, July 28, 1998; lowest measured, 14.22 ft above sea level, September 27, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	15.72	Dec 29	15.13	Mar 02	14.79	Apr 19	14.71	Jun 21	14.55	Aug 24	14.34
Dec 1	15.35	Jan 26	14.94	Mar 22	14.79	May 20	14.66	Jul 22	14.46	Sep 27	14.22

404233073471301. Local number, Q3813.1

LOCATION.—Lat 40°42'33", long 73°47'13", Hydrologic Unit 02030201, at south side of 91th Avenue, 50 ft west of 175th Street, Jamaica.

Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 75 ft, screened 70 to 75 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 58.9 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.49 ft below land-surface datum.

PERIOD OF RECORD.—August 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 18.43 ft above sea level, August 24 and September 27, 1999; lowest measured, 18.43 ft above sea level, August 24 and September 27, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug 24	18.43	Sep 27	18.43								

404337073540301. Local number, O3814.1

Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

**WELL CHARACTERISTICS.**—Drilled PVC observation well, diameter 2 in., depth 24 ft, screened 14 to 24 ft.

**INSTRUMENTATION.**—Measurement with chalked steel tape by United States Geological Survey personnel.

**DATUM.**—Land-surface datum is 53.7 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.06 ft below land-surface datum.

PERIOD OF RECORD.—August 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 43.37 ft above sea level, September 28, 1999; lowest measured, 43.26 ft above sea level, August 24, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug 24	43.26	Sep 28	43.37								

404617073483201. Local number, Q3815.1

LOCATION.—Lat 40°46'17", long 73°48'32", Hydrologic Unit 02030201, at south side of 29th Avenue, south of intersection with 156th Court, at north side of Bowne Park, Flushing. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

**WELL CHARACTERISTICS.**—Drilled PVC observation well, diameter 2 in., depth 90 ft, screened 80 to 85 ft.

**INSTRUMENTATION.**—Measurement with chalked steel tape by United States Geological Survey personnel.

**DATUM.**—Land-surface datum is 91.0 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.08 ft below land-surface datum.

PERIOD OF RECORD.—August 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 27.76 ft above sea level, August 25, 1999; lowest measured, 27.69 ft above sea level, September 29, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug 25	27.76	Sep 29	27.69								

404653073485301. Local number, Q3816.1

LOCATION.—Lat 40°46'53", long 73°48'53", Hydrologic Unit 02030201, at north side of 18th Avenue, 20 ft east of 150th Street, Whitestone. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

**WELL CHARACTERISTICS.**—Drilled PVC observation well, diameter 2 in., depth 60 ft, screened 50 to 60 ft.

**INSTRUMENTATION.**—Measurement with chalked steel tape by United States Geological Survey personnel.

**DATUM.**—Land-surface datum is 51.6 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.16 ft below land-surface datum.

PERIOD OF RECORD.—August 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 25.06 ft above sea level, August 25, 1999; lowest measured, 25.00 ft above sea level, September 29, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug 25	25.06	Sep 29	25.00								

## PRIMARY WELLS

404213073201001. Local number, S1803.4

LOCATION.—Lat 40°42'13", long 73°20'10", Hydrologic Unit 02030202, at north side of State Route 109, west of Little East Neck Road, on grass median, Babylon. Owner: New York State Department of Transportation.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven PVC observation well, diameter 1 1/4 in., depth 19 ft, screened 16 to 19 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 23.7 ft above sea level. Measuring point: Top of 2 in PVC casing, 0.20 ft below land-surface datum.

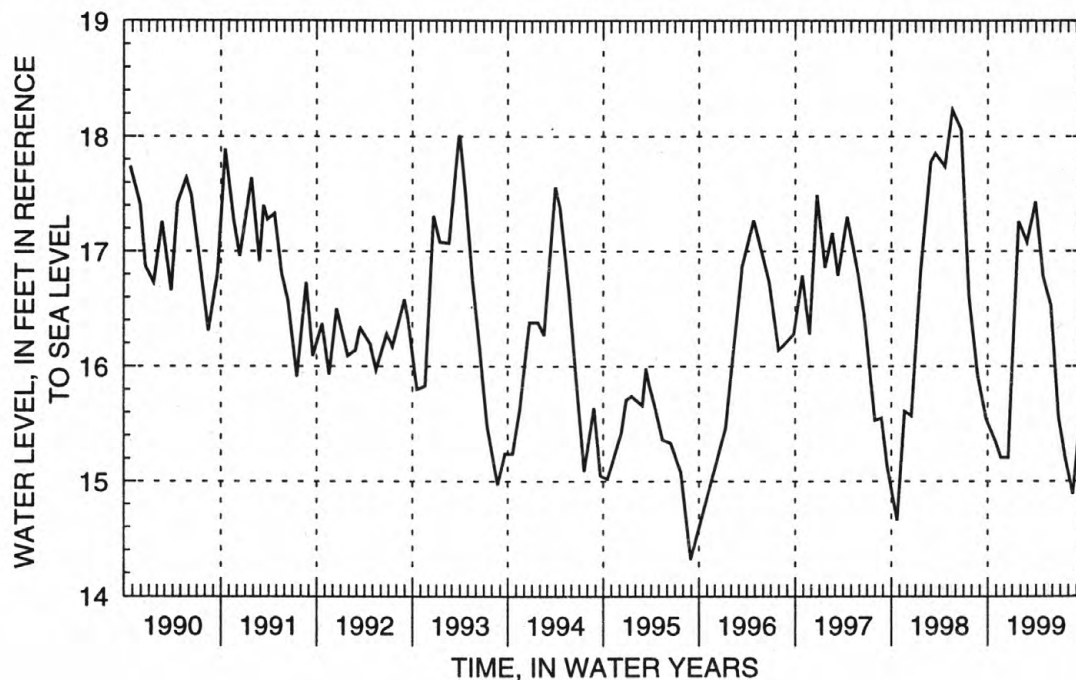
REMARKS.—Replaced well S1803.3 in November 1975 at same location. Unpublished records from October 1912 to November 1914, August and September 1932, and June 1936 to September 1975, for wells S1803.1 to S1803.3 are available in files of the Long Island Subdistrict Office.

PERIOD OF RECORD.—November 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 19.87 ft above sea level, May 23, 1983; lowest measured, 13.06 ft above sea level, July 26, 1976.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	15.35	Dec 17	15.21	Feb 26	17.08	Apr 28	16.78	Jun 25	15.56	Aug 18	14.89
Nov 19	15.21	Jan 26	17.26	Mar 30	17.43	May 27	16.53	Jul 20	15.21	Sep 28	15.83



## PRIMARY WELLS

404301073240904. Local number, S1805.4

LOCATION.—Lat 40°43'01", long 73°24'09", Hydrologic Unit 02030202, at south side of State Route 109, west of Albany Avenue, Maywood. Owner: New York State Department of Transportation.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 2 in., depth 33 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 57.2 ft above sea level. Measuring point: Top of 2-in steel casing, 2.02 ft above land-surface datum.

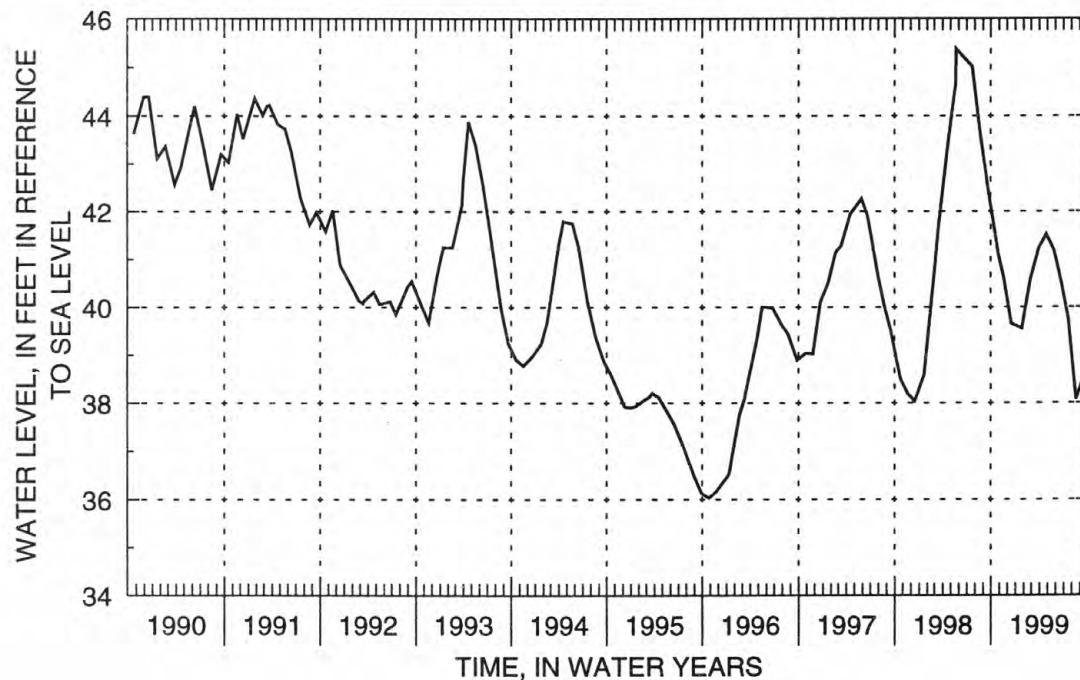
REMARKS.—Replaced well S1805.3 in October 1953 at same location. Unpublished records from October 1912 to September 1975 for wells S1805.1 to S1805.3 are available in files of the Long Island Subdistrict Office.

PERIOD OF RECORD.—October 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 46.47 ft above sea level, August 27, 1984; lowest measured, 35.79 ft above sea level, December 28, 1966.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	41.10	Dec 17	39.65	Feb 26	40.56	Apr 28	41.51	Jun 25	40.48	Aug 18	38.07
Nov 19	40.61	Jan 26	39.55	Mar 30	41.22	May 27	41.18	Jul 20	39.74	Sep 28	38.72





## PRIMARY WELLS

404442073240503. Local number, S1806.3

LOCATION.—Lat 40°44'42", long 73°24'05", Hydrologic Unit 02030202, at west side of Wellwood Avenue, north of Conklin Street, south of railroad tracks, Pinelawn. Owner: Suffolk County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Augered PVC observation well, diameter 2 in., depth 45 ft, screened 41 to 45 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 85.7 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.19 ft below land-surface datum.

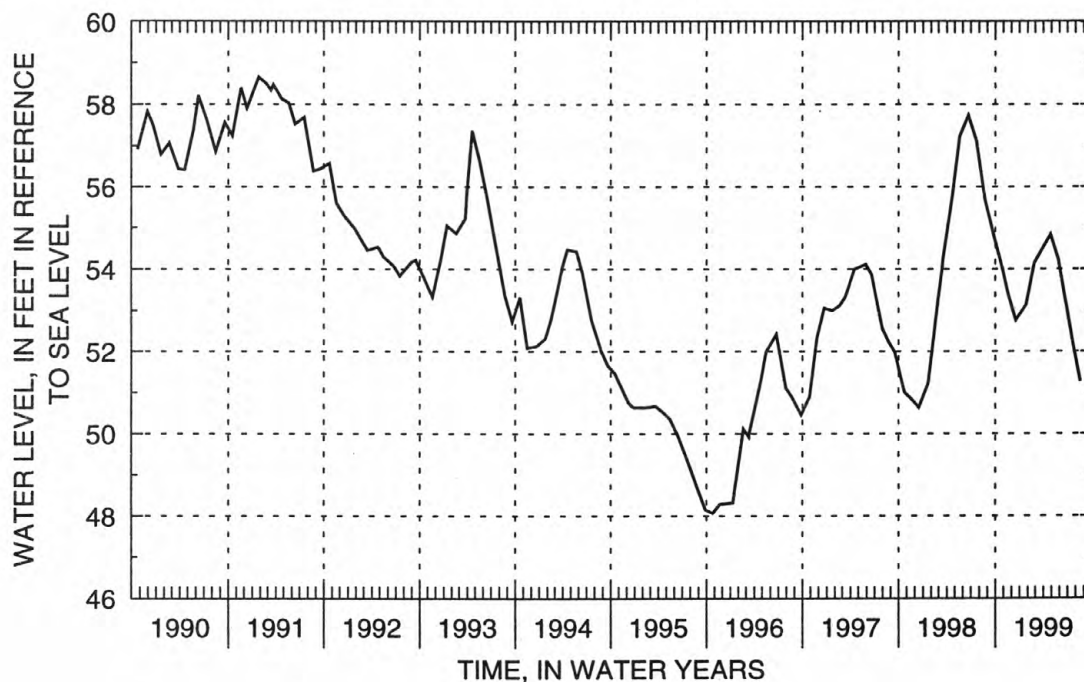
REMARKS.—Replaced well S1806.2 in August 1977 at same location. Unpublished records for October 1912 to November 1914, and May to September 1975, for wells S1806.1 to S1806.2 are available in files of the Long Island Subdistrict Office.

PERIOD OF RECORD.—August 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 62.37 ft above sea level, June 20, 1984; lowest measured, 48.07 ft above sea level, October 26, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	53.98	Dec 17	52.76	Feb 26	54.15	Apr 28	54.83	Jun 25	53.18	Aug 18	51.28
Nov 19	53.41	Jan 26	53.14	Mar 30	54.51	May 27	54.23	Jul 20	52.25		



## PRIMARY WELLS

404319073184701. Local number, S1807.6

LOCATION.—Lat 40°43'19", long 73°18'46", Hydrologic Unit 02030202, at north side of Kimberly Place, west side of Higbie Lane, West Islip. Owner: Town of Islip.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 21 ft, screened 19 to 21 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 23.5 ft above sea level. Measuring point: Top of 2-in steel casing, 0.45 ft below land-surface datum.

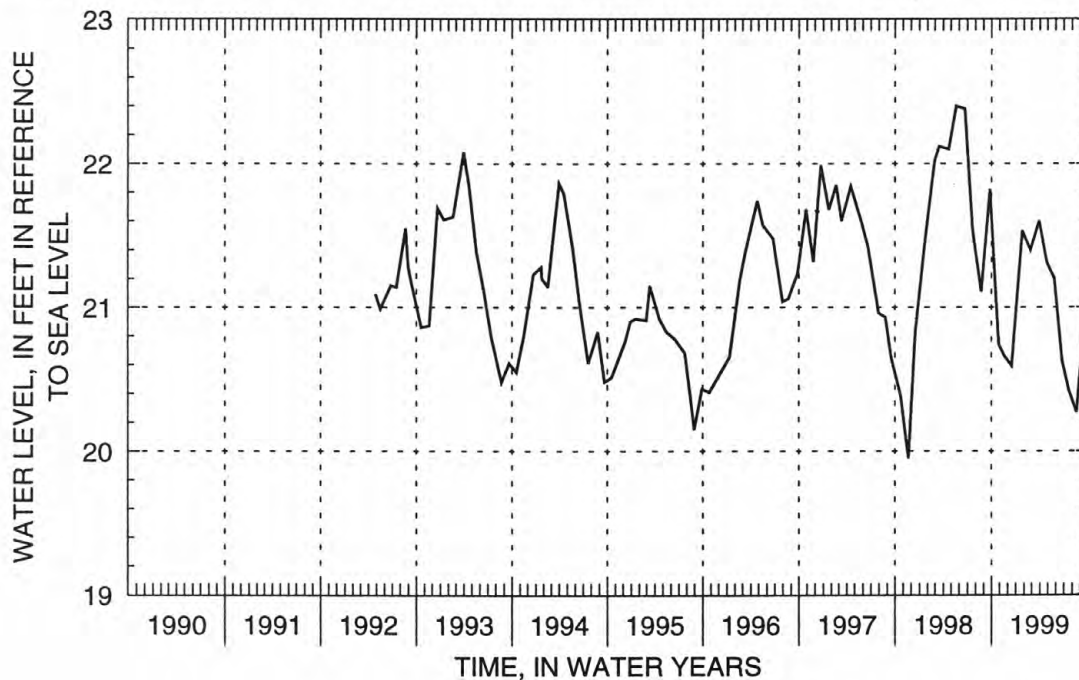
REMARKS.—Replaced well S1807.5 in April 1992 at same location. Unpublished records for October 1912 to November 1914, August 1932 to June 1933, and June 1936 to September 1975, for wells S1807.1 to S1807.5 are available in files of the Long Island Subdistrict Office.

PERIOD OF RECORD.—April 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 22.40 ft above sea level, May 20, 1998; lowest measured, 19.95 ft above sea level, November 21, 1997.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	20.74	Dec 17	20.59	Feb 26	21.40	Apr 28	21.31	Jun 25	20.63	Aug 18	20.27
Nov 19	20.66	Jan 26	21.53	Mar 30	21.60	May 27	21.20	Jul 20	20.42	Sep 28	21.11



## PRIMARY WELLS

404221073164905. Local number, S1808.5

LOCATION.—Lat 40°42'21", long 73°16'49", Hydrologic Unit 02030202, at Manor and Bardolier Lanes, West Islip. Owner: Town of Islip.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 11 ft, screened 10 to 11 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 13.5 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.22 ft below land-surface datum.

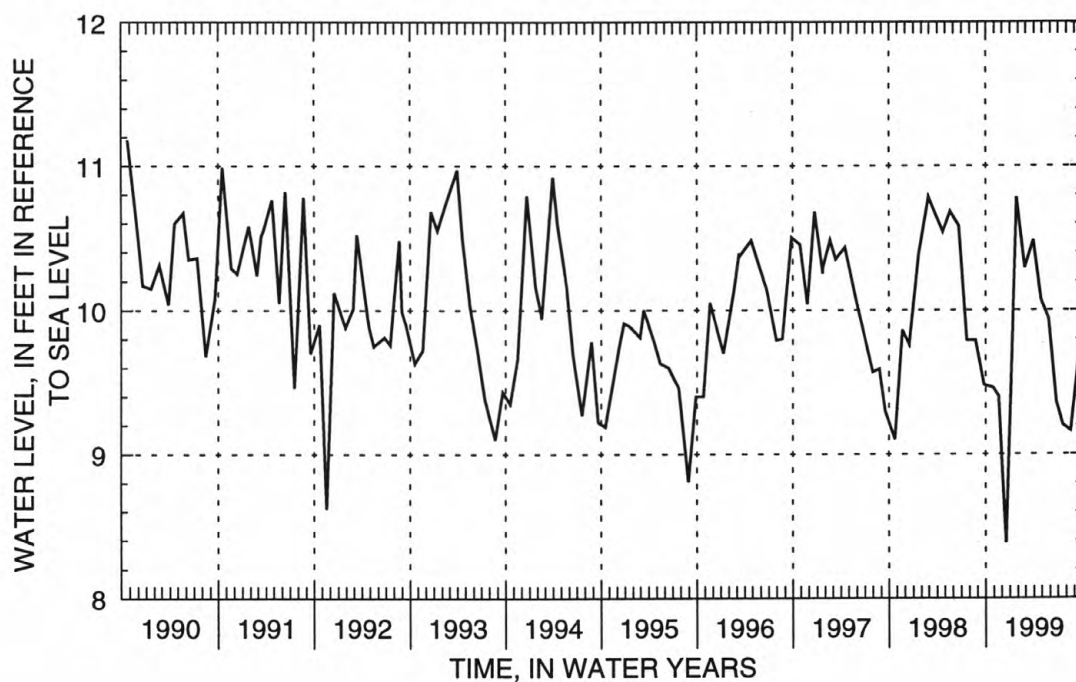
REMARKS.—Replaced well S1808.4 in October 1989 at same location. Unpublished records from October 1912 to September 1975, for wells S1808.1 to S1808.4 are available in files of the Long Island Subdistrict Office.

PERIOD OF RECORD.—October 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 11.18 ft above sea level, November 23, 1989; lowest measured, 8.38 ft above sea level, December 17, 1998

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	9.46	Dec 17	8.38	Feb 26	10.29	Apr 28	10.07	Jun 25	9.36	Aug 18	9.16
Nov 19	9.40	Jan 26	10.78	Mar 30	10.48	May 27	9.94	Jul 20	9.20	Sep 28	9.85



## PRIMARY WELLS

404351073164904. Local number, S1809.4

LOCATION.—Lat 40°43'51", long 73°16'49", Hydrologic Unit 02030202, at southeast corner of Muncey Road and Manor Lane, in recharge basin, Bay Shore. Owner: Town of Islip.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Augered PVC observation well, diameter 2 in., depth 29 ft, screened 26 to 29 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 42.0 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.45 ft below land-surface datum.

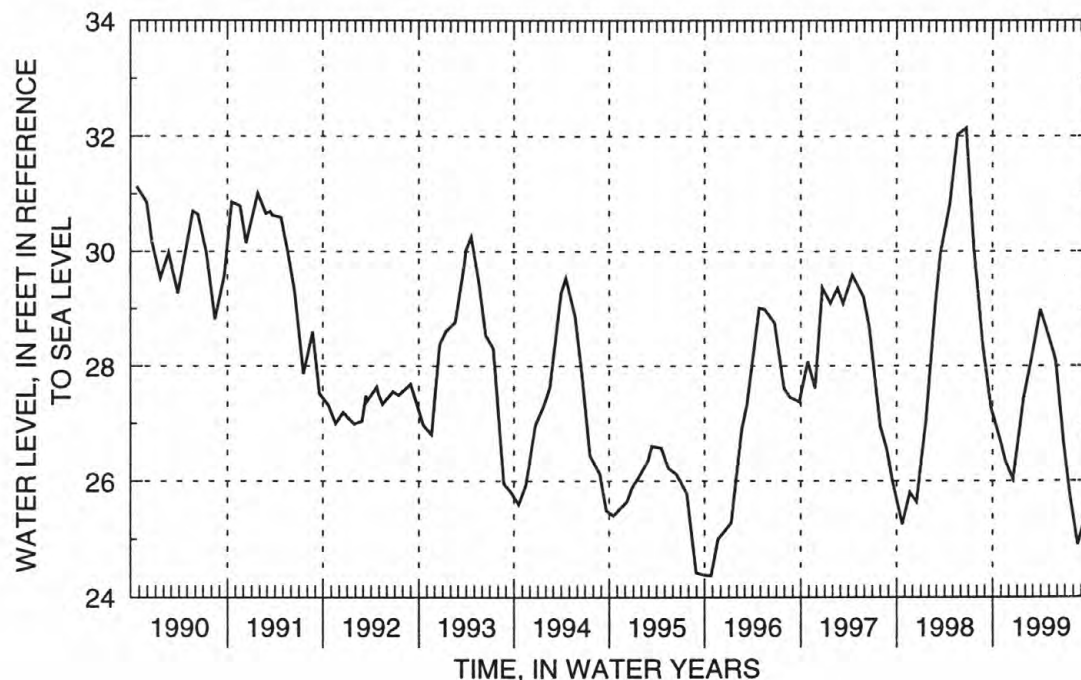
REMARKS.—Replaced well S1809.3 in March 1981 at same location. Unpublished records for October 1912 to November 1914, and August 1932 to September 1975, for wells S1809.1 to S1809.3 are available in files of the Long Island Subdistrict Office.

PERIOD OF RECORD.—March 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 32.97 ft above sea level, June 23, 1989; lowest measured, 24.37 ft above sea level, October 26, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	26.72	Dec 17	26.03	Feb 26	28.16	Apr 28	28.56	Jun 25	26.70	Aug 18	24.90
Nov 19	26.34	Jan 26	27.42	Mar 30	28.98	May 27	28.10	Jul 20	25.75	Sep 28	25.56





## PRIMARY WELLS

404614073164404. Local number, S1810.4

LOCATION.—Lat 40°46'14", long 73°16'44", Hydrologic Unit 02030202, at west side of North Gardiner Drive, south of Pine Aire Drive, in front of house 1712, Pine Aire. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Augered PVC observation well, diameter 2 in., depth 55 ft, screened 52 to 55 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 90.8 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.25 ft below land-surface datum.

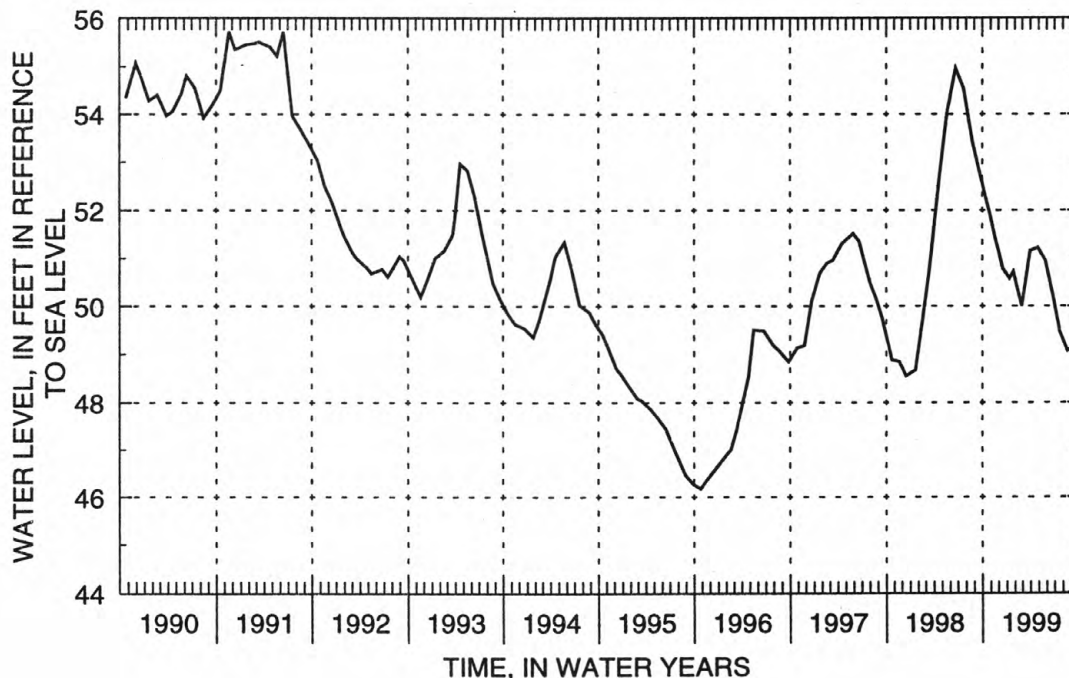
REMARKS.—Replaced well S1810.3 in November 1975 at same location. Unpublished records from October 1912 to November 1914, and August 1932 to September 1975, for wells S1810.1 to S1810.3 are available in files of the Long Island Subdistrict Office.

PERIOD OF RECORD.—November 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 56.28 ft above sea level, July 23, 1984; lowest measured, 46.17 ft above sea level, October 25, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 29	51.92	Jan 11	50.58	Feb 26	50.00	Apr 28	51.22	Jun 25	50.20	Aug 18	49.06
Nov 19	51.41	Jan 26	50.78	Mar 30	51.15	May 27	50.95	Jul 20	49.47	Sep 28	49.22
Dec 17	50.78										



## PRIMARY WELLS

404958073085001. Local number, S1812.3

LOCATION.—Lat 40°49'58", long 73°08'50", Hydrologic Unit 02030202, at southwest corner of Smithtown Boulevard and Nichols Road, Ronkonkoma. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven PVC observation well, diameter 2 in., depth 50 ft, screened 46 to 50 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 69.9 ft above sea level. Measuring point: Top of 2 in PVC coupling, 0.40 ft below land-surface datum.

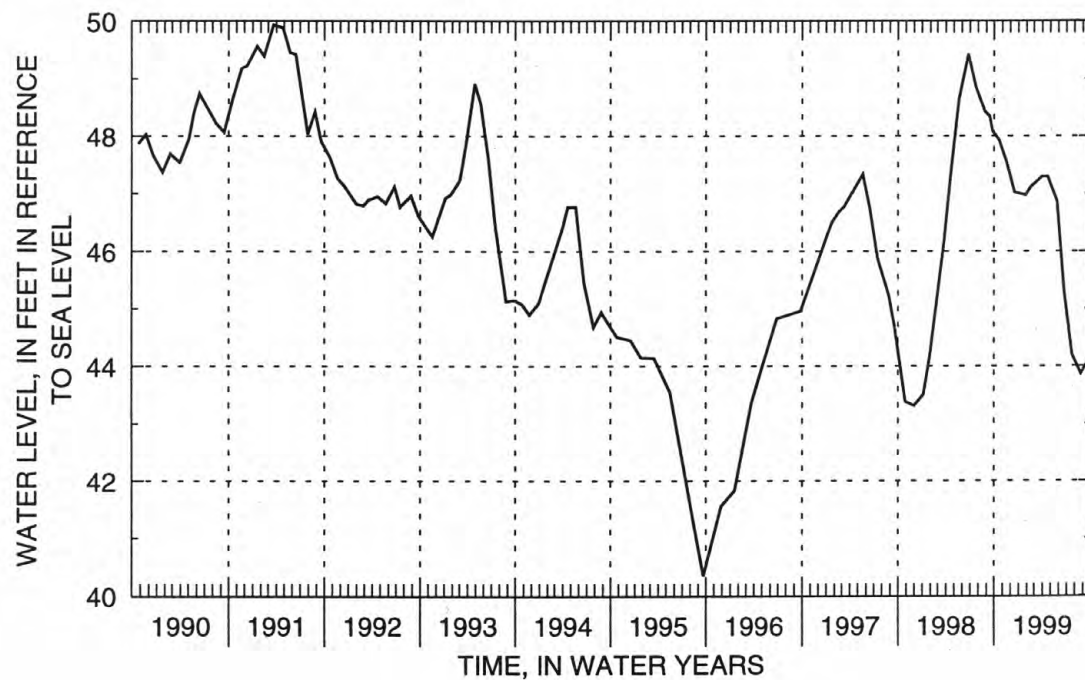
REMARKS.—Replaced well S1812.2 in May 1982 at same location. Unpublished records from April 1937 to September 1975 are available in files of the Long Island Subdistrict Office.

PERIOD OF RECORD.—May 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 51.34 ft above sea level, July 23, 1984; lowest measured, 40.34 ft above sea level, September 21, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	47.93	Dec 17	47.02	Feb 16	47.11	Apr 21	47.29	Jun 22	45.31	Aug 25	43.87
Nov 18	47.53	Jan 28	46.97	Mar 31	47.29	May 27	46.86	Jul 22	44.20	Sep 29	44.14



## PRIMARY WELLS

404737073112303. Local number, S1814.3

LOCATION.—Lat 40°47'37", long 73°11'23", Hydrologic Unit 02030202, at northwest corner of Suffolk Avenue and Dovecott Lane, Central Islip. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 54 ft, screened 51 to 54 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 63.5 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.35 ft below land-surface datum.

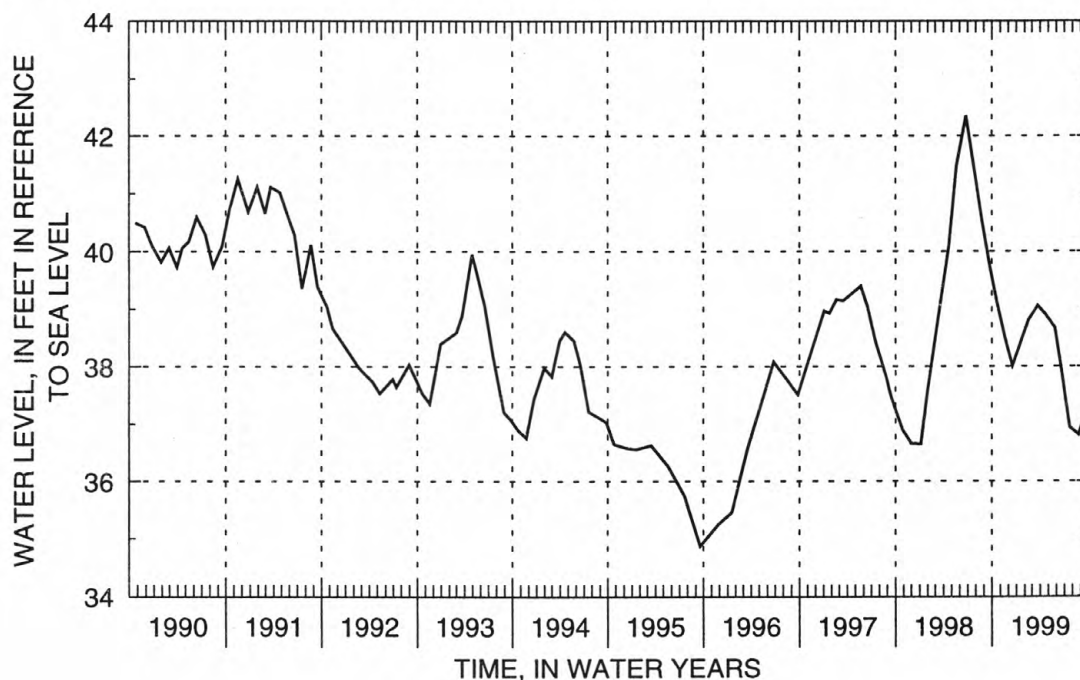
REMARKS.—Replaced well S1814.2 in May 1982 at same location, unpublished records from November 1939 to September 1975 are available in files of the Long Island Subdistrict Office.

PERIOD OF RECORD.—September 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 42.35 ft above sea level, June 25, 1998; lowest measured, 34.87 ft above sea level, September 19, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	39.12	Dec 17	38.01	Feb 16	38.81	Apr 21	38.91	Jun 22	37.89	Aug 25	36.81
Nov 18	38.52	Jan 28	38.56	Mar 23	39.06	May 27	38.67	Jul 22	36.94	Sep 29	37.33



## PRIMARY WELLS

405146073031801. Local number, S3513.1

LOCATION.—Lat 40°51'46", long 73°03'18", Hydrologic Unit 02030202, at south side of State Route 25, 235 ft west of High View Drive, Selden. Owner: New York Department of Transportation.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled unused steel well, diameter 8 in. to 4 in., depth 65 ft, screened 63 to 65 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

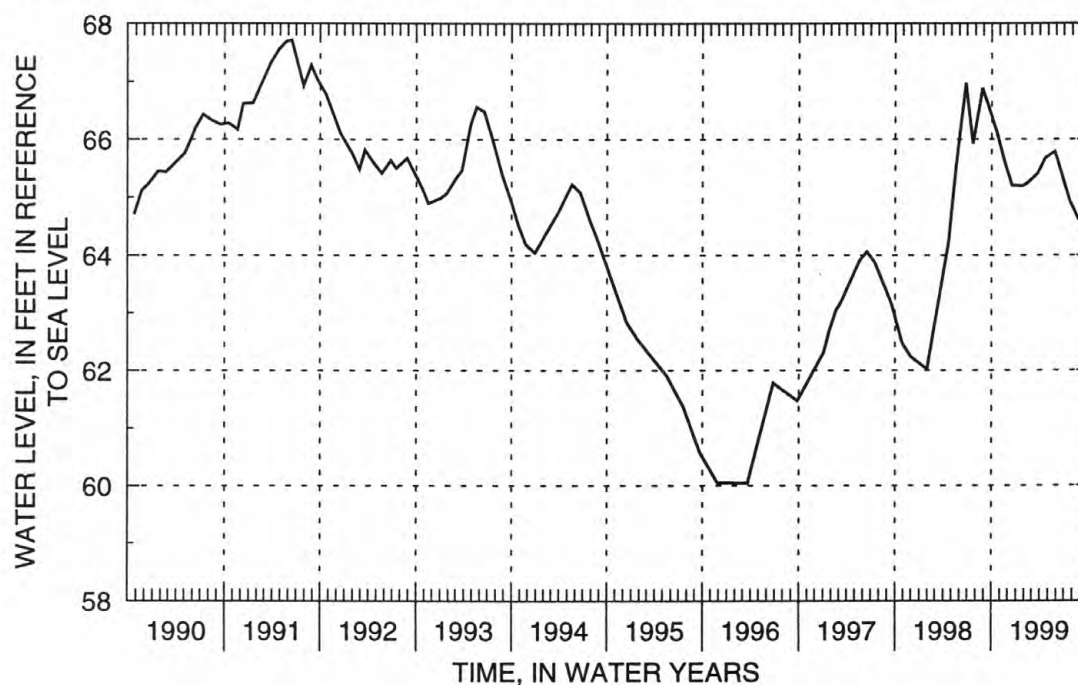
DATUM.—Land-surface datum is 101.0 ft above sea level. Measuring point: Top of 4-in to 1 1/4-in steel reducer, 1.31 ft above land-surface datum.

PERIOD OF RECORD.—April 1942 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 69.91 ft above sea level, May 29, 1979; lowest measured, 56.06 ft above sea level, March 1, 1967.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	66.13	Dec 18	65.20	Feb 16	65.25	Apr 21	65.67	Jun 22	65.40	Aug 25	64.62
Nov 18	65.62	Jan 28	65.19	Mar 23	65.40	May 27	65.78	Jul 22	64.94	Sep 29	64.47





## PRIMARY WELLS

404812073004101. Local number, S3521.1

LOCATION.—Lat 40°48'12", long 73°00'41", Hydrologic Unit 02030202, at west side of Old Medford Avenue, 237 ft north of Cedar Avenue, Medford. Owner: Town of Brookhaven.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 2 in., depth 50 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

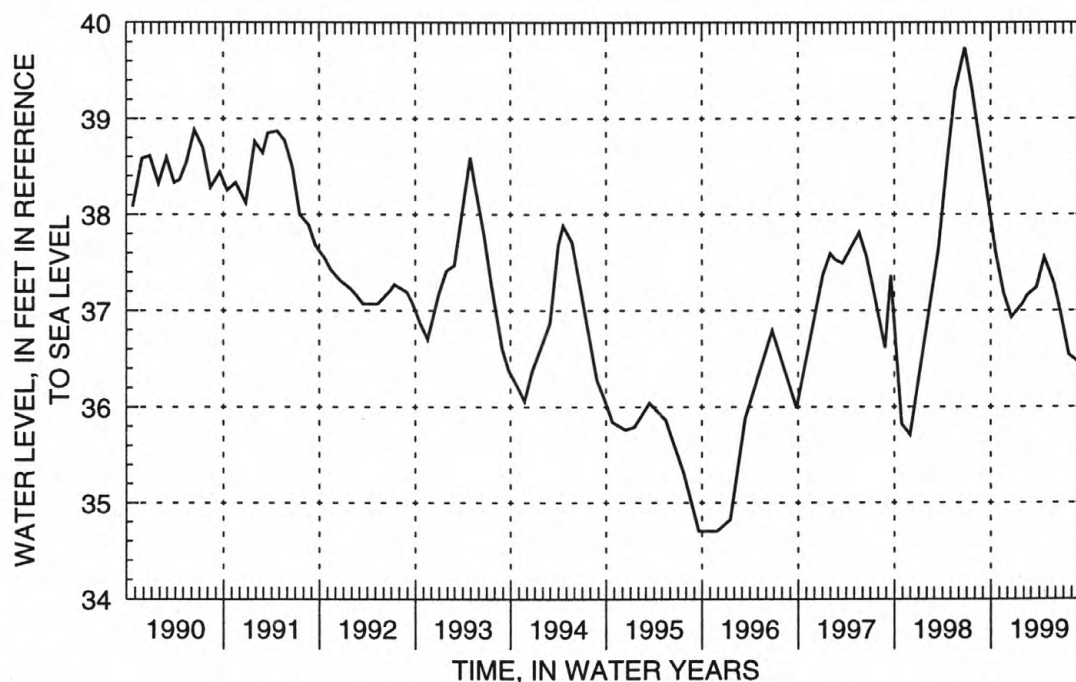
DATUM.—Land-surface datum is 71.8 ft above sea level. Measuring point: Top of 2-in steel casing, 0.35 ft above land-surface datum.

PERIOD OF RECORD.—January 1907 to current year. Unpublished records from January 1907 to July 1909, April 1942 to September 1975, are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 40.75 ft above sea level, March 27, 1979; lowest measured, 34.38 ft above sea level, October 26, 1966.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	37.59	Dec 17	36.93	Feb 16	37.16	Apr 21	37.55	Jun 22	36.97	Aug 25	36.47
Nov 19	37.18	Jan 28	37.07	Mar 23	37.24	May 27	37.28	Jul 22	36.54	Sep 29	36.33



## PRIMARY WELLS

404806072553802. Local number, S3529.2

LOCATION.—Lat 40°48'01", long 72°55'38", Hydrologic Unit 02030202, at entrance to Brookhaven Landfill, south of Horseblock Road, South Yaphank. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 45 ft, screened 41 to 45 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

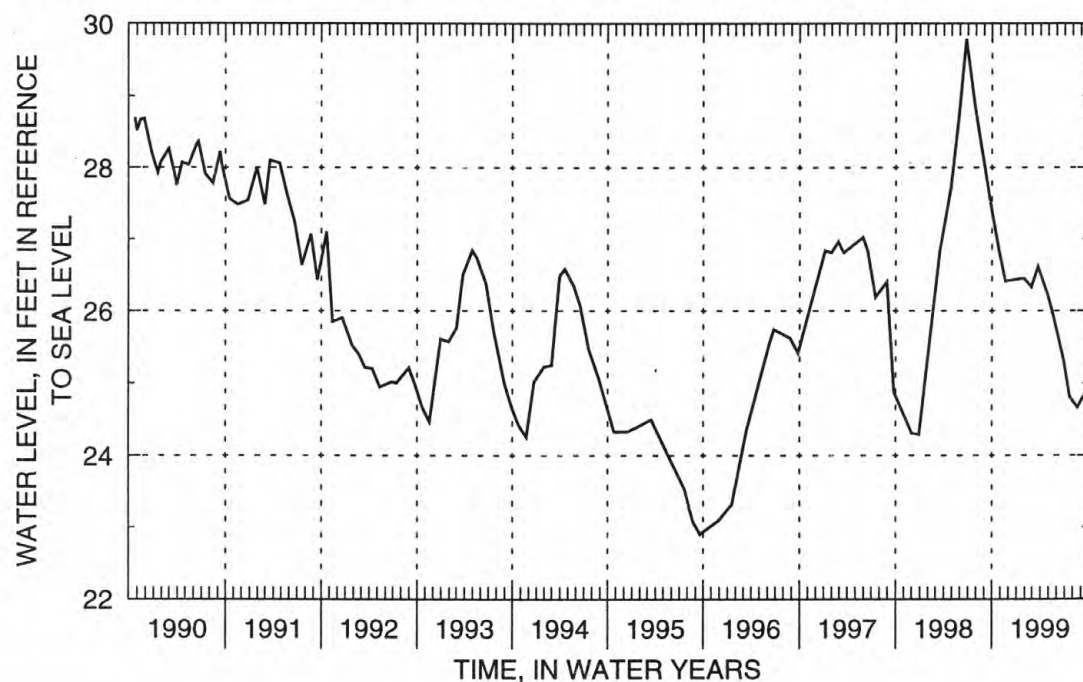
DATUM.—Land-surface datum is 34.0 ft above sea level. Measuring point: Top of 2-in PVC coupling, 3.11 ft above land-surface datum.

PERIOD OF RECORD.—December 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 29.79 ft above sea level, June 25, 1998; lowest measured, 22.90 ft above sea level, September 19, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	26.83	Jan 29	26.45	Mar 23	26.61	May 21	25.91	Jul 21	24.81	Sep 29	24.93
Nov 20	26.41	Feb 26	26.33	Apr 29	26.21	Jun 28	25.31	Aug 19	24.67		



405037072390301. Local number, S3543.1

LOCATION.—Lat 40°50'37", long 72°39'03", Hydrologic Unit 02030202, at north side of Stewart Avenue, 0.25 mi west of Old Riverhead Road, 226 ft north on dirt path, West Hampton. Owner: City of New York.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 2 in., depth 58 ft, screened 56 to 58 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 64.1 ft above sea level. Measuring point: Top of 2-in steel casing, 0.34 ft above land-surface datum.

PERIOD OF RECORD.—March 1907 to December 1909, April 1942 to April 1943, January 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 22.53 ft above sea level, July 23, 1984; lowest measured, 14.94 ft above sea level, November 25, 1986.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 31	45.41	May 21	44.96	Jul 21	45.42	Aug 19	45.66	Sep 29	46.03		

## PRIMARY WELLS

405145072592501. Local number, S3870.1

LOCATION.—Lat 40°51'45", long 72°59'25", Hydrologic Unit 02030202, at south side of Coram Yapank Road, 115 ft west of Overton Road, Coram. Owner: Town of Brookhaven.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 43 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 87.0 ft above sea level. Measuring point: Top of 2-in steel casing, 1.11 ft above land-surface datum.

PERIOD OF RECORD.—January 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 61.86 ft above sea level, June 27, 1979; lowest measured, 49.54 ft above sea level, October 26, 1966.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 30	56.61	Aug 25	55.24	Sep 29	55.85						

405343073055004. Local number, S3955.4

LOCATION.—Lat 40°53'43", long 73°05'50", Hydrologic Unit 02030201, at west side of Mark Tree Road, south of Pond Path, Setauket. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Augered PVC observation well, diameter 2 in., depth 80 ft, screened 76 to 80 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 123.0 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.24 ft below land-surface datum.

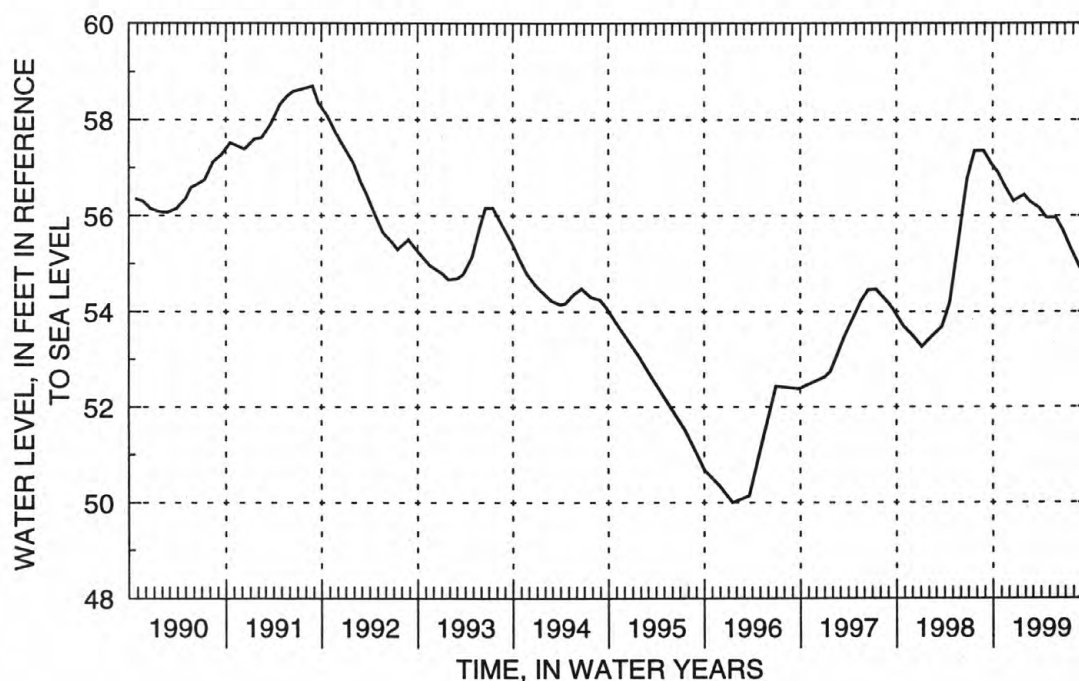
REMARKS.—Replaced well S3955.3 in April 1975 at same location. Unpublished records from September 1944 to September 1975 are available in files of the Long Island Subdistrict Office.

PERIOD OF RECORD.—April 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 60.23 ft above sea level, June 21, 1979; lowest measured, 50.00 ft above sea level, January 18, 1996.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	56.91	Dec 18	56.31	Feb 17	56.30	Apr 21	55.96	Jun 22	55.70	Aug 25	54.92
Nov 18	56.59	Jan 28	56.44	Mar 25	56.16	May 27	55.96	Jul 23	55.31	Sep 29	54.89



## PRIMARY WELLS

405743072425701. Local number, S4271.1

LOCATION.—Lat 40°57'43", long 72°42'57", Hydrologic Unit 02030202, at Long Island Research Farm, east of Horton Avenue, south of Sound Avenue, Riverhead. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 105 ft, screened 100 to 105 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

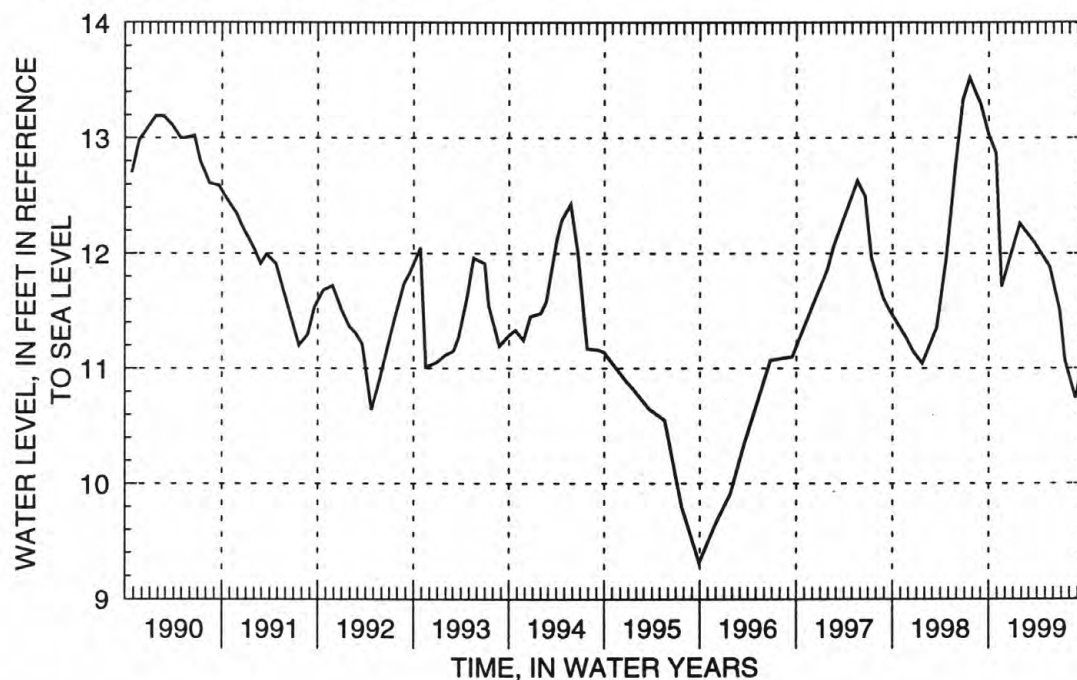
DATUM.—Land-surface datum is 100.3 ft above sea level. Measuring point: Top of 4-in steel coupling, 0.04 ft above land-surface datum.

PERIOD OF RECORD.—August 1945 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 14.25 ft above sea level, August 12, 1984; lowest measured, 8.16 ft above sea level, September 5, 1966.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 27	12.87	Jan 26	12.26	Mar 23	12.09	Jun 25	11.50	Aug 25	10.74	Sep 27	11.13
Nov 18	11.71	Feb 17	12.19	May 18	11.88	Jul 15	11.07				





## PRIMARY WELLS

405149072532201. Local number, S5517.1

LOCATION.—Lat 40°51'49", long 72°53'22", Hydrologic Unit 02030202, at Brookhaven National Laboratory, northwest corner of Princeton Avenue and Upton Road, 77 ft south of parking field. Owner: Brookhaven National Laboratory

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 91 ft, screened 85 to 91 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

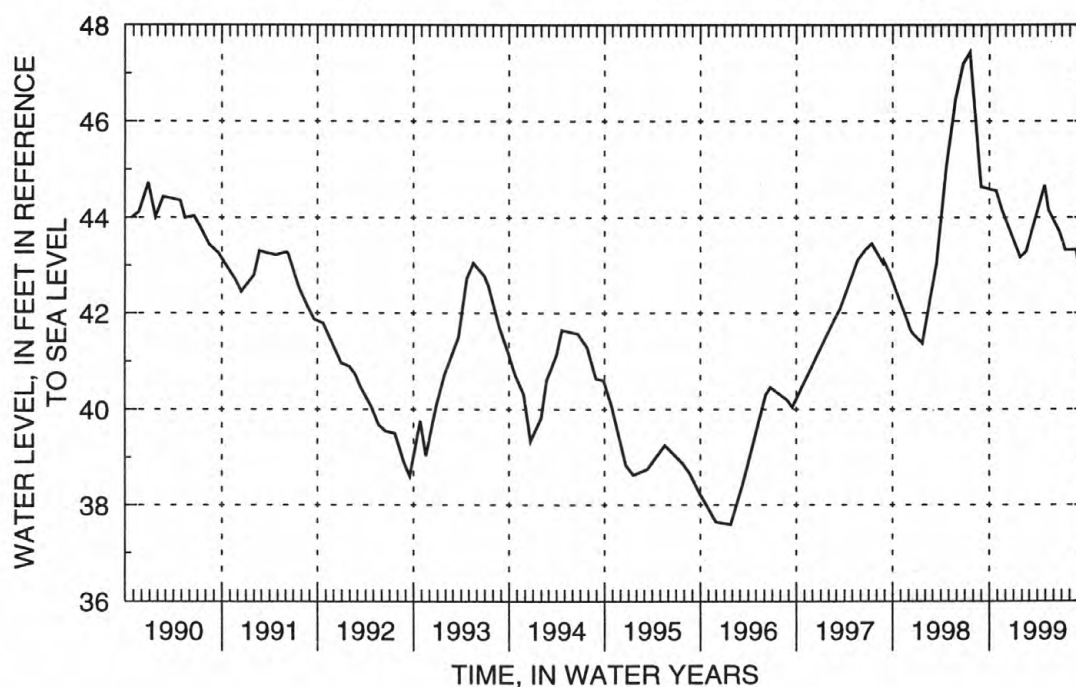
DATUM.—Land-surface datum is 115.0 ft above sea level. Measuring point: Top of 4-in steel casing, 0.04 ft above land-surface datum.

PERIOD OF RECORD.—April 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 47.43 ft above sea level, July 20, 1998; lowest measured, 33.34 ft above sea level, March 1, 1967.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 27	44.56	Jan 26	43.17	Mar 23	45.61	May 12	44.16	Jul 15	43.32	Sep 27	42.28
Nov 18	44.16	Feb 17	43.29	Apr 28	44.67	Jun 25	41.75	Aug 25	42.33		



405308072553101. Local number, S6413.1

LOCATION.—Lat 40°53'08", long 72°55'31", Hydrologic Unit 02030202, at south side of State Route 25, 70 ft east of Woodville Road, Middle Island. Owner: New York State Department of Transportation.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 108 ft, screened 103 to 108 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 93.8 ft above sea level. Measuring point: Top of steel meter box rim at yellow arrow, 0.13 ft above land-surface datum.

PERIOD OF RECORD.—January 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 54.16 ft above sea level, April 12, 1979; lowest measured, 42.40 ft above sea level, March 1, 1967.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 27	51.47	Jan 26	51.14	Mar 30	51.13	May 18	51.11	Jul 15	51.11	Sep 27	50.94
Nov 18	51.17	Feb 17	50.94	Apr 28	51.14	Jun 25	51.04	Aug 25	51.04		

## PRIMARY WELLS

405222072523301. Local number, S6431.1

LOCATION.—Lat 40°52'23", long 72°52'36", Hydrologic Unit 02030202, at Brookhaven National Laboratory, northwest corner of Thomson Road and Forth Avenue, Upton. Owner: Brookhaven National Laboratory.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 125 ft, screened 121 to 125 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 87.7 ft above sea level. Measuring point: Top of 4-in steel casing at yellow arrow, 1.48 ft below land-surface datum.

PERIOD OF RECORD.—January 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 48.98 ft above sea level, April 12, 1979; lowest measured, 38.93 ft above sea level, January 25, 1996.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 27	46.83	Jan 26	45.12	Mar 23	45.01	May 12	46.12	Jul 15	44.60	Sep 27	43.92
Nov 18	46.45	Feb 17	45.25	Apr 28	45.94	Jun 25	45.33	Aug 25	44.14		

405223072523401. Local number, S6434.1

LOCATION.—Lat 40°42'23", long 72°52'34", Hydrologic Unit 02030202, at Brookhaven National Laboratory, northeast corner of Thomson Road and Forth Avenue, Upton. Owner: Brookhaven National Laboratory.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel public supply well, diameter 10 in., depth 1,395 ft, screened 1,312 to 1,392 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 85.0 ft above sea level. Measuring point: Hole in flange at arrow, 2.07 ft above land-surface datum.

PERIOD OF RECORD.—August 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 36.11 ft above sea level, July 12, 1979; lowest measured, 28.74 ft above sea level, March 1, 1967.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 27	33.52	Feb 17	33.02	Apr 28	32.66	Jun 25	32.27	Aug 25	31.64	Sep 27	31.67
Jan 27	32.94	Mar 23	32.91	May 12	32.86	Jul 15	31.85				

405223072523402. Local number, S6455.1

LOCATION.—Lat 40°52'23", long 72°52'34", Hydrologic Unit 02030202, at Brookhaven National Laboratory, northeast corner of Thomson Road and Forth Avenue, under manhole cover, Upton. Owner: Brookhaven National Laboratory.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 962 ft, screened 952 to 962 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 85.0 ft above sea level. Measuring point: Top of 4-in steel casing, 0.45 ft below land-surface datum.

PERIOD OF RECORD.—July 1949 to June 1952, January 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 42.50 ft above sea level, April 2, 1979; lowest measured, 33.82 ft above sea level, December 27, 1966 and March 1, 1967.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 27	38.98	Jan 27	39.26	Mar 23	41.80	May 12	39.09	Jul 15	38.00	Sep 27	37.78
Nov 18	39.56	Feb 17	39.45	Apr 28	39.22	Jun 25	38.44	Aug 25	37.64		

## PRIMARY WELLS

405756072173501. Local number, S8833.1

LOCATION.—Lat 40°57'56", long 72°17'35", Hydrologic Unit 02030202, at west side of Toppings Path, near Crooked Pond, Bridgehampton. Owner: Town of Southampton.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 2 in., depth 13 ft, screened 10 to 13 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 20.0 ft above sea level. Measuring point: Top of 2-in steel casing, 1.63 ft above land-surface datum.

PERIOD OF RECORD.—October 1950 to current year. Unpublished records from October 1950 to September 1977 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 20.36 ft above sea level, June 25, 1998; lowest measured, 12.84 ft above sea level, March 29, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	18.65	Jan 29	17.76	Mar 25	17.69	May 21	17.31	Jul 21	16.33	Sep 29	15.62
Nov 20	18.28	Feb 26	17.63	Apr 29	17.51	Jun 28	16.78	Aug 19	15.94		

405309072233101. Local number, S8836.1

LOCATION.—Lat 40°53'09", long 72°23'31", Hydrologic Unit 02030202, at south side of Nugent Street, 399 ft east of Windmill Lane, Southampton. Owner: Southampton Fire Department.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel fire-protection well, diameter 8 in., depth 37 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

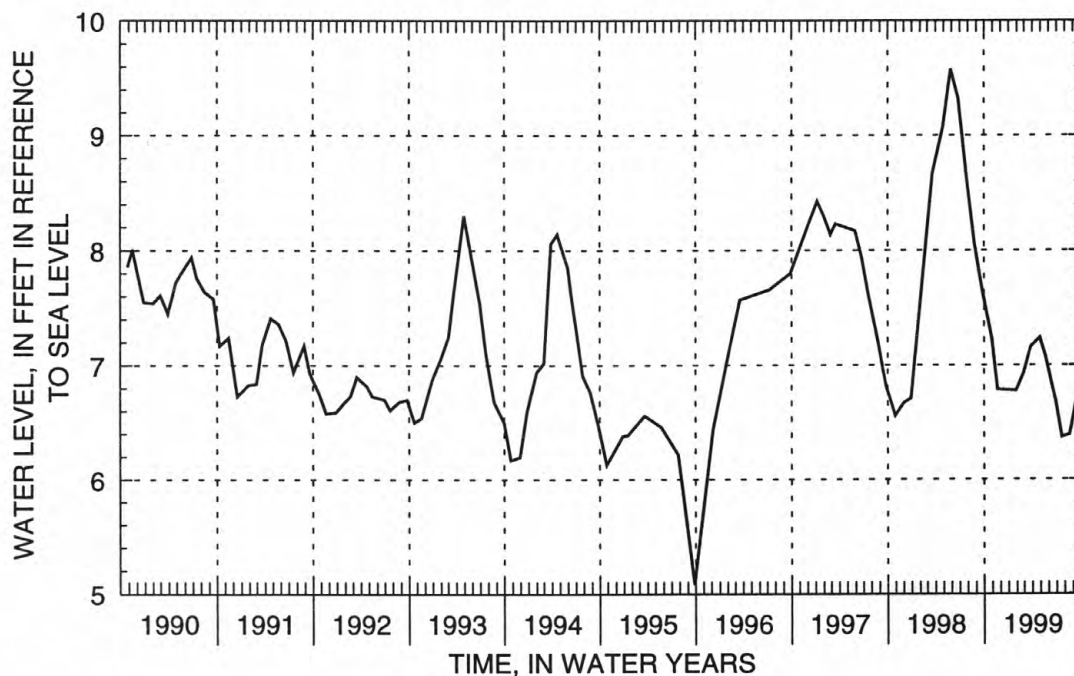
DATUM.—Land-surface datum is 18.0 ft above sea level. Measuring point: Top edge of 8-in steel casing, inside elbow extension, 0.87 ft above land-surface datum.

PERIOD OF RECORD.—July 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 9.58 ft above sea level, May 28, 1998; lowest measured, 4.93 ft above sea level, August 30, 1968

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	7.23	Jan 29	6.78	Mar 25	7.16	May 21	7.07	Jul 21	6.37	Sep 29	6.87
Nov 20	6.79	Feb 26	6.93	Apr 29	7.24	Jun 28	6.68	Aug 19	6.39		



## PRIMARY WELLS

405628072164701. Local number, S8838.1

LOCATION.—Lat 40°56'28", long 72°16'47", Hydrologic Unit 02030202, at west side of Sagg Road, 153 ft north of Montauk Highway (State Route 27), Bridgehampton. Owner: Bridgehampton Fire Department.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel fire-protection well, diameter 6 in., depth 46 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 28.0 ft above sea level. Measuring point: Top edge of 6-in steel casing, inside elbow extension, 0.40 ft above land-surface datum.

PERIOD OF RECORD.—July 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 14.02 ft above sea level, June 25, 1998; lowest measured, 8.84 ft above sea level, August 8, 1966.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	11.88	Jan 29	10.48	Mar 25	11.36	May 21	10.97	Jul 21	9.97	Sep 29	9.92
Nov 20	11.46	Feb 26	11.28	Apr 29	11.18	Jun 28	10.37	Aug 19	9.81		

405829072084302. Local number, S8839.2

LOCATION.—Lat 40°58'29", long 72°08'43", Hydrologic Unit 02030202, at west side of Windmill Lane, 0.1 mi north of State Route 27, Amaganset. Owner: D. Toler

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 50 ft, screened 40 to 50 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 37.0 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.35 ft below land-surface datum.

REMARKS.—Replaced well S8839.1 in August 1999 at same location.

PERIOD OF RECORD.—August 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 7.35 ft above sea level, September 29, 1999; lowest measured, 7.06 ft above sea level, August 19, 1999.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug 19	7.06	Sep 29	7.35								

405908072110001. Local number, S8843.1

LOCATION.—Lat 40°59'08", long 72°11'00", Hydrologic Unit 02030202, at east side of Three Mile Harbor Road, 0.35 mi north of Morris Park Lane, behind house, East Hampton. Owner: Conklin.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Dug unused well, diameter 30 in., depth 25 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 32.5 ft above sea level. Measuring point: Top of steel grill, 3.12 ft above land-surface datum.

PERIOD OF RECORD.—July 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 12.75 ft above sea level, June 25, 1998; lowest measured, 6.59 ft above sea level, December 17, 1981.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	11.12	Jan 29	10.10	Mar 25	10.05	May 21	9.91	Jul 21	9.25	Sep 29	8.68
Nov 20	10.77	Feb 26	10.08	Apr 29	10.01	Jun 28	9.58				



## PRIMARY WELLS

405250073180801. Local number, S15622.1

LOCATION.—Lat 40°52'50", long 73°18'08", Hydrologic Unit 02030201, at north side of Pulaski Road, 17 ft east of Rowena Lane, Northport. Owner: Rottkamp.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel unused domestic supply well, diameter 10 in., depth 458 ft, screened 437 to 457 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 205.0 ft above sea level. Measuring point: Top of hole in steel plate at yellow arrow, 0.19 ft below land-surface datum.

PERIOD OF RECORD.—January 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 47.09 ft above sea level, January 7, 1980; lowest measured, 34.33 ft above sea level, April 14, 1969.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	43.66	Dec 18	43.90	Feb 17	43.61	Apr 21	42.84	Jun 22	41.46	Aug 25	39.81
Nov 18	43.80	Jan 28	43.77	Mar 26	43.41	May 27	42.21	Jul 22	40.35	Sep 29	40.10

410634072223601. Local number, S16783.2

LOCATION.—Lat 41°06'34", long 72°22'36", Hydrologic Unit 02030201, at west side of Moore Lane, 61 ft south of North Road (State Route 25), Southold. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 28 ft, screened 20 to 24 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 16.0 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.13 ft below land-surface datum.

PERIOD OF RECORD.—July 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 4.11 ft above sea level, March 17, 1998; lowest measured, 1.56 ft above sea level, July 22, 1991.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 27	2.08	Jan 26	2.40	Mar 23	2.98	May 18	2.26	Jul 15	1.85	Sep 27	2.89
Nov 18	1.88	Feb 17	2.72	Apr 28	2.50	Jun 25	2.05	Aug 25	2.18		

410858072171501. Local number, S16787.1

LOCATION.—Lat 41°08'58", long 72°17'15", Hydrologic Unit 02030201, at south side of State Route 25, east of Platt Road, Orient. Owner: Suffolk County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Driven steel observation well, diameter 1 1/4 in., depth 44 ft, screened 41 to 44 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 22.3 ft above sea level. Measuring point: Top of 1 1/4-in steel casing, 0.14 ft above land-surface datum.

PERIOD OF RECORD.—August 1958 to current year. Unpublished records from August 1958 to September 1977 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 5.61 ft above sea level, May 27, 1998; lowest measured, 1.12 ft above sea level, August 8, 1966.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 27	2.90	Jan 26	2.56	Mar 23	3.09	May 18	3.05	Jul 15	2.37	Sep 27	2.54
Nov 18	2.67	Feb 17	2.88	Apr 28	3.22	Jun 25	2.74	Aug 25	2.17		

404751073240902. Local number, S16874.2

AQUIFER.—Upper glacial (water table).

**WELL CHARACTERISTICS.**—Drilled PVC observation well, diameter 2 in., depth 90 ft, screened 80 to 85 ft.

**INSTRUMENTATION.**—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 138.0 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.20 ft below land-surface datum.

REMARKS.—Replaced well S16874.1 in August 1999 at same location.

PERIOD OF RECORD.—August 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 74.20 ft above sea level, September 29, 1999; lowest measured, 73.37 ft above sea level, August 25, 1999.

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug 25	73.37	Sep 29	74.20								

405034073140401. Local number, S16881.1

LOCATION.—Lat 40°50'34", long 73°14'04", Hydrologic Unit 02030201, at east side of Old Willets Path, north of Bridge Branch Road, Commack. Owner: Town of Smithtown.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 47 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 58.0 ft above sea level. Measuring point: Top of 2-in steel casing, 0.34 ft below land-surface datum.

PERIOD OF RECORD.—July 1958 to current year.

**EXTREMES FOR PERIOD OF RECORD.**—Highest water level measured, 33.05 ft above sea level, January 23, 1974; lowest measured, 29.07 ft above sea level, September 21, 1995.

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	31.09	Dec 17	30.89	Feb 17	31.36	Apr 21	31.37	Jun 22	30.77	Aug 25	30.10
Nov 18	31.02	Jan 28	31.29	Mar 26	31.79	May 27	31.19	Jul 22	30.29	Sep 29	30.39

405455073025802. Local number, S31734.1

**LOCATION.**—Lat 40°54'51", long 73°02'57", Hydrologic Unit 02030202, at west side of Jayne Boulevard, 0.7 mi south of Nesconset Road (State Route 347), easternmost well, Terryville. Owner: Suffolk County Water Authority.

AQUIFER.—Lloyd (confined).

**WELL CHARACTERISTICS.**—Drilled steel observation well, diameter 6 in., depth 1,095 ft, screened 1,070 to 1,090 ft.

**INSTRUMENTATION.**—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 164.7 ft above sea level. Measuring point: Top of 2-in steel coupling welded to casing cap, 1.92 ft above land-surface datum.

PERIOD OF RECORD.—December 1970 to current year. Unpublished records from December 1970 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 44.52 ft above sea level, May 30, 1979; lowest measured, 36.58 ft above sea level, October 3, 1995.

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	40.54	Dec 18	42.18	May 27	40.80	Jul 23	38.20	Aug 25	38.26	Sep 29	39.42
Nov 18	42.02	Apr 21	41.85								

## PRIMARY WELLS

405452073025701. Local number, S32895.1

LOCATION.—Lat 40°54'51", long 73°02'57", Hydrologic Unit 02030202, at west side of Jayne Boulevard, 0.7 mi south of Nesconset Road (State Route 347), westernmost well, Terryville. Owner: Suffolk County Water Authority.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 845 ft, screened 840 to 845 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 164.7 ft above sea level. Measuring point: Top of 4-in steel coupling, 2.49 ft above land-surface datum.

PERIOD OF RECORD.—March 1970 to current year. Unpublished records from March 1970 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 46.54 ft above sea level, December 11, 1984; lowest measured, 37.73 ft above sea level, October 3, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	43.55	Dec 18	44.04	Feb 17	44.19	Apr 21	43.78	Jun 22	40.63	Aug 25	39.85
Nov 18	43.91	Jan 23	43.71	Mar 23	44.03	May 27	42.10	Jul 22	39.48	Sep 29	40.85

405040072414801. Local number, S34743.1

LOCATION.—Lat 40°50'40", long 72°41'48", Hydrologic Unit 02030202, at north side of dirt road, 120 ft east of Speonk Riverhead Road, 0.6 mi south of Sunrise Highway (State Route 27), northernmost well, Speonk. Owner: Suffolk County Water Authority.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, access pipe diameter 4 in., casing diameter 12 in., depth 1,226 ft, screened 1,077 to 1,117 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 64.0 ft above sea level. Measuring point: Top of 4-in steel coupling, 2.94 ft above land-surface datum.

PERIOD OF RECORD.—March 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 22.24 ft above sea level, April 2, 1979; lowest measured, 16.18 ft above sea level, March 18, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	21.06	Jan 29	19.99	Mar 31	19.65	May 21	19.74	Jul 21	19.08	Sep 29	18.90
Nov 20	20.77	Feb 26	20.04	Apr 29	19.71	Jun 28	19.46	Aug 19	18.94		

405517072574902. Local number, S34892.1

LOCATION.—Lat 40°55'19", long 72°57'49", Hydrologic Unit 02030202, at east side of Radio Avenue, 1.3 mi south of Nesconset Road (State Route 25A), northernmost well, Rocky Point. Owner: Suffolk County Water Authority.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 138 ft, screened 124 to 138 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 122.4 ft above sea level. Measuring point: Top of 6-in steel casing, 0.78 ft above land-surface datum.

PERIOD OF RECORD.—July 1970 to current year. Unpublished records from July 1970 to September 1975 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 52.82 ft above sea level, September 15, 1984; lowest measured, 42.17 ft above sea level, March 21, 1972.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 23	48.44	Jun 25	47.55	Jul 15	47.23	Aug 25	46.78	Sep 27	46.63		

## PRIMARY WELLS

404640073050201. Local number, S36144.1

LOCATION.—Lat 40°46'40", long 73°05'02", Hydrologic Unit 02030202, at east side of Lincoln Avenue, south of Veterans Memorial Highway (State Route 454), Bohemia. Owner: Town of Islip.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 53 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

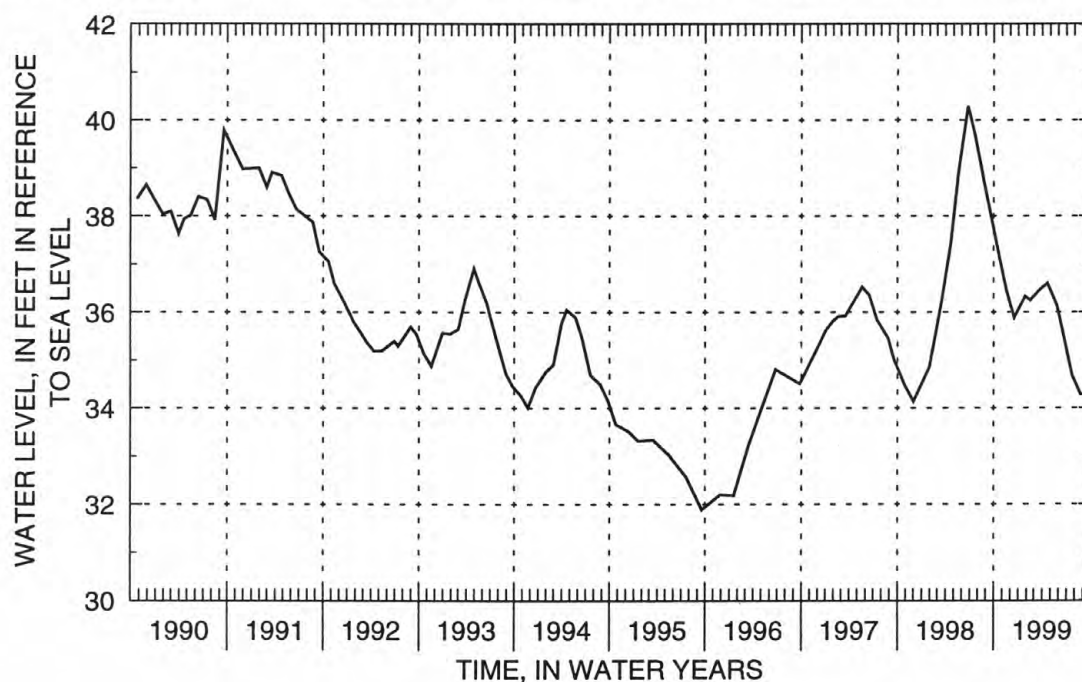
DATUM.—Land-surface datum is 54.0 ft above sea level. Measuring point: Top of 2-in steel casing, 1.84 ft above land-surface datum.

PERIOD OF RECORD.—October 1969 to current year. Unpublished records from October 1969 to September 1977 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 40.29 ft above sea level, June 25, 1998; lowest measured, 31.88 ft above sea level, December 15, 1981.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	37.22	Dec 17	35.89	Feb 16	36.25	Apr 21	36.60	Jun 22	35.49	Aug 25	34.28
Nov 19	36.44	Jan 28	36.33	Mar 23	36.46	May 27	36.14	Jul 23	34.69	Sep 29	34.29



405013073263601. Local number, S40840.1

LOCATION.—Lat 40°50'13", long 73°26'36", Hydrologic Unit 02030201, at intersection of Cold Spring Hill Road, Ledgewood Drive, and West Rogues Path, on grass island, Huntington. Owner: Town of Huntington.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 79 ft, screened 77 to 79 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 131.5 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.03 ft below land-surface datum.

PERIOD OF RECORD.—August 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 67.02 ft above sea level, December 10, 1984; lowest measured, 54.87 ft above sea level, November 28, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 26	60.48	Aug 25	58.23	Sep 29	58.39						



## PRIMARY WELLS

405124073111501. Local number, S40843.1

LOCATION.—Lat 40°51'24", long 73°11'15", Hydrologic Unit 02030201, at intersection of Nissequogue River Road and North Country Road (State Route 25A), just north of Middle Country Road (State Route 25), on grass island, Smithtown. Owner: Town of Smithtown.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Augered steel observation well, diameter 2 in., depth 44 ft, screened 41 to 44 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 66.0 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.01 ft below land-surface datum.

PERIOD OF RECORD.—July 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 37.93 ft above sea level, March 27, 1979; lowest measured, 33.84 ft above sea level, July 9, 1971.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	34.95	Dec 18	34.64	Feb 17	36.04	Apr 21	35.84	Jun 22	34.81	Aug 25	34.55
Nov 18	34.72	Jan 28	35.47	Mar 26	36.15	May 27	35.46	Jul 22	34.26	Sep 29	35.65

405230073212101. Local number, S46517.1

LOCATION.—Lat 40°52'30", long 73°21'21", Hydrologic Unit 02030201, at southeast corner of Stony Hollow Road and Maple Road, Huntington. Owner: Town of Huntington.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 66 ft, screened 63 to 66 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 123.5 ft above sea level. Measuring point: Top of 2-in steel casing, 0.03 ft above land-surface datum.

PERIOD OF RECORD.—September 1979 to current year. Unpublished records from September 1979 to September 1982 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 69.61 ft above sea level, June 11, 1984; lowest measured, 66.87 ft above sea level, August 23, 1988.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	68.13	Dec 18	67.76	Feb 17	67.47	Apr 21	67.66	Jun 22	67.70	Aug 25	67.39
Nov 18	67.83	Jan 28	67.50	Mar 26	67.53	May 27	67.78	Jul 22	67.54	Sep 29	67.36

405139072432401. Local number, S46544.1

LOCATION.—Lat 40°51'39", long 72°43'24", Hydrologic Unit 02030202, at southwest corner of County Road 51 and service road entrance to recharge basin 33, Eastport. Owner: Suffolk County Department of Public Works.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 107 ft, screen assumed at bottom.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 102.9 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.19 ft below land-surface datum.

PERIOD OF RECORD.—December 1972 to current year. Unpublished records from December 1972 to September 1976 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 31.28 ft above sea level, June 28, 1979; lowest measured, 23.59 ft above sea level, January 18, 1996.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	29.99	Jan 29	28.93	Mar 31	28.26	May 21	27.86	Jul 21	27.47	Sep 29	26.91
Nov 20	29.76	Feb 26	28.67	Apr 29	27.96	Jun 28	27.66	Aug 19	27.21		

## PRIMARY WELLS

405536072375303. Local number, S47231.2

LOCATION.—Lat 40°55'36", long 72°37'53", Hydrologic Unit 02030202, Indian Head County Park south of Hubbard Avenue, approximately 41 ft south of bathrooms, Riverhead. Owner: Suffolk County Department of Health Services.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 41 ft, screened 39 to 41 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 21.0 ft above sea level. Measuring point: Top of 2-in coupling, 0.64 ft below land-surface datum.

REMARKS.—Replaced well S47231.1 in March 1995 at same location.

PERIOD OF RECORD.—March 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 3.27 ft above sea level, March 17, 1998; lowest measured, 1.79 ft above sea level, July 15, 1999.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 23	2.69	May 18	2.32	Jun 25	1.96	Jul 15	1.79	Aug 25	2.04	Sep 27	2.25
Apr 28	3.07										

405604073064301. Local number, S47973.1

LOCATION.—Lat 40°56'04", long 73°06'43", Hydrologic Unit 02030201, at north side of State Route 25A, 189 ft west of Ridgeway Avenue, Setauket. Owner: Suffolk County Department of Health Services.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 90 ft, screened 78 to 88 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 94.0 ft above sea level. Measuring point: Top of 6-in steel flange, 2.43 ft below land-surface datum.

PERIOD OF RECORD.—January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 28.29 ft above sea level, June 26, 1998; lowest measured, 20.83 ft above sea level, March 5, 1980.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov 18	26.00	Jan 23	25.74	Mar 25	26.03	May 27	26.03	Jul 22	25.24	Sep 29	25.79
Dec 18	25.62	Feb 17	25.92	Apr 21	26.15	Jun 22	25.74	Aug 25	24.77		

410149071583201. Local number, S48577.1

LOCATION.—Lat 41°01'49", long 71°58'32", Hydrologic Unit 02030202, at north side of Montauk Point State Parkway (State Route 27), 19 ft east of entrance to East Hampton Disposal and Recycling Center, Montauk. Owner: Suffolk County Department of Health Services.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 189 ft, screened 173 to 183 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 168.1 ft above sea level. Measuring point: Top of 6-in steel flange, 1.61 ft below land-surface datum.

PERIOD OF RECORD.—January 1974 to current year. Unpublished records from January 1974 to September 1983 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 4.74 ft above sea level, June 25, 1998; lowest measured, 0.54 ft below sea level, May 5, 1981.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	4.63	Apr 29	3.70	Jun 28	3.63	Jul 21	3.27	Aug 19	3.22	Sep 29	4.08
Mar 25	4.04	May 21	3.62								

## PRIMARY WELLS

410316071535501. Local number, S48579.1

LOCATION.—Lat 41°03'16", long 71°53'54", Hydrologic Unit 02030202, at north side of Montauk Point State Parkway (State Route 27), adjacent to intersection with Old Montauk Highway, Montauk. Owner: Suffolk County Department of Health Services.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 66 ft, screened 53 to 56 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 38.6 ft above sea level. Measuring point: Top of 6-in steel flange, 1.55 ft below land-surface datum.

PERIOD OF RECORD.—January 1974 to current year. Unpublished records from January 1974 to September 1983 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 4.30 ft above sea level, May 28, 1998; lowest measured, 2.46 ft above sea level, December 22, 1976.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	3.38	Mar 25	3.37	May 21	3.31	Jul 21	3.05	Aug 19	3.10	Sep 29	3.25
Jan 29	3.06	Apr 29	3.47	Jun 28	3.25						

405309073125401. Local number, S50507.1

LOCATION.—Lat 40°53'09", long 73°12'54", Hydrologic Unit 02030201, at east side of Landing Avenue, 1.5 mi north of Spruce Street, San Remo. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 80 ft, screened 76 to 80 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 90.3 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.01 ft above land-surface datum.

PERIOD OF RECORD.—December 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 46.23 ft above sea level, September 19, 1984; lowest measured, 41.51 ft above sea level, December 14, 1981.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	45.77	Dec 18	45.24	Feb 17	44.84	Apr 21	44.54	Jun 22	44.39	Aug 25	43.42
Nov 18	45.56	Jan 28	44.96	Mar 26	44.67	May 27	44.61	Jul 22	43.32	Sep 29	43.31

404357072515701. Local number, S52162.1

LOCATION.—Lat 40°43'57", long 72°51'57", Hydrologic Unit 02030202, at Smith Point County Park, south of traffic circle. Owner: Suffolk County Department of Health Services.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel private supply well, diameter 4 in., depth 1,695 ft, screened 1,670 to 1,690 ft.

INSTRUMENTATION.—Measurement with clear plastic tube extension and stadia rod by United States Geological Survey personnel.

DATUM.—Land-surface datum is 18.0 ft above sea level. Measuring point: Top of coupling, 1.19 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—September 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 25.66 ft above sea level, January 17, 1985; lowest measured, 19.96 ft above sea level, March 8, 1988.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 31	22.94	Apr 30	22.85	May 20	22.97	Jun 29	22.62	Aug 27	22.46	Sep 30	22.84

## PRIMARY WELLS

404357072515702. Local number, S52163.1

LOCATION.—Lat 40°43'57", long 72°51'57", Hydrologic Unit 02030202, at Smith Point County Park, south of traffic circle. Owner: Suffolk County Department of Health Services.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 1,305 ft, screened 1,279 to 1,300 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 17.0 ft above sea level. Measuring point: Top of 4-in steel casing, 4.01 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—December 1974 to December 1982 and September 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 18.10 ft above sea level, July 25, 1978; lowest measured, 14.32 ft above sea level, March 9, 1982.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 31	16.08	Apr 30	16.23	May 20	16.06	Jun 29	15.10	Aug 27	14.81	Sep 30	15.83

404357072515703. Local number, S52164.1

LOCATION.—Lat 40°43'57", long 72°51'57", Hydrologic Unit 02030202, at Smith Point County Park, south of traffic circle. Owner: Suffolk County Department of Health Services.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 735 ft, screened 709 to 730 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 17.0 ft above sea level. Measuring point: Top of 4-in steel coupling, 4.14 ft above land-surface datum.

PERIOD OF RECORD.—December 1974 to March 1978, October 1980 to July 1986, and March 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 16.57 ft above sea level, October 1, 1976; lowest measured, 13.20 ft above sea level, July 31, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 31	14.97	Apr 30	15.00	May 20	14.75	Jun 29	13.67	Aug 27	13.62	Sep 30	14.65

410104072303301. Local number, S53324.1

LOCATION.—Lat 41°01'04", long 72°30'33", Hydrologic Unit 02030202, at east side of Alvahs Lane, 200 ft north of Middle Road (State Route 27), Southold. Owner: Suffolk County Department of Health Services.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 6 in., depth 62 ft, screened 49 to 59 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 42.0 ft above sea level. Measuring point: Top of 6-in steel flange, 0.51 ft above land-surface datum.

PERIOD OF RECORD.—October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 10.32 ft above sea level, September 28, 1989; lowest measured, 3.52 ft above sea level, November 20, 1981.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 27	7.88	Jan 27	6.45	Mar 23	6.40	May 18	6.54	Jul 15	5.56	Sep 27	5.28
Nov 18	7.42	Feb 17	6.44	Apr 28	6.63	Jun 25	6.06	Aug 25	5.01		



## PRIMARY WELLS

404642072520001. Local number, S54882.1

LOCATION.—Lat 40°46'42", long 72°52'00", Hydrologic Unit 02030202, at grassy divide between Margin Drive West and William Floyd Parkway, 156 ft south of Ranch Avenue, Center Moriches. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 34 ft, screened 30 to 34 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 33.0 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.43 ft below land-surface datum.

PERIOD OF RECORD.—July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 13.80 ft above sea level, June 25, 1998; lowest measured, 6.48 ft above sea level, December 15, 1981.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	10.47	Jan 29	9.18	Mar 23	9.81	Apr 29	10.10	Jun 28	9.31	Aug 19	8.83
Nov 20	9.79	Feb 26	9.57	Mar 30	9.91	May 21	9.82	Jul 21	8.95	Sep 29	9.27

410052072134001. Local number, S57371.1

LOCATION.—Lat 41°00'55", long 72°13'42", Hydrologic Unit 02030202, at west side of Old Northwest Road, 0.9 mi south of Alewife Brook Road, Grassy Hollow. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 62 ft, screened 58 to 62 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 24.0 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.30 ft below land-surface datum.

PERIOD OF RECORD.—November 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 10.52 ft above sea level, May 28, 1998; lowest measured, 5.80 ft above sea level, December 17, 1981.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	8.80	Jan 29	7.56	Mar 25	8.04	May 21	8.04	Jul 21	7.20	Sep 29	6.56
Nov 20	7.87	Feb 26	7.90	Apr 29	8.18	Jun 28	7.60	Aug 19	6.84		

405927072041901. Local number, S57372.1

LOCATION.—Lat 40°59'27", long 72°04'19", Hydrologic Unit 02030202, at south side of Montauk Highway (State Route 27), 2.4 mi east of Bluff Road, Napeague State Park. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 12 ft, screened 8 to 12 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 8.0 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.15 ft above land-surface datum.

PERIOD OF RECORD.—January 1976 to current year. Unpublished records from January 1976 to September 1983 are available in files of the Long Island Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 4.23 ft above sea level, July 18, 1989; lowest measured, 2.16 ft above sea level, July 22, 1988.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	2.99	Feb 26	3.36	Apr 29	3.00	Jun 28	2.49	Aug 19	2.77	Sep 29	3.33
Jan 29	3.54	Mar 25	3.48	May 25	2.92	Jul 21	2.35				

## PRIMARY WELLS

415843072213401. Local number, S62402.1

LOCATION.—Lat 40°58'58", long 72°21'36", Hydrologic Unit 02030202, at south end of Club Lane, 587 ft east of Wildwood Road,

Noyack. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 84 ft, screened 80 to 84 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 99.3 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.22 ft below land-surface datum.

PERIOD OF RECORD.—May 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 39.43 ft above sea level, June 25, 1998; lowest measured, 32.58 ft above sea level, December 5, 1986

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov 20	37.47	Mar 25	36.77	May 21	36.68	Jul 21	36.28	Aug 19	36.00	Sep 29	35.40
Jan 29	36.47	Apr 29	36.83	Jun 28	36.49						

404936072483501. Local number, S65604.1

LOCATION.—Lat 40°49'36", long 72°48'35", Hydrologic Unit 02030202, at northwest corner of Sunrise Highway Service Road and

Wading River Road, Manorville. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 56 ft, screened 51 to 56 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 64.5 ft above sea level. Measuring point: Top of 2-in PVC coupling, 0.32 ft below land-surface datum.

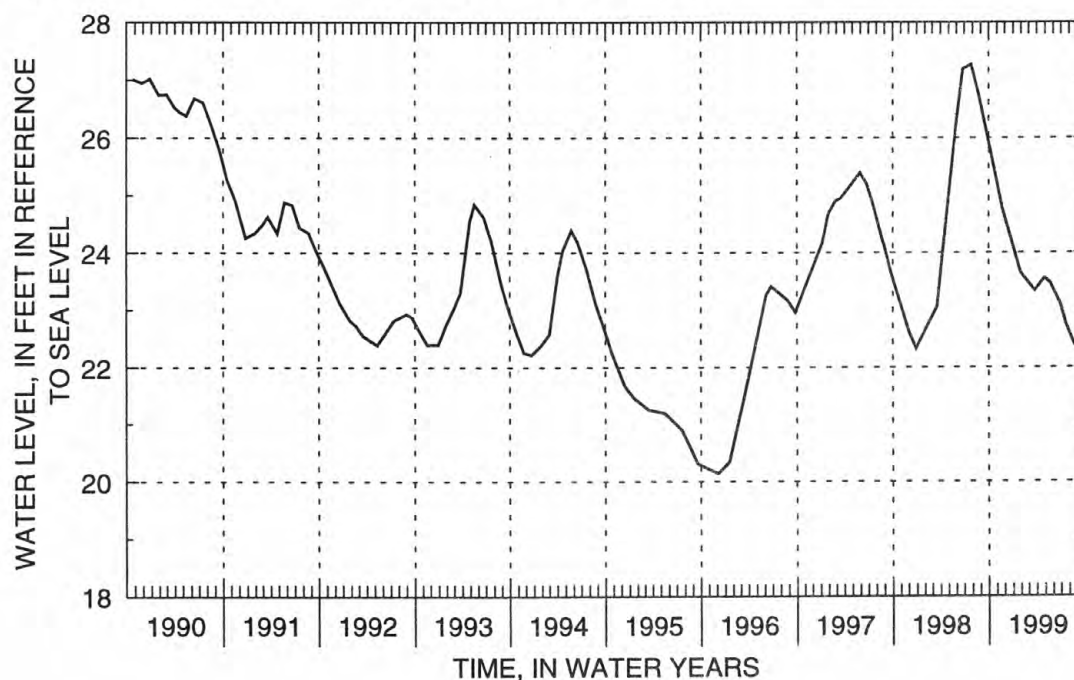
REMARKS.—Replaces well S6439.1 in October 1978 at same location, which has a period of record from January 1949 to October 1978.

PERIOD OF RECORD.—October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 28.14 ft above sea level, July 23, 1984; lowest measured, 20.14 ft above sea level, December 6, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	25.33	Jan 29	23.65	Apr 29	23.56	Jun 28	23.10	Aug 19	22.41	Sep 29	22.68
Nov 20	24.79	Mar 23	23.34	May 21	23.47	Jul 21	22.73				



## PRIMARY WELLS

403935073235001. Local number, S66136.1

LOCATION.—Lat 40°39'37", long 73°23'50", Hydrologic Unit 02030202, at Tanner Park, south side of Kerrigan Road across from Harding Road, easternmost well, Copiague. Owner: Suffolk County Department of Health Services.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, casing diameter 6 in., screen diameter 4 in., depth 134 ft, screened 124 to 134 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 5.0 ft above sea level. Measuring point: Top of 6-in PVC casing, 2.43 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 4.79 ft above sea level, March 4, 1991; lowest measured, 3.31 ft above sea level, July 31, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 31	3.86	Apr 30	3.95	May 20	3.90	Jun 29	3.59	Aug 27	3.88	Sep 30	4.42

403935073235002. Local number, S67537.1

LOCATION.—Lat 40°39'37", long 73°23'50", Hydrologic Unit 02030202, at Tanner Park, south side of Kerrigan Road, across from Harding Road, eastern middle well, Copiague. Owner: Suffolk County Department of Health Services.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 61 ft, screened 56 to 61 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 7.8 ft above sea level. Measuring point: Top of 2-in PVC casing, 0.28 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 2.57 ft above sea level, September 26, 1995; lowest measured, 1.14 ft above sea level, March 11, 1996.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 31	1.57	Apr 30	1.80	May 20	1.87	Jun 29	1.73	Aug 27	2.13	Sep 30	2.28

405529073272901. Local number, S69781.1

LOCATION.—Lat 40°55'29", long 73°27'29", Hydrologic Unit 02030201, at Caumsett State Park, 1.0 mi northeast of parking field, on park service road, Lloyd Neck. Owner: Suffolk County Department of Health Services.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 155 ft, screened 139 to 149 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 109.0 ft above sea level. Measuring point: Top of 4-in PVC coupling, 0.66 ft below land-surface datum.

PERIOD OF RECORD.—April 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 9.88 ft above sea level, June 26, 1998; lowest measured, 6.11 ft above sea level, January 18, 1996.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	8.74	Feb 17	7.62	Apr 21	7.74	Jun 22	7.63	Aug 25	7.14	Sep 29	7.03
Jan 28	7.61	Mar 26	7.56	May 27	7.81	Jul 22	7.41				

## PRIMARY WELLS

405801072354401. Local number, S71576.1

LOCATION.—Lat 40°58'01", long 72°35'44", Hydrologic Unit 02030202, at east side of Manor Lane, 1.6 mi north of Main Road (State Route 25), southern middle well, Jamesport. Owner: Suffolk County Department of Health Services.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 453 ft, screened 443 to 448 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 53.0 ft above sea level. Measuring point: Top of 4-in PVC coupling, 1.16 ft below land-surface datum.

PERIOD OF RECORD.—February 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 13.02 ft above sea level, September 27, 1984; lowest measured, 6.46 ft above sea level, September 28, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 23	8.82	May 18	8.80	Jun 25	8.27	Jul 15	7.89	Aug 25	7.64	Sep 27	7.85

405858072213601. Local number, S73998.1

LOCATION.—Lat 40°58'58", long 72°21'35", Hydrologic Unit 02030202, at south end of Club Lane, 624 ft west of Wildwood Road, near Highway Department entrance, southernmost well, Noyack. Owner: Suffolk County Department of Health Services.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 1 1/4 in., depth 803 ft, screened 795 to 800 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 99.7 ft above sea level. Measuring point: Top of 1 1/4-in steel casing, 0.20 ft below land-surface datum.

PERIOD OF RECORD.—April 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 6.97 ft above sea level, February 26, 1999; lowest measured, 4.00 ft above sea level, December 5, 1986.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 30	6.60	Jan 29	6.19	Apr 29	6.01	Jun 28	5.32	Aug 19	5.28	Sep 29	5.37
Nov 20	6.46	Feb 26	6.97	May 21	5.86	Jul 21	5.18				

405322072454101. Local number, S74292.1

LOCATION.—Lat 40°53'23", long 72°45'43", Hydrologic Unit 02030202, at south side of Mill Road, opposite Primrose Path, Brookhaven. Owner: United States Geological Survey.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 2 in., depth 56 ft, screened 52 to 56 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 73.0 ft above sea level. Measuring point: Top of 2-in PVC coupling, 1.20 ft above land-surface datum.

PERIOD OF RECORD.—May 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 42.22 ft above sea level, June 21, 1984; lowest measured, 33.59 ft above sea level, November 30, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 27	38.34	Jan 26	37.50	Mar 23	37.50	May 18	38.07	Jul 15	37.54	Sep 27	36.63
Nov 18	38.76	Feb 17	37.43	Apr 28	38.01	Jun 25	37.77	Aug 25	37.01		



404433073244903. Local number. S74586.1

AQUIFER.—Magothy (confined).

**WELL CHARACTERISTICS.**—Drilled PVC observation well, diameter 4 in., depth 441 ft., screened 433 to 438 ft.

**INSTRUMENTATION.**—Measurement with chalked steel tape by United States Geological Survey personnel.

**DATUM.**—Land-surface datum is 86.0 ft above sea level. Measuring point: Top of 4-in PVC casing, 0.90 ft below land-surface datum.

PERIOD OF RECORD.—June 1984 to current year.

**EXTREMES FOR PERIOD OF RECORD.**—Highest water level measured, 60.33 ft above sea level, June 5, 1984; lowest measured, 48.43 ft above sea level, September 19, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL. WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

[illegible]

404433073244904. Local number, S74587.1

AOUIFER.—Magothy (confined).

**WELL CHARACTERISTICS.**—Drilled PVC observation well, diameter 4 in., depth 196 ft, screened 188 to 193 ft.

**INSTRUMENTATION.**—Measurement with chalked steel tape by United States Geological Survey personnel.

**DATUM.**—Land-surface datum is 86.0 ft above sea level. Measuring point: Top of 4-in PVC coupling, 0.22 ft below land-surface datum.

PERIOD OF RECORD.—April 1984 to current year.

**EXTREMES FOR PERIOD OF RECORD.**—Highest water level measured, 61.94 ft above sea level, June 5, 1984; lowest measured, 49.36 ft above sea level, September 19, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	55.35	Nov 18	54.52	Dec 18	53.77	Mar 23	55.44				

404433073244905. Local number, S75033.1

AQUIFER.—Upper glacial (water table).

**WELL CHARACTERISTICS.**—Drilled PVC observation well, diameter 4 in., depth 62 ft, screened 47 to 52 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 86.5 ft above sea level. Measuring point: Top of 4-in PVC coupling, 0.51 ft below land-surface datum.

PERIOD OF RECORD.—April 1984 to current year.

**EXTREMES FOR PERIOD OF RECORD.**—Highest water level measured, 62.19 ft above sea level, June 5, 1984; lowest measured, 49.46 ft above sea level, September 19, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL. WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

[illegible]

## PRIMARY WELLS

404433073244902. Local number, S75034.2

LOCATION.—Lat 40°44'33", long 73°24'49", Hydrologic Unit 02030202, at northwest corner of New Highway and Conklin Street, north of Long Island Railroad tracks, northern middle well, Pinelawn. Owner: Suffolk County Department of Health Services.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 698 ft, screened 688 to 693 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 86.5 ft above sea level. Measuring point: Top of 4-in steel coupling, 0.26 ft below land-surface datum.

PERIOD OF RECORD.—April 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 59.57 ft above sea level, June 9, 1984; lowest measured, 47.86 ft above sea level, September 19, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	53.78	Nov 18	53.01	Dec 18	52.27	Jan 28	53.22	Feb 17	53.68	Mar 23	54.17

404859073194002. Local number, S75454.2

LOCATION.—Lat 40°48'59", long 73°19'40", Hydrologic Unit 02030202, at Dix Hills Park and Golf Course, 180 ft west of DeForest Road, 154 ft north of parking lot, northernmost well, Dix Hills. Owner: Suffolk County Department of Health Services.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 740 ft, screened 730 to 735 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 230.7 ft above sea level. Measuring point: Top of 4-in steel casing, 0.14 ft below land-surface datum.

PERIOD OF RECORD.—March 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 74.05 ft above sea level, March 21, 1991; lowest measured, 63.30 ft above sea level, June 27, 1996.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	68.97	Dec 18	69.28	Feb 17	69.77	Apr 21	70.52	Jun 22	68.13	Aug 25	66.54
Nov 18	69.00	Jan 28	69.60	Mar 26	69.64	May 27	68.78	Jul 22	67.00	Sep 29	66.79

404859073194004. Local number, S75456.1

LOCATION.—Lat 40°48'59", long 73°19'40", Hydrologic Unit 02030202, at Dix Hills Park and Golf Course, 180 ft west of DeForest Road, 134 ft north of parking lot, southernmost well, Dix Hills. Owner: Suffolk County Department of Health Services.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 203 ft, screened 195 to 200 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 230.5 ft above sea level. Measuring point: Top of 4-in PVC coupling, 0.98 ft below land-surface datum.

PERIOD OF RECORD.—March 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 78.96 ft above sea level, November 20, 1991; lowest measured, 69.86 ft above sea level, March 18, 1996.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	74.08	Dec 18	74.18	Feb 17	74.53	Apr 21	74.36	Jun 22	73.76	Aug 25	73.18
Nov 18	74.16	Jan 28	73.38	Mar 26	74.39	May 27	74.09	Jul 22	73.35	Sep 29	73.05

## PRIMARY WELLS

405317072331902. Local number, S77435.1

LOCATION.—Lat 40°53'17", long 72°33'18", Hydrologic Unit 02030202, at south side of dirt road, 145 ft east of Riverhead-Hampton Bays Road (State Route 24), 195 ft south of Bellows Pond Road, easternmost well, Rampasture. Owner: Suffolk County Department of Health Services.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 27 ft, screened 25 to 27 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 18.8 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.36 ft below land-surface datum.

PERIOD OF RECORD.—March 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 10.50 ft above sea level, June 25, 1998; lowest measured, 6.77 ft above sea level, October 28, 1986.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Dec 28	8.84	Jan 29	9.46	Apr 29	9.17	Jun 28	8.23	Aug 19	7.55	Sep 29	8.26
Nov 20	8.68	Mar 31	9.49	May 21	8.89	Jul 21	7.73				

405317072331903. Local number, S77436.2

LOCATION.—Lat 40°53'17", long 72°33'18", Hydrologic Unit 02030202, at south side of dirt road, 138 ft east of Riverhead-Hampton Bays Road (State Route 24), 195 ft south of Bellows Pond Road, westernmost well, Rampasture. Owner: Suffolk County Department of Health Services.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 508 ft, screened 500 to 505 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 18.7 ft above sea level. Measuring point: Top of 4-in PVC coupling, 0.41 ft below land-surface datum.

PERIOD OF RECORD.—March 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 10.76 ft above sea level, June 25, 1998; lowest measured, 6.94 ft above sea level, September 22, 1986.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 28	9.11	Jan 29	8.97	Apr 29	9.12	Jun 28	8.42	Aug 19	7.83	Sep 29	8.18
Nov 20	8.86	Mar 31	9.21	May 21	8.92	Jul 21	7.99				

403935073235003. Local number, S79407.1

LOCATION.—Lat 40°39'37", long 73°23'50", Hydrologic Unit 02030202, at Tanner Park, south side of Kerrigan Road, across from Harding Road, western middle well, Copiague. Owner: Suffolk County Department of Health Services.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 1,219 ft, screened 1,192 to 1,214 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 7.8 ft above sea level. Measuring point: Top of 4-in removable PVC extension, 10.39 ft above land-surface datum.

REMARKS.—Water level affected by tidal fluctuation. Flowing well, measurement taken from top of removable calibrated PVC extension.

PERIOD OF RECORD.—December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 18.71 ft above sea level, April 30, 1999; lowest measured, 14.07 ft above sea level, September 30, 1988.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 31	18.76	Apr 30	18.71	May 20	18.68	Jun 29	18.01	Aug 27	15.98		

## PRIMARY WELLS

403935073235004. Local number, S79408.1

LOCATION.—Lat 40°39'37", long 73°23'50", Hydrologic Unit 02030202, at Tanner Park, south side of Kerrigan Road, across from Harding Road, westernmost well, Copiague. Owner: Suffolk County Department of Health Services.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 4 in., depth 680 ft, screened 670 to 675 ft.

INSTRUMENTATION.—Measurement with clear plastic tube extension and stadia rod by United States Geological Survey personnel.

DATUM.—Land-surface datum is 7.8 ft above sea level. Measuring point: Top of 4-in steel coupling, 0.58 ft below land-surface datum.

REMARKS.—Water level affected by tidal fluctuation.

PERIOD OF RECORD.—December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 7.22 ft above sea level, March 4, 1991; lowest measured, 5.12 ft above sea level, July 31, 1955.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 31	6.53	Apr 30	6.37	May 20	6.29	Jun 29	5.43	Aug 27	5.82	Sep 30	6.63

405604073064302. Local number, S81831.1

LOCATION.—Lat 40°56'04", long 73°06'43", Hydrologic Unit 02030201, at north side of North Country Road (State Route 25A), 199 ft west of Ridgeway Avenue, East Setauket. Owner: Suffolk County Department of Environmental Conservation.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 470 ft, screened 462 to 467 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 94.0 ft above sea level. Measuring point: Top of 4-in PVC coupling, 0.96 ft below land-surface datum.

PERIOD OF RECORD.—March 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 24.03 ft above sea level, February 13, 1991; lowest measured, 18.73 ft above sea level, October 3, 1995.

## WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	22.19	Dec 18	22.01	Feb 17	22.45	May 27	21.67	Jul 23	21.00	Sep 29	20.32
Nov 18	22.56	Jan 23	22.33	Apr 21	22.16	Jun 22	21.10	Aug 25	19.37		



## PRIMARY WELLS

405536072375301. Local number, S82938.1

LOCATION.—Lat 40°55'36", long 72°37'53", Hydrologic Unit 02030202, at Indian Island County Park, north side of main entrance road, 107 ft east of rest room facilities, Riverhead. Owner: Suffolk County Department of Health Services.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 1,022 ft, screened 1,010 to 1,022 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

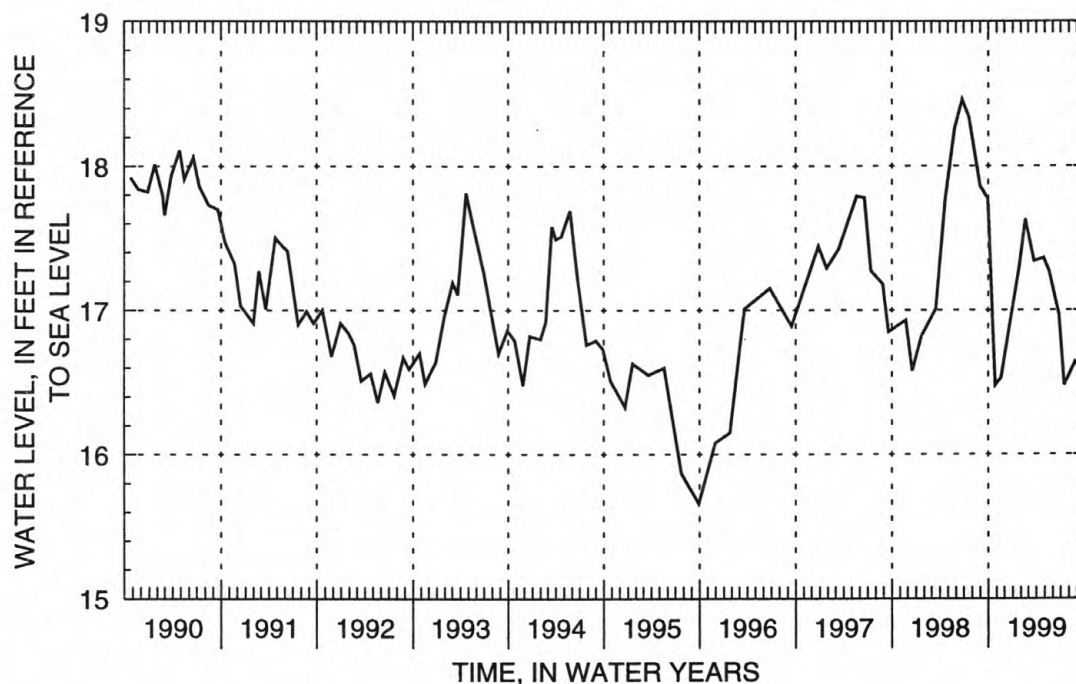
DATUM.—Land-surface datum is 21.0 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.14 ft below land-surface datum.

PERIOD OF RECORD.—June 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 18.46 ft above sea level, June 24, 1998; lowest measured, 15.55 ft above sea level, October 23, 1987.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 27	16.48	Jan 26	17.30	Mar 23	17.34	May 18	17.27	Jul 15	16.48	Sep 27	16.58
Nov 18	16.53	Feb 17	17.63	Apr 28	17.36	Jun 25	16.97	Aug 25	16.64		



## PRIMARY WELLS

405536072375302. Local number, S82939.1

LOCATION.—Lat 40°55'36", long 72°37'53", Hydrologic Unit 02030202, at Indian Island County Park, north side of main entrance road, 107 ft east of rest room facilities, Riverhead. Owner: Suffolk County Department of Health Services.

AQUIFER.—Magothy (confined).

WELL CHARACTERISTICS.—Drilled steel observation well, diameter 2 in., depth 162 ft, screened 155 to 162 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

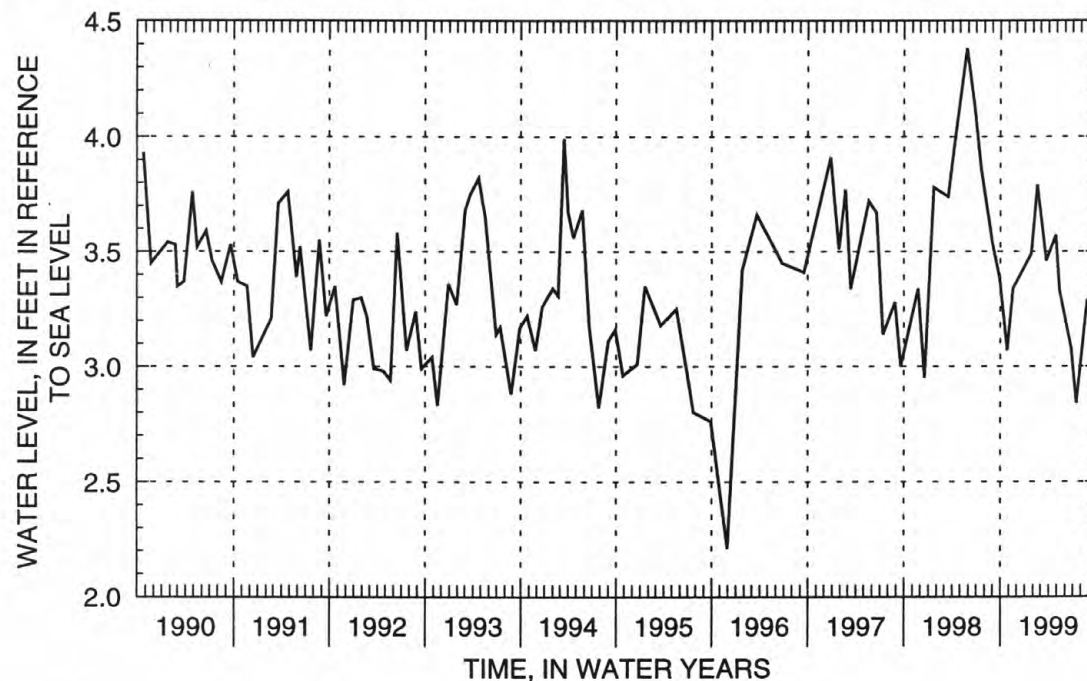
DATUM.—Land-surface datum is 21.0 ft above sea level. Measuring point: Top of 2-in steel coupling, 0.03 ft below land-surface datum.

PERIOD OF RECORD.—June 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 4.38 ft above sea level, May 27, 1998; lowest measured, 2.21 ft above sea level, November 30, 1995.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 27	3.07	Jan 26	3.49	Mar 23	3.46	May 12	3.33	Jul 15	2.84	Sep 27	3.18
Nov 18	3.34	Feb 17	3.79	Apr 28	3.57	Jun 25	3.08	Aug 25	3.29		



404433073244906. Local number, S87041.1

LOCATION.—Lat 40°44'33", long 73°24'49", Hydrologic Unit 02030202, at northwest corner of New Highway and Conklin Street, north of Long Island Railroad tracks, northernmost well, Pinelawn. Owner: Suffolk County Department of Health Services.

AQUIFER.—Lloyd (confined).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 983 ft, screened 968 to 978 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 86.0 ft above sea level. Measuring point: Top of 4-in PVC coupling, 0.28 ft above land-surface datum.

PERIOD OF RECORD.—June 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 28.63 ft above sea level, March 20, 1991; lowest measured, 22.84 ft above sea level, August 22, 1988.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct 20	26.21	Dec 18	27.17	Feb 17	27.86	Apr 21	27.94	Jun 22	26.55	Aug 25	24.18
Nov 18	26.54	Jan 28	27.30	Mar 30	27.84	May 27	27.62	Jul 22	25.27	Sep 29	24.66

## PRIMARY WELLS

410038072284202. Local number, S91814.1

LOCATION.—Lat 40°58'01", long 72°35'44", Hydrologic Unit 02030202, at east side of Manor Lane, south of Sound Avenue, 155 ft north of power lines, southernmost well, Jamesport. Owner: Suffolk County Department of Health Services.

AQUIFER.—Upper glacial (water table).

WELL CHARACTERISTICS.—Drilled PVC observation well, diameter 4 in., depth 77 ft, screened 67 to 72 ft.

INSTRUMENTATION.—Measurement with chalked steel tape by United States Geological Survey personnel.

DATUM.—Land-surface datum is 53.0 ft above sea level. Measuring point: Top of 4-in PVC coupling, 0.04 ft above land-surface datum.

PERIOD OF RECORD.—September 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 12.69 ft above sea level, June 18, 1990; lowest measured, 5.77 ft above sea level, October 31 and November 4, 1988.

WATER LEVEL, IN FEET IN REFERENCE TO SEA LEVEL, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar 23	9.76	May 18	9.99	Jun 25	9.48	Jul 15	8.90	Aug 25	8.41	Sep 27	8.65

GROUND-WATER LEVELS: KINGS, QUEENS, AND SUFFOLK COUNTIES  
SECONDARY WELLS

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Station number	Local number	Latitude	Longitude	Aquifer unit code	Start of record	Altitude of land surface (ft, msl)	Screen interval (feet below land surface)		Date	Water level (ft, msl)
							Top	Bottom		
404057073583701	K19. 1	404058	0735840	112JMCO	1954	46.9	--	--	03-23-1999	8.43
403503073525101	K1057. 1	403503	0735251	211LLYD	1944	13.0	--	--	10-30-1998	4.31
									03-23-1999	5.44
403748073422603	N1115. 3	403748	0734226	112GLCLU	1990	22.0	--	--	03-24-1999	10.33
403637073434502	N1422. 2	403637	0734345	112GLCLU	1964	16.0	--	--	03-25-1999	7.72
404052073414201	N1613. 1	404052	0734142	211MGTY	1968	25.0	--	--	03-30-1999	15.74
404532073420901	N1802. 2	404512	0734210	211LLYD	1946	131.0	641	691	05-04-1999	2.88
403842073420201	N3707. 3	403842	0734202	112GLCLU	1968	8.0	15	17	03-24-1999	2.05
403621073441801	N3862. 2	403621	0734418	211MGTY	1968	8.0	295	306	05-17-1999	3.02
403621073441702	N4062. 1	403621	0734418	112JMCO	1968	8.0	137	142	05-17-1999	2.91
404753073440303	N4266. 2	404752	0734403	211LLYD	1954	57.0	377	393	03-30-1999	7.57
403642073433201	N6510. 1	403642	0734332	211MGTY	1958	8.0	455	461	05-19-1999	2.32
404544073265502	N7397. 2	404544	0732655	112GLCLU	1984	154.0	96	101	03-30-1999	69.62
404606073434101	N8970. 1	404606	0734341	112GLCLU	1973	154.0	188	193	03-30-1999	29.28
404347073260702	N9662. 1	404347	0732607	112GLCLU	1981	68.8	52	57	03-30-1999	52.45
404713073445401	N9892. 1	404713	0734454	112GLCLU	1983	32.0	35	45	03-30-1999	10.51
404404073420201	N9983. 1	404404	0734202	211MGTY	1982	108.0	91	96	03-30-1999	42.76
403959073434301	N10001. 1	403959	0734343	112GLCLU	1990	16.0	--	--	03-30-1999	8.48
404823073265901	N10607. 1	404823	0732659	211MGTY	1990	260.5	--	--	03-30-1999	77.75
404910073271601	N10608. 1	404910	0732716	--	1990	249.0	--	--	03-30-1999	71.74
403511073450901	N10620. 1	403511	0734509	211LLYD	1987	4.0	140	150	03-25-1999	7.10
404818073293001	N11453. 1	404818	0732930	112PGQF	1991	207.5	840	860	03-30-1999	43.97
404818073293101	N11454. 1	404818	0732931	211MGTY	1991	207.5	570	590	03-30-1999	77.64
403732073443402	N11573. 1	403731	0734441	211LLYD	1991	8.0	775	795	05-19-1999	5.03
404324073414401	N11577. 1	404324	0734144	211LLYD	1991	45.5	700	720	03-30-1999	18.28
404323073414401	N11580. 1	404323	0734144	211MGTY	1991	44.5	430	450	03-30-1999	9.05
403732073443403	N11634. 1	403733	0734443	211MGTY	1991	8.5	535	555	05-19-1999	-1.95
405030073282101	N12075. 1	405030	0732821	211LLYD	1993	198.0	830	850	03-30-1999	37.84
404708073433301	N12154. 1	404708	0734333	211LLYD	1993	--	495	515	03-30-1999	10.60
404550073500802	Q34. 2	404553	0735008	211LLYD	1946	36.0	--	--	03-30-1999	8.42
404257073493701	Q273. 1	404257	0734937	211LLYD	1952	26.0	308	438	04-08-1999	12.43
404141073471702	Q562. 2	404140	0734716	211LLYD	1946	29.0	499	589	05-06-1999	7.58
404656073503701	Q1373. 1	404656	0735037	211LLYD	1962	50.5	194	206	10-29-1998	4.80
									03-30-1999	4.60
404224073450301	Q2300. 1	404224	0734503	211MGTY	1983	63.7	240	275	05-06-1999	15.07
404503073501901	Q2419. 1	404503	0735019	211LLYD	1972	7.0	221	271	03-30-1999	10.02
404135073440102	Q2443. 1	404135	0734402	211MGTY	1984	55.6	320	360	05-06-1999	15.70
404040073445001	Q2955. 1	404040	0734450	211MGTY	1967	25.0	405	445	05-06-1999	9.79
404403073485801	Q3015. 1	404403	0734858	211MGTY	1982	102.0	170	210	05-14-1999	17.10



GROUND-WATER LEVELS: SUFFOLK COUNTY  
SECONDARY WELLS

Station number	Local number	Latitude	Longitude	Aquifer unit code	Start of record	Altitude of land surface (ft, msl)	Screen interval (feet below land surface)		Date	Water level (ft, msl)
							Top	Bottom		
405410073281401	S9. 1	405418	0732816	211LLYD	1955	128.1	505	565	05-14-1999	15.40
405327073184301	S49. 1	405326	0731844	211LLYD	1946	132.0	747	762	04-14-1999	32.10
404957073073701	S1811. 2	404957	0730737	112GLCLU	1987	57.7	28	31	03-30-1999	56.60
404659073141801	S1815. 3	404659	0731418	112GLCLU	1984	72.5	50	54	04-02-1999	48.50
405109072513001	S2485. 1	405109	0725130	112GLCLU	1948	69.0	65	75	03-30-1999	36.00
404509073152301	S3516. 1	404509	0731523	112GLCLU	1942	60.0	--	--	03-30-1999	38.20
404918072560301	S3530. 1	404918	0725603	112GLCLU	1907	65.6	--	--	03-30-1999	33.50
405121072415601	S3539. 1	405121	0724156	112GLCLU	1942	79.0	--	--	03-31-1999	25.40
405607072393502	S4523. 2	405607	0723935	112GLCLU	1981	17.4	--	--	03-23-1999	10.30
405220072493101	S6441. 2	405220	0724931	--	1991	49.5	--	--	03-23-1999	38.10
405347072494001	S6443. 1	405347	0724940	112GLCLU	1949	55.0	--	--	03-23-1999	42.30
405507072244402	S8831. 2	405511	0722445	112GLCLU	1976	20.0	--	--	03-25-1999	7.70
405307072323503	S8835. 2	405307	0723235	112GLCLU	1981	30.5	--	--	03-31-1999	9.40
405948072172101	S8844. 1	405907	0721512	112GLCLU	1950	19.4	--	--	03-25-1999	6.60
404915072531801	S9129. 1	404914	0725317	112GLCLU	1982	34.0	--	--	03-23-1999	14.40
404831072530501	S9130. 1	404829	0725305	112GLCLU	1952	26.0	25	28	03-23-1999	10.60
404446073191801	S9646. 1	404446	0731918	112GLCLU	1958	51.0	--	--	03-23-1999	40.90
404225073234201	S10314. 1	404225	0732342	112GLCLU	1958	48.0	--	--	03-23-1999	32.30
404347073195501	S10370. 1	404347	0731955	--	1958	38.0	--	--	03-23-1999	26.90
404433073212701	S11204. 1	404433	0732127	--	1958	53.0	--	--	03-23-1999	43.30
404540073211001	S11240. 1	404540	0732110	112GLCLU	1958	61.0	--	--	03-23-1999	53.50
410034072094701	S15048. 1	410035	0720948	112GLCLU	1974	20.0	31	46	03-25-1999	6.90
405308073175101	S15514. 1	405308	0731751	211MGTY	1984	200.0	533	593	04-15-1999	38.20
404200073252701	S16480. 1	404200	0732527	112GLCLU	1958	39.0	35	45	03-23-1999	30.30
405843072352902	S16756. 2	405843	0723529	112GLCLU	1975	61.0	59	62	03-23-1999	8.00
410356072260301	S16780. 1	410356	0722603	112GLCLU	1958	43.0	47	50	03-23-1999	3.90
405355073174801	S16883. 1	405355	0731748	112GLCLU	1958	56.8	--	--	03-30-1999	30.30
405446073180701	S16884. 1	405446	0731807	112GLCLU	1958	34.0	40	43	03-26-1999	20.10
405040073175801	S19057. 1	405040	0731758	211MGTY	1970	150.0	604	676	05-11-1999	57.50
404902073094001	S22577. 1	404902	0730940	211MGTY	1964	60.0	724	734	03-31-1999	42.00
404902073094002	S22578. 1	404902	0730940	211MGTY	1964	60.0	392	402	03-31-1999	42.20
404902073094003	S22579. 1	404902	0730940	112GLCLU	1964	60.0	200	210	03-31-1999	42.20
404828073114002	S22580. 1	404828	0731140	211MGTY	1964	123.0	792	802	03-26-1999	39.80
404828073114004	S22582. 1	404828	0731140	112GLCLU	1964	123.7	105	115	03-31-1999	41.90
405047073120601	S23631. 1	405047	0731207	211MGTY	1977	40.0	494	595	04-20-1999	31.90
405140073222101	S23998. 1	405140	0732221	211MGTY	1970	220.0	525	597	05-11-1999	61.50
404818073135904	S24773. 1	404813	0731356	211MGTY	1966	118.4	412	422	03-26-1999	45.10
404703073264202	S29777. 1	404710	0732640	211MGTY	1967	193.0	387	397	03-26-1999	76.90
405124072353701	S30230. 1	405124	0723537	211MGTY	1970	45.0	805	825	03-31-1999	12.70
405411072232901	S31037. 1	405411	0722329	211MGTY	1980	36.0	--	--	04-27-1999	8.60
405838072114201	S31653. 1	405837	0721137	211MGTY	1974	68.0	420	460	04-27-1999	10.60
404046073252101	S32501. 1	404047	0732521	211MGTY	1972	26.0	560	630	04-15-1999	14.00
405336073073601	S33500. 1	405340	0730735	211MGTY	1970	148.0	485	548	04-20-1999	44.60
405715072193701	S33921. 1	405715	0721937	112GLCLU	1973	110.0	159	174	03-25-1999	20.30
405246073142801	S34460. 1	405250	0731429	211MGTY	1970	153.0	531	596	04-22-1999	37.60
405505072432201	S36013. 1	405505	0724322	112GLCLU	1970	47.0	--	--	03-23-1999	22.40
404930073120002	S36142. 2	404930	0731200	112GLCLU	1980	81.0	--	--	03-31-1999	44.80
404656073081401	S36143. 1	404656	0730814	112GLCLU	1969	72.0	59	62	03-23-1999	33.10
405259072465601	S36147. 1	405259	0724656	112GLCLU	1970	47.8	--	--	03-23-1999	36.60
405117072490301	S36150. 1	405117	0724903	112GLCLU	1951	50.0	--	--	03-23-1999	34.60
404236073225001	S37681. 1	404232	0732256	211MGTY	1976	42.0	--	--	04-15-1999	28.20
410400072195301	S38461. 1	410400	0721953	112GLCLU	1970	12.0	--	--	03-25-1999	5.70
404921073122703	S38491. 1	404920	0731225	211MGTY	1984	61.0	320	383	04-15-1999	39.40
405924072321501	S39269. 1	405924	0723215	112GLCLU	1983	13.6	--	--	03-23-1999	3.80
405206073153002	S40842. 2	405206	0731530	--	1975	91.6	60	63	03-26-1999	49.60
405510073063401	S40849. 1	405510	0730634	112GLCLU	1971	80.5	--	--	03-25-1999	42.30
405646072564301	S40852. 1	405656	0725643	112GLCLU	1971	114.6	95	97	03-23-1999	32.70
405610072562501	S40853. 2	405610	0725625	112GLCLU	1985	100.2	74	78	03-23-1999	40.10

## SECONDARY WELLS

Station number	Local number	Latitude	Longitude	Aquifer unit code	Start of record	Altitude of land surface (ft, msl)	Screen interval (feet below land surface)		Date	Water level (ft, msl)
							Top	Bottom		
405223073021301	S41050. 1	405222	0730213	112GLCLU	1972	89.4	67	69	03-23-1999	69.80
405357073194802	S42681. 2	405354	0731948	112GLCLU	1983	83.5	75	80	03-26-1999	32.70
405016073200101	S42682. 1	405016	0732001	112GLCLU	1972	159.2	--	--	03-26-1999	74.00
404305073161401	S42762. 1	404305	0731615	211MGTY	1976	26.0	650	710	04-15-1999	19.40
404820073073402	S43641. 1	404820	0730734	211MGTY	1984	99.9	--	--	04-15-1999	42.50
404124073241601	S43809. 1	404124	0732416	112GLCLU	1974	34.0	24	34	03-23-1999	21.00
405132073181401	S45207. 1	405132	0731814	112GLCLU	1974	165.0	134	144	03-26-1999	64.00
405005073233701	S45208. 1	405005	0732337	112GLCLU	1974	185.3	123	133	03-26-1999	77.30
404945073174501	S45210. 1	404945	0731745	112GLCLU	1974	130.2	97	107	03-26-1999	65.50
404508073080902	S45636. 1	404508	0730809	112GLCLU	1974	14.1	17	27	03-23-1999	9.60
405231073250500	S46281. 1	405231	0732505	112GLCLU	1974	34.0	38	50	03-26-1999	20.70
404823073211800	S46283. 1	404823	0732118	112GLCLU	1974	275.0	225	235	03-26-1999	71.20
405828072115101	S46523. 1	405828	0721150	112GLCLU	1972	64.5	94	97	03-25-1999	10.60
405746072175901	S46527. 1	405747	0721800	112GLCLU	1972	75.0	--	--	03-25-1999	23.90
405842072211401	S46528. 1	405843	0722115	112GLCLU	1972	125.5	99	102	03-30-1999	41.30
405602072221802	S46529. 2	405602	0722248	112GLCLU	1983	70.0	77	81	03-25-1999	17.30
405147072305001	S46532. 1	405147	0723050	112GLCLU	1972	24.0	--	--	03-31-1999	4.10
405302072313501	S46533. 1	405302	0723135	112GLCLU	1972	84.7	--	--	03-31-1999	6.90
405230072341901	S46534. 1	405230	0723419	112GLCLU	1973	82.0	81	84	03-31-1999	12.20
405144072333701	S46535. 1	405144	0723337	112GLCLU	1972	44.5	--	--	04-02-1999	9.30
405324072352101	S46536. 1	405324	0723521	112GLCLU	1976	24.7	--	--	03-31-1999	12.90
405130072353101	S46537. 1	405130	0723531	112GLCLU	1972	56.2	--	--	03-31-1999	13.40
405348072370401	S46538. 1	405340	0723709	112GLCLU	1972	61.3	--	--	03-31-1999	27.30
405353072403801	S46541. 1	405342	0724057	112GLCLU	1972	27.3	--	--	03-31-1999	18.30
405301072415101	S46542. 1	405301	0724151	112GLCLU	1972	163.0	--	--	03-31-1999	27.40
405131072455701	S46546. 1	405131	0724557	112GLCLU	1972	127.0	--	--	03-31-1999	30.40
405620073022001	S46549. 1	405624	0730221	112GLCLU	1972	97.0	97	101	03-23-1999	25.40
404804072484101	S46713. 1	404804	0724841	211MGTY	1977	20.0	385	440	04-22-1999	13.20
405230073164400	S46965. 1	405230	0731644	112GLCLU	1974	166.0	138	148	03-26-1999	47.20
405407073001101	S47310. 1	405407	0730011	211MGTY	1976	135.0	623	693	04-27-1999	53.00
404804073051300	S47453. 1	404804	0730513	211MGTY	1975	100.0	380	440	04-20-1999	43.80
404829072463101	S47489. 1	404829	0724631	112GLCLU	1973	--	25	31	03-23-1999	11.70
405004072515400	S47750. 1	405004	0725154	112GLCLU	1974	95.0	83	93	03-23-1999	28.60
404607072594701	S47752. 1	404607	0725947	112GLCLU	1974	24.0	88	98	03-23-1999	8.20
405412072441401	S47753. 1	405405	0724427	112GLCLU	1974	45.0	90	100	03-23-1999	25.60
405412072441402	S47754. 1	405405	0724427	112GLCLU	1974	45.0	29	39	03-23-1999	25.60
404941072414801	S48442. 1	404941	0724148	112GLCLU	1974	44.0	42	52	03-31-1999	13.20
410243071560101	S48519. 1	410242	0715605	112GLCLU	1974	63.5	68	78	03-30-1999	3.10
405335072562903	S49606. 1	405337	0725629	211MGTY	1983	75.0	307	367	04-27-1999	47.90
405120073085101	S50500. 1	405120	0730851	112GLCLU	1974	118.0	81	85	03-26-1999	71.20
405059073085601	S50501. 1	405059	0730757	112GLCLU	1974	73.6	60	64	03-31-1999	71.80
405010073103101	S50505. 1	405010	0731031	112GLCLU	1973	50.0	6	10	03-25-1999	46.70
405146073141001	S50512. 1	405146	0731410	112GLCLU	1973	84.5	--	--	03-31-1999	39.70
405100073152601	S50513. 1	405100	0731526	112GLCLU	1974	93.0	57	61	03-26-1999	48.40
404432073151303	S50546. 1	404432	0731513	211MGTY	1976	39.0	604	665	04-20-1999	27.40
410430072202301	S51176. 1	410430	0722023	112GLCLU	1974	39.6	47	57	03-25-1999	4.50
410047072184701	S51186. 1	410047	0721847	112GLCLU	1974	24.1	30	40	03-25-1999	2.50
404353073215801	S51298. 1	404353	0732158	211MGTY	1984	54.3	--	--	04-22-1999	37.10
405808072385401	S51568. 1	405808	0723854	112GLCLU	1974	56.0	58	68	03-23-1999	10.40
405805072403701	S51571. 1	405805	0724037	112GLCLU	1974	88.0	95	105	03-23-1999	9.20
405544072411802	S51575. 2	405544	0724118	112GLCLU	1994	33.0	--	--	03-23-1999	18.20
405630072442001	S51577. 1	405630	0724420	112GLCLU	1974	80.0	83	93	03-23-1999	20.10
405542072463001	S51579. 1	405542	0724630	112GLCLU	1974	78.0	75	85	03-23-1999	30.10
405722072342001	S51581. 1	405722	0723420	112GLCLU	1974	32.0	32	42	03-23-1999	8.20
410516072200901	S52084. 1	410516	0722009	112GLCLU	1974	28.4	62	72	03-25-1999	3.10
405512072395202	S52449. 1	405512	0723952	112GLCLU	1974	23.0	28	38	03-23-1999	7.90
405354073021202	S52490. 1	405355	0730212	211MGTY	1978	137.0	480	554	04-22-1999	52.60
404944072380901	S52551. 1	404944	0723809	112GLCLU	1974	27.8	20	25	03-31-1999	10.10



## GROUND-WATER LEVELS: SUFFOLK COUNTY—Continued

## SECONDARY WELLS

Station number	Local number	Latitude	Longitude	Aquifer unit code	Start of record	Altitude of land surface (ft, msl)	Screen interval (feet below land surface)		Date	Water level (ft, msl)
							Top	Bottom		
405924072342301	S53333. 1	405924	0723423	112GLCLU	1975	51.0	62	72	03-23-1999	6.20
405032073162802	S53360. 1	405034	0731618	211MGTY	1984	141.0	551	667	04-20-1999	49.30
404950073085002	S53498. 1	404948	0730847	211MGTY	1977	90.0	663	718	04-15-1999	45.20
405123072533701	S54883. 1	405049	0725310	112GLCLU	1975	79.9	--	--	03-23-1999	34.80
									03-30-1999	34.90
405706072345601	S54885. 1	405706	0723456	112GLCLU	1975	11.1	16	20	03-30-1999	9.20
405242072381801	S54886. 1	405241	0723818	112GLCLU	1975	59.4	51	55	03-31-1999	19.20
405120073231801	S55049. 1	405120	0732318	112GLCLU	1975	207.0	175	179	03-26-1999	58.50
404500073062101	S56030. 1	404500	0730621	112GLCLU	1994	--	26	31	03-23-1999	19.20
405326072275601	S57366. 1	405326	0722756	112GLCLU	1975	55.4	60	64	10-30-1998	4.60
									11-20-1998	4.40
									03-25-1999	4.10
405900072192901	S57369. 1	405855	0721926	112GLCLU	1975	76.0	93	97	03-25-1999	15.40
404722073093401	S57458. 1	404722	0730934	--	1976	47.4	--	--	03-23-1999	32.50
404651073095701	S57470. 1	404651	0730957	--	1976	28.0	--	--	03-23-1999	25.00
405123073125101	S57484. 1	405123	0731251	112GLCLU	1975	15.5	15	19	03-31-1999	11.10
405048073122801	S57488. 1	405048	0731228	112GLCLU	1975	30.0	--	--	03-26-1999	28.40
405514073050103	S57980. 1	405514	0730501	211MGTY	1977	187.0	630	700	04-20-1999	41.10
410040072002501	S58921. 1	410040	0720024	112GLCLU	1976	48.0	67	72	03-30-1999	2.90
410356071544201	S58922. 1	410355	0715444	112GLCLU	1976	47.8	51	56	03-25-1999	3.20
405933072093401	S58924. 1	405934	0720932	112GLCLU	1976	110.3	132	137	03-25-1999	8.90
405950072124501	S58925. 1	405952	0721245	112GLCLU	1976	72.0	85	90	03-25-1999	10.20
405737072215801	S58958. 1	405738	0722159	112GLCLU	1976	190.0	203	208	03-25-1999	30.10
405816072162801	S58959. 1	405808	0722035	112GLCLU	1976	187.5	195	200	03-25-1999	16.80
405827072190501	S58960. 1	405827	0721905	112GLCLU	1976	134.2	150	155	03-25-1999	26.20
405615072182301	S59793. 1	405616	0721823	211MGTY	1984	34.0	512	522	03-25-1999	11.70
405642072240001	S59992. 1	405642	0722400	211MGTY	1977	24.2	268	278	03-25-1999	5.60
405559072145901	S60123. 1	405600	0721500	211MGTY	1984	12.0	270	280	03-25-1999	8.10
405616072182301	S62393. 1	405616	0721823	112GLCLU	1984	34.0	30	34	03-25-1999	15.20
405600072150002	S62395. 1	405600	0721500	112GLCLU	1984	12.0	10	14	03-25-1999	7.10
410111072010101	S62397. 1	410111	0720101	112GLCLU	1980	57.2	61	65	03-25-1999	3.80
405604073080001	S62407. 1	405604	0730800	112GLCLU	1977	40.0	41	45	03-25-1999	13.80
404415073114001	S63618. 1	404416	0731137	211MGTY	1984	20.0	490	550	04-20-1999	19.40
404356073105501	S63830. 1	404356	0731055	--	1978	17.7	--	--	03-23-1999	13.60
404345073124001	S63835. 1	404345	0731240	--	1978	13.5	--	--	03-23-1999	8.80
405652072590003	S64023. 1	405643	0725859	211MGTY	1984	160.0	709	791	04-22-1999	27.70
404210073182501	S64192. 1	404210	0731825	--	1978	17.6	--	--	03-23-1999	10.10
404659073202001	S64313. 1	404659	0732020	112GLCLU	1979	89.4	25	30	03-23-1999	75.10
404746073221901	S64316. 1	404746	0732219	112GLCLU	1979	160.1	58	63	03-26-1999	112.60
404900073242801	S64317. 1	404900	0732428	112GLCLU	1978	149.6	78	83	03-26-1999	77.20
404813073084102	S65601. 1	404813	0730841	112GLCLU	1978	62.6	38	41	03-23-1999	40.10
405030073180601	S65602. 1	405030	0731806	112GLCLU	1978	146.0	91	96	03-26-1999	72.40
404713072575701	S65603. 1	404718	0725749	112GLCLU	1978	54.0	65	70	03-23-1999	26.50
405003073155201	S65607. 1	405003	0731552	112GLCLU	1978	138.0	97	102	03-26-1999	52.90
405200073082101	S65608. 1	405200	0730821	--	1978	105.0	67	72	03-31-1999	66.70
405351072535101	S65855. 1	405351	0725351	112GLCLU	1978	77.6	28	32	03-23-1999	50.60
405058073050901	S66496. 1	405058	0730509	211MGTY	1984	127.0	--	--	04-22-1999	55.60
405345072591101	S66507. 1	405345	0725911	112GLCLU	1979	100.0	68	72	03-23-1999	55.10
405014072564001	S66508. 1	405013	0725640	112GLCLU	1979	66.0	55	60	03-23-1999	39.20
405002073043501	S66509. 1	405002	0730435	112GLCLU	1979	139.7	109	114	03-23-1999	55.70
405441073043501	S66510. 1	405350	0730316	112GLCLU	1979	137.8	--	--	03-23-1999	54.90
405644073051201	S66511. 1	405644	0730512	112GLCLU	1979	105.0	--	--	03-25-1999	13.30
405504073011201	S66512. 1	405504	0730112	112GLCLU	1979	120.6	99	104	03-23-1999	52.40
404949073215101	S66847. 1	404949	0732151	112GLCLU	1978	170.8	97	102	03-26-1999	77.80
405255073044301	S67564. 1	405255	0730443	112GLCLU	1980	103.0	80	85	03-25-1999	59.40
404612073055003	S68552. 1	404612	0730550	211MGTY	1984	57.0	--	--	04-20-1999	30.50
405551072561601	S69364. 1	404551	0725616	211MGTY	1983	32.8	--	--	04-22-1999	11.00
410343071533101	S70262. 1	410343	0715331	112GLCLU	1981	50.5	158	163	03-25-1999	3.50

GROUND-WATER LEVELS: SUFFOLK COUNTY—Continued  
SECONDARY WELLS

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Station number	Local number	Latitude	Longitude	Aquifer unit code	Start of record	Altitude of land surface (ft, msl)	Screen interval (feet below land surface)		Date	Water level (ft, msl)
							Top	Bottom		
410213071572202	S70263. 1	410213	0715722	112GLCLU	1981	27.8	40	45	03-25-1999	3.80
405155073045203	S70488. 1	405158	0730448	211MGTY	1984	95.6	344	437	04-20-1999	57.70
410219071591101	S70614. 1	410219	0715911	112GLCLU	1981	86.0	90	95	03-25-1999	3.70
410320071570601	S70617. 1	410320	0715706	112GLCLU	1982	72.7	93	97	03-25-1999	10.60
410330071563901	S70618. 1	410330	0715639	112GLCLU	1981	85.6	100	105	03-25-1999	3.40
410414071515901	S70627. 1	410414	0715159	112GLCLU	1981	90.1	90	95	03-25-1999	15.40
404807072590801	S71785. 1	404807	0725908	211MGTY	1984	71.9	--	--	04-27-1999	35.20
405858072213602	S73999. 1	405858	0722135	211MGTY	1984	99.7	584	594	10-30-1998	11.70
									11-20-1998	11.60
404750073225302	S74284. 2	404750	0732253	211MGTY	1984	154.0	699	704	03-26-1999	70.10
404750073225303	S74285. 1	404750	0732253	211MGTY	1984	154.3	440	445	03-26-1999	71.20
404750073225304	S74286. 1	404750	0732253	211MGTY	1984	154.6	107	112	03-26-1999	72.60
405418072511201	S74289. 1	405417	0725116	112GLCLU	1983	76.8	40	44	03-23-1999	46.50
405421072474501	S74291. 1	405421	0724745	112GLCLU	1983	44.4	15	19	03-23-1999	39.70
405115072370501	S74300. 1	405127	0723643	112GLCLU	1983	75.0	68	72	03-31-1999	16.40
405434072421401	S74302. 1	405422	0724233	112GLCLU	1983	36.5	40	44	03-31-1999	20.40
405419072381201	S74304. 1	405417	0723810	112GLCLU	1983	25.3	25	29	03-31-1999	9.90
404849073261201	S74585. 1	404849	0732612	211MGTY	1984	365.0	452	455	03-26-1999	70.30
404530073181102	S76016. 2	404530	0731811	211MGTY	1984	63.5	752	757	03-23-1999	42.70
404530073181103	S76017. 1	404530	0731811	211MGTY	1984	63.2	495	500	03-23-1999	42.20
404530073181104	S76018. 1	404530	0731811	211MGTY	1984	63.0	186	191	03-23-1999	42.30
404530073181105	S76019. 1	404530	0731811	112GLCLU	1984	63.0	57	62	03-23-1999	53.20
404852073024202	S76478. 1	404852	0730242	112GLCLU	1984	104.8	70	75	03-23-1999	48.50
404942073175503	S76674. 1	404942	0731755	211MGTY	1984	130.0	455	460	03-26-1999	64.30
404942073175504	S76675. 1	404942	0731755	211MGTY	1984	130.0	245	250	03-26-1999	65.10
405446072524801	S76834. 1	405446	0725248	112GLCLU	1984	87.9	44	48	03-23-1999	50.60
405004072515402	S78323. 1	405004	0725154	211MGTY	1985	95.0	331	336	03-23-1999	28.10
404846072533204	S84806. 1	404846	0725332	211MGTY	1987	17.6	839	849	03-23-1999	23.80
404846072533201	S84807. 1	404846	0725332	211MGTY	1987	17.7	545	556	03-23-1999	21.00
404846072533203	S84808. 1	404846	0725332	211MGTY	1987	17.5	101	106	03-23-1999	11.20
404846072533202	S85712. 1	404846	0725332	112GLCLU	1987	17.5	21	22	03-23-1999	11.10
405405072442701	S89534. 1	405405	0724427	211MGTY	1994	44.0	782	792	03-23-1999	25.60
405405072442702	S89535. 1	405405	0724427	211MGTY	1990	44.0	510	520	03-23-1999	26.70
405405072442703	S89536. 1	405405	0724427	211MGTY	1990	44.0	260	270	03-23-1999	26.90
405038072431104	S94489. 1	405038	0724311	211MGTY	1990	46.0	824	834	03-31-1999	16.50
404759073251701	S95963. 1	404759	0732517	112GLCLU	1994	170.0	180	190	03-26-1999	76.70
404759073251702	S95964. 1	404759	0732517	211MGTY	1994	170.5	396	406	03-26-1999	76.10
405914072190803	S105710. 1	405914	0721908	211MGTY	1995	44.1	437	447	03-25-1999	10.50
405844072191702	S105711. 1	405844	0721917	211MGTY	1995	114.5	372	382	03-25-1999	12.50
405914072190802	S106182. 1	405914	0721908	112GLCLU	1994	43.8	45	55	03-25-1999	18.20
405844072191701	S106185. 1	405844	0721917	112GLCLU	1994	114.2	115	125	03-25-1999	64.50
405741072161801	S106189. 1	405741	0721618	112GLCLU	1994	70.3	77	87	03-25-1999	14.30

Aquifer unit code	Description
112GLCLU	Upper glacial aquifer, Pleistocene age.
112PLSC	Pleistocene deposit, undifferentiated
112PGFG	Port Washington confining unit, Pleistocene age.
112PGQF	Port Washington aquifer, Pleistocene age.
112GRDR	Gardiners Clay, Pleistocene age.
112JMCO	Jameco Gravel, Pleistocene age.
211MGTY	Magothy aquifer, Cretaceous age.
211RCNF	Raritan confining unit, Cretaceous age.
211LLYD	Lloyd aquifer, Cretaceous age.



## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

## NASSAU COUNTY

The following wells were sampled for water quality during the 1999 water year by the agency listed below.  
For further information, contact:

Nassau County Department of Health  
New Office Building  
240 Old Country Road  
Mineola, NY 11501

Local identifier	Local identifier	Local identifier	Local identifier	Local identifier	Local identifier	Local identifier	Local identifier
N14	N2414	N4265	N5308	N6867	N7773	N8474	N9521
N17	N2578	N4298	N5318	N6893	N7776	N8475	N9591
N22	N2597	N4327	N5320	N6915	N7781	N8480	N9613
N36	N2602	N4388	N5322	N6916	N7785	N8497	N9768
N37	N2613	N4389	N5528	N6945	N7796	N8526	N9792
N68	N2748	N4390	N5596	N6953	N7797	N8557	N9809
N69	N2920	N4393	N5603	N6956	N7831	N8558	N9846
N72	N3185	N4400	N5653	N7058	N7852	N8576	N9878
N79	N3327	N4405	N5654	N7076	N7855	N8595	N9910
N80	N3443	N4411	N5656	N7104	N7857	N8603	N9976
N81	N3456	N4425	N5672	N7117	N7873	N8657	N10033
N82	N3465	N4448	N5695	N7157	N7892	N8658	N10103
N83	N3474	N4450	N5696	N7298	N7957	N8664	N10144
N95	N3475	N4451	N5703	N7353	N8004	N8665	N10149
N97	N3498	N4512	N5710	N7377	N8007	N8713	N10195
N101	N3523	N4602	N5762	N7407	N8010	N8767	N10206
N103	N3603	N4623	N5767	N7414	N8011	N8768	N10207
N104	N3604	N4756	N5792	N7421	N8031	N8776	N10208
N118	N3605	N4757	N5852	N7445	N8043	N8778	N10286
N119	N3668	N4758	N5876	N7446	N8054	N8779	N10401
N133	N3704	N4759	N5947	N7482	N8183	N8818	N10408
N134	N3720	N4860	N6042	N7512	N8195	N8837	N10451
N152	N3732	N5007	N6077	N7513	N8196	N8941	N10555
N198	N3733	N5099	N6087	N7515	N8214	N8956	N10557
N570	N3745	N5121	N6092	N7516	N8216	N8957	N10612
N585	N3876	N5129	N6093	N7521	N8217	N8976	N10863
N687	N3878	N5145	N6146	N7522	N8218	N8979	N10889
N1298	N3881	N5147	N6148	N7523	N8233	N9068	N11004
N1328	N3905	N5148	N6149	N7526	N8248	N9076	N11037
N1346	N3934	N5152	N6150	N7548	N8250	N9151	N11107
N1601	N3935	N5153	N6190	N7549	N8251	N9173	N11295
N1602	N3937	N5155	N6192	N7551	N8253	N9180	N11509
N1603	N3953	N5156	N6315	N7552	N8264	N9210	N11647
N1651	N4043	N5163	N6442	N7561	N8279	N9211	N11909
N1697	N4077	N5187	N6443	N7562	N8321	N9212	N12217
N1715	N4082	N5193	N6450	N7593	N8339	N9308	N12218
N1716	N4095	N5194	N6580	N7620	N8342	N9334	N12525
N1802	N4096	N5195	N6644	N7649	N8354	N9338	N12535
N1870	N4097	N5201	N6651	N7650	N8355	N9446	N12560
N1958	N4118	N5209	N6657	N7651	N8409	N9452	N12639
N2028	N4132	N5260	N6744	N7665	N8414	N9463	N12727
N2030	N4206	N5302	N6745	N7720	N8420	N9488	N12734
N2052	N4243	N5303	N6817	N7747	N8426	N9514	N12735
N2214	N4245	N5304	N6866	N7772	N8457	N9520	N12795
N2400							

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

## NASSAU COUNTY (Continued)

The following wells were sampled for water quality during the 1999 water year by the agency listed below.  
For further information, contact:

Nassau County Department of Public Works  
Water Supply Unit  
170 Cantiague Rock Road  
Hicksville, NY 11801

Local identifier	Local identifier	Local identifier	Local identifier	Local identifier	Local identifier	Local identifier	Local identifier
N9	N7478	N9168	N9906	N10007	N11572	N12038	N12483
N180	N8046	N9188	N9907	N10009	N11573	N12076	N12506
N511	N8052	N9190	N9918	N10019	N11574	N12079	N12511
N1115	N8269	N9271	N9919	N10020	N11576	N12114	N12522
N1139	N8309	N9314	N9920	N10084	N11579	N12134	N12523
N1148	N8430	N9332	N9921	N10094	N11617	N12151	N12613
N1152	N8550	N9333	N9922	N10101	N11618	N12152	N12618
N1194	N8629	N9353	N9925	N10192	N11643	N12153	N12635
N1197	N8630	N9354	N9926	N10245	N11659	N12154	N12636
N1201	N8631	N9356	N9928	N10252	N11672	N12191	N12646
N1205	N8669	N9471	N9929	N10291	N11676	N12232	N12665
N1223	N8715	N9473	N9930	N10604	N11723	N12238	N12667
N1231	N8831	N9476	N9932	N10605	N11724	N12239	N12697
N1232	N8838	N9478	N9933	N10606	N11729	N12249	N12733
N1236	N8847	N9607	N9934	N10607	N11733	N12252	N12747
N1253	N8875	N9646	N9935	N10608	N11736	N12256	N12754
N1278	N8876	N9651	N9945	N10609	N11737	N12259	N12755
N1280	N8888	N9654	N9946	N10730	N11780	N12262	N12768
N1281	N8953	N9655	N9948	N10732	N11783	N12263	N12774
N1426	N8958	N9656	N9959	N10882	N11798	N12264	N12775
N1439	N8939	N9657	N9961	N10899	N11824	N12277	N12785
N1449	N8984	N9658	N9962	N10902	N11832	N12318	N12790
N2269	N9054	N9660	N9964	N11167	N11833	N12319	N12793
N2635	N9057	N9661	N9966	N11168	N11865	N12320	N12853
N3867	N9059	N9663	N9968	N11279	N11957	N12343	N12855
N4213	N9078	N9667	N9980	N11281	N11958	N12361	N12870
N6367	N9089	N9670	N9981	N11397	N11961	N12362	N12895
N6670	N9100	N9776	N9983	N11453	N11962	N12464	N12921
N7397	N9117	N9840	N10005	N11454	N11986	N12465	N12929
N7450	N9127	N9896	N10006	N11455	N11988	N12469	

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

## SUFFOLK COUNTY

The following wells were sampled for water quality during the 1999 water year by the agency listed below. For further information, contact:

Suffolk County Water Authority  
Sunrise Highway  
Oakdale, NY 11769

Local identifier	Local identifier	Local identifier	Local identifier	Local identifier	Local identifier	Local identifier	Local identifier	Local identifier
S8	S20705	S29411	S36748	S43001	S52945	S64062	S73332	S101321
S75	S20839	S29491	S36791	S43117	S53074	S64609	S73492	S101364
S703	S21121	S29492	S36791B	S43641	S53291	S64716	S74505	S101579
S1313	S21244	S29732	S36869	S44640	S53360	S64847	S74573	S101655
S1340	S21247	S30088	S36965	S44774	S53361	S65505	S74865	S101755
S1341	S21375	S30117	S36976	S44774B	S53497	S65766	S76672	S102248
S2415	S21487	S30118	S37140	S45610	S53522	S66183	S76772	S102721
S8439	S21632	S30207	S37141	S45839	S53593	S66184	S77010	S103447
S11105	S22048	S30208	S37301	S45840	S53747	S66366	S78310	S103519
S11810	S22362	S30227	S37351	S46235	S53850	S66429	S78612	S103522
S12130	S22389	S30228	S37494	S46400	S53851	S66496	S79293	S103523
S14326	S22471	S30506	S37681	S46712	S54305	S66657	S81473	S105003
S14710	S22547	S31037	S37847	S46713	S54308	S66733	S82174	S105300
S14792	S22640	S31038	S37861	S46830	S54377	S66758	S83096	S105301
S14828	S22711	S31039	S38192	S46928	S54473	S66881	S83475	S105524
S14921	S22880	S31104	S38194	S47024	S54568	S67074	S83707	S105669
S15500	S23183	S31624	S38320	S47035	S54730	S67197	S84848	S106416
S15501	S23184	S31913	S38321	S47219	S54957	S67656	S85660	S106565
S15514	S23185	S32180	S38491	S47310	S55028	S67819	S88463	S106977
S15746	S23186	S32287	S38701	S47435	S55463	S67925	S89754	S106978
S15776	S23255	S32325	S38784	S47436	S55502	S68161	S89756	S107792
S15923	S23371	S32326	S38785	S47437	S55733	S68230	S90674	S107894
S16129	S23445	S32359	S38916	S47438	S55734	S68552	S93519	S108161
S16175	S23524	S32501	S38917	S47453	S56038	S68666	S93701	S108235
S16309	S23715	S32551	S39024	S47673	S56039	S68690	S93702	S108335
S16497	S23827	S32552	S39347	S47886	S56133	S68880	S93794	S108347
S16892	S23828	S33005	S39536	S47887	S56674	S69024	S94138	S108991
S17037	S23832	S33006	S40161	S48193	S57008	S69364	S94274	S109073
S17474	S24047	S33308	S40330	S48719	S57354	S69511	S94286	S109249
S17689	S24484	S33500	S40331	S49422	S57357	S70008	S96232	S109640
S18261	S24545	S33775	S40497	S49606	S57979	S70155	S96352	S109647
S18729	S24552	S33820	S40498	S50222	S57980	S70459	S96673	S109750
S18846	S24663	S33922	S40709	S50546	S58708	S70488	S97501	S110018
S19048	S24850	S33970	S40710	S51214	S58761	S70767	S97502	S110782
S19198	S25617	S34007	S40711	S51266	S59347	S71038	S98322	S111004
S19317	S25674	S34030	S40837	S51274	S59744	S71083	S98350	S111165
S19399	S25776	S34031	S40838	S51275	S60127	S71533	S98523	S111457
S19408	S26681	S34300	S40980	S51298	S60486	S71715	S98721	S111969
S19465	S27070	S34301	S42226	S51457	S60812	S71785	S99014	S112290
S19584	S27192	S34460	S42227	S51519	S61910	S71881	S99130	S112236
S20057	S27259	S34894	S42270	S51609	S61937	S71882	S99271	S112293
S20300	S27440	S35033	S42473	S51673	S62022	S71892	S99928	S112780
S20369	S27533	S35446	S42504	S51953	S62855	S72245	S99960	S113006
S20479	S27784	S35494	S42505	S52126	S63205	S72271	S100204	S113157
S20530	S28408	S36166	S42760	S52451	S63256	S72300	S100453	S113643
S20566	S28503	S36459	S42761	S52490	S63618	S72326	S100608	S113672
S20635	S28819	S36460	S42762	S52943	S63966	S72917	S100691	S115103
S20689	S28928	S36714	S42827	S52944	S64023	S73144		

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

## SUFFOLK COUNTY (Continued)

The following wells were sampled for water quality during the 1999 water year by the agency listed below.  
For further information, contact:

Suffolk County Department of Health Services  
Office of Water Resources  
220 Rabro Drive East  
Hauppauge, NY 11788

Local identifier	Local identifier	Local identifier	Local identifier	Local identifier	Local identifier	Local identifier
S47232	S48440	S48582	S51174	S51176	S51179	S52050
S48439	S48581	S51172	S51175	S51178	S51180	



**Sample sites**

The following surface-water and ground-water sites were sampled on the given date as part of the New York State Pesticide Monitoring Program and the Brooklyn and Queens Aquifer Study. Ground-water sites include observation wells, industrial supply wells, public supply wells or sampling points in the public supply system after filtering and (or) treatment of raw water, as indicated. A site listed with two well numbers is a sampling point in the public-supply system after filtration where raw water can originate from either of the wells listed. All surface-water and ground-water samples were analyzed in the U.S. Geological Survey laboratory in Arvada, Colorado.

**New York State Pesticide Monitoring Program sites**

N 570. 1	07/23/1999
N 1685. 2	08/02/1999
N 1802. 2	07/28/1999
N 3523. 2	07/28/1999
N 3704. 1	08/05/1999
N 6087. 1	07/28/1999
N 6093. 1	07/23/1999
N 6744. 1	08/12/1999
N 8010. 1	08/11/1999
N 9059. 1	08/09/1999
N 9117. 1	07/27/1999
N 9211. 1	07/30/1999
N 9334. 3	07/30/1999
N 9356. 1	07/27/1999
N 9663. 1	07/26/1999
N 9667. 1	07/26/1999
N 9712. 1	07/27/1999
N 9930. 1	07/20/1999
N 11780. 1	08/11/1999
N 12252. 1	07/26/1999
S 1341. 1	01/25/1999
S 2415. 1	01/25/1999
S 16175. 1	09/14/1999
S 17474. 1	01/25/1999
S 17474. 1	08/25/1999
S 17474. 1,S 28928. 1,FILTERED	01/25/1999
S 17474. 1,S 28928. 1,FILTERED	08/25/1999
S 22362. 1	02/02/1999
S 22362. 1	08/24/1999
S 22362. 1 FILTERED	02/02/1999
S 22362. 1 FILTERED	08/24/1999
S 24850. 1	01/26/1999
S 24850. 1	08/26/1999
S 24850. 1 FILTERED	01/26/1999
S 24850. 1 FILTERED	08/26/1999
S 30088. 1	08/24/1999
S 33775. 1	01/27/1999
S 33775. 1	08/26/1999
S 45208. 1	09/14/1999
S 48429. 1	09/08/1999
S 49422. 1	02/05/1999
S 51566. 1	08/31/1999

S 51953. 1	08/24/1999
S 53593. 1	01/27/1999
S 53593. 1	08/25/1999
S 63825. 1	09/23/1999
S 67819. 1	02/05/1999
S 71569. 1	08/31/1999
S 71715. 1	02/01/1999
S 71715. 1	08/24/1999
S 71715. 1 FILTERED	02/01/1999
S 71715. 1 FILTERED	08/24/1999
S 73332. 1	02/05/1999
S 76772. 1	01/26/1999
S 83472. 1	01/27/1999
S 83707. 1	01/25/1999
S 83707. 1	08/25/1999
S 83707. 1,S 73332. 1,FILTERED	01/25/1999
S 83707. 1,S 73332. 1,FILTERED	08/25/1999
S 89756. 1	01/27/1999
S 93794. 1	01/27/1999
S 93794. 1,S 33775. 1,FILTERED,TREATED	01/27/1999
S 93794. 1,S 33775. 1,FILTERED,TREATED	08/26/1999
S 97501. 1	01/26/1999
S 97502. 1	01/26/1999
S 99928. 1	01/26/1999
S 99928. 1	08/26/1999
S 99928. 1 FILTERED	01/26/1999
S 99928. 1 FILTERED	08/26/1999
S112255. 1	08/12/1999
S112307. 1	09/21/1999
S112329. 3	09/08/1999
S112499. 1	09/14/1999
S112739. 1	07/29/1999
S112740. 1	07/22/1999
S112742. 1	09/21/1999
S115244. 1	08/18/1999
S115250. 1	07/29/1999
S115251. 1	07/29/1999
S115252. 1	07/29/1999
S115253. 1	07/22/1999
S115254. 1	07/22/1999
S115255. 1	07/22/1999
S115256. 1	08/25/1999
S115257. 1	08/03/1999
S115258. 1	08/03/1999
S115259. 1	08/03/1999
S115260. 1	08/18/1999
S115261. 1	08/18/1999
S115262. 1	08/18/1999
S115263. 1	08/18/1999

**Brooklyn and Queens Aquifer Study sites**

K 2510. 1	06/09/1999
K 2582. 1	06/10/1999
K 3133. 1	06/10/1999
K 3246. 2	06/23/1999

K 3248. 1 09/01/1999  
 K 3251. 1 09/01/1999  
 K 3255. 2 07/12/1999  
 K 3256. 2 06/23/1999  
 K 3405. 1 07/12/1999  
 K 3406. 1 07/19/1999  
 K 3407. 1 07/08/1999  
 K 3410. 1 07/07/1999  
 K 3414. 1 07/08/1999  
 K 3425. 1 07/07/1999  
 K 3426. 1 07/15/1999  
 K 3430. 1 07/01/1999  
 K 3431. 1 07/01/1999  
 Q 273. 1 09/03/1999  
 Q 277. 1 07/21/1999  
 Q 470. 1 08/05/1999  
 Q 471. 1 08/11/1999  
 Q 1071. 2 09/15/1999  
 Q 1237. 1 09/14/1999  
 Q 1373. 1 07/28/1999  
 Q 1472. 1 06/08/1999  
 Q 2418. 1 09/13/1999  
 Q 2419. 1 09/13/1999  
 Q 2420. 1 09/13/1999  
 Q 3003. 1 06/09/1999  
 Q 3036. 1 06/21/1999  
 Q 3036. 1 06/24/1999  
 Q 3112. 1 06/30/1999  
 Q 3117. 1 06/30/1999  
 Q 3587. 1 06/28/1999  
 Q 3589. 1 07/15/1999  
 Q 3593. 1 06/24/1999  
 Q 3604. 1 06/24/1999  
 Q 3627. 1 07/14/1999  
 Q 3628. 1 07/14/1999  
 Q 3629. 1 07/14/1999  
 Q 3649. 1 06/28/1999  
 Q 3804. 1 06/22/1999  
 Q 3806. 1 06/22/1999  
 Q 3810. 1 07/21/1999

Alley Creek Near Oakland Gardens, NY  
 (01302050) 07/22/1999

Alley Pond Spring (4045230734440) 07/22/1999  
 Gabblers Creek at Little Neck, NY  
 (01302125) 07/29/1999

#### **Analyses of pesticides in surface-water and ground-water samples (schedule 2001)**

Selected surface-water and ground-water samples from the New York State Pesticide Monitoring Program and the Brooklyn and Queens Aquifer Study sites were analyzed for pesticides on schedule 2001 during the 1999 water year. This table lists the pesticides on the schedule, the National Water Information System parameter code, the unit of measure (micrograms per liter, µg/L), and the reporting level.

**Only pesticides residues detected by the laboratory for one or more samples are listed in the organic water-quality tables.**

**SCHEDULE DESCRIPTION.**--Pesticides in filtered water extracted on C-18 Solid Phase Extraction (SPE) cartridge and analyzed by Gas Chromatography/Mass Spectrometry (GC/MS).

**SAMPLE REQUIREMENTS.**--1 liter of water filtered through 0.7-micron glass-fiber depth filter, chilled at 4° C (packed in ice).

**CONTAINER REQUIREMENTS.**--1 liter baked amber glass bottle (GCC) from OCALA Water Quality Service Unit.

**PCODE.**--The National Water Information System parameter code.

**COMPOUND NAME.**--Pesticide name.

**OTHER NAME.**--Common or trade name(s) for constituent

**MRL.**--Minimum reporting level. .

PCode	Compound name (other name)	MRL (µg/L)
49260	Acetochlor (Harness Plus, Surpass)	0.002
46342	Alachlor (Lasso, Bullet)	0.002
39632	Atrazine (Atrex, Atred)	0.001
04040	Atrazine, Deethyl- (Metabolite of Atrazine)	0.002
82686	Azinphos, Methyl- (Guthion, Gusathion)	0.001
82673	Benfluralin (Benefin, Balan)	0.002
04028	Butylate (Genate Plus, Suntan+)	0.002
82680	Carbaryl (Sevin, Denapan)	0.003
82674	Carbofuran (Furandan, Curaterr)	0.003
38933	Chlorpyrifos (Brodan, Dursban)	0.004
04041	Cyanazine (Bledex, Fortrol)	0.004
82682	DCPA (Dacthal, Chlorthal-dimethyl)	0.002
34653	<i>p,p'</i> -DDE	0.006
39572	Diazinon (Basudin, Diazatol)	0.002
39381	Dieldrin (Panoram D-31, Octalox)	0.001
82660	Diethylaniline (Metabolite of Alachlor)	0.003
82677	Disulfoton (Disyston, Frumin AL)	0.017
82668	EPTC (Eptam, Farmarox)	0.002
82663	Ethalfuralin (Sonalan, Curbit)	0.004
82672	Ethoprop (Mocap, Ethoprophos)	0.003
04095	Fonofos (Dyfonate, Capfos)	0.008
34253	α-HCH (α-BHC, α-lindane)	0.002
39341	γ-HCH (Lindane, γ-BHC)	0.004
82666	Linuron (Lorex, Linex)	0.002
39532	Malathion	0.005
39415	Metolachlor (Dual, Pennant)	0.002
82630	Metribuzin (Lexon, Sencor)	0.004
82671	Molinate (Ordram)	0.004
82684	Napropamide (Devrinol)	0.003
39542	Parathion, Ethyl- (Roethyl-P, Alkron)	0.004
82667	Parathion, Methyl- (Pennacp-M)	0.006
82669	Pebulate (Tillam, PEBL)	0.004
82683	Pendimethalin (Prowl, Stomp, Pre-M)	0.004
82687	Permethrin, <i>cis</i> - (Ambush, Astro)	0.005
82664	Phorate (Thimet, Granutox)	0.002
04037	Prometon (Pramitol, Princep)	0.018
82676	Pronamide (Kerb) (Propyzamid)	0.003
04024	Propachlor (Ramrod, Satecid)	0.007
82679	Propanil (Stampede, Stam)	0.004
82685	Propargite (Omite, Alkyl sulfite)	0.013
04035	Simazine (Princep, Caliber 91)	0.005
82670	Tebuthiuron (Spike, Tebusan)	0.010

PCode	Compound name (other name)	MRL (µg/L)
82665	Terbacil (Sinbar)	0.007
82675	Terbufos (Counter, Contraven)	0.013
82681	Thiobencarb (Bolero, Saturn)	0.002
82678	Triallate (Avadex BW, Far-Go)	0.001
82661	Trifluralin (Treflan, Gowan)	0.002

### **Analyses of pesticides in surface-water and ground-water samples (schedule 2050)**

Surface-water and ground-water samples from the Brooklyn and Queens Aquifer Study sites were analyzed for pesticides on schedule 2050 during the 1999 water year. This table lists the pesticides on the schedule, the National Water Information System parameter code, the unit of measure (micrograms per liter, µg/L), and the reporting level. **Only pesticides residues detected by the laboratory for one or more samples are listed in the organic water-quality tables.**

**SCHEDULE DESCRIPTION.**--Pesticides in filtered water extracted using a 0.5-gram graphitized carbon-based solid phase cartridge, eluted from the cartridge into two analytical fractions, and analyzed using high-performance liquid chromatography with photo-array detection.

**SAMPLE REQUIREMENTS.**--1 liter of water filtered through a 0.7 micron glass-fiber depth filter, and chilled at 4°C (packed in ice).

**CONTAINER REQUIREMENTS.**--1 liter baked amber glass bottle (GCC) from OCALA Water Quality Service Unit.

**PCODE.**--The National Water Information System parameter code.

**COMPOUND NAME.**--Pesticide or metabolite name.

**OTHER NAME.**--Common or trade name(s) for constituent

**MRL.**--Minimum reporting level.

PCode	Compound name (other name)	MRL (µg/L)
49315	Acifluorfen (Blazer, Tackle 2S)	0.035
49312	Aldicarb (Temik, Ambush)	0.55
49313	Aldicarb sulfone (Standak, Aldoxycad)	0.10
49314	Aldicarb sulfoxide	0.021
38711	Bentazone (Basagran, Bentazone)	0.014
04029	Bromacil (Bromax, Urox B)	0.035
49311	Bromoxynil (Torch, Buctril)	0.035
49310	Carbaryl (Sevin, Denapan)	0.008
49309	Carbofuran (Furandán, Curaterr)	0.12
49308	3-Hydroxy-carbofuran	0.014
49307	Chloramben (Amiben, methyl)	0.42
38482	4-Chloro-2-methylphenoxyacetic acid (MCPA) (Metaxon)	0.17
49306	Chlorothalonil (Bravo, Daconil 2787)	0.48
49305	Chlorpyrifid (Stringer)	0.23
40304	Dacthal (DCPA, chlorthal-dimethyl)	0.017
38442	Dicamba (Banval, Dianat)	0.035
49303	Dichlobenil (Barrier, Casoron)	1.20
39732	2,4-Dichlorophenoxyacetic acid (2,4-D, AquaKleen)	0.15

PCode	Compound name (other name)	MRL (µg/L)
38746	2,4-Dichlorophenoxybutyric acid (2,4-DB, Butyrac)	0.24
49302	Dichlorprop (2,4-DP, Seritux 50)	0.032
49299	Dinitrocresol (DNOC, Trifocide)	0.42
49301	Dinoseb (DNPB, Dinosebe)	0.035
49300	Diuron (DCMU, Crisuron)	0.020
49298	Esfenvalerate (Asana, Sumi-alpha)	0.019
49297	Fenuron (Beet-Klean, Fenulon)	0.013
38811	Fluometuron (Flo-Met, Cotoron)	0.035
38478	Linuron (Linurex, Lorex)	0.018
38501	Methiocarb (Mesurol, Slug-Geta)	0.026
49296	Methomyl (Lannate, Lanox)	0.017
38487	4-(4-Chloro-2-methylphenoxy)butyric acid (MCPB, Tropotox)	0.050
49295	1-Naphthol (Alpha Naphthol)	0.007
49294	Neburon (Neburea, Neburyl)	0.015
49293	Norflurazon (Euitol, Predict)	0.024
49292	Oryzalin (Surflan, Dirimal)	0.31
38866	Oxyamyl (Vydate, Pratt)	0.018
49291	Picloram (Grazon, Tordon)	0.035
49236	Propham (Tuberite)	0.035
38538	Propoxur (Baygon, Blattanex)	0.035
39762	Silvex (2,4,5-TP, Fenoprop)	0.021
39742	2,4,5-Trichlorophenoxyacetic acid (2,4,5-T)	0.035
49235	Triclopyr (Garlon, Grandstand)	0.25

### **Analyses of volatile organic compounds in surface-water and ground-water samples (schedule 2020/2021)**

Surface-water and ground-water samples from the Brooklyn and Queens Aquifer Study sites were analyzed for volatile organic compounds (VOCs) in 1999. The National Water Quality Lab (NWQL) created a method for accurate determination of VOCs in water in the nanogram per liter range, schedules 2020/2021. The method described in USGS Open-File Report 97-829 (Connor and others) is similar to USEPA method 524-2 (Mund, 1995) and the method described by Rose and Schroeder (1995). Minor improvements to instrument operating conditions include the following: additional compounds, quantitation ions that are different from those recommended in USEPA Method 524.2 because of interferences from the additional compounds, and a data reporting strategy for measuring detected compounds extrapolated at less than the lowest calibration standard or measured at less than the reporting limit. The non-detection value (NDV) is introduced as a statistically defined reporting limit designed to limit false positives and false negatives to less than 1 percent.

This table lists the volatile organic compounds on the schedule, the National Water Information System parameter code, the unit of measure (micrograms per liter (µg/L), the International Union of Pure and Applied Chemistry (IUPAC) compound name, and the National Water Quality Laboratory compound name. Positive detections measured at less than NDV are reported as estimated concentrations (E) to alert the data user to decreased confidence in accurate quantitation. Values for analytes in the 2020/2021 schedules are preceded by an "E" in the following situations:



1. When the calculated concentration is less than the lowest calibration standard. The analyte meets all identification criteria to be positively identified, but the amount detected is below where it can be reliably quantified.
2. If a sample is diluted for any reason. The method reporting level is multiplied by the dilution factor to obtain the adjusted method reporting level. Values below the lowest calibration standard, multiplied by the dilution factor are qualified with an "E". For example, a value of 0.19 in a 1:2 dilution is reported as E0.1.
3. If the set spike has recoveries out of the specified range (60-140%).
4. If the analyte is also detected in the set blank. If the value in the sample is less than five times the blank value and greater than the blank value plus the long term method detection limit, the value is preceded by an "E" to indicate that the analyte is positively identified but not positively quantified because the analyte was also detected in the blank.

**Only VOCs detected by the laboratory for one or more samples are listed in the organic water-quality tables.**

**SCHEDULE DESCRIPTION.**--The sample water is actively purged with helium to extract the volatile organic compounds. The volatile compounds are trapped onto a sorbent trap, thermally desorbed, separated by a megabore gas chromatographic capillary column, and finally determined by a full scan quadrupole mass spectrometer. Compound identification is confirmed by the gas chromatographic retention time and by the resultant mass spectrum, typically identified by three unique ions.

**SAMPLE REQUIREMENTS.**--Water collected in 3, 40 milliliter vials. Hydrochloric acid is added for preservation. Chilled at 4°C (packed in ice).

**CONTAINER REQUIREMENTS.**--40 milliliter baked amber septum glass vial, from OCALA Quality Water Service Unit.

**PCODE.**--The National Water Information System parameter code.

**COMPOUND NAME.**--Chemical name.

**OTHER NAME.**--Common or trade name(s).

**NDV.**--Non-detection value.

PCode	Compound name	Other name(s)	NDV (µg/L)
77353	(1,1-Dimethylethyl)benzene	<i>tert</i> -butylbenzene	0.05
77223	(1-Methylethyl)benzene	Isopropylbenzene	0.05
77350	(1-Methylpropyl)benzene	<i>sec</i> -butylbenzene	0.05
34396	Hexachloroethane		0.05

PCode	Compound name	Other name(s)	NDV (µg/L)
77562	1,1,1,2-Tetrachloroethane		0.05
34506	1,1,1-Trichloroethane	TCA	0.05
34516	1,1,2,2-Tetrachloroethane		0.1
77652	1,1,2-Trichloro-1,2,2-trifluoroethane	Freon-113	0.05
34511	1,1,2-Trichloroethane		0.1
34496	1,1-Dichloroethane		0.05
34501	1,1-Dichloroethene		0.1
77168	1,1-Dichloropropene		0.05
49999	1,2,3,4-Tetramethylbenzene	Prehnitene	0.05
50000	1,2,3,5-Tetramethylbenzene	Isodurene	0.05
77613	1,2,3-Trichlorobenzene		0.2
77443	1,2,3-Trichloropropane		0.2
77221	1,2,3-Trimethylbenzene		0.05
34551	1,2,4-Trichlorobenzene		0.2
77222	1,2,4-Trimethylbenzene		0.05
82625	1,2-Dibromo-3-chloropropane	DBCP	0.5
77651	1,2-Dibromoethane		0.1
34536	1,2-Dichlorobenzene		0.05
32103	1,2-Dichloroethane		0.05
34541	1,2-Dichloropropane		0.05
77135	1,2-Dimethylbenzene	<i>o</i> -xylene	0.05
85795	1,3- & 1,4-Dimethylbenzene	<i>m</i> & <i>p</i> -xylene	0.05
77226	1,3,5-Trimethylbenzene		0.05
34566	1,3-Dichlorobenzene		0.05
77173	1,3-Dichloropropane		0.05
34571	1,4-Dichlorobenzene		0.05
77275	1-Chloro-2-methylbenzene	2-chlorotoluene	0.05
77277	1-Chloro-4-methylbenzene	4-chlorotoluene	0.05
77356	1-Isopropyl-4-methylbenzene	<i>p</i> -Isopropyltoluene	0.05
77170	2,2-Dichloropropane		0.05
81595	2-Butanone	Methyl ethyl ketone, MEK	5.00
77220	2-Ethyltoluene		0.05
77103	2-Hexanone		5
34215	2-Propenenitrile	Acrylonitrile	2
78109	3-Chloro-1-propene		0.1
78133	4-Methyl-2-pentanone	Methyl isobutyl ketone	5.
81552	Acetone		5.
34030	Benzene		0.05
81555	Bromobenzene		0.05
77297	Bromochloromethane		0.1
32101	Bromodichloromethane		0.1
50002	Bromoethene	Vinyl Bromide	0.1
34413	Bromomethane	Methyl bromide	0.1
77041	Carbon disulfide		0.05
34301	Chlorobenzene		0.05
34311	Chloroethane		0.1
39175	Chloroethene	Vinyl Chloride	0.1
34418	Chloromethane	Methyl chloride	0.2
77093	<i>cis</i> -1,2-Dichloroethene		0.05
34704	<i>cis</i> -1,3-Dichloropropene		0.1
32105	Dibromochloromethane		0.1
30217	Dibromomethane		0.1
34668	Dichlorodifluoromethane	Freon-12	0.2
34423	Dichloromethane	Methylene Chloride	0.1
81576	Diethyl ether		0.1
81577	Diisopropyl ether		0.98
77128	Ethenylbenzene	Styrene	0.05
73570	Ethyl methacrylate		1
50004	Ethyl <i>tert</i> -butyl ether	Ethyl- <i>t</i> -butyl ether, ETBE	0.1



PCode	Compound name	Other name(s)	NDV (µg/L)
34371	Ethylbenzene		0.05
39702	Hexachlorobutadiene		0.2
77424	Iodomethane	Methyl iodide	0.05
49991	Methyl acrylate		2
81593	Methyl acrylonitrile		2
81597	Methyl methacrylate		1
78032	Methyl <i>tert</i> -butyl ether	Methyl- <i>t</i> -butyl ether, MTBE	0.1
34010	Methylbenzene	Toluene	0.05
77342	<i>n</i> -Butylbenzene		0.05
77224	<i>n</i> -Propylbenzene		0.05
34696	Naphthalene		0.20
50005	<i>tert</i> -Amyl methyl ether	<i>t</i> -amyl methyl ether, TAME	0.10
34475	Tetrachloroethene	PCE	0.05
32102	Tetrachloromethane	Carbon tetrachloride	0.05
81607	Tetrahydrofuran	THF	5
34546	<i>trans</i> -1,2-Dichloroethene		0.05
34699	<i>trans</i> -1,3-Dichloropropene		0.1
73547	<i>trans</i> -1,4-Dichloro-2-butene		5
32104	Tribromomethane	Bromoform	0.2
39180	Trichloroethene	Trichloroethylene, TCE	0.05
34488	Trichlorofluoromethane	Freon-11	0.1
32106	Trichloromethane	Chloroform	0.05
77057	Vinyl Acetate	Vinyl Acetate	5

**Analysis of organochlorine pesticides, gross polychlorinated biphenyls and polychlorinated naphthalenes in surface-water and ground-water samples (schedule 1324)**

Surface-water and ground-water samples from the Brooklyn and Queens Aquifer Study sites were analyzed for pesticides, gross polychlorinated biphenyls (PCB) and naphthalenes (PCN) on schedule 1324 during the 1999 water year. This table lists the pesticides, PCB, and PCN on the schedule, the National Water Information System parameter code, the unit of measure (micrograms per liter, µg/L), and the reporting level. **Only pesticides residues, gross PCB, or PCN measured at or above the minimum reporting level for one or more samples are listed in the organic water-quality tables.**

**SCHEDULE DESCRIPTION.**--Organochlorine pesticides with PCB's and PCN's, recoverable from whole water samples, analyzed by GC/ECD. A description of the methods for determination of organic substances in water can be found in USGS TWRI Book 5, Chapter A3, 1987. See Publications on techniques of water-resources investigations.

**SAMPLE REQUIREMENTS.**--800 milliliter of raw water, chilled at 4°C (packed in ice).

**CONTAINER REQUIREMENTS.**--1 liter baked amber glass bottle (GCC) from OCALA Water Quality Service Unit.

**PCODE.**--The National Water Information System parameter code.

**COMPOUND NAME.**--Chemical name.

PCode	Compound name	MRL (µg/L)
39330	Aldrin	0.013
39350	Chlordane, technical mix	0.1
39380	Dieldrin	0.009
39390	Endrin	0.014
39410	Heptachlor	0.009
39420	Heptachlor epoxide	0.009
39340	Lindane	0.012
39755	Mirex	0.01
39034	Perthane	0.1
39516	Polychlorinated biphenyls	0.1
39250	Polychlorinated naphthalenes	0.1
39400	Toxaphene	1
39388	Endosulfan-I	0.015
39360	<i>p,p'</i> -DDD	0.014
39365	<i>p,p'</i> -DDE	0.016
39370	<i>p,p'</i> -DDT	0.017
39480	<i>p,p'</i> -Methoxychlor	0.015

**Analysis of semivolatile organic compounds in surface-water and ground-water samples (schedule 1383)**

Surface-water and ground-water samples from the Brooklyn and Queens Aquifer Study sites were analyzed for semivolatile organic compounds (SVOC) on schedule 1324 during the 1999 water year. The method is referred to as Base/neutral and acid extractable compounds, with analysis by gas chromatography/mass spectrometry. The reference for schedule 1383 is in "Methods of Analysis by the US Geological Survey National Water Quality Laboratory -- Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments", USGS Open-File Report 93-125, (1993), Marvin Fishman, editor. Although it is not referenced in the report, the method is derived from EPA method 625. This table lists the SVOC on the schedule, the National Water Information System parameter code, the unit of measure (micrograms per liter, µg/L), and the reporting level. **Only SVOC measured at or above the minimum reporting level for one or more samples are listed in the organic water-quality tables.**

**SCHEDULE DESCRIPTION.**--Acid and base/neutral extractable organic compounds from whole water samples, analyzed using GC/MS technology. A description of the methods for determination of SVOC in water can be found in USGS Open File Report 93-125, (1993).

**SAMPLE REQUIREMENTS.**--1 liter of raw water, chilled at 4°C (packed in ice)..

**CONTAINER REQUIREMENTS.**--1 liter baked amber glass bottle (GCC) from OCALA Water Quality Service Unit.

**PCODE.**--The National Water Information System parameter code.

**COMPOUND NAME.**--Chemical name.

**MRL.**--Minimum reporting level.

PCode	Compound name	MRL (µg/L)
34551	1,2,4-Trichlorobenzene	2.2
34536	1,2-Dichlorobenzene	2.0
82626	1,2-Diphenylhydrazine	2.1
34566	1,3-Dichlorobenzene	1.9
34571	1,4-Dichlorobenzene	1.9
34621	2,4,6-Trichlorophenol	2.8
34601	2,4-Dichlorophenol	2.9
34606	2,4-Dimethylphenol	3.3
34616	2,4-Dinitrophenol	20
34611	2,4-Dinitrotoluene	2.6
34626	2,6-Dinitrotoluene	2.3
34581	2-Chloronaphthalene	1.9
34586	2-Chlorophenol	2.4
34591	2-Nitrophenol	2.8
34631	3,3'-Dichlorobenzidine	2.6
34657	4,6-Dinitro-2-methylphenol	3.2
34636	4-Bromophenyl phenyl ether	2.1
34452	4-Chloro-3-methylphenol	3.0
34641	4-Chlorophenyl phenyl ether	2.2
34646	4-Nitrophenol	2.6
34205	Acenaphthene	1.8
34200	Acenaphthylene	1.9
34220	Anthracene	2.0
34526	Benz[a]anthracene	2.4
39120	Benzidine	40
34247	Benzo[a]pyrene	2.8
34230	Benzo[b]fluoranthene	3.0
34521	Benzo[ghi]perylene	2.8
34242	Benzo[k]fluoranthene	3.2
34292	<i>n</i> -Butyl benzyl phthalate	4.2
34320	Chrysene	2.7
39110	Di- <i>n</i> -butyl phthalate	2.9
34596	Di- <i>n</i> -octyl phthalate	5.0
34556	Dibenz[a,h]anthracene	3.4
34336	Diethyl phthalate	2.4
34341	Dimethyl phthalate	2.4
34376	Fluoranthene	2.4
34381	Fluorene	2.0
39700	Hexachlorobenzene	2.2
39702	Hexachlorobutadiene	2.6
34386	Hexachlorocyclopentadiene	2.0
34396	Hexachloroethane	2.0
34403	Indeno[1,2,3- <i>cd</i> ]pyrene	3.0
34408	Isophorone	2.2
34428	N-Nitrosodi- <i>n</i> -propylamine	2.4
34438	N-Nitrosodimethylamine	2.8
34433	N-Nitrosodiphenylamine	3.2
34696	Naphthalene	1.8
34447	Nitrobenzene	2.0
39032	Pentachlorophenol	3.8
34461	Phenanthrene	2.0
34694	Phenol	3.4
34469	Pyrene	2.2
34278	Bis(2-Chloroethoxy)methane	2.6
34273	Bis(2-Chloroethyl) ether	2.2
39100	Bis(2-Ethylhexyl) phthalate	19
34283	Bis(2-chloroisopropyl) ether	2.2

**Analysis of inorganic substances: major ions and trace metals and cyanide in surface-water and ground-water samples (schedules 879 and 101)**

Surface-water and ground-water samples from the Brooklyn and Queens Aquifer Study sites were analyzed for inorganic substances on schedules 879 and 101 during the 1999 water year. Following digestion for trace metals (OFR 96-225) analysis for most trace metals and major ions are analyzed by inductively coupled plasma emission spectrometry. Specific methods of analysis for each constituent can be found in the reference cited in the table below. This table lists the National Water Information System parameter code, the bottle type, the constituent, the reporting level (MRL), the unit of measure (micrograms per liter, µg/L or milligrams per liter mg/L), and the USGS reference for the method of analysis of the constituent. **Only constituents measured at or above the minimum reporting level for one or more samples are listed in the inorganic water-quality table.**

**SAMPLE REQUIREMENTS.**--500 milliliters of water filtered through a 0.45 micron glass-fiber depth filter (FU), 250 milliliters of raw water acidified (RU), 50 milliliters fixed with 5 milliliters of 5 normal sodium hydroxide (LC0023), 250 milliliters of raw water fixed with 10 milliliters of 70% nitric acid/potassium dichromate (RAM), and 250 milliliters of raw water (RCB), all chilled at 4°C (packed in ice).

**CONTAINER REQUIREMENTS.**--1 500-ml clear poly bottle (FU), 1 250-ml acid rinsed clear poly bottle (RA), 3 250-ml clear poly bottles (RU, LC0023, RCB), and 250-ml glass bottle (RAM), all from Ocala Quality Water Service Unit

**PCODE.**--The National Water Information System parameter code.

PCode	Bottle type	Constituent	MRL	Report unit	Reference
00929	RA	Sodium	0.18	mg/L	OFR 98-168
38260	RCB	MBAS	0.02	mg/L	OFR 93-125
01002	RA	Arsenic	2.6	ug/L	OFR 98-636
90410	RU	Acid Neutralizing Capacity (ANC), laboratory	1	mg/L	TWRI B5-A1/89
01092	RA	Zinc	31	ug/L	OFR 98-165
01034	RA	Chromium	1	ug/L	OFR 93-449
01007	RA	Barium	0.9	ug/L	OFR 98-165
01042	RA	Copper	20	ug/L	OFR 98-168
00945	RU	Sulfate	0.31	mg/L	TWRI B5-A1/89
01027	RA	Cadmium	8	ug/L	OFR 98-165
00950	FU	Fluoride	0.1	mg/L	TWRI B1-A1/89
01045	RA	Iron	21	ug/L	OFR 98-165
01055	RA	Manganese	2.8	ug/L	OFR 98-165
01051	RA	Lead	1	ug/L	OFR 93-125
01147	RA	Selenium	2.6	ug/L	OFR 98-639
71900	RAM	Mercury	0.3	ug/L	TWRI B5-A1/89
00927	RA	Magnesium	0.024	mg/L	OFR 98-165

PCode	Bottle type	Constituent	MRL	Report unit	Reference
00720	LC0023	Cyanide	0.01	mg/L	TWRI B5-A1/89
00916	RA	Calcium	0.033	mg/L	OFR 98-165
01077	RA	Silver	1	ug/L	OFR 93-125
00937	RA	Potassium	0.1	mg/L	TWRI B5-A1/89
00955	FU	Silica	0.1	mg/L	TWRI B5-A1/89
00940	FU	Chloride	0.29	mg/L	TWRI B5-A1/89
70300	FU	Residue, 180 degrees Celsius	10	mg/L	TWRI B5-A1/89
00671	FCC	Orthophosphate, as phosphorous	0.01	mg/L	OFR 93-125
00631	FCC	Nitrite + Nitrate, as nitrogen	0.05	mg/L	OFR 93-125
00613	FCC	Nitrite, as nitrogen	0.01	mg/L	OFR 93-125
00608	FCC	Ammonia, as nitrogen	0.02	mg/L	OFR 93-125

### Quality-control data

The quality-control (QC) sample analyses reported here are equipment blanks: sampling equipment rinse-water samples collected to measure the cleanliness of the samplers prior to the collection of environmental samples. The same personnel and sampling equipment were used to collect both the environmental samples and the QA samples.

Equipment blanks were collected after cleaning the sampling equipment with about 1 gallon (3 pump and hose-assembly volumes) of a detergent solution, about 2.5 gallons of deionized water, and then 1 gallon of nitrogen-purged, volatile-free-grade water (for organics schedules) or inorganic-free blank water (for the inorganic schedule).

Eight QC samples were collected and analyzed for about 275 chemical constituents (organic and inorganic), totaling over 1050 analyses. Of these analyses, 36 detections

(3.43%) comprised of 20 VOC's, SVOC's and 6 inorganic, were recorded. Of these 36 detections, only 11 are quantified the remaining 25 are estimated values. There were no detections of any pesticides in any QC samples. However, 23 (2.19%) of these detections were from an equipment blank that was collected after sampling one of the most highly contaminated wells in the sampling network (Q-1071), and another 7 detections (0.7%) were from an equipment blank collected after another highly contaminated well (Q-1373). Additionally, 21 of the 30 combined detections for these two samples are reported as 'Estimated' values, reflecting the sample dilution required at the NWQL prior to analysis. Concentrations of organic compounds in the QC data range from an estimated value of 0.008 micrograms per liter (*m,p*-xylene) to a measured value of 0.239 micrograms per liter (toluene). Concentrations of inorganic compounds in the QC data range from 0.01 milligrams per liter (magnesium) to 61.3 micrograms per liter (iron).

At first inspection these results appear to suggest that about 3.5% of the water quality data from environmental samples collected after a contaminated site could be due to carry-over from the previous sample. However, as described above, the entire cleaning and QC sampling process uses about 5 gallons of cleaning solution and water. In contrast, when an environmental sample is collected, three casing volumes (about 50 gallons to many thousands of gallons, depending on casing diameter and length of water column) are evacuated prior to the collection of a sample. This large volume of water circulating through the pump and hose assembly as part of the well-evacuation process would further flush residual contaminants from the system, thereby minimizing the possibility of cross-contamination between sites.

Consequently, if the results from the two exceptional samples mentioned above are screened, the number of QC detections drops to 6 (0.6%). Additional QC samples are available from the Suffolk County Department of Health Services.

## ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

## Brooklyn Queens Aquifer study, Inorganic data

LOCAL IDENTIFIER	DATE	SPE- CIFIC CON- DUCT- ANCE FIELD (US/CM) (00094)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)
K 2510. 1	06-09-99	43,300	7.4	13.6	406	1,250	10,300	2.2	144
K 2582. 1	06-10-99	863	7.9	15.5	58.5	38.4	48.8	2.2	138
K 3133. 1	06-10-99	1,000	7.6	14.8	90.3	34.4	59.5	3.7	202
K 3246. 2	06-23-99	357	6.6	17.3	22.8	6.2	34.6	1.3	40
K 3248. 1	09-01-99	--	6.5	19.6	9.9	18.3	12.5	1.6	77
K 3251. 1	09-01-99	--	6.6	--	82.8	11.4	10.3	5.9	226
K 3255. 2	07-12-99	607	6.1	16.0	41.4	7.5	69.9	3.4	84
K 3256. 2	06-23-99	565	6.6	16.9	38.2	13.5	44.8	1.3	47
K 3405. 1	07-12-99	507	8.1	15.0	38.5	28.1	27.8	1.8	135
K 3406. 1	07-19-99	1.0	7.9	15.1	85.7	39.7	253	6.0	128
K 3407. 1	07-08-99	43,300	6.7	14.6	535	1,210	9,710	250	119
K 3410. 1	07-07-99	353	7.6	14.0	22.1	5.5	38.6	2.7	155
K 3414. 1	07-08-99	44,300	6.7	14.6	4,930	1,240	9,380	280	52
K 3425. 1	07-07-99	1,440	6.9	16.9	203	49.3	50.8	4.0	384
K 3426. 1	07-15-99	24.0	6.0	15.2	28.2	59.8	481	47	1.4
K 3430. 1	07-01-99	--	--	13.8	60.9	32.7	21.7	2.0	189
K 3431. 1	07-01-99	413	8.0	14.3	43.5	13.1	15.5	3.8	167
Q 273. 1	09-03-99	--	6.9	13.9	13.2	6.5	4.2	1.3	68
Q 277. 1	07-21-99	317	6.4	11.9	24.5	15.1	11.3	1.2	53
Q 470. 1	08-05-99	--	6.7	13.5	--	--	--	--	--
Q 471. 1	08-11-99	--	6.6	13.5	3.3	2.1	4.2	.7	13
Q 1071. 2	09-15-99	--	6.7	14.8	9.0	2.0	34.1	6.6	41
Q 1237. 1	09-14-99	--	7.1	15.0	144	48.0	108	4.4	83
Q 1373. 1	07-28-99	--	9.0	17.0	85.5	39.1	606	11	11
Q 1472. 1	06-08-99	436	6.5	25.3	30.3	17.4	21.4	2.2	73
Q 2418. 1	09-13-99	--	6.9	13.5	48.9	33.1	218	22	218
Q 2419. 1	09-13-99	--	6.9	13.1	13.9	6.0	6.9	1.4	69
Q 2420. 1	09-13-99	--	6.9	13.6	14.3	6.2	7.4	1.4	71
Q 3003. 1	06-09-99	315	6.3	22.5	14.3	7.5	22.4	2.1	25
Q 3036. 1	06-21-99	200	6.9	14.7	6.8	3.1	23.2	2.2	71
Q 3112. 1	06-30-99	450	7.9	14.8	35.1	12.0	26.8	2.6	63
Q 3117. 1	06-30-99	860	6.6	14.6	95.4	11.2	63.2	12	187
Q 3587. 1	06-28-99	724	7.4	15.9	71.7	28.2	33.0	2.5	220
Q 3589. 1	07-15-99	373	7.4	15.4	3.4	1.5	1.4	2.3	54
Q 3593. 1	06-24-99	183	6.8	14.0	12.8	6.4	9.0	1.5	51
Q 3604. 1	06-24-99	808	7.1	16.0	70.6	43.5	24.4	2.8	199
Q 3627. 1	07-14-99	149	6.9	13.1	14.8	6.9	4.3	1.3	61
Q 3628. 1	07-14-99	198	7.3	12.8	20.8	8.3	6.9	4.1	82
Q 3629. 1	07-14-99	332	5.9	14.9	30.2	15.2	11.1	.5	99
Q 3649. 1	06-28-99	707	7.4	15.6	68.9	28.4	36.2	2.1	222
Q 3804. 1	06-22-99	441	5.7	15.9	22.9	8.9	39.5	2.5	27
Q 3806. 1	06-22-99	750	6.2	15.6	47.8	27.4	49.3	2.1	69
Q 3810. 1	07-21-99	--	7.1	14.4	79.6	43.8	16.3	2.4	280
ALLEY CREEK NEAR OAKLAND GARDENS, NY	07-22-99	--	6.9	15.1	35.4	16.5	69.4	1.9	98
ALLEY POND SPRING	07-29-99	--	6.0	11.9	17.0	10.2	10	1.3	30
GABBLERS CREEK AT LITTLE NECK, NY	07-29-99	--	6.5	15.0	34.4	14.4	41.7	2.8	87



## ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Brooklyn Queens Aquifer study, Inorganic data (continued)

DATE	SULFATE DIS- SOLVED (MG/L AS S04) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)
06-09-99	2,200	17,000	.8	8.7	31,300	<.01	<.05	1.4	.03	4	43.5
06-10-99	95	110	<.1	26	534	<.01	11	<.02	.03	<1	60.6
06-10-99	110	140	<.1	20	608	<.01	.34	.34	.06	<1	18.2
06-23-99	42	33	<.1	18	220	<.01	10	<.02	.02	<1	31.5
09-01-99	26	11	<.1	31	167	<.01	3.3	<.02	<.01	<1	23.2
09-01-99	22	9.9	.1	9.3	325	<.01	6.9	<.02	<.01	<1	17.3
07-12-99	80	91	.1	12	374	<.01	1.3	<.02	.02	<1	39.0
06-23-99	59	72	<.1	20	357	<.01	15	<.02	.02	<1	48.9
07-12-99	69	39	<.1	29	340	<.01	4.1	<.02	.02	<1	36.4
07-19-99	120	470	<.1	24	1,140	<.01	11	<.02	.06	<1	5.2
07-08-99	2,200	16,000	.4	12	30,900	.02	<.05	.95	.02	69	44.0
07-07-99	2.6	18	.1	17	214	<.01	<.05	1.5	.51	<1	59.0
07-08-99	2,300	16,000	<.1	7.4	31,200	.01	<.05	.90	<.01	64	36.9
07-07-99	320	66	<.1	31	1,060	<.01	6.9	.04	.01	<1	27.1
07-15-99	1,000	8,400	<.1	8.2	280	<.01	<.05	1.0	.01	1	5.8
07-01-99	33	79	<.1	28	395	<.01	3.1	.02	.03	<1	101
07-01-99	9.1	26	.1	17	230	<.01	<.05	2.3	.22	<1	220
09-03-99	<.1	4.7	<.1	6.1	87	<.01	<.05	.02	<.01	1	8.5
07-21-99	45	25	<.1	16	190	<.01	3.7	<.02	.01	<1	22.9
08-05-99	--	--	--	--	--	.01	1.4	.17	<.01	--	--
08-11-99	1.7	5.2	<.1	15	48	<.01	2.1	<.02	<.01	<1	5.9
09-15-99	<.3	55	.1	2.2	135	<.01	<.05	.07	.01	<1	86.9
09-14-99	35	500	<.1	22	1,010	<.01	<.05	.67	<.01	<1	77.2
07-28-99	.2	1,200	<.1	.7	2,310	<.01	<.05	3.0	<.01	1	274
06-08-99	40	51	<.1	30	283	<.01	4.0	.04	.02	<1	37.4
09-13-99	<.3	400	.3	16	902	<.01	<.05	3.5	.04	1	128
09-13-99	3.0	4.4	.1	16	94	<.01	<.05	.05	<.01	2	29.2
09-13-99	3.4	5.0	<.1	16	98	<.01	<.05	.05	<.01	<1	28.6
06-09-99	18	51	<.1	20	203	<.01	2.5	<.02	.01	<1	17.0
06-21-99	7.5	6.6	.1	13	122	.01	<.05	.79	.12	3	68.5
06-30-99	10	96	<.1	23	313	<.01	<.05	.86	.32	<1	50.5
06-30-99	170	66	<.1	8.5	557	<.01	.07	1.2	.05	<1	42.1
06-28-99	54	57	<.1	26	446	<.01	6.6	.02	.04	<1	51.2
07-15-99	16	69	<.1	20	242	<.01	<.05	.12	.02	1	4.1
06-24-99	14	10	.2	--	--	<.01	<.05	.05	.01	1	26.3
06-24-99	21	13	.1	28	507	<.01	3.1	<.02	.05	<1	57.2
07-14-99	5.8	6.4	<.1	15	110	<.01	.65	<.02	.01	<1	11.9
07-14-99	8.6	9.3	<.1	16	136	.01	.30	<.02	.01	<1	11.3
07-14-99	53	10	<.1	25	236	<.01	.22	.04	<.01	<1	28.6
06-28-99	48	56	<.1	29	437	<.01	8.6	<.02	.01	<1	85.0
06-22-99	27	84	<.1	19	272	<.01	4.2	<.02	.02	<1	73.2
06-22-99	76	120	<.1	26	461	<.01	8.4	<.02	.02	<1	117
07-21-99	42	50	<.1	26	470	<.01	8.5	.03	.02	<1	96.3
07-22-99	40	130	<.1	20	391	<.01	2.4	.02	<.01	<1	45.9
07-29-99	39	15	<.1	15	155	<.01	4.5	<.02	<.01	<1	25.1
07-29-99	37	77	<.1	18	304	.05	2.9	.23	.03	<1	41.6

## ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Brooklyn Queens Aquifer study, Inorganic data (continued)

DATE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
06-09-99	<200	<1.0	<240	E158	13	4,480	<.1	<1	<10	<800
06-10-99	<10	1.9	<12	<14	<1	<3	<.1	2	<1	<40
06-10-99	<10	<1.0	<12	29.5	<1	61.8	<.1	2	<1	<40
06-23-99	<10	3.3	E8.5	1,590	1	184	<.1	2	<1	<40
09-01-99	<10	49	37.2	9,890	8	127	<.1	2	12	611
09-01-99	<10	<2.0	<12	912	<1	115	<.1	5	<1	50.0
07-12-99	<10	2.7	<12	1,300	<1	2,110	<.2	<1	<1	<40
06-23-99	<10	5.7	E9.5	2,950	1	195	<.1	3	<1	<40
07-12-99	<10	1.9	<12	16.0	<1	28.6	<.2	3	<1	<40
07-19-99	<10	3.3	<12	<14	1	<3	<.2	1	<1	<40
07-08-99	<200	<1.0	<240	25,400	<10	4,550	<.2	79	<10	<800
07-07-99	<10	<1.0	<12	1140	<1	118	<.01	<1	<1	<40
07-08-99	<200	<2.0	<240	49,600	<10	4,170	<.2	80	<10	<800
07-07-99	<10	1.6	<12	113	<1	7.8	<.01	4	<1	<40
07-15-99	<10	1.1	<12	17,400	7	5,210	<.2	2	<5	138
07-01-99	<10	1.0	<12	<14	<1	<3	<.1	1	<1	<40
07-01-99	<10	<1.0	<12	158	<1	165	<.1	<1	<1	<40
09-03-99	<10	1.7	<12	9,940	3	405	<.1	<1	<1	E26.2
07-21-99	<10	6.7	<12	<14	<1	<3	<.1	1	<1	<40
08-05-99	--	--	--	--	--	--	--	--	--	--
08-11-99	<10	1.4	996	16,700	69	18.5	<.1	<1	<1	204
09-15-99	<8	<1.0	<20	3,270	<1	176	<.1	<1	<1	<31
09-14-99	<8	3.3	<20	9,230	7	721	<.1	<1	<1	<31
07-28-99	<10	<1.0	<12	5,870	<1	318	<.1	<1	<1	<40
06-08-99	<10	<1.0	E6.9	E9.9	1	<3	<.1	<1	<1	70.3
09-13-99	<8	<1.0	<20	21,200	1	957	<.1	<1	<1	60.4
09-13-99	<8	<1.0	<20	3,790	<1	156	<.1	<1	<1	<31
09-13-99	<8	<1.0	<20	3,060	<1	155	<.1	<1	<1	<31
06-09-99	<10	4.6	43.1	21.7	6	<3	<.1	1	<1	86.8
06-21-99	E5.4	3.1	173	9,880	17	170	<.1	<1	<1	211
06-30-99	<10	<1.0	<12	291	<1	112	<.1	<1	<1	<40
06-30-99	<10	<1.0	<12	539	2	2,590	<.1	<1	<1	<40
06-28-99	<10	2.7	<12	137	<1	250	<.1	1	<1	<40
07-15-99	<10.0	<1.0	<12.0	119	<1	38.3	.2	<1	<1	<40.0
06-24-99	<10	2.1	<12	5,130	<1	247	<.1	<1	<1	<40
06-24-99	<10	1.4	<12	E10.7	<1	<3	<.1	<1	<1	<40
07-14-99	<10	1.5	<12	787	1	296	<.2	<1	<1	<40
07-14-99	<10	<1.0	<12	283	<1	75.5	<.2	<1	<1	<40
07-14-99	<10	1.1	<12	2,930	<1	1,450	<.2	<1	<1	E33.5
06-28-99	<10	2.0	<12	18.2	<1	E1.8	<.1	2	<1	<40
06-22-99	<10	11	<12	598	<1	66.7	<.1	<1	<1	<40
06-22-99	<10	2.1	<12	584	<1	62.3	<.1	1	<1	<40
07-21-99	<10	8.3	E10.3	2,070	<1	99.2	<.1	2	<1	<40
07-22-99	<10	<1.0	<12	506	<1	173	<.1	<1	<1	<40
07-29-99	<10	1.1	<12	<14	<1	<3	<.1	1	<1	<40
07-29-99	<10	<1.0	<12	243	<1	322	<.1	<1	<1	<40

## ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

## Brooklyn Queens Aquifer study, Organic data

LOCAL IDENTIFIER	DATE	TIME	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	1,2-DI- PHENYL- HYDRA- ZINE WATER TOT.REC (UG/L) (82626)
K 2510. 1	06-09-99	0930	E.0233	<.064	E.0877	<.044	<.13	<.068	<5
K 2582. 1	06-10-99	1100	E.00923	<.064	<.066	<.044	<.13	<.068	<5
K 3133. 1	06-10-99	1000	<.032	<.064	<.066	E.0107	<.13	<.068	<5
K 3246. 2	06-23-99	0900	E.0145	<.064	<.066	<.044	<.13	<.068	<5
K 3248. 1	09-01-99	1030	<.16	<.32	<.33	<.22	<.65	<.34	<2.1
K 3251. 1	09-01-99	1230	<.032	<.064	<.066	<.044	<.13	<.068	<2.1
K 3255. 2	07-12-99	1100	E.0127	<.064	E.0156	E.0141	<.13	<.068	<5
K 3256. 2	06-23-99	1030	E.0296	<.064	<.066	<.044	<.13	<.068	<5
K 3405. 1	07-12-99	0930	E.0313	<.064	<.066	<.044	<.13	<.068	<5
K 3406. 1	07-19-99	1100	<.032	<.064	<.066	<.044	<.13	<.068	<5
K 3407. 1	07-08-99	1000	<.064	<.128	<.132	<.088	<.26	<.136	<5
K 3410. 1	07-07-99	1000	<.032	<.064	<.066	<.044	<.13	<.068	<5
K 3414. 1	07-08-99	1200	<.064	<.128	<.132	<.088	<.26	<.136	<5
K 3425. 1	07-07-99	1100	E.0367	<.064	E.0418	<.044	<.13	<.068	<5
K 3426. 1	07-15-99	1000	<.16	<.32	<.33	<.22	<.65	<.34	<5
K 3430. 1	07-01-99	1100	<.032	<.064	<.066	<.044	<.13	<.068	<5
K 3431. 1	07-01-99	1015	<.032	<.064	<.066	<.044	<.13	<.068	<5
Q 273. 1	09-03-99	1400	<.032	<.064	<.066	<.044	<.13	<.068	<2.1
Q 277. 1	07-21-99	0830	<.032	<.064	<.066	<.044	<.13	<.068	<5
Q 471. 1	08-11-99	1230	<.032	<.064	<.066	<.044	<.13	<.068	<5
Q 1071. 2	09-15-99	1400	<.032	<.064	<.066	<.044	<.13	<.068	<2.1
Q 1237. 1	09-14-99	1300	<.032	<.064	<.066	<.044	<.13	<.068	<2.1
Q 1373. 1	07-28-99	1330	<.032	<.064	<.066	<.044	<.13	<.068	<5
Q 1472. 1	06-08-99	1200	E.0118	<.064	E.0580	<.044	<.13	<.068	<5
Q 2418. 1	09-13-99	1200	<.032	<.064	<.066	<.044	<.13	<.068	<2.1
Q 2419. 1	09-13-99	1000	<.032	<.064	<.066	<.044	<.13	<.068	<2.1
Q 2420. 1	09-13-99	1100	<.032	<.064	<.066	<.044	<.13	<.068	<2.1
Q 3003. 1	06-09-99	1200	.262	.137	.477	.690	.389	.134	<5
Q 3036. 1	06-24-99	1200	--	--	--	--	--	--	<5
	06-21-99	0930	<.16	<.32	<.33	<.22	<.65	<.34	--
Q 3112. 1	06-30-99	1000	<.032	<.064	<.066	<.044	<.13	<.068	<5
Q 3117. 1	06-30-99	1030	<.032	<.064	<.066	<.044	<.13	<.068	<5
Q 3587. 1	06-28-99	1100	E.0126	<.064	<.066	<.044	<.13	<.068	<5
Q 3589. 1	07-15-99	1200	<.16	<.32	<.33	<.22	<.65	<.34	<5
Q 3593. 1	06-24-99	0930	<.032	<.064	<.066	<.044	<.13	<.068	<5
Q 3604. 1	06-24-99	1000	<.032	<.064	<.066	<.044	.618	<.068	<5
Q 3627. 1	07-14-99	1000	<.032	<.064	<.066	<.044	<.13	<.068	<5
Q 3628. 1	07-14-99	1100	<.032	<.064	<.066	<.044	<.13	<.068	<5
Q 3629. 1	07-14-99	1200	E.0262	<.064	<.066	<.044	<.13	<.068	<5
Q 3649. 1	06-28-99	1200	E.0545	<.064	<.066	<.044	<.13	<.068	<5
Q 3804. 1	06-22-99	0930	.170	<.064	E.0370	E.0266	<.13	<.068	<5
Q 3806. 1	06-22-99	1100	.140	<.064	<.066	<.044	<.13	<.068	<5
Q 3810. 1	07-21-99	1000	E.0138	<.064	<.066	<.044	<.13	<.068	<5
ALLEY CREEK NEAR OAKLAND GARDENS, NY	07-22-99	1100	E.0905	<.064	<.066	<.044	<.13	<.068	<5
ALLEY POND SPRING	07-29-99	0900	<.032	<.064	<.066	<.044	<.13	<.068	<5
GABBLERS CREEK AT LITTLE NECK, NY	07-29-99	1000	E.0685	<.064	.231	E.0232	<.13	<.068	<5

## ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Brooklyn Queens Aquifer study, Organic data (continued)

DATE	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	2,4-DI- METHYL- PHENOL TOTAL (UG/L) (34606)	ACE- NAPHTH- ENE TOTAL (UG/L) (34205)	ANTHRA- CENE TOTAL (UG/L) (34220)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENZENE 123-TRI METHYL- WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF RECOVER (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)
06-09-99	<.032	<5	<5	<5	.0246	<.002	<.12	<.19	<.056	<.044	<.054
06-10-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
06-10-99	E.0151	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
06-23-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
09-01-99	<.16	<3	<2	<2	<.001	<.002	<.6	<.95	<.28	<.22	<.27
09-01-99	<.032	<3	<2	<2	<.001	<.002	<.12	<.19	<.056	<.044	<.054
07-12-99	<.032	<5	<5	<5	<.001	<.002	<.12	E.0953	<.056	<.044	.554
06-23-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
07-12-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
07-19-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
07-08-99	<.064	<5	<5	<5	--	--	<.24	<.38	<.112	<.088	<.108
07-07-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	E.0184	<.044	<.054
07-08-99	<.064	<5	<5	<5	<.001	<.002	<.24	<.38	<.112	<.088	<.108
07-07-99	E.0171	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
07-15-99	<.16	<5	<5	<5	<.001	<.002	<.6	<.95	<.28	<.22	<.27
07-01-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
07-01-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
09-03-99	<.032	<3	E.01	<2	<.001	<.002	<.12	<.19	<.056	<.044	<.054
07-21-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
08-11-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
09-15-99	<.032	5	75	21	<.001	<.002	.965	<.19	2.06	.715	<.054
09-14-99	<.032	<3	<2	<2	E.0020	<.002	<.12	<.19	<.056	<.044	<.054
07-28-99	<.032	E.2	E.2	<5	<.001	<.002	E.0351	<.19	E.0510	E.0307	<.054
06-08-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
09-13-99	<.032	<3	<2	<2	<.001	<.002	<.12	<.19	<.056	<.044	<.054
09-13-99	<.032	<3	E.05	<2	<.001	<.002	<.12	<.19	<.056	<.044	<.054
09-13-99	<.032	<3	<2	<2	<.001	<.002	<.12	<.19	<.056	<.044	<.054
06-09-99	1.48	<5	<5	<5	E.0022	<.002	<.12	<.19	<.056	<.044	.152
06-24-99	--	E.04	<5	<5	<.001	<.002	--	<5	--	--	<5
06-21-99	<.16	--	--	--	--	--	<.6	<.95	E.0457	E.0149	<.27
06-30-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
06-30-99	<.032	<5	<5	E.006	<.001	<.002	<.12	<.19	<.056	<.044	<.054
06-28-99	<.032	<5	<5	<5	.0095	<.002	<.12	<.19	<.056	<.044	<.054
07-15-99	<.16	<5	<5	<5	<.001	<.002	<.6	<.95	<.28	<.22	<.27
06-24-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
06-24-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
07-14-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
07-14-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
06-28-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
06-22-99	E.0303	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
06-22-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
07-21-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
07-22-99	<.032	<5	<5	<5	E.0023	<.002	<.12	<.19	E.00896	<.044	<.054
07-29-99	<.032	<5	<5	<5	<.001	<.002	<.12	<.19	<.056	<.044	<.054
07-29-99	<.032	<5	<5	<5	<.001	E.0040	<.12	<.19	E.0145	<.044	<.054



## ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Brooklyn Queens Aquifer study, Organic data (continued)

DATE	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)	BENZENE TOTAL (UG/L) (34030)	BIS(2- CHLORO- ETHYL) ETHER UNFLTRD RECOVER (UG/L) (34273)	BIS(2- ETHYL HEXYL) PHTHAL- ATE TOTAL (UG/L) (39100)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	CHLORO- BENZENE TOTAL (UG/L) (34301)
06-09-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
06-10-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
06-10-99	<.05	<.032	<.042	<.048	<.048	E.00663	<5	<5	<.036	<.088	<.028
06-23-99	<.05	<.032	<.042	<.048	<.048	E.00382	<5	<5	<.036	<.088	<.028
09-01-99	<.25	<.16	<.21	<.24	<.24	<.5	<2	<18	<.18	<.44	<.14
09-01-99	<.05	<.032	<.042	<.048	<.048	<.1	<2	<18	<.036	<.088	<.028
07-12-99	1.25	<.032	<.042	2.53	E.0111	E.0198	<5	E3	<.036	<.088	.158
06-23-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
07-12-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
07-19-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	E.0463	<.028
07-08-99	<.1	<.064	<.084	<.096	<.096	E.00791	<5	<5	<.072	<.176	<.056
07-07-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
07-08-99	<.1	<.064	<.084	<.096	<.096	<.2	<5	<5	<.072	<.176	<.056
07-07-99	<.05	<.032	<.042	<.048	<.048	E.0333	<5	<5	<.036	.505	<.028
07-15-99	<.25	<.16	<.21	<.24	<.24	<.5	<5	<5	<.18	<.44	<.14
07-01-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
07-01-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
09-03-99	<.05	<.032	<.042	<.048	<.048	<.1	<2	<18	<.036	<.088	<.028
07-21-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	E.0260	<.028
08-11-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
09-15-99	<.05	.304	.138	<.048	<.048	.807	<2	<18	<.036	<.088	<.028
09-14-99	<.05	<.032	<.042	<.048	<.048	E.00700	<2	<18	<.036	<.088	<.028
07-28-99	E.0424	E.0270	E.0192	<.048	<.048	E.0602	<5	<5	<.036	<.088	<.028
06-08-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	E.0237	<.028
09-13-99	<.05	<.032	<.042	<.048	<.048	E.0114	<2	<18	<.036	<.088	<.028
09-13-99	<.05	<.032	<.042	<.048	<.048	<.1	<2	<18	<.036	<.088	<.028
09-13-99	<.05	<.032	<.042	<.048	<.048	E.00679	<2	<18	<.036	<.088	<.028
06-09-99	E.0318	<.032	<.042	E.0269	<.048	E.0208	E.06	<5	E.0137	E.0621	E.00690
06-24-99	<5	--	--	<5	--	--	<5	<5	--	--	--
06-21-99	<.25	<.16	<.21	<.24	<.24	<.5	--	--	<.18	<.44	E.0602
06-30-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
06-30-99	<.05	<.032	<.042	<.048	<.048	E.00582	<5	E2	<.036	<.088	<.028
06-28-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	.172	<.028
07-15-99	<.25	<.16	<.21	<.24	<.24	<.5	<5	<5	<.18	<.44	<.14
06-24-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
06-24-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
07-14-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
07-14-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
07-14-99	<.05	<.032	<.042	<.048	<.048	E.0132	<5	<5	<.036	<.088	<.028
06-28-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	.132	<.028
06-22-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	<.088	<.028
06-22-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	.119	<.028
07-21-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	E.0185	<.028
07-22-99	<.05	<.032	<.042	<.048	<.048	E.0134	<5	<5	<.036	<.088	<.028
07-29-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	E.0408	<.028
07-29-99	<.05	<.032	<.042	<.048	<.048	<.1	<5	<5	<.036	E.00891	<.028

## ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Brooklyn Queens Aquifer study, Organic data (continued)

DATE	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	CHLOR- DIS- PYRIFOS SOLVED (UG/L) (38933)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI- ELDRIN DIS- TOTAL (UG/L) (39381)	DI- ELDRIN TOTAL (UG/L) (39380)	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L) (77562)
06-09-99	<.18	.137	<.004	<.038	E.0071	<.048	<.14	<.001	<.01	<.098	<.044
06-10-99	<.18	.468	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
06-10-99	<.18	E.0826	<.004	E.0768	<.002	<.048	<.14	<.001	<.01	<.098	<.044
06-23-99	<.18	8.44	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
09-01-99	<.9	1.20	<.004	<.19	<.002	<.24	<.7	<.001	<.009	<.49	<.22
09-01-99	<.18	.124	<.004	<.038	<.002	<.048	<.14	<.001	<.009	<.098	<.044
07-12-99	<.18	.137	<.004	.207	<.002	<.048	<.14	<.001	<.01	<.098	<.044
06-23-99	<.18	3.94	<.004	E.0133	<.002	<.048	<.14	<.001	<.01	<.098	<.044
07-12-99	<.18	E.0865	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
07-19-99	<.18	E.0834	<.004	<.038	<.002	<.048	E.151	<.001	<.01	<.098	<.044
07-08-99	<.36	<.104	--	<.076	--	<.096	<.28	--	<.01	<.196	<.088
07-07-99	<.18	<.052	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
07-08-99	<.36	<.104	<.004	<.076	<.002	<.096	<.28	<.001	<.01	<.196	<.088
07-07-99	<.18	1.83	<.004	.688	<.002	E.0416	E.359	<.001	<.01	<.098	E.0101
07-15-99	<.9	<.26	<.004	<.19	<.002	<.24	<.7	<.001	<.01	<.49	<.22
07-01-99	<.18	.942	<.004	<.038	<.002	E.0381	<.14	<.001	<.01	<.098	<.044
07-01-99	<.18	<.052	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
09-03-99	<.18	<.052	<.004	<.038	<.002	<.048	<.14	<.001	<.009	<.098	<.044
07-21-99	<.18	E.0232	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
08-11-99	<.18	<.052	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
09-15-99	<.18	<.052	<.004	<.038	<.080	<.048	<.14	<.001	<.009	<.098	<.044
09-14-99	<.18	<.052	<.004	<.038	<.002	<.048	<.14	<.001	<.009	<.098	<.044
07-28-99	<.18	<.052	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
06-08-99	<.18	.492	<.004	E.0660	<.002	E.0371	E.780	<.001	<.01	<.098	<.044
09-13-99	<.18	<.052	<.004	<.038	<.002	<.048	<.14	<.001	<.009	<.098	<.044
09-13-99	<.18	<.052	<.004	<.038	<.002	<.048	E2.74	<.001	<.009	<.098	<.044
09-13-99	<.18	<.052	<.004	<.038	<.002	<.048	E1.56	<.001	<.009	<.098	<.044
06-09-99	<.18	.588	<.004	101	<.002	<.048	E.207	<.001	<.01	<.098	<.044
06-24-99	--	--	<.004	--	<.002	--	--	<.001	--	--	--
06-21-99	<.9	E.100	--	<.19	--	<.24	<.7	--	<.01	<.49	<.22
06-30-99	<.18	<.052	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
06-30-99	<.18	<.052	<.004	E.0774	<.002	<.048	<.14	<.001	<.01	<.098	<.044
06-28-99	<.18	.308	<.004	<.038	E.0041	<.048	<.14	<.001	<.01	<.098	<.044
07-15-99	<.9	E.126	<.004	<.19	<.002	<.24	<.7	<.001	<.01	<.49	<.22
06-24-99	<.18	<.052	<.004	<.038	<.002	<.048	<.14	<.001	<.01	.438	<.044
06-24-99	<.18	<.052	<.004	<.038	E.0027	<.048	<.14	<.001	<.01	6.68	<.044
07-14-99	<.18	<.052	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
07-14-99	<.18	<.052	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
07-14-99	<.18	E.0407	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
06-28-99	<.18	.701	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
06-22-99	E.0584	.275	<.004	4.03	<.002	E.0336	<.14	.0064	E.008	<.098	<.044
06-22-99	<.18	.339	<.004	E.0170	<.002	E.0270	<.14	.0041	<.01	<.098	<.044
07-21-99	<.18	1.54	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
07-22-99	<.18	.176	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
07-29-99	<.18	E.0223	<.004	<.038	<.002	<.048	<.14	<.001	<.01	<.098	<.044
07-29-99	<.18	.155	.0076	<.038	<.002	<.048	E.433	<.001	<.01	<.098	<.044

## ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

## Brooklyn Queens Aquifer study, Organic data (continued)

DATE	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FLUOR- ANTHENE TOTAL (UG/L) (34376)	FLUOR- ENE TOTAL (UG/L) (34381)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	ISO- DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)
06-09-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	E.123	<.38	<.002
06-10-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	<.17	<.38	<.002
06-10-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	E.0793	E.0203	<.002
06-23-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	1.07	E.0232	<.002
09-01-99	<.85	<.55	<.15	<2	<2	<.16	<1	<.005	<.85	<1.9	<.002
09-01-99	<.17	<.11	<.03	<2	<2	<.032	<.2	<.005	E.0680	<.38	<.002
07-12-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	.173	<.38	<.002
06-23-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	1.66	E.0222	<.002
07-12-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	<.17	<.38	<.002
07-19-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	E.0425	<.38	<.002
07-08-99	<.34	<.22	<.06	<5	<5	<.064	<.4	--	E.0539	<.76	--
07-07-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	<.17	<.38	<.002
07-08-99	<.34	<.22	<.06	<5	<5	<.064	<.4	<.005	E.0475	<.76	<.002
07-07-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	.988	<.38	<.002
07-15-99	<.85	<.55	<.15	<5	<5	<.16	<1	<.005	<.85	<1.9	<.002
07-01-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	.174	<.38	<.002
07-01-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	<.17	<.38	<.002
09-03-99	<.17	<.11	<.03	E.09	E.06	<.032	<.2	<.005	<.17	<.38	<.002
07-21-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	<.17	<.38	<.002
08-11-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	<.17	<.38	<.002
09-15-99	<.17	<.11	2.03	15	65	<.032	.655	<.005	E.0634	<.38	<.002
09-14-99	<.17	<.11	<.03	E.2	<2	<.032	<.2	<.005	E.0490	<.38	E.0026
07-28-99	<.17	E.0604	.129	<5	E.1	<.032	E.0454	<.005	3.23	<.38	<.002
06-08-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	.197	<.38	<.002
09-13-99	<.17	<.11	E.00655	<2	<2	<.032	<.2	<.005	E.0532	<.38	<.002
09-13-99	<.17	<.11	<.03	<2	<2	<.032	<.2	E.0029	<.17	<.38	E.0032
09-13-99	<.17	<.11	<.03	<2	<2	<.032	<.2	<.005	E.0778	<.38	<.002
06-09-99	<.17	<.11	<.03	<5	<5	11.5	<.2	<.005	<.17	E.0236	<.002
06-24-99	--	--	--	<5	<5	--	--	<.005	--	--	<.002
06-21-99	<.85	<.55	E.0361	--	--	<.16	<1	--	<.85	<1.9	--
06-30-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	E.0305	<.38	<.002
06-30-99	<.17	<.11	<.03	E.02	<5	<.032	<.2	<.005	E.0851	<.38	<.002
06-28-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	E.0722	<.38	.0051
07-15-99	<.85	<.55	<.15	<5	<5	<.16	<1	<.005	<.85	<1.9	<.002
06-24-99	E.0715	<.11	<.03	<5	<5	<.032	<.2	<.005	E.0446	<.38	<.002
06-24-99	.573	<.11	<.03	<5	<5	<.032	<.2	<.005	E.0636	<.38	<.002
07-14-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	<.17	<.38	<.002
07-14-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	<.17	<.38	<.002
07-14-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	2.70	<.38	<.002
06-28-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	.348	<.38	<.002
06-22-99	<.17	<.11	<.03	<5	<5	1.43	<.2	<.005	.726	<.38	<.005
06-22-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	.614	<.38	<.002
07-21-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	<.17	<.38	<.002
07-22-99	<.17	<.11	<.03	<5	<5	E.0789	<.2	<.005	.217	<.38	<.002
07-29-99	<.17	<.11	<.03	<5	<5	<.032	<.2	<.005	<.17	<.38	<.002
07-29-99	<.17	<.11	<.03	<5	E.01	<.032	<.2	<.005	.597	<.38	<.002

## ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Brooklyn Queens Aquifer study, Organic data (continued)

DATE	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	NAPHTH- ALENE TOTAL (UG/L) (34696)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	P, P' DDE DISSOLV (UG/L) (34653)	PENTA- CHLORO- PHENOL TOTAL (UG/L) (39032)	PHENAN- THRENE TOTAL (UG/L) (34461)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	PREH- NITENE WATER UNFLTRD RECOVER (UG/L) (49999)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
06-09-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
06-10-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
06-10-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
06-23-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
09-01-99	<.004	<.3	<1.25	<.21	<.3	<.006	<4	<2	<.55	<1.15	<.018
09-01-99	<.004	<.06	<.25	<.042	<.06	<.006	<4	<2	<.11	<.23	E.0097
07-12-99	<.004	E.0148	<.25	E.00823	<.06	<.006	<30	<5	<.11	<.23	<.018
06-23-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
07-12-99	<.004	E.0135	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
07-19-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
07-08-99	--	<.12	<.5	<.084	<.12	--	<30	<5	<.22	<.46	--
07-07-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
07-08-99	<.004	<.12	<.5	<.084	<.12	<.006	<30	<5	<.22	<.46	<.018
07-07-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
07-15-99	<.004	<.3	<1.25	<.21	<.3	<.006	<30	<5	<.55	<1.15	<.018
07-01-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
07-01-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
09-03-99	<.020	<.06	<.25	<.042	<.06	<.006	<4	E.05	<.11	<.23	<.018
07-21-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
08-11-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
09-15-99	--	3.56	231	<.042	1.67	<.006	<4	120	E.109	.447	<.018
09-14-99	<.015	E.0174	<.25	<.042	<.06	<.006	<4	E.05	<.11	<.23	<.018
07-28-99	.0121	E.0665	E.154	<.042	E.0486	<.006	E.2	<5	<.11	E.0465	<.018
06-08-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
09-13-99	<.004	E.0222	<.25	<.042	<.06	<.006	<4	<2	<.11	<.23	<.018
09-13-99	<.004	<.06	<.25	<.042	<.06	E.0013	<4	<2	<.11	<.23	<.018
09-13-99	<.004	E.0213	<.25	<.042	<.06	<.006	<4	<2	<.11	<.23	<.018
06-09-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	E.0141
06-24-99	<.004	--	<5	--	--	<.006	<30	<5	--	--	<.018
06-21-99	--	E.193	<1.25	E.129	<.3	--	--	--	<.55	<1.15	--
06-30-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
06-30-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	E.008	<.11	<.23	<.018
06-28-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
07-15-99	<.004	<.3	<1.25	<.21	<.3	<.006	<30	<5	<.55	<1.15	<.018
06-24-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
06-24-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
07-14-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
07-14-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
07-14-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
06-28-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
06-22-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
06-22-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
07-21-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
07-22-99	<.004	E.0192	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	E.0097
07-29-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	<.11	<.23	<.018
07-29-99	<.004	<.06	<.25	<.042	<.06	<.006	<30	<5	E.0772	<.23	<.018



## ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Brooklyn Queens Aquifer study, Organic data (continued)

DATE	PYRENE TOTAL (UG/L) (34469)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	STYRENE TOTAL (UG/L) (77128)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	TOLUENE TOTAL (UG/L) (34010)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)
06-09-99	<5	2.54	<.042	<.010	<.1	<.1	<.05	<.038	<.09	<.002	<.11
06-10-99	<5	<.005	<.042	<.010	<.1	<.1	<.05	<.038	<.09	<.002	<.11
06-10-99	<5	<.005	<.042	<.010	.648	<.1	<.05	.407	<.09	<.002	<.11
06-23-99	<5	<.005	<.042	<.010	.237	<.1	E.0171	E.0132	<.09	<.002	<.11
09-01-99	<2	<.005	<.21	<.010	E.290	<.5	<.25	<.19	<.45	<.002	<.55
09-01-99	<2	.0053	<.042	<.010	<.1	<.1	E.0199	<.038	<.09	<.002	<.11
07-12-99	<5	<.005	<.042	<.010	.317	<.1	<.05	.558	<.09	<.002	<.11
06-23-99	<5	<.005	<.042	<.010	1.49	<.1	E.0186	.455	<.09	<.002	<.11
07-12-99	<5	<.005	<.042	<.010	<.1	<.1	<.05	<.038	<.09	<.002	<.11
07-19-99	<5	<.005	<.042	<.010	<.1	<.1	E.0131	<.038	<.09	<.002	<.11
07-08-99	<5	--	<.084	--	<.2	<.2	E.0300	<.076	<.18	--	<.22
07-07-99	<5	<.005	<.042	<.010	<.1	<.1	<.05	<.038	<.09	<.002	<.11
07-08-99	<5	<.005	<.084	<.010	<.2	<.2	E.0307	<.076	<.18	<.002	<.22
07-07-99	<5	<.005	<.042	<.010	20.9	<.1	<.05	31.1	<.09	<.002	<.11
07-15-99	<5	<.005	<.21	<.010	<.5	<.5	<.25	<.19	<.45	<.002	<.55
07-01-99	<5	<.005	<.042	<.010	<.1	<.1	E.0172	<.038	<.09	<.002	<.11
07-01-99	<5	<.005	<.042	<.010	<.1	<.1	E.0177	<.038	<.09	<.002	<.11
09-03-99	E.07	<.005	<.042	<.010	<.1	<.1	E.0531	<.038	<.09	<.002	<.11
07-21-99	<5	<.005	<.042	<.010	.280	<.1	<.05	<.038	<.09	<.002	<.11
08-11-99	<5	<.005	<.042	<.010	<.1	<.1	E.0241	<.038	<.09	<.002	<.11
09-15-99	13	<.005	.113	<.140	<.1	.317	2.04	<.038	<.09	<.002	<.11
09-14-99	E.2	<.005	<.042	<.010	<.1	<.1	E.0209	<.038	<.09	<.002	<.11
07-28-99	<5	<.005	<.042	<.010	<.1	E.0246	.154	<.038	<.09	<.002	<.11
06-08-99	<5	<.005	<.042	<.010	2.90	<.1	<.05	E.0294	<.09	<.002	<.11
09-13-99	<2	<.005	<.042	<.010	<.1	<.1	E.0263	<.038	<.09	<.002	<.11
09-13-99	<2	<.005	<.042	<.010	<.1	<.1	E.0121	<.038	<.09	<.002	<.11
09-13-99	<2	<.005	<.042	<.010	<.1	<.1	E.0252	<.038	<.09	<.002	<.11
06-09-99	<5	.266	<.042	.0178	21.2	<.1	<.05	33.6	.819	<.002	E.0223
06-24-99	<5	<.005	--	<.010	--	--	--	--	--	<.002	--
06-21-99	--	--	<.21	--	<.5	<.5	.574	<.19	<.45	--	<.55
06-30-99	<5	<.005	<.042	<.010	<.1	<.1	E.0134	<.038	<.09	<.002	<.11
06-30-99	E.01	<.005	<.042	<.010	<.1	<.1	E.0151	<.038	<.09	<.002	E.0878
06-28-99	<5	<.005	<.042	<.010	<.1	<.1	<.05	<.038	<.09	<.002	<.11
07-15-99	<5	<.005	<.21	<.010	<.5	<.5	<.25	<.19	<.45	<.002	<.55
06-24-99	<5	<.005	<.042	<.010	<.1	<.1	E.0136	<.038	<.09	<.002	<.11
06-24-99	<5	<.005	<.042	<.010	E.00569	<.1	E.0169	E.0639	<.09	<.002	<.11
07-14-99	<5	<.005	<.042	<.010	<.1	<.1	<.05	<.038	<.09	<.002	<.11
07-14-99	<5	<.005	<.042	<.010	<.1	<.1	<.05	<.038	<.09	<.002	<.11
07-14-99	<5	<.005	<.042	<.010	<.1	<.1	<.05	<.038	E.0244	E.0031	<.11
06-28-99	<5	<.005	<.042	<.010	<.1	<.1	<.05	<.038	<.09	<.002	<.11
06-22-99	<5	.0888	<.042	.0123	2.59	<.1	<.05	1.75	<.09	<.002	<.11
06-22-99	<5	<.005	<.042	<.010	1.27	<.1	E.0103	E.0329	<.09	<.002	<.11
07-21-99	<5	<.005	<.042	<.010	<.1	<.1	<.05	<.038	<.09	<.002	<.11
07-22-99	<5	.0066	<.042	<.010	.300	<.1	<.05	1.86	<.09	<.002	<.11
07-29-99	<5	<.005	<.042	<.010	<.1	<.1	E.0124	E.0146	<.09	<.002	<.11
07-29-99	<5	<.005	<.042	<.010	1.15	<.1	.317	E.0384	<.09	E.0036	<.11

## ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

## New York State Pesticide Monitoring Program

LOCAL IDENTIFIER	DATE	TIME	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	CAR- BARYL WATER FLTRD 0.7 U (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U (UG/L) (82674)
N 1685. 2	08-02-99	0915	<.002	<.002	.0102	<.003	<.003
N 3704. 1	08-05-99	1010	<.002	<.002	3.96	<.003	<.003
N 6087. 1	07-28-99	0930	<.002	<.002	<.001	<.003	<.003
N 6744. 1	08-12-99	0930	<.002	<.002	.0148	<.003	<.003
N 8010. 1	08-11-99	0930	<.002	<.002	.0303	<.003	<.003
N 9059. 1	08-09-99	1015	<.002	<.002	<.001	<.003	<.003
N 9117. 1	07-27-99	1200	<.002	<.002	.0108	<.003	<.003
N 9211. 1	07-30-99	0900	<.002	<.002	.0429	<.003	<.003
N 9334. 3	07-30-99	0915	<.002	<.002	.0044	<.003	<.003
N 9663. 1	07-26-99	1040	<.002	<.002	.754	<.003	<.003
N 9667. 1	07-26-99	0925	<.002	<.002	<.001	<.003	<.003
N 9712. 1	07-27-99	0920	<.002	<.002	<.001	<.003	<.003
N 9930. 1	07-20-99	0930	<.002	<.002	.414	<.003	<.003
N 11780. 1	08-11-99	1100	<.002	<.002	.148	E1.28	<.003
N 12252. 1	07-26-99	1205	<.002	<.002	.129	<.003	<.003
S 1341. 1	01-25-99	1125	<.002	<.002	E.0028	<.003	E.0604
S 2415. 1	01-25-99	1335	<.002	<.002	.155	<.003	E.122
S 16175. 1	09-14-99	1010	<.002	<.002	E.0026	<.003	<.003
S 17474. 1	01-25-99	1025	<.002	<.002	.0337	<.003	E.0875
	08-25-99	1400	<.002	<.002	.0396	<.003	E.0600
S 22362. 1	02-02-99	0950	<.002	<.002	.138	<.003	<.003
	08-24-99	0945	<.002	<.002	.135	<.003	<.003
S 22362. 1 FILTERED	02-02-99	1000	<.002	<.002	E.0032	<.003	<.003
	08-24-99	1000	<.002	<.002	E.0030	<.003	<.003
S 24850. 1	01-26-99	1200	<.002	<.002	<.001	<.003	E.0433
	08-26-99	1345	<.002	<.002	<.001	<.003	E.0437
S 24850. 1 FILTERED	01-26-99	1215	<.002	<.002	<.001	<.003	<.003
S 30088. 1	08-24-99	1230	.451	<.002	<.001	<.003	<.003
S 33775. 1	01-27-99	1140	<.002	<.002	.0040	<.003	E.0090
	08-26-99	1415	.0157	<.002	<.001	<.003	E.0101
S 45208. 1	09-14-99	1030	<.002	<.002	<.001	<.003	<.003
S 48429. 1	09-08-99	1153	<.002	<.002	<.001	<.003	<.003
S 49422. 1	02-05-99	0845	<.002	<.002	<.001	<.003	E.0088
S 51566. 1	08-31-99	1019	<.002	<.002	1.51	<.003	E.0356
S 51953. 1	08-24-99	1330	<.002	.0061	.0053	<.003	<.003
S 53593. 1	01-27-99	0930	<.002	<.002	<.001	<.003	E.670
	08-25-99	0945	<.002	<.002	<.001	<.003	E.538
S 63825. 1	09-23-99	0750	<.002	<.002	<.007	<.003	<.003
S 67819. 1	02-05-99	0930	<.002	<.002	<.001	<.003	<.003
S 71569. 1	08-31-99	1130	<.002	<.002	.0088	<.003	E.0203
S 71715. 1	02-01-99	1420	<.002	<.002	<.001	<.003	<.003
S 73332. 1	02-05-99	0840	<.002	<.002	.0306	<.003	E.488
S 83472. 1	01-27-99	1320	<.002	<.002	<.001	<.003	E.0312
S 83707. 1	01-25-99	1250	<.002	<.002	.0661	<.003	<.003
	08-25-99	1210	<.002	<.002	.0346	<.003	<.010
S 83707. 1, S 73332. 1, FILT	01-25-99	1255	<.002	<.002	.0088	<.003	E.0306
S 93794. 1	01-27-99	1055	.196	<.002	.0103	<.003	E.0129
S 93794. 1, S 33775. 1, FILT	01-27-99	1100	.0174	<.002	<.001	<.003	<.003
S 97501. 1	01-26-99	1330	<.002	<.002	<.001	<.003	<.003
S 97502. 1	01-26-99	1255	.0169	<.002	<.001	<.003	E.0205
S 99928. 1	01-26-99	1015	<.002	<.002	<.001	<.003	E.0123
	08-26-99	1100	<.002	<.002	<.001	<.003	E.0108
S 99928. 1 FILTERED	01-26-99	1030	<.002	<.002	<.001	<.003	<.003
S112255. 1	08-12-99	1220	<.002	<.002	<.001	<.003	<.003
S112329. 3	09-08-99	1310	.0315	<.002	.0182	<.003	<.003
S112499. 1	09-14-99	1245	<.002	<.002	.251	<.003	<.003
S112742. 1	09-21-99	1110	<.002	<.002	.0067	<.003	<.003
S115244. 1	08-18-99	1304	<.002	<.002	<.001	<.003	<.003
S115250. 1	07-29-99	1215	<.002	<.002	<.001	<.003	<.003
S115251. 1	07-29-99	1150	<.002	<.002	<.001	E.0096	<.02
S115253. 1	07-22-99	1110	<.002	<.002	.0044	<.003	<.003
S115254. 1	07-22-99	1244	<.002	<.002	.0120	E.0078	<.003
S115255. 1	07-22-99	1135	<.002	<.002	.0058	<.003	<.003
S115356. 1	08-25-99	1033	<.002	<.002	<.001	<.015	<.003
S115257. 1	08-03-99	1040	<.002	<.002	<.001	<.003	<.003
S115259. 1	08-03-99	1200	<.002	<.002	<.001	<.003	<.003
S115260. 1	08-18-99	1100	<.002	<.002	.0057	<.003	<.003
S115262. 1	08-18-99	1225	<.002	<.002	<.001	<.003	<.003
S115261. 1	08-18-99	1025	<.002	<.002	<.001	<.003	<.003
S115263. 1	08-18-99	1338	<.002	<.002	<.001	<.003	<.003

## ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

## New York State Pesticide Monitoring Program (continued)

DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)
08-02-99	<.004	E.0066	<.001	<.002	<.003	<.004	<.002	<.005
08-05-99	<.004	E.694	<.001	<.002	<.003	<.004	<.002	<.010
07-28-99	<.004	<.002	.0361	<.002	<.003	<.004	<.002	<.005
08-12-99	<.004	E.0037	.0487	<.002	<.003	<.004	<.002	<.005
08-11-99	<.004	E.0049	<.001	<.002	<.003	<.004	<.002	<.005
08-09-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	.0052
07-27-99	<.004	E.0061	<.001	<.002	<.003	.0356	<.002	<.005
07-30-99	<.004	E.0337	<.001	<.002	<.003	<.004	<.002	<.005
07-30-99	<.004	E.0077	<.001	<.002	<.003	<.004	<.002	<.005
07-26-99	<.004	E.0295	.460	<.002	<.003	<.004	<.002	<.005
07-26-99	<.004	<.002	.400	<.002	<.003	<.004	<.002	<.005
07-27-99	<.004	<.002	.104	<.002	<.003	<.004	<.002	<.005
07-20-99	<.004	E.0047	.0538	<.002	<.003	<.004	<.002	<.005
08-11-99	<.004	E.0112	<.001	<.002	<.003	<.004	<.002	<.005
07-26-99	<.004	E.0122	.582	<.002	<.003	<.004	<.002	<.005
01-25-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
01-25-99	<.004	E.0040	<.001	E.0028	<.003	<.004	<.002	<.005
09-14-99	<.004	E.0036	.0341	<.002	<.003	<.004	<.002	<.005
01-25-99	<.004	E.0180	<.001	<.002	<.003	<.004	<.002	<.005
08-25-99	<.004	E.0179	<.001	<.002	<.003	<.004	<.002	<.005
08-02-99	<.004	E.0053	<.001	<.002	<.003	<.004	<.002	<.005
08-24-99	<.004	E.0072	<.001	<.002	<.003	<.004	<.002	<.005
02-02-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-24-99	<.004	E.0013	<.001	<.002	<.003	<.004	<.002	<.005
01-26-99	E.0027	<.002	<.001	<.002	<.003	<.004	.0226	<.005
08-26-99	<.004	<.002	<.001	<.002	<.003	<.004	.0226	<.005
01-26-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-24-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
01-27-99	<.004	E.0020	<.001	E.0014	<.003	<.004	<.002	<.005
08-26-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
09-14-99	<.004	<.002	.108	<.002	<.003	<.004	<.002	<.005
09-08-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
02-05-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-31-99	6.93	E.0100	.0081	<.002	<.003	<.004	.0426	<.005
08-24-99	<.004	E.0013	<.001	<.002	<.003	.0129	<.002	<.005
01-27-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-25-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
09-23-99	<.004	E.0044	<.001	<.002	<.003	<.004	<.002	<.005
02-05-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-31-99	<.004	<.002	<.010	<.002	<.003	<.004	.0314	<.005
02-01-99	<.004	<.002	E.0036	<.002	<.003	<.004	<.002	<.005
02-05-99	<.004	E.0063	<.001	<.002	<.003	<.004	<.002	<.005
01-27-99	<.004	<.002	<.001	<.002	<.003	<.004	.0204	<.005
01-25-99	<.004	E.0061	<.001	E.0014	.103	<.004	<.002	<.005
08-25-99	<.004	E.0049	<.001	<.002	<.003	<.004	<.002	<.005
01-25-99	<.004	E.0017	<.001	<.002	<.003	<.004	<.002	<.005
01-27-99	<.004	E.0044	<.001	<.002	<.003	<.004	<.002	<.005
01-27-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
01-26-99	<.004	E.0022	<.001	<.002	<.003	<.004	<.002	<.005
01-26-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
01-26-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-26-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
01-26-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-12-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
09-08-99	<.004	E.0083	<.001	<.002	<.003	<.004	.0197	<.005
09-14-99	<.004	E.0085	<.001	<.002	<.003	<.004	<.002	<.005
09-21-99	<.004	E.0042	<.001	<.002	<.003	<.004	<.002	<.005
08-18-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
07-29-99	<.004	E.0076	<.001	<.002	<.003	<.004	<.002	<.005
07-29-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
07-22-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
07-22-99	<.004	<.002	.0108	<.002	<.003	<.004	<.002	<.005
07-22-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-25-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-03-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-03-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-18-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-18-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-18-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005
08-18-99	<.004	<.002	<.001	<.002	<.003	<.004	<.002	<.005

## ANALYSIS OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

## New York State Pesticide Monitoring Program (continued)

DATE	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	P, P' DDE DISSOLV (UG/L) (34653)	PENDI- METH- ALIN WAT FLT GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD GF, REC (UG/L) (82670)	TRI- FLUR- ALIN WAT FLT GF, REC (UG/L) (82661)
08-02-99	<.002	<.004	<.006	<.004	.129	.115	.0874	<.002
08-05-99	.0202	<.004	<.006	<.004	<.018	1.10	<.010	<.002
07-28-99	<.002	<.004	<.006	<.004	<.018	<.005	<.010	<.002
08-12-99	<.002	<.004	<.006	<.004	<.018	.0402	<.010	<.002
08-11-99	<.002	<.004	<.006	<.004	<.018	.0294	<.010	<.002
08-09-99	.0051	<.004	<.006	<.004	<.018	<.010	<.010	<.002
07-27-99	<.002	<.004	<.006	<.004	<.018	<.005	<.010	<.002
07-30-99	<.002	<.004	<.006	<.004	<.018	.0061	<.010	<.002
07-30-99	<.002	<.004	<.006	<.004	<.018	<.005	<.010	<.002
07-26-99	<.002	<.004	<.006	<.004	<.018	<.005	<.010	<.002
07-26-99	<.002	<.004	<.006	<.004	<.018	.0174	<.010	<.002
07-27-99	<.002	<.004	<.006	<.004	<.018	<.005	<.010	<.002
07-20-99	.0055	<.004	<.006	<.004	<.018	<.005	<.010	<.002
08-11-99	<.002	<.004	<.006	<.004	<.018	<.005	<.010	<.002
07-26-99	<.002	<.004	<.006	<.004	<.018	.0506	<.010	<.002
01-25-99	.0260	.0145	<.006	<.004	<.018	.0106	<.010	<.002
01-25-99	<.002	<.004	<.006	<.004	<.018	.115	<.010	<.002
09-14-99	<.002	<.004	E.0014	<.004	<.018	.0149	<.010	<.002
01-25-99	.971	.329	<.006	<.004	<.018	<.005	E.0026	<.002
08-25-99	.394	.154	<.006	<.004	<.018	<.005	<.010	<.002
02-02-99	<.002	<.004	<.006	<.004	<.018	.790	1.09	<.002
08-24-99	<.002	<.004	<.006	<.004	<.018	1.77	1.97	<.002
02-02-99	<.002	<.004	<.006	<.004	<.018	.0071	E.0052	<.002
08-24-99	<.002	<.004	<.006	<.004	<.018	.0098	E.0093	<.002
01-26-99	.443	.144	<.006	<.004	E.0027	<.005	<.010	<.002
08-26-99	.320	.118	<.006	<.004	<.018	<.005	<.010	<.002
01-26-99	<.002	<.004	E.00061	<.004	<.018	<.005	<.010	<.002
08-24-99	<.002	<.004	<.006	<.004	<.018	<.005	<.010	<.002
01-27-99	.153	E.0027	<.006	<.004	<.018	.241	<.010	<.002
08-26-99	.555	<.004	E.0021	<.004	<.018	.150	<.010	E.0020
09-14-99	E.0031	<.004	<.006	<.004	<.018	<.005	<.010	<.002
09-08-99	.407	<.004	<.006	<.004	<.018	<.005	<.010	<.002
02-05-99	<.002	<.004	<.006	<.004	<.018	<.005	<.010	<.002
08-31-99	2.25	<.004	E.0049	<.004	<.018	.0289	<.010	<.002
08-24-99	<.002	<.004	<.006	<.004	<.018	<.005	<.010	<.002
01-27-99	.0234	.0048	<.006	<.004	<.018	<.005	<.010	<.002
08-25-99	.0282	<.004	<.006	<.004	<.018	<.005	<.010	<.002
09-23-99	<.005	<.004	<.006	<.004	<.018	4.21	1.63	<.002
02-05-99	.0055	<.004	<.006	<.004	<.018	<.005	<.010	<.002
08-31-99	.517	.125	<.020	<.004	<.018	<.005	<.010	<.002
02-01-99	E.0038	<.004	<.006	<.004	<.018	<.005	<.010	<.002
02-05-99	<.002	<.004	<.006	<.004	<.018	.680	.282	<.002
01-27-99	.299	.0064	E.0024	<.004	<.018	<.005	<.010	<.002
01-25-99	<.002	<.004	E.00035	<.004	<.018	2.42	.556	<.002
08-25-99	<.002	<.004	<.006	<.004	<.018	1.68	.220	<.002
01-25-99	<.002	<.004	<.006	<.004	<.018	.0096	.0174	<.002
01-27-99	1.15	<.004	<.006	<.004	<.018	.0386	<.010	E.0014
01-27-99	.0897	<.004	E.0014	<.004	<.018	.0080	<.010	<.002
01-26-99	.0109	<.004	<.006	<.004	<.018	<.005	<.010	<.002
01-26-99	.143	.0060	<.006	<.004	<.018	<.005	<.010	<.002
01-26-99	.0065	.0452	<.006	<.004	<.018	<.005	<.010	<.002
08-26-99	.0113	.0419	<.006	<.004	<.018	<.005	<.010	<.002
01-26-99	<.002	<.004	E.00048	<.004	<.018	<.005	<.010	<.002
08-12-99	<.002	<.004	<.006	<.004	<.018	.0798	<.010	<.002
09-08-99	E150	<.004	<.01	<.004	.197	.0062	<.010	<.002
09-14-99	<.002	<.004	<.006	<.004	<.018	E22	2.52	<.002
09-21-99	.0170	<.004	<.006	<.004	<.018	.0144	<.010	<.002
08-18-99	.0267	<.004	E.0031	<.004	<.018	<.005	<.010	<.002
07-29-99	<.002	<.004	E.0014	<.004	<.018	<.005	<.010	E.0032
07-29-99	<.002	<.004	<.006	<.004	<.018	<.005	<.010	<.002
07-22-99	<.002	<.004	<.006	<.004	<.018	<.005	<.0767	<.002
07-22-99	<.002	<.004	<.006	<.004	<.018	.0070	<.0767	<.002
07-22-99	<.002	<.004	<.006	<.004	<.018	E.0041	<.0767	<.002
08-25-99	<.002	<.004	<.025	.0168	E.0099	<.005	<.0767	<.002
08-03-99	<.002	<.004	E.0021	<.004	<.018	<.005	<.010	<.002
08-03-99	<.002	<.004	E.0034	<.004	<.018	<.005	<.010	<.002
08-18-99	.0062	<.004	E.00093	<.004	<.018	<.005	<.010	<.002
08-18-99	.0536	<.004	E.0028	<.004	<.018	<.005	<.010	<.002
08-18-99	<.002	<.004	E.00070	<.004	<.018	<.005	<.010	<.002
08-18-99	.0966	<.004	E.0030	<.004	<.018	<.005	<.010	<.002





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## CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	$2.54 \times 10^1$	millimeter
	$2.54 \times 10^{-2}$	meter
foot (ft)	$3.048 \times 10^{-1}$	meter
mile (mi)	$1.609 \times 10^0$	kilometer
<i>Area</i>		
acre	$4.047 \times 10^3$	square meter
	$4.047 \times 10^{-1}$	square hectometer
	$4.047 \times 10^{-3}$	square kilometer
square mile (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometer
<i>Volume</i>		
gallon (gal)	$3.785 \times 10^0$	liter
	$3.785 \times 10^0$	cubic decimeter
	$3.785 \times 10^{-3}$	cubic meter
million gallons (Mgal)	$3.785 \times 10^3$	cubic meter
	$3.785 \times 10^{-3}$	cubic hectometer
cubic foot (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeter
	$2.832 \times 10^{-2}$	cubic meter
cubic-foot-per-second day [(ft <sup>3</sup> /s) d]	$2.447 \times 10^3$	cubic meter
	$2.447 \times 10^{-3}$	cubic hectometer
acre-foot (acre-ft)	$1.233 \times 10^3$	cubic meter
	$1.233 \times 10^{-3}$	cubic hectometer
	$1.233 \times 10^{-6}$	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liter per second
	$2.832 \times 10^1$	cubic decimeter per second
	$2.832 \times 10^{-2}$	cubic meter per second
gallon per minute (gal/min)	$6.309 \times 10^{-2}$	liter per second
	$6.309 \times 10^{-2}$	cubic decimeter per second
	$6.309 \times 10^{-5}$	cubic meter per second
million gallons per day (Mgal/d)	$4.381 \times 10^1$	cubic decimeter per second
	$4.381 \times 10^{-2}$	cubic meter per second
<i>Mass</i>		
ton (short)	$9.072 \times 10^{-1}$	megagram or metric ton

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



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