

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

MINIMUM AVERAGE 7-DAY, 10-YEAR FLOWS IN THE HUDSON RIVER BASIN,
NEW YORK, WITH RELEASE-FLOW DATA ON
RONDOUT AND ASHOKAN RESERVOIRS

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(in pocket)

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FACTORS FOR CONVERTING U.S. CUSTOMARY UNITS TO INTERNATIONAL SYSTEM (SI) UNITS

<u>Multiply U.S. Customary Units</u>	<u>By</u>	<u>To obtain SI units</u>
miles (mi)	1.609	kilometers (km)
feet (ft)	.3048	meters (m)
square miles (mi ²)	2.59	square kilometers (km ²)
cubic feet per second (ft ³ /s)	.028317	cubic meters per second (m ³ /s)
gallons (gal)	3.785	liters (L)
million gallons (10 ⁶ gal)	3.785 x 10 ³	cubic meters (m ³)

MINIMUM AVERAGE 7-DAY, 10-YEAR FLOWS IN THE
HUDSON RIVER BASIN, NEW YORK, AND
RELEASE-FLOW DATA ON
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ABSTRACT

Minimum average 7-day, 10-year flow at 67 gaging stations and 173 partial-record stations in the Hudson River basin are given in tabular form. Variation of the 7-day, 10-year low flow from point to point in selected reaches, and the corresponding times of travel, are shown graphically for Wawayanda Creek, Wallkill River, Woodbury-Moodna Creek, and the Fishkill Creek basins. The 7-day, 10-year low flow for the Saw Kill basin, and estimates of the 7-day, 10-year low flow of the Roeliff Jansen Kill at Ancram and of Birch Creek at Pine Hill, are given. Summaries of discharge from Rondout and Ashokan Reservoirs, in Ulster County, are also included.

Minimum average 7-day, 10-year flow for gaging stations with 10 years or more of record were determined by log-Pearson Type III computation; those for partial-record stations were developed by correlation of discharge measurements made at the partial-record stations with discharge data from appropriate long-term gaging stations. The variation in low flows from point to point within the selected subbasins were estimated from available data and regional regression formula. Time of travel at these flows in the four subbasins was estimated from available data and Boning's equations.

INTRODUCTION

The drought of the early 1960's provided a stimulus for several studies on water-resources planning and management in New York State. From the results of these studies, the State of New York prepared a proposal for a "Level B Study of the Hudson River basin," which was subsequently funded by Congress through the Water Resources Council (Hudson River Basin Study Group, written commun., Nov. 1976, p. 1). The New York State Department of Environmental Conservation was selected to provide guidance for the study.

Work groups composed of representatives from various State and Federal agencies were formed to assemble needed data. The U.S. Geological Survey, as one phase of its part in the study, prepared the following information on low flows in the Hudson River basin: (a) minimum average daily 7-day,

10-year flow for gaging stations with applicable records; (b) estimates of the 7-day, 10-year low flow at specific points in selected reaches of five streams in Dutchess, Orange, and Ulster Counties, and time of travel at these flows in four of the five streams; (c) estimates of the 7-day, 10-year low flow of the Roeliff Jansen Kill at Ancram, in Columbia County, and of Birch Creek at Pine Hill, in Ulster County and (d) data on the flow release of Ashokan and Rondout Reservoirs in Ulster County. Locations of the above sites are shown in figure 1; locations of gaging stations within the Hudson River basin are shown in plate 1.

The low-flow information is to be used by the Study Group to formulate a basis from which a management system for water allocation in the basin can be developed.

COMPUTATION OF MINIMUM AVERAGE 7-DAY, 2-YEAR AND 10-YEAR FLOWS

The 7-day, 2 year (or 10-year) low flow is the discharge with a 2-year (10-year) recurrence interval as determined from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days. These values were computed for 67 long-term gaging stations (those with 10 years record or more) in the Hudson River basin and are given in table 1; locations of these gaging stations are shown on plate 1. The frequency curves were computed as described by Riggs (1972). Discharge at some of these gaging stations is highly regulated; therefore, some of the data are primarily of historical significance and have only limited value for predictive purposes. The presence of significant regulation at a gaging station is indicated in table 1.

Minimum average 7-day, 10-year flows at 173 partial-record stations (stations where discharge measurements were made only periodically) are also included in table 1. These estimates were determined by correlating measurements taken at partial-record sites with concurrent flows at long-term gaging stations by methods described by Riggs (1972, p. 10). Riggs states that:

"...eight to ten measurements made on different recessions and in more than one year should provide adequate data to define a relation with concurrent flows at a long-record gaging station."

Computations were made for all partial-record stations having six or more applicable measurements.

Locations of all stations listed are indicated in plate 1; specific descriptions of the site locations are given in U.S. Geological Survey water-data reports (see "Selected References") for the years in which measurements were made, as indicated in table 1, or can be obtained from the Albany, N.Y. office of the U.S. Geological Survey.

MINIMUM AVERAGE 7-DAY, 10-YEAR FLOW AT SPECIFIC POINTS, AND
CORRESPONDING TIMES OF TRAVEL, IN SELECTED STREAM REACHES

The 7-day, 10-year low flow at specific points was determined for selected reaches of the Saw Kill (tributary to Esopus Creek), Wawayanda Creek (tributary of Wallkill River), Wallkill River, Fishkill Creek, and Woodbury-Moodna Creeks, and time of travel at those flows was estimated for the latter four streams, as described below. Locations of these streams are shown in figure 1.

Saw Kill

The estimated variation of 7-day, 10-year low flows of the Saw Kill from MP (milepoint) 9.7 in the vicinity of Woodstock to the mouth is shown in figure 2A; locations of key points in the reach are shown in figure 2B. The variation was estimated from data from partial-record stations on the Saw Kill at Woodstock (station 01364170) at MP 8.9 and at Sawkill (station 01364200) at MP 0.3. The discharge rates were adjusted upstream and downstream from the partial-record stations on the basis of change in drainage area and the 7-day, 10-year low flow at other partial-record stations in the Esopus Creek basin. Adjustments were made for Kingston Reservoirs 1 and 2 (figs. 2A and 2B) on the basis of a report that the water level in Reservoir 2 has dropped below the spillway in late summer and that some leakage is nearly always present, and that Reservoir 1 has spilled in all but major droughts and had leakage even then (Morris Nussbaum, Kingston Water Department, oral commun., April 21, 1977).

Wawayanda Creek

The 7-day, 10-year low flow at selected sites on Wawayanda Creek, and time of travel at these flows, were estimated for the reach from Wickham Lake (MP 9.5) to the New Jersey border (MP 0.0) (fig. 3A). Locations of key points in this reach are shown in figure 3B.

Estimates of the 7-day, 10-year low flows were based on partial-record-station data from Wawayanda Creek at Durland (station 01368713), Long House Creek near Bellvale (station 01368722), Long House Creek at Bellvale (station 01368724), Warwick Reservoir outlet tributary (station 01368740), Wawayanda Creek tributary near Warwick (station 01368760), Wawayanda Creek at New Milford (station 01368810), and Double Kill at New Milford (station 01368840). The 7-day, 10-year low-flow estimates were adjusted for reported (New York State Department of Environmental Conservation records) inflow of (1) sewage-plant effluent from Warwick School for Boys ($0.3 \text{ ft}^3/\text{s}$) on a tributary to Long House Creek; (2) discharge from Georgia Pacific Corporation ($0.09 \text{ ft}^3/\text{s}$) on tributary to Wawayanda Creek, whose mouth is at MP 5.8; and (3) discharge from Village of Warwick ($0.3 \text{ ft}^3/\text{s}$) at MP 4.6. The reach was subdivided at points of

significant changes in discharge and(or) slope. Estimates of time of travel for the 7-day, 10-year low flow for each subreach were calculated from the equation derived by Boning (1974), which relates velocity to channel slope and discharge ($V = CQ^a S^b$). These estimates are shown in figure 3A.

Wallkill River

Minimum average 7-day, 10-year flow of the Wallkill River (fig. 4A) from the mouth of Crystal Brook (MP 42.0) to the mouth were supplied by the New York State Department of Environmental Conservation. Locations of key points in the reach are shown in figure 4B. Estimates of time of travel for 7-day, 10-year low flow (fig. 4A) were calculated from time-of-travel measurements made in 1972 at flows greater than the 7-day, 10-year low flow on the reaches of the river from MP 45.4 to 32.2, MP 23.0 to 18.6, and MP 8.8 to 3.1. These measurements are available at the Albany, N.Y., office of the U.S. Geological Survey. The 7-day, 10-year low flow is zero in the reach MP 2.8 to 0.0. Estimates of the time of travel in reaches MP 32.2 to 23.0 and MP 18.6 to 8.8 were made from Boning's equations (1974).

Fishkill Creek

The 7-day, 10-year low flow at selected sites and the time of travel of these flows (fig. 5A) were estimated for Fishkill Creek from Frog Hollow Brook (MP 21.8) to the mouth. Locations of key points in that reach are shown in figure 5B. Low flows were computed from long-term gaging-station records at Hopewell Junction (MP 14.0) and at Beacon (MP 2.8).

The 7-day, 10-year low flow downstream from the mouth of Frog Hollow Brook (MP 21.8) was based on data from two partial-record stations in adjacent basins--Wappingers Creek at Clinton Corners (station 01372200) and Little Wappingers Creek at Salt Point (station 01372300). The 7-day, 10-year low flows at selected points between the mouth of Frog Hollow Brook and Hopewell Junction were estimated by adjusting the values on the basis of drainage area downstream from Frog Hollow Brook and upstream from Hopewell Junction. The estimates of 7-day, 10-year low flows between Hopewell Junction and the mouth were based on data supplied by the New York State Department of Environmental Conservation, which were adjusted to the most recent computation of the 7-day, 10-year low flow for the gaging stations at Hopewell Junction (station 01372800) and Beacon (station 01373500) (table 1). Estimates of the time of travel for the estimated 7-day, 10-year low flows were based on extrapolation of data obtained from field measurements for MP 21.2 to 18.2, MP 17.2 to 15.6, and MP 7.0 to 3.8. Estimates of time of travel for the remaining reaches were based on computations from Boning's equations (1974).

Woodbury and Moodna Creeks

Estimates of the 7-day, 10-year low flow and time of travel (fig. 6A) were made for Woodbury Creek from Peckermans Pond (MP 8.1) to the mouth, on Moodna Creek (MP 5.9), and from that point to the mouth of Moodna Creek. Locations of key points in the reach are shown in figure 6B. The 7-day, 10-year low-flow estimates (fig. 6A) were based on data from partial-record stations Woodbury Creek at Mountainville (station 01373690) and Moodna Creek at Mountainville (station 01373800). The 7-day, 10-year low-flow estimates include adjustments for Woodbury Sewer District Corporation, Atlantic Coast Aggregates, and Lakeside Trailer Parks based on data obtained from New York State Department of Environmental Conservation. Estimates were also adjusted for diversion of $1.2 \text{ ft}^3/\text{s}$ at Moodna Creek by Cornwall Paper Mill at MP 1.6 and equivalent return flow at MP 1.2 (Joseph Gott, oral commun., April 1977). Time-of-travel estimates are based on Boning's equations (1974).

ESTIMATES OF MINIMUM AVERAGE 7-DAY, 10-YEAR FLOWS OF ROELIFF JANSEN KILL AT ANCRAM AND BIRCH CREEK AT PINE HILL

Estimates of the 7-day, 10-year low flow were determined for Roeliff Jansen Kill at Ancram and for Birch Creek (tributary to Esopus Creek) at Pine Hill (fig. 1). Because no data were available from which flow could be determined for Birch Creek basin, and because only scant data (which were considered not directly applicable) were available for Roeliff Jansen Kill, regression formulas developed by Darmer (1970) were used to estimate the 7-day, 10-year low flow.

The regression formula for Birch Creek used the following basin characteristics: drainage area, channel slope, average annual maximum water content of snow, and soil index; the regression formula for Roeliff Jansen Kill used drainage area, total fall, and mean annual precipitation. The 7-day, 10-year low flow for Roeliff Jansen Kill at Ancram is estimated to be $8 \text{ ft}^3/\text{s}$. The flow, obtained from the regression formula, was adjusted by using the average ratio of the 7-day, 10-year low flow, obtained from the regression formula, the partial-record stations Roeliff Jansen Kill near Hillsdale (station 01362100) and Bashbish Brook at Copake Falls (station 01362150) to the 7-day, 10-year low flow at the partial-record stations obtained by direct correlation with long-term gaging-station records. The 7-day, 10-year low flow for Birch Creek at Pine Hill is estimated to be $0.2 \text{ ft}^3/\text{s}$. This value is based on the value obtained from the regression formula adjusted by the relationship determined for the partial-record station Esopus Creek at Allaben (station 01362200).

RELEASE FLOW OF RONDOUT AND ASHOKAN RESERVOIRS

Since May 1951, release from Rondout Reservoir to Rondout Creek (fig. 1) has been limited to spill. From January 1965 to December 1974, spill occurred only in April-May 1969, April-May 1970, June 1972, and June-July 1973 (City of New York, Board of Water Supply, 1965-1974). The spill during these periods ranged from 0.7 billion gallons in 1970 and 1973 to 3.0 billion gallons in 1972.

Leakage from Rondout Reservoir during low-flow periods is small, as implied by the minimum discharge measured at Rondout Creek near Lackawack (station 01366500), 2.5 mi downstream, during the period of record, October 1951 to June 1967. The minimum instantaneous flow was 0.1 ft³/s on October 3, 1961, and August 7, 1964. The minimum daily flow was 0.2 ft³/s on October 5-9, 11, 12, and December 2, 1964. The drainage area between Merriman Dam (Rondout Reservoir) and the gaging station is 6 mi².

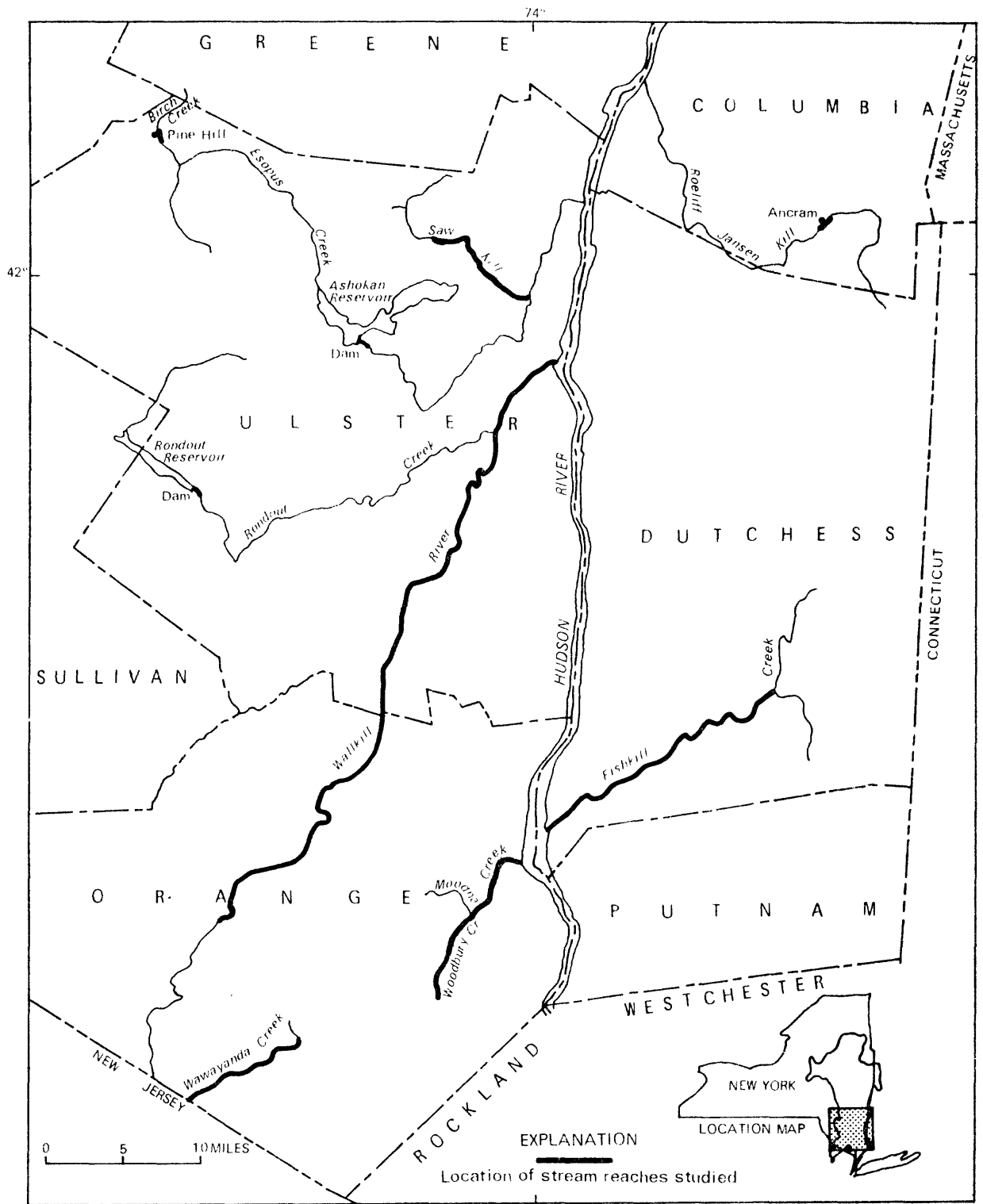
Since September 1931, release from Ashokan Reservoir to Esopus Creek (fig. 1) has been limited to spills. From January 1965 to December 1976, spills occurred each year except 1965 and 1966 (City of New York, Board of Water Supply, 1965-1976). The daily average volume, dates, and number of days on which spills occurred are given in table 2. Spill from Ashokan Reservoir is regulated to the extent that, during periods of spill or anticipated spill, releases from Schoharie Reservoir through the Shandaken Tunnel are curtailed or eliminated. Spills have occurred because of other circumstances also; for example, in November 1971, spill was the result of a shutdown of the Catskill Aqueduct for repairs (City of New York, Board of Water Supply, 1971). The above information suggests that it would require a series of very unusual circumstances for a spill to result during general low-flow periods.

SELECTED REFERENCES

- Boning, C. W., 1974, Generalization of stream travel rates and dispersion characteristics from time-of-travel measurements: U.S. Geol. Survey, Jour. Research, v. 2, no. 4, July-Aug. 1974, p. 495-499.
- City of New York, Bureau of Water Supply, Annual Report of Bureau of Water Supply, City of New York: (published annually since 1905).
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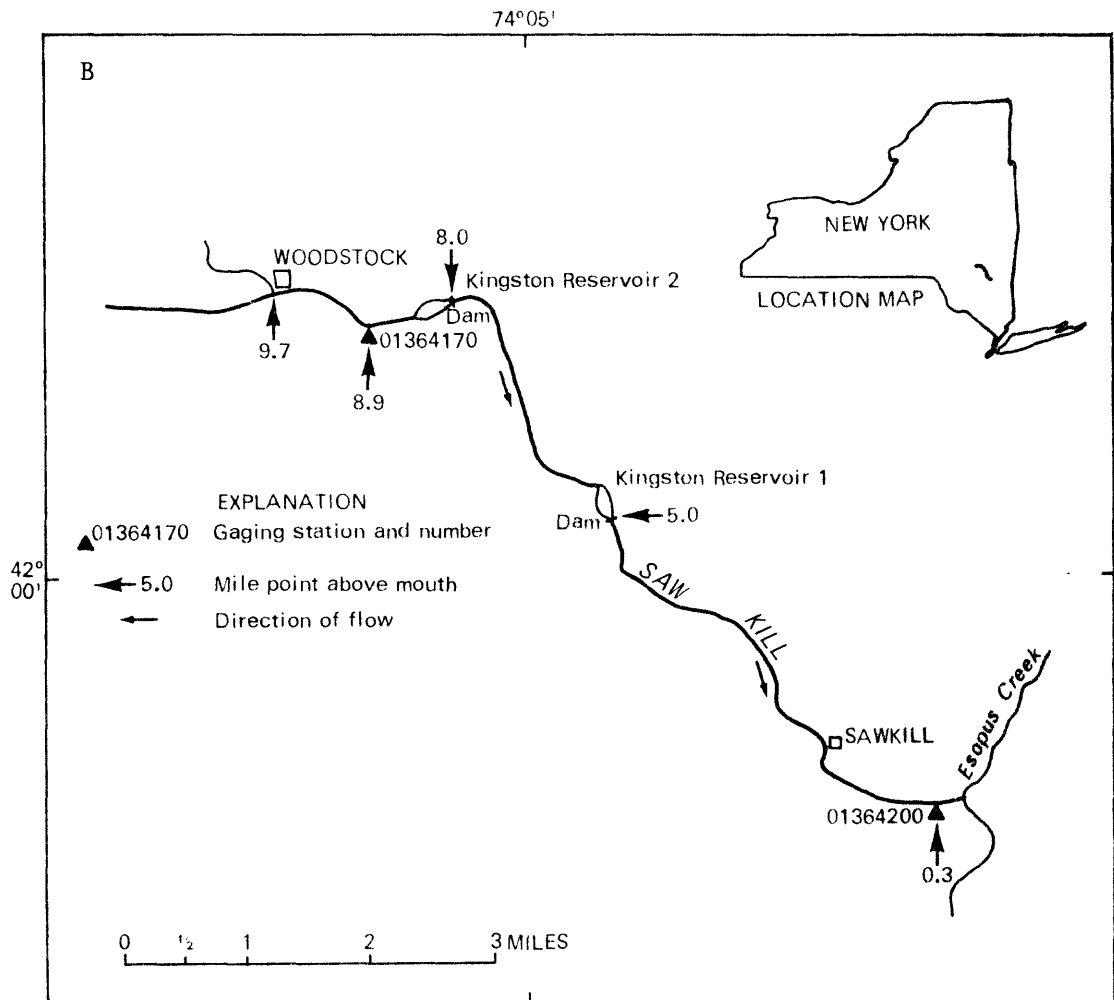
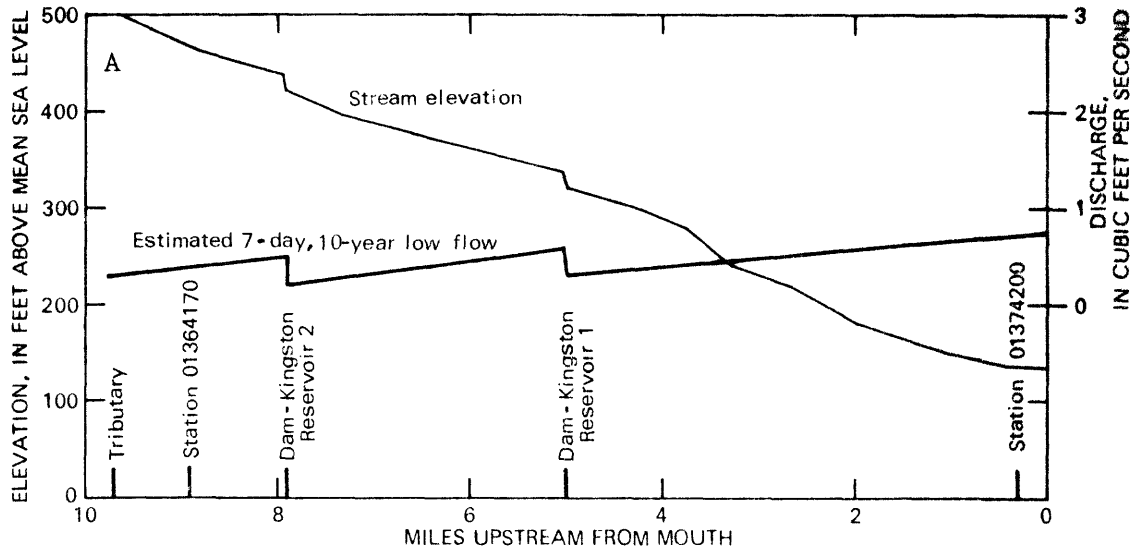
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- Riggs, H. C., 1972, Low-flow investigations: U.S. Geol. Survey Techniques Water Resources Inv., book 4, ch. B-1, 18 p.
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- _____ 1960, Compilation of records of surface waters of the United States through September 1950: U.S. Geol. Survey Water-Supply Paper 1302, 679 p., 1 pl.
- _____ 1964, Compilation of records of surface waters of the United States, October 1950 to September 1960, part 1-B, North Atlantic slope basins, New York to York River: U.S. Geol. Survey Water-Supply Paper 1722, 578 p., 1 pl.
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- _____ 1976, Surface water supply of the United States, 1966-1970, part 1, North Atlantic slope basins, volume 2, basins from New York to Delaware: U.S. Geol. Survey Water-Supply Paper 2102, 985 p.



Base from U.S. Geological Survey
 State base map, 1 500,000 1974

Figure 1. Location of stream reaches studied in Hudson River basin.



Base from U.S. Geological Survey
State base map, 1:500,000, 1974

Figure 2. A, elevation of study reach of Saw Kill and 7-day, 10-year low flow at selected points; B, location of key points in Saw Kill basin.

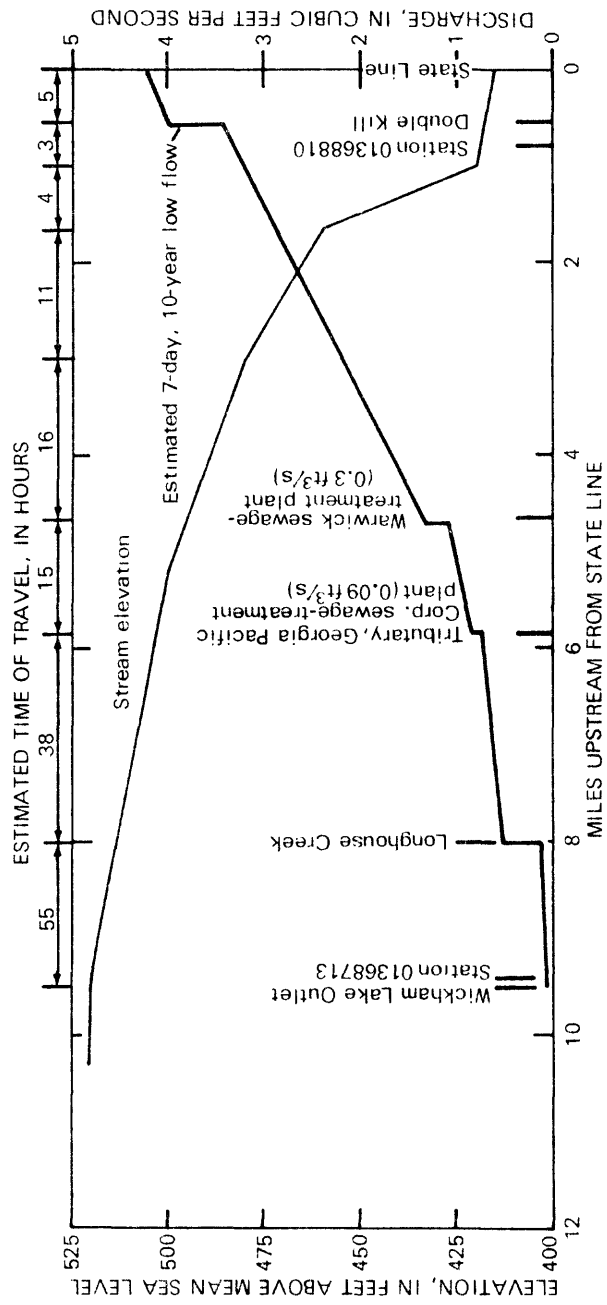


Figure 3A. Elevation of study reach of Wawayanda Creek with 7-day, 10-year low flow at selected points and corresponding times of travel.

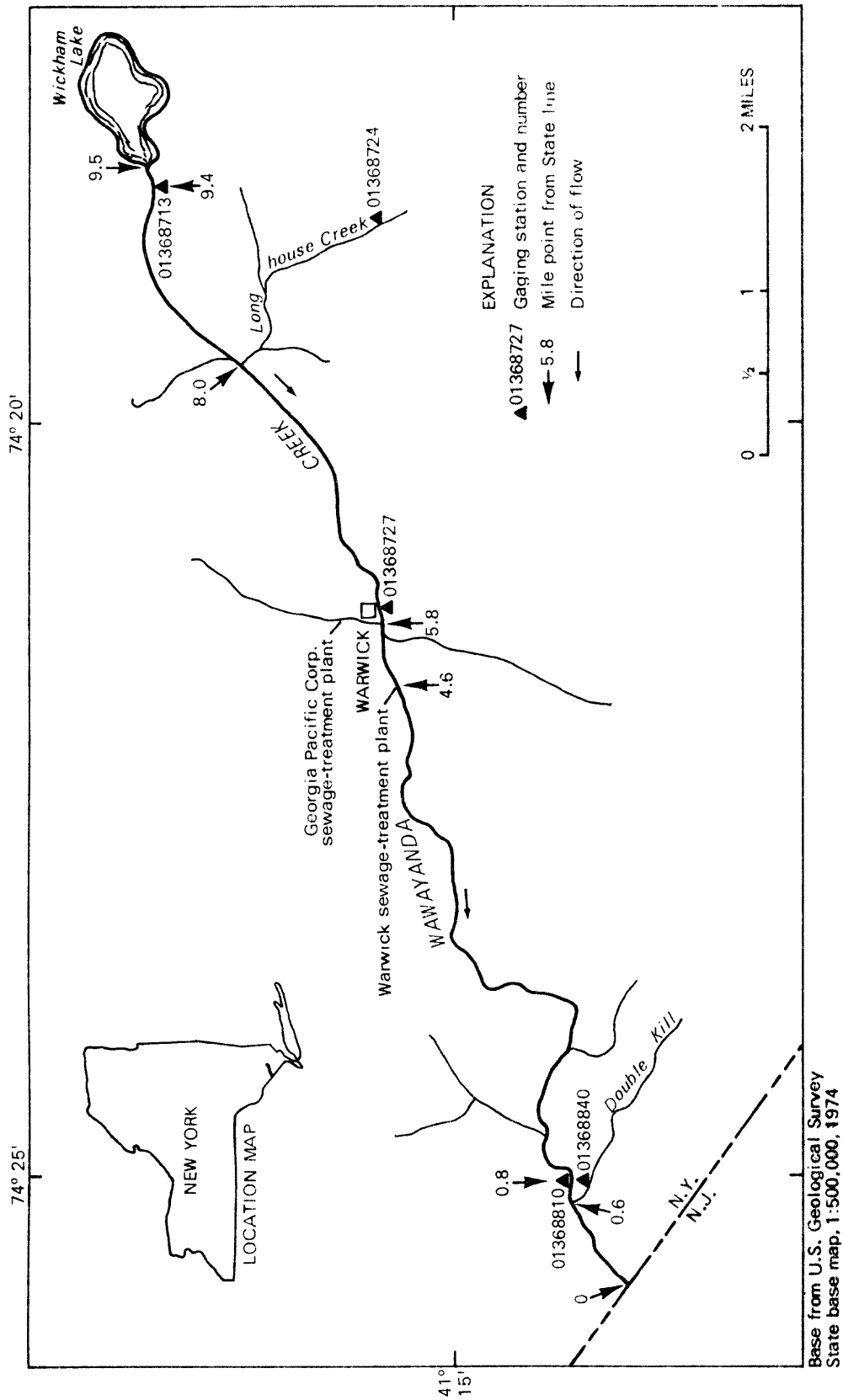


Figure 3B. Location of key points in Wawayanda Creek basin.

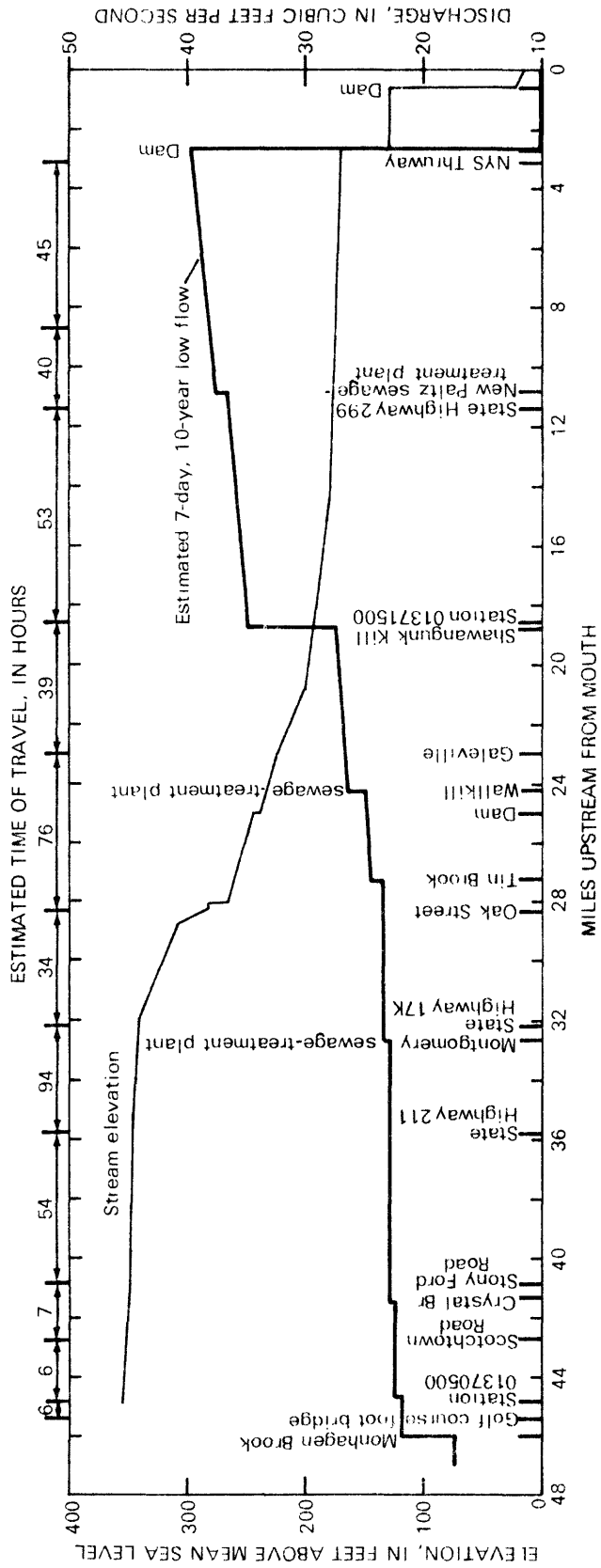


Figure 4A. Elevation of study reach of Wallkill River with 7-day, 10-year low flow at selected points and corresponding times of travel.

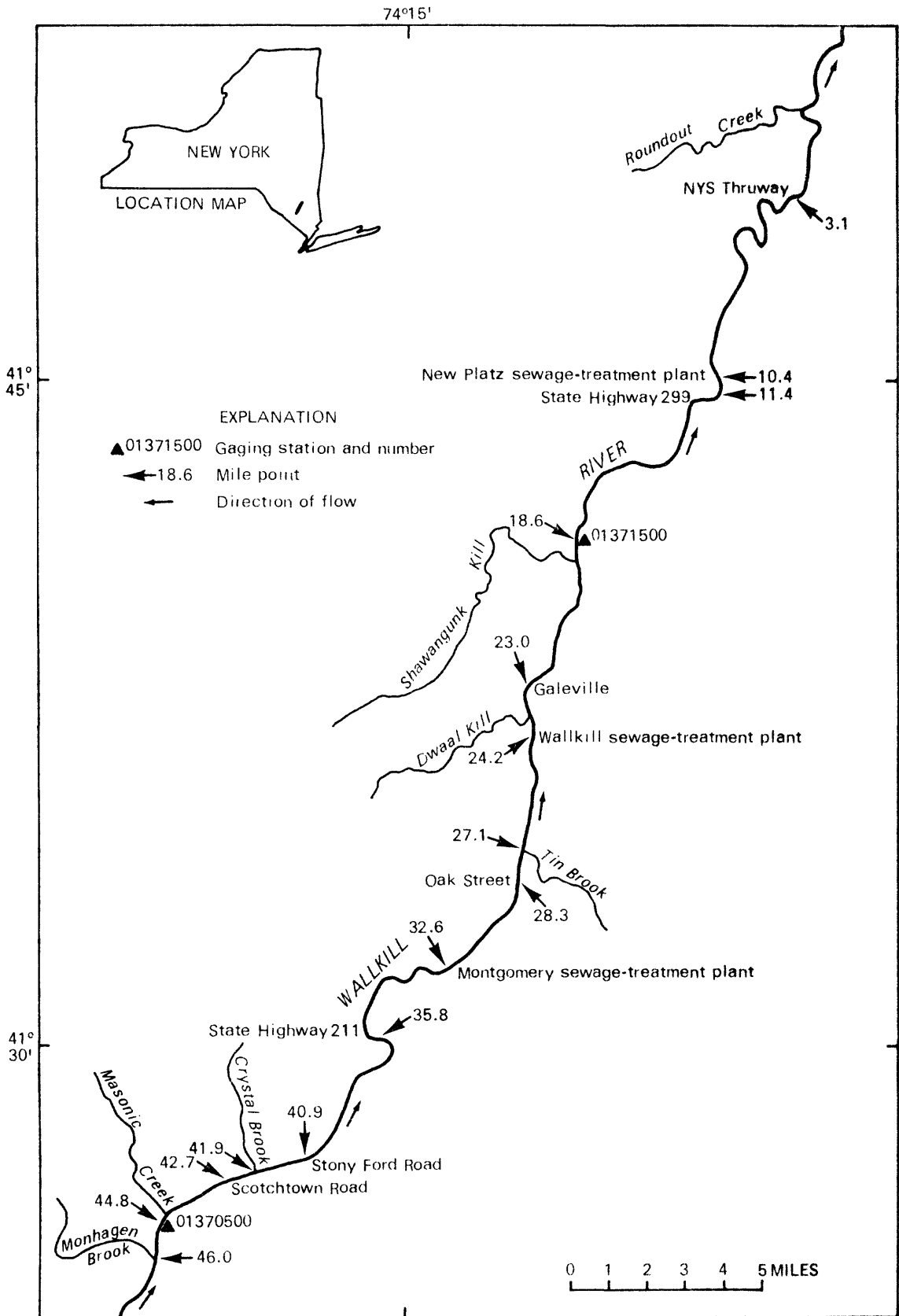


Figure 4B. Location of key points in Wallkill River basin.

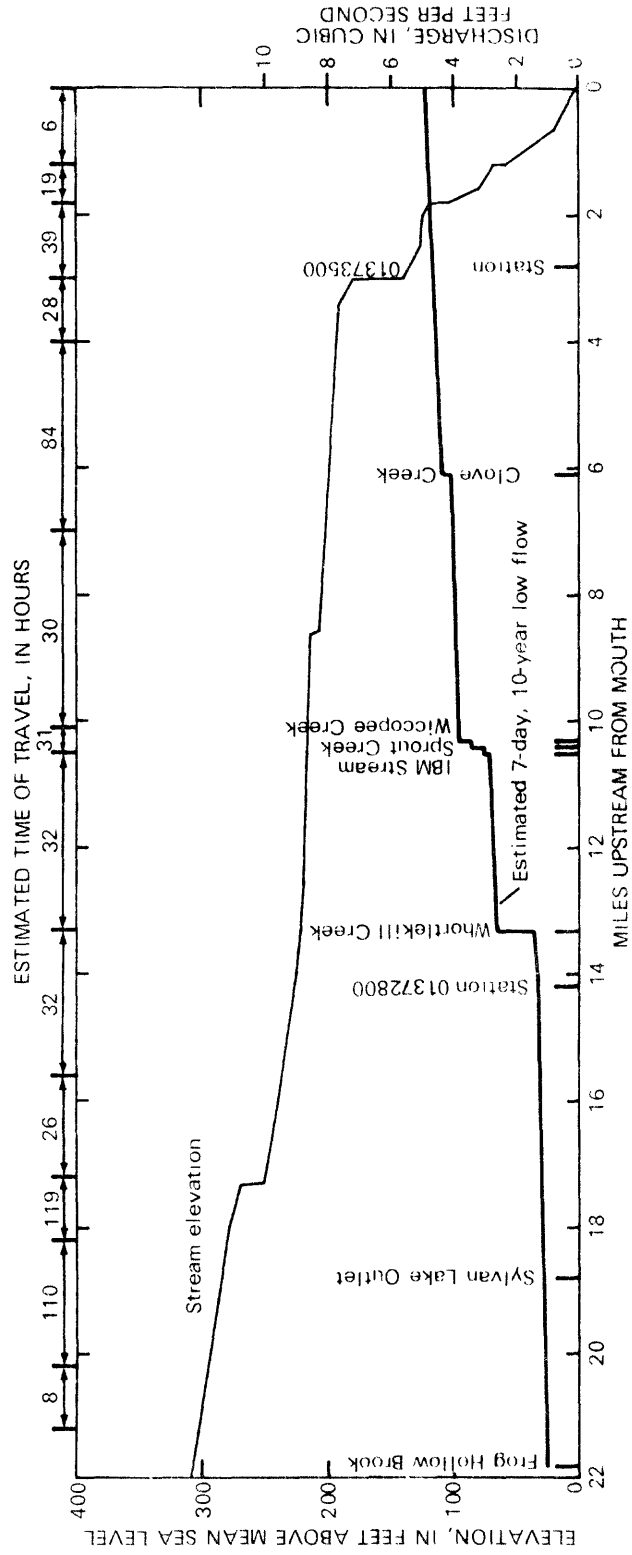
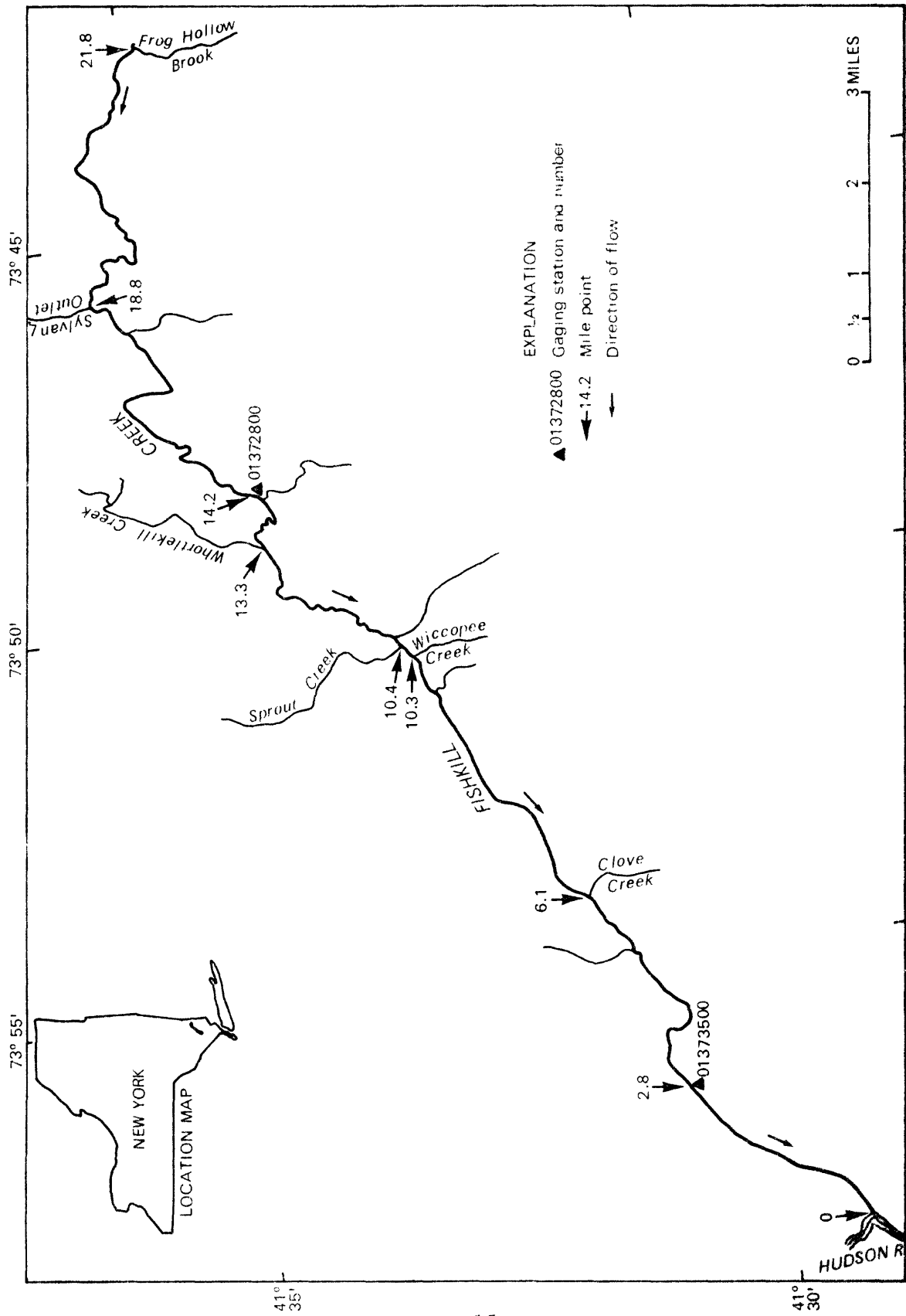


Figure 5A. Elevation of study reach of Fishkill Creek with 7-day, 10-year low flow at selected points and corresponding times of travel.



Base from U.S. Geological Survey
State base map, 1:500,000, 1974

Figure 5B. Location of key points in Fishkill Creek basin.

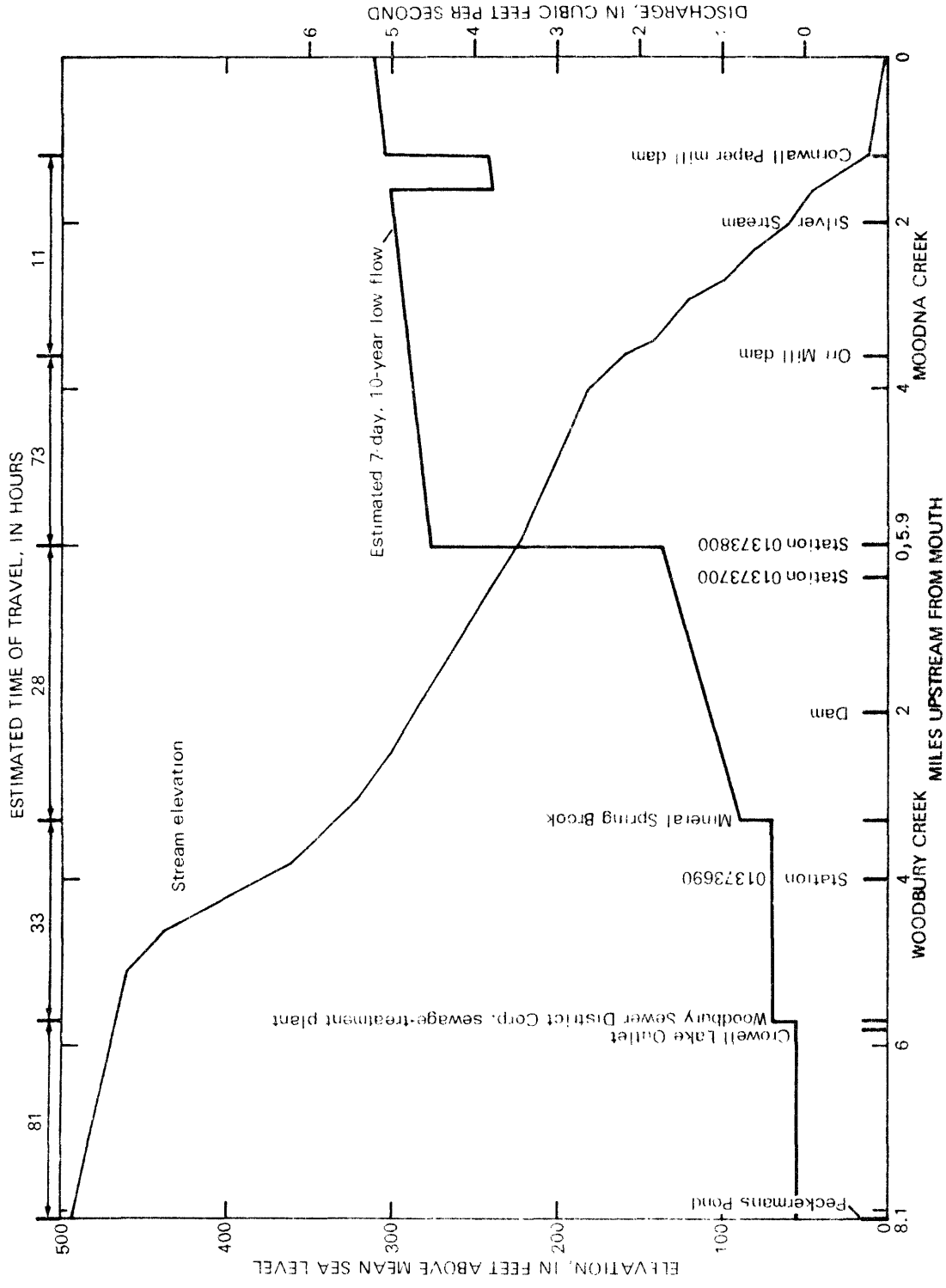
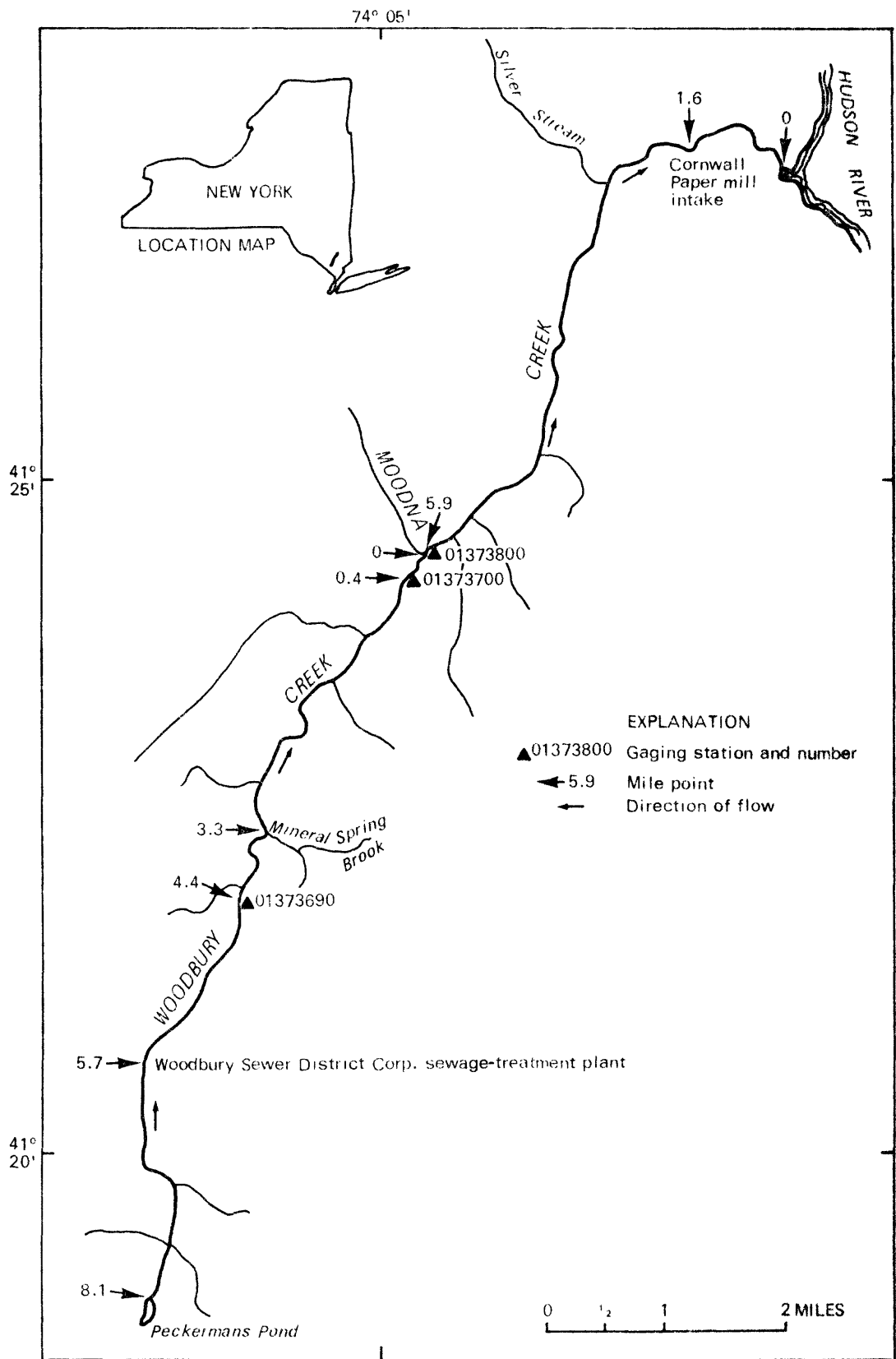


Figure 6A. Elevation of study reach of Moodna and Woodbury Creeks and with 7-day, 10-year low flow at selected points and corresponding times of travel.



Base from U.S. Geological Survey
State base map, 1:500,000, 1974

Figure 6B. Location of key points in Moodna and Woodbury Creeks.

NOTES TO TABLE 1

1/ Station numbers are the identification numbers assigned to stations by the U.S. Geological Survey to designate downstream order. This numbering system makes no distinction between types of stations. Gaps are left between numbers to allow for new stations; hence, station numbers are not consecutive.

Stations are listed in downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. Stations on a tributary that enters between two main-stream stations are listed between them. This system also applies to stations on first-order, second-order, and lower order tributaries. The order of any tributary is indicated by an indention in the column of station names. Each indention represents one rank.

2/ County codes, the numerical codes of the Federal Information Processing Standards (FIPS) (National Bureau of Standards, 1973), are as follows:

<u>Number</u>	<u>County</u>	<u>Number</u>	<u>County</u>	<u>Number</u>	<u>County</u>
001	Albany	057	Montgomery	093	Schenectady
021	Columbia	065	Oneida	095	Schoharie
027	Dutchess	071	Orange	105	Sullivan
031	Essex	079	Putnam	111	Ulster
035	Fulton	083	Rensselaer	113	Warren
039	Greene	085	Richmond	115	Washington
041	Hamilton	087	Rockland	119	Westchester
043	Herkimer	091	Saratoga		

3/ Period of record for continuous-record gaging stations indicates the low-flow years used in computation of 7-day, 2-year low flow and 7-day, 10-year low flow. Data for 1975 low flow year were the latest available at the time of computation. Some stations have records that are not applicable to the computation; these are generally seasonal records obtained before the listed year of record. Where major changes in stream regulation are known, calculations for each regulation period are given for the appropriate stations.

Dates for partial-record stations are the water years in which discharge measurements were made. Data for a few sites listed as partial-record stations were partly or entirely from short-term gaging stations. Periods during which the site was operated as a gaging station are indicated by an asterisk (*).

Superscripts preceding discharge values indicate the cause of significant change in regulation:

- ¹ Regulated by Indian Lake
- ² Change in regulating pattern
- ³ Change in regulating pattern
- ⁴ Unusual regulation in 1957
- ⁵ Regulated by Great Sacandaga Lake
- ⁶ Regulation by Rondout Reservoir

4/ Type of station and presence of significant regulation effects at the station are indicated as follows:

- G - gaging station
- GR - gaging station with significant regulation effect
- P - partial-record station
- PR - partial-record station with significant regulation effect.

Table 1.--Minimum 7-day, 2-year and 7-day, 10-year discharges at continuous and partial-record gaging stations, Hudson River basin, N.Y.

Station number ^{1/}	Station name	Latitude o ' " o ' "	Longitude o ' " o ' "	County code	Drainage area (square miles)	Period of record ^{3/}	7-day minimum discharge (cubic feet per second)		Remarks ^{4/}
							2-year	10-year	
01312000	Hudson River near Newcomb.....	43 58 00	74 07 55	031	192	1926-75	42	22	G
01313500	Cedar River below Chain Lakes, near Indian Lake.....	43 51 20	74 14 20	041	160	1931-61	40	24	G
01314000	Hudson River at Gooley near Indian Lake.....	43 49 55	74 11 45	041	419	1916-68	94	56	G
01315000	Indian River near Indian Lake.....	43 45 30	74 16 05	041	132	1914-42, 44-56, 58-75	1.5	1.73	GR
01315200	Boreas River near Aiden Lair.....	43 53 31	74 00 57	031	51.7	1956-61, 64, 67	6.7	3.7	GR
01315500	Hudson River at North Creek.....	43 42 03	73 59 02	113	792	1908-75	378	228	GR
01316000	North Creek at North Creek.....	43 41 52	73 59 04	113	21.8	1924-32	3.7	2.3	G
01316200	Schroon River at Severance.....	43 52 31	73 44 25	031	173	1954, 56-61, 64 67, 73	34	23	P
01316420	Mill Brook at Adirondack.....	43 45 45	73 45 14	113		1973-74	1.0	0.4	P
01316800	Trout Brook at Pottersville.....	43 43 39	73 49 28	113	99.1	1956-61, 67	14	10	P
01317000	Schroon River at Riverbank.....	43 36 34	73 44 17	113	527	1907-57, 1960-70	128	82	GR
01318500	Hudson River at Hadley.....	43 19 08	73 50 41	091	1664	1921-75	79	443	GR
01319000	Sacandaga River: East Branch Sacandaga River at Griffin....	43 28 25	74 13 25	041	114	1933-75	7.4	3.9	G
01319800	West Branch Sacandaga River at Arietta....	43 15 03	74 31 06	041	28.9	1957-67, 70-73	3.0	1.4	P
01319950	Piseco Outlet: Sand Lake Outlet near Piseco.....	43 22 15	74 32 47	041	7.16	1962-67, 70-73	.7	.3	P
01320500	West Branch Sacandaga River at Blackbridge, near Wells.....	43 22 11	74 19 27	041	210	1911-15†	24	11	F
01321000	Sacandaga River near Hope.....	43 21 10	74 16 15	041	491	1911-75	82	43	G
01321500	West Stony Creek near Northville.....	43 15 10	74 13 30	041		1933-37†	4.8	2.7	P
01322000	East Stony Creek near Northville.....	43 17 50	74 11 40	041		1933-37†	9.7	5.3	P
01323000	Kennyetto Creek near Broadalbin.....	43 03 57	74 09 48	035	28.3	1940-46†, 49-52, 56-58, 60-61, 66	6.2	4.4	P
01323310	Beecher Creek at Edinburg.....	43 13 16	74 06 15	035		1973-74	1.0	.6	P
01325000	Sacandaga River at Stewarts Bridge, near Hadley.....	43 18 41	73 52 04	091	1055	1909-25, 33-75	201	106	G
01328000	Bond Creek (Brook) at Dunham Basin.....	43 18 22	73 32 56	115	14.7	1949-75	11	58.5	GR
01328530	Snook Kill at King Station.....	43 09 10	73 46 25	091	4.00	1962, 64-65	0	0	P
01328560	Snook Kill at Gurn Spring.....	43 10 24	73 43 27	091		1964-65	3.5	3.0	P
01328590	Little Snook Kill at Gurn Spring.....	43 11 16	73 43 22	091		1964-65	.7	.5	P
01329300	Black Creek: White Creek near Salem.....	43 09 07	73 21 18	115	48.6	1956-61, 64, 67	6.0	3.6	P

Table 1.--Minimum 7-day, 2-year and 7-day, 10-year discharges at continuous and partial-record gaging stations, Hudson River basin, N.Y. (Continued)

Station number ^{1/}	Station name	Latitude			Longitude			County code	Drainage area (square miles)	Period of record ^{3/}	7-day minimum discharge (cubic feet per second)		Remarks ^{4/}
		o	'	"	o	'	"				2-year	10-year	
01329500	Batten Kill at Battenville.....	43	06	05	73	25	55	115	394	1923-68	109	76	G
	Kayaderosas Creek (head of Fish Creek);												
01330000	Glowegee Creek at West Milton.....	43	01	50	73	55	40	091	26.0	1948-63	2.3	.92	G
01330500	Kayaderosas Creek near West Milton.....	43	02	18	73	54	35	091	90.1	1927-75	24	17	G
	Hoosic River:												
01333500	Little Hoosic River at Petersburg.....	42	45	50	73	20	16	083	56.1	1951-75	5.6	3.1	G
01333520	Dill Creek near Petersburg.....	42	45	47	73	21	23	083	7.16	1962-64, 66, 73-74	.09	.04	P
01334500	Hoosic River near (at) Eagle Bridge.....	42	56	19	73	22	39	083	51.0	1910-75	135	96	G
01334800	Owl Kill at Eagle Bridge.....	42	57	08	73	22	57	083	56.4	1956-61, 64	6.1	3.8	P
01335500	Hudson River at Mechanicville.....	42	54	45	73	40	45	091	4500	1888-98, 1900-30, 32, 56-66	1490, 1440, 2600	988, 1908, 51900	G GR GR
01335750	Deep Kill at Melrose.....	42	49	52	73	37	35	083	10.9	1962-66	.07	.02	P
01336000	Mohawk River below Delta Dam, near Rome.....	43	15	52	75	26	12	065	150	1921-75	139	94	GR
01338000	Oriskany Creek near Oriskany.....	43	08	36	75	20	17	065	145	1954-55, 60-61, 67-68	44	36	P
01338800	Sauquoit Creek at New Hartford.....	43	04	28	75	17	12	065	43.4	1955-56, 58-61, 73-74	18	14	P
01342700	Moyer Creek at Frankfort.....	43	02	30	75	04	18	043	21.8	1954, 55-61, 67-68	2.8	2.0	P
01342730	Steele Creek at Ilion.....	43	00	05	75	02	44	043	26.1	1963-66, 67-68*	6.8	4.9	P
01342750	Fulmer Creek at Mohawk.....	43	00	37	75	00	42	043	26.4	1963-68	.7	.4	P
01342790	West Canada Creek: South Branch West Canada Creek near Morehouseville.....	43	23	47	74	44	30	041	40.2	1961-64, 66, 68	7.9	5.3	P
01344000	West Canada Creek at Hincley.....	43	18	20	75	07	10	043	375	1919-58	404	282	GR
01346000	West Canada Creek at Kast Bridge.....	43	04	08	74	59	26	043	556	1921-75	387	273	GR
01347000	Mohawk River near Little Falls.....	43	00	52	74	46	48	043	1348	1928-75	791	618	GR
01347500	East Canada Creek at Dolgeville.....	43	06	05	74	46	15	043	261	1900-46	88	54	GR
01348000	East Canada Creek at East Creek.....	43	01	00	74	44	28	043	291	1946-75	43	9.5	G
01349000	Otsuago Creek at Fort Plain.....	42	55	46	74	37	35	057	59.2	1950-75	3.8	2.6	G
01349200	Canajoharie Creek at Canajoharie.....	42	54	19	74	34	18	057	68.4	1949-50, 56-61, 67	2.2	1.4	P
01349250	Flat Creek at Sprakers.....	42	53	27	74	30	53	057	51.4	1949, 63-65, 67	.2	.05	P
01349600	Schoharie Creek near Hunter.....	42	11	31	74	10	52	039	29.2	1955-61	6.0	2.7	P
01349700	East Kill near Jewett Center.....	42	14	57	74	18	11	039	35.2	1955-64	2.1	.6	P
01349800	West Kill at West Kill.....	42	12	42	74	23	16	039	21.2	1954-61, 65	1.2	.3	P
01349900	Batavia Kill near Ashland.....	42	17	36	74	18	19	039	51.2	1955-61, 64	2.6	1.4	P

Table 1.—Minimum 7-day, 2-year and 7-day, 10-year discharges at continuous and partial-record gaging stations, Hudson River basin, N.Y. (Continued)

Station number ^{1/}	Station name	Latitude			Longitude			County code	Drainage area (square miles)	Period of record ^{3/}	7-day minimum discharge (cubic feet per second)		Remarks ^{4/}
		o	'	"	o	'	"				2-year	10-year	
01350000	Schoharie Creek at Prattsville.....	42	19	15	74	26	10	039	236	1903-75	18	8.5	G
01350120	Platter Kill at Gilboa.....	42	24	19	74	26	38	095	11.1	1969-73	1.4	.7	P
01350140	Mine Kill near North Bloomingville.....	42	25	44	74	28	24	039	16.3	1969-73, 75†	.4	.1	P
01350350	Keyser Kill at Breakabeen.....	42	31	23	74	24	38	095		1971-73	.2	.02	P
01350500	Schoharie Creek at Middleburg.....	42	35	58	74	20	12	095	532	1928-39	6.5	2.9	CS
01350900	Fox Creek: Beaverdam Creek near Knox.....	42	38	57	74	04	56	001	6.91	1962-65, 70, 73-75	.2	0	P
01350950	Switz Kill near Berne.....	42	36	41	74	09	24	001	28.3	1962-65, 67, 70, 73-75	.6	.2	F
01351000	Fox Creek at West Berne.....	42	37	42	74	11	08	001	73.0	1924-32, 62-68	1.3	.17	G
01351200	Fox Creek near Schoharie.....	42	40	23	74	15	16	095	96.9	1906, 49, 56-61, 65	3.4	1.0	F
01351500	Cobleskill Creek at Cobleskill.....	42	40	51	74	27	56	095	118	1949-50, 56-62, 66, 71, 72	2.4	1.2	F
01351500	Schoharie Creek at Burtonsville.....	42	48	00	74	15	48	057	883	1940-75	15.8	6.0	SF
01351510	Bowman Creek at Burtonsville.....	42	48	19	74	14	50	095	2.63	1962-64	0	0	F
01354080	South Chuctanunda Creek at Amsterdam.....	42	56	04	74	12	44	057	31.7	1961-64, 67, 73	.5	.2	F
01354200	Sandsea Kill at Pattersonville.....	42	53	20	74	04	20	095	9.56	1957, 59-62, 64, 67, 75	.04	0	F
01354300	Plotter Kill at Rynex Corners.....	42	49	16	74	04	20	095	3.70	1957-61, 64, 67	0	0	F
01354950	Alplaus Kill: Crabb Kill near Glenville.....	42	55	58	74	01	00	093	4.67	1962-64, 67, 74	.03	0	P
01355000	Alplaus Kill near Charlton.....	42	55	25	73	58	15	093	23.8	1913-16†, 48	.2	.1	P
01355200	Alplaus Kill at Burnt Hills.....	42	54	18	73	55	08	093	37.9	1960-61, 66, 73-74, 76	1.5	.9	P
01355450	Indian Kill near Alplaus.....	42	52	12	73	18	093	8.69	1962-64, 67, 73, 74	1.1	.8	P	
01355470	Alplaus Kill at Glenridge.....	42	52	01	73	54	12	091	54.3	1952-53, 64, 76	3.0	1.6	P
013556200	Lisha Kill near Niskayuna.....	42	47	30	73	50	52	093	18.2	1951-52, 54, 60-61, 65-67	1.0	.7	P

Table 1.--Minimum 7-day, 2-year and 7-day, 10-year discharges at continuous and partial-record gaging stations, Hudson River basin, N.Y. (Continued)

Station number/	Station name	Latitude		Longitude		County code	Drainage area (square miles)	Period of record ^{3/}	7-day minimum discharge (cubic feet per second)		Remarks ^{4/}		
		o	"	o	"				2-year	10-year			
01356300	Shaker Creek near Latham.....	42	45	49	73	47	33	001	11.2	1960-65, 67	1.3	.8	P
01356310	Shakers Creek tributary at Latham.....	42	45	01	73	46	54	001	2.09	1960, 63-65, 72-75	.2	.1	P
01356450	Delphus Kill near Dunsbach Ferry.....	42	46	32	73	45	51	001	1.74	1951-52, 63-65, 67	.1	.06	P
01356790	Stony Creek near Crescent.....	42	50	13	73	44	56	091	2.24	1958-59	.4	.3	P
01356795	Stony Creek tributary near Grays Corners.....	42	49	43	73	44	56	091	1.00	1958-59	.2	.1	P
01356800	Stony Creek at Crescent.....	42	49	36	73	44	33	091	5.04	1958-59	.7	.4	P
01357501	Mohawk River at Cohoes + Diversion through Erie (Barge) Canal at Lock 6.....	42	48	40	73	43	19	001		1918-75	1030		GR
01358000	Hudson River at Green Island.....	42	45	08	73	41	22	001	8090	1948-75	3620	2730	GR
01358480	Poesten Kill.....	42	45	27	73	36	31	083	1.81	1963-64	.2	.1	P
01358485	Sweet Milk Creek at Brunswick.....	42	45	16	73	36	29	083	3.16	1963-64	.1	.06	P
01358500	Sweet Milk Creek at Brunswick Center.....	42	44	00	73	38	00	083	89.4	1925-68	7.6	2.8	GR
01359080	Poesten Kill near Troy.....	42	38	48	73	36	33	083	18.6	1962, 65, 67	2.5	1.7	P
01359100	Wynants Kill at West Sand Lake.....	42	41	44	73	38	44	083	29.1	1961-67	5.1	3.5	P
01359110	Wynants Kill at Wynantskill.....	42	41	15	73	41	38	083	.65	1960-66	.2	.1	P
01359120	Jordan Creek at Troy.....	42	40	30	73	41	08	083	.65	1960-65	.08	.03	P
01359200	North Greenbush Creek near Troy.....	42	45	53	74	00	10	093	41.2	1956-61, 63-65	.7	.4	P
01359270	Normans Kill at Pine Grove.....	42	44	25	74	00	51	001	2.83	1965, 70, 73-75	0	0	P
01359270	Indian House Creek at Dunnsville.....	42	40	35	73	57	10	001	14.4	1970, 73-75	.02	0	P
01359325	Black Creek near Voorheesville.....	42	43	14	73	59	44	001	19.5	1962-63, 70, 73-75	.05	0	P
01359330	Black Creek near Guilderland Center.....	42	43	21	73	59	33	001	51.8	1962-63, 65, 70, 73-75	.7	.2	P
01359340	Bozen Kill near Guilderland Center.....	42	43	25	73	55	06	001	3.91	1960, 70, 73-75	5.1	4.7	P
01359507	Hunger Kill near Guilderland.....	42	42	40	73	54	39	001	1.58	1954, 60-65	2.1	1.7	P
01359510	East Branch Hunger Kill at Guilderland..	42	41	22	73	54	26	001	8.16	1968-75	6.8	5.5	GR
01359513	Hunger Kill at Guilderland.....	42	41	08	73	54	05	001	1.96	1962-67, 70, 72-75	1.0	.8	P
01359517	Blockhouse Creek near Guilderland.....	42	41	20	73	54	08	001		1962-65, 70, 73-75	1.7	1.5	P
01359518	Kaikout Kill near Guilderland.....	42	40	43	73	54	25	001	131	1968-75	12	7.7	GR
01359519	Normans Kill near Westmere.....	42	38	06	73	57	49	001	1.50	1962, 70, 72-75	.02	0	P
01359520	Vly Creek tributary at New Salem.....	42	38	56	73	50	51	001	5.58	1962-63, 70, 73-75	1.5	.8	P
01359524	Krum Kill at Karlsfeld.....	42	36	28	73	47	42	001	1.24	1960-61, 70, 73-75	.07	.03	P
01359539	Normans Kill tributary at Bethlehem Center												

Table 1.---Minimum 7-day, 2-year and 7-day, 10-year discharges at continuous and partial-record gaging stations, Hudson River basin, N.Y. (Continued)

Station number/	Station name	Latitude			Longitude			County code	Drainage area (square miles)	Period of record ^{3/}	7-day minimum discharge (cubic feet per second)		Remarks ^{4/}
		o	'	"	o	'	"				2-year	10-year	
01359585	Vloman Kill at New Scotland.....	42	37	27	73	54	16	001	2.55	1962-64, 70, 72-75	.3	.2	P
01359592	Vloman Kill at Mallorys Corners.....	42	33	54	73	49	48	001	17.2	1965-67, 70, 73-75	.1	.06	P
01359595	Dowers Kill near Selkirk.....	42	34	03	73	48	53	001	4.75	1962-66, 70, 73-75	0	0	P
01359600	Vloman Kill at Cedar Hill, near Selkirk.....	42	32	58	73	46	14	001	29.8	1952, 54-61, 63, 65-67	.1	.01	P
01359650	Moordener Kill at Schodack Center.....	42	33	17	73	40	33	083	13.7	1960-66, 75	.5	.2	P
01359660	North Branch Moordener Kill at Schodack Center.....	42	33	22	73	40	39	083	13.3	1960-66, 75	.6	.2	P
01359750	Moordener Kill at Castleton-on-Hudson.....	42	32	02	73	44	15	083	32.6	1958-75	3.7	1.9	G
01359800	Vlockie Kill at South Schodack.....	42	31	05	73	42	24	083	5.24	1960-64	1.0	.6	P
01359810	Coeymans Creek: Onesquethaw Creek above Clarksville.....	42	35	35	73	59	06	001	.62	1970, 72-75	0	0	P
01359895	South Albany Creek near South Bethlehem.....	42	32	22	73	49	48	001		1965-67	.3	.2	P
01359900	Coeymans Creek near South Bethlehem.....	42	32	18	73	49	41	001	34.6	1955, 61-67	1.9	.8	P
01359902	Coeymans Creek near Selkirk.....	42	31	58	73	49	14	001	35.1	1968-75	2.3	1.6	GR
01359910	Coeymans Creek near Coeymans.....	42	30	10	73	48	15	001		1965-67	2.3	1.1	P
01359915	Hannacrois Creek at Formansville.....	42	29	49	73	58	46	001	15.2	1965, 70, 73-75	.1	.01	P
01359916	Silver Creek near Lormansville.....	42	28	24	73	59	17	001		1970, 73-75	0	0	P
01359924	Hannacrois Creek near Baltimore.....	42	26	22	73	48	41	039	61.6	1968-75	1.8	.07	GR
01359980	Kindershook Creek: West Brook at Stephantown.....	42	33	07	73	22	44	083	18.6	1962-64	1.7	1.0	P
01359990	East Brook at Stephantown.....	42	33	08	73	22	43	083	7.24	1962-64, 73-74	1.5	.8	P
01360500	Kindershook Creek at East Nassau.....	42	30	22	73	30	26	083	116	1950-61, 64	18	11	P
01360520	Green Brook at Riders Mills.....	42	28	50	73	34	01	021	4.65	1962-65, 73-74	.4	.3	P
01360530	Trout Brook near Old Chatham.....	42	26	38	73	35	05	021	4.87	1962-65, 73-74	.1	.04	P
01360550	Stony Kill near East Chatham.....	42	23	22	73	33	05	021	32.7	1962-65, 72-74	1.6	.7	P
01360570	Indian Creek (head of Kline Kill) near Chatham.....	42	21	11	73	34	34	021	12.4	1962-66, 72-74	1.0	.5	P
01360580	Punsit Creek near Chatham.....	42	20	50	73	34	31	021	16.0	1967-66, 72-74	.6	.2	P
01360600	Kline Kill near Valatie.....	42	22	33	73	37	53	021	35.8	1961-65, 72-74	1.6	.5	P
01360700	Valatie Kill near North Chatham.....	42	27	42	73	38	37	021	33.1	1962-65, 73-74	2.1	.9	P

Table 1.--Minimum 7-day, 2-year and 7-day, 10-year discharges at continuous and partial-record gaging stations, Hudson River basin, N.Y. (Continued)

Station number/ Station name	Latitude o ' " o ' " o ' "	Longitude o ' " o ' " o ' "	County code	Drainage area (square miles)	Period of record ^{3/}	7-day minimum discharge (cubic feet per second)		Remarks ^{4/}
						2-year	10-year	
01361000 Kinderhook Creek at Rossman.....	42 19 50	73 44 40	021	329	1906-12, 28-68	41	17	G
01361200 Claverack Creek at Claverack.....	42 12 54	73 43 46	021	60.6	1963-68	4.2	3.2	G
01361250 Taghkanic Creek at Craryville.....	42 10 10	73 34 53	021	12.6	1962, 64-66, 70, 73-74	1.0	.5	P
01361300 Taghkanic Creek near Claverack.....	42 12 59	73 45 35	021	83.0	1949, 56-61, 64-65, 75	5.0	2.0	P
01361310 Loomis Creek near Claverack.....	42 11 43	73 44 21	021	6.09	1962, 64-66, 73-74	.1	.06	P
01361400 Conway Brook near Hudson.....	42 13 10	73 49 10	021	2.38	1962-66	0	0	P
01361465 Fox Creek near Preston Hollow.....	42 27 46	74 10 53	001	3.43	1970, 73-75	0	0	P
01361480 Catskill Creek: Catskill Creek tributary at Medusa.....	42 26 11	74 09 08	001	6.58	1970, 73-75	0	0	P
01361500 Catskill Creek at Oak Hill.....	42 24 16	74 09 07	039	98	1910-75	1.2	.14	G
01361550 Tenmile Creek at Medusa.....	42 26 10	74 07 58	001	19.1	1962-64, 70, 73-75	1.7	.7	P
01361560 Eightmile Creek at Medusa.....	42 26 07	74 07 24	001	12.8	1962-64, 70, 73-75	0	0	P
01361750 Basic Creek at South Westerlo.....	42 26 50	74 01 37	001	18.3	1962-64	.04	0	PR
01361760 Wolf Fly Creek at South Westerlo.....	42 26 46	74 01 52	001	6.45	1962-64, 70, 73-75	0	0	P
01362004 Bell Brook at landfill at South Cairo.....	42 16 10	73 57 32	039		1972-74	0	0	P
01362005 Bell Brook downstream of landfill at South Cairo.....	42 16 19	73 57 29	039	1.31	1971-74	.1	.02	P
01362040 Marys Glen at North Lake near Haines Falls.....	42 12 05	74 02 25	039	.80	1963-64	.04	0	P
01362100 Roeliff Jansen Kill near Hillsdale.....	42 09 13	73 51 14	021	27.5	1957-59†, 60-61, 64-65	3.6	1.8	P
01362150 Bashbish Brook at Copake Falls.....	42 06 59	73 30 30	021	15.8	1955-61, 64-65	2.4	1.1	P
01362155 Noster Kill: Preechey Hollow Brook near Copake.....	42 04 04	73 31 53	021	2.53	1962, 64-66, 73-74	.19	.06	P
01362168 Fall Kill near Elizaville.....	42 00 56	73 43 59	021	5.02	1962, 64-66, 73-74	0	0	P
01362180 Doove Kill at Manorton.....	42 05 03	73 47 52	021	10.8	1962, 64-66, 73-74	.2	.08	P
01362198 Esopus Creek at Shandaken.....	42 06 59	74 23 20	111	59.5	1864-75	8.7	4.6	G
01362200 Esopus Creek at Allaben.....	42 07 01	74 22 50	111	65.3	1941, 56-61	9.9	5.6	P
01362300 Woodland Creek at Phenicia.....	42 04 52	74 19 57	111	20.5	1955-61, 64	2.4	.7	P
01362400 Stony Clove Creek (Bush Kill) at Phoenicia.....	42 04 56	74 18 58	111	33.5	1954-61, 64	2.8	.7	P

Table 1.--Minimum 7-day, 2-year and 7-day, 10-year discharges at continuous and partial-record gaging stations, Hudson River basin, N.Y. (Continued)

Station number ^{1/}	Station name	Latitude ° ' " o ' "	Longitude ° ' " o ' "	County code	Drainage area (square miles)	Period of record ^{2/}	7-day minimum discharge (cubic feet per second) 2-year 10-year	Remarks ^{4/}
01362500	Esopus Creek at Coldbrook.....	42 00 51	74 16 16	111	192	1914-75	56 22	GR
01363500	Esopus Creek near Olivebridge.....	41 56 05	74 12 30	111	239	1905-14	31 18	G
01364000	Esopus Creek at Kingston.....	41 56 25	74 01 40	111	317	1902-09	51 18	G
01364200	Saw Kill at Sawkill.....	41 58 46	74 00 52	111	41.6	1951, 54-61, 64-67	2.2 .8	P
01364400	Plattekill Creek at Mount Marion.....	42 02 22	73 59 50	111	36.6	1962-66	.7	P
01364500	Esopus Creek at Mount Marion.....	42 02 16	73 58 21	111	419	1951, 56, 66-67, 70-75†	17 9.1	P
01364506	Stony Creek at Tivoli.....	42 02 45	73 54 42	027	22.2	1955, 60-62	.3 .06	P
01364700	Saw Kill at Rock City.....	41 58 15	73 49 19	027	6.01	1956-62 1965-66	.4 .2	P
01365000	Rondout Creek near Lowes Corners.....	41 52 00	74 29 12	105	38.5	1937-75	9.4 5.8	G
01365500	Chestnut Creek at Grahamsville.....	41 50 42	74 32 27	105	20.9	1939-75	4.5 2.7	G
01366500	Rondout Creek near Lackawack.....	41 46 25	74 24 01	111	100	1927-44, 52-67	27 16 2.3 6.35	G GR
01366550	Sandburg Creek at Spring Glen.....	41 40 01	74 26 20	105	27.3	1955-61, 64-65	4.0 2.2	P
01366600	Homowack Kill at Spring Glen.....	41 39 33	74 25 46	105	12.7	1956-61, 64-65	5.4 3.8	P
01366650	Sandburg Creek at Ellenville.....	41 42 54	74 23 21	111	56.7	1957-75	12 6.8	G
01366700	Beer Kill: West Branch Beer Kill at Ellenville...	41 43 32	74 24 54	111	20.3	1956-61, 64-65	1.2 0.5	P
01366750	Beer Kill at Ellenville.....	41 43 20	74 24 07	111	43.3	1956-61, 64-65	1.9 0.9	P
01366800	Vernooy Kill at Wawarsing.....	41 45 40	74 22 02	111	23.5	1957-61, 64-67	4.5 2.7	P
01366850	Rochester Creek near Accord.....	41 47 46	74 14 42	111	50.0	1952, 55-61, 64-65	1.9 .5	P
01366900	North Peters Kill (Peters Kill) at Accord.....	41 47 52	74 12 41	111	7.20	1956-61, 64	.6 .2	P
01366950	Coxing Kill near High Falls.....	41 49 54	74 06 38	111	12.6	1956-61, 64-65	.5 .1	P
01367500	Rondout Creek at Rosendale.....	41 50 35	74 05 11	111	386	1928-44, 53-75	66 39 40 620	G GR
01368000	Wallkill River near Unionville.....	41 15 36	74 32 56		140	1938-75	21 8.3	GR
01368495	Rutgers Creek: Indigot Creek: Indigot Creek tributary near							
01368500	Mount Hope.....	41 25 16	74 31 08	071	5.78	1973-76	.3	P
01368705	Rutgers Creek at Gardnerville.....	41 20 40	74 20 10	071	59.7	1943-68	1.9 .49	G
01368713	Wickham Lake tributary at Lake.....	41 17 38	74 17 33	071	.68	1971-75	.01 0	P
	Wawayanda Creek at Durland.....	41 16 44	74 18 20	071	5.15	1967, 71-75	.2 .05	P

Table 1.—Minimum 7-day, 2-year and 7-day, 10-year discharges at continuous and partial-record gaging stations, Hudson River basin, N.Y. (Continued)

Station number/	Station name	Latitude			Longitude			County code	Drainage area (square miles)	Period of record ^{3/}	7-day minimum discharge (cubic feet per second)		Remarks ^{4/}
		o	'	"	o	'	"				2-year	10-year	
01368722	Long House Creek below Cascade Lake.....	41	12	53	74	20	02	071	8.35	1973-75	.4	.1	P
01368724	Long House Creek at Bellvale.....	41	15	10	74	18	30	071	11.8	1971-75	.6	.2	P
01368740	Warwick Reservoir Outlet tributary at Warwick.....	41	14	31	74	21	14	071	.56	1971-75	.03	.01	P
01368760	Wawayanda Creek tributary near Warwick.....	41	14	34	74	22	18	071	2.96	1971-75	.02	0	P
01368810	Wawayanda Creek at New Milford.....	41	14	18	74	25	03	071	45.0	1971-75	7.4	3.3	P
01368840	Double Kill at New Milford.....	41	14	10	74	24	58	071	15.6	1971-75	1.5	.5	P
01369000	Pochuck Creek near Pine Island.....	41	16	32	74	28	18	071	98.0	1937-75	11	3.6	G
01369500	Quaker Creek at Florida.....	41	20	21	74	21	45	071	9.74	1938-75	.38	.19	GR
01369650	Stony Creek near Florida.....	41	18	06	74	23	14	071	2.62	1971-76	.08	.02	P
01369695	Coleman Ditch near Pine Island.....	41	17	37	74	26	10	071	1.60	1971-76	.1	.07	P
01370000	Wallkill River at Pellets Island Mountain.....	41	22	50	74	24	50	071	385	1920-68	37	13	GR
01370500	Wallkill River near Phillipsburg.....	41	26	00	74	22	20	071	419	1937-59	47	22	GR
01370600	Crystal Brook near Middletown.....	41	28	12	74	19	59	071	8.40	1964-68†	.2	.06	P
01370800	Tin Brook at Walden.....	41	33	41	74	11	01	071	20.8	1956-61, 64-65	.2	.05	P
01371000	Shawangunk Kill at Pine Bush.....	41	37	05	74	17	40	071	102	1925-32, 57-71	11	4.8	G
01371400	Shawangunk Kill at Ganahgote.....	41	41	12	74	10	28	111	147	1942, 55-61, 64-65	14	6.9	P
01371500	Wallkill River at Gardiner.....	41	41	10	74	09	56	071	711	1925-75	76	31	GR
01372020	Landsman Kill near Rhinecliff.....	41	52	58	73	55	37	027	22.7	1950-62, 64-65	.9	.2	P
01372030	Fallsburg Creek near Rhinebeck.....	41	53	33	73	54	52	027	3.58	1956-62, 64-66	.03	0	P
01372040	Crum Elbow Creek at Hyde Park.....	41	47	24	73	55	53	027	18.6	1956-59, 60-62†, 64-66	.8	.2	P
01372050	Fall Kill at Foughkeepsie.....	41	42	52	73	54	16	027	16.6	1956-62, 64-65	.4	.06	P
01372065	Casper Creek near Wappingers Falls.....	41	37	54	73	55	40	027	10.1	1960-62, 66, 68-75†	1.8	.7	P
01372100	Wappinger Creek: East Branch Wappinger Creek near East Clinton Corners.....	41	48	45	73	45	35	027	33.6	1956-63	5.1	2.4	G
01372200	Wappinger Creek near Clinton Corners.....	41	48	55	73	45	50	027	92.4	1956-75	10	3.5	G
01372300	Little Wappinger Creek at Salt Point.....	41	48	20	73	47	35	027	32.9	1956-75	1.7	.35	G
01372400	Great Spring Creek at Pleasant Valley.....	41	45	22	73	44	31	027	15.7	1960-63†	.3	.08	P
01372500	Wappinger Creek near Wappingers Falls.....	41	39	05	73	52	20	027	181	1928-75	15	6.1	G
01372600	Quassaic Creek near Newburgh.....	41	31	28	74	03	24	071	15.5	1956-61, 64-66	.8	.2	P
01372609	Gidneytown Creek at Newburgh.....	41	31	24	74	02	09	071	10.1	1956-61, 64-66	.5	.2	P
01372650	Whaley Lake Stream at Beekman.....	41	36	45	73	42	08	027	17.9	1955, 60-62, 65	.9	.3	P
01372800	Fishkill Creek at Hopewell Junction.....	41	34	22	73	48	25	027	57.3	1958-75	7.2	1.3	G
01372812	Shenandoah Brook near East Fishkill.....	41	34	15	73	48	26	027	17.1	1960-62, 65	.2	.02	P
01372850	Whortlekill Creek at Hopewell Junction.....	41	34	37	73	48	57	027	7.37	1959-68	1.9	1.2	G
01372866	Jackson Creek near Noxon.....	41	38	27	73	47	37	027	11.4	1960-62, 66	.05	0	P

Table 1.--Minimum 7-day, 2-year and 7-day, 10-year discharges at continuous and partial-record gaging stations, Hudson River basin, N.Y. (Continued)

Station number/	Station Name	Latitude O ' "	Longitude O ' "	County code	Drainage area (square miles)	Period of record ^{3/}	7-day minimum discharge (cubic feet per second)		Remarks
							2-year	10-year	
01372900	Sprout Creek near Fishkill Plains.....	41 35 50	73 50 42	027	49.3	1956-62, 64-65, 68-69	4.6	.6	P
01372904	Wicoppee Creek at Wicoppee.....	41 32 19	73 50 38	027	9.02	1960-62, 65-66	.6	.2	P
01372950	Clove Creek near Beacon.....	41 29 18	73 54 28	079	13.1	1956-65	.9	.3	P
01373300	Fishkill Creek at Beacon.....	41 30 40	73 56 55	027	190	1944-68	16	4.6	G
01373318	Black Meadow Creek near Florida.....	41 19 59	74 19 10	071	3.47	1971-76	.01	0	P
01373380	Trout Brook near Walton Park.....	41 16 36	74 15 01	071	2.39	1964, 71-75	.3	.2	P
	Moodna Creek:								
	Cromline Creek:								
01373600	Seely Brook near Chester.....	41 20 59	74 14 26	071	12.8	1964-68†, 69	.5	.08	P
01373690	Woodbury Creek near Highland Mills.....	41 22 00	74 06 17	071	11.2	1965-68†, 69	1.1	.41	P
01373700	Woodbury Creek at Mountainville.....	41 24 05	74 04 48	071	21.9	1956-61, 64-65	2.7	1.6	P
01373800	Moodna Creek at Mountainville.....	41 24 33	74 04 26	071	154	1956-60, 64-65	9.6	4.5	P
01374090	Doodletown Brook at Doodletown.....	41 18 04	73 59 11	087	2.91	1959-62	.05	.01	P
01374130	Canopus Creek (head of Sprout Brook) at Continental Village.....	41 20 15	73 54 15	079	14.5	1954, 60, 62-66	1.2	.3	P
01374200	Sprout Brook (Canopus Creek) near Annsville.....	41 19 11	73 54 57	119	15.6	1956-57	1.6	.6	P
01374300	Peekskili Hollow Creek at Van Cortlandville.....	41 19 04	73 54 19	119	46.6	1956-59, 61-62	8.7	4.7	P
01374400	Furnace Brook at Oscawana.....	41 13 47	73 54 35	119	7.33	1956-59, 61-62	T	0	P
	Cedar Pond Brook:								
01374420	Lake Tiorati Brook at Cedar Flats.....	41 14 26	74 01 29	087	10.5	1960-62†	.4	.2	P
01374440	Cedar Pond Brook at Stony Point.....	41 13 36	73 59 04	087	17.3	1960-62†	.7	.2	P
	Minisceonga Creek:								
01374460	South Branch Minisceonga Creek at Letchworth Village.....	41 12 15	74 01 54	087	5.83	1959-62, 66, 68	.7	.2	P
01375000	Croton River at New Croton Dam near Croton-on-Hudson.....	41 13 32	73 51 32	119	378	1933-75	.92	.43	GR
01375500	Bird Brook near Croton.....	41 12 40	73 52 00	119	.36	1933-38, 39-41	.02	.01	P
01376100	Pocantico River at North Tarrytown.....	41 05 23	73 51 43	119	15.7	1956-61	.5	.2	P
01376270	Sparkill Creek at Tappan.....	41 01 26	73 56 52	087	4.94	1960-63†	1.0	.7	P
01376280	Sparkill Creek at Sparkill.....	41 01 44	73 55 34	087	11.1	1959-63† 1964-68†	2.5	1.9	P
01376300	North Brook at Dobbs Ferry.....	41 01 16	73 52 12	119	.62	1956-59, 61	.3	.2	P
01376500	Saw Mill River at Yonkers.....	40 56 11	73 53 12	119	25.6	1944-75	2.2	.56	GR

Table 2.--Daily average spill from Ashokan Reservoir to

Esopus Creek, 1965-1976^{1/}, ^{2/}

[All discharges are in million gallons]

Month	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Jan.	0	1.0	0	0	0	22.8	412.4	81.4	0	280.3
Feb.	0	0	0	103.7	0	0	422.4	335.6	0	0
Mar.	0	334.6	0	0	0	342.7	250.9	380.5	312.4	64.1
Apr.	31.9	242.8	546.3	947.0	418.9	533.9	594.0	744.8	292.1	79.6
May	152.8	481.8	416.4	86.2	279.0	425.8	525.3	165.4	304.1	0
June	2.4	263.7	0	0	.4	684.0	172.5	0	86.4	124.1
July	0	37.0	43.6	0	0	201.8	210.2	0	0	136.0
Aug.	0	0	57.5	0	0	0	0	0	0	424.6
Sept.	0	0	0	0	0	0	0	0	0	267.1
Oct.	0	0	0	0	0	0	0	0	0	201.3
Nov.	0	0	0	0	0	0	0	0	421.7	130.4
Dec.	78.1	0	94.1	0	24.8	108.3	0	0	804.6	131.7
YEARLY TOTALS										
	22.4	113.9	71.4	93.1	60.3	193.1	213.2	140.2	186.5	154.1
TOTAL NUMBER OF DAYS ON WHICH SPILLS OCCURRED										
	66	^{3/} --	67	50	63	130	140	108	118	^{3/} --

^{1/} From City of New York, Bureau of Water Supply, annual reports 1965-76.

^{2/} No spill occurred during 1965-66.

^{3/} Not reported.