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Magnitude and Frequency of Floods in New York

Scientific Investigations Report 2006–5112

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

Cover. Shows washout on Chase Brook Road, across Chase Brook near Cannonsville Reservoir in Delaware County, New York, January 19, 1996. (Photography courtesy of The Walton Reporter, January 24, 1996, page. 6)

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Preface

This report includes a Geographic Information System (GIS) tool to compute basin characteristics used in the regional regression equations included with the report. It is the responsibility of the user to use the tool properly and to verify that the results are meaningful. The user is cautioned that although the tool has been tested, future uses might reveal errors that were not detected during testing. Users are encouraged to notify the U.S. Geological Survey New York Water Science Center of any errors found in the GIS tool by using the email address askny@usgs.gov. Updates might occasionally be made to the GIS tool. Users can check for updates on the Internet at URL http://ny.water.usgs.gov/projects/floodfreq/.

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DVD

[in pocket]

Figures

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Conversion Factors, Datum and Acronyms

Multiply	By	To obtain
	Length	
inch (in.)	25.4	millimeter (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
	Area	
square mile (mi^2)	2.590	square kilometer (km^2)
	Volume	
cubic foot (ft^3)	0.02832	cubic meter (m^3)
	Flow rate	
cubic foot per second (ft^3/s)	0.02832	cubic meter per second (m^3/s)
cubic foot per second per square mile [$(ft^3/s)/mi^2$]	0.01093	cubic meter per second per square kilometer [$(m^3/s)/km^2$]

Vertical coordinate information is referenced to the National Geodetic Vertical Datum of 1929 (NGVD 29).

Horizontal coordinate information is referenced to the North American Datum of 1927 (NAD 27).

LIST OF ACRONYMS

AML	Arc Macro language
DEM	Digital elevation model
ESRI	Environmental Systems Research Institute
GIS	Geographic Information System
GLS	Generalized least-squares
LSD	Least significant difference
MSE	Mean-square-error
NED	National Elevation Dataset
NLCD	National Land Cover Dataset
NRCC	Northeast Regional Climate Center
OLS	Ordinary least-squares
SAS	Statistical Analysis System
SIM	Simultaneous inference methods
STATGO	State Soil Geographic
USGS	U.S. Geological Survey
VIF	Variance inflation factor

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Abstract

Techniques are presented for estimating the magnitude and frequency of flood discharges on rural, unregulated streams in New York, excluding Long Island. Peak-discharge-frequency data and basin characteristics from 388 streamflow-gaging stations in New York and adjacent states were used to develop multiple linear regression equations for flood discharges with recurrence intervals ranging from 1.25 to 500 years. A generalized least-squares (GLS) procedure was used to develop the regression equations. Separate sets of equations were developed for each of six hydrologic regions of New York; standard errors of prediction range from 14 to 43 percent. Statistically significant explanatory variables in the regression equations include drainage area, main-channel slope, percent basin storage, mean annual precipitation, percent forested area, a basin lag factor, a ratio of main-channel slope to basin slope, mean annual runoff, maximum snow depth, and percentage of basin above 1,200 feet. Drainage areas for the 388 sites used in the analyses ranged from 0.41 to 4,773 square miles.

Methods of computing flood discharges from the regression equations differ, depending on whether the estimate is for a gaged or ungaged basin, and whether the basin crosses hydrologic-region or state boundaries. Examples of computations are included. Discharge-frequency estimates for an additional 122 streamflow-gaging stations with significant regulation or urbanization (including Long Island) are also included as at-site estimates.

Basin characteristics, log-Pearson Type III statistics, and regression and weighted estimates of the discharge-frequency relations are tabulated for the streamflow-gaging stations used in the regression analyses. Sensitivity analyses showed that mean-annual precipitation, drainage area, mean annual runoff, and maximum snow depth are the variables to which computed discharges are most sensitive in the regression equations.

Included with the report is a DVD that provides computation procedures and geographic information system spatial datasets to compute basin characteristics used in the regional regression equations and flood-frequency estimates at a specified location on a stream.

Introduction

Flood damage along flood plains is a constant concern for local and regional water-resource managers and planners. The effective management of flood-prone areas, and the design of structures along rivers and streams, require knowledge of the magnitude and frequency of floods. Several previous U.S. Geological Survey (USGS) reports provide techniques for estimating the magnitude and frequency of floods on rural, unregulated streams in New York by the index-flood method (Robison, 1961; Speer and Gamble, 1965; Tice, 1968; Wiitala, 1965), by ordinary least-squares (OLS) multiple-regression techniques (Darmer, 1970, and Zembrzuski and Dunn, 1979), and by generalized least-squares (GLS) multiple-regression techniques (Lumia, 1991). An additional 12 years of annual peak discharge data, updated skews (Lumia and Baevsky, 2000) for computing station flood-frequency curves as outlined in U.S. Water Resources Council Bulletin 17B (1981), and revised data on basin characteristics used for multiple-regression analyses enable refinement of the techniques established previously.

Since the 1990s, the USGS, in cooperation with New York State Department of Transportation, has been obtaining additional years of peak discharge records and has refined its basin characteristics data through geographic information system (GIS) coverages and techniques. The improved databases provide a basis for estimation of the magnitude and frequency of floods at gaged or ungaged sites on rural, unregulated streams in New York, excluding Long Island. Procedures for estimating peak discharges with recurrence intervals of 1.25, 1.5, 2, 5, 10, 25, 50, 100, 200, and 500 years depend on whether the stream is gaged or ungaged, and whether its drainage basin crosses hydrologic-region boundaries or state lines. In this study, which was also conducted in cooperation with the New York State Department of Transportation, regression equations for six hydrologic regions of New York (excluding Long Island) were developed from data collected through September 1999 at 388 gaged sites in and adjacent to New York.

Development of techniques for estimating peak discharges at ungaged locations on regulated streams,

urbanized basins, and streams on Long Island was beyond the scope of this study. Peak discharges for ungaged urban areas can be estimated through techniques of Sauer and others (1983). Flood characteristics of gaged stream locations that are urbanized (including Long Island sites) or regulated are presented herein as 122 at-site estimates only (these sites were not used in the development of the regional regression equations).

Purpose and Scope

This report presents techniques for estimating the magnitude and frequency of floods on rural, unregulated streams within six hydrologic regions of New York at gaged sites, ungaged sites, and ungaged sites on gaged streams. The information presented herein supersedes previous USGS data and reports on estimation of flood magnitude and frequency on rural, unregulated streams in New York.

The report discusses the delineation of the six hydrologic regions through statistical and hydrologic analyses and presents sets of equations for each of the six regions. It also describes use of the equations and includes sample computations, as well as tables of selected flood and basin characteristics data and summaries of statistical analyses.

Description of Study Area

Physiographic and geologic characteristics of New York that may help explain variations in streamflow were considered in the analysis and in the delineation of hydrologic-region boundaries (discussed in a later section). These factors affect the timing and magnitude of flood response, although many were not directly included in the regression equations. The area addressed in this study encompasses all of New York, excluding Long Island, as well as areas of adjacent states near the New York border.

Physiography

New York (excluding Long Island) encompasses parts or all of seven physiographic provinces (fig. 1), which range from high relief in the Adirondack and Catskill Mountains to low relief along the Great Lakes, the St. Lawrence River Valley, and the Hudson and Mohawk River Valleys. In northern New York, the *Adirondack* Province covers about 10,000 mi^2. The western half of the province and parts of the southern and northern margins are plateaulike. Lakes and ponds are abundant (about 2,000), especially in and near the mountains. The eastern half of the *Adirondack* Province is mountainous; some elevations exceed 5,000 ft above sea level (Fenneman, 1938). The *St. Lawrence Valley* of extreme northern New York is a smooth glacial plain with elevations dropping below 200 ft along the St. Lawrence River. The Mohawk River Valley, just south of the *Adirondack* Province, drains parts of the southern AdirondackMountains to the Hudson River.

The two major physiographic divisions of western New York are the *Central Lowlands* and the *Appalachian Plateau*. The *Central Lowlands* in New York extend east from Lake Erie, north of the Finger Lakes Region adjacent to Lake Ontario, to just west of the Mohawk and St. Lawrence River Valleys and the Adirondack Mountains. South of Lake Ontario, the lowland plain abuts the northern escarpment of the *Appalachian Plateau*, and east of Lake Ontario the plain comes to an end against the Tug Hill Plateau. Drainage throughout the *Central Lowlands* is generally toward Lakes Erie and Ontario. The *Appalachian Plateau* extends throughout the southern part of western New York east to and including the Catskill Mountains and southern sections of the Mohawk River Basin. The *Appalachian Plateau* is characterized by hilly terrain; its highest elevations are in the Allegheny and Catskill Mountains.

Physiographic divisions in eastern and southeastern New York include the *Valley and Ridge* Province, the *New England* Province, and the *Piedmont* Province. The *Valley and Ridge* Province extends from the New Jersey border, north through the lower Hudson River Valley to the southern end of Lake Champlain. Longitudinal drainage is prominent in the Hudson-Champlain section of the province. The *New England* Province also extends from the New Jersey border northward, crossing the southern part of the Hudson River. It includes the Taconic Mountains, running along the southeastern border of New York north to just south of Lake Champlain. The *Piedmont* Province includes a small lowland area in southeastern New York just north of New Jersey.

Geology

Crystalline rocks dominate the *Adirondack* and *New England* Provinces but contain carbonate rocks in outcrop fringes (escarpments) along the northern and eastern edges of the *Appalachian Plateau* Province, in isolated areas of the *St. Lawrence Valley*, and in eastern New York. Shale, the most extensive bedrock unit, predominates in the *Appalachian Plateau*, western *Central Lowland*, the Mohawk Valley, and the *Valley and Ridge* Province. Sandstone dominates in the *Piedmont*, *St. Lawrence Valley*, and eastern *Central Lowland* Provinces.

Bedrock in New York is covered with glacial deposits of till and stratified drift of variable thickness. The till mantles the uplands and small tributary valleys and generally is found beneath stratified drift in the larger valleys. Stratified drift forms the floors of large valleys and flat plains or terraces where bedrock relief is low. The stratified drift includes clay, silt, sand, and meltwater deposits of sand and gravel. The sand and gravel deposits form the principal aquifer systems of New York.

Figure 1. Physiographic provinces of New York, excluding Long Island (Modified from Lyford and others, 1984, figure 2).

Climate

The climate of New York is the humid continental type; cool, dry air masses move generally eastward through the state throughout the year, and warm, humid maritime tropical air masses from the south move northeastward during the summer. Mean annual precipitation ranges from almost 30 in. along Lakes Ontario and Champlain to about 60 in. in the southern Catskill Mountains.

The areal distribution of precipitation reflects the topographic relief and the general eastward-to-northeastward movement of storms. New York has a fairly uniform distribution of precipitation during the year and has no distinct rainy or dry season.

Regional differences in topography, elevation, and proximity to large bodies of water result in a wide variation of snowfall throughout the state. Maximum seasonal snowfall, averaging more than 175 in., occurs on the western and southwestern slopes of the Adirondack Moountains and Tug Hill Plateau (National Oceanic and Atmospheric Administration, 1980). A secondary maximum of more than 150 in. prevails some 10 to 30 mi inland from Lake Erie. The minimum seasonal snowfalls (25 to 35 in.) occur in extreme southeastern New York, and the minimum upstate snowfalls (40 to 50 in.) occur in the Chemung and mid-Genesee River Valleys and near the Hudson River in Orange, Rockland, and Westchester Counties up to southern Albany County. On average, some of the winter snowpack is still unmelted by mid-March over all but the extreme southeastern part of the state. In mid-March, as much as 10 in. of water content can still remain in the snowpack of the Adirondack Mountains and in the highlands to the east of Lake Ontario.

The greatest potential for floods is in the early spring, when substantial rains combine with rapid melting of snow to produce heavy runoff. Almost half of the state's annual runoff occurs from mid-February through mid-May. Local flooding, primarily within smaller drainage basins, is generally caused by summer thunderstorms. Occasionally hurricanes can cause severe flooding, particularly in southeastern parts of the state.

Magnitude and Frequency of Flood Discharges

This section of the report describes the database and the approach to developing equations used to estimate peak discharges for selected recurrence intervals at gaged and ungaged stream locations. A DVD that provides GIS datasets and procedures to compute flood frequencies is included with the report.

Database

The regression equations that provide estimates of the streamflow characteristics in this study were developed from records of annual peak discharges and basin-characteristic data from rural, unregulated gaging stations in New York (excluding Long Island) and adjacent states. Annual peak-discharges were obtained from the USGS peak-flow file; basin-characteristic and climate data were derived from (GIS) data sets and procedures.

Annual Peak-Discharge Records

The annual peak-discharge data that were the basis for this study were collected through September 1999 from 388 continuous-record and partial-record streamflow-gaging stations (locations are shown in fig. 2). Of these sites, 341 are in New York, and 47 are in adjacent states. Periods of peak-discharge record for these stations range from 10 to 99 years. Flood frequencies for some sites where significant flooding has occurred since 1999 (through 2005) have been updated accordingly.

The annual peak flows that were selected for analysis were recorded at streamflow-gaging stations in rural areas that had at least 10 consecutive years' record of unregulated flow. Streams were considered regulated if more than 25 percent of the drainage area above the streamflow-gaging station was upstream from a controlled reservoir, in accordance with analyses by Zembrzuski and Dunn (1979). An additional consideration in the assessment of significant effects of flood detention was the flood-control regulation criterion established by Benson (1962), namely, that basins with "usable storage" of more than 4.5 million ft^3/mi^2 are significantly affected by flood detention (storage could affect peak discharge by more than 10 percent). Usable storage is the volume of water normally available for release from a reservoir, between the minimum and maximum controllable elevations. Based on available storage data, the 388 sites used in this study were considered unregulated. Sites were considered "urbanized" (not rural) if more than 15 percent of the drainage area was affected by manmade changes (impervious area, channelization, diversions, and so forth) (Sauer and others, 1983).

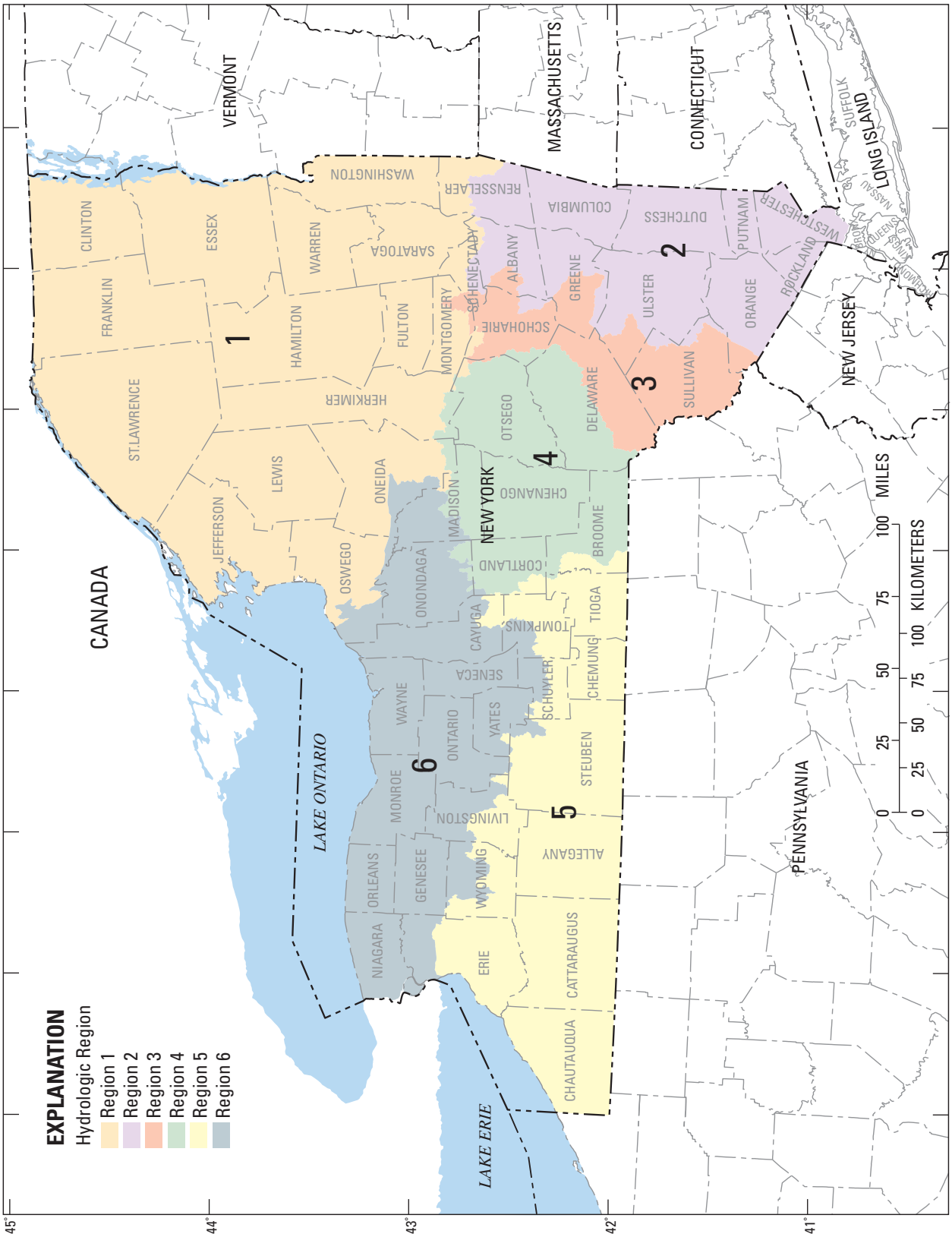
The drainage areas of the 388 gaging stations used in the analysis ranged from 0.41 to 4,773 mi^2. A list of the 388 streamflow-gaging stations used in the study, their locations, drainage area, period of record, maximum known discharge, and recurrence interval, is given in table 7 (at the end of the report). Much of the information in table 7 was published previously (Lumia and Murray, 1993).

A graph of 13,925 annual peak discharges recorded at the 388 sites used in the study are plotted in relation to drainage area in figure 3; also shown are the 100-year peak discharges at each site (discussed later) and a maximum-known-discharge envelope curve for New York (Lumia and Murray, 1993). The envelope curve is based on discharges at 1,280 gaging stations throughout the State. At most of the 388 sites, the 100-year discharge exceeds the maximum discharge, yet most are well below the envelope curve for New York.

Annual peak discharges at 435 streamflow-gaging stations (including 47 urbanized basins) with at least 10 consecutive years of record were examined for significant trends through the Kendall's tau test. The tau value is a measure of the correlation between the annual peak series and time (years). A trend was considered significant if the p-value (probability that no trend is erroneously rejected) was less than or equal to 0.05. This represents a 95-percent confidence level. Trends in flow records can be difficult to detect where periods of record are short and where outliers are present. Of the 435 sites having at least 40 years of record, a significant trend was indicated at 28 sites (6.4 percent of the sites). Of these trends, 21 were positive (general increase in annual peak discharges through time) and 7 negative. Trends were indicated at some other sites, but the period of record at these gages was generally much shorter than 40 years. Many of the sites showing a positive trend are in the extreme southeastern part of New York or on Long Island, which have undergone more extensive development over the years than most other parts of the State. The effect of urbanization can be seen through a comparison of trends for two urban sites (figs. 4A, 4B) with that for a rural area (fig. 4C). The two urban sites show strong positive trends, whereas the rural site shows a small but statistically significant negative trend.

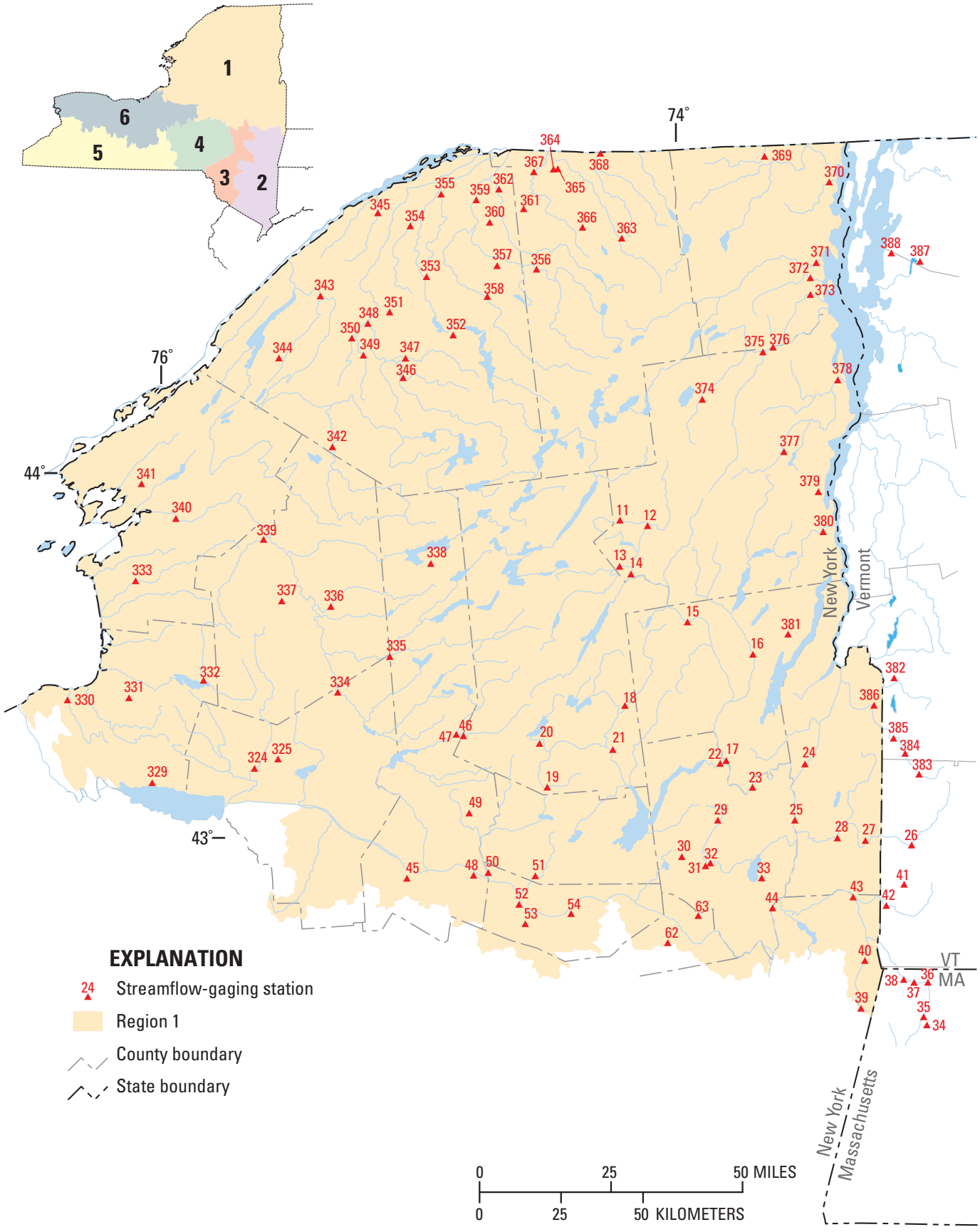
Several other sites in the Susquehanna River Basin showed negative trends. The reason is unknown, but may be related to trends in precipitation and (or), to a lesser degree, ground-water levels (Rasmussen and Perry, 2001), or to extreme climatic anomalies near the beginning and the end of the record, to which the trend test is sensitive. The absolute value of the Kendall tau values for the 388 sites on rural, unregulated streams in this study was generally much lower than a "strong" value of about 0.7 or larger (Helsel and Hirsch, 1992, p. 212). The absence of flow regulation and urbanization in these basins together with possible climatic influences at the 388 sites suggests that any indicated trends probably were not a function of manmade changes that affect annual peak flows at these sites. Therefore, none of the 388 sites were excluded despite slight positive trends at some. Further study would be needed to explain the indicated trends.

A plot of annual peak runoff for all 388 sites from 1865 through 2002 (fig. 5A), indicates a slight positive trend that



Base from U.S. Geological Survey, Digital Line Graph, 1:2,000,000
Universal Transverse Mercator projections, zone 18, NAD83

Figure 2. Six hydrologic regions of New York and locations of 388 streamflow-gaging stations represented in this study. (Map numbers refer to streamflow-gaging stations shown in tables 7 and 8.)



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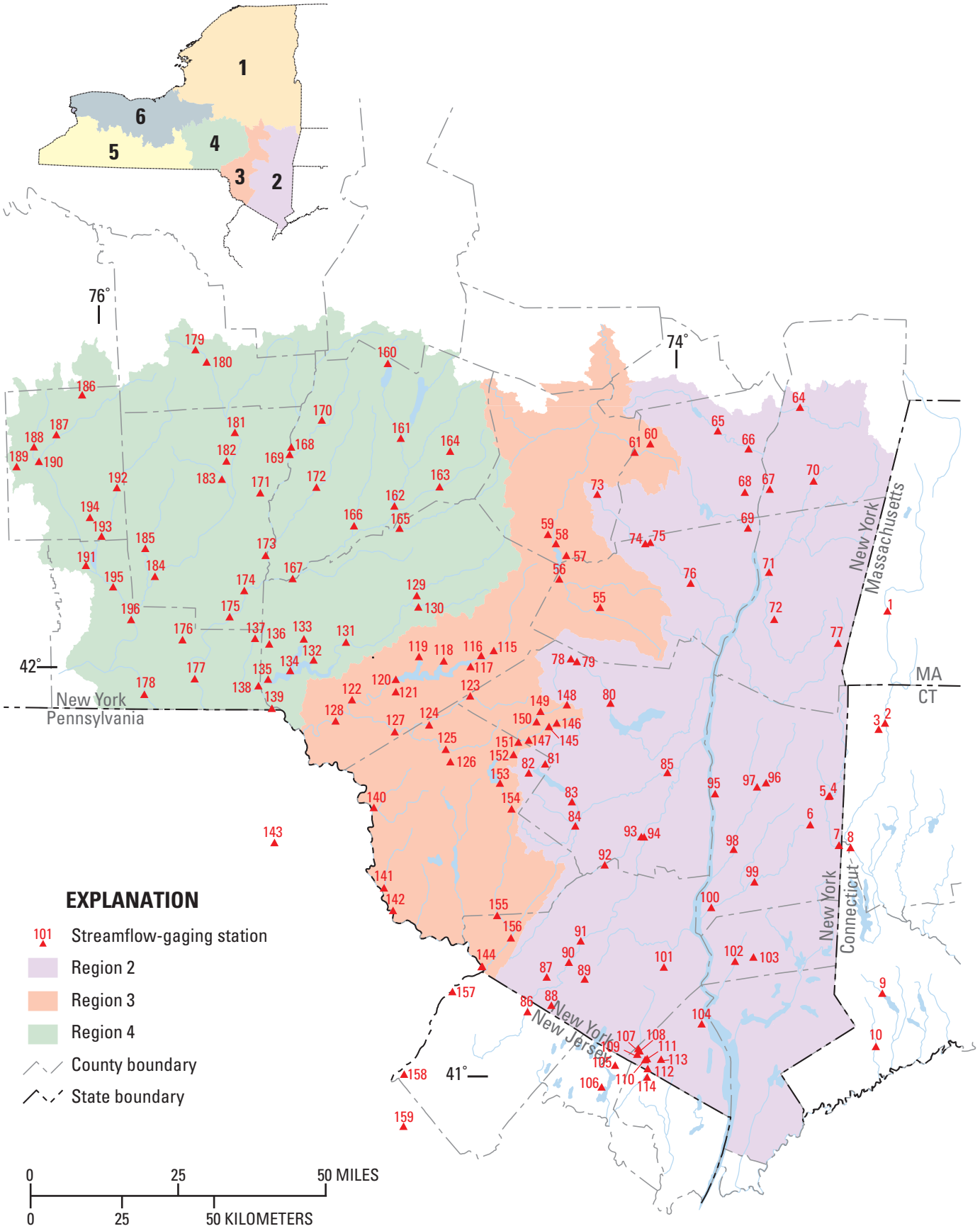

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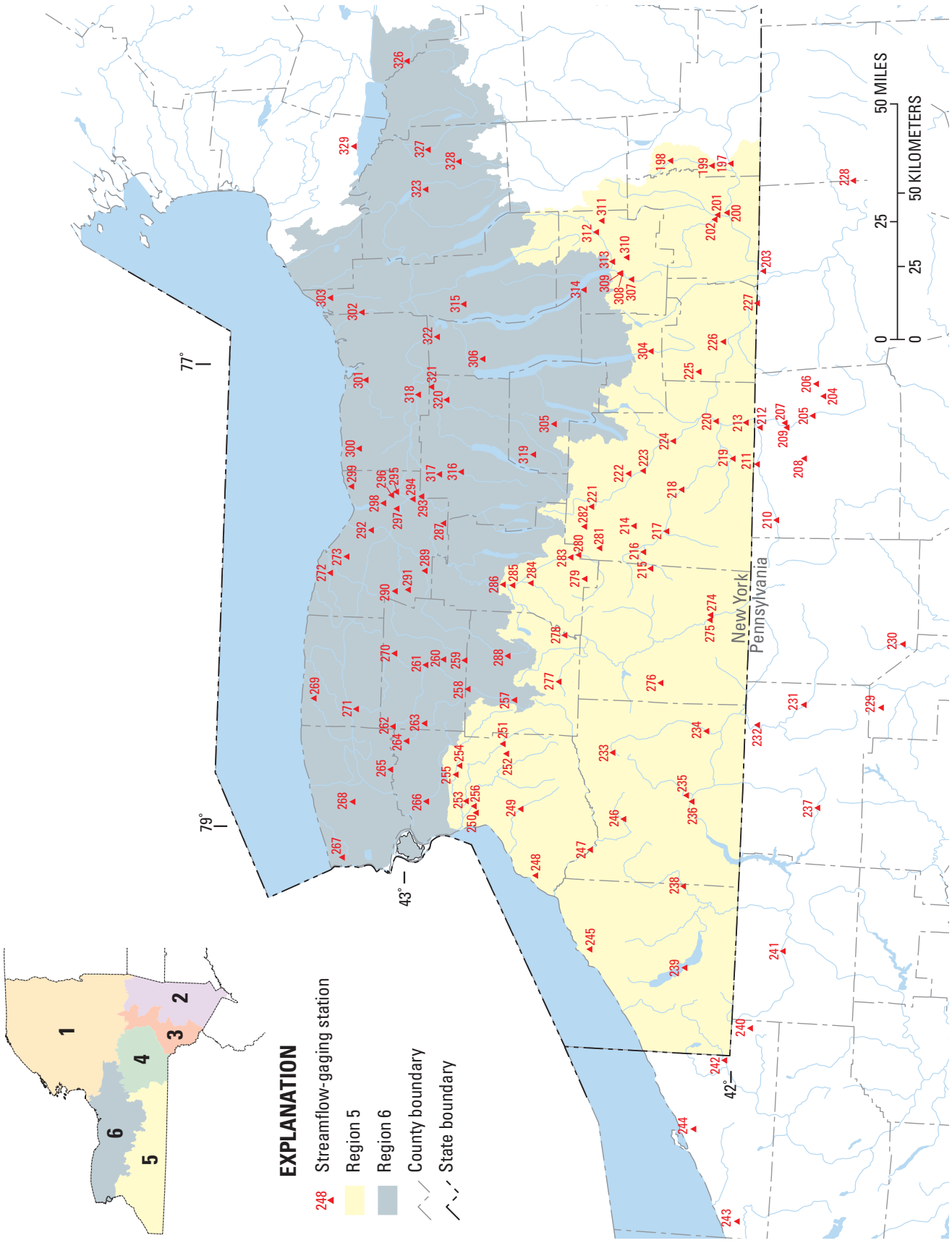

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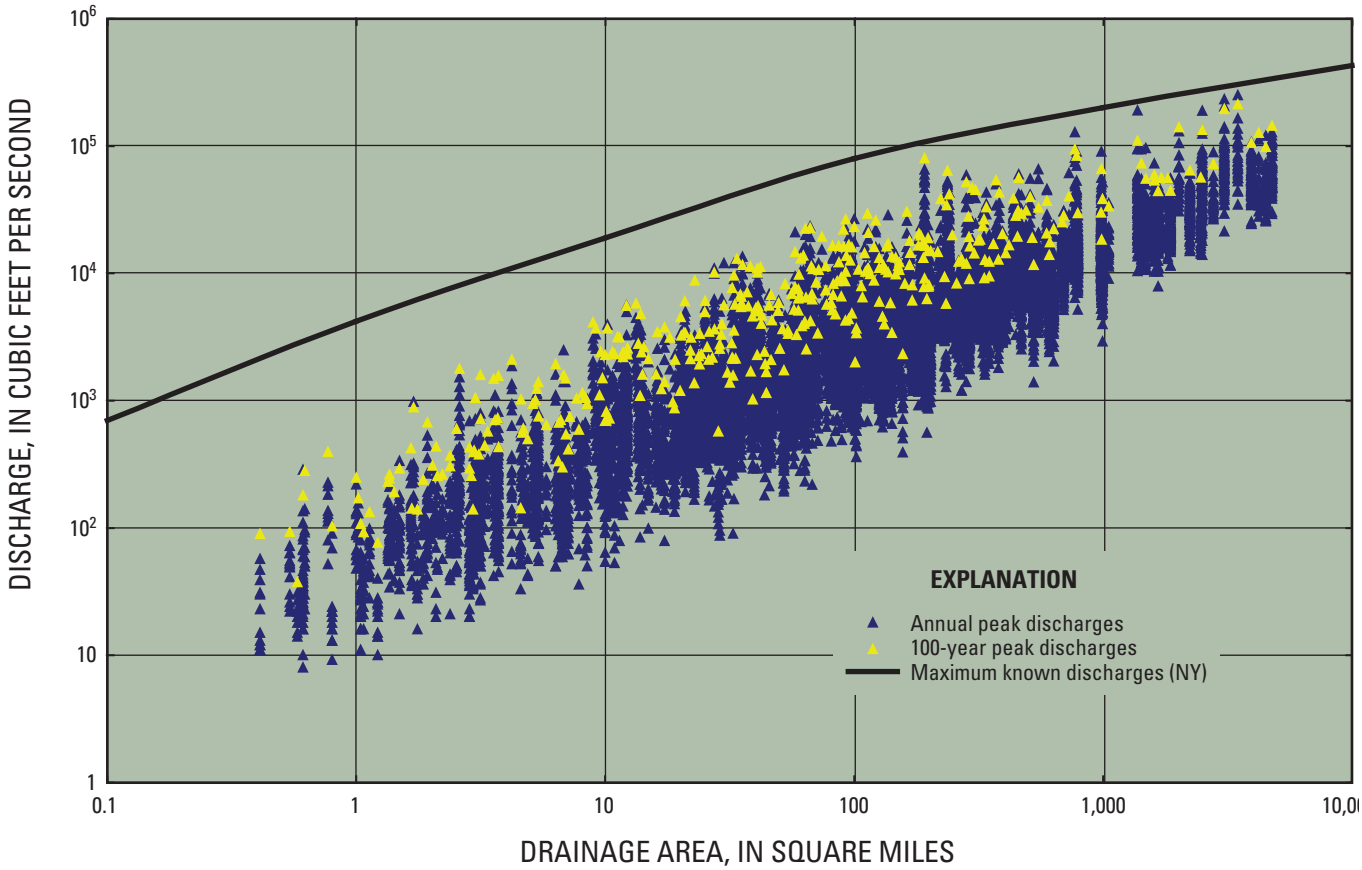


Figure 3. Annual peak discharges and 100-year peak discharges for 388 rural, unregulated streamflow-gaging stations used in this study.

is not statistically significant. One reason for this trend may be that stations on several small streams were added to the network through time and small basins generally produce greater peak runoff than large basins. A plot of annual peak runoff at small streams (drainage area 10- to 50-mi^2) from 1913 through 2002 (fig. 5B) indicates a slightly negative trend, that is not statistically significant.

Magnitude and Frequency of Flood Discharges at Streamflow-Gaging Stations

The relation of flood-discharge to frequency of occurrence at a streamflow-measurement site is generally expressed in terms of exceedance probability or recurrence interval. Exceedance probability is the probability that a flood-discharge of specified magnitude will be equaled or exceeded in any 1 year. Recurrence interval, the reciprocal of exceedance probability, is the average time interval between occurrences of a flood-discharge of equal or greater magnitude. For example, a 100-year flood has a 1-percent chance of occurring in any 1-year period.

Four representative flood-frequency curves are depicted in figure 6. A flood-frequency curve for each of the 388 gaging stations used in this study was developed by fitting the logarithms of the annual peak discharges to a Pearson Type-III distribution according to guidelines recommended by U.S. Water Resources Council (1981); the resulting data were analyzed through USGS flood-frequency programs (Kirby, 1981), and the frequency curves were adjusted to reflect historical information and high and low outliers. The coefficient of skewness was estimated as a weighted average of the systematic (station) skew and a generalized skew from a contoured skew map for New York (Lumia and Baevsky, 2000). Results of the discharge-frequency analyses for each gaging station are summarized in table 8 (at the end of the report). Caution must be exercised in using information from some of the stations listed in table 8 because several of the streams are now regulated. The discharges given in table 8 for streams that are currently regulated reflect pre-regulation periods and are not generally applicable to present conditions.

Discharge-frequency estimates for 122 gaging stations on streams with significant regulation or urbanization are listed in table 9 (at the end of the report). The discharge-frequency estimates were derived from the annual peak-discharge data for the regulated or urbanized period using recommended statistical procedures discussed earlier (U.S. Water Resources Council, 1981). The high degree of regulation or urbanization required use of the station skew rather than a weighted skew. These 122 sites were not used in the regional regression

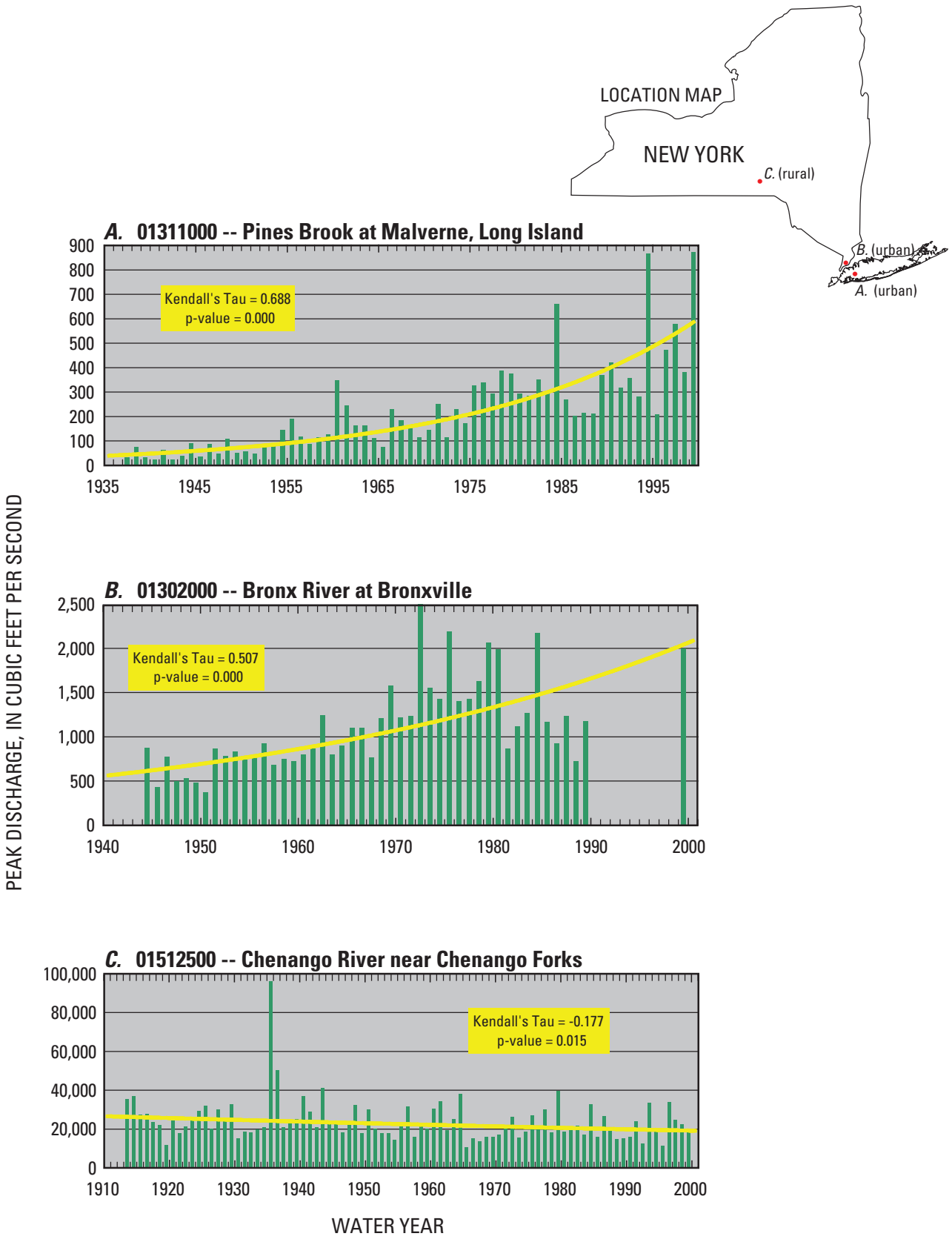


Figure 4. Annual peak discharges and trend line for streams in two highly developed areas (*A,B*) and in an undeveloped area (*C*) in New York: (*A*) 01311000–Pines Brook at Malverne, (*B*) 01302000–Bronx River at Bronxville, and (*C*) 01512500–Chenango River near Chenango Forks. (Location and peak-discharge data are given in tables 8 and 9).

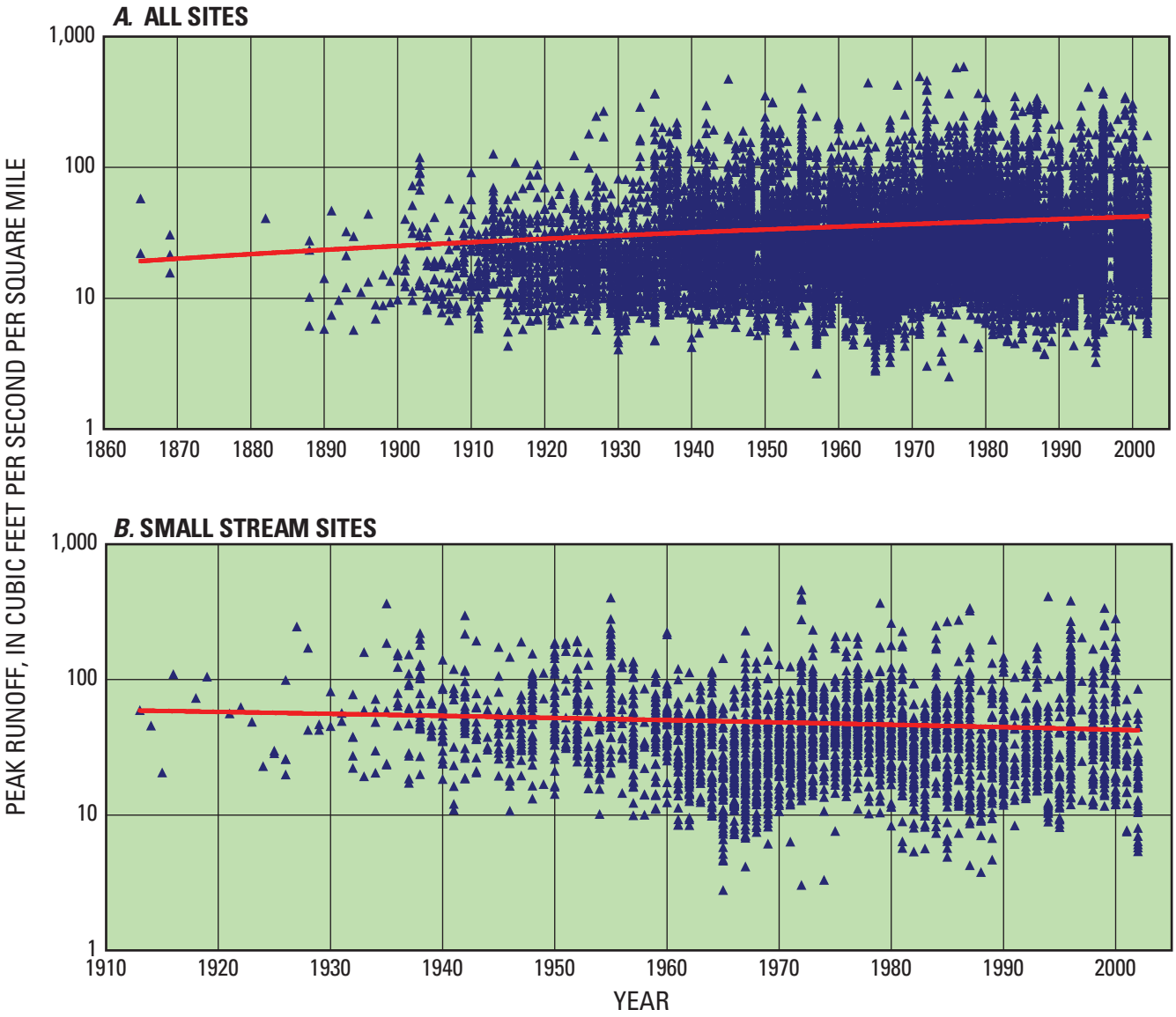


Figure 5. Annual peak discharges and trend lines for (*A*) all study sites and (*B*) all small stream (10- to 50-square miles) study sites.

analyses. At regulated sites, no adjustments were made for the amount of available storage in the reservoirs before or during floods, nor for changes in regulation procedures during the period of regulation. Other methods to estimate flood-frequency curves at reservoir outlets are available and can be applied to these sites. Computed discharge-frequency curves for urbanized basins with many years of record may not represent current conditions if the degree of development has increased significantly through time. A period with a relatively constant degree of urbanization has been defined, as a general guideline, as a change in development (commercial, industrial, or residential) of less than 50 percent during the period of record (Sauer, 1983). The locations of streamflow-gaging stations on streams that currently have a substantial amount of regulation or urbanization are shown in figure 7.

As noted earlier, frequency curves are adjusted to account for historical information, outliers, and skew of the distribution of annual peak discharges. To illustrate the effects of a high outlier and a historic period-of-record, annual peak discharges (1913–2002) for Chenango River near Chenango Forks, as well as "moving" 100-year and 2-year flood discharges are shown in figure 8A. Revised values were calculated for the period following the first 10 years of peak-discharge record and plotted in a continuous line as each "new" year of peak-discharge record was added. The continuous lines show computed values with no adjustments for the historic period (the 1935 peak discharge is the highest since at least 1865), whereas the triangles show computed discharges, for selected years, with such adjustment. The chart in figure 8A shows that the 1935 peak discharge had a major effect on the 100-year discharge but only a minimal effect on the 2-year flood-discharge. A similar graph for Independence River at Donnattsburg (fig. 8B) shows the effect of major floods much later during the record (early and mid-1980s) with no historic

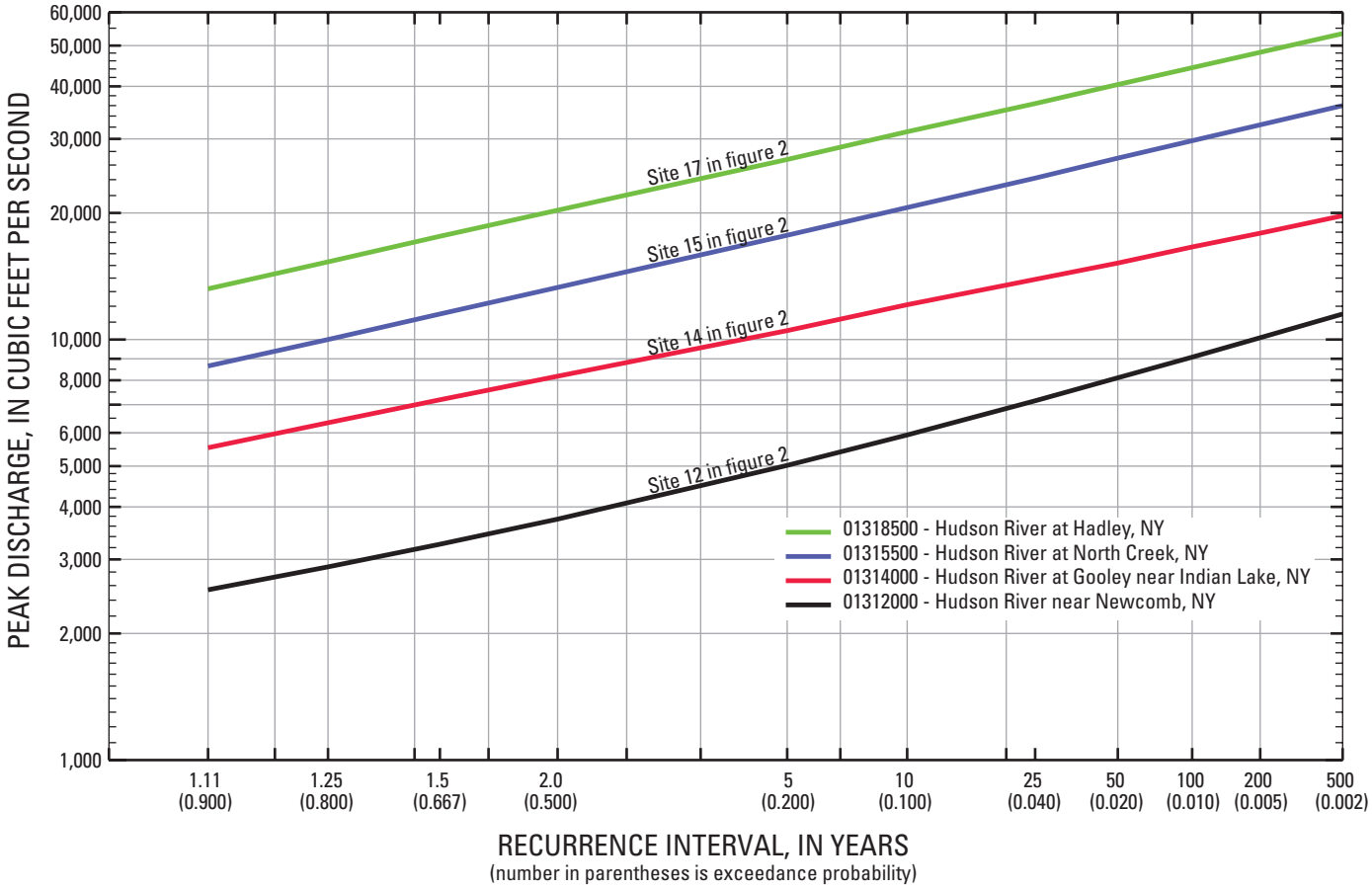


Figure 6. Examples of flood-frequency curves for selected streamflow-gaging stations along the Hudson River in New York.

(pre-1943) information available. The computed 100-year discharge from the 1950s through 1980 was slightly more than 4,000 ft^3/s; it then increased to nearly 7,000 ft^3/s after the flood of 1985. Again, the 2-year moving flood discharge showed little fluctuation during the period of record. The graphs in figure 8 give examples of the effect that high outliers and historic information can have on flood-frequency analyses (and the subsequent design of bridges and culverts).

Basin Characteristics

Peak-discharge information can be transferred to ungaged sites through multiple regression analysis that relates streamflow characteristics (such as 100-year flood discharge) to selected topographic and climatic characteristics for each gaged drainage basin. Values for many of the basin characteristics used in this study were obtained through a GIS in conjunction with a 30-m digital elevation model (DEM) (U.S. Geological Survey, 2001); the values for several characteristics were derived from a computer program through procedures described in Harvey and Eash (1995).

More than 60 basin and climate characteristics were tested for statistically significant correlation with peak flows during the regression analyses. Among those tested were drainage area, basin length, basin perimeter, average basin slope, basin relief, basin azimuth, basin width, basin-shape factor, basin-elongation ratio, basin rotundity, compactness ratio (basin perimeter to circumference of a circle of equal area), relative relief (basin relief to basin perimeter), total stream length, main-channel length, main-channel slope, main-channel sinuosity ratio (main-channel length to basin length), stream density (total stream length to drainage area), constant of channel maintenance (reciprocal of stream density), main-channel slope proportion (main-channel length to main-channel slope), ruggedness number (stream density times basin relief), slope ratio of main-channel slope to basin slope, number of first-order streams, basin stream order, drainage frequency (number of first-order streams per square mile), relative stream density (drainage frequency to stream density), basin-shape index, average main-channel elevation, minimum basin elevation, maximum basin elevation, average basin elevation, elevation at gage, percentage of basin that is urbanized, percentage of basin that is forested, percentage of basin with grasslands, percentage of basin storage, mean annual precipitation, mean annual snowfall, precipitation ratio (mean annual snowfall to mean annual precipitation), maximum seasonal snow depth, 100-year 24-hour precipitation, water equivalent of snowfall, total snowfall, mean annual runoff, average angle of basin slope, slope of lower half of main channel, slope of upper half of

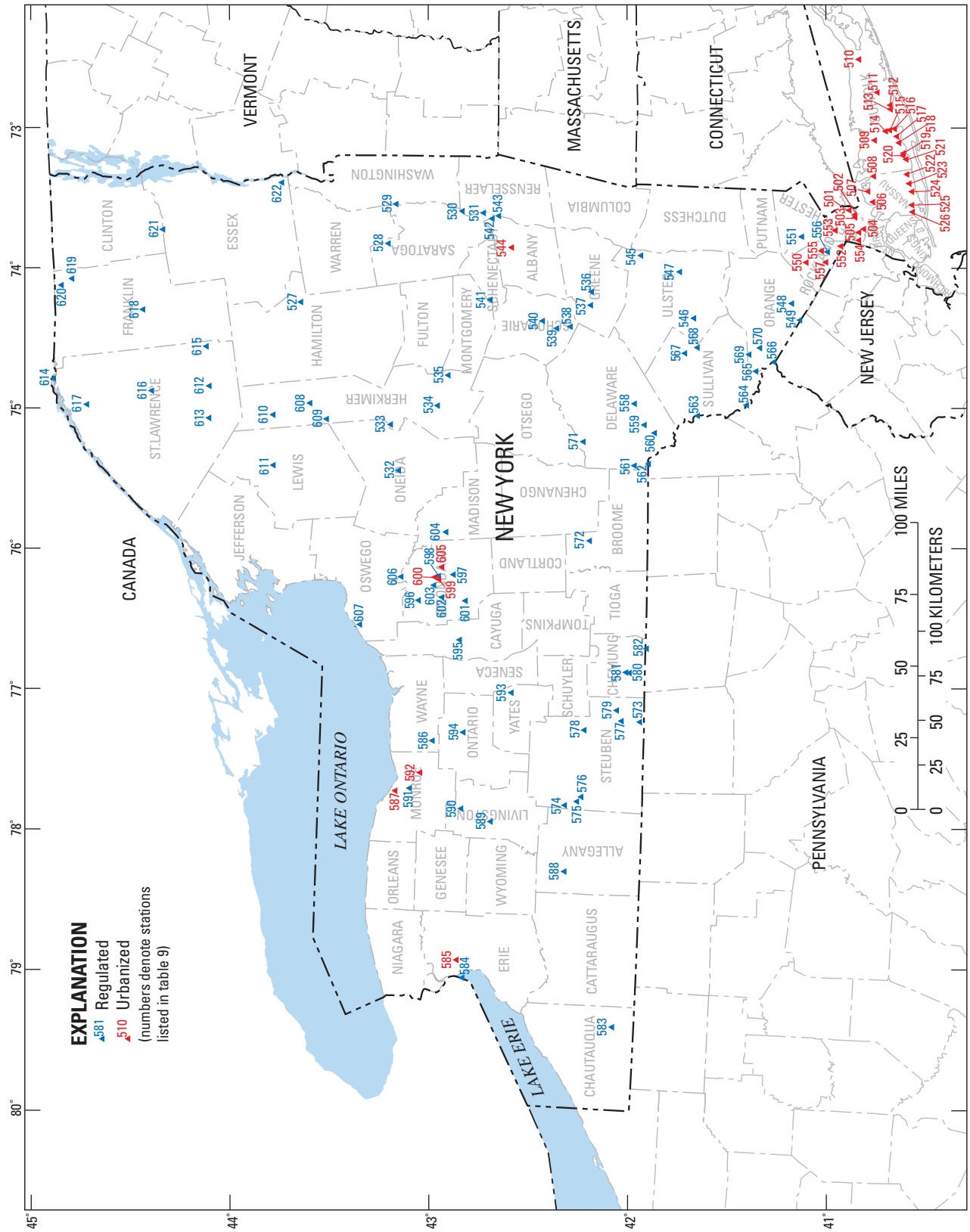


Figure 7. Locations of 122 streamflow-gaging stations on regulated and urbanized streams in New York. (Site numbers and their names, locations, and peak discharges for 10 recurrence intervals are given in table 9, at end of report).

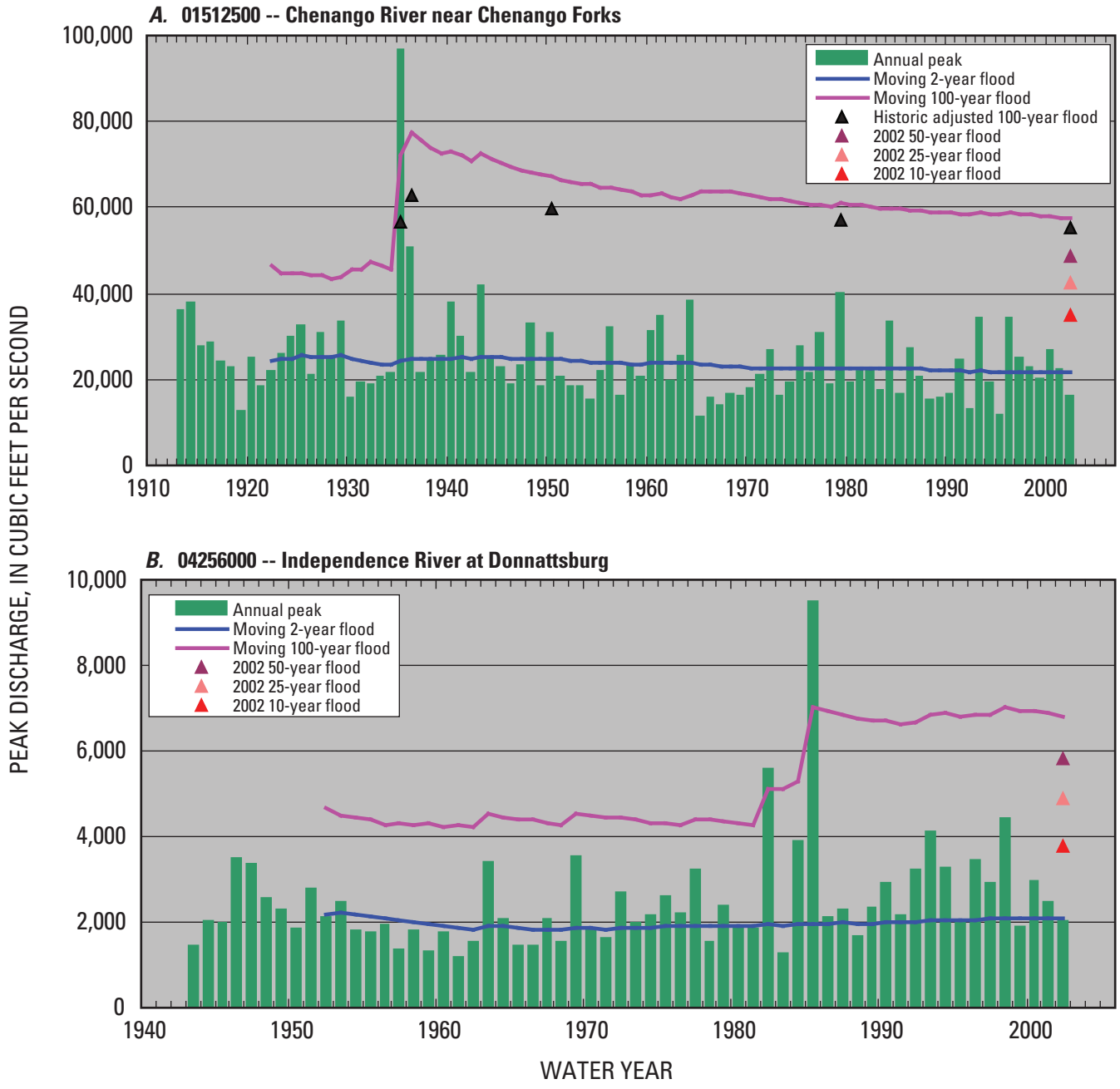


Figure 8. Annual peak discharges and moving 100- and 2-year flood discharges for two streamflow-gaging stations in New York: (*A*) 01512500 – Chenango River near Chenango Forks, and (*B*) 04256000 – Independence River at Donnattsburg. (Station locations are shown on figure 2, site 336, table 8).

main channel, percentage of basin above selected elevations, basin lag factor (relating main-channel length and slope), and several soil properties, including permeability, percent clay content, percent organic matter, and so forth. The variables that were selected for use in the final regression equations are defined as follows:

Drainage area (A), in square miles.—The area of a basin upstream from the gage or site of interest, delineated on 7.5-minute USGS topographic maps, then calculated by digitizing the basin outline (Wagner, 1982).

Main-channel stream length (L), in miles.— The longest flow distance measured along the main stream channel from

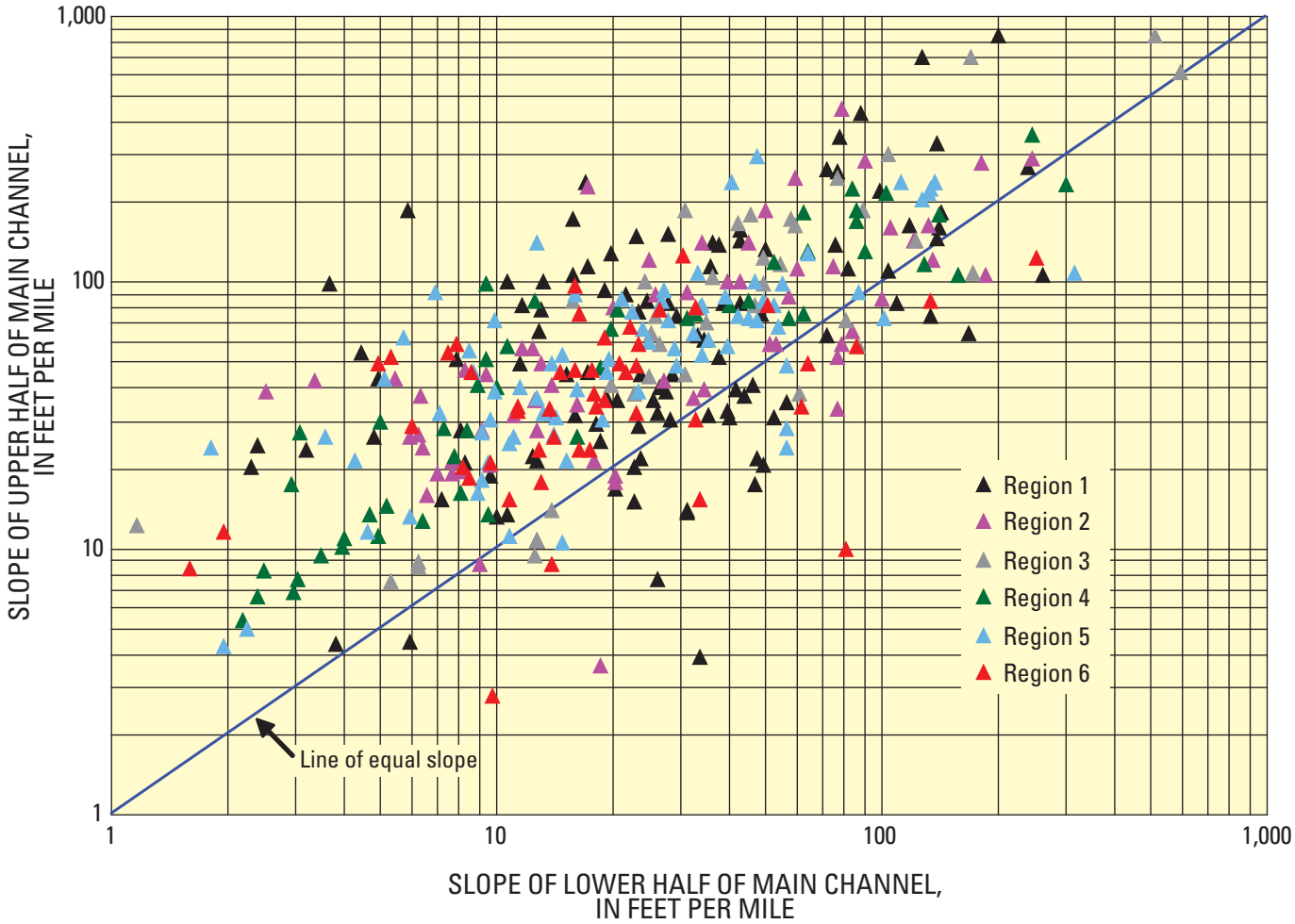


Figure 9. Slopes of the lower half and upper half of the main channel for 388 streamflow-gaging stations used in the study. (Hydrologic regions are shown in figure 2).

the gage or point of interest to the top of the basin. The main channel was derived from the 30-m DEM (U.S. Geological Survey, 2001).

Main-channel slope (SL), in feet per mile.— The difference in elevation (feet) between points 10 percent and 85 percent of the distance along the main stream channel from the gage or site of interest to the top of the basin, divided by the distance (miles) between the two points.

Slope of the lower half of the main channel (SL_LO), in feet per mile.— The difference in elevation (feet) between points 10 percent and 85 percent of the distance along the lower half of the main channel from the gage or site of interest to the midpoint of the entire main channel, divided by the distance (miles) between the two points.

Slope of the upper half of the main channel (SL_UP), in feet per mile.— The difference in elevation (feet) between points 10 percent and 85 percent of the distance along the upper half of the main channel from the midpoint of the entire main channel to the top of the basin, divided by the distance (miles) between the two points. Figure 9 shows a plot of the slopes of the upper and lower halves of the main channel for the 388 gaging stations used for this study.

Average basin slope (BS), in feet per mile.— Slope measured by the contour-band method, within the contributing drainage area, where BS = [(total length of all selected elevation contours) (contour interval)] / A.

Slope ratio (SR) of main channel slope to basin slope, dimensionless.— Computed within the drainage basin as SL / BS.

Basin lag factor (LAG).— Computed as main channel length divided by the square root of the product of the slopes (plus one) of the upper and lower halves of the main channel, $L / [(SL\_UP+1)\ (SL\_LO+1)]^{0.5}$.

Percentage of drainage basin at or greater than 1,200 feet above sea level (EL12).—Computed from the 30-m DEM (U.S. Geological Survey, 2001). A relief map showing the areas above 1,200 feet is given in figure 10.

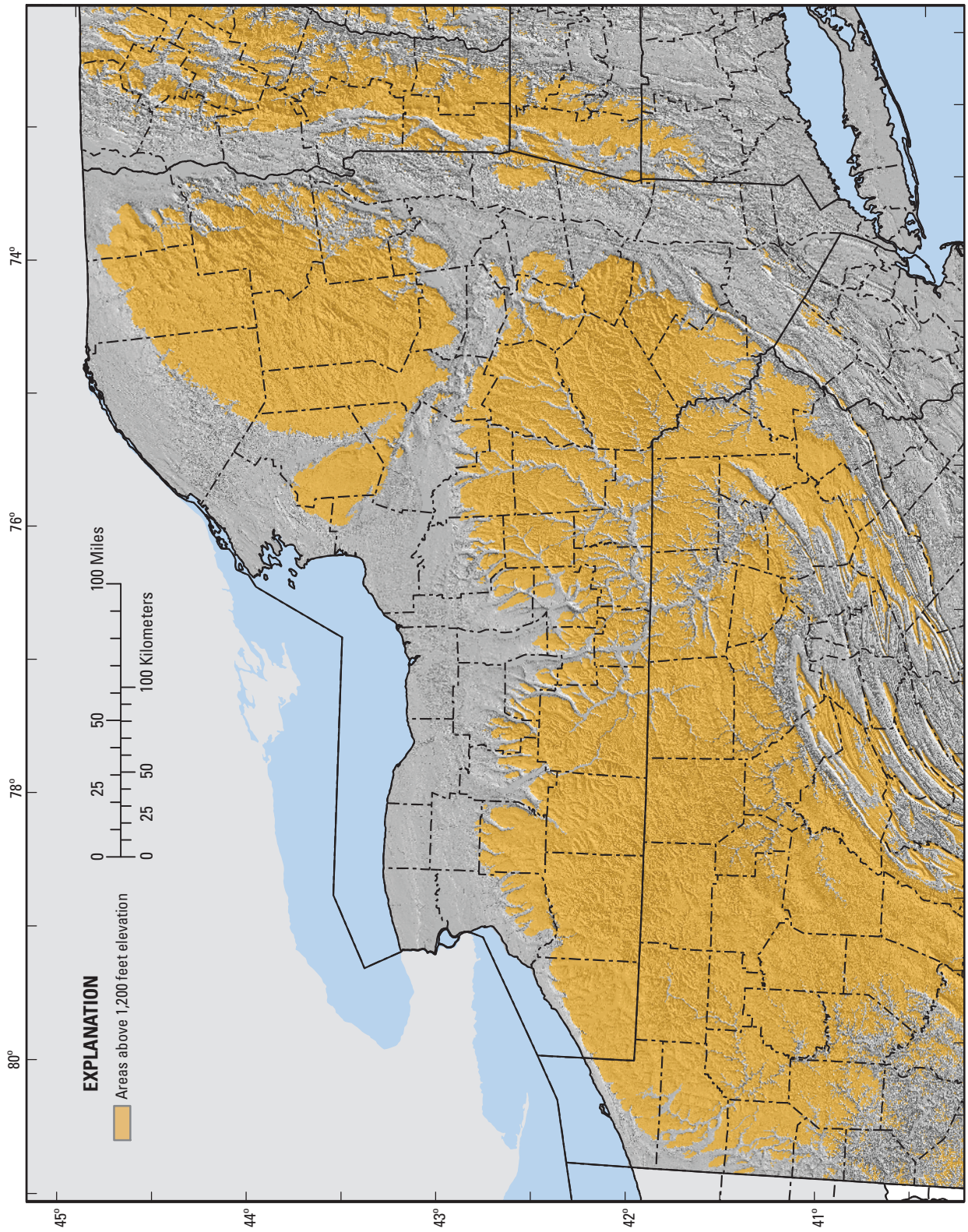


Figure 10. Areas in and adjacent to New York with elevations above 1,200 feet, as interpreted from 30-meter digital elevation model (DEM) data (U.S. Geological Survey, 2001).

Basin storage (ST), in percent.— Percentage of total drainage area shown as lakes, ponds, or swamps (wetlands) in the National Land Cover Dataset (NLCD) (U.S. Geological Survey, 2000) land-use data. A generalized land-use map of New York and adjacent States showing areas of storage, as well as urban and forested land, is given in figure 11.

Basin forested area (FOR), in percent.— Percentage of total drainage area shown as forest cover in the National NLCD) (U.S. Geological Survey, 2000 land-use data. A generalized land-use map of New York and adjacent States showing areas of forested land, as well as urban land and areas of basin storage, is given in figure 11.

Mean annual runoff (RUNF), in inches.— The average value for the basin calculated from a gridded contour map of mean annual runoff for 1951–80 (Randall, 1996). A map of New York and adjacent States showing mean annual runoff is given in figure 12.

Mean annual precipitation (P), in inches.— The average value for the basin calculated from a gridded contour map of mean annual precipitation for 1951–80 (Randall, 1996). A map of New York and adjacent States showing mean annual precipitation is given in figure 13.

Seasonal maximum snow depth, 50th percentile (MXSNO), in inches.— The average value for the basin computed from Northeast Regional Climate Center (NRCC) atlas of snowfall and snow depth (Cember and Wilks, 1993). A map of New York and adjacent States showing seasonal maximum snow depth is given in figure 14.

Of the 14 variables that were selected for this analysis, eight represent aspects of basin morphology (L, SL, SL_LO, SL_UP, BS, SR, LAG, EL12). Their values were calculated for each gaged basin from the 30-m National Elevation Dataset (U.S. Geological Survey, 2001). The basis for computation of all basin characteristics was the drainage basin outlines that had been manually delineated by Wagner (1982). Figure 9 shows a plot of the slopes of the lower half and the upper half of the main channel for each of 388 streamflow-gaging stations used in the study. The sites are shown by hydrologic region. Most slopes of the upper half of main channels are greater than the lower half, but several sites indicate the lower half to be steeper than the upper half. Further investigation is needed to determine what effect these main channel slope conditions have on resulting peak discharges.

Two of the 14 selected variables represent land-cover characteristics (ST and FOR). Their values for each site were computed from NLCD for 1992 at a 30-m cell size (U.S. Geological Survey, 2000). Storage (ST) represented the open-water and wetland categories; forest cover (FOR) represented three categories combined (deciduous, evergreen, and mixed). The degree of urbanization in a basin was calculated as the sum of (0.4) low-density residential, high-density residential, and commercial land. Urbanization was calculated only to determine if a site should be excluded from the analysis. It was not a variable in the regression analyses.

Mean annual runoff (RUNF) values were taken from an analysis by Randall (1996), that was based primarily on records of streamflow (1951–80) at 503 gaged sites across the Northeast. The resulting contour map was gridded through GIS techniques to compute the average runoff value for each basin in this study.

Mean-annual precipitation (P) values were taken from an analysis by Randall (1996) that was based primarily on records of precipitation (1951–80) at 483 precipitation stations across the Northeast. Precipitation values were compared to runoff values for consistency and adjusted accordingly (Randall, 1996). Average values were computed for each gaged basin.

Average values for seasonal maximum snow depth, 50th percentile (MXSNO) were computed from the Northeast Regional Climate Center (NRCC) atlas of snowfall and snow depth. A raster dataset was developed from the contour map in the atlas, and an average value for each gaged basin was computed. The period of record for climate stations used in the atlas was from October 1955 through April 1992 for Northeastern states (Cember and Wilks, 1993).

Values for each of the 14 variables used in the regional regression analyses are listed by USGS site number in table 10 (at the end of the report).

Regression Analysis

Multiple regression analysis was used to develop the relations between peak discharges of selected recurrence intervals (response variable) and drainage-basin characteristics (the 14 selected explanatory variables). Previous regression analyses for New York used (OLS) procedures (Zembrzuski and Dunn, 1979) and (GLS) procedures (Lumia, 1991). The OLS estimates are appropriate if three conditions are met: (1) all flow estimates are equally reliable, (2) the natural variability is the same for each site, and (3) observed concurrent flows at every pair of sites are independent of each other. In practice, available data seldom fully meet these requirements, however.

Research by Stedinger and Tasker (1985) and Tasker and Stedinger (1989) showed that GLS may be more appropriate for hydrologic regression than OLS. In this approach, the regression coefficients are estimated by taking into consideration the time-sampling error (length of record at each site) and the cross correlation of annual peak-discharges between sites. This research has shown that the GLS procedure was superior to OLS where streamflow data are cross correlated and (or) have differing lengths of record.

GLS regression entails weighting each basin in accordance with the variance (time-sampling error) and spatial-correlation structure of the streamflow characteristic (annual peak discharges); it also accounts for the time-sampling error in the streamflow characteristic when the accuracy of the regression equation is evaluated. The prediction error for ungaged sites is partitioned into regression error (error in assuming an incomplete regression form)

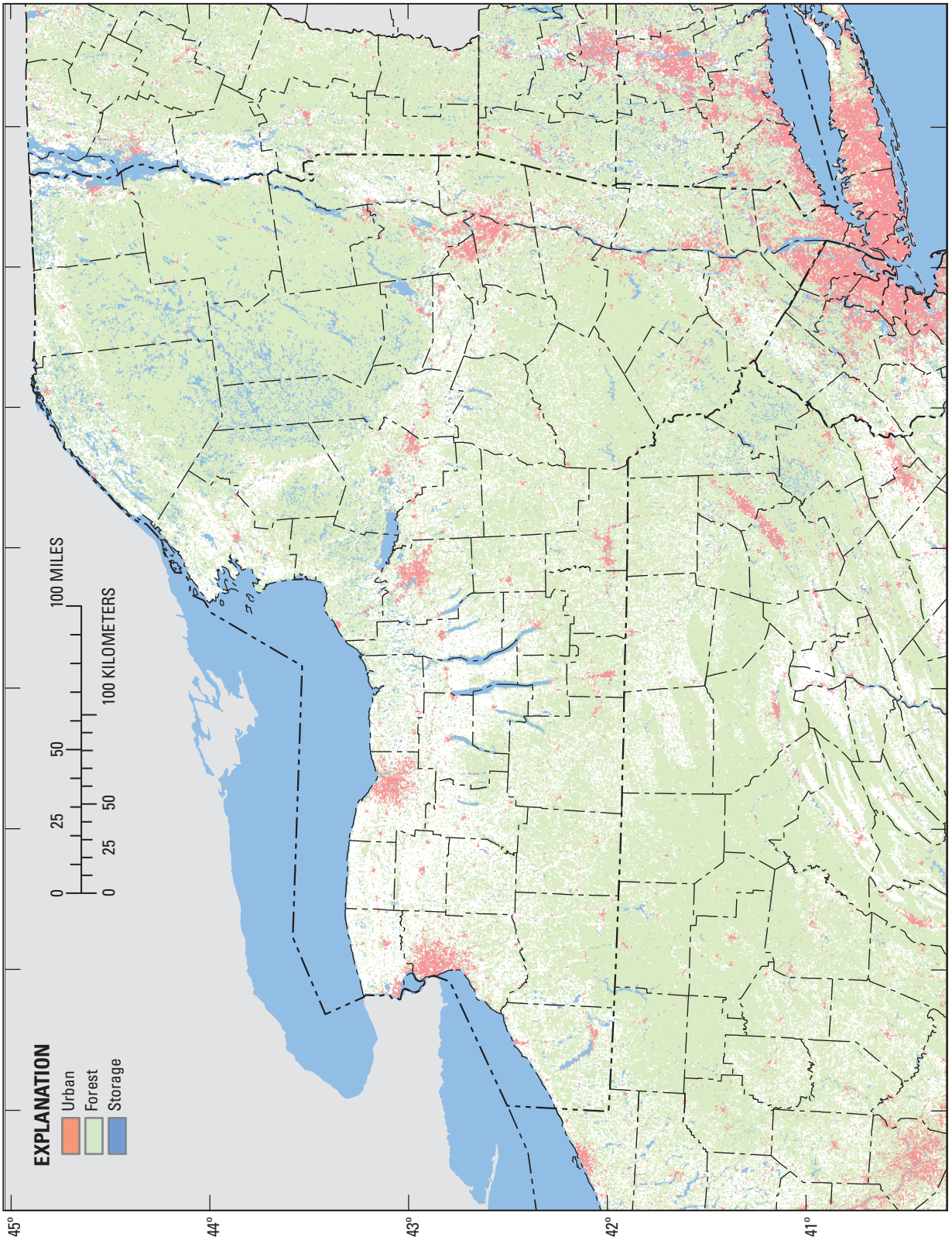


Figure 11. Areas of urbanization, forest, and storage in and adjacent to New York, as interpreted from the National Land Cover Dataset (NLCD) land-use data (U.S. Geological Survey, 2000).

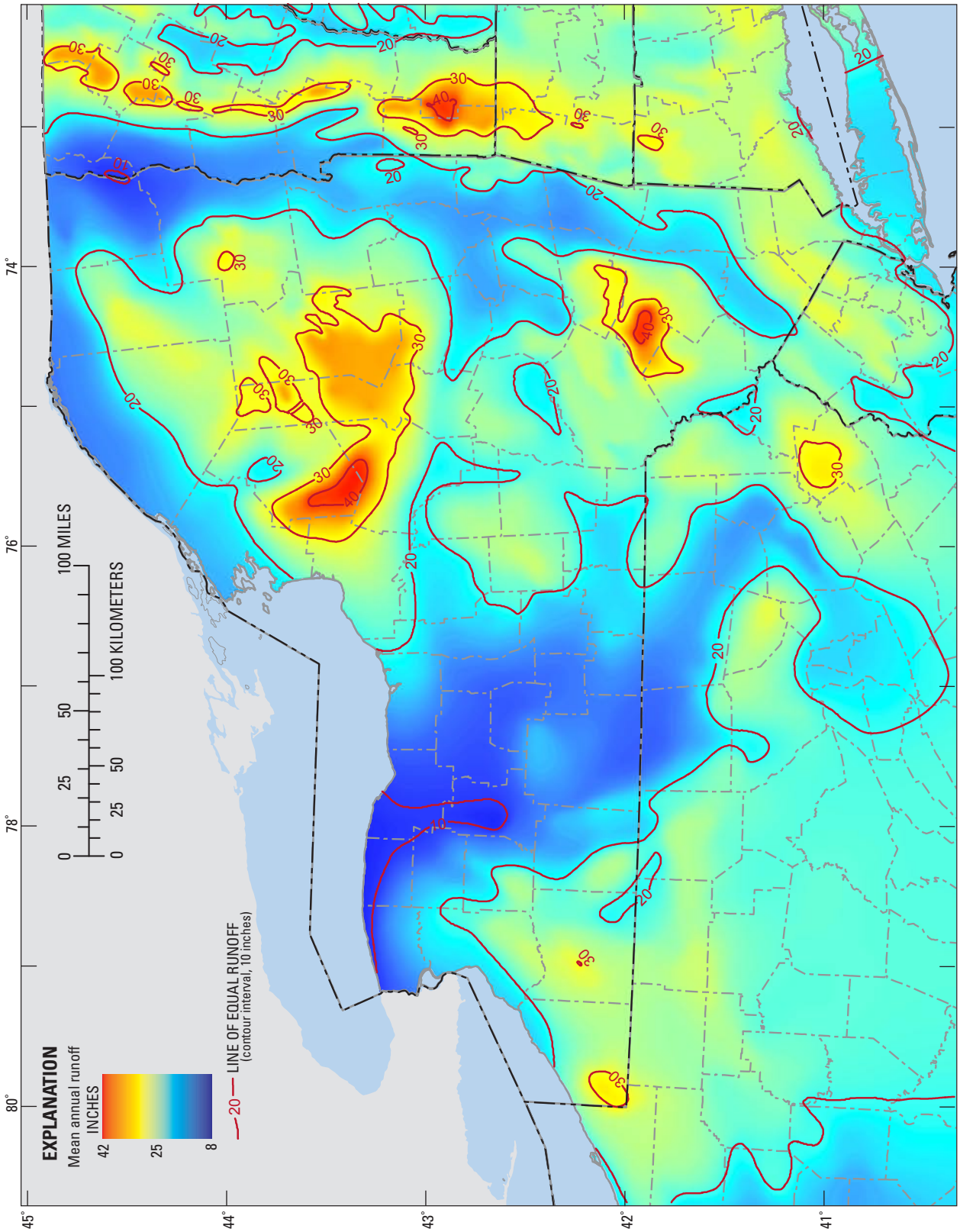


Figure 12. Mean annual runoff in areas in and adjacent to New York. (as interpreted from Randall, 1996)

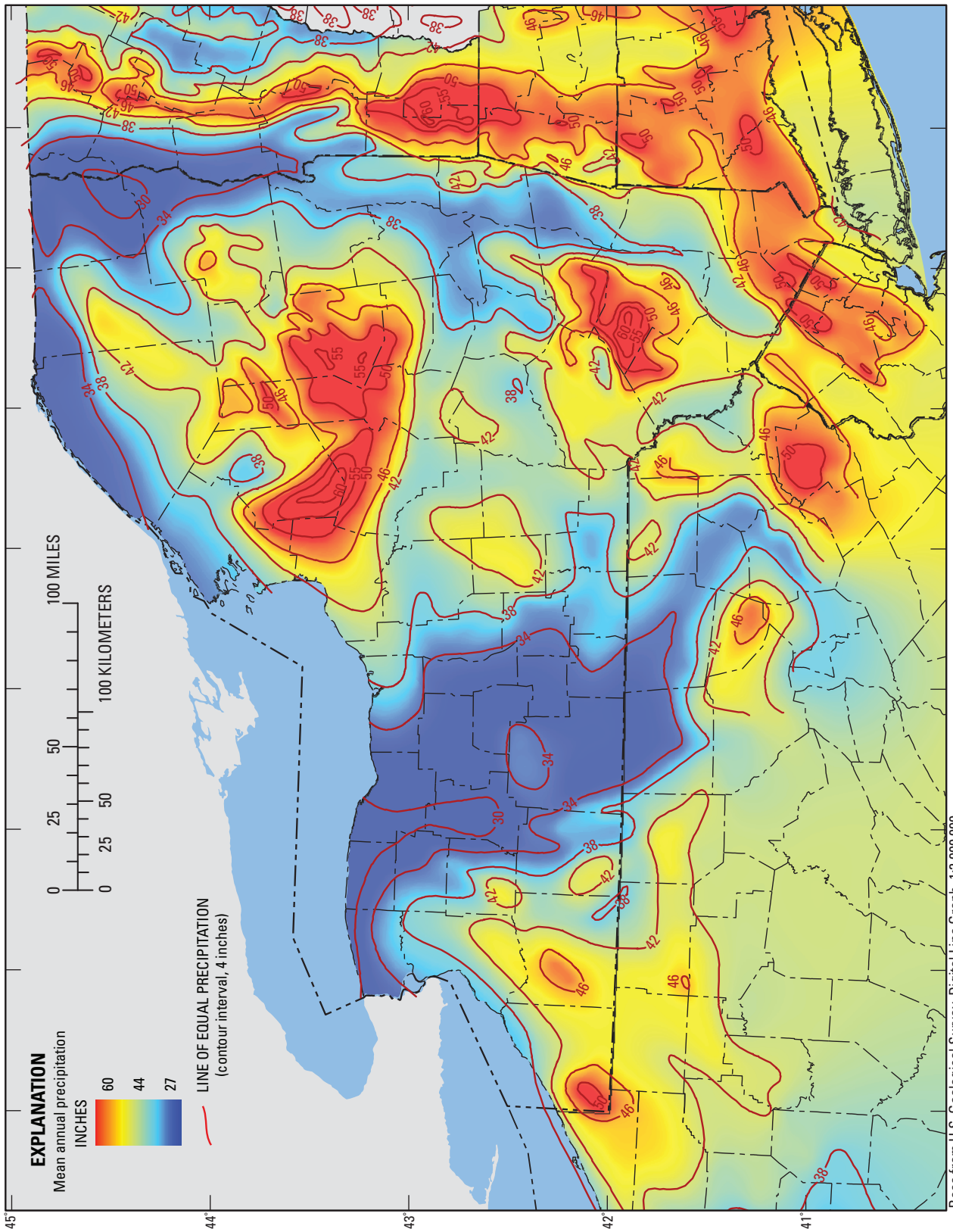


Figure 13. Mean annual precipitation in areas in and adjacent to New York. (as interpreted from Randall,1996)

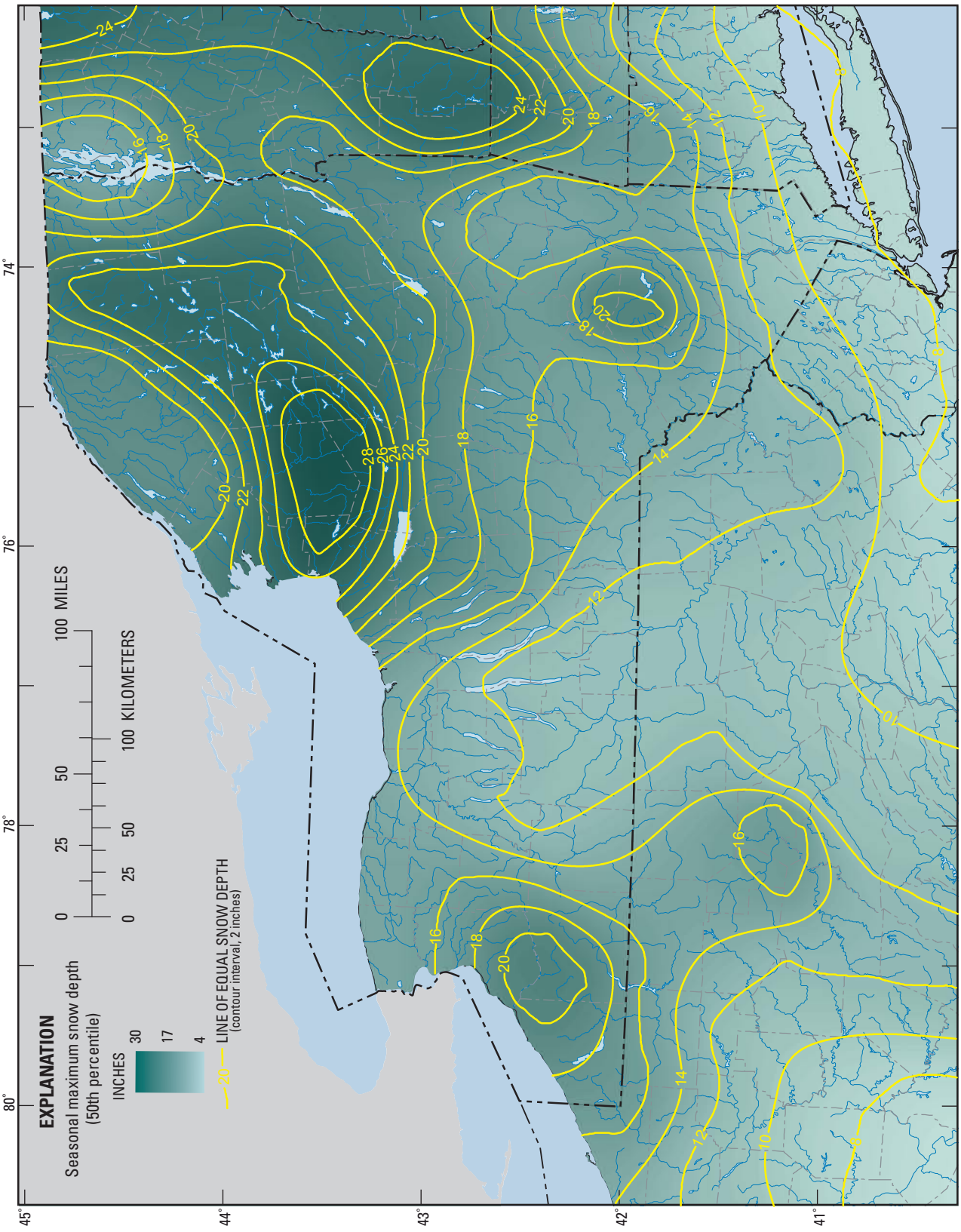


Figure 14. Seasonal maximum snow depth (50th percentile) in areas in and adjacent to New York. (as interpreted from Cember and Wilks, 1993)

and sampling error (time- and spatial-sampling errors). The regression error cannot be decreased through additional data collection, whereas the sampling error can (through extended operation of existing stations or installation of new stations, or some combination of both).

The GLS regression analysis used in this study entailed logarithmic (base 10) transformations of the streamflow (annual peak discharges) and basin characteristics to obtain a constant variance of the residuals about the regression line, and to linearize the relation between the response variable (peak-discharge) and explanatory variables (basin characteristics) for linear least-squares regression procedures. The multiple-regression equations based on logarithmic transformation of the variables are of the form:

$$\log_{10} Y = b_0 + b_1 \log_{10} X_1 + b_2 \log_{10} X_2 + ... + b_n \log_{10} X_n, \quad (1)$$

or, after taking antilogs:

$$Y = 10^{b_0} (X_1^{b_1})(X_2^{b_2}).....(X_n^{b_n}) , \quad (2)$$

where

Y = response variable (peak-discharge for selected recurrence interval),

b_0 to b_n = regression model coefficients estimated through GLS procedures,

and

X_1 to X_n = explanatory variables (basin characteristics).

Selection of final explanatory variables for each equation was based on stepwise regression algorithms and all-possible-subsets regression (SAS Institute, 1982). Final regression equations were selected on the basis of several factors, including: standard error of the estimate, Mallow's Cp statistic, statistical significance of the explanatory variables, r^2 (coefficient of determination), ease of measurement of explanatory variables, and the PRESS statistic (an index of the prediction error associated with the regression equation). Multicollinearity in the regression models was assessed by the variance inflation factor (VIF) and the correlation between explanatory variables.

Regionalization of Flood-Frequency Estimates

Regression analysis provides a means of relating peak discharge to basin characteristics. Variability of the relation between peak discharge and basin characteristics among gaged sites can be reduced by regionalization, a process in which an area is divided into hydrologic regions to account for regional differences in peak-discharge response and in topographic and climatic variables that affect streamflow. Hydrologic regions refer to areas in which streamflow-gaging stations indicate a similarity of peak-discharge response that differs from the peak-discharge response in adjacent regions. These similarities and differences are defined by the regression residuals, which are the differences between the peak discharges calculated from station records (log-Pearson type III estimates) and the values computed through the regression equations.

Delineation of Hydrologic Regions

The initial step in delineating hydrologic regions was to develop a statewide regression equation through OLS method. The response variable was the 50-year peak discharge, and the five most significant explanatory variables for the statewide equation were found to be drainage area, main-channel slope, basin storage, mean annual runoff, and water equivalent of snow cover.

Six hydrologic regions within New York were identified and delineated primarily through inspection of the areal distribution of the statewide regression residuals. Areas where the regression equation consistently overestimated or underestimated the peak-discharge response were delineated as discrete hydrologic regions, and separate GLS regression equations were developed to estimate peak-discharge frequencies for each region. Regional differences in geologic and physiographic conditions were also considered during the delineation; generally, the hydrologic-region boundaries were delineated to coincide with drainage-basin divides and are shown in figure 2.

The distribution of regression residuals for each hydrologic region before and after regionalization is shown in box plots in figures 15A and 15B, respectively. The upper plot (fig. 15A) depicts the clustering of residuals within the final six hydrologic regions before regionalization; the lower plot (fig. 15B) shows the distribution of the final GLS regression residuals for the six hydrologic regions after regionalization. The 50-year peak-discharge was the response variable. Comparison of the two plots shows the regression residuals after regionalization to have a smaller range, as well as median values at or near zero.

A further evaluation of the hydrologic region delineations used statistical tests to compare residuals among the six regions; the results indicated a normal distribution of residuals within each of the six regions. Multiple comparison tests were then used to identify which regions' means differed statistically from the other regions' mean. The six regions sample sizes were unequal, ranging from 39 in Region 3 to 109 in Region 1; therefore, two simultaneous inference methods (SIM)—Fisher's Least Significant Difference (LSD) test (t-tests) and Tukey's multiple comparison test—were used (Helsel and Hirsch, 1992). Both tests yielded the following comparisons of means of residuals among the six hydrologic regions:

for adjacent regions $1 = 2 < 3 > 4 < 5 > 6 < 1 > 4 = 6 < 1 < 3$.

A few adjacent regions had mean residuals that did not differ statistically from each other (the regional residuals shown above that are statistically equal), but other factors, such as topography, geology, climate, and hydrologic judgment, indicate that delineation of these areas as separate hydrologic regions is justified.

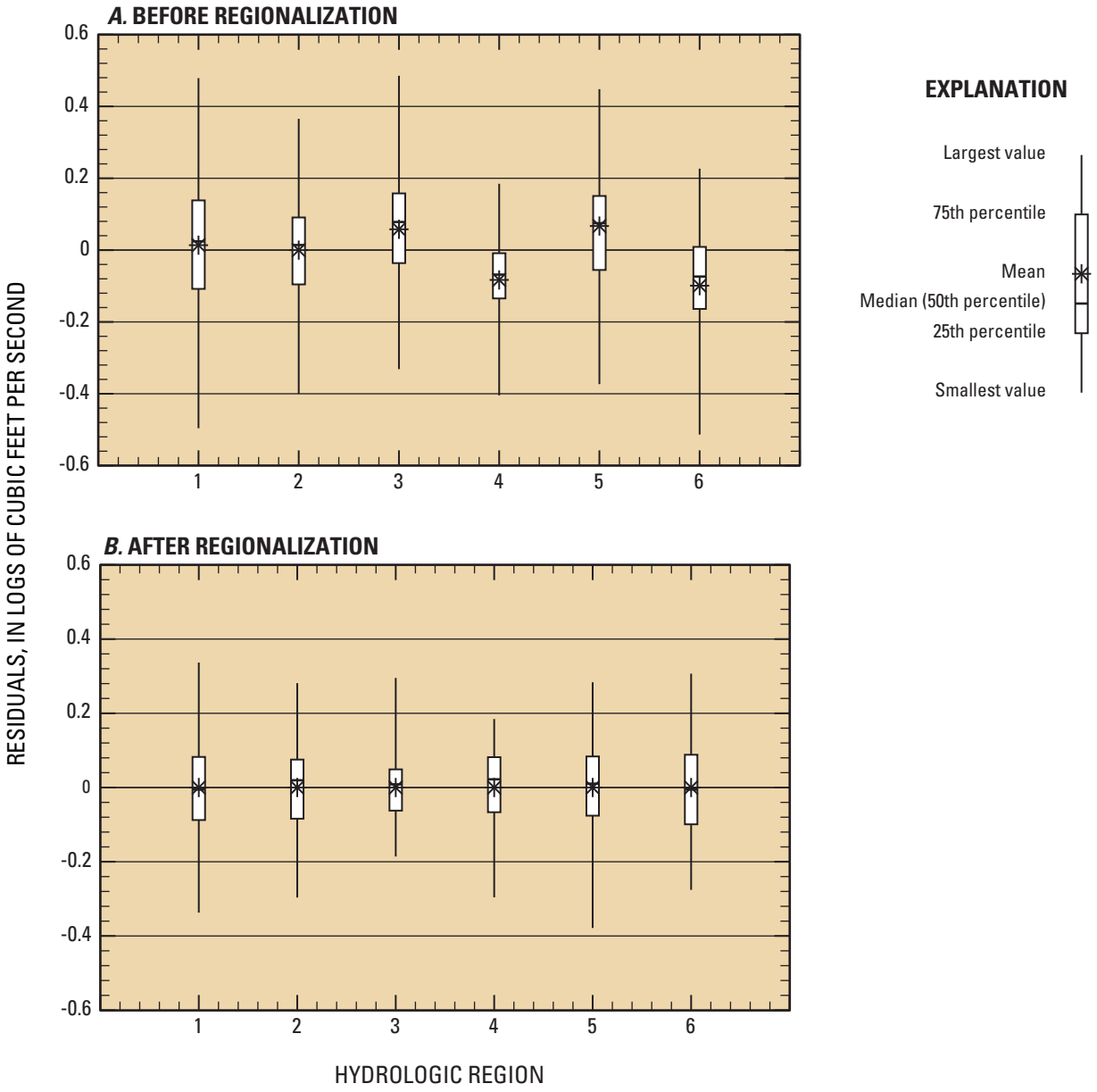


Figure 15. Boxplots of 50-year peak-discharge residuals from the statewide regression for streamflow-gaging stations within six hydrologic regions of New York, before and after regionalization. (Region boundaries are shown in figure 2).

Regional Basin and Peak-Discharge Characteristics

Basin and peak-discharge characteristics were compared among regions to summarize and evaluate their differences (figs. 16–17). The range and distribution of values for the 14 basin characteristics are plotted by region in figure 16; the range and distribution of seven peak-discharge statistics are plotted by region in figure 17. The data in figure 16 indicate that the basins with the greatest main channel slopes, greatest average basin slopes, and greatest mean annual runoff are in Region 3 (Catskill Mountains) (figs. 16C, F, L); those with the greatest basin-storage values are in regions 1 (northern New York) and 2 (lower Hudson River Valley) (fig. 16J). Basins with the greatest snow depth are in Region 1 (fig. 16N).

The statistics for annual peak discharges (fig. 17) indicate that basins with the greatest means and standard deviations are in hydrologic regions 3 and 2, respectively (figs. 17A, 17B), and those with the greatest 50- and 1.5-year peak-discharge runoff rates are in Region 3 (fig. 17E, 17F). Basins with the greatest median number of years of annual peak-discharge record are within Region 4 (upper Susquehanna River basin area), whereas those with the lowest are in Region 6 (area south of Lake Ontario) (fig. 17G).

The distribution of gaging stations, by length of period of annual peak-discharge record, is plotted in figure 18A,

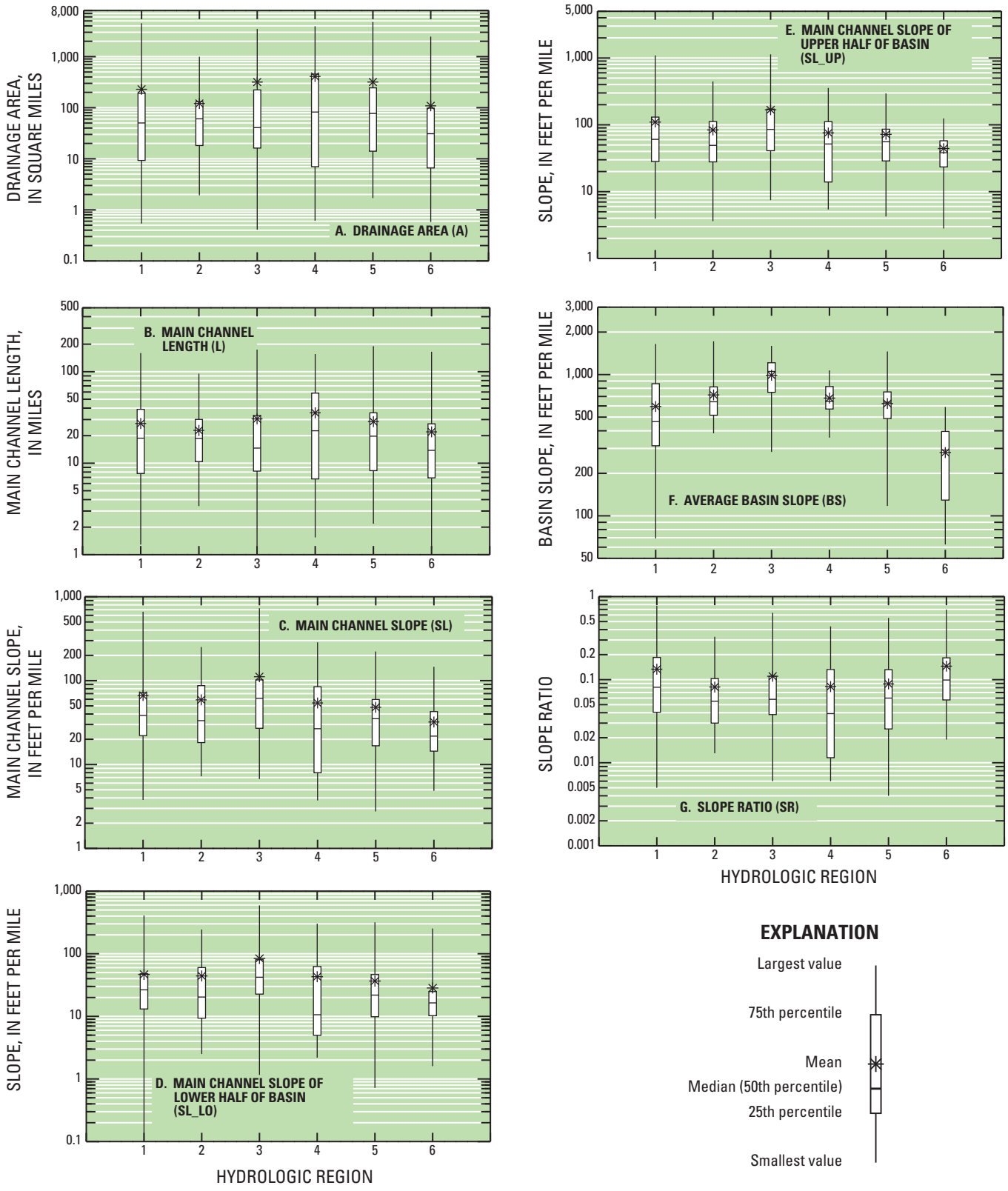


Figure 16. Boxplots of selected basin characteristics for streamflow-gaging stations within six hydrologic regions of New York. (Region boundaries are shown in figure 2).

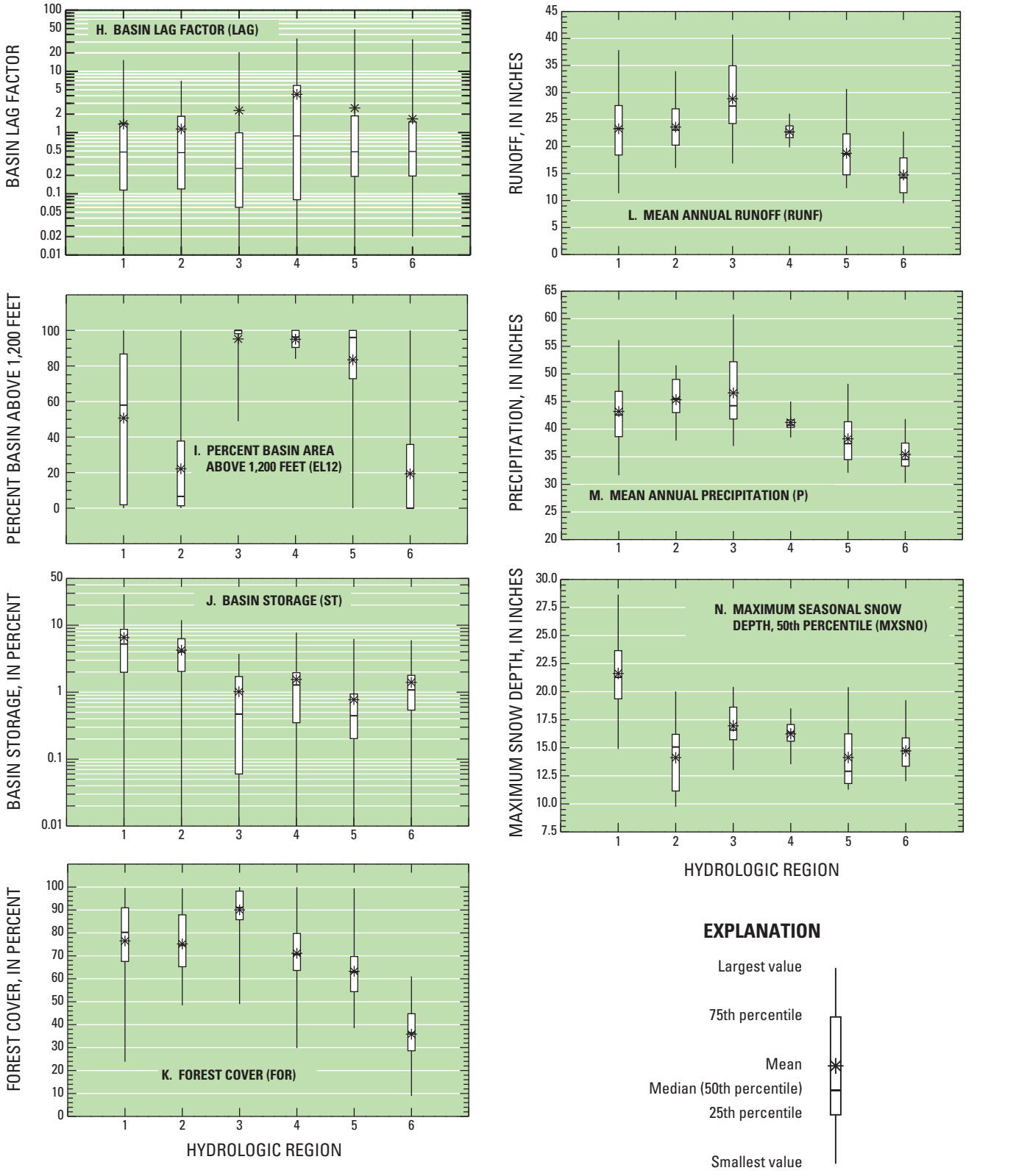


Figure 16. Boxplots of selected basin characteristics for streamflow-gaging stations within six hydrologic regions of New York. (Region boundaries are shown in figure 2).—Continued

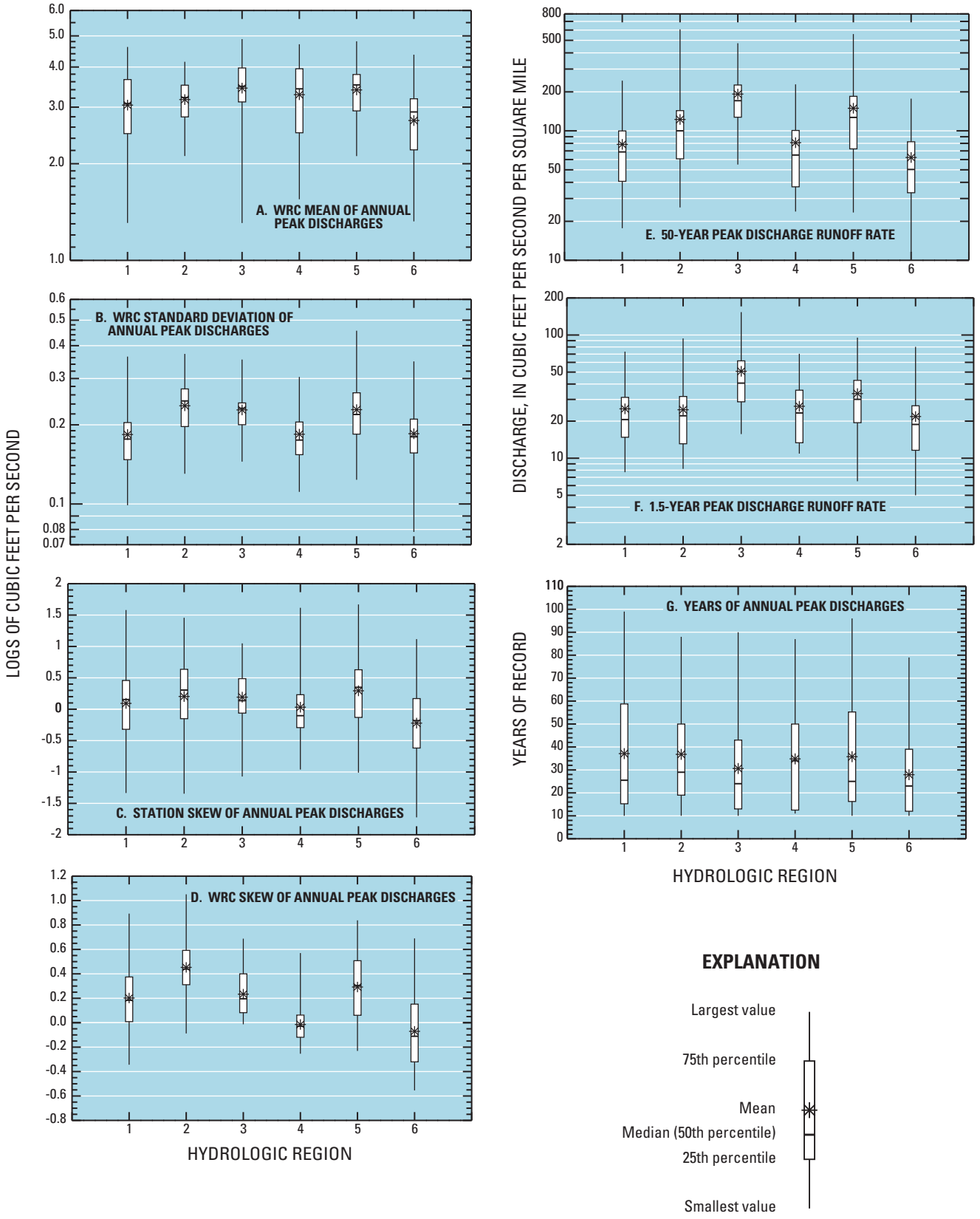


Figure 17. Boxplots of selected peak-discharge characteristics for streamflow-gaging stations within six hydrologic regions of New York. (WRC data represents computations based on Water Resources Council guidelines of 1981). (Region boundaries are shown in figure 2).

which indicates that the region with the most stations with a record greater than 55 years is Region 1, and the region with the fewest is Region 6. The distribution of gaging stations by size of drainage area is plotted in figure 18B; the region with the greatest number of stations with small drainage areas (less than 5 mi^2), is Region 1, and the one with the smallest number of large basins (>200 mi^2) is Region 6.

A comparison of the monthly frequency of annual peak discharges in each hydrologic region, and for all stations combined, was made to provide an indication of flood seasonality (fig. 19). Results indicate that most annual peak discharges in every hydrologic region occur in March and April (fig. 19A), as do those in all drainage areas, regardless of size (fig. 19B).

Regional Regression Equations

Regression equations were developed for each of the six hydrologic regions from (1) all 14 statistically significant explanatory variables (full regression equations) and (2) drainage area only. GLS procedures were used for all regional-regression analyses.

Full-Regression Equations

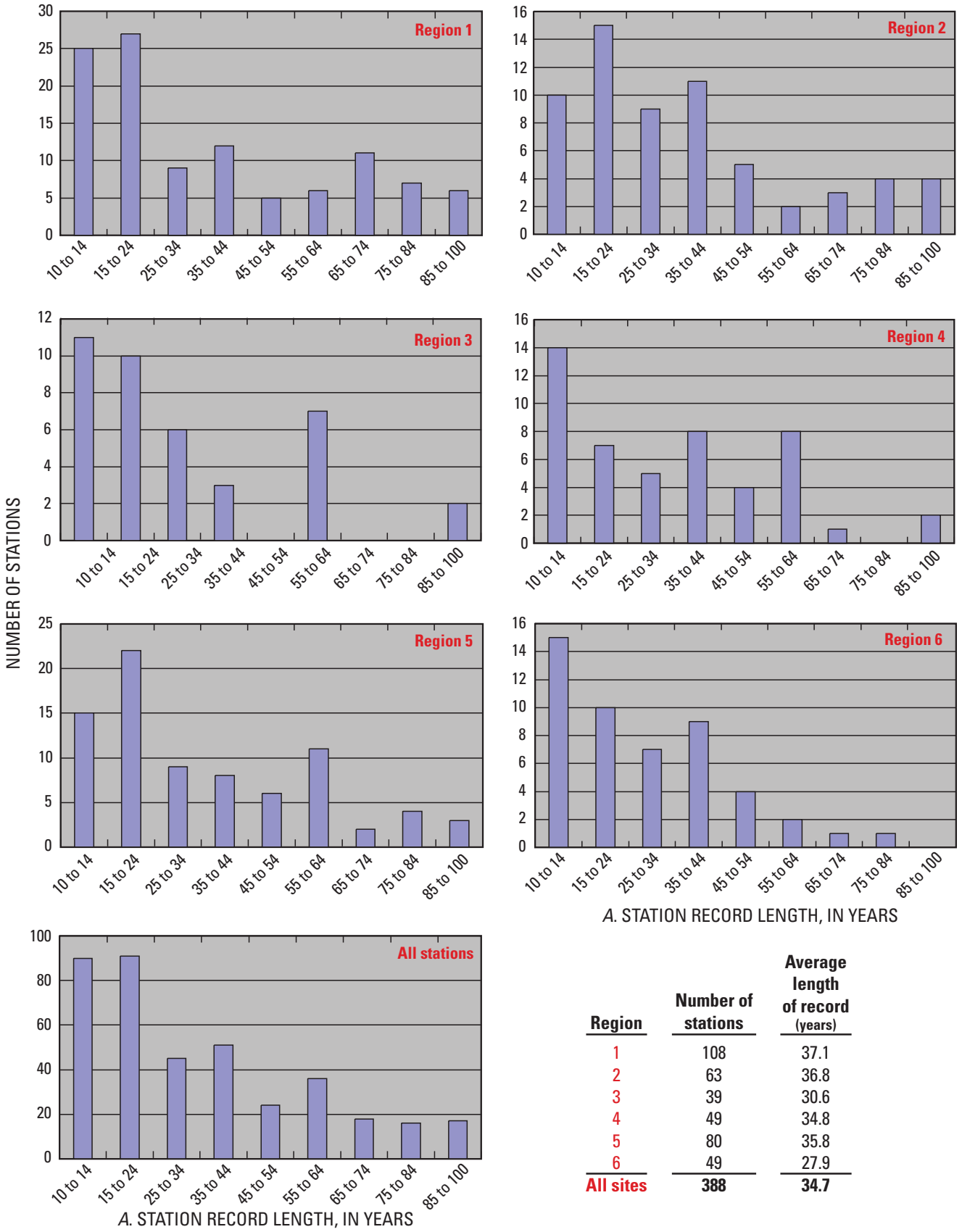
The multiple-variable regression equations developed through GLS procedures were used to estimate peak discharges for 10 recurrence intervals (1.25, 1.5, 2, 5, 10, 25, 50, 100, 200, and 500 years) in each of the six hydrologic regions and are presented in table 1. Estimates of the standard error of prediction and equivalent years of record for each of these regression equations (Hardison, 1971) are given in table 2, which includes similar data for the drainage-area-only equations (given in table 3). The prediction error indicates the expected accuracy of the regression equations when applied to ungaged sites not used in the regression analyses. The standard errors of prediction for the six hydrologic regions range from 14.1 percent (Region 3) to 42.6 percent (Region 5). Peak-discharge estimates for ungaged sites are expected to be within one standard error (of prediction) of the true value about 68 percent of the time. An additional measure of the predictive ability of the equations is the equivalent years of record (table 2), which is a function of three factors—the average variability and skew of the annual peak-discharges at sites in a hydrologic region, the accuracy of the regression equation, and the recurrence interval in question (Tasker and Stedinger, 1989). Equivalent years of record represent the number of years of gage data needed to achieve results with accuracy comparable to that given by the regression equations. Regression estimates used to compute peak discharges at gaged sites and at ungaged sites near gaged sites are weighted by the equivalent years of record for the equation. (See section “Computation of Peak Discharge,” p. 35.)

Several of the explanatory variables in the full-regression equations (table 1) require addition or subtraction of constants before the equation is applied. These constants were identified through sensitivity analyses, normality of the distribution of a variable within its region, improvement in standard error of estimate, coefficient of determination (r^2), and the PRESS statistic (an index for prediction error).

Drainage-Area-Only Equations

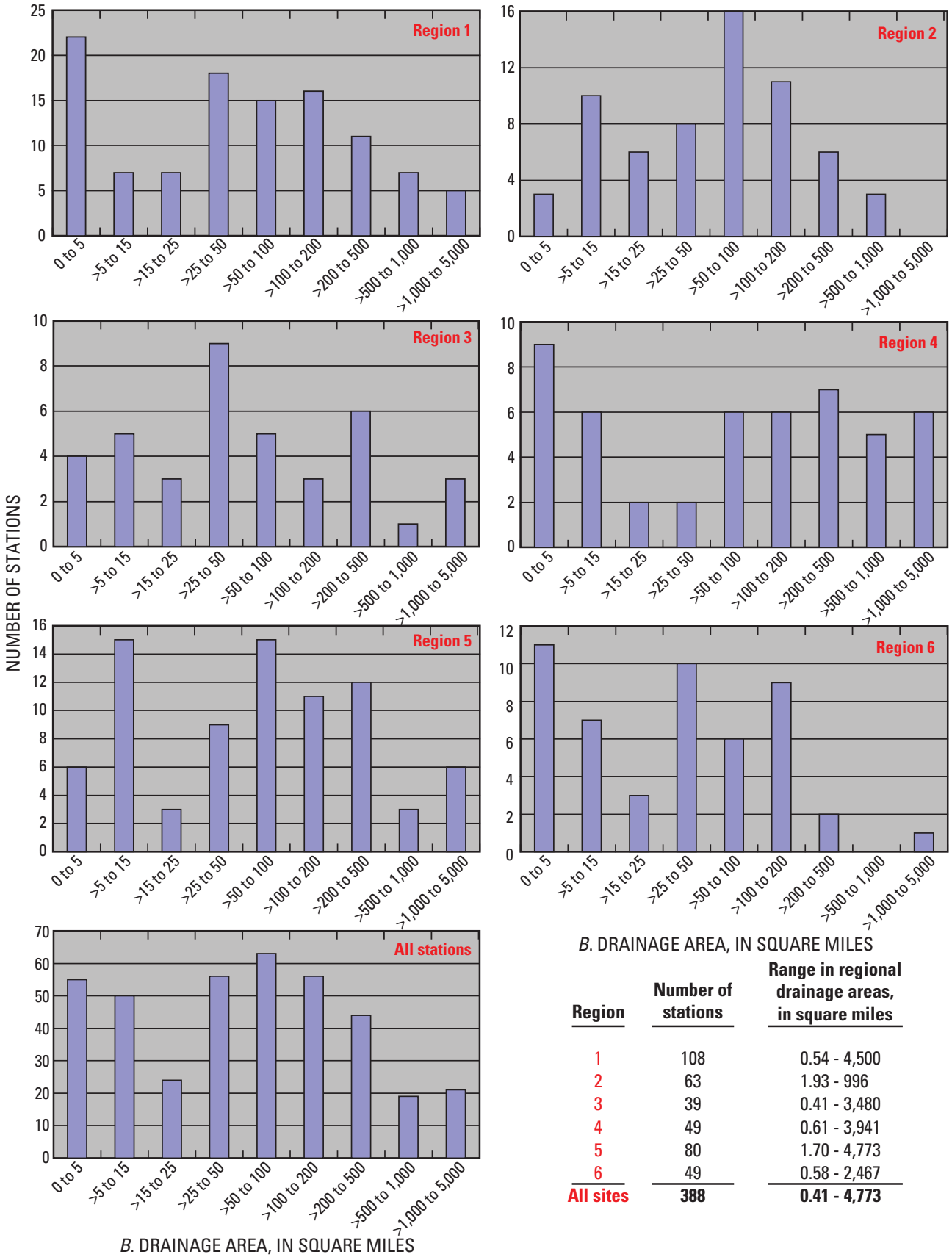
Alternative GLS regression equations that contain only the most significant basin characteristic (drainage area) were developed for each of the six hydrologic regions. These equations (table 3) have higher standard errors than the GLS full-regression equations (table 2).

The purpose of drainage-area-only equations (table 3) is to obtain estimates of peak discharges more easily (although less accurately) than those obtained by the full equations. The drainage-area-only equations exponents for each region (table 3) can be useful in transferring peak-discharge information upstream or downstream from a gaged site according to the ratio of the ungaged sites drainage area to the gaged sites drainage area, raised to the exponent power (Wandle, 1983).



Region	Number of stations	Average length of record (years)
1	108	37.1
2	63	36.8
3	39	30.6
4	49	34.8
5	80	35.8
6	49	27.9
All sites	**388**	**34.7**

Figure 18. Distribution of streamflow-gaging stations within each of six hydrologic regions of New York and for all stations combined by (*A*) length of record, and (*B*) drainage-basin size. (Region boundaries are shown in figure 2).



Region	Number of stations	Range in regional drainage areas, in square miles
1	108	0.54 - 4,500
2	63	1.93 - 996
3	39	0.41 - 3,480
4	49	0.61 - 3,941
5	80	1.70 - 4,773
6	49	0.58 - 2,467
All sites	**388**	**0.41 - 4,773**

Figure 18. Distribution of streamflow-gaging stations within each of six hydrologic regions of New York and for all stations combined by (*A*) length of record, and (*B*) drainage-basin size. (Region boundaries are shown in figure 2).—Continued

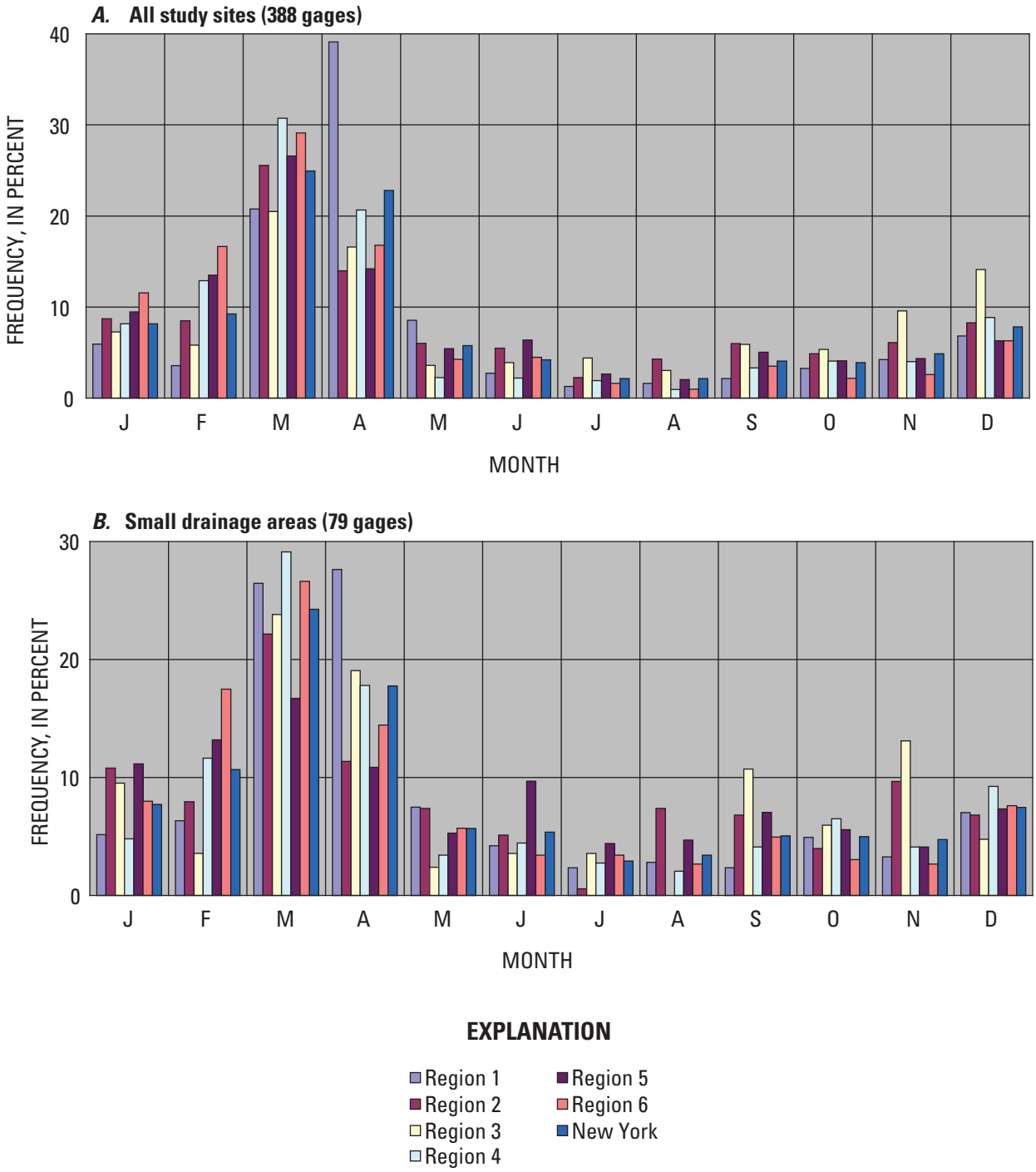


Figure 19. Monthly frequency of annual peak flows within each of six hydrologic regions of New York and for all streamflow-gaging stations combined for (*A*) all 388 study basins, and (*B*) 79 streams in small (less than 10 square miles) basins. (Region boundaries are shown in figure 2).

Table 1. Full-regression equations for estimating peak discharges for rural, unregulated streams in each of six hydrologic regions of New York, excluding Long Island.

[A, drainage area, in square miles; ST, basin storage, in percent; P, mean annual precipitation, in inches; LAG, basin lag factor; FOR, basin forested area, in percent; RUNF, mean annual runoff, in inches; MXSNO, seasonal maximum snow depth, 50th percentile, in inches; SR, slope ratio; SL, main channel slope, in feet per mile; EL12, percent of basin above 1,200 feet; Q, flow. subscript is recurrence interval; thus, Q_2 refers to discharge with 2-year recurrence interval]

Recurrence interval (years)		Full-regression equation *
Region 1		
$Q_{1.25}$	=	$69.0\ (A)^{0.972}\ (ST+1)^{-0.160}\ (P)^{1.859}\ (LAG+1)^{-0.355}\ (FOR+80)^{-1.514}$
$Q_{1.5}$	=	$144\ (A)^{0.973}\ (ST+1)^{-0.164}\ (P)^{1.718}\ (LAG+1)^{-0.383}\ (FOR+80)^{-1.519}$
Q_{2}	=	$299\ (A)^{0.972}\ (ST+1)^{-0.169}\ (P)^{1.576}\ (LAG+1)^{-0.411}\ (FOR+80)^{-1.518}$
Q_{5}	=	$1180\ (A)^{0.970}\ (ST+1)^{-0.178}\ (P)^{1.335}\ (LAG+1)^{-0.460}\ (FOR+80)^{-1.530}$
Q_{10}	=	$2310\ (A)^{0.968}\ (ST+1)^{-0.184}\ (P)^{1.241}\ (LAG+1)^{-0.482}\ (FOR+80)^{-1.549}$
Q_{25}	=	$4580\ (A)^{0.965}\ (ST+1)^{-0.192}\ (P)^{1.167}\ (LAG+1)^{-0.500}\ (FOR+80)^{-1.582}$
Q_{50}	=	$7030\ (A)^{0.963}\ (ST+1)^{-0.197}\ (P)^{1.131}\ (LAG+1)^{-0.511}\ (FOR+80)^{-1.610}$
Q_{100}	=	$10300\ (A)^{0.962}\ (ST+1)^{-0.202}\ (P)^{1.106}\ (LAG+1)^{-0.520}\ (FOR+80)^{-1.638}$
Q_{200}	=	$14500\ (A)^{0.960}\ (ST+1)^{-0.206}\ (P)^{1.086}\ (LAG+1)^{-0.528}\ (FOR+80)^{-1.667}$
Q_{500}	=	$22000\ (A)^{0.959}\ (ST+1)^{-0.210}\ (P)^{1.067}\ (LAG+1)^{-0.539}\ (FOR+80)^{-1.704}$
Region 2		
$Q_{1.25}$	=	$32.2\ (A)^{0.943}\ (ST+5)^{-0.943}\ (LAG+1)^{-0.294}\ (RUNF)^{0.588}$
$Q_{1.5}$	=	$32.5\ (A)^{0.936}\ (ST+5)^{-0.962}\ (LAG+1)^{-0.306}\ (RUNF)^{0.672}$
Q_{2}	=	$33.3\ (A)^{0.928}\ (ST+5)^{-0.976}\ (LAG+1)^{-0.318}\ (RUNF)^{0.759}$
Q_{5}	=	$37.6\ (A)^{0.914}\ (ST+5)^{-0.985}\ (LAG+1)^{-0.356}\ (RUNF)^{0.905}$
Q_{10}	=	$41.6\ (A)^{0.909}\ (ST+5)^{-0.977}\ (LAG+1)^{-0.385}\ (RUNF)^{0.968}$
Q_{25}	=	$46.5\ (A)^{0.905}\ (ST+5)^{-0.958}\ (LAG+1)^{-0.418}\ (RUNF)^{1.029}$
Q_{50}	=	$49.7\ (A)^{0.902}\ (ST+5)^{-0.939}\ (LAG+1)^{-0.441}\ (RUNF)^{1.068}$
Q_{100}	=	$52.3\ (A)^{0.900}\ (ST+5)^{-0.918}\ (LAG+1)^{-0.461}\ (RUNF)^{1.104}$
Q_{200}	=	$54.3\ (A)^{0.898}\ (ST+5)^{-0.894}\ (LAG+1)^{-0.479}\ (RUNF)^{1.138}$
Q_{500}	=	$55.9\ (A)^{0.895}\ (ST+5)^{-0.860}\ (LAG+1)^{-0.500}\ (RUNF)^{1.183}$
Region 3		
$Q_{1.25}$	=	$0.038\ (A)^{0.959}\ (LAG+1)^{-0.141}\ (RUNF)^{1.234}\ (MXSNO)^{1.037}$
$Q_{1.5}$	=	$0.052\ (A)^{0.961}\ (LAG+1)^{-0.161}\ (RUNF)^{1.142}\ (MXSNO)^{1.110}$
Q_{2}	=	$0.051\ (A)^{0.962}\ (LAG+1)^{-0.179}\ (RUNF)^{1.009}\ (MXSNO)^{1.360}$
Q_{5}	=	$0.083\ (A)^{0.965}\ (LAG+1)^{-0.215}\ (RUNF)^{0.776}\ (MXSNO)^{1.632}$
Q_{10}	=	$0.103\ (A)^{0.963}\ (LAG+1)^{-0.228}\ (RUNF)^{0.658}\ (MXSNO)^{1.794}$
Q_{25}	=	$0.117\ (A)^{0.957}\ (LAG+1)^{-0.239}\ (RUNF)^{0.524}\ (MXSNO)^{2.016}$
Q_{50}	=	$0.119\ (A)^{0.953}\ (LAG+1)^{-0.244}\ (RUNF)^{0.430}\ (MXSNO)^{2.195}$
Q_{100}	=	$0.115\ (A)^{0.951}\ (LAG+1)^{-0.249}\ (RUNF)^{0.341}\ (MXSNO)^{2.375}$
Q_{200}	=	$0.111\ (A)^{0.949}\ (LAG+1)^{-0.253}\ (RUNF)^{0.255}\ (MXSNO)^{2.547}$
Q_{500}	=	$0.105\ (A)^{0.948}\ (LAG+1)^{-0.258}\ (RUNF)^{0.147}\ (MXSNO)^{2.759}$
Region 4		
$Q_{1.25}$	=	$0.037\ (A)^{1.029}\ (ST+0.5)^{-0.104}\ (RUNF)^{2.308}\ (SR)^{0.317}$
$Q_{1.5}$	=	$0.064\ (A)^{1.022}\ (ST+0.5)^{-0.120}\ (RUNF)^{2.205}\ (SR)^{0.320}$
Q_{2}	=	$0.115\ (A)^{1.012}\ (ST+0.5)^{-0.139}\ (RUNF)^{2.092}\ (SR)^{0.319}$
Q_{5}	=	$0.424\ (A)^{0.992}\ (ST+0.5)^{-0.189}\ (RUNF)^{1.822}\ (SR)^{0.316}$
Q_{10}	=	$0.829\ (A)^{0.981}\ (ST+0.5)^{-0.219}\ (RUNF)^{1.685}\ (SR)^{0.314}$
Q_{25}	=	$1.585\ (A)^{0.970}\ (ST+0.5)^{-0.250}\ (RUNF)^{1.559}\ (SR)^{0.312}$
Q_{50}	=	$2.330\ (A)^{0.963}\ (ST+0.5)^{-0.269}\ (RUNF)^{1.489}\ (SR)^{0.312}$
Q_{100}	=	$3.243\ (A)^{0.957}\ (ST+0.5)^{-0.285}\ (RUNF)^{1.431}\ (SR)^{0.312}$
Q_{200}	=	$4.350\ (A)^{0.952}\ (ST+0.5)^{-0.300}\ (RUNF)^{1.380}\ (SR)^{0.313}$
Q_{500}	=	$6.163\ (A)^{0.946}\ (ST+0.5)^{-0.317}\ (RUNF)^{1.320}\ (SR)^{0.315}$

Table 1. Full-regression equations for estimating peak discharges for rural, unregulated streams in each of six hydrologic regions of New York, excluding Long Island.—Continued

[A, drainage area, in mi^2; ST, basin storage, in percent; P, mean annual precipitation, in inches; LAG, basin lag factor; FOR, basin forested area, in percent; RUNF, mean annual runoff, in inches; MXSNO, seasonal maximum snow depth, 50th percentile, in inches; SR, slope ratio; SL, main channel slope, in ft/mi; EL12, percent of basin above 1,200 ft; Q, flow. subscript is recurrence interval; thus, Q_2 refers to discharge with 2-year recurrence interval]

Recurrence interval (years)	Full-regression equation *
Region 5	
$Q_{1.25}$ =	$0.020\ (A)^{0.971}\ (SL)^{0.377}\ (P)^{1.625}$
$Q_{1.5}$ =	$0.040\ (A)^{0.968}\ (SL)^{0.402}\ (P)^{1.468}$
Q_{2} =	$0.083\ (A)^{0.965}\ (SL)^{0.431}\ (P)^{1.305}$
Q_{5} =	$0.322\ (A)^{0.965}\ (SL)^{0.498}\ (P)^{0.995}$
Q_{10} =	$0.597\ (A)^{0.967}\ (SL)^{0.538}\ (P)^{0.853}$
Q_{25} =	$1.05\ (A)^{0.972}\ (SL)^{0.581}\ (P)^{0.724}$
Q_{50} =	$1.46\ (A)^{0.976}\ (SL)^{0.610}\ (P)^{0.651}$
Q_{100} =	$1.91\ (A)^{0.980}\ (SL)^{0.636}\ (P)^{0.590}$
Q_{200} =	$2.43\ (A)^{0.984}\ (SL)^{0.659}\ (P)^{0.536}$
Q_{500} =	$3.22\ (A)^{0.989}\ (SL)^{0.688}\ (P)^{0.473}$
Region 6	
$Q_{1.25}$ =	$4.50\ (A)^{0.811}\ (ST+0.5)^{-0.270}\ (RUNF)^{0.840}\ (EL12+1)^{0.066}\ (SR)^{0.168}$
$Q_{1.5}$ =	$6.36\ (A)^{0.809}\ (ST+0.5)^{-0.265}\ (RUNF)^{0.790}\ (EL12+1)^{0.079}\ (SR)^{0.190}$
Q_{2} =	$8.98\ (A)^{0.807}\ (ST+0.5)^{-0.258}\ (RUNF)^{0.740}\ (EL12+1)^{0.093}\ (SR)^{0.209}$
Q_{5} =	$17.1\ (A)^{0.807}\ (ST+0.5)^{-0.234}\ (RUNF)^{0.646}\ (EL12+1)^{0.120}\ (SR)^{0.248}$
Q_{10} =	$23.4\ (A)^{0.810}\ (ST+0.5)^{-0.218}\ (RUNF)^{0.600}\ (EL12+1)^{0.133}\ (SR)^{0.268}$
Q_{25} =	$32.1\ (A)^{0.815}\ (ST+0.5)^{-0.200}\ (RUNF)^{0.555}\ (EL12+1)^{0.148}\ (SR)^{0.290}$
Q_{50} =	$39.0\ (A)^{0.819}\ (ST+0.5)^{-0.188}\ (RUNF)^{0.528}\ (EL12+1)^{0.157}\ (SR)^{0.305}$
Q_{100} =	$46.0\ (A)^{0.823}\ (ST+0.5)^{-0.177}\ (RUNF)^{0.505}\ (EL12+1)^{0.166}\ (SR)^{0.318}$
Q_{200} =	$53.2\ (A)^{0.828}\ (ST+0.5)^{-0.167}\ (RUNF)^{0.487}\ (EL12+1)^{0.173}\ (SR)^{0.330}$
Q_{500} =	$62.7\ (A)^{0.834}\ (ST+0.5)^{-0.155}\ (RUNF)^{0.466}\ (EL12+1)^{0.183}\ (SR)^{0.345}$

* A -- Drainage area, in square miles. Area of basin upstream from gaging station or site of interest.

L -- Main-channel stream length, in miles. Longest distance from gaging station or site of interest to top of basin.

SL -- Main-channel slope, in feet per mile. Difference in elevation (feet) between points 10 percent and 85 percent of the distance along main stream channel, from the gage or site of interest to the top of the basin, divided by distance (miles) between the two points.

SL_LO -- Slope of lower half of main channel, in feet per mile. Difference in elevation (feet) between points 10 percent and 85 percent of distance along lower half of main channel from gage or point of interest to midpoint of entire main channel, divided by distance (miles) between the two points.

SL_UP -- Slope of upper half of main channel, in feet per mile. Difference in elevation (feet) between points 10 percent and 85 percent of distance along upper half of main channel from midpoint of the entire main channel to the top of the basin, divided by distance (miles) between the two points.

BS -- Average basin slope, in feet per mile. Measured by contour-band method within contributing drainage area and equal to [(total length of all selected elevation contours) (contour interval)] / A .

SR -- Slope ratio. Ratio of main-channel slope to basin slope within the drainage basin, computed as SL / BS .

LAG -- Basin lag factor. Calculated as $L / [(SL\_UP + 1) (SL\_LO + 1)]^{0.5}$.

EL12 -- Percentage of drainage basin at or greater than 1,200 feet above sea level.

ST -- Basin storage. Percentage of total drainage area shown as lakes, ponds, and swamps (wetlands) as interpreted from National Land Cover Dataset (NLCD) land-use data (U.S. Geological Survey, 2000).

FOR -- Basin forested area. Percentage of total drainage area shown as forest cover, as interpreted from NLCD land-use data (U.S. Geological Survey, 2000).

RUNF -- Mean annual runoff, in inches. (from Randall, 1996).

Table 2. Standard errors of prediction and equivalent years of record for full regression equations and drainage-area-only regression equations, for six hydrologic regions of New York, excluding Long Island.

[SE, standard error of prediction. Region boundaries are shown in figure 2; regression equations are given in tables 1 and 3]

Recurrence interval (years)	Full equations		Drainage-area-only equations	
	Average SE (percent)	Equivalent years of record	Average SE (percent)	Equivalent years of record
Region 1				
1.25	31.6	2.2	45.9	1.0
1.5	30.3	2.0	44.6	0.9
2	29.0	2.1	43.4	1.0
5	27.3	3.6	42.0	1.6
10	27.2	5.1	42.1	2.2
25	28.2	6.9	42.9	3.0
50	29.4	8.0	44.0	3.6
100	30.8	8.8	45.4	4.2
200	32.5	9.4	47.0	4.6
500	35.1	9.8	49.2	5.1
Region 2				
1.25	25.5	4.8	43.1	1.8
1.5	25.6	4.3	44.6	1.5
2	25.8	4.4	46.1	1.5
5	27.0	7.3	48.5	2.4
10	28.2	10.1	49.8	3.5
25	29.9	13.6	51.2	5.0
50	31.5	15.8	52.3	6.2
100	33.3	17.6	53.5	7.4
200	35.3	18.9	54.9	8.5
500	38.4	20.1	56.9	9.9
Region 3				
1.25	26.4	5.1	48.3	1.6
1.5	23.5	8.4	46.8	1.4
2	23.6	5.4	44.7	1.6
5	20.4	11.3	39.9	3.0
10	18.7	19.4	37.4	4.8
25	16.6	36.1	35.3	7.9
50	15.4	54.2	34.1	10.6
100	14.6	76.7	33.3	13.4
200	14.1	100.8	32.8	16.4
500	14.1	128.5	32.6	20.2
Region 4				
1.25	29.4	3.1	34.4	2.3
1.5	28.8	2.6	34.1	1.9
2	27.9	2.5	33.6	1.7
5	24.7	4.2	32.3	2.5
10	23.1	6.5	31.7	3.5
25	22.0	9.9	31.7	4.8
50	21.6	12.6	32.1	5.8
100	21.6	15.0	32.5	6.7
200	21.7	17.1	33.2	7.5
500	22.4	19.4	34.2	8.5
Region 5				
1.25	38.5	2.2	42.4	1.7
1.5	38.0	1.9	41.9	1.5
2	37.4	2.0	41.6	1.6
5	36.3	3.4	41.8	2.5
10	36.1	4.9	42.9	3.4
25	36.7	7.0	44.9	4.6
50	37.5	8.5	46.7	5.4
100	38.7	9.7	48.9	6.1
200	40.2	10.8	51.2	6.6
500	42.6	11.8	54.6	7.2
Region 6				
1.25	34.7	2.3	48.2	1.2
1.5	33.3	2.0	48.5	1.0
2	32.3	1.9	49.1	0.9
5	32.2	2.4	51.0	1.0
10	32.9	3.1	52.5	1.3
25	34.4	3.9	54.4	1.7
50	35.8	4.5	56.0	2.0
100	37.2	4.9	57.6	2.2
200	39.0	5.2	59.3	2.5
500	41.4	5.5	61.7	2.7

Table 3. Regression equations based on drainage area only for estimating peak discharges for rural, unregulated streams in each of six hydrologic regions of New York, excluding Long Island.

[Corresponding full equations are given in table 1. Region boundaries are shown in figure 2. A, drainage area;Q, flow. Subscript is recurrence interval; thus, Q_2 refers to discharge with 2-year recurrence interval]

Region 1			**Region 2**			**Region 3**		
$Q_{1.25}$	=	$31.7\ (A)^{0.857}$	$Q_{1.25}$	=	$43.4\ (A)^{0.772}$	$Q_{1.25}$	=	$57.4\ (A)^{0.861}$
$Q_{1.5}$	=	$38.5\ (A)^{0.848}$	$Q_{1.5}$	=	$56.1\ (A)^{0.758}$	$Q_{1.5}$	=	$71.8\ (A)^{0.857}$
Q_{2}	=	$47.6\ (A)^{0.839}$	Q_{2}	=	$74.7\ (A)^{0.743}$	Q_{2}	=	$90.8\ (A)^{0.853}$
Q_{5}	=	$73.0\ (A)^{0.822}$	Q_{5}	=	$139\ (A)^{0.712}$	Q_{5}	=	$144\ (A)^{0.850}$
Q_{10}	=	$92.1\ (A)^{0.813}$	Q_{10}	=	$197\ (A)^{0.695}$	Q_{10}	=	$185\ (A)^{0.848}$
Q_{25}	=	$119\ (A)^{0.802}$	Q_{25}	=	$291\ (A)^{0.677}$	Q_{25}	=	$249\ (A)^{0.843}$
Q_{50}	=	$140\ (A)^{0.796}$	Q_{50}	=	$378\ (A)^{0.666}$	Q_{50}	=	$304\ (A)^{0.840}$
Q_{100}	=	$162\ (A)^{0.790}$	Q_{100}	=	$480\ (A)^{0.656}$	Q_{100}	=	$367\ (A)^{0.836}$
Q_{200}	=	$186\ (A)^{0.785}$	Q_{200}	=	$598\ (A)^{0.648}$	Q_{200}	=	$436\ (A)^{0.832}$
Q_{500}	=	$219\ (A)^{0.779}$	Q_{500}	=	$782\ (A)^{0.638}$	Q_{500}	=	$539\ (A)^{0.827}$
Region 4			**Region 5**			**Region 6**		
$Q_{1.25}$	=	$39.1\ (A)^{0.833}$	$Q_{1.25}$	=	$54.8\ (A)^{0.800}$	$Q_{1.25}$	=	$31.1\ (A)^{0.783}$
$Q_{1.5}$	=	$48.7\ (A)^{0.823}$	$Q_{1.5}$	=	$71.5\ (A)^{0.785}$	$Q_{1.5}$	=	$37.2\ (A)^{0.782}$
Q_{2}	=	$61.3\ (A)^{0.812}$	Q_{2}	=	$95.4\ (A)^{0.770}$	Q_{2}	=	$44.5\ (A)^{0.782}$
Q_{5}	=	$97.4\ (A)^{0.788}$	Q_{5}	=	$172\ (A)^{0.738}$	Q_{5}	=	$62.7\ (A)^{0.788}$
Q_{10}	=	$124\ (A)^{0.775}$	Q_{10}	=	$237\ (A)^{0.722}$	Q_{10}	=	$74.2\ (A)^{0.794}$
Q_{25}	=	$161\ (A)^{0.761}$	Q_{25}	=	$332\ (A)^{0.706}$	Q_{25}	=	$88.4\ (A)^{0.801}$
Q_{50}	=	$191\ (A)^{0.751}$	Q_{50}	=	$412\ (A)^{0.695}$	Q_{50}	=	$98.5\ (A)^{0.807}$
Q_{100}	=	$221\ (A)^{0.743}$	Q_{100}	=	$502\ (A)^{0.687}$	Q_{100}	=	$108\ (A)^{0.813}$
Q_{200}	=	$253\ (A)^{0.735}$	Q_{200}	=	$600\ (A)^{0.679}$	Q_{200}	=	$117\ (A)^{0.818}$
Q_{500}	=	$298\ (A)^{0.727}$	Q_{500}	=	$745\ (A)^{0.670}$	Q_{500}	=	$129\ (A)^{0.826}$

Computation of Peak Discharge

Methods for computing a peak discharge estimate for a selected recurrence interval at a specific site depend on whether the site is gaged or ungaged, and whether the drainage area lies within a single hydrologic region or crosses into an adjacent hydrologic region or State. Estimates for gaged and ungaged sites are described below with examples for each method.

Gaged Sites

The GLS regional-regression equations can be used to improve streamflow-gaging-station estimates (based on log-Pearson type III flood-frequency analysis of the gaged annual peak-discharge record) by using a weighted average of the two estimates (regression and gaged). Incorporating the regression estimate into the weighted average tends to decrease time sampling errors that result for sites with short periods of record. All three estimates — those based on the station record, those derived through regression, and the weighted average for each recurrence interval at each of the 388 streamflow-gaging stations used in this study are given in table 8 (at the end of the report). The weighted-average discharges are generally the most reliable and are computed from the equation:

$$Q_{T(w)} = \frac{Q_{T(g)}(N) + Q_{T(r)}(E)}{N + E} \quad , \tag{3}$$

where

$Q_{T(w)}$ is weighted peak discharge at the gaged site, in cubic feet per second, for the T-year recurrence interval;

$Q_{T(g)}$ is peak discharge at gage, in cubic feet per second, calculated through log-Pearson Type III frequency analysis of the station's peak discharge record, for the T-year recurrence interval;

N is number of years of annual peak-discharge record used to calculate $Q_{T(g)}$ at the gaging station;

$Q_{T(r)}$ is regional regression estimate of the peak discharge at the gaged site, in cubic feet per second, for the T-year recurrence interval;

and

E is average equivalent years of record associated with the regression equation (table 2) that was used to calculate $Q_{T(r)}$.

Ungaged Sites

The following methods may be used to estimate peak discharges of selected recurrence intervals for sites on four types of ungaged streams: (1) where the drainage area is within a single hydrologic region; (2) where the drainage area extends into an adjacent hydrologic region or State; (3) where the ungaged site is near a gaged site on the same stream, and (4) where the ungaged site is between two gaged sites on the same stream. Methods for each of these conditions are described below:

1. If the drainage area of an ungaged site lies entirely within a single hydrologic region (fig. 2), peak discharges for selected recurrence intervals are computed from the regression equations for that region (table 1).

2. If the drainage area of an ungaged site extends into an adjacent hydrologic region or state, the percentage that lies within each hydrologic region and (or) state is estimated. Peak-discharge estimates are computed for the entire drainage basin through each of the appropriate regional or State equations, and the drainage-area percentages are used as weighting factors by multiplying the percentages by the corresponding peak-discharge estimate; the resulting values are then summed to compute the peak discharge for the entire basin. Equations for the five adjacent states are given in USGS or State flood-frequency reports for New Jersey (Stankowski, 1974), Pennsylvania (Stuckey and Reed, 2000), Connecticut (Ahearn, 2004), Massachusetts (Wandle, 1983), and Vermont (Olson, 2002).

3. If the ungaged site for which flood-frequency estimates are needed is on a gaged stream, and if the site's drainage area is between 50 and 150 percent of the drainage area of the stream at the gage, the weighted estimate for the ungaged site can be computed by the following equation (Ries and Crouse, 2002):

$$Q_{T(U)w} = \frac{2\Delta A}{A_g} Q_{T(U)r} + \left(1 - \frac{2\Delta A}{A_g}\right) Q_{T(U)g} \quad , \tag{4}$$

where

$Q_{T(U)w}$ is the weighted estimate of discharge Q_T for recurrence interval T at the ungaged site,

ΔA is the absolute value of the difference between the drainage areas of the streamflow-gaging station, (A_g) and the ungaged site, (A_u), $|A_g - A_u|$,

$Q_{T(U)r}$ is the peak-flow estimate for recurrence interval T at the ungaged site, derived from the applicable regional regression equation (table 1),

and

$Q_{T(U)g}$ is the peak-flow estimate for recurrence interval T at the ungaged site, derived from the weighted estimate of peak discharge at the streamflow-gaging station, $Q_{T(w)}$ (see method for gaged sites), by adjusting for the effect of the difference in drainage area between the streamflow-gaging station and the ungaged site.

$Q_{T(U)g}$ is computed as:

$$Q_{T(U)g} = \left(\frac{A_u}{A_g}\right)^b \cdot Q_{T(w)} \quad , \tag{5}$$

where

depending on the hydrologic region and the recurrence interval T, b is the exponent from the appropriate drainage-area-only equation (table 3).

4. If the ungaged site is on a gaged stream, and lies between two gaging stations, the following equation (Hodgkins, 1999) is used:

$$Q_{T(uf)w} = \left[Q_{T(u1)w}(A_{g2} - A_u) + Q_{T(u2)w}(A_u - A_{g1})\right] / (A_{g2} - A_{g1}) \quad , \tag{6}$$

where

$Q_{T(uf)w}$ is final weighted flow estimate for the ungaged site between gaging stations;

$Q_{T(u1)w}$ is the weighted flow estimate computed for the ungaged site from the upstream-gage records as described in method 3 above;

A_{g2} is the drainage area of the downstream gage;

A_u is the drainage area of the ungaged site;

$Q_{T(u2)w}$ is the weighted flow estimate computed for the ungaged site from the downstream-gage records as described in method 3 above;

and

A_{g1} is the drainage area of the upstream gage.

Sample Computations

The following examples illustrate use of the four methods described for ungaged sites to calculate the 50-year peak discharge for a gaged site and three types of ungaged sites. Variables are explained in tables 1 and 3.

Example 1. Gaged site whose drainage area lies within a single hydrologic region: Estimate the 50-year peak discharge at the gage site on Fishkill Creek at Hopewell Junction, NY (01372800).

Given:

a) Gaged drainage basin is in hydrologic Region 2 (fig. 2);

b) Drainage area (A) = 57.3 mi^2 (table 10);

c) Area of lakes, ponds, and wetlands [basin storage (ST)] = 4.97 percent of total drainage area (table 10);

d) Basin lag factor (LAG) = L / [(SL_UP+1)(SL_LO+1)]$^{0.5}$;
SL_UP = 27.53 ft/mi; SL_LO = 12.67 ft/mi; L = 21.00 mi (table 10),

LAG = 21.00 / [(27.53 + 1)(12.67 + 1)] $^{0.5}$
= 21.00 / 19.75
= 1.063 (table 10);

e) Mean annual runoff (RUNF) = 21.29 in. (table 10);

f) The 50-year peak-discharge ($Q_{50(g)}$) based on the gaged record = 3,600 ft^3/s (table 8);

g) Number of years (N) of systematic annual peak-discharge record used to calculate ($Q_{50(g)}$) = 30 years (table 8).

Solution:

The 50-year regression estimate ($Q_{50(r)}$) for this station is computed from the following equation for hydrologic Region 2 (table 1):

$$Q_{50(r)} = 49.7(A)^{0.902}(ST+5)^{-0.939}(LAG+1)^{-0.441}(RUNF)^{1.068} \quad .$$

From the given values for these four basin characteristics:

$$Q_{50(r)} = 49.7(57.3)^{0.902}(4.97+5)^{-0.939}(1.063+1)^{-0.441}(21.29)^{1.068}$$

= 4,210 ft^3/s (also in table 8).

The equivalent years of record (E) for $Q_{50(r)}$ for Region 2 is 15.8 years (table 2). Therefore, the weighted peak-discharge $Q_{50(w)}$ for this station (method for gaged sites) is:

$$Q_{50(W)} = \frac{Q_{50(g)}(N)+Q_{50(r)}(E)}{N+E}$$

$$= \frac{(3,600)(30)+(4,210)(15.8)}{30+15.8}$$

= 3,810 ft^3/s (also in table 8).

Example 2. Ungaged site whose drainage area extends into an adjacent hydrologic region or State: Compute the 50-year peak-discharge regression estimate for Genesee River at Rochester (04232000). For this example, assume this site is ungaged and is under pre-regulation conditions.

Given:

a) Drainage area (A) at the site is 2,467 mi^2, and the site is in hydrologic Region 6 (fig. 2);

b) The upper 53.5 percent (1,321 mi^2) of the basin is in hydrologic Region 5;

c) Main channel slope (SL) = 8.05 ft/mi (table 10);

d) Mean annual precipitation = 33.92 in (table 10);

e) Area of lake, ponds, and wetlands [storage (ST)] = 1.08 percent (table 10);

f) Mean annual runoff ($RUNF$) = 14.64 in (table 10);

g) Percentage of the basin above 1,200 ft mean sea level ($EL12$) = 58.8 percent (table 10);

h) Slope ratio (SR) = $\frac{\text{Main channel slope } (SL)}{\text{Average basin slope } (BS)}$

$= \frac{8.05 \text{ ft/mi (table 10)}}{432.25 \text{ ft/mi (table 10)}}$

= 0.019 (also in table 10).

Solution:

Percentage of total drainage area within hydrologic Region 5 is 53.5 percent, and percentage of total drainage area within hydrologic Region 6 is 46.5 percent. These are the weighting factors to be applied after the 50-year peak-discharges for the site have been computed through regression equations for regions 5 and 6 (table 1):

$$Q_{50(r)}(\text{Region 5}) = 1.46(A)^{0.976}(SL)^{0.610}(P)^{0.651}$$
$$= 1.46(2,467)^{0.976}(8.05)^{0.610}(33.92)^{0.651}$$
$$= 105{,}700 \text{ ft}^3/\text{s};$$

$$Q_{50(r)}(\text{Region 6}) = 39.0(A)^{0.819}(ST+0.5)^{-0.188}(RUNF)^{0.528}(EL12+1)^{0.157}(SR)^{0.305}$$
$$= 39.0(2,467)^{0.819}(1.08+0.5)^{-0.188}(14.64)^{0.528}(58.8+1)^{0.157}(0.019)^{0.305}$$
$$= 50{,}270 \text{ ft}^3/\text{s}.$$

To compute a final 50-year regression estimate at this station, apply the two drainage-area percentages as weighting factors:

$$Q_{50(r)} = (105{,}700)(0.535) + (50{,}270)(0.465) = 79{,}900 \text{ ft}^3/\text{s}$$

The Genesee River station at Rochester (04232000) is currently regulated, and the above information represents pre-regulation conditions. This example is for illustration purposes only and is not applicable to present conditions at this station.

Example 3. Ungaged site near a gage site on the same stream. Estimate the 50-year peak-discharge at the ungaged site Normans Kill near Westmere. This example is for illustration purposes only since Normans Kill near Westmere was previously a streamflow-gaging station (01359519).

Given:

a) This drainage basin is in hydrologic Region 2, upstream from the gaged site of Normans Kill at Albany [station 01359528, drainage area (A_g) = 168 mi^2];

b) Drainage area (A_u) of ungaged site Normans Kill near Westmere = 131 mi^2;

c) Area of lakes, ponds, and wetlands [storage (*ST*)] = 2.39 percent of basin;

d) Basin lag factor (*LAG*) = 1.073;

e) Mean annual runoff (*RUNF*) = 17.57 in.

Solution:

The drainage area of this ungaged site (131 mi^2) meets the criterion of between 50 and 150 percent of the drainage area at the gaged site (168 mi^2). Therefore, method 3 (for an ungaged site near a gaged site on the same stream) can be used.

$$\Delta A = \left| A_g - A_u \right| = \left| 168 - 131 \right| = 37 \text{ mi}^2$$

The 50-year regression estimate ($Q_{50(u)r}$ for this ungaged site (Normans Kill near Westmere) is:

$$\begin{aligned} Q_{50(u)r} &= 49.7\ (A)^{0.902}\ (ST+5)^{-0.939}\ (LAG+1)^{-0.441}\ (RUNF)^{1.068}\ \text{(table 1, hydrologic Region 2)} \\ &= 49.7(131)^{0.902}(2.39+5)^{-0.939}(1.073+1)^{-0.441}(17.57)^{1.068} \\ &= 9{,}560 \text{ ft}^3\text{/s}. \end{aligned}$$

The 50-year weighted peak discharge at the gaged site (Normans at Albany) is:

$Q_{50(G)w}$ = 12,800 ft^3/s (table 8).

The estimate of the 50-year peak-discharge at the ungaged site near Westmere derived from the weighted estimate for the gaged site (at Albany) based on the drainage-area difference, is:

$$Q_{50(U)g} = (A_u / A_g)^b (Q_{50(G)w})$$

b is the exponent from the Region 2 drainage-area-only equations (table 3)

$$\begin{aligned} Q_{50(U)g} &= (131/168)^{0.666}(12{,}800 \text{ ft}^3\text{/s}) \\ &= 10{,}800 \text{ ft}^3\text{/s}. \end{aligned}$$

The weighted estimate of the Q_{50} peak discharge at the ungaged site near Westmere is:

$$Q_{50(U)w} = \frac{2\Delta A}{A_g}(Q_{50(U)r}) + \left(1 - \frac{2\Delta A}{A_g}\right) Q_{50(U)g}$$

$$= \frac{2(37)}{168}(9{,}560) + \left(1 - \frac{2(37)}{168}\right)(10{,}800)$$

$$= 10{,}300 \text{ ft}^3\text{/s}.$$

Example 4. Ungaged site on a gaged stream, located between two streamflow-gaging stations. Estimate the 50-year peak discharge at the ungaged site Susquehanna River at Windsor. The example is for illustration purposes only because Susquehanna River at Windsor (01502731) is an active USGS streamflow-gaging station**.**

Given:

a) The drainage basin for this site is in hydrologic Region 4, between the gaged sites of Susquehanna River at Afton (01502701) and Susquehanna River at Conklin (01503000);

b) The drainage areas are:
Afton (01502701) = 1,716 mi^2 (A_{g1}),
Windsor (01502731) = 1,820 mi^2 (A_u),
Conklin (01503000) = 2,232 mi^2 (A_{g2});

c) Areas of lakes, ponds, and wetlands [storage (*ST*)] = 2.09 percent of basin;

d) Mean annual runoff (*RUNF*) = 21.59 in.;

e) Slope ratio (*SR*) = *SL* / *BS* = (4.08 ft/mi) / (648 ft/mi) = 0.006.

Solution:

The weighted 50-year peak-discharge estimate for the ungaged site (at Windsor), computed from the Afton gage data and the method shown in example 3:

= 51,800 ft^3/s ($Q_{50(u1)w}$) .

The weighted 50-year peak-discharge estimate for the ungaged site (at Windsor), computed from the Conklin gage data and the method shown in example 3, is:

= 50,400 ft^3/s ($Q_{50(u2)w}$) .

The final weighted 50-year peak-discharge estimate for the ungaged site (at Windsor) is computed as:

$$Q50_{(Uf)w} = \left[Q_{50(U1)w}\left(A_{g2} - A_u\right) + Q_{50(U2)w}\left(A_u - A_{g1}\right)\right] \Big/ A_{g2} - A_{g1}$$

$$= \left[(51,800)(2,232 - 1,820) + (50,400)(1,820 - 1,716)\right] \Big/ (2,232 - 1,716)$$

= 51,500 ft^3/s.

The weighted 50-year peak-discharge estimate computed for each of the 388 gaging stations (table 8) were used to develop average, maximum, and minimum flood-frequency curves for each of the six hydrologic regions, and for New York (all sites including gages in adjacent States). The average flood-frequency curves for each hydrologic region, and for all sites combined, are shown in figure 20. The highest average peak-discharge runoff rates in cubic feet per second per square mile, for each recurrence interval are in hydrologic Region 3 (Catskill Mountains area), and the lowest are in Region 6 (*Central Lowlands* south of Lake Ontario).

The highest peak-discharge runoff rates (for recurrence intervals greater than 10 years) in the entire study area, in cubic feet per second per square mile, are those in hydrologic Region 2 (fig. 21), and the lowest (for all recurrence intervals) are in hydrologic Region 6.

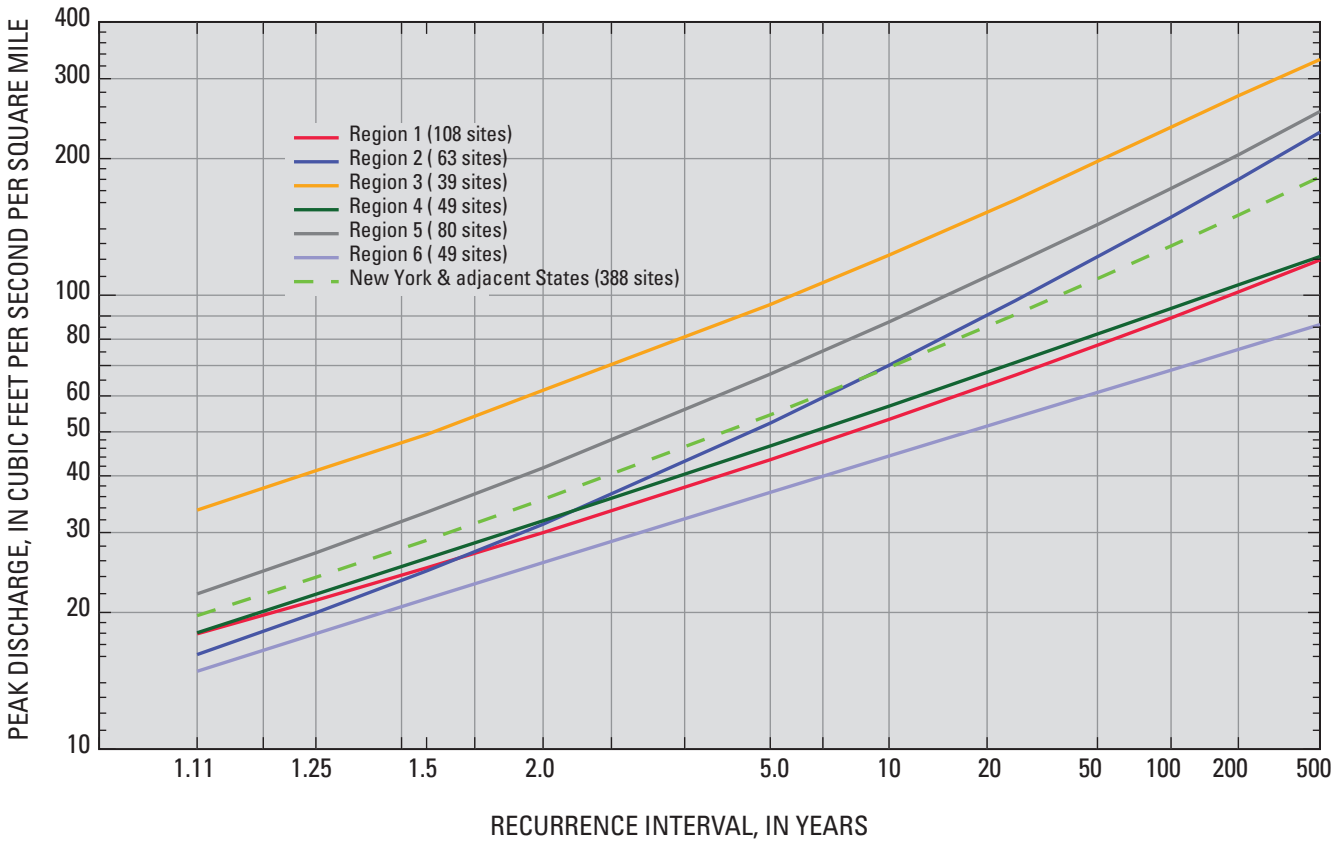


Figure 20. Average flood-frequency curves for six hydrologic regions of New York and for all 388 study sites combined (Region boundaries are shown in figure 2).

Limitations, Accuracy, and Sensitivity of Regression Equations

The regression equations developed in this study apply to streams in areas of New York where peak discharge is not greatly affected by stream regulation (flood-control reservoir) or by diversion or other manmade changes. The equations are not applicable to basins in urban areas (in which more than 15 percent of the basin is urbanized) unless the effects of urbanization on high flow are insignificant. Channelization, channel structures or constrictions, and large withdrawals from the stream may alter peak discharges and cause them to differ from those expected under undisturbed conditions. If the effects of urbanization can be quantified, adjustments to the rural peak-discharge estimates can be made through procedures outlined by Sauer and others (1983) to estimate peak discharge for urban areas. Lumia (1984) developed peak-discharge profiles for several streams in Rockland County, including many urbanized basins.

The relation between peak discharge and basin characteristics (actually the logarithms of these variables) given by the multiple linear regression equation is assumed to be linear only within the range of characteristics that define that relation. The suitability of the regional equations is undefined for streams having values beyond the ranges used, and extrapolation requires extreme caution or may be infeasible. The ranges of all basin characteristics used in the regression analyses for each region are given in table 4.

Flood-frequency analyses assume the gaged record to be representative of long-term conditions; sampling error results from limitations on the number of years of gaged record available and from hydrologic conditions during the particular period sampled. The use of GLS regression equations minimizes, but does not prevent, this type of error.

The standard error of prediction is an index of the expected accuracy of the regression estimates. If all assumptions for applying regression are met, the discrepancy between the regression estimate and actual discharge will be within 1 standard error about 68 percent of the time.

Values for the basin characteristics used in the regression equations are computed or estimated from GIS procedures and datasets and, therefore, may be subject to some error in measurement and judgment. Sensitivity tests were conducted on the 50-year peak-discharge regression equation for each hydrologic region to estimate how much variability may be introduced by error in computing the basin-characteristic values. Results (table 5) should be indicative of the relative magnitude of the sensitivities of the equations for other frequencies. The data presented in table 5 were obtained through a process whereby the value of only one basin characteristic at a time was varied while all others were held constant. Each characteristic was increased 10, 20, and 30 percent, then decreased 10, 20, and 30 percent; the percent

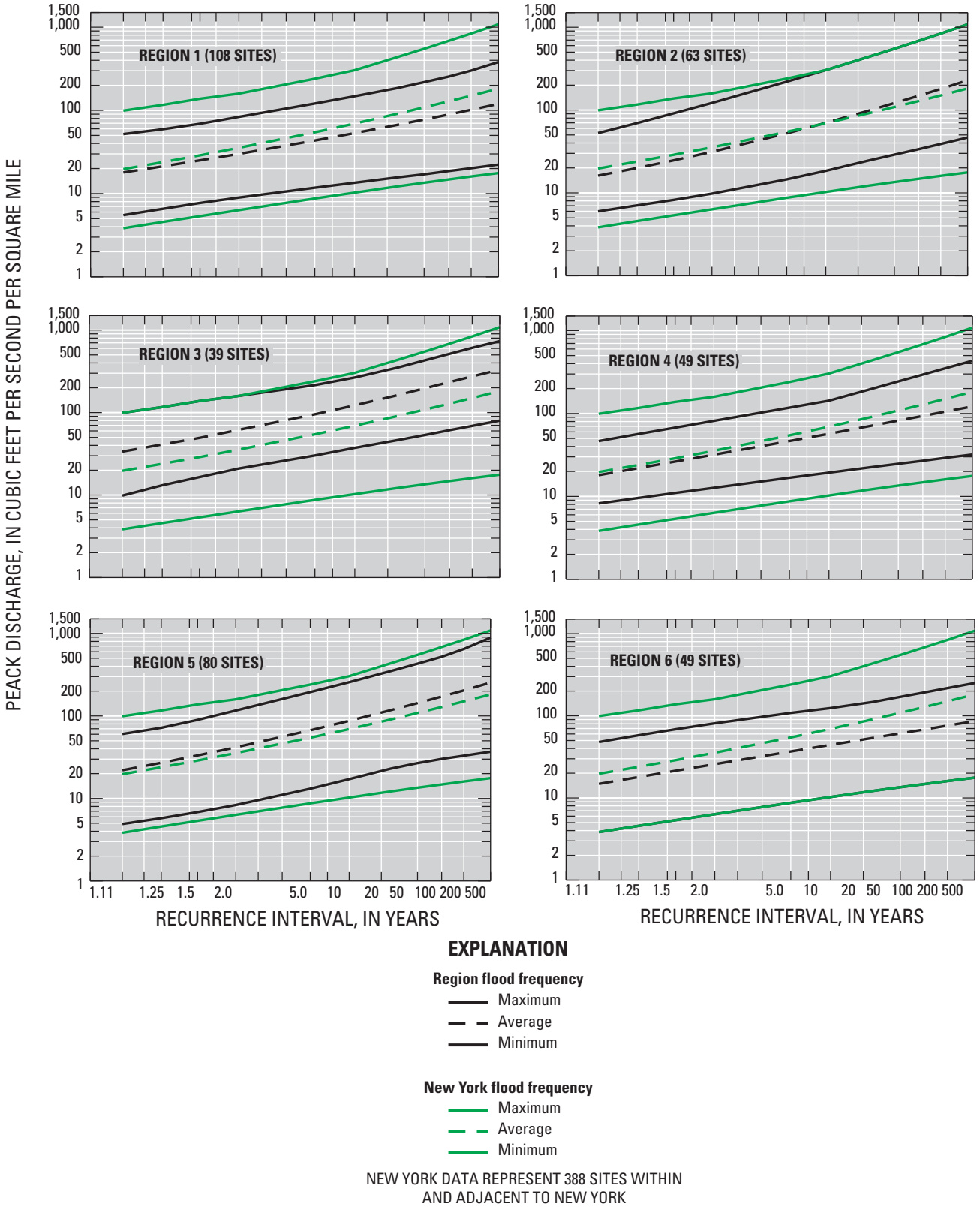


Figure 21. Maximum, minimum, and average flood-frequency curves for six hydrologic regions of New York and for all 388 study sites combined (Region boundaries are shown in figure 2).

Table 4. Minimum, maximum, and median values for basin characteristics used in the regression analyses for six hydrologic regions in New York, excluding Long Island.

[Hydrologic-region boundaries are delineated in figure 2. Min, minimum; max, maximum]

Basin characteristic *	Region 1 (108 sites)			Region 2 (63 sites)			Region 3 (39 sites)			Region 4 (49 sites)			Region 5 (80 sites)			Region 6 (49 sites)		
	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median
A	0.54	4500.00	48.50	1.93	996.00	60.60	0.41	3480.00	40.80	0.61	3941.00	82.30	1.70	4773.00	77.20	0.58	2467.00	31.00
L	1.29	159.96	18.59	3.40	95.06	18.64	1.06	174.38	14.63	1.54	155.90	22.62	2.18	189.96	19.73	1.16	165.26	13.81
SL	3.79	662.27	38.19	7.23	251.74	33.34	6.71	729.47	61.57	3.73	285.97	26.72	2.76	222.55	35.17	4.86	146.00	21.80
SL_LO	0.00	408.66	27.07	2.50	244.18	20.34	1.16	591.95	42.16	2.19	302.36	10.61	0.72	317.79	21.84	1.60	252.96	16.40
SL_UP	3.94	1093.58	61.68	3.62	445.27	49.31	7.48	1135.57	85.49	5.41	355.83	51.67	4.25	294.50	55.75	2.81	124.78	38.22
BS	69.23	1647.27	466.49	384.28	1720.11	642.03	283.56	1596.58	1052.62	357.81	1070.51	646.11	117.51	1457.15	637.46	62.69	589.72	292.39
SR	0.005	0.772	0.080	0.013	0.328	0.055	0.006	0.637	0.058	0.006	0.438	0.039	0.004	0.553	0.060	0.019	0.698	0.099
LAG	0.004	15.229	0.479	0.014	6.997	0.474	0.002	20.582	0.259	0.006	34.493	0.883	0.013	48.309	0.486	0.020	33.442	0.494
EL12	0.00	100.00	58.49	0.00	99.97	6.63	48.92	100.00	100.00	83.95	100.00	96.26	0.00	100.00	96.02	0.00	100.00	0.00
ST	0.00	28.92	5.16	0.00	11.88	3.99	0.00	3.73	0.47	0.00	7.75	1.28	0.00	6.24	0.45	0.00	5.98	1.08
FOR	23.83	99.61	80.29	48.45	99.42	74.58	49.00	100.00	91.10	29.78	99.93	0.59	38.46	99.38	62.91	8.99	61.05	36.41
RUNF	11.35	37.84	23.40	16.03	33.95	23.05	16.86	40.73	27.49	19.84	26.09	22.69	12.29	30.66	18.57	9.49	22.77	14.22
P	29.49	56.10	41.16	36.06	52.43	44.77	36.82	59.99	46.75	38.69	44.95	41.53	31.64	49.79	37.50	29.50	41.83	33.92
MXSNO	14.90	28.64	21.30	9.74	20.02	15.07	13.02	20.42	16.58	13.54	18.51	16.38	11.27	20.40	12.91	12.02	19.24	14.73

* A—Drainage area, in square miles. Area of basin upstream from gaging station or site of interest.

L—Main-channel stream length, in miles. Longest distance from streamflow-gaging station or site of interest to top of basin.

SL—Main-channel slope, in feet per mile. The difference in elevation (feet) between points 10 percent and 85 percent of distance along main stream channel, from the gage or site of interest to top of basin, divided by distance (miles) between the two points.

SL_LO—Slope of lower half of main channel, in feet per mile. The difference in elevation (feet) between points 10 percent and 85 percent of distance along the lower half of main channel from gage or point of interest to midpoint of entire main channel, divided by the distance (miles) between the two points.

SL_UP—Slope of upper half of the main channel, in feet per mile. The difference in elevation (feet) between points 10 percent and 85 percent of distance along the upper half of main channel from midpoint of the entire main channel to the top of the basin, divided by distance (miles) between the two points.

BS—Average basin slope, in feet per mile, measured by "contour-band" method within contributing drainage area and equal to [(total length of all selected elevation contours) (contour interval)] / A .

SR—Slope ratio of main-channel slope to basin slope within the drainage basin, computed as SL / BS .

LAG—Basin lag factor, calculated as $L / [(SL\_UP + 1) (SL\_LO + 1)]^{0.5}$.

EL12—Percentage of drainage basin at or greater than 1,200 feet above sea level.

ST—Basin storage, percentage of total drainage area shown as lakes, ponds, and swamps (wetlands) as interpreted from National Land Cover Dataset (NLCD) land-use data (U.S. Geological Survey, 2000).

FOR—Basin forested area. Percentage of total drainage area shown as forest cover, as interpreted from the NLCD land-use data (U.S. Geological Survey, 2000).

RUNF—Mean annual runoff, in inches (from Randall, 1996).

P —Mean annual precipitation, in inches (from Randall, 1996).

MXSNO—Seasonal maximum snow depth (50th percentile), in inches, as interpreted from Northeast Regional Climate Center (Cornell Atlas of Snowfall and Snow Depth (Cember and Wilks, 1993)

Table 5. Results of sensitivity analysis--percent change in computed 50-year peak discharges as a result of ±30-percent change in selected variables within each of six hydrologic regions of New York, excluding Long Island.

[Region boundaries are delineated in figure 2]

Explanatory variable*	Percent increase or decrease in variable						
	+30	+20	+10	0	-10	-20	-30
Region 1							
A	28.7	19.2	9.6	0.0	-9.6	-19.3	-29.1
ST (low)	-0.1	-0.0	-0.0	0.0	0.0	0.0	0.1
ST (high)	-4.9	-3.4	-1.8	0.0	2.0	4.3	7.0
P	34.5	22.9	11.4	0.0	-11.2	-22.3	-33.2
LAG (low)	-0.1	-0.0	-0.0	0.0	0.0	0.0	0.1
LAG (high)	-11.9	-8.4	-4.5	0.0	5.2	11.2	18.4
FOR (low)	-10.2	-7.0	-3.6	0.0	3.8	7.9	12.2
FOR (high)	-21.9	-15.6	-8.3	0.0	9.6	20.8	34.0
Region 2							
A	26.7	17.9	9.0	0.0	-9.1	-18.	-27.5
ST (low)	-0.1	0.0	0.0	0.0	0.0	0.0	0.1
ST (high)	-16.5	-11.6	-6.2	0.0	7.1	15.3	25.0
LAG (low)	-0.2	-0.1	-0.1	0.0	0.1	0.1	0.2
LAG (high)	-9.8	-6.9	-3.6	0.0	4.1	8.9	14.4
RUNF	32.3	21.5	10.7	0.0	-10.6	-21.2	-31.7
Region 3							
A	28.4	19.0	9.5	0.0	-9.6	-19.2	-28.8
LAG (low)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAG (high)	-6.0	-4.2	-2.2	0.0	2.5	5.3	8.6
RUNF	11.9	8.2	4.2	0.0	-4.4	-9.1	-14.2
MXSNO	77.9	49.2	23.3	0.0	-20.6	-38.7	54.3
Region 4							
A	28.7	19.2	9.6	0.0	-9.6	-19.3	-29.1
ST (low)	-0.2	-0.1	-0.1	0.0	0.1	0.1	0.2
ST (high)	-6.5	-4.5	-2.4	0.0	2.7	5.8	9.3
RUNF	45.7	29.8	14.6	0.0	-13.9	-27.1	-39.6
SR	8.5	5.9	3.0	0.0	-3.2	-6.7	-10.5
Region 5							
A	29.2	19.5	9.7	0.0	-9.8	-19.6	-29.4
SL	17.4	11.8	6.0	0.0	-6.2	-12.7	-19.6
P	18.6	12.6	6.4	0.0	-6.6	-13.5	-20.7
Region 6							
A	24.0	16.1	8.1	0.0	-8.3	-16.7	-25.3
ST (low)	-0.1	-0.1	0.0	0.0	0.0	0.1	0.1
ST (high)	-4.5	-3.1	-1.6	0.0	1.8	3.9	6.3
RUNF	14.9	10.1	5.2	0.0	-5.4	-11.1	-17.2
EL12 (low)	2.2	1.5	0.8	0.0	-0.8	-1.6	-2.5
EL12 (high)	4.2	2.9	1.5	0.0	-1.6	-3.4	-5.4
SR	8.3	5.7	2.9	0.0	-3.2	-6.6	-10.3

* A—Drainage area, in square miles. Area of basin upstream from gaging station or site of interest.
ST—Basin storage. Percentage of total drainage area shown as lakes, ponds, and swamps (wetlands) as interpreted from national Land Use Cover Dataset (NLCD) land-use data (U.S. Geological Survey, 2000).
P—Mean annual precipitation, in inches, (from Randall 1996).
LAG—Basin lag factor. Calculated as $L / [(SL\_UP + 1) (SL\_LO + 1)]^{0.5}$
FOR—Basin forested area. Percentage of total drainage area shown as forest cover as interpreted from NLCD land-use data (U.S. Geological Survey, 2000).
RUNF—Mean annual runoff, in inches (from Randall, 1996).
MXSNO—Seasonal maximum snow depth (50th percentile), in inches, as interpreted from Northeast Regional Climate Center (Cornell Atlas of Snowfall and Snow Depth (Cember and Wilks, 1993).
SR—Slope ratio. Ratio of main-channel slope to basin slope within the drainage basin, computed as SL / BS.
SL—Main-channel slope, in feet per mile. Difference in elevation (feet) between points 10 percent and 85 percent of distance along main stream channel, from gage or site of interest to top of basin, divided by distance (miles) between the two points.
EL12—Percentage of drainage basin at or greater than 1,200 feet above sea level.

changes in the computed peak discharge are given in table 5. A test of variables for which no constant was added or subtracted (for example, drainage area), was done in which the regional mean value of each variable was used to compute a "base" 50-year peak discharge. The variable being tested was then changed by the above percentages, and the resulting percent changes in 50-year peak discharge were tabulated. A regional low and high value was used to compute a "base" 50-year peak discharge for variables to which constants were added or subtracted, such as forest cover (FOR) and storage (ST), because errors in computed discharges will be affected differently depending on the magnitude of the basin characteristic being tested. The variable to which peak discharges were most sensitive was maximum snow depth (applicable to Region 3); other factors to which peak discharge was sensitive were mean annual precipitation (Region 1), mean annual runoff (Regions 2 ,3, 4, and 6), and drainage area (all regions) (table 5).

Use of the flood-frequency equations presented herein requires use of the basin-characteristic datasets developed for these analyses. The use of different or updated characteristics may add uncertainty to the resulting flood-frequency estimates.

Suggestions for Further Study

Standard errors of the regional equations presented in this study are similar to those obtained from equations published by Lumia (1991) or may be smaller because (1) several small-streamflow-gaging stations have been added to the network, (2) methods of defining basin characteristics have been refined, (3) records of annual peak discharges have been extended by several years, and (4) analytical procedures have improved. Additional research on several factors related to flood-frequency relations, discussed in the next sections, could further decrease errors in future analyses.

Skewness Coefficient

Weighting the skewness coefficient computed from station records with a generalized skewness coefficient decreases possible bias caused by the relatively short periods of record of some stations. A weighting technique based on the number of years of record at each of 226 sites in New York was used to develop a statewide contour map of unbiased, generalized skew coefficients (Lumia and Baevsky, 2000). An error analysis showed the statewide map to have a lower mean-square-error (MSE) than the previously used nationwide map (Interagency Advisory Committee on Water Data, 1982). The statewide map was used to assign generalized skew values to each of the 388 sites used in this study and it can be updated and refined for future updates of the New York flood-frequency relations. Until then, the statewide map can be used to provide generalized skew values. Standard errors of the generalized skews for each of the six hydrologic regions are given in table 6.

Soil Maps

Soil data were originally included in the regression analysis for this study. The soil values were computed from the 1:250,000-scale State Soil Geographic (STATSGO) data (National Resources Conservation Service, 1991; U.S. Geological Survey, 1997) and are based on generalized soils maps. The soil variables showed promise in improving the variability in some of the regional regression analyses but were not used in the final regression analyses because they were originally derived for use only in studies of multistate or national scale.

Future use of detailed soil maps, if available, might greatly increase the accuracy and predictive ability of the flood-frequency relations for the basins of the scale used in this study.

Table 6. Selected statistics for skew coefficients for each of six hydrologic regions of New York, excluding Long Island.

[Region boundaries are depicted in figure 2]

Hydrologic region	Number of stations with at least 20 years of record	Station statistics (log base 10 units)			
		Average unbiased station skew	Average statewide map skew	Mean square error	Standard error
1	60	0.173	0.212	0.160	0.400
2 and 3	65	.361	.410	.205	.453
4	34	-.092	-.042	.103	.321
5	48	.172	.288	.213	.462
6	19	-.199	-.118	.200	.447
All regions	226	.156	.219	.179	.423

Small-Stream Data

Historical flood data from small streams with short periods of record could improve the current flood-frequency relations but are generally unavailable. Such information, if located within sources such as flood-insurance studies, government agencies, public libraries, or engineering records, might be best compiled in a format similar to that used by Lumia and Murray (1993).

Expansion of the current annual peak-discharge gaging-station network to include additional small streams, particularly sites with drainage areas less than 1.0 mi^2, could improve the accuracy of computed peak discharges for these sites. Supplementing the peak-discharge data base for small streams with data from a rainfall-runoff data network with subsequent modeling could also increase the accuracy and predictive ability of the flood-frequency relations.

Other Factors

Study of several other factors that affect peak discharges could potentially improve the flood-frequency relations for streams in New York. These factors include (1) the effect of mixed populations in annual peak-discharge data analysis (for example, floods caused by thunderstorms combined with floods from snowmelt or hurricanes); (2) the effects of incorporating additional basin characteristics in the regression analyses to account for unexplained variability in peak discharges; (3) the effect of regulation, with development of criteria for selecting or rejecting peak-discharge records on the basis of storage effects; (4) the effect of urbanization on flood frequencies; and (5) the effects of using detailed wetland maps.

Summary

This report presents the results of a cooperative study with the New York State Department of Transportation to derive regional regression equations from generalized least-squares regression analysis for calculating the magnitude and frequency of floods on rural, unregulated streams in New York, excluding Long Island. Procedures for estimating peak discharges with 10 recurrence intervals (1.25, 1.5, 2, 5, 10, 25, 50, 100, 200, and 500 years) for each of 6 hydrologic regions of New York are given. The procedures depend on whether the site in question is gaged or ungaged, and whether the basin extends into an adjacent hydrologic region or State. The estimated standard error of prediction for the regression equations ranged from 14 to 43 percent. The data and final estimates of peak discharges for 10 recurrence intervals at the 388 gaging stations used for the analyses are summarized in tables and graphs. Four examples of peak-discharge computations are provided. The limitations and accuracy of the estimating equations and the relative importance of the significant variables (sensitivity analysis) are given in several tables. Maximum snow depth, mean annual precipitation, mean annual runoff, and drainage area are shown to be the most sensitive variables.

Suggestions for additional study include development of a detailed soils map for New York. Alternative peak-discharge estimating equations, based on drainage area only, are included. These equation provide estimates of peak discharges that are easier to compute, but less accurate, than those calculated through the full-regression equations.

A DVD (in the pocket at the back of the report) contains procedures and GIS datasets for computation of basin characteristics needed for the flood-frequency regression equations. Procedures are also included for the computation of peak-discharges for 10 recurrence intervals at any stream location in New York where the regression equations are applicable. A spreadsheet is also included on the DVD for computation of peak discharges at ungaged sites, gaged sites, and ungaged sites on gaged streams for each of the six hydrologic regions.

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Tables 7–10

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
1	01197500	Housatonic River near Great Barrington MA	Berkshire, MA	282.00	2	421355	732119	1914-99	01-01-49	12,200	43.3	100
2	01199000	Housatonic River at Falls Village CT	Litchfield, CT	634.00	2	415726	732211	1913-99	01-01-49	23,900	37.7	>100
3	01199050	Salmon Creek at Lime Rock CT	Litchfield, CT	29.40	2	415632	732329	1955,62-99	08-19-55	6,300	214.3	>100
4	01199400	Webatuck Creek near South Amenia NY	Dutchess	81.00	2	414651	733321	1962-76,84	05-29-84	3,400	42.0	15
5	01199420	Tenmile River near Wassaic NY	Dutchess	120.00	2	414645	733334	1960-76,84	05-29-84	5,500	45.8	20
6	01199477	Stony Brook near Dover Plains NY	Dutchess	1.93	2	414238	733718	1976-99	04-04-87	532	275.6	60
7	01200000	Tenmile River near Gaylordsville CT	Dutchess	203.00	2	413932	733144	1930-87,92-99	08-19-55	17,400	85.7	>100
8	01200500	Housatonic River at Gaylordsville CT	Litchfield, CT	996.00	2	413911	732925	1941-99	08-19-55	51,800	52.0	>100
9	01208990	Saugatuck River near Redding CT	Fairfield, CT	21.00	2	411740	732344	1962-99	03-25-69	2,160	102.9	25
10	01209700	Norwalk River at South Wilton CT	Fairfield, CT	30.00	2	410949	732511	1963-99	04-10-80	2,890	96.3	13
11	01311992	Arbutus Pond Outlet near Newcomb NY	Essex	1.22	1	435856	741409	1991-2001	01-09-98	40	32.8	8
12	01312000	Hudson River near Newcomb NY	Essex	192.00	1	435800	740755	1926-99	01-09-98	11,500	59.9	>100
13	01313500	Cedar River Below Chain Lakes near Indian Lake NY	Hamilton	160.00	1	435120	741420	1931-69	09-28-42	10,200	63.8	>100
14	01314000	Hudson River at Gooley near Indian Lake NY	Essex	419.00	1	435003	741145	1917-68	01-01-49	15,000	35.8	50
15	01315500	Hudson River at North Creek NY	Warren	792.00	1	434203	735902	1908-99	12-31-48	28,900	36.5	80
16	01317000	Schroon River at Riverbank NY	Warren	527.00	1	433634	734417	1908-70,87-99	03-21-36	12,100	23.0	>100
17	01318500	Hudson River at Hadley NY	Saratoga	1,664.00	1	431908	735041	1908-99	01-27-13	49,000	29.4	>100
18	01319000	East Branch Sacandaga River at Griffin NY	Hamilton	114.00	1	432825	741325	1934-78	12-31-48	10,700	93.9	90
19	01319800	West Branch Sacandaga River at Arietta NY	Hamilton	28.90	1	431503	743106	1963-85	03-25-79	1,940	67.1	20
20	01319950	Sand Lake Outlet ear Piseco NY	Hamilton	7.16	1	432215	743247	1962-83,85	04-09-80	475	66.3	11

* Water year is defined as October 1 through September 30. For example, October 1, 1980 through September 30, 1981 is the 1981 water year.

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
21	01321000	Sacandaga River near Hope NY	Hamilton	491.00	1	432110	741615	1912-99	03-27-13	32,000	65.2	>100
22	01325000	Sacandaga River at Stewarts Bridge near Hadley NY	Saratoga	1,055.00	1	431841	735204	1908-29	03-28-13	35,500	33.6	>100
23	01326500	Hudson River at Spier Falls NY	Warren	2,779.00	1	431439	734450	1900-22	03-28-13	89,100	32.1	>100
24	01328000	Bond Creek at Dunham Basin NY	Washington	14.70	1	431822	733256	1948-82,84	12-31-48	1,370	93.2	35
25	01328758	Pecks Creek at Fort Miller NY	Saratoga	2.38	1	430909	733525	1968-79	03-05-79	230	96.6	10
26	01329000	Batten Kill at Arlington VT	Bennington, VT	152.00	1	430434	730926	1929-84	03-18-36	11,100	73.0	>100
27	01329154	Steele Brook at Shushan NY	Washington	2.85	1	430535	731938	1979-99	01-19-96	149	52.3	9
28	01329500	Batten Kill at Battenville NY	Washington	394.00	1	430605	732555	1923-68,87-99	11-04-27	21,300	54.1	>100
29	01329780	Sessions Brook at Porters Corners NY	Saratoga	1.04	1	430921	735245	1968-86	03-14-77	80	76.9	30
30	01329900	Glowegee Creek Trib at Mosherville NY	Saratoga	1.42	1	430324	740058	1968-86	03-14-77	139	97.9	16
31	01330000	Glowegee Creek at West Milton NY	Saratoga	26.00	1	430150	735540	1949-63,91-99	12-31-48	1,670	64.2	40
32	01330500	Kayaderosseras Creek near West Milton NY	Saratoga	90.00	1	430218	735435	1927-95	03-18-36	4,710	52.3	90
33	01330880	Saratoga Lake Trib near Bemis Heights NY	Saratoga	2.98	1	425943	734306	1968-95	08-07-86	448	150.3	>100
34	01331400	Dry Brook near Adams MA	Berkshire, MA	7.67	1	423520	730648	1963-73	07-19-66	675	88.0	8
35	01331500	Hoosic River at Adams MA	Berkshire, MA	46.70	1	423640	730728	1932-99	09-21-38	5,080	108.8	>100
36	01332000	North Branch Hoosic River at North Adams MA	Berkshire, MA	40.90	1	424208	730537	1928,32-90	11- -27	9,980	244.0	90
37	01332500	Hoosic River near Williamstown MA	Berkshire, MA	126.00	1	424201	730934	1941-99	12-31-48	13,000	103.2	80
38	01333000	Green River at Williamstown MA	Berkshire, MA	42.60	1	424232	731150	1950-99	12-21-73	4,060	95.3	50
39	01333367	Little Hoosic River at Cherryplain NY	Rensselaer	2.22	1	423757	732123	1976-86	04-19-83	167	75.2	9
40	01333500	Little Hoosic River at Petersburg NY	Rensselaer	56.10	1	424550	732016	1949,52-99	12-31-48	7,470	133.2	>100

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
41	01333900	Paran Creek near South Shaftsbury VT	Bennington, VT	2.38	1	425813	731119	1964-78,99	06-30-73	193	81.1	10
42	01334000	Walloomsac River near North Bennington VT	Bennington, VT	111.00	1	425447	731525	1932-99	09-21-38	8,450	76.1	35
43	01334500	Hoosic River near Eagle Bridge NY	Rensselaer	510.00	1	425619	732239	1911-99	12-31-48	55,400	108.6	>100
44	01335500	Hudson River at Mechanicville NY	Saratoga	4,500.00	1	425445	734045	1869,1888-29	03-28-13	120,000	26.7	>100
45	01342730	Steele Creek at Ilion NY	Herkimer	26.20	1	430005	750244	1965-85,2000	05-13-00	2,100	80.2	14
46	01342797	Vly Brook near Morehouseville NY	Hamilton	3.28	1	432334	744959	1993-02	10-21-95	320	97.6	16
47	01342800	West Canada Creek at Nobleboro NY	Herkimer	193.00	1	432347	745135	1958-76,87-99	12-29-84	20,000	103.6	>100
48	01346820	Mohawk River Trib at Indian Castle NY	Herkimer	1.36	1	430034	744747	1974-86	03-22-80	210	154.4	60
49	01347460	Spruce Lake Trib near Salisbury Center NY	Herkimer	0.54	1	431051	744844	1975-86,2000	10-17-77	72	133.3	15
50	01348000	East Canada Creek at East Creek NY	Herkimer	289.00	1	430100	744428	1913,28-96,98	01-09-98	17,800	61.6	60
51	01348420	North Creek near Ephratah NY	Fulton	6.52	1	430028	743354	1975-99	06-29-82	540	82.8	25
52	01349000	Otsquago Creek at Fort Plain NY	Montgomery	61.00	1	425546	743735	1950-89	10-28-81	10,400	170.5	30
53	01349150	Canajoharie Creek near Canajoharie NY	Montgomery	59.70	1	425234	743612	1993-02	11-09-96	3,630	60.8	5
54	01349360	Van Wie Creek Trib near Randall NY	Montgomery	1.00	1	425411	742555	1974-86	03-21-80	219	219.0	60
55	01349700	East Kill near Jewett Center NY	Greene	35.60	3	421457	741811	1965-74,96-99	01-19-96	13,500	379.2	>100
56	01350000	Schoharie Creek at Prattsville NY	Greene	237.00	3	421910	742613	1904,08-99	01-19-96	52,800	222.8	45
57	01350080	Manor Kill at West Conesville near Gilboa NY	Schoharie	32.40	3	422237	742448	1987-99	01-19-96	5,050	155.9	25
58	01350120	Platter Kill at Gilboa NY	Schoharie	10.90	3	422422	742651	1976-99	01-19-96	1,370	125.7	25
59	01350140	Mine Kill near North Blenheim NY	Schoharie	16.20	3	422544	742824	1975-99	01-19-96	2,550	157.4	35
60	01350900	Beaverdam Creek near Knox NY	Albany	6.91	3	423855	740756	1963-86	03-27-63	1,400	202.6	80

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
61	01351000	Fox Creek at West Berne NY	Albany	67.20	3	423742	741101	1963-74,87	12-21-73	6,400	95.2	13
62	01354300	Plotter Kill at Rynex Corners NY	Schenectady	3.70	1	424916	740420	1958-86	09-12-60	725	195.9	>100
63	01355405	Indian Kill near Glenville Center NY	Schenectady	3.11	1	425340	735727	1968-86	03-22-80	200	64.3	12
64	01358500	Poesten Kill near Troy NY	Rensselaer	89.40	2	424400	733800	1924-68,77,84	09-22-38	11,900	133.1	>100
65	01359519	Normans Kill near Westmere NY	Albany	131.00	2	424043	735425	1956,68-84,87	10-16-55	10,800	82.4	65
66	01359528	Normans Kill at Albany NY	Albany	168.00	2	423800	734822	1980-84,92-99	09-17-99	11,800	70.2	35
67	01359750	Moordener Kill at Castleton-on-Hudson NY	Rensselaer	32.60	2	423202	734415	1958-95	03-15-86	1,520	46.6	16
68	01359902	Coeymans Creek near Selkirk NY	Albany	35.10	2	423138	734914	1968-77,96,99	09-16-99	4,800	136.8	50
69	01359924	Hannacrois Creek near New Baltimore NY	Greene	61.60	2	422622	734841	1968-77,96,99	06-09-96	3,700	60.1	35
70	01360640	Valatie Kill near Nassau NY	Rensselaer	9.48	2	423307	733531	1991-00	06-06-00	856	90.3	14
71	01361000	Kinderhook Creek at Rossman NY	Columbia	329.00	2	421950	734440	1928-68,87-99	12-31-48	29,800	90.6	>100
72	01361200	Claverack Creek at Claverack NY	Columbia	60.60	2	421254	734346	1961-84,93-95	06-30-73	5,590	92.2	35
73	01361453	Catskill Creek Trib at Franklinton NY	Schoharie	3.61	2	423135	741833	1968-87	04-04-87	1,100	304.7	>100
74	01361500	Catskill Creek at Oak Hill NY	Greene	98.00	2	422416	740907	1911-77,87-99	04-04-87	15,400	157.1	90
75	01361570	Tenmile Creek at Oak Hill NY	Greene	35.30	2	422426	740806	1969-80,87	03-21-80	3,800	107.6	35
76	01361900	Shingle Kill at Cairo NY	Greene	13.90	2	421822	740013	1953-56,65-87	03-21-80	3,600	259.0	35
77	01362100	Roeliff Jansen Kill near Hillsdale NY	Columbia	27.50	2	420914	733114	1958-99	06-30-73	3,280	119.3	70
78	01362197	Bushnellsville Creek at Shandaken NY	Ulster	11.40	2	420725	742402	1956,72-87, 94-05	04-03-05	2,700	236.8	50
79	01362200	Esopus Creek at Allaben NY	Ulster	63.70	2	420701	742250	1951,64-05	04-03-05	21,700	340.7	60
80	01362500	Esopus Creek at Coldbrook NY	Ulster	192.00	2	420051	741616	1932-05	03-21-80	65,300	340.1	50
81	01365000	Rondout Creek near Lowes Corners NY	Sullivan	38.30	2	415200	742912	1937-99	07-22-38	7,600	198.4	25
82	01365500	Chestnut Creek at Grahamsville NY	Sullivan	20.90	2	415042	743227	1939-87,1999	10-15-55	4,640	222.0	40
83	01366500	Rondout Creek near Lackawack NY	Ulster	100.00	2	414625	742401	1928,32-51	08-26-28	26,700	267.0	>100
84	01366650	Sandburg Creek at Ellenville NY	Ulster	56.70	2	414254	742321	1957-77	08-19-60	4,660	82.2	14
85	01367500	Rondout Creek at Rosendale NY	Ulster	383.00	2	415035	740511	1910-18,27-51	08-27-28	27,300	71.3	25

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
86	01368000	Wallkill River near Unionville NY	Sussex, NJ	140.00	2	411536	743258	1938-84,89-93	08-19-55	6,880	49.1	>100
87	01368500	Rutgers Creek at Gardnerville NY	Orange	59.70	2	412040	742910	1944-68,87-99	08-19-55	8,490	142.2	>100
88	01369000	Pochuck Creek near Pine Island NY	Orange	98.00	2	411632	742819	1938-77,84	10-16-55	3,090	31.5	20
89	01369500	Quaker Creek at Florida NY	Orange	9.74	2	412021	742145	1938-79,84	09-21-38	1,050	107.8	60
90	01370000	Wallkill River at Pellets Island NY	Orange	380.00	2	412250	742450	1920-68,84-93	03-14-36	12,400	32.6	70
91	01370500	Wallkill River near Phillipsburg NY	Orange	406.00	2	412557	742229	1936-59,89-93	03-13-36	11,500	28.3	35
92	01371000	Shawangunk Kill at Pine Bush NY	Ulster	104.00	2	413705	741740	1955-75,89-93	08-19-55	9,700	93.3	70
93	01371400	Shawangunk Kill at Ganahgote NY	Ulster	147.00	2	414112	741028	1955-56,62-69	08-19-55	14,000	95.2	100
94	01371500	Wallkill River at Gardiner NY	Ulster	695.00	2	414110	740956	1925-99	10-16-55	30,800	44.3	>100
95	01372040	Crum Elbow Creek at Hyde Park NY	Dutchess	17.30	2	414724	735553	1960-76	07-21-75	600	34.7	8
96	01372200	Wappinger Creek near Clinton Corners NY	Dutchess	92.40	2	414855	734550	1956-82,84	06-30-73	8,510	92.1	90
97	01372300	Little Wappinger Creek at Salt Point NY	Dutchess	32.90	2	414818	734738	1956-75,84	07-21-75	1,590	48.3	16
98	01372500	Wappinger Creek near Wappingers Falls NY	Dutchess	181.00	2	413911	735223	1929-99	08-19-55	18,600	102.8	>100
99	01372800	Fishkill Creek at Hopewell Junction NY	Dutchess	57.30	2	413422	734825	1964-75,87-99	12-21-73	2,770	48.3	18
100	01373500	Fishkill Creek at Beacon NY	Dutchess	190.00	2	413040	735655	1902,45-68,84	03-01-02	13,700	72.1	>100
101	01373690	Woodbury C near Highland Mills NY	Orange	11.20	2	412200	740617	1966-72,77-84	04-05-84	1,940	173.2	25
102	01374130	Canopus Creek at Oscawana Corners NY	Putnam	8.30	2	412243	735223	1975-86	04-06-84	416	50.1	5
103	01374250	Peekskill Hollow Creek at Tompkins Corners NY	Putnam	14.90	2	412318	734847	1975-99	09-16-99	2,000	134.2	70
104	01374440	Cedar Pond Brook at Stony Point NY	Rockland	17.30	2	411336	735904	1960-68,75-79	11-08-77	2,600	150.3	25
105	01384500	Ringwood Creek near Wanaque NJ	Passaic, NJ	19.10	2	410736	741552	1935-78,85-99	03-30-51	1,570	82.2	30

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
106	01386000	West Brook near Wanaque NJ	Passaic, NJ	11.80	2	410424	741842	1936-78	03-30-51	1,900	161.0	40
107	01387250	Ramapo River at Sloatsburg NY	Rockland	60.10	2	411005	741127	1956-63,75-79	10-16-55	5,970	99.3	50
108	01387300	Stony Brook at Sloatsburg NY	Rockland	18.20	2	410944	741110	1960-69	05-29-68	1,760	96.7	25
109	01387350	Nakoma Brook at Sloatsburg NY	Rockland	5.40	2	410914	741138	1960-78	11-08-77	550	101.9	25
110	01387400	Ramapo River at Ramapo NY	Rockland	86.90	2	410825	741008	1980-99	04-05-84	10,700	123.1	100
111	01387410	Torne Brook at Ramapo NY	Rockland	2.60	2	410834	740944	1960-99	11-08-77	1,520	584.6	60
112	01387420	Ramapo River at Suffern NY	Rockland	93.00	2	410706	740938	1980-99	04-05-84	12,300	132.3	100
113	01387450	Mahwah River near Suffern NY	Rockland	12.30	2	410827	740701	1959-95	11-08-77	1,840	149.6	30
114	01387500	Ramapo River near Mahwah NJ	Bergen, NJ	120.00	2	410551	740948	1904-14,23-99	04-05-84	15,500	129.2	90
115	01413500	East Branch Delaware River at Margaretville NY	Delaware	163.00	3	420841	743914	1937-99	01-19-96	25,800	158.3	60
116	01414000	Platte Kill at Dunraven NY	Delaware	34.90	3	420759	744145	1942-62,96-05	01-19-96	5,690	163.0	50
117	01414500	Mill Brook near Dunraven NY	Delaware	25.20	3	420622	744351	1937-99	01-19-96	5,380	213.5	60
118	01415000	Tremper Kill near Andes NY	Delaware	33.20	3	420712	744908	1937-99	01-19-96	5,000	150.6	60
119	01415500	Terry Clove Kill near Pepacton NY	Delaware	13.60	3	420750	745402	1937-62	05-23-42	4,010	294.9	>100
120	01417000	East Branch Delaware River at Downsville NY	Delaware	372.00	3	420430	745836	1942-54	11-26-50	23,900	64.2	7
121	01417185	Campbell Brook Trib near Downsville NY	Delaware	0.41	3	420241	745837	1975-86	11-26-79	57	139.0	18
122	01417500	East Branch Delaware River at Harvard NY	Delaware	458.00	3	420129	750713	1935-54	09-22-38	31,400	68.6	11
123	01418000	Beaver Kill near Turnwood NY	Ulster	40.80	3	420203	744355	1949-59	11-25-50	7,400	181.4	20
124	01418500	Beaver Kill at Craigie Clair NY	Sullivan	81.90	3	415747	745202	1937-74,96	01-19-96	13,000	158.7	35
125	01419500	Willowemoc Creek near Livingston Manor NY	Sullivan	62.60	3	415412	744847	1938-74,96	07-28-69	15,700	250.8	>100

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
126	01420000	Little Beaver Kill near Livingston Manor NY	Sullivan	20.10	3	415222	744751	1925-81	08-26-28	3,420	170.1	30
127	01420500	Beaver Kill at Cooks Falls NY	Delaware	241.00	3	415647	745848	1914-05	04-03-05	50,800	210.8	>100
128	01421000	East Branch Delaware River at Fishs Eddy NY	Delaware	784.00	3	415823	751028	1904,13-54	10-09-03	70,000	89.3	45
129	01421900	West Branch Delaware River Upstream From Delhi NY	Delaware	134.00	4	421649	745427	1937-74,96-99	01-19-96	13,000	97.0	>100
130	01422500	Little Delaware River near Delhi NY	Delaware	49.80	4	421508	745407	1938-74,96-99	01-19-96	6,100	122.5	>100
131	01423000	West Branch Delaware River at Walton NY	Delaware	332.00	4	420958	750826	1951-99	01-19-96	25,000	75.3	70
132	01423500	Dryden Brook near Granton NY	Delaware	8.10	4	420719	751450	1952-67	04-04-60	633	78.1	9
133	0142400103	Trout Creek near Trout Creek NY	Delaware	20.20	4	421025	751647	1952-67,96-99	01-19-96	2,800	138.6	100
134	01424500	Trout Creek at Cannonsville NY	Delaware	49.50	4	420545	751925	1941-63	03-22-48	4,600	92.9	90
135	01425000	West Branch. Delaware River at Stilesville NY	Delaware	456.00	4	420429	752347	1952-63	01-22-59	17,500	38.4	5
136	01425500	Cold Spring Brook at China NY	Delaware	1.49	4	420940	752335	1935-68	10-30-35	335	224.8	>100
137	01425675	Oquaga Creek near North Sanford NY	Broome	4.69	4	421028	752625	1970-81	02-11-81	480	102.3	25
138	01426000	Oquaga Creek at Deposit NY	Broome	67.60	4	420331	752542	1941-73,04-05	07-04-70	7,170	106.1	70
139	01426500	West Branch Delaware River at Hale Eddy NY	Delaware	595.00	4	420011	752302	1904,13-63	10-10-03	46,000	77.3	>100
140	01427500	Callicoon Creek at Callicoon NY	Sullivan	110.00	3	414539	750255	1940-82,87-99	08-17-47	16,000	145.5	>100
141	01428000	Tenmile River at Tusten NY	Sullivan	45.60	3	413351	750056	1946-73,2000	08-19-55	6,850	150.2	>100
142	01428500	Del River Abv Lackawaxen River near Barryville NY	Sullivan	2,020.00	3	413032	745910	1941-63	08-19-55	130,000	64.4	>100
143	01428750	West Branch Lackawaxen River near Aldenville PA	Wayne, PA	40.60	3	414028	752235	1975-99	01-19-96	4,340	106.9	45
144	01434000	Delaware River at Port Jervis NY	Pike, PA	3,070.00	3	412214	744152	1904-63	10-10-03	205,000	66.8	>100
145	0143400680	East Branch Neversink River northeast of Denning NY	Ulster	8.93	3	415801	742654	1991-2005	09-16-99	3,070	343.8	30

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
146	01434010	East Branch Neversink River at Denning NY	Ulster	13.30	3	415730	742826	1984-99	04-04-87	4,460	335.3	30
147	01434017	East Branch Neversink River near Claryville NY	Ulster	22.90	3	415531	743226	1992-2005	04-02-05	4,590	200.4	11
148	01434021	W Br Nev River at Winnisook L near Frost Valley NY	Ulster	0.77	3	420040	742453	1992-2001	09-16-99	212	275.3	11
149	01434025	Biscuit Brook Above Pigeon Brook at Frost Valley NY	Ulster	3.72	3	415943	743005	1984-99	04-04-87	815	219.1	12
150	01434092	Shelter Creek Below Dry Creek near Frost Valley NY	Ulster	0.62	3	415812	743053	1993-2002	12-17-00	140	225.8	10
151	01434498	West Branch Neversink River at Claryville NY	Sullivan	33.80	3	415513	743430	1992-2005	04-02-05	9,570	283.1	20
152	01435000	Neversink River near Claryville NY	Sullivan	66.60	3	415324	743525	1938-05	11-25-50	23,400	351.4	>100
153	01436000	Neversink River at Neversink NY	Sullivan	92.60	3	414912	743809	1942-1953	11-25-50	22,300	240.8	50
154	01436500	Neversink River at Woodbourne NY	Sullivan	113.00	3	414524	743552	1938-53	11-26-50	22,000	194.7	30
155	01437000	Neversink River at Oakland Valley NY	Sullivan	223.00	3	412945	743848	1928-53	11-26-50	23,300	104.5	15
156	01437500	Neversink River at Godeffroy NY	Orange	307.00	3	412628	743608	1938-53	11-26-50	24,500	79.8	11
157	01438500	Delaware River at Montague NJ	Pike, PA	3,480.00	3	411833	744744	1940-63	08-19-55	250,000	71.8	>100
158	01440000	Flat Brook near Flatbrookville NJ	Sussex, NJ	64.00	2	410624	745709	1924-99	08-19-55	9,560	149.4	>100
159	01443500	Paulins Kill at Blairstown NJ	Warren, NJ	126.00	2	405844	745715	1922-76,78-99	08-19-55	8,750	69.4	>100
160	01496370	Mink Creek at Richfield Springs NY	Otsego	10.40	4	425055	750010	1969-86	03-19-86	498	47.9	8
161	01496500	Oaks Creek at Index NY	Otsego	102.00	4	423956	745736	1930-32,37-95	10-17-77	3,320	32.5	80
162	01497500	Susquehanna River at Colliersville NY	Otsego	349.00	4	422959	745852	1924-72	03-19-36	8,740	25.0	50
163	01497800	Schenevus Creek at Schenevus NY	Otsego	54.20	4	423247	744954	1963-76	03-05-64	2,200	40.6	16
164	01497805	Little Elk Creek near Westford NY	Otsego	3.73	4	423801	744745	1978-99	01-19-96	278	74.5	18
165	01498500	Charlotte Creek at West Davenport NY	Delaware	167.00	4	422642	745750	1938-75	09-22-38	14,000	83.8	>100

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
166	01499000	Otego Creek near Oneonta NY	Otsego	108.00	4	422703	750654	1941-75	12-30-42	6,000	55.6	70
167	01500500	Susquehanna River at Unadilla NY	Otsego	982.00	4	421917	751901	1938-99	03-18-36	31,300	31.9	>100
168	01501000	Unadilla River near New Berlin NY	Chenango	199.00	4	423837	751924	1924-72	03-05-64	6,940	34.9	30
169	01501015	Mill Brook at New Berlin NY	Chenango	4.64	4	423732	751943	1975-86	03-30-77	450	97.0	20
170	01501140	Wharton Creek Trib near Edmeston NY	Otsego	2.02	4	424235	751319	1976-86	09-27-85	290	143.6	60
171	01501500	Sage Brook near South New Berlin NY	Chenango	0.70	4	423152	752532	1933-68	07-22-45	287	410.0	>100
172	01502000	Butternut Creek at Morris NY	Otsego	59.70	4	423243	751422	1938-95	10-17-77	5,980	100.2	>100
173	01502500	Unadilla River at Rockdale NY	Chenango	520.00	4	422240	752423	1930-99	12-31-42	17,400	33.5	50
174	01502632	Susquehanna River at Bainbridge NY	Chenango	1,610.00	4	421729	752836	1988-99	03-31-93	36,600	22.7	9
175	01502701	Susquehanna River at Afton NY	Chenango	1,716.00	4	421338	753127	1972,77-90,96	03-07-79	42,000	24.5	14
176	01502714	Ouaquaga Creek near Belden NY	Broome	3.37	4	421012	754045	1975-86	08-02-86	496	147.2	70
177	01502731	Susquehanna River at Windsor NY	Broome	1,820.00	4	420429	753817	1988-99	01-20-96	40,000	22.0	10
178	01503000	Susquehanna River at Conklin NY	Broome	2,232.00	4	420207	754812	1913-05	03-18-36	61,600	27.6	60
179	01503960	Electric Light Stream near Morrisville NY	Madison	7.21	4	425251	753837	1976-86	10-09-76	400	55.5	6
180	01503980	Chenango River at Eaton NY	Madison	24.30	4	425102	753621	1964-65,67-99	03-06-64	2,350	96.7	>100
181	01505000	Chenango River at Sherburne NY	Chenango	263.00	4	424043	753039	1936,38-05	04-03-05	9,330	35.5	60
182	01505017	Cold Brook near North Norwich NY	Chenango	5.80	4	423630	753216	1975-86	03-05-79	300	51.7	6
183	01505500	Canasawacta Creek near South Plymouth NY	Chenango	57.90	4	423350	753310	1945-75,77	02-25-61	6,980	120.6	60
184	01507000	Chenango River at Greene NY	Chenango	593.00	4	421928	754618	1937-05	04-03-05	20,800	35.1	90
185	01507500	Genegantslet Creek at Smithville Flats NY	Chenango	82.30	4	422334	754815	1938-71	12-30-42	5,890	71.6	40

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
186	01508000	Shackham Brook near Truxton NY	Cortland	2.95	4	424602	760108	1933-68	06-03-47	487	165.1	18
187	01508500	Albright Creek at East Homer NY	Cortland	6.81	4	424009	760612	1939-76	09-26-75	2,480	364.2	>100
188	01508803	West Branch Tioughnioga River at Homer NY	Cortland	71.50	4	423818	761036	1967-68,73-92	10-28-81	2,710	37.9	25
189	01508946	Otter Creek Trib at State Highway 222 near Cortland NY	Cortland	2.85	4	423522	761401	1976-86	10-28-81	690	242.1	>100
190	01509000	Tioughnioga River at Cortland NY	Cortland	292.00	4	423610	760935	1939-05	04-03-05	14,200	48.6	35
191	01509520	Tioughnioga River at Lisle NY	Broome	453.00	4	422059	755959	1988-05	04-02-05	19,800	43.7	45
192	01510000	Otselic River at Cincinnatus NY	Cortland	147.00	4	423228	755400	1938-64,70-05	04-03-05	11,300	76.9	>100
193	01510500	Otselic River near Upper Lisle NY	Cortland	217.00	4	422518	755659	1935,37-69	07-08-35	15,400	71.0	90
194	01510610	Merrill Creek Trib near Texas Valley NY	Cortland	5.32	4	422803	755919	1976-81,83-99	01-19-96	1,150	216.2	70
195	01511500	Tioughnioga River at Itaska NY	Broome	730.00	4	421753	755433	1930-41	07-08-35	61,100	83.7	>100
196	01512500	Chenango River near Chenango Forks NY	Broome	1,483.00	4	421305	755055	1913-05	07-08-35	96,000	64.7	>100
197	01513500	Susquehanna River at Vestal NY	Broome	3,941.00	4	420527	760323	1936-05	03-18-36	107,000	27.2	80
198	01513712	Nanticoke Creek Trib at Nanticoke NY	Broome	1.70	5	421640	760251	1975-86	07-11-76	977	574.7	>100
199	01513790	Nanticoke Creek at Union Center NY	Broome	90.70	5	420856	760400	1956,63-77	06-23-72	13,500	148.8	30
200	01513831	Susquehanna River at Owego NY	Tioga	4,216.00	5	420601	761539	1988-96,99	03-18-36	112,000	26.6	70
201	01514000	Owego Creek near Owego NY	Tioga	185.00	5	420745	761615	1930-99	07-08-35	23,500	127.0	>100
202	01514801	Catatonk Creek Northwest of Owego NY	Tioga	150.00	5	420818	761723	1988-99	01-20-96	9,740	64.9	40
203	01515000	Susquehanna River near Waverly NY	Bradford, PA	4,773.00	5	415905	763005	1936-99	03- -36	128,000	26.8	50
204	01516500	Corey Creek near Mainesburg PA	Tioga, PA	12.20	5	414727	770054	1955-99	06-23-72	5,580	457.4	100
205	01516800	Manns Creek near Mansfield PA	Tioga, PA	3.01	5	414919	770550	1960-77	06-22-72	715	237.5	25

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
206	01517000	Elk Run near Mainesburg PA	Tioga, PA	10.20	5	414854	765755	1955-78	06-22-72	3,940	386.3	>100
207	01518000	Tioga River at Tioga PA	Tioga, PA	282.00	5	415430	770747	1939-76	06-22-72	59,000	209.2	>100
208	01518420	Crooked Creek at Middlebury Center PA	Tioga, PA	74.30	5	415033	771625	1986-99	11-08-96	15,300	205.9	40
209	01518500	Crooked Creek at Tioga PA	Tioga, PA	122.00	5	415408	770855	1954-99	11-08-96	22,000	180.3	60
210	01518862	Cowanesque River at Westfield PA	Tioga, PA	90.60	5	415523	773156	1984-99	01-19-96	13,000	143.5	20
211	01519200	Cowanesque River at Elkland PA	Tioga, PA	235.00	5	415915	771809	1980-99	01-19-96	28,000	119.1	40
212	01520000	Cowanesque River near Lawrenceville PA	Tioga, PA	298.00	5	415948	770825	1952-78	09-26-75	43,700	146.6	70
213	01520500	Tioga River at Lindley NY	Steuben	771.00	5	420143	770757	1930-79	06-23-72	128,000	166.0	>100
214	01521596	Big Creek near Howard NY	Steuben	6.32	5	422201	773433	1977-99	01-19-96	1,600	253.2	60
215	01522500	Karr Valley Creek at Almond NY	Allegany	27.40	5	421840	774505	1935-68,71-73	06-23-72	10,900	397.8	>100
216	01523500	Canacadea Creek near Hornell NY	Steuben	57.90	5	422005	774100	1927-28,35-48	07-08-35	21,000	362.7	>100
217	01525000	Bennett Creek at Canisteo NY	Steuben	95.30	5	421556	773539	1939-47,72	06-22-72	19,500	204.6	>100
218	01525500	Canisteo River at West Cameron NY	Steuben	340.00	5	421320	772505	1931,35-99	06-23-72	43,000	126.5	>100
219	01526000	Tuscarora Creek near South Addison NY	Steuben	114.00	5	420400	771702	1937-70,72	06-23-72	18,700	164.0	60
220	01526500	Tioga River near Erwins NY	Steuben	1,377.00	5	420716	770746	1919-78	06-23-72	190,000	138.0	>100
221	01527000	Cohocton River at Cohocton NY	Steuben	52.20	5	423000	773002	1935,51-99	06-23-72	2,260	43.3	90
222	01528000	Fivemile Creek near Kanona NY	Steuben	66.80	5	422318	772129	1937-95	06-23-72	5,110	76.5	>100
223	01528320	Cohocton River at Bath NY	Steuben	340.00	5	422036	772039	1988-96,99	04-01-93	7,000	20.6	3
224	01529500	Cohocton River near Campbell NY	Steuben	470.00	5	421509	771301	1919-99	07-08-35	41,100	87.4	>100
225	01530301	Cuthrie Run near Big Flats NY	Chemung	5.39	5	421043	765532	1976,79-99	06-19-76	800	148.4	16
226	01530500	Newtown Creek at Elmira NY	Chemung	77.50	5	420616	764754	1938-89	06-23-72	4,000	51.6	15
227	01531000	Chemung River at Chemung NY	Chemung	2,506.00	5	420008	763806	1904-78	06-23-72	189,000	75.4	>100
228	01533250	Tuscarora Creek near Silvara PA	Bradford, PA	11.80	5	414225	760710	1963-95	06-22-72	1,610	136.4	30
229	01542810	Waldy Run near Emporium PA	Cameron, PA	5.24	5	413444	781734	1964-99	09-28-67	828	158.0	40
230	01543700	First Fork Sinnemahoning Creek at Wharton PA	Potter, PA	182.00	5	413108	780140	1984-99	01-19-96	15,400	84.6	30

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
231	03007800	Allegheny River at Port Allegany PA	Mckean, PA	248.00	5	414907	781735	1972,75-99	06-23-72	21,700	87.5	>100
232	03010500	Allegheny River at Eldred PA	Mckean, PA	550.00	5	415748	782311	1940-99	06-23-72	65,400	118.9	>100
233	03010734	Ischua Creek Trib near Machias NY	Cattaraugus	5.12	5	422428	783133	1978-99	09-14-79	570	111.3	18
234	03010800	Olean Creek near Olean NY	Cattaraugus	198.00	5	420712	782512	1950,58-95	09-29-67	18,200	91.9	>100
235	03011000	Great Valley Creek near Salamanca NY	Cattaraugus	137.00	5	421028	784128	1951-68,77-92	09-28-67	28,600	208.8	>100
236	03011020	Allegheny River at Salamanca NY	Cattaraugus	1,608.00	5	420923	784256	1904-99	06-23-72	73,000	45.4	>100
237	03011800	Kinzua Creek near Guffey PA	Mckean, PA	46.40	5	414559	784308	1966-99	06-22-72	5,220	112.5	40
238	03013000	Conewango Creek at Waterboro NY	Chautauqua	290.00	5	421015	790410	1938-94	04-07-47	8,600	29.7	50
239	03013800	Ball Creek at Stow NY	Chautauqua	9.06	5	420913	792427	1974-99	09-14-79	2,000	220.8	40
240	03015390	Hare Creek near Corry PA	Erie, PA	12.30	5	415629	793841	1964-85,94	09-19-77	2,240	182.1	50
241	03015500	Brokenstraw Creek at Youngsville PA	Warren, PA	321.00	5	415109	791903	1910-99	03-25-13	18,000	56.1	>100
242	03021350	French Creek near Wattsburg PA	Erie, PA	92.00	5	420055	794658	1975-99	09-14-79	6,350	69.0	17
243	04213040	Raccoon Creek near West Springfield PA	Erie, PA	2.53	5	415642	802651	1961-95	12-28-68	408	161.3	30
244	04213200	Mill Creek at Erie PA	Erie, PA	9.16	5	420554	800435	1964-88,94-99	09-17-96	3,310	361.4	80
245	04213376	Canadaway Creek at Fredonia NY	Chautauqua	32.90	5	422702	792103	1979,87-99	08-07-79	12,000	364.7	>100
246	04213490	South Branch Cattaraugus Creek near Otto NY	Cattaraugus	25.10	5	422154	784804	1963-99	09-14-79	4,350	173.3	50
247	04213500	Cattaraugus Creek at Gowanda NY	Erie	436.00	5	422750	785607	1940-98	03-07-56	34,600	79.4	50
248	04214040	Delaware Creek near Angola NY	Erie	8.32	5	423746	790315	1963-86	02-24-85	672	80.8	11
249	04214200	Eighteenmile Creek at North Boston NY	Erie	37.20	5	424104	784641	1963-76	09-29-67	5,790	155.6	50
250	04214250	Smoke Creek at Lackawanna NY	Erie	14.30	5	424921	784810	1953-55,63-76	03-01-55	2,330	162.9	>100

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
251	04214400	Buffalo Creek near Wales Hollow NY	Erie	76.90	5	424454	783031	1963-74	09-28-67	9,260	120.4	30
252	04214410	Hunter Creek at Colegrave NY	Erie	14.00	5	424411	783255	1964-86	09-28-67	1,680	120.0	25
253	04214500	Buffalo Creek at Gardenville NY	Erie	142.00	5	425117	784519	1937,39-99	06- -37	16,000	112.7	>100
254	04214980	Little Buffalo Creek at East Lancaster NY	Erie	24.00	5	425246	783627	1963,66-80	03-17-63	2,140	89.2	16
255	04215000	Cayuga Creek near Lancaster NY	Erie	96.40	5	425324	783843	1937-68,72-99	06- -37	18,000	186.7	>100
256	04215500	Cazenovia Creek at Ebenezer NY	Erie	135.00	5	424947	784631	1941-99	03-01-55	13,500	100.0	40
257	04216400	Tonawanda Creek near Johnsonburg NY	Wyoming	23.70	6	424305	781920	1962-86	06-23-72	1,850	78.1	35
258	04216418	Tonawanda Creek at Attica NY	Wyoming	76.90	6	425150	781702	1972,78-99	07-08-98	9,400	122.2	>100
259	04216500	Little Tonawanda Creek at Linden NY	Genesee	22.10	6	425237	780948	1913-68,77-99	06-23-89	2,900	131.2	60
260	04216875	Little Tonawanda Creek Tributary near Batavia NY	Genesee	1.02	6	425633	780946	1976-86	09-25-77	156	152.9	45
261	04217000	Tonawanda Creek at Batavia NY	Genesee	171.00	6	425951	781120	1942,45-99	03- -42	10,000	58.5	>100
262	04217500	Tonawanda Creek near Alabama NY	Genesee	231.00	6	430528	782715	1956-89	04-01-40	9,000	39.0	70
263	04217700	Murder Creek at Pembroke NY	Genesee	43.60	6	425937	782608	1962-86	03-18-63	1,870	42.9	16
264	04217750	Murder Creek near Akron NY	Erie	58.80	6	430249	783047	1983-99	02-25-85	3,000	51.0	60
265	04218000	Tonawanda Creek at Rapids NY	Niagara	349.00	6	430535	783811	1956-65,79-99	04-01-60	10,600	30.4	45
266	04218518	Ellicott Creek Below Williamsville NY	Erie	81.60	6	425840	784550	1936,56-99	03-17-36	6,800	83.3	>100
267	04219645	Fourmile Creek near Youngstown NY	Niagara	4.88	6	431349	790101	1969-73,76-86	01-31-69	480	98.4	80
268	04219738	Eighteenmile Creek Trib near Lockport NY	Niagara	2.53	6	431220	784647	1977-86	02-19-81	365	144.3	45
269	04219900	Johnson Creek near Lyndonville NY	Orleans	87.70	6	432021	782055	1954,62-99	02-17-54	5,430	61.9	>100
270	04219922	Oak Orchard Creek at Barrville Rd near Elba NY	Genesee	6.48	6	430542	780843	1976-86	03-22-78	205	31.6	5

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
271	04220150	Oak Orchard Creek at Medina NY	Orleans	157.00	6	431226	782311	1962-76	03-20-63	1,480	9.4	7
272	04220250	West Creek near Hilton NY	Monroe	31.00	6	431810	774850	1958-64,86-99	03-30-60	1,480	47.7	40
273	0422026250	Northrup Creek at North Greece NY	Monroe	11.70	6	431513	774333	1974,90-02	05-17-74	758	64.8	50
274	04220500	Dyke Creek at Wellsville NY	Allegany	72.10	5	420714	775613	1956-60,64-72	06-23-72	12,000	166.4	>100
275	04221000	Genesee River at Wellsville NY	Allegany	288.00	5	420720	775727	1917-99	06-23-72	38,500	133.7	>100
276	04221769	Black Creek at Hyder Flats Rd at Black Creek NY	Allegany	10.70	5	421603	781338	1978-93	12-30-90	1,560	145.8	11
277	04222600	Wiscoy Creek at Bliss NY	Wyoming	22.00	5	423459	781417	1962-86	06-23-72	1,850	84.1	20
278	04223000	Genesee River at Portageville NY	Wyoming	984.00	5	423413	780233	1909-99	06-23-72	90,000	91.5	>100
279	04224700	Sugar Creek near Ossian NY	Livingston	10.00	5	423052	774814	1964-86	06-18-84	1,460	146.0	25
280	04224775	Canaseraga Creek Above Dansville NY	Livingston	88.90	5	423208	774216	1975-99	01-19-96	7,340	82.6	40
281	04224807	Stony Brook Tributary at South Dansville NY	Steuben	3.15	5	422816	774021	1977-91,96-99	08-03-81	790	250.8	16
282	04224900	Mill Creek at Patchinville NY	Steuben	4.22	5	423113	773506	1964-86	03-05-64	1,860	440.8	60
283	04225000	Canaseraga Creek near Dansville NY	Livingston	152.00	5	423336	774257	1911-12,16-76	06-23-72	9,600	63.2	30
284	04226000	Keshequa Creek at Craig Colony at Sonyea NY	Livingston	68.30	5	424050	774945	1918-32,75-77	09-25-77	6,280	91.9	12
285	04227000	Canaseraga Creek at Shakers Crossing NY	Livingston	335.00	5	424413	775027	1959-70,75-99	06-23-72	11,200	33.4	45
286	04227500	Genesee River near Mount Morris NY	Livingston	1,424.00	5	424600	775021	1890-1951,72	05-17-16	55,100	38.7	30
287	04229500	Honeoye Creek at Honeoye Falls NY	Monroe	196.00	6	425726	773521	1946-70,72-99	06-23-72	6,600	33.7	>100
288	04230380	Oatka Creek at Warsaw NY	Wyoming	39.10	6	424439	780816	1964-99	07-08-98	4,110	105.1	60
289	04230500	Oatka Creek at Garbutt NY	Monroe	200.00	6	430036	774730	1946-99	03-31-60	7,050	35.3	50
290	04231000	Black Creek at Churchville NY	Monroe	130.00	6	430602	775257	1946-99	03-31-60	4,880	37.5	>100

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
291	04231040	Hotel Creek at Griffin Rd near Churchville NY	Monroe	4.57	6	430336	775228	1976-86	03-05-79	88	19.3	5
292	04232000	Genesee River at Rochester NY	Monroe	2,467.00	6	431050	773740	1865,11-51,72	03-18-1865	54,000	21.9	50
293	04232034	Irondequoit Creek at Rr Mills near Fishers NY	Ontario	39.20	6	430140	772842	1992-2001	01-08-98	1,000	25.5	80
294	04232040	Irondequoit Creek near Pittsford NY	Monroe	44.40	6	430315	772928	1962-72,81-91	03-12-62	640	14.4	5
295	04232046	Thomas Creek at Fairport NY	Monroe	28.50	6	430622	772744	1980-90	02-15-84	232	8.1	2
296	04232047	Irondequoit Creek at Linden Avenue E Rochester NY	Monroe	101.00	6	430716	772836	1974-88	10-29-74	1,480	14.7	14
297	0423204920	East Branch Allen Creek at Pittsford NY	Monroe	6.96	6	430611	773201	1991-2001	07-08-98	459	65.9	40
298	0423205010	Irondequoit Creek Above Blosm Road near Rochester NY	Monroe	142.00	6	430842	773044	1981-05	01-08-98	3,300	23.2	45
299	042320527	Mill Creek Tributary near Webster NY	Monroe	1.95	6	431445	772643	1971-72,76-86	09-29-86	211	108.2	25
300	042320578	Bear Creek at Ontario NY	Wayne	6.74	6	431330	771700	1971-73,75-99	01-08-98	238	35.3	30
301	04232071	Second Creek Tributary at Alton NY	Wayne	1.07	6	431236	765932	1970,73,76-86	09-19-86	57	53.3	6
302	04232087	Red Creek Tributary No 16 near Red Creek NY	Cayuga	2.90	6	431336	764223	1969,76-86	01-31-69	250	86.2	80
303	04232100	Sterling Creek at Sterling NY	Cayuga	44.40	6	431931	763851	1958-95	03-22-80	1,760	39.6	>100
304	04232200	Catharine Creek at Montour Falls NY	Schuyler	41.10	5	421942	765039	1976-77,87-99	11-08-96	4,700	114.4	30
305	04232460	Sugar Creek at Guyanoga NY	Yates	28.90	6	423723	770930	1966-2000	09-23-00	5,000	173.0	>100
306	04232630	Kendig Creek near Macdougall NY	Seneca	13.80	6	425057	765333	1966-99	07-31-92	1,000	72.5	40
307	04233000	Cayuga Inlet near Ithaca NY	Tompkins	35.20	5	422335	763243	1937-99	06-23-72	4,800	136.4	30
308	04233255	Cayuga Inlet at Ithaca NY	Tompkins	86.70	5	422538	763119	1971-72,75-99	01-19-96	12,500	144.2	35
309	04233258	Coy Glen Creek at Ithaca NY	Tompkins	3.56	5	422545	763118	1983-99	01-19-96	820	230.3	15
310	04233310	Sixmile Creek near Ithaca NY	Tompkins	42.00	5	422433	762714	1967-73,76-86	10-28-81	7,600	181.0	25

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
311	04233676	Virgil Creek at Mill Street at Dryden NY	Tompkins	20.70	5	422918	761808	1966-72,75-86	10-28-81	4,670	225.6	>100
312	04233700	Virgil Creek at Freeville NY	Tompkins	40.30	5	423018	762101	1974-86	10-27-81	7,000	173.7	>100
313	04234000	Fall Creek near Ithaca NY	Tompkins	126.00	5	422712	762823	1926-05	07-08-35	15,500	123.0	>100
314	042340202	Cayuga Lake Tributary Number 8 near Jacksonville NY	Tompkins	1.36	6	423224	763535	1977-86	02-15-84	144	105.9	7
315	042340588	Yawger Creek Trib near Auburn NY	Cayuga	1.76	6	425441	763946	1976-86	11-27-79	88	50.0	11
316	04234138	Schaeffer Creek near Canandaigua NY	Ontario	7.84	6	425425	772214	1977-99	03-05-79	520	66.3	35
317	04234200	Mud Creek at East Victor NY	Ontario	64.20	6	425828	772258	1958-68,72-99	04-21-91	1,880	29.3	12
318	04234363	Marbletown Creek Trib near Newark NY	Wayne	0.58	6	430247	770257	1976-86	02-17-76	31	53.4	15
319	04234400	West River near Middlesex NY	Yates	29.30	6	424106	771719	1965-77	06-23-72	2,000	68.3	15
320	04235250	Flint Creek at Phelps NY	Ontario	102.00	6	425728	770406	1960-95,02-05	03-30-93	3,170	31.1	30
321	04235255	Canandaigua Outlet Tributary near Alloway NY	Ontario	2.94	6	430021	770054	1978-99	01-19-96	102	34.7	9
322	04235276	Black Brook at Tyre NY	Seneca	19.00	6	425930	764813	1966-95	12-14-77	786	41.4	50
323	04240100	Harbor Brook at Syracuse NY	Onondaga	10.00	6	430209	761055	1960-99	07-03-74	726	72.6	>100
324	04242500	East Branch Fish Creek at Taberg NY	Oneida	188.00	1	431806	753709	1924-95	12-29-84	21,600	114.9	>100
325	04242795	Canada Creek Tributary near Lee Center NY	Oneida	1.34	1	431940	753152	1977-86	10-09-76	165	123.1	25
326	04243500	Oneida Creek at Oneida NY	Oneida	113.00	6	430551	753822	1950-99	10-09-76	9,110	80.6	40
327	04245000	Limestone Creek at Fayetteville NY	Onondaga	85.50	6	430148	760049	1940-95	10-28-81	7,490	87.6	50
328	04245200	Butternut Creek near Jamesville NY	Onondaga	32.20	6	425602	760344	1959-99	07-03-74	2,820	87.6	100
329	04245840	Scriba Creek near Constantia NY	Oswego	38.40	1	431535	760011	1966-99	09-26-75	1,310	34.1	17
330	04249050	Catfish Creek at New Haven NY	Oswego	31.70	1	432900	761934	1962-99	03-18-73	1,350	42.6	80

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
331	042490673	North Branch Grindstone Creek near Altmar NY	Oswego	11.20	1	432931	760541	1976-99	03-13-77	482	43.0	10
332	04249200	North Branch Salmon River at Redfield NY	Oswego	82.50	1	433232	754851	1962-64,85-99	12-29-84	13,600	164.8	>100
333	04250750	Sandy Creek near Adams NY	Jefferson	128.00	1	434848	760430	1958-99	01-19-96	7,700	60.2	12
334	04252500	Black River near Boonville NY	Oneida	304.00	1	433042	751825	1911-04	04-18-82	12,800	42.1	50
335	04254500	Moose River at Mckeever NY	Herkimer	363.00	1	433640	750635	1902-70,85-99	06-03-47	18,700	51.5	>100
336	04256000	Independence River at Donnattsburg NY	Lewis	88.70	1	434450	752005	1928-99	12-30-84	9,420	106.2	>100
337	04256040	Tributary To Mill Creek Tributary near Lowville NY	Lewis	1.66	1	434543	753113	1976-86,93-99	03-05-78	312	188.0	30
338	04256485	Woods Lake Outlet near Big Moose NY	Herkimer	0.80	1	435156	745719	1978-92	12-29-84	90	112.5	60
339	04258700	Deer River at Deer River NY	Lewis	94.80	1	435549	753527	1930-99	12-29-84	17,200	181.4	>100
340	04260500	Black River at Watertown NY	Jefferson	1,864.00	1	435908	755530	1869,1921-99	01-10-98	55,500	29.8	>100
341	04260575	Horse Creek Trib near Dexter NY	Jefferson	4.59	1	440447	760328	1976-86	03-13-77	700	152.5	20
342	04262500	West Branch Oswegatchie River near Harrisville NY	St Lawrence	244.00	1	441108	751952	1917-99	01-09-98	8,700	35.7	>100
343	04263000	Oswegatchie River near Heuvelton NY	St Lawrence	965.00	1	443558	752245	1917-99	04-06-60	19,600	20.3	>100
344	04263445	Birch Creek at Pierces Corners NY	St Lawrence	1.56	1	442542	753215	1976-86	04-03-78	85	54.5	8
345	04264300	Brandy Brook near Waddington NY	St Lawrence	27.00	1	444942	750932	1959-67,71-86	03-13-77	941	34.9	20
346	04264400	Middle Branch Grass River near Clare NY	St Lawrence	63.00	1	442233	750340	1959-76,85	04-20-75	3,170	50.3	25
347	04264700	North Branch Grass River near Clare NY	St Lawrence	46.30	1	442546	750307	1958-69,85	12-29-84	1,420	30.7	15
348	04265000	Grass River at Pyrites NY	St Lawrence	333.00	1	443128	751148	1924-77,85	11-18-27	8,300	24.9	40
349	04265100	Elm Creek near Hermon NY	St Lawrence	32.60	1	442615	751249	1959-99	04-06-74	1,270	39.0	25
350	04265200	Tanner Creek at Stellaville NY	St Lawrence	30.30	1	442904	751528	1959-69	06-02-60	1,580	52.1	18

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
351	04265300	Little River near Canton NY	St Lawrence	42.40	1	443224	750656	1959-76,85	04-05-74	3,300	77.8	35
352	04267600	Cold Brook near South Colton NY	St Lawrence	18.70	1	442935	745211	1962-76,85	03-29-63	768	41.1	15
353	04267700	Parkhurst Brook near Potsdam NY	St Lawrence	16.80	1	443911	745816	1959-77	04-05-74	1,200	71.4	60
354	04267800	Trout Brook at Allen Corners NY	St Lawrence	54.20	1	444734	750201	1959-86	04-05-74	3,350	61.8	80
355	04268200	Plum Brook near Grantville NY	St Lawrence	43.90	1	445246	745454	1959-68,71-99	03-30-63	1,920	43.7	100
356	04268700	St. Regis River at St. Regis Falls NY	Franklin	234.00	1	444021	743254	1958-68,85	12-29-84	4,800	20.5	20
357	04268720	Hopkinton Brook at Hopkinton NY	St Lawrence	20.00	1	444059	744158	1962-86	12-29-84	804	40.2	10
358	04268800	West Branch St. Regis River near Parishville NY	St Lawrence	171.00	1	443555	744415	1959-99	12-29-84	5,960	34.9	60
359	04269000	St. Regis River at Brasher Center NY	St Lawrence	612.00	1	445149	744645	1911-99	04-06-37	16,800	27.5	70
360	04269050	Allen Brook near Brasher Falls NY	St Lawrence	16.00	1	444807	744341	1962-86	12-09-80	1,270	79.4	30
361	04269100	Lawrence Brook near Moira NY	Franklin	25.70	1	445020	743546	1959-64,69-86	08-08-86	1,940	75.5	25
362	04269500	Deer River at Brasher Iron Works NY	St Lawrence	182.00	1	445332	744128	1913,59-80,85	01-17-13	9,700	53.3	>100
363	04270000	Salmon River at Chasm Falls NY	Franklin	132.00	1	444522	741309	1926-85,87-99	12-29-84	3,700	28.0	60
364	04270100	West Branch Deer Creek at Fort Covington Center NY	Franklin	32.40	1	445649	742851	1962-74,76-86	04-05-74	2,050	63.3	50
365	04270150	East Branch Deer Creek at Fort Covington Center NY	Franklin	23.90	1	445653	742750	1962-74,76-86	03-14-77	1,740	72.8	45
366	04270162	East Branch Little Salmon River near Skerry NY	Franklin	7.11	1	444713	742212	1978-93,98	06-20-78	240	33.8	11
367	04270200	Little Salmon River at Bombay NY	Franklin	92.20	1	445624	743326	1959-98	03-31-98	3,420	37.1	25
368	04270700	Trout River at Trout River NY	Franklin	107.00	1	445923	741756	1960-99	07-05-96	6,980	65.2	50
369	04270800	English River near Mooers Forks NY	Clinton	40.80	1	445832	733949	1960-69,71-79	03-15-74	2,000	49.0	40
370	04271815	Little Chazy River near Chazy NY	Clinton	50.30	1	445408	732456	1990-2001	11-10-96	2,750	54.7	100

Table 7. Location, drainage area, period of record, and maximum known discharge and recurrence interval for rural, unregulated streams in New York, excluding Long Island.—Continued

[Station locations shown in figure 2 as map numbers; mi², square miles; ° ' ", degrees, minutes, seconds; ft³/s, cubic feet per second; >, greater than]

Map number	Station number	Station name	County	Drainage area (mi²)	Hydrologic region	Latitude (°/'/")	Longitude (°/'/")	Water years of unregulated flow record *	Maximum known discharge and recurrence interval			
									Date	Discharge (ft³/s)	Peak runoff [(ft³/s)/mi²]	Recurrence interval (years)
371	04273500	Saranac River at Plattsburgh NY	Clinton	608.00	1	444054	732818	1928,44-99	11-09-96	14,400	23.7	>100
372	04273700	Salmon River at South Plattsburgh NY	Clinton	63.30	1	443824	732943	1960-86,90-99	11-09-96	4,200	66.4	90
373	04273800	Little Ausable River near Valcour NY	Clinton	67.80	1	443539	732948	1992-2001	06-27-98	7,210	106.3	>100
374	04274000	West Branch Ausable River near Lake Placid NY	Essex	116.00	1	441840	735500	1920-68,83-99	09-22-38	10,800	93.1	>100
375	04275000	East Branch Ausable River at Au Sable Forks NY	Essex	198.00	1	442620	734055	1925-99	11-09-96	23,900	120.7	>100
376	04275500	Ausable River near Au Sable Forks NY	Clinton	446.00	1	442705	733835	1911-68,90-99	11-09-96	37,400	83.9	>100
377	04276200	Bouquet River at New Russia NY	Essex	37.60	1	440951	733630	1949-80	11-26-79	6,400	170.2	>100
378	04276500	Bouquet River at Willsboro NY	Essex	270.00	1	442130	732350	1924-68,85-99	11-09-96	12,300	45.6	70
379	04276770	Mill Brook at Port Henry NY	Essex	27.00	1	440309	732847	1990-2000	01-19-96	1,290	47.8	10
380	04276842	Putnam Creek East of Crown Point Center NY	Essex	51.60	1	435633	732751	1990-2001	04-17-93	2,500	48.4	16
381	04278300	Northwest Bay Brook near Bolton Landing NY	Warren	22.00	1	433948	733614	1966-99	01-19-96	1,950	88.6	50
382	04279400	Poultney River Tributary at East Poultney VT	Rutland	1.13	1	433217	731236	1964-78,99	04-14-64	98	86.7	16
383	04280200	Mettawee River Tributary 2 at East Ruppert VT	Bennington	1.86	1	431616	730723	1963-74	03-27-63	130	69.9	10
384	04280300	Mettawee River Tributary near Pawlet VT	Rutland	2.95	1	431935	731020	1963-74	07-21-67	266	90.2	20
385	04280350	Mettawee River near Pawlet VT	Rutland	70.20	1	432214	731300	1985-01	12-17-00	7,080	100.9	50
386	04280450	Mettawee River near Middle Granville NY	Washington	167.00	1	432750	731705	1977,84,90-01	03-14-77	14,500	86.8	40
387	04292500	Lamoille River at East Georgia VT	Franklin	686.00	1	444045	730423	1930-99	04-18-82	23,700	34.5	60
388	04292700	Stone Bridge Brook near Georgia Plains VT	Franklin	8.45	1	444214	731055	1963-74,90-99	01-19-96	1,030	121.9	>100

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
1	01197500 2	Housatonic River near Great Barrington, MA [A]	282.00	86	2,700	3,130	3,700	5,340	6,600	8,410	9,920	11,600	13,400	16,200
					2,620	3,140	3,880	6,100	7,970	10,800	13,200	15,900	19,100	23,900
					2,700	3,130	3,710	5,400	6,740	8,740	10,400	12,300	14,400	17,700
2	01199000 2	Housatonic River at Falls Village, CT [A]	634.00	87	4,490	5,220	6,220	9,210	11,600	15,300	18,400	22,000	26,000	32,200
					4,500	5,300	6,430	9,690	12,300	16,200	19,500	23,200	27,400	33,700
					4,490	5,220	6,230	9,250	11,700	15,400	18,600	22,200	26,200	32,500
3	01199050 2	Salmon Creek at Lime Rock, CT [A]	29.40	38	348	440	576	1,080	1,570	2,450	3,340	4,470	5,930	8,490
					332	403	507	839	1,130	1,590	2,000	2,480	3,040	3,910
					346	436	569	1,040	1,480	2,220	2,950	3,840	4,970	6,910
4	01199400 2	Webatuck Creek near South Amenia, NY [B]	81.00	15	950	1,130	1,390	2,200	2,900	4,000	4,990	6,160	7,540	9,730
					900	1,080	1,340	2,130	2,780	3,760	4,590	5,540	6,620	8,260
					938	1,120	1,380	2,180	2,850	3,890	4,780	5,830	7,030	8,890
5	01199420 2	Tenmile River near Wassaic, NY [B]	120.00	16	1,600	1,940	2,390	3,600	4,490	5,690	6,640	7,650	8,710	10,200
					1,400	1,670	2,070	3,250	4,230	5,680	6,910	8,310	9,890	12,300
					1,550	1,880	2,320	3,490	4,390	5,690	6,770	8,000	9,350	11,400
6	01199477 2	Stony Brook near Dover Plains, NY	1.93	24	75	94	122	218	306	454	594	767	977	1,330
					58	73	94	160	217	302	376	459	552	693
					72	91	118	204	280	399	508	636	790	1,040
7	01200000 2	Tenmile River near Gaylordsville, CT [A]	203.00	67	1,830	2,290	2,940	5,070	6,940	9,950	12,700	16,000	19,900	26,200
					2,250	2,680	3,290	5,060	6,520	8,640	10,400	12,400	14,700	18,000
					1,860	2,310	2,960	5,070	6,880	9,730	12,300	15,300	18,800	24,300

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
8	01200500 2	Housatonic River at Gaylordsville, CT [A]	996.00	86	7,230	8,720	10,700	16,700	21,400	28,400	34,300	41,000	48,400	59,600
					6,710	7,840	9,450	14,000	17,600	22,800	27,100	32,000	37,400	45,600
					7,200	8,680	10,600	16,500	21,000	27,600	33,200	39,500	46,400	56,900
9	01208990 2	Saugatuck River near Redding, CT [A]	21.00	38	382	491	646	1,160	1,620	2,360	3,050	3,860	4,820	6,360
					331	410	525	889	1,210	1,690	2,130	2,630	3,210	4,120
					376	482	634	1,120	1,530	2,180	2,780	3,470	4,290	5,590
10	01209700 2	Norwalk River at South Wilton , CT [A]	30.00	33	669	855	1,120	2,030	2,850	4,200	5,460	6,970	8,790	11,800
					458	564	719	1,200	1,620	2,260	2,820	3,470	4,220	5,380
					642	822	1,070	1,880	2,560	3,630	4,610	5,750	7,130	9,370
11	01311992 1	Arbutus Pond Outlet near Newcomb, NY	1.22	11	14	17	20	28	34	42	47	53	59	68
					24	29	35	50	62	77	88	100	111	129
					15	19	22	34	43	55	64	74	83	96
12	01312000 1	Hudson River near Newcomb, NY	192.00	74	2,870	3,240	3,710	4,930	5,770	6,890	7,760	8,660	9,600	10,900
					3,260	3,840	4,570	6,500	7,840	9,540	10,800	12,200	13,400	15,400
					2,880	3,260	3,730	5,000	5,900	7,120	8,060	9,040	10,000	11,400
13	01313500 1	Cedar River below Chain Lakes near Indian Lake, NY	160.00	36	2,760	3,180	3,690	4,940	5,760	6,790	7,550	8,310	9,070	10,100
					2,200	2,550	2,970	4,100	4,880	5,860	6,580	7,410	8,110	9,230
					2,730	3,150	3,650	4,860	5,650	6,640	7,370	8,130	8,870	9,910
14	01314000 1	Hudson River at Gooley near Indian Lake, NY	419.00	52	6,360	7,210	8,200	10,500	12,000	13,700	14,900	16,100	17,300	18,800
					5,520	6,390	7,460	10,300	12,200	14,600	16,400	18,400	20,100	22,900
					6,330	7,180	8,170	10,500	12,000	13,800	15,100	16,400	17,700	19,500

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
15	01315500 1	Hudson River at North Creek, NY	792.00	92	10,000	11,500	13,300	17,600	20,500	24,000	26,700	29,300	31,900	35,400
					9,830	11,300	13,100	17,900	21,200	25,300	28,200	31,700	34,500	39,200
					10,000	11,500	13,300	17,600	20,500	24,100	26,800	29,500	32,100	35,800
16	01317000 1	Schroon River at Riverbank, NY	527.00	76	3,590	4,180	4,900	6,650	7,770	9,150	10,200	11,100	12,100	13,400
					4,660	5,370	6,220	8,460	9,980	11,900	13,300	14,900	16,200	18,400
					3,620	4,210	4,940	6,730	7,910	9,380	10,500	11,500	12,600	14,000
17	01318500 1	Hudson River at Hadley, NY	1,664.00	78	15,300	17,600	20,300	26,800	31,100	36,300	40,200	44,000	47,800	52,900
					14,800	16,900	19,400	25,800	30,100	35,600	39,600	44,200	47,900	54,000
					15,300	17,600	20,300	26,800	31,000	36,200	40,100	44,000	47,800	53,000
18	01319000 1	East Branch Sacandaga River at Griffin, NY	114.00	45	2,940	3,470	4,160	5,960	7,230	8,930	10,300	11,600	13,100	15,100
					2,030	2,370	2,800	3,950	4,750	5,780	6,530	7,400	8,140	9,320
					2,900	3,420	4,100	5,810	6,980	8,510	9,730	10,900	12,200	14,100
19	01319800 1	West Branch Sacandaga River at Arietta, NY	28.90	23	886	1,010	1,170	1,520	1,740	1,990	2,180	2,350	2,520	2,740
					718	834	981	1,370	1,650	2,000	2,270	2,570	2,830	3,250
					872	996	1,150	1,500	1,720	1,990	2,200	2,410	2,610	2,890
20	01319950 1	Sand Lake Outlet near Piseco, NY	6.62	23	187	226	274	393	472	570	643	714	785	879
					178	206	240	334	400	486	550	622	687	790
					186	224	271	385	459	551	619	689	757	853
21	01321000 1	Sacandaga River near Hope, NY	491.00	88	9,910	11,300	13,100	17,600	20,800	24,900	28,200	31,500	34,900	39,700
					8,050	9,250	10,700	14,600	17,200	20,600	23,100	25,900	28,300	32,200
					9,860	11,300	13,000	17,500	20,600	24,600	27,800	31,000	34,300	38,900

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
22	01325000 1	Sacandaga River at Stewarts Bridge near Hadley, NY [D]	1,055.00	22	12,200	13,700	15,600	20,400	23,800	28,200	31,600	35,100	38,800	43,900
					10,100	11,300	12,700	16,400	18,900	22,200	24,500	27,200	29,400	33,000
					12,000	13,500	15,300	19,800	22,900	26,800	29,700	32,800	36,000	40,500
23	01326500 1	Hudson River at Spier Falls, NY [D]	2,779.00	23	29,500	32,100	35,400	44,000	50,000	58,100	64,400	70,900	77,800	87,500
					24,800	28,100	31,900	42,000	48,700	57,200	63,300	70,500	76,200	85,700
					29,100	31,800	35,100	43,700	49,800	57,900	64,100	70,800	77,300	87,000
24	01328000 1	Bond Creek at Dunham Basin, NY	14.10	35	507	587	685	926	1,080	1,280	1,430	1,570	1,720	1,920
					345	418	513	775	966	1,220	1,410	1,630	1,840	2,160
					497	578	676	912	1,070	1,270	1,430	1,580	1,750	1,970
25	01328758 1	Pecks Creek at Fort Miller, NY	2.38	12	119	133	149	189	216	249	274	299	324	358
					84	103	127	197	250	321	377	440	500	592
					114	128	146	191	226	275	315	358	401	463
26	01329000 1	Batten Kill at Arlington, VT [A]	152.00	56	2,390	2,770	3,270	4,680	5,770	7,310	8,590	10,000	11,500	13,800
					4,060	4,700	5,490	7,610	9,120	11,100	12,500	14,200	15,700	18,000
					2,450	2,840	3,350	4,860	6,050	7,730	9,080	10,600	12,100	14,400
27	01329154 1	Steele Brook at Shushan, NY	2.85	21	42	51	65	102	131	173	207	244	285	344
					89	108	132	200	251	318	370	429	483	567
					46	56	71	117	155	209	252	299	346	415
28	01329500 1	Batten Kill at Battenville, NY	394.00	61	4,270	4,990	5,950	8,750	11,000	14,200	16,900	19,900	23,300	28,400
					6,680	7,720	9,000	12,400	14,800	17,800	20,100	22,700	24,900	28,500
					4,350	5,080	6,050	8,950	11,300	14,600	17,300	20,300	23,500	28,400

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
29	01329780 1	Sessions Brook at Porters Corners, NY	1.04	19	18	22	27	43	55	73	89	106	126	155
					25	30	37	55	69	87	101	116	130	151
					19	23	28	45	58	77	92	109	127	154
30	01329900 1	Glowegee Creek Tributary at Mosherville, NY	1.42	19	58	67	79	109	131	158	180	202	225	256
					36	44	54	81	102	129	150	173	194	227
					56	65	76	105	124	150	171	193	215	246
31	01330000 1	Glowegee Creek at West Milton, NY [B]	26.00	24	513	600	713	1,020	1,240	1,550	1,790	2,050	2,330	2,720
					443	529	640	941	1,150	1,430	1,630	1,860	2,070	2,390
					507	595	707	1,010	1,220	1,520	1,750	2,000	2,260	2,620
32	01330500 1	Kayaderosseras Creek near West Milton, NY	84.20	70	1,190	1,370	1,600	2,260	2,760	3,470	4,070	4,710	5,420	6,460
					1,280	1,520	1,830	2,650	3,220	3,950	4,490	5,100	5,630	6,470
					1,190	1,370	1,610	2,280	2,790	3,510	4,110	4,750	5,440	6,460
33	01330880 1	Saratoga Lake Tributary near Bemis Heights, NY	2.98	25	63	75	92	150	202	286	366	462	578	769
					54	66	82	125	156	197	228	262	294	343
					62	74	91	147	194	267	332	410	500	649
34	01331400 1	Dry Brook near Adams, MA [A]	7.67	11	358	406	465	616	719	854	957	1,060	1,170	1,330
					274	320	379	539	655	808	925	1,060	1,180	1,370
					344	393	451	597	699	836	944	1,060	1,170	1,350
35	01331500 1	Hoosic River at Adams, MA [A]	46.70	68	785	924	1,110	1,690	2,180	2,910	3,550	4,290	5,140	6,470
					1,330	1,550	1,830	2,570	3,100	3,790	4,300	4,890	5,420	6,250
					802	942	1,130	1,730	2,240	2,990	3,630	4,360	5,170	6,440

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
36	01332000 1	North Branch Hoosic River at North Adams, MA [A]	40.90	59	1,560	1,910	2,390	3,900	5,190	7,200	9,010	11,100	13,600	17,400
					1,320	1,530	1,800	2,510	3,020	3,690	4,190	4,770	5,270	6,080
					1,550	1,900	2,370	3,820	5,020	6,830	8,430	10,300	12,500	15,800
37	01332500 1	Hoosic River near Williamstown, MA [A]	126.00	59	2,730	3,190	3,820	5,720	7,260	9,570	11,600	13,900	16,500	20,400
					3,100	3,560	4,120	5,630	6,700	8,090	9,130	10,300	11,400	13,000
					2,740	3,200	3,830	5,710	7,220	9,420	11,300	13,400	15,800	19,300
38	01333000 1	Green River at Williamstown, MA [A]	42.60	49	1,040	1,220	1,460	2,130	2,640	3,370	3,980	4,640	5,370	6,440
					1,300	1,530	1,820	2,610	3,180	3,920	4,480	5,130	5,700	6,600
					1,050	1,230	1,470	2,160	2,690	3,440	4,050	4,710	5,420	6,470
39	01333367 1	Little Hoosic River at Cherryplain, NY	2.22	10	96	105	116	141	158	179	194	210	226	247
					74	88	107	158	195	246	284	328	367	428
					92	102	114	146	171	206	234	265	294	337
40	01333500 1	Little Hoosic River at Petersburg, NY	56.10	48	1,400	1,650	1,990	2,990	3,790	4,980	6,010	7,160	8,460	10,400
					1,390	1,660	2,010	2,950	3,630	4,510	5,170	5,930	6,600	7,650
					1,400	1,650	1,990	2,990	3,770	4,920	5,890	6,970	8,160	9,930
41	01333900 1	Paran Creek near South Shaftsbury, VT [A]	2.38	15	47	59	75	123	160	212	255	301	351	424
					108	128	154	226	279	351	407	471	530	620
					54	67	85	143	190	256	308	364	420	502
42	01334000 1	Walloomsac River near North Bennington, VT [A]	111.00	69	2,270	2,720	3,300	4,870	5,990	7,510	8,710	9,970	11,300	13,200
					3,380	3,960	4,700	6,690	8,100	9,950	11,300	12,900	14,300	16,600
					2,300	2,750	3,340	4,960	6,140	7,730	8,980	10,300	11,700	13,600

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
43	01334500 1	Hoosic River near Eagle Bridge, NY	510.00	88	8,250	9,580	11,400	16,900	21,500	28,400	34,500	41,400	49,400	61,800
					8,670	9,870	11,300	15,100	17,800	21,300	23,900	26,900	29,400	33,500
					8,260	9,590	11,400	16,800	21,300	27,900	33,600	40,100	47,500	59,000
44	01335500 1	Hudson River at Mechanicville, NY [AD]	4,500.00	42	32,400	35,600	39,800	52,000	61,300	74,600	85,700	97,900	111,000	131,000
					36,200	40,500	45,400	58,500	67,200	78,400	86,400	96,100	104,000	116,000
					32,600	35,800	40,100	52,500	61,900	75,100	85,800	97,600	110,000	128,000
45	01342730 1	Steele Creek at Ilion, NY	26.20	19	418	560	753	1,290	1,680	2,200	2,600	3,010	3,420	3,980
					939	1,130	1,370	2,040	2,530	3,190	3,690	4,270	4,800	5,620
					472	615	814	1,410	1,860	2,460	2,920	3,410	3,880	4,540
46	01342797 1	Vly Brook near Morehouseville, NY	3.28	10	116	142	174	262	325	409	474	542	613	712
					90	104	122	171	205	251	285	323	357	411
					111	136	165	238	285	344	390	439	489	563
47	01342800 1	West Canada Creek at Nobleboro, NY	193.00	32	6,770	7,550	8,480	10,800	12,300	14,200	15,600	17,000	18,400	20,300
					4,320	4,930	5,670	7,650	9,020	10,800	12,100	13,600	14,900	16,900
					6,610	7,400	8,310	10,500	11,800	13,600	14,900	16,300	17,600	19,500
48	01346820 1	Mohawk River Tributary at Indian Castle, NY	1.36	13	61	70	81	112	135	166	191	218	247	288
					52	62	77	118	148	190	222	258	293	345
					60	69	81	114	139	174	203	234	266	312
49	01347460 1	Spruce Lake Tributary near Salisbury Center, NY	0.54	13	31	36	43	61	72	87	98	110	121	137
					19	22	27	39	48	60	69	80	90	104
					29	34	41	56	65	78	87	98	108	123

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
50	01348000 1	East Canada Creek at East Creek, NY [B]	289.00	75	6,750	7,590	8,630	11,300	13,200	15,600	17,400	19,400	21,300	24,100
					5,740	6,610	7,680	10,500	12,400	14,900	16,800	18,900	20,700	23,600
					6,720	7,560	8,600	11,300	13,100	15,500	17,300	19,300	21,200	24,000
51	01348420 1	North Creek near Ephratah, NY	6.52	26	169	204	248	364	443	546	624	704	785	896
					144	172	210	311	384	480	552	632	705	818
					167	202	245	357	433	532	607	686	764	875
52	01349000 1	Otsquago Creek at Fort Plain, NY	61.00	40	3,170	3,830	4,660	6,840	8,360	10,300	11,900	13,400	15,000	17,200
					2,510	3,030	3,700	5,550	6,920	8,770	10,200	11,900	13,400	15,800
					3,140	3,790	4,610	6,730	8,200	10,100	11,600	13,100	14,700	16,900
53	01349150 1	Canajoharie Creek near Canajoharie, NY	59.70	10	1,930	2,240	2,610	3,520	4,100	4,810	5,340	5,850	6,370	7,040
					1,900	2,270	2,740	4,020	4,960	6,220	7,190	8,310	9,320	10,900
					1,920	2,250	2,630	3,650	4,390	5,390	6,160	7,000	7,800	8,950
54	01349360 1	Van Wie Creek Tributary near Randall, NY	1.00	12	62	73	89	132	164	208	244	282	324	383
					36	44	55	85	108	139	163	191	217	256
					58	69	84	121	147	183	212	243	277	326
55	01349700 3	East Kill near Jewett Center, NY [B]	35.60	10	1,980	2,650	3,620	6,730	9,370	13,400	16,900	20,900	25,400	32,200
					1,440	1,800	2,340	3,880	5,160	6,990	8,630	10,400	12,300	15,000
					1,800	2,260	3,170	5,220	6,590	8,380	9,920	11,600	13,500	16,200
56	01350000 3	Schoharie Creek at Prattsville, NY	237.00	90	8,430	10,900	14,500	25,200	33,900	46,800	57,700	69,900	83,400	104,000
					8,130	10,100	13,200	21,800	28,900	38,700	47,500	57,000	67,600	82,400
					8,410	10,800	14,400	24,800	33,000	44,500	53,900	64,000	75,100	91,300

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
57	01350080 3	Manor Kill at West Conesville near Gilboa, NY	32.40	13	899	1,180	1,570	2,870	3,990	5,750	7,320	9,150	11,300	14,600
					803	1,030	1,390	2,480	3,410	4,780	6,040	7,430	9,000	11,300
					872	1,120	1,520	2,690	3,640	5,040	6,290	7,680	9,260	11,600
58	01350120 3	Platter Kill at Gilboa, NY	10.90	24	124	171	240	489	724	1,120	1,490	1,950	2,510	3,410
					231	301	412	756	1,060	1,520	1,950	2,440	2,990	3,790
					143	204	272	574	874	1,360	1,810	2,320	2,900	3,730
59	01350140 3	Mine Kill near North Blenheim, NY	16.20	25	544	677	850	1,330	1,670	2,140	2,520	2,900	3,310	3,880
					454	577	758	1,300	1,750	2,410	3,000	3,630	4,340	5,310
					529	652	834	1,320	1,700	2,300	2,850	3,450	4,140	5,080
60	01350900 3	Beaverdam Creek near Knox, NY	6.91	23	221	281	365	630	853	1,200	1,500	1,850	2,240	2,860
					140	182	246	443	616	877	1,120	1,380	1,680	2,100
					207	255	343	569	745	1,000	1,230	1,490	1,780	2,220
61	01351000 3	Fox Creek at West Berne, NY [B]	67.20	20	1,950	2,410	3,040	4,760	6,040	7,790	9,190	10,700	12,200	14,500
					1,310	1,680	2,250	3,990	5,450	7,570	9,470	11,500	13,900	17,200
					1,820	2,190	2,870	4,480	5,750	7,650	9,390	11,300	13,600	16,800
62	01354300 1	Plotter Kill at Rynex Corners, NY	3.70	26	165	196	237	351	439	564	668	780	904	1,090
					79	97	120	186	233	296	344	398	447	524
					159	189	228	331	405	508	591	684	783	935
63	01355405 1	Indian Kill near Glenville Center, NY	3.11	17	67	79	95	142	180	235	282	334	393	481
					70	86	107	167	211	269	313	363	409	479
					67	80	96	147	187	245	292	344	398	480

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
64	01358500 2	Poesten Kill near Troy, NY	89.40	45	1,620	1,860	2,210	3,370	4,420	6,140	7,760	9,720	12,100	16,100
					1,200	1,430	1,760	2,750	3,600	4,880	5,980	7,230	8,630	10,700
					1,580	1,820	2,170	3,280	4,270	5,850	7,300	9,020	11,100	14,400
65	01359519 2	Normans Kill near Westmere, NY	131.00	25	2,730	3,230	3,880	5,690	7,050	8,940	10,500	12,200	13,900	16,600
					2,110	2,500	3,050	4,670	6,000	7,950	9,560	11,400	13,300	16,200
					2,630	3,120	3,760	5,460	6,750	8,590	10,100	11,900	13,600	16,400
66	01359528 2	Normans Kill at Albany, NY	168.00	26	3,450	4,120	4,990	7,470	9,370	12,100	14,300	16,700	19,400	23,200
					2,410	2,840	3,440	5,190	6,600	8,610	10,300	12,100	14,100	16,900
					3,290	3,940	4,770	6,970	8,600	10,900	12,800	14,800	17,200	20,500
67	01359750 2	Moordener Kill at Castleton-on-Hudson, NY	32.60	38	475	560	670	966	1,180	1,470	1,700	1,940	2,190	2,550
					564	672	824	1,290	1,680	2,260	2,750	3,290	3,890	4,790
					485	572	686	1,020	1,280	1,680	2,010	2,370	2,750	3,320
68	01359902 2	Coeymans Creek near Selkirk, NY	35.10	10	1,380	1,530	1,720	2,260	2,670	3,260	3,750	4,290	4,880	5,760
					987	1,210	1,530	2,500	3,320	4,520	5,530	6,660	7,910	9,760
					1,250	1,430	1,660	2,360	3,000	3,990	4,840	5,800	6,860	8,430
69	01359924 2	Hannacrois Creek near New Baltimore, NY	61.60	10	891	1,010	1,170	1,630	1,990	2,520	2,960	3,460	4,020	4,860
					930	1,120	1,380	2,200	2,900	3,960	4,870	5,900	7,070	8,840
					904	1,040	1,230	1,870	2,450	3,350	4,130	5,020	6,010	7,520
70	01360640 2	Valatie Kill near Nassau, NY	9.48	10	262	315	387	600	768	1,010	1,220	1,450	1,710	2,090
					219	265	332	538	712	970	1,190	1,440	1,710	2,120
					248	300	371	574	740	987	1,200	1,440	1,710	2,110

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
71	01361000 2	Kinderhook Creek at Rossman, NY	329.00	54	3,820	4,520	5,490	8,670	11,500	15,900	20,000	24,900	30,800	40,200
					4,270	5,000	6,030	9,020	11,500	15,000	17,900	21,200	24,700	29,900
					3,860	4,560	5,530	8,710	11,500	15,700	19,500	24,000	29,200	37,400
72	01361200 2	Claverack Creek at Claverack, NY	60.60	24	1,120	1,410	1,800	2,960	3,880	5,230	6,380	7,650	9,060	11,200
					1,100	1,310	1,600	2,510	3,270	4,400	5,360	6,420	7,610	9,350
					1,120	1,390	1,770	2,860	3,700	4,930	5,980	7,130	8,420	10,400
73	01361453 2	Catskill Creek Tributary at Franklinton, NY	3.61	19	100	124	159	272	370	527	670	840	1,040	1,360
					124	153	194	320	427	582	714	858	1,020	1,250
					105	130	166	285	390	550	690	849	1,030	1,300
74	01361500 2	Catskill Creek at Oak Hill, NY	98.00	81	2,470	3,150	4,070	6,710	8,720	11,600	13,900	16,300	19,000	22,800
					2,170	2,610	3,230	5,100	6,680	9,000	11,000	13,100	15,500	19,000
					2,450	3,120	4,030	6,580	8,490	11,200	13,400	15,700	18,300	22,000
75	01361570 2	Tenmile Creek at Oak Hill, NY [B]	35.30	10	727	875	1,080	1,730	2,280	3,130	3,890	4,780	5,810	7,430
					753	918	1,150	1,890	2,510	3,450	4,260	5,170	6,190	7,730
					735	888	1,100	1,800	2,400	3,310	4,120	5,030	6,060	7,630
76	01361900 2	Shingle Kill at Cairo, NY	13.90	20	657	807	1,020	1,710	2,310	3,270	4,150	5,200	6,450	8,450
					552	701	919	1,600	2,190	3,060	3,820	4,670	5,620	7,070
					637	788	1,000	1,680	2,270	3,190	4,000	4,950	6,050	7,760
77	01362100 2	Roeliff Jansen Kill near Hillsdale, NY	27.50	42	521	611	736	1,130	1,460	1,990	2,460	3,010	3,650	4,680
					722	890	1,130	1,870	2,500	3,420	4,210	5,100	6,090	7,580
					542	637	773	1,240	1,660	2,340	2,940	3,630	4,410	5,620

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
78	01362197 2	Bushnellsville Creek at Shandaken, NY	11.40	26	195	261	359	695	1,000	1,510	1,980	2,540	3,210	4,290
					510	653	863	1,520	2,090	2,930	3,660	4,480	5,400	6,790
					244	317	432	876	1,300	2,000	2,620	3,320	4,130	5,380
79	01362200 2	Esopus Creek at Allaben, NY	63.70	42	1,840	2,540	3,590	7,200	10,500	15,800	20,600	26,400	33,100	43,800
					2,670	3,410	4,470	7,800	10,600	14,900	18,500	22,600	27,200	34,100
					1,930	2,620	3,670	7,290	10,500	15,600	20,000	25,300	31,300	40,700
80	01362500 2	Esopus Creek at Coldbrook, NY	192.00	74	7,550	10,100	13,800	26,000	36,800	53,900	69,400	87,500	109,000	142,000
					6,500	8,160	10,500	17,700	23,800	32,800	40,400	48,900	58,400	72,500
					7,490	9,990	13,600	25,300	35,200	50,600	64,300	80,100	98,700	127,000
81	01365000 2	Rondout Creek near Lowes Corners, NY	38.30	64	1,670	2,110	2,690	4,340	5,570	7,260	8,630	10,100	11,600	13,800
					1,670	2,140	2,830	4,980	6,820	9,580	12,000	14,600	17,700	22,200
					1,670	2,110	2,700	4,410	5,740	7,670	9,300	11,100	13,000	15,800
82	01365500 2	Chestnut Creek at Grahamsville, NY	20.90	50	698	905	1,200	2,110	2,870	4,030	5,030	6,170	7,460	9,410
					643	807	1,040	1,790	2,420	3,380	4,210	5,150	6,200	7,810
					693	898	1,190	2,070	2,790	3,890	4,830	5,900	7,110	8,950
83	01366500 2	Rondout Creek near Lackawack, NY [D]	100.00	19	2,830	3,600	4,700	8,340	11,600	16,700	21,400	27,000	33,600	44,200
					2,970	3,710	4,780	8,070	10,900	15,000	18,500	22,500	27,000	33,700
					2,860	3,620	4,720	8,270	11,400	16,000	20,100	24,800	30,300	38,800
84	01366650 2	Sandburg Creek at Ellenville, NY	52.80	21	1,160	1,470	1,880	3,010	3,830	4,930	5,800	6,700	7,640	8,950
					1,320	1,630	2,080	3,450	4,610	6,330	7,810	9,480	11,300	14,200
					1,190	1,500	1,910	3,120	4,080	5,480	6,660	7,970	9,370	11,500

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
85	01367500 2	Rondout Creek at Rosendale, NY [D]	383.00	28	8,980	10,400	12,300	17,800	22,000	28,100	33,200	38,800	45,100	54,400
					6,550	7,930	9,890	15,600	20,100	26,700	32,200	38,300	45,000	55,000
					8,620	10,100	12,000	17,300	21,500	27,600	32,800	38,600	45,100	54,700
86	01368000 2	Wallkill River near Unionville, NY [A]	140.00	49	1,290	1,450	1,680	2,370	2,930	3,780	4,520	5,370	6,340	7,830
					1,560	1,870	2,300	3,600	4,690	6,310	7,700	9,270	11,000	13,700
					1,310	1,480	1,730	2,530	3,230	4,330	5,300	6,400	7,640	9,540
87	01368500 2	Rutgers Creek at Gardnerville, NY	59.70	36	1,140	1,300	1,530	2,270	2,910	3,920	4,850	5,940	7,240	9,330
					988	1,190	1,470	2,330	3,040	4,080	4,960	5,940	7,040	8,670
					1,120	1,290	1,520	2,280	2,940	3,960	4,880	5,940	7,170	9,090
88	01369000 2	Pochuck Creek near Pine Island, NY [A]	98.00	40	875	1,010	1,190	1,710	2,120	2,710	3,210	3,760	4,380	5,300
					1,160	1,390	1,730	2,740	3,610	4,900	6,020	7,300	8,750	11,000
					906	1,050	1,240	1,870	2,420	3,270	4,010	4,840	5,780	7,210
89	01369500 2	Quaker Creek at Florida, NY	9.74	42	258	306	369	550	691	892	1,060	1,250	1,450	1,750
					147	178	224	366	490	679	845	1,030	1,250	1,590
					246	294	355	523	652	840	1,000	1,190	1,390	1,700
90	01370000 2	Wallkill River at Pellets Island, NY [A]	380.00	54	3,050	3,470	4,010	5,540	6,700	8,350	9,710	11,200	12,800	15,200
					3,840	4,520	5,490	8,300	10,600	14,000	16,800	19,900	23,400	28,600
					3,110	3,550	4,120	5,870	7,310	9,490	11,300	13,300	15,500	18,800
91	01370500 2	Wallkill River near Phillipsburg, NY [A]	406.00	29	3,970	4,470	5,090	6,680	7,780	9,230	10,400	11,500	12,700	14,400
					3,900	4,580	5,540	8,290	10,500	13,700	16,400	19,300	22,600	27,500
					3,960	4,480	5,150	7,000	8,480	10,700	12,500	14,400	16,600	19,800

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
92	01371000 2	Shawangunk Kill at Pine Bush, NY	104.00	26	2,110	2,610	3,260	5,000	6,250	7,910	9,210	10,600	11,900	13,900
					1,760	2,110	2,610	4,080	5,270	7,000	8,440	10,000	11,800	14,400
					2,060	2,540	3,170	4,800	5,980	7,600	8,920	10,400	11,900	14,100
93	01371400 2	Shawangunk Kill at Ganahgote, NY [B]	147.00	10	2,900	3,660	4,690	7,520	9,610	12,500	14,700	17,100	19,600	23,100
					2,250	2,680	3,300	5,070	6,490	8,530	10,200	12,100	14,100	17,100
					2,690	3,370	4,270	6,490	8,040	10,200	11,900	13,900	16,000	19,100
94	01371500 2	Wallkill River at Gardiner, NY [A]	695.00	75	7,950	9,100	10,600	14,600	17,600	21,700	25,000	28,500	32,300	37,800
					6,380	7,430	8,900	13,000	16,300	21,000	24,700	28,900	33,600	40,300
					7,860	9,010	10,500	14,500	17,400	21,600	24,900	28,600	32,600	38,300
95	01372040 2	Crum Elbow Creek at Hyde Park, NY	17.30	17	157	195	246	405	536	734	907	1,100	1,330	1,670
					279	335	416	662	869	1,180	1,440	1,730	2,060	2,550
					184	223	281	482	660	932	1,160	1,420	1,710	2,150
96	01372200 2	Wappinger Creek near Clinton Corners, NY [B]	92.40	26	935	1,150	1,480	2,630	3,730	5,630	7,510	9,890	12,900	18,000
					1,280	1,520	1,870	2,890	3,720	4,940	5,960	7,090	8,350	10,200
					989	1,200	1,540	2,690	3,730	5,390	6,920	8,760	11,000	14,600
97	01372300 2	Little Wappinger Creek at Salt Point, NY [B]	32.90	19	318	395	504	845	1,130	1,580	1,980	2,430	2,960	3,790
					512	617	766	1,220	1,600	2,170	2,650	3,190	3,800	4,720
					357	436	553	949	1,290	1,830	2,280	2,800	3,380	4,270
98	01372500 2	Wappinger Creek near Wappingers Falls, NY	181.00	71	1,700	2,100	2,690	4,740	6,650	9,890	13,000	17,000	21,800	30,000
					2,110	2,490	3,020	4,550	5,780	7,550	9,000	10,600	12,400	15,000
					1,730	2,120	2,710	4,720	6,540	9,510	12,300	15,700	19,800	26,700

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
99	01372800 2	Fishkill Creek at Hopewell Junction, NY	57.30	30	520	662	862	1,500	2,030	2,860	3,600	4,450	5,430	6,940
					818	984	1,220	1,940	2,550	3,440	4,210	5,070	6,050	7,520
					561	702	908	1,590	2,160	3,040	3,810	4,680	5,670	7,170
100	01373500 2	Fishkill Creek at Beacon, NY	190.00	24	1,450	1,760	2,220	3,740	5,120	7,390	9,530	12,100	15,300	20,500
					2,210	2,630	3,220	4,950	6,370	8,440	10,200	12,100	14,300	17,500
					1,580	1,890	2,370	4,020	5,490	7,770	9,800	12,100	14,900	19,100
101	01373690 2	Woodbury Creek near Highland Mills, NY	11.20	13	253	355	511	1,070	1,590	2,450	3,260	4,230	5,390	7,250
					271	340	441	762	1,040	1,470	1,840	2,270	2,770	3,530
					258	352	493	959	1,350	1,950	2,480	3,100	3,840	4,990
102	01374130 2	Canopus Creek at Oscawana Corners, NY	8.30	12	165	192	226	316	379	464	530	598	670	770
					198	248	322	555	758	1,070	1,340	1,650	2,000	2,550
					174	207	252	407	552	786	990	1,220	1,480	1,880
103	01374250 2	Peekskill Hollow Creek at Tompkins Corners, NY	14.90	25	218	282	374	678	948	1,380	1,770	2,240	2,790	3,670
					253	313	402	684	932	1,310	1,650	2,050	2,500	3,210
					224	287	378	680	943	1,360	1,720	2,160	2,670	3,460
104	01374440 2	Cedar Pond Brook at Stony Point, NY	17.30	14	444	559	725	1,290	1,810	2,670	3,490	4,480	5,690	7,690
					429	538	698	1,210	1,650	2,320	2,920	3,600	4,380	5,580
					440	554	719	1,260	1,740	2,500	3,190	3,990	4,940	6,450
105	01384500 2	Ringwood Creek near Wanaque, NJ [A]	19.10	57	273	332	416	696	947	1,360	1,740	2,210	2,770	3,690
					311	385	494	839	1,140	1,610	2,020	2,500	3,050	3,920
					276	336	421	712	976	1,410	1,800	2,280	2,840	3,750

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
106	01386000 2	West Brook near Wanaque, NJ [A]	11.80	43	363	444	552	857	1,090	1,420	1,690	1,980	2,290	2,750
					404	512	669	1,170	1,590	2,230	2,790	3,420	4,140	5,230
					367	451	563	903	1,190	1,610	1,990	2,400	2,850	3,540
107	01387250 2	Ramapo River at Sloatsburg, NY	60.10	10	1,000	1,230	1,550	2,600	3,510	4,950	6,270	7,830	9,680	12,600
					979	1,200	1,530	2,540	3,400	4,700	5,840	7,140	8,620	10,900
					993	1,220	1,540	2,570	3,450	4,810	6,010	7,390	8,990	11,500
108	01387300 2	Stony Brook at Sloatsburg, NY [B]	18.20	10	398	492	623	1,030	1,370	1,900	2,360	2,900	3,510	4,460
					323	403	520	893	1,220	1,730	2,190	2,710	3,330	4,290
					374	465	591	972	1,290	1,800	2,260	2,780	3,390	4,350
109	01387350 2	Nakoma Brook at Sloatsburg, NY	5.40	19	93	119	157	285	401	591	768	981	1,240	1,650
					95	119	155	269	369	525	666	828	1,020	1,320
					93	119	157	281	390	563	722	908	1,130	1,480
110	01387400 2	Ramapo River at Ramapo, NY [B]	86.90	20	1,440	1,780	2,270	3,850	5,250	7,490	9,560	12,000	14,900	19,700
					1,290	1,580	2,000	3,280	4,370	6,010	7,430	9,050	10,900	13,700
					1,410	1,740	2,220	3,700	4,950	6,890	8,620	10,600	13,000	16,700
111	01387410 2	Torne Brook at Ramapo, NY	2.60	40	187	244	326	600	842	1,230	1,580	2,000	2,490	3,260
					122	157	208	371	510	716	896	1,100	1,320	1,660
					180	235	314	564	775	1,100	1,390	1,730	2,110	2,720
112	01387420 2	Ramapo River at Suffern, NY [B]	93.00	20	1,600	1,980	2,530	4,330	5,920	8,500	10,900	13,700	17,100	22,600
					1,400	1,710	2,160	3,530	4,690	6,430	7,930	9,650	11,600	14,600
					1,560	1,930	2,460	4,120	5,510	7,660	9,590	11,800	14,400	18,600

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
113	01387450 2	Mahwah River near Suffern, NY	12.30	38	356	442	561	926	1,220	1,670	2,060	2,500	3,000	3,760
					327	412	536	929	1,270	1,780	2,230	2,750	3,330	4,240
					352	439	559	926	1,230	1,700	2,110	2,580	3,110	3,930
114	01387500 2	Ramapo River near Mahwah, NJ [A]	120.00	88	1,820	2,260	2,900	5,040	6,960	10,100	13,000	16,500	20,800	27,700
					1,850	2,260	2,850	4,640	6,150	8,390	10,300	12,500	15,000	18,800
					1,820	2,260	2,900	5,010	6,880	9,870	12,600	15,800	19,800	26,000
115	01413500 3	East Branch Delaware River at Margaretville, NY	163.00	63	3,750	4,680	5,960	9,810	12,900	17,400	21,300	25,600	30,400	37,600
					5,300	6,550	8,410	13,600	17,900	23,700	28,900	34,400	40,400	48,800
					3,870	4,900	6,150	10,400	14,100	19,700	24,800	30,400	36,600	45,100
116	01414000 3	Platte Kill at Dunraven, NY	34.90	31	1,030	1,250	1,560	2,440	3,140	4,170	5,040	6,000	7,070	8,670
					1,050	1,320	1,700	2,800	3,710	4,970	6,060	7,210	8,460	10,200
					1,030	1,260	1,580	2,540	3,360	4,600	5,690	6,860	8,130	9,900
117	01414500 3	Mill Brook near Dunraven, NY	25.20	63	922	1,150	1,440	2,320	3,000	3,980	4,800	5,700	6,680	8,130
					992	1,230	1,570	2,540	3,330	4,430	5,390	6,380	7,460	8,920
					928	1,160	1,450	2,350	3,080	4,140	5,070	6,070	7,160	8,660
118	01415000 3	Tremper Kill near Andes, NY	33.20	62	830	1,040	1,330	2,120	2,730	3,560	4,230	4,950	5,720	6,810
					949	1,190	1,510	2,480	3,270	4,350	5,270	6,230	7,270	8,680
					839	1,060	1,340	2,180	2,860	3,850	4,720	5,660	6,680	8,070
119	01415500 3	Terry Clove Kill near Pepacton, NY	13.60	26	464	575	728	1,210	1,610	2,230	2,780	3,410	4,140	5,280
					417	519	653	1,050	1,380	1,820	2,200	2,580	3,000	3,540
					457	561	715	1,160	1,510	1,990	2,390	2,790	3,230	3,830

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
120	01417000 3	East Branch Delaware River at Downsville, NY [D]	372.00	13	8,040	9,820	12,200	19,300	24,900	33,000	39,900	47,500	55,900	68,400
					9,410	11,500	14,500	23,100	29,800	38,900	46,700	55,000	64,000	76,400
					8,430	10,500	12,900	21,100	27,800	37,300	45,400	53,900	63,100	75,700
121	01417185 3	Campbell Brook Tributary near Downsville, NY	0.41	12	12	15	20	36	48	67	82	99	118	145
					13	17	21	34	45	61	75	89	104	124
					12	16	20	35	46	62	76	90	105	125
122	01417500 3	East Branch Delaware River at Harvard, NY [D]	458.00	20	9,370	11,500	14,400	22,500	28,600	37,400	44,500	52,200	60,600	72,800
					10,400	12,700	15,800	24,600	31,600	40,800	48,800	57,100	66,100	78,500
					9,580	11,900	14,700	23,300	30,100	39,600	47,600	56,100	65,200	77,700
123	01418000 3	Beaver Kill near Turnwood, NY [B]	40.80	11	1,790	2,230	2,820	4,500	5,770	7,560	9,020	10,600	12,300	14,700
					2,040	2,480	3,090	4,760	6,080	7,850	9,340	10,900	12,500	14,600
					1,870	2,340	2,910	4,630	5,970	7,780	9,290	10,900	12,500	14,600
124	01418500 3	Beaver Kill at Craigie Clair, NY	81.90	40	2,680	3,300	4,140	6,510	8,330	10,900	13,000	15,300	17,700	21,300
					3,310	4,030	4,990	7,700	9,820	12,600	15,000	17,300	19,900	23,200
					2,750	3,430	4,240	6,770	8,820	11,700	14,200	16,600	19,300	22,700
125	01419500 3	Willowemoc Creek near Livingston, Manor, NY	62.60	37	2,090	2,560	3,200	5,100	6,610	8,830	10,700	12,800	15,200	18,700
					2,640	3,230	4,020	6,240	7,980	10,300	12,300	14,300	16,400	19,200
					2,160	2,680	3,300	5,370	7,080	9,560	11,700	13,800	16,100	19,100
126	01420000 3	Little Beaver Kill near Livingston, Manor, NY	20.10	57	828	1,030	1,300	2,050	2,600	3,350	3,950	4,570	5,240	6,170
					795	977	1,220	1,910	2,470	3,220	3,860	4,510	5,190	6,090
					825	1,020	1,290	2,030	2,570	3,300	3,910	4,540	5,210	6,110

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
127	01420500 3	Beaver Kill at Cooks Falls, NY	241.00	92	7,000	8,800	11,300	18,500	24,300	32,800	39,900	47,800	56,600	69,500
					8,070	9,860	12,200	19,000	24,200	30,900	36,600	42,400	48,500	56,600
					7,060	8,890	11,300	18,600	24,300	32,300	38,700	45,300	52,400	62,000
128	01421000 3	East Branch Delaware River at Fishs Eddy, NY [D]	784.00	43	16,800	20,300	24,700	36,500	45,100	56,500	65,500	75,000	84,900	98,700
					17,700	21,300	26,200	40,000	50,800	64,600	76,300	88,600	102,000	119,000
					16,900	20,500	24,900	37,200	46,900	60,200	71,500	83,700	96,900	114,000
129	01421900 4	West Branch Delaware River upstream from Delhi, NY	134.00	42	2,760	3,270	3,910	5,550	6,670	8,130	9,230	10,400	11,500	13,100
					2,890	3,450	4,150	5,980	7,240	8,890	10,100	11,400	12,700	14,400
					2,770	3,280	3,920	5,590	6,750	8,270	9,430	10,700	11,800	13,500
130	01422500 4	Little Delaware River near Delhi, NY	49.80	41	1,440	1,730	2,110	3,050	3,690	4,500	5,110	5,710	6,330	7,150
					1,490	1,780	2,130	3,060	3,690	4,530	5,160	5,810	6,470	7,320
					1,440	1,730	2,110	3,050	3,690	4,510	5,120	5,740	6,370	7,200
131	01423000 4	West Branch Delaware River at Walton, NY	332.00	49	6,320	7,730	9,510	14,100	17,200	21,200	24,200	27,200	30,300	34,400
					6,220	7,360	8,770	12,400	14,900	18,100	20,600	23,000	25,500	28,600
					6,310	7,710	9,470	14,000	16,900	20,700	23,500	26,200	29,100	32,800
132	01423500 4	Dryden Brook near Granton, NY	8.10	16	219	268	329	484	588	719	817	914	1,010	1,140
					273	337	420	653	826	1,060	1,240	1,430	1,630	1,900
					228	277	341	519	657	850	1,000	1,160	1,330	1,560
133	0142400103 4	Trout Creek near Trout Creek, NY	20.20	20	616	748	915	1,360	1,680	2,100	2,430	2,770	3,120	3,610
					587	719	887	1,360	1,700	2,150	2,500	2,870	3,250	3,750
					613	744	912	1,360	1,680	2,120	2,460	2,810	3,180	3,680

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
134	01424500 4	Trout Creek at Cannonsville, NY	49.50	23	1,560	1,810	2,120	2,950	3,520	4,290	4,880	5,500	6,140	7,040
					997	1,180	1,400	1,930	2,280	2,720	3,050	3,380	3,710	4,130
					1,490	1,750	2,050	2,790	3,250	3,820	4,230	4,660	5,100	5,710
135	01425000 4	West Branch Delaware River at Stilesville, NY [D]	456.00	12	8,320	10,100	12,300	18,100	22,000	27,000	30,800	34,500	38,400	43,500
					7,070	8,370	9,980	14,200	17,100	20,900	23,700	26,600	29,400	33,000
					8,060	9,790	11,900	17,100	20,300	24,200	27,200	30,100	33,100	37,000
136	01425500 4	Cold Spring Brook at China, NY	1.49	34	52	65	81	127	160	204	238	273	310	361
					66	83	105	168	217	283	337	393	452	533
					53	66	83	132	169	222	265	310	357	423
137	01425675 4	Oquaga Creek near North Sanford, NY	4.69	12	155	180	212	292	347	417	471	526	582	659
					162	197	240	353	431	533	612	694	777	888
					156	183	216	308	376	470	543	620	696	800
138	01426000 4	Oquaga Creek at Deposit, NY	67.60	35	1,920	2,300	2,780	4,070	5,000	6,240	7,220	8,240	9,310	10,800
					1,380	1,670	2,030	2,980	3,650	4,510	5,170	5,850	6,530	7,430
					1,880	2,260	2,730	3,950	4,790	5,860	6,680	7,520	8,400	9,600
139	01426500 4	West Branch Delaware River at Hale Eddy, NY [D]	595.00	51	11,400	13,200	15,500	21,300	25,200	30,200	33,900	37,700	41,500	46,700
					9,430	11,100	13,200	18,600	22,300	27,000	30,500	34,100	37,600	42,100
					11,300	13,100	15,400	21,100	24,900	29,700	33,200	36,900	40,500	45,400
140	01427500 3	Callicoon Creek at Callicoon, NY	110.00	56	3,000	3,530	4,220	6,170	7,650	9,740	11,500	13,300	15,400	18,400
					2,410	3,020	3,830	6,260	8,200	10,800	13,000	15,200	17,700	21,000
					2,950	3,460	4,190	6,190	7,790	10,200	12,200	14,400	16,900	20,200

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
141	01428000 3	Tenmile River at Tusten, NY	45.60	28	727	877	1,090	1,780	2,390	3,360	4,260	5,340	6,620	8,700
					866	1,090	1,380	2,280	3,010	3,980	4,810	5,650	6,560	7,780
					748	926	1,140	1,920	2,640	3,710	4,620	5,570	6,570	7,940
142	01428500 3	Delaware River above Lackawaxen River near Barryville, NY [ACD]	2,020.00	23	37,500	43,100	50,400	70,300	85,100	106,000	122,000	140,000	159,000	187,000
					30,800	36,200	42,900	61,300	74,900	91,700	106,000	120,000	135,000	154,000
					36,400	41,600	49,200	67,800	81,000	98,200	112,000	126,000	140,000	161,000
143	01428750 3	West Branch Lackawaxen River near Aldenville, PA [A]	40.60	25	1,410	1,660	1,980	2,790	3,360	4,100	4,660	5,240	5,840	6,670
					1,020	1,250	1,500	2,310	2,930	3,710	4,330	4,930	5,550	6,330
					1,340	1,560	1,890	2,640	3,170	3,870	4,430	5,010	5,610	6,390
144	01434000 3	Delaware River at Port Jervis, NY [ACD]	3,070.00	59	46,000	54,000	64,500	94,500	118,000	150,000	178,000	207,000	240,000	288,000
					43,200	50,800	60,100	85,900	105,000	128,000	147,000	166,000	187,000	214,000
					45,800	53,700	64,200	93,300	115,000	143,000	165,000	186,000	209,000	240,000
145	0143400680 3	East Branch Neversink River Northeast of Denning, NY	8.93	15	1,260	1,470	1,730	2,380	2,830	3,400	3,840	4,290	4,750	5,380
					670	816	1,040	1,630	2,130	2,840	3,470	4,130	4,850	5,810
					1,110	1,240	1,550	2,060	2,440	3,000	3,550	4,160	4,840	5,770
146	01434010 3	East Branch Neversink River at Denning, NY	13.30	16	1,740	1,990	2,290	3,050	3,570	4,240	4,750	5,270	5,800	6,530
					965	1,180	1,500	2,360	3,060	4,070	4,970	5,910	6,930	8,300
					1,550	1,710	2,090	2,760	3,290	4,120	4,920	5,800	6,780	8,100
147	01434017 3	East Branch Neversink River near Claryville, NY [B]	22.90	15	1,930	2,190	2,500	3,330	3,910	4,680	5,280	5,900	6,540	7,450
					1,500	1,830	2,340	3,690	4,790	6,350	7,720	9,170	10,700	12,900
					1,820	2,060	2,460	3,480	4,410	5,860	7,190	8,640	10,200	12,300

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
148	01434021 3	West Branch Neversink River at Winnisook Lake near Frost Valley, NY	0.77	10	101	115	132	177	207	247	277	308	340	384
					65	78	100	156	204	277	341	409	483	581
					89	98	121	166	205	270	331	397	470	566
149	01434025 3	Biscuit Brook above Pigeon Brook at Frost Valley, NY	3.72	16	248	287	337	472	570	703	809	922	1,040	1,210
					286	347	439	680	882	1,170	1,430	1,690	1,980	2,360
					257	308	363	558	741	1,030	1,290	1,560	1,850	2,230
150	01434092 3	Shelter Creek below Dry Creek near Frost Valley, NY	0.62	10	44	53	64	95	117	147	171	197	224	262
					47	57	73	113	147	199	244	291	342	410
					45	55	67	105	137	188	233	280	332	399
151	01434498 3	West Branch Neversink River at Claryville, NY	33.80	14	2,570	3,290	4,280	7,180	9,450	12,700	15,400	18,300	21,500	26,200
					2,140	2,610	3,300	5,150	6,640	8,700	10,500	12,400	14,400	17,100
					2,460	3,040	4,010	6,270	7,820	9,820	11,500	13,300	15,300	18,000
152	01435000 3	Neversink River near Claryville, NY	66.60	67	3,800	4,800	6,110	9,800	12,500	16,200	19,200	22,400	25,700	30,300
					3,910	4,780	6,070	9,540	12,300	16,200	19,500	23,100	26,900	32,000
					3,810	4,800	6,110	9,760	12,500	16,200	19,300	22,800	26,400	31,400
153	01436000 3	Neversink River at Neversink, NY [D]	92.60	12	4,680	5,710	7,090	11,000	13,900	18,000	21,400	25,000	28,900	34,600
					4,590	5,600	7,100	11,200	14,400	18,800	22,700	26,800	31,100	37,000
					4,650	5,660	7,090	11,100	14,200	18,600	22,500	26,600	30,900	36,800
154	01436500 3	Neversink River at Woodbourne, NY [D]	113.00	16	4,820	5,840	7,230	11,400	14,700	19,600	23,800	28,600	33,900	41,900
					5,020	6,150	7,780	12,300	15,800	20,700	25,000	29,400	34,200	40,800
					4,870	5,950	7,370	11,800	15,300	20,400	24,700	29,300	34,200	40,900

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
155	01437000 3	Neversink River at Oakland Valley, NY [D]	223.00	27	5,840	7,150	8,970	14,700	19,600	27,100	33,900	41,700	50,800	65,100
					6,770	8,260	10,300	16,100	20,600	26,600	31,800	37,100	42,800	50,400
					5,990	7,410	9,190	15,100	20,000	26,800	32,500	38,300	44,500	53,000
156	01437500 3	Neversink River at Godeffroy, NY [D]	307.00	17	6,560	7,970	9,980	16,500	22,100	31,100	39,400	49,200	60,900	79,600
					8,240	10,100	12,500	19,500	25,000	32,100	38,000	44,200	50,800	59,600
					6,950	8,670	10,600	17,700	23,600	31,800	38,300	45,100	52,300	61,900
157	01438500 3	Delaware River at Montague, NJ [ACD]	3,480.00	27	54,700	63,200	74,300	106,000	130,000	163,000	191,000	222,000	255,000	304,000
					50,000	59,200	70,700	104,000	129,000	159,000	184,000	210,000	236,000	273,000
					54,000	62,300	73,700	105,000	130,000	161,000	186,000	213,000	240,000	278,000
158	01440000 2	Flat Brook near Flatbrookville, NJ [A]	64.00	76	1,010	1,240	1,550	2,500	3,290	4,470	5,510	6,690	8,030	10,100
					1,060	1,290	1,620	2,630	3,470	4,730	5,810	7,020	8,400	10,500
					1,010	1,240	1,550	2,510	3,310	4,510	5,560	6,750	8,100	10,200
159	01443500 2	Paulins Kill at Blairstown, NJ [A]	126.00	76	1,260	1,470	1,760	2,600	3,270	4,230	5,050	5,960	6,970	8,500
					1,100	1,300	1,590	2,440	3,140	4,170	5,030	6,020	7,130	8,810
					1,250	1,460	1,750	2,590	3,250	4,220	5,050	5,970	7,000	8,560
160	01496370 4	Mink Creek at Richfield Springs, NY	10.40	18	221	260	308	423	495	582	644	705	764	840
					270	319	376	510	593	698	777	858	936	1,040
					228	268	317	439	521	623	699	774	848	944
161	01496500 4	Oaks Creek at Index, NY	102.00	62	983	1,150	1,360	1,880	2,220	2,650	2,960	3,280	3,590	4,020
					1,460	1,690	1,970	2,570	2,940	3,390	3,720	4,060	4,380	4,780
					1,010	1,170	1,380	1,920	2,290	2,750	3,090	3,430	3,760	4,200

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
162	01497500 4	Susquehanna River at Colliersville, NY	349.00	48	3,300	3,800	4,390	5,760	6,600	7,610	8,320	9,010	9,670	10,500
					3,940	4,570	5,300	7,000	8,040	9,310	10,200	11,200	12,000	13,200
					3,340	3,840	4,440	5,860	6,770	7,900	8,710	9,530	10,300	11,300
163	01497800 4	Schenevus Creek at Schenevus, NY	54.20	14	553	691	871	1,360	1,720	2,200	2,580	2,970	3,380	3,950
					821	995	1,210	1,800	2,210	2,740	3,140	3,550	3,960	4,500
					601	738	922	1,460	1,880	2,420	2,850	3,270	3,700	4,270
164	01497805 4	Little Elk Creek near Westford, NY	3.73	22	68	84	105	163	206	264	310	358	408	479
					88	110	140	228	294	383	454	528	605	710
					70	87	109	174	226	301	362	427	494	588
165	01498500 4	Charlotte Creek at West Davenport, NY	167.00	38	2,690	3,280	4,040	6,000	7,340	9,070	10,400	11,700	13,100	14,900
					2,920	3,480	4,170	5,920	7,100	8,610	9,740	10,900	12,000	13,500
					2,710	3,290	4,050	5,990	7,300	8,970	10,200	11,500	12,800	14,400
166	01499000 4	Otego Creek near Oneonta, NY	108.00	35	1,860	2,210	2,630	3,660	4,320	5,130	5,720	6,300	6,860	7,600
					1,650	1,970	2,360	3,400	4,090	4,980	5,650	6,340	7,010	7,890
					1,840	2,190	2,610	3,630	4,280	5,100	5,700	6,310	6,910	7,700
167	01500500 4	Susquehanna River at Unadilla, NY	982.00	62	9,800	11,300	13,100	17,500	20,400	23,900	26,500	29,100	31,700	35,100
					10,000	11,600	13,500	18,200	21,100	24,700	27,300	30,000	32,500	35,600
					9,810	11,300	13,100	17,500	20,500	24,000	26,600	29,300	31,900	35,200
168	01501000 4	Unadilla River near New Berlin, NY	199.00	49	2,740	3,170	3,700	4,930	5,690	6,620	7,280	7,920	8,540	9,350
					2,690	3,180	3,770	5,250	6,220	7,460	8,370	9,300	10,200	11,400
					2,740	3,170	3,700	4,960	5,750	6,760	7,500	8,240	8,970	9,930

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
169	01501015 4	Mill Brook at New Berlin, NY	4.64	12	202	237	279	377	438	510	561	610	657	717
					109	133	165	250	311	389	451	514	578	664
					182	218	259	344	393	455	504	557	610	684
170	01501140 4	Wharton Creek Tributary near Edmeston, NY	2.02	11	96	113	135	190	227	275	311	347	385	435
					62	76	94	142	176	220	255	291	327	377
					89	106	127	177	208	249	281	315	350	398
171	01501500 4	Sage Brook near South New Berlin, NY	0.61	36	20	26	35	64	88	124	156	192	232	293
					20	26	34	58	77	103	124	147	171	205
					20	26	35	63	86	120	148	179	212	262
172	01502000 4	Butternut Creek at Morris, NY	59.70	58	1,300	1,600	1,970	2,910	3,530	4,290	4,850	5,400	5,940	6,650
					1,190	1,420	1,710	2,460	2,970	3,630	4,130	4,640	5,140	5,800
					1,290	1,590	1,960	2,880	3,470	4,190	4,720	5,240	5,760	6,440
173	01502500 4	Unadilla River at Rockdale, NY	520.00	68	6,540	7,640	8,940	12,000	13,800	16,100	17,600	19,100	20,500	22,400
					5,590	6,560	7,750	10,700	12,700	15,200	17,000	18,800	20,600	22,900
					6,500	7,600	8,900	11,900	13,700	16,000	17,500	19,000	20,500	22,500
174	01502632 4	Susquehanna River at Bainbridge, NY [B]	1,610.00	12	18,900	21,700	25,000	32,700	37,600	43,500	47,800	51,900	56,000	61,300
					17,300	20,100	23,400	31,300	36,300	42,500	47,000	51,500	55,800	61,200
					18,600	21,400	24,700	32,300	37,100	43,000	47,400	51,700	55,900	61,200
175	01502701 4	Susquehanna River at Afton, NY [B]	1,716.00	13	19,700	22,600	26,200	34,600	40,000	46,600	51,400	56,100	60,700	66,800
					17,900	20,700	24,100	32,200	37,400	43,800	48,400	53,000	57,400	63,000
					19,400	22,300	25,900	34,000	39,100	45,400	49,900	54,400	58,800	64,500

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
176	01502714 4	Ouaquaga Creek near Belden, NY	3.37	12	186	219	260	361	428	513	577	640	704	789
					79	98	123	194	246	315	369	426	483	562
					164	197	236	318	364	424	470	521	574	649
177	01502731 4	Susquehanna River at Windsor, NY [B]	1,820.00	12	19,200	22,200	25,900	35,000	40,900	48,300	53,800	59,300	64,700	72,000
					18,000	20,900	24,300	32,500	37,700	44,200	48,900	53,600	58,000	63,700
					19,000	22,000	25,600	34,400	39,800	46,400	51,300	56,100	60,800	66,900
178	01503000 4	Susquehanna River at Conklin, NY [A]	2,232.00	93	23,600	27,000	31,200	41,000	47,200	54,900	60,400	65,800	71,100	78,100
					22,400	26,000	30,200	40,300	46,600	54,600	60,200	65,900	71,400	78,200
					23,600	27,000	31,200	41,000	47,200	54,900	60,400	65,800	71,100	78,100
179	01503960 4	Electric Light Stream near Morrisville, NY	7.21	11	225	250	280	347	388	438	473	508	541	585
					200	243	298	445	548	683	788	897	1,010	1,150
					220	249	283	374	448	554	641	732	826	946
180	01503980 4	Chenango River at Eaton, NY	24.30	35	543	655	799	1,180	1,460	1,830	2,120	2,420	2,740	3,180
					469	558	667	937	1,110	1,340	1,510	1,680	1,850	2,070
					537	649	790	1,150	1,410	1,720	1,960	2,200	2,450	2,780
181	01505000 4	Chenango River at Sherburne, NY	263.00	68	3,200	3,790	4,490	6,110	7,090	8,240	9,040	9,790	10,500	11,400
					3,040	3,580	4,230	5,830	6,850	8,150	9,090	10,000	11,000	12,100
					3,190	3,780	4,480	6,090	7,070	8,230	9,050	9,830	10,600	11,600
182	01505017 4	Cold Brook near North Norwich, NY	5.80	12	136	158	183	242	278	321	351	379	407	442
					155	191	239	371	468	598	701	807	916	1,060
					140	164	193	276	345	446	530	617	706	824

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
183	01505500 4	Canasawacta Creek near South Plymouth, NY	57.90	32	1,700	2,140	2,690	4,130	5,110	6,370	7,310	8,240	9,190	10,400
					1,620	1,940	2,340	3,360	4,050	4,950	5,630	6,340	7,040	7,970
					1,690	2,120	2,660	4,040	4,930	6,030	6,840	7,630	8,440	9,480
184	01507000 4	Chenango River at Greene, NY	593.00	68	6,740	7,840	9,180	12,400	14,600	17,200	19,100	21,000	23,000	25,500
					6,290	7,390	8,720	12,100	14,300	17,000	19,000	21,100	23,000	25,500
					6,720	7,820	9,160	12,400	14,600	17,200	19,100	21,000	23,000	25,500
185	01507500 4	Genegantslet Creek at Smithville Flats, NY	82.30	34	1,920	2,250	2,650	3,640	4,300	5,130	5,750	6,370	6,990	7,830
					2,130	2,540	3,040	4,300	5,140	6,220	7,030	7,860	8,690	9,790
					1,940	2,270	2,680	3,710	4,430	5,380	6,100	6,830	7,560	8,540
186	01508000 4	Shackham Brook near Truxton, NY [B]	3.16	36	115	147	191	320	419	559	674	798	931	1,120
					111	135	167	251	311	390	451	516	581	669
					115	146	189	313	402	522	616	715	818	962
187	01508500 4	Albright Creek at East Homer, NY	6.81	38	233	299	389	656	867	1,170	1,420	1,700	2,000	2,450
					234	290	363	571	727	937	1,100	1,280	1,460	1,700
					233	299	387	648	846	1,120	1,340	1,580	1,830	2,200
188	01508803 4	West Branch Tioughnioga River at Homer, NY	71.50	22	761	913	1,110	1,650	2,040	2,590	3,020	3,480	3,970	4,660
					1,040	1,230	1,470	2,050	2,440	2,930	3,290	3,670	4,020	4,490
					795	947	1,150	1,710	2,130	2,700	3,120	3,560	3,990	4,580
189	01508946 4	Otter Creek Tributary at State Hwy 222 near Cortland, NY	2.85	11	29	37	49	91	131	200	268	351	455	630
					85	106	135	220	284	371	441	515	591	696
					41	50	65	127	188	281	360	446	538	672

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
190	01509000 4	Tioughnioga River at Cortland, NY	292.00	67	4,080	4,920	5,970	8,710	10,600	13,100	15,000	17,000	19,000	21,700
					4,840	5,670	6,680	9,150	10,800	12,800	14,300	15,800	17,300	19,200
					4,110	4,950	6,000	8,740	10,600	13,100	14,900	16,800	18,700	21,100
191	01509520 4	Tioughnioga River at Lisle, NY [B]	453.00	18	6,180	7,170	8,410	11,700	14,000	17,100	19,500	22,000	24,600	28,200
					7,050	8,250	9,700	13,300	15,600	18,600	20,800	23,000	25,200	27,900
					6,310	7,310	8,570	12,000	14,400	17,600	20,000	22,500	24,900	28,000
192	01510000 4	Otselic River at Cincinnatus, NY	147.00	63	3,310	3,840	4,480	6,080	7,140	8,460	9,450	10,400	11,400	12,800
					3,060	3,630	4,330	6,130	7,340	8,910	10,100	11,300	12,500	14,000
					3,300	3,830	4,470	6,080	7,160	8,520	9,560	10,600	11,600	13,100
193	01510500 4	Otselic River near Upper Lisle, NY [B]	217.00	33	4,320	5,090	6,060	8,540	10,200	12,400	14,100	15,800	17,500	19,900
					4,170	4,940	5,880	8,300	9,940	12,000	13,600	15,200	16,800	18,900
					4,310	5,080	6,050	8,510	10,200	12,300	14,000	15,600	17,300	19,500
194	01510610 4	Merrill Creek Tributary near Texas Valley, NY	5.32	23	316	375	450	658	812	1,020	1,200	1,380	1,570	1,850
					177	219	274	429	546	702	827	957	1,090	1,270
					299	359	433	623	753	924	1,070	1,210	1,370	1,580
195	01511500 4	Tioughnioga River at Itaska, NY [D]	730.00	12	11,200	13,100	15,500	22,000	26,500	32,500	37,100	41,900	47,000	54,000
					11,600	13,700	16,100	22,400	26,600	32,000	36,000	40,100	44,000	49,100
					11,300	13,200	15,600	22,100	26,500	32,300	36,500	40,900	45,200	51,000
196	01512500 4	Chenango River near Chenango Forks, NY	1,483.00	93	16,700	19,000	21,800	29,600	35,200	42,900	49,000	55,600	62,600	72,600
					17,900	20,900	24,300	32,800	38,300	45,100	50,100	55,100	59,900	66,000
					16,700	19,100	21,900	29,700	35,400	43,100	49,100	55,500	62,200	71,500

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
197	01513500 4	Susquehanna River at Vestal, NY [A]	3,941.00	70	39,500	44,900	51,400	67,100	77,200	89,700	98,900	108,000	117,000	129,000
					41,200	47,500	54,900	72,800	83,900	97,900	108,000	118,000	127,000	139,000
					39,600	45,000	51,500	67,400	77,800	90,700	100,000	110,000	119,000	131,000
198	01513712 5	Nanticoke Creek Tributary at Nanticoke, NY	1.70	12	131	166	216	378	520	744	950	1,190	1,480	1,930
					80	103	135	236	319	434	535	639	749	913
					123	157	204	347	462	630	778	944	1,130	1,430
199	01513790 5	Nanticoke Creek at Union Center, NY	90.70	11	3,470	4,370	5,580	9,030	11,700	15,300	18,300	21,500	25,000	29,900
					2,080	2,530	3,150	4,980	6,360	8,290	9,930	11,600	13,300	15,800
					3,240	4,100	5,210	8,070	10,100	12,600	14,700	16,900	19,200	22,600
200	01513831 5	Susquehanna River at Owego, NY [ABC]	4,216.00	10	42,100	46,900	52,900	67,900	77,900	90,900	101,000	111,000	121,000	135,000
					41,300	47,700	55,100	73,100	84,500	98,800	109,000	119,000	129,000	142,000
					41,900	47,100	53,300	69,400	80,500	94,800	105,000	116,000	126,000	139,000
201	01514000 5	Owego Creek near Owego, NY	185.00	70	4,110	4,900	5,950	8,980	11,300	14,700	17,500	20,500	23,900	28,900
					3,450	4,110	5,020	7,590	9,490	12,100	14,200	16,400	18,700	21,900
					4,090	4,880	5,920	8,920	11,200	14,500	17,100	20,000	23,200	27,900
202	01514801 5	Catatonk Creek Northwest Of Owego, NY [B]	150.00	12	2,700	3,200	3,870	5,730	7,140	9,140	10,800	12,600	14,500	17,400
					2,280	2,730	3,350	5,080	6,340	8,050	9,470	10,900	12,300	14,400
					2,630	3,140	3,800	5,590	6,910	8,740	10,200	11,800	13,500	15,900
203	01515000 5	Susquehanna River near Waverly, NY [AC]	4,773.00	64	48,600	55,600	64,200	85,400	99,500	118,000	131,000	145,000	159,000	177,000
					42,500	48,800	56,400	75,100	87,100	102,000	113,000	124,000	135,000	148,000
					48,300	55,300	63,900	84,800	98,400	116,000	128,000	141,000	154,000	171,000

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
204	01516500 5	Corey Creek near Mainesburg, PA [A]	12.20	45	452	581	772	1,460	2,120	3,280	4,420	5,860	7,660	10,800
					452	582	776	1,400	1,910	2,670	3,330	4,030	4,790	5,930
					452	581	772	1,460	2,100	3,200	4,250	5,540	7,100	9,790
205	01516800 5	Manns Creek near Mansfield, PA [A]	3.01	17	217	258	312	460	569	718	837	963	1,100	1,290
					113	148	201	371	514	721	904	1,100	1,300	1,610
					205	247	301	445	557	719	859	1,010	1,180	1,420
206	01517000 5	Elk Run near Mainesburg, PA [A]	10.20	24	379	465	591	1,030	1,440	2,140	2,830	3,680	4,740	6,540
					338	433	575	1,020	1,390	1,910	2,370	2,850	3,370	4,130
					375	463	589	1,030	1,430	2,090	2,710	3,440	4,310	5,750
207	01518000 5	Tioga River at Tioga, PA [AD]	282.00	39	6,080	7,650	9,900	17,400	24,100	34,900	45,000	57,100	71,500	94,900
					5,390	6,600	8,320	13,400	17,400	22,900	27,700	32,600	37,800	45,400
					6,040	7,600	9,820	17,100	23,400	33,100	41,900	52,200	64,200	83,400
208	01518420 5	Crooked Creek below Catlin Hollow at Middlebury Center, PA [A]	74.30	14	3,000	3,710	4,720	7,970	10,800	15,300	19,400	24,300	30,100	39,300
					1,660	2,080	2,700	4,590	6,100	8,240	10,100	12,000	14,100	17,100
					2,820	3,520	4,470	7,310	9,580	12,900	15,900	19,300	23,100	29,100
209	01518500 5	Crooked Creek at Tioga, PA [A]	122.00	35	2,920	3,660	4,730	8,410	11,800	17,600	23,100	29,900	38,300	52,300
					2,070	2,560	3,260	5,320	6,910	9,120	11,000	12,900	14,900	17,900
					2,870	3,600	4,650	8,140	11,200	16,200	20,700	26,200	32,800	43,600
210	01518862 5	Cowanesque River at Westfield, PA [A]	90.60	15	2,060	2,750	3,770	7,150	10,100	14,900	19,300	24,300	30,300	39,600
					2,570	3,170	4,030	6,630	8,690	11,600	14,200	16,800	19,600	23,700
					2,130	2,800	3,800	7,050	9,750	13,900	17,500	21,400	25,800	32,600

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
211	01519200 5	Cowanesque River at Elkland, PA [A]	235.00	20	6,360	7,840	9,830	15,600	20,100	26,600	32,100	38,000	44,500	54,100
					4,540	5,550	6,990	11,200	14,500	19,100	23,100	27,100	31,400	37,700
					6,180	7,640	9,570	15,000	19,000	24,700	29,400	34,400	39,900	48,000
212	01520000 5	Cowanesque River near Lawrenceville, PA [AD]	298.00	27	6,680	8,240	10,500	17,700	24,200	34,600	44,300	55,800	69,600	91,900
					4,850	5,890	7,370	11,700	14,900	19,400	23,300	27,200	31,300	37,200
					6,540	8,090	10,300	17,000	22,800	31,500	39,300	48,200	58,700	75,300
213	01520500 5	Tioga River at Lindley, NY [AD]	771.00	50	13,100	16,300	20,600	34,200	45,600	63,300	78,900	97,000	118,000	150,000
					12,800	15,700	19,600	31,500	40,700	53,800	65,000	76,500	88,800	107,000
					13,100	16,300	20,600	34,000	45,200	62,100	76,900	93,700	113,000	142,000
214	01521596 5	Big Creek near Howard, NY	6.32	24	152	203	279	538	775	1,160	1,520	1,950	2,460	3,280
					204	262	348	616	836	1,150	1,420	1,700	2,000	2,450
					156	207	284	548	785	1,160	1,490	1,880	2,320	3,010
215	01522500 5	Karr Valley Creek at Almond, NY	27.40	35	1,550	2,020	2,660	4,530	5,960	7,940	9,550	11,300	13,100	15,600
					934	1,180	1,550	2,710	3,660	5,040	6,250	7,510	8,880	10,900
					1,510	1,980	2,600	4,370	5,680	7,460	8,910	10,500	12,100	14,400
216	01523500 5	Canacadea Creek near Hornell, NY [D]	57.90	13	2,160	2,900	3,950	7,140	9,670	13,300	16,300	19,600	23,100	28,200
					1,620	2,030	2,630	4,460	5,940	8,050	9,900	11,800	13,900	16,900
					2,080	2,790	3,770	6,580	8,650	11,500	13,800	16,300	18,900	22,800
217	01525000 5	Bennett Creek at Canisteo, NY [B]	95.30	10	3,380	4,010	4,870	7,390	9,370	12,300	14,700	17,500	20,600	25,200
					2,320	2,900	3,720	6,240	8,240	11,100	13,600	16,100	18,900	22,900
					3,190	3,830	4,680	7,100	9,000	11,800	14,200	16,800	19,700	24,000

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
218	01525500 5	Canisteo River at West Cameron, NY	340.00	62	5,450	6,560	8,090	12,900	16,900	23,000	28,500	34,800	42,100	53,600
					5,050	6,110	7,610	11,900	15,200	19,700	23,500	27,200	31,300	37,000
					5,440	6,550	8,080	12,800	16,800	22,700	27,900	33,800	40,500	50,900
219	01526000 5	Tuscarora Creek near South Addison, NY [B]	114.00	46	3,830	4,910	6,340	10,200	12,900	16,500	19,200	22,000	24,800	28,500
					2,140	2,690	3,480	5,910	7,830	10,600	12,900	15,300	17,900	21,800
					3,750	4,820	6,220	9,900	12,400	15,700	18,200	20,800	23,500	27,100
220	01526500 5	Tioga River near Erwins, NY [AD]	1,377.00	61	21,000	25,400	31,200	48,300	61,800	81,500	98,200	117,000	137,000	168,000
					15,300	18,200	22,200	33,600	41,800	53,300	62,800	72,300	82,300	96,500
					20,800	25,200	30,900	47,500	60,300	78,600	93,900	111,000	129,000	156,000
221	01527000 5	Cohocton River at Cohocton, NY	52.20	49	286	340	411	625	796	1,050	1,270	1,520	1,790	2,210
					1,000	1,240	1,580	2,580	3,340	4,400	5,300	6,200	7,150	8,540
					317	373	457	752	1,030	1,470	1,870	2,290	2,760	3,440
222	01528000 5	Fivemile Creek near Kanona, NY	66.80	59	1,000	1,170	1,400	2,040	2,530	3,230	3,820	4,460	5,170	6,220
					1,000	1,220	1,510	2,340	2,940	3,750	4,430	5,080	5,770	6,750
					1,000	1,170	1,400	2,060	2,560	3,290	3,900	4,550	5,260	6,310
223	01528320 5	Cohocton River at Bath, NY [B]	316.00	10	3,660	4,380	5,370	8,330	10,700	14,200	17,300	20,800	24,600	30,600
					4,430	5,340	6,620	10,300	13,000	16,700	19,800	22,900	26,100	30,800
					3,800	4,530	5,580	8,830	11,500	15,200	18,400	21,800	25,400	30,700
224	01529500 5	Cohocton River near Campbell, NY	470.00	81	4,660	5,670	7,070	11,400	15,000	20,400	25,300	30,800	37,200	47,000
					5,710	6,850	8,440	12,900	16,200	20,700	24,400	28,100	32,000	37,500
					4,690	5,700	7,100	11,500	15,100	20,400	25,200	30,500	36,600	45,800

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
225	01530301 5	Cuthrie Run near Big Flats, NY	5.39	21	172	218	279	453	585	770	919	1,080	1,250	1,490
					206	270	367	684	954	1,350	1,700	2,070	2,480	3,090
					175	222	287	485	655	915	1,140	1,390	1,670	2,070
226	01530500 5	Newtown Creek at Elmira, NY [D]	77.50	53	1,570	1,840	2,170	2,940	3,420	4,000	4,410	4,800	5,180	5,670
					1,610	2,000	2,540	4,170	5,440	7,200	8,720	10,200	11,900	14,300
					1,570	1,850	2,180	3,010	3,590	4,370	5,010	5,640	6,320	7,240
227	01531000 5	Chemung River at Chemung, NY [AD]	2,506.00	75	31,700	38,100	46,400	68,700	84,900	107,000	124,000	142,000	161,000	188,000
					21,400	25,000	30,000	43,500	53,000	65,900	76,600	86,900	97,800	113,000
					31,400	37,800	46,000	67,600	82,900	103,000	119,000	136,000	153,000	178,000
228	01533250 5	Tuscarora Creek near Silvara, PA [A]	11.80	33	277	360	473	801	1,050	1,400	1,690	1,990	2,310	2,770
					379	479	626	1,080	1,440	1,950	2,390	2,850	3,340	4,060
					283	367	482	827	1,100	1,500	1,830	2,190	2,560	3,110
229	01542810 5	Waldy Run near Emporium, PA [A]	5.24	36	131	158	194	308	406	559	697	858	1,050	1,350
					274	343	444	752	1,000	1,350	1,660	1,980	2,320	2,830
					140	167	207	346	477	688	881	1,100	1,340	1,720
230	01543700 5	First Fork Sinnemahoning Creek at Wharton, PA [A]	182.00	16	3,400	4,000	4,810	7,310	9,370	12,500	15,200	18,400	22,000	27,600
					5,420	6,490	8,020	12,500	15,900	20,700	24,900	29,100	33,600	40,100
					3,640	4,260	5,170	8,220	10,900	15,000	18,600	22,400	26,700	32,900
231	03007800 5	Allegheny River at Port Allegany, PA [A]	248.00	25	3,740	4,320	5,100	7,450	9,360	12,200	14,700	17,500	20,600	25,500
					5,710	6,700	8,070	11,900	14,700	18,500	21,800	25,000	28,400	33,300
					3,900	4,490	5,320	7,980	10,200	13,600	16,500	19,600	23,000	28,000

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
232	03010500 5	Allegheny River at Eldred, PA [A]	550.00	84	5,150	6,090	7,410	11,600	15,100	20,700	25,700	31,600	38,400	49,300
					10,100	11,700	13,900	20,000	24,400	30,300	35,300	40,200	45,400	52,700
					5,280	6,210	7,560	11,900	15,600	21,400	26,600	32,500	39,200	49,700
233	03010734 5	Ischua Creek Tributary near Machias, NY	5.12	20	143	175	219	348	451	601	728	870	1,030	1,260
					169	205	257	400	507	650	771	889	1,010	1,190
					146	178	222	356	462	614	741	876	1,020	1,230
234	03010800 5	Olean Creek near Olean, NY	198.00	37	2,110	2,710	3,540	6,010	7,950	10,700	13,100	15,600	18,400	22,400
					3,250	3,790	4,510	6,450	7,820	9,640	11,100	12,600	14,100	16,200
					2,170	2,760	3,590	6,050	7,930	10,500	12,700	15,000	17,400	20,900
235	03011000 5	Great Valley Creek near Salamanca, NY	137.00	35	3,440	3,980	4,720	7,060	9,040	12,100	14,900	18,100	21,900	27,900
					3,030	3,550	4,270	6,250	7,680	9,620	11,200	12,800	14,500	16,900
					3,420	3,960	4,700	6,990	8,870	11,700	14,200	16,900	20,200	25,100
236	03011020 5	Allegheny River at Salamanca, NY [A]	1,608.00	96	17,700	20,100	23,200	31,200	36,800	44,300	50,100	56,300	62,700	71,700
					20,700	23,600	27,400	37,600	44,700	54,300	62,200	69,900	77,900	89,000
					17,800	20,200	23,300	31,400	37,200	45,000	51,100	57,500	64,200	73,600
237	03011800 5	Kinzua Creek near Guffey, PA [A]	46.40	34	792	989	1,270	2,190	2,990	4,280	5,470	6,880	8,540	11,200
					1,460	1,750	2,160	3,320	4,190	5,400	6,430	7,450	8,530	10,100
					833	1,030	1,320	2,290	3,140	4,470	5,660	7,010	8,540	10,900
238	03013000 5	Conewango Creek at Waterboro, NY	290.00	56	2,710	3,140	3,690	5,100	6,090	7,400	8,430	9,480	10,600	12,100
					3,880	4,360	4,990	6,550	7,570	8,910	10,000	11,000	12,000	13,500
					2,750	3,180	3,730	5,180	6,210	7,570	8,640	9,700	10,800	12,300

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
239	03013800 5	Ball Creek at Stow, NY	9.58	24	716	836	985	1,360	1,620	1,950	2,200	2,450	2,710	3,060
					360	432	534	817	1,030	1,320	1,560	1,800	2,050	2,410
					686	807	950	1,290	1,520	1,810	2,030	2,260	2,510	2,850
240	03015390 5	Hare Creek near Corry, PA [A]	12.30	19	626	719	841	1,190	1,450	1,820	2,130	2,470	2,840	3,390
					579	693	855	1,310	1,660	2,140	2,550	2,960	3,390	4,010
					621	717	842	1,210	1,490	1,910	2,260	2,640	3,040	3,630
241	03015500 5	Brokenstraw Creek at Youngsville, PA [A]	321.00	90	5,480	6,370	7,450	10,100	11,900	14,200	15,900	17,600	19,300	21,600
					5,700	6,480	7,540	10,300	12,200	14,700	16,800	18,800	20,900	23,800
					5,490	6,370	7,450	10,100	11,900	14,200	16,000	17,700	19,500	21,900
242	03021350 5	French Creek near Wattsburg, PA [A]	92.00	25	2,940	3,370	3,890	5,130	5,910	6,880	7,580	8,260	8,940	9,830
					2,290	2,600	3,010	4,090	4,840	5,830	6,650	7,440	8,240	9,370
					2,890	3,320	3,820	5,010	5,730	6,650	7,340	8,030	8,730	9,680
243	04213040 5	Raccoon Creek near West Springfield, PA [A]	2.53	34	77	98	128	218	288	391	477	572	676	828
					89	110	139	223	286	371	443	514	588	695
					77	99	129	218	288	388	470	559	655	794
244	04213200 5	Mill Creek at Erie, PA [A]	9.16	23	506	634	814	1,390	1,880	2,630	3,310	4,100	5,010	6,430
					342	416	521	824	1,060	1,370	1,640	1,910	2,190	2,600
					491	617	791	1,320	1,740	2,340	2,860	3,450	4,110	5,130
245	04213376 5	Canadaway Creek at Fredonia, NY	32.90	13	1,280	1,600	2,080	3,670	5,120	7,500	9,750	12,500	15,800	21,200
					1,140	1,410	1,800	2,960	3,880	5,180	6,320	7,470	8,710	10,500
					1,260	1,580	2,040	3,520	4,780	6,690	8,390	10,400	12,600	16,100

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
246	04213490 5	South Branch Cattaraugus Creek near Otto, NY	25.10	36	996	1,190	1,440	2,170	2,730	3,540	4,210	4,950	5,760	6,960
					1,080	1,310	1,620	2,540	3,250	4,240	5,090	5,950	6,860	8,190
					1,000	1,200	1,450	2,200	2,790	3,650	4,380	5,160	6,010	7,260
247	04213500 5	Cattaraugus Creek at Gowanda, NY	436.00	59	10,500	12,200	14,500	20,300	24,400	29,800	33,900	38,200	42,700	48,900
					9,840	11,500	13,700	20,000	24,500	30,900	36,300	41,600	47,200	55,200
					10,500	12,200	14,500	20,300	24,400	29,900	34,200	38,700	43,400	50,000
248	04214040 5	Delaware Creek near Angola, NY	8.32	24	231	283	351	530	655	820	947	1,080	1,210	1,400
					215	263	331	524	667	860	1,020	1,180	1,350	1,590
					229	282	349	529	657	829	966	1,110	1,250	1,460
249	04214200 5	Eighteenmile Creek at North Boston, NY	37.20	14	2,300	2,620	3,000	3,970	4,610	5,450	6,080	6,720	7,380	8,280
					1,170	1,400	1,730	2,660	3,360	4,320	5,140	5,960	6,820	8,050
					2,150	2,470	2,840	3,710	4,290	5,070	5,720	6,410	7,140	8,170
250	04214250 5	Smoke Creek at Lackawanna, NY	14.30	13	482	566	676	981	1,210	1,530	1,790	2,070	2,380	2,820
					437	536	677	1,090	1,400	1,830	2,200	2,560	2,950	3,510
					476	562	676	1,000	1,260	1,640	1,950	2,280	2,640	3,150
251	04214400 5	Buffalo Creek near Wales Hollow, NY	76.90	12	2,630	3,210	3,960	5,940	7,330	9,140	10,500	12,000	13,400	15,400
					2,100	2,520	3,130	4,860	6,170	7,990	9,540	11,100	12,700	15,100
					2,550	3,120	3,840	5,700	6,990	8,720	10,100	11,600	13,100	15,300
252	04214410 5	Hunter Creek at Colegrave, NY	14.00	23	647	752	881	1,200	1,400	1,660	1,850	2,040	2,220	2,470
					458	555	691	1,080	1,370	1,770	2,110	2,440	2,790	3,300
					630	737	866	1,180	1,390	1,690	1,920	2,160	2,400	2,750

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
253	04214500 5	Buffalo Creek at Gardenville, NY	142.00	61	4,780	5,450	6,250	8,180	9,430	11,000	12,100	13,200	14,400	15,900
					3,000	3,550	4,320	6,440	7,990	10,100	11,900	13,600	15,500	18,100
					4,720	5,390	6,190	8,090	9,320	10,900	12,100	13,300	14,600	16,300
254	04214980 5	Little Buffalo Creek at East Lancaster, NY	24.00	14	465	592	762	1,250	1,620	2,140	2,560	3,020	3,500	4,190
					714	868	1,090	1,720	2,210	2,870	3,440	4,010	4,610	5,470
					499	625	803	1,340	1,770	2,380	2,890	3,430	3,980	4,780
255	04215000 5	Cayuga Creek near Lancaster, NY	96.40	59	3,760	4,430	5,240	7,270	8,610	10,300	11,500	12,800	14,000	15,700
					2,250	2,710	3,350	5,180	6,560	8,460	10,100	11,700	13,400	15,800
					3,710	4,380	5,180	7,160	8,450	10,100	11,300	12,600	13,900	15,700
256	04215500 5	Cazenovia Creek at Ebenezer, NY	135.00	59	5,280	6,040	6,970	9,240	10,700	12,600	14,000	15,400	16,700	18,600
					3,420	4,050	4,930	7,410	9,260	11,800	14,000	16,100	18,400	21,600
					5,210	5,980	6,900	9,140	10,600	12,500	14,000	15,500	17,000	19,100
257	04216400 6	Tonawanda Creek near Johnsonburg, NY	23.70	25	610	704	821	1,120	1,330	1,600	1,810	2,030	2,250	2,560
					637	790	990	1,530	1,920	2,450	2,850	3,260	3,710	4,310
					612	710	833	1,160	1,400	1,710	1,970	2,230	2,500	2,880
258	04216418 6	Tonawanda Creek at Attica, NY	76.90	22	2,210	2,530	2,930	4,010	4,780	5,820	6,630	7,490	8,400	9,680
					1,460	1,780	2,200	3,330	4,120	5,190	6,000	6,840	7,740	8,950
					2,140	2,470	2,870	3,940	4,700	5,730	6,520	7,370	8,270	9,530
259	04216500 6	Little Tonawanda Creek at Linden, NY	22.10	79	617	776	982	1,530	1,910	2,400	2,780	3,160	3,550	4,080
					541	670	838	1,290	1,600	2,010	2,330	2,650	2,990	3,450
					615	774	978	1,520	1,900	2,380	2,760	3,130	3,520	4,040

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
260	04216875 6	Little Tonawanda Creek Tributary near Batavia, NY	1.02	11	64	75	88	119	138	162	179	195	211	232
					38	45	54	73	85	98	107	116	124	134
					59	70	83	111	127	145	158	171	183	199
261	04217000 6	Tonawanda Creek at Batavia, NY	171.00	55	2,730	3,250	3,860	5,200	5,970	6,820	7,390	7,900	8,380	8,940
					2,260	2,730	3,330	4,920	6,030	7,530	8,650	9,820	11,100	12,700
					2,710	3,230	3,840	5,190	5,970	6,870	7,490	8,060	8,610	9,280
262	04217500 6	Tonawanda Creek near Alabama, NY	231.00	65	3,510	4,040	4,660	6,080	6,930	7,920	8,610	9,260	9,890	10,700
					2,630	3,140	3,790	5,480	6,650	8,230	9,400	10,600	11,900	13,600
					3,480	4,010	4,640	6,060	6,920	7,940	8,660	9,350	10,000	10,900
263	04217700 6	Murder Creek at Pembroke, NY	43.60	25	692	839	1,010	1,420	1,670	1,950	2,150	2,330	2,500	2,720
					721	864	1,040	1,510	1,840	2,260	2,580	2,890	3,230	3,670
					695	840	1,010	1,430	1,690	1,990	2,220	2,420	2,630	2,890
264	04217750 6	Murder Creek near Akron, NY	58.80	17	698	862	1,070	1,620	2,000	2,480	2,850	3,230	3,610	4,120
					892	1,060	1,270	1,820	2,190	2,680	3,040	3,410	3,800	4,300
					721	883	1,090	1,640	2,030	2,520	2,890	3,270	3,650	4,160
265	04218000 6	Tonawanda Creek at Rapids, NY	349.00	31	3,190	3,730	4,410	6,230	7,530	9,270	10,700	12,100	13,600	15,800
					3,490	4,110	4,910	6,980	8,420	10,300	11,800	13,200	14,800	16,900
					3,210	3,750	4,440	6,280	7,610	9,390	10,800	12,300	13,800	16,000
266	04218518 6	Ellicott Creek below Williamsville, NY [B]	81.60	44	1,370	1,580	1,840	2,590	3,150	3,930	4,580	5,270	6,030	7,130
					1,220	1,420	1,660	2,250	2,640	3,140	3,500	3,860	4,240	4,720
					1,360	1,570	1,830	2,570	3,120	3,870	4,480	5,130	5,840	6,860

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
267	042196456	Fourmile Creek near Youngstown, NY	4.88	15	77	103	138	237	309	405	480	555	633	738
					90	108	130	185	220	264	295	325	356	393
					79	104	137	230	294	376	437	498	561	645
268	042197386	Eighteenmile Creek Tributary near Lockport, NY	2.96	10	178	203	231	294	331	372	401	428	453	484
					87	105	128	183	218	262	293	323	355	393
					161	187	215	272	304	341	368	393	419	452
269	042199006	Johnson Creek near Lyndonville, NY	95.10	35	1,100	1,310	1,570	2,270	2,760	3,410	3,920	4,450	5,000	5,770
					969	1,160	1,390	1,990	2,410	2,940	3,350	3,750	4,190	4,730
					1,090	1,300	1,560	2,250	2,730	3,360	3,860	4,360	4,900	5,630
270	042199226	Oak Orchard Creek at Barrville Road near Elba, NY	6.48	11	109	125	144	183	204	228	244	258	271	287
					150	179	214	298	351	416	462	505	551	605
					116	134	154	203	237	277	307	334	361	393
271	042201506	Oak Orchard Creek at Medina, NY	157.00	15	660	787	935	1,270	1,460	1,670	1,810	1,940	2,060	2,210
					1,090	1,250	1,460	1,990	2,360	2,820	3,160	3,490	3,860	4,310
					717	841	994	1,370	1,610	1,910	2,120	2,320	2,520	2,770
272	042202506	West Creek near Hilton, NY	31.00	20	597	688	797	1,060	1,220	1,420	1,560	1,700	1,830	2,010
					374	455	555	810	982	1,200	1,360	1,520	1,690	1,900
					574	667	776	1,030	1,190	1,380	1,520	1,660	1,800	1,990
273	0422026250 6	Northrup Creek at North Greece, NY	10.10	11	261	315	379	532	628	741	821	897	970	1,060
					162	198	241	351	423	514	581	644	711	794
					244	297	359	500	583	682	751	819	887	971

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
274	04220500 5	Dyke Creek at Wellsville, NY	72.10	11	1,610	1,910	2,320	3,590	4,660	6,320	7,800	9,520	11,500	14,700
					1,840	2,270	2,890	4,740	6,190	8,230	10,000	11,800	13,700	16,500
					1,650	1,960	2,410	3,860	5,130	7,060	8,760	10,600	12,600	15,600
275	04221000 5	Genesee River at Wellsville, NY [AB]	288.00	83	4,610	5,560	6,860	10,800	14,100	19,000	23,300	28,200	33,800	42,400
					5,110	6,100	7,490	11,400	14,300	18,300	21,700	25,100	28,700	33,800
					4,620	5,570	6,870	10,800	14,100	18,900	23,200	27,900	33,200	41,300
276	04221769 5	Black Creek at Hyder Flats Road at Black Creek, NY	10.70	16	534	648	796	1,200	1,500	1,910	2,230	2,580	2,940	3,460
					446	552	706	1,160	1,530	2,030	2,470	2,920	3,400	4,100
					524	638	786	1,190	1,510	1,950	2,310	2,710	3,130	3,730
277	04222600 5	Wiscoy Creek at Bliss, NY	22.00	25	561	672	814	1,190	1,450	1,790	2,060	2,340	2,620	3,020
					648	774	950	1,440	1,800	2,290	2,700	3,100	3,530	4,130
					568	679	824	1,220	1,510	1,900	2,220	2,550	2,890	3,380
278	04223000 5	Genesee River at Portageville, NY [A]	984.00	92	15,800	18,400	21,800	31,500	38,800	49,100	57,700	67,000	77,200	92,100
					13,300	15,500	18,600	27,000	33,100	41,400	48,300	55,000	62,200	72,200
					15,700	18,300	21,700	31,300	38,500	48,600	56,900	65,900	75,600	89,800
279	04224700 5	Sugar Creek near Ossian, NY	10.00	23	337	412	514	817	1,060	1,410	1,710	2,040	2,410	2,960
					267	343	456	810	1,100	1,510	1,860	2,230	2,630	3,210
					331	407	510	816	1,070	1,430	1,750	2,100	2,480	3,040
280	04224775 5	Canaseraga Creek above Dansville, NY	88.90	25	1,350	1,690	2,140	3,430	4,410	5,780	6,900	8,100	9,390	11,200
					1,760	2,180	2,800	4,650	6,090	8,120	9,870	11,600	13,500	16,300
					1,380	1,720	2,190	3,580	4,690	6,290	7,650	9,080	10,600	12,800

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
281	042248075	Stony Brook Tributary at South Dansville, NY	3.15	16	61	92	143	354	579	992	1,420	1,960	2,650	3,850
					127	166	225	414	573	803	1,010	1,220	1,450	1,800
					69	100	152	364	577	934	1,280	1,680	2,170	2,980
282	042249005	Mill Creek at Patchinville, NY	4.22	22	117	167	245	546	851	1,390	1,930	2,620	3,480	4,940
					168	218	293	535	738	1,030	1,290	1,560	1,860	2,300
					122	171	249	545	830	1,300	1,750	2,300	2,950	4,020
283	042250005	Canaseraga Creek near Dansville, NY	152.00	61	2,520	3,100	3,840	5,790	7,140	8,890	10,200	11,600	13,000	14,900
					2,870	3,560	4,540	7,510	9,830	13,100	15,900	18,800	21,900	26,400
					2,530	3,110	3,860	5,880	7,340	9,320	10,900	12,600	14,300	16,800
284	042260005	Keshequa Creek at Craig Colony at Sonyea, NY	68.30	18	1,920	2,350	2,940	4,630	5,950	7,840	9,420	11,100	13,000	15,800
					1,430	1,800	2,350	4,040	5,390	7,320	8,990	10,700	12,600	15,300
					1,870	2,300	2,880	4,540	5,830	7,690	9,280	11,000	12,900	15,600
285	042270005	Canaseraga Creek at Shakers Crossing, NY	335.00	38	2,600	3,020	3,540	4,870	5,770	6,950	7,850	8,770	9,720	11,000
					5,130	6,340	8,070	13,300	17,300	22,900	27,800	32,700	38,000	45,800
					2,740	3,180	3,770	5,560	7,090	9,430	11,500	13,600	16,000	19,200
286	042275005	Genesee River near Mount Morris, NY [AD]	1,424.00	49	16,100	18,700	22,200	31,900	39,400	49,900	58,600	68,100	78,500	93,700
					20,200	24,000	29,200	44,200	55,300	70,800	84,000	97,100	111,000	131,000
					16,300	18,900	22,500	32,700	40,800	52,500	62,400	72,900	84,400	101,000
287	042295006	Honeoye Creek at Honeoye Falls, NY	196.00	52	1,150	1,410	1,750	2,730	3,490	4,560	5,450	6,420	7,470	9,010
					1,050	1,270	1,550	2,330	2,890	3,660	4,230	4,830	5,470	6,310
					1,150	1,400	1,740	2,710	3,460	4,500	5,350	6,280	7,290	8,750

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
288	04230380 6	Oatka Creek at Warsaw, NY	39.10	36	1,030	1,210	1,440	2,110	2,610	3,330	3,910	4,550	5,240	6,260
					999	1,240	1,540	2,360	2,920	3,690	4,270	4,860	5,490	6,350
					1,030	1,210	1,450	2,130	2,630	3,370	3,950	4,590	5,270	6,270
289	04230500 6	Oatka Creek at Garbutt, NY	200.00	54	1,670	2,030	2,490	3,750	4,670	5,900	6,890	7,920	9,000	10,500
					2,300	2,760	3,350	4,860	5,900	7,290	8,310	9,350	10,500	11,900
					1,700	2,060	2,520	3,800	4,740	5,990	7,000	8,040	9,130	10,600
290	04231000 6	Black Creek at Churchville, NY	130.00	54	1,100	1,310	1,590	2,300	2,810	3,480	4,000	4,530	5,090	5,860
					1,120	1,350	1,650	2,430	2,980	3,710	4,260	4,820	5,420	6,200
					1,100	1,310	1,590	2,310	2,820	3,500	4,020	4,550	5,120	5,890
291	04231040 6	Hotel Creek at Griffin Road near Churchville, NY	4.57	11	55	60	64	75	81	88	93	97	102	107
					72	86	103	145	171	203	225	245	267	292
					58	64	70	87	101	118	131	143	155	169
292	04232000 6	Genesee River at Rochester, NY [ACD]	2,467.00	40	17,900	20,000	22,600	30,100	35,600	43,300	49,600	56,400	63,800	74,500
					20,900	24,700	29,800	44,000	54,200	68,400	79,900	91,500	104,000	121,000
					18,100	20,200	22,900	31,000	37,300	46,400	53,900	61,900	70,600	83,000
293	04232034 6	Irondequoit Creek at Railroad Mills near Fishers, NY	39.20	10	359	405	460	592	678	784	863	940	1,020	1,120
					344	404	480	668	793	949	1,060	1,170	1,290	1,430
					356	405	463	607	705	830	924	1,020	1,110	1,230
294	04232040 6	Irondequoit Creek near Pittsford, NY [B]	44.40	19	407	448	501	644	749	892	1,010	1,130	1,260	1,450
					373	436	515	711	840	1,000	1,120	1,230	1,350	1,490
					403	447	502	651	762	910	1,030	1,150	1,280	1,460

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
295	042320466	Thomas Creek at Fairport, NY [B]	28.50	10	137	160	188	256	299	351	390	427	464	512
					261	306	362	501	593	707	790	868	953	1,050
					160	184	216	303	369	451	514	572	631	703
296	042320476	Irondequoit Creek at Linden Avenue East Rochester, NY	101.00	15	638	730	842	1,120	1,300	1,530	1,700	1,870	2,040	2,270
					745	867	1,020	1,390	1,650	1,960	2,190	2,400	2,640	2,930
					652	746	862	1,160	1,360	1,620	1,810	2,000	2,190	2,450
297	04232049206	East Branch Allen Creek at Pittsford, NY [B]	6.96	10	158	182	213	300	365	455	529	609	695	820
					113	135	163	231	274	328	366	403	441	486
					150	174	205	287	344	419	479	541	608	702
298	042320501006	Irondequoit Creek above Blossom Road near Rochester, NY	142.00	24	918	1,090	1,310	1,910	2,340	2,940	3,420	3,920	4,460	5,220
					980	1,150	1,350	1,870	2,220	2,660	2,990	3,300	3,650	4,070
					923	1,090	1,310	1,910	2,330	2,900	3,350	3,810	4,320	5,010
299	042320527 6	Mill Creek Tributary near Webster, NY	2.12	13	76	92	110	155	182	215	239	261	282	309
					65	80	97	139	166	198	221	242	264	290
					75	90	109	152	179	211	234	256	277	304
300	042320578 6	Bear Creek at Ontario, NY	6.74	28	76	89	106	152	184	228	262	297	334	386
					88	104	124	174	207	247	276	304	333	368
					77	90	107	154	186	230	264	298	334	383
301	042320716	Second Creek Tributary at Alton, NY	1.07	13	26	30	36	48	55	64	69	75	80	86
					37	44	54	78	93	113	127	140	154	170
					27	32	38	53	63	75	84	93	101	111

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
302	042320876	Red Creek Tributary No 16 near Red Creek, NY	2.90	11	63	77	94	139	172	215	248	283	319	368
					63	74	87	119	139	164	182	198	216	237
					63	76	93	136	164	201	229	257	286	324
303	042321006	Sterling Creek at Sterling, NY	44.40	38	655	752	866	1,130	1,290	1,490	1,620	1,750	1,880	2,040
					413	466	534	703	815	955	1,060	1,150	1,260	1,380
					641	738	850	1,100	1,250	1,440	1,560	1,680	1,810	1,960
304	042322005	Catharine Creek at Montour Falls, NY	41.10	18	573	734	970	1,810	2,600	3,960	5,290	6,940	8,980	12,500
					944	1,190	1,540	2,630	3,490	4,710	5,770	6,850	8,010	9,710
					614	777	1,030	1,940	2,790	4,170	5,440	6,910	8,620	11,400
305	042324606	Sugar Creek at Guyanoga, NY	28.90	35	265	362	502	943	1,310	1,850	2,310	2,820	3,380	4,200
					519	641	799	1,210	1,490	1,860	2,140	2,420	2,710	3,090
					280	377	517	960	1,320	1,850	2,290	2,770	3,290	4,050
306	042326306	Kendig Creek near Macdougall, NY	13.80	34	323	399	490	699	823	964	1,060	1,140	1,220	1,320
					215	257	309	439	524	631	708	783	862	958
					316	391	480	682	798	930	1,020	1,090	1,170	1,270
307	042330005	Cayuga Inlet near Ithaca, NY	35.20	63	713	931	1,240	2,220	3,040	4,300	5,410	6,670	8,100	10,300
					912	1,150	1,490	2,550	3,400	4,610	5,660	6,740	7,890	9,600
					720	937	1,250	2,240	3,070	4,330	5,440	6,680	8,070	10,200

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
308	042332555	Cayuga Inlet at Ithaca, NY [B]	86.70	27	1,980	2,530	3,320	5,730	7,710	10,700	13,200	16,100	19,300	24,200
					2,440	3,090	4,050	7,080	9,570	13,200	16,400	19,800	23,400	28,900
					2,010	2,570	3,370	5,880	8,000	11,200	14,000	17,100	20,500	25,600
309	042332585	Coy Glen Creek at Ithaca, NY	3.56	17	122	168	234	451	637	921	1,170	1,450	1,770	2,260
					161	211	287	537	752	1,070	1,350	1,650	1,970	2,460
					127	172	240	465	662	965	1,230	1,520	1,850	2,340
310	042333105	Sixmile Creek near Ithaca, NY [B]	42.00	15	1,010	1,350	1,860	3,660	5,360	8,230	11,000	14,400	18,500	25,300
					1,200	1,500	1,940	3,280	4,360	5,900	7,230	8,610	10,100	12,300
					1,030	1,370	1,870	3,590	5,110	7,490	9,640	12,100	15,000	19,600
311	042336765	Virgil Creek at Mill Street at Dryden, NY [B]	20.70	17	576	701	876	1,410	1,860	2,540	3,140	3,830	4,610	5,830
					676	819	1,020	1,600	2,040	2,640	3,160	3,670	4,210	5,000
					587	713	891	1,440	1,900	2,570	3,150	3,770	4,450	5,490
312	042337005	Virgil Creek at Freeville, NY [B]	40.30	13	766	933	1,170	1,950	2,630	3,730	4,740	5,940	7,360	9,670
					1,130	1,370	1,710	2,680	3,420	4,440	5,310	6,170	7,090	8,410
					819	989	1,240	2,100	2,850	3,980	4,970	6,040	7,240	9,070
313	042340005	Fall Creek near Ithaca, NY	126.00	80	2,190	2,580	3,100	4,670	5,950	7,850	9,490	11,400	13,500	16,700
					2,420	2,880	3,520	5,310	6,610	8,380	9,870	11,300	12,900	15,100
					2,200	2,590	3,110	4,700	5,990	7,890	9,530	11,400	13,400	16,500
314	0423402026	Cayuga Lake Tributary No 8 near Jacksonville, NY	1.36	10	55	68	84	128	160	205	241	278	319	376
					62	76	93	133	158	188	210	231	252	278
					57	69	85	129	160	200	231	263	296	341

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
315	042340588 6	Yawger Creek Tributary near Auburn, NY	1.76	11	27	33	40	60	74	92	106	120	134	153
					44	54	66	97	118	144	164	183	203	228
					30	36	44	67	84	106	123	139	156	178
316	04234138 6	Schaeffer Creek near Canandaigua, NY	7.84	23	161	198	243	348	410	483	532	577	619	671
					156	191	236	350	424	520	588	656	725	813
					161	198	243	348	412	488	541	591	639	699
317	04234200 6	Mud Creek at East Victor, NY	64.20	34	771	924	1,110	1,520	1,770	2,060	2,260	2,440	2,610	2,830
					756	914	1,120	1,640	1,990	2,450	2,790	3,120	3,480	3,930
					770	923	1,110	1,530	1,790	2,100	2,320	2,530	2,730	2,980
318	04234363 6	Marbletown Creek Tributary near Newark, NY	0.58	11	17	19	21	26	28	31	33	34	36	38
					15	18	21	29	33	38	42	45	48	52
					17	19	21	26	29	33	35	38	40	42
319	04234400 6	West River near Middlesex, NY	29.30	13	339	477	677	1,310	1,820	2,570	3,190	3,860	4,590	5,640
					440	533	653	955	1,160	1,410	1,600	1,790	1,980	2,230
					354	485	674	1,250	1,690	2,300	2,780	3,290	3,840	4,630
320	04235250 6	Flint Creek at Phelps, NY	102.00	39	847	1,070	1,350	2,050	2,510	3,060	3,460	3,850	4,220	4,690
					1,030	1,240	1,520	2,220	2,700	3,340	3,800	4,280	4,780	5,440
					857	1,080	1,360	2,060	2,520	3,090	3,500	3,900	4,290	4,780
321	04235255 6	Canandaigua Outlet Tributary near Alloway, NY	2.94	22	47	55	65	87	101	115	125	135	143	154
					57	66	77	103	118	137	149	161	172	186
					48	56	66	89	103	119	129	139	149	161

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
322	042352766	Black Brook at Tyre, NY	19.00	28	220	270	333	492	597	727	823	918	1,010	1,130
					181	212	251	349	414	496	556	613	675	750
					217	266	328	481	579	699	786	872	958	1,070
323	042401006	Harbor Brook at Syracuse, NY	10.00	40	142	179	226	344	423	521	592	661	729	818
					294	348	413	568	666	786	873	955	1,040	1,150
					150	187	234	357	440	544	620	693	765	858
324	042425001	East Branch Fish Creek at Taberg, NY	188.00	72	5,100	5,780	6,670	9,090	10,900	13,400	15,400	17,500	19,800	23,200
					4,650	5,210	5,890	7,710	8,980	10,600	11,900	13,300	14,500	16,500
					5,090	5,760	6,650	9,020	10,800	13,200	15,100	17,000	19,200	22,400
325	042427951	Canada Creek Tributary near Lee Center, NY	1.34	10	55	65	79	117	147	191	228	268	314	381
					48	55	65	90	109	134	153	174	193	224
					54	63	76	110	134	167	194	224	255	303
326	042435006	Oneida Creek at Oneida, NY	113.00	50	2,180	2,660	3,290	5,040	6,340	8,130	9,580	11,100	12,800	15,100
					1,870	2,250	2,740	4,050	4,960	6,190	7,120	8,080	9,110	10,500
					2,170	2,640	3,270	4,990	6,260	7,990	9,380	10,800	12,500	14,600
327	042450006	Limestone Creek at Fayetteville, NY	85.50	56	1,490	1,890	2,430	3,910	5,000	6,470	7,630	8,840	10,100	11,900
					1,580	1,910	2,330	3,430	4,200	5,250	6,040	6,860	7,740	8,910
					1,490	1,890	2,430	3,890	4,960	6,390	7,510	8,680	9,900	11,600
328	042452006	Butternut Creek near Jamesville, NY	32.20	41	650	773	931	1,360	1,670	2,090	2,430	2,780	3,160	3,690
					759	917	1,120	1,650	2,010	2,480	2,830	3,190	3,570	4,070
					656	780	939	1,380	1,690	2,120	2,470	2,820	3,210	3,730

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
329	04245840 1	Scriba Creek near Constantia, NY	38.40	32	567	644	738	969	1,120	1,310	1,460	1,600	1,750	1,950
					621	720	845	1,180	1,410	1,700	1,920	2,170	2,380	2,730
					570	649	744	990	1,160	1,380	1,550	1,720	1,890	2,130
330	04249050 1	Catfish Creek at New Haven, NY	31.70	37	387	449	527	735	883	1,080	1,240	1,410	1,580	1,830
					414	469	538	721	849	1,020	1,140	1,280	1,400	1,590
					389	450	528	734	879	1,070	1,220	1,390	1,540	1,780
331	042490673 1	North Branch Grindstone Creek near Altmar, NY	10.10	24	209	244	288	393	461	545	606	666	726	805
					235	274	324	456	550	672	763	866	957	1,100
					211	246	290	401	476	573	645	720	791	891
332	04249200 1	North Branch Salmon River at Redfield, NY	82.50	13	3,730	4,050	4,470	5,570	6,360	7,430	8,270	9,160	10,100	11,400
					1,960	2,220	2,540	3,400	4,000	4,770	5,340	6,010	6,580	7,490
					3,470	3,810	4,200	5,100	5,700	6,510	7,150	7,890	8,620	9,720
333	04250750 1	Sandy Creek near Adams, NY	137.00	42	4,070	4,590	5,190	6,530	7,330	8,260	8,900	9,510	10,100	10,800
					3,590	4,170	4,880	6,800	8,160	9,960	11,300	12,900	14,300	16,500
					4,050	4,570	5,180	6,550	7,420	8,500	9,280	10,100	10,900	11,900
334	04252500 1	Black River near Boonville, NY	304.00	94	4,460	5,010	5,720	7,630	9,030	10,900	12,500	14,100	15,800	18,400
					5,010	5,690	6,510	8,680	10,200	12,100	13,500	15,100	16,400	18,700
					4,470	5,020	5,740	7,670	9,090	11,000	12,600	14,200	15,900	18,400
335	04254500 1	Moose River at Mckeever, NY	363.00	81	5,930	6,680	7,600	9,950	11,600	13,600	15,200	16,800	18,500	20,800
					5,760	6,580	7,570	10,200	12,000	14,200	15,900	17,800	19,400	22,000
					5,930	6,680	7,600	9,960	11,600	13,600	15,300	16,900	18,600	20,900

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
336	04256000 1	Independence River at Donnattsburg, NY [B]	88.70	72	1,540	1,780	2,090	3,030	3,780	4,880	5,820	6,880	8,070	9,890
					1,500	1,740	2,030	2,800	3,330	4,010	4,510	5,080	5,570	6,360
					1,540	1,780	2,090	3,020	3,750	4,800	5,690	6,680	7,780	9,470
337	04256040 1	Tributary to Mill Creek Tributary near Lowville, NY	1.66	18	97	112	131	185	227	288	339	395	457	551
					97	115	139	206	257	327	382	445	504	596
					97	112	131	188	234	299	352	411	474	567
338	04256485 1	Woods Lake Outlet near Big Moose, NY	0.80	13	13	16	21	36	50	73	95	121	152	204
					19	22	26	38	46	57	65	74	82	95
					13	17	21	36	49	68	84	102	123	157
339	04258700 1	Deer River at Deer River, NY [B]	94.80	68	3,850	4,530	5,420	7,940	9,850	12,600	14,800	17,200	19,900	23,700
					2,650	3,040	3,520	4,800	5,710	6,890	7,770	8,800	9,690	11,100
					3,810	4,490	5,360	7,780	9,560	12,100	14,100	16,200	18,700	22,100
340	04260500 1	Black River at Watertown, NY	1,864.00	99	17,600	19,500	21,700	27,500	31,500	36,600	40,500	44,600	48,700	54,500
					17,800	19,600	21,700	27,400	31,300	36,200	39,900	44,200	47,600	53,300
					17,600	19,500	21,700	27,500	31,500	36,600	40,500	44,600	48,600	54,400
341	04260575 1	Horse Creek Tributary near Dexter, NY	4.59	11	161	208	275	477	640	881	1,090	1,310	1,560	1,940
					146	178	221	340	428	548	641	746	845	997
					158	204	266	443	573	752	901	1,060	1,230	1,500
342	04262500 1	West Branch Oswegatchie River near Harrisville, NY	258.00	83	3,290	3,680	4,140	5,260	5,970	6,850	7,500	8,130	8,770	9,620
					3,550	4,100	4,780	6,570	7,790	9,330	10,500	11,800	12,800	14,600
					3,300	3,690	4,160	5,310	6,080	7,040	7,760	8,480	9,180	10,100

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
343	04263000 1	Oswegatchie River near Heuvelton, NY	986.00	83	7,420	8,280	9,320	11,900	13,500	15,600	17,100	18,700	20,200	22,300
					6,610	7,340	8,200	10,500	12,000	14,000	15,400	17,000	18,400	20,500
					7,400	8,260	9,290	11,800	13,400	15,500	17,000	18,500	20,000	22,100
344	04263445 1	Birch Creek at Pierces Corners, NY	1.67	10	42	48	55	72	84	97	107	117	127	140
					35	42	53	82	103	131	153	177	199	233
					41	47	55	75	90	111	128	145	162	186
345	04264300 1	Brandy Brook near Waddington, NY	22.80	23	234	290	366	590	767	1,030	1,250	1,490	1,750	2,150
					264	313	377	548	668	825	942	1,070	1,190	1,370
					237	292	367	584	749	983	1,170	1,370	1,590	1,920
346	04264400 1	Middle Branch Grass River near Clare, NY	63.00	12	928	1,100	1,320	1,930	2,370	3,000	3,500	4,040	4,610	5,450
					1,100	1,300	1,560	2,260	2,760	3,390	3,860	4,400	4,860	5,590
					955	1,130	1,360	2,010	2,490	3,140	3,640	4,190	4,720	5,510
347	04264700 1	North Branch Grass River near Clare, NY	46.30	11	346	413	502	760	962	1,260	1,500	1,770	2,080	2,530
					705	832	994	1,430	1,730	2,110	2,390	2,710	2,990	3,430
					406	477	580	925	1,210	1,590	1,870	2,190	2,500	2,950
348	04265000 1	Grass River at Pyrites, NY	333.00	53	3,550	4,010	4,560	5,830	6,620	7,570	8,250	8,910	9,560	10,400
					3,610	4,170	4,860	6,660	7,900	9,460	10,600	11,900	13,000	14,800
					3,550	4,020	4,570	5,880	6,730	7,790	8,560	9,340	10,100	11,100
349	04265100 1	Elm Creek near Hermon, NY	32.60	41	454	523	608	827	976	1,170	1,320	1,470	1,620	1,840
					527	628	757	1,110	1,350	1,670	1,910	2,170	2,410	2,780
					457	528	616	850	1,020	1,240	1,420	1,590	1,770	2,020

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
350	04265200 1	Tanner Creek at Stellaville, NY	33.40	11	537	640	772	1,130	1,380	1,720	1,990	2,280	2,570	2,990
					493	588	712	1,040	1,280	1,580	1,800	2,050	2,280	2,620
					529	632	762	1,110	1,350	1,670	1,910	2,180	2,440	2,820
351	04265300 1	Little River near Canton, NY	42.40	18	727	905	1,150	1,860	2,420	3,240	3,940	4,700	5,550	6,810
					718	864	1,050	1,560	1,930	2,390	2,740	3,140	3,490	4,030
					726	901	1,140	1,810	2,310	3,000	3,570	4,190	4,840	5,830
352	04267600 1	Cold Brook near South Colton, NY	18.70	15	265	307	359	494	587	710	804	902	1,000	1,140
					361	429	518	756	925	1,140	1,310	1,490	1,650	1,900
					277	321	378	544	673	845	980	1,120	1,250	1,440
353	04267700 1	Parkhurst Brook near Potsdam, NY	16.80	18	240	288	353	544	694	913	1,100	1,300	1,530	1,870
					296	357	436	652	806	1,010	1,150	1,320	1,470	1,700
					246	295	362	562	719	940	1,120	1,310	1,510	1,810
354	04267800 1	Trout Brook at Allen Corners, NY	54.20	28	671	821	1,020	1,600	2,040	2,680	3,210	3,790	4,430	5,360
					593	707	852	1,240	1,520	1,870	2,130	2,420	2,680	3,080
					666	813	1,010	1,560	1,960	2,520	2,970	3,460	3,990	4,770
355	04268200 1	Plum Brook near Grantville, NY	43.90	38	512	592	694	975	1,180	1,470	1,700	1,950	2,220	2,600
					444	531	643	943	1,150	1,420	1,610	1,830	2,030	2,330
					508	589	691	973	1,180	1,460	1,680	1,930	2,180	2,540
356	04268700 1	St. Regis River at St. Regis Falls, NY	234.00	10	1,610	1,840	2,120	2,840	3,330	3,970	4,450	4,950	5,460	6,160
					2,510	2,880	3,330	4,510	5,310	6,330	7,070	7,920	8,630	9,780
					1,770	2,010	2,330	3,280	4,000	4,930	5,610	6,340	7,000	7,950

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
357	04268720 1	Hopkinton Brook at Hopkinton, NY	20.00	20	363	420	488	656	764	899	997	1,100	1,190	1,320
					361	431	523	770	945	1,170	1,340	1,520	1,690	1,950
					363	421	492	673	801	968	1,100	1,230	1,350	1,530
358	04268800 1	West Branch St. Regis River near Parishville, NY	171.00	41	1,870	2,200	2,600	3,600	4,240	5,040	5,630	6,210	6,790	7,550
					2,070	2,380	2,760	3,770	4,470	5,350	5,990	6,730	7,350	8,350
					1,880	2,210	2,610	3,610	4,270	5,080	5,690	6,300	6,890	7,700
359	04269000 1	St. Regis River at Brasher Center, NY	612.00	87	5,740	6,540	7,520	10,000	11,800	14,000	15,800	17,600	19,400	22,000
					6,030	6,930	8,010	10,900	12,800	15,200	17,000	19,000	20,700	23,500
					5,750	6,550	7,530	10,000	11,900	14,100	15,900	17,700	19,500	22,200
360	04269050 1	Allen Brook near Brasher Falls, NY	16.00	25	332	418	528	823	1,030	1,300	1,510	1,710	1,930	2,210
					261	319	394	602	751	945	1,090	1,250	1,400	1,630
					326	410	518	796	983	1,220	1,410	1,590	1,790	2,050
361	04269100 1	Lawrence Brook near Moira, NY	25.70	23	494	617	779	1,230	1,570	2,030	2,400	2,790	3,200	3,790
					468	574	713	1,100	1,370	1,740	2,010	2,320	2,600	3,030
					491	613	773	1,210	1,530	1,960	2,300	2,660	3,030	3,560
362	04269500 1	Deer River at Brasher Iron Works, NY	191.00	22	1,730	2,080	2,550	3,840	4,790	6,100	7,150	8,270	9,460	11,200
					1,970	2,330	2,760	3,930	4,730	5,740	6,480	7,330	8,050	9,200
					1,750	2,100	2,570	3,850	4,780	6,010	6,970	8,000	9,040	10,600
363	04270000 1	Salmon River at Chasm Falls, NY	132.00	70	1,220	1,420	1,660	2,220	2,560	2,960	3,250	3,530	3,790	4,130
					1,910	2,270	2,720	3,930	4,770	5,830	6,620	7,500	8,270	9,490
					1,240	1,440	1,690	2,300	2,710	3,220	3,600	3,970	4,320	4,790

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
364	04270100 1	West Branch Deer Creek at Fort Covington Center, NY	32.40	21	647	766	911	1,270	1,510	1,800	2,020	2,240	2,460	2,740
					505	618	767	1,180	1,470	1,850	2,140	2,460	2,750	3,210
					634	753	897	1,260	1,500	1,810	2,050	2,300	2,550	2,890
365	04270150 1	East Branch Deer Creek at Fort Covington Center, NY	23.90	21	464	558	679	996	1,220	1,510	1,740	1,970	2,210	2,540
					436	532	658	1,010	1,260	1,580	1,830	2,110	2,360	2,760
					461	556	677	998	1,230	1,530	1,760	2,010	2,260	2,610
366	04270162 1	East Branch Little Salmon River near Skerry, NY	7.11	16	81	96	114	160	190	228	256	285	314	352
					129	155	190	284	351	438	503	575	640	741
					87	103	123	182	229	291	338	388	434	500
367	04270200 1	Little Salmon River at Bombay, NY	92.20	40	1,310	1,530	1,790	2,420	2,830	3,320	3,670	4,020	4,360	4,810
					1,260	1,520	1,840	2,720	3,330	4,130	4,710	5,380	5,970	6,890
					1,310	1,530	1,790	2,440	2,890	3,440	3,840	4,270	4,670	5,220
368	04270700 1	Trout River at Trout River, NY	107.00	40	1,960	2,340	2,820	4,060	4,920	6,050	6,910	7,800	8,710	9,970
					1,880	2,280	2,790	4,190	5,180	6,460	7,420	8,510	9,470	11,000
					1,960	2,340	2,820	4,070	4,950	6,110	7,000	7,930	8,850	10,200
369	04270800 1	English River near Mooers Forks, NY	40.80	16	670	779	916	1,270	1,510	1,820	2,060	2,310	2,560	2,910
					509	620	764	1,160	1,430	1,780	2,040	2,330	2,590	3,010
					650	762	898	1,250	1,490	1,810	2,050	2,320	2,570	2,950
370	04271815 1	Little Chazy River near Chazy, NY [B]	50.30	11	366	459	588	974	1,280	1,740	2,130	2,570	3,050	3,780
					617	755	933	1,420	1,770	2,210	2,540	2,920	3,250	3,760
					408	504	643	1,080	1,440	1,920	2,300	2,730	3,140	3,770

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
371	04273500 1	Saranac River at Plattsburgh, NY	608.00	57	3,980	4,680	5,560	7,780	9,280	11,200	12,700	14,100	15,600	17,700
					3,930	4,540	5,290	7,270	8,590	10,200	11,400	12,800	13,900	15,700
					3,980	4,680	5,550	7,750	9,220	11,100	12,500	13,900	15,400	17,400
372	04273700 1	Salmon River at South Plattsburgh, NY	63.30	36	498	648	860	1,530	2,080	2,920	3,660	4,490	5,420	6,850
					704	875	1,100	1,730	2,180	2,760	3,180	3,660	4,080	4,740
					510	660	873	1,550	2,090	2,890	3,570	4,330	5,140	6,400
373	04273800 1	Little Ausable River near Valcour, NY	67.80	10	680	910	1,250	2,440	3,530	5,340	7,050	9,110	11,600	15,600
					772	963	1,220	1,920	2,430	3,080	3,570	4,120	4,610	5,370
					697	919	1,240	2,300	3,160	4,420	5,500	6,770	8,210	10,500
374	04274000 1	West Branch Ausable River near Lake Placid, NY	116.00	66	2,430	2,860	3,410	4,930	6,050	7,600	8,840	10,200	11,600	13,700
					2,000	2,390	2,870	4,180	5,090	6,250	7,110	8,090	8,930	10,300
					2,420	2,850	3,390	4,890	5,980	7,470	8,650	9,950	11,300	13,300
375	04275000 1	East Branch Ausable River at Au Sable Forks, NY	198.00	75	4,410	5,230	6,300	9,290	11,500	14,700	17,200	19,900	22,900	27,200
					2,940	3,510	4,240	6,200	7,570	9,330	10,600	12,100	13,400	15,400
					4,370	5,190	6,240	9,150	11,200	14,200	16,600	19,100	21,800	25,800
376	04275500 1	Ausable River near Au Sable Forks, NY	446.00	68	7,150	8,380	9,950	14,300	17,500	21,800	25,400	29,100	33,100	38,900
					5,580	6,670	8,040	11,700	14,300	17,500	19,900	22,600	24,800	28,500
					7,100	8,330	9,890	14,200	17,300	21,400	24,800	28,400	32,100	37,600
377	04276200 1	Bouquet River at New Russia, NY [B]	37.60	31	1,070	1,320	1,660	2,630	3,360	4,400	5,240	6,140	7,120	8,520
					813	983	1,210	1,820	2,250	2,830	3,250	3,740	4,170	4,840
					1,050	1,300	1,630	2,550	3,200	4,110	4,830	5,610	6,430	7,640

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
378	04276500 1	Bouquet River at Willsboro, NY	270.00	58	2,990	3,690	4,580	6,810	8,300	10,200	11,500	12,900	14,200	16,000
					3,100	3,750	4,590	6,840	8,420	10,400	11,900	13,600	15,100	17,400
					2,990	3,690	4,580	6,810	8,310	10,200	11,500	13,000	14,300	16,200
379	04276770 1	Mill Brook at Port Henry, NY	27.00	11	437	545	683	1,050	1,300	1,640	1,890	2,150	2,410	2,770
					412	507	633	980	1,230	1,550	1,790	2,060	2,300	2,670
					433	539	675	1,030	1,280	1,610	1,850	2,110	2,360	2,720
380	04276842 1	Putnam Creek East of Crown Point Center, NY	51.60	16	849	1,050	1,300	1,980	2,480	3,130	3,640	4,170	4,720	5,490
					744	908	1,120	1,710	2,130	2,660	3,050	3,500	3,890	4,500
					836	1,030	1,280	1,930	2,400	2,990	3,440	3,930	4,410	5,110
381	04278300 1	Northwest Bay Brook near Bolton Landing, NY	22.00	34	745	877	1,030	1,390	1,610	1,860	2,030	2,190	2,350	2,540
					389	472	583	886	1,100	1,380	1,590	1,830	2,040	2,360
					723	855	1,000	1,340	1,540	1,780	1,950	2,120	2,280	2,500
382	04279400 1	Poultney River Tributary at East Poultney, VT [A]	1.13	14	43	50	58	78	91	106	118	130	141	156
					27	33	41	64	80	103	120	138	156	183
					41	48	56	75	88	105	119	133	147	167
383	04280200 1	Mettawee River Tributary 2 at East Ruppert, VT [A]	1.86	12	48	58	71	106	131	165	192	221	252	295
					48	57	70	105	130	164	189	218	244	284
					48	58	71	105	131	165	191	220	249	290
384	04280300 1	Mettawee River Tributary near Pawlet, VT [A]	2.09	11	37	51	74	150	219	331	433	553	692	911
					50	62	77	119	150	192	223	259	292	342
					39	53	74	142	197	277	345	422	508	643

Table 8. Peak discharge for 10 selected recurrence intervals on rural, unregulated streams in New York, excluding Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Hydrologic-region boundaries and station locations are shown in figure 2]

Map number	Station number and hydrologic region	Station name and location	Drainage area (mi²)	Number years of peak discharge record	Peak-discharge (ft³/s) for recurrence interval (years) (Top line is computed from log-Pearson type-III analysis; middle line is computed from the regression equations; bottom line is weighted average of first two discharges)									
					1.25	1.5	2	5	10	25	50	100	200	500
385	04280350 1	Mettawee River near Pawlet, VT [A]	70.20	17	1,260	1,590	2,040	3,400	4,490	6,080	7,430	8,920	10,600	13,100
					1,630	1,960	2,380	3,530	4,350	5,420	6,230	7,160	7,970	9,270
					1,300	1,630	2,080	3,420	4,460	5,890	7,050	8,320	9,660	11,700
386	04280450 1	Mettawee River near Middle Granville, NY [A]	167.00	18	2,450	3,180	4,190	7,280	9,800	13,500	16,700	20,300	24,200	30,100
					3,040	3,650	4,420	6,510	7,990	9,900	11,300	13,000	14,400	16,700
					2,510	3,230	4,210	7,150	9,400	12,500	15,000	17,900	20,800	25,400
387	04292500 1	Lamoille River at East Georgia, VT [A]	686.00	71	10,700	11,900	13,300	16,600	18,700	21,200	23,100	24,900	26,700	29,200
					8,780	10,000	11,600	15,500	18,300	21,800	24,400	27,400	29,900	34,000
					10,600	11,800	13,300	16,500	18,700	21,300	23,200	25,200	27,100	29,800
388	04292700 1	Stone Bridge Brook near Georgia Plains, VT [A]	8.45	23	93	124	169	318	449	659	849	1,070	1,330	1,740
					152	187	234	365	460	584	679	785	882	1,030
					98	129	174	324	451	642	805	991	1,200	1,530

[A] Regression and weighted discharges computed from New York full-regression equations. Out-of-State flood-frequency report and relations should be consulted because part or all of the drainage basin lies in an adjacent State.

[B] Annual peak-discharge record extended through two-station comparison method (U.S. Water Resources Council, 1981) or record was combined with record (adjusted for drainage area) from a nearby streamflow-gaging station on the same stream.

[C] Streamflow-gaging station with drainage area lying within two or more hydrologic regions of New York. The regression estimate was obtained by weighting the estimates from the regional equations by the relative percentage of drainage area in each hydrologic region of New York.

[D] Streamflow-gaging station currently on a regulated stream. Peak discharges and statistics reflect preregulation conditions and are not generally applicable to present conditions (See table 7 for period of unregulated record).

Table 9. Location, drainage area, period of record, and calculated peak discharge for 10 recurrence intervals for regulated streams, and streams in urbanized basins in New York, including Long Island.

[mi², square miles; ft³/s, cubic feet per second. Locations are shown in figure 7]

Map number	Station number	Station name and code (U, urbanized drainage basin; R, regulated stream)	County	Latitude (°/'/")	Longitude (°/'/")	Drainage area (mi²)	Number of years of peak discharge record	Peak-discharge (ft³/s) for 10 recurrence intervals (years)									
								1.25	1.5	2	5	10	25	50	100	200	500
501	01300000	Blind Brook at Rye NY (U)	Westchester	405900	734114	9.20	47	440	539	677	1,110	1,460	2,010	2,500	3,060	3,700	4,700
502	01300500	Beaver Swamp Brook at Mamaroneck NY (U)	Westchester	405721	734307	4.71	46	91	102	116	157	188	232	269	308	352	417
503	01301000	Mamaroneck River at Mamaroneck NY (U)	Westchester	405714	734406	23.40	47	952	1,170	1,450	2,190	2,720	3,410	3,950	4,510	5,090	5,890
504	01301500	Hutchinson River at Pelham NY (U)	Westchester	405441	734855	5.76	46	174	203	240	333	396	477	539	602	666	754
505	01302000	Bronx River at Bronxville NY (U)	Westchester	405609	735010	26.50	47	704	845	1,020	1,480	1,800	2,200	2,510	2,830	3,150	3,590
506	01302500	Glen Cove Creek at Glen Cove NY (U)	Nassau	405148	733805	11.00	61	231	284	350	508	608	727	811	891	968	1,070
507	01303000	Mill Neck Creek at Mill Neck NY (U)	Nassau	405315	733351	11.50	63	38	44	53	76	94	118	138	160	183	217
508	01303500	Cold Spring Br at Cold Spring Harbor NY (U)	Nassau	405126	732750	7.30	48	16	22	31	61	87	126	159	198	240	304
509	01304000	Nissequogue River near Smithtown NY (U)	Suffolk	405058	731329	27.00	55	81	92	106	147	177	219	254	293	334	395
510	01304500	Peconic River at Riverhead NY (U)	Suffolk	405449	724114	75.00	58	64	73	85	114	135	163	185	207	231	265
511	01305000	Carmans River at Yaphank NY (U)	Suffolk	404949	725424	71.00	57	42	49	57	81	99	122	141	161	182	212
512	01305500	Swan River at East Patchogue NY (U)	Suffolk	404601	725939	8.80	53	28	32	36	47	54	62	68	74	80	89
513	01306000 [a]	Patchogue River at Patchogue NY (U)	Suffolk	404556	730116	13.50	27	34	38	43	54	61	68	73	78	83	88
514	01306440	Connetquot Brook at Central Islip NY (U)	Suffolk	404733	730958	12.00	21	15	18	22	31	37	44	49	54	59	66
515	01306460	Connetquot Bk near Central Islip NY (U)	Suffolk	404619	730933	18.00	22	57	69	84	120	142	169	188	205	222	244

Table 9. Location, drainage area, period of record, and calculated peak discharge for 10 recurrence intervals for regulated streams, and streams in urbanized basins in New York, including Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Locations are shown in figure 7]

Map number	Station number	Station name and code (U, urbanized drainage basin; R, regulated stream)	County	Latitude (°/'/")	Longitude (°/'/")	Drainage area (mi²)	Number of years of peak discharge record	Peak-discharge (ft³/s) for 10 recurrence intervals (years)									
								1.25	1.5	2	5	10	25	50	100	200	500
516	01306500 [a]	Connetquot River near Oakdale NY (U)	Suffolk	404451	730903	24.00	53	64	72	82	111	133	164	189	217	247	290
517	01307000	Champlin Creek at Islip NY (U)	Suffolk	404413	731208	6.50	22	31	36	42	58	68	82	92	102	113	127
518	01307500	Penataquit Creek at Bay Shore NY (U)	Suffolk	404334	731441	5.00	31	34	38	43	54	61	69	74	79	84	91
519	01308000	Sampawams Creek at Babylon NY (U)	Suffolk	404215	731852	22.70	55	50	63	79	123	153	191	219	247	276	313
520	01308500	Carlls River at Babylon NY (U)	Suffolk	404231	731944	35.40	55	94	112	134	191	230	281	319	359	400	456
521	01309000	Santapogue Creek at Lindenhurst NY (U)	Suffolk	404130	732120	7.00	23	18	20	23	30	35	42	47	52	57	64
522	01309500	Massapequa Creek at Massapequa NY (U)	Nassau	404120	732719	38.00	63	74	100	135	240	320	431	520	614	713	851
523	01310000 [a]	Bellmore Creek at Bellmore NY (U)	Nassau	404043	733058	17.00	42	38	47	59	91	114	144	168	192	218	252
524	01310500	East Meadow Brook at Freeport NY (U)	Nassau	403956	733413	31.00	63	171	230	309	523	669	854	990	1,120	1,250	1,420
525	01311000	Pines Brook at Malverne NY (U)	Nassau	403959	733935	10.00	63	77	114	167	339	479	680	844	1,020	1,210	1,470
526	01311500	Valley Stream at Valley Stream NY (U)	Nassau	403949	734218	4.50	46	94	112	134	190	227	276	312	349	387	438
527	01315000	Indian River near Indian Lake NY (R)	Hamilton	434530	741605	132.00	83	740	864	1,030	1,480	1,830	2,320	2,730	3,170	3,660	4,370
528	01325000	Sacandaga River at Stewarts Bridge near Hadley NY (R)	Saratoga	431841	735204	1,055.00	70	5,630	6,250	7,020	9,030	10,400	12,300	13,800	15,300	16,900	19,200
529	01327750 [b]	Hudson River at Fort Edward NY (R)	Washington	431610	733547	2,817.00	23	18,700	21,000	23,800	30,100	34,100	39,000	42,500	45,900	49,200	53,600
530	01331095 [b]	Hudson River at Stillwater NY (R)	Rensselaer	425608	733908	3,773.00	23	20,100	26,700	27,700	37,400	43,200	50,200	55,100	59,700	64,200	69,900

Table 9. Location, drainage area, period of record, and calculated peak discharge for 10 recurrence intervals for regulated streams, and streams in urbanized basins in New York, including Long Island.—Continued

[mi^2, square miles; ft^3/s, cubic feet per second. Locations are shown in figure 7]

Map number	Station number	Station name and code (U, urbanized drainage basin; R, regulated stream)	County	Latitude (°/'/")	Longitude (°/'/")	Drainage area (mi^2)	Number of years of peak discharge record	Peak-discharge (ft^3/s) for 10 recurrence intervals (years)									
								1.25	1.5	2	5	10	25	50	100	200	500
531	01335754 [b]	Hudson River above Lock 1 near Waterford NY (R)	Saratoga	424945	734000	4,611.00	46	29,400	32,800	37,300	50,100	59,900	73,800	85,300	97,800	112,000	132,000
532	01336000	Mohawk River below Delta Dam near Rome NY (R)	Oneida	431552	752612	152.00	72	1,530	1,900	2,390	3,790	4,840	6,310	7,500	8,770	10,100	12,100
533	01344000	West Canada Creek at Hinckley NY (R)	Oneida	431820	750710	375.00	40	4,920	5,730	6,720	9,210	10,900	13,000	14,600	16,100	17,800	19,900
534	01346000	West Canada Creek at Kast Bridge NY (R)	Herkimer	430408	745919	560.00	80	7,860	9,090	10,500	13,600	15,400	17,500	18,800	20,100	21,300	22,700
535	01347000	Mohawk River near Little Falls NY (R)	Herkimer	430053	744647	1,342.00	73	15,200	17,000	18,900	23,100	25,400	28,000	29,800	31,400	32,900	34,800
536	01349850	Batavia Kill at Hensonville NY (R)	Greene	421718	741255	13.50	18	580	688	838	1,320	1,740	2,400	3,000	3,720	4,560	5,910
537	01349900 [b]	Batavia Kill near Ashland NY (R)	Greene	421736	741822	51.20	14	1,380	1,920	2,720	5,370	7,670	11,300	14,400	18,000	22,100	28,400
538	01350101	Schoharie Creek at Gilboa NY (R)	Schoharie	422350	742703	316.00	26	6,960	9,890	14,100	27,100	37,400	51,800	63,500	75,800	88,800	107,000
539	01350180	Schoharie Creek at North Blenheim NY (R)	Schoharie	422757	742745	358.00	29	7,050	10,100	14,400	28,000	38,700	53,800	66,000	78,900	92,500	112,000
540	01350355	Schoharie Creek at Breakabeen NY (R)	Schoharie	423213	742439	444.00	24	8,640	11,700	16,000	29,300	40,200	56,200	69,800	84,700	101,000	125,000
541	01351500	Schoharie Creek at Burtonsville NY (R)	Schenectady	424800	741548	886.00	60	13,100	16,300	20,500	32,800	42,200	55,500	66,400	78,100	90,800	109,000
542	01357500	Mohawk River at Cohoes NY (R)	Albany	424707	734229	3,450.00	86	42,500	49,600	58,200	79,400	93,200	110,000	123,000	136,000	148,000	165,000
543	01358000	Hudson River at Green Island NY (R)	Albany	424508	734122	8,090.00	54	69,500	81,000	94,400	124,000	142,000	162,000	176,000	188,000	200,000	215,000
544	01359513	Hunger Kill at Guilderland NY (U)	Albany	424122	735426	8.16	10	81	89	98	122	137	157	171	186	202	222
545	01364500	Esopus Creek at Mount Marion NY (R)	Ulster	420216	735821	419.00	35	5,940	7,020	8,500	13,000	16,700	22,200	27,100	32,700	39,000	48,800

Table 9. Location, drainage area, period of record, and calculated peak discharge for 10 recurrence intervals for regulated streams, and streams in urbanized basins in New York, including Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Locations are shown in figure 7]

Map number	Station number	Station name and code (U, urbanized drainage basin; R, regulated stream)	County	Latitude (°/'/")	Longitude (°/'/")	Drainage area (mi²)	Number of years of peak discharge record	Peak-discharge (ft³/s) for 10 recurrence intervals (years)									
								1.25	1.5	2	5	10	25	50	100	200	500
546	01366500	Rondout Creek near Lackawack NY (R)	Ulster	414625	742401	100.00	16	157	255	432	1,290	2,360	4,610	7,210	10,900	16,000	25,700
547	01367500	Rondout Creek at Rosendale NY (R)	Ulster	415035	740511	383.00	55	7,940	9,850	12,200	18,300	22,200	27,200	30,800	34,400	37,900	42,500
548	01368713	Wawayanda Creek at Durland NY (R)	Orange	411644	741822	5.09	10	44	50	57	76	90	108	122	137	153	175
549	01368810	Wawayanda Creek at New Milford NY (R)	Orange	411417	742502	44.80	10	754	821	901	1,100	1,220	1,380	1,490	1,610	1,720	1,880
550	01374460	South Branch Minisceongo Creek at Letchworth Village NY (U)	Rockland	411213	740156	5.86	17	94	116	145	225	282	359	419	482	548	640
551	01375000	Croton River at Dam near Croton-on-hudson NY (R)	Westchester	411330	735135	378.00	66	1,730	2,340	3,260	6,520	9,590	14,700	19,700	25,700	32,900	44,800
552	01376280	Sparkill Creek at Sparkill NY (U)	Rockland	410144	735534	10.70	13	253	301	367	572	742	1,000	1,230	1,500	1,800	2,280
553	01376420	Saw Mill River at Elmsford NY (U)	Westchester	410319	734916	15.40	15	289	333	394	570	709	913	1,090	1,280	1,500	1,820
554	01376500	Saw Mill River at Yonkers NY (U)	Westchester	405611	735312	25.60	48	372	432	512	747	934	1,210	1,440	1,710	2,000	2,450
555	01376690	East Branch Hackensack River near Congers NY (U)	Rockland	410732	735724	6.90	12	189	240	312	537	727	1,020	1,280	1,570	1,910	2,430
556	01376800	Hackensack River at West NY Nyack NY (R)	Rockland	410544	735752	30.70	40	346	452	592	966	1,230	1,560	1,810	2,060	2,320	2,650
557	01377200	Pascack Brook Tributary at Spring Valley NY (U)	Rockland	410615	740157	4.19	18	147	182	228	360	460	598	711	832	962	1,150
558	01417000	East Branch Delaware River at Downsville NY (R)	Delaware	420430	745836	372.00	51	1,100	1,540	2,560	6,080	8,990	13,100	16,300	19,600	22,900	27,300
559	01417500	East Branch Delaware River at Harvard NY (R)	Delaware	420129	750713	458.00	41	2,550	3,320	4,420	7,980	11,100	15,800	20,100	25,000	30,800	39,600
560	01421000	East Branch Delaware River at Fishs Eddy NY (R)	Delaware	415823	751028	784.00	51	12,700	15,600	19,400	29,700	37,100	47,100	55,000	63,300	72,000	84,200

Table 9. Location, drainage area, period of record, and calculated peak discharge for 10 recurrence intervals for regulated streams, and streams in urbanized basins in New York, including Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Locations are shown in figure 7]

Map number	Station number	Station name and code (U, urbanized drainage basin; R, regulated stream)	County	Latitude (°/'/")	Longitude (°/'/")	Drainage area (mi²)	Number of years of peak discharge record	Peak-discharge (ft³/s) for 10 recurrence intervals (years)									
								1.25	1.5	2	5	10	25	50	100	200	500
561	01425000	West Branch Delaware River at Stilesville NY (R)	Delaware	420429	752347	456.00	42	2,370	3,260	4,500	8,220	11,100	15,100	18,300	21,700	25,200	30,100
562	01426500	West Branch Delaware River at Hale Eddy NY (R)	Delaware	420011	752302	595.00	42	4,630	5,790	7,310	11,500	14,600	18,900	22,300	25,800	29,500	34,800
563	01427510 [b]	Delaware River at Callicoon NY (R)	Wayne, Pa	414524	750328	1,820.00	30	22,400	27,700	35,000	55,000	69,800	90,300	107,000	124,000	143,000	169,000
564	01428500	Delaware River near Barryville NY (R)	Sullivan	413032	745910	2,020.00	42	25,200	30,900	38,300	59,100	74,600	96,300	114,000	133,000	153,000	182,000
565	01433500	Mongaup River near Mongaup NY (R)	Sullivan	412741	744533	200.00	41	1,170	1,580	2,220	4,630	7,050	11,300	15,700	21,200	28,200	40,400
566	01434000	Delaware River at Port Jervis NY (R)	Pike, Pa	412214	744152	3,070.00	42	32,800	40,100	49,800	77,700	99,200	130,000	155,000	183,000	213,000	257,000
567	01436000	Neversink River at Neversink NY (R)	Sullivan	414912	743809	92.60	52	266	504	881	2,480	4,150	7,040	9,780	13,000	16,900	22,900
568	01436500 [b]	Neversink River at Woodbourne NY (R)	Sullivan	414524	743552	113.00	36	989	1,360	1,920	3,960	5,930	9,290	12,600	16,600	21,500	29,700
569	01437000 [b]	Neversink River at Oakland Valley NY (R)	Sullivan	412945	743848	223.00	20	2,750	3,490	4,570	7,980	10,900	15,400	19,500	24,200	29,700	38,200
570	01437500	Neversink River at Godeffroy NY (R)	Orange	412628	743607	307.00	52	3,080	3,860	4,980	8,730	12,100	17,600	22,800	28,900	36,400	48,500
571	01500000	Ouleout Creek at East Sidney NY (R)	Delaware	422000	751407	103.00	50	1,500	1,610	1,750	2,170	2,480	2,930	3,300	3,690	4,130	4,760
572	01511500	Tioughnioga River at Itaska NY (R)	Broome	421753	755433	730.00	63	8,200	9,190	10,400	13,700	15,900	19,000	21,400	23,800	26,400	30,100
573	01520500	Tioga River at Lindley NY (R)	Steuben	420143	770757	771.00	20	8,550	9,450	10,400	12,400	13,500	14,600	15,400	16,000	16,600	17,300
574	01521500	Canisteo River at Arkport NY (R)	Steuben	422345	774242	30.60	60	610	647	701	879	1,030	1,260	1,460	1,690	1,960	2,370
575	01523500	Canacadea Creek near Hornell NY (R)	Steuben	422005	774100	57.90	51	1,010	1,190	1,440	2,200	2,840	3,810	4,670	5,670	6,810	8,600

Table 9. Location, drainage area, period of record, and calculated peak discharge for 10 recurrence intervals for regulated streams, and streams in urbanized basins in New York, including Long Island.—Continued

[mi^2, square miles; ft^3/s, cubic feet per second. Locations are shown in figure 7]

Map number	Station number	Station name and code (U, urbanized drainage basin; R, regulated stream)	County	Latitude (°/'/")	Longitude (°/'/")	Drainage area (mi^2)	Number of years of peak discharge record	Peak-discharge (ft^3/s) for 10 recurrence intervals (years)									
								1.25	1.5	2	5	10	25	50	100	200	500
576	01524500	Canisteo River at Hornell NY (R)	Steuben	421850	773905	158.00	51	2,110	2,440	2,870	4,070	4,970	6,230	7,260	8,370	9,580	11,300
577	01526500	Tioga River near Erwins NY (R)	Steuben	420716	770746	1,377.00	20	15,500	17,700	20,300	27,000	31,700	37,800	42,500	47,300	52,300	59,300
578	01529000	Mud Creek near Savona NY (R)	Steuben	421829	771150	76.60	47	456	584	758	1,280	1,700	2,300	2,810	3,370	3,980	4,890
579	01529950	Chemung River at Corning NY (R)	Steuben	420847	770328	2,005.00	20	21,100	24,100	27,800	37,300	43,700	52,200	58,600	65,300	72,200	81,600
580	01530332 [b]	Chemung River at Elmira NY (R)	Chemung	420511	764805	2,162.00	12	22,100	25,200	29,300	40,300	48,600	60,000	69,300	79,400	90,200	106,000
581	01530500	Newtown Creek at Elmira NY (R)	Chemung	420616	764754	77.50	11	1,530	1,800	2,120	2,890	3,370	3,940	4,350	4,740	5,120	5,610
582	01531000	Chemung River at Chemung NY (R)	Chemung	420008	763806	2,506.00	21	27,200	30,900	35,600	48,600	58,200	71,500	82,300	93,800	106,000	124,000
583	03014500	Chadakoin River at Falconer NY (R)	Chautauqua	420645	791215	194.00	65	1,080	1,190	1,310	1,610	1,800	2,040	2,210	2,380	2,540	2,770
584	04216000 [a]	Niagara River at Buffalo NY (R)	Erie	425240	785500	263,700	40	239,000	251,000	264,000	288,000	300,000	313,000	320,000	327,000	332,000	339,000
585	04216200	Scajaquada Creek at Buffalo NY (U)	Erie	425441	784745	15.40	37	742	871	1,040	1,520	1,890	2,420	2,860	3,340	3,860	4,640
586	04219000 [a]	Erie Canal at Lock 30 at Macedon NY (R)	Wayne	430420	771745	0.00	38	343	393	455	614	724	868	979	1,090	1,210	1,370
587	0422028490	Slater Creek (Latta Road) near Greece NY (U)	Monroe	431510	773855	1.52	10	78	93	113	162	196	239	272	306	340	387
588	04222000	Caneadea Creek at Caneadea NY (R)	Allegany	422310	780945	62.00	19	679	893	1,230	2,630	4,200	7,290	10,700	15,600	22,200	35,100
589	04227500	Genesee River near Mount Morris NY (R)	Livingston	424600	775021	1,424.00	48	7,750	8,370	9,120	10,900	12,100	13,600	14,700	15,800	16,900	18,400
590	04228500	Genesee River at Avon NY (R)	Livingston	425504	774527	1,673.00	44	8,130	8,730	9,460	11,300	12,500	14,100	15,300	16,500	17,700	19,300

Table 9. Location, drainage area, period of record, and calculated peak discharge for 10 recurrence intervals for regulated streams, and streams in urbanized basins in New York, including Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Locations are shown in figure 7]

Map number	Station number	Station name and code (U, urbanized drainage basin; R, regulated stream)	County	Latitude (°/'/")	Longitude (°/'/")	Drainage area (mi²)	Number of years of peak discharge record	Peak-discharge (ft³/s) for 10 recurrence intervals (years)									
								1.25	1.5	2	5	10	25	50	100	200	500
591	04232000	Genesee River at Rochester NY (R)	Monroe	431050	773740	2,467.00	48	14,400	15,800	17,500	21,300	23,600	26,400	28,400	30,300	32,200	34,600
592	04232050	Allen Creek near Rochester NY (U)	Monroe	430749	773108	30.10	41	576	680	814	1,190	1,470	1,860	2,170	2,510	2,880	3,410
593	04232482	Keuka Lake Outlet at Dresden NY (R)	Yates	424049	765715	207.00	34	889	1,130	1,440	2,230	2,760	3,430	3,910	4,390	4,860	5,480
594	04235000	Canandaigua Outlet at Chapin NY (R)	Ontario	425505	771359	195.00	60	554	642	746	983	1,130	1,290	1,410	1,520	1,630	1,760
595	04235500	Owasco Outlet near Auburn NY (R)	Cayuga	425648	763556	206.00	92	1,110	1,280	1,480	1,900	2,130	2,380	2,540	2,680	2,820	2,970
596	04237500 [a]	Seneca River at Baldwinsville NY (R)	Onondaga	430925	761955	3,138.00	50	8,490	9,510	10,700	13,600	15,400	17,700	19,300	20,900	22,600	24,700
597	04239000	Onondaga Creek at Dorwin Ave, Syracuse NY (R)	Onondaga	425900	760904	88.50	48	875	1,050	1,270	1,840	2,230	2,740	3,120	3,510	3,910	4,440
598	04240010	Onondaga Creek at Spencer St. Syracuse NY (R)	Onondaga	430327	760946	110.00	29	1,400	1,640	1,930	2,680	3,190	3,860	4,370	4,890	5,420	6,160
599	04240105	Harbor Brook at Hiawatha Blvd. Syracuse NY (U)	Onondaga	430322	761107	11.30	29	351	406	471	628	728	851	941	1,030	1,120	1,230
600	04240120	Ley Creek at Park Street, Syracuse NY (U)	Onondaga	430438	761014	29.90	27	543	612	695	899	1,030	1,200	1,330	1,450	1,580	1,750
601	04240180	Ninemile Creek near Marietta NY (R)	Onondaga	425515	761947	45.10	35	168	221	288	451	552	668	746	818	885	965
602	04240200	Ninemile Creek at Camillus NY (R)	Onondaga	430221	761830	84.30	35	834	1,070	1,360	2,000	2,350	2,720	2,950	3,140	3,310	3,500
603	04240300 [a]	Ninemile Creek at Lakeland NY (R)	Onondaga	430451	761336	115.00	28	918	1,030	1,170	1,490	1,680	1,920	2,090	2,260	2,420	2,640
604	04244000	Chittenango Creek near Chittenango NY (R)	Madison	430123	755132	66.30	20	1,100	1,410	1,790	2,760	3,390	4,150	4,690	5,210	5,710	6,340
605	04245236	Meadow Brook at Hurlburt Rd. Syracuse NY (U)	Onondaga	430230	760602	2.90	29	102	123	150	225	281	360	424	493	567	675

Table 9. Location, drainage area, period of record, and calculated peak discharge for 10 recurrence intervals for regulated streams, and streams in urbanized basins in New York, including Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Locations are shown in figure 7]

Map number	Station number	Station name and code (U, urbanized drainage basin; R, regulated stream)	County	Latitude (°/'/")	Longitude (°/'/")	Drainage area (mi²)	Number of years of peak discharge record	Peak-discharge (ft³/s) for 10 recurrence intervals (years)									
								1.25	1.5	2	5	10	25	50	100	200	500
606	04246500 [a]	Oneida River at Caughdenoy NY (R)	Oswego	431449	761012	1,382.00	80	6,120	6,710	7,420	9,170	10,300	11,800	12,800	13,900	15,000	16,600
607	04249000	Oswego River at Lock 7, Oswego NY (R)	Oswego	432706	763020	5,100.00	66	17,400	19,200	21,300	26,200	29,300	33,100	35,900	38,600	41,300	45,000
608	04253500 [a]	Middle Branch Moose River at Old Forge NY (R)	Herkimer	434250	745810	55.00	65	305	342	390	524	625	767	884	1,010	1,150	1,350
609	04254000	Middle Branch Moose River near Mckeever NY (R)	Herkimer	433745	750455	151.00	43	1,060	1,180	1,320	1,680	1,920	2,230	2,470	2,700	2,950	3,280
610	04257000 [a]	Beaver River below Stillwater Dam near Bvr River NY (R)	Herkimer	435356	750308	171.00	80	851	1,050	1,300	2,020	2,570	3,330	3,940	4,610	5,320	6,350
611	04258000	Beaver River at Croghan NY (R)	Lewis	435350	752416	291.00	69	1,650	1,870	2,150	2,890	3,420	4,140	4,720	5,330	5,980	6,900
612	04261000 [a]	Oswegatchie River at Cranberry Lake NY (R)	St. Lawrence	441315	745100	140.00	60	684	813	961	1,270	1,440	1,620	1,740	1,840	1,930	2,030
613	04262000	Oswegatchie River near Oswegatchie NY (R)	St. Lawrence	441321	750429	259.00	56	2,060	2,270	2,520	3,150	3,570	4,090	4,490	4,890	5,290	5,840
614	04264331 [a]	St. Lawrence River near Massena NY (R)	St. Lawrence	450022	744743	298,800	82	249,000	263,000	279,000	312,000	330,000	351,000	365,000	378,000	390,000	405,000
615	04266500	Raquette River at Piercefield NY (R)	St. Lawrence	441405	743420	721.00	91	4,340	4,820	5,370	6,560	7,230	7,990	8,500	8,980	9,420	9,970
616	04267500	Raquette River at South Colton NY (R)	St. Lawrence	443042	745300	937.00	47	5,000	5,600	6,270	7,680	8,460	9,310	9,870	10,400	10,900	11,400
617	04268000	Raquette River at Raymondville NY (R)	St. Lawrence	445020	745845	1,125.00	56	5,620	6,400	7,310	9,350	10,600	12,000	13,000	13,900	14,800	15,900
618	04268600	East Br St. Regis River near Meacham Lake NY (R)	Franklin	443313	741833	52.20	10	258	293	339	471	571	714	833	963	1,110	1,320
619	04270500	Chateaugay River near Chateaugay NY (R)	Franklin	445435	740510	112.00	40	686	809	954	1,290	1,490	1,730	1,890	2,040	2,190	2,370
620	04270510	Chateaugay River below Chateaugay NY (R)	Franklin	445749	740753	151.00	31	1,370	1,650	2,040	3,220	4,180	5,620	6,890	8,320	9,950	12,500

Table 9. Location, drainage area, period of record, and calculated peak discharge for 10 recurrence intervals for regulated streams, and streams in urbanized basins in New York, including Long Island.—Continued

[mi², square miles; ft³/s, cubic feet per second. Locations are shown in figure 7]

Map number	Station number	Station name and code (U, urbanized drainage basin; R, regulated stream)	County	Latitude (°/'/")	Longitude (°/'/")	Drainage area (mi²)	Number of years of peak discharge record	Peak-discharge (ft³/s) for 10 recurrence intervals (years)									
								1.25	1.5	2	5	10	25	50	100	200	500
621	04274500	Black Brook at Black Brook NY (R)	Clinton	442653	734448	49.40	37	334	398	475	657	770	905	1,000	1,090	1,180	1,290
622	04279000 [a]	La Chute at Ticonderoga NY (R)	Essex	435038	732557	234.00	36	918	969	1,030	1,140	1,210	1,280	1,320	1,370	1,410	1,460

[a] Flood-frequency estimates are based on annual maximum daily discharges only.

[b] Annual peak-discharge record extended through two-station comparison method (U.S. Water Resources Council, 1981) or record was combined with record (adjusted for drainagearea) from a nearby gaging station on the same stream.

Notes:

Flood-frequencies for sites with significant regulation (R) were calculated from statistical analyses of annual peak discharges during the regulated period. No adjustments were made for the amount of available storage in the reservoirs before or during floods, or for changes in regulation procedures during the period of regulation. Other studies, such as flood-insurance studies, and other procedures, can be investigated for alternative methods of determining discharge frequencies at these sites.

Flood-frequencies for sites with significant urbanization (U) which have many years of record, may not represent current conditions as the degree of development may have increased significantly over time.

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydro-logic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
1	01197500	Housatonic River near Great Barrington MA	2	282.00	45.77	18.77	12.55	35.98	626.87	0.030	2.045	61.34	9.29	68.74	26.00	45.90	18.82
2	01199000	Housatonic River at Falls Village CT	2	634.00	67.79	10.81	6.45	24.12	642.03	0.017	4.956	50.02	9.41	70.52	25.13	45.08	17.60
3	01199050	Salmon Ck at Lime Rock CT	2	29.40	12.14	124.80	83.31	65.17	696.23	0.179	0.163	38.02	11.88	67.13	23.37	43.36	16.20
4	01199400	Webatuck Creek near South Amenia NY	2	81.00	24.09	18.42	7.05	19.05	638.31	0.029	1.896	9.68	7.29	56.06	23.84	43.99	15.79
5	01199420	Tenmile River near Wassaic NY	2	120.00	24.20	18.30	7.69	19.00	649.44	0.028	1.836	8.57	6.27	57.20	23.05	43.27	15.68
6	01199477	Stony Brook near Dover Plains NY	2	1.93	3.40	126.58	121.09	142.96	407.24	0.311	0.026	9.30	1.81	48.45	20.83	41.21	14.36
7	01200000	Tenmile River near Gaylordsville CT	2	203.00	37.41	14.08	7.71	21.54	686.09	0.021	2.669	6.50	5.46	65.27	22.60	43.07	14.88
8	01200500	Housatonic River at Gaylordsville CT	2	996.00	95.06	8.45	8.10	19.29	675.51	0.013	6.997	37.77	8.40	70.56	24.76	44.93	16.71
9	01208990	Saugatuck River near Redding CT	2	21.00	10.89	33.34	32.36	36.89	636.69	0.052	0.306	0.00	7.75	79.76	26.98	49.09	10.29
10	01209700	Norwalk River at South Wilton CT	2	30.00	18.04	30.17	27.16	42.58	427.39	0.071	0.515	0.00	7.23	66.77	26.64	48.93	9.74
11	01311992	Arbutus Pond Outlet near Newcomb NY	1	1.22	1.99	153.24	0.00	460.97	638.82	0.240	0.093	100.00	14.57	85.43	26.29	42.33	24.78
12	01312000	Hudson River near Newcomb NY	1	192.00	26.18	69.83	15.83	173.85	996.84	0.070	0.483	100.00	7.21	92.09	27.64	43.59	24.40
13	01313500	Cedar River below Chain Lakes near Indian Lake NY	1	160.00	38.53	26.25	18.52	25.43	830.35	0.032	1.697	100.00	8.49	91.05	27.78	43.83	24.29
14	01314000	Hudson River at Gooley near Indian Lake NY	1	419.00	42.95	21.65	16.05	31.56	911.20	0.024	1.823	100.00	7.53	91.87	27.60	43.59	24.37
15	01315500	Hudson River at North Creek NY	1	792.00	62.94	22.70	23.40	28.84	904.29	0.025	2.332	99.31	6.66	92.78	27.47	43.75	23.98
16	01317000	Schroon River at Riverbank NY	1	527.00	49.62	5.16	3.19	23.43	969.62	0.005	4.906	60.34	5.06	93.32	21.92	39.74	22.01
17	01318500	Hudson River at Hadley NY	1	1664.00	100.56	20.14	12.77	21.34	925.52	0.022	5.733	78.10	5.24	93.42	24.59	41.77	22.75
18	01319000	East Branch Sacandaga River at Griffin NY	1	114.00	25.29	36.89	23.63	44.91	1106.90	0.033	0.752	100.00	4.22	95.60	27.41	44.73	22.11
19	01319800	West Branch Sacandaga River at Arietta NY	1	28.90	9.57	81.20	37.94	137.71	888.05	0.091	0.130	100.00	8.94	90.89	32.08	49.86	21.28
20	01319950	Sand Lake Outlet near Piseco NY	1	6.62	6.59	37.83	28.02	84.14	607.70	0.062	0.132	100.00	14.23	85.62	34.59	51.53	22.24
21	01321000	Sacandaga River near Hope NY	1	491.00	38.11	23.74	46.79	17.26	922.01	0.026	1.290	98.03	8.35	91.12	30.03	47.40	22.04
22	01325000	Sacandaga River at Stewarts Br near Hadley NY	1	1055.00	77.86	15.23	2.39	24.18	781.44	0.019	8.432	78.83	7.47	90.10	27.25	45.26	21.09
23	01326500	Hudson River at Spier Falls NY	1	2779.00	112.88	17.82	12.42	22.39	865.44	0.021	6.373	77.04	6.11	92.03	25.52	43.07	22.05
24	01328000	Bond Creek at Dunham Basin NY	1	14.10	9.98	20.66	31.36	13.63	212.97	0.097	0.459	0.00	7.33	30.85	17.38	35.57	19.54
25	01328758	Pecks Creek at Fort Miller NY	1	2.38	3.74	50.36	40.16	31.07	199.41	0.253	0.103	0.00	3.05	23.83	15.67	35.57	18.78

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydro-logic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
26	01329000	Batten Kill at Arlington VT	1	152.00	22.16	67.98	5.89	185.30	946.08	0.072	0.619	62.18	2.11	83.62	30.96	49.68	24.34
27	01329154	Steele Brook at Shushan NY	1	2.85	3.99	93.49	42.73	156.57	649.40	0.144	0.048	0.00	1.42	56.59	19.63	39.66	20.95
28	01329500	Batten Kill at Battenville NY	1	394.00	48.53	9.34	7.82	51.69	1006.21	0.009	2.251	39.90	2.47	76.65	24.91	43.96	22.38
29	01329780	Sessions Brook at Porters Corners NY	1	1.04	2.17	44.83	27.71	152.71	324.06	0.138	0.033	0.00	1.09	94.60	20.87	40.56	18.94
30	01329900	Glowegee Creek Tributary at Mosherville NY	1	1.42	2.38	166.85	141.84	184.04	458.66	0.364	0.015	5.10	0.80	86.08	19.93	39.87	18.71
31	01330000	Glowegee Creek at West Milton NY	1	26.00	13.43	38.46	26.04	31.95	360.90	0.107	0.450	1.45	7.37	76.43	19.05	39.07	18.36
32	01330500	Kayaderosseras Creek near West Milton NY	1	84.20	22.32	21.92	19.31	36.94	428.32	0.051	0.804	10.95	5.66	83.93	19.96	39.81	18.61
33	01330880	Saratoga Lake Tributary near Bemis Heights NY	1	2.98	3.88	25.78	28.73	44.75	354.60	0.073	0.105	0.00	9.99	62.78	15.34	35.33	17.39
34	01331400	Dry Brook near Adams MA	1	7.67	5.29	169.34	140.48	161.86	639.63	0.265	0.035	98.59	3.06	75.01	30.98	49.95	22.21
35	01331500	Hoosic River at Adams MA	1	46.70	13.50	12.93	19.85	128.21	837.58	0.015	0.260	71.49	5.74	72.30	29.50	48.64	21.26
36	01332000	North Branch Hoosic River at North Adams MA	1	40.90	11.60	69.19	50.18	132.86	914.94	0.076	0.140	84.69	2.61	86.66	33.05	51.83	24.29
37	01332500	Hoosic River near Williamstown MA	1	126.00	24.11	17.85	22.62	20.11	922.55	0.019	1.079	71.18	3.90	75.38	30.59	49.58	22.74
38	01333000	Green River at Williamstown MA	1	42.60	13.94	67.66	42.86	142.45	1295.73	0.052	0.176	67.33	1.52	78.33	27.44	47.06	20.56
39	01333367	Little Hoosic River at Cherryplain NY	1	2.22	3.03	381.62	200.34	841.63	1647.27	0.232	0.007	97.17	0.00	92.04	25.48	45.42	18.62
40	01333500	Little Hoosic River at Petersburg NY	1	56.10	15.35	60.31	35.86	115.57	1191.58	0.051	0.234	67.41	0.29	91.73	23.03	43.12	19.13
41	01333900	Paran Creek near South Shaftsbury VT	1	2.38	3.23	226.92	240.51	272.64	627.85	0.361	0.013	64.09	0.13	65.05	27.88	47.25	23.97
42	01334000	Walloomsac River near North Bennington VT	1	111.00	18.77	120.43	75.39	137.67	819.06	0.147	0.182	59.48	2.13	75.29	28.92	47.91	23.69
43	01334500	Hoosic River near Eagle Bridge NY	1	510.00	51.31	14.52	9.68	18.77	953.38	0.015	3.531	54.82	2.04	75.85	26.91	46.37	21.82
44	01335500	Hudson River at Mechanicville NY	1	4500.00	159.96	14.00	8.28	21.09	810.26	0.017	11.172	57.97	5.26	82.37	24.24	42.54	21.43
45	01342730	Steele Creek at Ilion NY	1	26.20	11.00	100.58	108.58	83.56	591.14	0.170	0.114	77.75	1.12	47.37	22.20	41.66	18.67
46	01342797	Vly Brook near Morehouseville NY	1	3.28	4.53	51.38	24.50	84.30	333.93	0.154	0.097	100.00	18.07	78.47	34.98	50.37	23.63
47	01342800	West Canada Creek at Nobleboro NY	1	193.00	31.18	36.06	52.62	31.13	812.28	0.044	0.751	100.00	8.35	91.32	35.21	52.55	24.06
48	01346820	Mohawk River Tributary at Indian Castle NY	1	1.36	2.64	164.18	77.64	354.59	741.52	0.221	0.016	0.00	0.00	56.81	20.23	40.11	19.30
49	01347460	Spruce Lake Tributary near Salisbury Center NY	1	0.54	1.29	109.49	138.88	145.34	343.89	0.318	0.009	100.00	0.19	99.61	30.05	47.75	21.18
50	01348000	East Canada Creek at East Creek NY	1	289.00	39.09	38.63	37.90	52.01	547.97	0.070	0.861	79.58	9.96	82.12	30.83	48.63	21.19

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydrologic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
51	01348420	North Creek near Ephratah NY	1	6.52	4.80	100.51	167.31	64.06	433.86	0.232	0.046	16.31	4.92	80.54	21.28	40.96	19.90
52	01349000	Otsquago Creek at Fort Plain NY	1	61.00	17.56	73.94	36.13	141.81	443.20	0.167	0.241	20.36	0.15	34.01	20.45	40.20	18.69
53	01349150	Canajoharie Creek near Canajoharie NY	1	59.70	17.56	25.85	3.66	99.27	456.79	0.057	0.813	26.37	0.78	37.21	20.56	40.00	18.13
54	01349360	Van Wie Creek Tributary near Randall NY	1	1.00	1.65	218.06	138.39	334.86	378.73	0.576	0.008	0.00	0.00	51.72	17.51	37.51	18.63
55	01349700	East Kill near Jewett Center NY	3	35.60	16.22	45.12	46.73	81.51	912.18	0.049	0.259	100.00	0.83	94.17	28.21	47.45	18.52
56	01350000	Schoharie Creek at Prattsville NY	3	237.00	30.11	29.80	22.65	38.32	1094.20	0.027	0.987	99.68	0.54	91.80	27.49	46.75	18.70
57	01350080	Manor Kill at West Conesville near Gilboa NY	3	32.40	9.61	82.17	30.64	187.11	748.88	0.110	0.125	100.00	0.27	86.41	19.70	39.15	17.38
58	01350120	Platter Kill at Gilboa NY	3	10.90	7.39	122.33	171.66	107.79	655.05	0.187	0.054	99.33	0.77	85.76	16.86	36.82	17.07
59	01350140	Mine Kill near North Blenheim NY	3	16.20	8.19	123.15	122.69	142.71	756.53	0.163	0.061	98.83	0.79	87.59	21.96	40.64	16.61
60	01350900	Beaverdam Creek near Knox NY	3	6.91	4.50	72.00	80.22	71.44	283.56	0.254	0.059	76.98	1.67	49.00	16.86	36.95	16.13
61	01351000	Fox Creek at West Berne NY	3	67.20	13.79	60.55	24.17	100.45	581.61	0.104	0.273	77.23	2.44	71.16	18.01	38.16	16.03
62	01354300	Plotter Kill at Rynex Corners NY	1	3.70	3.11	87.58	134.46	74.64	313.63	0.279	0.031	39.29	4.14	61.79	15.48	35.53	16.73
63	01355405	Indian Kill near Glenville Center NY	1	3.11	2.84	192.22	98.76	221.77	249.07	0.772	0.019	0.00	1.21	71.18	15.66	35.67	16.77
64	01358500	Poesten Kill near Troy NY	2	89.40	22.03	64.75	25.88	89.40	506.24	0.128	0.447	53.68	5.54	74.51	18.43	38.42	16.59
65	01359519	Normans Kill near Westmere NY	2	131.00	26.88	31.08	13.81	41.39	384.28	0.081	1.073	15.14	2.39	58.76	17.57	37.65	16.03
66	01359528	Normans Kill at Albany NY	2	168.00	38.56	19.73	6.37	37.47	398.43	0.050	2.291	12.37	2.30	56.38	18.20	38.21	15.88
67	01359750	Moordener Kill at Castleton-on-hudson NY	2	32.60	15.02	33.18	34.63	39.66	438.06	0.076	0.394	0.00	2.96	52.36	16.03	36.06	15.15
68	01359902	Coeymans Creek near Selkirk NY	2	35.10	18.40	87.12	33.98	140.35	510.73	0.171	0.262	16.67	0.79	66.83	21.05	40.67	15.38
69	01359924	Hannacrois Creek near New Baltimore NY	2	61.60	21.92	59.61	42.93	100.28	530.84	0.112	0.329	11.91	5.11	79.23	19.38	39.12	15.46
70	01360640	Valatie Kill near Nassau NY	2	9.48	8.65	52.11	44.95	140.57	592.32	0.088	0.107	1.16	2.04	81.92	16.98	37.08	15.55
71	01361000	Kinderhook Creek at Rossman NY	2	329.00	49.03	27.45	13.01	49.31	653.88	0.042	1.847	26.36	3.05	75.27	17.88	37.87	16.06
72	01361200	Claverack Creek at Claverack NY	2	60.60	17.66	53.15	53.35	58.09	581.73	0.091	0.312	2.82	2.65	65.41	16.72	36.80	15.53
73	01361453	Catskill Creek Tributary at Franklinton NY	2	3.61	3.66	251.74	244.18	293.72	768.27	0.328	0.014	99.97	0.08	94.28	17.19	36.99	16.69
74	01361500	Catskill Creek at Oak Hill NY	2	98.00	18.64	49.89	39.78	100.74	826.36	0.060	0.289	79.07	1.42	86.73	18.52	38.69	16.75
75	01361570	Tenmile Creek at Oak Hill NY	2	35.30	14.85	92.76	74.84	114.29	516.28	0.180	0.159	58.97	2.92	75.13	20.86	40.78	16.22

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydrologic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
76	01361900	Shingle Kill at Cairo NY	2	13.90	8.71	190.25	78.60	445.27	929.38	0.205	0.046	35.52	0.45	90.55	28.53	47.66	16.78
77	01362100	Roeliff Jansen Kill near Hillsdale NY	2	27.50	10.87	38.77	20.04	80.06	761.21	0.051	0.263	20.57	1.57	72.64	22.42	42.44	15.96
78	01362197	Bushnellsville Creek at Shandaken NY	2	11.40	6.21	142.32	132.49	163.79	1720.11	0.083	0.042	99.16	0.04	99.42	30.24	50.06	19.99
79	01362200	Esopus Creek at Allaben NY	2	63.70	14.09	83.39	49.66	186.05	1660.78	0.050	0.145	97.91	0.03	98.68	33.49	52.43	19.99
80	01362500	Esopus Creek at Coldbrook NY	2	192.00	25.89	48.77	31.18	91.64	1634.78	0.030	0.474	85.90	0.26	97.78	31.57	50.89	20.02
81	01365000	Rondout Creek near Lowes Corners NY	2	38.30	12.83	111.42	59.24	244.71	1473.33	0.076	0.105	95.50	0.08	98.95	33.95	51.74	19.80
82	01365500	Chestnut Creek at Grahamsville NY	2	20.90	6.53	88.52	60.13	111.84	818.24	0.108	0.079	81.02	1.58	88.97	26.49	45.87	17.56
83	01366500	Rondout Creek near Lackawack NY	2	100.00	23.89	58.07	24.89	121.34	1054.41	0.055	0.425	75.09	1.16	95.38	29.95	48.61	18.71
84	01366650	Sandburg Creek at Ellenville NY	2	52.80	18.74	60.79	51.42	59.02	790.91	0.077	0.334	45.81	1.93	91.25	24.69	44.79	15.51
85	01367500	Rondout Creek at Rosendale NY	2	383.00	54.01	23.73	8.32	46.64	772.23	0.031	2.564	40.67	2.16	89.09	26.92	46.55	17.56
86	01368000	Wallkill River near Unionville NY	2	140.00	24.07	18.27	9.67	20.68	568.58	0.032	1.582	6.63	6.80	54.51	22.41	45.27	11.17
87	01368500	Rutgers Creek at Gardnerville NY	2	59.70	17.84	29.97	5.46	43.81	422.98	0.071	1.049	3.80	3.26	58.27	20.26	42.23	12.18
88	01369000	Pochuck Creek near Pine Island NY	2	98.00	30.10	31.10	11.62	56.70	611.71	0.051	1.115	15.87	7.25	61.87	22.91	45.06	11.02
89	01369500	Quaker Creek at Florida NY	2	9.74	6.30	42.03	57.04	87.74	502.48	0.084	0.088	0.00	6.81	51.13	18.84	40.93	11.48
90	01370000	Wallkill River at Pellets Island NY	2	380.00	39.07	24.21	3.38	42.32	515.75	0.047	2.836	7.18	5.61	53.78	21.42	43.78	11.40
91	01370500	Wallkill River near Phillipsburg NY	2	406.00	43.88	22.18	2.50	38.62	502.91	0.044	3.724	6.58	5.34	52.78	21.11	43.44	11.47
92	01371000	Shawangunk Kill at Pine Bush NY	2	104.00	32.02	21.58	11.00	31.35	466.46	0.046	1.625	9.80	2.35	72.38	20.87	41.99	13.80
93	01371400	Shawangunk Kill at Ganahgote NY	2	147.00	44.28	17.47	9.19	27.90	484.69	0.036	2.580	10.24	2.32	72.25	21.05	42.04	14.22
94	01371500	Wallkill River at Gardiner NY	2	695.00	71.35	9.98	5.95	26.44	460.31	0.022	5.168	6.03	4.47	56.25	20.39	42.31	12.41
95	01372040	Crum Elbow Creek at Hyde Park NY	2	17.30	14.17	17.09	9.35	45.28	471.81	0.036	0.647	0.00	4.09	81.23	17.98	38.90	15.47
96	01372200	Wappinger Creek near Clinton Corners NY	2	92.40	17.44	15.21	18.64	3.62	566.76	0.027	1.830	0.69	3.73	69.01	19.95	40.62	15.26
97	01372300	Little Wappinger Creek at Salt Point NY	2	32.90	17.30	21.80	13.95	32.43	557.15	0.039	0.774	0.00	4.34	80.90	19.57	40.13	15.51
98	01372500	Wappinger Creek near Wappingers Falls NY	2	181.00	33.58	11.80	6.62	15.80	531.34	0.022	2.968	0.34	3.87	68.64	19.41	40.09	15.07
99	01372800	Fishkill Creek at Hopewell Junction NY	2	57.30	21.00	17.12	12.67	27.53	619.92	0.028	1.063	2.23	4.97	70.32	21.29	42.26	12.96
100	01373500	Fishkill Creek at Beacon NY	2	190.00	32.81	14.98	6.28	26.64	606.83	0.025	2.312	1.37	4.97	67.99	21.47	42.35	12.90

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydrologic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
101	01373690	Woodbury C near Highland Mills NY	2	11.20	6.05	127.79	90.53	283.83	689.06	0.185	0.037	6.50	3.96	74.58	26.72	48.00	11.07
102	01374130	Canopus Creek at Oscawana Corners NY	2	8.30	8.05	105.04	78.36	58.34	1019.47	0.103	0.117	1.36	3.99	94.59	26.35	47.31	11.34
103	01374250	Peekskill Hollow Creek at Tompkins Corners NY	2	14.90	7.34	79.43	76.66	52.02	984.04	0.081	0.114	0.09	7.29	88.60	25.81	46.82	11.35
104	01374440	Cedar Pond Brook at Stony Point NY	2	17.30	8.27	159.10	105.55	161.91	862.56	0.184	0.063	1.27	3.73	84.37	28.09	49.69	10.33
105	01384500	Ringwood Creek near Wanaque NJ	2	19.10	11.20	56.31	76.69	33.21	903.60	0.062	0.217	2.77	7.59	89.49	26.74	48.65	10.42
106	01386000	West Brook near Wanaque NJ	2	11.80	5.56	165.01	186.07	106.24	726.26	0.227	0.039	0.04	1.35	86.99	27.90	49.77	10.15
107	01387250	Ramapo River at Sloatsburg NY	2	60.10	18.68	17.73	16.24	34.55	818.13	0.022	0.755	2.80	5.69	80.08	27.61	49.06	10.68
108	01387300	Stony Brook at Sloatsburg NY	2	18.20	10.42	75.23	100.29	86.56	809.51	0.093	0.111	5.31	7.27	91.99	28.22	50.06	10.26
109	01387350	Nakoma Brook at Sloatsburg NY	2	5.40	3.86	97.72	136.16	120.62	826.28	0.118	0.030	0.00	8.01	87.71	26.39	48.32	10.11
110	01387400	Ramapo River at Ramapo NY	2	86.90	21.60	17.07	18.00	21.39	824.81	0.021	1.048	3.05	5.98	83.17	27.66	49.24	10.54
111	01387410	Torne Brook at Ramapo NY	2	2.60	3.51	229.94	180.64	281.50	1027.23	0.224	0.015	0.73	0.00	97.10	27.71	49.66	10.02
112	01387420	Ramapo River at Suffern NY	2	93.00	23.63	17.59	20.32	18.66	826.07	0.021	1.154	2.87	5.65	83.71	27.61	49.21	10.50
113	01387450	Mahwah River near Suffern NY	2	12.30	8.30	119.19	17.32	226.77	715.14	0.167	0.128	1.17	3.07	61.62	27.91	49.94	9.96
114	01387500	Ramapo River near Mahwah NJ	2	120.00	25.28	17.58	20.34	17.68	760.59	0.023	1.267	2.31	5.04	75.29	27.61	49.31	10.35
115	01413500	East Branch Delaware River at Margaretville NY	3	163.00	20.52	11.69	13.98	14.03	1218.35	0.010	1.367	100.00	0.17	90.27	27.57	46.29	17.87
116	01414000	Platte Kill at Dunraven NY	3	34.90	12.48	61.57	54.62	116.93	1212.55	0.051	0.154	100.00	0.01	85.97	24.70	43.32	16.17
117	01414500	Mill Brook near Dunraven NY	3	25.20	11.41	111.77	88.82	186.67	1337.22	0.084	0.088	100.00	0.02	95.99	28.84	47.22	17.01
118	01415000	Tremper Kill near Andes NY	3	33.20	11.59	70.22	42.16	166.22	1118.92	0.063	0.136	100.00	0.40	83.55	24.38	42.90	15.52
119	01415500	Terry Clove Kill near Pepacton NY	3	13.60	6.19	102.03	58.04	172.16	1137.15	0.090	0.061	100.00	0.11	82.96	25.42	43.91	15.11
120	01417000	East Branch Delaware River at Downsville NY	3	372.00	40.55	6.99	1.16	12.09	1197.70	0.006	7.630	99.99	0.08	90.36	26.02	44.67	16.71
121	01417185	Campbell Brook Tributary near Downsville NY	3	0.41	1.06	607.64	591.95	617.54	954.63	0.637	0.002	100.00	0.00	98.22	23.88	43.68	14.88
122	01417500	East Branch Delaware River at Harvard NY	3	458.00	54.80	10.54	12.76	10.63	1228.90	0.009	4.332	98.48	0.06	91.10	25.65	44.41	16.33
123	01418000	Beaver Kill near Turnwood NY	3	40.80	14.76	68.09	49.10	99.01	1203.01	0.057	0.209	100.00	0.77	98.36	35.68	53.58	17.21
124	01418500	Beaver Kill at Craigie Clair NY	3	81.90	25.40	47.95	34.99	70.26	1156.89	0.041	0.502	100.00	0.50	97.68	32.71	51.00	16.42
125	01419500	Willowemoc Creek near Livingston Manor NY	3	62.60	19.05	48.42	36.23	105.03	776.67	0.062	0.303	100.00	2.05	95.32	32.82	51.24	16.58

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydro-logic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
126	01420000	Little Beaver Kill near Livingston Manor NY	3	20.10	8.97	76.75	86.58	57.12	592.64	0.130	0.126	100.00	3.73	90.48	30.35	49.60	16.02
127	01420500	Beaver Kill at Cooks Falls NY	3	241.00	36.14	37.54	26.49	58.85	937.23	0.040	0.891	99.91	1.30	94.73	30.50	49.14	16.06
128	01421000	East Branch Delaware River at Fishs Eddy NY	3	784.00	62.32	9.82	12.55	9.39	1141.52	0.009	5.253	98.14	0.47	92.79	26.94	45.69	16.05
129	01421900	West Branch Delaware River Upstream From Delhi NY	4	134.00	26.71	22.91	9.43	51.67	904.45	0.025	1.139	100.00	0.32	73.67	24.42	43.76	15.85
130	01422500	Little Delaware River near Delhi NY	4	49.80	15.59	49.86	32.72	75.42	1015.98	0.049	0.307	100.00	0.41	81.29	26.09	44.95	15.63
131	01423000	West Branch Delaware River at Walton NY	4	332.00	46.73	13.04	8.33	27.98	955.08	0.014	2.842	99.96	0.30	75.36	24.57	43.99	15.40
132	01423500	Dryden Brook near Granton NY	4	8.10	5.79	135.66	102.81	215.20	1070.51	0.127	0.039	99.95	0.03	87.61	24.09	42.09	14.29
133	0142400103	Trout Creek near Trout Creek NY	4	20.20	8.13	73.19	52.69	119.94	837.75	0.087	0.101	99.03	0.10	80.58	23.65	42.11	14.47
134	01424500	Trout Creek at Cannonsville NY	4	49.50	15.06	48.40	9.37	98.77	925.08	0.052	0.468	94.77	3.04	81.74	23.18	42.09	14.37
135	01425000	West Branch Delaware River at Stilesville NY	4	456.00	69.45	7.53	2.95	17.38	995.73	0.008	8.155	97.11	0.21	79.17	24.22	43.49	15.09
136	01425500	Cold Spring Brook at China NY	4	1.49	1.96	285.97	244.95	355.83	831.07	0.344	0.007	100.00	0.00	99.93	24.06	42.11	14.08
137	01425675	Oquaga Creek near North Sanford NY	4	4.69	3.86	134.34	83.50	222.50	646.11	0.208	0.028	100.00	1.42	85.70	24.27	42.21	14.11
138	01426000	Oquaga Creek at Deposit NY	4	67.60	19.06	37.32	19.68	67.10	852.88	0.044	0.508	94.57	0.56	85.67	22.54	41.17	13.66
139	01426500	West Branch Delaware River at Hale Eddy NY	4	595.00	76.74	9.31	8.11	16.18	974.35	0.010	6.134	95.86	0.35	80.56	23.82	43.00	14.77
140	01427500	Callicoon Creek at Callicoon NY	3	110.00	21.98	33.16	25.23	64.33	714.29	0.046	0.531	80.76	1.71	72.93	22.27	41.38	14.63
141	01428000	Tenmile River at Tusten NY	3	45.60	14.63	26.61	30.98	44.86	503.30	0.053	0.382	48.92	3.46	84.47	20.01	39.72	13.77
142	01428500	Del River above Lackawaxen River near Barryville NY	3	2020.00	139.56	6.71	5.29	7.48	973.32	0.007	19.117	89.31	1.58	86.17	24.57	43.60	14.97
143	01428750	West Br Lackawaxen River near Aldenville PA	3	40.60	13.66	63.57	60.91	38.14	578.07	0.110	0.277	100.00	1.83	74.10	25.88	45.30	13.02
144	01434000	Delaware River at Port Jervis NY	3	3070.00	165.40	6.78	6.26	8.62	810.21	0.008	19.795	86.40	3.63	84.58	24.02	43.34	14.36
145	0143400680	East Branch Neversink River Northeast of Denning NY	3	8.93	6.16	169.06	103.29	305.34	1451.39	0.116	0.034	100.00	0.00	100.00	40.19	58.57	20.34
146	01434010	East Branch Neversink River at Denning NY	3	13.30	7.80	135.14	76.32	244.63	1350.68	0.100	0.057	100.00	0.00	99.93	39.93	58.13	20.23
147	01434017	East Branch Neversink River near Claryville NY	3	22.90	12.96	89.00	59.79	162.03	1238.43	0.072	0.130	100.00	0.00	99.75	38.36	56.06	19.84
148	01434021	West Branch Neversink River at Winnisook Lake near Frost Valley NY	3	0.77	1.63	729.47	431.03	1135.57	1596.58	0.457	0.002	100.00	0.00	100.00	40.35	59.99	20.42
149	01434025	Biscuit Brook above Pigeon Brook at Frost Valley NY	3	3.72	3.44	387.59	169.90	699.68	1401.98	0.276	0.010	100.00	0.00	100.00	40.73	59.79	19.76
150	01434092	Shelter Creek below Dry Creek near Frost Valley NY	3	0.62	1.27	596.99	510.47	842.63	1054.67	0.566	0.002	100.00	0.00	100.00	38.66	55.93	19.43

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

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Map number	Station number	Station name	Hydro-logic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
151	01434498	West Branch Neversink River at Claryville NY	3	33.80	14.46	75.78	45.91	178.14	1215.07	0.062	0.158	100.00	0.15	99.49	38.89	56.83	19.27
152	01435000	Neversink River near Claryville NY	3	66.60	17.91	69.69	49.03	124.07	1196.49	0.058	0.226	100.00	0.09	99.30	37.54	55.43	19.30
153	01436000	Neversink River at Neversink NY	3	92.60	27.12	44.02	15.77	85.49	1052.62	0.042	0.712	100.00	0.06	97.93	34.95	53.13	18.62
154	01436500	Neversink River at Woodbourne NY	3	113.00	33.10	41.44	25.86	75.25	968.85	0.043	0.731	99.72	0.18	94.92	33.24	51.70	18.26
155	01437000	Neversink River at Oakland Valley NY	3	223.00	56.66	26.10	19.90	40.98	731.83	0.036	1.913	93.65	2.73	89.84	28.77	47.99	16.47
156	01437500	Neversink River at Godeffroy NY	3	307.00	62.26	27.03	24.83	44.10	710.88	0.038	1.824	80.21	3.50	89.92	27.38	46.94	15.72
157	01438500	Delaware River at Montague NJ	3	3480.00	174.38	6.78	6.28	8.85	795.14	0.009	20.582	84.17	3.70	84.98	24.26	43.66	14.42
158	01440000	Flat Brook near Flatbrookville NJ	2	64.00	25.45	36.06	12.44	56.54	624.14	0.058	0.915	16.39	4.26	87.89	23.82	45.89	11.73
159	01443500	Paulins Kill at Blairstown NJ	2	126.00	30.23	7.23	8.99	8.75	503.53	0.014	3.062	1.93	8.22	59.95	21.93	44.77	11.15
160	01496370	Mink Creek at Richfield Springs NY	4	10.40	6.95	49.38	45.02	85.06	357.81	0.138	0.110	100.00	7.38	29.78	23.93	42.36	18.08
161	01496500	Oaks Creek at Index NY	4	102.00	29.87	12.47	7.33	28.01	558.17	0.022	1.921	99.77	7.75	49.75	23.19	41.87	17.69
162	01497500	Susquehanna River at Colliersville NY	4	349.00	46.26	9.13	4.71	13.28	633.05	0.014	5.123	94.92	5.85	60.00	21.64	40.57	17.29
163	01497800	Schenevus Creek at Schenevus NY	4	54.20	19.03	42.01	12.63	85.51	895.83	0.047	0.554	100.00	1.28	74.98	20.12	39.29	16.66
164	01497805	Little Elk Creek near Westford NY	4	3.73	5.07	139.65	86.39	168.16	700.11	0.199	0.042	100.00	0.33	75.89	19.97	39.14	16.79
165	01498500	Charlotte Creek at West Davenport NY	4	167.00	27.90	26.72	10.61	56.99	678.78	0.039	1.075	99.78	1.30	79.13	21.67	40.74	16.09
166	01499000	Otego Creek near Oneonta NY	4	108.00	27.25	18.53	9.98	40.56	633.25	0.029	1.275	91.14	1.41	70.75	21.44	40.48	16.31
167	01500500	Susquehanna River at Unadilla NY	4	982.00	73.98	5.76	4.94	11.13	686.80	0.008	8.715	93.71	2.81	69.58	21.42	40.51	16.41
168	01501000	Unadilla River near New Berlin NY	4	199.00	36.85	8.72	3.09	27.15	552.54	0.016	3.434	90.54	1.88	58.92	22.15	41.17	17.71
169	01501015	Mill Brook at New Berlin NY	4	4.64	4.24	113.57	128.39	117.53	567.78	0.200	0.034	97.97	1.85	56.81	20.79	40.10	16.40
170	01501140	Wharton Creek Trib near Edmeston NY	4	2.02	3.28	130.87	156.84	105.75	653.83	0.200	0.025	100.00	1.46	60.90	23.50	42.11	17.06
171	01501500	Sage Brook near South New Berlin NY	4	0.61	1.54	265.32	302.36	233.63	605.16	0.438	0.006	100.00	0.00	97.41	20.88	40.02	15.85
172	01502000	Butternut Creek at Morris NY	4	59.70	22.62	27.09	18.61	47.66	616.00	0.044	0.732	95.54	1.17	69.63	22.78	41.53	16.54
173	01502500	Unadilla River at Rockdale NY	4	520.00	62.74	4.06	4.02	10.86	593.67	0.007	8.134	88.80	1.47	63.68	22.00	41.02	16.85
174	01502632	Susquehanna River at Bainbridge NY	4	1610.00	84.59	5.03	3.99	10.06	654.57	0.008	11.393	91.36	2.23	67.77	21.63	40.72	16.44
175	01502701	Susquehanna River at Afton NY	4	1716.00	90.87	4.61	3.50	9.31	650.63	0.007	13.338	91.04	2.16	68.11	21.66	40.74	16.32

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydro-logic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
176	01502714	Ouaquaga Creek near Belden NY	4	3.37	3.56	124.05	86.39	187.18	484.55	0.256	0.028	100.00	1.11	63.62	19.84	38.69	13.54
177	01502731	Susquehanna River at Windsor NY	4	1820.00	110.52	4.08	2.48	8.25	648.00	0.006	19.472	89.86	2.09	68.46	21.59	40.66	16.12
178	01503000	Susquehanna River at Conklin NY	4	2232.00	136.79	4.05	2.39	6.60	677.49	0.006	26.961	89.28	2.03	70.59	21.67	40.75	15.56
179	01503960	Electric Light Stream near Morrisville NY	4	7.21	7.38	68.10	57.44	73.77	552.76	0.123	0.112	100.00	1.03	73.94	23.33	42.01	18.50
180	01503980	Chenango River at Eaton NY	4	24.30	11.55	29.37	20.62	78.48	509.02	0.058	0.279	99.01	3.31	55.26	22.69	41.53	18.51
181	01505000	Chenango River at Sherburne NY	4	263.00	28.14	8.44	9.46	13.52	572.91	0.015	2.283	85.09	2.92	60.24	21.15	40.39	17.66
182	01505017	Cold Brook near North Norwich NY	4	5.80	7.28	95.64	63.86	130.68	821.46	0.116	0.079	96.25	0.35	78.29	22.61	41.14	16.38
183	01505500	Canasawacta Creek near South Plymouth NY	4	57.90	14.54	56.60	40.32	82.61	566.92	0.100	0.247	98.08	0.92	80.36	23.41	42.12	16.38
184	01507000	Chenango River at Greene NY	4	593.00	69.92	5.09	3.03	7.72	560.94	0.009	11.798	83.95	1.78	67.98	21.23	40.35	16.51
185	01507500	Genegantslet Creek at Smithville Flats NY	4	82.30	18.50	46.37	31.29	73.17	396.70	0.117	0.378	94.88	1.57	83.78	22.42	41.23	15.53
186	01508000	Shackham Brook near Truxton NY	4	3.16	3.17	172.59	140.20	181.14	825.06	0.209	0.020	100.00	0.93	99.00	24.19	43.24	17.99
187	01508500	Albright Creek at East Homer NY	4	6.81	6.51	111.26	90.65	129.69	717.09	0.155	0.060	99.56	0.00	71.09	23.62	42.33	17.28
188	01508803	West Branch Tioughnioga River at Homer NY	4	71.50	17.92	15.92	8.87	40.71	606.35	0.026	0.883	84.06	2.76	59.55	21.94	41.12	17.29
189	01508946	Otter Creek Tributary at State Hwy 222 near Cortland NY	4	2.85	3.59	98.12	62.65	182.52	433.03	0.227	0.033	100.00	0.11	35.60	21.45	40.65	16.16
190	01509000	Tioughnioga River at Cortland NY	4	292.00	33.07	11.26	5.02	30.06	654.69	0.017	2.419	89.53	1.49	65.70	23.67	42.67	17.41
191	01509520	Tioughnioga River at Lisle NY	4	453.00	54.91	7.44	5.16	14.37	645.79	0.012	5.643	88.43	1.15	66.10	23.83	42.72	16.71
192	01510000	Otselic River at Cincinnatus NY	4	147.00	33.25	17.79	16.08	26.20	683.47	0.026	1.542	93.46	0.68	77.94	24.29	43.23	17.08
193	01510500	Otselic River near Upper Lisle NY	4	217.00	44.51	13.10	7.77	22.29	628.13	0.021	3.115	90.28	0.63	75.29	23.99	42.94	16.67
194	01510610	Merrill Creek Tributary near Texas Valley NY	4	5.32	5.59	69.04	62.38	76.16	500.64	0.138	0.080	98.29	0.05	59.29	23.81	43.10	15.62
195	01511500	Tioughnioga River at Itaska NY	4	730.00	61.79	7.01	6.45	12.79	631.92	0.011	6.096	87.21	0.54	69.24	23.71	42.63	16.54
196	01512500	Chenango River near Chenango Forks NY	4	1483.00	80.21	4.80	2.97	6.87	586.86	0.008	14.353	84.89	1.46	69.22	22.43	41.41	16.35
197	01513500	Susquehanna River at Vestal NY	4	3941.00	155.90	3.73	2.19	5.41	637.70	0.006	34.493	85.95	1.79	69.72	21.78	40.81	15.72
198	01513712	Nanticoke Creek Tributary at Nanticoke NY	5	1.70	2.18	139.88	132.88	214.49	500.12	0.280	0.013	95.11	0.04	54.80	19.24	38.25	13.56
199	01513790	Nanticoke Creek at Union Center NY	5	90.70	18.09	29.31	19.21	45.98	575.91	0.051	0.587	74.53	0.42	67.41	18.72	37.79	13.17
200	01513831	Susquehanna River at Owego NY	5	4216.00	170.69	3.49	2.24	4.98	637.44	0.005	38.772	84.85	1.74	69.79	21.65	40.69	15.51

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydrologic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
201	01514000	Owego Creek near Owego NY	5	185.00	35.87	16.67	12.79	36.83	712.71	0.023	1.571	79.17	0.18	74.75	19.46	38.39	13.17
202	01514801	Catatonk Creek Northwest of Owego NY	5	150.00	29.95	12.85	9.10	27.10	743.11	0.017	1.778	68.34	0.77	76.28	17.13	35.80	11.89
203	01515000	Susquehanna River near Waverly NY	5	4773.00	189.96	2.76	1.94	4.25	643.93	0.004	48.309	83.06	1.63	69.99	21.27	40.29	15.13
204	01516500	Corey Creek near Mainesburg PA	5	12.20	7.27	133.99	47.55	294.50	747.03	0.179	0.061	100.00	0.42	47.62	15.08	34.44	11.56
205	01516800	Manns Creek near Mansfield PA	5	3.01	3.67	157.09	136.56	239.04	748.03	0.210	0.020	99.90	0.21	52.09	13.82	32.61	11.71
206	01517000	Elk Run near Mainesburg PA	5	10.20	8.13	103.57	40.75	237.14	766.52	0.135	0.081	100.00	0.08	50.57	14.50	34.01	11.49
207	01518000	Tioga River at Tioga PA	5	282.00	38.20	28.08	13.97	49.95	755.65	0.037	1.383	97.71	0.30	66.08	15.61	34.83	11.63
208	01518420	Crooked Creek at Middlebury Center PA	5	74.30	14.05	48.04	26.77	85.47	878.54	0.055	0.287	99.00	0.31	55.42	13.85	32.99	11.92
209	01518500	Crooked Creek at Tioga PA	5	122.00	23.13	25.24	8.49	54.96	921.53	0.027	1.004	95.74	1.30	60.28	13.54	32.68	11.86
210	01518862	Cowanesque River at Westfield PA	5	90.60	15.70	52.91	33.67	79.93	878.83	0.060	0.296	100.00	0.23	62.90	18.61	37.56	12.42
211	01519200	Cowanesque River at Elkland PA	5	235.00	31.54	27.71	14.78	53.34	853.63	0.032	1.077	98.75	0.14	63.39	15.87	35.02	12.12
212	01520000	Cowanesque River near Lawrenceville PA	5	298.00	43.08	19.64	11.47	40.41	822.35	0.024	1.896	96.06	0.12	62.80	15.02	34.28	12.02
213	01520500	Tioga River at Lindley NY	5	771.00	50.04	23.29	8.67	46.01	804.78	0.029	2.346	95.28	0.26	63.82	14.75	34.01	11.81
214	01521596	Big Creek near Howard NY	5	6.32	4.27	97.16	86.85	92.07	548.97	0.177	0.047	100.00	0.12	53.33	14.41	33.66	11.66
215	01522500	Karr Valley Creek at Almond NY	5	27.40	8.34	99.53	63.90	127.23	679.01	0.147	0.091	100.00	0.21	80.64	16.55	35.54	11.99
216	01523500	Canacadea Creek near Hornell NY	5	57.90	13.87	62.90	33.07	108.97	740.03	0.085	0.227	99.92	0.12	78.34	16.27	35.29	11.94
217	01525000	Bennett Creek at Canisteo NY	5	95.30	19.73	49.46	34.13	81.53	923.27	0.054	0.366	99.03	0.07	77.00	15.66	34.79	11.92
218	01525500	Canisteo River at West Cameron NY	5	340.00	37.36	16.25	5.13	43.18	826.44	0.020	2.270	94.91	0.32	72.92	14.84	33.94	11.81
219	01526000	Tuscarora Creek near South Addison NY	5	114.00	21.05	37.88	35.57	61.09	659.05	0.057	0.442	98.89	0.21	58.82	12.29	31.64	11.70
220	01526500	Tioga River near Erwins NY	5	1377.00	61.11	8.82	4.26	21.50	790.03	0.011	5.615	94.33	0.31	66.51	14.32	33.57	11.77
221	01527000	Cohocton River at Cohocton NY	5	52.20	18.93	28.59	5.76	61.67	793.57	0.036	0.920	100.00	0.67	57.10	14.80	33.75	11.95
222	01528000	Fivemile Creek near Kanona NY	5	66.80	22.52	14.09	13.14	31.97	497.95	0.028	1.043	99.58	0.74	64.37	15.85	34.35	11.89
223	01528320	Cohocton River at Bath NY	5	316.00	36.14	13.81	9.61	30.26	695.79	0.020	1.985	97.94	0.58	60.74	15.26	33.98	11.81
224	01529500	Cohocton River near Campbell NY	5	470.00	47.46	10.50	9.55	20.97	665.13	0.016	3.117	90.78	1.34	61.41	14.73	33.40	11.74
225	01530301	Cuthrie Run near Big Flats NY	5	5.39	4.01	174.78	133.31	223.93	770.09	0.227	0.023	97.92	0.00	88.79	13.79	32.50	11.32

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydro-logic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
226	01530500	Newtown Creek at Elmira NY	5	77.50	20.63	33.73	19.66	51.66	591.89	0.057	0.625	68.19	0.39	63.39	15.17	34.37	11.27
227	01531000	Chemung River at Chemung NY	5	2506.00	99.19	4.72	4.60	11.52	748.35	0.006	11.848	89.14	0.60	66.33	14.23	33.31	11.65
228	01533250	Tuscarora Creek near Silvara PA	5	11.80	5.77	79.47	39.44	88.55	722.20	0.110	0.096	76.75	1.95	62.91	16.20	35.55	11.92
229	01542810	Waldy Run near Emporium PA	5	5.24	5.13	134.69	112.73	239.67	1358.74	0.099	0.031	100.00	0.00	99.38	22.27	41.85	15.10
230	01543700	First Fork Sinnemahoning Creek at Wharton PA	5	182.00	21.86	38.64	23.95	66.71	1457.15	0.027	0.532	98.66	0.05	95.17	22.96	42.12	15.12
231	03007800	Allegheny River at Port Allegany PA	5	248.00	34.30	18.67	9.92	38.68	1022.56	0.018	1.647	100.00	0.03	87.68	23.88	42.80	14.60
232	03010500	Allegheny River at Eldred PA	5	550.00	48.10	11.70	3.58	26.28	933.25	0.013	4.305	100.00	1.41	87.02	23.27	42.15	14.82
233	03010734	Ischua Creek Tributary near Machias NY	5	5.12	4.39	39.49	12.75	140.06	485.52	0.081	0.100	100.00	2.55	57.43	22.55	41.96	18.96
234	03010800	Olean Creek near Olean NY	5	198.00	34.52	9.41	8.95	16.29	680.38	0.014	2.631	100.00	0.86	67.78	21.87	40.63	16.46
235	03011000	Great Valley Creek near Salamanca NY	5	137.00	25.32	16.37	11.10	26.24	843.18	0.019	1.394	100.00	0.47	79.96	23.63	42.59	18.45
236	03011020	Allegheny River at Salamanca NY	5	1608.00	84.61	5.45	0.72	14.28	912.67	0.006	16.519	100.00	0.96	83.50	22.37	41.22	15.56
237	03011800	Kinzua Creek near Guffey PA	5	46.40	16.45	36.46	29.23	48.85	510.01	0.071	0.424	100.00	0.65	95.71	23.90	43.14	14.98
238	03013000	Conewango Creek at Waterboro NY	5	290.00	30.26	3.91	1.80	23.76	387.14	0.010	3.633	100.00	4.71	51.22	25.10	44.21	19.98
239	03013800	Ball Creek at Stow NY	5	9.58	6.34	42.55	39.48	57.95	347.06	0.123	0.130	100.00	1.36	55.56	25.75	45.13	17.95
240	03015390	Hare Creek near Corry PA	5	12.30	8.09	59.70	6.89	92.45	452.59	0.132	0.298	100.00	3.45	59.01	29.30	48.13	16.67
241	03015500	Brokenstraw Creek at Youngsville PA	5	321.00	39.28	7.61	10.83	11.07	529.48	0.014	3.288	99.99	2.62	69.68	26.03	45.17	16.26
242	03021350	French Creek near Wattsburg PA	5	92.00	27.84	11.08	9.19	17.93	388.34	0.029	2.005	100.00	1.86	53.90	30.66	49.79	17.16
243	04213040	Raccoon Creek near West Springfield PA	5	2.53	2.93	50.96	44.91	73.78	204.52	0.249	0.050	0.00	6.24	58.32	20.59	40.63	12.77
244	04213200	Mill Creek at Erie PA	5	9.16	8.27	52.71	47.48	71.36	345.65	0.152	0.140	12.04	0.00	53.31	22.94	42.70	15.59
245	04213376	Canadaway Creek at Fredonia NY	5	32.90	17.79	67.62	52.33	81.50	503.62	0.134	0.268	65.70	0.21	63.10	20.51	39.44	19.77
246	04213490	South Branch Cattaraugus Creek near Otto NY	5	25.10	11.39	62.60	27.05	92.90	476.71	0.131	0.222	100.00	1.29	51.69	26.79	45.72	20.40
247	04213500	Cattaraugus Creek at Gowanda NY	5	436.00	56.01	17.08	15.20	21.33	519.14	0.033	2.945	94.90	1.01	57.25	24.68	43.61	19.18
248	04214040	Delaware Creek near Angola NY	5	8.32	7.77	31.83	28.97	56.54	117.51	0.271	0.187	0.00	0.19	38.46	19.16	38.26	19.93
249	04214200	Eighteenmile Creek at North Boston NY	5	37.20	13.92	36.12	21.09	86.14	520.49	0.069	0.317	64.87	0.24	62.20	23.92	43.07	19.78
250	04214250	Smoke Creek at Lackawanna NY	5	14.30	15.25	45.48	32.53	64.64	218.38	0.208	0.325	7.18	0.58	38.49	20.13	39.41	18.01

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydrologic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
251	04214400	Buffalo Creek near Wales Hollow NY	5	76.90	20.98	33.00	9.84	71.32	386.17	0.085	0.749	86.21	1.12	41.18	21.62	40.78	17.38
252	04214410	Hunter Creek at Colegrave NY	5	14.00	9.54	40.90	22.60	77.00	410.19	0.100	0.222	85.72	0.16	56.58	23.32	42.11	17.96
253	04214500	Buffalo Creek at Gardenville NY	5	142.00	43.11	17.77	14.20	31.27	345.30	0.051	1.947	59.17	0.88	42.10	21.53	40.69	17.37
254	04214980	Little Buffalo Creek at East Lancaster NY	5	24.00	15.26	40.63	24.92	59.93	243.55	0.167	0.384	7.40	0.56	40.23	20.74	40.13	16.81
255	04215000	Cayuga Creek near Lancaster NY	5	96.40	28.53	26.15	18.87	30.34	275.93	0.095	1.143	37.30	0.49	39.37	20.05	39.26	16.59
256	04215500	Cazenovia Creek at Ebenezer NY	5	135.00	39.35	24.02	16.18	39.26	398.04	0.060	1.496	59.41	0.52	57.07	23.39	42.36	18.61
257	04216400	Tonawanda Creek near Johnsonburg NY	6	23.70	9.72	79.96	86.19	57.12	397.15	0.201	0.137	100.00	1.76	53.62	21.32	40.40	16.53
258	04216418	Tonawanda Creek at Attica NY	6	76.90	23.54	45.29	16.40	75.63	430.49	0.105	0.645	88.17	1.15	52.83	19.04	38.07	16.31
259	04216500	Little Tonawanda Creek at Linden NY	6	22.10	11.02	70.23	15.94	97.34	498.84	0.141	0.270	86.72	0.87	56.55	17.38	36.37	15.56
260	04216875	Little Tonawanda Creek Trib near Batavia NY	6	1.02	2.05	45.19	21.75	45.84	257.01	0.176	0.063	0.00	0.07	28.95	14.75	34.72	15.31
261	04217000	Tonawanda Creek at Batavia NY	6	171.00	39.46	22.47	5.31	52.36	372.36	0.060	2.151	59.02	1.19	43.23	17.31	36.65	15.93
262	04217500	Tonawanda Creek near Alabama NY	6	231.00	62.38	13.14	11.41	32.82	314.30	0.042	3.044	43.70	1.21	40.13	17.09	36.54	15.86
263	04217700	Murder Creek at Pembroke NY	6	43.60	20.59	22.38	4.94	49.38	168.09	0.133	1.191	7.73	1.88	31.94	18.38	37.64	15.92
264	04217750	Murder Creek near Akron NY	6	58.80	29.04	17.40	18.03	33.95	153.29	0.114	1.126	5.75	1.81	32.45	18.50	37.84	15.89
265	04218000	Tonawanda Creek at Rapids NY	6	349.00	85.65	8.66	8.50	18.48	247.63	0.035	6.297	29.88	1.36	36.72	17.57	37.03	15.83
266	04218518	Ellicott Creek below Williamsville NY	6	81.60	36.66	9.79	9.65	21.16	123.81	0.079	2.386	2.06	1.08	34.16	19.85	38.64	16.11
267	04219645	Fourmile Creek near Youngstown NY	6	4.88	5.77	13.42	7.44	53.85	74.27	0.181	0.268	0.00	0.86	36.82	11.84	31.92	15.16
268	04219738	Eighteenmile Creek Tributary near Lockport NY	6	2.96	4.48	69.45	26.45	78.92	169.71	0.409	0.096	0.00	0.55	11.53	14.50	34.53	15.23
269	04219900	Johnson Creek near Lyndonville NY	6	95.10	26.92	15.95	8.21	20.29	78.77	0.203	1.923	0.00	1.66	22.19	12.98	32.96	15.35
270	04219922	Oak Orchard Creek at Barrville Rd. near Elba NY	6	6.48	7.47	27.37	16.00	46.78	132.94	0.206	0.262	0.00	0.33	8.99	13.85	33.85	15.33
271	04220150	Oak Orchard Creek at Medina NY	6	157.00	36.46	4.86	1.96	11.64	95.53	0.051	5.963	0.00	3.11	24.22	14.26	34.23	15.36
272	04220250	West Creek near Hilton NY	6	31.00	17.42	20.69	11.28	33.90	86.42	0.239	0.841	0.00	0.55	29.47	9.49	29.50	14.73
273	0422026250	Northrup Creek at North Greece NY	6	10.10	10.49	32.69	32.97	30.51	125.58	0.260	0.321	0.00	0.49	30.28	9.98	29.98	14.26
274	04220500	Dyke Creek at Wellsville NY	5	72.10	16.43	44.45	16.05	89.47	677.08	0.066	0.419	100.00	0.12	67.72	18.04	36.50	12.37
275	04221000	Genesee River at Wellsville NY	5	288.00	27.70	16.85	10.77	25.02	686.59	0.025	1.583	100.00	0.14	69.05	18.52	37.44	12.85

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydro-logic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
276	04221769	Black Creek at Hyder Flats Road at Black Creek NY	5	10.70	6.98	83.82	47.04	101.08	564.65	0.148	0.100	100.00	0.71	64.45	22.10	41.19	14.98
277	04222600	Wiscoy Creek at Bliss NY	5	22.00	7.38	29.14	23.23	38.91	327.03	0.089	0.237	100.00	1.79	51.29	23.94	43.04	16.19
278	04223000	Genesee River at Portageville NY	5	984.00	80.18	8.65	5.97	13.17	563.58	0.015	8.066	98.81	0.57	65.63	18.88	37.78	13.69
279	04224700	Sugar Creek near Ossian NY	5	10.00	6.96	77.28	55.52	98.11	538.60	0.143	0.093	100.00	0.14	72.99	13.02	31.83	11.87
280	04224775	Canaseraga Creek above Dansville NY	5	88.90	22.75	34.44	56.37	28.34	680.62	0.051	0.555	93.73	0.70	69.74	14.04	33.19	11.78
281	04224807	Stony Brook Tributary at South Dansville NY	5	3.15	3.32	168.75	127.46	204.90	540.45	0.312	0.020	100.00	0.20	63.31	14.04	33.61	11.64
282	04224900	Mill Creek at Patchinville NY	5	4.22	3.94	157.19	137.24	235.33	679.10	0.231	0.022	100.00	0.32	66.08	14.70	33.96	11.75
283	04225000	Canaseraga Creek near Dansville NY	5	152.00	25.11	32.08	56.26	23.96	637.48	0.050	0.664	91.23	0.68	62.58	13.95	33.11	11.77
284	04226000	Keshequa Creek at Craig Colony at Sonyea NY	5	68.30	24.38	47.10	27.82	72.34	462.78	0.102	0.530	57.97	0.29	48.99	12.98	31.82	12.51
285	04227000	Canaseraga Creek at Shakers Crossing NY	5	335.00	42.06	23.67	7.07	32.00	515.69	0.046	2.577	63.13	0.42	51.61	12.72	31.69	12.06
286	04227500	Genesee River near Mount Morris NY	5	1424.00	107.73	12.49	14.85	10.50	540.94	0.023	7.982	87.65	0.39	60.39	17.06	35.99	13.31
287	04229500	Honeoye Creek at Honeoye Falls NY	6	196.00	37.70	10.79	13.81	33.33	567.60	0.019	1.672	46.76	4.44	56.83	11.00	30.80	12.24
288	04230380	Oatka Creek at Warsaw NY	6	39.10	11.59	57.05	64.49	49.69	344.82	0.165	0.201	93.50	0.53	41.01	18.23	37.39	15.22
289	04230500	Oatka Creek at Garbutt NY	6	200.00	53.22	12.67	16.36	23.46	276.56	0.046	2.583	36.48	0.60	29.24	14.46	33.93	14.74
290	04231000	Black Creek at Churchville NY	6	130.00	34.83	17.42	6.05	28.89	140.91	0.124	2.400	2.78	1.83	21.08	11.61	31.58	14.86
291	04231040	Hotel Creek at Griffin Road near Churchville NY	6	4.57	6.84	11.64	10.80	15.21	118.77	0.098	0.494	0.00	0.53	16.63	10.09	30.07	14.35
292	04232000	Genesee River at Rochester NY	6	2467.00	165.26	8.05	1.60	8.40	432.25	0.019	33.442	58.80	1.08	47.86	14.64	33.92	13.43
293	04232034	Irondequoit Creek at Rr Mills near Fishers NY	6	39.20	14.44	22.10	18.95	35.88	336.81	0.066	0.533	0.00	1.56	35.06	10.96	30.73	13.00
294	04232040	Irondequoit Creek near Pittsford NY	6	44.40	16.61	19.39	23.08	32.11	357.67	0.054	0.588	0.00	1.47	36.75	10.99	30.77	13.02
295	04232046	Thomas Creek at Fairport NY	6	28.50	12.13	19.06	8.60	45.81	322.79	0.059	0.572	0.00	1.97	28.31	11.67	31.58	13.43
296	04232047	Irondequoit Creek at Linden Ave E Rochester NY	6	101.00	22.26	15.84	12.91	23.42	325.99	0.049	1.208	0.00	1.31	29.05	11.24	31.09	13.24
297	0423204920	East Branch Allen Creek at Pittsford NY	6	6.96	7.09	37.84	61.91	33.85	257.88	0.147	0.151	0.00	0.62	19.15	10.83	30.67	13.38
298	0423205010	Irondequoit Creek above Blosm Rd. near Rochester NY	6	142.00	25.79	17.14	17.47	23.50	292.39	0.059	1.213	0.00	1.49	25.60	11.15	31.01	13.34
299	042320527	Mill Creek Tributary near Webster NY	6	2.12	4.06	36.58	20.71	49.22	97.55	0.375	0.123	0.00	0.00	36.52	11.42	31.43	14.04
300	042320578	Bear Creek at Ontario NY	6	6.74	5.23	10.34	12.99	17.73	114.99	0.090	0.323	0.00	2.78	33.40	12.96	32.97	13.96

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydrologic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
301	04232071	Second Creek Tributary at Alton NY	6	1.07	1.54	29.79	7.82	58.19	62.69	0.475	0.067	0.00	1.68	49.62	16.99	36.99	14.55
302	04232087	Red Creek Tributary No. 16 near Red Creek NY	6	2.90	3.70	20.77	14.64	45.94	176.94	0.117	0.136	0.00	3.45	51.11	19.89	39.87	16.46
303	04232100	Sterling Creek at Sterling NY	6	44.40	19.49	10.60	13.81	8.72	323.04	0.033	1.624	0.00	5.98	50.76	20.08	39.94	17.06
304	04232200	Catharine Creek at Montour Falls NY	5	41.10	19.73	49.33	48.99	84.78	712.50	0.069	0.301	43.97	0.96	66.07	13.79	33.04	11.27
305	04232460	Sugar Creek at Guyanoga NY	6	28.90	10.06	42.20	22.29	67.87	380.12	0.111	0.251	35.21	0.30	50.03	12.05	31.93	12.02
306	04232630	Kendig Creek near Macdougall NY	6	13.80	9.60	20.40	33.77	15.33	110.35	0.185	0.403	0.00	0.94	19.18	12.50	31.81	12.23
307	04233000	Cayuga Inlet near Ithaca NY	5	35.20	11.74	59.45	56.94	48.16	757.46	0.078	0.220	52.66	0.87	71.58	14.86	33.98	11.75
308	04233255	Cayuga Inlet at Ithaca NY	5	86.70	15.66	81.07	101.75	73.33	582.33	0.139	0.179	59.73	0.56	64.38	14.67	33.79	11.83
309	04233258	Coy Glen Creek at Ithaca NY	5	3.56	4.78	222.55	317.79	108.13	402.44	0.553	0.026	53.56	0.05	55.84	14.84	33.79	12.06
310	04233310	Sixmile Creek near Ithaca NY	5	42.00	14.98	63.77	53.46	67.58	645.44	0.099	0.245	70.95	0.40	75.71	16.95	35.58	12.96
311	04233676	Virgil Creek at Mill Street at Dryden NY	5	20.70	11.73	42.70	42.37	75.06	544.73	0.078	0.204	95.97	0.24	54.26	23.09	41.93	15.05
312	04233700	Virgil Creek at Freeville NY	5	40.30	14.99	35.90	34.29	52.95	527.80	0.068	0.344	82.19	0.82	53.33	21.47	40.30	14.74
313	04234000	Fall Creek near Ithaca NY	5	126.00	33.11	16.68	14.05	26.83	403.27	0.041	1.618	72.25	1.26	53.70	20.00	38.84	14.99
314	042340202	Cayuga Lake Trib No. 8 near Jacksonville NY	6	1.36	3.59	146.00	252.96	124.44	209.27	0.698	0.020	0.00	0.03	41.08	14.79	33.81	12.11
315	042340588	Yawger Creek Tributary near Auburn NY	6	1.76	3.58	78.69	50.67	82.67	164.01	0.480	0.055	0.00	3.31	11.50	15.56	34.63	14.43
316	04234138	Schaeffer Creek near Canandaigua NY	6	7.84	7.96	39.57	23.25	58.27	445.08	0.089	0.210	15.78	0.26	37.81	11.08	30.85	12.44
317	04234200	Mud Creek at East Victor NY	6	64.20	26.93	21.80	23.19	48.73	548.00	0.040	0.776	31.15	0.37	46.34	11.12	30.91	12.42
318	04234363	Marbletown Creek Tributary near Newark NY	6	0.58	1.16	36.17	80.15	9.88	509.14	0.071	0.039	0.00	1.01	40.10	14.22	34.22	13.50
319	04234400	West River near Middlesex NY	6	29.30	12.78	27.03	17.80	38.22	420.46	0.064	0.471	17.21	0.29	34.04	11.48	31.39	12.17
320	04235250	Flint Creek at Phelps NY	6	102.00	40.59	15.45	17.56	46.71	395.09	0.039	1.364	27.19	0.94	41.80	12.33	32.04	12.25
321	04235255	Canandaigua Outlet Tributary near Alloway NY	6	2.94	3.79	20.78	13.99	26.30	376.51	0.055	0.187	0.00	0.83	24.10	14.06	33.98	13.42
322	04235276	Black Brook at Tyre NY	6	19.00	15.27	5.17	9.70	2.81	80.81	0.064	2.390	0.00	4.19	35.06	13.51	32.80	13.42
323	04240100	Harbor Brook at Syracuse NY	6	10.00	6.99	105.95	133.69	85.45	343.54	0.308	0.065	0.00	0.27	36.41	18.23	38.24	18.96
324	04242500	East Branch Fish Creek at Taberg NY	1	188.00	42.63	35.64	47.25	21.73	313.00	0.114	1.287	75.87	10.95	79.16	37.84	56.10	28.64
325	04242795	Canada Creek Tributary near Lee Center NY	1	1.34	2.90	57.64	71.68	62.84	152.61	0.378	0.043	0.00	17.66	60.99	33.08	51.30	27.36

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydro-logic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
326	04243500	Oneida Creek at Oneida NY	6	113.00	26.43	43.30	19.16	61.39	416.05	0.104	0.745	37.22	1.67	39.34	20.68	39.82	19.24
327	04245000	Limestone Creek at Fayetteville NY	6	85.50	24.81	48.23	32.91	79.81	487.45	0.099	0.474	52.20	1.96	56.69	22.77	41.83	19.01
328	04245200	Butternut Creek near Jamesville NY	6	32.20	13.81	48.14	30.63	124.78	589.72	0.082	0.219	71.79	1.02	61.05	21.11	40.48	18.54
329	04245840	Scriba Creek near Constantia NY	1	38.40	13.92	14.38	10.06	13.06	232.65	0.062	1.116	0.00	18.47	74.71	24.89	43.78	24.20
330	04249050	Catfish Creek at New Haven NY	1	31.70	21.42	3.79	3.81	4.41	197.67	0.019	4.200	0.00	17.13	63.12	23.73	43.08	23.07
331	042490673	North Branch Grindstone Creek near Altmar NY	1	10.10	8.48	24.42	20.50	36.32	228.16	0.107	0.299	0.00	11.57	80.26	27.96	47.16	26.68
332	04249200	North Branch Salmon River at Redfield NY	1	82.50	28.05	37.84	49.04	20.45	234.46	0.161	0.856	86.94	9.54	88.52	35.30	53.97	28.46
333	04250750	Sandy Creek near Adams NY	1	137.00	28.28	24.83	23.70	21.76	312.92	0.079	1.193	29.21	3.71	53.38	27.32	45.69	24.83
334	04252500	Black River near Boonville NY	1	304.00	45.05	23.93	11.44	49.36	394.46	0.061	1.800	90.35	16.03	79.70	32.05	48.81	27.85
335	04254500	Moose River at Mckeever NY	1	363.00	41.40	23.45	15.10	45.43	696.14	0.034	1.514	100.00	18.77	80.59	31.26	47.81	26.82
336	04256000	Independence River at Donnattsburg NY	1	88.70	30.90	33.83	35.26	31.47	438.17	0.077	0.901	98.12	22.49	76.66	28.64	45.72	27.96
337	04256040	Tributary to Mill Creek Tributary near Lowville NY	1	1.66	3.35	192.32	260.00	106.74	341.51	0.563	0.020	100.00	0.52	33.11	27.57	45.01	28.01
338	04256485	Woods Lake Outlet near Big Moose NY	1	0.80	1.39	74.36	0.00	343.55	791.97	0.094	0.075	100.00	17.01	82.58	29.98	46.07	26.80
339	04258700	Deer River at Deer River NY	1	94.80	29.43	40.99	44.20	37.56	227.70	0.180	0.705	91.59	6.77	69.55	33.91	51.41	26.67
340	04260500	Black River at Watertown NY	1	1864.00	128.05	12.83	4.81	26.19	423.21	0.030	10.191	77.06	14.26	71.01	28.99	46.08	27.02
341	04260575	Horse Creek Tributary near Dexter NY	1	4.59	4.36	15.34	4.90	43.71	69.23	0.222	0.268	0.00	1.02	36.68	17.47	36.24	21.49
342	04262500	West Br Oswegatchie River near Harrisville NY	1	258.00	46.02	31.58	28.10	30.32	413.23	0.076	1.524	55.38	16.91	81.50	27.30	43.91	21.96
343	04263000	Oswegatchie River near Heuvelton NY	1	986.00	127.52	12.79	2.29	20.30	423.33	0.030	15.229	41.51	13.13	73.80	23.46	40.88	20.84
344	04263445	Birch Creek at Pierces Corners NY	1	1.67	4.15	30.68	27.63	38.81	380.36	0.081	0.123	0.00	0.83	81.85	16.95	35.81	18.65
345	04264300	Brandy Brook near Waddington NY	1	22.80	16.09	4.57	5.93	4.46	100.54	0.045	2.617	0.00	28.92	35.17	13.99	32.77	18.68
346	04264400	Middle Branch Grass River near Clare NY	1	63.00	22.49	32.24	39.96	32.95	399.08	0.081	0.603	74.39	2.27	96.68	24.69	41.59	20.72
347	04264700	North Branch Grass River near Clare NY	1	46.30	24.07	26.95	26.50	40.39	447.33	0.060	0.713	64.12	7.42	91.80	24.25	41.37	20.26
348	04265000	Grass River at Pyrites NY	1	333.00	63.02	21.06	20.40	16.90	446.30	0.047	3.220	63.39	5.29	92.34	24.34	41.24	21.09
349	04265100	Elm Creek near Hermon NY	1	32.60	12.51	23.69	4.43	54.10	514.02	0.046	0.723	0.00	5.73	77.64	20.64	38.91	18.90
350	04265200	Tanner Creek at Stellaville NY	1	33.40	17.87	20.91	18.23	29.10	407.24	0.051	0.743	0.00	6.37	80.33	19.17	37.93	18.66

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydro-logic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
351	04265300	Little River near Canton NY	1	42.40	16.94	37.93	41.80	39.71	347.38	0.109	0.406	0.01	3.79	81.34	20.16	38.12	19.00
352	04267600	Cold Brook near South Colton NY	1	18.70	9.67	40.69	56.64	35.34	478.03	0.085	0.211	91.00	5.08	91.00	24.72	42.01	20.51
353	04267700	Parkhurst Brook near Potsdam NY	1	16.80	13.52	50.82	33.44	62.67	313.12	0.162	0.289	2.35	3.49	85.07	20.67	38.29	19.24
354	04267800	Trout Brook at Allen Corners NY	1	54.20	24.60	10.57	7.15	15.38	176.28	0.060	2.129	0.00	9.80	61.89	15.63	34.04	18.77
355	04268200	Plum Brook near Grantville NY	1	43.90	22.25	11.82	12.78	10.68	149.01	0.079	1.754	0.00	22.69	58.37	14.97	33.28	18.91
356	04268700	St. Regis River at St. Regis Falls NY	1	234.00	41.46	13.19	10.61	13.51	464.67	0.028	3.195	100.00	14.14	84.25	25.61	42.22	24.28
357	04268720	Hopkinton Brook at Hopkinton NY	1	20.00	9.21	53.84	38.89	82.77	256.02	0.210	0.159	50.48	5.50	93.03	24.07	40.86	20.13
358	04268800	West Branch St. Regis River near Parishville NY	1	171.00	40.69	15.35	26.09	7.67	482.86	0.032	2.655	97.53	7.64	91.03	26.30	43.03	23.32
359	04269000	St. Regis River at Brasher Center NY	1	612.00	75.27	22.29	22.86	14.85	412.07	0.054	3.871	73.80	9.41	85.78	24.20	41.08	22.47
360	04269050	Allen Brook near Brasher Falls NY	1	16.00	12.98	54.50	29.20	74.27	142.48	0.383	0.272	0.00	5.82	68.01	17.71	34.74	19.68
361	04269100	Lawrence Brook near Moira NY	1	25.70	13.36	52.07	19.16	93.59	270.15	0.193	0.306	1.20	1.92	67.05	17.36	34.48	20.57
362	04269500	Deer River at Brasher Iron Works NY	1	191.00	52.06	31.14	31.09	14.02	251.07	0.124	2.371	31.41	10.09	75.11	19.62	36.79	21.11
363	04270000	Salmon River at Chasm Falls NY	1	132.00	21.40	18.07	25.53	35.97	651.01	0.028	0.683	99.78	5.76	93.34	23.33	40.27	24.41
364	04270100	West Branch Deer Creek at Fort Covington Center NY	1	32.40	16.07	32.70	11.68	81.33	126.75	0.258	0.497	0.00	4.84	58.61	14.84	33.02	21.39
365	04270150	East Branch Deer Creek at Fort Covington Center NY	1	23.90	17.39	57.13	21.59	90.15	140.10	0.408	0.383	0.69	4.64	54.64	16.42	34.31	22.35
366	04270162	East Branch Little Salmon River near Skerry NY	1	7.11	6.18	131.24	117.22	162.33	398.94	0.329	0.044	74.86	6.56	88.60	22.19	39.20	23.76
367	04270200	Little Salmon River at Bombay NY	1	92.20	35.51	45.37	12.82	66.00	261.70	0.173	1.167	23.25	4.35	70.45	18.16	35.63	21.92
368	04270700	Trout River at Trout River NY	1	107.00	27.72	63.76	42.66	83.00	311.93	0.204	0.458	45.69	2.21	73.41	19.48	36.86	23.68
369	04270800	English River near Mooers Forks NY	1	40.80	21.13	41.81	46.38	40.80	152.75	0.274	0.475	8.41	23.76	58.28	15.33	33.15	20.52
370	04271815	Little Chazy River near Chazy NY	1	50.30	22.52	43.68	13.04	78.89	229.37	0.190	0.672	7.68	7.82	66.69	14.16	32.40	16.45
371	04273500	Saranac River at Plattsburgh NY	1	608.00	89.09	17.75	33.71	3.94	556.37	0.032	6.804	88.62	8.87	85.48	18.70	35.60	22.78
372	04273700	Salmon River at South Plattsburgh NY	1	63.30	21.93	54.07	48.88	76.11	468.30	0.115	0.354	31.39	3.61	82.07	12.29	30.37	17.50
373	04273800	Little Ausable River near Valcour NY	1	67.80	21.63	41.49	13.19	101.01	445.51	0.093	0.568	12.70	1.48	78.47	11.35	29.49	17.03
374	04274000	West Branch Ausable River near Lake Placid NY	1	116.00	20.30	78.77	16.97	237.49	1090.98	0.072	0.310	100.00	5.37	90.65	25.21	41.41	23.40
375	04275000	East Branch Ausable River at Au Sable Forks NY	1	198.00	41.68	44.53	17.25	115.03	1394.65	0.032	0.906	77.00	1.32	95.35	21.78	38.72	21.21

Table 10. Data on selected basin characteristics of rural, unregulated streams in New York, excluding Long Island.—Continued

[Basin characteristics are explained in table 1. Station locations and hydrologic region boundaries are shown in figure 2]

Map number	Station number	Station name	Hydro-logic region	Basin characteristics (definitions are given in footnote)													
				A	L	SL	SL_LO	SL_UP	BS	SR	LAG	EL12	ST	FOR	RUNF	P	MXSNO
376	04275500	Ausable River near Au Sable Forks NY	1	446.00	44.04	43.39	15.74	106.13	1167.00	0.037	1.040	80.19	3.02	93.54	20.75	37.65	21.46
377	04276200	Bouquet River at New Russia NY	1	37.60	15.65	152.21	76.49	258.67	1561.72	0.097	0.110	82.15	0.16	98.91	22.67	39.96	21.32
378	04276500	Bouquet River at Willsboro NY	1	270.00	47.17	34.21	10.63	100.10	1000.13	0.034	1.375	42.07	1.10	90.19	15.77	34.22	19.46
379	04276770	Mill Brook at Port Henry NY	1	27.00	12.13	91.15	103.81	110.45	856.07	0.106	0.112	63.29	1.75	92.40	15.67	34.47	20.50
380	04276842	Putnam Creek East of Crown Point Center NY	1	51.60	18.42	79.95	81.35	112.84	747.29	0.107	0.190	49.35	3.03	94.54	16.70	35.68	20.77
381	04278300	Northwest Bay Brook near Bolton Landing NY	1	22.00	7.53	167.88	71.80	267.39	1201.22	0.140	0.054	54.00	1.70	98.29	19.11	37.73	20.57
382	04279400	Poultney River Tributary at East Poultney VT	1	1.13	2.10	164.92	88.63	429.46	858.29	0.192	0.011	0.00	3.99	57.31	16.85	36.06	19.64
383	04280200	Mettawee River Tributary 2 at East Ruppert VT	1	1.86	2.40	662.27	408.66	1093.58	1306.27	0.507	0.004	86.50	0.86	95.21	23.27	42.09	22.51
384	04280300	Mettawee River Tributary near Pawlet VT	1	2.09	3.55	357.33	127.64	705.20	1175.41	0.304	0.012	47.30	0.83	73.60	17.50	36.57	21.57
385	04280350	Mettawee River near Pawlet VT	1	70.20	19.02	55.02	23.18	149.53	1226.34	0.045	0.315	59.01	1.15	73.48	21.34	40.31	21.98
386	04280450	Mettawee River near Middle Granville NY	1	167.00	29.59	35.74	23.26	77.59	986.63	0.036	0.678	34.20	2.92	67.12	18.96	38.14	20.93
387	04292500	Lamoille River at East Georgia VT	1	686.00	66.23	14.75	8.06	27.67	785.38	0.019	4.109	48.70	4.21	77.63	26.02	43.25	19.64
388	04292700	Stone Bridge Brook near Georgia Plains VT	1	8.45	7.91	34.84	34.47	60.68	478.15	0.073	0.169	0.00	5.65	54.39	12.72	32.89	14.90
		Minimum		0.41	1.06	2.76	0.00	2.81	62.69	0.004	0.002	0.00	0.00	8.99	9.49	29.49	9.74
		Maximum		4773.00	189.96	729.47	591.95	1135.57	1720.11	0.772	48.309	100.00	28.92	100.00	40.73	59.99	28.64
		Mean		246.47	27.43	60.14	45.27	91.18	632.36	0.109	2.058	58.93	3.14	69.13	21.82	40.94	16.84
		Median		57.90	18.24	36.06	23.21	52.65	599.41	0.069	0.474	76.86	1.49	70.58	21.65	40.80	16.38
		Standard deviation		612.68	30.59	83.04	66.86	129.79	322.80	0.118	5.041	40.94	4.22	20.33	6.18	5.99	4.01
		25th Percentile		13.05	8.12	17.55	10.61	27.04	406.25	0.032	0.128	7.71	0.46	56.59	17.28	36.47	14.02
		75th Percentile		181.25	34.35	69.51	50.30	100.81	819.66	0.140	1.783	99.01	4.23	85.68	25.44	43.94	19.30

A Drainage area (A), in square miles.
L Main-channel stream length, in miles.
SL Main channel slope, in feet per mile.
SL_LO Lower half main channel slope, in feet per mile.
SL_UP Upper half main channel slope, in feet per mile.
BS Average basin slope, in feet per mile.
SR Slope ratio .
LAG Basin lag factor.
EL12 Percentage of basin above 1,200 feet.
ST Basin storage, in percent.
FOR Basin forested area, in percent.
RUNF Mean annual runoff, in inches.
P Mean annual precipitation, in inches.
MXSNO Seasonal maximum snow depth, in inches.

Appendix 1. New York Flood-Frequency Tool

A DVD is included with this report (in the pocket at the back of the report) that contains a customized geographic information system (GIS) tool that automates the measurement of basin characteristics and calculation of corresponding flow statistics. The application, called the New York Flood-Frequency Tool, allows the user to select a point of interest on a synthetic stream network derived from a digital elevation model (DEM). The tool automatically computes the required basin characteristics and solves the regional regression equations based on the location of the site of interest. The tool produces a map for the user to review the results of the automated measurement of basin characteristics and a text file containing the calculated basin parameters and flow statistics.

The DVD also contains a spreadsheet for computing peak discharges for a gaged site, an ungaged site, or an ungaged site on a gaged stream within any of the six flood-frequency hydrologic regions developed for this report (a separate worksheet is included for each region).

The New York Flood Frequency Tool was developed with the Environmental Systems Research Institute, Inc. (ESRI) Arc/INFO Workstation version 9.1 software using the ESRI Arc Macro Language (AML) for the programming language.

Updates and additional information about the New York Flood-Frequency Tool can be downloaded from the USGS New York Water Science Center website at http://ny.water.usgs.gov/projects/floodfreq.

System Requirements

The New York Flood-Frequency Tool requires the following software:

1. ESRI ArcGIS Desktop 9.0 or higher with the Spatial Analyst extension;

2. ESRI Arc/INFO Workstation, version 9.0 or higher with the Grid module;

The New York Flood-Frequency Tool successfully runs on Microsoft Windows XP. Other operating systems have not been tested. Required disk space for computing basin characteristics throughout New York is estimated to be 3.3 gigabytes.

Data Requirements

The New York Flood-Frequency Tool functions properly by copying the entire suite of programs and supporting datasets using the naming convention provided on the DVD. The following is a summary of the directory structure and contents:

\ny_flood_freq - top level directory name

\aml - location of AML program files, batch files, shortcuts, help and readme files

\comp_ny - location of the Excel spreadsheets for computing discharges in each of the hydrologic regions

\input - location for user-supplied basin outlines and of auto-delineated basin outlines created by the New York Flood-Frequency Tool

\ned - location of the National Elevation Dataset (NED) 1 Arc Second raster product and elevation derivatives

\output - location of the output text summary files, ArcPlot GRA maps, and enhanced metafile (EMF) map files

\prereq - location of prerequisite projection files, supporting datasets, and the AFPL Ghostscript utility

\process - temporary processing folder, should be empty when not in run time

\raster - location of raster datasets needed for generating basin characteristics.

The datasets included on the DVD were used to develop the equations and should be used when generating basin characteristics for the regional regression equations. To use different or updated versions of these datasets may result in computed discharges of undeterminable accuracy. More detailed information about the spatial datasets included on the DVD can be found on p. 12 under “Basin Characteristics”.

Installation of the New York Flood-Frequency Tool

Once the required ESRI software is installed and the programs, datasets, and other supporting files are loaded in the appropriate directory structure, the New York Flood-Frequency Tool is ready for use. Proper installation requires the following steps:

1. Copy the entire ny*_flood_freq* folder from the DVD to a location on a local drive (for example, *C:*\ny*_flood_freq*).

2. In th*e* \ny*_flood_freq**amls* folder, right click on the “NY Flood-Frequency Tool” shortcut, and select Properties. Under the Shortcut tab, edit the path to the “Start In” to reflect the location of the *amls* folder in your local installation and edit the “Target” to reflect the location of the *menu.bat* file in your *amls* folder in your local installation.

(for example **Target:** *C:*\ny*_flood_freq\amls\menu.bat*) (for example **Start in:** *C:*\ny*_flood_freq\amls*).

3. This step is dependent on your ESRI ArcGIS installation location. If the path to your ArcGIS installation is different than *C:\ArcGIS*, the *menu.bat* file in the *amls* folder must be edited to reflect the correct path of your ArcGIS installation.

Using the New York Flood-Frequency Tool

The New York Flood-Frequency Tool is invoked by using the "NY Flood Frequency Tool" shortcut in the *\ny_flood_freq\amls* folder. This shortcut can be copied and placed on the user's desktop. The tool consists of four steps or programs to assist users to derive the necessary basin characteristics for solving the flood-frequency regression equations in this report. A brief summary of each step is provided below:

1. Step one allows the user to select a single grid cell on the digital stream network called a pourpoint (based initially on a user provided latitude and longitude) for the site of interest. The user has the option to either input a pre-determined basin outline (recommended) or to auto-delineate a basin outline using the DEM flow-direction derivative dataset.

2. Step two uses the basin outline provided by the user or delineated in step one to calculate non-DEM-generated basin characteristics required to solve the flood-frequency equations.

3. Step three uses the pourpoint grid cell and the basin outline from step one to calculate DEM-generated basin and main-channel characteristics required to solve the flood-frequency equations.

4. Step four computes the flood-frequency discharges for selected recurrence intervals based on the information from steps one through three.

The flowchart on page 152 shows the steps involved to use the New York Flood-Frequency Tool. There is online information to guide the user through the programs and each step has a help file. The tool is designed to be used sequentially from step one through step four without interruption. For the site of interest, the tool uses a Process ID and associated basin outline to maintain continuity between steps. Using the steps out of order could result in incorrect values. If any step does not successfully complete, it is recommended that the user start over from step one. It is the user's responsibility to verify the accuracy of datasets used as inputs and any basin-characteristic outputs created by the New York Flood-Frequency Tool before use in the regional regression equations.

Limitations

The New York Flood-Frequency Tool is provided to assist users with solving the regional regression equations. However, there will be instances, especially in low relief areas, where the tool will fail to properly model the watershed. For these cases, the user may need to use an alternate method to derive the basin characteristics from the provided datasets.

Step one provides the option of delineating a basin outline for the site of interest using the DEM derivative datasets. It is the user's responsibility to verify the accuracy of any basin outline generated using this program.

Step two computes non-DEM generated basin characteristics (for example, land-use and climate parameters) using the basin outline from step one. If the computed values are outside the limits of the data used for the study sites, the accuracy of the computed discharges may be unknown (this reasoning applies to all computed basin characteristics).

The contour interval used in step three should be set to match the contour interval displayed on the 1:24,000-scale digital raster graphics for the point of interest. For an outlet of a large watershed, a larger contour interval might be required to calculate the basin characteristics.

In some cases, the tool may fail to properly model the watershed for a site of interest. Manual derivation of basin characteristics using the spatial datasets provided on the DVD may be possible. A spreadsheet is available on the DVD to compute flood discharges.

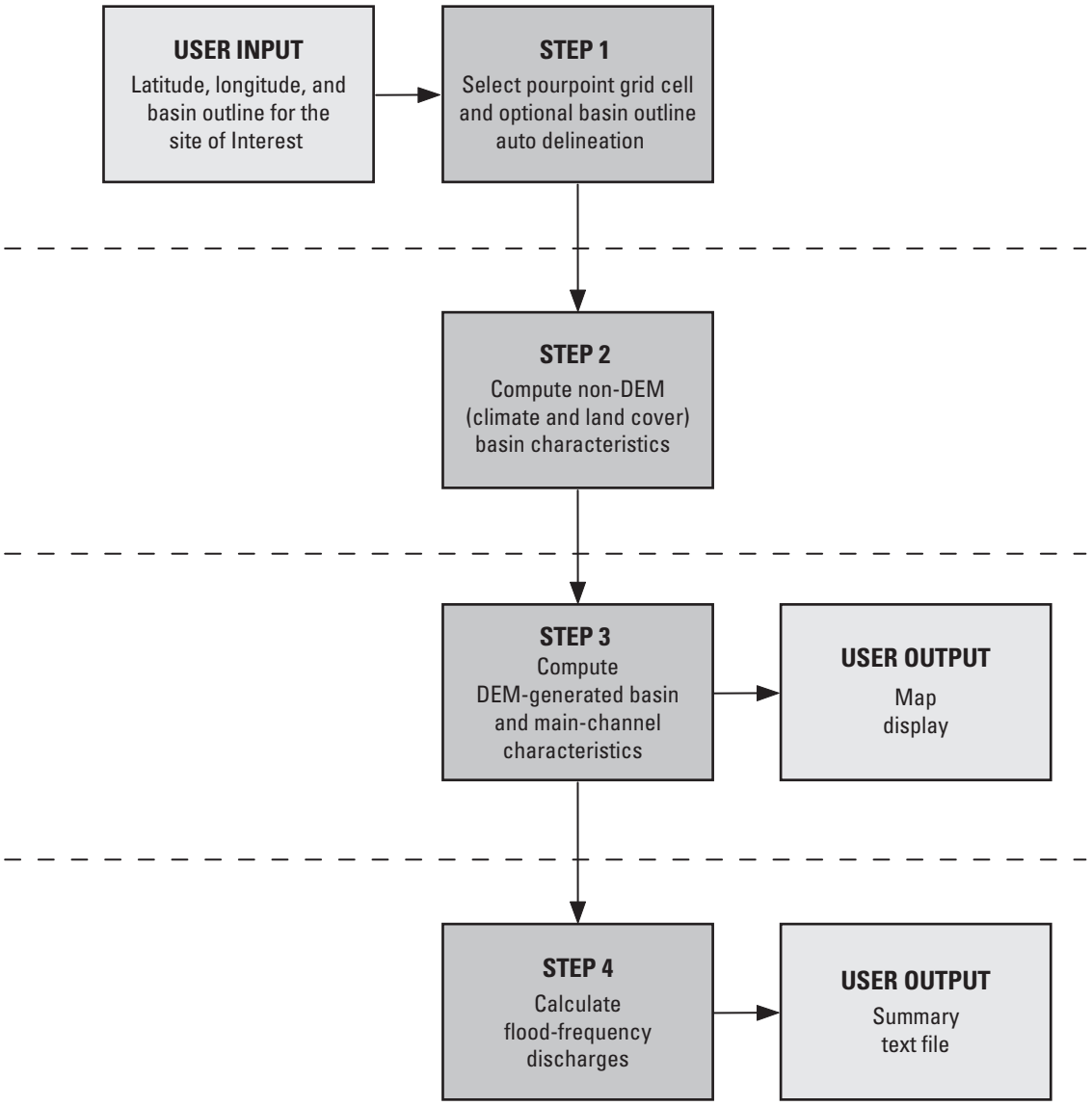
Questions regarding the use of the New York Flood-Frequency Tool can be sent to the AskNY@usgs.gov email address.

Using the New York Flood-Frequency Spreadsheet

An Excel spreadsheet (workbook) is available on the DVD for manual computation of flood discharges at a gaged site, an ungaged site, or an ungaged site on a gaged stream. The spreadsheet is located in the comp_ny folder and is called *ny_flood_freqv1.0.xls*. Only cells shown with a yellow background need to be edited with the correct information. All variables being computed are defined in the report in the section "Computation of Peak Discharge." Comments are included with several cells in the worksheet to assist the user. A worksheet is provided for each of the six hydrologic regions and example data are included with each worksheet. Copies of the worksheets can be made for use with specific sites of interest.

Future Updates

Updates and additional information about the New York Flood-Frequency Tool can be downloaded from the USGS New York Water Science Center website at http://ny.water.usgs.gov/projects/floodfreq.


USER INPUT
Latitude, longitude, and basin outline for the site of Interest
STEP 1
Select pourpoint grid cell and optional basin outline auto delineation
STEP 2
Compute non-DEM (climate and land cover) basin characteristics
STEP 3
Compute DEM-generated basin and main-channel characteristics
USER OUTPUT
Map display
STEP 4
Calculate flood-frequency discharges
USER OUTPUT
Summary text file

For additional information write to:
New York Water Science Center
U.S. Geological Survey
425 Jordan Road
Troy, NY 12180

Information requests:
(518) 285-5602
or visit our Web site at:
http://ny.water.usgs.gov