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MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION,
OFFICE OF WATERSHED MANAGEMENT

Streamflow Measurements, Basin Characteristics, and Streamflow Statistics for Low-Flow Partial-Record Stations Operated in Massachusetts from 1989 Through 1996

Water-Resources Investigations Report 99-4006

U.S. Department of the Interior
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By KERNELL G. RIES, III

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Northborough, Massachusetts
1999

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

U.S. GEOLOGICAL SURVEY
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CONVERSION FACTORS, VERTICAL DATUM, AND ABBREVIATIONS

CONVERSION FACTORS

Multiply	By	To Obtain
cubic feet per second (ft^3/s)	0.02832	cubic meter per second
foot (ft)	0.3048	meter
inch (in.)	25.4	millimeter
mile (mi)	1.609	kilometer
square mile (mi^2)	2.590	square kilometer

Temperature in degrees Fahrenheit (°F) can be converted to degrees Celsius (°C) as follows:
$°C = 5/9 \times (°F - 32)$.

VERTICAL DATUM

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

ABBREVIATIONS

Organizations

USGS	U.S. Geological Survey
MOWR	Massachusetts Department of Environmental Management, Office of Water Resources

Miscellaneous

LFPR	Low-flow partial-record station
GIS	Geographic information system computer software
DEM	Digital elevation model
MOVE.1	Maintenance Of Variance Extension, type 1, method of correlation

Streamflow Measurements, Basin Characteristics, and Streamflow Statistics for Low-Flow Partial-Record Stations Operated in Massachusetts from 1989 Through 1996

By Kernell G. Ries, III

Abstract

A network of 148 low-flow partial-record stations was operated on streams in Massachusetts during the summers of 1989 through 1996. Streamflow measurements (including historical measurements), measured basin characteristics, and estimated streamflow statistics are provided in the report for each low-flow partial-record station. Also included for each station are location information, streamflow-gaging stations for which flows were correlated to those at the low-flow partial-record station, years of operation, and remarks indicating human influences of streamflows at the station. Three or four streamflow measurements were made each year for three years during times of low flow to obtain nine or ten measurements for each station. Measured flows at the low-flow partial-record stations were correlated with same-day mean flows at a nearby gaging station to estimate streamflow statistics for the low-flow partial-record stations. The estimated streamflow statistics include the 99-, 98-, 97-, 95-, 93-, 90-, 85-, 80-, 75-, 70-, 65-, 60-, 55-, and 50-percent duration flows; the 7-day, 10- and 2-year low flows; and the August median flow. Characteristics of the drainage basins for the stations that theoretically relate to the response of the station to climatic variations were measured from digital map data by use of an automated geographic information system procedure. Basin characteristics measured include drainage area; total stream length; mean basin slope; area of surficial stratified drift; area of wetlands; area of water bodies; and mean, maximum, and minimum basin elevation. Station descriptions and calculated streamflow statistics are also included in the report for the 50 continuous gaging stations used in correlations with the low-flow partial-record stations.

INTRODUCTION

Streamflow statistics are useful for design and operation of reservoirs for water supply and hydroelectric generation, sewage-treatment facilities, commercial and industrial facilities, agriculture, maintenance of streamflows for fisheries and wildlife, and recreational users. These statistics provide indications of reliability of water resources, especially during times when water conservation practices are most likely to be needed to protect instream flow and other uses. In 1988, the U.S. Geological Survey (USGS) began the first of three studies to determine streamflow statistics for Massachusetts streams. These studies, done in cooperation with the Massachusetts Department of Environmental Management, Office of Water Resources (MOWR), were referred to as the Basin Yield studies. Three reports have been published previously as a result of the Basin Yield studies (Ries, 1994a, 1994b, 1997). Each report describes regression equations that were developed for use in estimating streamflow statistics for sites on streams where no data are available, and provides basin characteristics and estimated streamflow statistics for selected stations. The MOWR uses the information provided in the

reports to develop water management plans for the 27 water-resources planning basins in the State. The completed plans are used by communities, regional planners, and other State agencies to manage the water resources in the basins, and to make decisions regarding permitting of new water withdrawals and interbasin transfers.

A network of low-flow partial-record (LFPR) stations was established at the beginning of the first Basin Yield study and continued through the second and third Basin Yield studies. Streamflow measurements were collected systematically over a period of years at the LFPR stations, and were used to estimate streamflow statistics for the stations. Selected basin characteristics were measured for the stations from digital maps by use of a Geographic Information System (GIS). The streamflow statistics and basin characteristics determined for the LFPR stations were used to develop regression equations for predicting streamflow statistics at ungaged sites where no data are available, and to provide a better understanding of the physical mechanisms that cause streamflow to vary in time and space.

Regression equations were developed for each Basin Yield study. Initially, data for only a small number of historical LFPR stations were available for use along with data for continuous streamflow-gaging stations in the regression analyses. As more data for the network LFPR stations were used in the regression analyses, the validity and applicability of the equations for estimating streamflow statistics for ungaged streams increased.

The first Basin Yield study (Ries, 1994a) developed regression equations for estimating the 99-, 98-, and 95-percent duration discharges (streamflows exceeded 99, 98, and 95 percent of the time). These equations were developed before data from the LFPR network were available. Streamflow statistics and basin characteristics for 41 stations were used in the analysis; of these stations, 36 were continuous streamflow-gaging stations and 5 were historical LFPR stations.

The second Basin Yield study (Ries, 1994b) also developed regression equations for estimating the 99-, 98-, and 95-percent duration discharges. The analyses for these equations included 61 stations, 37 continuous streamflow-gaging stations and 24 LFPR stations, 19 of which were part of the network established during the first study.

During the third Basin Yield study (Ries, 1997), but before data for all stations in the network were available, a regression equation was developed to predict the August median streamflow. The analysis for this equation included 96 stations; 37 were continuous streamflow-gaging stations and 59 were LFPR stations, of which 54 were part of the network. This equation is applicable to ungaged streams with a much larger range of basin characteristics than the flow-duration equations developed for the first study.

This report describes the network of 148 LFPR stations operated in Massachusetts as part of the Basin Yield studies between the summers of 1989 and 1996. The description includes station selection and operation of the network, selection and measurement of basin characteristics, and methods used to estimate the streamflow statistics. Streamflow measurements (including historical measurements), basin characteristics and estimated streamflow statistics are provided in this report for each of the LFPR stations. Location information, streamflow-gaging stations for which flows were correlated to those at the LFPR station, years of operation, and remarks indicating human influences on streamflows are also provided for each station.The estimated streamflow statistics include the 99-, 98-, 97-, 95-, 93-, 90-, 85-, 80-, 75-, 70-, 65-, 60-, 55-, and 50-percent duration flows; the 7-day, 10- and 2-year low flows; and the August median flow. Basin characteristics measured include drainage area; total stream length; mean basin slope; area of surficial stratified drift; area of wetlands; area of water bodies; and mean, maximum, and minimum basin elevation. Location information and streamflow statistics also are provided for 50 continuous streamflow-gaging stations used for correlation with the LFPR stations.

Streamflow statistics and basin characteristics for many stations on Massachusetts streams were published previously in a series of gazetteers published as Water Resources Investigations Reports, in a series of Hydrologic Atlas reports (see U.S. Geological Survey, 1987, for a complete listing of both series), in a series of ground-water assessment reports published as Water Resources Investigations Reports (Olimpio and DeLima, 1984; Lapham, 1988; Myette and Simcox, 1992; DeLima, 1991; Hanson and Lapham, 1992; Persky, 1993; Bratton and Parker, 1995; Bent, 1995; Friesz, 1996; Klinger, 1996), and in the three previous Basin Yield study reports by Ries (1994a, 1994b,

1997). Many of the stations for which streamflow statistics are provided in the previous reports are also included in this report. Where the values are different, streamflow statistics published in this report supersede those published in the previous reports.

The author would like to thank the MOWR for its long-term support of this work, especially Peter Phippen for his support and assistance in selecting the stations for the network. The author would also like to express his appreciation to the numerous employees of the USGS Massachusetts–Rhode Island District who assisted with streamflow data collection, analysis, and interpretation; measurements of basin characteristics; and preparation of this report. In addition, the author thanks Philip Mackey, formerly of the Environmental Careers Organization, who made many of the streamflow measurements, entered data into the database, and helped in many aspects of the analyses.

PHYSICAL SETTING

Massachusetts encompasses an area of 8,093 mi^2. Located in the northeastern United States, Massachusetts has a humid climate, with an average annual precipitation of about 45 in. and average annual temperatures that range from 50˚F in coastal areas to 45˚F in the western mountains. Precipitation is distributed fairly evenly throughout the year. Average monthly temperatures in coastal areas range from about 30˚F in February to about 71˚F in July, with average monthly temperatures in the western parts of the State that range from about 20˚F in January to about 68˚F in July (U.S. Commerce Department, National Oceanic and Atmospheric Administration, 1989).

Elevations range from sea level along the coast in eastern Massachusetts to almost 3,500 ft in the western mountains. Basin relief and mean basin slope, which are highly related, also tend to increase from east to west in Massachusetts. Ries (1997) attributed the higher relief in western Massachusetts than in eastern Massachusetts as a major reason that August median streamflows per unit area were generally higher in the western part of the State than in the eastern part of the State. Ries noted that relief is the driving force that causes ground water to flow from aquifers to streams.

Except during and for a short time after storms, summertime flow in Massachusetts streams comes from ground water discharged by aquifers in unconsolidated deposits adjacent to the streams. This discharge is termed base flow. High-yielding aquifers usually are in stratified drift, sand and gravel deposits along the valley floors of inland river basins and in coastal areas of southeastern Massachusetts. The extent of coarse-grained stratified drift, as a proportion of total basin area, generally decreases from east to west. The stratified-drift deposits usually are surrounded by upland areas underlain by till with exposed bedrock outcrops. Till is an unsorted glacial deposit that consists of material ranging in size from clay to large boulders. Till yields little water to adjacent streams in comparison to yields from coarse-grained stratified drift. As a result, during summertime, streams in till areas tend to have less flow per unit of drainage area than streams in areas of stratified drift, and some small streams in till areas may go dry.

The extent of lakes, ponds, and wetlands, as a proportion of total basin area, also generally decreases from east to west in Massachusetts. The lakes, ponds, and wetlands provide more opportunity for evapotranspiration than drier land surfaces. As a result, streams that have drainage areas with large proportions of lakes, ponds, and wetlands may have lower low flows per unit area than other streams.

STREAMFLOW MEASUREMENTS

Stations were selected for inclusion in the network by the USGS in consultation with the MOWR. Most stations had natural flow conditions, but some stations in eastern Massachusetts were affected by urbanization, flow regulation, diversions, or a combination of these factors. These stations were included in the network because water-use activities within the basins for the stations made knowledge of streamflow characteristics important to MOWR. In some cases, water-use activities affected streamflows at these stations to the extent that streamflow statistics could not be estimated accurately.

The stations were selected to provide maximum areal distribution and variation in drainage area size, surficial geology, water bodies, relief, and other basin characteristics. Efforts were made to have an equal distribution of stations among the 27 planning basins in the State; however, no stations were established on the islands of Nantucket and Martha's Vineyard because few streams there are large enough to measure, and travel costs were prohibitive.

Each of the 148 stations included in the network was measured three or four times during three consecutive summers for a total of nine or ten measurements. When a station had been measured the requisite number of times, it was retired from the network and a new station was added. Thirty stations were measured during the first year of the network, then 60 stations were operated during each of the following years through 1994, when the last new stations were added. Forty-six stations were measured during 1995, and 33 stations were measured during 1996, the last year of network operation.

Low-flow measurements were collected at the stations in accordance with standard USGS methods prescribed by Rantz and others (1982) and Riggs (1972). Rainfall at selected U.S. National Oceanographic and Atmospheric Administration, National Weather Service stations and streamflow at selected USGS continuous streamflow-gaging stations were monitored to determine when low-flow measurements should be collected. Measurements were made at least 3 days after any substantial precipitation, when there was no longer surface runoff and base flow conditions existed. In addition, measurements generally were made during separate recessional periods to assure independence of the data with respect to time. Occasionally, when a recessional period lasted for a few weeks or more (this is rare in New England), two measurements were made during the same recession because the flow during the second measurement was substantially lower than during the first measurement. In these cases, the better definition of the very low flow condition was more important than assuring independence of the data with respect to time. The ranges of the previously-collected data at the LFPR stations were also considered in determining when to collect additional measurements. Streamflow measurements had been made at many of the stations before the Basin Yield studies were done. All measurements, including historical measurements, were stored in the National Water Information System (NWIS) streamflow database of the USGS.

BASIN CHARACTERISTICS

Differences in basin characteristics account to a large extent for differences in flow magnitudes of Massachusetts streams. The effects of some basin characteristics on streamflows were discussed in the Physical Setting section of this report. Basin characteristics provided in this report were selected for measurement on the basis of their theoretical relation to differences in flow magnitudes of streams, and on the ability to measure them.

All basin characteristics were measured from digital-map data by use of a GIS automated procedure developed for the Basin Yield studies. The automated procedure uses the AML programming language of the ARC/INFO GIS software (Environmental Systems Research Institute, Inc., 1987). The automated procedure determines the drainage-basin boundary for any selected site on a Massachusetts stream, and creates a digital data layer of the basin boundary. The procedure calculates the drainage area for the site (in square miles), then overlays the basin boundary on the other digital data layers to determine the other basin characteristics for the site.

Ries (1994a, p. 25–28) and MassGIS, the State GIS agency (1997, p. 55–57), described a digital data layer of drainage-basin boundaries for locations on Massachusetts streams, and how the data layer was developed from 1:24,000-scale USGS topographic quadrangle maps. Drainage-basin boundaries for virtually all streamflow and water-quality data-collection sites that existed in the State through 1982 were included in the data layer. The data layer includes boundaries for every 4.5 mi^2 of drainage area, on average, in the State, and also includes drainage-basin boundaries for selected areas outside the State that drain into Massachusetts. This data layer was used in the automated procedure to aid in determining drainage-basin boundaries for the LFPR stations. Boundaries for many of the LFPR stations were already included in the data layer, and drainage areas for these stations were determined directly from the available boundaries by the automated procedure.

Drainage-basin boundaries for LFPR stations that were not already in the digital data layer were determined by the automated procedure partly from the USGS's 1:250,000-scale Digital Elevation Model (DEM) data (Elassal and Caruso, 1983) and partly from the drainage-basin boundary data layer. The automated procedure utilized a series of ARC/INFO commands to determine basin boundaries for new stations based on differences in elevation of the points in the DEM grid. The automated procedure defined the new basin boundary from the DEM grid until the new boundary intersected an existing boundary in the statewide drainage-basin boundary data layer, and from that point, the existing boundary was used. In this way,

errors introduced by use of the DEM data to determine the boundaries were minimized. Boundaries for some small streams were determined entirely from the DEM data if the delineated boundary did not intersect an existing boundary. New boundaries determined by use of the automated procedure were checked visually against USGS topographic maps for the area. Drainage-basin boundaries for some stations were digitized from the topographic maps because the DEM-derived boundaries were incorrect. Digitizing was needed most often in coastal and other flat areas, where the resolution of the 1:250,000-scale DEM data was inadequate. Mean basin slope (in percent) and mean, maximum, and minimum basin elevations (in feet) also were determined by the automated procedure, but from the 1:25,000-scale DEM data.

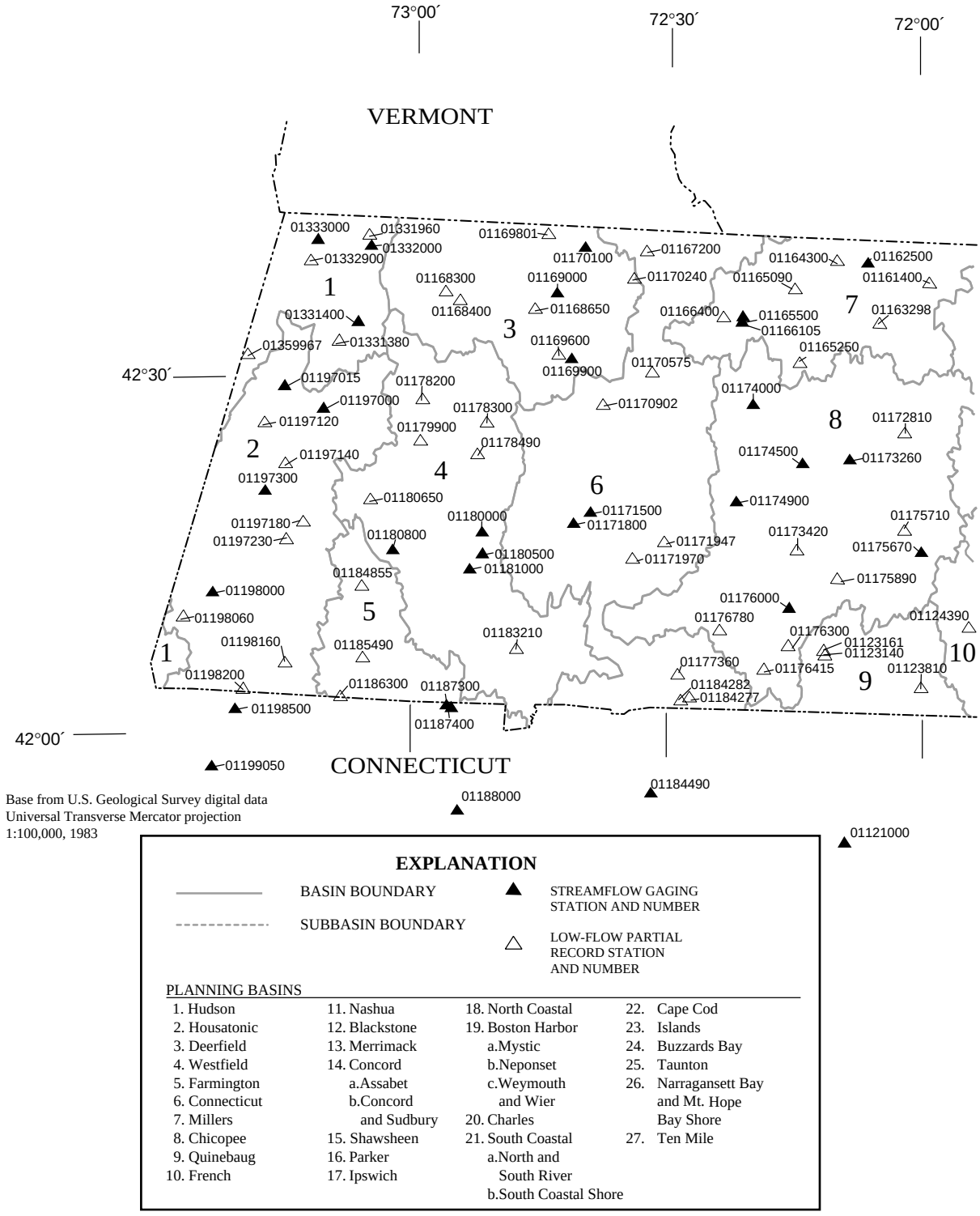
Stream lengths and areas of wetlands and water bodies were determined by the automated procedure from digital versions of the hydrography shown on USGS topographic maps. Separate data layers of streams, wetlands, and water bodies were developed by MassGIS from scanned Mylar maps of the three separate types of hydrography from the most-recently available 1:25,000 USGS topographic maps. The scanned maps were joined together electronically to produce a single statewide data layer for each of the hydrography types. Center lines were digitized through double-line streams, ponds, and wetlands to make connections through these features in the stream data layer. Areas of stratified drift, in square miles, were determined by the automated procedure from a statewide surficial-geology data layer described by Ries (1994a, p. 29) and MassGIS (1997, p. 71).

Since the basin characteristics were measured for the LFPR stations, the automated procedure has been updated to use the 1:25,000-scale DEM data for delineating the drainage basin boundaries. Boundaries delineated by use of the 1:25,000-scale DEM data generally are slightly different and slightly more accurate than those delineated by use of the 1:250,000-scale DEM data. Time constraints did not allow the updated automated procedure to be run for all LFPR stations in the network. However, limited comparisons indicate that percent differences in total drainage areas determined by use of the two DEM data layers generally are minimal.

STREAMFLOW STATISTICS

Streamflow statistics were determined for the LFPR stations by correlation of measured discharges at the stations to same-day mean discharges at selected nearby continuous streamflow-gaging stations. Lines or curves of relation were developed between the same-day discharges at the LFPR stations and the selected gaging stations, and then the streamflow statistics for the gaging stations were entered into the relations to determine the corresponding streamflow statistics for the LFPR stations. Brief descriptions of the 50 gaging stations used for correlation with the LFPR stations are provided in table 1 (at back of report). Streamflow statistics for the gaging stations are listed in table 2 (at back of report). Locations of all the LFPR stations and the gaging stations are shown in figure 1, along with locations of the 27 major drainage basins of Massachusetts.

The flow-duration and low-flow frequency statistics were computed for the gaging stations using standard USGS methods described in Searcy (1959) and Riggs (1972), respectively. The flow-duration statistics (99- though 50-percent duration) were computed for the gaging stations from the series of daily mean flows at the stations. These statistics indicate the percent of time streamflows are equaled or exceeded at the station. For example, if the flow at the 90-percent duration is given for a location as 5 cubic feet per second, then the flow at that location is greater than or equal to that number 90 percent of the time. The low-flow frequency statistics (7-day, 2- and 10-year recurrence intervals) were computed for the gaging stations from series of annual minimum 7-day mean streamflows at the stations. Flows equal to or less than the 7-day, 2-year low flow occur on average once every 2 years, whereas flows equal to or less than the 7-day, 10-year low flow occur on average once every 10 years. These flows have a 50 percent and 10 percent chance of occurring in any given year, respectively. August median streamflows were computed for the gaging stations from the daily mean streamflows for all complete Augusts for the period of record, as described by Ries (1997). The August daily mean flows were ordered from highest to lowest, and the flow at which half the values are higher and half the values are lower is the August median flow.



Base from U.S. Geological Survey digital data
Universal Transverse Mercator projection
1:100,000, 1983

Figure 1. Locations of low-flow partial-record stations in the network operated in Massachusetts during 1989 through 1996, streamflow-gaging stations used for correlation with the low-flow partial-record stations, and boundaries of the 27 major river basins in Massachusetts.

Figure 1. —*Continued*.

All gaging stations used for correlations with the LFPR stations would ideally have entirely natural flow conditions. Few gaging stations in Massachusetts have entirely natural flow conditions, however, and many of the gaging stations used for this study were affected to some extent by regulations, diversions, or both (table 1). Regulations or diversions affecting the gaging stations used for the correlations did not substantially affect the streamflow statistics for the stations, or they were consistent enough that the daily mean discharges and streamflow statistics computed for the stations were useful for the correlations. In all cases, when gaging stations were selected for use in the correlations, those with natural flows were preferred over those affected by regulations or diversions.

Two methods were used to develop the relations between measured streamflows at the LFPR stations and same-day mean streamflows at selected gaging stations: a mathematical method developed by Hirsch (1982), and a graphical method described by Riggs (1972) and Searcy (1959). These methods were recommended for use by the USGS Office of Surface Water in Technical Memorandum No. 86.02, Low-Flow Frequency Estimation at Partial-Record Sites, issued December 16, 1985. Plots of the logarithms-base 10 of the same-day discharges were made to determine whether the relations between the discharges were linear or non-linear. Most relations were linear; for these, the mathematical method, termed the MOVE.1 (Maintenance Of Variance Extension, type 1) method, was used. The graphical method was used when the relations were non-linear. The MOVE.1 method was used most often. A thorough explanation of the MOVE.1 method is provided by Ries (1994a, p. 21–24).

Selection of individual gaging stations for relation to a LFPR station was based on distance between the stations and similarity of basin characteristics between the stations. Usually the measured streamflows at the LFPR stations correlated well with more than one gaging station. When this happened, MOVE.1 or graphical relations between a given LFPR station and each of several gaging stations were developed to estimate the streamflow statistics for the LFPR station. This process resulted in multiple estimates of the streamflow statistics for a single LFPR station when only a single best estimate was desired.

Single best estimates of the streamflow statistics for each LFPR station were determined through a process suggested by Tasker (1975). Tasker stated that when multiple estimates of streamflow statistics are available for a single station, the best estimate can be obtained by weighting each individual estimate by its variance and averaging the weighted estimates. This final weighted estimate is best because its variance is less than or equal to the variances of each of the individual estimates.

Calculated variances for each individual estimate of the streamflow statistics for each LFPR station were needed to obtain the final best estimates for the stations. Variances were calculated by use of the equation

$$V_{S,U} = \frac{V_R}{M}\left[1 + \frac{1}{M-3} + \frac{z^2 M}{M-3} + \left(\frac{SE_{S,G}}{S_{B,G}}\right)^2\left(\frac{M}{M-3}\right)\right] + b^2 V_{S,G}\ , \qquad (1)$$

where:

$V_{S,U}$ is the variance of the streamflow statistic at the LFPR station, in log units;

$V_{S,G}$ is the variance of the streamflow statistic at the gaging station, in log units;

V_R is the variance about the MOVE.1 or graphical line of relation;

M is the number of base-flow measurements;

$SE_{S,G}$ is the standard error of the streamflow statistic at the gaging station, which equals the square root of $V_{S,G}$;

b is computed as $r(S_{B,U}/S_{B,G})$, where r is the correlation coefficient between the low streamflow measurements made at the LFPR station and the same-day mean discharges at the gaging station, and $s_{B,U}$ is the standard deviation of the logarithms-base 10 of the low streamflow measurements made at the LFPR station;

$S_{B,G}$ is the standard deviation of the logarithms-base 10 of the mean discharges at the gaging station on the same days the low-flow measurements were made at the ungaged site; and

z is the number of standard deviation units between the mean of the logarithms-base 10 of the same-day mean discharges at the gaging station and the logarithm-base 10 of the streamflow statistic at the gaging station.

Equation 1 is modified from an equation developed by Hardison and Moss (1972) to determine the variance of estimates of 7-day, T-year low flows obtained from an ordinary-least-squares (OLS) regression of the logarithms-base 10 of base-flow measurements at a

LFPR station to the logarithms-base 10 of same-day mean discharges at a nearby, hydrologically-similar gaging station. Modifications to the Hardison and Moss equation were needed to generalize its use for other streamflow statistics and to allow for the MOVE.1 or graphical methods of line fitting to be used rather than the ordinary-least-squares method of line fitting. The modifications to the Hardison and Moss equation are more fully described in Ries (1997), along with assumptions for use of both the original and the modified equations.

For LFPR stations where estimates were obtained from relations with more than one streamflow-gaging station, the individual estimates were weighted by their variances, determined from equation 1, then the weighted estimates were averaged to obtain minimum-variance estimates for each of the statistics. Weighted final variances (V_w) were also determined for each of the statistics. Standard errors, (SE_f), in percent, for the final weighted estimates were obtained from the equation (Tasker, written communication, 1992)

$$SE_f = 100\sqrt{\exp(5.3018 V_w) - 1}\,. \qquad (2)$$

Equation 1 does not account for errors inherent in the discharge measurements made at the LFPR station or in the mean daily discharges determined for the gaging stations. As a result, the true standard errors for the estimates are somewhat larger than those determined by use of equation 2, and are unknown.

PRESENTATION OF DATA

Table 3 (at the back of the report) presents a page of data for each of the 148 stations in the LFPR station network operated in Massachusetts from 1989 to 1996. The pages for the stations are grouped by major basin, and are listed in the order consistent with the USGS downstream ordering system (Socolow and others, 1998, p. 10).

Descriptive information, measured basin characteristics, streamflow-gaging stations correlated to the LFPR station, streamflow measurements (including historical measurements), and estimated streamflow statistics are provided for each station. The descriptive information includes the USGS station identification number, station name, major drainage basin name, location, period of record, and remarks. Location information includes latitude, longitude, county, and the location of the gage with respect to cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name. The period of record includes all years during which at least one streamflow measurement was collected. Remarks include whether the station is affected by flow regulations, municipal or industrial-supply wells, or diversions, and any other pertinent information regarding the station. Basin characteristics presented in table 3 are those described in the Basin Characteristics section of this report. The gaging stations correlated to the LFPR station are listed by their USGS station identification numbers (see table 1). The discharge measurements are listed in chronological order. Standard errors of estimate, in percent, are listed along with the streamflow statistics.

SUMMARY

A network of 148 low-flow partial-record stations was operated in Massachusetts during the summers of 1989 through 1996. The network was operated to provide data that could be used by State agencies for water-resources planning and for decisions on permitting of water withdrawals and diversions. The network also was operated to provide data that could be used for regional analyses to determine equations for predicting streamflow statistics for ungaged streams in Massachusetts.

Descriptive information, measured basin characteristics, streamflow-gaging stations correlated to the LFPR station, streamflow measurements (including historical measurements), and estimated streamflow statistics are provided in this report for each LFPR station. Station descriptions and calculated streamflow statistics are also included in this report for the 50 continuous gaging stations used in correlations with the LFPR stations.

The measured flows at the LFPR stations were correlated with same-day mean flows at nearby gaging stations to estimate streamflow statistics for the LFPR stations. The estimated streamflow statistics include the 99-, 98-, 97-, 95-, 93-, 90-, 85-, 80-, 75-, 70-, 65-, 60-, 55-, and 50-percent duration flows; the 7-day, 10- and 2-year low flows; and the August median flow. Standard errors of estimate are provided in the report for each estimate. Streamflow statistics could not be estimated for some stations because flow regulations, water withdrawals, or diversions caused poor correlations between the measured flows for the LFPR station and daily mean flows for nearby gaging stations.

Characteristics of the drainage basins for the LFPR stations that theoretically relate to the response of the station to climatic variations were measured from digital map data by use of an automated GIS procedure. Basin characteristics measured include drainage area; total stream length; mean basin slope; area of surficial stratified drift; area of wetlands; area of water bodies; and mean, maximum, and minimum basin elevation.

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Tables 1 through 3

Table 1. Descriptions of streamflow-gaging stations used for correlation with the low-flow partial record stations

[Periods of record shown are based on climatic years, which begin on April 1 of the year noted; No., number; USGS, U.S. Geological Survey.]

USGS station No.	Latitude ° ' "	Longitude ° ' "	Station name	Period of record	Remarks
01073000	43 08 55	70 57 56	Oyster River near Durham, N.H.	1935–present	--
01096000	42 38 03	71 39 30	Squannacook River near West Groton, Mass.	1950–present	Occasional regulation by mill upstream.
01096910	42 27 04	71 34 39	Boulder Brook at East Bolton, Mass.	1972–82	--
01097300	42 30 39	71 24 25	Nashoba Brook near Acton, Mass.	1964–present	--
01100700	42 48 41	71 01 59	East Meadow Brook near Haverhill, Mass.	1963–73	--
01101000	42 45 10	70 56 46	Parker River at Byfield, Mass.	1946–present	Occasional regulation by mill and ponds.
01105600	42 11 25	70 56 43	Old Swamp River near South Weymouth, Mass.	1966–present	--
01105730	42 06 02	70 49 23	Indian Head River at Hanover, Mass.	1967–present	Some regulation by mills and ponds.
01105870	41 59 27	70 44 03	Jones River at Kingston, Mass.	1967–present	Regulation by pond and cranberry bogs. Ground- and surface-water drainage boundaries are not coincident.
011058837	41 35 32	70 30 30	Quashnet River at Waquoit Village, Mass.	1989–present	Some regulation by cranberry bog. Ground- and surface-water drainage boundaries are not coincident.
01106000	41 33 30	71 07 47	Adamsville Brook at Adamsville, R.I.	1941–77	--
01107000	42 03 41	71 03 59	Dorchester Brook near Brockton, Mass.	1963–73	--
01109000	41 56 51	71 10 38	Wading River near Norton, Mass.	1926–present	Regulation by lakes and ponds. Diversions to and from basin for municipal supplies.
01109200	41 52 46	71 15 18	West Branch Palmer River near Rehoboth, Mass.	1962–73	--
01109403	41 49 51	71 21 06	Ten Mile River at East Providence, R.I.	1987–present	Regulations and diversions from reservior.
01111200	42 06 17	71 36 28	West River at West Hill Dam near Uxbridge, Mass.	1962–89	Flood-control dam upstream.
01111300	41 58 52	71 41 11	Nipmuc River near Harrisville, R.I.	1964–90	--
01118000	41 29 53	71 43 01	Wood River at Hope Valley, R.I.	1942–present	Seasonal regulation by pond since 1968. Regulation at low flow until 1952.
01121000	41 50 37	72 10 10	Mount Hope River near Warrenville, Conn.	1941–present	Occasional regulation by ponds.
01162500	42 40 57	72 06 56	Priest Brook near Winchendon, Mass.	1919–present	No daily record during August 1936.
01165500	42 36 10	72 21 36	Moss Brook at Wendell Depot, Mass.	1917–81	
01166105	42 35 39	72 21 41	Whetstone Brook at Wendell Depot, Mass.	1986–90	--
01169000	42 38 18	72 43 32	North River at Shattuckville, Mass.	1940–present	Occasional small diurnal fluctuation.
01169900	42 32 31	72 41 39	South River near Conway, Mass.	1967–present	Small diurnal fluation since 1982.
01170100	42 42 12	72 40 16	Green River near Colrain, Mass.	1969–present	--

Table 1. Descriptions of streamflow-gaging stations used for correlation with the low-flow partial record stations—*Continued*

USGS station No.	Latitude ° ′ ″	Longitude ° ′ ″	Station name	Period of record	Remarks
01171500	42 19 05	72 39 21	Mill River at Northampton, Mass.	1940–present	--
01171800	42 18 09	72 41 16	Bassett Brook near Northampton, Mass.	1963–73	--
01173260	42 23 52	72 08 51	Moose Brook near Barre, Mass.	1963–73	--
01174000	42 28 42	72 20 05	Hop Brook near New Salem, Mass.	1948–81	--
01174500	42 23 36	72 14 21	East Branch Swift River near Hardwick, Mass.	1938–present	--
01174900	42 20 08	72 22 12	Cadwell Creek near Belchertown, Mass.	1962–present	--
01175670	42 15 54	72 00 19	Sevenmile River near Spencer, Mass.	1961–present	Occasional regulation by ponds upstream.
01176000	42 10 56	72 15 51	Quaboag River at West Brimfield, Mass.	1913–present	Flood-retarding reservoirs upstream.
01180000	42 17 27	72 52 15	Sykes Brook at Knightville, Mass.	1946–72	--
01180500	42 15 31	72 52 23	Middle Branch Westfield River at Goss Heights, Mass.	1910–89	Data for August 1965–66 not used due to construction of flood-control reservoir upstream.
01180800	42 15 49	73 02 48	Walker Brook near Becket Center, Mass.	1963–76	--
01181000	42 14 14	72 53 46	West Branch Westfield River at Huntington, Mass.	1936–present	--
01184490	41 54 50	72 33 00	Broad Brook at Broad Brook, Conn.	1962–present	Regulation by reservoir and mill.
01187300	42 02 14	72 56 22	Hubbard River near West Hartland, Conn.	1939–55, 1957–present	--
01187400	42 02 03	72 55 49	Valley Brook near West Hartland, Conn.	1941–71	--
01188000	41 47 10	72 57 55	Burlington Brook near Burlington, Conn.	1932–present	--
01197000	42 28 10	73 11 49	East Branch Housatonic River at Coltsville, Mass.	1936–present	Flow regulated by powerplants and reservoir. Diversion for municipal supply.
01197015	42 31 12	73 13 48	Town Brook at Bridge Street, Lanesborough, Mass.	1980–82	--
01197300	42 20 59	73 17 56	Marsh Brook at Lenox, Mass.	1963–73	--
01198000	42 11 31	73 23 28	Green River near Great Barrington, Mass.	1952–70	--
01198500	42 01 26	73 20 32	Blackberry Brook at Canaan, Conn.	1950–71	--
01199050	41 56 32	73 23 29	Salmon Creek at Lime Rock, Conn.	1962–present	--
01331400	42 35 20	73 06 48	Dry Brook near Adams, Mass.	1963–73	--
01332000	42 42 08	73 05 37	North Branch Hoosic River at North Adams, Mass.	1932–89	Infrequent small diurnal fluctuation.
01333000	42 42 32	73 11 50	Green River at Williamstown, Mass.	1950–present	Infrequent small diurnal fluctuation.

Table 2. Streamflow statistics for the gaging stations used for correlation with the low-flow partial-record stations

[Streamflow statistics are in cubic feet per second. 7Q10 and 7Q2 are the 7-day mean low flows at the 10- and 2-year recurrence intervals. No., number; *, not calculated.]

Station No.	Years of record	Discharge equaled or exceeded at the given percentage of the time														7Q10	7Q2	August median
		99	98	97	95	93	90	85	80	75	70	65	60	55	50			
01073000	62	0.60	0.69	0.76	0.90	1.00	1.20	1.60	2.10	2.80	3.80	5.00	6.40	8.20	10.0	0.50	0.90	1.60
01096000	47	6.40	7.80	9.20	11.0	13.0	15.0	18.0	22.0	27.0	32.0	39.0	48.0	58.0	69.0	6.52	11.7	19.0
01096910	11	.04	.06	.08	.10	.12	0.15	.24	.34	.47	.69	.95	1.30	1.80	2.20	.03	.08	.22
01097300	32	.19	.29	.43	.71	.96	1.40	2.10	3.10	4.10	5.20	6.50	7.90	9.50	12.0	.12	.67	2.30
01100700	11	.15	.22	.28	.41	.49	0.60	.78	1.10	1.40	1.80	2.40	3.20	4.00	4.90	.15	.36	.67
01101000	50	.21	.30	.39	.64	.95	1.60	2.70	4.20	6.00	8.70	11.0	15.0	19.0	23.0	.16	.74	3.05
01105600	30	.20	.29	.35	.48	.63	0.83	1.20	1.70	2.20	2.71	3.40	4.10	4.80	5.40	.16	.44	1.40
01105730	30	2.40	3.20	3.88	5.00	5.96	7.30	9.70	13.0	16.6	21.0	26.0	31.0	36.0	41.0	1.66	4.83	11.0
01105870	30	4.60	5.50	6.10	7.10	8.00	9.00	11.0	12.0	14.0	16.0	18.0	19.0	22.0	24.0	4.02	7.44	14.0
011058837	7	8.00	8.40	8.77	9.50	10.0	11.0	11.0	12.0	12.0	12.0	13.0	13.0	13.0	14.0	*	*	13.0
01106000	37	.07	.08	.09	.12	.18	.30	.63	1.20	2.20	3.40	4.90	6.50	7.80	9.20	.05	.15	.65
01107000	11	.02	.03	.04	.07	.10	.17	.32	.60	1.00	1.60	2.50	3.70	4.70	5.50	.01	.06	.19
01109000	70	2.40	3.00	3.70	4.70	5.50	6.90	9.30	12.0	16.0	21.0	27.0	34.0	42.0	51.0	1.93	4.99	11.0
01109200	10	.02	.04	.05	.09	.11	.16	.29	.48	.78	1.50	2.40	3.40	4.30	5.00	.01	.02	.26
01109403	10	15.0	16.0	18.0	20.0	21.0	24.0	28.0	33.0	37.0	43.0	51.0	58.0	67.0	77.0	13.1	21.1	27.0
01111200	28	2.10	2.50	2.70	3.20	3.70	4.50	6.10	7.90	10.0	13.0	16.0	20.0	24.0	290	1.80	3.23	6.80
01111300	29	0.50	.66	0.86	1.00	1.30	1.80	2.60	3.90	5.60	7.60	9.80	12.0	15.0	18.0	.25	1.16	2.40
01118000	55	20.0	23.0	25.0	28.0	31.0	35.0	41.0	49.0	57.9	67.0	79.0	92.0	105	120	19.4	28.6	44.0
01121000	55	1.20	1.60	2.00	2.60	3.10	4.10	6.00	8.10	11.0	14.0	17.0	22.0	26.0	31.0	.96	2.26	5.30
01162500	76	.50	.80	1.00	1.50	1.90	2.40	3.50	4.90	6.50	8.20	10.0	12.0	14.0	17.0	.45	1.48	3.80
01165500	65	0.70	.87	1.00	1.20	1.40	1.70	2.30	3.00	3.90	4.90	6.00	7.40	8.80	10.0	.62	1.19	2.20
01166105	5	.99	1.10	1.20	1.40	1.70	2.00	2.50	2.90	3.40	4.00	4.50	5.10	5.70	6.30	*	*	2.60
01169000	57	9.20	11.0	12.0	15.0	17.0	21.0	27.0	33.0	40.0	49.0	58.0	68.0	80.0	92.0	8.46	13.9	27.4
01169900	30	3.70	4.32	4.90	5.70	6.40	7.40	9.10	11.0	13.0	16.0	18.0	22.0	25.0	30.0	3.32	5.37	9.60
01170100	29	6.03	7.10	7.80	8.80	9.80	12.0	14.6	17.6	21.0	26.0	31.0	36.0	42.0	49.0	4.81	7.61	15.0
01171500	57	6.70	7.80	8.70	10.0	12.0	14.0	17.0	21.0	25.0	29.0	35.0	40.0	47.6	55.0	6.31	10.0	18.0
01171800	11	.55	.63	.65	.79	.91	1.10	1.40	1.70	2.00	2.30	2.90	3.60	4.30	4.80	.46	.89	1.50
01173260	9	.00	.01	.02	.04	.09	.15	.34	.56	.88	1.40	2.00	2.60	3.10	3.60	.01	.11	.26
01174000	34	.02	.05	.07	.14	.20	.31	.56	.81	1.14	1.55	2.00	2.50	3.00	3.60	.02	.10	.50
01174500	60	.60	1.40	2.40	3.80	5.18	7.05	10.0	14.0	18.0	22.0	27.0	32.0	37.0	44.0	0.60	3.61	11.0

Table 2. Streamflow statistics for the gaging stations used for correlation with the low-flow partial-record stations—*Continued*

Station No.	Years of record	Discharge equaled or exceeded at the given percentage of the time														7Q10	7Q2	August median
		99	98	97	95	93	90	85	80	75	70	65	60	55	50			
01174900	35	0.11	0.13	0.15	0.21	0.26	0.34	0.52	0.72	1.00	1.30	1.70	2.10	2.60	3.00	0.09	0.18	0.55
01175670	35	.28	.35	.44	.61	.81	1.00	1.80	2.60	3.40	4.30	5.50	6.70	8.00	9.40	.23	.56	1.90
01176000	83	16.0	20.0	24.0	30.0	35.0	42.0	52.0	65.0	78.0	93.0	110	126	145	168	15.8	32.8	65.0
01180000	28	.07	.08	.09	.11	.13	.16	.22	.28	.38	.53	.71	.86	1.00	1.20	.06	.11	.21
01180500	79	2.90	3.60	4.20	5.30	6.50	8.00	11.0	15.0	19.0	24.0	30.0	36.0	43.0	50.0	1.40	5.33	11.2
01180800	14	.26	.30	.34	.40	.45	.54	.74	1.00	1.30	1.60	2.10	2.50	2.90	3.40	.21	.34	.80
01181000	60	7.10	8.90	10.0	12.0	14.0	18.0	24.0	30.0	38.0	46.0	57.0	70.0	82.0	96.0	5.79	11.0	23.0
01184490	28	6.0	6.90	7.40	8.00	8.80	9.60	11.0	12.0	12.1	13.0	14.0	15.0	17.0	18.0	5.52	9.38	13.0
01187300	56	.50	.84	1.10	1.50	1.90	2.30	3.30	4.70	6.30	8.20	10.0	13.0	16.0	19.0	.48	1.33	3.10
01187400	31	.30	.40	.40	.50	.60	.80	1.00	1.60	2.20	3.00	4.00	5.00	6.10	7.20	.24	.46	1.00
01188000	64	.66	.80	.90	1.10	1.20	1.30	1.70	2.00	2.40	2.80	3.30	3.80	4.30	5.00	.58	1.08	1.80
01197000	61	14.0	15.0	17.0	19.0	21.0	23.0	27.0	31.0	35.0	38.0	42.0	47.0	53.0	60.0	12.4	18.8	29.0
01197015	2	1.20	1.30	1.30	1.40	1.50	1.60	2.17	2.70	3.60	4.40	6.35	8.34	9.20	9.90	*	*	2.35
01197300	9	.01	.02	.03	.06	.12	.21	.38	.55	.83	1.10	1.30	1.60	2.00	2.40	.01	.67	0.47
01198000	21	3.20	3.70	4.20	4.70	5.30	6.40	8.50	12.0	15.0	19.0	25.0	30.4	36.0	42.0	3.11	5.30	9.10
01198500	21	3.40	4.40	5.00	6.20	7.30	9.00	11.0	14.0	18.0	22.0	26.0	30.0	35.0	40.0	2.99	6.66	12.0
01199050	34	3.90	4.60	5.20	6.20	7.30	8.60	11.0	14.0	16.0	19.0	22.0	25.0	28.0	32.0	3.19	6.58	12.0
01331400	10	.17	.27	.38	.57	.79	1.10	1.60	2.00	2.60	3.37	4.30	5.20	6.20	7.30	.06	1.00	1.90
01332000	58	5.70	6.50	7.20	8.50	9.60	11.0	14.4	19.0	23.0	28.0	32.0	37.0	42.0	49.0	5.21	7.77	14.0
01333000	47	4.80	5.60	6.20	7.80	9.10	11.0	14.0	18.2	23.0	27.0	31.0	36.0	42.0	48.0	4.57	8.19	15.0

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996

[ft, foot; ft^3/s, cubic foot per second; mi, mile; mi^2, square mile]

NORTH COASTAL BASIN

01073860 Smallpox Brook at Salisbury, MA

LOCATION.--Lat 42˚05'00", long 70˚41'59", Essex County, at culvert on U.S. Highway 1, 0.6 mi north of Salisbury.

PERIOD OF RECORD.--1974, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 1.83 mi^2	Area of water bodies = 0.0 mi^2	Minimum elevation = 26 ft
Area of stratified drift = 1.80 mi^2	Total length of streams = 4.21 mi	Maximum elevation = 115 ft
Area of wetlands = 0.0 mi^2	Mean basin slope = 0.84 percent	Mean elevation = 50 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01097300, 01096000, 01073000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-22-74	0.42	7-11-91	0.38	7-28-92	0.43	7-02-93	0.29
8-02-74	.20	7-18-91	.31	8-24-92	.47	7-08-93	.19
8-23-74	.20	9-12-91	.46	9-17-92	.39	7-19-93	.00

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.17	12.7	70	0.51	10.0
98	.18	11.0	65	.58	12.0
97	.20	9.7	60	.66	14.0
95	.23	7.9	55	.73	15.8
93	.25	6.8	50	.81	17.5
90	.28	5.8	August median	.34	5.7
85	.33	5.6	7Q10	.15	14.5
80	.38	6.5	7Q2	.23	8.1
75	.44	8.1			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

NASHUA RIVER BASIN

01094340 Whitman River near Westminster, MA

LOCATION.--Lat 42˚33'35", long 71˚52'02", Worcester County, at State Highway 2A, 2.5 mi northeast of Westminster.

PERIOD OF RECORD.--1973–74, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 21.7 mi^2	Area of water bodies = 0.77 mi^2	Minimum elevation = 670 ft
Area of stratified drift = 3.78 mi^2	Total length of streams = 38.6 mi	Maximum elevation = 1,340 ft
Area of wetlands = 0.70 mi^2	Mean basin slope = 4.57 percent	Mean elevation = 1,000 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
3-19-73	173	1-08-74	40.0	9-04-91	8.58	7-02-93	3.17
7-30-73	7.9	7-12-91	6.06	8-24-92	10.9	7-09-93	2.88
8-27-73	12.0	7-19-91	1.7	9-17-92	5.97	7-23-93	1.23
8-29-73	11.0						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.05	22.9	70	13.0	14.3
98	1.33	19.5	65	16.3	16.6
97	1.60	17.2	60	20.4	19.0
95	2.21	13.7	55	24.9	21.0
93	2.82	11.5	50	30.4	23.1
90	3.78	9.7	August median	5.82	9.0
85	5.40	8.8	7Q10	.887	25.4
80	7.53	9.9	7Q2	2.29	14.2
75	10.0	12.0	70	13.0	14.3

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

NASHUA RIVER BASIN

01094396 Philips Brook at Fitchburg, MA

LOCATION.--Lat 42˚34'28", long 71˚50'15", Worcester County, at bridge on Westminster Street, 2.0 mi west of Fitchburg.

PERIOD OF RECORD.--1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area =15.8 mi^2	Area of water bodies = 0.25 mi^2	Minimum elevation = 567 ft
Area of stratified drift =1.40 mi^2	Total length of streams = 32.3 mi	Maximum elevation = 1,580 ft
Area of wetlands = 0.40 mi^2	Mean basin slope = 6.41 percent	Mean elevation = 1,050 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01096000, 01097300, 01162500, 01175670, 01101000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-12-94	1.09	6-20-95	4.63	8-22-95	0.31	8-21-96	1.34
8-10-94	2.64	8-11-95	1.75	8-07-96	5.22	9-05-96	.86
9-08-94	1.37						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.44	22.5	70	4.98	18.1
98	.58	18.5	65	6.43	20.8
97	.71	15.9	60	8.16	23.3
95	1.04	12.7	55	10.1	25.6
93	1.35	11.5	50	12.7	27.9
90	1.69	11.3	August median	2.34	12.2
85	2.20	11.8	7Q10	.39	25.3
80	2.95	13.5	7Q2	1.08	14.1
75	3.87	15.7	70	4.98	18.1

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

NASHUA RIVER BASIN

01095220 Stillwater River near Sterling, MA

LOCATION.--Lat 42˚24'39", long 71˚47'30", Worcester County, on left bank at downstream side of bridge on Muddy Pond Road, 1.5 mi upstream of mouth and 2.5 mi southwest of Sterling.

PERIOD OF RECORD.--1971–73, 1991–93, continuous record station April 1994 to present.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 30.4 mi^2	Area of water bodies = 0.47 mi^2	Minimum elevation = 403 ft
Area of stratified drift = 5.41 mi^2	Total length of streams = 50.7 mi	Maximum elevation = 2,000 ft
Area of wetlands = 0.80 mi^2	Mean basin slope = 5.80 percent	Mean elevation = 1,150 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01096000, 01097300, 01175670, 01162500, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-26-71	2.40	10-05-72	5.20	9-04-91	18.1	4-29-94	51.0
9-09-71	3.20	9-11-73	3.80	7-28-92	7.32	6-13-94	17.7
9-30-71	3.60	9-13-73	3.50	8-24-92	18.4	8-01-94	32.1
10-20-71	5.60	1-08-74	55.0	9-17-92	7.28	9-14-94	4.52
8-23-72	6.10	7-11-91	8.54	7-01-93	2.90	9-23-94	24.2
9-28-72	5.70	7-19-91	3.75	7-08-93	2.73		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.23	7.6	70	12.7	3.7
98	1.65	6.9	65	15.9	3.8
97	2.06	6.4	60	19.6	4.0
95	2.79	5.7	55	23.8	4.2
93	3.48	5.2	50	28.9	4.4
90	4.39	4.7	August median	6.42	4.3
85	5.99	4.2	7Q10	1.06	12.0
80	7.97	3.8	7Q2	2.73	8.6
75	10.1	3.7			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

NASHUA RIVER BASIN

01095380 Trout Brook near Holden, MA

LOCATION.--Lat 42˚23'00", long 71˚50'12", Worcester County, at culvert on Manning Street, 2.2 mi north of Holden.

PERIOD OF RECORD.--1971–73, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 6.79 mi^2	Area of water bodies = 0.02 mi^2	Minimum elevation = 532 ft
Area of stratified drift = 1.95 mi^2	Total length of streams = 11.6 mi	Maximum elevation = 1,080 ft
Area of wetlands = 0.41 mi^2	Mean basin slope = 3.99 percent	Mean elevation = 806 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01175670, 01097300, 01096000, 01162500, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-26-71	0.14	9-27-72	1.20	7-11-91	1.05	9-17-92	0.84
9-27-71	.31	10-05-72	.96	7-19-91	.45	7-01-93	.52
9-29-71	.44	9-11-73	.45	9-14-91	2.17	7-08-93	.72
10-19-71	1.10	9-13-73	.43	7-28-92	1.51	7-23-93	.11
8-23-72	.97	9-14-73	.43	8-24-92	5.22		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.061	19.2	70	3.06	12.4
98	.096	15.9	65	4.52	14.9
97	.13	13.6	60	6.56	17.2
95	.22	10.4	55	9.19	19.2
93	.33	8.3	50	13	21.4
90	.49	6.8	August median	.94	7.0
85	.83	6.5	7Q10	.051	24.4
80	1.35	8.0	7Q2	.22	13.8
75	2.09	10.2		3.06	12.4

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

NASHUA RIVER BASIN

01095928 Trapfall Brook near Ashby, MA

LOCATION.--Lat 42˚40'24", long 71˚46'39", Middlesex County at bridge on unmarked road off State Highway 119, 2.2 mi east of Ashby.

PERIOD OF RECORD.--1993–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 5.89 mi^2	Area of water bodies = 0.02 mi^2	Minimum elevation = 482 ft
Area of stratified drift = 0.66 mi^2	Total length of streams = 13.3 mi	Maximum elevation = 1,300 ft
Area of wetlands = 0.22 mi^2	Mean basin slope = 4.93 percent	Mean elevation = 893 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01162500, 01175670, 01096000, 01097300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-01-93	0.53	9-08-94	0.60	6-20-95	1.35	8-21-95	0.021
7-09-93	.74	9-15-94	.32	7-14-95	.13	8-22-95	0
7-19-93	.08	10-20-94	1.24	8-11-95	.49	8-30-95	.004
7-12-94	.54	5-23-95	5.42	8-14-95	.20	9-13-95	.01
8-10-94	.42	6-19-95	2.03				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.030	15.8	70	2.69	15.2
98	.054	13.4	65	3.97	16.8
97	.085	11.9	60	5.66	18.2
95	.16	10.4	55	7.86	19.5
93	.24	9.9	50	11.3	21.0
90	.36	9.8	August median	.74	11.2
85	.65	10.6	7Q10	.020	24.2
80	1.15	12.1	7Q2	.16	16.0
75	1.82	13.7		2.69	15.2

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

NASHUA RIVER BASIN

01096504 Reedy Brook near East Pepperell, MA

LOCATION.--Lat 42˚40'03", long 71˚33'55", Middlesex County at culvert on Lowell Road, at East Pepperell.

PERIOD OF RECORD.--1971–73, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 1.92 mi^2	Area of water bodies = 0.02 mi^2	Minimum elevation = 181 ft
Area of stratified drift = 1.52 mi^2	Total length of streams = 3.26 mi	Maximum elevation = 425 ft
Area of wetlands = 0.30 mi^2	Mean basin slope = 1.93 percent	Mean elevation = 300 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01096000, 01097300, 01162500, 01101000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-27-71	0.66	8-23-72	1.50	7-11-91	0.68	9-17-92	0.54
9-09-71	.46	9-26-72	.96	7-18-91	.52	7-01-93	.70
9-29-71	.74	10-05-72	.89	9-12-91	.82	7-09-93	.68
10-04-71	.58	8-31-73	.80	7-28-92	.42	7-19-93	.35
10-21-71	.64	9-13-73	.64	8-24-92	.84		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.26	12.8	70	1.25	8.6
98	.31	10.5	65	1.40	9.9
97	.37	8.7	60	1.60	11.4
95	.45	6.5	55	1.78	12.6
93	.53	5.0	50	2.00	13.9
90	.63	3.9	August median	.81	4.4
85	.77	4.1	7Q10	.24	14.7
80	.92	5.4	7Q2	.46	7.1
75	1.08	7.0		1.25	8.6

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

NASHUA RIVER BASIN

01096505 Unkety Brook near Pepperell, MA

LOCATION.--Lat 42˚41'23", long 71˚32'54", Middlesex County at culvert on River Street, 2.5 mi northeast of Pepperell.

PERIOD OF RECORD.--1971–74, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 6.84 mi^2	Area of water bodies = 0.02 mi^2	Minimum elevation = 177 ft
Area of stratified drift = 4.62 mi^2	Total length of streams = 12.7 mi	Maximum elevation = 514 ft
Area of wetlands = 0.52 mi^2	Mean basin slope = 2.28 percent	Mean elevation = 332 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01096000, 01097300, 01162500, 01101000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-27-71	0.93	9-26-72	2.40	8-30-73	1.40	8-24-92	3.06
9-09-71	1.10	10-05-72	2.10	1-10-74	6.00	9-17-92	1.46
9-29-71	1.80	3-21-73	27.0	7-11-91	2.36	7-01-93	4.13
10-04-71	1.10	7-31-73	3.60	7-18-91	1.01	7-09-93	.94
10-21-71	1.80	8-01-73	3.60	9-12-91	1.86	7-19-93	.63
8-23-72	2.70	8-28-73	2.30	7-28-92	14.5		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.50	12.0	70	3.50	6.4
98	.64	10.4	65	4.16	7.2
97	.76	9.3	60	4.98	8.1
95	.97	7.9	55	5.81	8.9
93	1.16	7.0	50	6.80	9.8
90	1.41	6.2	August median	1.94	5.5
85	1.82	5.5	7Q10	.46	14.5
80	2.34	5.4	7Q2	.97	9.2
75	2.89	5.8			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

MERRIMACK RIVER BASIN

01096515 Salmon Brook at Main Street at Dunstable, MA

LOCATION.--Lat 42˚40'41", long 71˚29'38", Middlesex County, at culvert on Main Street, at Dunstable.

PERIOD OF RECORD.--1975–78, 1993–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 8.48 mi^2	Area of water bodies = 0.62 mi^2	Minimum elevation = 200 ft
Area of stratified drift = 5.80 mi^2	Total length of streams = 10.8 mi	Maximum elevation = 514 ft
Area of wetlands = 0.01 mi^2	Mean basin slope = 2.93 percent	Mean elevation = 332 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01162500, 01101000, 01096000, 01073000, 01097300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-25-75	12.0	7-26-78	8.20	7-09-93	7.19	9-08-94	4.91
8-31-76	6.70	8-18-78	9.50	7-19-93	3.38	6-19-95	5.87
9-09-76	4.50	9-07-78	5.70	7-12-94	8.86	8-11-95	3.47
5-05-77	38.0	7-01-93	8.06	8-10-94	13.1	8-22-95	1.40
9-01-77	4.50						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.55	11.8	70	13.3	9.3
98	3.06	10.2	65	15.8	10.5
97	3.48	9.1	60	18.6	11.8
95	4.32	7.8	55	21.6	13.0
93	5.03	7.0	50	25.0	14.2
90	5.98	6.6	August median	7.76	6.7
85	7.41	6.6	7Q10	2.34	13.4
80	9.18	7.2	7Q2	4.49	8.4
75	11.2	8.2		13.3	9.3

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONCORD RIVER BASIN

01096805 North Brook near Berlin, MA

LOCATION.--Lat 42˚21'15", long 71˚37'40", Worcester County, at culvert on Whitney Street, 2.0 mi south of Berlin.

PERIOD OF RECORD.--1975–78, 1990–92.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 15.4 mi^2	Area of water bodies = 0.15 mi^2	Minimum elevation = 216 ft
Area of stratified drift = 3.43 mi^2	Total length of streams = 42.6 mi	Maximum elevation = 701 ft
Area of wetlands = 0.57 mi^2	Mean basin slope = 4.54 percent	Mean elevation = 450 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01175670, 01097300, 01162500, 01096000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-24-75	3.70	8-17-78	3.80	8-30-90	4.29	9-12-91	1.96
8-26-76	1.10	9-06-78	1.10	9-07-90	1.86	7-28-92	7.47
8-31-77	1.40	7-11-90	1.64	7-11-91	2.55	8-24-92	11.2
7-10-78	2.80	8-03-90	.83	7-18-91	.64	9-17-92	3.86

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.65	14.9	70	5.61	9.5
98	.77	13.2	65	6.95	11.0
97	.92	11.7	60	8.34	12.4
95	1.19	9.7	55	9.87	13.6
93	1.47	8.3	50	11.7	14.8
90	1.85	7.1	August median	2.73	6.7
85	2.62	6.4	7Q10	.54	19.3
80	3.50	6.9	7Q2	1.09	12.4
75	4.53	8.2			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONCORD RIVER BASIN

01096855 Danforth Brook at Hudson, MA

LOCATION.--Lat 42˚23'57", long 71˚34'00", Middlesex County, at culvert on Cox Street, Hudson.

PERIOD OF RECORD.--1975–78, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 6.62 mi^2	Area of water bodies = 0.05 mi^2	Minimum elevation = 244 ft
Area of stratified drift = 1.76 mi^2	Total length of streams = 18.5 mi	Maximum elevation = 605 ft
Area of wetlands = 0.57 mi^2	Mean basin slope = 3.71 percent	Mean elevation = 387 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01096000, 01175670, 01105600, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-24-75	0.92	8-17-78	0.79	9-21-94	0.56	8-22-95	0.01
8-26-76	.40	9-06-78	.21	6-19-95	1.41	8-06-96	1.55
8-31-77	.24	7-13-94	.36	7-24-95	.24	8-20-96	.14
7-14-78	.53	8-10-94	.06	8-11-95	.34	9-05-96	.21

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.16	17.2	70	1.02	13.4
98	.18	14.8	65	1.27	15.7
97	.21	12.9	60	1.55	17.8
95	.26	10.5	55	1.87	19.7
93	.32	8.9	50	2.25	21.6
90	.39	7.9	August median	.53	8.3
85	.50	8.0	7Q10	.14	19.8
80	.65	9.3	7Q2	.25	11.5
75	.82	11.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONCORD RIVER BASIN

01096935 Elizabeth Brook at Wheeler Street at Stow, MA

LOCATION.--Lat 42˚25'47", long 71˚30'56", Middlesex County, at culvert on Wheeler Street, 1.0 mi southwest of Stow.

PERIOD OF RECORD.--1975–76, 1990–92.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 17.2 mi^2	Area of water bodies = 0.37 mi^2	Minimum elevation = 205 ft
Area of stratified drift = 5.55 mi^2	Total length of streams = 42.4 mi	Maximum elevation = 640 ft
Area of wetlands = 0.71 mi^2	Mean basin slope = 3.92 percent	Mean elevation = 422 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01096000, 01175670, 01111200, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-25-75	6.70	7-11-90	4.28	9-07-90	3.58	9-12-91	2.77
8-27-76	1.60	8-03-90	4.74	7-10-91	2.47	7-28-92	5.30
9-01-76	2.60	8-30-90	8.08	7-11-91	2.28	8-24-92	9.99

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.91	19.8	70	6.69	8.7
98	1.07	17.4	65	8.40	10.8
97	1.24	15.4	60	10.5	12.9
95	1.54	12.8	55	12.8	14.9
93	1.88	10.7	50	15.7	16.9
90	2.39	8.5	August median	3.36	6.5
85	3.19	6.6	7Q10	.76	23.1
80	4.05	6.0	7Q2	1.55	13.7
75	5.24	6.9			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONCORD RIVER BASIN

01097050 Assabet River at Main Street near Concord, MA

LOCATION.--Lat 42˚27'23", long 71˚23'26", Middlesex County, at bridge on State Highway 62, 0.1 mi upstream from railroad bridge, 2.1 mi west of Concord.

PERIOD OF RECORD.--1968, 1990–92.

REMARKS.-- Flow affected by regulation by mills and reserviors upstream, municipal well withdrawals, and wastewater treatment plant discharges.

BASIN CHARACTERISTICS.--

Drainage area = 121 mi^2	Area of water bodies = 0.35 mi^2	Minimum elevation = 127 ft
Area of stratified drift = 50.0 mi^2	Total length of streams = 293 mi	Maximum elevation = 748 ft
Area of wetlands = 7.27 mi^2	Mean basin slope = 3.50 percent	Mean elevation = 345 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01096000, 01175670, 01105600, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
12-11-68	160	8-31-90	75.3	9-12-91	51.7	8-25-92	91.3
7-19-90	49.3	7-12-91	62.6	7-29-92	51.0	9-17-92	21.2
8-03-90	40.3	7-18-91	36.9				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	34.5	13.5	70	87	6.9
98	36.2	11.5	65	105	8.2
97	37.5	10.2	60	125	9.6
95	40.3	8.6	55	147	10.8
93	43.0	7.3	50	168	11.9
90	47.0	6.3	August median	57.1	5.7
85	54.2	5.6	7Q10	33.4	15.3
80	64.1	5.6	7Q2	39.6	9.5
75	74.9	6.1			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONCORD RIVER BASIN

01097280 Fort Pond Brook at West Concord, MA

LOCATION.--Lat 42˚28'07", long 71˚24'31", Middlesex County, at bridge on State Highway 2, 400 ft upstream from confluence with Nashoba Brook, 1.0 mi northwest of West Concord.

PERIOD OF RECORD.--1975–78, 1990–92.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 24.9 mi^2	Area of water bodies = 0.49 mi^2	Minimum elevation = 126 ft
Area of stratified drift = 7.70 mi^2	Total length of streams = 57.4 nmi	Maximum elevation = 470 ft
Area of wetlands = 1.56 mi^2	Mean basin slope = 2.28 percent	Mean elevation = 295 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01105600, 01109000, 01111200, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-25-75	4.60	8-17-78	7.00	8-30-90	14.3	9-12-91	5.71
9-10-76	2.60	9-06-78	3.10	9-07-90	3.25	7-29-92	1.27
9-27-76	3.40	7-12-90	3.96	7-12-91	1.41	8-24-92	14.1
8-31-77	2.30	8-03-90	2.59	7-18-91	1.79	9-17-92	5.29
7-14-78	5.00						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.11	14.3	70	6.77	7.7
98	1.33	12.5	65	8.14	9.1
97	1.51	11.2	60	9.60	10.4
95	1.78	9.7	55	11.2	11.7
93	2.11	8.3	50	13.0	13.0
90	2.60	6.9	August median	3.65	5.8
85	3.42	5.8	7Q10	.89	17.6
80	4.40	5.7	7Q2	1.83	10.3
75	5.49	6.5			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONCORD RIVER BASIN

01098860 Sudbury River at Nashawtuc Street at Concord, MA

LOCATION.--Lat 42˚27'35", long 71˚21'35", Middlesex County, at bridge on Nashawtuc Street, 0.5 mi upstream from mouth, at Concord.

PERIOD OF RECORD.--1984, 1990–92.

REMARKS.-- Flow affected by regulation by reservoirs upstream, municipal well withdrawals, wastewater treatment plant discharges, and diversions into and out of the basin.

BASIN CHARACTERISTICS.--

Drainage area = 162 mi^2	Area of water bodies = 6.70 mi^2	Minimum elevation = 118 ft
Area of stratified drift = 87.6 mi^2	Total length of streams = 344 mi	Maximum elevation = 699 ft
Area of wetlands = 10.5 mi^2	Mean basin slope = 2.63 percent	Mean elevation = 256ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01096000, 01175670

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
5-22-84	395	7-12-90	78.4	7-11-91	71.7	7-29-92	47.1
7-31-84	169	8-03-90	123	7-18-91	70.7	8-25-92	300
8-01-84	184	8-31-90	260	9-12-91	112	9-17-92	94.3

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	25.9	28.1	70	205	9.8
98	32.4	24.5	65	248	11.2
97	39.5	21.4	60	304	13.0
95	50.2	17.6	55	371	14.9
93	59.8	14.9	50	459	17.0
90	73.1	12.2	August median	111	8.5
85	103	8.6	7Q10	24.7	31.4
80	150	8.2	7Q2	51.1	19.0
75	176	8.9			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONCORD RIVER BASIN

01099400 River Meadow Brook at Lowell, MA

LOCATION.--Lat 42˚37'29", long 71˚19'11", Middlesex County, at bridge on Plain Street, at Lowell.

PERIOD OF RECORD.--1975, 1978, 1990–92.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 25.6 mi^2	Area of water bodies = 0.47 mi^2	Minimum elevation = 98 ft
Area of stratified drift = 15.8 mi^2	Total length of streams = 48.1 mi	Maximum elevation = 403 ft
Area of wetlands = 16.0 mi^2	Mean basin slope = 2.01 percent	Mean elevation = 249 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01096000, 01101000, 01105600

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-25-75	8.10	8-03-90	3.39	7-11-91	2.35	7-28-92	2.90
7-26-78	4.50	8-31-90	11.6	7-18-91	2.25	8-24-92	18.5
9-07-78	4.40	9-07-90	6.08	9-12-91	11.7	9-17-92	12.7
7-12-90	10.2						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.17	25.1	70	14.2	13.1
98	1.61	20.9	65	17.7	15.3
97	1.9	18.4	60	22.1	17.6
95	2.54	14.6	55	26.8	19.6
93	3.24	12.1	50	32.2	21.5
90	4.22	9.7	August median	6.52	8.5
85	5.93	8.3	7Q10	.98	28.8
80	8.28	9.0	7Q2	2.45	16.1
75	11.0	10.9			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

SHAWSHEEN RIVER BASIN

01100608 Meadow Brook near Tewksbury, MA

LOCATION.--Lat 42˚37'14", long 71˚12'44", Middlesex County, at culvert on Pinnacle Street 1.2 mi northeast of Tewksbury.

PERIOD OF RECORD.--1973–75, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 4.09 mi^2	Area of water bodies = 0.13 mi^2	Minimum elevation = 104 ft
Area of stratified drift = 2.17 mi^2	Total length of streams = 10.2 mi	Maximum elevation = 354 ft
Area of wetlands =0.12 mi^2	Mean basin slope = 1.37 percent	Mean elevation = 229 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01073000, 01096000, 01097300, 01105600, 01101000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-10-73	1.70	10-10-74	1.40	6-19-95	0.82	8-06-96	1.63
9-28-73	.97	7-12-94	.34	6-20-95	.46	8-20-96	.59
7-25-74	.30	8-10-94	.17	8-10-95	1.27	9-06-96	.97
8-08-74	.20	9-08-94	.11	8-22-95	.24		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.18	17.0	70	1.52	13.5
98	.24	14.4	65	1.88	15.3
97	.28	12.9	60	2.30	17.0
95	.36	10.8	55	2.78	18.6
93	.44	9.6	50	3.36	20.2
90	.55	8.9	August median	.78	9.3
85	.73	9.1	7Q10	.15	19.6
80	.96	10.2	7Q2	.36	11.5
75	1.23	11.8			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

PARKER RIVER BASIN

01101100 Mill River near Rowley, MA

LOCATION.--Lat 42˚43'31", long 70˚54'54", Essex County, at bridge on Wethersfield Street, 2.0 mi west of Rowley.

PERIOD OF RECORD.--1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 7.70 mi^2	Area of water bodies = 0.07 mi^2	Minimum elevation = 26 ft
Area of stratified drift = 5.51 mi^2	Total length of streams = 25.6 mi	Maximum elevation = 252 ft
Area of wetlands = 0.56 mi^2	Mean basin slope = 4.67 percent	Mean elevation = 130 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01097300, 01073000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-11-91	0.81	7-28-92	1.81	9-17-92	1.84	7-09-93	1.01
7-18-91	1.31	8-24-92	4.29	7-02-93	1.38	7-19-93	.57
9-12-91	1.50						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.45	13.4	70	2.81	9.3
98	.53	11.6	65	3.21	10.5
97	.61	10.4	60	3.76	12.0
95	.77	8.3	55	4.27	13.3
93	.93	6.9	50	4.75	14.3
90	1.20	5.6	August median	1.64	5.9
85	1.55	5.6	7Q10	.39	17.0
80	1.93	6.5	7Q2	.81	10.0
75	2.32	7.8			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

IPSWICH RIVER BASIN

01101740 Fish Brook at Lockwood Lane near Boxford, MA

LOCATION.--Lat 42˚38'39", long 70˚59'20", Essex County, at bridge on Lockwood Lane, 1.3 mi south of Boxford.

PERIOD OF RECORD.--1993–95.

REMARKS.-- Flow affected by municpal well withdrawals and regulation by dams.

BASIN CHARACTERISTICS.--

Drainage area = 14.7 mi^2	Area of water bodies = 0.27 mi^2	Minimum elevation = 45 ft
Area of stratified drift = 2.63 mi^2	Total length of streams = 30.8 mi	Maximum elevation = 396 ft
Area of wetlands = 1.18 mi^2	Mean basin slope = 1.75 percent	Mean elevation = 219 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01073000, 01096000, 01097300, 01101000, 01162500.

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-02-93	0.96	7-07-94	0.81	6-20-95	2.44	8-10-95	0.74
7-09-93	.49	7-12-94	.77	7-24-95	.15	8-22-95	.050
7-19-93	.022	8-10-94	.36				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.12	21.4	70	3.90	22.6
98	.16	17.7	65	5.86	25.9
97	.20	15.1	60	8.83	29.1
95	.30	12.0	55	13.0	32.0
93	.42	10.7	50	19.4	35.1
90	.60	10.7	August median	1.11	13.4
85	.98	12.6	7Q10	.10	26.9
80	1.63	15.8	7Q2	.34	15.5
75	2.59	19.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

IPSWICH RIVER BASIN

01101850 Pye Brook (Head of Howlett Brook) near Topsfield, MA

LOCATION.--Lat 42˚39'17", long 70˚57'12", Essex County, at bridge on Haverhill Street 1.2 mi north of Topsfield.

PERIOD OF RECORD.--1970–71, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 6.66 mi^2	Area of water bodies = 0.32 mi^2	Minimum elevation = 59 ft
Area of stratified drift = 5.13 mi^2	Total length of streams = 15.6 mi	Maximum elevation = 308 ft
Area of wetlands = 0.73 mi^2	Mean basin slope = 1.12 percent	Mean elevation = 181 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01073000, 01096000, 01097300, 01105600, 01101000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-08-70	7.20	7-12-94	5.46	7-24-95	0.53	8-06-96	1.77
8-27-70	1.50	8-10-94	.09	8-10-95	.93	8-20-96	1.88
5-24-71	23.0	6-20-95	3.90	8-22-95	.11	9-06-96	.82
7-07-94	6.91						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.25	29.8	70	10.0	27.6
98	.38	25.4	65	14.5	30.6
97	.48	22.7	60	21.7	33.7
95	.74	19.4	55	31.8	36.5
93	1.07	17.5	50	46.4	39.0
90	1.61	16.8	August median	3.17	19.1
85	2.70	18.1	7Q10	.20	34.4
80	4.51	21.2	7Q2	.77	21.5
75	6.90	24.5			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

NORTH COASTAL BASIN

01102053 Crane Brook at Danvers, MA

LOCATION.--Lat 42˚33'34", long 70˚56'55", Essex County, on Pine Street, 0.5 mi southwest of Danvers center.

PERIOD OF RECORD.--1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 2.72 mi^2	Area of water bodies = 0.01 mi^2	Minimum elevation = 59 ft
Area of stratified drift = 1.72 mi^2	Total length of streams = 0.54 mi	Maximum elevation = 253 ft
Area of wetlands = 0.02 mi^2	Mean basin slope = 2.41 percent	Mean elevation = 149 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01073000, 01096000, 01097300, 01105600, 01101000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-07-94	0.89	6-20-95	1.32	8-22-95	0.43	8-20-96	0.62
7-12-94	.98	7-24-95	.54	8-06-96	1.13	9-06-96	.69
8-10-94	.71	8-10-95	.66				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.46	7.4	70	1.36	6.9
98	.49	6.3	65	1.64	8.0
97	.52	5.4	60	2.00	9.0
95	.57	4.5	55	2.39	10.0
93	.62	3.9	50	2.85	10.9
90	.69	3.7	August median	.84	4.3
85	.78	4.0	7Q10	.47	9.4
80	.94	4.9	7Q2	.58	5.9
75	1.13	6.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Mystic River subbasin)
01102470 Sweetwater Brook at Stoneham, MA

LOCATION.--Lat 42˚28'45", long 71˚06'44", Middlesex County, at culvert on Maple Street, 0.6 mi west of Stoneham.

PERIOD OF RECORD.--1973–74, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 2.08 mi^2	Area of water bodies = 0.00 mi^2	Minimum elevation = 59 ft
Area of stratified drift = 0.32 mi^2	Total length of streams = 0.54 mi	Maximum elevation = 253 ft
Area of wetlands = 0.00 mi^2	Mean basin slope = 2.41 percent	Mean elevation = 149 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01097300, 01105600

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-11-73	0.93	10-16-73	0.13	8-10-94	0.27	8-22-95	0.020
6-14-73	1.20	7-29-74	.10	6-20-95	.49	8-06-96	.52
8-06-73	1.00	7-07-94	.33	7-24-95	.088	8-20-96	.32
8-09-73	.78	7-12-94	.31	8-10-95	.11	9-06-96	.25
9-28-73	.22						

ESTIMATED STREAMFLOW STATISTICS.---

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.050	15.4	70	0.55	9.1
98	.066	13.5	65	.66	9.9
97	.080	12.1	60	.79	10.8
95	.11	10.3	55	.92	11.6
93	.14	9.1	50	1.09	12.6
90	.19	8.1	August median	.29	7.9
85	.27	7.7	7Q10	.043	19.4
80	.36	7.8	7Q2	.12	12.6
75	.45	8.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Mystic River subbasin)

01102480 Aberjona River at Swanton Street, at Winchester, MA

LOCATION.--Lat 42˚27'39", long 71˚08'15", Middlesex County, 20 ft upstream from bridge on Swanton Street, 0.6 mi north of Winchester.

PERIOD OF RECORD.--1973–75, 1989–90.

REMARKS.-- Flow affected by municpal and industrial diversions and regulation by dams.

BASIN CHARACTERISTICS.--

Drainage area = 13.4 mi^2	Area of water bodies = 0.11 mi^2	Minimum elevation = 20 ft
Area of stratified drift = 6.70 mi^2	Total length of streams = 15.1 mi	Maximum elevation = 277 ft
Area of wetlands = 0.27 mi^2	Mean basin slope = 1.98 percent	Mean elevation = 138 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01097300, 01105600

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-12-73	7.30	3-27-74	21.0	10-09-74	3.20	9-07-89	3.89
6-14-73	22.0	7-29-74	2.80	10-10-74	2.90	7-11-90	5.05
8-07-73	8.30	8-09-74	1.30	7-25-89	4.38	8-30-90	14.3
10-15-73	2.30	9-13-74	1.30	8-28-89	5.36	9-06-90	9.05
10-16-73	2.10						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.47	30.4	70	5.96	10.2
98	.64	26.7	65	7.08	11.0
97	.82	23.9	60	8.49	12.1
95	1.18	20.0	55	9.89	13.2
93	1.51	17.4	50	11.4	14.5
90	2.04	14.4	August median	3.12	11.3
85	2.84	11.8	7Q10	.37	34.4
80	3.86	10.3	7Q2	1.16	21.0
75	4.83	9.9			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Mystic River subbasin)
01102490 Shaker Glen Brook near Woburn, MA

LOCATION.--Lat 42˚28'16", long 71˚10'34", Middlesex County, at culvert on Lexington Street, 1.3 mi west of Woburn.

PERIOD OF RECORD.--1973–74, 1992–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 3.05 mi^2	Area of water bodies = 0.01 mi^2	Minimum elevation = 15 ft
Area of stratified drift = 0.34 mi^2	Total length of streams = 5.06 mi	Maximum elevation = 377 ft
Area of wetlands = 0.04 mi^2	Mean basin slope = 3.21 percent	Mean elevation = 194 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01105600, 01101000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-09-73	2.20	8-09-74	0.56	9-17-92	0.73	7-12-94	0.45
10-02-73	.81	9-13-74	.76	7-02-93	.42	8-03-94	.27
10-27-73	.85	8-24-92	1.57	7-19-93	.17	8-10-94	.25
7-29-74	.84						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.19	15.4	70	1.45	12.5
98	.24	13.1	65	1.67	13.9
97	.28	11.7	60	1.95	15.4
95	.36	9.6	55	2.22	16.7
93	.45	8.3	50	2.47	17.8
90	.58	7.6	August median	.83	8.5
85	.77	8.0	7Q10	.17	18.3
80	.99	9.4	7Q2	.37	10.8
75	1.20	10.9			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Mystic River subbasin)
01103015 Mill Brook at Arlington, MA

LOCATION.--Lat 42˚25'20", long 71˚08'59", Middlesex County, 1,200 ft upstream from mouth, 0.4 mi northeast of Arlington.

PERIOD OF RECORD.--1973–74, 1989–91.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 5.35 mi^2	Area of water bodies = 0.05 mi^2	Minimum elevation = 15 ft
Area of stratified drift = 2.26 mi^2	Total length of streams = 10.5 mi	Maximum elevation = 377 ft
Area of wetlands = 0.13 mi^2	Mean basin slope = 3.21 percent	Mean elevation = 194 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01105600, 01101000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-06-73	3.90	10-02-73	1.60	7-26-89	1.22	8-30-90	3.98
6-11-73	3.40	10-27-73	1.20	8-29-89	1.35	9-06-90	2.95
6-15-73	4.10	7-29-74	.83	9-07-89	1.37	7-12-91	1.10
8-06-73	3.90	8-09-74	.64	7-11-90	2.38	7-18-91	1.00
8-09-73	3.20	9-13-74	3.40	8-03-90	1.83	9-13-91	1.16

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.45	15.4	70	2.79	6.8
98	.57	13.2	65	3.17	7.6
97	.67	11.7	60	3.6	8.5
95	.87	9.6	55	4.01	9.3
93	1.04	8.2	50	4.48	10.2
90	1.29	6.8	August median	1.76	5.8
85	1.64	5.8	7Q10	.38	18.2
80	2.04	5.7	7Q2	.84	11.0
75	2.41	6.1			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHARLES RIVER BASIN

01103200 Charles River at Bellingham, MA

LOCATION.--Lat 42˚05'38", long 71˚28'56", Norfolk County, at bridge on Depot Street, 800 ft downstream from Box Pond, 0.6 mi northwest of Bellingham.

PERIOD OF RECORD.--1967, 1969–70, 1982, 1989–90.

REMARKS.-- Flow affected by municipal well withdrawals.

BASIN CHARACTERISTICS.--

Drainage area = 14.5 mi^2	Area of water bodies = 0.38 mi^2	Minimum elevation = 222 ft
Area of stratified drift = 3.74 mi^2	Total length of streams = 33.9 mi	Maximum elevation = 583 ft
Area of wetlands = 0.46 mi^2	Mean basin slope = 2.92 percent	Mean elevation = 359 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-24-67	4.25	9-17-69	4.01	8-26-70	9.40	7-25-89	16.4
9-07-67	4.73	10-31-69	5.10	9-14-70	2.30	8-28-89	11.5
10-02-68	1.69	4-06-70	80.0	8-24-82	5.30	9-05-89	8.25
10-18-68	2.19	4-21-70	32.0	8-30-82	6.00	7-11-90	3.54
4-02-69	38.2	7-29-70	2.80	9-13-82	2.60	8-30-90	13.3
5-28-69	10.7	8-12-70	4.00	9-20-82	6.70	9-06-90	8.49

ESTIMATED STREAMFLOW STATISTICS.

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.50	6.8	70	8.88	3.6
98	1.83	6.2	65	10.5	3.8
97	2.12	5.7	60	12.3	4.1
95	2.57	5.1	55	14.1	4.4
93	3.02	4.7	50	16.2	4.7
90	3.69	4.2	August median	5.12	3.8
85	4.76	3.8	7Q10	1.18	9.2
80	6.06	3.6	7Q2	2.53	6.4
75	7.38	3.5			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHARLES RIVER BASIN

01103217 Hopping Brook near West Medway, MA

LOCATION.--Lat 42˚08'31", long 71˚27'21", Norfolk County, at culvert on West Street, 1.2 mi west of West Medway.

PERIOD OF RECORD.--1968–71, 1983, 1989–90.

REMARKS.-- Flow affected by municipal well withdrawals.

BASIN CHARACTERISTICS.--

Drainage area = 10.1 mi^2	Area of water bodies = 0.06 mi^2	Minimum elevation = 206 ft
Area of stratified drift = 3.95 mi^2	Total length of streams = 22.9 mi	Maximum elevation = 511 ft
Area of wetlands = 0.76 mi^2	Mean basin slope = 2.35 percent	Mean elevation = 338 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-30-68	0.060	9-17-69	0.64	8-17-83	0.53	7-10-90	1.42
9-24-68	.040	9-25-69	.81	7-25-89	10.8	8-30-90	8.72
10-03-68	.020	10-31-69	1.30	8-28-89	5.57	9-06-90	3.58
7-11-69	.28	4-22-71	20.0	9-06-89	2.74		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.009	12.4	70	3.71	7.2
98	.029	11.0	65	5.24	8.0
97	.061	10.2	60	7.31	9.0
95	.13	9.0	55	9.78	9.9
93	.23	8.2	50	12.7	10.9
90	.40	7.3	August median	1.11	7.4
85	.86	6.5	7Q10	.005	23.1
80	1.49	6.4	7Q2	.13	16.0
75	2.38	6.6		3.71	7.2

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHARLES RIVER BASIN

01103240 Mine Brook near Franklin, MA

LOCATION.--Lat 42˚07'29", long 71˚25'52", Norfolk County, at bridge on Pond Street, 3.4 mi northwest of Franklin.

PERIOD OF RECORD.--1968–70, 1983, 1989–91.

REMARKS.-- Flow affected by municipal well withdrawals.

BASIN CHARACTERISTICS.--

Drainage area = 14.1 mi^2	Area of water bodies = 0.20 mi^2	Minimum elevation = 180 ft
Area of stratified drift = 6.98 mi^2	Total length of streams = 26.8 mi	Maximum elevation = 478 ft
Area of wetlands = 0.87 mi^2	Mean basin slope = 2.44 percent	Mean elevation = 328 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-24-68	4.75	10-31-69	5.60	8-17-83	4.20	8-30-90	13.3
10-02-68	3.73	4-06-70	91.0	8-24-83	3.90	9-06-90	5.57
4-02-69	63.5	4-21-70	28.0	7-26-89	15.5	6-26-91	1.28
7-10-69	3.33	7-29-70	3.10	8-28-89	14.4	7-18-91	1.00
9-17-69	6.73	8-12-70	4.40	9-05-89	11.5	9-12-91	6.09
9-25-69	6.28	8-26-70	5.50	7-10-90	5.07		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.63	7.7	70	10.1	4.5
98	1.98	7.0	65	12.1	4.8
97	2.29	6.4	60	14.2	5.1
95	2.78	5.8	55	16.5	5.4
93	3.28	5.4	50	19.0	5.8
90	4.02	4.9	August median	5.68	4.5
85	5.22	4.5	7Q10	1.33	9.9
80	6.67	4.3	7Q2	2.81	6.9
75	8.24	4.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHARLES RIVER BASIN

01103253 Chicken Brook near West Medway, MA

LOCATION.--Lat 42˚08'27", long 71˚25'26", Norfolk County, at culvert on Cottage Street, 3.5 mi southeast of West Medway.

PERIOD OF RECORD.--1968–71, 1983, 1989–91.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 7.23 mi^2	Area of water bodies = 0.06 mi^2	Minimum elevation = 172 ft
Area of stratified drift = 1.09 mi^2	Total length of streams = 18.5 mi	Maximum elevation = 445 ft
Area of wetlands = 0.36 mi^2	Mean basin slope = 2.29 percent	Mean elevation = 306 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-30-68	0.38	10-12-70	0.71	8-25-83	0.54	8-30-90	4.66
9-24-68	.44	6-24-83	3.70	7-25-89	4.85	9-06-90	2.65
10-03-68	.44	7-11-83	1.20	8-28-89	3.78	6-27-91	.74
7-10-69	.45	7-19-83	.56	9-06-89	2.84	7-18-91	.28
9-17-69	.96	8-10-83	.38	7-10-90	1.69	9-12-91	.95
9-25-69	1.94	8-17-83	.64				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.26	9.9	70	2.53	7.2
98	.32	8.8	65	3.28	8.3
97	.39	8.0	60	4.18	9.4
95	.46	7.2	55	5.22	10.6
93	.56	6.5	50	6.41	11.6
90	.72	5.7	August median	1.04	5.4
85	.99	5.2	7Q10	.18	14.8
80	1.36	5.4	7Q2	.48	9.7
75	1.86	6.1			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHARLES RIVER BASIN

01103300 Mill River near Norfolk, MA

LOCATION.--Lat 42˚07'21", long 71˚21'59", Norfolk County, at bridge on Miller Street, 0.9 mi above mouth, 2.1 mi west of Norfolk.

PERIOD OF RECORD.--1968–69, 1971, 1983, 1989–90.

REMARKS.-- Flow affected by municipal well withdrawals.

BASIN CHARACTERISTICS.--

Drainage area = 13.8 mi^2	Area of water bodies = 0.68 mi^2	Minimum elevation = 139 ft
Area of stratified drift = 9.79 mi^2	Total length of streams = 24.2 mi	Maximum elevation = 456 ft
Area of wetlands = 0.49 mi^2	Mean basin slope = 2.61 percent	Mean elevation = 295 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-30-68	6.33	9-17-69	9.57	8-24-83	11.0	7-10-90	16.0
10-01-68	7.58	9-25-69	8.60	9-06-89	18.8	8-30-90	10.8
10-18-68	6.50	10-08-70	4.20	9-13-89	15.5	9-07-90	9.85
7-10-69	11.1	4-22-71	26.0				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	5.40	7.8	70	15.7	4.9
98	6.14	6.8	65	17.4	5.6
97	6.75	6.0	60	19.2	6.3
95	7.72	5.1	55	20.9	7.0
93	8.56	4.5	50	22.7	7.7
90	9.63	4.1	August median	11.5	3.8
85	11.0	3.8	7Q10	4.71	9.4
80	12.4	3.9	7Q2	7.62	5.5
75	13.9	4.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHARLES RIVER BASIN

01103330 Stop River near Medfield, MA

LOCATION.--Lat 42˚09'03", long 71˚18'18", Norfolk County, at culvert on Seekonk Street, 2.5 mi south of Medfield.

PERIOD OF RECORD.--1967–71, 1983, 1989–90.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 12.8 mi^2	Area of water bodies = 0.31 mi^2	Minimum elevation = 115 ft
Area of stratified drift = 7.43 mi^2	Total length of streams = 27.0 mi	Maximum elevation = 358 ft
Area of wetlands = 0.95 mi^2	Mean basin slope = 1.76 percent	Mean elevation = 236 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-24-67	5.98	10-16-68	5.72	10-07-69	13.0	9-07-89	12.9
9-08-67	6.00	4-02-69	88.3	10-12-70	3.80	7-11-90	7.09
8-30-68	2.72	7-11-69	3.85	8-24-83	8.20	8-30-90	15.5
9-25-68	3.77	9-19-69	8.59	7-25-89	6.29	9-07-90	15.9
10-03-68	3.13	9-25-69	6.53	8-28-89	18.3		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.44	7.2	70	13.0	4.6
98	2.91	6.5	65	15.5	5.1
97	3.31	5.9	60	18.1	5.6
95	3.95	5.3	55	21.0	6.1
93	4.61	4.9	50	24.0	6.7
90	5.59	4.4	August median	7.59	4.1
85	7.08	4.0	7Q10	2.03	9.5
80	8.79	4.0	7Q2	4.02	6.4
75	10.8	4.2			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHARLES RIVER BASIN

01103395 Bogastow Brook, Orchard Street, near Millis, MA

LOCATION.--Lat 42˚11'17", long 71˚21'46", Norfolk County, 100 ft downstream from bridge on Orchard Street, 200 ft downstream from outlet of Bogastow Pond, and 1.5 mi north of Millis.

PERIOD OF RECORD.--1967, 1989–90.

REMARKS.-- Flow affected by municipal well withdrawals.

BASIN CHARACTERISTICS.--

Drainage area = 23.4 mi^2	Area of water bodies = 0.35 mi^2	Minimum elevation = 119 ft
Area of stratified drift = 9.64 mi^2	Total length of streams = 65.7 mi	Maximum elevation = 444 ft
Area of wetlands = 2.36 mi^2	Mean basin slope = 2.09 percent	Mean elevation = 270 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-24-67	5.20	7-25-89	4.66	9-07-89	6.78	8-30-90	12.6
9-08-67	5.04	8-28-89	12.50	7-10-90	4.49	9-06-90	6.12

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	3.80	17.2	70	7.42	5.1
98	3.86	15.0	65	8.92	6.2
97	3.95	13.6	60	11.0	7.6
95	4.05	11.8	55	13.7	8.9
93	4.19	10.2	50	17.1	10.3
90	4.41	8.4	August median	5.19	5.9
85	4.89	6.2	7Q10	3.72	21.2
80	5.64	4.9	7Q2	4.10	12.9
75	6.34	4.6			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHARLES RIVER BASIN

01103400 Charles River near Medfield, MA

LOCATION.--Lat 42˚12'36", long 71˚21'09", Norfolk County, at old highway bridge, 600 ft upstream from bridge on State Highway 27, 2.9 mi northwest of Medfield.

PERIOD OF RECORD.--1969–70, 1982–83, 1989–90.

REMARKS.-- Flow affected by municipal well withdrawals and regulation by dams.

BASIN CHARACTERISTICS.--

Drainage area = 140 mi^2	Area of water bodies = 2.71 mi^2	Minimum elevation = 114 ft
Area of stratified drift = 65.6 mi^2	Total length of streams = 333 mi	Maximum elevation = 583 ft
Area of wetlands = 10.6 mi^2	Mean basin slope = 2.20 percent	Mean elevation = 314 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
4-03-69	1,030	4-21-70	285	8-31-82	49.0	8-29-89	143
6-03-69	186	7-28-70	42.0	9-10-82	49.0	9-06-89	128
7-11-69	36.8	8-12-70	25.0	9-13-82	42.0	7-11-90	33.0
9-17-69	64.3	8-26-70	136	9-20-82	30.0	8-30-90	182
9-25-69	50.3	9-14-70	27.0	7-20-83	37.0	9-06-90	84.9
4-07-70	1,160	8-25-82	60.0	8-25-83	47.0		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	16.6	6.7	70	111	3.7
98	20.4	6.1	65	133	3.8
97	23.7	5.7	60	158	4.1
95	28.8	5.2	55	184	4.4
93	34.4	4.7	50	214	4.7
90	42.6	4.3	August median	61.7	3.9
85	56.6	3.8	7Q10	12.6	9.6
80	73.8	3.6	7Q2	28.4	6.8
75	91.2	3.6			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHARLES RIVER BASIN

01103435 Waban Brook at Wellesley, MA

LOCATION.--Lat 42˚17'13", long 71˚18'05", Norfolk County, on access road of Wellesley College Golf course, 800 ft upstream from State Highway 16, 0.8 mi southwest of Wellesley.

PERIOD OF RECORD.--1983, 1989–90.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 10.2 mi^2	Area of water bodies = 0.50 mi^2	Minimum elevation = 110 ft
Area of stratified drift = 6.24 mi^2	Total length of streams = 19.0 mi	Maximum elevation = 370 ft
Area of wetlands = 0.48 mi^2	Mean basin slope = 1.81 percent	Mean elevation = 236 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-24-83	5.50	8-10-83	0.62	9-08-89	3.77	8-30-90	12.4
7-11-83	1.00	8-18-83	.57	9-13-89	3.04	9-06-90	5.50
7-19-83	.75	8-26-83	.54	7-19-90	2.94		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.25	21.7	70	4.68	10.5
98	.33	19.2	65	6.95	12.7
97	.43	17.3	60	10.1	15.0
95	.51	15.4	55	14.1	17.2
93	.67	13.4	50	19.6	19.3
90	.96	11.2	August median	1.51	9.4
85	1.46	9.4	7Q10	.13	29.8
80	2.05	8.7	7Q2	.54	18.2
75	2.94	8.8			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHARLES RIVER BASIN

01103440 Fuller Brook at Wellesley, MA

LOCATION.--Lat 42˚17'45", long 71˚17'18", Norfolk County, at Brook Street bridge at Wellesley.

PERIOD OF RECORD.--1959–60, 1968–71, 1983, 1989, 1991.

REMARKS.-- None.

BASIN CHARACTERISTICS.--Not available.

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-30-68	0.65	9-15-69	1.04	8-10-70	0.30	7-25-89	2.82
9-24-68	.20	9-23-69	.97	10-09-70	.63	8-28-89	1.80
10-15-68	.32	10-07-69	1.40	4-22-71	5.00	9-07-89	2.00
7-07-69	.46	7-27-70	.44	8-18-83	.16	7-18-91	.09
8-25-69	.48	7-31-70	.47				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.15	14.6	70	1.70	10.7
98	.19	12.9	65	2.18	12.2
97	.23	11.5	60	2.74	13.7
95	.30	10.1	55	3.40	15.1
93	.38	9.1	50	4.18	16.6
90	.50	8.3	August median	.74	8.0
85	.70	7.9	7Q10	.11	19.1
80	.95	8.3	7Q2	.31	11.8
75	1.27	9.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHARLES RIVER BASIN

01103445 Fuller Brook at Wellesley College Golf Course at Wellesley, MA

LOCATION.--Lat 42˚17'00", long 71˚17'57", Norfolk County, at furthest downstream footbridge on Wellesley College Golf Course, 200 ft upstream from confluence with Waban Brook, 0.9 mi southwest of Wellesley.

PERIOD OF RECORD.--1989–91.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = mi^2	Area of water bodies = mi^2	Minimum elevation = ft
Area of stratified drift = mi^2	Total length of streams = mi	Maximum elevation = ft
Area of wetlands = mi^2	Mean basin slope = percent	Mean elevation = ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01105600, 01111200, 01111300, 01109000, 01105730

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-25-89	8.10	9-07-89	3.12	8-30-90	4.43	9-12-91	0.89
8-28-89	3.99	7-19-90	1.80	9-06-90	2.52		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.34	30.6	70	3.76	6.3
98	.46	26.6	65	4.44	6.5
97	.57	23.9	60	5.56	7.8
95	.77	20.2	55	6.93	9.7
93	1.01	17.2	50	8.51	11.8
90	1.41	13.6	August median	2.67	8.4
85	2.32	9.0	7Q10	.24	36.1
80	3.08	7.9	7Q2	.73	21.7
75	3.29	7.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHARLES RIVER BASIN

01104470 Stony Brook at Waltham, MA

LOCATION.--Lat 42˚22'04", long 71˚16'16", Middlesex County, at railroad bridge, 0.5 mi upstream from Stony Brook Reservoir, 1.0 mi west of Waltham.

PERIOD OF RECORD.--1989–90.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 22.3 mi^2	Area of water bodies = 0.29 mi^2	Minimum elevation = 90 ft
Area of stratified drift = 10.6 mi^2	Total length of streams = 40.4 mi	Maximum elevation = 358 ft
Area of wetlands = 1.15 mi^2	Mean basin slope = 2.85 percent	Mean elevation = 199 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-25-89	12.3	9-08-89	39.1	8-30-90	10.4	9-06-90	5.90
8-28-89	2.40	7-11-90	15.9				

ESTIMATED STREAMFLOW STATISTICS.-- Not determined because correlations of streamflow measurements at Stony Brook with same-day mean streamflows at nearby streamflow-gaging stations were poor.

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Neponset River subbasin)
01104840 Neponset River at Walpole, MA

LOCATION.--Lat 42˚08'28", long 71˚15'25", Norfolk County, at culvert on Main Street, 0.4 mi southwest of Walpole.

PERIOD OF RECORD.--1967–68, 1989–90.

REMARKS.-- Flow affected by municipal well withdrawals.

BASIN CHARACTERISTICS.--

Drainage area = 11.4 mi^2	Area of water bodies = 0.65 mi^2	Minimum elevation = 147 ft
Area of stratified drift = 8.42 mi^2	Total length of streams = 22.0 mi	Maximum elevation = 470 ft
Area of wetlands = 1.04 mi^2	Mean basin slope = 2.47 percent	Mean elevation = 305 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
10-06-66	2.74	6-07-67	19.7	9-06-67	11.5	9-06-89	8.24
12-19-66	8.19	7-06-67	19.4	9-20-67	5.96	7-11-90	3.61
1-25-67	10.6	8-10-67	15.5	10-12-67	7.15	8-30-90	13.5
3-23-67	23.9	8-17-67	8.82	7-25-89	6.00	9-07-90	7.78
5-02-67	21.2	8-21-67	7.45	8-28-89	10.2		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.98	12.1	70	8.97	4.1
98	2.35	10.9	65	10.3	4.0
97	2.69	10.0	60	11.8	4.2
95	3.24	8.9	55	13.3	4.6
93	3.73	8.0	50	15.0	5.1
90	4.45	7.0	August median	5.83	5.6
85	5.49	5.9	7Q10	1.63	14.0
80	6.65	5.0	7Q2	3.21	9.3
75	7.74	4.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Neponset River subbasin)
01104850 Mine Brook at Walpole, MA

LOCATION.--Lat 42˚09'14", long 71˚15'25", Norfolk County, at inlet to Turner Pond, 0.75 mi northwest of Walpole.

PERIOD OF RECORD.--Continuous record during 1967–68, 1985–87, 1989–91.

REMARKS.-- Flow affected by municipal well withdrawals.

BASIN CHARACTERISTICS.--

Drainage area = 5.99 mi^2	Area of water bodies = 0.07 mi^2	Minimum elevation = 144 ft
Area of stratified drift = 3.64 mi^2	Total length of streams = 11.0 mi	Maximum elevation = 436 ft
Area of wetlands = 0.70 mi^2	Mean basin slope = 2.91 percent	Mean elevation = 283 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01097300, 01105600, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-16-66	0.81	8-20-68	0.18	5-19-86	3.40	7-11-90	2.10
9-12-66	.79	8-22-68	.03	7-22-86	4.00	8-30-90	7.54
10-06-66	1.28	8-27-68	.00	7-30-87	.28	9-07-90	4.58
5-01-67	19.7	10-18-68	.00	7-25-89	6.09	6-27-91	.72
9-06-67	3.79	5-02-85	4.20	8-28-89	8.85	7-18-91	.22
9-20-67	3.02	4-22-86	7.20	9-06-89	6.40	9-12-91	2.72
8-19-68	.26	5-14-86	3.90				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.11	25.3	70	4.52	13.4
98	.16	22.3	65	6.48	14.9
97	.22	20.2	60	8.97	16.6
95	.33	17.7	55	12.1	18.4
93	.48	15.7	50	16.0	20.1
90	.74	13.7	August median	1.49	12.2
85	1.27	12.2	7Q10	.079	30.2
80	2.04	11.8	7Q2	.33	19.0
75	3.07	12.2		4.52	13.4

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Neponset River subbasin)
01104980 Hawes Brook at Norwood, MA

LOCATION.--Lat 42˚10'26", long 71˚12'31", Norfolk County, at culvert on Washington Street, at Norwood, MA.

PERIOD OF RECORD.--1967–68, 1986–87, 1989–90, 1994.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 8.64 mi^2	Area of water bodies = 0.46 mi^2	Minimum elevation = 59 ft
Area of stratified drift = 2.20 mi^2	Total length of streams = 15.5 mi	Maximum elevation = 396 ft
Area of wetlands = 0.31 mi^2	Mean basin slope = 2.27 percent	Mean elevation = 222 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
10-06-66	0.74	7-07-67	11.6	7-29-87	1.00	8-30-90	10.4
12-19-66	2.68	8-11-67	6.41	7-25-89	8.07	9-07-90	2.88
1-25-67	3.98	10-12-67	2.76	8-28-89	4.62	7-19-94	.76
3-23-67	21.8	10-31-85	.50	9-06-89	3.66	8-16-94	1.00
6-07-67	11.7	8-14-86	4.00	7-12-90	2.86	10-18-94	1.23

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.38	10.7	70	3.60	3.8
98	.47	9.8	65	4.59	3.7
97	.53	9.2	60	5.85	3.9
95	.67	8.3	55	7.24	4.2
93	.81	7.6	50	8.93	4.7
90	1.05	6.7	August median	1.71	5.6
85	1.51	5.6	7Q10	.29	15.0
80	2.07	4.8	7Q2	.66	10.5
75	2.71	4.2			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Neponset River subbasin)
01105270 Massapoag Brook at Canton, MA

LOCATION.--Lat 42˚08'59", long 71˚08'58", Norfolk County, 25 ft upstream from bridge on Walnut Street, 0.7 mi south of Canton.

PERIOD OF RECORD.--1986–87, 1989–90.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 10.4 mi^2	Area of water bodies = 0.72 mi^2	Minimum elevation = 104 ft
Area of stratified drift = 6.45 mi^2	Total length of streams = 29.4 mi	Maximum elevation = 490 ft
Area of wetlands = 0.73 mi^2	Mean basin slope = 2.50 percent	Mean elevation = 284 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
5-19-86	3.60	7-26-89	3.27	9-07-89	5.06	8-30-90	1.70
7-24-86	4.90	8-28-89	6.93	7-11-90	1.49	9-06-90	1.37
7-29-87	1.30						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.32	46.5	70	3.50	12.8
98	.44	39.9	65	4.37	14.7
97	.54	35.5	60	5.49	17.6
95	.73	29.6	55	6.78	20.8
93	.95	25.1	50	8.28	24.2
90	1.30	20.0	August median	2.10	14.5
85	1.89	15.3	7Q10	.24	54.0
80	2.43	13.3	7Q2	.70	30.3
75	2.87	12.5			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Neponset River subbasin)
01105300 Steep Hill Brook at Canton, MA

LOCATION.--Lat 42˚08'39", long 71˚08'14", Norfolk County, at culvert on Bailey Street, 1.0 mi southeast of Canton.

PERIOD OF RECORD.--1966–68, 1985–90.

REMARKS.-- Flow affected by regulation by dams.

BASIN CHARACTERISTICS.--

Drainage area = 6.68 mi^2	Area of water bodies = 0.16 mi^2	Minimum elevation = 106 ft
Area of stratified drift = 5.57 mi^2	Total length of streams = 12.7 mi	Maximum elevation = 299 ft
Area of wetlands = 0.14 mi^2	Mean basin slope = 2.13 percent	Mean elevation = 204 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-13-66	2.13	8-23-67	5.99	10-31-85	4.69	8-28-89	17.9
10-06-66	4.42	9-07-67	5.91	7-24-86	8.60	9-06-89	12.9
7-12-67	9.16	9-21-67	5.34	7-29-87	3.90	7-11-90	6.00
8-02-67	8.46	9-23-68	5.54	6-28-88	3.80	8-30-90	6.27
8-18-67	7.00	5-15-85	8.04	7-26-89	11.2	9-06-90	3.63

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.13	11.4	70	8.09	5.1
98	2.48	10.1	65	9.36	5.9
97	2.77	9.1	60	10.7	6.8
95	3.19	8.0	55	12.1	7.7
93	3.56	7.2	50	13.5	8.6
90	4.09	6.2	August median	5.26	4.9
85	4.92	5.1	7Q10	1.78	13.6
80	5.84	4.6	7Q2	3.2.0	8.3
75	6.86	4.6		8.09	5.1

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Neponset River subbasin)

01105554 Neponset River near Dedham, MA

LOCATION.--Lat 42˚12'33", long 71˚08'47", Norfolk County, 5 ft upstream from bridge on Green Lodge Street, 0.1 mi upstream from State Highway 128, 2.9 mi southeast of Dedham.

PERIOD OF RECORD.--1989–90.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 88.5 mi^2	Area of water bodies = 3.28 mi^2	Minimum elevation = 49 ft
Area of stratified drift = 51.2 mi^2	Total length of streams = 188 mi	Maximum elevation = 490 ft
Area of wetlands = 6.43 mi^2	Mean basin slope = 2.48 percent	Mean elevation = 265 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01101000, 01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-26-89	112	9-06-89	54.4	8-30-90	101	9-06-90	54.1
8-29-89	89.7	7-19-90	34.5				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	7.20	30.1	70	65.3	5.4
98	9.42	26.7	65	78.0	5.4
97	11.4	24.4	60	97.9	6.8
95	14.6	21.4	55	120	8.7
93	17.7	18.9	50	145	10.8
90	22.3	16.0	August median	35	10.8
85	30.7	12.0	7Q10	5.14	35.8
80	42.5	8.5	7Q2	14.3	22.6
75	54.4	6.4		65.3	5.4

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Weymouth–Weir Rivers subbasin)
01105568 Cochato River at Holbrook, MA

LOCATION.--Lat 42˚09'19˝, long 71˚01'37", Norfolk County, at culvert on Union Street, 0.9 mi west of Holbrook.

PERIOD OF RECORD.--1992–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 4.31 mi^2	Area of water bodies = 0.05 mi^2	Minimum elevation = 118 ft
Area of stratified drift = 2.04 mi^2	Total length of streams = 6.53 mi	Maximum elevation = 241 ft
Area of wetlands = 0.05 mi^2	Mean basin slope = 1.30 percent	Mean elevation = 180 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105600, 01097300, 01105730, 01109000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-14-92	0.68	7-01-93	0.30	8-25-93	0.12	8-02-94	0.14
7-29-92	.53	7-22-93	.18	7-13-94	.45	8-11-94	.14
8-24-92	1.53						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.12	20.5	70	1.21	23.2
98	.15	17.0	65	1.52	26.2
97	.19	14.8	60	1.85	29.0
95	.24	12.7	55	2.22	31.5
93	.30	11.9	50	2.65	34.1
90	.38	11.9	August median	.60	15.1
85	.53	13.8	7Q10	.093	24.9
80	.73	17.0	7Q2	.25	14.0
75	.96	20.2			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Weymouth-Weir Rivers subbasin)
01105582 Monatiquot River at Braintree, MA

LOCATION.--Lat 42˚13'25", long 70˚59'49", Norfolk County, at bridge on Middle Street, 0.7 mi northeast of Braintree.

PERIOD OF RECORD.--1967, 1989–90.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 27.4 mi^2	Area of water bodies = 1.01 mi^2	Minimum elevation = 59 ft
Area of stratified drift = 10.8 mi^2	Total length of streams = 48.7 mi	Maximum elevation = 630 ft
Area of wetlands = 1.86 mi^2	Mean basin slope = 2.33 percent	Mean elevation = 330 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105600, 01097300, 01105730, 01109000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-18-67	11.3	9-20-67	4.26	9-07-89	15.7	8-30-90	14.0
8-21-67	7.36	7-25-89	31.9	7-11-90	1.64	9-06-90	6.33
9-06-67	8.95	8-28-89	21.5				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.38	53.3	70	17.0	15.1
98	.64	44.5	65	25.1	18.7
97	.93	38.5	60	36.3	23.0
95	1.62	30.6	55	50.2	27.3
93	2.44	25.1	50	66.7	31.3
90	4.01	19.3	August median	8.15	14.1
85	6.92	14.6	7Q10	.22	64.4
80	9.83	13.8	7Q2	1.50	32.9
75	12.4	13.7			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Weymouth-Weir Rivers subbasin)
01105610 Whitmans Pond Outlet at East Weymouth, MA

LOCATION.--Lat 42˚12'45", long 70˚55'32", Norfolk County, at culvert on Pleasant Street, 0.9 mi southeast of Weymouth.

PERIOD OF RECORD.--1966–67, 1989–91.

REMARKS.-- Flow affected by regulations by dam.

BASIN CHARACTERISTICS.--

Drainage area = 12.5 mi^2	Area of water bodies = 0.88 mi^2	Minimum elevation = 26 ft
Area of stratified drift = 4.61 mi^2	Total length of streams = 21.6 mi	Maximum elevation = 255 ft
Area of wetlands = 0.91 mi^2	Mean basin slope = 1.88 percent	Mean elevation = 141 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01097300, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-13-66	2.60	8-22-67	1.13	8-29-89	3.13	9-06-90	2.11
10-10-66	1.79	9-07-67	3.75	9-07-89	2.52	6-27-91	2.67
5-02-67	21.1	9-20-67	.49	7-11-90	1.15	7-18-91	.67
8-18-67	1.23	7-26-89	5.52	8-30-90	5.28	8-29-91	1.82

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.39	18.0	70	4.30	9.7
98	.52	15.6	65	5.38	10.9
97	.64	13.9	60	6.58	12.3
95	.85	11.9	55	7.91	13.6
93	1.08	10.4	50	9.37	14.9
90	1.42	9.0	August median	2.20	8.1
85	1.98	8.0	7Q10	.28	21.6
80	2.66	8.1	7Q2	.84	12.7
75	3.40	8.7			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Weymouth-Weir Rivers subbasin)
01105630 Crooked Meadow River near Hingham Center, MA

LOCATION.--Lat 42˚12'53", long 70˚53'06", Plymouth County, at culvert on Main Street, 1.3 mi south of Hingham Center.

PERIOD OF RECORD.--1969–71, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 4.91 mi^2	Area of water bodies = 0.06 mi^2	Minimum elevation = 29 ft
Area of stratified drift = 3.64 mi^2	Total length of streams = 10.9 mi	Maximum elevation = 180 ft
Area of wetlands = 0.21 mi^2	Mean basin slope = 1.63 percent	Mean elevation = 104 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01097300, 01105600, 01107530, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-23-69	1.70	10-12-70	0.85	8-11-94	0.25	8-07-96	1.79
10-15-69	1.45	7-09-71	.51	6-20-95	1.70	8-21-96	1.10
7-22-70	1.05	7-13-94	.95	8-11-95	1.05	9-05-96	2.89
9-11-70	.76	8-02-94	1.29	8-22-95	.03		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.35	14.0	70	3.19	13.4
98	.46	11.2	65	3.98	15.6
97	.56	9.4	60	4.82	17.5
95	.73	7.4	55	5.71	19.3
93	.89	6.4	50	6.71	21.0
90	1.08	6.0	August median	1.55	7.3
85	1.40	6.6	7Q10	.27	18.1
80	1.92	8.8	7Q2	.71	8.8
75	2.50	11.1			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BOSTON HARBOR BASIN (Weymouth-Weir Rivers subbasin)

01105640 Weir River near Hingham, MA

LOCATION.--Lat 42˚14'31", long 70˚51'36", Plymouth County, at culvert on Macadam Road, 0.3 mi above Foundry Pond, 1.5 mi east of Hingham.

PERIOD OF RECORD.--1969–71, 1989–91.

REMARKS.-- Flow affected by regulations by dams.

BASIN CHARACTERISTICS.--

Drainage area = 14.6 mi^2	Area of water bodies = 0.33 mi^2	Minimum elevation = 16 ft
Area of stratified drift = 9.65 mi^2	Total length of streams = 31.9 mi	Maximum elevation = 239 ft
Area of wetlands = 0.79 mi^2	Mean basin slope = 1.45 percent	Mean elevation = 127 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105600, 01105730, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-17-69	1.18	10-12-70	1.10	9-07-89	6.92	6-27-91	1.58
10-15-69	1.90	7-09-71	.82	7-11-90	3.60	7-18-91	.22
7-20-70	2.20	7-26-89	7.02	8-30-90	6.96	8-29-91	2.36
9-11-70	1.10	8-28-89	8.95	9-06-90	3.09		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.47	13.8	70	5.19	7.3
98	.61	12.0	65	6.73	8.6
97	.76	10.6	60	8.54	9.9
95	.98	9.1	55	10.6	11.1
93	1.22	7.9	50	12.9	12.3
90	1.62	6.6	August median	2.51	6.0
85	2.26	5.8	7Q10	.33	18.1
80	2.99	5.8	7Q2	.99	10.7
75	3.90	6.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

SOUTH COASTAL BASIN

01105670 Satuit River at Scituate, MA

LOCATION.--Lat 42˚11'35", long 70˚43'44", Plymouth County, at bridge on Old Parish Road, at Scituate.

PERIOD OF RECORD.--1990–92.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 1.61 mi^2	Area of water bodies = 0.00 mi^2	Minimum elevation = 6 ft
Area of stratified drift = 0.15 mi^2	Total length of streams = 2.47 mi	Maximum elevation = 124 ft
Area of wetlands = 0.06 mi^2	Mean basin slope = 0.81 percent	Mean elevation = 65 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105600, 01105730, 01105870

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-20-90	0.22	6-27-91	0.34	8-29-91	0.28	7-29-92	0.38
8-30-90	.47	7-18-91	.13	7-14-92	.48	8-25-92	.60
9-06-90	.49						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.14	19.9	70	0.58	13.0
98	.17	16.3	65	.67	15.3
97	.19	14.4	60	.75	17.0
95	.23	11.8	55	.84	19.0
93	.26	10.0	50	.91	20.4
90	.30	8.8	August median	.41	8.8
85	.36	8.4	7Q10	.12	23.5
80	.43	9.5	7Q2	.22	13.0
75	.50	11.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

SOUTH COASTAL BASIN

01105810 Third Herring Brook at Hanover, MA

LOCATION.--Lat 42˚07'01", long 70˚48'35", Plymouth County, at culvert on River Street, 0.5 mi northeast of Hanover.

PERIOD OF RECORD.--1969–71, 1987, 1990–92.

REMARKS.-- Flow affected by regulations by dams.

BASIN CHARACTERISTICS.--

Drainage area = 9.80 mi^2	Area of water bodies = 0.12 mi^2	Minimum elevation = 49 ft
Area of stratified drift = 5.57 mi^2	Total length of streams = 18.0 mi	Maximum elevation = 197 ft
Area of wetlands = 1.08 mi^2	Mean basin slope = 1.07 percent	Mean elevation = 110 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105600, 01105730, 0115870, 01109000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-17-69	2.10	7-09-71	0.60	8-30-90	4.63	8-29-91	1.78
10-15-69	2.37	8-14-87	.72	9-07-90	1.08	7-14-92	1.57
7-22-70	.76	8-25-87	.10	6-27-91	.75	7-29-92	1.00
9-11-70	.34	7-19-90	1.11	7-18-91	.51	8-24-92	7.14
10-13-70	.54						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.22	15.6	70	3.98	14.0
98	.32	13.0	65	5.39	16.2
97	.41	11.4	60	6.88	18.1
95	.57	9.6	55	8.75	20.0
93	.72	8.6	50	10.6	21.6
90	.96	8.1	August median	1.80	9.5
85	1.42	8.5	7Q10	.15	20.8
80	2.03	9.9	7Q2	.55	11.9
75	2.88	11.9			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

SOUTH COASTAL BASIN

01105820 Second Herring Brook at Norwell, MA

LOCATION.--Lat 42˚09'36", long 70˚47'20", Plymouth County, at culvert on State Highway 123, at Norwell.

PERIOD OF RECORD.--1969–71, 1990–92.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 3.17 mi^2	Area of water bodies = 0.05 mi^2	Minimum elevation = 49 ft
Area of stratified drift = 0.77 mi^2	Total length of streams = 6.09 mi	Maximum elevation = 197 ft
Area of wetlands = 0.28 mi^2	Mean basin slope = 1.14 percent	Mean elevation = 114 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105600,01105730, 01105870, 01109000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-17-69	0.61	10-12-70	0.26	9-06-90	0.20	7-14-92	0.56
10-15-69	.66	7-09-71	.21	6-27-91	.14	7-29-92	.13
7-20-70	.38	7-19-90	.45	7-18-91	.02	8-25-92	1.32
9-11-70	.32	8-30-90	.96	8-29-91	.47		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.047	24.2	70	1.29	18.7
98	.071	19.9	65	1.81	21.9
97	.094	17.3	60	2.37	24.6
95	.14	14.1	55	3.08	27.4
93	.18	12.1	50	3.80	29.6
90	.26	10.8	August median	.53	12.2
85	.41	11.0	7Q10	.033	29.9
80	.62	13.0	7Q2	.14	16.1
75	.91	15.7		1.29	18.7

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

SOUTH COASTAL BASIN

01105845 South River at Marshfield, MA

LOCATION.--Lat 42˚05'32", long 70˚43'50", Plymouth County, at culvert on Old Ocean Street, 0.8 mi west of Marshfield.

PERIOD OF RECORD.--1969–71, 1987, 1990.

REMARKS.-- Streamflow affected by dam regulations.

BASIN CHARACTERISTICS.--

Drainage area = 7.56 mi^2	Area of water bodies = 0.25 mi^2	Minimum elevation = 30 ft
Area of stratified drift =6.08 mi^2	Total length of streams = 13.3 mi	Maximum elevation = 203 ft
Area of wetlands = 0.62 mi^2	Mean basin slope = 0.82 percent	Mean elevation = 116 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105600, 01105730, 01105870, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-23-69	3.44	9-11-70	3.85	8-14-87	3.58	8-30-90	8.77
10-16-69	2.55	10-12-70	2.60	8-25-87	.46	9-06-90	3.82
7-23-70	2.52	7-09-71	2.10	7-19-90	4.06		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.49	9.6	70	5.65	6.3
98	1.73	8.1	65	6.50	7.4
97	1.94	7.1	60	7.28	8.4
95	2.24	5.9	55	8.26	9.6
93	2.51	5.0	50	9.15	10.5
90	2.89	4.2	August median	3.85	4.1
85	3.51	3.8	7Q10	1.26	12.1
80	4.10	4.2	7Q2	2.28	6.7
75	4.80	5.1			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

SOUTH COASTAL BASIN

01105861 Jones River Brook near Kingston, MA

LOCATION.--Lat 41˚59'47", long 70˚47'18", Plymouth County, at culvert on West St., 3.2 mi west of Kingston, 1.2 mi northeast of North Plympton.

PERIOD OF RECORD.--1983, 1987, 1993–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 4.74 mi^2	Area of water bodies = 0.06 mi^2	Minimum elevation = 39 ft
Area of stratified drift = 4.22 mi^2	Total length of streams = 7.92 mi	Maximum elevation = 170 ft
Area of wetlands = 0.00 mi^2	Mean basin slope = 1.06 percent	Mean elevation = 94 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105600, 01109000, 01105870, 01097300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-02-83	2.40	6-28-93	2.62	7-13-94	2.49	6-21-95	1.94
8-22-83	4.60	7-01-93	1.59	8-02-94	1.20	8-11-95	2.04
9-12-83	2.10	7-23-93	1.35	8-11-94	1.70	8-22-95	.32
8-21-87	.44	8-25-93	.23				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.60	13.5	70	5.09	15.9
98	.79	11.3	65	6.46	18.1
97	.95	10.0	60	7.61	19.6
95	1.23	8.9	55	9.63	21.9
93	1.47	8.6	50	11.5	23.7
90	1.81	9.1	August median	3.11	11.8
85	2.38	10.2	7Q10	.49	16.8
80	2.97	11.6	7Q2	1.24	10.1
75	3.93	13.7		5.09	15.9

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CAPE COD BASIN

011058793 Herring River near Wellfleet, MA

LOCATION.--Lat 41˚57'43", long 70˚01'16", Barnstable County, at culvert on dirt road, 0.6 mi east of stream crossing at State Highway 6, 1.8 mi northeast of Wellfleet center.

PERIOD OF RECORD.--1994–96.

REMARKS.-- Surface-water and ground-water drainage basins for this station are not coincident.

BASIN CHARACTERISTICS.--

Drainage area = 1.78 mi^2	Area of water bodies = 0.34 mi^2	Minimum elevation = 7 ft
Area of stratified drift = 1.78 mi^2	Total length of streams = 0.36 mi	Maximum elevation = 148 ft
Area of wetlands = 0.01 mi^2	Mean basin slope = 7.20 percent	Mean elevation = 63 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105870, 01105730, 01109000, 011058837

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-10-94	0.58	6-21-95	0.88	8-21-95	0	8-21-96	0.21
9-09-94	1.18	8-10-95	.010	8-07-96	.25	9-05-96	.52

ESTIMATED STREAMFLOW STATISTICS.--Not detemined because correlations of streamflow measurements at Herring River with same-day streamflows at nearby streamflow-gaging stations were poor.

CAPE COD BASIN

0110588320 Centerville River near Centerville, MA

LOCATION.--Lat 41˚39'06", long 70˚20'09", Barnstable County, at culvert on Pine Street, 0.7 mi east of Centerville.

PERIOD OF RECORD.--1994–96.

REMARKS.-- Surface-water and ground-water drainage basins for this station are not coincident.

BASIN CHARACTERISTICS.--

Drainage area = 5.67 mi^2	Area of water bodies = 0.24 mi^2	Minimum elevation = 35 ft
Area of stratified drift = 5.67 mi^2	Total length of streams = 4.05 mi	Maximum elevation = 199 ft
Area of wetlands = 0.00 mi^2	Mean basin slope = 3.86 percent	Mean elevation = 75 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105870, 01105730, 01109000, 011058837

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-21-94	0.12	6-21-95	0	8-21-95	0	8-20-96	0.05
8-10-94	.09	8-10-95	0	8-07-96	0	9-05-96	.10
9-09-94	0						

ESTIMATED STREAMFLOW STATISTICS.-- Not detemined because correlations of non-zero streamflow measurements at Centerville River with same-day streamflows at nearby streamflow-gaging stations were poor.

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CAPE COD BASIN

0110588340 Santuit River at Old Kings Road at Santuit, MA

LOCATION.--Lat 41˚37'39", long 70˚27'04", Barnstable County, at culvert on Old Kings Road, 0.7 mi south of Santuit.

PERIOD OF RECORD.--1993–96.

REMARKS.-- Surface-water and ground-water drainage basins for this station are not coincident.

BASIN CHARACTERISTICS.--

Drainage area = 3.21 mi^2	Area of water bodies = 0.27 mi^2	Minimum elevation = 16 ft
Area of stratified drift = 3.21 mi^2	Total length of streams = 8.62 mi	Maximum elevation = 134 ft
Area of wetlands = 0.08 mi^2	Mean basin slope = 3.36 percent	Mean elevation = 75 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105870, 01109000, 011058837

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
3-22-93	8.74	9-09-94	4.42	8-21-95	2.72	8-20-96	5.94
7-12-94	4.83	6-21-95	3.92	8-08-96	6.50	9-06-96	10.4
8-10-94	4.20	8-10-95	3.76				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.57	10.0	70	4.74	5.0
98	2.82	9.0	65	4.99	4.6
97	3.00	8.3	60	5.05	4.7
95	3.26	7.4	55	5.17	4.8
93	3.46	6.8	50	5.59	4.5
90	3.70	6.0	August median	4.63	4.5
85	4.06	5.5	7Q10	1.92	10.7
80	4.28	5.0	7Q2	3.73	8.6
75	4.53	4.9			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CAPE COD BASIN

0110588360 Mashpee River at Route 28, near Waquoit Village, MA

LOCATION.--Lat 41˚37'18", long 70˚28'51", Barnstable County, at bridge on State Highway 28, 1.8 mi south of Waquoit Village.

PERIOD OF RECORD.--1978, 1993, 1994–96.

REMARKS.-- Surface-water and ground-water drainage basins for this station are not coincident.

BASIN CHARACTERISTICS.--

Drainage area = 7.66 mi^2	Area of water bodies = 0.38 mi^2	Minimum elevation = 16 ft
Area of stratified drift = 7.66 mi^2	Total length of streams = 5.98 mi	Maximum elevation = 206 ft
Area of wetlands = 0.05 mi^2	Mean basin slope = 3.69 percent	Mean elevation = 111 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105870, 01105730, 01109000, 01105600, 011058837

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-04-78	15.5	8-10-94	11.9	8-10-95	7.39	8-20-96	9.43
3-22-93	22.9	9-09-94	15.4	8-21-95	7.23	9-06-96	7.32
7-12-94	13.9	6-21-95	10.2	8-08-96	10.6		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	6.61	9.3	70	12.9	5.7
98	7.29	8.2	65	13.4	6.0
97	7.76	7.5	60	13.9	6.3
95	8.47	6.6	55	14.5	6.8
93	9.03	6.1	50	15.0	6.9
90	9.66	5.6	August median	11.1	4.9
85	10.6	5.2	7Q10	6.27	10.6
80	11.3	5.2	7Q2	7.08	6.2
75	12.1	5.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CAPE COD BASIN

01105883757 Coonamessett River at Sandwich Road, near East Falmouth, MA

LOCATION.--Lat 41˚35'55", long 70˚34'20", Barnstable County, at Sandwich Road, 1.5 mi northwest of East Falmouth.

PERIOD OF RECORD.--1980, 1989, 1993, 1994–96.

REMARKS.-- Surface-water and ground-water drainage basins for this station are not coincident.

BASIN CHARACTERISTICS.--

Drainage area = 1.83 mi^2	Area of water bodies = 0.27 mi^2	Minimum elevation = 22 ft
Area of stratified drift = 1.83 mi^2	Total length of streams = 4.81 mi	Maximum elevation = 108 ft
Area of wetlands = 0.01 mi^2	Mean basin slope = 3.64 percent	Mean elevation = 65 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
011058730, 01105730, 01109000, 01105600, 011058837

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
11-09-79	5.10	7-06-89	5.55	8-10-94	5.35	8-21-95	2.82
1-25-89	2.26	3-24-93	11.7	9-09-94	4.46	8-08-96	5.30
4-12-89	6.23	6-17-93	7.04	6-21-95	3.63	8-20-96	2.13
5-24-89	7.43	7-12-94	5.99	8-10-95	2.96	9-06-96	5.06

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.80	7.6	70	5.14	3.7
98	3.04	6.8	65	5.42	3.7
97	3.21	6.3	60	5.59	3.8
95	3.46	5.7	55	5.84	3.9
93	3.66	5.2	50	6.09	4.0
90	3.91	4.7	August median	4.61	3.8
85	4.26	4.3	7Q10	2.73	8.8
80	4.56	3.9	7Q2	3.58	6.1
75	4.86	3.8			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

SOUTH COASTAL BASIN

011058839 Herring River at Bournedale, MA

LOCATION.--Lat 41˚46'21", long 70˚33'46", Barnstable County, at mouth, at Bournedale.

PERIOD OF RECORD.--1969–71, 1986, 1992–94.

REMARKS.-- Streamflow occasionally affected by dam regulations.

BASIN CHARACTERISTICS.--

Drainage area = 6.87 mi^2	Area of water bodies = 1.10 mi^2	Minimum elevation = 36 ft
Area of stratified drift = 6.87 mi^2	Total length of streams = 5.34 mi	Maximum elevation = 171 ft
Area of wetlands =0.02 mi^2	Mean basin slope = 2.21 percent	Mean elevation = 88 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 011058837, 01105870, 01105730

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-21-86	6.40	8-24-92	6.48	7-23-93	6.30	7-13-94	11.3
12-28-88	11.0	9-17-92	3.80	8-25-93	4.58	8-02-94	10.1
7-14-92	5.33	7-01-93	9.14	7-07-94	7.95	8-11-94	8.10

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.62	16.7	70	12.0	15.6
98	3.26	20.6	65	13.9	10.7
97	3.70	23.6	60	14.9	8.9
95	4.45	30.1	55	17.7	6.2
93	5.15	37.1	50	19.7	5.1
90	5.95	44.1	August median	10.2	15.0
85	7.60	46.1	7Q10	2.22	2.3
80	8.45	38.3	7Q2	4.71	6.2
75	10.2	24.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BUZZARDS BAY BASIN

011059106 Mattapoisett River tributary #1 near Rochester, MA

LOCATION.--Lat 41˚44'35", long 70˚52'04", Plymouth County, at bridge on Hartley Road, 2.6 mi west of Rochester.

PERIOD OF RECORD.--1982, 1992–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 2.58 mi^2	Area of water bodies = 0.02 mi^2	Minimum elevation = 52 ft
Area of stratified drift = 1.64 mi^2	Total length of streams = 3.46 mi	Maximum elevation = 88 ft
Area of wetlands = 0.50 mi^2	Mean basin slope = 0.61 percent	Mean elevation = 70 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105870, 01111200, 01105730

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
3-22-82	3.10	8-24-92	1.10	7-23-93	0.05	7-13-94	0.70
5-18-82	1.00	9-17-92	.36	8-25-93	.02	8-02-94	.17
7-13-82	.60	7-01-93	.08	7-07-94	1.19	8-10-94	.18
7-14-92	.22						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.090	18.2	70	0.64	8.8
98	.11	16.5	65	.74	8.0
97	.12	15.5	60	.87	7.4
95	.15	14.0	55	1.02	7.2
93	.17	13.0	50	1.20	7.4
90	.22	11.9	August median	.41	11.0
85	.32	10.8	7Q10	.076	21.1
80	.41	10.2	7Q2	.15	14.9
75	.52	9.7			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BUZZARDS BAY BASIN

01105930 Paskamanset River at Turner Pond near New Bedford, MA

LOCATION.--Lat 41˚40'43", long 70˚58'39", Bristol County, at bridge on Old Plainville Road, 4.0 mi northwest of New Bedford.

PERIOD OF RECORD.--1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 8.09 mi^2	Area of water bodies = 0.16 mi^2	Minimum elevation = 75 ft
Area of stratified drift = 3.63 mi^2	Total length of streams = 17.4 mi	Maximum elevation = 236 ft
Area of wetlands = 2.40 mi^2	Mean basin slope = 1.24 percent	Mean elevation = 155 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
0110900, 01105600, 01105730, 01111300, 01106000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
5-21-91	6.85	8-15-91	1.09	2-13-92	8.18	10-08-92	5.93
5-30-91	4.46	8-30-91	1.34	5-22-92	7.34	10-08-92	5.98
6-13-91	2.86	10-04-91	16.2	6-18-92	6.01	7-01-93	.65
6-27-91	1.11	1-21-92	9.92	7-28-92	1.72	7-23-93	.60
7-10-91	.74	1-28-92	21.6	8-25-92	12.4	8-25-93	.44
7-19-91	.87	2-04-92	12.3	9-16-92	4.28		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.41	14.5	70	6.23	7.6
98	.54	12.8	65	8.26	8.6
97	.68	11.7	60	10.5	9.5
95	.91	10.2	55	13.0	10.4
93	1.15	9.2	50	15.5	11.3
90	1.53	8.1	August median	2.71	7.0
85	2.29	7.0	7Q10	.32	17.9
80	3.34	6.7	7Q2	.94	11.9
75	4.63	6.9			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BUZZARDS BAY BASIN

01105935 Destruction Brook near South Dartmouth, MA

LOCATION.--Lat 41˚34'20", long 71˚00'47", Bristol County, at bridge on Slades Corner Road, 5 mi southwest of South Dartmouth.

PERIOD OF RECORD.--1972–74, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 2.64 mi^2	Area of water bodies = 0.01 mi^2	Minimum elevation = 41 ft
Area of stratified drift = 1.44 mi^2	Total length of streams = 5.76 mi	Maximum elevation = 179 ft
Area of wetlands = 0.43 mi^2	Mean basin slope = 1.82 percent	Mean elevation = 109 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
0110900, 01105600, 01105870, 01105730, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-24-72	1.16	5-30-91	2.35	10-04-91	3.20	7-29-92	1.14
6-06-73	2.95	6-14-91	1.21	1-22-92	3.64	8-25-92	4.54
8-09-73	.20	6-27-91	.71	1-28-92	6.78	9-17-92	2.01
9-06-73	.89	7-10-91	.56	2-04-92	4.32	7-01-93	1.04
7-17-74	.94	7-19-91	.53	2-13-92	3.42	7-23-93	.61
8-19-74	.30	8-15-91	1.10	5-22-92	2.38	8-25-93	.36
5-22-91	3.17	8-30-91	.88	6-18-92	1.66		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.39	8.4	70	2.31	4.4
98	.48	7.3	65	2.77	4.8
97	.56	6.7	60	3.21	5.3
95	.69	5.8	55	3.76	5.9
93	.81	5.2	50	4.27	6.4
90	.98	4.6	August median	1.45	4.1
85	1.28	4.1	7Q10	.33	10.7
80	1.60	4.0	7Q2	.69	7.1
75	1.93	4.1			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BUZZARDS BAY BASIN

01105937 Shingle Island River near North Dartmouth, MA

LOCATION.--Lat 41˚40'55", long 71˚01'05", Bristol County, at bridge on Old Fall River Road, 3 mi northwest of North Dartmouth.

PERIOD OF RECORD.--1957, 1972–74, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 8.59 mi^2	Area of water bodies = 0.02 mi^2	Minimum elevation = 70 ft
Area of stratified drift = 3.27 mi^2	Total length of streams = 15.3 mi	Maximum elevation = 270 ft
Area of wetlands = 0.76 mi^2	Mean basin slope = 1.52 percent	Mean elevation = 170 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105600, 01105730, 01111200, 01106000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-30-57	0.10	6-14-91	1.44	10-04-91	11.3	6-18-92	3.54
8-24-72	1.40	6-27-91	.49	1-21-92	9.48	7-29-92	1.18
6-07-73	6.52	7-11-91	.16	1-28-92	20.4	8-25-92	4.89
8-09-73	1.95	7-18-91	.07	2-04-92	11.7	9-17-92	1.88
7-18-74	2.13	8-15-91	1.81	2-13-92	8.95	7-01-93	.46
5-22-91	5.66	8-30-91	1.22	5-22-92	5.62	7-23-93	.08
5-31-91	6.85						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.085	16.2	70	4.25	7.9
98	.13	14.5	65	6.29	8.9
97	.18	13.4	60	8.78	9.9
95	.28	11.7	55	11.6	10.8
93	.40	10.4	50	14.7	11.7
90	.60	9.1	August median	1.29	7.8
85	1.05	7.7	7Q10	.062	21.1
80	1.76	7.0	7Q2	.28	14.3
75	2.80	7.2			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BUZZARDS BAY BASIN

01105947 Bread and Cheese Brook at Head of Westport, MA

LOCATION.--Lat 41˚38'00", long 71˚03'46", Bristol County, at culvert on State Highway 177, 1.0 mi north of Head of Westport.

PERIOD OF RECORD.--1972–74, 1992, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 9.25 mi^2	Area of water bodies = 0.01 mi^2	Minimum elevation = 19 ft
Area of stratified drift = 1.43 mi^2	Total length of streams = 18.3 mi	Maximum elevation = 296 ft
Area of wetlands =1.03 mi^2	Mean basin slope = 0.90 percent	Mean elevation = 155 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01009000, 01105600, 01105870, 01105730, 01111200, 01106000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-24-72	0.91	8-19-74	0.18	7-07-94	1.65	8-22-95	0.17
10-12-72	11.8	5-21-92	7.49	7-12-94	1.00	8-07-96	2.57
6-07-73	6.82	6-18-92	2.91	8-03-94	.36	8-20-96	1.25
8-09-73	1.78	7-29-92	.94	8-10-94	.39	9-05-96	6.56
9-06-73	1.47	8-26-92	4.25	6-21-95	3.65	9-11-96	10.6
7-18-74	1.72	9-18-92	1.75	8-10-95	.48	9-24-96	19.4

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.18	19.3	70	3.04	9.4
98	.26	17.1	65	4.08	10.3
97	.33	15.7	60	5.21	11.3
95	.47	13.8	55	6.78	12.5
93	.62	12.4	50	8.41	13.6
90	.82	11.1	August median	1.52	9.3
85	1.21	9.7	7Q10	.14	22.3
80	1.65	9.1	7Q2	.46	14.6
75	2.24	9.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01106430 Trout Brook at Brockton, MA

LOCATION.--Lat 42˚05'26", long 71˚00'45", Plymouth County, at bridge on Elliot Street, 0.2 mi east of Main Street, at Brockton

PERIOD OF RECORD.--1990.

REMARKS.-- Station discontinued after one year of data collection because initial assessment indicated correlations of measured streamflows with same-day mean streamflows at nearby continuous gaging stations were poor.

BASIN CHARACTERISTICS.--

Drainage area = 5.88 mi^2	Area of water bodies = 0.05 mi^2	Minimum elevation = 98 ft
Area of stratified drift = 2.38 mi^2	Total length of streams = 9.98 mi	Maximum elevation = 269 ft
Area of wetlands = 0.04 mi^2	Mean basin slope = 1.62 percent	Mean elevation = 184 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01009000, 01118000, 01105730, 01105870, 01111200, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-10-90	2.56	8-31-90	5.33	9-07-90	4.18

ESTIMATED STREAMFLOW STATISTICS.--Not estimated.

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01106460 Beaver Brook near East Bridgewater, MA

LOCATION.--Lat 42˚02'43", long 70˚58'17", Plymouth County, at culvert on Belmont Street, 1.0 mi northwest of East Bridgewater.

PERIOD OF RECORD.--1965–68, 1983, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 8.94 mi^2	Area of water bodies = 0.19 mi^2	Minimum elevation = 55 ft
Area of stratified drift = 3.30 mi^2	Total length of streams = 17.3 mi	Maximum elevation = 259 ft
Area of wetlands = 0.91 mi^2	Mean basin slope = 1.50 percent	Mean elevation = 175 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01009000, 01118000, 01105730, 01105870, 01111200, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-09-65	0.14	9-19-67	1.07	8-25-83	0.80	8-11-95	0.98
8-22-66	.39	9-05-68	.92	7-13-94	1.34	8-22-95	.76
9-12-66	.76	7-14-83	.69	8-02-94	.45	8-07-96	2.41
8-25-67	1.56	7-18-83	1.10	8-11-94	.52	8-21-96	1.60
9-07-67	1.89	8-23-83	.87	6-20-95	3.21	9-05-96	3.82
9-13-67	.89						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.40	9.3	70	2.80	10.2
98	.50	7.7	65	3.41	11.5
97	.60	6.7	60	3.99	12.5
95	.74	5.8	55	4.84	13.8
93	.89	5.4	50	5.66	14.9
90	1.10	5.5	August median	1.64	6.9
85	1.44	6.3	7Q10	.34	11.8
80	1.81	7.5	7Q2	.76	6.9
75	2.26	8.8			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01106500 Matfield River at Elmwood, MA

LOCATION.--Lat 42˚00'55", long 70˚57'42", Plymouth County, at bridge on State Highway 18 at Elmwood, 0.6 mi upstream from Satucket River, and 1.2 mi south of East Bridgewater.

PERIOD OF RECORD.--Continuous streamflow record 1958–60; 1965, 1978–81, 1983, 1990-91.

REMARKS.-- Streamflow affected by dam regulations.

BASIN CHARACTERISTICS.--

Drainage area = 40.6 mi^2	Area of water bodies = 0.52 mi^2	Minimum elevation = 36 ft
Area of stratified drift = 18.4 mi^2	Total length of streams = 83.7 mi	Maximum elevation = 320 ft
Area of wetlands = 2.79 mi^2	Mean basin slope = 1.05 percent	Mean elevation = 187 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01111300, 01105600, 01105730, 01105870, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-06-65	9.63	7-15-80	36.0	9-01-81	15.0	7-17-90	25.1
9-12-78	49.0	8-18-80	17.0	7-20-83	21.0	9-07-90	27.0
7-10-79	21.0	7-21-81	19.0	9-06-83	25.0	10-04-90	22.2
5-20-80	62.0						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	12.0	10.0	70	38.4	6.8
98	14.0	8.6	65	43.0	7.8
97	15.4	7.7	60	47.1	8.6
95	17.6	6.6	55	52.5	9.6
93	19.5	5.9	50	57.2	10.5
90	22.1	5.3	August median	27.9	5.1
85	25.9	5.0	7Q10	10.3	11.9
80	29.7	5.3	7Q2	17.4	6.9
75	33.8	6.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01106900 Poor Meadow Brook at South Hanson, MA

LOCATION.--Lat 42˚02'32", long 70˚53'56", Plymouth County, at bridge on State Highway 27, 0.9 mi west of South Hanson and 2.5 mi south of Hanson

PERIOD OF RECORD.--Continuous gaging station 1958–60; 1965; 1990.

REMARKS.-- Station discontinued after one year of data collection because initial assessment indicated correlations of measured streamflows with same-day mean streamflows at nearby continuous gaging stations were poor. Discharge measurements below do not include those made when the continuous gaging station was in operation.

BASIN CHARACTERISTICS.--

Drainage area = 14.6 mi^2	Area of water bodies = 0.08 mi^2	Minimum elevation = 60 ft
Area of stratified drift = 6.48 mi^2	Total length of streams = 30.9 mi	Maximum elevation = 206 ft
Area of wetlands = 1.78 mi^2	Mean basin slope = 1.07 percent	Mean elevation = 116 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01009000, 01118000, 01105730, 01105870, 01111200, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-5-65	0.18	7-11-90	1.47	8-30-90	8.59	9-07-90	2.82

ESTIMATED STREAMFLOW STATISTICS.--Not estimated.

TAUNTON RIVER BASIN

01106915 Robbins Pond Outlet near East Bridgewater, MA

LOCATION.--Lat 42˚00'32", long 70˚54'29", Plymouth County, at bridge on Pond Street, 3.1 mi southeast of East Bridgewater

PERIOD OF RECORD.--1990.

REMARKS.-- Station affected by regulations by dams and cranberry bogs. Station discontinued after one year of data collection because initial assessment indicated correlations of measured streamflows with same-day mean streamflows at nearby continuous gaging stations were poor.

BASIN CHARACTERISTICS.--

Drainage area = 13.3 mi^2	Area of water bodies = 1.84 mi^2	Minimum elevation = 19 ft
Area of stratified drift = 13.3 mi^2	Total length of streams = 34.3 mi	Maximum elevation = 140 ft
Area of wetlands = 2.95 mi^2	Mean basin slope = 0.71 percent	Mean elevation = 88ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01009000, 01118000, 01105730, 01105870, 01111200, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-11-90	3.31	9-06-90	5.46	10-04-90	6.62

ESTIMATED STREAMFLOW STATISTICS.--Not estimated.

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01106920 Satucket River at East Bridgewater, MA

LOCATION.--Lat 42˚01'13", long 70˚57'09", Plymouth County, 100 ft downstream from mill on State Highway 106, 0.9 mi southeast of East Bridgewater.

PERIOD OF RECORD.--1966–67, 1990–91.

REMARKS.-- Streamflow affected by dam regulations.

BASIN CHARACTERISTICS.--

Drainage area = 34.7 mi^2	Area of water bodies = 1.93 mi^2	Minimum elevation = 19 ft
Area of stratified drift = 24.5 mi^2	Total length of streams = 82.0 mi	Maximum elevation = 206 ft
Area of wetlands = 5.55 mi^2	Mean basin slope = 0.84 percent	Mean elevation = 106 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105600, 01105730, 01105870, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-22-66	1.24	9-05-67	10.7	7-19-90	6.46	10-04-90	13.9
9-13-66	3.07	9-18-67	3.63	9-07-90	10.5		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.97	11.4	70	12.9	12.1
98	2.48	9.6	65	15.9	13.8
97	2.89	8.6	60	18.9	15.3
95	3.53	7.6	55	22.4	16.9
93	4.07	7.2	50	25.9	18.2
90	4.83	6.9	August median	7.06	8.1
85	6.32	7.5	7Q10	1.59	15.1
80	8.11	8.8	7Q2	3.51	9.2
75	10.3	10.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01107010 Queset Brook at North Easton, MA

LOCATION.--Lat 42˚03'57", long 71˚05'43", Bristol County, at bridge on Main Street, 0.5 mi east of North Easton.

PERIOD OF RECORD.--1990.

REMARKS.-- Station affected by dam regulations and withdrawals by municipal supply wells. Station discontinued after one year of data collection because initial assessment indicated correlations of measured streamflows with same-day mean streamflows at nearby continuous gaging stations were poor.

BASIN CHARACTERISTICS.--

Drainage area = 7.47 mi^2	Area of water bodies = 0.27 mi^2	Minimum elevation = 117 ft
Area of stratified drift = 2.08 mi^2	Total length of streams = 18.6 mi	Maximum elevation = 399 ft
Area of wetlands =0.41 mi^2	Mean basin slope = 1.94 percent	Mean elevation = 247 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105600, 01105730, 01105870, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-10-90	1.37	8-31-90	2.74	9-07-90	2.08

ESTIMATED STREAMFLOW STATISTICS.-- Not estimated.

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01107050 Hockomock River near West Bridgewater, MA

LOCATION.--Lat 42˚00'40", long 71˚03'31", Plymouth County, at bridge on State Highway 106, 2.6 mi west of West Bridgewater.

PERIOD OF RECORD.--1966–68, 1990.

REMARKS.-- Streamflow affected by dam regulations and withdrawals by municipal supply wells.

BASIN CHARACTERISTICS.--

Drainage area = 20.5 mi^2	Area of water bodies = 0.40 mi^2	Minimum elevation = 69 ft
Area of stratified drift = 7.81 mi^2	Total length of streams = 46.1 mi	Maximum elevation = 399 ft
Area of wetlands = 1.15 mi^2	Mean basin slope = 1.21 percent	Mean elevation = 223 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105600, 01105730, 01105870, 01111200, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-22-66	1.42	9-08-67	5.00	10-25-67	6.30	8-31-90	11.6
9-12-66	3.07	9-13-67	3.58	9-19-68	1.38	9-07-90	6.11
8-25-67	7.66	9-20-67	3.52	7-11-90	4.33		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.96	7.8	70	8.78	6.6
98	2.34	6.7	65	10.3	7.6
97	2.66	5.9	60	11.8	8.5
95	3.14	5.1	55	13.6	9.4
93	3.53	4.6	50	15.3	10.2
90	4.08	4.2	August median	5.47	4.6
85	5.00	4.2	7Q10	1.67	10.3
80	6.03	4.7	7Q2	3.18	6.2
75	7.30	5.6			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01107100 Town River at Bridgewater, MA

LOCATION.--Lat 41˚59'49", long 70˚58'23", Plymouth County, at bridge on State Highway 18, 0.5 mi north of Bridgewater.

PERIOD OF RECORD.--1966–67, 1990–91.

REMARKS.-- Streamflow affected by dam regulations and withdrawal by municipal supply wells.

BASIN CHARACTERISTICS.--

Drainage area = 55.6 mi^2	Area of water bodies = 1.55 mi^2	Minimum elevation = 32 ft
Area of stratified drift = 31.0 mi^2	Total length of streams = 119 mi	Maximum elevation = 399 ft
Area of wetlands = 9.46 mi^2	Mean basin slope = 0.80 percent	Mean elevation = 209 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105730, 01105870, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-22-66	1.76	9-05-67	21.4	7-17-90	21.4	10-04-90	25.2
9-13-66	6.32	9-19-67	10.1	9-06-90	25.1		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	4.43	12.0	70	29.2	12.0
98	6.16	10.2	65	34.4	13.6
97	7.65	9.1	60	38.9	15.0
95	9.68	8.0	55	44.6	16.5
93	11.2	7.5	50	49.7	17.8
90	13.1	7.2	August median	17.9	8.5
85	16.2	7.7	7Q10	2.97	17.0
80	19.9	8.7	7Q2	9.47	10.6
75	23.9	10.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01107188 Winnetuxet River at Thompson Street near Halifax, MA

LOCATION.--Lat 41˚58'09", long 70˚54'03", Plymouth County, at bridge on Thompson Street, 2.4 mi southwest of Halifax.

PERIOD OF RECORD.--1990–92.

REMARKS.-- Streamflow affected by regulations by dams and cranberry bogs.

BASIN CHARACTERISTICS.--

Drainage area = 40.2 mi^2	Area of water bodies = 0.80 mi^2	Minimum elevation = 32 ft
Area of stratified drift = 34.1 mi^2	Total length of streams = 89.9 mi	Maximum elevation = 288 ft
Area of wetlands = 7.06 mi^2	Mean basin slope = 0.80 percent	Mean elevation = 137 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105600, 01109000, 01105730, 01105870

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-11-90	18.5	6-26-91	9.80	8-29-91	22.3	7-29-92	10.4
8-30-90	54.6	7-19-91	8.00	7-14-92	18.9	9-17-92	14.6
9-06-90	23.5						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	6.14	13.5	70	32.0	9.1
98	7.52	11.4	65	39.3	10.9
97	8.79	9.9	60	45.6	12.3
95	10.7	8.2	55	54.8	14.2
93	12.2	7.2	50	62.7	15.6
90	14.4	6.4	August median	20.8	6.2
85	17.8	6.0	7Q10	4.93	16.8
80	21.0	6.5	7Q2	10.6	9.2
75	25.6	7.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01108140 Poquoy Brook near North Middleboro, MA

LOCATION.--Lat 41˚54'20", long 70˚59'19", Plymouth County, at culvert on Vernon Street, 2.0 mi south of North Middleboro.

PERIOD OF RECORD.--1966–68, 1990–92.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 8.20 mi^2	Area of water bodies = 0.18 mi^2	Minimum elevation = 32 ft
Area of stratified drift = 6.98 mi^2	Total length of streams = 16.0 mi	Maximum elevation = 131 ft
Area of wetlands = 0.89 mi^2	Mean basin slope = 1.09 percent	Mean elevation = 82 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105600, 01111300, 01105730

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-22-66	1.13	9-15-67	4.45	8-30-90	7.55	8-29-91	2.79
9-12-66	2.66	9-20-67	3.54	9-06-90	3.34	7-14-92	4.55
8-25-67	4.00	9-18-68	4.02	6-26-91	2.69	7-29-92	2.59
9-07-67	2.94	7-10-90	3.99	7-19-91	2.39	8-24-92	6.14

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.75	7.9	70	5.89	7.0
98	2.02	6.7	65	6.68	8.1
97	2.25	5.8	60	7.45	9.1
95	2.57	5.0	55	8.23	10.0
93	2.84	4.5	50	8.96	10.8
90	3.21	4.2	August median	4.02	4.6
85	3.78	4.3	7Q10	1.47	10.1
80	4.42	5.0	7Q2	2.56	5.6
75	5.13	6.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01108180 Cotley Brook at East Taunton, MA

LOCATION.--Lat 41˚52'57", long 71˚02'54", Bristol County, at bridge on Middleboro Avenue, 1.0 mi west of East Taunton.

PERIOD OF RECORD.--1966–68, 1990–92.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 7.48 mi^2	Area of water bodies = 0.05 mi^2	Minimum elevation = 15 ft
Area of stratified drift = 3.69 mi^2	Total length of streams = 11.6 mi	Maximum elevation = 183 ft
Area of wetlands = 0.61 mi^2	Mean basin slope = 0.96 percent	Mean elevation = 92 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105600, 01111300, 01105730

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-22-66	0.34	9-20-68	0.66	6-26-91	1.41	7-14-92	2.20
9-12-66	1.42	7-10-90	2.21	7-19-91	1.25	7-29-92	1.45
8-23-67	2.37	9-06-90	1.82	8-29-91	1.48	8-24-92	4.22
9-06-67	2.72	10-04-90	1.57				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.60	12.8	70	3.64	11.9
98	.75	10.7	65	4.38	13.7
97	.88	9.3	60	5.13	15.3
95	1.07	7.8	55	5.90	16.8
93	1.24	7.0	50	6.64	18.1
90	1.48	6.5	August median	2.09	7.5
85	1.90	7.0	7Q10	.47	16.3
80	2.41	8.3	7Q2	1.06	8.8
75	2.99	10.1			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01108280 Forge River near Taunton, MA

LOCATION.--Lat 41˚54'25", long 71˚03'33", Bristol County, at bridge on South Street West, 1.8 mi east of Taunton.

PERIOD OF RECORD.--1966–68, 1990.

REMARKS.-- Streamflow affected by dam regulations and withdrawal by municipal supply wells.

BASIN CHARACTERISTICS.--

Drainage area = 9.19 mi^2	Area of water bodies = 0.20 mi^2	Minimum elevation = 10 ft
Area of stratified drift = 8.55 mi^2	Total length of streams = 12.5 mi	Maximum elevation = 196 ft
Area of wetlands = 1.72 mi^2	Mean basin slope = 0.59 percent	Mean elevation = 99 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105730, 01105870, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-22-66	1.06	9-06-67	4.49	9-19-68	2.24	8-30-90	9.77
9-12-66	1.66	9-14-67	3.66	7-10-90	5.22	9-06-90	4.31
8-23-67	4.31	9-21-67	2.82				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.41	5.2	70	6.26	4.2
98	1.68	4.5	65	7.61	4.8
97	1.89	4.0	60	8.96	5.4
95	2.24	3.5	55	10.8	6.0
93	2.54	3.2	50	12.7	6.5
90	2.93	3.0	August median	4.06	3.2
85	3.57	2.9	7Q10	1.26	7.7
80	4.20	3.2	7Q2	2.20	5.0
75	5.11	3.6			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01108320 Canoe River near Norton, MA

LOCATION.--Lat 41˚58'38", long 71˚08'40", Bristol County, at bridge on Plain Street, 2.4 mi northeast of Norton.

PERIOD OF RECORD.--1965–68, 1978–81, 1983, 1990–91.

REMARKS.-- Streamflow affected by dam regulations and withdrawals by municipal supply wells.

BASIN CHARACTERISTICS.--

Drainage area = 18.3 mi^2	Area of water bodies = 0.18 mi^2	Minimum elevation = 69 ft
Area of stratified drift = 14.1 mi^2	Total length of streams = 56.5 mi	Maximum elevation = 359 ft
Area of wetlands = 1.62 mi^2	Mean basin slope = 0.93 percent	Mean elevation = 211 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01111300, 01105600, 01105730, 01105870, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-31-65	0.40	9-21-67	4.32	8-18-80	1.70	7-10-90	8.87
9-09-65	.24	10-25-67	6.97	10-08-80	1.20	9-06-90	5.37
8-22-66	.66	9-19-68	2.68	6-19-81	2.90	10-04-90	4.61
9-12-66	2.31	9-12-78	2.00	8-13-81	.83	6-26-91	3.04
8-23-67	9.57	7-10-79	4.50	7-20-83	2.40	7-22-91	.86
9-06-67	8.85	5-15-80	31.0	9-07-83	1.70	8-29-91	7.50
9-14-67	5.50	7-15-80	2.90				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.70	11.1	70	10.3	9.8
98	.97	9.5	65	13.6	11.2
97	1.22	8.4	60	17.3	12.4
95	1.66	7.3	55	22.2	13.8
93	2.10	6.6	50	27.3	14.9
90	2.75	6.2	August median	4.71	6.9
85	3.97	6.4	7Q10	.50	14.4
80	5.47	7.2	7Q2	1.64	8.6
75	7.55	8.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01108400 Mill River near Taunton, MA

LOCATION.--Lat 41˚55'23", long 71˚06'23", Bristol County, at bridge on Whittenton Street, 1.6 mi northwest of Taunton.

PERIOD OF RECORD.--1966–67, 1986–88, 1990.

REMARKS.-- Streamflow affected by dam regulations and withdrawals by municipal supply wells.

BASIN CHARACTERISTICS.--

Drainage area = 41.2 mi^2	Area of water bodies = 1.46 mi^2	Minimum elevation = 49 ft
Area of stratified drift = 29.8 mi^2	Total length of streams = 107 mi	Maximum elevation = 405 ft
Area of wetlands = 4.31 mi^2	Mean basin slope = 0.85 percent	Mean elevation = 225 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105600, 01105730, 01105870, 01111300, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-22-66	3.42	5-20-86	6.67	2-12-87	86.0	8-14-87	5.25
9-12-66	3.84	8-14-86	107	3-16-87	123	9-18-87	75.0
8-24-67	65.0	9-16-86	32.2	4-06-87	717	10-15-87	30.3
9-08-67	29.0	10-16-86	20.0	4-21-87	221	7-10-90	21.4
4-07-86	50.9	11-14-86	83.1	5-13-87	126	8-30-90	42.8
4-09-96	53.4	12-16-86	131	6-15-87	17.7	9-06-90	9.66
5-19-86	23.3	1-15-87	172	7-14-87	21.8		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	3.35	14.1	70	31.2	5.9
98	4.35	12.8	65	39.6	5.9
97	5.22	11.9	60	48.4	6.1
95	6.65	10.8	55	59.3	6.5
93	8.02	9.9	50	70.3	6.9
90	10.0	9.0	August median	17.3	7.3
85	13.8	7.8	7Q10	2.63	16.4
80	18.1	6.9	7Q2	6.96	11.4
75	24.0	6.2			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01108600 Hodges Brook at West Mansfield, MA

LOCATION.--Lat 41˚59'11", long 71˚14'27", Bristol County, at culvert on Oak Street, 0.8 mi south of West Mansfield.

PERIOD OF RECORD.--1966–67, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 3.83 mi^2	Area of water bodies = 0.01 mi^2	Minimum elevation = 124 ft
Area of stratified drift = 2.49 mi^2	Total length of streams = 11.4 mi	Maximum elevation = 305 ft
Area of wetlands = 0.19 mi^2	Mean basin slope = 0.96 percent	Mean elevation = 214ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01105730, 01105870, 01111200, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-22-66	0.01	7-12-94	1.50	7-05-95	0.37	9-01-95	0.01
9-12-66	.06	8-10-94	.46	7-24-95	.21	9-12-95	.004
8-23-67	.51	9-16-94	.41	7-24-95	.22	10-02-95	.32
9-06-67	.61	9-21-94	.40	8-10-95	.80	8-07-96	2.93
9-14-67	.28	10-14-94	.77	8-14-95	.20	8-20-96	.42
9-21-67	.14	6-21-95	1.14	8-15-95	.16	9-05-96	.14
9-06-68	.09	6-21-95	1.03	8-22-95	.03		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.036	15.4	70	3.29	19.1
98	.058	12.9	65	5.51	21.7
97	.084	11.3	60	8.37	23.9
95	.14	9.9	55	13.2	26.5
93	.20	9.4	50	19.3	28.6
90	.32	9.8	August median	.90	13.3
85	.61	11.6	7Q10	.025	22.1
80	1.05	13.7	7Q2	.15	13.8
75	1.88	16.3		3.29	19.1

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01109020 Rumford River at East Foxboro, MA

LOCATION.--Lat 42˚03'48", long 71˚12'57", Bristol County, at culvert on Cocasset Street, 0.8 mi west of East Foxboro.

PERIOD OF RECORD.--1966–68, 1990.

REMARKS.-- Streamflow affected by withdrawals by municipal supply wells. Station discontinued after one year of data collection because the newer measurements correlated poorly with same-day streamflows at nearby continuous gaging stations.

BASIN CHARACTERISTICS.--

Drainage area = 5.10 mi^2	Area of water bodies = 0.10 mi^2	Minimum elevation = 200 ft
Area of stratified drift = 3.83 mi^2	Total length of streams = 12.6 mi	Maximum elevation = 453 ft
Area of wetlands = 0.45 mi^2	Mean basin slope = 2.04 percent	Mean elevation = 311 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105730, 01105870, 01109000, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-22-66	0.53	9-06-67	3.47	9-06-68	1.25	8-30-90	1.81
9-12-66	1.16	9-14-67	2.34	7-10-90	.84	9-06-90	1.24
8-23-67	3.21	9-21-67	2.36				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.89	5.5	70	4.82	7.3
98	1.09	4.6	65	5.82	8.3
97	1.28	4.1	60	6.87	9.2
95	1.57	3.7	55	8.06	10.1
93	1.78	3.7	50	9.28	10.9
90	2.09	3.8	August median	2.95	5.1
85	2.61	4.5	7Q10	.76	8.8
80	3.17	5.2	7Q2	1.56	5.8
75	3.92	6.2			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01109040 Rumford River at Norton, MA

LOCATION.--Lat 41˚58'23", long 71˚10'32", Bristol County, at bridge on State Highway 123, 0.8 mi northeast of Norton.

PERIOD OF RECORD.--1965, 1990–92.

REMARKS.-- Streamflow affected by dam regulations and withdrawals by municipal supply wells.

BASIN CHARACTERISTICS.--

Drainage area = 20.5 mi^2	Area of water bodies = 0.22 mi^2	Minimum elevation = 69 ft
Area of stratified drift = 13.6 mi^2	Total length of streams = 54.3 mi	Maximum elevation = 453 ft
Area of wetlands = 1.47 mi^2	Mean basin slope = 1.15 percent	Mean elevation = 245 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105600, 01105730, 01105870, 01109000, 01111300, 01118000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-31-65	6.30	9-06-90	12.1	8-26-91	1.25	8-24-92	19.0
9-09-65	4.56	10-04-90	3.65	8-29-91	14.9	9-17-92	7.66
7-10-90	11.6	7-19-91	.78	7-14-92	8.48		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.58	24.7	70	23.7	18.8
98	2.05	20.9	65	33.2	22.3
97	2.50	18.4	60	43.8	25.4
95	3.19	15.6	55	58.0	28.4
93	3.92	13.7	50	73.6	31.1
90	5.11	11.9	August median	9.63	11.9
85	7.52	11.0	7Q10	1.40	28.8
80	11.2	12.5	7Q2	3.43	16.5
75	16.7	15.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01109087 Assonet River at Assonet, MA

LOCATION.--Lat 41˚47'57", long 71˚03'37", Bristol County, at bridge on Locust Street, 0.5 mi northeast of Assonet.

PERIOD OF RECORD.--1986–88, 1990–91.

REMARKS.-- Occasional regulation by upstream dam.

BASIN CHARACTERISTICS.--

Drainage area = 20.7 mi^2	Area of water bodies = 0.15 mi^2	Minimum elevation = 27 ft
Area of stratified drift = 9.37 mi^2	Total length of streams = 37.0 mi	Maximum elevation = 249 ft
Area of wetlands = 2.53 mi^2	Mean basin slope = 1.42 percent	Mean elevation = 138 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01105730, 01109000, 01111200, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-12-86	11.8	2-12-87	45.8	7-14-87	7.12	8-30-90	10
9-16-86	4.4	3-16-87	62.4	8-14-87	1.86	9-06-90	4.95
10-16-86	11.2	4-06-87	427	9-18-87	18.1	6-26-91	3.97
11-14-86	32.9	4-20-87	105	10-15-87	4.26	7-19-91	2.64
12-16-86	43	5-13-87	48.1	7-10-90	5.76	8-29-91	5.68
1-14-87	82.3	6-15-87	14				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.84	14.0	70	10.4	6.0
98	1.11	12.9	65	13.3	5.8
97	1.40	11.9	60	16.3	5.7
95	1.84	10.8	55	19.8	5.8
93	2.27	10.1	50	24.0	6.0
90	2.99	9.1	August median	4.67	7.8
85	4.22	8.0	7Q10	.62	17.6
80	5.95	7.0	7Q2	1.91	12.5
75	7.98	6.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

NARRAGANSETT BAY BASIN

01109185 East Branch Palmer River near Rehoboth, MA

LOCATION.--Lat 41˚51'36", long 71˚13'47", Bristol County, at bridge on State Highway 44, 1.7 mi northeast at Rehoboth.

PERIOD OF RECORD.--1992–94.

REMARKS.-- Occasional regulation by upstream dam and fish ladder.

BASIN CHARACTERISTICS.--

Drainage area = 5.86 mi^2	Area of water bodies = 0.02 mi^2	Minimum elevation = 68 ft
Area of stratified drift = 2.69 mi^2	Total length of streams = 8.68 mi	Maximum elevation = 26 ft
Area of wetlands = 0.59 mi^2	Mean basin slope = 0.95 percent	Mean elevation = 164 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105870, 01109000, 01121000, 01175670

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-14-92	0	7-01-93	0.027	8-25-93	0.004	8-10-94	0.09
8-24-92	.20	7-22-93	0	7-12-94	.48	9-21-94	.19
9-17-92	.13						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.013	32.4	70	0.60	28.0
98	.020	27.9	65	.98	32.5
97	.028	24.4	60	1.49	37.0
95	.042	21.1	55	2.49	41.4
93	.054	19.3	50	3.83	45.6
90	.077	17.9	August median	.21	20.5
85	.14	18.0	7Q10	.009	39.8
80	.22	19.9	7Q2	.045	23.5
75	.37	23.8		.60	28.0

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

NARRAGANSETT BAY BASIN

01109225 Rocky Run near Rehoboth, MA

LOCATION.--Lat 41˚46'52", long 71˚15'03", Bristol County, at bridge on Davis Street, 2.2 mi south of Rehoboth.

PERIOD OF RECORD.--1972–74, 1979–81, 1983, 1986–87, 1994–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 7.21 mi^2	Area of water bodies = 0.02 mi^2	Minimum elevation = 19 ft
Area of stratified drift = 2.85 mi^2	Total length of streams = 11.6 mi	Maximum elevation = 200 ft
Area of wetlands = 1.18 mi^2	Mean basin slope = 1.11 percent	Mean elevation = 109 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01106000, 01109000, 01111200, 01111300, 01118000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-24-72	1.10	7-15-80	.86	12-05-86	69.8	7-14-87	0.64
10-12-72	6.70	8-25-80	.23	12-17-86	11.7	9-17-87	6.14
6-07-73	5.50	6-19-81	.46	1-14-87	21.6	10-16-87	2.75
8-10-73	1.20	8-24-81	.02	2-13-87	11.9	7-07-94	1.12
9-11-73	3.60	7-20-83	1.50	3-17-87	14.2	7-12-94	.61
7-18-74	1.40	9-06-83	1.20	4-06-87	140	8-10-94	.37
8-20-74	.02	8-14-86	2.94	4-21-87	26.9	6-21-95	3.75
7-10-79	1.50	9-16-86	.57	5-13-87	12.8	8-10-95	.59
8-27-79	2.60	10-17-86	2.07	6-16-87	1.17	8-14-95	.04
5-16-80	11.0	11-14-86	4.39				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.083	19.3	70	2.05	8.9
98	.11	17.8	65	2.90	9.0
97	.14	16.8	60	3.95	9.4
95	.18	15.6	55	5.15	10.0
93	.24	14.4	50	6.60	10.7
90	.35	13.0	August median	.60	11.0
85	.55	11.3	7Q10	.065	22.0
80	.88	10.0	7Q2	.20	16.2
75	1.39	9.1			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TENMILE RIVER BASIN

01109381 Speedway Brook at Attleboro, MA

LOCATION.--Lat 41˚55'37", long 71˚17'08", Bristol County, at bridge on State Highway 152, 0.7 mi south of Attleboro.

PERIOD OF RECORD.--1992–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = not available	Area of water bodies = not available	Minimum elevation = 109 ft
Area of stratified drift = not available	Total length of streams = not available	Maximum elevation = 242 ft
Area of wetlands = not available	Mean basin slope = not available	Mean elevation = 158 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01105730, 01109000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-14-92	0.48	7-02-93	0.45	8-25-93	0.25	8-10-94	0.42
8-24-92	.88	7-19-93	.32	7-12-94	.83	9-21-94	.42
9-17-92	.49						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.29	9.2	70	0.82	9.7
98	.32	7.9	65	.91	11.0
97	.36	6.8	60	1.00	12.2
95	.40	5.8	55	1.09	13.3
93	.44	5.4	50	1.19	14.6
90	.49	5.2	August median	.60	6.3
85	.57	5.9	7Q10	.26	11.4
80	.65	7.0	7Q2	.41	6.5
75	.74	8.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BLACKSTONE RIVER BASIN

01109460 Dark Brook at Auburn, MA

LOCATION.--Lat 42˚12'20", long 71˚50'06", Worcester County, at bridge on State Highway 12, 0.7 mi north of Auburn.

PERIOD OF RECORD.--1978–79, 1985–86, 1988–91.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 11.1 mi^2	Area of water bodies = 0.51 mi^2	Minimum elevation = 491 ft
Area of stratified drift = 2.91 mi^2	Total length of streams = 31.1 mi	Maximum elevation = 869 ft
Area of wetlands = 0.44 mi^2	Mean basin slope = 3.46 percent	Mean elevation = 680 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 0115600, 01109000, 01111200, 01111300, 01175670

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-25-78	4.80	8-14-86	7.00	8-29-89	4.70	9-06-90	3.50
3-27-79	22.0	8-15-86	7.40	9-06-89	3.42	7-11-91	3.36
4-30-85	7.20	9-11-86	7.20	7-11-90	2.38	7-19-91	1.67
7-08-86	6.60	8-11-88	14.0	8-30-90	10.5	9-11-91	2.32
7-23-86	7.10	7-27-89	6.32				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.11	14	70	6.29	5.1
98	1.36	12.4	65	7.26	5.4
97	1.58	11.2	60	8.36	5.9
95	1.97	9.7	55	9.57	6.6
93	2.38	8.5	50	10.9	7.4
90	2.94	7.2	August median	4.13	5.8
85	3.84	5.9	7Q10	.944	16.1
80	4.74	5.3	7Q2	1.92	10.4
75	5.48	5.1			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BLACKSTONE RIVER BASIN

01109570 Tatnuck Brook below Coes Reservoir at Worcester, MA

LOCATION.--Lat 42˚15'03", long 71˚50'15", Worcester County, at outlet below Coes Reservoir, 2.0 mi southwest of Worcester.

PERIOD OF RECORD.--1989–90.

REMARKS.-- Streamflow affected by dam regulations.

BASIN CHARACTERISTICS.--

Drainage area = 11.5 mi^2	Area of water bodies = 0.53 mi^2	Minimum elevation = 416 ft
Area of stratified drift = 1.40 mi^2	Total length of streams = 132 mi	Maximum elevation = 1,384 ft
Area of wetlands = 0.10 mi^2	Mean basin slope = 4.51 percent	Mean elevation = 900 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01105600, 01109000, 01111200, 01111300, 01175670

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-27-89	2.6	7-11-90	0.24	9-06-90	0.55	7-19-91	0.27
8-29-89	1.1	8-30-90	1.77	7-11-91	.68	9-11-91	1.24
9-06-89	.50						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.10	30.1	70	1.30	12.3
98	.14	26.0	65	1.64	13.4
97	.18	22.9	60	2.27	16.2
95	.25	18.9	55	2.99	19.1
93	.34	15.7	50	3.81	21.8
90	.46	12.9	August median	.72	10.7
85	.67	10.6	7Q10	.08	35.3
80	.93	10.9	7Q2	.24	20.0
75	1.13	11.9			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BLACKSTONE RIVER BASIN

01109658 Blackstone River near Millbury, MA

LOCATION.--Lat 42˚12'46", long 71˚47'02", Worcester County, 40 ft upstream from bridge on State Highway 20, 2.0 mi northwest of Millbury.

PERIOD OF RECORD.--1989–90.

REMARKS.-- Streamflow affected by dam regulations.

BASIN CHARACTERISTICS.--

Drainage area = 65.1 mi^2	Area of water bodies = 2.68 mi^2	Minimum elevation = 416 ft
Area of stratified drift = 12.6 mi^2	Total length of streams = 132 mi	Maximum elevation = 1,384 ft
Area of wetlands = 1.04 mi^2	Mean basin slope = 4.51 percent	Mean elevation = 900 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01105600, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-27-89	33.0	9-06-89	20.0	8-30-90	59.0	9-06-90	20.2
8-29-89	30.0	7-11-90	17.5				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	6.69	20.4	70	22.6	3.9
98	7.34	18.2	65	26.9	3.8
97	7.60	17.2	60	40.5	5.0
95	8.78	14.9	55	56.4	6.5
93	10.4	12.7	50	78.6	8.2
90	13.8	9.8	August median	21.7	7.1
85	20.9	6.3	7Q10	6.21	25.4
80	21.2	6.6	7Q2	8.77	17.5
75	20.4	5.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BLACKSTONE RIVER BASIN

01110100 Quinsigamond River near Grafton, MA

LOCATION.--Lat 42˚11'39", long 71˚41'35", Worcester County, 0.4 mi upstream from Fisherville Pond, 1.0 mi south of Grafton.

PERIOD OF RECORD.--1985, 1991–93.

REMARKS.-- Streamflow affected by dam regulations.

BASIN CHARACTERISTICS.--

Drainage area = 37.2 mi^2	Area of water bodies = 1.65 mi^2	Minimum elevation = 291 ft
Area of stratified drift = 12.6 mi^2	Total length of streams = 74.0 mi	Maximum elevation = 764 ft
Area of wetlands = 0.86 mi^2	Mean basin slope = 3.72 percent	Mean elevation = 528 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01111300, 01175670, 01176000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
5-02-85	24.0	9-11-91	13.2	8-25-92	13.0	7-08-93	17.8
7-18-91	13.0	7-14-92	16.6	9-18-92	13.2	7-19-93	1.53
8-08-91	27.6	7-29-92	13.0	7-02-93	6.18		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	3.9	30.4	70	26.5	20.3
98	4.91	25.9	65	34.7	24.2
97	6.05	22.7	60	44.2	28.2
95	7.38	19.6	55	54.7	31.8
93	8.21	17.7	50	67.6	35.5
90	9.3	16.2	August median	12.2	14.3
85	11.4	14.2	7Q10	3.07	34.2
80	15.2	14.5	7Q2	7.8	19.8
75	20.4	17			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BLACKSTONE RIVER BASIN

01111050 Mumford River at Uxbridge, MA

LOCATION.--Lat 42˚04'30", long 71˚37'35", Worcester County, 10 ft downstream from bridge on State Highway 16, 0.5 mi upstream from mouth, 0.1 mi west of Uxbridge.

PERIOD OF RECORD.--1936, 1989–90.

REMARKS.-- Streamflow affected by dam regulations.

BASIN CHARACTERISTICS.--

Drainage area = 56.4 mi^2	Area of water bodies = 2.64 mi^2	Minimum elevation = 229 ft
Area of stratified drift = 13.6 mi^2	Total length of streams = 131 mi	Maximum elevation = 907 ft
Area of wetlands = 2.15 mi^2	Mean basin slope = 3.86 percent	Mean elevation = 568 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01105600, 01111200, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-26-89	60.4	9-06-89	35.9	8-30-90	79.2	9-06-90	39.3
8-28-89	49.5	7-19-90	23.2				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	5.59	26.9	70	39.4	5.3
98	7.16	24.0	65	47.3	4.8
97	8.86	21.8	60	58.9	5.8
95	11.4	19.0	55	71.7	7.5
93	15.1	16.2	50	86.7	9.4
90	19.5	13.2	August median	29.3	9.1
85	27.0	9.7	7Q10	4.88	31.0
80	34.5	7.7	7Q2	12.2	19.8
75	35.6	7.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BLACKSTONE RIVER BASIN

01111142 Miscoe Brook near Grafton, MA

LOCATION.--Lat 42˚11'25", long 71˚39'23", Worcester County, at bridge on State Highway 140 at outlet of Silver Lake, 1.9 mi southwest of Grafton.

PERIOD OF RECORD.--1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 5.67 mi^2	Area of water bodies = 0.05 mi^2	Minimum elevation = 350 ft
Area of stratified drift = 1.30 mi^2	Total length of streams = 11.7 mi	Maximum elevation = 659 ft
Area of wetlands = 0.65 mi^2	Mean basin slope = 3.98 percent	Mean elevation = 505 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01105600, 01109000, 01175670

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-13-94	1.00	6-21-95	1.21	8-14-95	0.23	8-20-96	0.093
8-10-94	.14	7-24-95	.15	8-21-95	.090	9-05-96	.29
9-21-94	.32	8-11-95	.38	8-06-96	2.43		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.07	26.0	70	1.32	23.8
98	.11	21.3	65	1.75	27.1
97	.14	18.0	60	2.21	30.0
95	.21	14.7	55	2.76	32.8
93	.27	13.7	50	3.44	35.7
90	.36	13.7	August median	.58	15.9
85	.52	15.0	7Q10	.05	32.2
80	0.74	17.7	7Q2	.20	17.3
75	1.00	20.8			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BLACKSTONE RIVER BASIN

01111225 Emerson Brook near Uxbridge, MA

LOCATION.--Lat 42˚02'40", long 71˚37'21", Worcester County, at culvert on State Highway 146-A, 2.1 mi south of Uxbridge.

PERIOD OF RECORD.--1993–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 7.26 mi^2	Area of water bodies = 0.08 mi^2	Minimum elevation = 270 ft
Area of stratified drift = 2.60 mi^2	Total length of streams = 17.2 mi	Maximum elevation = 641 ft
Area of wetlands = 0.19 mi^2	Mean basin slope = 3.15 percent	Mean elevation = 456 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01109000, 01111300, 01175670

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-28-93	1.71	7-19-93	1.32	9-21-94	1.80	8-10-95	1.28
7-02-93	.99	7-13-94	2.01	6-21-95	2.62	8-14-95	.87
7-08-93	2.44	8-10-94	1.31	7-24-95	.99	8-23-95	.67

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.78	7.3	70	2.79	8.7
98	.90	6.2	65	3.13	9.8
97	1.02	5.2	60	3.46	10.7
95	1.15	4.6	55	3.81	11.6
93	1.29	4.2	50	4.18	12.6
90	1.49	4.3	August median	1.80	5.2
85	1.78	5.0	7Q10	.63	10.6
80	2.12	6.3	7Q2	1.19	5.9
75	2.46	7.5			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BLACKSTONE RIVER BASIN

01112190 Muddy Brook at South Milford, MA

LOCATION.--Lat 42˚05'35", long 71˚31'11", Worcester County, at bridge on Bellingham Road, 1.0 mi southwest of South Millford, and 2.4 mi west of Bellingham.

PERIOD OF RECORD.--1978, 1985-86, 1994-95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 6.17 mi^2	Area of water bodies = 0.02 mi^2	Minimum elevation = 200 ft
Area of stratified drift = 0.95 mi^2	Total length of streams = 16.2 mi	Maximum elevation = 587 ft
Area of wetlands = 0.17 mi^2	Mean basin slope = 3.38 percent	Mean elevation = 360 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01109000, 01111300, 01175670

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-11-78	1.00	9-05-86	1.10	9-21-94	0.32	8-10-95	0.65
9-26-78	.96	7-13-94	.65	6-21-95	.83	8-14-95	.42
5-08-85	11.0	8-10-94	.44	7-24-95	.28	8-21-95	.24
8-06-86	1.20						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.19	16.5	70	1.74	12.5
98	.24	14.6	65	2.15	14.0
97	.30	12.9	60	2.56	15.5
95	.36	11.6	55	3.06	17.0
93	.45	10.4	50	3.60	18.4
90	.57	9.4	August median	.79	9.3
85	.78	9.1	7Q10	.14	21.8
80	1.05	9.7	7Q2	.39	13.2
75	1.37	11.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BLACKSTONE RIVER BASIN

01112250 Mill River near Blackstone, MA

LOCATION.--Lat 42˚02'55", long 71˚31'15", Worcester County, 40 ft downstream from bridge on Elm Street, 2.2 mi northeast of Blackstone.

PERIOD OF RECORD.--1978–79, 1985–86, 1989–90.

REMARKS.-- Streamflow affected by dam regulations and by municipal water-supply withdrawals.

BASIN CHARACTERISTICS.--

Drainage area = 25.3 mi^2	Area of water bodies = 0.63 mi^2	Minimum elevation = 180 ft
Area of stratified drift = 6.45 mi^2	Total length of streams = 54.3 mi	Maximum elevation = 513 ft
Area of wetlands = 1.08 mi^2	Mean basin slope = 3.68 percent	Mean elevation = 337 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01105600, 01109000, 01111200, 01111300, 01175670

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-11-78	2.90	5-08-85	59.0	8-28-89	18.6	8-30-90	22.6
9-27-78	5.00	9-11-86	12.0	9-06-89	6.58	9-06-90	9.77
3-29-79	50.0	7-25-89	26.0	7-11-90	8.70		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.07	12.4	70	16.0	5.0
98	2.63	11.1	65	19.2	5.1
97	3.18	10.2	60	23.2	5.6
95	4.19	8.9	55	27.8	6.1
93	5.21	8.0	50	33.0	6.7
90	6.63	7.0	August median	9.86	5.7
85	9.03	5.9	7Q10	1.73	14.7
80	11.5	5.4	7Q2	3.98	9.9
75	13.6	5.1			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BLACKSTONE RIVER BASIN

01112380 Peters Brook at Crooks Corner, MA

LOCATION.--Lat 42˚01'26", long 71˚29'17", Norfolk County, 40 ft downstream from bridge on State Highway 126, 0.2 mi southeast of Crooks Corner.

PERIOD OF RECORD.--1978–79, 1986, 1989–90.

REMARKS.-- Streamflow affected by dam regulations and by municipal water-supply withdrawals.

BASIN CHARACTERISTICS.--

Drainage area = 11.8 mi^2	Area of water bodies = 0.14 mi^2	Minimum elevation = 180 ft
Area of stratified drift = 4.91 mi^2	Total length of streams = 22.5 mi	Maximum elevation = 513 ft
Area of wetlands = 0.48 mi^2	Mean basin slope = 2.71 percent	Mean elevation = 337 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01111200, 01111300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-27-78	2.50	7-10-86	5.90	7-26-89	8.96	7-19-90	2.96
3-28-79	28.0	7-23-86	2.90	8-28-89	8.82	8-30-90	12.2
5-01-86	10.0	9-10-86	3.10	9-06-89	7.51	9-06-90	5.82

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.59	15.7	70	5.7	4.3
98	.74	14.3	65	7.14	4.2
97	.88	13.1	60	8.64	4.6
95	1.03	12.2	55	10.5	5.2
93	1.26	11.0	50	12.5	5.9
90	1.65	9.4	August median	2.28	8.1
85	2.27	7.7	7Q10	.47	22.7
80	3.19	6.0	7Q2	1.16	15.7
75	4.35	4.8			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

BLACKSTONE RIVER BASIN

01113750 Abbott Run near South Attleboro, MA

LOCATION.--Lat 41˚55'43", long 71˚22'23", Bristol County, 120 ft downstream from culvert on Mendon Road, 1.8 mi north of South Attleboro.

PERIOD OF RECORD.--1970, 1989–90.

REMARKS.-- Streamflow affected by dam regulations and by municipal water-supply withdrawals.

BASIN CHARACTERISTICS.--

Drainage area = 23.9 mi^2	Area of water bodies = 0.32 mi^2	Minimum elevation = 80 ft
Area of stratified drift = Not available	Total length of streams = 53.4 mi	Maximum elevation = 540 ft
Area of wetlands =0.67 mi^2	Mean basin slope = 3.13 percent	Mean elevation = 309 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01097300, 01105600, 01109000, 01111200, 01111300, 01175670

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
10-01-70	44.0	7-25-89	30.0	9-05-89	29.3	8-30-90	101
10-25-88	30.0	8-28-89	28.9	7-10-90	53.6	9-06-90	38.7

ESTIMATED STREAMFLOW STATISTICS.-- Not estimated because correlations of measured streamflows with same-day mean streamflows at nearby continuous gaging stations were poor.

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

QUINEBAUG RIVER BASIN

01123140 Mill Brook at Brimfield, MA

LOCATION.--Lat 42˚06'55", long 72˚11'51", Hampden County, at bridge on Pace Hill Road, 0.5 mi south of Brimfield.

PERIOD OF RECORD.--1993–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 13.8 mi^2	Area of water bodies = 0.17 mi^2	Minimum elevation = 652 ft
Area of stratified drift = 3.27 mi^2	Total length of streams = 39.2 mi	Maximum elevation = 1,250 ft
Area of wetlands = 0.57 mi^2	Mean basin slope = 6.33 percent	Mean elevation = 943 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01111300, 01121000, 01174900, 01175670, 01176000, 01184490

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-02-93	3.31	9-07-94	3.00	6-19-95	4.21	8-10-95	6.82
8-25-93	1.67	9-21-94	3.23	7-24-95	1.33	8-21-95	2.43
8-11-94	4.67						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.44	13.5	70	5.67	10.9
98	1.64	11.6	65	6.53	12.6
97	1.86	10.1	60	7.4	14.2
95	2.16	8.4	55	8.39	15.9
93	2.45	7.3	50	9.30	17.3
90	2.84	6.5	August median	3.85	7.2
85	3.54	6.6	7Q10	1.29	15.3
80	4.28	7.9	7Q2	2.20	8.6
75	4.89	9.2			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

QUINEBAUG RIVER BASIN

01123161 Wales Brook at Brimfield, MA

LOCATION.--Lat 42˚06'52", long 72˚11'36", Hampden County, at bridge on Holland Road, 0.6 mi southeast of Brimfield.

PERIOD OF RECORD.--1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 6.57 mi^2	Area of water bodies = 0.16 mi^2	Minimum elevation = 653 ft
Area of stratified drift = 1.88 mi^2	Total length of streams = 15.3 mi	Maximum elevation = 1,180 ft
Area of wetlands = 0.24 mi^2	Mean basin slope = 5.96 percent	Mean elevation = 915 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01121000, 01174000, 01175670

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-11-94	0	6-19-95	3.48	8-21-95	0	8-20-96	1.75
9-07-94	0	7-24-95	.45	8-07-96	4.19	9-05-96	.57
9-21-94	2.55	8-10-95	2.41				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.12	32.6	70	4.68	18.7
98	.20	28.8	65	5.62	22.2
97	.35	25.6	60	6.96	25.5
95	.66	20.5	55	7.68	28.5
93	.92	17.2	50	8.68	31.2
90	1.38	13.5	August median	2.25	11.0
85	2.22	10.5	7Q10	.08	37.6
80	2.99	12.0	7Q2	.54	23.8
75	3.85	15.5			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

FRENCH–QUINEBAUG RIVER BASIN

01123810 Quinebaug River Tributary at Sandersdale, MA

LOCATION.--Lat 42˚04'15", long 72˚00'23", Worcester County, at bridge at wastewater-treatment plant off Dresser Hill Road, 0.5 mi northeast of Sandersdale.

PERIOD OF RECORD.--1980–82, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 9.40 mi^2	Area of water bodies = 0.08 mi^2	Minimum elevation = 403 ft
Area of stratified drift = 0.00 mi^2	Total length of streams = 27.8 mi	Maximum elevation = 993 ft
Area of wetlands = 0.46 mi^2	Mean basin slope = 4.80 percent	Mean elevation = 686 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01111300, 01175670, 01176000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-26-80	0.93	7-07-82	3.40	7-14-92	1.08	7-02-93	0.07
9-11-80	.12	8-04-82	1.10	7-29-92	1.08	7-08-93	.21
9-24-80	.10	7-19-91	.03	8-25-92	3.71	7-19-93	.20
8-18-81	.18	9-11-92	2.11	9-18-92	1.62	8-25-93	.30
5-14-82	6.50						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.04	30.8	70	2.11	20.2
98	.05	27.1	65	3.1	22.9
97	.08	23.9	60	4.22	25.2
95	.12	21.2	55	5.83	27.9
93	.17	18.7	50	7.8	30.4
90	.27	16.4	August median	.547	15.6
85	.48	15.1	7Q10	.025	39.7
80	.85	15.8	7Q2	.138	24.2
75	1.38	17.7			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

FRENCH RIVER BASIN

01124390 Little River at Richardson Corners, MA

LOCATION.--Lat 42˚09'16", long 71˚54'47", Worcester County, at bridge on U.S. Highway 20, 0.7 mi east of Richardson Corners.

PERIOD OF RECORD.--1980–82, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 8.58 mi^2	Area of water bodies = 0.16 mi^2	Minimum elevation = 564 ft
Area of stratified drift = 0.00 mi^2	Total length of streams = 28.5 mi	Maximum elevation = 1,090 ft
Area of wetlands = 0.50 mi^2	Mean basin slope = 3.82 percent	Mean elevation = 828 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01111200, 01111300, 01121000, 01175670, 01176000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-26-80	1.40	7-08-82	3.80	7-14-92	2.46	7-02-93	0.25
9-11-80	.71	8-03-82	2.60	7-29-92	2.97	7-08-93	.16
9-23-80	.54	7-11-91	2.31	8-25-92	6.89	7-19-93	.07
8-18-81	1.36	7-19-91	.53	9-18-92	3.81	8-25-93	.77
5-12-82	9.30	9-11-91	.79				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.26	20.7	70	3.23	13.5
98	.33	18.3	65	4.22	15.3
97	.40	16.5	60	5.47	17.3
95	.50	14.5	55	6.89	19.1
93	.62	13.0	50	8.69	21.1
90	.84	11.5	August median	1.38	10.5
85	1.25	10.5	7Q10	.20	23.7
80	1.77	10.8	7Q2	.52	15.0
75	2.40	11.9			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

MILLERS RIVER BASIN

01161400 Millers River at Old North Ashburnham Station near Winchendon, MA

LOCATION.--Lat 42˚39'19", long 71˚59'21", Worcester County, 200 ft below bridge on State Highway 12, 0.3 mi west of Old North Ashburnham Station. 3.7 mi southeast of Winchendon.

PERIOD OF RECORD.--1965–66, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 23.6 mi^2	Area of water bodies = 1.79 mi^2	Minimum elevation = 1,020 ft
Area of stratified drift = 3.87 mi^2	Total length of streams = 38.1 mi	Maximum elevation = 1,820 ft
Area of wetlands = 1.20 mi^2	Mean basin slope = 3.68 percent	Mean elevation = 1,390 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01096000, 01162500, 01169000, 01174900, 01175670

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-03-65	15.0	8-09-66	0.41	7-28-92	2.73	7-01-93	1.05
9-15-65	1.16	7-12-91	1.19	8-24-92	14.5	7-08-93	.83
2-08-66	2.49	7-19-91	1.06	9-17-92	4.19	7-23-93	.29
4-05-66	44.5	9-12-91	5.17				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.25	17.1	70	5.99	11.2
98	.36	14.9	65	8.09	12.5
97	.46	13.5	60	10.6	13.9
95	.71	11.5	55	13.6	15.2
93	.95	10.3	50	17.3	16.6
90	1.29	9.4	August median	2.25	8.9
85	2.07	8.7	7Q10	.22	20.1
80	3.11	9.1	7Q2	.68	13.5
75	4.42	10.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

MILLERS RIVER BASIN

01163298 Trout Brook at Route 202, near Baldwinville, MA

LOCATION.--Lat 42˚35'49", long 72˚05'28", Worcester County, at bridge on Route 202, 1.1 mi southwest of Baldwinville.

PERIOD OF RECORD.--1994–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 7.22 mi^2	Area of water bodies = 0.09 mi^2	Minimum elevation = 834 ft
Area of stratified drift = 2.59 mi^2	Total length of streams = 10.9 mi	Maximum elevation = 1,160 ft
Area of wetlands = 0.21 mi^2	Mean basin slope = 3.09 percent	Mean elevation = 995 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01096000, 01169000, 01170100, 01174900

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-13-94	3.10	6-19-95	4.47	8-21-95	1.17	8-20-96	3.76
8-10-94	2.55	8-11-95	3.01	8-07-96	6.63	9-05-96	2.84
9-08-94	2.08						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.94	10.3	70	7.06	10.9
98	1.56	8.5	65	8.58	12.9
97	1.83	7.3	60	10.3	14.8
95	2.29	5.9	55	12.3	16.7
93	2.66	5.1	50	14.2	18.3
90	3.16	4.8	August median	4.02	5.7
85	3.67	5.4	7Q10	.905	13.2
80	4.65	6.9	7Q2	2.07	8
75	5.72	8.8			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

MILLERS RIVER BASIN

01164300 Lawrence Brook at Royalston, MA

LOCATION.--Lat 42˚41'14", long 72˚10'39", Worcester County, at Northeast Fitzwilliam Road, 0.9 mi northeast of Royalston.

PERIOD OF RECORD.--1965–66, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 15.6 mi^2	Area of water bodies = 0.54 mi^2	Minimum elevation = 856 ft
Area of stratified drift = 2.80 mi^2	Total length of streams = 26.8 mi	Maximum elevation = 1,880 ft
Area of wetlands = 0.73 mi^2	Mean basin slope = 4.06 percent	Mean elevation = 1,360 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01096000, 01162500, 01174500, 01175670

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-03-65	1.37	8-09-66	1.07	7-28-92	1.34	7-01-93	0.73
9-15-65	2.75	7-12-91	1.36	8-24-92	7.45	7-26-93	.26
2-07-66	8.40	7-19-91	1.43	9-17-92	2.28	8-26-93	1.50
4-07-66	49.0	9-12-91	4.92				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.35	22.9	70	6.54	15.9
98	.52	19.3	65	8.38	17.6
97	.69	17.0	60	10.5	19.4
95	1.02	14.4	55	12.7	20.9
93	1.34	13.0	50	15.6	22.7
90	1.77	12.1	August median	2.87	12.1
85	2.65	11.9	7Q10	.32	25.2
80	3.80	12.9	7Q2	1.01	15.7
75	5.11	14.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

MILLERS RIVER BASIN

01165090 West Branch Tulley River at North Orange, MA

LOCATION.--Lat 42˚38'45", long 72˚15'25", Franklin County, at bridge on Tully Road, 0.8 mi north of North Orange.

PERIOD OF RECORD.--1966, 1992–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 14.1 mi^2	Area of water bodies = 0.05 mi^2	Minimum elevation = 560 ft
Area of stratified drift = 1.45 mi^2	Total length of streams = 20.8 mi	Maximum elevation = 1,400 ft
Area of wetlands = 0.18 mi^2	Mean basin slope = 7.64 percent	Mean elevation = 977 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01096000, 01162500, 01174500, 01175670

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-09-66	0.11	9-27-92	1.63	7-26-93	0.20	7-13-94	0.59
7-28-92	1.60	7-01-93	1.93	8-26-93	.39	9-08-94	.54
8-24-92	3.02						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.15	22.6	70	2.57	17.7
98	.20	18.6	65	3.29	20.0
97	.26	16.1	60	4.07	22.0
95	.38	13.2	55	4.94	23.9
93	.49	11.7	50	6.07	25.9
90	.67	10.7	August median	1.10	11.7
85	1.01	11.3	7Q10	.12	25.8
80	1.46	13.2	7Q2	.34	15.0
75	1.97	15.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

MILLERS RIVER BASIN

01165250 Riceville Brook near South Athol, MA

LOCATION.--Lat 42˚32'17", long 72˚14'51", Worcester County, at bridge on South Athol Road, 4.0 mi south of Athol.

PERIOD OF RECORD.--1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 7.08 mi^2	Area of water bodies = 0.16 mi^2	Minimum elevation = 623 ft
Area of stratified drift = 1.45 mi^2	Total length of streams = 11.25 mi	Maximum elevation = 1,300 ft
Area of wetlands = 0.17 mi^2	Mean basin slope = 4.34 percent	Mean elevation = 961 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01096000, 01162500, 01174500, 01175670, 01170100

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-13-94	1.15	6-19-95	2.99	8-21-95	0.11	8-20-96	0.88
8-10-94	.81	8-11-95	.75	8-07-96	5.02	9-05-96	.36
9-08-94	1.78						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.02	17.5	70	3.60	17.5
98	.16	14.0	65	4.91	20.7
97	.30	11.7	60	6.39	23.9
95	.52	9.2	55	8.16	26.8
93	.72	8.2	50	10.1	29.5
90	.96	8.1	August median	1.47	10.1
85	1.28	9.4	7Q10	.02	25.8
80	1.98	11.7	7Q2	.50	15.2
75	2.69	14.7			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

MILLERS RIVER BASIN

01166400 Keyup Brook at Erving, MA

LOCATION.--Lat 42˚36'08", long 72˚24'00", Franklin County, at bridge on Church Street, 0.2 mi north of State Highway 2 at Erving.

PERIOD OF RECORD.--1993–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 7.03 mi^2	Area of water bodies = 0.00 mi^2	Minimum elevation = 491 ft
Area of stratified drift = 0.29 mi^2	Total length of streams = 7.62 mi	Maximum elevation = 1,500 ft
Area of wetlands = 0.11 mi^2	Mean basin slope = 11.4 percent	Mean elevation = 985 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01162500, 01174500, 01170100

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-02-93	0.52	7-13-94	0.54	9-08-94	0.35	8-11-95	1.76
7-26-93	.20	8-11-94	.29	6-19-95	2.47	8-21-95	.63
8-25-93	.65						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.15	39.5	70	6.86	61.2
98	.22	29.5	65	10.5	71.8
97	.28	24.2	60	15.2	81.6
95	.44	17.9	55	22.1	91.7
93	.62	16.7	50	32.3	102.1
90	.97	20.6	August median	1.79	31.5
85	1.64	29.6	7Q10	.11	50.6
80	2.68	39.7	7Q2	.37	22.3
75	4.27	50.2			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

DEERFIELD RIVER BASIN

01168300 Cold River near Zoar, MA

LOCATION.--Lat 42˚38'12", long 72˚56'10", Franklin County, at bridge 150 ft east of State Highway 2, 0.9 mi upstream from mouth, 1.1 mi south of Zoar.

PERIOD OF RECORD.--1938, 1965, 1967–69, 1978–81, 1983, 1991–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 29.6 mi^2	Area of water bodies = 0.17 mi^2	Minimum elevation = 751 ft
Area of stratified drift = 0.20 mi^2	Total length of streams = 57.0 mi	Maximum elevation = 2,830 ft
Area of wetlands = 0.20 mi^2	Mean basin slope = 11.0 percent	Mean elevation = 1,940 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169000, 01169900, 01170100, 01333000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-21-38	16,900	9-14-78	6.10	8-03-81	4.30	9-17-92	8.32
9-07-65	4.68	6-04-79	46.0	7-29-83	3.10	7-01-93	4.92
9-09-67	5.56	5-21-80	33.0	9-06-83	1.90	7-08-93	3.25
8-07-68	4.30	7-22-80	8.60	7-11-91	3.67	8-16-93	2.74
9-18-68	4.23	8-25-80	2.70	7-18-91	3.73	8-24-93	2.62
9-24-68	2.60	5-21-81	31.0	8-28-91	10.4	10-07-93	7.52
8-27-69	6.38	6-19-81	5.30	7-29-92	6.33	8-26-94	11.6
9-16-69	8.42	6-30-81	7.50	8-25-92	8.04	9-07-94	3.94

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.97	6.1	70	12.3	4.7
98	2.39	5.4	65	14.8	5.3
97	2.69	5.0	60	17.8	5.9
95	3.27	4.4	55	21.3	6.6
93	3.77	4.0	50	25.3	7.3
90	4.70	3.6	August median	6.36	3.6
85	6.11	3.4	7Q10	1.69	8.2
80	7.77	3.6	7Q2	3.05	5.8
75	9.72	4.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

DEERFIELD RIVER BASIN

01168400 Chickley River near Charlemont, MA

LOCATION.--Lat 42˚37'28", long 72˚54'27", Franklin County, at bridge on Chickley Road, 0.5 mi upstream from mouth, 1.7 mi west of Charlemont.

PERIOD OF RECORD.--1967–69, 1991–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 27.1 mi^2	Area of water bodies = 0.14 mi^2	Minimum elevation = 613 ft
Area of stratified drift = 0.91 mi^2	Total length of streams = 55.5 mi	Maximum elevation = 2,510 ft
Area of wetlands = 0.13 mi^2	Mean basin slope = 12.1 percent	Mean elevation = 1,790 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169000, 01169900, 01170100, 01333000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-07-67	6.95	7-11-91	5.82	7-01-93	8.72	10-07-93	5.75
8-07-68	8.06	7-18-91	5.14	7-08-93	7.18	7-15-94	6.97
9-18-68	6.88	8-28-91	9.00	8-11-93	5.18	8-11-94	3.93
9-24-68	5.07	7-29-92	8.86	8-24-93	5.46	8-26-94	6.64
8-27-69	10.9	8-25-92	9.46	8-30-93	4.02	9-07-94	4.10
9-16-69	14.9	9-17-92	3.68				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	3.56	6.6	70	13.1	7.1
98	4.06	5.5	65	14.9	8.2
97	4.44	4.9	60	17.1	9.4
95	5.05	4.0	55	19.5	10.5
93	5.57	3.5	50	22.2	11.6
90	6.52	3.2	August median	8.14	3.8
85	7.91	3.6	7Q10	3.24	8.0
80	9.44	4.6	7Q2	4.84	4.9
75	11.1	5.8			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

DEERFIELD RIVER BASIN

01168650 Clesson Brook near Shelburne Falls, MA

LOCATION.--Lat 42˚36'47", long 72˚46'10", Franklin County, at bridge on State Highway 112, 0.5 mi upstream from mouth, 1.7 mi northwest of Shelburne Falls.

PERIOD OF RECORD.--1967–69, 1991–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 18.1 mi^2	Area of water bodies = 0.04 mi^2	Minimum elevation = 499 ft
Area of stratified drift = 2.17 mi^2	Total length of streams = 36.7 mi	Maximum elevation = 1,900 ft
Area of wetlands = 0.07 mi^2	Mean basin slope = 11.1 percent	Mean elevation = 1,290 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169000, 01169900, 01170100, 01171500, 01333000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-08-68	10.8	7-18-91	6.09	7-01-93	3.77	10-01-93	4.68
9-19-68	6.78	8-28-91	7.79	7-26-93	3.74	6-20-94	8.83
9-25-68	6.01	9-06-91	5.99	8-06-93	5.23	8-11-94	4.42
8-26-69	9.38	7-28-92	4.59	8-24-93	4.14	8-27-94	5.18
9-17-69	10.6	8-24-92	4.12	8-25-93	3.73	9-07-94	3.42
7-11-91	6.98	9-17-92	6.17	8-30-93	3.18		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	3.13	6.1	70	10.3	6.8
98	3.55	5.2	65	11.8	7.8
97	3.87	4.6	60	13.3	8.9
95	4.39	3.9	55	15.1	10.0
93	4.84	3.5	50	17.1	11.0
90	5.55	3.3	August median	6.78	3.9
85	6.57	3.7	7Q10	2.89	7.1
80	7.72	4.6	7Q2	4.25	4.4
75	8.94	5.6			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

DEERFIELD RIVER BASIN

01169600 Bear River near Conway, MA

LOCATION.--Lat 42˚32'45", long 72˚43'15", Franklin County, at bridge on Shelburne Falls Road, 2.7 mi northeast of Conway.

PERIOD OF RECORD.--1967–69, 1993–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 10.5 mi^2	Area of water bodies = 0.01 mi^2	Minimum elevation = 587 ft
Area of stratified drift = 1.06 mi^2	Total length of streams = 21.4 mi	Maximum elevation = 1,550 ft
Area of wetlands = 0.01 mi^2	Mean basin slope = 8.49 percent	Mean elevation = 1,070 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169000, 01169900, 01170100, 01171500, 01333000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-06-67	2.18	9-25-68	1.32	7-26-93	1.03	9-06-94	1.02
10-18-67	2.18	8-26-69	2.54	8-25-93	1.45	6-19-95	3.07
8-08-68	3.09	9-22-69	3.27	7-13-94	1.55	8-10-95	3.63
8-20-68	1.25	7-02-93	1.61	8-11-94	.97	8-21-95	1.17
9-19-68	1.93						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.80	8.0	70	4.48	8.6
98	.96	6.6	65	5.35	10.0
97	1.08	5.8	60	6.41	11.4
95	1.29	4.7	55	7.65	12.8
93	1.47	4.0	50	9.07	14.2
90	1.80	3.6	August median	2.41	4.5
85	2.32	4.3	7Q10	.70	9.8
80	2.92	5.5	7Q2	1.20	5.8
75	3.62	7.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

DEERFIELD RIVER BASIN

01169801 South River at North Poland Road near Burkville, MA

LOCATION.--Lat 42˚30'45", long 72˚44'36", Franklin County, 100 ft downstream from mouth of Poland Brook near North Poland Road, 1.7 mi west of Burkville.

PERIOD OF RECORD.--1993–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 15.6 mi^2	Area of water bodies = 0.09 mi^2	Minimum elevation = 820 ft
Area of stratified drift = 1.89 mi^2	Total length of streams = 31.2 mi	Maximum elevation = 1,830 ft
Area of wetlands = 0.08 mi^2	Mean basin slope = 8.72 percent	Mean elevation = 1,280 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169000, 01169900, 01170100, 01171500, 01333000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-19-93	2.68	10-01-93	3.43	8-27-94	5.82	8-10-95	5.50
8-06-93	3.36	6-20-94	6.59	9-06-94	3.63	8-21-95	2.53
8-24-93	2.94	7-13-94	4.08	9-08-94	3.39	8-06-96	10.5
8-31-93	2.34	8-11-94	3.03	6-19-95	7.42	8-20-96	4.09

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.41	3.0	70	7.77	4.8
98	2.75	2.4	65	8.70	5.4
97	3.04	2.1	60	9.98	6.1
95	3.44	1.9	55	11.2	6.7
93	3.76	1.9	50	12.8	7.4
90	4.24	2.1	August median	5.07	2.9
85	4.95	2.6	7Q10	2.17	5.2
80	5.79	3.3	7Q2	3.10	3.3
75	6.69	4.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

DEERFIELD RIVER BASIN

01170240 Mill Brook near Bernardston, MA

LOCATION.--Lat 42˚39'33", long 72˚34'18", Franklin County, at culvert on Eden Trail, 1.3 mi southwest of Bernardston.

PERIOD OF RECORD.--1969, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--Not available.

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01162500, 01169000, 01170100

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-07-69	1.18	9-17-69	1.36	6-19-95	0.55	8-07-96	1.13
7-16-69	.94	7-13-94	.41	8-10-95	.67	8-20-96	.31
8-27-69	1.04	8-11-94	.18	8-21-95	.06	9-05-96	.12
9-17-69	1.36	9-08-94	.11				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.003	14.7	70	1.16	11.6
98	.06	12.4	65	1.32	13.7
97	.11	11.1	60	1.54	15.6
95	.21	9.4	55	1.76	17.5
93	.28	8.3	50	2.00	19.5
90	.42	7.1	August median	.62	7.6
85	.59	7.0	7Q10	.003	21.1
80	.77	7.9	7Q2	.15	13.3
75	.95	9.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONNECTICUT RIVER BASIN

01167200 Fall River at Bernardston, MA

LOCATION.--Lat 42˚41'15", long 72˚32'43", Franklin County, at bridge on Burke Falls Road, 1.0 mi northeast of Bernardston.

PERIOD OF RECORD.--1971–74, 1993–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 22.3 mi^2	Area of water bodies = 0.05 mi^2	Minimum elevation = 395 ft
Area of stratified drift = 1.15 mi^2	Total length of streams = 38.6 mi	Maximum elevation = 1,400 ft
Area of wetlands = 0.03 mi^2	Mean basin slope = 10.6 percent	Mean elevation = 858 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01162500, 01169000, 01169900, 01170100

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-21-71	5.70	9-27-72	2.50	7-26-93	1.31	9-07-94	2.20
10-07-71	1.00	3-22-73	128	8-25-93	1.24	6-19-95	5.58
4-06-72	89.0	10-02-73	2.20	7-13-94	3.87	8-10-95	4.36
9-12-72	2.50	7-02-93	2.82	8-11-94	1.92	8-21-95	1.27

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.91	7.7	70	9.61	7.7
98	2.43	7.2	65	10.4	7.7
97	2.75	7.0	60	10.9	7.4
95	3.48	6.9	55	11.9	7.3
93	4.04	6.9	50	13.2	7.3
90	5.21	7.1	August median	6.63	7.6
85	6.58	7.4	7Q10	1.46	11.0
80	7.71	7.6	7Q2	2.89	8.7
75	8.66	7.7			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONNECTICUT RIVER BASIN

01170575 Sawmill Brook near Montague, MA

LOCATION.--Lat 42˚31'23", long 72˚32'24", Franklin County, at bridge on State Highway 63, 1.1 mi south of Montague.

PERIOD OF RECORD.--1992–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 21.7 mi^2	Area of water bodies = 0.32 mi^2	Minimum elevation = 296 ft
Area of stratified drift = 4.43 mi^2	Total length of streams = 39.7 mi	Maximum elevation = 1,300 ft
Area of wetlands = 0.10 mi^2	Mean basin slope = 6.86 percent	Mean elevation = 907 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01162500, 01169900, 01171500, 01174500, 01174900

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-29-92	7.20	7-02-93	4.56	8-25-93	4.26	8-11-94	5.94
8-25-92	10.0	7-26-93	4.79	7-13-94	10.3	9-08-94	9.27
9-18-92	4.82						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	3.80	11.6	70	11.0	11.2
98	4.20	9.8	65	12.4	13.0
97	4.59	8.5	60	13.7	14.6
95	5.33	6.8	55	15.1	16.2
93	5.87	6.1	50	16.6	17.8
90	6.50	5.9	August median	7.73	6.8
85	7.48	6.6	7Q10	3.48	13.2
80	8.60	7.9	7Q2	5.05	7.5
75	9.79	9.6			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONNECTICUT RIVER BASIN

01170902 Bloody Brook near South Deerfield, MA

LOCATION.--Lat 42˚28'30", long 72˚38'03", Franklin County, at culvert on Whately Road, 1.3 mi west of South Deerfield.

PERIOD OF RECORD.--1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 5.48 mi^2	Area of water bodies = 0.01 mi^2	Minimum elevation = 186 ft
Area of stratified drift = 4.43 mi^2	Total length of streams = 11.3 mi	Maximum elevation = 771 ft
Area of wetlands = 0.01 mi^2	Mean basin slope = 2.98 percent	Mean elevation = 467 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169900, 01171500, 01147900, 01184490

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-26-91	0.78	8-28-91	0.78	9-17-92	0.08	7-26-93	0
7-11-91	.09	7-29-92	0	7-2-93	0	8-25-93	0
7-18-91	.10	8-25-92	.08				

ESTIMATED STREAMFLOW STATISTICS.-- Not estimated because correlations of measured streamflows with same-day mean streamflows at nearby continuous gaging stations were poor.

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONNECTICUT RIVER BASIN

01171947 Bachelor Brook at Granby, MA

LOCATION.--Lat 42˚16'33", long 72˚30'31", Hampshire County, at bridge on North Street, 1.2 mi north of Granby.

PERIOD OF RECORD.--1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 18.4 mi^2	Area of water bodies = 0.25 mi^2	Minimum elevation = 292 ft
Area of stratified drift = 8.20 mi^2	Total length of streams = 34.4 mi	Maximum elevation = 797 ft
Area of wetlands = 1.31 mi^2	Mean basin slope = 3.46 percent	Mean elevation = 394 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01171500, 01174900, 01175670, 01176000, 01184490

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-27-91	1.82	8-29-91	23.5	9-03-92	5.70	8-26-93	2.29
7-11-91	4.94	7-29-92	4.73	7-02-93	4.20	10-08-93	5.51
7-18-91	4.23	8-25-92	23.6				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.61	14.4	70	10.5	8.0
98	1.97	12.7	65	12.6	9.0
97	2.33	11.3	60	14.7	10.0
95	3.06	9.5	55	17.4	11.1
93	3.71	8.3	50	20.4	12.3
90	4.62	7.4	August median	6.96	6.8
85	6.02	6.8	7Q10	1.49	16.0
80	7.42	6.9	7Q2	3.03	10.2
75	8.75	7.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONNECTICUT RIVER BASIN

01171970 Stony Brook at Morgan Street at South Hadley, MA

LOCATION.--Lat 42˚15'08", long 72˚34'26", Hampshire County, 50 ft upstream from bridge on Morgan Street, 0.5 mi south of South Hadley.

PERIOD OF RECORD.--1965, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 18.8 mi^2	Area of water bodies = 0.10 mi^2	Minimum elevation = 167 ft
Area of stratified drift = 10.9 mi^2	Total length of streams = 31.2 mi	Maximum elevation = 643 ft
Area of wetlands = 0.88 mi^2	Mean basin slope = 1.41 percent	Mean elevation = 401 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169900, 01171500, 01174900, 01175670, 01176000, 01181000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-07-65	0.51	9-06-94	10.3	8-21-95	1.36	8-20-96	4.04
7-13-94	8.36	6-20-95	3.90	8-07-96	6.61	9-05-96	2.45
8-11-94	8.04	8-11-95	5.28				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.85	21.5	70	12.6	16.9
98	1.11	18.5	65	16.9	19.5
97	1.38	16.3	60	21.9	21.7
95	1.91	13.3	55	28.6	24.0
93	2.47	11.3	50	37.0	26.3
90	3.38	10.0	August median	5.65	11.0
85	5.12	10.6	7Q10	.75	23.7
80	7.17	12.5	7Q2	1.84	14.3
75	9.62	14.7			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONNECTICUT RIVER BASIN

01177360 South Branch Mill River at Porter Road near East Longmeadow, MA

LOCATION.--Lat 42˚05'06", long 72˚28'50", Hampden County, at bridge on Porter Road, 2.0 mi north of East Longmeadow.

PERIOD OF RECORD.--1991–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 6.92 mi^2	Area of water bodies = 0.03 mi^2	Minimum elevation = 243 ft
Area of stratified drift = 4.57 mi^2	Total length of streams = 12.5 mi	Maximum elevation = 850 ft
Area of wetlands = 0.54 mi^2	Mean basin slope = 3.20 percent	Mean elevation = 332 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01174500, 01174900, 01175670, 01176000, 01184490

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-27-91	4.60	8-29-91	5.57	9-17-92	5.77	8-26-93	2.96
7-11-91	4.29	7-29-92	5.91	7-02-93	6.82	10-08-93	3.94
7-18-91	6.37	8-24-92	8.61				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.74	12.1	70	6.50	5.4
98	2.97	10.5	65	7.17	6.4
97	3.19	9.3	60	7.79	7.4
95	3.61	7.7	55	8.61	8.7
93	3.93	6.6	50	9.25	9.7
90	4.32	5.5	August median	5.57	4.7
85	4.95	4.5	7Q10	2.62	13.2
80	5.58	4.4	7Q2	3.71	7.7
75	5.91	4.7			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONNECTICUT RIVER BASIN

01184277 Scantic River near Hampden, MA

LOCATION.--Lat 42˚02'54", long 72˚27'16", Hampden County, at bridge on Mill Road, 2.4 mi southwest of Hampden.

PERIOD OF RECORD.--1993–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 24.4 mi^2	Area of water bodies = 0.07 mi^2	Minimum elevation = 399 ft
Area of stratified drift = 5.58 mi^2	Total length of streams = 49.6 mi	Maximum elevation = 1,210 ft
Area of wetlands = 0.25 mi^2	Mean basin slope = 7.70 percent	Mean elevation = 786 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01174900, 01175670, 01176000, 01184490

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-02-93	7.09	7-13-94	7.01	9-07-94	10.4	8-10-95	6.33
8-26-93	1.57	8-10-94	8.18	6-20-95	8.72	8-21-95	3.07
10-07-93	.46						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.41	11.3	70	10.2	9.4
98	2.25	9.9	65	10.9	11.1
97	2.95	8.8	60	11.5	12.5
95	4.32	7.1	55	12.4	14.3
93	5.21	6.1	50	13.0	15.5
90	6.36	5.4	August median	8.44	6.3
85	7.82	5.6	7Q10	.68	13.6
80	8.90	6.7	7Q2	4.21	8.2
75	9.46	7.9			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CONNECTICUT RIVER BASIN

01184282 Watchaug Brook near East Longmeadow, MA

LOCATION.--Lat 42˚04'44", long 72˚28'25", Hampden County, at bridge on State Highway 83, 2.1 mi southeast of East Longmeadow.

PERIOD OF RECORD.--1993–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--Not available.

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.-- 01171500, 01175670, 01176000, 0118100, 01184490

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-02-93	0.57	7-13-94	0.51	9-07-94	1.29	8-10-95	0.42
8-26-93	.11	8-10-94	.84	6-20-95	.50	8-21-95	.10
10-07-93	1.03						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.06	32.5	70	1.99	22.1
98	.08	26.7	65	3.08	26.7
97	.11	22.8	60	4.54	30.9
95	.16	18.0	55	7.18	36.1
93	.25	14.0	50	10.4	40.2
90	.38	11.5	August median	.83	13.9
85	.64	12.2	7Q10	.05	36.3
80	1.00	15.4	7Q2	.19	18.1
75	1.35	18.2			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHICOPEE RIVER BASIN

01172810 Canesto Brook near Barre, MA

LOCATION.--Lat 42˚26'15", long 72˚02'26", Worcester County, at bridge on State Highway 62, 3.5 mi east of Barre.

PERIOD OF RECORD.--1992–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 12.7 mi^2	Area of water bodies = 0.03 mi^2	Minimum elevation = 713 ft
Area of stratified drift = 2.47 mi^2	Total length of streams = 17.8 mi	Maximum elevation = 1,310 ft
Area of wetlands = 0.59 mi^2	Mean basin slope = 3.61 percent	Mean elevation = 1,010 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01162500, 01174900, 01175670, 01176000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-28-92	2.90	7-01-93	2.24	8-26-93	3.55	8-11-94	2.32
8-24-92	6.54	7-08-93	4.19	7-13-94	1.83	9-07-94	4.02
9-16-92	2.09	7-23-93	1.64				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.38	15.9	70	4.7	12.0
98	1.55	13.7	65	5.28	13.7
97	1.72	12.1	60	5.82	15.2
95	2.05	9.7	55	6.38	16.7
93	2.32	8.4	50	6.99	18.2
90	2.64	7.6	August median	3.36	8.0
85	3.18	7.7	7Q10	1.29	17.2
80	3.69	8.9	7Q2	2.02	10.1
75	4.19	10.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHICOPEE RIVER BASIN

01173420 Muddy Brook at Ware, MA

LOCATION.--Lat 42˚14'53", long 72˚15'59", Hampshire County, at bridge on Greenwich Street, 0.4 mi north of Ware.

PERIOD OF RECORD.--1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 19.0 mi^2	Area of water bodies = 0.25 mi^2	Minimum elevation = 432 ft
Area of stratified drift = 4.54 mi^2	Total length of streams = 33.4 mi	Maximum elevation = 986 ft
Area of wetlands = 1.23 mi^2	Mean basin slope = 5.44 percent	Mean elevation = 699 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01174500, 01174900, 01175670, 01176000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-26-91	9.59	8-29-91	8.92	8-24-92	18.7	7-01-93	5.87
7-11-91	6.30	7-28-92	6.83	9-17-92	7.24	8-25-93	2.32
7-19-91	4.47						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.37	13.1	70	10.2	6.5
98	2.68	11.6	65	11.9	7.5
97	2.99	10.3	60	13.5	8.4
95	3.69	8.5	55	15.2	9.3
93	4.24	7.4	50	17.1	10.3
90	4.96	6.3	August median	6.47	5.3
85	6.08	5.4	7Q10	2.17	14.6
80	7.40	5.2	7Q2	3.56	9.4
75	8.82	5.7			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHICOPEE RIVER BASIN

01175710 Five Mile River near North Brookfield, MA

LOCATION.--Lat 42˚17'39", long 72˚02'18", Worcester County, at outlet of Brooks Pond, 2.5 mi northeast of North Brookfield.

PERIOD OF RECORD.--1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 13.8 mi^2	Area of water bodies = 0.43 mi^2	Minimum elevation = 664 ft
Area of stratified drift = 2.16 mi^2	Total length of streams = 28.8 mi	Maximum elevation = 1,150 ft
Area of wetlands = 0.83 mi^2	Mean basin slope = 3.87 percent	Mean elevation = 908 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01174500, 01174900, 01175670, 01176000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-19-55	1,730	7-19-91	1.83	8-24-92	7.00	7-08-93	3.51
7-11-91	.86	9-12-91	1.90	9-17-92	3.87	7-19-93	.48
7-11-91	.97	7-28-92	3.37	7-01-93	3.03		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.32	22.4	70	5.34	13.1
98	.42	19.8	65	6.90	13.9
97	.55	17.9	60	8.49	14.5
95	.82	15.2	55	10.3	15.2
93	1.09	13.5	50	12.7	16.0
90	1.52	12.1	August median	2.52	11.3
85	2.18	11.3	7Q10	.30	24.5
80	3.10	11.6	7Q2	.83	16.8
75	4.14	12.4			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHICOPEE RIVER BASIN

01175890 Naultaug Brook at Warren, MA

LOCATION.--Lat 42˚13'31", long 72˚10'12", Worcester County, at bridge on State Highway 67, 1.5 mi northeast of Warren.

PERIOD OF RECORD.--1981–82, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 3.55 mi^2	Area of water bodies = 0.01 mi^2	Minimum elevation = 609 ft
Area of stratified drift = 0.67 mi^2	Total length of streams = 7.68 mi	Maximum elevation = 1,100 ft
Area of wetlands = 0.09 mi^2	Mean basin slope = 5.64 percent	Mean elevation = 857 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01162500, 01174900, 01175670, 01176000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-21-81	0.32	9-14-82	0.39	6-19-95	0.85	8-07-96	2.18
5-13-82	4.40	8-11-94	.46	8-10-95	.83	8-20-96	.68
7-07-82	2.50	9-07-94	.92	8-21-95	.22	9-05-96	.40
7-27-82	1.20	9-21-94	.56				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.12	14.3	70	1.35	6.6
98	.16	12.4	65	1.70	7.5
97	.20	11.1	60	2.06	8.4
95	.30	9	55	2.51	9.4
93	.38	7.9	50	3.03	10.5
90	.48	6.9	August median	.74	5.8
85	.66	5.9	7Q10	.10	16.3
80	.86	5.7	7Q2	.29	10.2
75	1.08	6			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHICOPEE RIVER BASIN

01176300 Foskett Mill Stream near Fentonville, MA

LOCATION.--Lat 42˚07'43", long 72˚15'31", Hampden County, 30 ft upstream from bridge on Old Palmer Road, 1.2 mi southeast of Fentonville, and 3.8 mi southeast of Palmer.

PERIOD OF RECORD.--1960–62, 1965–66, 1994–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 6.57 mi^2	Area of water bodies = 0.05 mi^2	Minimum elevation = 408 ft
Area of stratified drift = 1.41 mi^2	Total length of streams = 8.76 mi	Maximum elevation = 1,210 ft
Area of wetlands = 0.13 mi^2	Mean basin slope = 8.54 percent	Mean elevation = 806 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01121000, 01171500, 01176000, 01184490

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-27-60	5.26	9-12-61	3.34	9-14-66	2.04	6-19-95	4.53
9-08-60	4.33	7-07-62	2.70	7-13-94	4.55	7-24-95	4.40
9-28-60	6.58	8-07-62	2.69	8-11-94	3.45	8-10-95	4.26
8-09-61	3.77	8-27-65	2.88	9-07-94	3.63	8-21-95	2.67
9-06-61	3.73						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.32	5.6	70	4.97	4.6
98	2.54	4.7	65	5.41	5.4
97	2.72	4.1	60	5.79	6.0
95	2.95	3.5	55	6.30	6.8
93	3.19	3.0	50	6.74	7.5
90	3.48	2.8	August median	4.09	3.4
85	3.90	3.1	7Q10	2.26	6.2
80	4.30	3.6	7Q2	3.09	3.6
75	4.61	4.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHICOPEE RIVER BASIN

01176415 Chicopee Brook at Route 32, South Monson, MA

LOCATION.--Lat 42˚05'35", long 72˚18'44", Hampden County, at bridge on Old Palmer Road, 1.2 mi southeast of Fentonville, and 3.8 mi southeast of Palmer.

PERIOD OF RECORD.--1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 15.3 mi^2	Area of water bodies = 0.32 mi^2	Minimum elevation = 396 ft
Area of stratified drift = 3.54 mi^2	Total length of streams = 18.9 mi	Maximum elevation = 1,260 ft
Area of wetlands = 0.28 mi^2	Mean basin slope = 5.80 percent	Mean elevation = 819 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01121000, 01174900, 01175670, 01184490

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-22-94	5.40	6-19-95	7.64	8-21-95	3.37	8-20-96	5.06
8-11-94	3.69	7-24-95	4.66	8-07-96	7.57	9-05-96	5.07
9-07-94	7.39	8-10-95	5.95				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	3.31	6.2	70	7.61	4.0
98	3.58	5.4	65	8.36	4.8
97	3.84	4.8	60	9.08	5.5
95	4.26	3.9	55	9.92	6.4
93	4.57	3.3	50	10.5	6.9
90	5.02	2.8	August median	6.05	2.7
85	5.78	2.5	7Q10	3.11	7.3
80	6.48	2.9	7Q2	4.17	4.5
75	6.93	3.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

CHICOPEE RIVER BASIN

01176780 Twelvemile Brook near North Wilbraham, MA

LOCATION.--Lat 42˚08'52", long 72˚24'00", Hampden County, at bridge on Crane Hill Road, 1.4 mi east of North Wilbraham.

PERIOD OF RECORD.--1992–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 13.6 mi^2	Area of water bodies = 0.08 mi^2	Minimum elevation = 260 ft
Area of stratified drift = 2.83 mi^2	Total length of streams = 22.0 mi	Maximum elevation = 1,050 ft
Area of wetlands = 0.26 mi^2	Mean basin slope = 5.57 percent	Mean elevation = 647 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01121000, 01171500, 01175670, 01176000, 01184490

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-29-92	7.52	9-17-92	7.21	8-25-93	2.77	8-11-94	3.98
8-24-92	18.7	7-02-93	7.47	7-22-94	3.80	9-07-94	6.25

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.75	18.9	70	9.16	8.5
98	2.10	16.3	65	11.1	10.2
97	2.46	14.4	60	13.1	11.9
95	3.00	12.1	55	15.9	14.1
93	3.51	10.3	50	18.3	15.7
90	4.20	8.6	August median	6.42	6.9
85	5.41	7.0	7Q10	1.68	20.3
80	6.76	6.8	7Q2	3.18	12.0
75	7.7	7.5			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

WESTFIELD RIVER BASIN

01178200 Westfield Brook at East Windsor, MA

LOCATION.--Lat 42˚28'41", long 72˚59'09", Berkshire County, at bridge on High Street, at East Windsor, 1.6 mi upstream from mouth.

PERIOD OF RECORD.--1962–65, 1984, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 11.1 mi^2	Area of water bodies = 0.01 mi^2	Minimum elevation = 1,360 ft
Area of stratified drift = 0.22 mi^2	Total length of streams = 19.2 mi	Maximum elevation = 2,300 ft
Area of wetlands = 0.10 mi^2	Mean basin slope = 5.79 percent	Mean elevation = 1,860 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169000, 01169900, 01171500, 01180500, 01181000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-11-62	0.55	8-05-64	0.89	6-28-91	1.55	8-24-92	5.55
9-21-62	.55	9-07-65	1.00	7-19-91	.90	9-17-92	4.66
6-27-63	2.55	8-28-84	2.00	8-28-91	3.76	7-01-93	1.15
8-27-63	.78	9-13-84	1.80	7-28-92	5.24	8-26-93	.99
9-09-63	.63						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.62	6.9	70	5.20	8.7
98	.79	5.8	65	6.64	10.0
97	.92	5.3	60	8.18	11.2
95	1.16	4.8	55	10.3	12.5
93	1.43	4.6	50	12.6	13.6
90	1.82	4.7	August median	2.55	5.6
85	2.43	5.3	7Q10	.54	9.4
80	3.21	6.4	7Q2	1.11	6.1
75	4.11	7.6			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

WESTFIELD RIVER BASIN

01178300 Swift River at Swift River, MA

LOCATION.--Lat 42˚26'50", long 72˚51'29", Hampshire County, at bridge on State Highway 9, at Swift River.

PERIOD OF RECORD.--1962–65, 1984, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 22.9 mi^2	Area of water bodies = 0.17 mi^2	Minimum elevation = 961 ft
Area of stratified drift = 0.80 mi^2	Total length of streams = 38.8 mi	Maximum elevation = 1,870 ft
Area of wetlands = 0.48 mi^2	Mean basin slope = 4.86 percent	Mean elevation = 1,410 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169000, 01171500, 01180500, 01181000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-27-62	2.03	9-09-63	0.86	6-28-91	3.31	8-24-92	7.94
9-11-62	2.08	7-29-64	1.66	7-19-91	2.74	9-17-92	8.28
9-21-62	1.56	9-07-65	2.92	8-28-91	8.85	7-01-93	2.78
6-27-63	8.50	8-28-84	4.40	7-28-92	8.19	8-26-93	2.57
8-27-63	1.13	9-13-84	5.00				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.51	10.2	70	11.6	13.4
98	1.90	8.5	65	14.8	15.4
97	2.27	7.5	60	18.3	17.4
95	2.87	6.7	55	22.8	19.3
93	3.52	6.4	50	27.9	21.2
90	4.37	6.6	August median	5.91	8.2
85	5.68	7.8	7Q10	1.32	12.8
80	7.36	9.6	7Q2	2.71	7.8
75	9.33	11.5			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

WESTFIELD RIVER BASIN

01178490 West Branch at West Chesterfield, MA

LOCATION.--Lat 42˚24'02", long 72˚52'36", Hampshire County, at bridge on South Road, 0.2 mi south of West Chesterfield.

PERIOD OF RECORD.--1992–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 12.3 mi^2	Area of water bodies = 0.01 mi^2	Minimum elevation = 747 ft
Area of stratified drift = 0.26 mi^2	Total length of streams = 26.0 mi	Maximum elevation = 2,070 ft
Area of wetlands = 0.00 mi^2	Mean basin slope = 5.78 percent	Mean elevation = 1,410 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169000, 01169900, 01181000, 01187300

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-28-92	10.9	9-17-92	10.3	8-26-93	1.16	8-10-94	1.51
8-24-92	5.57	7-01-93	4.14	7-13-94	2.84	9-06-94	2.41

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.73	20.8	70	12.7	16.2
98	1.06	16.9	65	17.5	19.3
97	1.40	14.6	60	24.6	22.6
95	1.99	11.6	55	33.2	25.7
93	2.52	10.1	50	44.9	28.7
90	3.28	9.0	August median	4.77	9.5
85	4.67	9.2	7Q10	.59	24.5
80	6.43	10.7	7Q2	1.67	14.4
75	8.95	13.2			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

WESTFIELD RIVER BASIN

01179900 Trout Brook at West Worthington, MA

LOCATION.--Lat 42˚25'21", long 72˚59'19", Hampshire County, at bridge on Route 143, at West Worthington.

PERIOD OF RECORD.--1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 6.46 mi^2	Area of water bodies = 0.01 mi^2	Minimum elevation = 1,460 ft
Area of stratified drift = 0.19 mi^2	Total length of streams = 6.78 mi	Maximum elevation = 2,120 ft
Area of wetlands = 0.07 mi^2	Mean basin slope = 5.34 percent	Mean elevation = 1,830 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169900, 01171500, 01181000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-13-94	0.58	6-20-95	0.88	8-21-95	0.16	8-20-96	1.78
8-10-94	.56	8-10-95	.83	8-06-96	37.9	9-05-96	.87
9-06-94	.96						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.06	22.8	70	4.75	13.5
98	.1	19.4	65	8.02	16.2
97	.14	17.6	60	13.5	19.0
95	.21	15.0	55	21.2	21.4
93	.31	13.0	50	34.0	23.8
90	.55	10.7	August median	1.04	10.4
85	1.04	9.5	7Q10	.04	31.2
80	1.74	9.9	7Q2	.18	20.2
75	2.97	11.5			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

WESTFIELD RIVER BASIN

01180650 Shaker Mill Brook at Becket, MA

LOCATION.--Lat 42˚19'56", long 73˚05'09", Berkshire County, at bridge on State Highway 8, in center of Becket.

PERIOD OF RECORD.--1993–95.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 6.35 mi^2	Area of water bodies = 0.01 mi^2	Minimum elevation = 1,220 ft
Area of stratified drift = 0.00 mi^2	Total length of streams = 13.2 mi	Maximum elevation = 2,140 ft
Area of wetlands = 0.11 mi^2	Mean basin slope = 4.74 percent	Mean elevation = 1,700 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169900, 01171500, 0118100, 01199050

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-01-93	1.15	7-12-94	1.20	9-07-94	1.00	8-10-95	0.89
7-19-93	.49	8-10-94	1.25	6-19-95	1.12	8-21-95	.17
10-07-93	1.54						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.30	22.4	70	3.22	24.0
98	.37	18.7	65	4.26	27.9
97	.44	16.2	60	5.53	31.5
95	.55	13.5	55	7.04	34.8
93	.67	11.4	50	9.12	38.4
90	.86	10.1	August median	1.31	12.4
85	1.28	12.1	7Q10	.24	26.7
80	1.83	16.2	7Q2	.55	14.5
75	2.44	20.1			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

WESTFIELD RIVER BASIN

01183210 Munn Brook near Westfield, MA

LOCATION.--Lat 42˚07'05", long 72˚48'01", Hampden County, at bridge on Granville Road, 2.0 mi west of Westfield.

PERIOD OF RECORD.--1991–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 22.2 mi^2	Area of water bodies = 0.28 mi^2	Minimum elevation = 209 ft
Area of stratified drift = 5.02 mi^2	Total length of streams = 43.2 mi	Maximum elevation = 1,460 ft
Area of wetlands = 0.29 mi^2	Mean basin slope = 8.39 percent	Mean elevation = 829 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01171500, 01184490, 01188000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-27-91	2.70	8-29-91	9.12	9-03-92	10.9	8-25-93	3.69
7-12-91	7.64	7-29-92	15.7	7-01-93	13.0	10-07-93	5.88
7-18-91	6.99	8-25-92	16.4				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.95	11.5	70	13.3	6.7
98	4.43	9.7	65	14.5	8.1
97	5.48	8.6	60	15.4	9.5
95	7.26	7.2	55	15.9	11.5
93	8.03	6.5	50	16.8	12.9
90	8.77	5.9	August median	11.9	5.5
85	10.5	5.2	7Q10	1.94	13.7
80	11.7	5.3	7Q2	7.44	7.9
75	12.2	5.8			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

FARMINGTON RIVER BASIN

01184855 West Branch Farmington River near Otis, MA

LOCATION.--Lat 42˚09'40", long 73˚04'19", Berkshire County, 20 ft upstream from confluence with Fall River, 2.4 mi south of Otis.

PERIOD OF RECORD.--1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 12.3 mi^2	Area of water bodies = 0.01 mi^2	Minimum elevation = 747 ft
Area of stratified drift = 0.26 mi^2	Total length of streams = 26.0 mi	Maximum elevation = 2,070 ft
Area of wetlands = 0.00 mi^2	Mean basin slope = 5.78 percent	Mean elevation = 1,410 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01171500, 01181000, 01187300, 01188000, 01199050

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
6-28-91	19.0	8-28-91	13.2	9-02-92	16.3	7-26-93	2.59
7-12-91	4.47	7-28-92	16.6	7-01-93	7.48	8-25-93	9.21
7-18-91	3.38	8-24-92	28.4				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	3.13	13.7	70	22.9	11.9
98	4.03	11.5	65	28.3	13.7
97	4.72	10.3	60	34.1	15.3
95	5.94	8.9	55	40.9	17.0
93	7.09	8.0	50	48.7	18.7
90	8.5	7.5	August median	12.0	8.0
85	11.5	7.7	7Q10	2.7	15.6
80	14.9	8.9	7Q2	5.81	9.6
75	18.6	10.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

FARMINGTON RIVER BASIN

01185490 Clam River near West New Boston, MA

LOCATION.--Lat 42˚06'03", long 73˚05'43", Berkshire County, at culvert on State Highway 8, 2.1 mi south of New Boston.

PERIOD OF RECORD.--1955, 1965, 1984, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 29.1 mi^2	Area of water bodies = 0.71 mi^2	Minimum elevation = 898 ft
Area of stratified drift = 0.19 mi^2	Total length of streams = 46.8 mi	Maximum elevation = 1,800 ft
Area of wetlands = 0.89 mi^2	Mean basin slope = 6.69 percent	Mean elevation = 1,460 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01181000, 01187300, 01188000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-08-65	3.21	6-28-91	22.7	7-28-92	9.87	7-01-93	12.8
8-30-84	2.85	7-12-91	6.95	8-24-92	40.8	7-26-93	2.04
9-11-84	2.63	7-18-91	4.79	9-02-92	10.3	8-25-93	3.30
9-26-84	2.30	8-28-91	12.3				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.17	18.6	70	23.8	20.8
98	2.99	15.2	65	30.3	23.6
97	3.61	13.6	60	38.7	26.5
95	4.82	11.9	55	47.4	29.1
93	5.76	11.4	50	58.2	31.7
90	7.00	11.3	August median	10.3	13.0
85	10.3	12.9	7Q10	1.75	21.4
80	13.9	15.2	7Q2	4.47	13.0
75	18.6	18.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

FARMINGTON RIVER BASIN

01186300 Sandy Brook near Sandisfield, MA

LOCATION.--Lat 42˚02'37", long 73˚08'13", Berkshire County, at culvert on New Marlborough Road, 0.1 mi north of Connecticut State line, 4.6 mi south of Sandisfield.

PERIOD OF RECORD.--1984–86, 1992–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 9.87 mi^2	Area of water bodies = 0.09 mi^2	Minimum elevation = 1,280 ft
Area of stratified drift = 0.59 mi^2	Total length of streams = 15.9 mi	Maximum elevation = 1,810 ft
Area of wetlands = 0.79 mi^2	Mean basin slope = 3.83 percent	Mean elevation = 1,540 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01180500, 01181000, 01187300, 01188000, 01197000, 01199050

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-10-84	1.40	8-26-86	4.42	7-01-93	0.98	7-12-94	1.69
9-26-84	.96	7-28-92	4.15	7-26-93	.51	8-10-94	.98
9-03-85	7.30	8-24-92	8.80	8-25-93	1.66	9-06-94	1.72
9-23-85	2.20	9-02-92	3.31				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.51	13.6	70	5.49	10.2
98	.70	11.3	65	6.91	11.7
97	.88	9.8	60	8.76	13.3
95	1.17	8.2	55	10.8	14.7
93	1.47	7.2	50	13.6	16.2
90	1.83	6.6	August median	2.61	6.9
85	2.55	6.7	7Q10	.40	16.3
80	3.38	7.6	7Q2	1.11	9.2
75	4.34	8.8			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

HOUSATONIC RIVER BASIN

01197120 Southwest Branch Housatonic River at Pittsfield, MA

LOCATION.--Lat 42˚26'28", long 73˚17'47", Berkshire County, at Mungerford Street, 550 ft downstream from Smith Brook, at Pittsfield.

PERIOD OF RECORD.--1963–65, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 20.4 mi^2	Area of water bodies = 0.40 mi^2	Minimum elevation = 1,020 ft
Area of stratified drift = 0.11 mi^2	Total length of streams = 36.2 mi	Maximum elevation = 2,210 ft
Area of wetlands = 0.56 mi^2	Mean basin slope = 8.09 percent	Mean elevation = 1,600 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169900, 01181000, 01197000, 01333000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-27-63	2.57	9-07-65	2.55	7-28-92	5.52	9-15-92	5.25
9-09-63	1.63	6-28-91	5.63	8-24-92	6.56	7-01-93	5.16
8-06-64	1.17	7-19-91	2.22	8-27-91	6.46	8-26-93	1.54

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.63	11.0	70	11.3	13.4
98	1.96	9.3	65	13.6	15.1
97	2.24	8.1	60	17.3	17.4
95	2.76	6.6	55	21.2	19.2
93	3.33	6.0	50	26.8	21.3
90	4.15	6.0	August median	5.90	7.9
85	5.57	7.3	7Q10	1.45	13.2
80	7.16	9.2	7Q2	2.67	7.9
75	9.05	11.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

HOUSATONIC RIVER BASIN

01197140 Yokun Brook near Lenox, MA

LOCATION.--Lat 42˚22'51", long 73˚15'26", Berkshire County, 30 ft downstream from twin culverts on East Street, 1.7 mi south of Pittsfield city line and 2.2 mi north east of Lenox.

PERIOD OF RECORD.--1963–65, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 5.95 mi^2	Area of water bodies = 0.03 mi^2	Minimum elevation = 969 ft
Area of stratified drift = 0.03 mi^2	Total length of streams = 7.50 mi	Maximum elevation = 2,160 ft
Area of wetlands = 0.37 mi^2	Mean basin slope = 8.59 percent	Mean elevation = 1,550 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169900, 01181000, 01199050, 01333000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-26-63	0.20	8-10-94	1.14	7-06-95	0.65	9-05-95	0.02
9-10-63	.09	9-06-94	1.61	8-02-95	.31	8-06-96	4.19
7-29-64	.13	10-06-94	3.43	8-10-95	1.48	8-20-96	.94
9-07-65	1.51	6-08-95	1.83	8-21-95	.10	9-05-96	1.17
7-12-94	1.08	6-19-95	.98				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.16	19.3	70	2.63	15.7
98	.21	16.9	65	3.45	17.7
97	.26	15.3	60	4.61	20.1
95	.36	13.2	55	5.87	22.1
93	.46	11.9	50	7.61	24.3
90	.63	10.7	August median	1.02	10.8
85	.95	10.6	7Q10	.12	22.8
80	1.39	11.7	7Q2	.34	14.5
75	1.94	13.6			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

HOUSATONIC RIVER BASIN

01197180 Greenwater Brook at East Lee, MA

LOCATION.--Lat 42˚17'59", long 73˚12'53", Berkshire County, at bridge on private land near U.S. Highway 20, 0.3 mi east of East Lee.

PERIOD OF RECORD.--1963–65, 1991–93.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 7.62 mi^2	Area of water bodies = 0.16 mi^2	Minimum elevation = 1,060 ft
Area of stratified drift = 0.78 mi^2	Total length of streams = 8.91 mi	Maximum elevation = 2,260 ft
Area of wetlands = 0.18 mi^2	Mean basin slope = 12.4 percent	Mean elevation = 1,660 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01181000, 01187300, 01188000, 01197000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-26-63	1.50	6-28-91	3.46	7-28-92	3.24	7-01-93	3.06
9-09-63	1.15	7-12-91	2.37	8-24-92	4.85	7-19-93	2.61
7-28-64	1.90	7-18-91	2.35	9-02-92	3.80	10-07-93	2.99
9-07-65	1.83	8-28-91	2.83				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.64	6.6	70	4.43	7.5
98	1.85	5.5	65	4.91	8.6
97	2.01	4.9	60	5.45	9.6
95	2.25	4.3	55	5.93	10.5
93	2.44	4.1	50	6.47	11.4
90	2.68	4.1	August median	3.13	4.8
85	3.13	4.7	7Q10	1.49	7.7
80	3.54	5.6	7Q2	2.17	4.7
75	4.00	6.6			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

HOUSATONIC RIVER BASIN

01197230 Hop Brook near South Lee, MA

LOCATION.--Lat 42˚16'13", long 73˚15'06", Berkshire County, at bridge on Meadow Street, 1.4 mi southeast of South Lee.

PERIOD OF RECORD.--1963–65, 1991–93, 1995.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 22.2 mi^2	Area of water bodies = 0.19 mi^2	Minimum elevation = 846 ft
Area of stratified drift = 2.79 mi^2	Total length of streams = 25.6 mi	Maximum elevation = 1,960 ft
Area of wetlands = 0.46 mi^2	Mean basin slope = 10.7 percent	Mean elevation = 1,400 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169900, 01181000, 01187300, 01188000, 01199050

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-28-63	2.04	6-28-91	4.84	7-29-92	6.50	7-26-93	1.46
9-09-63	1.59	7-12-91	3.74	9-02-92	7.41	6-08-95	11.8
8-06-64	1.88	7-09-91	3.38	7-01-93	2.80	9-05-95	1.53
9-07-65	2.56	8-28-91	2.60				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.70	6.9	70	8.63	9.1
98	2.09	5.7	65	10.1	10.2
97	2.37	5.2	60	11.9	11.3
95	2.84	4.8	55	13.5	12.2
93	3.28	4.7	50	15.5	13.2
90	3.83	4.9	August median	4.98	6.0
85	4.91	5.8	7Q10	1.50	8.6
80	6.06	6.9	7Q2	2.77	5.7
75	7.26	8.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

HOUSATONIC RIVER BASIN

01198060 Fenton Brook near South Egremont, MA

LOCATION.--Lat 42˚09'17", long 73˚26'51", Berkshire County, at bridge on Mount Washington Road, 1.8 mi west of South Egremont.

PERIOD OF RECORD.--1963–65, 1992–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 2.91 mi^2	Area of water bodies = 0.00 mi^2	Minimum elevation = 774 ft
Area of stratified drift = 0.80 mi^2	Total length of streams = 3.19 mi	Maximum elevation = 2,030 ft
Area of wetlands = 0.00 mi^2	Mean basin slope = 19.0 percent	Mean elevation = 1,400 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01181000, 011873000, 01188000, 01199050

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-27-63	0.31	8-24-92	1.39	8-25-93	0.005	10-06-94	1.67
9-09-63	.27	9-02-92	.63	7-12-94	.21	6-09-95	.90
8-05-64	.30	7-01-93	.13	8-10-94	.52	8-23-95	.009
9-08-65	.26	7-26-93	.005	9-06-94	1.33	9-06-95	.005
7-28-92	.68						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.02	22.4	70	1.65	25.0
98	.04	19.3	65	2.46	27.7
97	.06	17.8	60	3.71	30.4
95	.10	16.5	55	5.23	32.9
93	.14	16.1	50	7.42	35.6
90	.20	16.1	August median	.40	17.9
85	.38	17.6	7Q10	.02	26.9
80	.66	19.9	7Q2	.09	18.6
75	1.06	22.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

HOUSATONIC RIVER BASIN

01198160 Umpachene River at Southfield, MA

LOCATION.--Lat 42˚05'26", long 73˚14'40", Berkshire County, at bridge on Canaan-Southfield Road, 0.9 mi southwest of Southfield.

PERIOD OF RECORD.--1963–65, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 8.46 mi^2	Area of water bodies = 0.05 mi^2	Minimum elevation = 1,010 ft
Area of stratified drift = 0.27 mi^2	Total length of streams = 18.9 mi	Maximum elevation = 1,850 ft
Area of wetlands = 0.27 mi^2	Mean basin slope = 6.22 percent	Mean elevation = 1,490 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01181000, 01188000, 01199050

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-27-63	0.61	8-10-94	3.50	6-19-95	2.08	9-06-95	0.41
9-10-63	.81	9-06-94	1.08	8-03-95	1.17	8-06-96	3.79
8-06-64	.56	10-07-94	2.87	8-10-95	1.13	8-20-96	2.00
9-08-65	.96	6-09-95	3.03	8-22-95	.58	9-06-96	1.78
7-12-94	1.44						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.68	8.7	70	2.70	9.0
98	.80	7.7	65	3.13	10.1
97	.88	7.2	60	3.57	11.1
95	1.03	6.5	55	3.99	11.9
93	1.15	6.2	50	4.50	12.9
90	1.34	6.1	August median	1.70	6.6
85	1.67	6.4	7Q10	.59	10.6
80	2.00	7.2	7Q2	1.02	7.3
75	2.33	8.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

HOUSATONIC RIVER BASIN

01198200 Konkapot River at Ashley Falls, MA

LOCATION.--Lat 42˚03'11", long 73˚19'35", Berkshire County, on right bank at downstream side of bridge on U.S. Highway 7, 0.5 mi southeast of Ashley Falls, and 1.5 mi upstream from mouth.

PERIOD OF RECORD.--Crest-stage partial-record: water years 1963–71; low-flow partial-record: water years 1963–65; and 1991–93; continuous record March 1994 to September 1996.

REMARKS.-- None.

BASIN CHARACTERISTICS.--Not available.

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01181000, 01187300, 01197000, 01198000, 01198500, 01999050

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-26-63	17.3	9-02-92	23.9	9-08-94	28	5-05-95	57
9-10-63	16.7	9-17-92	23.6	10-19-94	28	5-11-95	55
8-06-64	13.7	7-01-93	23.6	11-29-94	208	6-09-95	40
9-08-65	16.3	8-25-93	19.4	12-06-94	288	6-21-95	22
6-27-91	45.7	3-25-94	357	2-01-95	99	7-20-95	22
7-12-91	34.4	3-29-94	410	3-15-95	201	8-17-95	14
7-19-91	22.3	4-07-94	588	4-13-95	249	8-18-95	13
8-28-91	26.1	8-03-94	91	4-28-95	68	9-06-95	10
8-25-92	47	8-23-94	200				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	12.7	3.6	70	47.4	2.3
98	14.8	3.3	65	53.9	2.3
97	16.5	3.2	60	61.0	2.3
95	19.1	3.0	55	68.2	2.4
93	21.5	2.8	50	75.9	2.5
90	24.5	2.7	August median	30.6	2.6
85	29.6	2.5	7Q10	11.5	5.2
80	35.7	2.4	7Q2	19.0	4.0
75	41.3	2.3			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

HUDSON RIVER BASIN

01331380 South Brook at Windsor Road at Cheshire, MA

LOCATION.--Lat 42˚33'40", long 73˚09'06", Berkshire County, at culvert on Windsor Road, 3,000 ft above mouth, and 0.8 mi east of Cheshire.

PERIOD OF RECORD.--1965, 1967–69, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 7.03 mi^2	Area of water bodies = 0.00 mi^2	Minimum elevation = 979 ft
Area of stratified drift = 0.02 mi^2	Total length of streams = 12.8 mi	Maximum elevation = 2,260 ft
Area of wetlands = 0.02 mi^2	Mean basin slope = 10.5 percent	Mean elevation = 1,640 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169000, 01169900, 01197000, 01333000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-08-67	1.33	9-23-69	1.17	6-20-95	1.83	8-06-96	4.62
10-25-67	1.77	7-12-94	.85	8-10-95	1.17	8-20-96	1.73
8-27-68	.61	8-10-94	.99	8-21-95	.53	9-05-96	1.13
8-28-69	1.05	9-20-94	.72				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.48	13.6	70	2.16	9.2
98	.54	11.6	65	2.58	10.7
97	.60	10.4	60	3.20	12.4
95	.72	8.4	55	3.88	14.2
93	.80	7.2	50	5.22	15.8
90	.96	6.0	August median	1.22	5.7
85	1.17	5.6	7Q10	.44	15.5
80	1.44	6.1	7Q2	.70	9.5
75	1.78	7.5			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

HUDSON RIVER BASIN

01331960 Hudson Brook at Middle Road at Clarksburg, MA

LOCATION.--Lat 42˚42'59", long 73˚05'48", Berkshire County, at bridge on side street to Middle Road at Clarksburg, 1.25 mi northeast of North Adams.

PERIOD OF RECORD.--1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--Not available.

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.-- 01169000, 01169900, 01170100, 01333000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-12-94	1.66	6-20-95	3.14	8-21-95	0.79	8-20-96	1.64
8-10-94	.79	8-10-95	2.64	8-06-96	4.15	9-05-96	1.02
9-07-94	1.34						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.52	11.3	70	3.71	8.4
98	.67	9.4	65	4.53	9.9
97	.79	8.4	60	5.63	11.5
95	.98	6.8	55	6.96	13.2
93	1.15	5.9	50	8.50	14.7
90	1.43	5.2	August median	1.85	5.2
85	1.77	5.0	7Q10	.42	14.0
80	2.23	5.5	7Q2	.84	8.6
75	2.92	6.8			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

HUDSON RIVER BASIN

01332900 Hopper Brook at Hopper Road near South Williamstown, MA

LOCATION.--Lat 42˚40'38", long 73˚12'39", Berkshire County, at culvert on Hopper Road, 350 ft above mouth, and 2.0 mi northeast of South Williamstown.

PERIOD OF RECORD.--1967–69, 1994–96.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 6.70 mi^2	Area of water bodies = 0.00 mi^2	Minimum elevation = 766 ft
Area of stratified drift = .022 mi^2	Total length of streams = 8.21 mi	Maximum elevation = 3,480 ft
Area of wetlands = 0.00 mi^2	Mean basin slope = 24.6 percent	Mean elevation = 2,080 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01169000, 01169900, 01333000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
9-08-67	3.38	9-24-68	1.84	9-07-94	1.66	8-06-96	6.45
10-24-67	5.43	8-28-69	3.10	6-20-95	5.60	8-20-96	2.17
8-15-68	1.58	7-12-94	1.46	8-10-95	3.45	9-05-96	1.86
8-29-68	1.26	8-10-94	1.64	8-21-95	1.25		

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	1.35	8.1	70	5.00	5.9
98	1.38	7.1	65	5.74	6.7
97	1.41	6.5	60	6.48	7.6
95	1.46	5.3	55	7.28	8.5
93	1.51	4.6	50	7.98	9.4
90	1.67	3.9	August median	2.13	3.9
85	2.01	3.7	7Q10	1.34	10.4
80	2.70	4.1	7Q2	1.45	6.8
75	3.95	5.0			

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

HUDSON RIVER BASIN

01359967 Kinderhook Creek at Hancock, MA

LOCATION.--Lat 42˚32'19", long 73˚20'01", Berkshire County, at bridge on State Highway 43, 0.6 mi southwest of Hancock.

PERIOD OF RECORD.--1992–94.

REMARKS.-- None.

BASIN CHARACTERISTICS.--

Drainage area = 14.1 mi^2	Area of water bodies = 0.02 mi^2	Minimum elevation = 979 ft
Area of stratified drift = 1.39 mi^2	Total length of streams = 21.4 mi	Maximum elevation = 2,550 ft
Area of wetlands = 0.05 mi^2	Mean basin slope = 17.6 percent	Mean elevation = 1,580 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01197000, 01198000, 01199050, 01333000

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
7-28-92	5.42	9-15-92	3.98	8-26-93	3.20	8-10-94	6.44
8-24-92	4.71	7-01-93	4.48	7-12-94	6.59	9-07-94	7.59
9-02-92	4.23						

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	2.43	12.5	70	6.80	6.8
98	2.75	10.7	65	8.05	9.0
97	3.01	9.3	60	9.09	10.7
95	3.66	7.0	55	10.1	12.2
93	4.19	5.7	50	11.3	13.8
90	4.74	5.2	August median	4.96	5.5
85	4.94	5.5	7Q10	2.29	14.0
80	5.11	4.7	7Q2	3.74	7.2
75	5.77	5.2			

District Chief,
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