Surface Water Supply of the United States 1959

Part 1-A. North Atlantic Slope Basins, Maine to Connecticut

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1621

Prepared in cooperation with the States of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont, and with other agencies

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Prepared under the direction of J. V. B. WELLS, *Chief, Surface Water Branch*

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Thomas B. Nolan, *Director*

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PREFACE

This report was prepared by the Geological Survey in cooperation with the States of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont, and with other agencies, by personnel of the Water Resources Division, L. B. Leopold, chief, under the general direction of J. V. B. Wells, chief, Surface Water Branch, succeeded by E. L. Hendricks, and F. J. Flynn, chief, Basic Records Section.

The data were collected and computed under supervision of district engineers, Surface Water Branch, as follows:

B. L. Bigwood, succeeded by John Horton ..... Hartford, Conn.
D. F. Dougherty ..... Albany, N. Y.
G. S. Hayes ..... Augusta, Maine
C. E. Knox ..... Boston, Mass.

CALENDAR FOR WATER YEAR 1959

OCTOBER 1958

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

NOVEMBER 1958

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

DECEMBER 1958

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

JANUARY 1959

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

FEBRUARY 1959

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

MARCH 1959

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

APRIL 1959

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

MAY 1959

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

JUNE 1959

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

JULY 1959

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

AUGUST 1959

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

SEPTEMBER 1959

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

CONTENTS

ILLUSTRATIONS

SURFACE WATER SUPPLY OF NORTH ATLANTIC SLOPE BASINS, MAINE TO CONNECTICUT, 1959

SCOPE OF WORK

This volume is one of a series of 20 reports presenting records of stage, discharge, and content, of streams, lakes, and reservoirs in the United States during the 1959 water year. Since 1888, when the United States Geological Survey first studied streamflow in relation to problems of irrigation, similar records have been obtained at more than 15,200 gaging stations in the 50 States. On September 30, 1959, the Geological Survey and cooperating organizations were maintaining 7,110 gaging stations. Partial-record stations for low flow or for flood flow have been operated at many other points. In addition discharge measurements are made at miscellaneous sites. The records for the 1959 water year at gaging stations, partial-record stations, and miscellaneous sites in the North Atlantic slope basins, Maine to Connecticut, are given in this report.

COOPERATION

Many State, municipal, and private organizations have cooperated with the Geological Survey in this work by either furnishing or helping to collect data. Organizations that supplied data are acknowledged in station descriptions, and organizations that assisted in the collection of data through cooperative agreements with the Survey are:

Connecticut: State Water Resources Commission, S. H. Wadhams, chairman, succeeded by E. J. McDonough, and W. S. Wise, director; city of Hartford, Department of Public Works, L. C. Lovell, director; Greater Hartford Flood Commission, C. W. Cooke, director; city of New Britain, Board of Water Commissioners, A. J. Giana, chairman, and G. W. Wood, chief engineer; city of Torrington, A. C. Geloromino, mayor, and G. F. Mahoney, city engineer.

Maine: Maine Public Utilities Commission, T. E. Delehanty, chairman, succeeded by F. N. Allen.

Massachusetts: State Department of Public Health, A. L. Frechette, commissioner; State Water Resources Commission, C. H. W. Foster, chairman, and C. I. Sterling, Jr., chief engineer; State Department of Public Works, A. N. DiNatale, commissioner; Metropolitan District Commission, C. W. Greenough, commissioner, succeeded by J. E. Maloney, and H. J. Toole, director and chief engineer of Water Division.

New Hampshire: Water Resources Board, W. G. White, chairman.

New York: State Department of Public Works, J. W. Johnson, superintendent, succeeded by J. B. McMorran.

Rhode Island: State Department of Public Works, Henry Ise', chief of Division of Harbors and Rivers.

Vermont: Water Conservation Board, R. W. Thieme, commissioner.

Assistance in the form of funds or services was given by the Corps of Engineers, Department of the Army, in collecting records published herein for 39 gaging stations, of which 2 were in Connecticut, 11 in Massachusetts, 15 in New Hampshire, and 11 in Vermont.

On waters adjacent to the international boundary, certain gaging stations are maintained by the United States (or Canada) under agreement with Canada (or the United States), and

the records are obtained and compiled in a manner equally acceptable in both countries. These stations are designated herein as "international gaging stations."

The following organizations aided in collecting records:

Connecticut: Metropolitan Water Bureau of Hartford; Borough of Groton; city of Waterbury; Bridgeport Hydraulic Co.; Collins Co.; Connecticut Light & Power Co.; Connecticut Power Co.; Farmington River Power Co.; Guilford-Chester Water Co.; and Rockville Water & Aqueduct Co.

Maine: Bangor Hydro-Electric Co.; St. Croix Paper Co.; and Union Water Power Co.

Massachusetts: New England Power Association; Western Massachusetts Electric Co.; and Worcester Electric Light Co.

New Hampshire: New England Power Association.

Vermont: New England Power Association.

DIVISION OF WORK

The stream-gaging work was done by the Water Resources Division of the Geological Survey under the direction of personnel shown in the preface. The data for stations in the several States were collected and prepared for publication in the district offices listed below.

State	District office	Address
Connecticut a/	Hartford	203 Federal Building.
Maine b/	Augusta	422 Statehouse.
Massachusetts c/	Boston	141 Milk Street.
New Hampshire d/	Boston, Mass.	Do.
New York	Albany	343 Federal Building.
Rhode Island	Boston, Mass.	141 Milk Street.
Vermont	....do	Do.

a/ Except for Connecticut River at Thompsonville.
b/ Including Androscoggin River near Errol and near Gorham, N. H., Diamond River near Wentworth Location, N. H., and Saco River near Conway, N. H.
c/ Including Connecticut River at Thompsonville, Conn.
d/ Except for Androscoggin River near Errol and near Gorham, Diamond River near Wentworth Location, and Saco River near Conway.

Information of a more detailed nature than that published for most of the gaging stations given in this report is on file in the district offices listed above. Some gaging-station records for Massachusetts and Vermont have been analyzed by electronic computer to give: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year. Provisional records of discharge, information on the availability of electronic computer results, and other unpublished data concerning the gaging-station records may generally be obtained from the district office.

DEFINITION OF TERMS AND ABBREVIATIONS

The terms of streamflow and other hydrologic data, as used in this report, are defined as follows:

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied herein only to those gaging stations where a continuous record of discharge is obtained.

Partial-record station is a particular site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

Cubic foot per second (cfs) is the rate of discharge of a stream whose channel is 1 square foot in cross-sectional area and whose average velocity is 1 foot per second.

Cubic feet per second per square mile (cfsm) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

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

Acre-foot (ac-ft) is the quantity of water required to cover an acre to the depth of 1 foot and is equivalent to 43,560 cubic feet.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.983471 acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inch from 1 square mile.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, a long reach of the channel, or an artificial structure.

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

The drainage area of a stream at a specified location is that area, measured in a horizontal plane, which is so enclosed by a topographic divide that direct surface runoff from precipitation normally would drain by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

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

DOWNSTREAM ORDER AND STATION NUMBERS

Beginning with the series of reports for the water year ending September 30, 1951, the order of listing gaging-station records was changed. In this report, in a downstream direction along the main stem, all stations on a tributary entering above a main-stem station are listed before that station. If a tributary enters between two main-stem stations, it is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. To indicate the rank of any tributary on which a gaging station is situated and the stream to which it is immediately tributary, each indention in the listing of gaging stations in the table of contents of this report represents one rank. This downstream order and system of indention show which gaging stations are on tributaries between any two stations on a main stem and the rank of the tributary on which each gaging station is situated.

The order of listing used before the publication of the 1951 report listed first all stations on the main stem from headwaters toward mouth, then all stations on the uppermost tributary to the main stem from the tributary's source to mouth, and then all stations from source to mouth of the uppermost tributary to the tributary.

As an added means of identification, each gaging station and partial-record station has been assigned a station number. The numbers have been assigned in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and regular gaging stations, so that the station number for a partial-record station indicates downstream-order position in a list made up of both types

of stations. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete number for each station includes the part number, but the station number as shown in this report, just to the left of the station name, consists of only the essential digits of the complete number. For example, for a station with the complete number 1A-0345.00 the station number shown in this report is 345. The notation to the left of the hyphen is the part number; it is 1A for all stations in this report and is therefore omitted.

EXPLANATION OF DATA

The base data collected at gaging stations consist of records of stage and measurements of discharge. In addition, observations of factors affecting the stage-discharge relation, weather records, and other information are used to supplement base data in determining the daily flow. The records of stage are obtained either from direct readings on a nonrecording gage or from a water-stage recorder that gives a continuous record of fluctuations. Measurements of discharge are made with a current meter by the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in Water-Supply Paper 888 and are also outlined in standard textbooks on the measurement of stream discharge.

Rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs, and by other methods), velocity-area studies, and logarithmic plotting. The application of the daily mean gage height to those rating tables gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is essentially the shifting-control method.

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

At most gaging stations in the northern part of the United States and at some in the mountainous regions of other parts the stage-discharge relation is affected by ice during the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and engineers, and comparable records of discharge for other stations in the same or nearby basins. If the stage-discharge relation is affected by ice, this information is given in a note to the

table. No mention is made of occasional days of ice effect if the degree of accuracy of daily records is not changed.

The data herein presented generally comprise a description of the station, a skeleton rating table, and a table showing the daily discharge and monthly and yearly discharge of the stream. Records are published for the water year which begins on October 1 and ends on September 30. A calendar for the 1959 water year is shown on page IV for the purpose of finding the day of the week for any date.

The description of the station gives the location, drainage area, records available, type and history of gages, average discharge, extremes of discharge, general remarks, and notations of revisions of the previously published record. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "Location" for some stations, is that determined and used by the Corps of Engineers unless otherwise noted. Under "Records available" are given the periods for which there are published records generally equivalent to those at present site. Under "Gage" are given the type of gage currently in use and the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of records available. Under "Average discharge" is given the average discharge for the number of years indicated. It is not given for stations having fewer than five complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. Under "Extremes" are given the maximum discharge and gage height; the minimum discharge if there is little or no regulation; the minimum daily discharge if there is extensive regulation (also the minimum discharge if useful); and the minimum gage height (unless it is of no importance). In the first paragraph, the data given are for the complete current water year unless otherwise specified. In the second paragraph, the data given are for the periods of record within the calendar year dates in the heading (not necessarily those for the complete years indicated by the heading dates). Reliable information concerning major floods that have occurred outside the period of record are given in the third or last paragraph under "Extremes." Unless otherwise qualified, the maximum discharge corresponds to the crest stage obtained by use of a water-stage recorder, a crest-stage indicator, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge, it is given separately. Information pertaining to the accuracy of the records and conditions which affect the natural flow at the gaging station is given under "Remarks."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual reports. In order to make it easier to find such revised records, a paragraph headed "Revisions (water years)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge are concerned in the revision, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure

was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

Skeleton rating tables are published for all stations except those at which the daily discharge for the greater part of the open-water period was determined by the shifting-control method, the slope method, or other special methods involving an equivalent adjustment to the gage height of more than one-tenth foot. Skeleton rating tables are generally not published for stations on canals.

For stations equipped with water-stage recorders, except those on streams subject to sudden or rapid fluctuation, the daily table gives the discharge corresponding to the daily mean gage height. For stations subject to such fluctuation the daily mean gage height may not indicate the true daily mean discharge, which must be obtained by averaging the discharge for parts of the day or by using the discharge integrator, an instrument for obtaining the daily mean discharge from a continuous gage-height graph and containing, as an essential element, a curve representing the stage-discharge relation at the station. For stations equipped with nonrecording gages, the table of daily discharge gives the discharge corresponding to once-daily readings of the gage, or to the mean of twice-daily readings, or to the mean gage height determined from gage-height graphs based on gage readings. For periods of rapidly changing stage, the daily mean discharge is determined from gage-height graphs based on gage readings, the frequency of which is stated in the station description.

In the table of daily discharge, the figures for the maximum day and the minimum day for each month are underlined. If the figure is repeated, it is underlined only on the first day of its occurrence.

In the monthly summary below the daily table, the line headed "Total" gives the sum of the daily figures; it is the total cfs-days for the month. The line headed "Mean" gives the average flow in cubic feet per second during the month. Discharge for the month may be expressed in cubic feet per second per square mile (line headed "Cfsm"), or in inches (line headed "In."), or in acre-feet (line headed "Ac-ft"). Figures for cubic feet per second per square mile and runoff in inches are omitted if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches.

In the yearly summary below the monthly summary, the figures of maximum are the maximum daily discharges, not the momentary discharges when the water was at crest stage. Likewise, the minimums in this summary are the minimum daily discharges.

Peak discharges and the times of their occurrence and corresponding gage heights of most stations are listed below the table of daily and monthly discharge. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man.

Footnotes to the table of daily discharge indicate periods when discharge was computed or estimated by unusual or special methods during periods of no gage-height record and ice effect, or by other effects that reduce the degree of accuracy of the records. Days on

which discharge measurements were made are indicated by asterisk and footnote unless they were made at frequent regular intervals, in which instance the general frequency of discharge measurements is given under "Remarks" in the station description.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published each year for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

At many gaging stations water samples are collected from the streams for the purpose of making chemical analyses, computing dissolved solids, suspended sediment loads, and particle-size distribution, or measuring water temperatures. For most of these samples the results are published in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States" which is issued in four volumes. In this report under "Remarks" a reference is made to quality-of-water records collected at gaging stations on a regular basis and published in the quality-of-water reports. At many other gaging stations quality-of-water data are obtained at irregular intervals and published as "miscellaneous analyses" in quality-of-water reports; such records are not referred to in "Remarks" paragraph in this report. At many gaging stations water temperature is obtained also at the time a discharge measurement is made; such temperature readings are not reported in the quality-of-water annual reports.

Data collected at partial-record stations and at miscellaneous sites are given at the end of each report. Partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements at miscellaneous sites are given in a third table. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are given in special tables after the list of measurements at miscellaneous sites.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

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

The station description states the degree of accuracy of the records. "Excellent" indicates that, in general, the error in the daily records is believed to be less than 5 percent; "good," less than 10 percent; "fair," less than 15 percent; and "poor," probably more than 15 percent. The records of monthly and yearly mean discharge and runoff are, in general, more nearly accurate than the daily records.

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

occur when relatively large negative adjustments are made or when evaporation is large in comparison with the observed discharge.

Many gaging stations on streams in the irrigated areas of the United States are situated above most of the diversions from those streams, and therefore the discharge recorded does not actually show the water supply available at the stations for further development, because water must first be supplied to existing irrigation systems.

PUBLICATIONS

Basic data for gaging stations are published in an annual series of reports consisting of 20 volumes, including one each for the States of Alaska and Hawaii. The area of the other 48 States is divided into 14 parts whose boundaries coincide with certain natural drainage lines. Formerly, the annual series of reports on surface water supply consisted of 14 volumes, one for each of the 14 parts. Beginning with the reports for 1951, the records for the 48 States were published in 18 volumes, there being 2 volumes each for Parts 1, 2, 3, and 6. The boundaries of the various parts are indicated by the following list and the map in figure 1.

Part 1. North Atlantic slope basins, in two volumes:
- A, North Atlantic slope basins, Maine to Connecticut.
- B, North Atlantic slope basins, New York to York River.

2. South Atlantic slope and eastern Gulf of Mexico basins, in two volumes:
- A, South Atlantic slope basins, James River to Savannah River.
- B, South Atlantic slope and eastern Gulf of Mexico basins, Ogeechee River to Pearl River.

3. Ohio River basin, in two volumes:
- A, Ohio River basin except Cumberland and Tennessee River basins.
- B, Cumberland and Tennessee River basins.

4. St. Lawrence River basin.
5. Hudson Bay and upper Mississippi River basins.
6. Missouri River basin, in two volumes:
- A, Missouri River basin above Sioux City, Iowa.
- B, Missouri River basin below Sioux City, Iowa.

7. Lower Mississippi River basin.
8. Western Gulf of Mexico basins.
9. Colorado River basin.
10. The Great Basin.
11. Pacific slope basins in California.
12. Pacific slope basins in Washington and upper Columbia River basin.
13. Snake River basin.
14. Pacific slope basins in Oregon and lower Columbia River basin.

Water-supply papers and other publications of the Geological Survey containing data on the water resources of the United States may be purchased or consulted as follows:

1. Copies may be purchased from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., who will, on application, furnish lists giving prices. A list of Geological Survey publications may also be obtained by applying to the Director, Geological Survey, Washington, D. C.

2. Sets of the reports may be consulted in the libraries of the principal cities in the United States.

3. Sets are available for consultation in the offices of the Water Resources Division of the Geological Survey. Addresses of the offices in the area covered by this report are given on page 2.

Early records of the flow of streams in the United States are published in the reports listed below. In many of these reports records for years earlier than those indicated have been included for some streams.

Streamflow data for the years 1884-1901, in reports of the Geological Survey

(A = Annual Report; B = Bulletin)

Report	Character of data	Year
10th A, pt. 2	Descriptive information only.	
11th A, pt. 2	Monthly discharge and descriptive information.....	1884 to September 1890.
12th A, pt. 2	....do.....	1884 to June 30, 1891.
13th A, pt. 3	....do.....	1884-92.

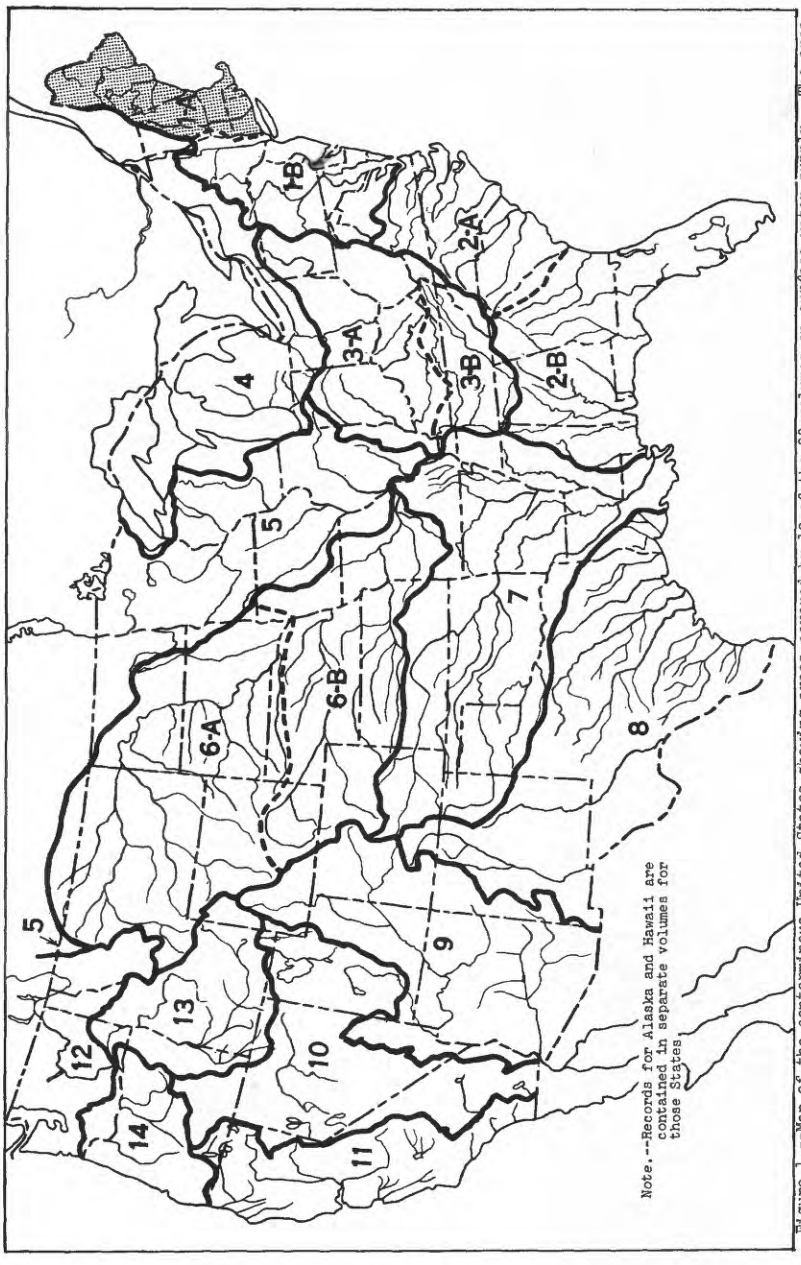

Figure 1.--Map of the conterminous United States showing areas covered by 18 of the 20 volumes on surface water supply. The area covered by this report is shaded.

Streamflow data for the years 1884-1901, in reports of the Geological Survey--Continued

(A = Annual Report; B = Bulletin)

Report	Character of data	Year
14th A, pt. 2	Monthly discharge	1888-93.
B 131	Descriptions, measurements, gage heights, and ratings	1893-94.
16th A, pt. 2	Descriptive information only.	
B 140	Descriptions, measurements, gage heights, ratings, and monthly discharge.	1895.
WSP 11	Gage heights	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge.	1895-96.
WSP 15	Descriptions, measurements, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries above Kansas River.	1897.
WSP 16	Descriptions, measurements, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries above Kansas River.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge.	1897.
WSP 27	Measurements, ratings, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries.	1898.
WSP 28	Measurements, ratings, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries.	1898.
20th A, pt. 4	Monthly discharge	1898.
WSP 35 to 39.	Descriptions, measurements, gage heights, and ratings	1899.
21st A, pt. 4	Monthly discharge	1899.
WSP 47 to 52.	Descriptions, measurements, gage heights, and ratings	1900.
22d A, pt. 4.	Monthly discharge	1900.
WSP 65, 66	Descriptions, measurements, gage heights, and ratings	1901.
WSP 75	Monthly discharge	1901

Reports on surface water supply containing records from 1899 to date for drainage basins in this report are listed below. The data for any particular gaging station will, in general, be found in the reports covering the years during which the station was maintained. Before 1951, records for the North Atlantic slope basins, Maine to Connecticut, were included with those of the other rivers in the North Atlantic slope basins.

Numbers of water-supply papers containing results of stream measurements in North Atlantic slope basins, Maine to Connecticut, 1899-1959

Year	WSP	Year	WSP	Year	WSP	Year	WSP	Year	WSP
1899	35	1912	321	1925	601	1937	821	1949	1141
1900	47	1913	351	1926	621	1938	851	1950	1171
1901	65,75	1914	381	1927	641	1939	871	1951	1201
1902	82	1915	401	1928	661	1940	891	1952	1231
1903	97	1916	431	1929	681	1941	921	1953	1271
1904	124	1917	451	1930	696	1942	951	1954	1331
1905	165	1918	471	1931	711	1943	971	1955	1381
1906	201	1919-20	501	1932	726	1944	1001	1956	1431
1907-8	241	1921	521	1933	741	1945	1031	1957	1501
1909	261	1922	541	1934	756	1946	1051	1958	1551
1910	281	1923	561	1935	781	1947	1081	1959	1621
1911	301	1924	581	1936	801	1948	1111		

A compilation of records for the area covered by this report through September 1950 has been published as Water-Supply Paper 1301. That report contains a summary of monthly and annual discharges for all previously published records as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical.

The reports listed in the foregoing tables contain the customary records of discharge collected during the systematic operation of gaging stations. Detailed information on the stage and discharge of many streams during major floods has been included in special reports on these floods published by the Geological Survey. The more recent of these special reports also contain other pertinent hydrologic information and analyses and compilations of data relating to earlier notable floods. The following list gives the numbers and titles of these reports:

Title

WSP 162: Destructive floods in the United States in 1905.
WSP 636-C: The New England flood of November 1927.
WSP 771: Floods in the United States, magnitude and frequency.
WSP 798: The floods of March 1936, Part 1, New England rivers.
WSP 836-A: Stages and flood discharges of the Connecticut River at Hartford, Conn.

Special reports on floods published by the Geological Survey and other agencies--Continued

Title

WSP 847: Maximum discharges at stream measurement stations through September 1938.
WSP 867: Hurricane floods of September 1938.
WSP 966: Minor floods of 1938 in North Atlantic States.
WSP 967-C: Flood of August 21, 1939, in town of Baldwin, Maine.
WSP 1137-I: Summary of floods in the United States during 1950.
WSP 1260-F: Summary of floods in the United States during 1952.
WSP 1320-E: Summary of floods in the United States during 1953.
WSP 1370-C: Summary of floods in the United States during 1954.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The table below contains a list of gaging stations for the area covered by this report, at which records of discharge were collected during the 1959 water year by agencies other than the Geological Survey. The records of these stations are not contained in publications of the Geological Survey.

Records of discharge collected by agencies other than the Geological Survey

Stream	Location	Period	Collected by
Androscoggin River.....	Lewiston, Maine.....	1929-59	Central Maine Power Co.
Kennebec River.....	Bingham, Maine.....	1931-59	Do.
Do.....	Indian Pond, Maine.....	1954-59	Do.
Penobscot River.....	Old Town, Maine.....	1915-59	Bangor Hydro-Electric Co.
Race Brook.....	Orange, Conn.....	1911-59	New Haven Water Co.
Saco River.....	Hiram, Maine.....	1930-59	Central Maine Power Co.
Do.....	West Buxton, Maine.....	1940-59	Do.
Stillwater Branch Penobscot River.	Stillwater, Maine.....	1915-59	Bangor Hydro-Electric Co.
Wepawaug River.....	Orange, Conn.....	1911-59	New Haven Water Co.
West River.....	Guilford, Conn.....	1930-59	Do.

Note.--The Agricultural Research Service of the U. S. Department of Agriculture has collected records of runoff from selected areas near Danville, Vt., as follows; beginning in 1958, 1 area of 146 acres and 1 area of 10,600 acres; beginning in 1959, 3 areas of 2,000 to 27,500 acres.

HYDROLOGIC CONDITIONS

During the 1959 water year, streamflow ranged from deficient in some parts to slightly more than median in other parts of the area covered by this report. Streamflow was excessive in most parts during April. No significant floods occurred during the year.

Figure 2, below, for which records of two long-term representative gaging stations were used, shows a comparison of the monthly and yearly mean discharge for the 1959 water year with the median discharge for the period 1921-45.

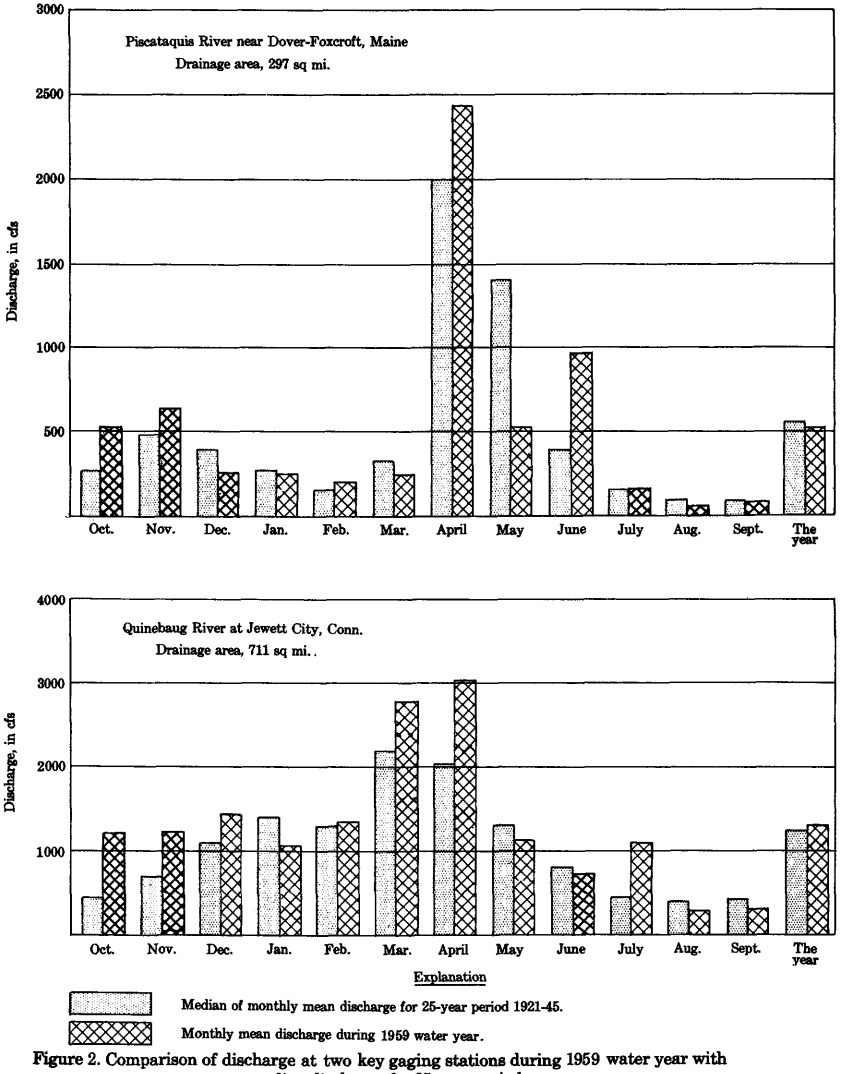

Figure 2. Comparison of discharge at two key gaging stations during 1959 water year with median discharge for 25-year period.

ST. JOHN RIVER BASIN

100. St. John River at Ninemile Bridge, Maine

Location.--Lat 46°42'00", long 69°43'00", T.12, T.15, Aroostook County, on right bank about 0.1 mile downstream from Ninemile Brook, 0.4 mile downstream from highway bridge at Ninemile, and 11 miles northwest of Clayton Lake Post Office.

Drainage area.--1,290 sq mi, approximately.

Records available.--November 1950 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 931.26 ft above mean sea level, adjustment of 1929.

Average discharge.--8 years (1951-59), 2,201 cfs.

Extremes.--Maximum discharge during year, 16,300 cfs Apr. 27 (gage height, 7.42 ft); maximum gage height, 8.02 ft Apr. 12 (backwater from ice); minimum discharge, 111 cfs Aug. 9 (gage height, 0.54 ft).
1950-59: Maximum discharge, 34,200 cfs Apr. 25, 1958 (gage height, 10.97 ft); minimum, 59 cfs Sept. 5, 1953 (gage height, 0.25 ft).

Remarks.--Records excellent except those for period of ice effect, which are fair.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.5	102	3.0	2,180
.7	149	4.0	4,230
1.0	240	5.0	7,050
1.3	368	6.0	10,700
1.6	551	7.0	14,600
2.0	882	8.0	18,700
2.5	1,430		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	472	2,460	975	395	405	200	370	9,990	618	4,020	182	5,010
2	484	2,370	975	395	390	198	410	9,750	1,580	3,250	223	5,860
3	538	2,070	1,300	390	375	198	455	9,140	2,150	4,490	230	4,850
4	524	1,750	1,410	380	360	190	605	8,590	1,620	4,040	248	*5,170
5	484	1,530	1,340	370	350	188	800	8,200	1,120	3,000	197	3,990
6	504	1,410	1,240	365	340	190	1,300	8,380	810	2,120	160	2,880
7	581	1,430	1,160	360	330	190	2,000	8,700	618	1,580	139	2,100
8	551	1,530	1,080	340	320	190	3,100	9,250	538	1,250	120	1,560
9	538	1,430	1,010	325	310	188	4,620	8,700	665	1,100	115	1,180
10	497	1,280	965	320	305	194	5,280	7,350	1,610	801	150	937
11	620	1,220	910	310	300	194	5,610	6,480	2,070	625	405	792
12	1,460	1,190	855	300	305	194	5,690	6,860	1,490	531	1,300	732
13	*1,640	1,100	810	290	300	200	5,610	6,790	1,320	531	1,360	649
14	1,310	1,060	765	285	290	200	5,500	5,750	2,740	690	1,190	544
15	1,040	1,140	725	280	285	200	5,390	4,670	10,300	641	864	441
16	900	2,320	690	280	280	205	5,280	3,830	13,000	504	740	406
17	1,240	2,770	655	325	280	205	5,200	3,120	10,400	401	2,250	368
18	2,040	2,480	625	370	275	205	5,200	2,530	7,770	325	3,650	330
19	2,280	2,860	605	385	*270	*205	5,390	2,070	*9,820	286	4,830	307
20	1,940	4,460	580	395	265	220	6,420	1,740	9,070	267	3,990	286
21	1,540	4,460	560	400	260	235	8,240	1,510	6,620	251	3,420	267
22	1,260	3,780	540	395	250	245	8,410	1,440	4,750	216	5,360	251
23	1,070	2,730	520	410	235	260	9,440	1,920	3,760	197	4,960	248
24	984	2,400	495	430	225	280	12,000	1,920	3,000	188	5,650	400
25	1,380	1,990	485	455	215	290	13,900	1,560	2,350	182	2,460	4,110
26	1,860	1,180	470	465	210	305	15,200	1,260	1,820	173	1,810	4,010
27	1,720	1,100	460	460	205	315	16,100	993	1,490	168	6,800	2,860
28	1,570	1,040	445	455	205	320	14,700	810	1,300	160	9,570	1,990
29	1,820	995	435	445	-	320	12,800	*674	2,180	149	6,640	1,440
30	2,460	985	*425	435	-------	325	10,700	566	4,520	144	4,650	1,150
31	2,580	-------	410	420	-------	345	-------	497	-------	144	3,440	-------
Total	37,887	58,520	23,920	11,630	8,140	7,194	195,720	145,040	110,699	32,424	75,103	55,118
Mean	1,222	1,951	772	375	291	232	6,524	4,679	3,697	1,048	2,423	1,837
Cfsm	0.947	1.51	0.598	0.291	0.226	0.180	5.06	3.63	2.87	0.811	1.88	1.42
In.	1.09	1.68	0.69	0.34	0.24	0.21	5.64	4.18	3.20	0.94	2.17	1.58

Calendar year 1958: Max 33,700 Min 280 Mean 2,480 Cfsm 1.92 In. 26.09
Water year 1958-59: Max 16,100 Min 115 Mean 2,087 Cfsm 1.62 In. 21.96

Peak discharge (base, 10,000 cfs).--Apr. 27 (7 to 8 a.m.) 16,300 cfs (7.42 ft); June 15 (11 p.m.) (13,500 cfs (6.73 ft); Aug. 27 (11 p.m.) 11,100 cfs (6.09 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 29 to Apr. 23 (no gage-height record Mar. 12-19).

105. St. John River at Dickey, Maine

Location.--Lat 47°06'40", long 69°05'15", on right bank at Dickey, Aroostock County, 0.6 mile downstream from Little Black River and 2.5 miles upstream from Allagash River.

Drainage area.--2,700 sq mi, approximately.

Records available.--July 1910 to November 1911 (published as "near Dickey"), September 1946 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 590 ft (from topographic map). July 5, 1910, to Nov. 21, 1911, staff gage at site 1,000 ft downstream at different datum.

Average discharge.--13 years, (1946-59), 4,595 cfs.

Extremes.--Maximum discharge during year, 31,000 cfs Apr. 28 (gage height, 11.18 ft); maximum gage height, 14.10 ft Apr. 10 (backwater from ice); minimum daily discharge, 295 cfs Feb. 24-27; minimum gage height, 1.97 ft Aug. 7.
1910-11, 1946-59: Maximum discharge, 71,200 cfs Apr. 25, 1958 (gage height, 16.58 ft); maximum gage height, 19.88 ft Mar. 29, 1953 (backwater from ice); minimum discharge, 129 cfs Sept. 17, 1948.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair.

Revisions.--WSP 1141: Drainage area.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	270	5.0	5,810
2.0	630	6.0	8,500
2.5	1,190	8.0	15,200
3.0	1,860	10.0	24,500
4.0	3,600	12.0	36,000

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,570	4,350	1,590	960	580	300	1,150	19,200	2,800	8,470	1,000	5,050
2	1,530	4,140	1,640	950	530	300	1,190	19,800	3,600	7,590	1,250	9,240
3	1,460	3,820	2,090	905	500	310	1,320	19,600	5,120	7,510	1,400	9,580
4	1,460	3,380	2,680	875	455	310	1,580	*18,400	5,550	8,680	*1,530	10,200
5	1,450	3,010	2,680	840	435	325	2,170	18,200	4,430	7,540	1,260	9,460
6	1,460	2,800	2,510	820	410	410	3,600	19,000	3,620	5,910	1,010	6,970
7	1,460	2,700	2,340	800	385	435	4,650	20,000	2,700	4,780	830	5,190
8	1,570	2,820	2,170	745	375	435	7,070	21,200	2,200	4,030	693	4,140
9	1,580	2,890	2,110	735	360	435	8,800	20,000	1,900	3,560	620	3,230
10	1,540	2,820	1,980	715	*350	435	10,900	16,600	4,050	3,160	630	2,710
11	1,650	2,600	1,880	680	340	435	11,900	14,700	5,620	2,530	1,070	2,480
12	2,320	2,510	1,830	670	335	435	12,200	14,600	5,450	2,360	3,730	2,370
13	3,480	2,480	1,720	640	325	480	12,200	15,400	4,610	2,360	5,430	2,140
14	3,380	2,200	1,650	630	320	530	11,900	13,700	5,190	2,680	4,410	1,900
15	2,830	2,320	1,580	610	310	630	11,600	11,400	12,400	2,900	3,320	1,710
16	2,420	2,560	1,530	630	310	705	11,600	9,640	24,700	2,500	2,680	1,500
17	2,190	4,200	1,480	695	310	*735	11,200	8,000	21,100	2,200	3,980	1,420
18	2,480	4,470	1,450	705	310	745	11,000	6,730	14,900	2,000	9,620	1,280
19	3,680	4,240	1,380	715	300	755	11,400	5,810	12,500	1,750	11,200	1,200
20	3,930	5,670	1,350	715	300	820	14,800	5,170	13,800	1,580	9,920	1,180
21	3,360	7,540	1,320	715	300	860	17,800	4,870	11,800	1,500	7,500	1,110
22	2,870	7,020	1,290	735	300	930	17,500	4,850	9,400	1,400	7,220	1,070
23	2,510	5,810	1,240	775	300	960	16,600	4,920	7,940	1,300	8,260	1,040
24	2,290	4,540	1,200	820	295	1,010	19,000	5,280	7,070	1,200	6,760	1,080
25	2,240	3,970	1,190	840	295	1,030	23,400	5,100	6,080	1,120	5,170	1,400
26	2,600	3,210	1,150	840	295	1,060	27,400	4,610	5,260	1,040	3,880	5,010
27	3,070	2,340	1,120	830	295	1,070	30,200	4,090	4,920	980	3,480	4,280
28	2,940	2,060	1,080	800	300	1,070	29,200	3,600	4,430	910	11,000	3,230
29	3,100	1,860	1,070	735	-	1,080	25,000	3,000	4,430	860	10,300	2,530
30	3,900	1,900	1,050	695	-------	1,090	21,000	2,400	6,300	820	7,420	2,200
31	4,410	-------	1,000	650	-------	1,110	-------	2,000	-------	800	5,590	-------
Total	76,730	106,230	50,350	23,450	9,920	21,235	389,330	341,870	223,870	96,020	142,163	105,900
Mean	2,475	3,541	1,624	756	354	685	12,980	11,030	7,462	3,097	4,586	3,530
Cfsm	0.917	1.31	0.601	0.280	0.131	0.254	4.81	4.09	2.76	1.15	1.70	1.31
In.	1.06	1.46	0.69	0.32	0.14	0.29	5.37	4.72	3.08	1.33	1.96	1.46

Calendar year 1958: Max 70,200 Min 650 Mean 5,469 Cfsm 2.03 In. 27.47
Water year 1958-59: Max 30,200 Min 295 Mean 4,348 Cfsm 1.61 In. 21.88

Peak discharge (base, 27,000 cfs).--Apr. 28 (1 a.m.) 31,000 cfs (11.18 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 2 to Apr. 20 (no gage-height record Jan. 31 to Feb. 9, Feb. 25 to Mar. 17; discharge estimated on basis of 2 discharge measurements, weather records, and records for nearby stations). No gage-height record May 29 to June 1, June 7-9, July 15 to Aug. 3, Sept. 21-24; discharge estimated on basis of intermittent gage-height record, weather records, and records for stations on St. John River.

110. Allagash River near Allagash, Maine

Location.--Lat 47°04'15", long 69°04'50", on left bank 3 miles upstream from mouth and village of Allagash, Aroostook County.

Drainage area.--1,250 sq mi, approximately (not including about 240 sq mi drained by Chamberlain Lake through Telos Canal).

Records available.--July 1910 to November 1911, September 1931 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 604.6 ft above mean sea level, datum of 1929. July 1910 to November 1911, staff gage at site 3 miles downstream at different datum.

Average discharge.--28 years (1931-59), 1,901 cfs.

Extremes.--Maximum discharge during year, 8,620 cfs May 8 (gage height, 7.03 ft); maximum gage height, 7.57 ft Apr. 15 (ice jam); minimum daily discharge, 250 cfs Mar. 1-5. 1910-11, 1931-59: Maximum discharge, 23,400 cfs May 5, 1933 (gage height, 11.32 ft); maximum gage height, 13.14 ft May 1, 1939 (ice jam); minimum daily discharge, 91 cfs Mar. 9-15, 1948.

Remarks.--Records excellent except those for periods of ice effect, which are fair.

Revisions (water years).--WSP 726: Drainage area. WSP 1231: 1911.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 15

2.0	250	2.4	480
2.1	299	3.0	990

Note.--Same as following table above 3.0 ft.

Apr. 16 to Sept. 30

2.1	270	4.0	2,300
2.4	450	5.0	4,000
3.0	990	6.0	6,090
3.5	1,590	7.0	8,540

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	672	1,470	940	445	630	250	790	7,310	1,430	3,610	430	1,370
2	672	1,410	1,000	440	570	250	990	7,510	1,680	3,810	409	1,710
3	631	1,330	1,040	430	545	250	1,250	7,460	1,620	3,870	358	1,800
4	592	1,250	1,180	425	485	250	1,500	*7,280	1,410	3,520	*334	2,240
5	592	1,210	1,280	420	475	250	1,860	7,540	1,280	3,170	317	1,960
6	615	1,200	1,320	*410	430	260	2,300	7,990	1,220	2,830	306	1,730
7	569	1,200	1,320	410	405	300	2,930	8,310	1,180	2,590	306	1,550
8	553	1,200	1,210	405	370	330	3,630	8,540	1,180	2,360	291	1,410
9	538	1,120	1,140	405	360	350	3,940	7,840	1,180	2,140	275	1,260
10	516	1,130	1,060	400	*355	355	4,130	7,560	1,320	1,940	370	1,140
11	623	*1,110	990	400	355	360	4,190	7,080	1,200	1,630	835	1,140
12	783	1,090	940	395	350	370	4,130	6,940	1,060	1,490	1,090	1,200
13	706	1,070	890	395	320	380	3,940	6,680	1,200	1,560	890	1,030
14	639	1,000	845	390	305	410	3,540	6,160	1,730	1,430	707	900
15	600	1,030	800	390	300	465	3,240	5,610	4,850	1,280	577	*802
16	569	1,090	765	405	295	465	3,100	5,060	5,040	1,180	698	726
17	576	1,100	720	445	295	*510	3,080	4,550	4,570	1,070	1,250	672
18	672	1,100	680	555	290	525	3,120	4,060	4,370	960	1,800	610
19	1,000	1,180	650	715	285	545	3,270	3,630	4,830	900	1,820	552
20	1,040	1,460	625	775	275	555	3,630	3,340	4,960	861	1,500	512
21	910	1,520	610	785	275	575	4,040	3,050	4,710	773	1,330	458
22	827	1,500	590	785	275	615	4,020	2,930	4,510	698	1,200	443
23	774	1,430	570	800	275	640	4,110	2,740	4,290	636	1,140	430
24	766	1,380	545	880	270	670	4,790	2,510	3,920	645	1,000	430
25	783	1,270	530	890	265	665	5,960	2,320	3,590	764	890	423
26	783	1,080	515	890	260	655	7,210	2,140	3,290	707	831	389
27	748	1,020	500	880	260	650	7,970	1,960	2,950	610	1,030	376
28	766	960	485	820	255	630	7,760	1,780	2,790	544	1,320	376
29	1,110	890	475	785	-	615	7,660	1,620	3,050	512	1,370	376
30	1,590	910	460	715	-------	610	7,160	1,540	3,670	465	1,340	402
31	1,540	-------	455	670	-------	655	-------	1,410	-------	496	1,290	-------
Total	23,755	35,690	25,130	17,955	9,830	14,410	119,240	154,250	84,080	49,051	27,304	28,417
Mean	766	1,190	811	579	351	465	3,975	4,976	2,803	1,582	881	947
Cfsm	0.613	0.952	0.649	0.463	0.281	0.372	3.18	3.98	2.24	1.27	0.705	0.758
In.	0.71	1.06	0.75	0.53	0.29	0.43	3.55	4.59	2.50	1.46	0.81	0.85

Calendar year 1958: Max 18,600 Min 445 Mean 2,462 Cfsm 1.97 In. 26.74
Water year 1958-59: Max 8,540 Min 250 Mean 1,614 Cfsm 1.29 In. 17.53

Peak discharge (base, 5,700 cfs).--May 8 (9 a.m.) 8,620 cfs (7.03 ft); June 15 (7 p.m.) 5,740 cfs (5.84 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 27, 28, Nov. 30 to Dec. 5, Dec. 7 to Apr. 21 (no gage-height record Feb. 24 to Mar. 16; discharge estimated on basis of weather records and flow of nearby streams).

115. St. Francis River at outlet of Glazier Lake, near Connors, New Brunswick

(International gaging station)

Location.--Lat 47°12'25", long 68°57'25", on left bank at outlet of Glazier Lake, 4 miles upstream from mouth and 6.5 miles west of Connors, Madawaska County.

Drainage area.--520 sq mi (revised).

Records available.--October 1951 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 550 ft (from International Boundary Map).

Average discharge.--8 years, 901 cfs.

Extremes.--Maximum discharge during year, 4,920 cfs Apr. 29, May 9 (gage height, 8.40 ft); minimum, 142 cfs Mar. 30, 31, Apr. 1, 2 (gage height, 2.40 ft).
1951-59: Maximum discharge, 10,800 cfs Apr. 26, 1958 (gage height, 13.21 ft); minimum, 98 cfs Jan. 21, 1957 (gage height, 2.20 ft).

Remarks.--Records excellent except those for periods of no gage-height record, which are fair. Lake area above station has not yet been developed for storage.

Cooperation.--This station is maintained by Canada under agreement with the United States.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

2.4	142	5.0	1,530
2.7	229	7.0	3,400
3.0	334	8.0	4,480
3.5	551	9.0	5,580
4.0	827		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	493	475	541	276	255	159	142	4,530	692	714	380	512
2	479	462	527	269	249	156	145	4,300	686	686	431	507
3	457	457	493	266	245	153	170	*4,240	676	659	410	512
4	431	453	480	262	239	150	199	4,220	670	633	*385	561
5	423	436	466	259	232	150	259	4,230	649	601	357	596
6	410	423	453	252	229	150	406	4,300	622	566	338	643
7	385	414	440	249	223	159	633	4,500	576	541	315	654
8	372	414	431	242	217	159	895	4,760	541	507	293	649
9	368	410	423	239	211	159	1,140	4,870	527	466	269	612
10	364	436	414	236	205	156	1,390	4,770	541	435	262	566
11	380	*431	406	229	199	153	1,660	4,420	596	397	280	551
12	410	414	393	226	193	153	1,810	4,120	796	376	342	512
13	466	410	385	223	187	153	1,860	4,010	864	380	380	479
14	571	436	376	220	184	153	1,860	3,910	926	364	440	435
15	643	480	372	217	187	156	1,830	3,690	1,080	345	466	406
16	670	527	364	223	184	156	1,760	3,380	1,460	334	493	376
17	670	601	361	*229	182	156	1,690	2,990	1,910	304	531	353
18	665	654	353	236	179	156	1,590	2,650	2,020	286	638	327
19	*643	708	349	242	184	156	1,550	2,300	1,920	269	725	312
20	622	777	342	249	182	156	1,590	2,040	1,750	259	808	290
21	601	765	334	255	179	153	1,730	1,830	1,590	249	833	272
22	576	737	330	262	176	156	1,880	1,660	1,420	239	802	266
23	551	708	323	266	176	153	1,980	1,500	1,310	223	725	259
24	536	681	319	269	173	150	2,200	1,350	1,190	217	654	262
25	512	654	312	276	170	148	2,640	1,250	1,070	249	596	255
26	493	628	308	279	167	148	3,350	1,150	957	239	541	245
27	471	601	301	279	164	148	4,130	1,040	883	229	531	236
28	462	576	297	272	162	148	4,660	964	815	220	606	236
29	484	566	290	269	-	145	4,890	877	802	208	561	239
30	475	551	286	266	-------	142	4,780	821	771	199	526	255
31	466	-------	280	262	-------	142	-------	748	-------	205	502	-------
Total	15,549	16,285	11,749	7,799	5,533	4,732	54,819	91,420	30,310	11,599	15,420	12,378
Mean	502	543	379	252	198	153	1,827	2,949	1,010	374	497	413
Cfsm	0.965	1.04	0.729	0.485	0.381	0.294	3.51	5.67	1.94	0.719	0.956	0.794
In.	1.11	1.16	0.84	0.56	0.40	0.34	3.92	6.54	2.17	0.83	1.10	0.88

Calendar year 1958: Max 10,700 Min 242 Mean 1,143 Cfsm 2.20 In. 31.13
Water year 1958-59: Max 4,890 Min 142 Mean 761 Cfsm 1.46 In. 19.85

* Discharge measurement made on this day.

Note.--No gage-height record Nov. 14 to Dec. 2, Dec. 4-13, Dec. 15 to Jan. 11, Jan. 18-25, Jan. 27 to Feb. 13, Feb. 21 to Mar. 2; discharge estimated on basis of recorded range in stage and weather records.

135. Fish River near Fort Kent, Maine

Location.--Lat 47°14'15", long 68°34'55", on right bank 300 ft upstream from highway bridge at Fort Kent Mills, 2 miles upstream from mouth, and 2 miles south of Fort Kent, Aroostook County.

Drainage area.--871 sq mi.

Records available.--July 1903 to December 1908, May to November 1911, September 1929 to September 1959. Published as "at Wallagrass" 1903-8, 1911.

Gage.--Water-stage recorder. Datum of gage is 511.38 ft above mean sea level, datum of 1929. July 1903 to December 1908 and May to November 1911, chain gage at site 10 miles upstream at different datum.

Average discharge.--35 years (1903-8, 1929-59), 1,351 cfs.

Extremes.--Maximum discharge during year, 5,660 cfs May 7 (gage height, 7.40 ft); minimum daily, 230 cfs Mar. 4-6.
1903-8, 1911, 1929-59: Maximum discharge, 12,000 cfs Apr. 26, 1958 (gage height, 10.81 ft); minimum, 46 cfs Oct. 9, 10, 1950.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Large lake area above station has not yet been developed for storage.

Revisions.--WSP 1001: Drainage area.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.7	228	5.0	2,000
3.0	354	6.0	3,420
3.5	625	7.0	5,020
4.0	990	8.0	6,660

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	930	865	990	605	445	255	355	5,440	1,320	1,200	392	865
2	897	897	956	590	430	245	355	5,470	1,290	1,220	336	889
3	849	922	950	575	400	235	400	5,470	1,200	1,190	314	973
4	818	922	930	560	390	230	565	*5,470	1,120	1,180	301	1,040
5	790	922	914	540	380	230	825	5,480	1,130	1,110	*292	1,080
6	762	930	939	530	375	230	1,350	5,550	964	1,070	271	1,120
7	742	922	930	520	360	260	1,760	5,640	914	999	267	1,140
8	701	897	897	510	355	320	2,000	5,610	897	905	263	1,160
9	688	889	914	495	350	335	2,100	5,500	905	873	263	1,160
10	663	922	905	485	340	330	2,180	5,340	914	818	284	1,150
11	695	922	895	475	*335	325	2,360	5,160	881	762	354	1,130
12	682	*914	880	470	330	320	2,510	5,000	857	735	438	1,120
13	675	897	865	465	325	320	2,660	4,800	849	742	453	1,050
14	663	881	850	460	320	380	2,820	4,570	914	688	470	1,020
15	631	873	825	455	320	455	2,890	4,320	*1,310	656	502	982
16	631	857	810	450	315	455	2,940	4,060	1,310	625	542	930
17	619	873	795	565	310	*440	2,960	3,770	1,340	589	663	889
18	625	881	785	575	295	440	3,010	3,500	1,360	559	783	833
19	625	930	760	570	290	430	3,100	3,260	1,440	548	849	797
20	601	956	750	565	290	410	3,280	3,020	1,440	519	881	762
21	595	982	735	560	285	400	3,340	2,800	1,470	497	905	748
22	589	990	720	615	275	395	3,390	2,600	1,480	464	881	708
23	577	999	710	645	270	390	3,520	2,400	1,450	448	873	688
24	571	999	695	625	265	375	3,770	2,260	1,440	443	865	682
25	565	990	680	600	265	370	4,240	2,080	1,420	453	825	638
26	559	990	675	570	265	370	4,800	1,930	1,370	448	818	625
27	548	1,010	665	550	260	370	5,210	1,780	1,320	428	930	607
28	554	982	655	520	260	365	5,420	1,630	1,270	407	1,040	583
29	797	1,010	645	500	-	355	5,520	1,540	1,300	397	865	565
30	825	990	630	480	-------	355	5,450	1,440	1,250	392	825	559
31	849	-------	620	455	-------	355	-------	1,320	-------	412	811	-------
Total	21,316	28,014	24,970	16,580	9,100	10,745	85,080	118,210	36,125	21,777	18,556	26,493
Mean	688	934	805	535	325	347	2,836	3,813	1,204	702	599	883
Cfsm	0.790	1.07	0.924	0.614	0.373	0.398	3.26	4.38	1.38	0.806	0.688	1.01
In.	0.91	1.19	1.07	0.71	0.39	0.46	3.64	5.05	1.54	0.93	0.79	1.13

Calendar year 1958: Max 11,600 Min 470 Mean 1,871 Cfsm 2.15 In. 29.16
Water year 1958-59: Max 5,640 Min 230 Mean 1,142 Cfsm 1.31 In. 17.81

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 3, 4, Dec. 11 to Apr. 9.

140. St. John River below Fish River at Fort Kent, Maine

(International gaging station)

Location.--Lat. 47°15'25", long 68°35'35", on right bank at Fork Kent, Aroostook County, a quarter of a mile downstream from Fish River.

Drainage area.--5,690 sq mi, approximately (not including about 240 sq mi drained by Chamberlain Lake through Telos Canal).

Records available.--October 1926 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 488.9 ft above mean sea level, datum of 1929. Prior to Oct. 10, 1933, staff gage on opposite bank at same datum.

Average discharge.--33 years, 9,523 cfs.

Extremes.--Maximum discharge during year, 52,700 cfs Apr. 28 (gage height, 15.95 ft); minimum daily, 1,300 cfs Feb. 27 to Mar. 1.
1926-59: Maximum discharge, 121,000 cfs May 5, 1933 (gage height, 25.1 ft); minimum daily, 510 cfs Mar. 13-15, 1948.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair.

Cooperation.--This station is maintained by the United States under agreement with Canada.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	1,300	8.0	14,900
2.0	1,800	10.0	22,900
3.0	2,980	12.0	32,000
4.0	4,540	14.0	42,000
5.0	6,560	16.0	53,000
6.5	10,100		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,330	8,060	4,760	2,990	2,260	1,300	2,380	39,800	5,720	13,400	4,040	8,900
2	4,240	7,730	4,490	2,950	2,140	1,310	2,560	40,200	6,080	12,500	6,190	11,500
3	4,050	7,390	4,720	2,920	2,070	1,310	3,190	40,000	7,110	12,000	4,580	14,300
4	3,880	6,930	5,370	2,900	1,990	1,320	4,160	38,800	8,080	13,000	3,520	14,900
5	3,840	6,430	5,470	2,870	1,920	1,360	5,370	38,600	7,270	11,900	*2,900	14,900
6	3,840	6,080	5,680	2,840	1,850	1,450	7,940	39,800	6,190	9,980	2,480	12,200
7	3,760	5,910	5,330	*2,810	1,810	1,550	10,400	41,400	5,390	8,560	2,180	9,930
8	3,660	5,930	4,850	2,750	1,770	1,600	12,800	42,900	4,920	7,430	1,990	8,440
9	3,670	5,990	4,540	2,610	1,720	1,600	15,700	42,000	4,830	6,540	1,860	7,390
10	3,600	6,140	4,310	2,520	1,670	1,600	19,700	38,000	5,490	5,850	1,810	6,700
11	3,810	5,870	4,170	2,460	*1,620	1,600	21,700	34,600	6,610	5,210	2,210	6,100
12	4,360	*5,640	4,050	2,400	1,590	1,620	22,300	33,400	7,570	4,720	4,410	5,600
13	5,350	5,510	3,940	2,320	1,560	1,680	22,900	33,400	7,070	4,580	7,640	5,200
14	6,040	5,210	3,830	2,260	1,530	1,780	22,800	31,200	7,340	4,580	7,340	4,900
15	5,600	5,230	3,750	2,200	1,500	1,860	22,900	27,400	15,600	4,290	5,910	*4,550
16	5,030	5,370	3,670	2,220	1,480	1,900	21,800	24,300	*33,100	4,120	5,090	4,260
17	4,700	6,430	3,610	2,300	1,460	1,910	21,700	21,400	31,500	3,800	5,950	3,920
18	4,610	7,600	3,550	2,400	1,440	*1,960	21,700	18,800	25,200	3,400	11,300	3,660
19	5,830	7,660	3,500	2,480	1,420	1,970	21,700	16,300	21,600	3,190	15,500	3,440
20	6,880	8,370	3,460	2,500	1,400	2,000	26,100	14,300	23,100	3,040	14,400	3,230
21	6,430	10,900	3,420	2,460	1,380	2,060	29,100	12,900	21,000	2,840	11,800	3,080
22	5,700	11,100	3,370	2,440	1,360	2,130	20,600	12,100	17,700	2,610	10,500	2,980
23	5,130	9,960	3,340	2,440	1,350	2,180	29,300	11,500	15,200	2,400	11,500	2,900
24	4,770	8,900	3,320	2,520	1,330	2,200	32,000	11,000	13,400	2,260	10,300	2,920
25	4,590	7,780	3,250	2,640	1,320	2,220	38,200	10,500	11,900	2,440	8,710	2,880
26	4,650	6,250	3,160	2,710	1,310	2,230	45,400	9,500	10,400	2,680	7,180	4,990
27	5,250	5,640	3,110	2,680	1,300	2,240	51,000	8,660	9,330	2,630	6,760	6,580
28	5,390	5,370	3,050	2,640	1,300	2,240	51,400	7,890	8,750	2,340	11,900	5,530
29	6,120	5,070	3,020	2,560	-	2,260	47,200	7,090	8,350	2,210	15,000	4,630
30	7,230	5,130	3,010	2,480	-------	2,260	42,600	6,540	10,100	2,290	11,800	4,310
31	7,990	-------	3,010	2,380	-------	2,270	-------	6,020	-------	2,400	9,600	-------
Total	154,330	205,580	122,110	79,650	44,850	56,970	705,600	760,300	365,880	169,190	226,350	194,620
Mean	4,978	6,853	3,939	2,569	1,602	1,838	23,520	24,530	12,200	5,458	7,302	6,494
Cfsm	0.875	1.20	0.692	0.451	0.282	0.323	4.13	4.31	2.14	0.959	1.28	1.14
In.	1.01	1.34	0.80	0.52	0.29	0.37	4.61	4.97	2.39	1.11	1.48	1.27

Calendar year 1958: Max 116,000 Min 2,110 Mean 11,910 Cfsm 2.09 In. 28.41
Water year 1958-59: Max 51,400 Min 1,300 Mean 8,454 Cfsm 1.49 In. 20.16

Peak discharge (base, 45,000 cfs).--Apr. 28 (5 a.m.) 52,700 cfs (15.95 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 9 to Apr. 10, Apr. 18-20. No gage-height record Sept. 10-15; discharge estimated on basis of recorded range in stage.

158. Aroostook River near Masardis, Maine

Location.--Lat 46°31'20", long 68°22'25", on left bank 80 ft upstream from highway bridge and 1.8 miles downstream from St. Croix Stream and Masardis, Aroostook County.

Drainage area.--888 sq mi.

Records available.--September 1957 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 530.0 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during year, 7,340 cfs Apr. 27 (gage height, 10.56 ft); maximum gage height, 12.15 ft Apr. 19 (ice jam); minimum discharge, 170 cfs Sept. 23 (gage height, 2.59 ft).
1957-59: Maximum discharge, 21,500 cfs Apr. 25, 1958 (gage height, 16.30 ft); maximum recorded gage height, 16.44 ft Dec. 23, 1957 (ice jam); minimum discharge, 69 cfs Sept. 16, 1957 (gage height, 2.08 ft).

Remarks.--Records excellent except those for period of ice effect, which are fair. Flow partly regulated by Millinocket Lake (capacity, 1,007,000,000 cu ft) used for power.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.6	172	6.0	2,020
3.0	288	8.0	4,000
4.0	710	10.0	6,540
5.0	1,300	12.0	9,650

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	340	2,090	700	300	455	310	775	5,490	631	1,800	336	1,010
2	344	1,880	710	290	435	305	825	5,330	700	1,750	322	872
3	336	1,640	835	290	410	305	930	5,220	720	1,970	302	850
4	326	1,440	920	280	395	300	1,050	5,160	636	1,900	282	1,040
5	381	1,260	925	275	390	305	1,260	*5,190	557	1,680	*269	1,060
6	385	1,150	895	270	380	310	1,520	5,500	491	1,450	259	907
7	377	1,090	860	260	370	310	1,860	5,780	436	1,260	256	757
8	362	1,010	815	*260	360	315	2,280	5,810	420	1,120	256	626
9	336	936	760	260	350	320	2,940	5,500	465	913	351	535
10	358	895	725	260	345	335	3,540	4,960	535	794	351	453
11	412	971	685	260	335	345	3,780	4,510	521	705	432	404
12	491	936	650	255	*335	350	3,800	4,160	457	660	491	381
13	482	*895	610	255	330	355	3,780	3,870	432	626	470	347
14	449	861	585	260	325	375	3,760	3,570	571	583	440	315
15	424	884	555	275	325	430	3,690	3,230	2,310	535	388	*288
16	440	918	525	290	325	485	3,670	2,850	*3,490	482	385	259
17	517	954	495	305	325	510	3,670	2,480	3,160	436	444	238
18	607	936	485	320	320	*525	3,760	2,150	2,950	396	539	223
19	655	971	470	385	320	535	3,850	1,890	3,690	354	685	209
20	646	1,130	445	480	320	550	3,920	1,670	4,010	344	641	195
21	603	1,270	435	565	320	565	4,000	1,530	3,720	315	617	188
22	566	1,280	420	660	320	580	4,110	1,520	3,150	322	816	180
23	530	1,060	405	695	320	595	4,310	1,550	2,680	453	778	172
24	548	1,150	395	685	315	605	4,610	1,440	2,280	436	617	275
25	665	1,030	380	660	310	615	5,590	1,300	1,930	432	491	344
26	720	940	365	620	310	650	6,710	1,100	1,680	412	428	336
27	726	870	360	600	310	670	7,260	924	1,520	388	487	326
28	794	815	350	565	310	685	7,140	816	1,400	377	805	305
29	1,360	760	335	520	-	675	6,790	710	1,480	366	948	288
30	2,040	730	320	505	---------	675	5,920	650	1,840	347	1,210	269
31	2,240	--------	310	480	--------	710	--------	650	--------	344	1,160	--------
Total	19,460	32,752	17,725	12,385	9,665	14,600	111,100	96,510	48,862	23,951	16,256	13,652
Mean	628	1,092	572	400	345	471	3,703	3,113	1,629	773	524	455
(†)	-80	+53	+8	-44	-115	-124	+203	+120	+30	-94	-38	-67
Adjusted for change in reservoir contents												
Mean	548	1,145	580	356	230	347	3,906	3,233	1,659	679	486	388
Cfsm	0.617	1.29	0.653	0.401	0.259	0.391	4.40	3.64	1.87	0.765	0.547	0.437
In.	0.71	1.44	0.75	0.46	0.27	0.45	4.91	4.20	2.09	0.88	0.63	0.49

	Observed			Adjusted		
Calendar year 1958:	Max 21,400	Min 310	Mean 1,735	Mean 1,734	Cfsm 1.95	In. 26.52
Water year 1958-59:	Max 7,260	Min 172	Mean 1,142	Mean 1,130	Cfsm 1.27	In. 17.28

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Millinocket Lake.
Note.--Stage-discharge relation affected by ice Nov. 26 to Apr. 22 (no gage-height record Mar. 13-18).

165. Machias River near Ashland, Maine

Location.--Lat 46°37'40", long 68°26'05", on right bank just upstream from highway bridge, 0.8 mile upstream from mouth and 1½ miles west of Ashland, Aroostook County.

Drainage area.--330 sq mi.

Records available.--June 1951 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 535 ft (from topographic map).

Average discharge.--8 years, 565 cfs.

Extremes.--Maximum discharge during year, 3,190 cfs Apr. 27 (gage height, 4.39 ft); maximum gage height, 8.48 ft Apr. 12, 13 (backwater from ice); minimum daily discharge, 14 cfs Feb. 27 to Mar. 2.
1951-59: Maximum discharge, 16,600 cfs June 29, 1954 (gage height, 11.94 ft), from rating curve extended above 7,900 cfs by logarithmic plotting; minimum, 5.4 cfs Sept. 17, 1952 (gage height, 0.64 ft).

Remarks.--Records excellent except those for period of ice effect, which are fair. Flow partly regulated by Machias and Rowe Lakes (combined capacity, about 280,000,000 cu ft) used for log driving and power.

Revisions.--WSP 1501: Drainage area.

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 12				Apr. 13 to Sept. 30			
0.4	14	1.3	246	0.8	71	2.5	1,070
.6	38	1.6	411	1.0	123	3.0	1,550
.8	76	2.0	706	1.3	237	4.0	2,720
1.0	131	2.5	1,160	1.6	390	5.0	3,990
				2.0	660		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	162	465	215	63	81	14	275	2,260	220	505	88	275
2	158	521	235	59	76	14	330	2,170	220	505	81	256
3	155	755	295	55	70	15	410	2,160	211	445	78	285
4	148	816	480	55	61	15	490	2,170	198	470	76	390
5	145	530	460	52	53	15	620	*2,200	183	390	*71	720
6	141	134	425	52	46	16	790	2,360	167	368	71	507
7	138	131	400	*50	41	16	1,060	2,480	160	340	71	390
8	134	310	360	41	37	16	1,440	2,480	156	310	76	325
9	131	626	335	38	34	17	1,630	2,340	175	295	106	290
10	119	505	295	38	28	17	1,750	2,050	183	256	190	256
11	134	125	275	37	24	18	1,850	1,800	143	228	305	237
12	145	*116	245	35	*21	20	1,950	1,630	109	216	335	228
13	151	255	225	32	21	21	1,980	1,480	103	211	340	216
14	145	626	205	28	20	23	1,790	1,350	245	211	357	198
15	138	536	196	26	20	25	1,550	1,190	800	190	325	*183
16	138	500	176	28	20	34	1,420	932	*970	175	325	164
17	145	458	166	104	18	38	1,300	660	868	160	403	153
18	165	431	154	205	18	*41	1,290	548	1,100	146	474	143
19	188	438	142	305	18	43	1,330	583	1,490	143	468	130
20	192	485	138	300	17	55	1,390	569	1,640	133	455	120
21	184	521	126	295	17	76	1,480	541	1,530	123	462	115
22	169	536	120	260	17	128	1,510	527	1,320	115	442	106
23	134	444	108	245	16	158	1,590	488	870	109	416	103
24	158	465	100	230	16	188	1,870	455	692	115	379	109
25	173	465	96	205	15	210	2,410	416	639	136	305	103
26	173	424	91	172	15	235	2,940	379	555	123	261	98
27	180	405	84	158	14	245	3,160	340	510	109	325	93
28	195	380	78	130	14	245	3,070	300	396	103	335	90
29	290	295	76	120	-	245	2,830	275	481	106	330	85
30	368	245	72	100	-------	245	2,500	251	560	98	310	83
31	405	-------	70	88	-------	250	-------	224	-------	90	290	-------
Total	5,401	12,943	6,443	3,606	848	2,698	48,005	37,608	16,894	6,924	8,550	6,451
Mean	174	431	208	116	30.3	87.0	1,600	1,213	563	223	276	215
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 8,120 Min 41 Mean 638 Cfsm 1.93 In. 26.25
Water year 1958-59: Max 3,160 Min 14 Mean 428 Cfsm 1.30 In. 17.64

Peak discharge (base, 3,200 cfs).--No peak above base.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 29 to Apr. 19.

170. Aroostook River at Washburn, Maine

Location.--Lat 46°46'35", long 68°09'30", on right bank just upstream from Bangor & Aroostook Railroad bridge, 0.1 mile downstream from Salmon Brook, and 1 mile south of railroad station at Washburn, Aroostook County.

Drainage area.--1,652 sq mi.

Records available.--August 1930 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 436.40 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1948, at datum 2.0 ft higher.

Average discharge.--29 years, 2,551 cfs (unadjusted).

Extremes.--Maximum discharge during year, 13,600 cfs Apr. 27 (gage height, 7.75 ft); maximum gage height, 11.46 ft Apr. 11 (backwater from ice); minimum daily discharge, 340 cfs Feb. 10-15.

1930-59: Maximum discharge, 37,800 cfs Mar. 22, 1936 (gage height, 13.80 ft, present datum); maximum gage height, 15.78 ft Apr. 6, 1951 (backwater from ice); minimum daily discharge, 75 cfs Feb. 13-15, 1948.

Remarks.--Records excellent except those for period of ice effect, which are fair. Flow partly regulated by Squapan Lake (capacity, 2,554,000,000 cu ft), and by Millinocket Lake (capacity, 1,007,000,000 cu ft) used for power, and Machias and Rowe Lakes (combined capacity, about 280,000,000 cu ft) used for log driving and power.

Revisions (water years).--WSP 951: 1935. WSP 1301: 1933-50 (adjusted monthly runoff). WSP 1501: Drainage area.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	273	4.0	3,240
1.9	510	5.0	5,300
2.2	800	6.0	7,990
2.6	1,250	8.0	14,500
3.0	1,750		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	877	3,290	1,720	875	650	385	1,130	9,880	1,100	2,750	600	1,620
2	1,030	3,070	1,830	845	680	370	1,250	9,610	1,100	2,540	730	1,480
3	932	2,780	1,880	820	580	345	1,620	9,460	1,140	2,780	*502	1,610
4	844	2,850	1,880	800	470	345	2,020	9,370	1,080	2,810	537	2,160
5	620	2,400	1,850	*800	425	345	2,750	9,430	1,040	2,450	476	2,450
6	720	1,850	1,830	800	425	345	3,580	*9,880	1,430	2,160	459	2,100
7	899	1,620	1,750	800	415	355	4,810	10,300	844	1,890	493	1,670
8	811	1,500	1,750	790	355	360	6,100	10,300	780	1,710	493	1,360
9	910	1,880	1,670	770	*345	385	6,910	9,850	811	1,450	822	1,170
10	833	*1,870	1,620	750	340	435	7,720	8,880	943	1,290	1,060	1,010
11	921	1,540	1,570	710	340	425	7,990	7,990	954	1,140	1,380	910
12	1,020	1,410	1,490	700	340	410	7,940	7,340	833	1,050	1,610	899
13	1,010	1,370	1,480	690	340	600	7,770	6,780	790	1,020	1,490	833
14	888	1,740	1,440	670	340	600	7,670	6,210	932	987	1,290	790
15	965	1,840	1,410	660	340	495	7,450	5,590	2,730	910	1,110	750
16	910	1,850	1,370	680	410	*610	7,370	4,810	*5,460	822	1,060	710
17	932	1,850	1,350	710	510	630	7,180	4,030	5,030	760	1,290	660
18	1,090	1,800	1,300	730	495	600	6,910	3,320	4,760	680	1,590	620
19	1,210	1,870	1,250	780	460	640	7,990	3,050	5,880	630	1,750	573
20	1,100	2,150	1,210	800	410	700	8,540	2,770	6,690	591	1,680	528
21	1,040	2,360	1,150	820	440	730	8,760	2,540	6,370	582	1,530	502
22	976	2,390	1,130	855	450	790	8,820	2,450	5,400	630	1,540	493
23	899	1,960	1,110	875	425	820	8,940	2,440	4,400	690	1,570	476
24	888	1,940	1,060	890	495	875	9,230	2,320	3,530	780	1,370	425
25	965	1,830	1,030	900	460	910	10,800	2,100	3,140	720	1,150	510
26	1,060	1,440	1,020	910	440	930	12,500	1,920	2,660	700	976	555
27	1,090	1,430	985	900	360	955	13,400	1,620	2,420	630	1,030	546
28	1,240	1,410	920	820	370	890	13,300	1,420	2,160	600	1,300	519
29	2,050	1,470	910	780	-	1,020	12,300	1,290	2,170	730	1,500	546
30	3,100	1,560	910	700	-------	1,020	10,900	1,140	2,600	640	1,620	555
31	3,460	-------	900	620	-------	1,040	-------	1,060	-------	591	1,750	---------
Total	35,290	58,320	42,775	24,250	12,110	19,360	223,650	169,150	79,177	37,713	35,758	29,030
Mean	1,138	1,944	1,380	782	433	625	7,455	5,456	2,639	1,217	1,153	968
(†)	-160	+95	-148	-156	-291	-206	+548	+265	+95	-156	-3	-95
Adjusted for change in reservoir contents												
Mean	978	2,039	1,232	626	142	419	8,003	5,721	2,734	1,061	1,150	873
Cfsm	0.592	1.23	0.746	0.379	0.086	0.254	4.84	3.46	1.65	0.642	0.696	0.528
In.	0.68	1.37	0.86	0.44	0.09	0.29	5.40	3.99	1.84	0.74	0.80	0.59

	Observed			Adjusted		
Calendar year 1958:	Max 35,300	Min 620	Mean 3,205	Mean 3,192	Cfsm 1.93	In. 26.23
Water year 1958-59:	Max 13,400	Min 340	Mean 2,100	Mean 2,082	Cfsm 1.26	In. 17.09

Peak discharge (base, 13,100 cfs).--Apr. 27 (11:30 p.m.) 13,600 cfs (7.75 ft).

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Millinocket and Squapan Lakes.
Note.--Stage-discharge relation affected by ice Nov. 28 to Apr. 22.

180. Meduxnekeag River near Houlton, Maine

Location.--Lat 46°06'15", long 67°52'00", on right bank 0.3 mile downstream from South Branch and 2 miles upstream from Houlton, Aroostook County.

Drainage area.--175 sq mi.

Records available.--October 1940 to September 1959. October, November 1940 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 333.92 ft above mean sea level, datum of 1929.

Average discharge.--19 years, 279 cfs.

Extremes.--Maximum discharge during year, about 4,200 cfs Apr. 6 or 7; maximum gage height, 8.49 ft Apr. 6 (backwater from ice); minimum discharge, 11 cfs Aug. 5-7 (gage height, 2.28 ft).

1940-59: Maximum discharge, 6,620 cfs Apr. 23, 1958 (gage height, 9.30 ft); maximum gage height, 10.83 ft Mar. 27, 1953 (backwater from ice); minimum discharge, 3.6 cfs Sept. 19, 1946 (gage height, 2.09 ft).

Remarks.--Records excellent except those for period of ice effect, which are fair.

Revisions (water years).--WSP 1031: 1944

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 5

2.2	5.9	3.0	175
2.3	12	3.5	400
2.4	21	4.0	650
2.5	34	5.0	1,360
2.7	76	6.0	2,320

Apr. 6 to Sept. 30

3.5	400	6.0	2,320
4.0	695	7.0	3,400
5.0	1,420	8.0	4,660

Note.--Same as preceding table below 3.5 ft.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	445	375	52	34	13	200	877	90	167	16	274
2	76	355	380	52	34	19	215	838	111	167	15	336
3	84	292	365	52	38	21	305	*760	101	203	*15	370
4	74	256	340	52	52	24	1,120	702	87	203	14	528
5	66	228	305	*52	82	24	2,320	656	74	134	11	504
6	74	211	280	50	87	25	4,080	612	64	111	11	350
7	71	199	270	48	64	31	3,940	570	57	93	11	251
8	64	179	270	45	48	34	3,460	522	54	84	12	183
9	59	167	265	38	*47	36	2,800	466	71	71	12	141
10	54	*207	255	34	39	34	2,120	400	90	62	13	111
11	79	256	235	33	34	33	1,740	360	76	57	15	93
12	98	251	215	31	34	33	1,500	336	64	74	16	82
13	96	242	200	28	33	36	1,360	314	52	76	17	71
14	84	215	188	24	31	48	1,260	*282	*98	87	16	62
15	74	224	168	21	28	59	1,200	287	425	101	14	57
16	66	242	144	24	25	*76	1,150	260	438	82	14	50
17	84	228	130	48	22	82	1,000	228	341	66	16	47
18	104	220	118	90	21	98	946	203	314	50	25	43
19	107	300	110	174	21	104	1,150	220	428	43	36	41
20	96	395	102	250	20	110	1,380	211	438	45	33	39
21	84	375	93	250	20	128	1,320	199	395	43	48	36
22	76	336	82	215	19	134	1,180	207	296	36	71	34
23	71	269	74	188	19	138	1,150	203	242	31	59	34
24	101	246	69	144	18	144	1,220	179	187	29	41	66
25	191	235	57	120	16	156	1,360	164	148	26	33	82
26	187	260	54	98	16	168	1,390	145	127	25	31	66
27	171	325	54	82	15	172	1,310	124	120	21	106	57
28	203	345	52	64	13	176	1,090	111	120	18	310	50
29	460	330	52	52	-	176	918	93	148	16	422	47
30	570	355	52	45	-------	180	818	87	199	16	450	43
31	535	-------	52	38	-------	182	-------	96	-------	16	328	-------
Total	4,207	8,188	5,406	2,494	930	2,694	45,002	10,712	5,455	2,253	2,231	4,148
Mean	136	273	174	80.5	33.2	86.9	1,500	346	182	72.7	72.0	138
Cfsm	0.777	1.56	0.994	0.460	0.190	0.497	8.57	1.98	1.04	0.415	0.411	0.789
In.	0.90	1.74	1.15	0.53	0.20	0.57	9.56	2.28	1.16	0.48	0.47	0.88

Calendar year 1958: Max 5,600 Min 30 Mean 333 Cfsm 1.90 In. 25.87
Water year 1958-59: Max 4,080 Min 11 Mean 257 Cfsm 1.47 In. 19.92

Peak discharge (base, 2,100 cfs).--Apr. 6 or 7 (time unknown) about 4,200 cfs.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 25 to Apr. 15.

185. St. Croix River at Vanceboro, Maine

(International gaging station)

Location.--Lat 45°34'10", long 67°25'45", on right bank at international highway bridge in Vanceboro, Washington County, 400 ft downstream from outlet of Spednik Lake.

Drainage area.--417 sq mi.

Records available.--October 1928 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 367.75 ft above mean sea level, datum of 1929.

Average discharge.--31 years, 684 cfs.

Extremes.--Maximum discharge during year, 2,150 cfs May 16 (gage height, 7.16 ft); minimum, 154 cfs Apr. 3 (gage height, 3.48 ft).
1928-59: Maximum discharge, 4,470 cfs Apr. 23, 1954 (gage height, 9.24 ft); minimum, 1.9 cfs several times during October and November 1936 (gage height, 1.91 ft), when flow was held back by cofferdam during repairs to dam just upstream.

Remarks.--Records excellent except those for period of no gage-height record, which are good. Flow regulated by Chiputneticook Lakes (combined usable capacity, about 13,200,000,000 cu ft).

Cooperation.--This station is maintained by the United States under agreement with Canada.

Revisions.--WSP 1431: Drainage area.

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 15				Apr. 16 to Sept. 30			
3.5	157	5.5	815	3.9	235	5.5	848
4.0	257	6.0	1,180	4.2	305	6.0	1,180
4.5	385	7.0	2,010	4.5	395	7.0	2,010
5.0	561			5.0	595		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	910	400	239	1,080	785	690	359	290	998	435	814	719
2	750	397	239	1,060	992	680	359	287	*885	435	809	719
3	565	400	242	1,050	964	670	250	287	704	435	798	595
4	565	400	244	1,040	725	670	159	355	699	439	792	509
5	565	400	244	1,020	463	480	164	1,010	699	439	792	509
6	565	400	246	1,010	463	356	171	910	694	439	792	513
7	695	404	246	999	460	359	175	565	694	439	781	517
8	1,040	404	495	985	815	359	260	353	699	439	781	517
9	1,040	404	930	971	922	356	362	356	694	439	776	635
10	615	404	695	957	887	353	370	356	689	885	771	792
11	388	407	822	950	860	351	379	356	689	1,140	*771	792
12	391	407	1,180	922	830	348	385	356	689	830	766	787
13	490	407	1,040	915	800	348	305	356	689	564	766	787
14	636	407	910	908	775	351	*235	850	545	*564	766	781
15	632	404	1,060	894	750	351	239	835	385	564	760	776
16	627	495	960	860	730	353	244	870	586	564	760	766
17	632	690	785	828	770	353	244	540	586	564	760	771
18	632	690	715	815	815	353	246	1,150	*591	564	760	766
19	632	700	675	809	822	348	248	1,380	595	564	645	766
20	627	700	670	797	809	348	253	1,140	435	560	431	766
21	695	700	695	791	791	348	255	1,140	264	560	435	855
22	867	700	925	625	779	356	257	1,140	266	560	435	932
23	860	700	1,050	502	761	356	262	790	370	560	550	920
24	600	700	578	502	750	356	264	950	424	560	650	1,200
25	388	700	574	502	733	356	266	1,740	424	560	719	1,380
26	388	695	574	499	722	359	271	1,720	427	560	719	1,360
27	388	400	570	499	706	359	273	1,700	431	700	724	1,340
28	391	231	685	499	695	359	278	1,690	431	820	724	1,320
29	394	235	767	495	-	359	280	1,670	435	820	724	1,300
30	394	237	1,090	495	-------	359	285	570	435	820	724	1,290
31	397	-------	1,230	491	-------	359	-------	910	-------	814	724	-------
Total	18,759	14,618	21,375	24,770	21,374	12,403	8,098	26,622	17,152	18,636	22,219	25,680
Mean	605	487	690	799	763	400	270	859	572	601	717	856
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 4,270 Min 210 Mean 801 Cfsm - In. -
Water year 1958-59: Max 1,740 Min 159 Mean 635 Cfsm - In. -

* Discharge measurement made on this day.
Note.--No gage-height record Feb. 12-17; discharge estimated on basis of gate openings at Spednik Lake dam.

190. Grand Lake Stream at Grand Lake Stream, Maine

Location.--Lat 45°10'25", long 67°46'05", on left bank at Big Falls, 0.5 mile southeast of village of Grand Lake Stream, Washington County, and 0.8 mile downstream from outlet dam of Grand Lake.

Drainage area.--224 sq mi.

Records available.--October 1928 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 273.96 ft above mean sea level, datum of 1929.

Average discharge.--31 years, 355 cfs.

Extremes.--Maximum discharge during year, 1,920 cfs June 21 (gage height, 5.20 ft); minimum, 107 cfs May 24 (gage height, 1.74 ft).
1928-59: Maximum discharge, 2,840 cfs June 12, 1952 (gage height, 6.35 ft); minimum daily, 5 cfs Dec. 3-6, 11, 1945.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are good. Flow regulated by Grand and other lakes (combined usable capacity, about 8,250,000,000 cu ft).

Revisions.--WSP 971: Drainage area.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	99	3.5	790
1.9	141	4.0	1,080
2.2	225	5.0	1,760
2.5	326	6.0	2,560
3.0	541		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	500	216	302	345	397	834	690	192	225	556	1,130	605
2	284	213	288	479	401	828	540	192	*228	556	1,120	610
3	291	213	288	479	397	818	375	187	228	556	1,100	550
4	291	213	288	479	305	818	271	355	228	370	1,090	446
5	291	213	288	479	189	650	271	198	228	322	1,070	465
6	291	213	291	475	207	512	271	173	232	480	1,070	465
7	291	240	291	475	207	517	271	159	232	640	1,060	465
8	288	397	291	475	330	512	265	141	232	801	1,050	465
9	291	397	291	470	414	590	265	123	235	812	1,040	465
10	270	401	290	470	414	845	268	120	232	818	1,040	465
11	222	406	290	470	414	834	268	120	345	840	*1,040	465
12	222	325	291	490	414	818	222	120	424	850	1,040	460
13	320	248	288	520	414	828	225	120	424	850	1,030	455
14	437	248	312	535	410	823	245	123	390	850	590	600
15	432	251	326	531	414	812	251	120	278	845	536	835
16	432	325	302	536	414	812	255	114	270	845	536	1,060
17	437	474	284	551	495	801	258	112	248	720	536	1,060
18	442	474	284	546	561	790	238	112	600	590	541	1,040
19	437	479	284	541	570	780	225	112	1,350	585	541	1,030
20	432	474	284	541	566	775	225	112	1,790	845	541	1,020
21	428	474	288	541	561	760	216	112	1,850	1,450	541	1,010
22	424	479	288	445	561	775	213	114	1,490	1,420	541	996
23	345	474	284	291	556	765	213	110	1,200	1,030	585	984
24	255	470	284	288	556	755	204	108	812	517	620	984
25	207	474	288	288	551	745	201	108	806	725	685	972
26	207	470	288	288	660	735	198	108	806	1,370	575	960
27	210	385	288	288	850	730	192	108	801	1,270	535	948
28	216	316	284	288	845	725	189	108	796	1,170	600	936
29	219	330	284	288	-	710	187	192	615	1,160	600	924
30	213	305	288	288	-------	705	189	232	566	1,150	600	918
31	216	-------	288	330	-------	700	-------	228	-------	1,130	600	-------
Total	9,847	10,597	9,005	13,510	13,073	23,102	7,901	4,533	18,161	26,123	24,183	22,658
Mean	318	353	290	436	467	745	263	146	605	843	780	755
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 1,780 Min 125 Mean 416 Cfsm - In. -
Water year 1958-59: Max 1,850 Min 108 Mean 501 Cfsm - In. -

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 10, 11, Jan. 1. No gage-height record Jan. 6-14; discharge estimated on basis of gate openings and lake elevations at dam just upstream.

200. St. Croix River near Baileyville, Maine

(International gaging station)

Location.--Lat 45°15'55", long 67°28'35", in township of Baileyville, Washington County, on right bank 700 ft downstream from powerhouse of St. Croix Paper Co. at Grand Falls, and 8 miles upstream from village of Woodland.

Drainage area.--1,320 sq mi.

Records available.--November 1919 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 148.8 ft above mean sea level, datum of 1929.

Average discharge.--40 years, 2,207 cfs.

Extremes.--Maximum discharge during year, 9,840 cfs June 19 (gage height, 6.95 ft); minimum daily, 613 cfs Oct. 26.
1919-59: Maximum discharge, about 23,300 cfs May 1, 1923 (gage height, 13.90 ft); minimum daily, 64 cfs Oct. 13, 1957.

Remarks.--Records excellent except those below 1,000 cfs, which are good. Flow regulated by Chiputneticook Lakes, Grand and other lakes (combined usable capacity, about 25,000,000,000 cu ft).

Cooperation.--This station is maintained by the United States under agreement with Canada.

Revisions (water years).--WSP 1231: 1922.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

1.0	548	3.0	2,840
1.2	688	4.0	4,340
1.4	855	5.0	6,030
1.6	1,040	6.0	7,850
1.8	1,230	7.0	9,950
2.0	1,450		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,060	3,200	2,870	2,470	777	785	2,640	3,810	2,220	3,170	1,020	2,660
2	2,510	2,470	2,820	2,310	2,030	1,950	2,850	2,960	2,860	2,370	768	3,020
3	2,820	2,260	2,420	1,290	2,540	2,250	4,220	2,640	2,750	2,990	2,170	2,900
4	1,570	2,480	2,460	704	2,480	2,250	4,720	3,530	2,860	1,540	2,900	4,670
5	1,180	2,640	2,480	1,880	2,580	2,680	6,320	3,250	2,960	1,650	2,760	4,210
6	2,170	2,690	2,570	2,190	2,600	2,840	7,560	2,900	3,000	2,620	3,040	3,650
7	1,990	2,640	1,260	2,280	1,420	1,480	7,600	2,990	1,350	2,900	2,760	3,080
8	1,610	1,390	1,800	2,430	777	768	7,600	2,580	1,890	2,990	2,680	3,390
9	1,630	673	2,430	2,140	2,070	2,330	7,530	2,960	2,690	3,000	1,120	2,980
10	1,640	1,970	2,280	1,320	2,660	*3,080	7,400	1,260	2,650	3,000	2,030	2,780
11	1,750	2,560	2,530	785	2,740	2,890	6,580	2,190	2,930	1,470	*2,990	2,650
12	644	2,510	2,400	1,830	2,660	3,080	6,350	2,770	2,790	2,100	2,990	2,930
13	1,300	2,400	2,200	2,120	2,720	2,940	6,670	2,430	2,640	4,100	2,930	1,230
14	1,670	2,700	1,240	2,350	1,370	1,650	*5,540	2,330	1,320	4,500	3,100	2,190
15	1,700	2,630	2,140	2,500	794	794	4,720	2,820	2,370	3,900	1,290	3,000
16	1,580	1,340	2,800	2,260	2,220	2,130	4,300	2,880	3,000	3,210	752	2,690
17	1,890	1,810	2,500	1,790	2,470	2,870	4,180	1,290	3,060	3,080	1,980	*2,840
18	1,010	2,440	2,540	1,820	1,730	2,840	2,900	2,330	5,920	1,360	2,960	2,930
19	658	2,660	2,460	2,410	2,070	3,020	3,040	2,960	8,680	712	2,990	1,270
20	1,430	2,740	1,320	2,740	2,170	2,900	4,300	2,950	8,080	2,340	3,080	659
21	1,530	2,840	803	2,470	1,320	1,410	4,190	2,860	7,470	2,960	3,080	2,280
22	1,600	2,680	1,830	2,500	794	673	3,960	2,730	7,320	2,850	1,380	2,940
23	1,740	2,800	2,260	2,510	1,930	2,280	4,040	1,980	5,840	3,060	785	2,980
24	1,530	2,540	1,920	1,310	2,470	2,930	4,040	1,350	5,450	3,080	2,310	2,750
25	1,020	2,610	720	838	2,760	2,930	3,770	2,220	4,620	1,400	2,960	2,990
26	613	2,460	736	1,870	2,580	2,880	3,740	2,910	4,010	688	2,940	2,990
27	1,720	2,930	644	2,720	2,210	2,920	4,130	2,950	2,690	2,510	2,730	1,470
28	2,250	2,740	681	2,370	1,380	1,360	4,020	3,120	2,400	2,910	2,650	2,280
29	2,580	3,470	1,820	2,660	-	681	4,000	2,920	3,420	2,980	3,050	2,940
30	3,780	3,440	2,480	2,620	-------	2,230	3,810	2,840	3,700	3,120	1,360	2,930
31	3,210	-------	2,440	1,320	-------	2,800	-------	1,380	-------	2,880	2,410	-------
Total	54,385	74,713	61,854	62,807	56,322	68,621	146,720	81,090	112,940	81,440	71,965	82,279
Mean	1,754	2,490	1,995	2,026	2,012	2,214	4,891	2,616	3,765	2,627	2,321	2,743
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 10,200 Min 613 Mean 2,616 Cfsm - In. -
Water year 1958-59: Max 8,680 Min 613 Mean 2,617 Cfsm - In. -

* Discharge measurement made on this day.

212. Dennys River at Dennysville, Maine

Location.--Lat 44°54'05", long 67°14'55", on right bank just upstream from railroad bridge, 0.9 mile upstream from Cathance Stream and 1 mile west of Dennysville, Washington County.

Drainage area.--92.4 sq mi.

Records available.--October 1955 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 54.78 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during year, 1,640 cfs Apr. 3 (gage height, 5.85 ft); minimum, 30 cfs Sept. 28-30 (gage height, 0.67 ft).
1955-59: Maximum discharge, that of Apr. 3, 1959; minimum, 8.4 cfs Oct. 1, 1957 (gage height, 0.28 ft).

Remarks.--Records excellent except those for periods of ice effect, which are fair. Flow partly regulated by power development at Meddybemps Lake. Records of water temperatures for the water year 1959 are given in WSP 1641.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.6	24	2.5	345
.8	42	3.0	490
1.0	65	4.0	830
1.5	140	5.0	1,240
2.0	230	6.0	1,720

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	235	258	460	112	112	83	216	270	108	158	102	45
2	450	208	362	110	104	96	254	302	120	143	113	49
3	325	155	266	110	122	120	698	292	245	150	77	72
4	250	174	235	110	174	134	1,340	228	280	132	59	210
5	194	143	210	65	250	140	1,070	258	198	122	51	176
6	128	162	198	100	190	164	825	238	160	119	48	124
7	146	131	186	108	156	290	745	234	137	116	45	90
8	144	148	154	106	120	278	560	238	128	149	46	70
9	150	148	168	104	65	178	496	232	144	130	48	58
10	146	178	160	102	104	210	448	202	167	116	*49	52
11	112	206	155	95	90	178	487	146	156	280	57	49
12	124	192	152	71	106	194	388	194	137	617	58	46
13	83	184	138	*92	104	194	*318	122	198	520	53	44
14	118	162	143	92	100	170	332	149	565	388	50	41
15	122	180	110	92	98	132	332	152	700	295	45	39
16	96	172	128	114	53	114	310	150	490	250	46	41
17	114	130	138	295	*95	188	272	137	310	226	45	*39
18	170	156	138	345	96	196	295	125	*840	214	45	36
19	182	164	138	255	98	160	338	113	1,120	208	46	35
20	128	184	138	215	100	155	305	114	934	208	46	34
21	148	186	130	190	100	178	298	83	730	210	46	33
22	137	214	114	270	98	256	282	118	460	212	52	32
23	131	192	130	430	55	248	292	136	302	192	50	32
24	143	146	128	270	95	268	305	130	232	182	45	33
25	174	168	126	190	96	220	310	152	182	108	43	33
26	161	174	126	138	92	196	300	130	150	63	43	32
27	149	460	120	156	89	190	252	128	182	53	44	31
28	275	340	116	146	68	180	278	155	180	51	43	30
29	553	1,060	80	140	-	156	248	140	172	48	43	30
30	475	890	110	134	-------	138	250	134	192	44	43	30
31	335	-------	112	126	-------	184	-------	118	-------	43	43	-------
Total	6,098	7,265	5,069	4,883	3,030	5,588	12,844	5,320	9,919	5,747	1,624	1,666
Mean	197	242	164	158	108	180	428	172	331	185	52.4	55.5
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 1,320 Min 24 Mean 229 Cfsm 2.48 In. 33.62
Water year 1958-59: Max 1,340 Min 30 Mean 189 Cfsm 2.05 In. 27.79

Peak discharge (base, 600 cfs).--Nov. 29 (2 p.m.) 1,340 cfs (5.22 ft); Apr. 3 (8 p.m.) 1,640 cfs (5.85 ft); June 18 (9 p.m.) 1,400 cfs (5.33 ft); July 12 (4 a.m.) 652 cfs (3.52 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 4-10, Dec. 16 to Mar. 5.

215. Machias River at Whitneyville, Maine

Location.--Lat 44°43'25", long 67°31'15", on right bank 800 ft downstream from highway bridge at Whitneyville, Washington County.

Drainage area.--457 sq mi.

Records available.--October 1905 to September 1921, September 1929 to September 1959. Monthly discharge only for some periods, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 37.22 ft above mean sea level, datum of 1929. Oct. 1, 1905, to Sept. 30, 1921, staff and chain gages on highway bridge at different datum.

Average discharge.--46 years, 937 cfs.

Extremes.--Maximum discharge during year 6,510 cfs Apr. 4 (gage height, 10.49 ft); minimum, 47 cfs May 12 (gage height, 2.67 ft).
1905-21, 1929-59: Maximum discharge, 11,800 cfs Nov. 28, 1950 (gage height, 14.70 ft, from floodmarks), from rating curve extended above 7,000 cfs by logarithmic plotting; maximum gage height, 16.18 ft Mar. 14, 1936 (ice jam); minimum daily discharge, 3.5 cfs Oct. 12, 1939, when flow was held back by cofferdam during reconstruction of highway bridge upstream.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Some storage in lakes above station.

Revisions (water years).--WSP 241: 1903-4. WSP 971: Drainage area. WSP 1231: 1907-15, 1916-21(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.2	145	6.0	2,380
3.6	295	7.0	3,160
4.0	520	9.0	4,910
4.5	950	11.0	7,070
5.0	1,430		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	570	825	2,790	205	355	178	822	1,730	*230	1,570	446	345
2	1,130	670	2,080	205	315	210	1,000	1,790	310	1,260	410	372
3	925	845	1,590	200	285	250	3,190	1,860	570	1,130	315	755
4	545	395	1,060	196	385	270	6,110	1,770	1,100	1,140	350	1,490
5	423	585	1,080	192	755	250	5,870	1,670	920	1,080	335	1,520
6	412	614	1,220	190	670	265	4,860	1,730	785	1,010	330	950
7	400	569	1,240	186	500	590	4,080	2,380	470	655	367	615
8	389	520	1,110	186	355	850	3,300	2,360	198	750	325	477
9	182	385	870	182	295	*755	2,910	2,030	246	900	330	389
10	238	460	750	182	250	670	2,640	1,270	495	930	340	325
11	406	748	630	178	245	525	2,620	930	680	1,320	340	315
12	394	722	525	178	250	460	2,560	600	541	2,880	429	295
13	378	622	460	*186	210	400	*2,400	615	540	3,020	435	277
14	350	569	400	190	205	345	2,250	545	1,510	2,360	242	226
15	340	527	370	190	210	350	2,460	1,110	2,700	1,710	226	210
16	315	520	350	210	*220	400	2,640	1,030	2,550	1,180	277	226
17	320	514	345	670	210	555	2,640	940	1,990	1,050	268	259
18	660	483	330	1,430	210	685	2,650	822	2,340	715	268	250
19	705	458	325	1,040	215	615	2,750	705	3,290	662	268	325
20	679	685	310	740	225	540	2,910	540	3,180	840	268	345
21	475	794	300	640	260	520	2,770	501	2,900	690	272	345
22	290	425	295	1,010	255	1,040	2,490	435	2,540	548	277	367
23	250	520	285	2,020	250	1,630	1,830	435	2,320	527	277	362
24	259	508	275	1,430	250	1,630	1,620	395	2,210	540	277	362
25	325	464	255	880	240	1,380	1,670	510	2,090	464	268	400
26	452	452	250	670	210	1,160	1,750	968	1,950	458	226	458
27	640	1,270	245	510	200	1,010	1,850	890	1,850	305	163	446
28	955	1,720	235	405	182	880	1,760	600	1,730	325	203	356
29	1,930	3,500	230	395	-	748	1,760	315	1,390	365	238	295
30	1,920	3,400	215	385	-------	638	1,720	178	1,580	250	250	290
31	1,590	-------	210	400	-------	646	-------	206	-------	315	305	-------
Total	18,847	24,769	20,630	15,681	8,212	20,445	79,882	31,860	45,205	30,949	9,325	13,647
Mean	608	826	665	506	293	660	2,663	1,028	1,507	998	301	455
Cfsm	1.33	1.81	1.46	1.11	0.641	1.44	5.83	2.25	3.30	2.18	0.659	0.996
In.	1.53	2.02	1.68	1.28	0.67	1.66	6.50	2.59	3.68	2.51	0.76	1.11

Calendar year 1958: Max 4,640 Min 93 Mean 1,057 Cfsm 2.31 In. 31.42
Water year 1958-59: Max 6,100 Min 163 Mean 875 Cfsm 1.91 In. 25.99

Peak discharge (base, 3,200 cfs).--Nov. 30 (time unknown) about 5,000 cfs; Apr. 4 (9 p.m.) 6,510 cfs (10.49 ft); June 19 (5 p.m.) 3,360 cfs (7.25 ft); July 12 (10:30 p.m.) 3,240 cfs (7.10 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 6, 7, Dec. 10 to Mar. 23. No gage-height record Nov. 29, 30, Dec. 29 to Jan. 13; discharge estimated on basis of partial gage-height record, weather records, and 1 discharge measurement.

220. East Machias River near East Machias, Maine

Location.--Lat 44°46'05", long 67°24'30", on left bank just downstream from outlet of Hadley Lake, 3 miles upstream from East Machias, Washington County.

Drainage area.--251 sq mi.

Records available.--October 1926 to March 1959 (discontinued).

Gage.--Staff gage read once daily. Datum of gage is 34.9 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1950, at datum 1.00 ft higher.

Average discharge.--31 years (1927-58), 507 cfs.

Extremes.--Maximum discharge observed during period October 1958 to March 1959, 1,300 cfs Dec. 2 (gage height, 5.61 ft); minimum observed, 150 cfs Jan. 15 (gage height, 2.16 ft). 1926-59: Maximum discharge, 3,660 cfs Dec. 15, 1950 (gage height, 9.05 ft); minimum, 8.4 cfs Nov. 8, 1947 (gage height, 0.65 ft, present datum).

Remarks.--Records good.

Revisions (water years).--WSP 971: Drainage area. WSP 1231: 1928-30.

Rating table, Oct. 1, 1958, to Mar. 14, 1959 (gage height, in feet, and discharge, in cubic feet per second)

2.0	124	4.0	595
2.5	208	5.0	1,010
3.0	310	6.0	1,500

Discharge, in cubic feet per second, October 1958 to March 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	156	581	861	226	464	208						
2	222	581	1,300	221	433	201						
3	253	577	1,280	215	412	194						
4	278	566	1,260	208	420	187						
5	289	548	1,200	201	410	182						
6	298	528	1,150	194	400	190						
7	283	508	1,090	188	390	197						
8	261	491	922	185	382	290						
9	247	461	773	180	372	380						
10	237	485	749	175	360	370						
11	232	511	725	170	347	357						
12	226	498	709	164	367	343						
13	213	473	693	159	357	335						
14	204	453	670	154	343	324						
15	194	450	602	150	330	-						
16	187	444	545	170	*315	-						
17	188	436	491	234	305	-						
18	194	428	476	289	298	-						
19	194	417	458	343	294	-						
20	199	412	444	367	287	-						
21	201	417	417	407	274	-						
22	201	428	387	461	265	-						
23	201	420	360	602	261	-						
24	204	410	343	670	249	-						
25	212	400	319	659	241	-						
26	221	394	303	651	230	-						
27	232	511	287	625	224	-						
28	276	581	276	595	215	-						
29	382	918	265	552	-	-						
30	467	883	249	517	-------	-						
31	524	-------	236	491	-------	-	-------		-------			-------
Total	7,676	15,210	19,840	10,423	9,245	-						
Mean	248	507	640	336	330	-						
Cfsm	0.987	2.02	2.55	1.34	1.31	-						
In.	1.14	2.25	2.94	1.54	1.36	-						

Calendar year 1958: Max 1,800 Min 108 Mean 616 Cfsm 2.45 In. 33.33
Water year 1958-59: Max - Min - Mean - Cfsm - In. -

* Discharge measurement made on this day.

225. Narraguagus River at Cherryfield, Maine

Location.--Lat 44°36'30", long 67°56'15", on left bank at Cherryfield, Washington County, 800 ft upstream from railroad bridge and 0.7 mile downstream from West Branch Narraguagus River.

Drainage area.--232 sq mi.

Records available.--February 1948 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 44.2 ft above mean sea level, datum of 1929. Prior to July 1, 1948, staff gage at same site and datum.

Average discharge.--11 years, 485 cfs.

Extremes.--Maximum discharge during year, 6,520 cfs Apr. 3 (gage height, 15.28 ft); minimum daily, 64 cfs Feb. 28, Mar. 1.
1948-59: Maximum discharge, 7,250 cfs Nov. 28, 1950 (gage height, 15.81 ft); minimum, 27 cfs Oct. 6, 1957 (gage height, 6.98 ft).

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair.

Revisions (water years).--WSP 1301: 1948(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

7.4	58	10.0	850
7.7	96	11.0	1,460
8.0	149	13.0	3,300
8.5	270	14.0	4,580
9.0	425	15.0	6,060
9.5	620		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	375	736	1,970	112	275	64	918	690	*226	934	147	125
2	704	586	1,450	104	240	120	1,000	736	219	740	177	242
3	566	495	1,050	96	215	250	3,080	717	305	646	174	542
4	439	511	876	89	540	215	5,220	676	432	542	153	900
5	348	454	754	82	1,220	205	4,240	637	357	450	137	850
6	293	402	645	77	713	240	3,660	599	296	379	124	603
7	242	366	585	73	425	665	2,740	574	253	357	118	429
8	214	335	520	72	330	725	2,140	566	229	329	110	329
9	192	320	460	70	265	620	1,790	526	229	299	106	262
10	172	610	425	69	225	540	1,580	488	256	273	*105	211
11	170	663	390	69	186	490	1,590	465	248	605	147	179
12	170	578	355	68	158	435	1,430	461	216	1,440	172	160
13	157	495	315	68	132	405	*1,260	476	242	1,400	157	137
14	145	432	290	67	116	385	1,110	499	640	1,100	139	118
15	135	*450	275	67	102	375	994	526	1,300	816	120	113
16	129	432	265	66	*90	415	929	518	1,410	620	113	125
17	131	392	255	1,250	85	530	855	511	1,280	488	141	118
18	197	360	250	1,140	79	460	855	429	1,250	405	151	110
19	284	360	240	881	77	420	924	389	1,470	348	137	100
20	256	370	235	731	74	390	994	366	1,430	317	125	95
21	216	386	230	620	72	460	934	354	1,260	305	122	90
22	192	450	220	1,050	70	900	806	373	1,000	284	147	88
23	174	415	215	1,810	69	805	736	415	830	256	137	83
24	181	373	205	1,240	68	755	713	389	676	232	116	82
25	234	360	192	940	67	725	726	382	554	216	110	116
26	245	338	180	760	66	690	763	348	476	197	106	170
27	380	965	174	620	65	670	773	311	558	177	105	162
28	645	1,030	160	500	64	655	726	284	503	164	102	139
29	1,100	2,290	148	400	-	637	668	253	625	149	102	120
30	1,140	2,780	136	350	-------	603	646	237	1,030	139	113	113
31	945	-------	124	310	-------	704	-------	245	-------	131	118	-------
Total	10,771	18,734	13,589	13,851	6,088	15,553	44,800	14,440	19,800	14,738	4,031	6,911
Mean	347	624	438	447	217	502	1,493	466	660	475	130	230
Cfsm	1.50	2.69	1.89	1.93	0.935	2.16	6.44	2.01	2.84	2.05	0.560	0.991
In.	1.73	3.00	2.18	2.22	0.97	2.49	7.18	2.32	3.17	2.36	0.65	1.11

Calendar year 1958: Max 3,310 Min 65 Mean 564 Cfsm 2.43 In. 33.04
Water year 1958-59: Max 5,220 Min 64 Mean 502 Cfsm 2.16 In. 29.38

Peak discharge (base, 1,500 cfs).--Nov. 20 (3 a.m.) 3,090 cfs (12.81 ft); Jan. 17 (10 a.m.) about 1,700 cfs; Jan. 23 (4 a.m.) 2,010 cfs (11.72 ft); Feb. 5 (time unknown) about 1,700 cfs; Apr. 3 (11 p.m.) 6,520 cfs (15.28 ft); July 12 (8 p.m.) 1,500 cfs (11.06 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 6 to Jan. 17, Jan. 31 to Feb. 3, Feb. 11 to Mar. 28, Apr. 3. No gage-height record Dec. 14 to Jan. 11, Jan. 26-30, Feb. 4, 5, 7-10, Mar. 10-16, 19,20, 23-25; discharge estimated on basis of weather records and records for stations on nearby streams.

230. West Branch Union River at Amherst, Maine

Location.--Lat 44°50'25", long 68°22'20", on right bank 200 ft upstream from site of old tannery dam, 0.6 mile upstream from Indian Camp Brook, and 0.7 mile northwest of Amherst, Hancock County.

Drainage area.--148 sq mi.

Records available.--July 1909 to September 1919, July 1929 to September 1959. Published as Union River at Amherst October 1910 to September 1913.

Gage.--Water-stage recorder. Altitude of gage is 160 ft (from topographic map). July 1909 to Sept. 30, 1919, staff and chain gages at highway bridge 1 mile downstream at different datum.

Average discharge.--40 years, 260 cfs.

Extremes.--Maximum discharge during year, 2,670 cfs Apr. 3 (gage height, 8.07 ft); minimum daily, 11 cfs Jan. 13, 14, 15.
1909-19, 1929-59: Maximum discharge, 4,140 cfs Apr. 13, 1940 (gage height, 9.58 ft); maximum gage height, 10.41 ft Mar. 9, 1942 (ice jam); minimum discharge, 3.6 cfs Sept. 29, 1941; minimum gage height, 2.82 ft Sept. 14, 1949.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair.

Revisions (water years).--WSP 801: 1935. WSP 821: Drainage area. WSP 1231: 1912-15, 1916-19(M). WSP 1301: 1910-11.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.0	9.0	4.5	305
3.1	13	5.0	515
3.2	19	5.5	780
3.3	26	6.0	1,100
3.4	37	6.5	1,430
3.6	66	7.0	1,770
4.0	155		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	105	458	712	18	102	33	240	530	*134	535	82	94
2	179	405	657	17	84	45	270	515	129	520	77	177
3	196	357	668	16	77	50	1,740	486	147	501	66	275
4	208	323	609	16	130	50	1,720	462	155	444	60	436
5	199	285	535	14	225	66	1,740	431	139	388	56	440
6	182	263	486	13	188	71	1,670	422	132	330	*52	418
7	158	244	535	13	160	235	1,710	405	129	302	50	380
8	142	223	505	12	130	250	1,650	405	122	269	50	341
9	132	220	481	12	106	240	1,580	376	124	238	49	288
10	122	285	440	12	84	220	1,450	357	127	211	49	238
11	124	288	410	12	75	110	1,390	341	119	279	68	208
12	112	275	375	12	66	*58	1,250	330	110	388	68	171
13	105	256	330	11	56	47	1,100	316	134	414	77	150
14	94	244	300	11	53	40	972	312	320	409	80	127
15	88	247	270	*11	50	37	888	309	642	372	71	115
16	84	241	240	12	49	37	*815	298	668	319	73	103
17	86	223	210	182	46	36	769	272	652	272	82	97
18	103	211	182	445	44	35	734	260	769	238	86	86
19	150	220	156	625	*53	106	774	238	906	214	92	82
20	140	226	132	670	52	340	780	229	913	202	101	77
21	130	232	112	445	49	465	734	214	900	185	105	70
22	120	241	97	515	47	420	684	229	870	166	105	68
23	116	229	80	605	46	370	657	238	804	155	92	66
24	120	214	66	445	42	305	631	232	706	139	82	75
25	140	208	58	340	41	280	631	235	599	129	75	99
26	180	229	47	270	37	270	631	220	515	112	82	86
27	240	477	38	210	36	265	652	205	444	101	90	82
28	305	462	34	168	34	255	620	188	384	92	97	79
29	496	930	27	156	-	245	594	168	467	84	97	73
30	*530	851	23	140	-------	245	559	158	569	77	92	73
31	501	-------	20	130	-------	240	-------	152	-------	73	84	-------
Total	5,587	9,567	8,835	5,558	2,162	5,466	29,635	9,533	12,829	8,158	2,390	5,074
Mean	180	319	285	179	77.2	176	988	308	428	263	77.1	169
Cfsm	1.22	2.16	1.93	1.21	0.522	1.19	6.68	2.08	2.89	1.78	0.521	1.14
In.	1.41	2.41	2.22	1.40	0.54	1.37	7.45	2.40	3.22	2.05	0.60	1.27

Calendar year 1958: Max 1,430 Min 20 Mean 318 Cfsm 2.15 In. 29.19
Water year 1958-59: Max 1,740 Min 11 Mean 287 Cfsm 1.94 In. 26.34

Peak discharge (base, 1,000 cfs).--Nov. 29 (2 to 3 p.m.) 1,060 cfs (5.94 ft); Apr. 3 (12:30 p.m.) 2,670 cfs (8.07 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 11 to Mar. 11. No gage-height record Oct. 19-27, Mar. 12 to Apr. 2; discharge estimated on basis of recorded range in stage, weather records, and records for stations on nearby streams.

295. East Branch Penobscot River at Grindstone, Maine

Location.--Lat 45°43'50", long 68°35'20", on left bank 500 ft downstream from Bangor and Aroostook Railroad bridge, half a mile south of Grindstone, Penobscot County, and 9½ miles upstream from confluence with West Branch Penobscot River.

Drainage area.--1,070 sq mi, approximately (including about 240 sq mi drained by Chamberlain Lake through Telos Canal).

Records available.--October 1902 to September 1959. Monthly discharge only for some periods, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 294.74 ft above mean sea level, datum of 1929. Prior to June 30, 1929, chain gage on railroad bridge at same datum.

Average discharge.--57 years, 1,882 cfs (unadjusted).

Extremes.--Maximum discharge during year, 9,450 cfs June 16 (gage height, 9.30 ft); minimum daily, 350 cfs Aug. 1.
1902-59: Maximum discharge, 37,000 cfs Apr. 30, 1923 (gage height, 16.9 ft, site then in use, present datum); minimum daily (1914-59), 77 cfs Nov. 19, 1924.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Flow partly regulated by Chamberlain, Telos, Second and Grand Lakes and Round Pond (see p. 41).

Revisions (water years).--WSP 501: Drainage area. WSP 1301: 1907-12, 1914-29(M).

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

4.4	325	7.0	3,800
4.9	650	8.0	6,020
5.5	1,260	9.0	8,600
6.0	1,970	10.0	11,600

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,040	2,680	1,530	1,020	1,120	1,040	870	4,370	1,110	3,760	350	1,610
2	1,120	2,230	1,530	1,020	1,120	1,040	870	4,030	1,740	3,840	510	2,080
3	1,120	2,070	1,470	1,020	1,110	1,040	1,390	3,780	1,600	3,140	790	2,320
4	1,060	1,790	1,400	1,020	1,100	1,030	3,400	3,560	1,380	2,380	780	2,590
5	950	1,590	1,360	1,020	1,070	1,000	4,770	3,400	1,300	2,680	780	2,310
6	930	1,530	1,300	1,020	1,050	960	5,560	*3,400	1,260	2,360	780	1,970
7	910	1,460	1,240	1,020	1,040	930	6,500	3,800	1,220	1,900	1,090	1,760
8	586	1,420	1,150	*970	1,050	950	6,500	4,640	980	1,340	1,080	1,600
9	399	1,400	1,100	950	1,120	930	6,380	5,010	1,120	1,180	1,070	1,040
10	454	1,560	1,050	930	1,140	870	6,260	3,600	1,490	1,110	1,070	850
11	722	1,680	1,010	930	1,150	*830	6,210	3,050	1,390	1,140	1,060	695
12	1,190	1,850	960	930	1,150	830	6,020	3,180	1,260	1,220	*1,040	634
13	1,220	*1,760	950	910	1,140	850	5,740	3,340	1,190	1,050	1,030	578
14	1,150	1,680	940	900	1,120	930	5,470	3,090	1,810	1,180	1,020	535
15	794	1,680	930	890	1,070	1,050	5,380	2,680	6,710	1,110	1,010	500
16	442	2,100	900	890	1,050	1,140	5,080	2,320	8,880	880	1,000	474
17	535	1,970	890	1,010	1,030	1,120	4,550	2,150	*8,910	731	1,000	448
18	618	1,840	850	1,600	*990	1,070	4,220	1,730	7,000	713	1,600	429
19	650	1,880	830	1,460	970	1,050	4,640	1,640	8,130	713	1,700	417
20	686	2,030	930	1,300	960	1,070	5,610	1,360	8,050	776	1,600	528
21	642	1,910	1,100	1,220	950	1,160	5,580	1,640	7,620	713	1,500	695
22	618	1,760	1,140	1,140	1,010	1,190	5,280	2,290	5,510	677	1,380	695
23	507	1,470	1,110	*1,240	1,110	1,160	5,060	2,900	3,820	535	1,270	686
24	578	1,500	1,080	1,420	1,150	1,140	5,510	3,180	2,950	528	1,180	1,000
25	1,400	1,430	1,060	1,400	1,160	1,120	6,310	2,710	2,660	468	1,120	1,150
26	1,180	1,240	1,050	1,380	1,140	1,050	6,850	1,520	3,380	448	1,110	960
27	1,030	1,220	1,040	1,290	1,120	1,030	6,700	1,670	3,160	399	1,100	870
28	1,190	1,190	1,040	1,260	1,070	1,010	5,840	1,530	2,640	393	1,600	821
29	2,600	1,240	1,040	1,240	-	1,000	5,330	1,060	3,160	387	2,390	794
30	4,350	1,390	1,030	1,160	--------	990	4,970	930	3,880	370	2,360	776
31	4,180	--------	1,020	1,140	--------	990	--------	1,470	--------	355	1,850	--------
Total	34,851	50,550	34,030	34,700	30,260	31,570	152,850	85,030	105,310	38,476	37,220	31,815
Mean	1,124	1,685	1,098	1,119	1,081	1,018	5,095	2,743	3,510	1,241	1,201	1,060
(†)	-59	+122	+39	-263	-679	-91	+1,174	+1,022	-47	-36	-78	-68

Adjusted for change in reservoir contents

Mean	1,065	1,807	1,137	856	402	927	6,269	3,765	3,463	1,205	1,123	992
Cfsm	1.00	1.69	1.06	0.800	0.376	0.866	5.86	3.52	3.24	1.13	1.05	0.927
In.	1.15	1.89	1.22	0.92	0.39	1.00	6.54	4.06	3.62	1.30	1.21	1.03

	Observed			Adjusted		
Calendar year 1958:	Max 24,000	Min 399	Mean 2,673	Mean 2,588	Cfsm 2.42	In. 32.85
Water year 1958-59:	Max 8,910	Min 350	Mean 1,826	Mean 1,916	Cfsm 1.79	In. 24.33

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Chamberlain, Telos, Second and Grand Lakes and Round Pond.
Note.--Stage-discharge relation affected by ice Nov. 27 to Apr. 15. No gage-height record July 30 to Aug. 28; discharge estimated on basis of recorded range in stage, flow records at Grand Lake Dam, and weather records.

300. Penobscot River near Mattawamkeag, Maine

Location.--Lat 45°34'00", long 68°24'10", on left bank 1,800 ft downstream from Mattaseunk Dam and powerhouse, 1¼ miles upstream from Mattaseunk Brook, and 4¼ miles upstream from Mattawamkeag, Penobscot County.

Drainage area.--3,310 sq mi, approximately (including about 240 sq mi drained by Chamberlain Lake through Telos Canal).

Records available.--June 1940 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 191.72 ft above mean sea level, datum of 1929.

Average discharge.--19 years, 5,507 cfs (unadjusted).

Extremes.--Maximum discharge during year, 18,600 cfs June 19 (gage height, 7.56 ft); maximum gage height, 8.79 ft Jan. 9 (backwater from ice); minimum daily discharge, 3,380 cfs Feb. 8.
1940-59: Maximum discharge, 40,200 cfs May 21, 1945 (gage height, 11.09 ft); minimum daily, 1,430 cfs Aug. 17, 1941.

Remarks.--Records good except those for period of no gage-height record, which are fair. Flow regulated by several reservoirs above station (see p. 41).

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,700	6,600	5,200	4,410	4,440	5,300	4,800	8,220	4,300	8,360	4,250	5,300
2	5,300	5,800	5,450	4,560	3,750	4,400	5,460	7,980	4,650	7,820	4,400	6,100
3	4,900	6,000	5,250	4,710	3,540	3,460	6,370	7,720	5,130	7,250	4,700	6,740
4	4,860	5,750	5,350	4,660	3,500	3,700	8,030	7,200	4,550	5,930	4,700	7,610
5	5,450	5,400	5,250	4,900	3,520	3,750	9,320	7,000	4,550	6,100	4,600	8,370
6	5,100	5,150	4,950	4,120	3,800	3,600	10,800	7,100	4,750	5,880	4,400	5,020
7	5,600	5,050	5,000	5,150	3,720	3,800	11,800	*7,150	5,080	5,930	4,300	4,500
8	4,120	4,810	4,760	4,760	3,380	4,050	12,400	7,930	4,700	5,670	4,150	5,880
9	5,200	5,150	4,760	4,050	4,280	4,100	12,400	8,030	4,860	6,260	4,650	4,860
10	3,930	5,550	4,610	4,900	3,840	3,850	12,200	7,350	5,620	6,260	4,400	4,960
11	4,610	5,550	4,510	4,600	3,920	3,650	12,400	6,150	5,300	5,770	*4,650	4,800
12	4,900	5,700	4,270	4,630	3,920	3,950	11,800	6,370	5,130	5,130	4,650	4,700
13	5,100	5,950	4,460	4,350	4,150	3,460	11,500	6,530	4,800	5,350	4,450	4,960
14	4,170	5,650	4,410	4,160	3,900	4,050	10,900	*6,420	5,930	5,460	4,000	4,400
15	4,710	5,650	3,930	4,280	4,240	3,800	11,100	5,990	11,200	4,960	4,000	3,800
16	4,270	6,050	4,220	4,460	4,040	4,250	10,400	5,560	13,500	4,700	4,300	*4,300
17	3,700	5,650	4,560	4,850	4,460	4,450	10,200	5,300	*12,600	4,300	5,400	4,050
18	4,170	5,800	4,320	5,600	4,800	4,750	9,600	5,020	14,200	4,910	5,510	4,550
19	3,930	5,950	4,460	4,730	3,750	4,150	10,100	4,300	17,400	4,400	5,180	4,500
20	3,790	5,800	4,760	4,980	4,350	3,750	11,000	4,800	15,600	4,800	4,800	4,800
21	3,980	6,150	4,860	5,350	4,400	4,000	11,000	4,500	14,700	4,750	5,080	4,400
22	4,270	6,000	4,660	5,480	4,250	4,350	10,400	5,460	11,700	4,550	5,880	4,650
23	3,560	5,550	3,650	5,520	4,150	4,400	10,200	6,100	9,140	4,500	5,240	4,350
24	3,430	5,550	3,700	5,530	4,400	4,300	10,100	5,990	7,720	4,350	5,300	4,050
25	4,900	5,250	3,880	4,640	3,850	3,850	10,500	5,720	7,000	3,700	5,830	4,450
26	4,900	5,350	4,070	4,690	3,600	4,050	11,300	5,180	6,950	4,860	5,510	4,400
27	4,950	5,350	3,880	4,700	4,150	3,950	11,100	4,450	7,450	4,400	3,460	4,450
28	4,810	5,600	4,320	4,650	4,350	4,150	9,790	4,400	7,150	4,500	3,650	4,450
29	6,050	5,600	4,860	4,750	-	4,150	9,180	4,150	8,310	4,650	5,460	4,050
30	7,700	5,200	4,610	4,640	--------	4,500	8,720	4,300	10,300	3,850	5,880	4,450
31	8,250	--------	4,510	5,000	--------	4,000	--------	4,250	--------	3,600	5,670	--------
Total	150,310	168,610	141,480	147,810	112,450	125,970	304,870	186,420	244,270	162,950	148,450	145,900
Mean	4,849	5,620	4,564	4,768	4,016	4,064	10,160	6,014	8,142	5,256	4,789	4,863
(†)	-1,417	+216	-1,678	-2,571	-2,722	-2,271	+7,796	+5,839	+3,336	-1,498	-1,190	-2,269

Adjusted for change in reservoir contents

Mean	3,432	5,836	2,886	2,197	1,294	1,793	17,960	11,850	11,480	3,758	3,599	2,594
Cfsm	1.04	1.76	0.872	0.664	0.391	0.542	5.43	3.58	3.47	1.14	1.09	0.784
In.	1.20	1.96	1.01	0.77	0.41	0.62	6.06	4.13	3.87	1.31	1.26	0.87

	Observed			Adjusted		
Calendar year 1958:	Max 35,000	Min 3,000	Mean 6,427	Mean 6,681	Cfsm 2.02	In. 27.39
Water year 1958-59:	Max 17,400	Min 3,380	Mean 5,588	Mean 5,719	Cfsm 1.73	In. 23.47

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in reservoirs on East and West Branches of Penobscot River.
Note.--Stage-discharge relation affected by ice Dec. 5 to Mar. 27 (no gage-height record Jan. 9 to Feb. 18; discharge estimated on basis of records at powerhouse just upstream).

305. Mattawamkeag River near Mattawamkeag, Maine

Location.--Lat 45°30'20", long 68°18'05", on right bank at Gordon Lower Falls, 1 mile upstream from Mattakeunk Stream, 4 miles upstream from Mattawamkeag, Penobscot County, and 4½ miles upstream from mouth.

Drainage area.--1,418 sq mi.

Records available.--October 1934 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 230 ft (from topographic map).

Average discharge.--25 years, 2,369 cfs.

Extremes.--Maximum discharge during year, 14,400 cfs Apr. 11 (gage height, 9.60 ft); maximum gage height, 9.92 ft Apr. 5 (backwater from ice); minimum discharge, 187 cfs Aug. 8 (gage height, 0.59 ft).
1934-59: Maximum discharge, 29,200 cfs Mar. 23, 1936 (gage height, 15.34 ft); minimum, 38 cfs Sept. 19, 1952 (gage height, 0.14 ft).

Remarks.--Records excellent except those for period of ice effect, which are fair.

Revisions.--WSP 1501: Drainage area.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.6	191	4.0	2,860
1.0	375	6.0	6,080
1.5	685	8.0	10,500
2.0	1,040	10.0	15,400
3.0	1,820		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	643	5,200	2,310	845	685	350	1,130	8,830	1,120	4,110	320	4,880
2	895	4,950	2,090	825	670	345	1,110	8,200	1,100	4,100	316	4,920
3	1,120	4,470	1,980	825	615	325	1,670	7,670	1,090	3,910	284	4,900
4	1,190	3,920	1,840	805	610	320	3,240	7,200	1,060	3,610	262	5,420
5	1,270	3,440	1,740	770	615	325	5,150	6,740	988	3,180	240	5,680
6	1,160	3,040	1,660	770	670	350	7,740	6,440	895	2,670	222	5,440
7	1,070	2,760	1,600	755	665	375	10,000	*6,140	825	2,290	213	4,670
8	980	2,520	1,530	750	615	415	11,300	5,850	797	2,020	195	3,730
9	895	2,320	1,470	725	550	430	12,400	5,530	895	1,790	209	2,920
10	825	2,330	1,420	705	520	430	13,100	5,100	1,080	1,600	248	2,320
11	825	2,500	1,360	690	490	*430	14,100	4,590	1,140	1,480	312	1,900
12	888	2,600	1,340	685	460	430	14,100	4,190	995	1,680	355	1,620
13	923	2,530	1,310	680	440	430	13,600	3,880	881	1,730	375	1,380
14	888	2,400	1,270	665	435	440	13,100	3,600	1,140	1,600	375	1,180
15	762	2,300	1,250	635	430	460	12,600	3,320	3,480	1,490	345	1,030
16	692	2,290	1,210	685	425	490	11,900	3,120	5,110	1,460	330	*916
17	811	2,220	1,180	760	425	540	10,700	2,870	5,460	1,360	340	818
18	1,130	2,200	1,160	880	*420	550	9,700	2,600	6,360	1,250	685	748
19	1,330	2,330	1,120	915	425	550	9,100	2,330	9,740	1,130	1,070	678
20	1,310	2,880	1,110	895	435	550	9,260	2,030	11,200	1,130	1,090	615
21	1,200	3,240	1,080	890	455	615	9,420	1,850	10,300	1,050	1,190	563
22	1,080	3,200	1,050	895	465	965	9,540	2,020	8,870	951	1,640	544
23	995	2,990	1,040	935	440	1,160	9,490	2,360	7,390	860	1,690	496
24	1,040	2,700	1,010	*1,040	430	1,100	9,490	2,360	6,100	776	1,470	490
25	1,480	2,490	980	1,130	395	1,050	9,660	2,220	5,040	692	1,220	615
26	1,860	2,090	965	1,120	380	1,040	10,400	2,040	4,110	576	1,090	832
27	1,970	2,000	945	1,040	365	1,040	10,700	1,850	3,480	520	1,170	881
28	2,090	2,090	915	965	355	1,060	10,500	1,650	3,060	466	1,820	818
29	3,010	2,340	900	880	-	1,090	10,200	1,460	2,980	424	2,490	748
30	4,400	2,470	895	775	-------	1,120	9,610	1,300	3,670	380	3,380	692
31	5,100	-------	875	740	-------	1,130	-------	1,210	-------	340	4,350	-------
Total	43,832	84,810	40,605	25,675	13,885	19,905	284,010	120,550	110,356	50,625	29,296	62,444
Mean	1,414	2,827	1,310	828	496	642	9,467	3,889	3,679	1,633	945	2,081
Cfsm	0.997	1.99	0.924	0.584	0.350	0.453	6.68	2.74	2.59	1.15	0.666	1.47
In.	1.15	2.22	1.06	0.67	0.36	0.52	7.45	3.16	2.89	1.33	0.77	1.64

Calendar year 1958: Max 25,400 Min 386 Mean 2,787 Cfsm 1.97 In. 26.67
Water year 1958-59: Max 14,100 Min 195 Mean 2,427 Cfsm 1.71 In. 23.22

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Apr. 6.

315. Piscataquis River near Dover-Foxcroft, Maine

Location.--Lat 45°10'35", long 69°18'55", on left bank at Lows Bridge, 1 mile upstream from Black Stream and 4½ miles upstream from Dover-Foxcroft, Piscataquis County.

Drainage area.--297 sq mi.

Records available.--August 1902 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 358.1 ft above mean sea level, datum of 1929. Prior to July 20, 1930, staff gage at same site and datum.

Average discharge.--57 years, 583 cfs.

Extremes.--Maximum discharge during year, 5,250 cfs June 19 (gage height, 7.76 ft); maximum gage height, 12.12 ft Apr. 4 (backwater from ice); minimum discharge, 22 cfs Sept. 29, 30 (gage height, 1.61 ft).
1902-59: Maximum discharge, 21,500 cfs Apr. 29, 1923 (gage height, 17.67 ft, from graph based on gage readings), from rating curve extended above 13,000 cfs by logarithmic plotting; minimum, 5 cfs Aug. 6, 1905, Nov. 22, 1908.

Remarks.--Records excellent except those for period of ice effect, which are fair. Low flow regulated by operation of powerplant above station.

Revisions (water years).--WSP 279: 1902. WSP 1171: Drainage area. WSP 1201: 1903-17, 1918-30(M), 1934-35. WSP 1301: 1909(M).

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	21	3.5	700
1.8	40	4.0	1,080
2.0	72	5.0	1,990
2.2	119	6.0	3,100
2.5	209	8.0	5,560
3.0	415		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	135	1,330	*445	146	*255	130	415	1,380	127	553	41	40
2	199	1,030	455	142	245	136	520	1,410	122	445	40	48
3	180	863	435	140	235	146	1,500	1,250	116	388	40	220
4	149	732	415	136	255	158	2,870	1,120	109	321	38	558
5	127	635	390	130	285	174	3,720	1,020	96	277	38	313
6	116	575	365	128	260	180	4,380	920	102	234	37	190
7	96	520	335	124	240	260	4,870	856	685	209	38	130
8	94	460	315	122	215	245	4,000	779	526	196	38	104
9	90	460	300	120	215	178	3,910	687	498	165	38	90
10	87	856	290	116	235	136	3,250	623	460	143	39	72
11	99	849	280	114	245	124	3,320	548	343	141	47	65
12	119	674	275	114	240	116	2,770	482	257	162	92	59
13	96	570	255	112	215	174	2,350	425	213	149	74	56
14	79	526	250	*114	192	152	2,210	406	425	138	65	54
15	74	599	240	114	196	140	2,290	374	*1,730	132	54	54
16	74	713	235	124	*200	*178	2,230	334	2,390	116	50	53
17	193	*642	215	285	196	200	2,120	305	2,180	109	53	50
18	370	581	210	635	178	174	2,220	273	2,870	94	81	48
19	301	752	205	565	205	140	2,450	234	4,610	87	130	44
20	234	884	200	490	190	146	2,760	220	2,730	87	119	40
21	196	772	192	425	174	210	2,260	209	1,720	85	85	36
22	168	674	188	405	152	415	*1,960	285	1,240	76	56	26
23	149	514	182	520	156	505	1,860	370	988	70	56	24
24	340	498	180	475	152	480	2,000	301	772	65	56	26
25	1,050	430	178	405	146	450	2,170	305	599	61	63	25
26	694	415	170	335	142	405	2,160	261	509	54	65	24
27	745	390	170	295	138	375	1,960	216	498	51	61	24
28	1,530	380	166	275	*136	365	1,620	190	460	47	83	23
29	3,800	395	162	250	-	360	1,430	168	746	50	81	23
30	2,820	420	152	255	-------	350	1,390	149	814	48	29	23
31	1,830	-------	*146	255	-------	*350	-------	141	-------	43	*38	-------
Total	16,234	19,139	7,996	7,866	5,693	7,552	72,965	16,241	28,935	4,796	1,825	2,542
Mean	524	638	258	254	203	244	2,432	524	964	155	58.9	84.7
Cfsm	1.76	2.15	0.869	0.853	0.684	0.822	8.19	1.76	3.25	0.522	0.198	0.285
In.	2.03	2.40	1.00	0.99	0.71	0.95	9.14	2.03	3.63	0.60	0.23	0.32

Calendar year 1958: Max 10,800 Min 50 Mean 732 Cfsm 2.46 In. 33.47
Water year 1958-59: Max 4,870 Min 23 Mean 525 Cfsm 1.77 In. 24.03

Peak discharge (base, 4,000 cfs).--Oct. 29 (9 a.m.) 4,060 cfs (6.78 ft); Apr. 7 (3:30 a.m.) 5,200 cfs (7.72 ft); June 19 (5 a.m.) 5,250 cfs (7.76 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26 to Apr. 6.

330(revised). Sebec River at Sebec, Maine

Location.--Lat 45°16'10", long 69°06'45", on right bank at Sebec, Piscataquis County, 1,000 ft downstream from highway bridge and dam at outlet of Sebec Lake.

Drainage area.--327 sq mi.

Records available.--October 1924 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 296.3 ft above mean sea level, datum of 1929. Prior to June 22, 1942, water-stage recorder on opposite bank 60 ft downstream at same datum.

Average discharge.--35 years, 606 cfs (unadjusted).

Extremes.--Maximum discharge during year, 3,300 cfs Apr. 12 (gage height, 6.95 ft); minimum, 139 cfs Oct. 23 (gage height, 2.20 ft).
1924-59: Maximum discharge, 11,400 cfs Mar. 20, 1936 (gage height, 14.46 ft), from rating curve extended above 6,000 cfs on basis of velocity-area studies; minimum, about 2 cfs Oct. 14-17, 1930 (gage height, 0.87 ft), when gates in dam were closed.

Remarks.--Records excellent. Flow partly regulated by Sebec Lake and other reservoirs above station.

Revisions (water years).--WSP 1171: Drainage area, 1936(M). WSP 1301: 1925.

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 11				Apr. 12 to Sept. 30			
2.2	139	4.0	1,140	2.2	146	4.0	1,250
2.3	173	4.5	1,460	2.3	184	4.5	1,620
2.5	251	5.0	1,790	2.5	274	5.0	1,980
3.0	495	6.0	2,500	3.0	550	6.0	2,640
3.5	810			3.5	895	7.0	3,340

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	490	425	462	598	210	347	324	1,340	297	820	367	*206
2	478	420	468	586	210	328	356	1,340	297	799	362	206
3	484	425	468	580	210	305	500	1,310	297	785	356	206
4	478	425	473	574	290	301	642	1,300	297	729	351	206
5	456	430	478	568	250	292	845	1,290	297	687	346	206
6	430	430	478	490	380	287	1,020	1,270	297	628	306	206
7	415	435	478	395	656	301	1,160	1,250	297	582	256	206
8	410	430	478	544	642	287	1,270	1,240	297	563	251	206
9	410	435	478	534	636	274	1,490	1,130	302	525	251	206
10	395	405	478	517	555	264	1,890	991	302	513	251	206
11	390	405	478	500	517	251	2,420	962	297	500	251	206
12	376	410	473	345	500	247	3,030	948	302	500	246	206
13	356	405	468	142	495	282	3,100	525	302	488	242	202
14	347	410	462	142	555	274	2,820	302	311	488	237	202
15	342	415	462	142	610	260	2,650	302	336	476	237	197
16	342	420	570	142	574	274	2,520	302	*406	470	233	188
17	342	420	738	146	550	264	2,390	297	710	464	233	184
18	347	*415	731	146	534	260	2,300	297	1,090	470	233	180
19	342	420	717	149	522	251	2,270	297	1,730	470	233	176
20	328	435	710	153	534	251	2,270	297	2,020	464	233	176
21	319	435	696	156	517	251	2,230	925	2,040	464	237	173
22	205	435	689	159	500	282	*2,140	395	1,890	458	269	173
23	142	435	682	300	484	292	*2,050	494	1,630	446	269	169
24	146	435	675	371	462	292	1,990	370	1,090	417	265	169
25	149	440	668	371	446	296	1,940	297	880	400	260	169
26	153	435	656	371	415	296	1,920	297	842	394	260	161
27	159	448	642	260	390	296	1,630	292	820	389	265	165
28	166	448	636	206	366	301	990	297	792	383	237	161
29	184	456	630	210	-	301	813	297	806	372	206	161
30	188	462	616	210	--------	301	*1,030	297	858	372	206	161
31	330	--------	610	210	--------	305	--------	297	--------	367	*206	--------
Total	10,099	12,840	17,748	10,217	13,010	8,813	52,000	21,248	22,132	15,883	8,155	5,639
Mean	326	428	573	330	465	284	1,733	685	738	512	263	188
(†)	+85	+213	-261	+9	-415	-44	+716	-16	+203	-291	-163	-113
Adjusted for change in reservoir contents												
Mean	411	641	312	339	50	240	2,449	669	941	221	100	75
Cfsm	1.26	1.96	0.954	1.04	0.153	0.734	7.49	2.05	2.88	0.676	0.306	0.229
In.	1.45	2.19	1.10	1.20	0.16	0.85	8.36	2.36	3.21	0.78	0.35	0.26

	Observed			Adjusted		
Calendar year 1958:	Max 5,560	Min 142	Mean 722	Mean 682	Cfsm 2.09	In. 28.34
Water year 1958-59:	Max 3,100	Min 142	Mean 542	Mean 536	Cfsm 1.64	In. 22.27

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Sebec Lake and Wilson Pond.

335. Pleasant River near Milo, Maine

Location.--Lat 45°17'05", long 69°00'25", on left bank 2 miles northeast of Milo, Piscataquis County, and 8¼ miles upstream from mouth.

Drainage area.--322 sq mi.

Records available.--June 1920 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 302 ft (from river-profile map). Prior to June 17, 1929, chain gage at Snows Bridge 2 miles downstream at datum 32 ft lower.

Average discharge.--39 years, 691 cfs.

Extremes.--Maximum discharge during year, 6,810 cfs June 19 (gage height, 6.75 ft); maximum gage height, 7.28 ft Apr. 5 (ice jam); minimum discharge, 84 cfs Aug. 6, 7, 8 (gage height, 1.65 ft).
1920-59: Maximum discharge, 24,400 cfs Apr. 30, 1923 (gage height, 14.33 ft, from floodmarks, site and datum then in use), from rating curve extended above 5,500 cfs; minimum, 15 cfs Aug. 17, 1944 (gage height, 1.21 ft).

Remarks.--Records excellent except those for period of ice effect, which are fair. Flow partly regulated by power development at Brownville and by small storage dams above station.

Revisions (water years).--WSP 1301: 1921-22(M), 1924-27(M), 1929(M).

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	71	3.5	1,370
1.8	128	4.0	1,990
2.0	202	5.0	3,520
2.5	480	6.0	5,300
3.0	875	7.0	7,330

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	226	1,230	415	138	250	100	965	1,690	266	2,040	107	436
2	310	974	450	138	230	98	1,260	1,680	299	1,450	104	487
3	299	803	460	138	250	116	1,990	1,550	304	1,180	101	970
4	255	708	450	138	315	140	3,100	1,420	266	938	95	1,330
5	245	637	415	138	370	178	3,550	1,340	245	776	90	929
6	226	570	365	138	350	200	3,840	1,300	266	645	84	653
7	207	555	350	138	305	255	4,450	1,290	455	599	84	487
8	202	507	305	136	260	350	4,170	1,270	474	528	84	394
9	198	514	280	136	250	295	3,620	1,160	480	455	90	326
10	190	708	250	136	265	210	3,050	1,020	528	411	410	272
11	198	734	240	136	265	154	2,970	965	423	400	541	245
12	207	637	230	136	250	120	2,460	920	348	417	461	216
13	202	584	210	136	225	120	2,180	884	315	411	376	194
14	190	563	200	136	200	134	2,020	803	735	376	293	173
15	173	614	200	*136	186	122	2,110	734	2,040	354	231	161
16	182	692	194	160	182	160	2,060	653	*2,290	326	202	158
17	388	692	190	415	*194	*220	1,890	584	2,000	304	198	148
18	494	*653	182	660	198	200	1,860	528	3,380	272	710	141
19	411	785	178	565	194	160	2,130	480	6,380	255	534	131
20	354	938	170	480	186	160	2,480	455	4,340	250	388	128
21	310	857	160	440	182	250	2,220	423	2,700	226	320	128
22	272	768	158	430	160	550	*1,980	570	1,820	202	310	128
23	255	645	154	515	154	875	1,910	660	1,430	194	272	122
24	376	592	150	535	140	895	2,030	555	1,130	177	221	119
25	830	570	150	465	128	875	2,340	541	920	161	202	107
26	830	535	148	415	122	840	2,520	474	794	154	182	104
27	760	480	144	360	112	820	2,490	417	751	144	169	98
28	984	450	140	315	108	770	2,160	376	676	135	165	98
29	2,160	410	140	295	--	715	1,860	326	2,570	107	272	98
30	2,150	400	138	250	-------	710	1,720	304	3,150	116	417	98
31	1,600	-------	138	270	-------	830	-------	293	-------	110	*394	-------
Total	15,684	19,805	7,354	8,624	6,031	11,622	73,385	25,665	41,775	14,113	8,107	9,079
Mean	506	660	237	278	215	375	2,446	828	1,393	455	262	303
Cfsm	1.57	2.05	0.736	0.863	0.668	1.16	7.60	2.57	4.33	1.41	0.814	0.941
In.	1.81	2.29	0.85	0.99	0.67	1.34	8.48	2.96	4.83	1.63	0.94	1.05

Calendar year 1958: Max 11,500 Min 138 Mean 847 Cfsm 2.63 In. 35.66
Water year 1958-59: Max 6,380 Min 84 Mean 661 Cfsm 2.05 In. 27.84

Peak discharge (base, 3,700 cfs).--Apr. 7 (5 p.m.) 4,760 cfs (5.71 ft); June 19 (11 a.m.) 6,810 cfs (6.75 ft); June 29 (5 p.m.) 4,220 cfs (5.41 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26 to Apr. 5 (no gage-height record Dec. 10 to Jan. 15; discharge estimated on basis of weather records and records for stations on nearby streams).

340. Piscataquis River at Medford, Maine

Location.--Lat 45°15'40", long 68°52'05", on left bank 1¾ miles southwest of Medford, Piscataquis County, and 3½ miles downstream from Pleasant River.

Drainage area.--1,161 sq mi.

Records available.--June 1924 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 248.68 ft above mean sea level, datum of 1929. Prior to Aug. 14, 1929, staff gage at site 1¾ miles downstream at different datum.

Average discharge.--35 years, 2,267 cfs.

Extremes.--Maximum discharge during year, 15,000 cfs Apr. 7 (gage height, 7.86 ft); minimum, 293 cfs Sept. 28, 29 (gage height, 1.74 ft).
1924-59: Maximum discharge, 50,200 cfs Mar. 20, 1936 (gage height, 15.07 ft), from rating curve extended above 20,000 cfs by logarithmic plotting; minimum, 99 cfs Oct. 28, 1947 (gage height, 1.28 ft).
Maximum stage known 20.8 ft May 1, 1923, at former site 1¾ miles downstream.

Remarks.--Records excellent except those for period of ice effect, which are fair. Some regulation for power and log-driving by lakes above station.

Revisions (water years).--WSP 1171: Drainage area. WSP 1231: 1936. WSP 1301: 1925-29(M).

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	273	4.0	2,770
2.0	440	5.0	4,880
2.5	840	6.0	7,720
3.0	1,340	7.0	11,300
3.5	1,980	8.0	15,700

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,060	3,820	1,680	970	840	715	1,840	4,470	777	4,040	538	*795
2	1,210	2,990	1,720	960	770	680	2,860	4,760	768	2,970	531	903
3	1,160	2,530	1,680	950	730	660	4,350	4,520	795	2,570	496	1,680
4	1,030	2,220	1,610	940	860	730	8,380	4,170	768	2,200	468	3,080
5	970	2,090	1,560	930	1,110	770	10,900	3,910	714	1,900	468	2,370
6	930	1,980	1,460	930	1,070	775	12,400	3,700	687	1,640	468	1,630
7	885	1,830	1,390	910	1,150	860	14,500	3,590	950	1,420	475	1,200
8	849	1,640	1,330	770	1,440	910	15,600	3,470	1,640	1,350	468	950
9	831	1,590	1,260	840	1,340	840	12,200	3,200	1,440	1,250	428	813
10	813	2,400	1,230	805	1,210	730	10,800	2,770	1,510	1,140	580	687
11	804	2,720	1,170	770	1,200	650	11,000	2,630	1,320	1,090	867	612
12	822	2,370	1,140	750	1,210	605	10,400	2,500	1,160	1,110	813	566
13	822	2,010	1,110	580	1,160	645	9,820	2,280	921	1,060	678	517
14	777	1,810	1,090	510	1,140	635	8,860	1,710	1,400	970	604	482
15	732	1,810	1,070	*460	1,130	620	8,450	1,680	4,170	930	538	468
16	652	1,970	1,070	460	1,130	850	8,120	1,560	*5,520	912	489	447
17	822	2,080	1,400	580	*1,130	*970	7,620	1,350	5,210	876	500	440
18	1,280	*2,010	1,410	1,230	1,090	1,010	7,500	1,190	6,090	786	1,020	428
19	1,300	2,180	1,360	1,660	1,070	820	7,790	1,110	13,100	786	1,000	410
20	1,220	2,570	1,340	1,520	1,050	680	8,480	1,060	11,300	912	822	392
21	1,160	2,500	1,300	1,410	1,110	660	7,880	1,020	7,590	912	723	374
22	1,020	2,300	1,270	1,360	1,020	1,030	*7,030	1,200	5,600	867	687	374
23	813	2,040	1,250	1,540	930	2,090	6,490	1,610	4,520	795	612	386
24	885	1,830	1,210	1,610	860	2,060	6,520	1,500	3,600	652	552	380
25	2,050	1,740	1,170	1,530	820	1,950	6,880	1,400	2,680	612	538	380
26	2,260	1,520	1,140	1,360	815	1,870	7,060	1,250	2,270	580	524	358
27	1,980	1,360	1,120	1,270	770	1,760	6,850	1,120	2,140	566	517	324
28	2,810	1,240	1,080	1,140	740	1,710	5,650	970	2,020	559	517	309
29	6,480	1,210	1,050	1,030	-	1,660	4,620	894	3,950	552	580	298
30	7,050	1,440	1,020	910	-------	1,630	4,330	831	5,960	552	777	304
31	5,130	-------	1,010	905	-------	1,630	-------	804	-------	538	777	-------
Total	50,607	61,800	39,700	31,590	28,895	33,205	243,180	68,209	100,570	37,097	19,055	22,357
Mean	1,632	2,060	1,281	1,019	1,032	1,071	8,106	2,200	3,352	1,197	615	745
Cfsm	1.41	1.77	1.10	0.878	0.889	0.922	6.98	1.89	2.89	1.03	0.530	0.642
In.	1.63	1.98	1.27	1.01	0.93	1.06	7.79	2.18	3.22	1.19	0.61	0.72

Calendar year 1958: Max 35,300 Min 531 Mean 2,766 Cfsm 2.38 In. 32.36
Water year 1958-59: Max 14,500 Min 298 Mean 2,017 Cfsm 1.74 In. 23.59

Peak discharge (base, 13,000 cfs).--Apr. 7 (4 p.m.) 15,000 cfs (7.86 ft); June 19 (6 p.m.) 14,400 cfs (7.71 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Apr. 5 (no gage-height record Dec. 22-28, Dec. 30 to Jan. 1).

345. Penobscot River at West Enfield, Maine

Location.--Lat 45°14'15", long 68°39'10", on left bank at highway bridge, 1,000 ft downstream from Piscataquis River and 1 mile southwest of West Enfield, Penobscot County.

Drainage area.--6,600 sq mi, approximately (including about 240 sq mi drained by Chamberlain Lake through Telos Canal).

Records available.--November 1901 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 125.94 ft above mean sea level, datum of 1929. Prior to Dec. 11, 1912, chain gage at same site and datum.

Average discharge.--57 years (1902-59), 11,530 cfs (unadjusted).

Extremes.--Maximum discharge during year, 50,300 cfs June 20 (gage height, 12.68 ft); maximum gage height, 15.4 ft Apr. 7 (ice jam); minimum daily discharge, 4,360 cfs Mar. 6.
1901-59: Maximum discharge, 153,000 cfs May 1, 1923 (gage height, 25.15 ft), from rating curve extended above 88,000 cfs by logarithmic plotting; minimum, 1,630 cfs Oct. 29, 1905 (gage height, 1.0 ft).

Remarks.--Records excellent except those for periods of ice effect or backwater from aquatic growth, which are fair. Flow regulated by several reservoirs above station (see p. 41).

Cooperation.--Water-stage-recorder graph furnished by Bangor Hydro-Electric Co.

Revisions (water years).--WSP 279: 1902-10. WSP 1171: 1940. WSP 1231: 1902-13.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,000	19,200	13,800	6,410	7,210	5,220	7,860	23,800	6,100	20,800	5,140	12,700
2	8,610	16,400	12,100	6,220	6,960	5,660	10,400	22,800	5,860	17,000	5,840	13,400
3	8,630	15,100	11,300	6,170	6,220	4,890	14,800	21,800	6,410	15,700	5,960	15,500
4	8,240	14,000	11,300	6,080	5,700	4,760	24,000	20,100	6,390	14,100	6,080	20,500
5	8,030	12,800	11,200	6,080	5,310	4,420	31,300	18,900	5,980	12,200	6,080	19,800
6	8,470	11,800	11,200	6,080	5,220	*4,360	35,900	18,000	6,100	11,400	*6,240	17,200
7	7,700	11,000	10,600	5,860	5,570	4,440	44,300	18,000	7,420	10,300	5,860	13,900
8	8,000	10,400	9,410	5,730	5,980	4,920	49,700	*17,500	7,950	9,730	5,730	12,100
9	6,660	9,820	8,830	5,680	5,860	5,160	48,600	17,600	7,680	9,820	5,660	12,000
10	7,040	11,200	8,140	5,700	5,820	5,140	46,900	16,500	8,630	9,850	6,510	9,940
11	6,480	12,500	7,550	5,750	6,030	5,000	46,000	14,500	8,770	9,500	6,980	9,530
12	6,740	12,400	7,080	5,750	5,750	4,850	45,300	13,500	8,000	9,120	7,210	8,630
13	7,240	12,000	6,710	5,540	5,400	4,870	42,300	12,700	7,370	8,980	6,960	8,240
14	7,160	*11,400	6,390	5,430	5,380	4,850	38,700	12,100	7,700	8,800	6,540	8,050
15	6,270	11,000	6,120	*5,220	5,470	4,700	36,600	*11,700	17,600	8,470	5,960	6,980
16	6,580	11,000	5,770	5,520	5,610	5,070	35,500	10,100	27,600	7,950	5,800	*6,610
17	6,640	11,200	5,860	5,980	5,610	5,400	32,700	9,760	29,000	7,420	5,860	6,860
18	6,940	10,900	6,170	6,840	5,680	5,750	30,800	9,290	29,600	6,940	7,950	6,580
19	7,630	11,300	6,480	8,000	*5,910	5,860	30,500	7,930	43,400	7,340	8,380	6,610
20	7,420	12,600	6,910	8,890	5,750	5,660	32,100	7,570	48,000	7,310	8,220	6,580
21	7,240	13,200	7,500	8,830	5,520	5,430	32,600	7,440	40,800	7,570	7,600	6,610
22	6,960	13,600	7,730	8,830	5,360	5,750	30,800	7,950	34,200	7,370	7,840	6,320
23	6,710	12,500	7,210	8,890	5,430	6,460	29,500	9,410	*26,500	6,960	8,800	6,560
24	6,220	11,600	6,580	9,120	5,520	6,960	29,100	9,970	20,800	6,710	8,270	6,170
25	7,760	11,200	6,100	9,320	5,520	7,470	29,500	9,700	17,800	6,050	8,000	6,050
26	10,400	10,400	5,840	9,290	5,360	7,470	31,200	8,800	14,600	5,450	8,190	6,340
27	10,200	12,000	5,980	9,060	5,220	7,470	32,000	8,000	14,400	6,360	7,730	6,460
28	11,300	13,300	6,170	8,830	5,000	7,440	29,900	7,140	13,400	6,120	6,580	6,610
29	16,000	14,100	6,360	8,080	-	7,080	26,200	6,580	15,100	6,080	7,600	6,540
30	21,400	14,900	6,460	7,310	--------	6,980	25,100	6,120	22,800	6,120	10,200	5,860
31	21,900	--------	6,460	7,210	--------	7,470	--------	6,080	--------	5,160	11,400	--------
Total	274,570	374,820	245,310	217,700	159,370	176,960	980,160	391,340	515,960	282,680	221,170	285,230
Mean	8,857	12,490	7,913	7,023	5,692	5,708	32,670	12,620	17,200	9,119	7,135	9,508
(†)	-1,333	+429	-1,940	-2,562	-3,137	-2,316	+8,512	+5,823	+3,539	-1,788	-1,353	-2,382

Adjusted for change in reservoir contents

Mean	7,524	12,920	5,973	4,461	2,555	3,392	41,180	18,440	20,740	7,331	5,782	7,126
Cfsm	1.14	1.96	0.905	0.676	0.387	0.514	6.24	2.79	3.14	1.11	0.876	1.08
In.	1.31	2.19	1.04	0.78	0.40	0.59	6.96	3.22	3.50	1.28	1.01	1.20

	Observed			Adjusted		
Calendar year 1958:	Max 21,900	Min 5,000	Mean 13,580	Mean 13,790	Cfsm 2.09	In. 28.35
Water year 1958-59:	Max 49,700	Min 4,360	Mean 11,300	Mean 11,420	Cfsm 1.73	In. 23.48

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in reservoirs on East and West Branches of Penobscot River, also Sebec Lake and Wilson Pond in Piscataquis River basin.
Note.--Stage-discharge relation affected by ice Dec. 6 to Apr. 10 and by backwater from aquatic vegetation Oct. 1-31.

350. Passadumkeag River at Lowell, Maine

Location.--Lat 45°11'00", long 68°28'25", on right bank at Lowell, Penobscot County, half a mile downstream from dam and highway bridge and 10 miles upstream from mouth.

Drainage area.--299 sq mi.

Records available.--October 1915 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 151.3 ft above mean sea level, datum of 1929. Oct. 1, 1915, to Sept. 30, 1917, chain and staff gages at same site and datum. Oct. 1, 1917, to Nov. 30, 1921, chain gage at site on left bank 400 ft downstream from highway bridge at different datum.

Average discharge.--44 years, 491 cfs.

Extremes.--Maximum discharge during year, 2,230 cfs Apr. 6 (gage height, 5.34 ft); maximum gage height, 5.61 ft Dec. 14 (backwater from ice); minimum daily discharge, 110 cfs Mar. 3, 4.
1915-59: Maximum discharge, 5,680 cfs May 2, 1923 (gage height, 9.40 ft); minimum, about 5 cfs several times in July and August 1921 (gates in dam closed).

Remarks.--Records excellent except those for period of ice effect, which are fair.

Revisions.--WSP 821: Drainage area.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	205	3.5	1,050
2.0	365	4.0	1,340
2.5	560	5.0	1,980
3.0	780	6.0	2,770

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	314	885	330	180	260	116	453	1,230	468	1,260	304	375
2	395	850	365	178	230	112	496	1,180	460	1,240	293	588
3	468	785	380	174	230	110	1,040	1,140	468	1,230	280	695
4	484	698	365	172	230	110	1,540	1,100	480	1,180	267	905
5	472	620	345	170	245	134	1,870	1,060	476	1,120	258	996
6	445	552	320	166	255	136	2,160	1,030	468	1,040	249	1,110
7	407	496	295	162	250	148	2,200	1,000	472	954	244	984
8	369	445	285	158	235	180	2,160	972	472	875	241	910
9	335	418	270	156	220	240	2,140	942	492	795	255	810
10	307	433	265	156	205	210	2,070	910	524	716	293	708
11	290	460	260	154	180	174	2,010	900	552	703	388	612
12	274	478	260	150	178	*144	1,910	900	548	785	457	528
13	264	472	250	150	162	180	1,800	895	536	830	468	457
14	252	457	245	*148	150	205	1,710	875	636	835	441	399
15	241	437	240	148	144	188	*1,610	860	954	815	392	361
16	258	414	230	184	152	178	1,550	835	1,140	770	358	*335
17	244	392	230	295	150	158	1,480	795	1,250	716	343	314
18	283	376	225	420	*138	138	1,440	721	1,440	658	395	296
19	332	376	220	420	156	128	1,440	667	1,700	600	445	283
20	358	395	215	405	172	116	1,450	620	1,760	568	453	271
21	358	430	210	385	166	114	1,430	592	1,780	540	445	264
22	339	445	210	390	156	112	1,400	616	1,770	508	426	261
23	318	445	205	405	150	485	1,360	658	1,730	484	399	255
24	321	430	200	405	142	520	1,350	694	1,630	449	369	249
25	365	407	200	395	142	480	1,340	698	1,510	422	354	244
26	414	395	198	375	138	440	1,360	676	1,380	395	369	238
27	457	365	196	360	132	415	1,360	640	1,260	373	346	229
28	528	330	190	340	124	405	1,350	600	1,150	354	318	221
29	685	310	188	305	-	400	1,310	560	1,180	335	328	213
30	825	305	182	285	-------	390	1,270	516	1,290	318	332	210
31	890	-------	180	265	-------	405	-------	492	-------	304	321	-------
Total	12,292	14,299	7,754	8,056	5,092	7,271	46,059	25,374	29,976	22,172	10,831	14,321
Mean	397	477	250	260	182	235	1,535	819	999	715	349	477
Cfsm	1.33	1.60	0.836	0.870	0.609	0.786	5.13	2.74	3.34	2.39	1.17	1.60
In.	1.53	1.78	0.96	1.00	0.63	0.90	5.72	3.16	3.73	2.76	1.35	1.78

Calendar year 1958: Max 2,340 Min 180 Mean 588 Cfsm 1.97 In. 26.70
Water year 1958-59: Max 2,200 Min 110 Mean 558 Cfsm 1.87 In. 25.30

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Mar. 31.

365. Kenduskeag Stream near Kenduskeag, Maine

Location.--Lat 44°53'50", long 68°53'00", on right bank 300 ft upstream from highway bridge, 1.8 miles downstream from Black Stream, and 2.9 miles south of Kenduskeag, Penobscot County.

Drainage area.--178 sq mi.

Records available.--October 1941 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 97 ft (from topographic map).

Average discharge.--18 years, 310 cfs.

Extremes.--Maximum discharge during year, 6,380 cfs Apr. 4 (gage height, 14.24 ft); minimum daily, 8.5 cfs Aug. 16.
1941-59: Maximum discharge, 6,440 cfs Sept. 12, 1954 (gage height, 14.83 ft); minimum, 1.0 cfs Sept. 30, Oct. 1, 1948 (gage height, 1.09 ft).

Remarks.--Records good except those for periods of ice effect or backwater from aquatic growth, which are fair. An artificial cut has been made through a low divide between Souadabscook Stream and Black Stream which enters Kenduskeag Stream 1.8 miles above station. During high stages of Souadabscook Stream part of its flow passes through the cut in Kenduskeag Stream; at low stages of Souadabscook Stream all flow continues down its own channel.

Rating table, water year 1958-59, except periods of ice effect or backwater from aquatic growth (gage height, in feet, and discharge, in cubic feet per second)

1.6	33	5.0	980
2.0	76	6.0	1,480
2.5	153	8.0	2,560
3.0	263	10.0	3,760
4.0	560	12.0	4,960

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	62	827	1,090	44	184	42	720	349	40	162	19	28
2	215	612	881	42	152	54	1,030	392	40	142	16	79
3	198	472	814	40	132	63	2,920	341	*44	240	17	170
4	156	386	708	37	140	120	5,740	288	48	152	13	710
5	120	328	585	35	176	132	5,260	251	42	106	10	465
6	100	286	430	33	194	140	4,360	218	36	75	9.5	260
7	82	253	736	31	192	160	4,000	196	114	61	*9.5	160
8	67	223	760	31	170	215	3,510	188	153	56	9.0	100
9	59	230	616	30	140	245	3,680	167	125	50	9.5	64
10	53	775	462	28	120	255	2,570	148	124	42	10	47
11	52	724	401	27	108	220	2,300	132	97	60	14	38
12	67	536	325	25	96	172	1,850	124	67	146	14	31
13	61	422	258	25	87	152	1,530	119	59	130	13	29
14	50	344	186	24	79	150	1,300	110	140	100	10	24
15	44	366	151	24	70	140	1,190	*106	800	71	9.0	23
16	43	344	137	*35	63	146	*1,080	103	764	53	8.5	21
17	42	301	124	152	60	194	962	91	616	44	13	20
18	205	268	116	370	52	220	944	83	680	37	19	*18
19	205	311	108	475	50	*220	1,000	75	1,260	33	22	16
20	156	401	100	455	*43	220	980	70	890	34	17	15
21	120	358	93	405	43	250	788	67	596	47	16	15
22	96	319	87	420	42	370	644	80	398	37	16	14
23	84	261	80	475	40	660	546	104	293	31	16	13
24	130	223	75	525	38	690	502	97	207	27	13	13
25	410	205	68	490	37	680	472	101	146	25	12	14
26	355	176	66	430	35	670	447	104	113	24	11	14
27	505	765	61	370	35	670	413	83	119	23	11	15
28	970	735	56	330	34	665	358	66	129	19	10	14
29	1,760	795	53	285	-	650	319	52	198	19	13	13
30	*1,640	1,220	50	245	-------	645	330	46	288	18	12	13
31	1,180	-------	48	215	-------	640	-------	41	-------	18	17	-------
Total	9,287	13,466	9,725	6,153	2,612	9,850	51,745	4,393	8,626	2,082	409.0	2,456
Mean	300	449	314	198	93.3	318	1,725	142	288	67.2	13.2	81.9
Cfsm	1.69	2.52	1.76	1.11	0.524	1.79	9.69	0.798	1.62	0.378	0.074	0.460
In.	1.95	2.81	2.03	1.28	0.55	2.06	10.8	0.92	1.81	0.44	0.09	0.51

Calendar year 1958: Max 2,980 Min 16 Mean 430 Cfsm 2.42 In. 32.82
Water year 1958-59: Max 5,740 Min 8.5 Mean 331 Cfsm 1.86 In. 25.25

Peak discharge (base, 1,600 cfs).--Oct. 29 (3 to 4 p.m.) 1,840 cfs (6.73 ft); Apr. 4 (4 p.m.) 6,380 cfs (14.24 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by aquatic vegetation Oct. 1-23, July 1 to Sept. 30 and by ice Dec. 17 to Apr. 6 (no gage-height record Jan. 6-16, Feb. 20-28; discharge estimated on basis of recorded range in stage, weather records, and records of stations on nearby streams).

Reservoirs in Penobscot River basin

270. Chesuncook, Ripogenus, and Caribou Lakes and Moose Pond in West Branch Penobscot River basin are controlled by Ripogenus Dam, in T.3, R.11, Piscataquis County, Maine, 36 miles upstream from Millinocket and 42 miles northeast of Greenville; present dam completed in 1917 for power and log driving; usable capacity of reservoir, 30,000,000,000 cu ft. Records furnished by Great Northern Paper Co.

270. Ambajejus, Pemadumcook, North Twin, South Twin, and Elbow Lakes in West Branch Penobscot River basin are controlled by North Twin Dam, 3 miles upstream from Millinocket, Penobscot County, Maine, for power and log driving; usable capacity of reservoir, 15,000,000,000 cu ft. Records furnished by Great Northern Paper Co.

285. Chamberlain and Telos Lakes and Round Pond in East Branch Penobscot River basin are controlled by dams in outlets of Chamberlain and Telos Lakes, although regulation is at Telos Dam, in T.6, R.11, Piscataquis County, Maine. Telos Dam rebuilt during 1941; usable capacity, 5,040,000,000 cu ft between gage heights 2.0 and 11.0 ft. Records furnished by Bangor Hydro-Electric Co.

290. Second and Grand Lakes in East Branch Penobscot River basin are controlled by dam rebuilt in 1942 at outlet of Grand Lake, in T.6, R.8, Penobscot County, Maine; usable capacity, 1,785,000,000 cu ft between elevation 643.0 and 655.0 ft. Records furnished by Bangor Hydro-Electric Co.

320. Wilson Pond on Wilson Stream, 2¾ miles east of Greenville, Piscataquis County, Maine, used for power; usable capacity, 390,000,000 cu ft between gage heights 27.5 and 33.5 ft. Gage-height record furnished by Central Maine Power Co.

325. Sebec Lake on Sebec River at Sebec, Piscataquis County, Maine, used for power and log driving; usable capacity, 2,511,000,000 cu ft between elevations 316.1 and 325.1 ft. Records furnished by Bangor Hydro-Electric Co.

Month-end contents, in millions of cubic feet, water year October 1958 to September 1959

Date	Chesuncook, Ripogenus, Caribou, Ambajejus, Pemadumcook, North Twin, South Twin, and Elbow Lakes and Moose Pond†	Chamberlain, Telos, Second, and Grand Lakes and Round Pond	Wilson Pond and Sebec Lake
Sept.30, 1958	43,111	2,830	1,514
Oct. 31	39,472	2,673	1,741
Nov. 30	39,716	2,988	2,293
Dec. 31	35,117	3,093	1,593
Jan. 31, 1959	28,935	2,389	1,617
Feb. 28	23,993	746	614
Mar. 31	18,153	503	495
Apr. 30	35,316	3,547	2,352
May 31	48,217	6,283	2,308
June 30	56,986	6,161	2,834
July 31	53,072	6,064	2,056
Aug. 31	50,093	5,855	1,620
Sept.30	44,388	5,679	1,328

† Includes month-end contents of following additional reservoirs in West Branch Penobscot River basin; used primarily for log driving (total capacity approximately, 12,000,000,000 cu ft); Penobscot, Seboomook, Caucomgomoc, Loon, Shallow, Umbazooksus, Harrington, Sourdnahunk, Rainbow, Ragged and Millinocket Lakes, Canada Falls Reservoir, Dole and Poland Ponds.

380. Sheepscot River at North Whitefield, Maine

Location.--Lat 44°13'20", long 69°35'40", on left bank at North Whitefield, Lincoln County, just upstream from highway bridge, half a mile downstream from Pleasant Pond Brook.

Drainage area.--148 sq mi.

Records available.--October 1938 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 101.1 ft above mean sea level, datum of 1929.

Average discharge.--21 years, 234 cfs.

Extremes.--Maximum discharge during year, 3,650 cfs Apr. 3 (gage height, 8.65 ft); minimum, 15 cfs Sept. 30 (gage height, 1.92 ft).
1938-59: Maximum discharge, 5,260 cfs Apr. 13, 1940 (gage height, 11.81 ft, backwater from fish weir), from rating curve extended above 1,900 cfs by logarithmic plotting; minimum, 5.0 cfs Oct. 24, 1941 (gage height, 1.70 ft).

Remarks.--Records excellent except those for periods of ice effect, which are fair. Some regulation at low flow by sawmill at North Whitefield. Records of water temperatures for the water year 1959 are given in WSP 1641.

Revisions (water years).--WSP 1231: 1940.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.0	20	4.0	520
2.2	38	5.0	970
2.4	62	6.0	1,550
2.6	93	7.0	2,250
3.0	180	8.0	3,060
3.5	325		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	142	548	740	104	190	87	580	256	87	173	53	64
2	259	512	676	106	174	97	665	250	85	173	52	66
3	170	480	588	108	162	108	2,690	232	99	180	48	88
4	142	460	532	108	240	118	3,010	214	101	156	46	245
5	131	412	496	106	300	114	2,540	205	85	142	45	131
6	122	372	612	106	260	147	2,300	198	82	133	44	102
7	108	336	536	104	240	319	2,000	188	77	129	46	90
8	101	307	476	100	220	320	1,680	180	72	118	46	82
9	97	360	416	93	200	285	1,470	166	305	108	59	76
10	91	572	356	85	185	255	1,290	158	215	102	59	66
11	87	452	307	77	170	230	1,200	149	144	176	65	61
12	80	404	268	74	150	215	1,060	147	120	220	54	56
13	74	380	232	68	144	235	930	170	110	151	48	50
14	70	360	200	*82	135	211	830	173	160	138	45	47
15	68	356	182	61	138	200	735	168	430	125	41	46
16	71	336	180	85	132	244	672	166	353	118	42	47
17	79	*301	172	390	127	283	624	149	304	110	52	46
18	88	283	162	325	122	274	580	138	370	102	49	39
19	87	280	156	262	116	245	544	131	492	97	*44	37
20	80	265	150	241	112	244	516	129	428	95	39	35
21	74	247	144	241	108	356	*460	127	368	93	40	34
22	71	235	144	332	106	632	416	192	339	90	37	34
23	71	220	142	400	104	572	384	190	313	80	35	33
24	99	205	138	360	102	536	356	149	274	72	34	29
25	142	198	132	332	100	540	339	144	244	70	36	32
26	129	240	130	313	99	556	322	131	220	62	37	31
27	390	536	126	292	93	572	304	120	200	59	37	29
28	460	410	120	265	90	532	283	*114	190	57	46	28
29	624	1,050	114	244	--	480	268	106	226	54	102	27
30	600	825	112	215	-------	460	262	101	202	53	77	28
31	556	-------	108	200	-------	484	-------	95	-------	52	66	-------
Total	5,363	11,942	8,847	5,859	4,319	9,951	29,310	5,036	6,695	3,488	1,524	1,779
Mean	173	398	285	189	154	321	977	162	223	113	49.2	59.3
Cfsm	1.17	2.69	1.93	1.28	1.04	2.17	6.60	1.09	1.51	0.764	0.332	0.401
In.	1.35	3.00	2.22	1.48	1.08	2.50	7.36	1.26	1.68	0.88	0.38	0.45

Calendar year 1958: Max 1,300 Min 46 Mean 324 Cfsm 2.19 In. 29.67
Water year 1958-59: Max 3,010 Min 27 Mean 258 Cfsm 1.74 In. 23.64

Peak discharge (base, 1,100 cfs).--Nov. 29 (6 a.m.) 1,140 cfs (5.34 ft); Apr. 3 (10 p.m.) 3,650 cfs (8.65 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 14-27, 31, Jan. 1, 15-18, 28, 30, Jan. 31 to Feb. 4, Feb. 6-9, 12, 16, 19-27, Mar. 1, 8-12, 15, 19.

405. Moosehead Lake at East Outlet, Maine

Location.--Lat 45°35'10", long 69°42'45", at wharf at east outlet of lake at Moosehead, Piscataquis County.

Drainage area.--1,240 sq mi, approximately.

Records available.--April 1895 to September 1959.

Gage.--Staff gage read daily at 7 a.m. Datum of gage is 1,011.48 ft above mean sea level, datum of 1929.

Extremes.--Maximum gage height observed during year, 17.73 ft June 16; minimum observed, 13.51 ft Mar. 31.
1895-1959: Maximum gage height, 18.0 ft May 30, 1902; minimum, 10.0 ft or lower, present datum, Mar. 20-29, 1911.

Remarks.--Lake is controlled by dams at East and West Outlets originally built prior to 1840. East Outlet dam partly rebuilt of concrete in 1947-48 with gate sills at gage height 7.0 ft. Remaining wooden section rebuilt of concrete in 1955-56. Lake outlet dredged in 1948 to permit drawing level down to gage height 10.0 ft at a faster rate than formerly. Capacity, 23,735,000,000 cu ft between gage heights 10.0 and 17.5 ft. Water is used primarily for power, although some logs are driven each year. Some water was diverted through gates in dam at West Outlet; monthly mean diversion, in cubic feet per second, during water year 1959, is given below;

November.....	10	February.....	10	July.....	80
December.....	10	May.....	50	August.....	70
January.....	10	June.....	80	September.....	70

Cooperation.--Gage-height record furnished by Kennebec Water Power Co.

Revisions (water years).--WSP 1111: 1946-47 (change in contents).

Capacity table, water year 1958-59 (gage height, in feet, and capacity, in millions of cubic feet)

10.0	0	15.0	15,713
11.0	3,110	16.0	18,908
12.0	6,237	17.0	22,121
13.0	9,397	18.0	25,355
14.0	12,537		

Gage height, in feet, at 7 a.m., water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15.43	15.35	16.68	16.27	15.45	13.87	13.53	16.10	17.51	17.61	17.01	16.25
2	15.42	15.47	16.70	16.22	15.39	13.86	13.53	16.23	17.55	17.54	16.96	16.23
3	15.40	15.50	16.72	16.25	15.35	13.85	13.65	16.34	17.50	17.52	16.87	16.18
4	15.35	15.57	16.72	16.23	15.28	13.84	13.70	16.50	17.46	17.52	16.80	16.15
5	15.30	15.61	16.72	16.25	15.24	13.85	13.78	16.63	17.41	17.53	16.72	16.15
6	15.26	15.66	16.73	16.27	15.18	13.84	13.83	16.83	17.38	17.51	16.64	16.16
7	15.20	15.70	16.73	16.21	15.14	13.88	13.90	16.98	17.45	17.51	16.60	16.19
8	15.14	15.75	16.74	16.17	15.08	13.85	13.90	17.10	17.47	17.53	16.56	16.20
9	15.08	15.78	16.74	16.15	15.00	13.84	14.02	17.20	17.43	17.53	16.52	16.20
10	15.03	15.86	16.72	16.10	14.96	13.83	14.07	17.30	17.45	17.54	16.55	16.17
11	15.03	15.95	16.72	16.05	14.93	13.82	14.12	17.34	17.49	17.54	16.60	16.12
12	15.00	15.99	16.68	16.01	14.85	13.80	14.17	17.37	17.50	17.54	16.60	16.12
13	14.93	16.02	16.66	15.98	14.73	13.87	14.23	17.37	17.51	17.52	16.55	16.05
14	14.85	15.99	16.66	15.94	14.65	13.85	14.28	17.37	17.60	17.54	16.55	16.00
15	14.83	16.01	16.64	15.90	14.64	13.83	14.35	17.40	17.68	17.54	16.55	15.94
16	14.80	16.05	16.62	15.90	14.61	13.83	14.40	17.38	17.73	17.53	16.54	15.89
17	14.87	16.09	16.62	16.00	14.53	13.78	14.47	17.38	17.67	17.50	16.58	15.82
18	14.85	16.15	16.60	15.97	14.47	13.74	14.56	17.38	17.62	17.49	16.65	15.76
19	14.81	16.20	16.55	15.89	14.44	13.71	14.63	17.37	17.59	17.48	16.62	15.70
20	14.80	16.31	16.53	15.82	14.39	13.70	14.74	17.35	17.50	17.47	16.60	15.65
21	14.77	16.34	16.51	15.82	14.32	13.66	14.83	17.34	17.47	17.46	16.60	15.61
22	14.72	16.37	16.50	15.85	14.26	13.62	14.96	17.50	17.50	17.46	16.60	15.56
23	14.68	16.42	16.48	15.87	14.20	13.57	15.08	17.51	17.50	17.45	16.57	15.51
24	14.72	16.47	16.47	15.85	14.16	13.56	15.14	17.55	17.49	17.44	16.54	15.49
25	14.78	16.51	16.45	15.80	14.11	13.56	15.28	17.55	17.48	17.42	16.54	15.45
26	14.87	16.50	16.45	15.75	14.03	13.56	15.42	17.54	17.49	17.38	16.48	15.43
27	14.91	16.57	16.43	15.70	13.97	13.55	15.57	17.52	17.50	17.33	16.42	15.40
28	14.93	16.60	16.43	15.65	13.91	13.54	15.72	17.54	17.50	17.27	16.39	15.38
29	15.09	16.63	16.39	15.62	-	13.53	15.80	17.54	17.52	17.20	16.38	15.35
30	15.22	16.65	16.34	15.57	-------	13.53	15.91	17.52	17.64	17.13	16.31	15.35
31	15.30	-------	16.30	15.50	-------	13.51	-------	17.50	-------	17.06	16.27	-------
(†)	16,670	20,994	19,871	17,308	12,253	10,989	18,620	23,735	24,189	22,314	19,775	16,830
(‡)	-702	+4,324	-1,123	-2,563	-5,055	-1,264	+7,631	+5,115	+454	-1,875	-2,539	-2,945

Calendar year 1958..... ‡ -706
Water year 1958-59..... ‡ -542

† Contents, in millions of cubic feet, at end of month.
‡ Change in contents, in millions of cubic feet.

410. Kennebec River at Moosehead, Maine

Location.--Lat 45°35'10", long 69°43'10", on right bank an eighth of a mile downstream from dam at east outlet of Moosehead Lake and half a mile northwest of Moosehead, Piscataquis County.

Drainage area.--1,240 sq mi, approximately.

Records available.--October 1919 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 1,015.53 ft above mean sea level, datum of 1929. Prior to Oct. 9, 1924, chain gage on railroad bridge 300 ft downstream at same datum.

Average discharge.--40 years, 1,863 cfs (unadjusted).

Extremes.--Maximum discharge during year, 14,700 cfs June 18 (gage height, 9.29 ft); minimum, 94 cfs Apr. 3, June 1 (gage height, 2.08 ft).
1919-59: Maximum discharge, 15,600 cfs May 8, 1947 (gage height, 9.94 ft); minimum, about 62 cfs Apr. 7-15, 1923.

Remarks.--Records excellent. Some water diverted down west channel by leakage and occasional opening of gates in dam at West Outlet. Flow regulated by Moosehead Lake (see preceding page) and by Brassua Lake and Second and First Roach Ponds (see p. 54).

Revisions (water years).--WSP 1301: 1928-50 (adjusted monthly runoff).

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 1)

2.1	100	4.5	2,500
2.2	130	5.0	3,360
2.4	220	5.5	4,340
2.7	420	6.0	5,410
3.0	650	7.0	7,820
3.5	1,110	8.0	10,700
4.0	1,750	9.3	14,800

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,890	138	455	1,820	2,540	1,950	1,440	109	1,910	5,170	2,730	*2,320
2	1,900	134	1,480	1,820	2,730	1,850	1,460	109	3,510	5,150	2,410	2,150
3	1,890	134	1,480	1,660	2,690	1,820	680	106	3,420	4,420	2,560	1,920
4	1,890	520	1,480	1,530	2,660	1,830	150	109	2,600	3,770	2,830	1,650
5	1,880	650	885	1,720	2,760	1,830	146	112	2,470	2,790	2,810	1,420
6	1,950	650	522	1,820	2,800	1,830	945	115	1,790	2,410	2,800	1,100
7	2,130	658	522	2,410	3,260	1,820	1,500	115	980	1,810	2,740	910
8	2,120	658	1,160	2,370	3,380	1,810	1,530	115	2,390	1,820	2,780	1,590
9	2,100	666	1,710	1,760	2,880	1,820	1,530	118	2,440	1,830	2,760	2,420
10	2,080	375	1,690	1,750	2,850	1,820	1,530	112	1,040	1,820	2,760	2,510
11	2,080	146	1,690	1,750	3,000	1,960	1,530	1,040	800	1,820	2,370	2,300
12	2,060	740	1,690	2,300	3,090	2,070	1,530	1,030	1,020	1,810	2,040	2,360
13	2,020	1,740	1,690	2,560	3,050	2,100	1,500	1,000	1,030	1,820	2,040	2,360
14	2,000	2,060	2,010	2,500	3,020	2,300	1,480	1,000	1,970	1,810	2,010	2,340
15	1,980	1,540	2,240	2,180	2,980	2,550	1,180	1,240	4,540	1,790	2,630	2,320
16	1,980	1,210	2,240	1,960	2,970	2,370	695	1,020	*8,750	1,780	2,930	2,280
17	2,000	585	2,220	2,210	2,930	2,060	506	1,010	*10,700	1,300	2,610	2,280
18	2,020	142	2,220	2,480	2,920	2,040	255	1,670	12,500	905	2,440	2,260
19	1,980	142	1,970	2,150	2,900	2,040	103	2,530	14,500	820	2,420	2,260
20	1,980	760	1,720	1,510	2,850	2,040	103	2,390	11,000	820	2,420	2,260
21	1,960	1,130	1,720	1,510	2,850	1,690	106	1,580	6,620	820	2,420	2,310
22	1,960	515	2,030	1,510	2,830	1,470	106	2,420	5,410	820	2,440	2,300
23	1,950	380	2,310	2,040	2,800	1,470	*106	3,000	5,410	820	2,420	2,320
24	1,980	870	1,890	2,110	2,760	1,470	103	2,980	4,550	1,110	2,200	2,320
25	1,470	1,010	1,880	2,020	2,730	1,460	103	3,000	3,170	1,750	1,940	2,130
26	815	1,020	1,400	2,420	2,690	1,460	100	3,000	3,040	1,920	2,140	2,280
27	790	1,020	838	2,420	2,640	1,460	106	2,890	3,050	2,470	2,360	2,260
28	127	1,020	1,160	2,400	2,210	1,460	106	2,250	2,380	2,800	2,340	2,260
29	130	470	1,830	3,300	-	1,440	106	2,200	3,480	2,740	2,340	1,900
30	134	146	1,830	3,700	--------	1,430	112	2,200	5,190	2,740	2,340	1,740
31	134	--------	1,830	2,800	--------	1,430	--------	1,850	--------	2,730	2,320	--------
Total	51,380	21,229	49,792	66,490	79,770	56,150	20,847	42,420	131,660	66,385	76,350	62,830
Mean	1,657	708	1,606	2,145	2,849	1,811	695	1,368	4,389	2,142	2,463	2,094
(†)	-510	+1,465	-500	-1,062	-2,170	-1,199	+4,613	+3,013	+324	-738	-1,604	-2,090
Adjusted for change in reservoir contents												
Mean	1,147	2,173	1,106	1,083	679	612	5,308	4,381	4,713	1,404	859	4
Cfsm	0.925	1.75	0.892	0.873	0.548	0.494	4.28	3.53	3.80	1.13	0.693	0.003
In.	1.07	1.95	1.03	1.01	0.57	0.57	4.78	4.07	4.24	1.30	0.80	0.00

	Observed						Adjusted					
Calendar year 1958:	Max	5,700	Min	127	Mean	2,288	Mean	2,421	Cfsm	1.95	In.	26.48
Water year 1958-59:	Max	14,500	Min	100	Mean	1,987	Mean	1,955	Cfsm	1.58	In.	21.39

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Brassua and Moosehead Lakes and Second and First Roach Ponds, also diversion through West Outlet.

425. Kennebec River at The Forks, Maine

Location.--Lat 45°20'35", long 69°57'45", on right bank at The Forks, Somerset County, half a mile upstream from highway bridge and 1 mile upstream from Dead River.

Drainage area.--1,570 sq mi, approximately.

Records available.--September 1901 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 569.03 ft above mean sea level, datum of 1929. Prior to June 21, 1912, chain gage and June 21, 1912, to Oct. 17, 1919, water-stage recorder and chain gage, at highway bridge half a mile downstream, at different datum.

Average discharge.--58 years, 2,540 cfs (unadjusted).

Extremes.--Maximum discharge during year, 20,200 cfs June 19 (gage height, 10.37 ft); minimum daily, 365 cfs Mar. 29.
1901-59: Maximum discharge, about 23,700 cfs June 18, 1917 (gage height, 10.1 ft, site then in use); minimum, 85 cfs Sept. 3, 1953 (gage height, 1.02 ft).

Remarks.--Records excellent. Flow regulated by Moosehead Lake (see p. 54), Brassua Lake, and Moxie, Indian, Second and First Roach Ponds (see p. 54).

Revisions (water years).--WSP 198: Drainage area. WSP 1231: 1902-4, 1906-8, 1912, 1914, 1919-20(M), 1923(M), 1926(M), 1928-29(M), 1936(M), 1938(M). WSP 1301: 1928-35 (adjusted monthly runoff).

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to June 16

1.7	295	4.0	3,250
2.0	519	4.5	4,360
2.5	983	5.0	5,590
3.0	1,570	7.0	10,700
3.5	2,300		

June 17 to Sept. 30

5.0	5,590	9.0	16,900
7.0	11,500	10.0	19,400

Note.--Same as preceding table below 5.0 ft.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,630	1,480	2,370	1,040	3,000	2,000	1,450	2,010	3,940	5,730	3,490	2,180
2	1,980	860	2,260	3,300	3,790	2,370	3,130	1,160	3,540	6,630	1,580	2,240
3	1,920	580	920	2,050	3,510	2,090	900	970	2,660	4,770	2,640	*3,100
4	2,250	1,220	2,260	480	3,130	1,980	1,360	1,040	2,760	4,700	3,130	1,650
5	1,380	1,510	1,220	3,550	3,150	1,870	1,740	1,020	3,120	3,270	2,980	1,770
6	2,270	1,750	1,530	2,630	3,350	2,510	2,210	1,240	1,490	3,440	3,770	1,320
7	2,630	1,570	860	1,800	3,380	2,060	2,550	1,260	700	1,660	3,150	2,460
8	2,190	1,610	1,440	3,210	3,150	1,580	2,360	1,260	3,850	1,650	3,140	3,660
9	2,740	540	2,450	1,910	3,400	2,390	3,750	920	2,270	3,330	4,080	3,710
10	2,660	1,100	2,390	1,960	3,370	1,530	4,320	880	1,160	1,730	2,350	1,760
11	1,590	1,240	2,190	2,240	3,250	2,130	2,510	2,330	1,130	2,120	1,110	3,750
12	1,530	1,840	2,730	3,010	3,310	2,740	2,210	3,650	1,530	460	3,290	3,210
13	2,770	715	2,890	2,720	3,450	2,980	3,100	1,630	2,060	2,510	2,030	1,210
14	2,330	2,260	1,780	2,430	3,210	2,390	3,570	1,170	2,650	1,930	3,750	2,600
15	1,940	1,980	2,280	2,450	3,020	1,930	3,680	1,000	5,560	2,730	3,140	2,640
16	2,720	730	1,060	2,730	3,170	1,840	3,410	2,890	10,600	1,400	1,810	2,280
17	2,420	1,670	2,890	3,780	3,300	3,270	1,850	2,320	*13,500	1,540	2,310	3,220
18	2,210	1,160	2,150	2,090	3,210	1,340	1,380	1,640	16,000	820	3,350	2,970
19	415	1,150	*2,350	2,130	3,270	1,670	1,580	1,500	*18,700	490	2,590	3,620
20	1,980	1,740	2,860	2,180	3,350	2,370	2,050	1,530	*15,800	1,540	3,290	2,290
21	2,240	2,170	1,730	1,710	3,300	2,340	2,060	1,840	10,400	1,380	3,410	2,630
22	2,570	2,460	3,920	2,540	3,350	1,220	2,080	2,230	7,900	1,220	3,100	3,130
23	2,650	1,140	1,550	2,910	3,240	1,250	2,200	4,070	7,060	1,180	1,550	1,880
24	2,760	2,840	1,710	2,500	3,180	2,730	*1,820	3,000	6,400	1,460	3,210	2,090
25	1,590	920	1,500	2,310	2,920	2,040	1,910	3,200	4,800	1,600	2,160	3,370
26	960	1,890	2,430	3,190	2,450	2,030	1,780	3,460	4,130	2,000	2,470	2,160
27	2,290	780	1,600	3,270	2,190	3,060	2,290	4,080	3,810	2,930	1,920	2,010
28	1,580	1,220	710	3,230	2,220	2,350	1,620	3,810	2,510	2,990	2,820	3,610
29	1,960	900	2,440	3,180	-	365	2,380	1,090	3,440	2,670	2,100	2,050
30	2,690	1,020	2,000	3,380	--------	2,770	2,120	2,910	6,290	2,710	2,510	1,990
31	2,170	--------	2,210	3,330	--------	420	--------	1,960	--------	2,540	3,770	--------
Total	66,015	42,045	62,680	79,240	88,620	63,615	69,370	63,070	169,760	75,130	86,000	76,560
Mean	2,130	1,401	2,022	2,556	3,165	2,052	2,312	2,035	5,659	2,424	2,774	2,552
(†)	-494	+1,348	-663	-1,059	-2,177	-1,246	+4,918	+2,980	+310	-872	-1,667	-2,404
Adjusted for change in reservoir contents												
Mean	1,636	2,749	1,359	1,497	988	806	7,230	5,015	5,969	1,552	1,107	148
Cfsm	1.04	1.75	0.886	0.954	0.629	0.513	4.61	3.19	3.80	0.989	0.705	0.094
In.	1.20	1.95	1.00	1.10	0.66	0.59	5.14	3.68	4.24	1.14	0.81	0.10

	Observed			Adjusted			
Calendar year 1958:	Max 11,000	Min 340	Mean 3,119	Mean 3,149	Cfsm 2.01	In. 27.21	
Water year 1958-59:	Max 18,700	Min 365	Mean 2,581	Mean 2,501	Cfsm 1.59	In. 21.61	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Brassua and Moosehead Lakes, and Second and First Roach, Indian, and Moxie Ponds.

435. Dead River near Dead River, Maine

Location.--Lat 45°13'48", long 70°11'58", T.3, R.4, Somerset County, on right bank at foot of Long Falls, 0.3 mile upstream from Black Brook and 0.5 mile downstream from Flagstaff Lake Dam.

Drainage area.--520 sq mi.

Records available.--October 1939 to September 1959. Monthly discharge only October to December 1939, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 1,037.32 ft above mean sea level, datum of 1929.

Average discharge.--20 years, 812 cfs (unadjusted).

Extremes.--Maximum discharge during year, 9,680 cfs June 15 (gage height, 9.64 ft); minimum daily, 2.6 cfs on many days during October, November, January, and February.
1939-59: Maximum discharge, 18,000 cfs Sept. 12, 1954 (gage height, 11.50 ft); no flow part of July 31, 1949, when flow was completely shutoff by cofferdam during construction of Flagstaff Lake dam.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by Flagstaff Lake (see p. 54).

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to June 15

3.4	2.4	4.1	48	6.0	942
3.5	4.9	4.3	78	7.0	2,230
3.6	8.1	4.5	120	8.0	4,320
3.7	12	5.0	285	9.0	7,290
3.9	26	5.5	550	9.5	9,140

June 16 to Sept. 30

3.4	3.5	3.7	13
3.5	5.7	3.9	26
3.6	8.9		

Note.--Same as preceding table above 3.9 ft.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,630	2.6	2,040	1,670	2.6	1,190	1,020	4.3	885	2,250	598	515
2	1,040	2.6	2,030	1,150	2.6	1,180	330	4.3	440	1,120	591	*1,050
3	752	265	1,270	1,190	2.6	1,180	7.8	4.9	70	1,180	525	635
4	736	1,450	2,040	1,650	2.6	1,170	6.4	4.9	75	1,100	584	5.0
5	728	1,940	2,450	1,070	2.6	1,170	5.4	5.7	88	665	577	4.7
6	1,210	1,940	1,160	869	2.6	1,160	5.4	9.3	885	1,240	577	4.7
7	1,380	995	430	869	2.6	1,160	4.3	13	370	1,550	577	4.7
8	1,280	620	1,260	1,390	2.6	1,150	4.9	15	345	1,780	577	530
9	1,220	620	1,260	1,630	2.6	1,150	5.1	18	*1,000	1,810	570	809
10	1,150	99	1,260	1,610	2.6	1,140	4.3	22	2,060	470	445	809
11	1,140	2.6	1,250	1,610	2.6	1,130	4.3	26	895	1,550	8.1	801
12	1,090	240	1,250	1,130	2.6	1,120	3.8	26	1,170	1,610	365	792
13	340	1,490	1,250	851	2.6	1,120	3.6	775	1,230	1,590	584	775
14	2.6	1,280	385	851	2.6	1,100	3.3	180	2,400	1,290	584	767
15	650	850	865	851	2.6	1,100	3.6	24	6,850	1,370	584	759
16	953	108	1,330	851	2.6	1,290	3.6	27	9,140	1,190	577	752
17	955	2.9	1,330	*825	2.6	1,510	4.1	27	6,370	1,830	577	736
18	955	2.9	1,330	826	2.6	1,500	4.3	32	5,540	22	577	1,250
19	215	10	1,320	826	80	1,490	5.1	570	7,460	2,130	577	1,490
20	2.6	*20	1,320	826	245	1,460	4.9	33	4,750	2,060	570	1,440
21	325	3.6	1,320	330	380	1,450	4.1	505	2,260	1,690	570	1,330
22	955	685	835	4.3	600	1,440	3.6	1,190	1,920	1,540	570	1,350
23	955	1,150	1,040	3.1	680	1,430	3.8	300	1,120	2,410	564	1,320
24	940	1,180	1,250	2.6	820	*1,410	4.6	390	1,010	2,250	905	1,260
25	97	1,150	1,250	2.6	860	1,400	5.1	860	1,060	2,180	1,350	1,230
26	2.9	435	1,430	2.6	1,080	1,460	5.1	580	953	5.4	1,310	1,180
27	2.9	3.3	2,050	2.6	1,220	1,490	4.6	785	974	1,620	1,270	1,120
28	2.9	790	1,940	2.6	1,200	1,460	4.3	735	890	1,040	1,240	1,050
29	2.9	1,260	1,400	2.6	-	1,440	4.1	230	2,930	1,180	1,200	1,350
30	2.9	1,260	975	2.6	--------	1,410	4.1	59	4,880	975	1,180	1,140
31	2.6	--------	1,350	2.6	--------	1,390	--------	955	--------	1,730	265	--------
Total	20,718.3	19,857.5	41,670	22,903.2	7,211.8	40,250	1,477.6	8,410.4	70,020	44,427.4	21,048.1	26,259.1
Mean	668	662	1,344	739	258	1,298	49.3	271	2,334	1,433	679	875
(†)	+211	+57	-940	-337	-19	1,082	+2,996	+930	+16	-998	-460	-704

Adjusted for change in reservoir contents

Mean	879	719	404	402	239	216	3,045	1,201	2,350	435	219	171
Cfsm	1.69	1.38	0.777	0.773	0.460	0.415	5.86	2.31	4.52	0.837	0.421	0.329
In.	1.95	1.54	0.90	0.89	0.48	0.48	6.54	2.66	5.04	0.97	0.49	0.37

	Observed			Adjusted			
Calendar year 1958:	Max 5,540	Min 2.6	Mean 1,191	Mean 1,140	Cfsm 2.19	In. 29.79	
Water year 1958-59:	Max 9,140	Min 2.6	Mean 888	Mean 854	Cfsm 1.64	In. 22.31	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Flagstaff Lake.
Note.--Stage-discharge relation affected by ice Jan. 26 to Feb. 6. No gage-height record Oct. 17 to Nov. 20, Feb. 6-20; discharge estimated on basis of recorded range in stage and flow records at dam just upstream.

450. Dead River at The Forks, Maine

Location.--Lat 45°21'00", long 69°59'30", on left bank 1½ miles northwest of The Forks, Somerset County, and 1½ miles upstream from mouth.

Drainage area.--872 sq mi.

Records available.--September 1901 to August 1907, March 1910 to September 1959. Monthly discharge only for some periods, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 600.5 ft above mean sea level, adjustment of 1912. Prior to Sept. 29, 1923, staff gage at site 100 ft downstream at same datum.

Average discharge.--54 years (1902-7, 1910-59), 1,418 cfs (unadjusted).

Extremes.--Maximum discharge during year, 11,400 cfs June 16 (gage height, 6.84 ft); minimum daily, 134 cfs Sept.7.
1901-7, 1910-59: Maximum discharge, 28,700 cfs Mar. 20, 1936 (gage height, 10.54 ft), from rating curve extended above 15,000 cfs; minimum since September 1923, 54 cfs Sept. 27, 1941 (gage height, 1.50 ft).

Remarks.--Records excellent except those for periods of ice effect, which are fair. Flow partly regulated by Flagstaff and Spencer Lakes (see p. 54).

Revisions (water years).--WSP 801: Drainage area. WSP 1231: 1913-15, 1916-17(M), 1919-20(M), 1922(M). WSP 1301: 1904(M), 1907, 1911-12.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	134	4.0	3,440
1.9	255	5.0	5,810
2.1	409	6.0	8,700
2.5	835	7.0	12,000
3.0	1,550		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,720	1,300	2,410	1,450	310	1,410	1,530	1,570	1,120	3,900	713	335
2	1,420	1,100	3,480	1,240	305	1,390	1,090	1,520	920	1,870	691	1,140
3	965	1,090	2,570	965	300	1,390	823	1,520	616	1,620	648	*1,120
4	926	1,790	3,050	1,500	290	1,380	1,070	1,470	428	1,620	681	343
5	900	2,590	3,590	1,360	275	1,380	1,470	1,410	351	1,090	691	229
6	1,090	2,550	2,520	1,020	270	1,360	1,740	1,530	520	1,650	691	173
7	1,550	2,140	564	1,100	260	1,360	1,790	1,650	1,330	1,930	691	134
8	1,800	1,320	1,560	1,360	255	1,360	1,820	1,640	513	2,190	691	220
9	1,720	1,360	1,720	2,050	250	1,340	1,940	1,410	1,360	2,210	691	887
10	1,640	1,230	1,750	1,960	240	1,340	1,910	1,130	2,200	865	737	874
11	1,600	737	1,770	1,720	235	1,340	1,980	1,060	1,620	1,790	437	900
12	1,580	840	1,770	1,570	220	1,330	1,840	1,230	1,290	1,860	335	874
13	1,170	1,770	1,790	1,100	215	1,330	1,640	1,880	1,530	1,880	737	861
14	447	2,250	1,580	1,140	210	1,330	1,600	1,640	2,520	1,580	725	861
15	565	1,570	990	1,130	205	1,330	1,690	1,030	7,620	1,680	691	861
16	1,380	1,570	1,740	1,090	190	1,550	1,750	913	11,300	1,440	702	848
17	1,840	887	1,740	1,100	184	1,740	1,860	786	*9,780	2,020	713	848
18	2,120	798	1,740	1,110	*178	*1,720	2,030	798	7,790	376	887	1,070
19	1,750	*887	1,740	1,140	255	1,690	2,200	1,330	10,000	2,070	811	1,500
20	823	913	1,740	1,230	410	1,650	2,550	700	8,640	2,100	725	1,450
21	850	861	1,740	1,100	555	1,640	2,180	920	4,890	1,770	713	1,360
22	1,520	992	1,740	456	785	1,620	1,840	1,890	3,500	1,740	762	1,410
23	1,440	1,790	1,030	409	940	1,600	1,840	1,780	2,450	2,560	725	1,330
24	1,640	1,840	1,650	400	1,100	1,570	*2,270	1,230	1,800	2,320	845	1,280
25	1,910	1,750	1,670	375	1,240	1,550	2,950	1,230	1,820	2,260	1,380	1,260
26	1,110	1,420	2,290	360	1,320	1,530	3,170	1,120	1,550	305	1,360	1,240
27	965	648	2,330	350	1,390	1,600	2,890	1,550	1,530	1,460	1,330	1,170
28	1,390	825	2,310	345	1,420	1,580	2,400	1,330	1,520	1,270	1,300	1,130
29	2,480	1,740	1,490	335	-	1,570	2,020	1,550	2,820	1,300	1,300	1,240
30	2,310	1,790	1,260	325	--------	1,530	1,770	544	6,110	1,280	1,270	1,220
31	1,640	--------	978	320	--------	1,570	--------	965	--------	1,580	815	--------
Total	44,261	42,348	58,302	31,110	13,807	46,080	57,653	40,326	99,438	53,586	25,488	28,168
Mean	1,428	1,412	1,881	1,004	493	1,486	1,922	1,301	3,315	1,729	822	939
(†)	+27	+6	-954	-337	-19	-1,082	+3,242	+904	+78	-1,031	-460	-718
Adjusted for change in reservoir contents												
Mean	1,455	1,418	927	667	474	404	5,164	2,205	3,393	698	362	221
Cfsm	1.67	1.63	1.06	0.765	0.544	0.463	5.92	2.53	3.89	0.800	0.415	0.253
In.	1.92	1.82	1.22	0.88	0.57	0.53	6.60	2.92	4.34	0.92	0.48	0.28

	Observed			Adjusted
Calendar year 1958:	Max 9,650	Min 222	Mean 1,934	Mean 1,880 Cfsm 2.16 In. 29.27
Water year 1958-59:	Max 11,300	Min 134	Mean 1,481	Mean 1,445 Cfsm 1.66 In. 22.58

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Flagstaff and Spencer Lakes.
Note.--Stage-discharge relation affected by ice Dec. 9-27, Jan. 17, Jan. 24 to Mar. 22, Mar. 29 (no gage-height record Feb. 2-18, Mar. 7-17; discharge estimated on basis of weather records and records for other stations in Kennebec River basin).

460. Austin Stream at Bingham, Maine

Location.--Lat 45°03'55", long 69°52'55", on right bank at Bingham, Somerset County, three-quarters of a mile upstream from mouth.

Drainage area.--91.1 sq mi.

Records available.--October 1931 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 350.14 ft above mean sea level, datum of 1929.

Average discharge.--28 years, 172 cfs.

Extremes.--Maximum discharge during year, 1,310 cfs June 19 (gage height, 8.58 ft); maximum gage height, 9.45 ft Apr. 4 (backwater from ice); minimum discharge, 3.4 cfs Aug. 4, 6, caused by temporary closure of cofferdam 1,000 ft upstream.
1931-59: Maximum discharge, 5,820 cfs Sept. 17, 1932, Nov. 27, 1950; maximum gage height, 17.63 ft Mar. 13, 1936 (backwater from ice jam); minimum discharge, 1.6 cfs Sept. 30, Oct. 1, 1948.

Remarks.--Records good except those for periods of ice effect or rock dam on control, which are fair.

Revisions.--WSP 1171: Drainage area.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	354	128	34	55	21	81	380	37	222	15	32
2	54	267	143	32	55	26	112	355	37	170	14	*41
3	46	222	152	32	70	34	360	342	37	133	11	200
4	41	190	156	29	81	38	855	331	33	101	10	245
5	35	167	138	28	62	41	949	*320	29	87	9.3	192
6	34	150	110	28	50	47	1,030	304	30	73	8.7	118
7	33	139	120	28	44	70	*949	288	222	73	*11	73
8	32	122	146	28	40	94	895	268	229	62	15	47
9	32	130	156	27	39	87	813	233	233	*51	20	32
10	32	190	160	26	44	73	703	203	210	43	29	24
11	35	182	164	26	47	59	683	185	151	37	57	21
12	41	159	138	25	50	54	601	159	108	41	45	18
13	36	143	114	25	44	63	530	151	115	37	32	14
14	34	146	98	25	41	55	490	133	304	39	25	13
15	32	182	84	26	44	45	485	122	559	39	23	12
16	33	228	68	*55	55	41	481	111	703	33	21	11
17	62	210	65	120	47	47	495	94	*773	36	21	9.3
18	105	193	64	190	44	56	547	87	*799	39	22	8.7
19	94	*216	63	164	34	56	651	79	1,240	37	27	8.7
20	74	216	62	128	*30	52	716	73	845	36	23	8.7
21	59	199	63	108	28	55	559	68	554	39	22	8.3
22	51	169	59	120	28	68	461	94	382	41	25	7.9
23	45	139	56	178	26	*120	445	94	288	39	23	8.3
24	79	126	55	172	25	89	*490	84	214	34	20	8.3
25	213	107	55	140	24	73	553	87	170	27	19	8.3
26	204	99	52	116	22	65	565	81	148	20	16	8.3
27	219	114	47	98	20	64	481	65	144	15	15	8.3
28	415	114	44	84	20	63	416	57	133	14	16	8.3
29	773	122	41	74	-	62	378	51	*229	14	17	8.3
30	677	120	39	68	-------	55	360	45	297	14	23	8.7
31	482	-------	38	64	-------	55	-------	45	-------	14	30	-------
Total	4,146	5,115	2,878	2,298	1,169	1,830	17,134	4,969	9,253	1,660	665.0	1,211.4
Mean	134	170	92.8	74.1	41.8	59.0	571	160	308	53.5	21.5	40.4
Cfsm	1.47	1.87	1.02	0.813	0.459	0.648	6.27	1.76	338	0.587	0.236	0.443
In.	1.70	2.09	1.18	0.94	0.48	0.75	7.00	2.03	3.77	0.68	0.27	0.49

Calendar year 1958: Max 4,440 Min 14 Mean 235 Cfsm 2.58 In. 34.95
Water year 1958-59: Max 1,240 Min 7.9 Mean 143 Cfsm 1.57 In. 21.38

Peak discharge (base, 1,200 cfs).--June 19 (5:30 a.m.) 1,310 cfs (8.58 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 3 to Apr. 4 and by rock dam on control Aug. 7 to Sept. 4.

465. Kennebec River at Bingham, Maine

Location.--Lat 45°03'05", long 69°53'15", on right bank at Bingham, Somerset County, 200 ft downstream from highway bridge, half a mile downstream from Austin Stream, $1\frac{3}{4}$ miles downstream from Wyman Dam.

Drainage area.--2,710 sq mi, approximately.

Records available.--June 1907 to June 1910, October 1930 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 330.2 ft above mean sea level, datum of 1929. June 1907 to June 1910, chain gage on highway bridge at different datum.

Average discharge.--31 years (1907-9, 1930-59), 4,270 cfs (unadjusted).

Extremes.--Maximum discharge during year, 33,400 cfs June 19 (gage height, 11.80 ft); minimum daily, 2,040 cfs May 3.
1907-10, 1930-59: Maximum discharge, 58,800 cfs Mar. 20, 1936 (gage height, 14.44 ft), from rating curve extended above 30,000 cfs on basis of computations of flow at Wyman Dam plus inflow; minimum daily, 110 cfs Dec. 25, 1947.

Remarks.--Records excellent except those for periods of ice effect, which are good. Flow regulated by Moosehead Lake (see p. 54); Brassua, Flagstaff, and Spencer Lakes, Second Roach, First Roach, Indian, Moxie and Wyman Ponds (see p. 54). Considerable diurnal fluctuation caused by powerplant above station.

Revisions (water years).--WSP 1271: 1951(M). WSP 1301: 1936(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

6.0	1,940	8.5	10,600
6.5	3,090	9.0	13,200
7.0	4,500	10.0	19,300
7.5	6,270	12.0	35,200
8.0	8,320		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,700	3,330	3,460	3,280	3,170	2,960	3,440	5,440	3,520	10,600	3,530	3,650
2	3,550	2,380	3,720	3,740	b3,600	3,830	3,370	2,830	3,400	8,150	3,120	3,220
3	3,470	2,820	3,840	3,500	3,440	3,610	5,260	2,040	3,530	8,630	3,520	3,160
4	3,590	3,300	3,810	3,060	3,250	3,630	6,010	2,780	3,580	5,520	3,980	2,620
5	2,850	3,350	3,710	3,860	3,540	3,840	6,230	2,660	3,510	5,530	3,490	2,850
6	3,780	3,520	3,850	4,010	3,390	3,810	7,360	2,920	3,300	5,240	3,650	2,440
7	3,480	*3,290	3,010	3,870	b3,390	3,610	*8,440	3,230	2,920	3,820	3,590	2,350
8	3,630	3,400	3,480	3,750	b3,050	3,210	8,350	3,910	3,500	3,860	3,440	3,330
9	3,850	2,780	3,630	3,740	b3,500	3,980	8,170	3,100	3,460	4,160	3,110	3,480
10	3,830	3,160	3,820	3,930	3,440	3,740	7,370	2,450	3,680	4,170	3,590	3,650
11	3,580	2,810	3,560	2,750	3,520	3,780	6,390	4,460	3,610	4,050	3,720	3,650
12	3,030	2,860	3,810	3,750	3,500	3,990	5,300	3,750	3,320	3,430	3,280	3,560
13	3,670	2,810	3,760	3,200	3,510	3,780	6,690	3,170	3,440	3,670	3,390	2,870
14	3,630	3,170	3,300	3,390	3,480	3,710	6,710	3,500	4,990	3,920	3,300	3,800
15	3,720	3,230	3,590	3,420	2,770	3,110	6,600	3,330	15,800	3,820	3,640	3,700
16	3,630	3,090	3,670	3,340	3,920	3,590	6,120	3,080	24,200	3,840	3,080	3,400
17	3,560	3,230	3,690	3,450	3,510	3,620	4,850	2,710	*25,500	3,590	3,640	3,880
18	3,620	3,380	3,650	3,340	3,420	3,880	4,100	3,150	25,500	3,320	3,560	3,780
19	2,710	3,200	3,870	3,650	3,830	4,030	4,300	3,160	31,300	2,990	3,660	3,340
20	3,970	3,250	3,950	3,440	b3,700	3,610	5,650	3,270	26,900	3,540	3,520	3,170
21	3,630	3,110	3,240	3,350	3,430	3,930	6,100	3,220	15,600	3,510	3,640	3,740
22	3,620	3,040	3,980	3,160	b3,200	3,200	5,900	4,070	12,000	3,520	3,490	4,030
23	3,600	2,580	3,840	3,830	b3,700	4,950	5,830	4,440	10,100	3,560	3,050	3,710
24	3,700	3,290	3,420	3,380	3,290	3,870	5,450	4,400	8,410	3,750	3,640	3,660
25	3,510	3,290	3,420	2,540	b3,600	3,770	5,580	4,700	8,100	3,500	3,720	3,730
26	2,570	3,410	3,420	b3,400	3,610	3,940	5,000	4,660	5,860	3,140	3,570	3,630
27	3,400	2,830	3,300	b3,450	3,930	3,700	6,540	4,600	5,420	3,720	3,640	3,100
28	3,660	3,130	2,930	3,290	3,480	3,900	6,210	4,540	4,790	3,510	3,540	3,870
29	6,750	3,040	3,650	3,480	-	2,660	5,940	4,590	5,810	3,550	3,700	3,730
30	7,000	3,000	3,720	3,150	-------	3,750	5,870	3,890	11,900	3,660	2,910	3,610
31	6,020	-------	3,700	3,660	-------	3,580	-------	3,420	-------	3,580	3,950	-------
Total	118,310	93,080	111,800	107,170	97,170	114,370	179,130	111,470	286,950	134,850	108,660	102,710
Mean	3,816	3,103	3,606	3,457	3,470	3,689	5,971	3,596	9,565	4,350	3,505	3,424
(†)	-478	+1,303	-1,577	-1,388	-2,155	-2,361	+8,141	+3,866	+473	-1,937	-2,112	-3,129

Adjusted for change in reservoir contents

Mean	3,338	4,406	2,029	2,069	1,315	1,328	14,110	7,462	10,040	2,413	1,393	295
Cfsm	1.23	1.63	0.749	0.763	0.485	0.490	5.21	2.75	3.70	0.891	0.514	0.109
In.	1.42	1.82	0.86	0.88	0.50	0.56	5.81	3.17	4.13	1.03	0.59	0.12

	Observed			Adjusted		
Calendar year 1958:	Max 29,100	Min 2,050	Mean 5,478	Mean 5,450	Cfsm 2.01	In. 27.31
Water year 1958-59:	Max 31,300	Min 2,040	Mean 4,290	Mean 4,174	Cfsm 1.54	In. 20.89

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Brassua, Moosehead, Flagstaff and Spencer Lakes, Second and First Roach, Indian, Moxie and Wyman Ponds.
b Stage-discharge relation affected by ice.

470. Carrabassett River near North Anson, Maine

Location.--Lat 44°52'00", long 69°57'10", on left bank 3 miles upstream from Mill Stream and North Anson, Somerset County.

Drainage area.--354 sq mi.

Records available.--November and December 1901, June 1902 to May 1907, August 1925 to September 1959. Monthly discharge only for some periods, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 303.3 ft above mean sea level, datum of 1929. Nov. 1, 1901, to May 5, 1907, chain and rod gages 1 mile upstream at different datum.

Average discharge.--38 years (1902-6, 1925-59), 688 cfs.

Extremes.--Maximum discharge during year, about 9,000 cfs Apr. 3 (occurred during period of ice effect); minimum, 50 cfs Sept. 26 (gage height, 2.50 ft).
1902-7, 1925-59: Maximum discharge, 30,800 cfs Mar. 19, 1936 (gage height, 21.17 ft); minimum, 18 cfs Oct. 29, 1929 (gage height, 2.02 ft).

Remarks.--Records excellent except those for period of ice effect, which are fair. Some regulation at low flow by mills above station.

Revisions (water years).--WSP 851: Drainage area. WSP 1231: 1904-7, 1928(M), 1932(M), 1936(M), 1938(M), 1944(M), 1950(M).

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.6	61	6.0	2,030
3.0	128	7.0	3,230
3.5	270	8.0	4,530
4.0	490	10.0	7,670
5.0	1,160		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	154	1,140	545	154	235	108	440	1,130	204	726	101	333
2	*168	950	545	150	230	128	865	1,140	201	583	114	*324
3	166	694	530	144	215	150	3,520	1,100	198	522	99	1,070
4	142	543	505	140	235	176	6,650	1,050	176	440	95	1,260
5	130	485	510	132	235	182	4,930	1,060	164	375	87	726
6	130	480	555	128	225	182	4,480	1,120	149	328	84	465
7	120	495	570	126	205	235	3,930	1,130	154	304	77	341
8	116	465	545	122	182	240	3,300	1,150	184	274	74	274
9	114	520	490	116	170	225	3,830	897	535	238	133	226
10	106	1,010	440	112	168	196	3,110	754	577	213	154	193
11	106	860	405	110	170	188	3,350	795	380	207	840	164
12	126	713	375	108	176	170	2,660	867	289	235	367	142
13	120	612	350	108	*166	168	2,270	817	266	216	229	120
14	114	606	335	108	166	160	2,100	687	985	252	174	106
15	114	831	325	106	176	164	2,220	583	3,560	232	137	104
16	116	989	335	*104	182	198	2,210	495	3,910	193	122	101
17	188	747	325	182	176	230	2,460	435	3,750	174	126	97
18	380	655	300	545	164	205	2,810	389	*3,140	151	128	85
19	293	740	280	495	150	192	2,780	349	4,750	137	120	76
20	235	*760	270	465	142	210	2,970	333	2,840	137	114	76
21	201	649	255	440	142	270	2,240	341	1,640	135	108	82
22	182	566	235	480	138	350	1,910	480	1,100	130	135	82
23	174	490	215	545	128	395	1,810	511	824	126	135	80
24	515	460	198	590	126	*385	1,930	398	549	106	116	79
25	1,280	431	182	545	118	355	*2,170	412	485	101	120	73
26	802	333	176	440	108	300	2,180	371	440	94	122	65
27	1,350	455	176	350	100	325	1,930	308	506	99	114	62
28	2,760	426	176	310	97	300	1,520	274	495	97	108	70
29	4,240	402	174	270	-	280	1,210	238	1,350	94	118	73
30	2,650	490	170	250	-------	265	1,080	226	1,110	88	320	77
31	1,590	-------	164	240	-------	275	-------	226	-------	87	300	-------
Total	18,882	18,997	10,656	8,115	4,725	7,207	78,865	20,066	34,911	7,094	5,071	7,026
Mean	609	633	344	262	169	232	2,629	647	1,164	229	164	234
Cfsm	1.72	1.79	0.972	0.740	0.477	0.655	7.43	1.83	3.29	0.647	0.463	0.661
In.	1.98	2.00	1.12	0.85	0.50	0.76	8.29	2.11	3.67	0.75	0.53	0.74

Calendar year 1958: Max 14,000 Min 79 Mean 861 Cfsm 2.43 In. 33.01
Water year 1958-59: Max 6,650 Min 62 Mean 607 Cfsm 1.71 In. 23.30

Peak discharge (base, 6,000 cfs).--Apr. 3 (time unknown) about 9,000 cfs.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 1 to Apr. 3.

480. Sandy River near Mercer, Maine

Location.--Lat 44°42'30", long 69°56'25", on right bank 0.9 mile upstream from Bog Stream, 3 miles north of Mercer, Somerset County, and 9½ miles upstream from mouth.

Drainage area.--514 sq mi.

Records available.--October 1928 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 197.1 ft above mean sea level, datum of 1929.

Average discharge.--31 years, 921 cfs.

Extremes.--Maximum discharge during year, 10,900 cfs Apr. 4 (gage height, 9.23 ft); minimum, 109 cfs Sept. 29 (gage height, 2.79 ft).
1928-59: Maximum discharge, 38,600 cfs Mar. 19, 1936 (gage height, 16.75 ft), from rating curve extended above 12,000 cfs on basis of records for stations on Kennebec River at Bingham and Waterville, Carrabassett River near North Anson, and Sebasticook River near Pittsfield; minimum, 32 cfs Sept. 22-26, 1939 (gage height, 2.15 ft).

Remarks.--Records excellent except those for period of ice effect, which are fair.

Revisions (water years).--WSP 756: 1933. WSP 801: Drainage area. WSP 1231: 1936(M).

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 2				Apr. 3 to Sept. 30			
2.8	111	5.0	1,540	2.8	111	5.0	1,650
3.0	160	6.0	2,960	3.0	160	6.0	3,100
3.5	352	7.0	4,920	3.5	358	7.0	5,180
4.0	650	8.0	7,270	4.0	671	8.0	7,550
4.5	1,040			4.5	1,100	9.0	10,200

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	200	1,420	635	220	340	134	1,410	1,460	287	1,490	204	1,020
2	242	1,130	610	220	275	134	2,200	1,440	257	1,180	300	1,200
3	*256	1,010	570	215	245	184	7,070	1,320	261	1,010	222	3,180
4	223	907	545	215	260	305	9,810	1,220	253	838	160	3,200
5	193	803	540	210	295	340	7,550	1,200	222	695	137	1,630
6	166	720	585	205	300	350	8,000	1,220	214	592	125	982
7	157	671	900	205	260	490	7,210	1,190	218	526	113	734
8	147	616	780	200	245	585	6,090	1,130	245	507	132	586
9	137	657	670	198	230	460	6,570	1,030	1,280	*441	137	489
10	132	1,510	595	190	230	315	4,930	862	1,500	374	257	424
11	134	1,160	565	188	235	295	5,460	774	782	390	1,390	369
12	139	931	520	184	250	270	4,310	766	520	489	638	329
13	160	795	495	*178	225	260	3,610	758	412	464	513	283
14	155	780	465	176	225	250	3,230	710	765	990	358	*241
15	139	1,060	450	176	240	240	3,360	649	4,200	552	283	225
16	137	1,200	460	184	255	260	3,230	579	4,320	429	229	222
17	144	989	450	305	225	340	3,320	526	4,080	363	214	204
18	338	827	405	720	200	405	3,810	476	3,320	324	233	190
19	450	875	370	955	198	350	3,490	453	5,470	314	229	190
20	323	891	340	635	192	305	1,990	418	4,080	507	190	172
21	256	780	305	565	190	460	2,800	412	2,230	338	178	157
22	220	692	280	520	184	700	2,280	470	1,540	309	178	150
23	203	610	270	650	170	*1,240	2,100	782	1,240	269	194	144
24	320	552	260	865	*156	1,220	2,200	559	1,000	237	187	142
25	1,220	533	255	720	150	1,040	2,400	507	814	*211	178	139
26	1,010	*496	240	570	144	990	2,340	507	710	178	190	134
27	1,590	615	225	460	142	970	*2,100	441	742	160	200	120
28	2,950	665	215	405	138	940	1,710	385	750	144	204	113
29	5,340	595	215	385	-	850	1,460	309	*3,980	137	363	113
30	3,180	630	215	380	-------	860	*1,490	287	2,690	134	545	120
31	1,890	-------	220	370	-------	1,040	-------	265	-------	134	703	-------
Total	22,151	25,120	13,650	11,669	6,199	16,582	117,530	23,105	48,382	14,726	9,384	17,202
Mean	715	837	440	376	221	535	3,918	745	1,613	475	303	573
Cfsm	1.39	1.63	0.856	0.732	0.430	1.04	7.62	1.45	3.14	0.924	0.589	1.11
In.	1.60	1.82	0.99	0.84	0.45	1.20	8.50	1.67	3.50	1.07	0.68	1.24

Calendar year 1958: Max 14,400 Min 86 Mean 1,148 Cfsm 2.23 In. 30.31
Water year 1958-59: Max 9,810 Min 113 Mean 892 Cfsm 1.74 In. 23.56

Peak discharge (base, 6,000 cfs).--Oct. 29 (8 to 9 a.m.) 6,220 cfs (7.57 ft); Apr. 4 (3:30 a.m.) 10,900 cfs (9.23 ft); June 29 (12:30 p.m.) 6,710 cfs (7.65 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Apr. 3 (no gage-height record Jan. 5-13).

490. Sebasticook River near Pittsfield, Maine

Location.--Lat 44°42'55", long 69°24'55", on right bank 1¾ miles upstream from Twentyfive-mile Stream and 4 miles south of Pittsfield, Somerset County.

Drainage area.--579 sq mi.

Records available.--October 1928 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 133.9 ft above mean sea level, datum of 1929.

Average discharge.--30 years (1929-59), 924 cfs.

Extremes.--Maximum discharge during year, 8,410 cfs Apr. 7 (gage height, 9.79 ft); minimum daily, 4.6 cfs June 4.
1928-59: Maximum discharge, 14,400 cfs Mar. 22, 1936 (gage height, 13.18 ft); minimum, 2.9 cfs Dec. 30, 1941 (gage height, 0.40 ft); minimum daily, 4.5 cfs Nov. 10, 1956.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Considerable diurnal fluctuation caused by powerplants above station. Flow partly regulated by powerplants above station and by Great Moose and Sebasticook Lakes and Plymouth Pond (combined capacity, about 2,345,000,000 cu ft).

Revisions.--WSP 1271: Drainage area.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.7	4.6	2.5	284
.9	10	3.0	524
1.2	25	3.5	874
1.4	42	4.0	1,340
1.6	65	6.0	3,400
1.8	95	8.0	5,900
2.0	134	10.0	8,700

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	188	2,310	1,770	430	540	420	1,300	1,050	410	665	17	158
2	275	2,190	1,810	420	580	430	1,550	1,020	395	625	111	375
3	395	2,070	1,640	114	570	430	2,800	1,020	190	605	260	580
4	6.9	1,800	1,540	350	560	440	4,660	968	4.6	340	235	1,280
5	52	1,580	1,400	400	410	440	6,360	874	148	447	142	1,100
6	485	1,350	1,350	400	400	410	7,650	794	5.5	655	152	977
7	420	1,140	1,330	390	81	84	8,180	760	6.9	530	215	900
8	400	986	1,320	390	480	480	8,210	630	220	490	10	760
9	9.4	908	1,270	380	500	540	8,240	96	330	435	34	625
10	370	1,020	1,180	90	500	560	8,180	463	166	210	355	540
11	6.9	1,110	1,110	370	500	560	7,680	695	156	9.1	240	470
12	6.9	1,140	1,010	380	490	570	7,150	560	146	14	132	333
13	345	1,140	925	370	470	570	6,540	345	6.9	475	138	337
14	260	1,110	842	*360	9.7	450	5,800	450	8.8	420	186	*505
15	110	1,100	779	280	200	620	5,060	435	*430	410	7.2	290
16	176	1,080	700	296	460	*620	4,440	158	480	210	11	190
17	260	1,040	600	55	460	630	4,010	328	720	200	320	400
18	170	995	500	520	10	640	3,640	545	915	7.8	172	225
19	7.8	986	370	585	450	640	3,390	420	1,140	9.4	142	7.5
20	285	1,010	340	600	450	600	3,220	390	1,060	410	134	7.8
21	325	1,020	440	700	15	520	*3,030	345	1,280	325	166	280
22	315	1,020	500	840	440	900	2,760	355	1,530	120	8.8	156
23	325	977	500	960	450	1,330	2,440	6.2	1,400	210	37	128
24	425	934	500	1,100	440	1,210	2,190	11	1,260	104	315	150
25	435	874	490	650	15	1,180	1,920	445	1,100	6.2	154	154
26	485	834	480	1,100	420	1,190	1,700	395	930	6.9	116	7.8
27	650	1,060	470	980	420	1,230	1,570	355	623	198	120	53
28	1,080	1,240	200	850	16	1,000	1,410	64	656	16	116	360
29	1,630	1,450	450	700	-	1,090	1,280	49	840	40	21	118
30	2,060	1,680	440	580	-------	1,190	1,130	6.9	710	66	93	170
31	2,260	-------	430	350	-------	*1,130	-------	6.7	-------	215	395	-------
Total	14,218.9	37,154	26,686	15,990	10,336.7	22,104	127,490	14,039.8	17,267.7	8,474.4	4,555.0	11,637.1
Mean	459	1,238	861	516	369	713	4,250	453	577	273	147	388
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 7,200 Min 6.4 Mean 1,202 Cfsm 2.08 In. 28.19
Water year 1958-59: Max 8,240 Min 4.6 Mean 849 Cfsm 1.47 In. 19.91

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 16-27, Dec. 29 to Jan. 2, Jan. 4-14, Jan. 18 to Feb. 8, Feb. 8-13, 15-27, Mar. 1-6, 8-22.

495. Cobbosseecontee Stream at Gardiner, Maine

Location.--Lat 44°13'15", long 69°47'25", at dam of Gardiner Water Power Co., in Gardiner, Kennebec County, 1.2 miles upstream from mouth.

Drainage area.--217 sq mi.

Records available.--June 1890 to September 1959.

Gage.--Staff gage in pond above dam and in tailrace of powerplant. Datum of gage is about at mean sea level.

Average discharge.--69 years, 325 cfs.

Extremes.--Maximum daily discharge during year, 305 cfs Apr. 18, 21; minimum daily, 10 cfs Nov. 27, Dec. 25, Jan. 17, 18, Feb. 14, Mar. 26, 27, May 30, June 28 to July 4, Sept. 6, 7.
1890-1959: Maximum discharge, 5,020 cfs Mar. 21, 1936 (elevation, 139.4 ft above mean sea level); maximum daily, 4,320 cfs Mar. 20, 21, 1936; minimum, leakage only, when all gates in dam are closed.

Remarks.--Discharge is sum of flow over dam, through gates and water wheels (computed on basis of coefficients and experiments), and leakage. Flow regulated by Cobbosseecontee Lake (surface area, 8.5 sq mi) and several other lakes above station.

Cooperation.--Records of daily discharge furnished by S. D. Warren Co.

Revisions (water years).--WSP 541: 1916-20. WSP 1201: Drainage area. WSP 1231: 1910-15.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	240	270	285	260	255	245	280	280	205	10	160	180
2	245	265	285	260	260	250	285	295	195	10	170	180
3	255	270	290	265	260	245	300	295	180	10	165	200
4	245	260	285	270	255	250	295	300	265	10	170	225
5	245	275	280	260	260	245	300	295	160	125	175	225
6	250	275	280	255	260	245	300	295	155	155	165	10
7	255	265	260	260	260	245	295	285	135	150	155	10
8	255	260	250	255	260	250	290	280	140	150	150	215
9	250	270	275	255	260	250	295	285	140	150	155	210
10	225	265	275	250	260	250	295	275	145	150	155	225
11	225	260	265	250	260	250	295	270	160	160	185	235
12	250	260	260	250	255	255	280	270	160	170	180	235
13	255	265	255	250	255	250	285	265	160	185	180	225
14	255	265	250	245	10	250	290	265	170	190	175	210
15	250	245	255	250	245	255	295	270	160	195	170	220
16	250	275	255	245	245	260	290	255	165	195	180	240
17	245	265	245	10	245	260	300	255	180	195	185	235
18	245	265	240	10	250	265	305	255	190	190	190	225
19	265	265	245	240	245	260	300	235	190	180	190	185
20	255	270	240	255	245	265	300	230	205	185	185	160
21	245	270	245	240	245	265	305	225	200	185	180	160
22	245	265	270	240	255	275	300	225	210	175	185	160
23	245	270	275	245	265	280	300	225	195	170	190	165
24	245	265	280	240	270	270	295	215	190	165	180	140
25	250	260	10	235	255	285	295	215	190	160	185	105
26	250	275	280	240	250	10	295	210	185	160	180	85
27	270	10	260	250	250	10	295	205	180	165	180	95
28	280	265	265	250	250	300	295	225	10	160	185	120
29	270	295	265	255	-	290	295	215	10	155	190	125
30	270	290	260	250	-------	280	280	10	10	160	190	130
31	275	-------	265	255	-------	275	-------	210	-------	155	180	-------
Total	7,805	7,775	7,950	7,295	6,885	7,585	8,830	7,635	4,840	4,575	5,465	5,135
Mean	252	259	256	235	246	245	294	246	161	148	176	171
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 305 Min 10 Mean 245 Cfsm - In. -
Water year 1958-59: Max 305 Min 10 Mean 224 Cfsm - In. -

Smaller reservoirs in Kennebec River basin

385. Brassua Lake on Moose River, 4 miles southwest of Rockwood, Maine, completed in 1928, for power, has usable capacity of 8,560,000,000 cu ft between elevations 1,043.0 and 1,073.0 ft. Elevation record furnished by Kennebec Water Power Co.

395. Second Roach Pond on Roach River, 6 miles east of Kokadjo, Maine, used for power, has usable capacity of 216,000,000 cu ft between gage heights 0.5 and 10.0 ft. Gage-height record furnished by Kennebec Water Power Co.

400. First Roach Pond on Roach River, at Kokadjo, Maine, used for power, has usable capacity of 938,000,000 cu ft between gage heights 1.5 and 8.0 ft. Gage-height record furnished by Kennebec Water Power Co.

405. Moosehead Lake on Kennebec River (see p.

415. Indian Pond on Kennebec River, 13 miles downstream from East Outlet of Moosehead Lake, Maine, completed in 1954 for power, has capacity of 830,000,000 cu ft in normal operating range between elevations 950.0 and 955.0 ft (total capacity of pond 3,150,000,000 cu ft below elevation 955.0 ft). Elevation record furnished by Central Maine Power Co.

420. Moxie Pond on Moxie Stream, 4½ miles east of The Forks, Maine, used for power, has usable capacity of 640,000,000 cu ft between gage heights 6.0 and 14.0 ft. Gage-height record furnished by Kennebec Water Power Co.

430. Flagstaff Lake on Dead River, three-quarters of a mile upstream from Black Brook, Maine, in T.3, R.4, completed in 1950 for power, has usable capacity of 12,050,000,000 cu ft between elevations 1,110 and 1,146 ft. Elevation record furnished by Kennebec Water Power Co.

445. Spencer Lake on Little Spencer Stream, Maine, 4 miles upstream from mouth, in T.3, R.5, used for power, has usable capacity of 639,000,000 cu ft between gage heights 3.5 and 12.0 ft. Gage-height record furnished by Kennebec Water Power Co.

455. Wyman Pond on Kennebec River, 1½ miles upstream from Bingham, Maine, completed in 1930 for power, has capacity of 2,630,000,000 cu ft in normal operating range between elevations 465.0 and 485.0 ft (total capacity of pond, 9,080,000,000 cu ft below elevation 485.0 ft). Elevation record furnished by Central Maine Power Co.

Month-end contents, in millions of cubic feet, water year October 1958 to September 1959

Date	Brassua Lake	Second Roach Pond	First Roach Pond	Indian Pond	Moxie Pond	Flagstaff Lake	Spencer Lake	Wyman Pond
Sept.30, 1958.....	5,842	0	624	3,060	658	7,524	666	8,960
Oct. 31.....	5,606	0	196	3,096	676	8,090	171	8,920
Nov. 30.....	5,250	0	0	3,186	307	8,238	38	8,790
Dec. 31.....	5,006	0	0	3,024	60	5,720	0	8,900
Jan. 31, 1959.....	4,698	0	0	3,060	60	4,818	0	8,920
Feb. 28.....	4,480	0	0	3,096	30	4,772	0	9,020
Mar. 31.....	2,534	0	0	2,970	30	1,875	0	8,930
Apr. 30.....	6,324	33.5	503	3,150	640	9,640	639	8,780
May 31.....	8,854	11.0	815	3,150	685	12,131	570	8,830
June 30.....	8,896	11.0	952	3,294	712	12,173	729	9,050
July 31.....	8,812	0	732	3,204	658	9,501	639	8,960
Aug. 31.....	6,936	0	664	3,204	676	8,270	639	9,000
Sept.30.....	4,631	0	316	3,132	116	6,444	604	8,980

Note.--Wyman Pond contents at 12 p.m. on day shown. All others at 7 a.m. on first day of following month.

525. Diamond River near Wentworth Location, N. H.

Location.--Lat 44°52'40", long 71°03'25", on left bank 0.7 mile upstream from mouth and 1½ miles north of Wentworth Location, Coos County.

Drainage area.--153 sq mi.

Records available.--July 1941 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 1,275 ft (from topographic map).

Average discharge.--18 years, 342 cfs.

Extremes.--Maximum discharge during year, 3,320 cfs June 15 (gage height, 7.29 ft); minimum, 26 cfs Aug. 7 (gage height, 1.37 ft).
1941-59: Maximum discharge, 8,630 cfs June 16, 1943 (gage height, 10.66 ft), from rating curve extended above 3,000 cfs; minimum, 6.8 cfs Aug. 27, 28, 1949, Sept. 1, 1952 (gage height, 0.81 ft).

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	21	3.0	320
1.5	35	4.0	705
1.7	53	5.0	1,270
2.0	89	6.0	2,010
2.5	185	7.0	3,000

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	210	652	168	64	126	64	110	928	204	378	160	420
2	396	468	160	64	120	64	136	999	277	359	106	300
3	234	385	148	63	114	63	385	1,100	277	420	56	350
4	175	330	140	62	110	64	1,050	1,150	212	301	34	440
5	159	301	138	61	124	64	870	1,330	159	239	31	300
6	159	292	136	58	122	64	906	1,350	156	195	29	150
7	139	292	160	58	118	64	870	1,380	402	216	26	62
8	124	260	235	*58	108	64	825	1,210	292	171	35	58
9	115	242	210	56	100	64	1,250	765	1,020	137	90	54
10	110	263	192	55	92	64	972	648	515	117	230	52
11	260	255	176	53	89	66	1,100	657	304	102	400	57
12	242	232	160	53	*82	69	890	785	226	104	250	142
13	180	212	140	52	84	69	755	627	209	131	140	110
14	146	290	128	50	84	68	805	503	305	102	100	74
15	135	622	120	49	82	66	*961	406	2,810	85	89	54
16	157	601	110	51	80	65	1,100	346	2,520	76	92	*44
17	640	410	104	63	77	64	1,660	292	1,160	68	106	48
18	495	388	94	89	76	64	1,700	250	885	62	92	49
19	330	495	89	260	76	64	1,960	224	850	54	70	48
20	250	427	86	140	75	66	1,660	263	618	71	56	42
21	214	346	80	126	75	89	1,130	330	450	64	51	41
22	185	298	79	186	74	210	1,040	975	355	70	54	41
23	175	234	77	280	72	705	1,420	527	346	54	51	43
24	575	255	77	320	72	260	1,930	399	277	47	52	43
25	696	204	76	235	71	*160	2,260	446	*239	43	60	63
26	491	178	74	182	70	128	2,460	326	212	43	80	47
27	605	250	72	160	68	108	1,920	260	209	38	58	41
28	795	172	70	142	66	100	1,370	224	230	34	80	38
29	1,110	*142	68	136	-	92	1,170	190	1,480	32	160	36
30	714	168	66	130	-------	90	890	207	670	30	220	67
31	535	-------	65	130	-------	94	-------	274	-------	28	310	-------
Total	10,751	9,664	3,698	3,486	2,507	3,336	35,555	19,371	17,869	3,871	3,368	3,314
Mean	347	322	119	112	89.5	108	1,185	625	596	125	109	110
Cfsm	2.27	2.10	0.778	0.732	0.585	0.706	7.75	4.08	3.90	0.817	0.712	0.719
In.	2.62	2.34	0.90	0.84	0.61	0.81	8.65	4.70	4.35	0.94	0.82	0.80

Calendar year 1958: Max 4,310 Min 44 Mean 352 Cfsm 2.30 In. 31.18
Water year 1958-59: Max 2,810 Min 26 Mean 320 Cfsm 2.09 In. 28.38

Peak discharge (base, 3,600 cfs).--No peak above base.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28 to Apr. 3. No gage-height record July 30 to Sept. 16; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.

535. Androscoggin River at Errol, N. H.

Location.--Lat 44°46'55", long 71°07'45", on right bank 0.4 mile downstream from Errol Dam, 0.4 mile northeast of Errol, Coos County, and 0.6 mile upstream from Clear Stream.

Drainage area.--1,045 sq mi.

Records available.--January 1905 to September 1959. Monthly discharge only October 1922 to November 1943, published in WSP 1301. Published as "at Errol Dam" prior to 1922.

Gage.--Water-stage recorder. Datum of gage is 1,227.30 ft above mean sea level, datum of 1929. Prior to Dec. 8, 1943, movable rod gage at Errol Dam at datum 5.0 ft higher.

Average discharge.--54 years, 1,880 cfs (adjusted).

Extremes.--Maximum discharge during year, 7,460 cfs June 19 (gage height, 6.06 ft); minimum daily, 375 cfs Apr. 4.
1905-59: Maximum daily discharge, 15,700 cfs June 18, 1943; minimum daily, leakage only at various times when gates in dam were closed.
Instantaneous maximum not available prior to Dec. 9, 1943.

Remarks.--Records excellent. Flow regulated by Kennebago, Rangeley, Mooselookmeguntic, Richardson, Umbagog, and Aziscohos Lakes (see p. 64).

Cooperation.--Records prior to Dec. 9, 1943, furnished by Union Water Power Co.

Revisions.--WSP 1001: Drainage area.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

0.7	345	3.0	2,420
1.0	485	4.0	3,860
1.4	716	5.0	5,390
2.0	1,200	6.1	7,540
2.5	1,760		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,120	1,440	2,390	2,240	2,020	1,990	1,360	1,760	1,530	4,550	1,920	1,860
2	2,110	1,570	2,340	2,230	2,050	1,900	1,130	1,290	1,550	4,540	1,930	1,790
3	2,080	1,730	2,340	2,190	2,050	1,900	595	1,250	1,560	3,680	1,960	1,620
4	2,070	1,920	2,280	2,180	1,880	1,890	375	1,580	1,670	2,800	1,980	1,500
5	2,100	1,900	2,200	2,250	1,900	1,860	405	1,440	1,680	2,100	1,990	1,720
6	2,120	1,940	2,180	2,320	1,930	1,920	955	1,350	1,720	1,990	1,990	1,810
7	2,150	1,960	2,220	2,350	1,940	1,890	760	1,670	1,560	1,930	2,010	1,820
8	2,150	1,930	2,310	2,320	1,970	1,920	1,750	1,510	1,580	1,880	2,020	1,860
9	2,150	1,980	2,320	2,250	2,030	1,900	2,420	1,440	1,670	1,860	1,970	1,890
10	2,160	1,790	2,270	2,270	2,010	1,920	2,680	1,460	1,670	1,900	1,820	1,930
11	2,110	1,860	2,280	2,290	1,960	1,900	2,900	1,550	1,720	1,920	1,640	1,930
12	2,070	1,920	2,240	2,250	1,980	1,890	2,500	1,490	1,810	1,930	1,840	1,900
13	2,120	1,930	2,190	2,240	1,990	1,880	2,590	1,400	1,730	1,940	1,820	1,920
14	2,200	1,930	2,160	2,220	1,990	1,890	2,360	1,450	1,640	1,960	1,850	1,960
15	2,240	1,810	2,160	2,240	1,990	1,860	*2,350	1,610	925	1,960	1,900	1,940
16	2,230	1,720	2,180	2,160	1,990	1,820	2,340	1,500	1,260	1,940	1,930	*1,890
17	2,060	1,840	2,120	2,050	1,990	1,790	2,420	1,610	4,320	1,930	1,850	1,930
18	1,820	1,850	2,110	2,060	1,980	1,800	2,590	1,670	6,680	1,940	1,840	1,930
19	1,890	1,880	2,080	2,110	2,020	1,850	2,730	1,640	7,440	1,960	1,880	1,930
20	2,070	1,850	2,110	2,070	2,070	1,840	2,910	1,620	7,310	1,940	1,880	1,930
21	2,020	1,890	2,200	2,010	2,070	1,700	2,880	1,560	6,400	1,940	1,880	1,920
22	2,050	1,980	2,190	1,780	2,060	1,560	2,500	1,170	3,940	1,920	1,880	1,900
23	2,050	2,050	2,180	1,730	2,030	1,660	1,880	1,260	2,440	1,940	1,930	1,850
24	1,800	2,080	2,180	1,900	2,140	1,610	1,220	1,330	2,230	1,970	1,940	1,840
25	1,470	2,080	2,180	1,810	1,880	1,550	1,060	1,430	*2,010	1,970	1,920	1,860
26	1,610	2,140	2,160	1,820	2,050	1,560	1,140	1,550	1,860	1,970	1,930	1,860
27	1,290	2,050	2,160	1,920	2,070	1,560	1,780	1,580	1,820	1,980	1,940	1,840
28	868	2,120	2,160	1,960	2,100	1,520	2,130	1,590	1,880	2,010	1,930	1,820
29	884	2,230	2,180	1,970	-	1,500	1,830	1,710	3,450	2,010	1,900	1,810
30	1,030	2,320	2,180	1,940	--------	1,470	1,410	1,680	4,160	1,990	1,890	1,760
31	1,400	--------	2,230	1,930	--------	1,420	--------	1,590	--------	1,960	1,930	--------
Total	58,492	57,690	68,480	65,060	56,140	54,720	55,750	46,740	81,215	68,310	59,090	55,520
Mean	1,887	1,923	2,209	2,099	2,005	1,765	1,858	1,508	2,707	2,204	1,906	1,851
(†)	-9	-172	-1,630	-1,326	-1,527	-1,398	+5,140	+2,495	+1,578	-1,411	-1,382	-1,680

Adjusted for change in reservoir contents

Mean	1,878	1,751	579	773	478	367	6,998	4,001	4,285	793	524	171
Cfsm	1.80	1.68	0.554	0.740	0.457	0.351	6.70	3.83	4.10	0.759	0.501	0.164
In.	2.08	1.87	0.64	0.85	0.48	0.40	7.48	4.42	4.57	0.88	0.58	0.18

	Observed			Adjusted			
Calendar year 1958:	Max 7,460	Min 868	Mean 2,293	Mean 2,101	Cfsm 2.01	In. 27.34	
Water year 1958-59:	Max 7,440	Min 375	Mean 1,992	Mean 1,879	Cfsm 1.80	In. 24.43	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Kennebago, Rangeley, Mooselookmeguntic, Richardson, Umbagog, and Aziscohos Lakes.

540. Androscoggin River near Gorham, N. H.

Location.--Lat 44°26'30", long 71°11'15", on right bank at Pulsifer Rips, 2 miles downstream from Dead River and 4 miles upstream from Gorham, Coos County.

Drainage area.--1,363 sq mi.

Records available.--October 1913 to September 1959. Monthly discharge only October 1922 to February 1929, published in WSP 1301. Published as "at Berlin" prior to October 1928.

Gage.--Water-stage recorder since Mar. 16, 1929. Datum of gage is 832.88 ft above mean sea level, datum of 1929. Prior to Sept. 30, 1922, staff gages showing head and tailwater elevations at site 3 miles upstream at different datum.

Average discharge.--46 years, 2,439 cfs (adjusted).

Extremes.--Maximum discharge during year, 8,900 cfs June 19 (gage height, 7.18 ft); minimum daily, 1,700 cfs June 9, 12.
1913-59: Maximum daily discharge, 20,000 cfs June 18, 1917, Apr. 30, 1923; minimum (since 1929), 456 cfs Aug. 10, 1947 (gage height, 1.74 ft), from rating curve extended below 1,400 cfs; minimum daily, 795 cfs Mar. 15, 1948.

Remarks.--Records excellent except those for period of ice effect, which are fair. Flow regulated by powerplants above station and by Kennebago, Rangeley, Mooselookmeguntic, Richardson, Umbagog, and Aziscohos Lakes (see p. 64).

Revisions.--WSP 1001: Drainage area.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.2	1,500	6.0	6,000
4.0	2,460	7.0	8,430
5.0	4,050		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,430	2,520	2,500	2,390	2,140	2,220	1,980	2,740	1,900	4,720	2,040	2,140
2	2,600	2,430	2,720	2,400	2,180	2,120	2,100	2,670	1,820	4,820	1,990	2,060
3	2,460	2,320	2,520	2,350	2,200	2,090	2,740	2,330	1,810	4,650	1,960	2,380
4	2,320	2,400	2,660	2,320	2,290	2,090	2,970	2,230	1,780	3,520	1,980	2,310
5	2,310	2,380	2,600	2,290	2,120	2,050	2,720	2,560	1,790	2,700	1,990	1,990
6	2,310	2,330	2,500	2,240	2,180	2,050	3,230	2,380	1,750	2,190	1,990	2,010
7	2,320	2,430	2,310	2,320	2,090	2,070	3,370	2,400	1,860	2,190	2,010	1,950
8	2,320	2,320	2,400	*2,400	2,160	2,010	3,410	2,730	1,790	2,060	2,010	2,010
9	2,320	2,350	2,460	2,360	2,090	2,040	4,720	2,240	1,700	2,020	2,100	2,040
10	2,320	2,500	2,450	2,290	2,220	2,040	4,880	2,090	1,810	1,990	2,110	1,960
11	2,380	2,320	2,440	2,310	2,190	2,050	5,420	2,110	1,710	2,040	2,320	2,020
12	2,380	2,360	2,420	2,380	2,110	2,050	5,020	2,240	1,700	2,020	1,990	1,990
13	2,350	2,310	2,400	2,330	2,150	2,020	4,320	2,160	1,810	2,040	2,020	1,990
14	2,330	2,350	2,390	2,280	2,150	2,010	4,100	2,020	1,810	2,020	1,920	1,990
15	2,450	2,490	2,380	2,290	2,180	2,010	*4,210	2,020	3,020	2,050	1,980	2,040
16	2,400	2,520	2,390	2,320	2,140	2,010	4,230	2,020	4,070	2,020	2,010	*2,000
17	2,620	2,360	2,390	2,290	2,180	1,990	4,680	1,930	3,550	2,010	2,160	1,870
18	2,850	2,320	2,350	2,200	2,180	1,980	5,360	2,010	6,110	2,010	2,070	2,010
19	2,380	2,390	*2,320	2,200	2,150	1,980	5,520	1,990	8,100	2,010	2,020	2,020
20	2,320	2,380	2,360	2,270	2,150	2,110	5,750	1,950	8,330	2,040	2,000	2,050
21	2,320	2,320	2,400	2,220	2,180	2,240	5,020	1,940	7,870	2,020	2,010	1,930
22	2,280	2,320	2,450	2,520	2,180	2,180	4,370	2,320	6,500	2,050	2,000	2,060
23	2,330	2,330	2,430	2,450	2,140	2,120	3,960	2,260	4,020	2,000	1,950	2,060
24	2,620	2,360	2,420	2,450	2,140	2,160	3,420	1,950	2,740	2,010	2,020	2,010
25	2,740	2,350	2,500	2,420	2,120	2,020	3,090	1,900	*2,520	2,010	2,040	2,000
26	2,360	2,380	2,500	2,240	2,060	1,980	3,260	1,930	2,200	2,000	2,010	2,020
27	3,020	2,480	2,480	2,200	2,120	1,960	3,310	1,920	2,090	2,000	2,020	2,020
28	2,740	2,310	2,450	2,230	2,200	1,920	3,500	1,890	2,190	2,010	2,020	2,000
29	3,170	*2,380	2,430	2,220	-	1,880	3,310	1,840	3,280	2,060	2,110	1,990
30	2,800	2,460	2,500	2,270	--------	1,830	2,880	1,950	4,500	2,060	2,020	2,000
31	2,500	--------	2,460	2,180	--------	1,870	--------	2,060	--------	2,040	2,020	--------
Total	77,050	71,470	75,980	71,630	60,390	63,150	116,850	66,780	96,130	73,380	62,890	60,920
Mean	2,485	2,383	2,451	2,311	2,157	2,037	3,895	2,154	3,204	2,367	2,029	2,031
(†)	-9	-172	-1,630	-1,326	-1,527	-1,398	+5,140	+2,493	+1,578	-1,411	-1,382	-1,680

Adjusted for change in reservoir contents

Mean	2,476	2,211	821	985	630	639	9,035	4,647	4,782	956	647	351
Cfsm	1.82	1.62	0.602	0.723	0.462	0.469	6.63	3.41	3.51	0.701	0.475	0.258
In.	2.10	1.81	0.69	0.83	0.48	0.54	7.40	3.93	3.92	0.81	0.55	0.29

	Observed			Adjusted		
Calendar year 1958:	Max 13,300	Min 1,740	Mean 2,943	Mean 2,751	Cfsm 2.02	In. 27.45
Water year 1958-59:	Max 8,330	Min 1,700	Mean 2,456	Mean 2,343	Cfsm 1.72	In. 23.35

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Kennebago, Rangeley, Mooselookmeguntic, Richardson, Umbagog, and Aziscohos Lakes.
Note.--Stage-discharge relation affected by ice Dec. 9-29.

545. Androscoggin River at Rumford, Maine

Location.--Lat 44°32'45", long 70°32'35", on left bank at upper powerplant of Rumford Falls Power Co., 0.8 mile upstream from Swift River, at Rumford, Oxford County.

Drainage area.--2,067 sq mi.

Records available.--May 1892 to September 1959. Monthly discharge only October 1903 to September 1904, published in WSP 1301.

Gage.--Gages in pond above dam and in tailrace of upper plant. Prior to Aug. 1, 1937, gages in pond and tailrace of middle plant.

Average discharge.--67 years, 3,667 cfs (adjusted).

Extremes.--Maximum daily discharge during year, 15,700 cfs June 19; minimum daily, 1,850 cfs June 12.
1892-1959: Maximum discharge, 74,000 cfs Mar. 20, 1936; minimum daily, 625 cfs Mar. 27, 1911.

Remarks.--Discharge computed from flow over upper dam and through wheels. Flow regulated by Kennebago, Rangeley, Mooselookmeguntic, Richardson, Umbagog, and Aziscohos Lakes (see p. 64).

Cooperation.--Records furnished by Rumford Falls Power Co.

Revisions.--WSP 1001: Drainage area.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,620	4,440	2,560	2,610	2,680	2,470	3,590	4,350	2,350	5,150	2,150	4,190
2	2,950	4,170	2,990	2,720	2,580	2,450	5,180	4,430	2,130	5,100	2,210	3,950
3	2,920	3,630	3,020	2,660	2,530	2,510	12,600	3,790	2,120	5,210	2,070	6,420
4	2,840	3,350	2,740	2,750	2,690	2,480	11,900	3,920	2,100	4,610	2,020	5,380
5	2,420	3,310	3,350	2,620	2,790	2,450	10,800	4,090	2,040	3,680	2,090	3,700
6	2,510	3,090	3,230	2,390	2,650	2,340	11,000	4,770	1,980	3,320	2,090	3,320
7	2,450	3,300	2,660	2,340	2,630	2,460	9,860	4,670	2,080	3,180	2,100	3,180
8	2,510	3,080	2,370	2,600	2,540	2,270	9,940	4,710	2,290	2,880	2,120	2,730
9	2,550	3,340	2,370	2,770	2,450	2,450	12,400	3,950	2,190	2,580	2,160	2,370
10	2,460	4,860	2,820	2,580	2,420	2,400	11,700	3,230	2,290	2,390	3,420	2,460
11	2,560	4,150	2,650	2,580	2,560	2,330	12,300	3,120	2,120	2,320	4,440	2,260
12	2,670	3,470	2,510	2,560	2,500	2,390	11,100	3,380	1,850	2,320	2,970	2,320
13	2,470	3,260	2,680	2,690	2,480	2,150	9,070	3,700	2,170	2,680	2,650	2,190
14	2,400	3,140	2,660	2,670	2,350	2,240	8,300	3,150	2,660	2,790	2,290	2,150
15	2,450	4,120	2,640	2,620	2,580	2,270	8,540	2,950	8,450	2,320	2,120	2,160
16	2,600	4,620	2,600	2,660	2,570	2,430	8,820	2,750	8,690	2,430	2,150	2,250
17	2,850	3,530	2,620	3,210	2,490	2,410	10,200	2,570	7,200	2,250	2,720	2,130
18	3,300	3,250	2,560	3,510	2,510	2,260	11,600	2,510	9,950	2,160	2,660	2,080
19	3,130	3,420	2,630	3,120	2,470	2,370	11,900	2,530	15,700	2,230	2,250	2,210
20	2,500	3,550	2,530	3,010	2,360	2,590	12,200	2,460	13,400	2,250	2,140	2,110
21	2,530	3,060	2,450	2,990	2,350	3,680	9,410	2,560	10,900	2,220	2,120	2,120
22	2,430	3,070	2,440	3,730	2,490	4,530	7,850	3,010	8,650	2,190	2,120	2,180
23	2,470	3,050	2,530	5,760	2,450	3,370	7,040	3,330	5,820	2,180	2,060	2,070
24	4,090	2,770	2,510	4,050	2,450	3,340	7,150	2,680	4,080	2,150	2,060	2,090
25	5,280	2,740	2,530	3,680	2,430	3,190	7,000	2,500	3,120	2,060	2,160	2,060
26	4,350	2,740	2,560	3,230	2,380	2,870	7,350	2,480	3,160	2,140	2,190	2,010
27	7,500	3,050	2,580	2,920	2,240	2,920	6,850	2,380	2,760	2,070	2,050	2,050
28	9,180	2,740	2,690	2,850	2,350	2,800	5,230	2,240	2,900	2,150	2,310	2,060
29	8,770	2,430	2,540	2,850	-	2,720	5,110	2,230	3,990	2,090	2,680	1,990
30	6,820	2,530	2,630	2,810	--------	2,850	4,690	2,180	5,200	2,100	2,930	2,070
31	5,080	--------	2,640	2,810	--------	2,730	--------	2,350	--------	2,130	2,820	--------
Total	111,460	101,260	82,730	92,350	69,970	82,720	270,680	98,970	144,340	85,330	74,320	80,260
Mean	3,595	3,375	2,669	2,979	2,499	2,668	9,022	3,193	4,811	2,753	2,397	2,675
(†)	-9	-172	-1,630	-1,326	-1,527	-1,398	+5,140	+2,493	+1,578	-1,411	-1,382	-1,680

Adjusted for change in reservoir contents

Mean	3,586	3,203	1,039	1,653	972	1,270	14,160	5,686	6,389	1,342	1,015	995
Cfsm	1.73	1.55	0.503	0.800	0.470	0.614	6.85	2.75	3.09	0.649	0.491	0.481
In.	1.99	1.73	0.58	0.92	0.49	0.71	7.64	3.17	3.45	0.75	0.57	0.54

	Observed			Adjusted		
Calendar year 1958:	Max 32,500	Min 2,030	Mean 4,404	Mean 4,212	Cfsm 2.04	In. 27.67
Water year 1958-59:	Max 15,700	Min 1,850	Mean 3,546	Mean 3,433	Cfsm 1.66	In. 22.54

† Change on contents, equivalent in cubic feet per second, in Kennebago, Rangeley, Mooselookmeguntic, Richardson, Umbagog, and Aziscohos Lakes.

550. Swift River near Roxbury, Maine

Location.--Lat 44°38'30", long 70°35'15", on left bank 2½ miles downstream from Roxbury, Oxford County, and 6 miles upstream from mouth.

Drainage area.--95.8 sq mi.

Records available.--June 1929 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 615.67 ft above mean sea level, datum of 1929.

Average discharge.--30 years, 195 cfs.

Extremes.--Maximum discharge during year, 2,440 cfs June 15 (gage height, 5.60 ft); minimum, 11 cfs July 30, 31 (gage height, 1.04 ft).
1929-59: Maximum discharge, 14,500 cfs June 15, 1942 (gage height, 12.42 ft), from rating curve extended above 7,000 cfs; maximum gage height, 12.58 ft Sept. 17, 1932; minimum discharge, 3.8 cfs Sept. 16, 17, 1948 (gage height, 0.93 ft).

Remarks.--Records excellent except those for periods of ice effect, which are fair.

Revisions (water years).--WSP 801: 1934(m). WSP 1031: Drainage area. WSP 1301: 1937-38(M), 1942 (M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.0	9.8	2.5	255
1.2	19	3.0	437
1.4	33	3.5	680
1.7	69	4.0	1,010
2.0	124	5.0	1,810

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	316	108	31	69	45	146	383	74	116	315	550
2	91	226	104	31	63	49	340	379	74	102	66	292
3	*61	190	100	31	63	51	1,220	387	71	93	37	995
4	50	168	90	31	69	55	891	414	59	76	26	670
5	44	150	83	31	69	54	783	450	50	63	21	272
6	42	147	95	31	66	53	802	480	43	54	20	166
7	39	145	120	30	58	55	642	476	55	63	19	126
8	37	128	108	30	55	51	653	429	65	56	21	99
9	35	159	91	30	55	48	802	298	380	43	37	84
10	35	193	79	30	55	48	721	268	163	37	555	71
11	55	166	71	29	55	48	783	302	95	49	340	63
12	59	137	68	29	55	48	595	349	68	53	132	58
13	48	124	58	*29	55	50	521	281	90	59	83	51
14	43	183	55	30	54	53	560	236	560	48	62	45
15	42	364	53	31	54	48	621	188	1,670	37	43	*48
16	47	295	48	31	54	51	*692	159	802	32	49	53
17	275	205	43	69	53	50	935	137	653	29	76	48
18	242	188	41	168	53	47	1,000	124	945	25	63	45
19	132	226	37	86	51	45	1,100	116	1,200	24	39	44
20	97	202	35	66	51	68	935	128	541	32	32	42
21	79	170	33	43	50	192	631	143	309	27	32	39
22	69	147	33	83	50	625	550	365	214	23	35	39
23	69	126	33	225	48	330	630	190	173	20	27	36
24	305	112	32	148	*48	146	805	152	132	19	30	34
25	312	95	32	104	48	*106	877	170	112	19	55	32
26	205	*76	32	90	47	86	783	132	*106	18	39	28
27	735	104	32	86	45	79	590	102	110	14	31	28
28	1,080	90	32	84	45	72	450	88	124	14	250	28
29	885	104	32	78	-	69	418	72	425	13	270	28
30	463	110	31	74	-------	69	368	83	190	12	240	33
31	316	-------	31	72	-------	86	-------	102	-------	67	176	-------
Total	6,039	5,046	1,840	1,961	1,538	2,877	20,844	7,583	9,553	1,337	3,221	4,147
Mean	195	168	59.4	63.3	54.9	92.8	695	245	318	43.1	104	138
Cfsm	2.04	1.75	0.620	0.661	0.573	0.969	7.25	2.56	3.32	0.450	1.09	1.44
In.	2.35	1.95	0.72	0.76	0.60	1.12	8.09	2.95	3.70	0.52	1.24	1.61

Calendar year 1958: Max 3,610 Min 20 Mean 225 Cfsm 2.35 In. 31.92
Water year 1958-59: Max 1,670 Min 12 Mean 181 Cfsm 1.89 In. 25.61

Peak discharge (base, 2,400 cfs).--June 15 (12 p.m. to 1 a.m.) 2,440 cfs (5.60 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 24 to Feb. 24, Mar. 21 to Apr. 3.

555. Nezinscot River at Turner Center, Maine

Location.--Lat 44°16'10", long 70°13'50", on left bank 500 ft upstream from upper highway bridge at Turner Center, Androscoggin County, and 3 miles upstream from mouth.

Drainage area.--171 sq mi.

Records available.--August 1941 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 276.29 ft above mean sea level, unadjusted.

Average discharge.--18 years, 298 cfs.

Extremes.--Maximum discharge during year, 4,430 cfs Apr. 4 (gage height, 6.42 ft); minimum, 22 cfs Aug. 6, 7 (gage height, 1.05 ft).
1941-59: Maximum discharge, 13,900 cfs Mar. 27, 1953 (gage height, 11.18 ft); minimum, 5.6 cfs Aug. 29, 1956 (gage height, 0.72 ft).

Remarks.--Records excellent except those for period of ice effect, which are fair.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.0	19	3.0	620
1.1	26	4.0	1,350
1.3	47	5.0	2,390
1.6	98	6.0	3,750
2.0	195	7.0	5,450
2.5	375		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	442	260	65	132	63	420	274	63	256	31	42
2	104	327	220	66	112	75	565	281	65	213	29	73
3	100	267	190	66	98	91	1,930	253	73	232	27	162
4	85	225	166	66	128	118	4,030	225	70	192	25	295
5	73	204	160	65	146	136	3,260	207	61	150	23	274
6	61	186	170	65	166	196	2,840	189	57	122	22	174
7	53	171	260	63	146	420	2,470	177	80	108	25	118
8	49	155	465	60	128	495	*1,930	168	82	96	26	94
9	47	190	385	60	122	525	1,820	158	108	84	25	77
10	43	367	335	60	114	465	1,580	148	133	75	45	60
11	42	359	290	60	110	425	1,450	140	118	116	110	53
12	42	281	255	*63	106	380	1,280	140	89	174	125	45
13	41	225	220	65	102	385	1,040	150	84	160	96	39
14	39	204	196	66	110	365	866	160	190	138	75	34
15	37	225	170	68	118	325	775	152	535	127	57	*34
16	39	225	158	80	114	440	704	140	692	110	46	34
17	41	204	140	140	106	555	668	127	609	96	53	33
18	46	192	122	260	102	515	632	122	644	82	52	31
19	49	192	112	230	98	465	598	114	943	73	43	30
20	47	186	102	166	87	460	560	112	992	75	39	28
21	43	*171	94	130	77	565	485	108	692	84	34	27
22	42	158	85	180	66	730	420	125	470	77	32	26
23	42	145	80	260	57	895	363	148	359	68	30	27
24	94	140	73	280	63	775	335	131	278	58	30	32
25	225	138	66	230	*71	680	307	120	222	53	32	39
26	242	136	63	200	68	*590	284	112	*186	47	34	39
27	525	207	61	170	66	530	270	98	152	42	33	35
28	775	192	60	150	63	465	256	91	150	39	32	33
29	880	274	57	142	-	385	242	80	274	34	31	31
30	796	270	60	146	------	335	260	73	335	33	36	31
31	587	------	63	146	------	305	------	68	------	31	39	------
Total	5,360	6,658	5,138	3,868	2,876	13,154	32,640	4,591	8,806	3,245	1,337	2,050
Mean	173	222	166	125	103	424	1,088	148	294	105	43.1	68.3
Cfsm	1.01	1.30	0.971	0.731	0.602	2.48	6.36	0.865	1.72	0.614	0.252	0.399
In.	1.16	1.45	1.12	0.84	0.63	2.86	7.10	1.00	1.92	0.71	0.29	0.45

Calendar year 1958: Max 2,820 Min 24 Mean 363 Cfsm 2.12 In. 28.77
Water year 1958-59: Max 4,030 Min 22 Mean 246 Cfsm 1.44 In. 19.53

Peak discharge (base, 1,700 cfs).--Apr. 4 (1 p.m.) 4,430 cfs (6.42 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 30 to Apr. 3.

570. Little Androscoggin River near South Paris, Maine

Location.--Lat 44°17'05", long 70°32'10", on right bank just upstream from Biscoe Falls, 4½ miles upstream from South Paris, Oxford County.

Drainage area.--76.2 sq mi.

Records available.--September 1913 to April 1924, October 1931 to September 1959.

Gage.--Water-stage recorder and concrete control. Datum of gage is 394.48 ft above mean sea level, datum of 1929. Prior to Apr. 30, 1924, chain gage at same site and datum.

Average discharge.--38 years (1913-23, 1931-59), 136 cfs.

Extremes.--Maximum discharge during year, 2,200 cfs Apr. 3 (gage height, 7.44 ft); minimum, 7.8 cfs Aug. 6, 7 (gage height, 1.68 ft).
1913-24, 1931-59: Maximum discharge, 8,000 cfs Mar. 27, 1953 (gage height, 12.41 ft), from rating curve extended above 2,800 cfs, verified by computation of flow over dam at South Paris; minimum, 1 cfs Aug. 16, 1914, Feb. 22 to Mar. 5, 1920.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are good. Occasional slight diurnal fluctuation at low and medium flow by sawmills and gristmills above station.

Revisions (water years).--WSP 726: Drainage area. WSP 1301: 1915-23(M).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 2				Apr. 3 to Sept. 23				Sept. 24-30	
1.8	11	3.5	170	1.6	5.9	3.5	197	1.7	8.3
2.0	18	4.0	272	1.8	11	4.0	332	1.8	11
2.5	49	5.0	595	2.0	20	5.0	700		
3.0	97			2.5	55	6.0	1,200		
				3.0	109	7.0	1,850		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	131	81	30	47	30	297	154	27	80	11	94
2	35	103	71	32	43	34	426	140	28	89	10	79
3	26	83	60	32	41	35	1,520	120	30	89	9.1	270
4	22	77	59	31	49	38	1,570	106	28	64	8.8	189
5	18	69	65	31	54	41	1,090	96	24	55	8.3	101
6	15	68	128	31	49	41	1,030	89	22	50	8.1	68
7	14	62	126	30	41	85	870	84	24	40	8.1	50
8	12	55	102	30	40	93	734	80	30	34	8.1	38
9	12	71	82	29	35	66	*837	74	44	30	8.6	29
10	12	186	65	29	36	59	692	68	50	27	28	24
11	14	139	55	29	38	55	721	67	34	38	78	22
12	17	112	50	29	35	49	592	64	25	48	36	18
13	14	90	47	29	36	55	473	80	28	40	22	17
14	*12	87	42	28	35	55	410	68	190	40	18	15
15	12	110	41	28	37	51	396	67	480	32	14	*14
16	12	101	47	30	38	63	*375	59	427	35	14	15
17	15	86	43	77	37	78	365	54	348	25	22	15
18	19	78	44	124	36	70	389	50	392	22	20	15
19	19	81	42	104	35	59	358	47	592	22	16	13
20	16	75	41	91	33	84	329	47	438	53	14	13
21	15	66	39	78	28	199	269	45	248	42	12	12
22	14	61	38	102	26	277	222	82	163	33	11	12
23	14	59	40	140	27	254	*195	78	127	26	10	11
24	60	56	39	136	28	219	176	61	89	22	9.9	11
25	124	55	34	114	28	172	166	60	75	20	12	9.9
26	95	52	32	86	28	156	154	52	66	18	12	9.1
27	310	93	33	71	28	162	*143	44	*66	16	11	8.6
28	312	72	33	63	28	140	130	38	74	15	10	8.6
29	344	109	29	56	-	128	126	33	170	13	11	8.6
30	279	108	32	55	-------	140	142	29	124	12	11	*8.3
31	184	-------	33	55	-------	184	-------	30	-------	11	13	-------
Total	2,083	2,595	1,673	1,830	1,016	3,172	15,197	2,166	4,463	1,141	485.0	1,198.1
Mean	67.2	86.5	54.0	59.0	36.3	102	507	69.9	149	36.8	15.6	39.9
Cfsm	0.882	1.14	0.709	0.774	0.476	1.34	6.65	0.917	1.96	0.483	0.205	0.524
In.	1.02	1.27	0.82	0.89	0.50	1.54	7.42	1.06	2.19	0.56	0.24	0.58

Calendar year 1958: Max 1,620 Min 6.5 Mean 141 Cfsm 1.85 In. 25.21
Water year 1958-59: Max 1,570 Min 8.1 Mean 101 Cfsm 1.33 In. 18.09

Peak discharge (base, 1,000 cfs).--Apr. 3 (6 p.m.) 2,200 cfs (7.44 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 3-7, 23, 29, Feb. 3, Apr. 3. No gage-height record Jan. 8-11; discharge estimated on basis of weather records and records for nearby stations.

585. Little Androscoggin River near Auburn, Maine

Location.--Lat 44°03'50", long 70°16'25", on right bank just upstream from highway bridge at Littlefields, 3 miles southwest of Auburn, Androscoggin County, and 3.6 miles upstream from mouth.

Drainage area.--328 sq mi.

Records available.--October 1940 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 215 ft (from topographic map).

Average discharge.--19 years, 548 cfs (adjusted).

Extremes.--Maximum discharge during year, 4,990 cfs Apr. 5 (gage height, 8.10 ft); minimum daily, 46 cfs Aug. 9, Sept. 22-25.
1940-59: Maximum discharge, 16,500 cfs Mar. 28, 1953 (gage height, 14.76 ft); minimum, 14 cfs Oct. 14, 22, 1949; minimum gage height, 1.07 ft Sept. 8, 1941.
Maximum discharge known, 16,800 cfs Mar. 20, 1936, at mouth of river.

Remarks.--Records excellent except those for period of ice effect, which are good. Flow regulated by Pennesseewassee and Thompson Lakes (see p. 64) and several powerplants above station.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	40	4.0	1,150
1.5	73	5.0	1,880
2.0	198	6.0	2,710
2.5	377	7.0	3,710
3.0	597	8.0	4,860

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	132	587	410	146	192	172	1,200	637	200	512	132	115
2	138	438	385	240	225	235	1,570	602	172	442	79	160
3	132	389	315	230	245	265	3,200	549	180	360	62	350
4	132	346	295	136	245	245	4,400	535	170	156	59	417
5	93	315	285	220	255	270	4,840	563	176	106	55	417
6	92	280	430	280	245	280	4,260	517	224	108	52	373
7	118	255	381	210	225	310	3,730	472	135	159	49	285
8	114	225	445	205	168	325	3,180	451	160	182	48	184
9	112	182	425	215	182	420	*2,800	397	180	182	46	311
10	114	323	355	235	255	415	2,610	385	176	176	60	286
11	110	350	300	148	210	385	2,440	405	172	189	59	240
12	74	430	235	*148	215	360	2,270	365	160	214	52	170
13	*66	360	225	180	210	285	2,020	405	113	237	50	85
14	93	315	152	172	200	430	1,770	397	170	224	55	66
15	96	300	205	160	146	380	1,570	381	645	244	85	64
16	100	227	225	180	192	540	1,460	361	1,020	405	95	60
17	102	320	245	270	230	515	1,360	350	1,070	346	97	57
18	99	345	270	235	220	505	1,300	334	1,130	315	102	*55
19	59	370	220	270	215	480	1,260	319	1,340	286	104	52
20	69	380	210	270	230	510	1,200	319	1,400	264	102	49
21	93	*365	128	295	215	690	1,100	300	1,140	268	100	48
22	102	290	168	360	132	858	960	330	*897	261	97	46
23	106	182	200	395	240	820	836	327	766	240	91	46
24	144	225	138	380	275	1,020	755	330	719	227	91	46
25	164	250	110	325	*250	995	734	327	607	217	95	46
26	135	245	192	395	230	989	672	311	535	201	97	50
27	305	268	205	320	235	995	622	296	499	189	100	69
28	455	285	122	320	235	931	632	278	544	182	102	81
29	640	485	164	290	-	858	607	261	563	176	102	83
30	745	381	200	260	---------	842	592	247	573	167	106	83
31	703	--------	136	260	--------	925	---------	240	--------	162	111	--------
Total	5,637	9,713	7,776	7,750	6,117	17,250	55,950	11,991	15,836	7,397	2,535	4,394
Mean	182	324	251	250	218	556	1,865	387	528	239	81.8	146
(†)	-32	+7	+1	-12	-33	-15	+230	-3	-3	-56	-57	-55

Adjusted for change in reservoir contents

Mean	150	331	252	238	185	541	2,095	384	525	183	24.8	91.0
Cfsm	0.457	1.01	0.768	0.726	0.564	1.65	6.39	1.17	1.60	0.558	0.076	0.277
In.	0.53	1.13	0.89	0.84	0.59	1.90	7.13	1.35	1.78	0.64	0.09	0.31

	Observed			Adjusted		
Calendar year 1958:	Max 3,320	Min 39	Mean 612	Mean 608	Cfsm 1.85	In. 25.17
Water year 1958-59:	Max 4,840	Min 46	Mean 417	Mean 414	Cfsm 1.26	In. 17.18

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Pennesseewassee and Thompson Lakes.
Note.--Stage-discharge relation affected by ice Dec. 23 to Mar. 20.

590. Androscoggin River near Auburn, Maine

Location.--Lat 44°04'15", long 70°12'35", on right bank 1½ miles downstream from Little Androscoggin River and 2 miles downstream from north bridge between Auburn and Lewiston, Androscoggin County.
Drainage area.--3,257 sq mi.
Records available.--October 1928 to September 1959. Monthly discharge only for October 1928, published in WSP 1301.
Gage.--Water-stage recorder. Datum of gage is 109.18 ft above mean sea level, datum of 1929.
Average discharge.--31 years, 5,960 cfs (adjusted).
Extremes.--Maximum discharge during year, 31,000 cfs Apr. 4 (gage height, 10.47 ft); minimum daily, 530 cfs Sept. 20, 27.
1928-59: Maximum discharge, 135,000 cfs Mar. 20, 1936 (gage height, 27.57 ft), from rating curve extended above 76,000 cfs on basis of slope-area measurement of peak flow and computation of flow over dams; minimum, 309 cfs Sept. 28, 1941 (gage height, 0.34 ft); minimum daily, 340 cfs Sept. 28, 1941.
Remarks.--Records excellent except those for periods of no gage-height record, which are fair. Considerable diurnal fluctuation and some regulation caused by powerplants above station. Flow regulated by Kennebago, Rangeley, Mooselookmeguntic, Richardson, Umbagog, Aziscohos, Pennesseewassee, and Thompson Lakes, and Gulf Island Pond (see p. 64).
Revisions (water years).--WSP 781: 1930, 1933-34. WSP 1301: 1932-36.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

0.7	500	4.0	5,350
1.0	695	6.0	11,100
1.5	1,100	8.0	18,900
2.0	1,650	10.0	28,700
3.0	3,240	12.0	38,400

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,280	7,690	3,870	2,400	3,170	715	7,710	8,200	3,760	7,640	1,600	4,100
2	4,650	6,680	4,700	3,640	3,870	4,050	8,160	7,800	4,430	7,650	600	5,000
3	4,540	5,760	4,630	3,920	4,510	4,650	16,900	7,160	4,410	7,440	3,200	6,300
4	2,380	5,710	4,720	2,600	4,670	4,630	30,000	7,210	3,790	7,050	3,020	10,500
5	595	5,140	4,730	3,850	4,740	4,230	27,300	6,920	3,700	6,310	2,950	8,000
6	3,470	4,740	4,310	4,520	4,640	4,460	26,400	6,840	1,260	5,020	2,960	6,000
7	3,700	5,230	3,660	4,610	3,690	2,700	24,400	7,300	600	4,480	2,200	5,000
8	3,900	5,500	4,350	4,100	960	850	21,700	7,230	3,520	4,520	1,100	4,100
9	3,920	3,180	4,740	3,310	2,350	2,800	21,700	6,690	3,790	4,250	620	3,700
10	3,900	5,640	4,720	2,270	4,620	4,810	21,800	6,430	3,840	4,230	2,800	3,600
11	1,710	6,600	4,750	680	4,530	4,810	21,200	6,130	4,230	4,170	5,100	3,300
12	550	5,900	4,650	3,670	4,410	4,750	20,700	5,900	4,230	1,880	5,300	1,600
13	3,400	5,390	2,980	4,040	4,100	4,520	18,200	5,860	3,750	4,190	4,000	560
14	3,780	5,430	2,680	4,230	2,410	2,700	15,800	5,490	640	4,500	4,050	3,500
15	*3,860	5,000	3,490	4,400	1,140	840	15,200	6,550	6,600	4,520	3,900	3,300
16	3,770	4,490	4,550	4,380	3,780	4,100	15,000	6,350	12,400	4,610	2,900	3,250
17	3,860	5,710	4,510	2,900	4,600	5,140	*15,400	5,060	11,800	4,520	3,300	3,200
18	2,270	5,780	4,540	2,420	4,630	5,040	16,400	5,540	11,200	2,200	3,250	*3,100
19	1,510	5,630	4,450	4,440	4,400	4,830	16,800	4,100	16,800	750	3,200	1,530
20	3,780	5,640	2,940	4,850	4,380	4,860	17,600	4,660	21,000	3,780	3,190	530
21	4,380	5,600	750	4,670	2,090	4,020	16,600	4,820	16,000	3,710	3,100	3,390
22	4,020	5,470	3,450	5,190	740	4,790	13,800	4,740	*12,400	3,860	1,600	3,210
23	3,960	1,820	4,500	5,700	3,560	6,450	11,800	2,430	11,000	3,990	800	3,300
24	4,250	4,340	4,050	5,870	4,660	7,600	11,600	2,550	8,270	3,950	3,000	3,270
25	4,370	5,550	2,360	5,140	4,370	7,460	11,400	4,480	6,760	1,810	2,900	3,170
26	4,500	5,540	3,350	4,780	4,160	7,360	11,000	4,800	5,440	600	2,800	1,080
27	6,740	2,440	3,380	5,260	3,900	7,470	11,100	4,650	3,790	3,460	2,750	530
28	11,500	4,780	1,700	4,590	1,870	7,230	10,800	4,640	1,090	3,620	2,720	3,380
29	14,400	4,830	3,850	4,520	-	3,520	8,720	4,580	6,470	3,250	1,500	3,190
30	13,300	3,770	4,480	4,670	--------	5,640	9,170	2,110	7,540	2,940	1,120	3,180
31	10,100	--------	4,280	4,330	--------	7,360	--------	830	--------	2,620	3,400	--------
Total	145,345	154,980	120,120	125,950	100,950	144,385	494,360	168,050	204,510	127,520	84,930	107,870
Mean	4,689	5,166	3,875	4,063	3,605	4,658	16,480	5,421	6,817	4,114	2,740	3,596
(†)	+17	-169	-1,671	-1,338	-1,597	-1,427	+5,543	+2,298	+1,767	-1,627	-1,332	-1,848
Adjusted for change in reservoir contents												
Mean	4,706	4,997	2,204	2,725	2,008	3,231	22,020	7,719	8,584	2,487	1,408	1,748
Cfsm	1.44	1.53	0.677	0.837	0.617	0.992	6.76	2.37	2.64	0.764	0.432	0.537
In.	1.66	1.71	0.78	0.96	0.64	1.14	7.54	2.73	2.94	0.88	0.50	0.60

	Observed			Adjusted			
Calendar year 1958:	Max 46,300	Min 405	Mean 7,090	Mean 6,889	Cfsm 2.12	In. 28.71	
Water year 1958-59:	Max 30,000	Min 530	Mean 5,422	Mean 5,303	Cfsm 1.63	In. 22.08	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Kennebago, Rangeley, Mooselookmeguntic, Richardson, Umbagog, Aziscohos, Auburn, Pennesseewassee, and Thompson Lakes, and Gulf Island Pond.
Note.--No gage-height record June 14-22, July 31 to Sept. 18; discharge estimated on basis of records at Gulf Island power station and records for Little Androscoggin River.

Reservoirs in Androscoggin River basin

500. Kennebago Lake on Kennebago River, at Kennebago, Maine, used for power, has usable capacity of 721,000,000 cu ft between elevations 1,773.0 and 1,780.5 ft above mean sea level, unadjusted. Gage-height record furnished by Union Water Power Co.

505. Rangeley Lake on Rangeley Stream, at Oquossoc, Maine, used for power and log driving, has usable capacity of 1,339,200,000 cu ft in top 4 ft of lake (top of flashboards). Gage-height record furnished by Union Water Power Co.

510. Mooselookmeguntic Lake at Upper Dam, in Richardson Township, Maine, used for power and log driving, has usable capacity of 8,370,000 cu ft between gage heights 8.3 and 20.5 ft. Gage-height record furnished by Union Water Power Co.

515. Upper and Lower Richardson Lakes on Rapid River, at Middle Dam, Maine, used for power and log driving, has usable capacity of 5,691,500,000 cu ft between gage heights 3.0 and 20.5 ft. Gage-height record furnished by Union Water Power Co.

520. Aziscohos Lake on Magalloway River, in Lincoln Township, 3 miles east of village of Wilsons Mills, Maine, completed in 1911 for power, has usable capacity of 9,593,000,000 cu ft between elevations 1,490.0 and 1,535.0 ft. Elevation record furnished by Union Water Power Co.

530. Umbagog Lake on Androscoggin River, at Errol Dam, three-quarters of a mile northeast of Errol, N. H., used for power and log driving, has usable capacity of 3,080,160,000 cu ft between gage heights 5.5 and 15.0 ft. Gage-height record furnished by Union Water Power Co.

560. Gulf Island Pond on Androscoggin River, 3 miles upstream from Lewiston, Maine, completed in 1928 for power, has capacity of 1,100,000,000 cu ft in top 10 ft of pond below elevation 262 ft. Elevation record furnished by Central Maine Power Co.

565. Lake Auburn on outlet stream to Androscoggin River, at East Auburn, Maine, used for storing water supply of Auburn and Lewiston, has usable capacity of 580,000,000 cu ft between elevations 254.7 and 260.7 ft. Elevation record furnished by Auburn Water District.

575. Pennesseewassee Lake on short outlet stream to Little Androscoggin River, at Norway, Maine, used for power, has usable capacity of 192,000,000 cu ft between gage heights 95.0 and 100.0 ft. Gage-height record furnished by Central Maine Power Co.

580. Thompson Lake on short outlet stream to Little Androscoggin River, at Oxford, Maine, used for power, has usable capacity of 950,000,000 cu ft between gage heights 95.0 and 100.0 ft. Gage-height record furnished by Robinson Manufacturing Co.

Month-end contents, in millions of cubic feet, water year October 1958 to September 1959

Date	Kennebago Lake†	Rangeley Lake†	Mooselookmeguntic Lake†	Upper and Lower Richardson Lakes†	Aziscohos Lake†
Sept.30, 1958	704	1,004	5,550	4,176	8,036
Oct. 31	963	894	4,436	4,676	7,500
Nov. 30	917	643	4,953	4,676	7,630
Dec. 31	698	127	3,178	4,047	6,548
Jan. 31, 1959	588	97	404	3,973	5,876
Feb. 28	438	84	124	2,686	4,385
Mar. 31	172	40	0	1,662	2,830
Apr. 30	917	727	4,402	2,905	6,884
May 31	974	920	7,080	4,658	9,268
June 30	963	1,359	8,298	5,595	9,996
July 31	756	1,229	7,080	5,181	9,177
Aug. 31	545	1,172	5,906	3,954	8,260
Sept.30	335	920	4,334	3,252	6,772

	Umbagog Lake†	Gulf Island Pond‡	Lake Auburn†	Pennesseewassee Lake††	Thompson Lake‡‡
Sept.30, 1958	1,596	2,327	342	93	1,618
Oct. 31	2,573	2,486	342	89	1,533
Nov. 30	1,776	2,449	364	93	1,552
Dec. 31	1,632	2,302	364	111	1,571
Jan. 31, 1959	1,740	2,327	375	63	1,552
Feb. 28	1,268	2,223	386	63	1,476
Mar. 31	536	2,128	452	102	1,390
Apr. 30	2,729	2,482	544	111	1,980
May 31	2,339	2,017	496	150	1,932
June 30	3,119	2,492	520	93	1,980
July 31	2,129	2,112	474	102	1,818
Aug. 31	2,015	2,461	408	93	1,676
Sept.30	1,884	2,213	364	93	1,533

† Contents at 7 a.m. on first day of following month.
‡ Contents at 12 p.m.
†† Contents as of last day of month determined by interpolation.
‡‡ Contents at 8 a.m.

600. Royal River at Yarmouth, Maine

Location.--Lat 43°47'55", long 70°10'45", on right bank 150 ft upstream from lower highway bridge, in Yarmouth, Cumberland County.

Drainage area.--142 sq mi.

Records available.--October 1949 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 10 ft (from topographic map).

Average discharge.--10 years, 283 cfs.

Extremes.--Maximum discharge during year, 4,640 cfs Apr. 4 (gage height, 5.55 ft); minimum, 31 cfs Sept. 13 (gage height, 1.00 ft).
1949-59: Maximum discharge, 7,960 cfs Sept. 12, 1954 (gage height, 7.12 ft); minimum, 4.4 cfs Oct. 17, 18, 1952 (gage height, 0.71 ft); minimum gage height, 0.64 ft Aug. 23, 24, 1950.

Remarks.--Records excellent except those for periods of ice effect, debris effect, or no gage-height record, which are fair. Some diurnal fluctuation at low flow caused by mill above station.

Rating table, water year 1958-59, except periods of ice effect or debris on control (gage height, in feet, and discharge, in cubic feet per second)

1.0	31	2.5	705
1.1	47	3.0	1,140
1.3	92	4.0	2,290
1.6	196	5.0	3,740
2.0	385	6.0	5,500

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	168	440	64	90	80	965	240	60	127	41	58
2	120	130	320	64	90	85	1,270	236	60	98	41	78
3	110	118	225	64	92	98	3,110	209	75	87	39	127
4	80	124	184	64	148	117	4,230	184	85	75	39	323
5	68	120	184	*64	215	124	2,260	167	66	64	37	309
6	62	106	505	62	196	205	1,600	155	62	60	37	167
7	55	98	450	62	156	616	1,340	148	66	58	39	103
8	53	90	310	62	120	609	1,090	144	87	58	39	78
9	51	140	215	60	*98	492	1,000	130	78	58	39	62
10	49	490	170	60	90	364	852	120	73	55	44	55
11	47	350	120	60	90	285	836	117	64	58	60	49
12	44	230	103	60	87	249	765	117	58	75	75	47
13	*39	162	98	60	92	205	616	124	58	73	60	42
14	36	134	92	58	92	188	512	138	120	64	58	42
15	34	134	90	58	92	167	448	134	330	58	58	45
16	34	140	92	68	90	262	414	120	320	55	51	53
17	39	144	85	196	90	375	*385	109	310	53	53	53
18	41	128	80	275	87	385	380	100	390	51	53	47
19	41	120	78	240	87	375	380	82	440	47	53	45
20	41	118	75	188	85	419	380	92	370	45	53	44
21	39	114	73	163	82	698	343	90	240	47	55	42
22	37	110	70	205	80	968	295	112	*156	49	53	41
23	39	98	68	258	80	941	267	144	117	49	51	41
24	70	*92	68	254	80	765	244	106	103	51	51	39
25	148	90	68	209	80	622	236	98	92	55	49	39
26	134	118	66	163	80	602	231	90	80	55	51	37
27	330	475	66	134	80	677	222	80	85	51	53	34
28	390	375	66	117	80	576	209	75	90	47	55	36
29	395	1,480	66	112	-	555	209	66	188	44	68	34
30	335	1,180	66	98	-------	461	236	64	196	42	64	34
31	230	-------	66	92	-------	576	-------	62	-------	41	60	-------
Total	3,273	7,376	4,659	3,694	2,829	13,141	25,325	3,853	4,519	1,850	1,579	2,204
Mean	106	246	150	119	101	424	844	124	151	59.7	50.9	73.5
Cfsm	0.746	1.73	1.06	0.838	0.711	2.99	5.94	0.873	1.06	0.420	0.358	0.518
In.	0.86	1.93	1.22	0.97	0.74	3.45	6.63	1.01	1.18	0.48	0.41	0.58

Calendar year 1958: Max 2,970 Min 34 Mean 279 Cfsm 1.96 In. 26.66
Water year 1958-59: Max 4,230 Min 34 Mean 204 Cfsm 1.44 In. 19.46

Peak discharge (base, 1,500 cfs).--Nov. 29 (9 to 10 a.m.) 1,720 cfs (3.52 ft); Apr. 4 (5 a.m.) 4,640 cfs (5.55 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 1-3, 7-10, Dec. 17 to Jan. 18, Jan. 30 to Feb. 11, Feb. 21 to Mar. 1 and by debris on control Oct. 2 to Nov. 26. No gage-height record June 14-22; discharge estimated on basis of recorded range in stage, weather records, and records for nearby streams.

640. Presumpscot River at outlet of Sebago Lake, Maine

Location.--Lat 43°49'05", long 70°27'00", at dam of hydroelectric plant at Eel Weir Falls, 1 mile downstream from lake outlet, Cumberland County.

Drainage area.--436 sq mi.

Records available.--January 1887 to September 1959.

Gage.--Float gages in forebay and tailrace of hydroelectric plant at Eel Weir Falls and staff gages at dam on outlet of Sebago Lake.

Average discharge.--72 years, 661 cfs (unadjusted).

Remarks.--Discharge computed from Allen Meter records for each of three pairs of water wheels and from records of openings of two regulating gates at Eel Weir hydroelectric plant. Water wasted at rare intervals through gates in dam on outlet of Sebago Lake; flow computed from records of gate openings. Water diverted by Portland Water District and leakage through dam, totaling about 35 cfs, not included in figures of daily discharge. Flow completely regulated by Highland, Long, and Pleasant Lakes, Brandy, Thomas, and Panther Ponds, Sebago Lake (surface area, 45.6 sq mi), and by several smaller ponds, which have a combined usable capacity of 13,535,000,000 cu ft.

Cooperation.--Records furnished by S. D. Warren Co.

Revisions (water years).--WSP 261: Drainage area. WSP 1301: 1920-50 (adjusted monthly runoff).

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	827	536	681	684	524	671	504	510	555	516	527	534
2	827	0	677	674	701	693	414	508	553	536	527	276
3	822	720	672	613	681	684	159	523	554	400	551	418
4	725	740	672	599	660	691	238	514	552	0	565	524
5	615	711	673	674	626	685	401	511	552	0	575	534
6	830	706	550	677	660	624	543	496	554	449	655	0
7	832	724	499	673	676	537	544	423	552	519	644	251
8	832	729	628	713	670	578	546	435	555	549	565	498
9	830	673	675	706	677	649	546	499	556	537	551	450
10	828	668	671	495	679	663	546	499	553	530	513	539
11	727	667	664	354	675	677	491	500	555	523	550	535
12	592	718	675	676	664	683	459	514	570	551	526	536
13	827	714	586	675	676	682	503	558	578	518	551	531
14	828	693	472	675	676	680	504	552	501	526	550	535
15	828	693	662	672	676	679	503	556	504	633	540	533
16	823	677	678	675	673	651	504	555	524	553	530	537
17	823	689	677	569	675	678	505	556	513	552	557	535
18	0	714	681	507	681	679	507	547	501	531	649	536
19	906	673	667	671	684	658	504	558	503	527	537	534
20	828	725	617	698	684	612	505	559	512	549	535	535
21	822	689	553	698	685	430	507	556	451	505	536	520
22	824	684	673	471	680	380	507	553	500	513	536	535
23	824	703	671	655	676	505	507	431	539	519	535	420
24	823	712	420	679	677	529	508	562	554	537	535	347
25	0	725	0	670	681	537	505	750	554	518	533	494
26	788	721	464	684	678	536	484	691	538	534	535	499
27	663	656	670	654	677	536	505	678	529	531	533	506
28	721	723	666	692	674	537	512	626	554	531	532	503
29	693	266	695	683	-	532	509	556	520	534	534	436
30	678	244	698	670	---------	537	509	556	521	554	533	422
31	706	--------	673	600	--------	522	--------	539	--------	527	534	--------
Total	22,692	19,293	18,960	19,836	18,746	18,735	14,479	16,871	16,057	15,302	17,074	14,053
Mean	732	643	612	640	670	604	483	544	535	494	551	458
(†)	-745	-295	+49	-487	-201	+188	+1,747	-86	+118	-330	-491	-729

Adjusted for change in reservoir contents

Mean	-13	348	661	153	469	792	2,230	458	653	164	60	-261
Cfsm	-0.030	0.798	1.52	0.351	1.08	1.82	5.11	1.05	1.50	0.376	0.138	-0.599
In.	-0.03	0.89	1.75	0.40	1.12	2.10	5.70	1.21	1.67	0.43	0.16	-0.67

	Observed			Adjusted		
Calendar year 1958:	Max 2,940	Min 0	Mean 714	Mean 766	Cfsm 1.76	In. 23.84
Water year 1958-59:	Max 906	Min 0	Mean 581	Mean 476	Cfsm 1.09	In. 14.73

† Change in contents, equivalent in cubic feet per second, in Sebago and other lakes upstream, diversion by Portland Water District, and leakage through dam.

Note.--Negative figures indicate evaporation and seepage from reservoirs exceeded inflow.

645. Saco River near Conway, N. H.

Location.--Lat 43°59'25", long 71°05'30", on left bank at Odell Falls, 1¾ miles downstream from Swift River and Conway, Carroll County.

Drainage area.--386 sq mi.

Records available.--August 1903 to December 1909, January 1910 to June 1912 (gage heights only), February 1929 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 418.19 ft above mean sea level, datum of 1929. Aug. 26, 1903, to June 30, 1912, chain gage at site three-quarters of a mile downstream at different datum.

Average discharge.--36 years (1903-9, 1929-59), 920 cfs.

Extremes.--Maximum discharge during year, 5,390 cfs Apr. 20 (gage height, 6.71 ft); maximum gage height, 7.52 ft Apr. 3 (ice jam); minimum discharge, 61 cfs Aug. 4 (gage height, 1.70 ft).
1903-9, 1929-59: Maximum discharge, 43,900 cfs Mar. 27, 1953 (gage height, 17.20 ft), from rating curve extended above 13,000 cfs on basis of slope-area measurement of peak flow; minimum, 40 cfs Mar. 16, 1932 (gage height, 1.61 ft).

Remarks.--Records excellent except those for period of ice effect, which are fair.

Revisions (water years).--WSP 756: Drainage area. WSP 1301: 1908-9.

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 2				Apr. 3 to Sept. 30			
2.2	140	3.5	685	1.7	61	4.0	1,140
2.5	228	4.0	1,050	2.0	102	5.0	2,330
3.0	420	5.0	2,200	2.3	162	6.0	3,970
				2.5	217	7.0	6,080
				3.0	417		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	174	548	405	170	390	230	605	1,660	379	360	98	2,690
2	242	491	385	170	390	240	1,030	1,620	388	388	110	1,850
3	231	443	365	172	400	260	4,350	1,580	412	365	79	3,360
4	192	416	345	170	410	290	3,970	1,620	398	317	66	2,440
5	171	394	320	170	430	295	3,650	1,720	343	289	66	1,130
6	162	380	350	168	430	310	3,680	1,890	313	271	68	671
7	155	372	400	*166	425	315	3,310	2,070	343	465	71	486
8	150	352	485	166	420	300	3,270	2,100	338	379	74	374
9	145	376	420	162	410	290	4,420	1,570	309	301	96	301
10	142	673	350	160	405	275	3,470	1,270	289	271	440	263
11	142	537	315	158	*395	265	3,380	1,240	260	274	1,700	230
12	165	448	285	156	390	*260	3,110	1,450	246	281	427	197
13	155	402	260	156	390	260	2,690	1,500	246	267	233	170
14	142	380	245	152	390	260	*2,540	1,210	388	253	170	148
15	138	548	230	156	370	265	2,690	1,040	815	227	135	155
16	142	724	225	170	355	280	2,720	875	1,260	217	117	205
17	150	591	215	345	340	275	3,310	758	996	205	146	*202
18	165	501	210	710	330	270	4,040	713	1,190	191	183	197
19	168	476	200	650	310	295	3,950	644	1,750	191	170	188
20	158	486	198	565	285	370	4,430	644	2,000	191	139	183
21	142	429	192	475	275	505	2,930	750	1,210	211	112	178
22	140	402	188	690	270	570	2,510	975	892	200	102	175
23	142	360	182	1,050	260	490	2,400	1,170	742	170	67	170
24	470	352	182	820	250	445	2,580	780	*598	150	98	165
25	619	336	180	700	240	430	2,870	671	519	141	191	162
26	448	309	178	595	235	390	3,060	604	480	129	165	155
27	805	320	178	500	225	340	2,870	537	469	114	123	150
28	1,280	335	178	450	220	300	2,180	508	464	100	140	148
29	1,370	360	174	425	-	290	1,910	459	508	90	249	146
30	862	385	174	405	-------	295	1,700	422	433	86	385	144
31	649	-------	170	395	-------	320	-------	417	-------	86	405	-------
Total	10,216	13,126	8,184	11,397	9,640	9,980	89,625	34,467	18,978	7,180	6,645	17,033
Mean	330	438	264	368	344	322	2,987	1,112	633	232	214	568
Cfsm	0.855	1.13	0.684	0.953	0.891	0.834	7.74	2.88	1.64	0.601	0.554	1.47
In.	0.99	1.26	0.79	1.10	0.93	0.96	8.64	3.32	1.83	0.69	0.64	1.64

Calendar year 1958: Max 11,200 Min 95 Mean 866 Cfsm 2.24 In. 30.47
Water year 1958-59: Max 4,430 Min 66 Mean 648 Cfsm 1.68 In. 22.79

Peak discharge (base, 8,700 cfs).--No peak above base.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Apr. 4 (no gage-height record Nov. 30 to Jan. 3; discharge estimated on basis of weather records and records for nearby streams).

650. Ossipee River at Effingham Falls, N. H.

Location.--Lat 43°47'40", long 71°03'40", on left bank 0.3 mile upstream from highway bridge at Effingham Falls, Carroll County, 0.35 mile downstream from outlet of Ossipee Lake, and 4 miles northwest of Effingham.

Drainage area.--330 sq mi.

Records available.--September 1942 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 390 ft (from topographic map).

Average discharge.--17 years, 716 cfs.

Extremes.--Maximum discharge during year, 3,460 cfs Apr. 10 (gage height, 7.47 ft); minimum, 34 cfs Feb. 26; minimum daily, 105 cfs Oct. 6-10.
1942-59: Maximum discharge, 11,700 cfs Mar. 28, 1953 (gage height, 11.64 ft); minimum, 10 cfs Oct. 9, 10, 1944; minimum daily, 11 cfs Oct. 10, 1944.

Remarks.--Records excellent. Flow regulated by Ossipee and Silver Lakes and Pine River Pond (combined capacity, 1,430,000,000 cu ft).

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

1.6	95	4.0	840
2.0	160	5.0	1,380
2.5	266	7.0	2,950
3.0	420	8.0	4,130

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	214	471	240	201	229	301	692	1,020	289	448	292	164
2	214	467	244	203	429	259	741	1,040	289	441	287	168
3	173	463	301	205	682	217	930	875	289	438	284	170
4	108	459	396	205	674	330	1,580	790	289	434	282	171
5	106	*459	406	205	669	298	2,390	790	259	434	274	173
6	105	455	420	200	656	285	2,940	700	183	256	170	173
7	105	452	413	197	651	333	3,230	555	181	130	168	173
8	105	448	402	199	642	350	*3,280	555	181	130	168	173
9	105	444	416	201	624	368	3,380	559	183	128	168	173
10	105	399	420	201	620	385	3,450	411	183	128	170	*171
11	134	372	463	199	611	382	3,420	315	183	130	170	171
12	195	375	511	199	603	385	3,340	333	183	130	170	171
13	193	375	503	197	587	402	3,200	355	185	130	170	171
14	193	410	499	197	571	388	2,990	375	216	130	170	171
15	191	455	444	197	563	375	2,800	420	301	132	170	170
16	191	452	399	197	555	396	2,630	607	378	136	170	170
17	191	452	396	201	535	396	2,250	579	543	122	170	170
18	191	448	392	201	*507	399	1,980	559	674	160	170	170
19	189	448	392	203	483	399	2,170	539	800	183	170	170
20	189	448	388	205	440	406	2,460	555	860	*185	170	170
21	189	444	385	*207	406	420	2,390	547	855	187	170	170
22	189	399	382	207	380	487	2,210	503	831	187	168	170
23	189	327	378	210	349	543	2,020	385	687	187	168	170
24	191	276	378	216	336	607	1,870	388	456	185	168	168
25	193	229	375	222	312	646	1,740	388	199	185	166	168
26	225	229	372	227	219	674	1,550	388	175	183	166	168
27	282	231	368	229	220	682	1,080	385	175	183	164	168
28	335	231	362	231	289	692	885	382	229	189	164	166
29	448	240	355	233	-	692	940	359	298	295	164	166
30	479	242	346	231	-------	687	1,090	289	368	292	164	166
31	471	-------	272	227	-------	682	-------	289	-------	292	164	-------
Total	6,388	11,600	12,018	6,453	13,842	13,866	65,628	16,235	10,922	6,770	5,789	5,093
Mean	206	387	388	208	494	447	2,188	524	364	218	187	170
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 5,300 Min 105 Mean 723 Cfsm 2.19 In. 29.72
Water year 1958-59: Max 3,450 Min 105 Mean 478 Cfsm 1.45 In. 19.68

* Discharge measurement made on this day.

655. Ossipee River at Cornish, Maine

Location.--Lat 43°48'25", long 70°47'55", on left bank just downstream from highway bridge in Cornish, York County, 1¼ miles upstream from mouth.

Drainage area.--453 sq mi.

Records available.--July 1916 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 276.1 ft above mean sea level, datum of 1929. Prior to Aug. 21, 1929, chain gage and Aug. 21, 1929, to Sept. 30, 1942, water-stage recorder, at same site at datum 1 ft higher.

Average discharge.--43 years, 871 cfs.

Extremes.--Maximum discharge during year, 4,250 cfs Apr. 9 (gage height, 6.98 ft); minimum, 39 cfs July 18 (gage height, 0.75 ft); minimum daily, 132 cfs July 18.
1916-59: Maximum discharge, 17,200 cfs Mar. 21, 1936 (gage height, 16.32 ft, present datum), from rating curve extended above 7,500 cfs; minimum, 25 cfs Oct. 23, 1947 (gage height, 0.60 ft).

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Flow partly regulated by powerplants at Kezar Falls and by Ossipee and Silver Lakes, Pine River, Bickford and Colcord Ponds (combined capacity, 1,600,000,000 cu ft).

Revisions (water years).--WSP 756: Drainage area. WSP 1301: 1917-29(M).

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 8				Apr. 9 to Sept. 30	
1.3	135	4.0	1,480	1.2	111
1.5	183	5.0	2,300	1.5	183
2.0	351	7.0	4,270		
3.0	844				

Note.--Same as preceding table above 1.5 ft.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	292	559	305	255	265	350	1,060	1,240	360	519	288	200
2	295	554	320	250	265	345	1,260	1,200	374	529	277	207
3	284	574	360	250	465	290	2,100	1,120	382	504	288	243
4	200	589	475	250	860	340	2,910	950	369	489	273	225
5	160	564	555	250	855	380	3,370	939	364	494	280	192
6	142	549	570	*245	840	360	3,930	923	234	454	228	176
7	146	544	560	245	830	370	4,080	749	250	220	163	194
8	142	519	535	245	800	395	4,060	739	225	164	163	176
9	146	564	525	250	780	430	4,200	709	237	160	178	198
10	148	639	530	250	765	460	4,120	664	225	170	190	172
11	152	504	580	245	*730	*465	4,100	494	210	178	207	192
12	176	494	660	245	710	470	3,950	499	222	188	180	174
13	230	464	655	245	680	480	3,670	509	303	184	174	172
14	231	464	595	245	670	490	*3,460	524	370	160	174	196
15	220	544	525	240	645	500	3,230	539	460	164	166	192
16	234	554	505	240	610	505	3,030	684	640	166	166	213
17	225	549	490	245	585	505	2,740	704	760	148	186	*186
18	215	544	480	245	555	510	2,410	684	920	132	176	190
19	225	544	475	250	540	520	2,350	659	1,060	182	176	198
20	225	524	470	250	520	570	2,690	679	1,090	200	176	174
21	200	524	465	255	490	690	2,660	659	1,070	213	176	182
22	199	504	460	260	465	830	2,470	684	1,030	196	173	168
23	198	425	460	265	450	980	2,260	534	880	196	163	186
24	260	*378	455	270	435	1,080	2,060	504	*670	199	182	160
25	284	326	450	275	395	1,090	1,900	489	469	199	178	184
26	266	290	445	275	360	1,060	1,800	484	280	183	176	172
27	396	290	435	280	285	1,020	1,470	479	273	196	168	170
28	454	300	425	285	350	970	1,090	464	263	186	158	182
29	614	300	405	275	-	930	1,090	449	439	220	160	176
30	634	305	395	275	-------	925	1,270	374	425	292	166	178
31	589	-------	385	270	-------	950	-------	356	-------	288	184	-------
Total	8,182	14,482	14,950	7,925	16,200	19,260	80,790	20,684	14,854	7,773	5,993	5,628
Mean	264	483	482	256	579	621	2,693	667	495	251	193	188
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 6,190 Min 118 Mean 927 Cfsm 2.05 In. 27.76
Water year 1958-59: Max 4,200 Min 132 Mean 594 Cfsm 1.31 In. 17.78

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Mar. 30. No gage-height record June 14-24; discharge estimated on basis of recorded range in stage and records for station at Effingham Falls.

660. Saco River at Cornish, Maine

Location.--Lat 43°48'30", long 70°46'55", on left bank just upstream from highway bridge at Cornish, York County, half a mile downstream from Ossipee River.

Drainage area.--1,298 sq mi.

Records available.--June 1916 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 263.48 ft above mean sea level, datum of 1929. Prior to Oct. 30, 1919, chain gage on bridge just downstream at different datum.

Average discharge.--43 years, 2,685 cfs.

Extremes.--Maximum discharge during year, 11,700 cfs Apr. 12 (gage height, 9.01 ft); minimum, 194 cfs Aug. 29, 30 (gage height, 1.10 ft).
1916-59: Maximum discharge, 45,000 cfs Mar. 21, 22, 1936 (gage height, 21.90 ft, from floodmarks); minimum, 90 cfs Oct. 1, 1921 (gage height, 0.03 ft).

Remarks.--Records excellent except those below 600 cfs, which are good, and those for periods of ice effect, which are fair. Flow partly regulated by powerplants above station and by Ossipee, Silver, Conway, and Kezar Lakes, and Moose, Hancock, Pine River, Bickford, and Colcord Ponds (combined capacity, 3,400,000,000 cu ft).

Revisions (water years).--WSP 1301: 1917-18(M), 1936(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.8	439	5.0	3,240
2.0	527	6.0	4,950
2.5	773	7.0	7,000
3.0	1,090	8.0	9,360
4.0	1,930	9.0	11,700

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	752	2,090	1,170	940	1,440	965	2,990	5,010	1,360	1,580	545	700
2	779	2,000	1,110	930	1,410	980	3,320	4,700	1,270	1,550	514	883
3	807	1,920	1,090	920	1,520	985	4,570	4,410	1,270	1,490	540	980
4	689	1,840	1,180	915	1,860	1,030	6,370	4,010	1,260	1,410	500	1,260
5	630	1,720	1,680	890	1,850	1,100	7,920	3,690	1,220	1,380	560	1,280
6	620	1,580	1,950	865	1,820	1,260	9,140	3,630	1,150	1,300	545	1,210
7	620	1,550	1,840	*865	1,810	1,440	10,100	3,410	1,100	1,030	455	1,140
8	611	1,500	1,750	855	1,800	1,620	10,700	3,380	967	902	485	980
9	564	1,490	1,610	820	1,800	1,580	11,300	3,330	967	941	485	967
10	568	1,650	1,510	795	*1,740	*1,520	*11,600	3,240	987	941	650	865
11	564	1,540	1,460	775	1,700	1,460	11,700	2,950	915	941	635	859
12	573	1,550	1,420	755	1,660	1,400	11,600	2,760	896	974	685	823
13	625	1,530	1,400	735	1,620	1,400	11,200	2,690	915	928	853	730
14	615	1,520	1,380	730	1,580	1,400	10,700	2,690	1,030	853	736	746
15	611	1,530	1,370	730	1,540	1,400	10,000	2,640	1,410	841	649	741
16	630	1,540	1,330	735	1,490	1,400	9,380	2,630	1,670	835	564	768
17	669	1,580	1,290	830	1,440	1,520	8,810	2,540	2,010	818	580	*746
18	640	1,610	1,240	875	1,400	1,610	8,020	2,320	2,340	801	600	605
19	578	1,650	1,190	895	1,370	1,640	7,760	2,240	2,880	785	550	600
20	592	1,630	1,150	910	1,310	1,680	8,110	2,090	3,140	765	510	580
21	530	1,490	1,120	980	1,270	2,000	8,130	2,040	3,200	679	560	630
22	694	1,480	1,160	1,120	1,200	2,180	8,110	2,070	3,120	664	560	550
23	640	1,370	1,190	1,250	1,130	2,300	7,780	1,920	2,960	664	540	590
24	736	1,130	1,160	1,460	1,110	2,600	7,330	1,890	*2,470	705	460	530
25	818	1,090	1,150	1,630	1,030	2,820	6,790	1,920	2,180	865	485	590
26	908	1,120	1,150	1,570	980	3,020	6,450	1,820	1,850	785	445	575
27	1,300	1,150	1,150	1,570	960	3,100	5,910	1,750	1,680	746	470	540
28	1,380	1,150	1,100	1,560	955	3,050	5,380	1,670	1,570	669	480	580
29	1,810	1,230	1,050	1,480	-	2,990	5,280	1,580	1,660	679	470	550
30	2,220	1,220	980	1,480	-------	2,910	5,220	1,450	1,540	674	475	550
31	2,170	-------	965	1,460	-------	2,850	-------	1,400	-------	679	580	-------
Total	25,943	45,450	40,295	32,325	40,795	57,210	241,670	83,870	50,987	28,874	17,166	23,148
Mean	837	1,515	1,300	1,043	1,457	1,845	8,056	2,705	1,700	931	554	772
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 20,100 Min 386 Mean 2,860 Cfsm 2.20 In. 29.90
Water year 1958-59: Max 11,700 Min 445 Mean 1,884 Cfsm 1.45 In. 19.70

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26 to Dec. 4, Dec. 9 to Apr. 4.

665. Little Ossipee River near South Limington, Maine

Location.--Lat 43°41'15", long 70°40'05", on right bank just upstream from highway bridge, 2 miles southeast of South Limington, York County, and 4 miles upstream from mouth.

Drainage area.--161 sq mi.

Records available.--August 1940 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 260 ft (from topographic map).

Average discharge.--19 years, 291 cfs.

Extremes.--Maximum discharge during year, 2,530 cfs Apr. 5 (gage height, 5.09 ft); minimum daily, 5.4 cfs Nov. 24.
1940-59: Maximum discharge, 5,300 cfs May 10, 1954 (gage height, 6.78 ft); minimum, 4.7 cfs Nov. 7, 1953 (gage height, 1.23 ft).
Maximum discharge known, 8,530 cfs Mar. 19, 1936, at "Ledgemere" dam 4 miles upstream.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Flow regulated by Little Ossipee Lake, Ledgemere and Balch Ponds (combined capacity, 581,000,000 cu ft).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.2	3.6	2.5	269
1.3	7.3	3.0	509
1.4	12	3.5	835
1.6	29	4.0	1,260
1.8	58	5.0	2,400
2.0	104	6.0	3,850

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	185	213	96	126	209	172	598	290	79	135	41	118
2	182	209	135	126	220	165	734	290	62	121	33	156
3	178	209	144	126	277	169	1,120	285	68	107	28	202
4	175	206	185	126	337	182	2,310	210	82	96	26	250
5	172	202	220	126	306	188	2,430	150	86	89	25	220
6	162	199	224	130	302	202	2,060	104	92	79	27	144
7	104	195	224	*132	332	281	1,820	122	96	77	33	115
8	47	192	224	144	328	319	1,600	202	92	60	39	67
9	47	195	220	147	324	319	1,470	192	86	18	44	13
10	47	195	216	150	328	337	1,370	178	86	28	78	11
11	48	195	213	150	328	337	1,250	172	77	50	138	11
12	50	192	209	150	328	324	1,180	172	73	64	104	11
13	52	230	206	147	314	314	1,050	206	73	66	14	11
14	52	14	202	141	310	314	*942	220	94	64	11	31
15	52	10	199	141	314	298	640	206	200	66	11	90
16	53	9.2	195	141	298	302	465	185	246	71	15	138
17	53	8.2	195	138	277	328	544	172	242	68	22	*153
18	53	7.3	192	141	265	337	493	156	246	66	26	153
19	53	7.3	188	144	258	328	471	147	345	64	26	150
20	53	6.9	188	144	213	320	439	147	419	73	24	150
21	66	6.9	182	147	206	335	505	144	389	75	25	126
22	92	6.6	182	153	202	345	567	162	314	77	24	79
23	94	6.2	169	156	188	430	350	162	*281	73	22	58
24	96	5.4	132	156	199	630	45	156	168	66	33	56
25	99	8.6	132	162	195	707	41	141	79	60	73	56
26	99	53	132	162	188	598	38	132	89	50	57	55
27	104	60	132	185	188	573	36	126	102	45	12	55
28	104	58	129	227	182	545	34	121	118	44	9.6	55
29	144	86	129	227	-	493	34	115	144	42	11	55
30	188	89	126	224	-------	466	184	115	147	42	18	56
31	213	-------	126	213	-------	482	-------	112	-------	41	42	-------
Total	3,117	3,074.6	5,446	4,782	7,416	11,140	24,820	5,292	4,675	2,077	1,091.6	2,845
Mean	101	102	176	154	265	359	827	171	156	67.0	35.2	94.8
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 2,170 Min 5.4 Mean 339 Cfsm - In. -
Water year 1958-59: Max 2,430 Min 5.4 Mean 208 Cfsm - In. -

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 21, 22, 25, 26, Jan. 1, 5-8, Mar. 20-24, 28.

695. Mousam River near West Kennebunk, Maine

Location.--Lat 43°25'05", long 79°39'35", on right bank 100 ft upstream from highway bridge, 1½ miles downstream from Middle Branch, and 4 miles west of West Kennebunk, York County.

Drainage area.--105 sq mi.

Records available.--October 1939 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 170 ft (from topographic map).

Average discharge.--20 years, 179 cfs (unadjusted).

Extremes.--Maximum discharge during year, 1,500 cfs Apr. 3 (gage height, 3.79 ft); minimum, 8.1 cfs Aug. 22, 23 (gage height, 0.44 ft).
1939-59: Maximum discharge, 2,830 cfs Sept. 12, 1954 (gage height, 5.69 ft); minimum, 1.1 cfs Aug. 22, 1941; minimum gage height, 0.29 ft Nov. 15, 16, 1947.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by Square Pond and Mousam and Estes Lakes (combined capacity, about 700,000,000 cu ft) and powerplants above station.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.4	6.1	1.5	216
.5	11	2.0	412
.6	18	2.5	655
.8	40	3.0	963
1.0	73	4.0	1,670

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	114	248	60	92	62	416	227	44	88	40	54
2	68	96	223	59	92	66	545	192	60	84	25	42
3	59	125	184	59	90	71	1,200	158	79	68	28	65
4	54	131	184	59	181	84	1,220	139	59	59	25	134
5	59	119	195	58	192	102	879	131	52	52	29	77
6	46	114	310	*58	184	171	809	125	75	48	32	57
7	49	104	271	58	139	279	672	116	68	57	33	52
8	49	94	220	58	134	238	586	119	57	39	33	50
9	49	142	192	58	112	238	581	106	52	40	36	42
10	54	223	161	58	119	223	531	99	55	42	48	36
11	57	174	139	59	109	195	497	102	40	73	48	43
12	38	145	134	60	96	178	465	104	40	64	34	33
13	32	125	122	60	96	155	*430	102	57	54	33	30
14	40	122	112	62	96	136	391	109	102	50	30	29
15	43	125	114	75	104	128	362	99	102	44	32	43
16	49	128	109	90	86	192	391	88	90	43	34	52
17	44	116	106	139	81	192	447	114	94	40	38	50
18	46	112	106	114	79	192	430	145	155	40	35	57
19	38	116	104	112	75	174	358	145	265	79	19	60
20	38	102	104	102	73	202	306	148	250	161	*18	55
21	39	106	94	114	71	298	290	139	215	161	32	69
22	40	102	86	174	71	374	267	142	180	114	23	84
23	57	88	81	174	71	345	260	131	*144	75	10	84
24	106	94	79	158	73	337	245	134	114	77	29	90
25	86	*92	75	148	69	325	238	125	112	66	44	86
26	81	114	73	128	66	341	216	125	114	48	30	84
27	128	181	71	114	62	362	206	90	109	46	25	88
28	131	178	68	106	62	317	216	62	128	42	25	90
29	158	461	66	99	-	267	234	52	142	43	26	99
30	145	362	64	96	---	263	238	54	125	39	32	94
31	119	---	62	94	---	306	---	48	---	39	43	---
Total	2,073	4,305	4,157	2,863	2,775	6,813	13,926	3,670	3,179	1,975	969	1,929
Mean	66.9	144	134	92.4	99.1	220	464	118	106	63.7	31.3	64.3
(†)	-19	-10	+4	-9	+3	+35	+65	-19	-8	-12	-14	-33
Adjusted for change in reservoir contents												
Mean	47.9	134	138	83.4	102	255	529	99.0	98.0	51.7	17.3	31.3
Cfsm	0.456	1.28	1.31	0.794	0.971	2.43	5.04	0.943	0.933	0.492	0.165	0.298
In.	0.53	1.43	1.51	0.92	1.01	2.80	5.62	1.09	1.04	0.57	0.19	0.33

	Observed			Adjusted		
Calendar year 1958:	Max 1,440	Min 29	Mean 216	Mean 216	Cfsm 2.06	In. 27.90
Water year 1958-59:	Max 1,220	Min 10	Mean 133	Mean 131	Cfsm 1.25	In. 17.04

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Square Pond and Mousam Lake.
Note.--Stage-discharge relation affected by ice Dec. 23 to Jan. 14, Jan. 30 to Feb. 2, Feb. 18-21, Mar. 4. No gage-height record June 19-23; discharge estimated on basis of weather records, recorded range in stage, and records for nearby streams.

725. Salmon Falls River near South Lebanon, Maine

Location.--Lat 43°19'40", long 70°55'40", on left bank at Stair Falls, 1½ miles south of South Lebanon, York County, and 2½ miles upstream from Little River.

Drainage area.--147 sq mi.

Records available.--November 1928 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 179.60 ft above mean sea level, datum of 1929.

Average discharge.--30 years (1929-59), 239 cfs (unadjusted).

Extremes.--Maximum discharge during year, 1,790 cfs Apr. 6 (gage height, 5.86 ft); minimum, 12 cfs Sept. 14 (gage height, 1.14 ft).
1928-59: Maximum discharge, 5,490 cfs Mar. 19, 1936 (gage height, 12.31 ft); minimum, 4.7 cfs Aug. 28, 1950.

Remarks.--Records excellent except those for periods of aquatic growth, ice effect, or no gage-height record, which are fair. Flow partly regulated by powerplants above station and by Great East and Lovell Lakes, and Horn, Wilson, and Milton Ponds (also controls Northeast and Town House Ponds), combined capacity, 1,280,000,000 cu ft.

Revisions (water years).--WSP 1231: 1930-31(M), 1933(M). WSP 1301: 1936-37.

Rating tables, water year 1958-59, except periods of aquatic growth or ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 6				Apr. 7 to Sept. 30			
1.3	25	3.0	635	1.1	9.2	2.5	422
1.5	52	4.0	1,100	1.3	25	3.0	680
1.7	92	6.0	1,860	1.5	54	4.0	1,100
2.0	187			1.7	105	5.0	1,470
				2.0	206		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	83	267	59	80	38	549	256	153	150	52	93
2	100	31	135	130	160	180	600	240	136	116	36	78
3	97	95	155	80	148	158	1,250	233	127	100	86	83
4	81	136	108	40	142	158	1,470	221	86	70	89	102
5	30	108	116	102	128	158	1,560	221	92	45	105	66
6	120	122	246	*96	128	210	1,720	214	64	66	108	15
7	106	81	141	124	90	226	1,460	174	42	92	83	15
8	95	59	218	120	73	155	1,140	143	97	52	35	120
9	97	63	169	112	188	280	990	78	78	51	47	83
10	74	183	141	84	172	226	1,180	92	71	51	143	71
11	31	138	100	30	173	206	924	108	76	66	117	76
12	31	106	114	110	151	176	892	146	83	64	83	47
13	95	138	114	130	165	214	*836	163	49	120	83	13
14	100	92	59	118	103	158	599	146	40	127	78	81
15	100	72	165	120	40	54	499	150	110	78	51	111
16	108	36	145	129	183	267	499	66	92	81	21	83
17	61	138	116	119	169	246	489	102	108	92	133	73
18	32	106	111	72	145	238	364	105	160	83	97	81
19	32	119	165	138	125	284	378	150	250	17	68	51
20	110	92	148	169	129	301	402	124	265	139	*83	14
21	114	125	77	125	74	355	364	130	210	120	92	61
22	97	97	150	165	48	310	355	136	170	108	59	81
23	85	27	152	173	187	432	345	68	*140	94	13	81
24	97	63	140	116	191	386	260	31	97	92	78	68
25	83	*108	134	85	183	373	252	163	94	59	83	73
26	32	132	140	138	158	414	167	139	89	19	*61	61
27	70	92	114	132	176	427	236	100	66	117	73	13
28	150	173	72	132	90	276	260	133	46	97	71	59
29	126	319	140	119	-	165	272	130	130	92	54	64
30	102	141	122	116	-------	342	272	54	220	78	15	68
31	110	-------	116	90	-------	414	-------	31	-------	81	89	-------
Total	2,666	3,275	4,290	3,473	3,799	7,827	20,584	4,253	3,441	2,617	2,286	1,986
Mean	86.0	109	138	112	136	252	686	137	115	84.4	73.7	66.2
(†)	-47.3	+14.3	-10.0	-21.5	-16.2	+121	+150	-17.6	+2.5	-41.2	-74.4	-49.4
Adjusted for change in reservoir contents												
Mean	38.7	123	128	90.5	120	373	836	119	118	43.2	-0.7	16.8
Cfsm	0.263	0.837	0.871	0.616	0.816	2.54	5.69	0.810	0.803	0.294	-0.005	0.114
In.	0.30	0.93	1.00	0.71	0.85	2.93	6.35	0.93	0.90	0.34	-0.01	0.13

	Observed			Adjusted		
Calendar year 1958:	Max 1,680	Min 27	Mean 293	Mean 285	Cfsm 1.94	In. 26.32
Water year 1958-59:	Max 1,720	Min 13	Mean 166	Mean 167	Cfsm 1.14	In. 15.36

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Great East, and Lovell Lakes, and Horn, Wilson, and Milton (also controls Northeast and Town House) Ponds.
Note.--Stage-discharge relation affected by aquatic growth Oct. 1 to Nov. 9 and by ice Dec. 22-27, 29-31, Jan. 2, 3, 5-10, 12-15. No gage-height record Feb. 1-10, June 13-23, June 29 to July 8; discharge estimated on basis of recorded range in stage, weather records, and records for nearby streams. Negative figures of adjusted discharge and runoff indicate that evaporation and seepage exceeded natural inflow.

730. Oyster River near Durham, N. H.

Location.--Lat 43°08'55", long 70°58'00", on left bank 200 ft upstream from bridge on U. S. Highway 4, 2½ miles west of Durham, Strafford County, and 7 miles upstream from mouth.

Drainage area.--12.1 sq mi.

Records available.--October 1934 to September 1959. Monthly discharge only October and November 1934, published in WSP 1301.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 70 ft (from topographic map).

Average discharge.--25 years, 19.3 cfs.

Extremes.--Maximum discharge during year, 260 cfs Apr. 3 (gage height, 2.71 ft); maximum gage height, 2.91 ft Mar. 6 (backwater from ice); minimum discharge, 1.25 cfs Aug. 4, 5. 1934-59: Maximum discharge, 862 cfs Sept. 11, 1954 (gage height, 5.47 ft); maximum gage height, 7.45 ft Mar. 19, 1936; minimum discharge, 0.39 cfs Aug. 9-11, 1949.

Remarks.--Records good except those for periods of ice effect, which are fair.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.07	1.25	0.6	12
.1	1.45	1.0	34
.2	2.6	1.5	76
.3	4.1	2.0	141
.4	6.2	2.5	223

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.0	5.8	23	4.8	8.0	5.7	54	31	3.5	9.8	1.65	13
2	5.1	5.2	18	5.2	7.5	5.9	75	26	4.4	7.5	1.45	7.5
3	3.6	8.1	14	6.8	7.0	6.5	220	23	11	6.7	1.35	7.2
4	2.9	9.2	14	6.8	23	10	167	20	7.0	5.3	1.25	15
5	2.6	7.1	21	6.6	16	15	107	18	5.1	4.4	1.3	9.3
6	2.25	6.4	45	6.4	12	40	*94	16	4.4	3.8	1.5	6.8
7	2.05	5.9	31	6.1	10	69	76	15	4.4	3.4	1.5	5.3
8	1.95	5.4	23	5.7	9.0	50	66	15	4.0	2.9	1.7	4.4
9	1.9	14	19	5.4	8.7	35	70	13	3.6	2.5	2.9	3.6
10	1.8	18	15	4.7	8.3	26	70	12	3.1	3.1	3.7	3.1
11	1.6	12	13	4.1	7.9	22	70	11	2.6	21	3.5	3.1
12	1.5	9.3	12	4.0	6.4	19	59	17	2.4	11	2.7	2.9
13	1.4	8.1	11	4.1	6.7	17	48	22	4.3	7.2	2.05	2.5
14	*1.4	8.1	9.6	4.1	7.2	16	41	24	10	5.8	1.8	2.25
15	1.4	8.1	9.0	4.3	7.8	15	36	20	19	5.1	1.55	3.7
16	1.4	8.8	8.4	4.7	8.1	23	32	16	12	4.6	1.45	5.0
17	1.4	*7.8	7.9	8.4	8.3	35	30	14	9.3	3.6	1.6	3.8
18	1.4	7.1	7.7	6.6	8.1	28	28	12	15	3.0	1.95	3.2
19	1.4	7.2	7.7	6.4	7.7	25	27	10	35	2.8	1.95	3.0
20	1.35	7.0	7.7	6.2	7.2	45	32	10	35	4.1	1.55	2.6
21	1.35	6.7	7.6	7.0	6.7	80	32	9.2	24	13	1.45	2.4
22	1.4	6.5	7.6	25	6.5	82	27	8.4	18	6.7	1.5	2.3
23	2.15	5.9	7.2	20	6.2	61	24	7.2	14	4.6	1.4	2.1
24	5.5	5.8	6.6	14	5.9	54	22	6.7	10	3.5	1.8	2.05
25	4.4	5.6	5.9	11	5.8	56	21	*6.4	8.0	2.9	2.25	2.2
26	4.6	8.0	5.5	9.0	5.7	60	21	5.6	9.9	2.35	1.9	1.95
27	12	15	4.4	7.9	5.6	48	*26	5.2	9.3	*1.95	1.65	1.85
28	12	10	4.4	7.0	5.6	40	32	4.7	22	1.75	1.45	1.8
29	12	70	4.4	6.6	-	35	36	4.6	34	1.65	1.4	1.95
30	8.1	34	*5.3	8.0	-------	36	34	4.0	*16	1.6	2.6	2.05
31	6.6	-------	5.4	8.5	-------	39	-------	4.0	-------	1.65	*7.1	-------
Total	112.50	336.1	381.3	235.4	232.9	1,099.1	1,677	411.0	360.3	159.25	62.90	127.90
Mean	3.63	11.2	12.3	7.59	8.32	35.5	55.9	13.3	12.0	5.14	2.03	4.26
Cfsm	0.300	0.926	1.02	0.627	0.688	2.93	4.62	1.10	0.992	0.425	0.168	0.352
In.	0.35	1.03	1.17	0.72	0.72	3.38	5.15	1.26	1.11	0.49	0.19	0.39

Calendar year 1958: Max 350 Min 1.25 Mean 23.1 Cfsm 1.91 In. 25.88
Water year 1958-59: Max 220 Min 1.25 Mean 14.2 Cfsm 1.17 In. 15.96

Peak discharge (base, 170 cfs).--Apr. 3 (8 a.m.) 260 cfs (2.71 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 14, Dec. 17 to Apr. 3.

735. Lamprey River near Newmarket, N. H.

Location.--Lat 43°06'05", long 70°57'20", on right bank 200 ft upstream from Packers Falls, 2 miles northwest of Newmarket, Rockingham County, and 4.6 miles upstream from mouth.

Drainage area.--183 sq mi.

Records available.--July 1934 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 40 ft (from topographic map).

Average discharge.--25 years, 279 cfs.

Extremes.--Maximum discharge during year, 3,300 cfs Apr. 5 (gage height, 9.83 ft); minimum daily, 11 cfs Aug. 23, 29, Sept. 27, 30.
1934-59: Maximum discharge, 5,490 cfs Mar. 20, 1936 (gage height, 14.88 ft), from rating curve extended above 3,100 cfs on basis of computation of flow over dam at gage height 14.69 ft; minimum daily, 1 cfs Oct. 21, 1935.

Remarks.--Records excellent except those below 150 cfs, which are good, and those for periods of ice effect, which are fair. Flow regulated by Pawtuckaway and Mendums Ponds (combined capacity, about 600,000,000 cu ft).

Revisions (water years).--WSP 1231: 1936-37.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 22				Jan. 23 to Sept. 30			
1.0	32	2.0	176	0.6	9.2	2.0	167
1.2	51	3.0	382	.8	18	3.0	361
1.5	92	4.0	655	1.1	40	5.0	970
				1.5	92	10.0	3,390

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	112	450	94	151	99	670	445	54	157	22	105
2	102	94	385	98	134	99	900	410	59	130	19	105
3	92	100	300	117	118	106	1,700	361	96	114	17	86
4	82	137	270	133	206	190	2,830	319	102	92	15	98
5	75	118	322	140	*247	298	3,130	286	89	72	15	84
6	68	115	494	128	231	350	*2,310	261	77	63	15	59
7	61	106	450	112	263	660	1,640	242	70	55	16	45
8	56	94	425	102	236	560	1,290	227	61	47	16	36
9	54	110	384	92	193	510	1,140	211	55	42	23	30
10	50	205	358	82	165	470	1,090	193	49	39	25	26
11	44	181	268	77	161	420	1,110	181	42	76	30	23
12	39	158	215	77	146	350	1,050	185	38	89	27	21
13	39	138	190	78	140	294	904	223	42	68	22	19
14	*37	125	169	72	145	292	750	253	86	59	19	18
15	36	123	158	71	151	279	638	253	172	52	19	18
16	35	166	149	74	186	310	557	229	181	51	17	32
17	82	*60	149	125	172	360	482	202	167	48	15	34
18	102	117	149	120	167	380	438	180	188	43	16	28
19	100	125	147	112	161	370	412	161	273	38	17	26
20	96	118	147	107	142	500	418	150	385	42	15	25
21	94	110	137	110	128	700	452	142	341	103	13	22
22	92	104	125	247	134	900	445	132	283	102	13	21
23	94	95	117	265	118	890	410	120	238	84	11	19
24	115	88	118	231	112	880	366	108	193	67	12	18
25	120	84	110	242	106	820	335	*98	157	54	15	16
26	120	88	100	240	105	780	311	88	150	40	16	13
27	190	145	95	211	102	780	*328	79	150	*37	14	11
28	204	138	92	181	99	700	390	74	156	32	12	12
29	219	472	89	161	-	630	435	65	190	27	11	12
30	189	450	*91	161	-------	540	462	60	180	24	20	11
31	142	-------	95	172	-------	540	-------	59	-------	23	*53	-------
Total	2,918	4,276	6,748	4,232	4,419	15,057	27,393	5,997	4,324	1,970	570	1,073
Mean	94.1	143	218	137	158	486	913	193	144	63.5	18.4	35.8
Cfsm	0.514	0.781	1.19	0.749	0.863	2.66	4.99	1.05	0.787	0.347	0.101	0.196
In.	0.59	0.87	1.37	0.86	0.90	3.06	5.57	1.22	0.88	0.40	0.12	0.22

Calendar year 1958: Max 2,710 Min 9.9 Mean 329 Cfsm 1.80 In. 24.40
Water year 1958-59: Max 3,130 Min 11 Mean 216 Cfsm 1.18 In. 16.06

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 30 to Dec. 3, Dec. 7, 8, Mar. 6-12, Mar. 16 to Apr. 3. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

750. Pemigewasset River at Woodstock, N. H.

Location.--Lat 43°58'35", long 71°40'50", on right bank 0.2 mile east of Woodstock, Grafton County, and 0.7 mile upstream from Eastman Brook.

Drainage area.--193 sq mi.

Records available.--October 1939 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 615 ft (from topographic map).

Average discharge.--20 years, 510 cfs.

Extremes.--Maximum discharge during year, about 6,700 cfs Apr. 3; maximum gage height, 8.27 ft Apr. 3 (backwater from ice); minimum daily discharge, 66 cfs Aug. 6.
1939-59: Maximum discharge, 24,600 cfs Dec. 21, 1957 (gage height, 12.43 ft), from rating curve extended above 9,300 cfs by logarithmic plotting; minimum daily, 42 cfs Feb. 11, 1948.

Remarks.--Records good except those for periods of ice effect, which are fair. Some diurnal fluctuation caused by powerplant above station.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 3				Apr. 4 to Sept. 30			
2.4	93	3.5	470	2.2	66	3.5	520
2.7	168	4.0	720	2.5	127	4.0	810
3.0	273	5.0	1,540	3.0	295	5.0	1,570

Discharge, in cubic feet per second, water year October 1958 September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*213	326	190	105	220	130	382	822	299	241	93	483
2	337	277	180	110	210	128	578	822	315	220	80	g271
3	206	245	170	110	220	128	3,800	840	311	202	70	g662
4	156	217	210	105	270	130	1,940	951	275	182	70	g420
5	149	206	220	105	300	128	1,440	1,110	241	170	68	g234
6	150	206	240	105	230	130	1,350	1,290	234	161	66	g196
7	123	220	175	100	210	192	1,100	*1,450	238	199	68	g158
8	116	203	*150	99	200	150	*1,300	1,400	220	170	71	g127
9	109	210	145	98	195	140	1,690	944	199	138	104	g113
10	107	277	140	97	190	135	1,440	828	176	130	173	*g100
11	154	245	140	96	185	128	1,440	930	164	176	314	106
12	153	217	135	95	180	128	1,240	1,160	152	152	145	106
13	133	200	135	*94	175	130	1,050	1,010	232	152	104	90
14	113	279	130	93	175	128	1,060	828	284	135	88	84
15	107	510	130	92	180	120	1,130	702	2,550	122	79	90
16	116	570	125	100	175	150	1,160	582	1,270	118	75	111
17	136	406	125	250	*170	144	1,820	510	804	111	84	98
18	182	346	125	280	170	138	1,880	470	*774	96	106	88
19	153	330	130	230	165	133	2,090	420	1,000	96	86	82
20	136	314	130	210	160	208	1,990	495	774	109	79	82
21	120	295	120	200	155	410	1,250	510	606	111	73	79
22	111	273	120	2,200	150	450	1,100	1,170	490	102	71	77
23	118	251	120	1,120	145	330	1,130	652	430	92	70	75
24	328	234	115	530	140	262	1,330	600	351	94	110	79
25	273	214	115	440	135	231	1,520	570	315	92	152	80
26	206	192	115	310	135	217	1,720	475	295	82	102	80
27	473	362	110	300	140	217	1,390	411	295	84	88	73
28	497	210	110	300	135	196	1,040	367	492	77	80	70
29	474	360	110	310	-	186	944	339	425	*75	82	73
30	386	270	110	320	-------	192	828	319	303	73	92	84
31	*306	-------	105	300	-------	231	-------	335	-------	73	111	---------
Total	6,341	8,445	4,375	8,904	5,115	5,720	42,132	23,312	14,514	4,035	3,054	4,471
Mean	205	282	141	287	183	185	1,404	752	484	130	98.5	149
Cfsm	1.06	1.46	0.731	1.49	0.948	0.959	7.27	3.90	2.51	0.674	0.510	0.772
In.	1.22	1.63	0.84	1.72	0.99	1.10	8.12	4.49	2.80	0.78	0.59	0.86

Calendar year 1958: Max 6,140 Min 68 Mean 448 Cfsm 2.32 In. 31.52
Water year 1958-59: Max 3,800 Min 66 Mean 357 Cfsm 1.85 In. 25.14

Peak discharge (base, 7,100 cfs).--No peak above base.

* Discharge measurement made on this day.
g Computed from once-daily tape-gage readings.
Note.--Stage-discharge relation affected by ice Nov. 28 to Jan. 22, Jan. 24 to Feb. 28, Mar. 4, 8-10, 22, 23, Apr. 3.

760. Baker River near Rumney, N. H.

Location.--Lat 43°47'45", long 71°50'45", on right bank 0.3 mile upstream from Halls Brook and 1¾ miles southwest of Rumney, Grafton County.

Drainage area.--143 sq mi.

Records available.--October 1928 to September 1959. October 1928 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Concrete control since Sept. 10, 1938. Altitude of gage is 495 ft (from topographic map).

Average discharge.--31 years, 256 cfs.

Extremes.--Maximum discharge during year, 3,060 cfs Apr. 3 (gage height, 6.33 ft); minimum, 15 cfs Aug. 4-6.

1928-59: Maximum discharge, 21,400 cfs June 15, 1942 (gage height, 15.50 ft), from rating curve extended above 3,800 cfs on basis of slope-area measurements at gage heights 13.03, 14.49, and 15.50 ft; minimum, 6.5 cfs Dec. 4, 1947, caused by ice conditions upstream.

Maximum discharge known, 25,900 cfs Nov. 3, 1927 (gage height, 17.4 ft, from floodmarks), from rating curve extended above 3,800 cfs as described above.

Remarks.--Records excellent except those for periods of ice effect, which are fair.

Revisions (water years).--WSP 726: Drainage area. WSP 781: 1934(M). WSP 1231: 1929-33(M), 1934.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.27	15	3.5	395
2.3	18	4.0	720
2.4	30	5.0	1,620
2.7	87	6.0	2,670
3.0	175		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*43	128	103	40	92	48	300	395	90	87	18	186
2	92	116	119	42	90	50	600	344	97	74	18	110
3	65	105	103	44	100	52	2,200	301	110	69	17	245
4	50	97	110	45	105	55	2,040	287	95	61	16	219
5	43	87	119	46	95	58	1,670	283	74	54	15	119
6	40	80	216	45	92	62	1,640	*274	65	48	16	76
7	36	78	155	44	90	100	1,280	270	59	54	18	59
8	33	72	*112	42	85	115	1,220	252	56	54	32	48
9	32	74	105	41	80	105	*1,620	197	52	44	36	*43
10	30	100	80	40	74	100	1,390	175	46	40	192	38
11	35	95	70	39	70	90	1,480	172	*41	55	358	38
12	41	80	76	38	68	86	1,130	220	38	69	143	40
13	40	74	74	*38	66	82	886	205	54	87	78	33
14	35	85	62	37	64	78	862	179	72	65	57	30
15	32	152	60	37	64	74	950	175	536	52	44	35
16	32	168	58	40	63	90	977	155	492	44	40	56
17	52	142	56	56	*62	94	1,340	139	349	40	77	48
18	72	119	54	72	61	88	1,300	128	283	35	78	40
19	57	105	54	78	60	83	1,210	116	354	33	56	35
20	48	97	54	70	59	100	1,050	133	370	46	43	33
21	43	90	54	66	58	200	650	136	301	*44	36	32
22	38	90	52	200	56	325	524	359	220	38	35	30
23	47	78	52	300	56	330	498	274	186	33	30	29
24	250	76	50	240	54	280	498	194	139	30	46	27
25	165	72	48	210	53	230	504	165	110	30	102	30
26	122	67	46	170	52	200	504	139	100	30	63	29
27	190	113	45	140	50	190	428	116	105	27	44	26
28	216	70	43	120	49	170	370	100	140	24	38	25
29	232	170	42	110	-	160	339	85	182	22	38	24
30	*194	145	42	110	-------	160	354	85	125	21	61	26
31	149	-------	42	108	-------	175	-------	122	-------	20	75	-------
Total	2,554	3,025	2,356	2,708	1,968	4,030	29,814	6,175	4,941	1,430	1,920	1,809
Mean	82.4	101	76.0	87.4	70.3	130	994	199	165	46.1	61.9	60.3
Cfsm	0.576	0.706	0.531	0.611	0.492	0.909	6.95	1.39	1.15	0.322	0.433	0.422
In.	0.66	0.79	0.61	0.70	0.51	1.05	7.75	1.61	1.29	0.37	0.50	0.47

Calendar year 1958: Max 3,680 Min 19 Mean 249 Cfsm 1.74 In. 23.64
Water year 1958-59: Max 2,200 Min 15 Mean 172 Cfsm 1.20 In. 16.31

Peak discharge (base, 3,600 cfs).--No peak above base.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28-30, Dec. 8 to Apr. 3.

765. Pemigewasset River at Plymouth, N. H.

Location.--Lat 43°45'35", long 71°41'10", on right bank 150 ft downstream from bridge at Plymouth, Grafton County, and a third of a mile downstream from Baker River.

Drainage area.--622 sq mi.

Records available.--October 1903 to September 1959. Records for April 1886 to September 1903, published in WSP 124, have been found to be unreliable and should not be used.

Gage.--Water-stage recorder. Datum of gage is 457.07 ft above mean sea level, datum of 1929. Prior to Jan. 1, 1910, staff or chain gages at sites 150 and 200 ft upstream at present datum or datum 1.11 ft lower. Jan. 1, 1910, to Sept. 30, 1926, staff gage at site 200 ft upstream at present datum.

Average discharge.--56 years, 1,353 cfs.

Extremes.--Maximum discharge during year, 21,800 cfs Apr. 3; maximum gage height, 12.81 ft Apr. 3; minimum discharge, 132 cfs Aug. 7, 8; minimum daily, 132 cfs Aug. 7.
1903-59: Maximum discharge, 65,400 cfs Mar. 19, 1936 (gage height, 29.0 ft, from floodmarks), from rating curve extended above 33,000 cfs on basis of computations of flow over dam at gage heights 23.0, 27.4, and 29.0 ft; minimum, 39 cfs Oct. 1, 3, 4, 1948; minimum daily, 45 cfs Sept. 20, 1923.

Remarks.--Records excellent except those for period of ice effect, which are fair. Some diurnal fluctuation caused by powerplants above station.

Revisions (water years).--WSP 471: 1912-14. WSP 726: Drainage area. WSP 1231: 1904-11, 1913-14, 1917-18, 1919(M), 1920-25, 1926-27(M), 1929-31(M). See also Records available.

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Rate of change in stage used as a factor Apr. 4, 5)

Oct. 1 to Apr. 2		Apr. 3 to Sept. 30			
0.3	213	0.0	105	1.2	1,110
.5	330	.2	175	1.5	1,540
.8	564	.5	345	2.0	2,150
1.0	810	.9	720	6.0	7,150
1.3	1,260				

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	268	622	500	240	600	300	1,400	2,130	*600	530	155	957
2	532	564	520	250	480	300	2,500	2,050	610	492	167	819
3	426	516	480	260	470	300	9,500	1,920	654	465	147	1,140
4	350	488	450	260	430	310	12,000	1,980	610	398	139	1,320
5	299	433	660	250	470	330	8,000	2,080	520	360	135	695
6	268	419	840	240	680	360	6,250	2,250	456	332	135	465
7	262	419	720	230	630	430	5,230	2,420	447	326	132	390
8	246	411	540	225	460	500	*4,540	2,470	420	352	143	332
9	235	411	470	220	450	460	6,920	1,920	398	326	163	280
10	230	657	450	215	430	410	5,690	1,620	352	286	285	252
11	240	564	430	210	420	390	5,980	1,630	326	338	998	225
12	287	488	400	205	400	380	4,970	1,960	306	405	559	225
13	262	433	380	200	380	380	3,980	1,920	338	405	338	210
14	246	455	360	200	380	390	3,700	1,600	465	382	264	180
15	218	1,000	340	220	390	370	4,040	1,430	2,570	312	215	200
16	235	1,200	340	230	370	400	4,100	1,230	2,590	280	195	252
17	268	970	340	400	360	440	5,220	1,050	1,670	258	230	252
18	350	732	340	580	370	410	6,280	957	1,440	236	264	220
19	343	645	350	580	360	400	5,510	866	1,840	225	247	200
20	305	622	350	520	350	420	5,930	892	1,860	274	195	185
21	268	564	330	500	330	700	3,710	984	1,430	280	175	175
22	252	536	310	1,100	320	1,500	3,000	2,030	1,110	269	163	175
23	252	469	300	3,300	310	1,350	2,840	1,930	957	230	143	171
24	669	447	300	1,600	*310	1,150	3,030	1,360	768	220	167	167
25	745	433	300	1,250	300	1,000	3,320	1,220	654	220	334	167
26	526	397	290	850	310	900	3,600	998	610	205	286	167
27	823	719	280	*780	320	880	3,210	853	610	190	215	163
28	1,120	530	270	720	310	820	2,520	756	774	175	180	151
29	1,240	*750	260	620	-	750	*2,250	676	1,050	*163	206	*147
30	1,000	800	*250	640	--------	750	2,100	621	*756	159	312	151
31	*719	--------	240	680	--------	770	--------	676	--------	155	*398	--------
Total	13,484	17,694	12,390	17,775	11,390	18,250	141,320	46,479	27,191	9,248	7,685	10,433
Mean	435	590	400	573	407	589	4,711	1,499	906	298	248	348
Cfsm	0.699	0.949	0.643	0.921	0.654	0.947	7.57	2.41	1.46	0.479	0.399	0.559
In.	0.81	1.06	0.74	1.06	0.68	1.09	8.45	2.78	1.63	0.55	0.46	0.62

Calendar year 1958: Max 15,400 Min 156 Mean 1,179 Cfsm 1.90 In. 25.74
Water year 1958-59: Max 12,000 Min 132 Mean 913 Cfsm 1.47 In. 19.93

Peak discharge (base, 12,600 cfs).--Apr. 3 (6:30 p.m.) 21,800 cfs (12.81 ft at 9 p.m.).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28 to Apr. 5 (no gage-height record Dec. 7-29, Jan. 6-16, 18-21, 24-27, Feb. 21-23; discharge estimated on basis of 1 discharge measurement, weather records, and recorded range in stage when available, powerplant records, and records for Baker River near Rumney).

770. Squam River at Ashland, N. H.

Location.--Lat 43°42'15", long 71°37'50", on right bank 200 ft upstream from bridge on U. S. Highway 3 and a third of a mile north of Ashland, Grafton County.

Drainage area.--57.6 sq mi.

Records available.--August 1939 to September 1959.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 545 ft (from topographic map).

Average discharge.--20 years, 90.1 cfs.

Extremes.--Maximum discharge during year, 86 cfs Mar. 18 (gage height, 10.49 ft); maximum gage height, 10.78 ft Mar. 23 (backwater from ice); minimum daily discharge, 45 cfs July 4.
1939-59: Maximum discharge, 498 cfs Apr. 11, 1951 (gage height, 11.93 ft); minimum daily, 14 cfs Feb. 4, 1940.

Remarks.--Records excellent. Flow completely regulated by Squam and Little Squam Lakes.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

10.2	43
10.3	57
10.5	89

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*67	68	67	73	75	73	71	79	59	62	63	62
2	67	68	67	73	75	73	71	83	59	63	63	62
3	67	68	67	73	75	71	78	76	59	63	63	62
4	67	68	67	73	76	71	78	76	59	45	62	62
5	67	*67	68	73	76	75	78	76	59	57	62	62
6	67	67	68	73	76	76	78	71	59	57	62	62
7	68	67	68	73	76	79	73	*68	59	57	62	62
8	71	67	68	73	75	79	70	68	59	59	60	62
9	71	67	70	71	75	79	73	70	59	59	60	62
10	71	67	70	71	73	79	73	73	59	60	60	62
11	71	67	68	71	73	81	73	75	59	60	60	62
12	70	67	68	*71	73	76	73	71	59	60	60	62
13	68	65	68	73	73	73	73	68	59	60	60	62
14	68	65	68	73	73	75	73	63	59	62	60	60
15	68	65	68	73	73	76	73	57	60	62	60	60
16	68	65	68	73	73	81	73	60	60	62	60	60
17	68	67	68	73	73	84	75	62	60	62	60	60
18	70	67	68	73	*73	83	76	60	60	62	60	60
19	68	67	68	73	73	71	78	63	*60	62	60	60
20	67	67	68	73	73	71	78	63	60	62	60	60
21	67	67	67	73	73	71	76	62	62	63	60	60
22	67	67	67	73	73	71	75	59	60	63	60	60
23	67	67	67	73	73	71	75	59	60	63	60	60
24	67	67	67	73	73	71	75	59	60	65	60	59
25	67	67	67	73	73	71	73	59	60	65	60	59
26	67	67	67	73	73	71	73	59	62	65	60	59
27	67	67	67	73	73	71	75	59	62	65	60	59
28	68	67	67	73	73	71	78	59	62	65	60	59
29	70	67	68	73	-	71	76	59	62	65	62	59
30	70	67	71	73	-------	70	76	59	62	*65	62	59
31	68	-------	71	75	-------	70	-------	59	-------	63	62	-------
Total	2,114	2,006	2,106	2,257	2,066	2,305	2,240	2,034	1,798	1,903	1,883	1,819
Mean	68.2	66.9	67.9	72.8	73.8	74.4	74.7	65.6	59.9	61.4	60.7	60.6
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 199 Min 26 Mean 85.2 Cfsm - In. -
Water year 1958-59: Max 84 Min 45 Mean 67.2 Cfsm - In. -

* Discharge measurement made on this day.

780. Smith River near Bristol, N. H.

Location.--Lat 43°34'00", long 71°44'50", on right bank in Hill, Merrimack County, 1.5 miles upstream from mouth and 1¾ miles southwest of Bristol, Grafton County.

Drainage area.--85.8 sq mi.

Records available.--May 1918 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 449.80 ft above mean sea level, datum of 1929 (levels by Corps of Engineers). Prior to Nov. 25, 1933, staff gage at site 1½ miles upstream at different datum.

Average discharge.--41 years, 142 cfs.

Extremes.--Maximum discharge during year, 1,600 cfs Apr. 4 (gage height, 6.51 ft); minimum daily, 6.3 cfs Aug. 23.
1918-59: Maximum discharge, 8,100 cfs Mar. 19, 1936 (gage height, 16.09 ft, from floodmarks), from rating curve extended above 2,700 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 2.7 cfs Aug. 2, 1933.
Maximum stage known since at least 1885, that of Mar. 19, 1936.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Prior to 1954, some diurnal fluctuation caused by small mill above station; greater fluctuation prior to 1941.

Revisions (water years).--WSP 711: Drainage area. WSP 781: 1934. WSP 1231: 1919, 1920-21(M), 1922-31, 1932-33(M), 1941-43.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.83	6.3	3.5	207
1.9	8.6	4.0	380
2.0	12	5.0	840
2.3	29	6.0	1,340
2.7	64	6.5	1,590
3.1	118		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	60	98	30	82	38	250	229	79	38	9.0	197
2	20	52	78	31	72	39	450	199	66	41	7.8	144
3	20	56	67	33	64	40	1,100	169	80	40	7.8	120
4	19	83	66	33	68	43	1,450	149	79	35	*7.5	129
5	18	76	72	33	84	46	1,390	131	58	28	7.5	91
6	16	64	140	33	80	49	1,280	*120	47	26	8.6	62
7	15	58	155	32	76	80	1,040	112	41	29	8.6	48
8	15	51	*105	31	72	90	880	104	37	23	9.0	39
9	15	62	87	31	60	86	*890	96	34	21	10	*31
10	15	85	67	30	54	82	855	91	31	19	23	27
11	17	76	56	29	54	76	845	88	*28	19	31	24
12	16	64	53	*28	52	70	760	114	26	20	30	21
13	16	54	48	28	50	66	636	153	30	21	19	19
14	15	52	43	28	50	62	538	125	31	20	15	17
15	15	62	42	28	50	60	524	112	37	19	12	30
16	15	87	42	30	*50	74	520	95	48	17	11	42
17	15	88	41	45	50	80	556	85	54	15	10	42
18	15	74	40	50	49	80	574	79	69	14	9.0	34
19	15	68	40	52	48	76	533	74	99	13	8.2	27
20	15	60	40	55	47	86	474	80	149	14	7.5	24
21	16	54	39	50	46	120	376	83	140	*16	7.2	22
22	15	49	38	100	45	210	297	165	101	17	7.8	20
23	24	44	38	170	44	280	247	198	87	18	6.3	19
24	60	41	36	210	43	260	221	131	65	16	12	18
25	74	39	35	200	43	240	204	101	51	14	15	16
26	60	43	34	167	41	207	194	82	48	13	16	15
27	88	68	33	125	40	197	191	69	50	12	12	15
28	127	60	32	101	39	176	229	60	53	11	10	14
29	122	125	31	87	-	150	221	52	60	9.7	17	14
30	*101	150	31	80	-------	149	224	64	50	9.4	219	13
31	79	-------	31	85	-------	171	-------	98	-------	9.4	181	-------
Total	1,092	2,005	1,758	2,065	1,553	3,483	17,949	3,508	1,828	617.5	754.8	1,334
Mean	35.2	66.8	56.7	66.6	55.5	112	598	113	60.9	19.9	24.3	44.5
Cfsm	0.410	0.779	0.661	0.776	0.647	1.31	6.97	1.32	0.710	0.232	0.283	0.519
In.	0.47	0.87	0.76	0.90	0.67	1.51	7.78	1.52	0.79	0.27	0.33	0.58

Calendar year 1958: Max 1,620 Min 8.6 Mean 154 Cfsm 1.79 In. 24.35
Water year 1958-59: Max 1,450 Min 6.3 Mean 104 Cfsm 1.21 In. 16.45

Peak discharge (base, 1,150 cfs).--Apr. 4 (6 p.m.) 1,600 cfs (6.51 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Dec. 6, Dec. 11 to Jan. 25, Feb. 2 to Mar. 25, Mar. 29, Apr. 1-3.

800. Lake Winnipesaukee at The Weirs, N. H.

Location.--Lat 43°36'20", long 71°27'25", 800 ft north of highway bridge at The Weirs, Belknap County.

Drainage area.--363 sq mi at outlet at Lakeport.

Records available.--September 1933 to September 1959. Prior to November 1937, month-end contents only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 500.02 ft above mean sea level, datum of 1929. Prior to November 1937, staff and float gage at Lakeport at datum 0.53 ft higher.

Extremes.--Maximum daily gage height during year, 4.28 ft May 13, 22, 23; minimum daily, 2.28 ft Jan. 14, 15.
1937-59: Maximum daily gage height, 5.86 ft May 22, 23, 1954; minimum daily, 0.63 ft Dec. 11, 1941.

Remarks.--Lake used for recreation and conservation for development of water power. Total usable capacity, 18,240,000,000 cu ft. Draft limited by law to an average of 250 cfs during the 7 days in any week between June 1 and Oct. 15 of any year when gage reading is at or below 502.4 ft above mean sea level. Stage regulated at outlet and by Wentworth, Merrymeeting (see p.), and other lakes. Contents given herein are computed from gage heights at 12 p.m. on last day of month, eliminating the effect of seiche and wind action.

Capacity table, water year 1958-59 (gage height, in feet, and contents, in millions of cubic feet)

2.0	13,880
3.0	15,840
4.0	17,840
5.0	19,850

Mean gage height, in feet, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.00	2.45	2.48	2.34	2.48	2.43	2.32	4.23	4.25	4.18	3.63	3.63
2	3.00	2.46	2.45	2.38	2.45	2.41	2.36	4.23	4.24	4.16	3.57	3.68
3	2.98	2.48	2.46	2.37	2.47	2.40	2.57	4.23	4.25	4.15	3.57	3.68
4	2.97	2.49	2.50	2.37	2.51	2.42	2.77	4.24	4.26	4.14	3.55	3.66
5	2.92	2.48	2.51	2.33	2.52	2.43	2.92	4.25	4.25	4.13	3.53	3.64
6	2.89	2.47	2.50	2.33	2.51	2.47	3.05	4.26	4.23	4.13	3.51	3.64
7	2.86	2.46	2.47	2.32	2.51	2.50	3.16	4.26	4.21	4.11	3.51	3.62
8	2.85	2.45	2.50	2.32	2.49	2.49	3.26	4.23	4.20	4.10	3.48	3.59
9	2.84	2.48	2.50	2.31	2.52	2.50	3.39	4.23	4.21	4.09	3.50	3.60
10	2.81	2.50	2.48	2.31	2.56	2.50	3.48	4.23	4.17	4.07	3.52	3.58
11	2.76	2.45	2.47	2.30	2.57	2.49	3.58	4.23	4.17	4.10	3.54	3.53
12	2.73	2.45	2.47	2.30	2.57	2.52	3.65	4.25	4.15	4.07	3.51	3.50
13	2.71	2.45	2.45	2.29	2.57	2.55	3.72	4.28	4.16	4.05	3.49	3.45
14	2.69	2.47	2.46	2.28	2.58	2.54	3.77	4.27	4.15	4.04	3.48	3.40
15	2.66	2.47	2.45	2.28	2.62	2.54	3.81	4.26	4.16	4.02	3.47	3.43
16	2.65	2.48	2.45	2.31	2.62	2.57	3.85	4.24	4.18	3.98	3.44	3.41
17	2.64	2.47	2.46	2.33	2.60	2.55	3.89	4.23	4.18	3.96	3.43	3.37
18	2.60	2.46	2.46	2.33	2.60	2.52	3.94	4.22	4.16	3.94	3.42	3.35
19	2.58	2.44	2.45	2.32	2.57	2.49	3.97	4.22	4.21	3.94	3.40	3.30
20	2.57	2.43	2.43	2.31	2.55	2.46	4.01	4.23	4.20	3.95	3.38	3.28
21	2.55	2.42	2.42	2.37	2.54	2.45	4.04	4.23	4.23	3.94	3.35	3.26
22	2.53	2.39	2.42	2.44	2.53	2.44	4.06	4.28	4.22	3.92	3.36	3.25
23	2.53	2.38	2.41	2.45	2.52	2.44	4.08	4.28	4.21	3.93	3.32	3.25
24	2.56	2.36	2.40	2.46	2.51	2.42	4.10	4.26	4.20	3.89	3.31	3.22
25	2.54	2.35	2.38	2.47	2.49	2.41	4.12	4.25	4.20	3.82	3.30	3.21
26	2.54	2.37	2.37	2.47	2.48	2.39	4.13	4.25	4.19	3.81	3.28	3.20
27	2.53	2.36	2.37	2.48	2.47	2.40	4.15	4.25	4.18	3.77	3.27	3.18
28	2.52	2.40	2.37	2.48	2.45	2.37	4.18	4.25	4.19	3.76	3.27	3.18
29	2.51	2.47	2.36	2.48	-	2.36	4.20	4.25	4.20	3.73	3.31	3.17
30	2.49	2.45	2.35	2.49	-------	2.34	4.22	4.25	4.18	3.71	3.50	3.17
31	2.48	-------	2.34	2.49	-------	2.32	-------	4.25	-------	3.68	3.55	-------
(†)	14,780	14,780	14,540	14,820	14,740	14,510	18,300	18,340	18,200	17,160	17,040	16,180
(‡)	-392	0	-89.6	+105	-33.1	-85.9	+1,462	+14.9	-54.0	-388	-44.8	-332

Calendar year 1958..... ‡ -66.6
Water year 1958-59..... ‡ +11.1

† Contents, in millions of cubic feet, at 12 p.m. on last day of month.
‡ Change in contents, equivalent in cubic feet per second.

805. Lake Winnipesaukee Outlet at Lakeport, N. H.

Location.--Lat 43°32'55", long 71°27'55", 100 ft upstream from highway bridge across Paugus Bay at Lakeport, Belknap County.

Drainage area.--363 sq mi.

Records available.--January 1860 to December 1911 (monthly gage heights only), June 1933 to September 1959.

Gage.--Water-stage recorder, Keeler deflection meter, and measuring flume. Datum of gage is 500.55 ft above mean sea level, datum of 1929. January 1860 to December 1911, staff gage at site 150 ft downstream at same datum. June 1, 1933, to Sept. 30, 1936, staff gage and continuous-recording current meter at same site and datum. Oct. 1, 1936, to May 23, 1944, discharge computed from flow over spillway and through gates and wheels at site 150 ft downstream.

Average discharge.--26 years, 532 cfs (adjusted for storage).

Extremes.--Maximum daily discharge during year, 1,030 cfs Mar. 23; minimum daily, 205 cfs Dec. 30.
1933-59: Maximum daily discharge, 2,890 cfs Mar. 31, 1936; minimum daily, 5 cfs several days during April, May, and June 1957.

Remarks.--Records good. Flow completely regulated by Winnipesaukee (see preceding page), Wentworth, Merrymeeting (see p. 109), and other lakes. Daily discharge computed from relation between discharge, stage, and deflection of vane in measuring flume.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	285	275	310	275	270	500	640	305	335	550	275	310
2	285	275	280	305	330	540	270	485	300	340	275	305
3	295	*305	265	260	265	520	285	325	295	315	270	305
4	285	*255	270	285	260	525	310	*470	300	280	270	310
5	360	260	275	320	250	520	330	260	325	265	265	295
6	375	245	260	290	260	520	345	260	330	320	265	305
7	330	255	275	475	240	495	310	260	325	300	265	305
8	330	290	*315	340	265	475	*305	500	345	300	260	*320
9	330	285	*285	275	310	545	*295	295	300	245	260	*295
10	345	300	270	280	270	535	305	325	285	290	295	295
11	340	265	275	270	275	535	310	335	*290	415	270	290
12	335	250	260	*320	270	525	330	305	285	575	265	305
13	330	280	270	*280	265	570	345	285	310	565	275	300
14	405	290	285	280	255	500	310	*415	570	560	285	320
15	390	275	295	285	285	485	310	310	660	560	285	300
16	380	270	240	270	*420	655	315	255	640	555	300	255
17	400	305	255	270	*520	940	315	325	590	345	325	270
18	385	260	265	275	530	950	310	355	470	295	295	260
19	380	245	270	305	530	935	335	320	320	510	285	255
20	410	240	270	240	525	950	355	300	285	585	290	295
21	395	270	285	270	520	950	305	310	535	560	290	315
22	395	265	305	265	520	1,010	310	510	590	*545	290	270
23	390	265	270	265	540	1,030	305	330	560	*540	300	275
24	390	305	265	270	510	985	295	325	560	360	325	265
25	365	260	280	285	505	975	305	350	540	295	290	295
26	355	265	315	315	505	975	315	300	485	495	285	290
27	350	275	260	285	500	960	320	290	545	540	285	290
28	265	300	275	270	495	955	355	295	545	540	280	310
29	255	265	305	265	-	965	325	310	585	540	290	275
30	260	270	205	255	---------	965	315	320	550	540	300	260
31	270	--------	295	265	---------	960	--------	320	--------	330	345	--------
Total	10,665	8,165	8,550	8,910	10,690	22,950	9,780	10,350	13,055	13,455	8,855	8,740
Mean	344	272	276	287	382	740	326	334	435	434	286	291
(†)	-392	0	-89.6	+105	-33.1	-85.9	+1,462	+14.9	-54.0	-388	-44.8	-332
Adjusted for change in contents in Lake Winnipesaukee‡												
Mean	-48.0	272	186	392	349	654	1,788	349	381	45.7	241	-40.5
Cfsm	-0.132	0.749	0.512	1.08	0.961	1.80	4.93	0.961	1.05	0.126	0.664	-0.112
In.	-0.15	0.84	0.59	1.24	1.00	2.08	5.50	1.11	1.17	0.15	0.76	-0.12

	Observed			Adjusted		
Calendar year 1958:	Max 1,990	Min 135	Mean 608	Mean 541	Cfsm 1.49	In. 20.24
Water year 1958-59:	Max 1,030	Min 205	Mean 368	Mean 379	Cfsm 1.04	In. 14.17

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Lake Winnipesaukee.
‡ Negative figures indicate that evaporation and seepage from reservoirs exceeded inflow.

810. Winnipesaukee River at Tilton, N. H.

Location.--Lat 43°26'30", long 71°35'15", on right bank at Tilton, Belknap County, 0.3 mile upstream from Packer Brook.

Drainage area.--471 sq mi.

Records available.--January 1937 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 441.87 ft above mean sea level, unadjusted.

Average discharge.--22 years, 694 cfs.

Extremes.--Maximum discharge during year, 2,160 cfs Apr. 4 (gage height, 6.18 ft); minimum daily, 255 cfs Jan. 5.
1937-59: Maximum discharge, 3,810 cfs Sept. 21, 1938 (gage height, 7.90 ft), from rating curve extended above 2,400 cfs on basis of computation of peak flow over dam; maximum gage height, 7.93 ft Mar. 27, 1953; minimum daily discharge, 48 cfs Aug. 31, 1941.

Remarks.--Records good. Flow regulated by powerplants and by Winnipesaukee (see p. 81), Winnisquam, Wentworth, Merrymeeting (see p. 109), and other lakes above station.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 3				Apr. 4 to Sept. 30			
3.0	240	5.0	1,250	3.0	253	5.0	1,250
3.5	424	6.0	2,000	4.0	660	6.2	2,180
4.0	660						

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	289	276	285	300	325	544	1,380	418	370	766	309	1,170
2	292	283	325	290	335	544	1,310	394	523	755	291	1,220
3	286	289	549	305	375	544	1,760	364	545	484	333	1,040
4	286	*289	577	299	442	558	2,040	353	541	316	323	1,050
5	346	286	572	255	558	558	1,820	420	523	298	309	670
6	375	280	596	340	555	635	1,710	*550	351	298	305	441
7	433	283	586	310	505	808	1,600	541	305	294	305	410
8	460	276	502	300	285	820	1,520	371	298	298	294	387
9	460	292	334	300	325	820	1,520	334	294	294	287	330
10	415	316	305	300	313	814	1,520	327	*294	294	298	319
11	316	306	300	300	360	802	1,470	327	298	301	291	*312
12	286	299	299	320	375	808	1,410	338	298	350	291	312
13	350	292	296	370	371	710	1,260	406	301	545	294	309
14	424	342	290	310	309	568	1,030	541	371	586	294	309
15	486	334	346	300	295	572	715	534	545	605	291	327
16	512	316	371	350	450	859	670	368	645	705	294	342
17	342	354	375	308	540	1,030	665	323	778	502	305	334
18	283	371	375	300	544	1,030	655	327	790	330	316	327
19	416	367	324	370	475	1,030	645	481	705	376	305	319
20	500	327	300	379	715	1,060	635	421	586	586	301	316
21	508	342	290	483	565	1,100	615	532	568	755	298	316
22	510	316	300	720	550	1,160	610	523	559	*778	301	330
23	522	292	299	665	610	1,160	601	360	554	700	294	375
24	358	334	295	370	572	1,280	572	312	550	490	305	379
25	289	363	315	310	610	1,430	402	309	605	319	305	349
26	448	327	360	320	*620	1,440	353	367	760	367	301	277
27	379	306	315	330	568	1,450	349	498	577	502	298	280
28	264	*305	299	*320	544	1,420	364	353	563	523	294	280
29	280	315	299	315	-	1,380	364	312	695	515	312	284
30	283	285	299	430	-------	1,370	364	309	772	519	619	287
31	280	-------	*299	460	-------	1,390	-------	316	-------	453	934	-------
Total	11,678	9,363	11,277	11,026	13,091	29,694	29,929	12,329	15,564	14,904	10,297	13,401
Mean	377	312	364	356	468	958	998	398	519	481	332	447
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 2,640 Min 264 Mean 791 Cfsm - In. -
Water year 1958-59: Max 2,040 Min 255 Mean 500 Cfsm - In. -

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 28 to Dec. 2, Dec. 10, 11, 14, 20-22, 24-27, Jan. 1-3, 5-19, Jan. 23 to Feb. 3, Feb. 6-9, 11, 12, 15, 16, 19-23, 25.

815. Merrimack River at Franklin Junction, N. H.

Location.--Lat 43°25'25", long 71°39'10", on right bank at Franklin Junction, Merrimack County, 1 mile downstream from confluence of Pemigewasset and Winnipesaukee Rivers.

Drainage area.--1,507 sq mi.

Records available.--July 1903 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 250.4 ft above mean sea level, unadjusted. Prior to Sept. 13, 1923, chain gage at bridge 350 ft downstream at same datum.

Average discharge.--54 years (1905-59), 2,774 cfs.

Extremes.--Maximum discharge during year, 15,500 cfs Apr. 5 (gage height, 12.71 ft); minimum daily, 288 cfs Sept. 26.
1903-59: Maximum discharge, 83,000 cfs May 19, 1936 (gage height, 36.4 ft, from floodmarks), from rating curve extended above 30,000 cfs on basis of slope-area measurement and computation of flow over dam at gage height 29.5 ft, and velocity-area study; minimum daily, 209 cfs Sept. 14, 1957.

Remarks.--Records excellent except those for periods of ice effect, no gage-height record, or backwater from aquatic vegetation, which are good. Flow regulated by powerplants, by Franklin Falls Reservoir since 1942, and by Squam, Little Squam, Newfound, Winnipesaukee, Winnisquam, Wentworth, Merrymeeting, and other lakes. See pages 81,109, for description and month-end contents of many of these reservoirs.

Revisions (water years).--WSP 401: 1914. WSP 641: 1923(M). WSP 756: Drainage area. WSP 781: 1928(M). WSP 1231: 1911-13, 1916-17(M), 1919(M), 1922(M).

Rating table, water year 1958-59, except periods of ice effect or backwater from aquatic vegetation (gage height, in feet, and discharge, in cubic feet per second)

3.2	270	7.0	4,270
3.5	420	9.0	8,060
4.0	735	11.0	12,300
5.0	1,630	13.0	16,100

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	890	1,160	1,580	680	1,300	1,000	3,390	3,000	1,330	1,890	513	2,260
2	940	935	1,250	730	1,100	1,250	4,570	3,190	1,460	1,840	700	2,570
3	1,110	1,230	1,500	510	1,150	1,200	8,420	2,630	1,500	1,360	837	2,500
4	812	*1,240	1,610	670	1,300	1,200	14,400	2,720	1,480	583	790	2,650
5	818	1,260	1,510	730	1,500	1,200	15,300	2,820	1,310	945	762	2,280
6	945	982	1,770	760	1,300	1,400	14,100	*3,140	755	898	872	1,370
7	936	1,000	1,800	720	1,200	1,400	11,700	3,190	1,020	1,130	912	869
8	966	552	1,680	720	1,050	1,600	9,280	3,290	1,030	929	446	992
9	940	988	1,210	670	1,200	1,700	10,900	3,220	956	743	797	864
10	942	1,410	1,000	450	1,150	1,650	*11,000	2,200	917	785	1,160	860
11	587	1,430	980	670	950	1,600	10,800	2,120	967	572	1,290	*781
12	596	1,150	750	770	950	1,650	10,400	2,320	*820	910	1,390	412
13	812	1,140	600	770	1,100	1,400	8,450	2,800	492	1,210	1,480	659
14	1,020	1,020	880	730	800	1,050	8,040	2,810	1,020	1,230	1,220	827
15	1,040	1,090	980	720	750	1,100	7,460	2,310	1,960	a1,300	569	872
16	1,020	1,740	970	700	1,100	1,600	6,860	2,110	3,800	a1,350	1,060	951
17	934	1,830	1,000	660	1,100	1,900	6,300	1,920	3,180	a1,150	777	912
18	541	1,730	1,000	880	1,100	1,850	7,680	1,460	2,580	a550	757	764
19	862	1,370	880	1,200	1,050	1,900	8,100	1,710	2,620	a900	804	316
20	1,190	1,300	610	1,250	1,150	2,010	8,640	1,620	2,930	a1,200	762	611
21	1,060	1,220	790	1,200	800	2,300	6,940	1,660	2,640	a1,400	648	846
22	1,040	887	1,000	2,000	1,000	2,930	5,420	2,110	2,140	a1,400	417	870
23	1,190	1,050	840	3,000	1,300	3,520	4,740	3,090	2,020	a1,350	528	889
24	1,420	1,180	600	2,600	1,300	3,490	4,580	2,360	1,760	984	833	775
25	1,070	1,060	760	2,500	1,150	3,650	4,320	1,770	1,610	537	885	592
26	1,280	1,180	720	2,100	1,100	3,640	4,520	1,690	1,720	773	837	288
27	1,440	1,050	460	1,900	1,200	3,540	4,480	1,910	1,150	1,030	659	592
28	1,720	*1,310	700	1,300	700	3,090	4,170	1,510	1,550	948	561	693
29	1,690	1,470	790	1,350	-	2,910	3,370	1,400	1,780	1,040	311	674
30	1,580	1,780	770	1,300	-------	3,050	3,390	927	2,140	906	1,430	696
31	1,510	-------	700	1,150	-------	3,140	-------	1,290	-------	755	1,530	-------
Total	32,901	36,744	31,690	35,390	30,850	64,920	231,720	70,297	50,637	32,598	26,537	31,235
Mean	1,061	1,225	1,022	1,142	1,102	2,094	7,724	2,268	1,688	1,052	856	1,041
Cfsm	0.704	0.813	0.678	0.758	0.731	1.39	5.13	1.50	1.12	0.698	0.568	0.691
In.	0.81	0.91	0.78	0.87	0.76	1.60	5.72	1.73	1.25	0.80	0.65	0.77

Calendar year 1958: Max 18,500 Min 335 Mean 2,666 Cfsm 1.77 In. 24.02
Water year 1958-59: Max 15,300 Min 288 Mean 1,851 Cfsm 1.23 In. 16.65

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for other stations in the Merrimack River basin.
Note.--Stage-discharge relation affected by ice Dec. 10 to Mar. 19. Backwater from aquatic vegetation May 16-22, May 24 to June 15, June 18 to July 14, July 24 to Sept. 30. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

820. Contoocook River at Peterboro, N. H.

Location.--Lat 42°51'45", long 71°57'35", on left bank 1,100 ft downstream from milldam, 1 mile south of Peterboro, Hillsboro County, and 1½ miles upstream from Nubanusit Brook.

Drainage area.--68.1 sq mi.

Records available.--July 1945 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 740 ft (from topographic map).

Average discharge.--14 years, 121 cfs.

Extremes.--Maximum discharge during year, 1,450 cfs Apr. 3 (gage height, 4.87 ft); maximum gage height, 5.55 ft Jan. 22 (backwater from ice); minimum daily discharge, 9.0 cfs July 18.

1945-59: Maximum discharge, 2,640 cfs Nov. 26, 1950 (gage height, 6.35 ft), from rating curve extended above 1,700 cfs by logarithmic plotting; minimum daily, 0.8 cfs Sept. 15, 16, 1953.

Flood in September 1938 reached a stage of about 15 ft, from information by local residents.

Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by mill and reservoirs above station.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	6.2	2.5	262
1.0	9.8	3.0	440
1.2	22	4.0	900
1.5	51	5.0	1,540
2.0	133		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	43	133	34	90	45	310	240	71	31	15	174
2	82	29	82	37	100	47	450	182	102	32	13	*77
3	68	92	78	34	90	47	1,300	168	154	54	12	74
4	31	114	53	33	80	46	1,030	161	103	56	11	60
5	24	92	61	38	100	60	715	148	83	28	12	43
6	40	88	94	40	110	80	636	139	39	35	13	33
7	44	78	80	40	80	90	539	137	85	20	13	28
8	43	36	70	40	78	110	499	137	78	16	13	72
9	20	56	98	38	90	180	535	110	76	13	13	61
10	37	130	84	33	77	110	523	118	68	24	20	22
11	15	91	77	32	*70	90	560	135	64	20	20	19
12	13	80	71	37	68	88	475	166	19	13	20	15
13	12	68	57	36	66	130	402	168	30	11	18	13
14	12	74	55	36	60	70	338	163	37	10	19	12
15	13	35	62	40	65	70	280	148	84	15	17	22
16	13	37	64	45	60	120	234	124	83	*14	16	40
17	12	80	61	50	60	110	237	120	87	12	15	33
18	12	66	58	50	57	95	198	125	106	9.0	16	25
19	12	67	55	50	56	98	193	102	126	16	14	21
20	13	*63	47	45	54	110	225	96	75	42	14	18
21	*13	64	45	100	45	150	*211	125	51	96	13	16
22	12	31	49	350	45	294	185	120	60	63	15	58
23	51	28	48	250	50	335	168	89	40	37	13	54
24	51	59	45	170	50	290	140	51	34	27	18	31
25	55	57	37	130	48	*250	147	92	30	21	17	28
26	54	61	41	170	47	240	144	110	51	18	14	37
27	119	43	35	135	47	234	190	*107	54	15	13	28
28	107	64	33	130	45	154	228	100	51	14	13	60
29	73	280	36	120	-	120	283	82	60	14	50	34
30	62	172	39	110	-------	159	283	30	44	*14	83	54
31	49	-------	37	98	-------	214	-------	32	-------	15	164	-------
Total	1,234	2,278	1,885	2,551	1,888	4,236	11,658	3,825	2,045	805.0	717	1,262
Mean	39.8	75.9	60.8	82.3	67.4	137	389	123	68.2	26.0	23.1	42.1
Cfsm	0.584	1.11	0.893	1.21	0.990	2.01	5.71	1.81	1.00	0.382	0.339	0.618
In.	0.67	1.24	1.03	1.39	1.03	2.31	6.37	2.09	1.12	0.44	0.39	0.69

Calendar year 1958: Max 1,100 Min 12 Mean 127 Cfsm 1.86 In. 25.27
Water year 1958-59: Max 1,300 Min 9.0 Mean 94.2 Cfsm 1.38 In. 18.77

Peak discharge (base, 700 cfs).--Apr. 3 (3:30 a.m.) 1,450 cfs (4.87 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 2-4, Dec. 6 to Mar. 20, Mar. 29, Apr. 1, 2.

830. Nubanusit Brook near Peterboro, N. H.

Location.--Lat 42°53'10", long 71°58'25", on left bank 1¼ miles downstream from Edward MacDowell Reservoir, 1.3 miles northwest of Peterboro, Hillsboro County, and 1½ miles upstream from mouth.

Drainage area.--46.9 sq mi.

Records available.--October 1920 to September 1931, July 1945 to September 1959. October 1920 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Altitude of gage is 790 ft (from topographic map). Prior to Oct. 1, 1931, at site 550 ft downstream at different datum.

Average discharge.--25 years, 84.6 cfs.

Extremes.--Maximum discharge during year, 634 cfs Apr. 8 (gage height, 4.33 ft); minimum daily, 4.2 cfs Oct. 8.
1920-31, 1945-59: Maximum discharge, 1,130 cfs Apr. 11, 1931 (gage height, 5.59 ft, site and datum then in use), from rating curve extended above 380 cfs; minimum daily, 0.5 cfs Aug. 1, 1926.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Flow regulated by mills and Nubanusit Lake, Edward MacDowell Reservoir since March 1950 (see p. 109), and other reservoirs above station.

Revisions (water years).--WSP 561: 1921(M). WSP 1051: Drainage area.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 8

0.5	3.2	1.5	54
.6	4.5	2.0	113
.7	6.6	3.0	286
.9	13	4.0	535
1.2	29	4.5	685

Apr. 9 to Sept. 30

1.5	54	4.0	535
2.0	108	4.5	685
3.0	281		

Note.--Same as preceding table below 1.5 ft.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	23	149	24	180	96	155	149	41	28	22	108
2	49	6.6	113	41	165	57	212	127	43	36	22	115
3	49	23	75	35	148	39	156	119	44	39	20	*101
4	34	31	77	36	91	74	247	127	47	37	19	88
5	10	47	79	43	82	90	430	104	48	33	20	72
6	36	34	79	42	100	91	520	96	26	31	21	66
7	4.5	22	94	45	75	64	583	82	22	30	21	57
8	4.2	18	106	56	72	48	589	76	48	28	21	62
9	10	49	100	52	74	74	607	65	47	30	22	46
10	9.2	63	87	40	65	74	571	39	46	44	28	44
11	10	60	66	47	*63	73	580	75	40	57	42	43
12	13	57	67	64	64	73	565	76	50	33	45	24
13	30	54	62	48	61	80	484	87	19	25	63	12
14	48	56	58	64	44	50	314	66	5.6	26	53	39
15	51	47	65	43	53	44	239	58	39	21	35	45
16	47	47	60	17	66	76	208	42	41	20	16	44
17	47	54	58	22	61	79	179	22	48	*19	52	42
18	27	50	56	46	57	70	134	60	42	18	54	44
19	28	49	50	70	52	70	118	62	56	21	47	26
20	45	*46	40	70	22	76	124	57	34	34	47	23
21	51	47	40	66	19	104	121	58	36	56	46	43
22	*48	37	47	79	32	185	119	57	52	55	26	43
23	53	39	47	73	70	190	*107	41	33	41	21	41
24	51	45	48	100	65	200	97	16	42	36	40	43
25	20	41	49	110	53	188	75	48	49	32	39	40
26	9.1	40	46	165	47	*189	75	*50	46	28	40	27
27	36	40	28	200	29	191	96	51	20	25	39	11
28	52	50	30	190	25	175	96	48	7.7	21	40	37
29	53	136	49	195	-	150	123	49	8.2	19	36	38
30	52	155	35	210	-------	140	149	9.4	9.1	*19	42	39
31	54	-------	27	203	-------	136	-------	7.9	-------	19	84	-------
Total	1,068.0	1,466.6	1,987	2,496	1,935	3,246	8,073	2,024.3	1,089.6	961	1,123	1,463
Mean	34.5	48.9	64.1	80.5	69.1	105	269	65.3	36.3	31.0	36.2	48.8
Cfsm	0.736	1.04	1.37	1.72	1.47	2.24	5.74	1.39	0.774	0.661	0.772	1.04
In.	0.85	1.16	1.58	1.98	1.53	2.57	6.40	1.61	0.86	0.76	0.89	1.16

Calendar year 1958: Max 634 Min 4.2 Mean 97.5 Cfsm 2.08 In. 28.21
Water year 1958-59: Max 607 Min 4.2 Mean 73.8 Cfsm 1.57 In. 21.35

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 10-27, 30, Jan. 3-15, 19-29, Feb. 1, 2, 6-16, 19-21, 23-26, Mar. 7-15, 17-19, 22, 23, 28, 29. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

840. North Branch Contoocook River near Antrim, N. H.

Location.--Lat 43°04'55", long 71°58'40", on right bank at North Branch, 4 miles northwest of Antrim, Hillsboro County, and 6 miles upstream from mouth.

Drainage area.--54.8 sq mi.

Records available.--August 1924 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 882.38 ft above mean sea level (levels by Corps of Engineers). Prior to Nov. 14, 1932, staff gage and Nov. 14, 1932, to Jan. 7, 1941, float gage, at same site and datum.

Average discharge.--35 years, 100 cfs.

Extremes.--Maximum discharge during year, 765 cfs Apr. 6 (gage height, 4.50 ft); minimum, 4.1 cfs Aug. 8, 9.
1924-59: Maximum discharge, 5,000 cfs Mar. 19, 1936 (gage height, 9.30 ft, from floodmarks), from rating curve extended above 1,600 cfs on basis of slope-area measurements at gage heights 8.4 and 9.3 ft; minimum, 0.3 cfs Sept. 18, 1948, Aug. 5, 6, 1955.

Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by Highland Lake and several ponds above station.

Revisions (water years).--WSP 756: Drainage area. WSP 1231: 1925(M), 1926, 1927(M), 1928, 1929-30(M), 1933-36, 1938-40, 1944.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from leaves Oct. 25 to Nov. 28)

Oct. 1 to Apr. 3				Apr. 4 to Sept. 30			
0.5	9.1	2.5	203	0.1	3.0	2.0	123
.7	16	3.0	304	.3	6.3	2.5	203
1.0	30	4.0	580	.6	13	3.0	304
1.5	67	4.5	765	1.0	28	4.0	580
2.0	123			1.5	65	4.5	765

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	105	190	32	100	38	160	152	18	42	6.5	160
2	38	98	170	33	90	38	250	166	18	35	6.1	163
3	*39	108	140	36	80	39	608	158	35	30	6.0	160
4	37	131	120	36	70	44	713	144	41	25	5.2	144
5	33	130	125	34	85	50	654	126	39	21	4.6	115
6	29	129	160	33	80	58	725	111	31	18	4.7	94
7	26	*122	170	32	75	135	*713	99	25	17	4.4	79
8	24	111	145	31	70	140	668	90	23	15	4.2	68
9	21	114	125	31	60	120	717	80	21	13	4.4	61
10	19	131	105	31	57	110	737	72	19	12	8.8	55
11	17	126	90	30	57	100	709	64	17	11	14	51
12	15	111	*87	29	52	86	640	73	14	11	14	46
13	14	99	82	29	51	90	542	*86	15	9.5	14	42
14	14	96	76	29	52	82	462	91	15	8.6	13	39
15	14	95	74	29	54	80	410	86	16	*8.2	12	*43
16	13	97	72	35	52	82	373	77	*19	*7.2	11	49
17	12	95	68	62	50	80	359	68	22	6.9	11	46
18	16	91	64	65	48	78	351	60	34	6.5	12	40
19	12	89	61	48	47	74	333	54	55	7.2	12	36
20	10	88	58	*48	46	82	317	51	83	9.7	11	33
21	9.7	84	54	70	45	120	302	49	87	11	11	29
22	17	81	52	150	43	190	274	46	80	9.3	10	25
23	79	76	54	260	40	210	239	43	82	8.6	10	18
24	130	73	50	250	41	200	212	39	67	7.6	12	13
25	129	72	46	200	*40	176	144	34	54	7.2	16	11
26	118	72	43	160	39	162	65	30	49	7.1	40	9.5
27	129	89	40	140	38	155	56	27	51	7.1	52	8.2
28	136	86	37	125	38	145	74	25	49	7.4	40	7.4
29	136	190	34	110	-	130	96	24	55	7.1	30	7.1
30	126	200	33	100	-------	127	119	22	53	6.7	32	6.9
31	114	-------	34	110	-------	120	-------	21	-------	6.7	57	-------
Total	1,555.7	3,189	2,659	2,408	1,600	3,341	12,022	2,268	1,187	399.6	488.9	1,659.1
Mean	50.2	106	85.8	77.7	57.1	108	401	73.2	39.6	12.9	15.8	55.3
Cfsm	0.916	1.93	1.57	1.42	1.04	1.97	7.32	1.34	0.723	0.235	0.288	1.01
In.	1.06	2.16	1.80	1.63	1.09	2.27	8.16	1.54	0.81	0.27	0.33	1.13

Calendar year 1958: Max 1,370 Min 3.8 Mean 113 Cfsm 2.06 In. 27.94
Water year 1958-59: Max 737 Min 4.2 Mean 89.8 Cfsm 1.64 In. 22.25

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 28, Nov. 30 to Mar. 24, Mar. 28, 29, 31, Apr. 1 (no gage-height record Dec. 10, 11, Jan. 5-9, 23-28, Feb. 1-3, Mar. 21, 22; discharge estimated on basis of weather records, recorded range in stage when available, and records for Warner River at Davisville and Blackwater River near Webster). Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

845. Beards Brook near Hillsboro, N. H.

Location.--Lat 43°06'50", long 71°53'35", on right bank 300 ft upstream from bridge on State Highway 9, 500 ft upstream from mouth, and 1½ miles west of Hillsboro, Hillsboro County.

Drainage area.--55.4 sq mi.

Records available.--October 1945 to September 1959. October 1945 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Altitude of gage is 595 ft (from topographic map).

Average discharge.--14 years, 95.1 cfs.

Extremes.--Maximum discharge during year, about 1,100 cfs Apr. 3; maximum gage height not determined, occurred during period of ice effect in January; minimum discharge, 1.4 cfs Aug. 5.
1945-59: Maximum discharge, 2,070 cfs Nov. 26, 1950 (gage height, 6.59 ft), from rating curve extended above 1,200 cfs by logarithmic plotting; minimum, 1.1 cfs Oct. 3, 1948.

Remarks.--Records good except those for periods of ice effect and those below 5 cfs, which are fair.

Revisions (water years).--WSP 1231: 1948.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Sept. 13, 14)

Oct. 1 to Apr. 3				Apr. 4 to Sept. 30			
1.4	7.9	2.2	76	1.07	1.4	2.2	72
1.5	11	2.6	170	1.1	1.7	2.5	137
1.7	19	3.0	308	1.2	2.9	3.0	308
1.8	26	3.5	500	1.4	6.0	3.5	500
2.0	46	4.0	705	1.6	12	4.0	705
				1.8	25	5.0	1,180
				2.0	44		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	68	130	24	70	31	200	170	12	20	3.0	69
2	*23	55	100	24	66	32	400	140	16	16	2.5	48
3	29	64	90	26	61	34	700	114	45	13	2.0	44
4	34	104	80	28	56	38	1,000	96	39	21	1.7	40
5	23	95	86	27	80	40	840	84	28	15	1.6	30
6	18	87	115	27	76	45	808	77	23	8.6	1.7	22
7	14	*74	150	26	66	100	*687	70	18	7.6	1.8	15
8	13	60	130	26	60	130	592	68	14	7.4	2.1	11
9	12	66	115	26	54	110	782	62	13	6.9	2.8	9.2
10	12	95	90	25	50	85	692	58	11	10	8.0	7.6
11	11	86	75	24	48	72	600	53	9.2	23	17	5.7
12	9.8	71	*70	24	46	64	484	*69	7.4	12	12	4.7
13	9.5	62	65	24	44	70	364	79	7.4	8.6	7.6	4.1
14	9.0	60	58	24	44	66	304	70	7.6	7.9	5.9	3.6
15	8.4	60	56	24	45	62	278	62	8.6	*8.2	4.9	*6.6
16	8.4	65	53	26	43	64	264	54	*25	*7.6	3.9	*17
17	8.4	66	50	45	41	66	267	49	25	6.9	3.8	15
18	8.2	62	47	60	40	64	264	45	41	5.9	4.1	11
19	7.9	57	45	*50	38	62	235	41	62	6.6	4.9	8.6
20	7.9	59	43	38	37	80	214	42	86	12	4.7	7.1
21	7.9	53	39	47	36	120	190	40	69	17	3.9	6.2
22	7.9	42	37	100	35	170	158	37	52	16	3.5	5.0
23	15	35	36	200	35	220	134	32	42	11	2.8	4.4
24	60	33	35	160	33	190	116	28	33	8.9	4.5	3.9
25	60	32	33	130	*32	160	104	24	26	7.6	9.8	3.3
26	51	33	30	110	32	155	96	23	25	6.9	8.6	2.9
27	76	59	28	90	31	150	102	21	25	5.7	6.4	2.6
28	104	60	27	80	31	140	140	19	27	5.0	19	2.4
29	142	130	26	74	-	130	170	16	33	4.2	6.3	2.2
30	113	160	25	70	------	125	184	13	27	3.6	5.4	2.1
31	86	------	25	76	------	130	------	13	------	3.3	29	------
Total	1,005.3	2,053	1,989	1,734	1,330	3,005	11,369	1,767	857.2	313.4	195.2	414.2
Mean	32.4	68.4	64.2	55.9	47.5	96.9	379	57.0	28.6	10.1	6.30	13.8
Cfsm	0.585	1.23	1.16	1.01	0.857	1.75	6.84	1.03	0.516	0.182	0.114	0.249
In.	0.67	1.38	1.34	1.16	0.89	2.02	7.63	1.19	0.58	0.21	0.13	0.28

Calendar year 1958: Max 1,040 Min 6.6 Mean 105 Cfsm 1.90 In. 25.75
Water year 1958-59: Max 1,000 Min 1.6 Mean 71.3 Cfsm 1.29 In. 17.48

Peak discharge (base, 910 cfs).--Apr. 3 (about 12 p.m.) about 1,100 cfs.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28 to Jan. 19, Jan. 21 to Feb. 24, Mar. 3 to Apr. 5 (no gage-height record Jan. 13-15, Jan. 24 to Feb. 24; discharge estimated on basis of weather records and records for Warner River at Davisville and North Branch Contoocook River near Antrim).

850. Contoocook River near Henniker, N. H.

Location.--Lat 43°09'10", long 71°51'25", on right bank 1.6 miles downstream from Sand Brook and 2.2 miles southwest of Henniker, Merrimack County.

Drainage area.--368 sq mi.

Records available.--October 1939 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 475 ft (from topographic map). Prior to Dec. 18, 1939, staff gage at same site and datum.

Average discharge.--20 years, 631 cfs.

Extremes.--Maximum discharge during year, 5,750 cfs Apr. 4 (gage height, 11.24 ft); maximum gage height, 11.88 ft Jan. 24 (backwater from ice); minimum daily discharge, 49 cfs July 10.
1939-59: Maximum discharge, 8,710 cfs June 26, 1944 (gage height, 13.13 ft); minimum daily, 19 cfs Oct. 29, 1940.
Maximum discharge known, 22,200 cfs Sept. 21, 1938 (gage height, 21.3 ft, from floodmarks), from rating curve extended above 7,500 cfs on basis of computations of flow over dams at gage heights 12.72 and 21.3 ft.

Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by powerplants and by Nubanusit Lake, Edward MacDowell Reservoir (see p. 109) since March 1950, Highland Lake, Jackman Reservoir, and other reservoirs above station.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

4.2	42	7.0	700
4.5	67	8.0	1,320
5.0	129	9.0	2,270
5.5	220	12.0	7,100
6.0	340		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	272	312	980	160	400	240	1,410	1,110	258	263	79	540
2	*294	251	833	200	500	300	2,030	920	330	258	78	602
3	247	276	660	260	470	340	*3,980	745	401	254	67	474
4	233	495	580	180	500	350	5,630	730	340	263	74	406
5	182	538	587	200	580	370	4,880	700	289	240	82	332
6	264	*509	730	250	520	420	4,090	618	199	220	85	247
7	314	498	600	280	400	630	3,720	574	182	174	88	184
8	310	329	700	280	350	610	3,330	526	251	81	86	239
9	303	285	600	260	480	640	3,660	445	214	62	84	248
10	296	454	550	160	470	570	4,010	394	191	49	86	266
11	164	502	510	130	450	520	3,820	430	184	58	120	228
12	94	470	*480	200	420	460	3,580	*523	162	75	111	132
13	79	428	380	280	410	508	3,090	586	166	66	136	114
14	232	404	230	270	390	474	2,640	582	160	80	132	156
15	288	346	350	260	250	376	2,170	566	167	101	100	190
16	280	305	390	250	350	473	1,840	445	175	*98	86	226
17	270	352	390	230	380	570	1,680	370	212	89	133	314
18	151	389	390	220	380	578	1,580	405	278	88	157	377
19	87	413	370	340	370	530	1,420	419	361	88	158	268
20	172	408	350	220	370	498	1,340	474	460	89	158	220
21	261	372	190	190	370	813	1,380	479	388	106	146	174
22	271	325	280	800	240	1,010	1,250	493	290	116	100	191
23	309	252	330	1,000	290	1,460	1,110	386	258	103	84	196
24	322	320	330	1,150	310	1,400	1,000	272	224	99	128	192
25	318	370	200	800	320	1,300	842	332	186	95	143	162
26	292	397	250	700	325	1,200	750	387	191	89	169	114
27	380	348	310	640	325	1,220	740	427	258	73	154	110
28	550	434	170	500	325	1,150	884	416	278	71	182	154
29	562	962	230	540	-	1,000	1,060	398	288	79	114	181
30	474	1,240	280	400	--------	920	1,210	262	278	107	103	193
31	385	--------	280	420	--------	1,000	--------	175	--------	81	203	--------
Total	8,656	12,984	13,510	11,770	10,945	21,930	70,126	15,589	7,626	3,715	3,626	7,430
Mean	279	433	436	380	391	707	2,338	503	254	120	117	248
Cfsm	0.758	1.18	1.18	1.03	1.06	1.92	6.35	1.37	0.690	0.326	0.318	0.674
In.	0.87	1.31	1.37	1.19	1.11	2.22	7.09	1.58	0.77	0.38	0.37	0.75

Calendar year 1958: Max 5,080 Min 63 Mean 719 Cfsm 1.95 In. 26.51
Water year 1958-59: Max 5,630 Min 49 Mean 515 Cfsm 1.40 In. 19.01

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 3, Dec. 6 to Mar. 9, Mar. 24-31. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

860. Warner River at Davisville, N. H.

Location.--Lat 43°15'05", long 71°43'50", on left bank 60 ft downstream from highway bridge at Davisville, Merrimack County, 2¼ miles northwest of Contoocook, and 2.4 miles upstream from mouth.

Drainage area.--146 sq mi.

Records available.--October 1939 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 380 ft (from topographic map). Prior to Dec. 22, 1939, chain gage at bridge 60 ft upstream at same datum.

Average discharge.--20 years, 234 cfs.

Extremes.--Maximum discharge during year, 2,460 cfs Apr. 4 (gage height, 8.10 ft); minimum, 5.2 cfs Aug. 23, 24.

1939-59: Maximum discharge, 4,510 cfs Mar. 27, 1953 (gage height, 9.88 ft), from rating curve extended above 2,800 cfs by logarithmic plotting; minimum, 4.4 cfs Aug. 27-29, 1949.

Flood in September 1938 reached a stage of 12.8 ft, from information by local residents.

Remarks.--Records good. Prior to 1948, slight diurnal fluctuation at low flow caused by mill above station.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from aquatic vegetation and debris Oct. 1 to Nov. 5; shifting-control method used May 11-13)

3.09	5.9	4.5	163
3.1	6.1	5.0	300
3.2	8.9	5.5	505
3.3	12	6.0	775
3.5	24	7.0	1,460
3.8	51	9.0	3,420
4.1	90		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	101	b310	70	208	90	b490	407	47	49	11	72
2	*20	86	b270	68	186	90	*b730	379	42	40	10	61
3	19	86	b210	76	163	93	1,740	335	68	36	8.9	49
4	18	128	186	79	159	104	2,380	297	73	31	8.3	43
5	17	128	204	82	196	118	2,290	271	58	27	7.7	a35
6	13	*120	262	79	222	127	2,180	250	50	26	8.0	a31
7	12	106	284	76	204	214	2,010	233	48	26	8.3	a29
8	14	93	247	75	186	297	1,700	219	38	24	8.3	a27
9	12	93	*222	73	155	300	1,760	201	36	23	8.9	a25
10	10	131	179	72	142	274	1,820	186	32	22	11	a24
11	13	127	146	70	140	235	1,640	179	29	23	14	a23
12	15	116	140	70	134	206	1,460	*179	26	24	19	a22
13	17	100	132	70	132	186	1,210	181	25	24	17	a21
14	15	92	120	68	132	198	1,010	170	26	23	12	*a20
15	16	90	118	*70	132	191	895	159	30	22	11	20
16	19	108	116	72	127	b195	811	146	*32	22	7.4	30
17	22	123	111	92	123	b205	757	134	36	20	7.1	30
18	24	120	108	113	120	b200	727	125	46	19	7.7	24
19	23	113	106	114	*116	b180	676	113	68	18	11	20
20	25	104	106	103	106	b200	627	109	111	17	9.3	21
21	23	96	95	98	106	b310	570	106	98	20	6.6	26
22	28	87	89	185	104	b480	505	101	80	24	5.9	29
23	29	79	90	359	100	b550	446	92	68	22	5.9	26
24	70	73	89	428	98	b520	395	83	57	20	5.9	24
25	70	73	82	379	98	b470	355	75	49	18	6.6	30
26	66	71	75	332	96	464	328	71	47	16	8.9	35
27	86	98	72	281	95	478	318	66	56	15	8.9	35
28	113	b104	71	241	93	451	351	61	64	*14	8.3	36
29	157	264	71	216	-	b400	379	56	73	14	7.4	32
30	140	b330	71	204	-------	b380	411	50	67	12	7.1	31
31	121	-------	72	216	-------	383	-------	49	-------	11	23	-------
Total	1,242	3,440	4,454	4,531	3,873	8,589	30,971	5,083	1,580	702	300.4	931
Mean	40.1	115	144	146	138	277	1,032	164	52.7	22.6	9.69	31.0
Cfsm	0.275	0.788	0.986	1.00	0.945	1.90	7.07	1.12	0.361	0.155	0.066	0.212
In.	0.32	0.88	1.13	1.15	0.99	2.19	7.89	1.29	0.40	0.18	0.08	0.24

Calendar year 1958: Max 2,020 Min 10 Mean 259 Cfsm 1.77 In. 24.08
Water year 1958-59: Max 2,380 Min 5.9 Mean 180 Cfsm 1.23 In. 16.74

Peak discharge (base, 1,200 cfs).--Apr. 4 (3 to 4 a.m.) 2,460 cfs (8.10 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge computed on basis of 1 discharge measurement, weather records, and records for Smith River near Bristol and Blackwater River near Webster.
b Stage-discharge relation affected by ice.

870. Blackwater River near Webster, N. H.

Location.--Lat 43°17'50", long 71°41'40", on left bank 0.2 mile west of Dingit Corner, 2½ miles southeast of Webster, Merrimack County, and 6½ miles upstream from mouth.

Drainage area.--129 sq mi.

Records available.--May 1918 to September 1920, February 1927 to September 1959. Published as "near Contoocook" 1918-20, 1927-35. Records published for both sites October 1934 to September 1935.

Gage.--Water-stage recorder at present site since Oct. 1, 1934. Altitude of gage is 430 ft (from topographic map). Prior to Oct. 1, 1935, chain gage at site 5 miles downstream at different datum.

Average discharge.--34 years, 213 cfs (adjusted to present site).

Extremes.--Maximum discharge during year, 2,220 cfs Apr. 6 (gage height, 7.05 ft); minimum, 17 cfs Aug. 4, 5; minimum daily, 18 cfs Aug. 4-6.
1918-20, 1927-59: Maximum discharge, 11,000 cfs Mar. 19, 1936 (gage height, 11.78 ft, from floodmarks), from rating curve extended above 6,700 cfs on basis of slope-area and critical-depth measurements of peak flow; minimum, 3 cfs Sept. 17, 1941 (gage height, 1.20 ft); minimum daily, 10 cfs Aug. 14, 1950.

Remarks.--Records excellent except those for periods of ice effect, which are good. High flow regulated by Blackwater Reservoir since 1941 (see p. 109). Some regulation at low flow prior to 1953 by mill above station.

Revisions (water years).--WSP 696: Drainage area. WSP 821: 1936(M). WSP 851: 1936. WSP 867: 1936 (flood-report data). WSP 1231: 1919-20, 1927, 1928(M), 1929-32, 1933-34(M), 1936 calendar year summaries.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.9	18	4.0	381
2.0	22	4.5	550
2.2	36	5.0	785
2.5	63	6.0	1,370
3.0	135	7.0	2,170
3.5	241		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*50	106	200	56	130	63	319	337	56	68	23	7.
2	54	90	172	56	126	63	448	319	54	58	22	90
3	54	82	135	57	118	67	830	283	62	48	*19	112
4	50	93	128	60	109	71	458	248	68	46	18	96
5	46	103	133	60	116	75	858	225	67	43	18	79
6	41	104	158	58	130	85	1,560	203	60	41	18	64
7	37	97	196	56	132	103	2,120	187	53	41	19	54
8	33	88	198	55	123	141	2,050	174	48	40	19	47
9	30	85	*185	54	108	178	*1,970	160	46	39	19	42
10	28	102	148	52	97	176	1,890	148	43	37	22	39
11	26	118	123	50	93	154	1,790	141	40	39	25	35
12	28	110	110	49	89	132	1,570	143	*38	42	26	32
13	26	97	103	49	86	116	1,110	*152	39	42	26	29
14	26	86	95	49	85	116	818	156	40	41	26	*24
15	26	82	88	*49	86	114	725	148	43	39	23	26
16	26	96	88	50	85	114	670	135	47	37	22	34
17	25	121	84	60	85	125	655	123	50	34	27	37
18	24	126	82	70	82	141	655	115	73	32	28	37
19	26	115	80	82	81	141	655	109	100	30	29	36
20	24	104	80	85	79	143	604	106	126	30	27	32
21	22	93	74	82	76	189	550	109	137	31	24	29
22	23	85	70	105	75	275	480	109	115	34	22	28
23	27	77	72	175	73	349	403	108	100	37	20	28
24	53	72	70	280	71	391	349	106	86	39	21	27
25	81	68	66	290	70	410	316	96	75	38	22	27
26	100	67	60	258	68	410	291	88	67	34	25	26
27	103	82	58	214	66	381	278	84	64	30	24	22
28	118	93	57	174	64	352	291	80	67	28	24	20
29	141	148	56	146	-	316	319	72	70	28	23	19
30	141	223	56	132	-------	278	331	64	75	26	32	20
31	125	-------	56	126	-------	270	-------	60	-------	25	44	-------
Total	1,614	3,013	3,281	3,139	2,603	5,939	25,363	4,588	2,009	1,177	737	1,266
Mean	52.1	100	106	101	93.0	192	845	148	67.0	38.0	23.8	42.2
Cfsm	0.404	0.775	0.822	0.783	0.721	1.49	6.55	1.15	0.519	0.295	0.184	0.327
In.	0.47	0.87	0.95	0.90	0.75	1.71	7.31	1.32	0.58	0.34	0.21	0.36

Calendar year 1958: Max 1,790 Min 21 Mean 221 Cfsm 1.71 In. 23.30
Water year 1958-59: Max 2,120 Min 18 Mean 150 Cfsm 1.16 In. 15.77

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 17 to Jan. 8, Jan. 18-25.

880. Contoocook River at Penacook, N. H.

Location.--Lat 43°17'10", long 71°36'00", on right bank at Penacook, Merrimack County, half a mile upstream from mouth.

Drainage area.--766 sq mi.

Records available.--October 1928 to September 1959. Monthly discharge only October 1928, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 273.09 ft above mean sea level, datum of 1929.

Average discharge.--31 years, 1,260 cfs.

Extremes.--Maximum discharge during year, about 10,300 cfs Apr. 5; maximum gage height, 7.26 ft Apr. 5 (backwater from ice); minimum discharge, 95 cfs July 30; minimum daily, 129 cfs Aug. 3, 5, 6.
1928-59: Maximum discharge, 46,800 cfs Mar. 20, 1936 (gage height, 14.26 ft, from floodmarks); minimum, 44 cfs Oct. 20, 1950; minimum daily, 81 cfs Aug. 19, 1950.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by mills and by Nubanusit Lake, Edward MacDowell Reservoir since March 1950, and by Highland Lake, Jackman Reservoir, Blackwater Reservoir since 1941 (see p. 109), and other reservoirs above station.

Revisions (water years).--WSP 756: 1933(M), drainage area. WSP 1231: 1929, 1931.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	122	3.0	1,540
1.8	252	4.0	3,400
2.1	450	5.0	5,820
2.5	840	7.0	12,700

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	414	720	1,750	340	940	575	2,630	2,320	414	530	159	541
2	443	602	1,600	340	1,000	414	3,620	2,070	428	482	137	852
3	466	575	1,400	450	940	575	5,500	1,780	593	450	129	816
4	399	*768	1,140	380	900	630	9,000	1,570	690	428	137	670
5	364	960	1,110	390	950	700	10,000	1,480	602	421	129	575
6	300	924	1,300	450	1,050	744	8,880	1,370	539	399	129	482
7	380	864	1,450	470	1,050	1,020	*8,810	1,240	450	377	140	414
8	400	816	1,400	470	890	1,140	8,010	1,160	406	337	148	*337
9	390	650	1,200	450	800	1,110	7,880	1,040	421	247	144	337
10	380	732	1,050	350	850	1,180	8,330	924	*406	189	155	351
11	360	948	900	310	820	974	8,080	*864	370	180	180	357
12	250	888	820	330	800	864	7,480	936	351	176	185	324
13	180	828	720	480	770	700	6,430	1,090	337	193	198	258
14	250	744	580	440	750	756	5,260	1,110	337	193	193	212
15	330	720	620	430	730	780	4,490	1,060	344	185	202	237
16	360	670	670	430	580	756	3,910	974	364	207	185	311
17	360	680	660	440	700	988	3,560	804	377	202	155	351
18	300	780	650	480	700	1,100	3,400	744	435	189	172	399
19	200	780	640	610	680	1,050	3,230	780	566	180	207	490
20	190	780	620	500	680	1,050	3,020	780	780	222	227	421
21	300	732	460	450	680	1,350	2,900	828	864	242	217	364
22	350	660	480	1,250	580	2,100	2,700	828	720	227	207	311
23	400	593	560	1,750	490	2,400	2,410	792	602	227	185	293
24	500	506	560	2,150	570	2,800	2,160	650	539	*222	155	293
25	550	593	400	1,800	600	2,800	1,900	548	498	202	163	282
26	600	630	430	1,550	600	2,800	1,710	602	458	185	198	276
27	740	710	500	1,350	580	2,800	1,660	650	435	176	217	237
28	900	670	350	1,200	593	2,680	1,880	670	490	172	227	207
29	1,110	1,230	390	1,050	-	2,350	2,050	630	548	148	237	202
30	1,020	2,050	460	960	-------	2,160	2,300	602	577	140	222	227
31	864	-------	460	910	-------	2,210	-------	466	-------	159	237	-------
Total	14,050	23,803	25,330	22,960	21,273	43,556	143,190	31,362	14,941	7,887	5,576	11,427
Mean	453	793	817	741	760	1,405	4,773	1,012	498	254	180	381
Cfsm	0.591	1.04	1.07	0.967	0.992	1.83	6.23	1.32	0.650	0.332	0.235	0.497
In.	0.68	1.16	1.23	1.11	1.03	2.11	6.95	1.52	0.73	0.38	0.27	0.55

Calendar year 1958: Max 8,400 Min 159 Mean 1,411 Cfsm 1.84 In. 25.00
Water year 1958-59: Max 10,000 Min 129 Mean 1,001 Cfsm 1.31 In. 17.72

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 6-27; discharge estimated on basis of weather records, recorded range in stage, and records for Contoocook River near Henniker, Warner River at Davisville, and Blackwater River near Webster. Stage-discharge relation affected by ice Nov. 30 to Dec. 3, Dec. 7 to Feb. 27, Mar. 8, 19-25, 29, Apr. 3-5.

890. Soucook River near Concord, N. H.

Location.--Lat 43°14'22", long 71°27'44", on left bank 500 ft upstream from U. S. Highway 4, 0.9 mile upstream from Cemetery Brook, and 4.4 miles northeast of State Capitol at Concord, Merrimack County.

Drainage area.--76.8 sq mi.

Records available.--October 1951 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 290 ft (from topographic map).

Average discharge.--8 years, 117 cfs.

Extremes.--Maximum discharge during year, 1,900 cfs Apr. 3 (gage height, 11.77 ft), from rating curve extended above 960 cfs by logarithmic plotting; maximum gage height, 12.03 ft Apr. 3 (backwater from ice); minimum discharge, 3.6 cfs Aug. 16.
1951-59: Maximum discharge, 2,380 cfs Apr. 6, 1952 (gage height, 12.35 ft); minimum, 3.3 cfs Sept. 22-24, 1955.

Remarks.--Records good except those for periods of ice effect, no gage-height record, or backwater from debris, which are fair.

Revisions (water years).--WSP 1331: 1952(M).

Rating tables, water year 1958-59, except periods of ice effect or backwater from debris (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 2				Apr. 3 to Sept. 30			
4.6	8.0	5.7	34	4.3	4.4	7.0	260
4.8	9.0	6.1	60	4.5	8.6	8.0	475
5.0	11	6.5	106	4.8	18	9.0	750
5.3	18			5.2	38	11.0	1,520
				5.6	64	11.5	1,770
				6.0	105		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	19	80	22	53	28	250	174	21	37	10	267
2	17	17	65	22	44	29	400	154	20	32	15	250
3	18	34	55	24	36	30	1,300	134	28	29	14	170
4	15	*45	52	25	48	32	1,620	118	45	27	9.1	130
5	13	39	65	25	66	36	1,180	108	37	22	8.1	92
6	12	34	95	24	80	45	*976	98	30	19	6.4	70
7	12	30	100	23	60	80	792	92	26	22	7.4	56
8	11	27	88	22	50	100	651	*86	30	19	7.2	*45
9	11	35	62	21	44	110	708	78	28	16	7.2	39
10	11	60	*52	20	41	90	705	74	25	16	12	33
11	10	50	44	20	40	70	595	70	23	21	14	29
12	9.5	43	40	19	40	60	525	79	20	24	13	26
13	9.2	38	38	20	39	54	430	85	20	21	10	24
14	8.7	33	36	*20	39	56	362	81	45	*18	8.4	20
15	8.0	35	34	20	39	54	323	75	*75	22	7.2	23
16	7.7	48	33	22	*39	60	295	68	60	25	5.5	44
17	7.4	42	32	28	38	90	276	62	50	22	7.3	37
18	6.6	37	31	32	38	96	260	58	53	19	14	30
19	7.0	34	31	32	37	85	244	55	86	18	11	27
20	8.0	33	31	30	36	100	236	54	100	26	8.4	25
21	8.8	31	28	28	35	150	218	56	90	28	6.2	22
22	9.2	28	26	100	33	200	194	51	75	28	6.0	20
23	10	28	26	150	31	240	177	48	58	25	5.1	19
24	11	29	26	130	30	220	161	42	47	21	7.4	17
25	12	28	24	110	30	205	150	39	43	19	9.7	15
26	16	30	23	90	30	210	143	35	41	18	9.7	14
27	23	35	22	75	29	210	144	32	40	17	7.6	13
28	28	40	22	65	28	200	175	29	46	14	6.4	12
29	32	130	22	58	-	190	182	26	64	13	7.8	13
30	29	115	22	55	-------	175	185	23	49	11	113	13
31	25	-------	22	59	-------	200	-------	24	-------	11	149	-------
Total	418.1	1,227	1,327	1,391	1,153	3,505	13,857	2,208	1,375	660	523.1	1,595
Mean	13.5	40.9	42.8	44.9	41.2	113	462	71.2	45.8	21.3	16.9	53.2
Cfsm	0.176	0.533	0.557	0.585	0.536	1.47	6.02	0.927	0.596	0.277	0.220	0.693
In.	0.20	0.59	0.64	0.67	0.56	1.70	6.71	1.07	0.67	0.32	0.25	0.77

Calendar year 1958: Max 963 Min 6.6 Mean 110 Cfsm 1.43 In. 19.42
Water year 1958-59: Max 1,620 Min 5.1 Mean 80.1 Cfsm 1.04 In. 14.15

Peak discharge (base, 700 cfs).--Apr. 3 (11 p.m.) 1,900 cfs (11.77 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 20 to Nov. 4, Nov. 9 to Dec. 16, Dec. 25-31, Jan. 15-28, Mar. 28-30, June 3-15, 18-30, July 2-10; discharge estimated on basis of 3 discharge measurements, weather records, recorded range in stage when available, and records for Suncook River at North Chichester. Stage-discharge relation affected by ice Dec. 10 to Apr. 3 and probably at times during period of no gage-height record in early December. Backwater from debris Oct. 11 to Nov. 4.

895. Suncook River at North Chichester, N. H.

Location.--Lat 43°15'25", long 71°22'10", on left bank at North Chichester, Merrimack County, 3.1 miles upstream from Little Suncook River.

Drainage area.--157 sq mi.

Records available.--May 1918 to September 1920, June 1921 to November 1927, November 1928 to September 1959.

Gage.--Water-stage recorder. Concrete control since Sept. 14, 1937. Datum of gage is 329.35 ft above mean sea level, adjustment of 1912.

Average discharge.--38 years (1918-20, 1921-27, 1929-59), 241 cfs.

Extremes.--Maximum discharge during year, 3,480 cfs Apr. 3 (gage height, 11.01 ft); minimum, 9.0 cfs Aug. 16; minimum daily, 9.8 cfs Aug. 16.
1918-59: Maximum discharge, 12,900 cfs Mar. 19, 1936 (gage height, 15.27 ft, from floodmarks), from rating curve extended above 4,800 cfs on basis of slope-area and contracted-opening measurements of peak flow; minimum, 0.4 cfs Sept. 4, 1926; minimum daily, 1.4 cfs Sept. 4, 1926.

Remarks.--Records good except those for period of ice effect, which are fair. Flow regulated by mills and reservoirs above station; regulation greater prior to 1949.

Revisions (water years).--WSP 781: 1923(M). WSP 1231: 1919(M), 1920, 1922, 1924(M), 1933-34(M).

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.5	7.2	4.5	515
2.6	11	5.0	700
2.8	23	6.0	950
3.1	56	8.0	1,500
3.4	113	9.0	1,920
3.7	195	10.0	2,550
4.0	290	11.0	3,470

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	34	200	39	120	62	350	318	43	177	20	126
2	95	31	160	39	100	64	600	290	41	138	16	183
3	85	50	125	42	90	66	2,650	255	67	118	16	207
4	72	*72	120	45	110	72	2,860	231	78	95	17	177
5	66	62	155	45	145	85	2,120	213	62	80	19	136
6	62	53	250	43	160	110	*1,880	195	44	69	20	106
7	50	44	260	41	140	160	1,660	180	46	82	21	82
8	44	39	240	40	120	230	1,400	*168	50	69	20	*70
9	41	58	190	38	96	250	1,420	154	40	55	19	58
10	40	102	140	37	92	190	1,450	141	34	56	21	48
11	33	85	120	36	94	150	1,260	136	30	78	34	47
12	33	72	105	35	90	130	1,120	154	27	78	41	47
13	33	61	95	35	85	150	954	168	27	64	54	36
14	27	55	85	*34	82	130	810	168	52	58	33	31
15	24	58	80	36	98	120	688	160	*100	55	11	36
16	24	80	75	45	94	150	551	141	95	56	9.8	48
17	24	70	70	70	86	210	500	126	89	*50	13	48
18	22	58	72	85	82	230	495	116	113	38	12	46
19	18	53	70	75	*84	200	485	106	201	36	13	38
20	22	51	65	67	80	230	485	100	237	51	13	36
21	23	47	60	72	74	310	455	100	216	62	13	36
22	22	43	56	200	70	450	397	93	186	61	13	32
23	24	44	56	280	68	500	350	83	157	53	13	28
24	27	46	53	320	67	450	318	76	130	46	15	27
25	24	42	49	250	66	420	290	74	109	39	15	24
26	28	45	46	200	64	420	276	62	102	38	18	20
27	42	67	43	170	63	420	272	56	100	35	20	16
28	47	80	41	145	62	370	310	55	123	28	19	19
29	56	285	40	125	-	350	326	53	180	24	18	20
30	53	260	40	125	-------	320	334	48	210	24	15	19
31	44	-------	39	130	-------	300	-------	44	-------	22	64	-------
Total	1,298	2,147	3,200	2,944	2,582	7,299	27,066	4,264	2,989	1,935	645.8	1,847
Mean	41.9	71.6	103	95.0	92.2	235	902	138	99.6	62.4	20.8	61.6
Cfsm	0.267	0.456	0.656	0.605	0.587	1.50	5.75	0.879	0.634	0.397	0.132	0.392
In.	0.31	0.51	0.76	0.70	0.61	1.73	6.41	1.01	0.71	0.46	0.15	0.44

Calendar year 1958: Max 1,830 Min 13 Mean 249 Cfsm 1.59 In. 21.52
Water year 1958-59: Max 2,860 Min 9.8 Mean 159 Cfsm 1.01 In. 13.80

Peak discharge (base, 1,500 cfs).--Apr. 3 (9 p.m.) 3,480 cfs (11.01 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 30 to Apr. 3.

910. South Branch Piscataquog River near Goffstown, N. H.

Location.--Lat 43°00'50", long 71°38'30", on right bank 20 ft upstream from highway bridge, 1.4 miles upstream from mouth, and 2.2 miles west of Goffstown, Hillsboro County.

Drainage area.--104 sq mi.

Records available.--July 1940 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 310 ft (from topographic map).

Average discharge.--19 years, 166 cfs.

Extremes.--Maximum discharge during year, 2,890 cfs Apr. 3 (gage height, 8.39 ft); minimum, 8.2 cfs Aug. 23, 24.
1940-59: Maximum discharge, 4,100 cfs June 25, 1944 (gage height, 9.47 ft); maximum gage height, 11.18 ft Mar. 20, 1948 (ice jam); minimum discharge, 3.0 cfs Sept. 22, 1941.

Remarks.--Records good except those for periods of ice effect, which are fair. Prior to 1954, some regulation at low flow by mill above station.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Sept. 1				Sept. 2-30			
2.9	6.3	4.5	247	2.9	6.8	3.3	29
3.2	20	5.0	425	3.0	11	3.7	72
3.5	45	6.0	950	3.1	16		
4.0	120	8.0	2,500				

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	76	250	55	150	70	450	289	28	58	13	70
2	49	64	200	58	120	76	800	241	36	51	15	69
3	43	94	160	64	94	84	*2,410	203	143	47	13	54
4	40	168	120	80	150	100	1,960	176	114	40	11	44
5	36	134	150	67	230	140	1,420	156	74	35	11	34
6	30	106	240	59	220	160	1,220	145	55	31	14	54
7	29	89	190	70	190	400	998	134	45	28	14	27
8	31	82	160	65	140	400	866	128	41	28	12	22
9	33	102	170	62	120	320	968	118	36	26	13	19
10	33	*166	130	60	105	260	932	111	33	25	16	17
11	29	134	82	56	105	210	866	107	28	26	23	15
12	25	107	90	54	105	170	705	122	25	26	26	13
13	24	91	82	54	90	180	535	*126	26	25	21	13
14	28	83	72	56	98	160	445	126	37	25	18	12
15	31	83	70	55	120	140	389	116	92	23	15	17
16	28	86	80	*62	130	190	344	104	97	23	13	*25
17	25	86	84	72	120	210	310	94	*84	21	11	26
18	23	80	85	100	115	200	276	86	126	19	10	25
19	19	77	85	92	98	180	253	82	166	24	9.8	24
20	18	74	86	85	*85	230	279	86	156	32	8.8	22
21	17	103	70	150	83	480	316	82	118	71	9.4	20
22	16	70	56	370	81	590	266	72	94	67	9.0	19
23	28	63	60	520	78	550	223	65	86	51	8.6	18
24	99	60	72	480	75	500	195	56	65	34	11	16
25	94	61	64	300	72	460	189	52	52	28	14	14
26	92	61	60	220	70	440	171	47	67	25	16	13
27	126	84	59	180	67	450	181	44	78	23	13	12
28	134	86	58	160	66	410	266	41	80	21	12	10
29	118	420	58	150	-	350	324	37	92	18	12	10
30	102	385	58	140	-------	320	330	33	82	16	12	10
31	88	-------	60	170	-------	300	-------	30	-------	*14	24	-------
Total	1,526	3,375	3,261	4,166	3,177	8,730	18,887	3,309	2,256	981	429.6	744
Mean	49.2	112	105	134	113	282	630	107	75.2	31.6	13.9	24.8
Cfsm	0.473	1.08	1.01	1.29	1.09	2.71	6.06	1.03	0.723	0.304	0.134	0.238
In.	0.55	1.21	1.17	1.49	1.14	3.12	6.75	1.18	0.81	0.35	0.15	0.27

Calendar year 1958: Max 1,860 Min 9.4 Mean 186 Cfsm 1.79 In. 24.25
Water year 1958-59: Max 2,410 Min 8.6 Mean 139 Cfsm 1.34 In. 18.19

Peak discharge (base, 1,000 cfs).--Apr. 3 (12 m.) 2,890 cfs (8.39 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28, Dec. 1 to Apr. 2.

915. Piscataquog River near Goffstown, N. H.

Location.--Lat 43°01'00", long 71°33'00", on left bank 300 ft upstream from highway bridge, 0.2 mile upstream from Harry Brook, 0.4 mile southwest of Grasmere, and 2.5 miles east of Goffstown, Hillsboro County.

Drainage area.--202 sq mi.

Records available.--October 1939 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 185 ft (from topographic map). Prior to Dec. 22, 1939, staff gage at same site and datum.

Average discharge.--20 years, 306 cfs.

Extremes.--Maximum discharge during year, 4,860 cfs Apr. 3 (gage height, 9.56 ft); minimum daily, 7.6 cfs July 18.
1939-59: Maximum discharge, 6,760 cfs June 15, 1942 (gage height, 10.79 ft); minimum daily, 4.6 cfs July 19, 23, 1957.
Maximum discharge known, 21,900 cfs Sept. 21, 1938 (gage height, 17.52 ft, from floodmarks), by computation of flow over dam. Flood of Mar. 19, 1936, reached a discharge of 19,900 cfs, by computation of flow over dam.

Remarks.--Records excellent except those below 100 cfs and those for periods of ice effect or no gage-height record, which are good. Flow regulated by powerplant above station.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.8	6.8	5.0	496
2.9	11	5.5	745
3.1	21	6.0	1,090
3.5	61	7.0	1,940
4.0	153	8.0	2,940
4.5	296	9.0	4,110

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	137	151	440	50	170	9.4	*680	479	48	169	9.8	58
2	23	118	330	120	220	40	1,130	493	54	72	9.4	198
3	56	282	265	135	190	156	*3,920	327	241	9.4	9.4	89
4	71	323	280	105	330	145	3,640	307	171	9.0	9.4	125
5	55	265	330	255	395	270	2,650	340	89	9.0	9.8	67
6	71	292	350	135	378	451	2,250	292	87	103	9.4	11
7	34	201	330	57	315	665	1,910	245	34	37	9.8	11
8	35	178	310	110	23	430	1,560	208	70	51	9.8	25
9	27	202	310	130	326	460	1,760	134	65	37	11	36
10	65	*433	250	105	270	459	1,760	81	65	61	41	59
11	53	370	190	47	346	408	1,560	213	67	39	38	*44
12	10	160	175	150	30	190	1,370	151	60	9.0	45	11
13	66	170	70	100	127	278	1,150	220	9.8	69	51	11
14	37	155	87	125	196	240	926	176	36	66	24	12
15	39	180	200	116	103	236	789	232	211	60	9.8	84
16	36	155	190	135	215	366	701	168	176	61	10	40
17	35	220	175	135	195	355	684	81	*88	34	41	40
18	8.6	250	155	95	292	346	556	147	153	7.6	43	36
19	25	150	210	185	205	290	503	172	326	8.6	14	11
20	39	135	170	175	170	366	515	151	296	38	43	11
21	37	150	100	244	56	538	652	155	143	124	10	11
22	37	155	180	421	9.0	650	438	116	178	82	8.2	12
23	53	125	120	510	100	690	439	96	146	103	7.9	56
24	247	140	63	430	175	696	414	39	118	122	75	33
25	151	110	115	557	125	701	372	9.4	147	9.0	10	12
26	115	230	120	410	*132	757	195	48	92	8.6	10	11
27	251	105	110	335	179	818	314	66	7.9	75	11	11
28	296	205	97	260	93	712	377	64	123	69	11	11
29	291	660	104	260	-	706	556	53	183	63	11	12
30	170	680	116	354	-------	690	623	65	228	9.8	11	12
31	214	-------	116	195	-------	675	-------	9.4	-------	9.8	92	-------
Total	2,784.6	6,950	6,058	6,441	5,365.0	13,793.4	34,394	5,337.8	3,712.7	1,624.8	704.7	1,160
Mean	89.8	232	195	208	192	445	1,146	172	124	52.4	22.7	38.7
Cfsm	0.445	1.15	0.965	1.03	0.950	2.20	5.67	0.851	0.614	0.259	0.112	0.192
In.	0.51	1.28	1.12	1.19	0.99	2.54	6.33	0.98	0.68	0.30	0.13	0.21

Calendar year 1958: Max 3,090 Min 6.2 Mean 337 Cfsm 1.67 In. 22.65
Water year 1958-59: Max 3,920 Min 7.6 Mean 242 Cfsm 1.20 In. 16.26

* Discharge measurement made on this day.

Note.--No gage-height record Nov. 11 to Dec. 11; discharge estimated on basis of weather records, recorded range in stage, and powerplant records. Stage-discharge relation affected by ice Dec. 13-23, 25-27, Jan. 1-14, 17-19, 23, 24, 26-29, Jan. 31 to Feb. 3, Feb. 7, 10, 12, 16, 17, 19-21, 23-25, Mar. 4, 5, 8, 9, 12, 14, 17, 19.

920. Merrimack River near Goffs Falls, below Manchester, N. H.

Location.--Lat 42°56'55", long 71°27'45", on right bank 0.8 mile downstream from Bowman Brook, 1.3 miles north of Goffs Falls, Hillsboro County, and 2.3 miles downstream from Piscataquog River.

Drainage area.--3,092 sq mi.

Records available.--October 1936 to September 1959. Monthly discharge only October 1936, published in WSP 1301.

Gage.--Water-stage recorder. Altitude of gage is 105 ft (from topographic map).

Average discharge.--23 years, 5,276 cfs.

Extremes.--Maximum discharge during year, 36,500 cfs Apr. 5 (gage height, 12.01 ft); minimum daily, 248 cfs Aug. 22.
1936-59: Maximum discharge, 102,500 cfs Sept. 23, 1938 (gage height, 25.87 ft), from rating curve extended above 48,000 cfs on basis of computations of flow over dam at gage heights 25.87 and 35.19 ft; minimum daily, 147 cfs Sept. 2, 1957.
Maximum discharge known, 150,000 cfs Mar. 20, 1936 (gage height, 35.19 ft, from floodmarks), from rating curve extended above 48,000 cfs by method explained above.

Remarks.--Records good. Flow regulated by powerplants, by Franklin Falls Reservoir since 1942, and by Squam, Newfound, Winnipesaukee, Winnisquam, and other lakes and reservoirs above station. See pages 81, 109, for description and month-end contents of many of these reservoirs.

Revisions (water years).--WSP 1231: 1937. WSP 1271: 1937(M, m).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from bridge construction Mar. 3-19, Apr. 14 to May 3, May 6, 8, 10, 15, 17, 22, 23, June 15, Aug. 7, 10, 11, 13, 21, Aug. 31 to Sept. 5, Sept. 8, 15, 16, 18, 23, 24)

1.4	223	4.0	2,360
2.0	454	5.0	4,780
2.5	725	6.0	8,200
3.0	1,110	8.0	17,200
3.5	1,630	12.0	36,400

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,690	2,330	4,220	1,400	2,850	1,440	9,250	7,600	2,160	3,400	673	2,900
2	1,460	1,970	3,960	1,800	3,000	2,230	12,000	7,000	2,270	3,100	299	4,300
3	1,550	2,490	3,780	1,750	2,300	2,450	22,900	6,200	3,150	2,280	1,270	4,300
4	1,910	2,670	3,040	1,340	3,000	2,800	32,600	5,720	2,610	1,600	1,440	4,300
5	1,160	2,550	3,820	2,150	3,610	3,000	36,200	5,430	2,560	1,250	1,170	3,900
6	1,660	2,670	4,280	1,800	3,750	3,000	33,600	5,400	2,220	1,850	1,200	3,120
7	1,070	2,240	4,170	1,490	3,300	4,400	29,400	5,500	1,560	1,870	1,150	1,960
8	1,360	2,040	3,680	1,850	3,000	4,200	25,500	5,500	1,780	1,600	988	1,850
9	1,350	1,400	3,620	1,850	2,900	4,200	23,900	5,100	1,810	1,440	416	1,750
10	1,530	2,720	3,420	1,610	2,900	4,300	26,000	4,700	1,720	1,430	1,500	1,430
11	1,330	3,390	2,990	945	2,420	4,400	25,000	4,200	1,610	1,610	1,850	1,350
12	594	2,320	2,610	1,900	2,200	3,900	23,800	3,900	1,530	270	1,850	1,110
13	984	2,460	2,190	1,650	2,200	3,900	21,600	4,330	1,210	1,650	1,900	600
14	1,240	2,350	1,590	1,750	2,520	3,400	17,000	4,810	1,040	2,150	1,850	1,500
15	1,330	2,350	2,560	1,750	2,400	3,000	16,000	4,800	2,200	1,880	1,400	1,450
16	1,420	2,240	2,320	1,850	2,300	3,500	14,000	4,100	3,900	1,680	764	1,550
17	1,470	2,850	2,200	1,900	2,450	3,900	12,500	3,300	3,900	1,750	1,490	1,650
18	1,300	2,970	2,330	1,400	2,650	4,200	12,000	3,300	4,400	1,560	1,500	1,500
19	612	2,830	2,750	2,150	2,700	4,200	13,000	3,190	4,300	753	1,310	1,300
20	1,590	2,360	2,290	2,550	2,450	4,650	13,000	3,160	4,100	1,640	1,200	660
21	1,520	2,350	1,630	3,150	2,100	6,010	13,000	3,100	4,500	1,820	1,100	1,450
22	1,350	1,960	2,210	3,670	1,900	7,740	11,000	3,200	4,300	2,140	248	1,500
23	1,720	1,540	2,040	4,830	2,200	8,600	9,400	3,600	3,600	2,030	416	1,450
24	2,420	2,010	1,510	6,790	2,400	9,710	8,000	4,100	3,400	1,960	1,480	1,450
25	2,400	2,120	1,760	6,400	2,600	9,840	7,400	3,410	2,920	1,260	1,550	1,300
26	1,230	2,110	1,830	5,400	2,400	10,000	7,400	2,870	2,570	526	1,270	384
27	2,770	1,930	1,630	4,500	2,450	10,400	7,700	2,680	2,390	1,550	1,150	378
28	2,930	2,530	1,120	4,000	2,500	9,630	8,000	2,920	2,310	1,550	*1,260	1,210
29	3,120	4,170	1,850	3,200	-	8,500	7,600	2,210	3,000	1,600	491	1,220
30	3,100	4,890	1,950	3,400	--------	7,900	7,500	2,860	3,150	1,360	1,480	1,330
31	2,610	--------	1,600	3,200	--------	8,010	--------	1,440	--------	1,260	2,500	--------
Total	51,780	74,810	80,950	83,425	73,450	167,410	506,250	129,630	82,170	51,819	38,165	54,152
Mean	1,670	2,494	2,611	2,691	2,623	5,400	16,880	4,182	2,739	1,672	1,231	1,805
Cfsm	0.540	0.807	0.844	0.870	0.848	1.75	5.46	1.35	0.886	0.541	0.398	0.584
In.	0.62	0.90	0.97	1.00	0.88	2.01	6.09	1.56	0.99	0.62	0.46	0.65

Calendar year 1958: Max 30,000 Min 259 Mean 5,337 Cfsm 1.73 In. 23.43
Water year 1958-59: Max 36,200 Min 248 Mean 3,819 Cfsm 1.24 In. 16.75

Peak discharge (base, 22,000 cfs).--Apr. 5 (12:30 to 1:30 p.m.) 36,500 cfs (12.01 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 31, Jan. 2, 3, 6, 14-17, Jan. 25 to Feb. 4, Feb. 7-10, 12, 13, 16, 18-20, 22-28, Mar. 23, 29. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

930. Sucker Brook at Auburn, N. H.
(Formerly published as Clark Brook at Auburn)

Location.--Lat 43°00'20", long 71°20'55", on left bank at Auburn, Rockingham County, 0.4 mile upstream from Massabesic Lake.

Drainage area.--27.8 sq mi.

Records available.--January 1938 to September 1959. Prior to October 1958, published as Clark Brook at Auburn.

Gage.--Water-stage recorder and concrete control. Datum of gage is 252.60 ft above mean sea level (city of Manchester bench mark).

Average discharge.--21 years, 40.2 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 430 cfs Apr. 3 (gage height, 2.20 ft); minimum, 0.6 cfs Sept. 29, 30.
1938-59: Maximum discharge, 602 cfs Sept. 12, 1954 (gage height, 2.55 ft); no flow for all or part of each day Oct. 5-8, 1939, Dec. 4, 1941, Aug. 12, 1955, caused by unusual regulation.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow regulated by Tower Hill Pond (see p. 109). Some diurnal fluctuation prior to 1951 caused by mill above station.

Revisions (water years).--WSP 891: 1939. WSP 921: Drainage area. WSP 1301: 1939(M).

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

0.1	0.3	0.9	40
.2	1.0	1.2	80
.3	2.4	1.5	152
.4	4.9	1.8	251
.5	8.7	2.1	380
.7	21		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	42	a49	12	25	14	66	80	11	29	2.6	13
2	22	36	a47	15	22	15	110	74	8.7	20	2.2	15
3	22	35	a44	15	19	15	379	61	15	15	1.7	15
4	22	35	a41	15	24	22	328	54	17	11	1.5	12
5	21	33	a45	15	32	26	274	48	15	8.3	1.5	9.7
6	22	30	a46	16	38	39	*240	43	12	6.7	1.5	7.9
7	36	27	a45	15	35	61	219	41	10	5.5	1.4	6.3
8	49	25	a42	14	31	77	195	*41	8.7	5.9	1.3	4.9
9	64	26	a39	13	26	70	185	33	7.9	7.1	1.3	3.7
10	64	*29	*38	12	24	59	189	30	*5.9	7.1	3.5	3.2
11	60	28	36	11	22	52	185	30	4.9	8.3	6.3	2.6
12	59	27	34	10	20	43	182	31	3.7	37	4.9	2.2
13	59	30	31	10	19	42	167	37	3.7	13	4.9	1.7
14	56	40	28	9.7	19	43	138	41	6.8	8.3	3.5	*1.5
15	54	40	27	9.7	21	39	105	41	19	6.7	2.4	1.8
16	51	40	26	*12	22	42	55	38	25	5.5	2.0	2.4
17	49	39	25	15	23	44	46	31	25	4.3	1.5	2.8
18	46	38	24	15	24	32	41	28	28	3.5	1.8	2.8
19	43	35	24	16	22	31	40	25	38	3.0	1.5	2.6
20	39	34	23	16	*21	38	41	25	45	3.8	1.4	2.4
21	43	31	22	19	19	64	43	22	42	12	1.3	2.0
22	58	29	20	30	17	123	43	21	37	15	1.4	1.8
23	74	a27	18	44	17	119	38	21	34	14	1.3	1.7
24	80	a25	16	49	16	84	36	19	40	11	1.5	1.5
25	80	a25	15	45	15	69	34	19	30	7.9	1.5	1.3
26	80	a24	14	40	15	69	33	16	27	6.3	1.3	1.1
27	75	25	13	35	14	74	36	16	36	5.5	1.2	1.0
28	77	a27	12	30	14	80	49	14	43	*4.6	1.2	.8
29	70	a35	12	27	-	48	58	13	59	3.7	1.1	.6
30	58	a50	12	26	--------	44	70	12	49	3.5	2.2	3.2
31	50	--------	12	26	--------	45	--------	13	--------	3.0	4.6	--------
Total	1,603	967	880	637.4	616	1,603	3,625	1,018	707.3	295.5	67.3	128.5
Mean	51.7	32.2	28.4	20.6	22.0	51.7	121	32.8	23.6	9.53	2.17	4.28
(†)	-49.5	-12.7	-2.20	+2.10	-1.82	+30.6	+37.5	-1.35	-0.31	-0.35	-1.35	-1.70
Adjusted for change in contents in Tower Hill Pond												
Mean	2.26	19.5	26.2	22.7	20.2	82.3	158	31.5	23.3	9.18	0.816	2.58
Cfsm	0.081	0.701	0.942	0.817	0.727	2.96	5.68	1.13	0.838	0.330	0.029	0.093
In.	0.09	0.78	1.09	0.94	0.76	3.41	6.35	1.31	0.93	0.38	0.03	0.10

	Observed			Adjusted		
Calendar year 1958:	Max 287	Min 0.5	Mean 45.8	Mean 42.9	Cfsm 1.54	In. 20.97
Water year 1958-59:	Max 379	Min 0.6	Mean 33.3	Mean 33.1	Cfsm 1.19	In. 16.17

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Tower Hill Pond.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage when available, and records for Warner River at Davisville.

940. Souhegan River at Merrimack, N. H.

Location.--Lat 42°51'25", long 71°30'30", on left bank at head of Atherton Falls, at Merrimack, Hillsboro County, 1½ miles upstream from mouth.

Drainage area.--171 sq mi.

Records available.--July 1909 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 160.58 ft above mean sea level, unadjusted (levels by Corps of Engineers). Prior to Apr. 12, 1911, staff gage at site 300 ft downstream at datum 0.38 ft lower. Apr. 12, 1911, to Oct. 14, 1913, chain gage at present site and datum.

Average discharge.--50 years, 285 cfs.

Extremes.--Maximum discharge during year, 4,180 cfs Apr. 3 (gage height, 8.36 ft); minimum, 23 cfs Oct. 20, Aug. 20, 21.
1909-59: Maximum discharge, 16,900 cfs Mar. 19, 1936 (gage height, 16.2 ft), from rating curve extended above 7,300 cfs on basis of velocity-area studies and computation of flow over dam at gage height 12.78 ft; minimum, 13 cfs Sept. 9, 1926.

Remarks.--Records excellent except those below 40 cfs, which are good, and those for period of ice effect, which are fair. Some diurnal fluctuation caused by mill above station.

Revisions (water years).--WSP 431: 1909-14. WSP 726: Drainage area. WSP 781: 1924(M). WSP 1231: 1914-15(M), 1917(M), 1919-23(M), 1927-28(M), 1929, 1930-34(M).

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from debris Oct. 15-21)

Oct. 1 to Apr. 2				Apr. 3 to Sept. 30			
2.1	25	3.5	350	2.1	21	3.5	325
2.3	42	4.0	570	2.2	27	4.0	535
2.6	86	5.0	1,120	2.4	46	5.0	1,100
3.0	179	6.0	1,830	2.7	94	6.0	1,830
				3.0	165	8.0	3,780

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	102	354	78	250	110	790	490	58	134	31	205
2	79	74	275	82	160	100	1,290	416	*59	76	32	155
3	79	76	225	90	145	130	*3,060	303	112	86	29	*111
4	71	208	155	115	220	190	3,230	275	165	66	28	94
5	56	196	200	92	360	220	2,040	300	137	52	27	79
6	36	155	320	67	390	240	1,580	279	104	62	27	67
7	46	142	260	98	310	620	1,310	233	70	50	28	52
8	49	98	230	90	230	680	1,050	217	65	45	28	52
9	46	92	240	86	150	550	1,110	202	79	40	28	61
10	31	156	180	82	150	450	1,090	160	69	32	32	50
11	35	174	115	82	190	350	1,060	152	61	37	35	31
12	31	140	130	82	170	290	1,000	211	54	42	35	31
13	26	121	115	72	150	230	764	258	52	*41	33	32
14	33	110	100	78	165	250	645	303	51	41	29	31
15	26	110	98	78	185	220	570	282	96	39	27	32
16	32	86	115	86	205	235	522	239	214	40	26	47
17	25	90	120	105	195	350	476	182	157	35	26	56
18	31	104	120	150	210	340	416	152	147	29	26	61
19	25	104	120	135	185	300	352	160	220	31	25	49
20	25	102	125	120	140	400	352	142	233	42	23	43
21	27	96	94	200	145	850	486	137	179	167	23	30
22	*26	83	80	560	120	1,000	*407	137	115	239	25	37
23	29	71	84	760	105	880	355	120	142	139	26	47
24	52	58	100	720	105	795	329	94	142	84	26	40
25	102	76	88	500	115	770	279	100	107	75	27	35
26	83	*86	80	350	110	775	217	96	75	56	26	35
27	115	98	70	300	115	832	258	94	90	42	25	36
28	179	98	84	250	120	655	445	84	88	49	25	29
29	152	393	75	205	-	458	526	77	132	51	24	28
30	133	525	78	240	-------	502	575	72	179	46	26	36
31	115	-------	*88	280	-------	516	-------	61	-------	*31	61	-------
Total	1,858	4,024	4,518	6,233	5,095	14,288	26,584	6,028	3,452	1,999	889	1,692
Mean	59.9	134	146	201	182	461	886	194	115	64.5	28.7	56.4
Cfsm	0.350	0.784	0.854	1.18	1.06	2.70	5.18	1.13	0.673	0.377	0.168	0.330
In.	0.40	0.88	0.98	1.36	1.11	3.11	5.78	1.31	0.75	0.43	0.19	0.37

Calendar year 1958: Max 2,410 Min 21 Mean 306 Cfsm 1.79 In. 24.28
Water year 1958-59: Max 3,230 Min 23 Mean 210 Cfsm 1.23 In. 16.67

Peak discharge (base, 2,250 cfs).--Apr. 3 (8 to 9 p.m.) 4,180 cfs (8.36 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 2 to Mar. 23 (no gage-height record Jan. 18-23, Mar. 21-23).

945. North Nashua River near Leominster, Mass.

Location.--Lat 42°30'06", long 71°43'23", on right bank 1 1/3 miles upstream from Wekepeke Brook, 2½ miles southeast of Leominster, Worcester County, and 6.1 miles upstream from confluence with South Branch Nashua River.

Drainage area.--107 sq mi.

Records available.--September 1935 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 270.04 ft above mean sea level, datum of 1929.

Average discharge.--24 years, 195 cfs.

Extremes.--Maximum discharge during year, 3,560 cfs Apr. 3 (gage height, 7.94 ft); minimum, 26 cfs July 6; minimum daily, 36 cfs July 8.
1935-59: Maximum discharge, 16,300 cfs Mar. 18, 1936 (gage height, 20.53 ft, from floodmarks), by computation of flow over dam; minimum, 11 cfs Aug. 29, 1948; minimum daily, 22 cfs Sept. 27, 1936, Sept. 2, 1957.

Remarks.--Records good. Flow regulated by mills above station. Discharge includes flow diverted from 2.1 sq mi in Squannacook River basin to North Nashua River basin for municipal supply of Fitchburg.

Rating tables, water year 1958-59 (gage height, in feet and discharge, in cubic feet per second)

Oct. 1 to Jan. 21		Jan. 22 to Sept. 30			
1.5	52	1.2	28	3.0	360
2.0	126	1.6	71	4.0	740
2.5	226	2.0	133	6.0	1,890
3.0	360	2.5	230	7.0	2,670
4.0	740				

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	131	78	154	74	190	100	480	328	58	66	77	306
2	135	72	152	119	190	143	704	268	78	67	60	176
3	103	117	135	126	150	187	2,560	218	137	65	50	174
4	86	124	166	107	364	299	1,300	196	98	47	65	147
5	74	101	235	98	258	204	835	182	79	40	86	111
6	70	92	369	93	202	670	664	170	67	49	90	91
7	70	82	222	93	172	672	550	158	63	47	84	74
8	67	70	196	88	162	265	469	153	65	36	77	77
9	67	125	171	81	*162	210	476	130	64	42	64	*77
10	70	137	124	78	153	202	448	124	59	77	73	78
11	64	111	124	68	151	214	518	130	56	124	75	86
12	59	90	128	96	135	186	438	160	56	60	69	74
13	56	80	116	86	157	198	375	174	123	58	67	58
14	65	74	101	82	149	176	302	178	98	59	67	56
15	68	74	114	82	304	162	268	155	121	*66	67	67
16	67	67	116	134	184	285	245	131	100	66	59	92
17	70	67	112	168	157	282	228	114	91	61	70	79
18	68	*72	111	119	147	238	210	113	122	54	109	72
19	62	77	107	114	135	*226	196	110	128	130	75	70
20	54	75	103	101	113	579	265	116	128	475	71	60
21	64	70	88	279	108	706	272	110	96	844	80	58
22	65	63	82	1,370	100	770	222	103	82	296	71	65
23	*133	54	95	564	96	427	200	92	82	196	54	64
24	137	62	92	318	111	372	188	82	71	151	74	64
25	104	68	77	250	108	381	170	84	66	121	82	61
26	118	80	70	214	106	351	155	81	128	97	71	59
27	169	93	80	182	105	434	284	77	105	88	69	50
28	131	88	75	188	106	328	396	*74	88	*83	69	51
29	116	554	81	178	-	258	490	66	90	86	165	65
30	103	231	90	252	-------	260	399	56	79	79	197	63
31	87	-------	88	242	-------	310	-------	55	-------	82	397	-------
Total	2,733	3,148	3,974	6,044	4,475	10,093	14,307	4,188	2,678	3,812	2,784	2,625
Mean	88.2	105	128	195	160	326	477	135	89.3	123	89.8	87.5
Cfsm	0.824	0.981	1.20	1.82	1.50	3.05	4.46	1.26	0.835	1.15	0.839	0.818
In.	0.95	1.09	1.38	2.10	1.56	3.51	4.97	1.46	0.93	1.32	0.97	0.91

Calendar year 1958: Max 1,720 Min 28 Mean 222 Cfsm 2.07 In. 28.21
Water year 1958-59: Max 2,560 Min 36 Mean 167 Cfsm 1.56 In. 21.15

Peak discharge (base, 1,000 cfs).--Jan. 22 (12 m.) 2,000 cfs (6.15 ft); Mar. 6 (9:30 p.m.) 1,950 cfs (6.09 ft); Mar. 22 (12:30 a.m.) 1,300 cfs (5.07 ft); Apr. 3 (7 a.m.) 3,560 cfs (7.94 ft); July 20 (11 p.m.) 1,880 cfs (5.98 ft).

* Discharge measurement made on this day.

950. Rocky Brook near Sterling, Mass.

Location.--Lat 42°26'57", long 71°48'10", on right bank 150 ft downstream from bridge on Beaman Road, 0.7 mile upstream from mouth, and 2¼ miles west of Sterling, Worcester County.

Drainage area.--2.28 sq mi.

Records available.--October 1946 to September 1959.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 505 ft (from topographic map).

Average discharge.--13 years, 3.71 cfs.

Extremes.--Maximum discharge during year, 470 cfs July 20 (gage height, 4.74 ft), from rating curve extended above 35 cfs; minimum, 0.14 cfs July 5-11.
1946-59: Maximum discharge, that of July 20, 1959; minimum, 0.003 cfs Aug. 24, 27, 1957.

Remarks.--Records fair. Flow regulated by reservoir from 1949 to 1955.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	6.4	2.35	0.92	2.0	1.2	13.1	4.8	0.40	0.56	1.04	*5.4
2	2.8	6.4	2.0	1.1	2.2	1.6	27	4.3	.48	.48	.77	3.7
3	2.0	8.0	1.8	1.7	1.7	3.2	38	3.8	2.7	.40	.64	3.6
4	1.7	6.7	2.35	2.1	5.6	8.0	16.5	3.4	1.65	.22	.56	3.2
5	1.55	6.4	3.7	*1.7	4.1	5.2	12.1	3.0	.92	.16	.56	2.35
6	1.3	6.2	7.4	1.5	3.2	27	10.4	2.7	.60	.14	.56	1.7
7	.98	6.2	3.2	1.1	2.8	15.5	8.6	2.4	1.4	.14	.56	1.23
8	.82	5.8	2.45	.9	2.6	10.5	7.5	2.2	.92	.14	.56	1.04
9	.72	8.2	2.2	.8	*2.0	7.0	7.2	2.0	.72	.14	.64	.77
10	.64	7.5	1.9	.7	2.0	6.4	6.7	1.9	.52	.14	.64	.77
11	.56	2.7	1.55	.7	2.0	5.6	9.4	1.8	.52	1.7	.72	.77
12	.52	1.7	1.45	.7	2.0	4.0	7.7	2.2	.40	.87	.72	.64
13	.48	1.3	1.45	.7	2.2	3.4	6.2	2.2	.52	.64	.56	.52
14	.44	1.23	1.3	.75	3.0	4.0	5.6	2.4	1.55	.56	.40	.52
15	.44	1.16	1.23	.8	7.0	4.7	5.2	2.0	2.2	*.56	.40	.44
16	.44	1.04	1.4	1.0	5.4	6.9	4.8	1.8	1.65	.77	.40	.77
17	.44	1.04	1.45	4.2	4.2	6.7	4.6	1.6	1.4	.56	.40	.64
18	.44	*.98	1.45	3.6	3.9	5.6	4.4	1.4	2.0	.44	.40	.52
19	.44	.98	1.45	2.6	3.4	*5.6	4.2	1.3	2.2	1.3	.40	.52
20	*.44	.92	1.45	2.35	2.7	14.0	*6.0	1.2	2.45	46	.27	.36
21	.44	.92	1.3	4.7	2.0	22	5.4	1.1	1.45	34	.22	.33
22	2.05	.87	1.1	34	1.8	18.0	4.6	1.0	1.23	13.1	.22	.33
23	5.2	.82	1.1	12.0	1.6	10.5	3.7	.90	1.23	8.0	.22	.27
24	5.3	.82	1.1	8.4	1.5	9.4	3.4	1.15	.92	5.6	.27	.27
25	4.4	.77	1.1	5.5	1.4	10.0	3.1	1.05	.87	4.2	.33	.27
26	5.2	.77	.92	5.0	1.3	10.7	3.5	.95	.77	3.0	.27	.27
27	6.7	1.8	.92	4.0	1.2	8.9	8.0	.85	.92	2.2	.22	.27
28	4.8	1.3	.92	3.2	1.1	7.7	7.0	*.72	1.04	*1.8	.16	.27
29	4.4	14.0	.92	2.5	-	7.0	8.8	.64	1.04	1.4	4.0	.27
30	6.2	3.9	.92	4.0	-------	6.4	5.4	.56	.77	1.16	4.8	.27
31	6.4	-------	.92	3.5	-------	10.2	-------	.48	-------	1.04	9.7	-------
Total	70.64	106.82	54.75	116.72	76.9	266.9	257.9	57.80	35.44	131.42	31.61	32.28
Mean	2.28	3.56	1.77	3.77	2.75	8.61	8.60	1.86	1.18	4.24	1.02	1.08
Cfsm	1.00	1.56	0.776	1.65	1.21	3.78	3.77	0.816	0.518	1.86	0.447	0.474
In.	1.15	1.74	0.89	1.90	1.25	4.35	4.21	0.94	0.58	2.14	0.52	0.53

Calendar year 1958: Max 34 Min 0.10 Mean 4.31 Cfsm 1.89 In. 25.66
Water year 1958-59: Max 46 Min 0.14 Mean 3.40 Cfsm 1.49 In. 20.20

Peak discharge (base, 45 cfs).--Jan. 22 (5:30 a.m.) 49 cfs (3.14 ft); Mar. 6 (5 p.m.) 90 cfs (3.47ft); Apr. 2 (10:30 p.m.) 151 cfs (3.81 ft); July 20 (8 p.m.) 470 cfs (4.74 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 18, 19, Dec. 30 to Jan. 5, Apr. 24 to May 27; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for Ware River near Barre and Hop Brook near New Salem. Stage-discharge relation affected by ice Jan. 6-18, Jan. 23 to Feb. 7, Feb. 11-16, 19, 20, Feb. 23 to Mar. 9, Mar. 11-15, 22, 23, 28, 29.

955. South Branch Nashua River at Clinton, Mass.

Location.--Lat 42°24'15", long 71°41'25", at Wachusett Dam, 1 mile south of Clinton, Worcester County.

Drainage area.--107.69 sq mi since July 1937.

Records available.--July 1896 to September 1959.

Average discharge.--63 years, 189 cfs (adjusted to present drainage area).

Remarks.--Flow regulated by Wachusett Reservoir and several ponds. Records adjusted for change in contents in and wastage from Wachusett Reservoir and diversions from Ware River and Quabbin Reservoir on Swift River. Entire flow, except wastage, diverted for use of Boston metropolitan district.

Cooperation.--Records furnished by Water Division of Metropolitan District Commission.

Revisions (water years).--WSP 1051: 1928.

Monthly discharge and rainfall, water year October 1958 to September 1959

Month	Runoff (millions of gallons)	Discharge per square mile		Runoff (inches)	Rainfall (inches)
		Millions of gallons per day	Cubic feet per second		
October	2,002.0	0.600	0.928	1.07	2.81
November	2,966.0	.918	1.42	1.58	4.38
December	3,471.1	1.040	1.61	1.86	1.89
Calendar year 1958	58,520.3	1.489	2.30	31.27	53.16
January	4,769.8	1.429	2.21	2.55	4.05
February	3,156.4	1.047	1.62	1.69	2.67
March	8,364.4	2.506	3.88	4.47	6.51
April	9,959.1	3.083	4.77	5.32	4.65
May	2,903.9	.870	1.35	1.55	.62
June	1,850.8	.573	.886	.99	4.70
July	4,469.2	1.339	2.07	2.39	8.42
August	2,109.4	.632	.978	1.13	5.61
September	1,591.9	.493	.762	.85	1.91
Water year 1958-59	47,614.0	1.211	1.87	25.45	48.22

960. Squannacook River near West Groton, Mass.

Location.--Lat 42°38'03", long 71°39'30", on left bank 0.7 mile downstream from Trout Brook and 2.7 miles northwest of West Groton, Middlesex County.

Drainage area.--62.8 sq mi, excludes 2.10 sq mi above outlet of Fitchburg Reservoir.

Records available.--October 1949 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 244.27 ft above mean sea level, datum of 1929.

Average discharge.--10 years, 116 cfs.

Extremes.--Maximum discharge during year, 2,000 cfs Apr. 3 (gage height, 6.58 ft); minimum daily, 9.5 cfs Oct. 22.
1949-59: Maximum discharge, 4,010 cfs Oct. 16, 1955 (gage height, 8.04 ft), from rating curve extended above 2,200 cfs by logarithmic plotting; minimum daily, 4.3 cfs Aug. 14, 1950.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are good. Flow regulated by mill above station. Entire flow from 2.10 sq mi above outlet of Fitchburg Reservoir diverted for municipal supply of Fitchburg during most years.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	8.4	3.2	182
1.7	12	4.0	366
2.0	27	5.0	760
2.4	61	6.0	1,440
2.8	112		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	27	b89	33	b89	46	310	202	29	33	18	*159
2	29	25	72	37	b71	47	452	167	*32	28	16	93
3	29	28	57	43	57	58	1,370	143	58	25	15	62
4	24	45	56	49	74	89	1,010	125	68	24	15	52
5	21	49	64	b43	154	110	600	112	46	20	15	41
6	17	40	116	b41	136	139	450	104	37	18	15	32
7	16	35	b115	38	b100	366	370	98	40	19	18	27
8	15	30	92	35	82	310	310	94	38	18	16	23
9	15	33	76	32	b66	208	300	90	32	16	16	20
10	15	53	b60	31	58	147	280	83	27	17	17	19
11	14	53	b51	29	60	b110	320	79	24	33	18	19
12	12	43	51	29	b56	87	300	90	23	37	16	18
13	12	36	48	29	58	89	250	118	28	27	15	17
14	12	34	43	30	69	96	210	115	41	23	14	16
15	12	31	43	31	92	87	190	109	45	*21	15	17
16	13	31	45	35	110	109	170	89	52	21	13	26
17	*12	30	45	45	94	150	160	79	47	20	14	28
18	14	30	45	48	84	*140	150	73	51	17	24	23
19	12	29	44	47	b76	b110	145	69	65	23	23	20
20	12	28	46	43	b60	175	150	68	82	81	19	18
21	15	27	40	50	58	394	182	65	64	247	15	17
22	9.5	26	37	166	51	575	158	60	46	174	14	16
23	15	25	36	380	46	403	136	52	38	88	13	15
24	28	*24	37	234	47	259	125	47	33	58	14	15
25	36	24	36	150	46	259	117	46	29	46	17	13
26	32	25	32	118	45	289	110	45	33	35	15	12
27	41	30	30	94	44	315	135	40	46	29	12	12
28	54	36	30	b79	44	234	*217	37	46	*25	11	12
29	45	109	31	73	-	172	236	34	47	22	18	12
30	38	165	32	78	-------	172	261	31	46	20	42	12
31	31	-------	*35	96	-------	180	-------	30	-------	19	146	-------
Total	674.5	1,201	1,634	2,266	2,027	5,925	9,174	2,594	1,293	1,284	649	866
Mean	21.8	40.0	52.7	73.1	72.4	191	306	83.7	43.1	41.4	20.9	28.9
Cfsm	0.347	0.637	0.839	1.16	1.15	3.04	4.87	1.33	0.686	0.659	0.333	0.460
In.	0.40	0.71	0.97	1.34	1.20	3.51	5.43	1.54	0.77	0.76	0.38	0.51

Calendar year 1958: Max 1,020 Min 9.5 Mean 118 Cfsm 1.88 In. 25.41
Water year 1958-59: Max 1,370 Min 9.5 Mean 81.1 Cfsm 1.29 In. 17.52

Peak discharge (base, 700 cfs).--Apr. 3 (3 to 4 p.m.) 2,000 cfs (6.58 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Apr. 5-19, Sept. 12-24; discharge estimated on basis of weather records, recorded range in stage when available, and records for North Nashua River near Leominster.

965. Nashua River at East Pepperell, Mass.

Location.--Lat 42°40'03", long 71°34'32", on right bank 200 ft downstream from powerplant of St. Regis Paper Co. at East Pepperell, Middlesex County, and 0.8 mile upstream from Nissitissit River.

Drainage area.--Total above gage, 433 sq mi; net above gage, 316 sq mi (flow diverted from 117 sq mi for use of Boston metropolitan district and city of Worcester).

Records available.--October 1935 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 169.04 ft above mean sea level, datum of 1929.

Average discharge.--24 years, 535 cfs (adjusted for wastage into Nashua River).

Extremes.--Maximum discharge during year, 4,000 cfs Apr. 4 (gage height, 8.63 ft); minimum daily, 8.3 cfs May 31.

1935-59: Maximum discharge, 20,900 cfs Mar. 20, 1936 (gage height, 19.1 ft, from floodmarks), from rating curve extended above 12,000 cfs on basis of velocity-area studies; minimum daily, 1.1 cfs Aug. 13, 1939.

Remarks.--Records good except those for periods of backwater from aquatic vegetation, which are fair. Extremes and daily discharge include water wasted in diverting drainage from basin of South Branch Nashua River for use of Boston metropolitan district and water diverted around station through plant of St. Regis Paper Co. Flow regulated by powerplant above station.

Revisions.--WSP 801: Drainage area.

Rating table, water year 1958-59, except periods of backwater from aquatic vegetation (gage height, in feet, and discharge, in cubic feet per second)

0.35	7.1	1.5	152
.4	8.7	2.0	321
.6	18	3.0	775
.8	32	6.0	2,410
1.0	52	9.0	4,240
1.2	82		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	320	322	941	11	233	118	891	1,090	202	311	357	891
2	301	99	670	525	252	187	987	962	*228	334	95	825
3	379	245	424	458	365	315	2,330	470	242	200	198	706
4	154	336	384	112	591	796	3,830	910	377	12	186	548
5	13	340	492	272	886	1,000	3,350	913	377	13	*174	458
6	273	340	825	288	*825	968	2,660	615	433	91	235	*97
7	328	240	343	*259	626	2,020	1,980	467	193	123	270	15
8	206	152	728	259	125	1,700	1,650	472	162	133	266	141
9	139	51	715	259	256	1,390	1,450	462	177	109	82	221
10	139	637	485	215	357	1,030	1,350	116	166	118	296	235
11	61	745	375	60	357	710	1,310	299	171	211	274	232
12	10	558	371	168	357	575	1,050	630	174	344	199	232
13	200	359	344	232	576	566	1,350	516	225	286	183	765
14	250	234	110	180	437	566	1,130	462	85	236	189	128
15	161	305	265	166	161	229	1,010	494	375	232	221	169
16	136	117	384	232	868	487	968	526	397	229	76	221
17	131	128	384	467	680	913	918	154	389	211	214	281
18	133	181	380	175	595	*918	685	274	385	135	281	208
19	39	230	364	210	472	890	208	365	381	158	228	186
20	158	272	287	274	373	913	621	361	380	769	189	64
21	247	272	89	476	338	1,660	924	361	83	2,080	183	156
22	240	272	213	915	104	2,020	720	357	356	2,280	174	212
23	301	83	322	1,670	205	2,050	*715	274	288	1,690	54	208
24	351	213	238	1,600	252	1,520	544	74	238	1,180	132	212
25	347	236	9.0	719	252	1,220	570	194	238	1,030	174	215
26	121	*223	280	904	281	1,160	212	266	215	239	174	44
27	443	73	380	670	296	1,170	760	266	349	456	174	24
28	508	277	143	445	307	1,150	935	270	126	349	183	227
29	345	637	201	421	-	568	946	270	377	369	196	235
30	*345	725	269	539	--------	1,020	1,140	66	389	369	178	228
31	334	--------	174	625	--------	924	--------	8.3	--------	365	822	--------
Total	7,113	8,902	11,589.0	13,806	11,427	30,753	37,194	12,964.3	8,178	14,682	6,657	8,384
Mean	229	297	374	445	408	992	1,240	418	273	473	215	279
(†)	7.41	7.24	7.06	7.25	7.18	7.18	5.39	5.43	5.61	17.7	22.6	8.07

Adjusted for wastage (figures represent net discharge from net drainage area)

Mean	222	289	367	438	401	985	1,234	413	267	455	192	271
Cfsm	0.703	0.915	1.16	1.39	1.27	3.12	3.91	1.31	0.845	1.44	0.608	0.858
In.	0.81	1.02	1.34	1.60	1.32	3.59	4.36	1.51	0.94	1.66	0.70	0.96

	Observed			Adjusted		
Calendar year 1958:	Max 3,390	Min 7.1	Mean 613	Mean 605	Cfsm 1.91	In. 25.97
Water year 1958-59:	Max 3,830	Min 8.3	Mean 470	Mean 461	Cfsm 1.46	In. 19.81

* Discharge measurement made on this day.

† Water wasted in diverting drainage from basin of South Branch Nashua River for use of Boston metropolitan district, equivalent in cubic feet per second. Records furnished by Water Division of Metropolitan District Commission.

Note.--Backwater from aquatic vegetation Oct. 1 to Nov. 25, Nov. 27, 28, Dec. 7, 8, 14, 15, 21, 22, 24-26, 28, 29, Dec. 31 to Jan. 2, Jan. 4, 5, 11, 12, 18, 19, Feb. 1, 2, 8, 9, 15, 22, 23, Mar. 1, 2, 15, 16, Apr. 19, 26, May 3, 10, 11, 17, 18, 24, 25, May 30 to June 1, June 5 to July 20, July 26 to Aug. 31, Sept. 3-30.

970. Assabet River at Maynard, Mass.

Location.--Lat 42°25'55", long 71°27'01", on right bank at Maynard, Middlesex County, 150 ft upstream from bridge on State Highway 27, 1.7 miles downstream from Assabet Brook, and 7.1 miles upstream from confluence with Sudbury River.

Drainage area.--116 sq mi.

Records available.--July 1941 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 145 ft (from topographic map).

Average discharge.--18 years, 181 cfs.

Extremes.--Maximum discharge during year, 1,250 cfs Apr. 4 (gage height, 5.26 ft); minimum daily, 3.7 cfs Aug. 22.
1941-59: Maximum discharge, 4,250 cfs Aug. 20, 1955 (gage height, 8.94 ft); maximum gage height, 8.96 ft Aug. 20, 1955 (backwater from debris); minimum daily discharge, 0.8 cfs Oct. 4, 1953.

Remarks.--Records fair. Low flow regulated by mills above station; greater regulation prior to 1953.

Revisions (water years).--WSP 1231: 1945-46.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used or backwater from aquatic vegetation or both Oct. 1-17, Oct. 19 to Dec. 27, Jan. 2-6, Jan. 22, Mar. 29-31, Apr. 13 to May 22, June 4-6, 19-21, July 12-18, 20, 26-29, Aug. 31 to Sept. 6)

1.2	3.2	2.5	159
1.3	6.5	3.0	305
1.5	18	4.0	630
1.8	44	5.0	1,100
2.1	82	6.0	1,700

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	263	114	293	92	186	102	398	449	*56	90	111	284
2	162	99	242	111	142	156	473	395	58	81	96	308
3	167	109	186	140	109	269	804	332	94	71	82	301
4	159	133	175	159	168	413	1,170	290	154	68	74	293
5	140	147	206	145	275	572	980	*257	164	68	*69	236
6	114	147	263	130	*278	662	742	224	122	30	68	*172
7	97	131	269	105	181	1,000	572	215	107	26	69	131
8	85	112	287	*90	154	1,010	496	195	99	70	68	106
9	79	122	245	81	116	648	467	183	84	64	65	90
10	64	172	198	75	114	404	452	170	71	37	68	81
11	62	209	172	72	120	314	461	154	62	*114	74	76
12	64	224	154	67	111	263	476	152	59	263	71	71
13	78	209	140	65	120	224	458	154	58	290	67	68
14	69	175	124	65	170	251	410	170	59	242	58	65
15	*68	149	120	65	281	251	362	172	84	195	55	62
16	53	133	118	78	365	278	329	154	109	221	53	64
17	40	124	120	145	353	335	305	142	107	236	53	64
18	32	118	122	167	302	380	281	131	107	195	53	64
19	46	118	122	154	317	*368	266	120	131	152	34	67
20	65	114	122	120	251	476	278	116	149	254	19	65
21	64	114	118	139	212	781	326	109	140	658	19	65
22	50	104	107	362	149	1,010	332	104	116	975	3.7	64
23	57	99	97	606	120	850	302	88	102	950	14	64
24	57	*96	96	562	106	606	263	79	90	733	52	41
25	104	94	96	362	99	479	230	78	84	496	52	4.3
26	140	72	90	248	97	434	215	76	85	344	52	4.3
27	186	68	82	198	97	425	230	71	94	263	32	5.4
28	183	77	78	164	94	407	320	67	100	215	19	57
29	181	175	79	140	-	356	419	64	109	181	4.0	67
30	159	272	84	154	-------	332	470	62	104	152	46	79
31	135	-------	90	212	-------	341	-------	59	-------	129	198	-------
Total	3,223	4,030	4,695	5,273	5,087	14,397	13,287	5,032	2,958	7,863	1,798.7	3,119.0
Mean	104	134	151	170	182	464	443	162	98.6	254	58.0	104
Cfsm	0.897	1.16	1.30	1.47	1.57	4.00	3.82	1.40	0.850	2.19	0.500	0.897
In.	1.03	1.29	1.51	1.69	1.63	4.62	4.26	1.61	0.95	2.52	0.58	1.00

Calendar year 1958: Max 1,270 Min 2.2 Mean 250 Cfsm 2.16 In. 29.29
Water year 1958-59: Max 1,170 Min 3.7 Mean 194 Cfsm 1.67 In. 22.69

* Discharge measurement made on this day.

975. Sudbury River at Framingham Center, Mass.

Location.--Lat 42°17'30", long 71°26'40", at dam of Framingham Reservoir No. 1, half a mile upstream from outlet of Farm Pond and three-quarters of a mile southwest of Framingham Center, Middlesex County.

Drainage area.--75.2 sq mi since January 1881.

Records available.--January 1875 to September 1959.

Average discharge.--84 years, 113 cfs (adjusted to present drainage area).

Remarks.--Records adjusted for change in reservoir contents, diversions, and wastage. Flow diverted as needed for use of Boston metropolitan district. Part of flow from Wachusett Reservoir on South Branch Nashua River is diverted into Sudbury Reservoir en route to Boston metropolitan district.

Cooperation.--Records furnished by Water Division of Metropolitan District Commission.

Revisions (water years).--WSP 1051: 1937.

Monthly discharge and rainfall, water year October 1958 to September 1959

Month	Runoff (millions of gallons)	Discharge per square mile		Runoff (inches)	Rainfall (inches)
		Millions of gallons per day	Cubic feet per second		
October	894.0	0.383	0.593	0.68	2.45
November	2,093.4	.928	1.44	1.60	3.57
December	2,562.4	1.099	1.70	1.96	2.12
Calendar year 1958	38,274.1	1.394	2.16	29.28	50.95
January	2,154.3	.924	1.43	1.65	2.71
February	2,271.2	1.079	1.67	1.74	3.26
March	6,418.8	2.753	4.26	4.91	5.56
April	5,668.3	2.513	3.89	4.34	4.76
May	2,079.7	.892	1.38	1.59	.81
June	896.7	.397	.615	.69	4.80
July	2,923.4	1.254	1.94	2.24	7.62
August	446.1	.191	.296	.34	3.58
September	264.8	.117	.182	.20	.49
Water year 1958-59	28,673.1	1.045	1.62	21.94	41.73

985. Lake Cochituate Outlet at Cochituate, Mass.

Note.--Records for the 1959 water year witheld because of uncertainties regarding accuracy. Records since 1938 may be considerably in error and should not be used.

995. Concord River below River Meadow Brook, at Lowell, Mass.

Location.--Lat 42°38'12", long 71°18'09", on right bank 300 ft downstream from Rogers Street Bridge at Lowell, Middlesex County, 0.3 mile downstream from River Meadow Brook, and 0.8 mile upstream from mouth.

Drainage area.--Total above gage, 405 sq mi; net above gage, 312 sq mi (diversion as needed from 92.6 sq mi for use of Boston metropolitan district).

Records available.--October 1936 to September 1959. October, November 1936 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 67.41 ft above mean sea level, datum of 1929.

Average discharge.--23 years, 464 cfs (adjusted to net drainage area).

Extremes.--Maximum discharge during year, 2,050 cfs Apr. 6 (gage height, 7.01 ft); minimum daily, 116 cfs Aug. 22.
1936-59: Maximum discharge, 4,540 cfs Aug. 23, 1955 (gage height, 8.97 ft); minimum daily, 4.0 cfs Sept. 29, 1957.

Remarks.--Records excellent except those for periods of ice effect or backwater from aquatic vegetation, which are good. Daily discharge includes water wasted from 92.6 sq mi in basins of Sudbury River and Lake Cochituate. Water diverted above station for use of city of Lowell. Flow regulated by mills above station

Rating table, water year 1958-59, except periods of ice effect or backwater from aquatic vegetation (gage height, in feet, and discharge, in cubic feet per second)

4.1	98	6.0	1,100
4.5	204	7.0	2,040
5.0	430		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	631	485	690	365	b590	441	1,220	1,090	267	430	882	355
2	657	491	716	414	b530	497	1,250	1,120	247	419	812	458
3	638	503	716	446	463	593	1,480	1,110	279	392	*749	*515
4	612	503	728	485	474	854	1,730	1,090	325	360	683	575
5	587	503	791	b480	*575	1,110	1,930	1,030	360	355	612	593
6	563	497	854	b440	638	1,350	2,010	980	370	325	557	587
7	515	497	861	b430	b580	1,680	1,930	928	380	311	503	545
8	468	485	935	452	569	1,830	1,840	854	392	275	458	497
9	441	515	935	446	b470	1,940	1,720	805	350	251	436	430
10	430	533	b900	b410	441	1,790	1,620	756	325	*243	424	375
11	392	533	b850	b380	424	1,650	1,550	716	302	355	386	345
12	380	551	812	*350	b390	1,360	1,490	664	279	414	355	307
13	375	563	777	302	397	1,080	1,450	631	243	491	335	293
14	340	557	b740	279	414	1,190	1,400	624	259	515	325	288
15	316	551	b700	263	545	1,220	1,320	599	311	545	271	259
16	293	533	b640	267	683	1,220	1,250	581	297	557	263	284
17	275	539	b620	325	742	1,230	1,180	569	316	557	255	279
18	211	515	624	b370	791	1,220	1,120	539	345	545	201	271
19	204	509	612	b380	861	1,230	1,070	503	408	563	176	243
20	214	503	b590	370	b790	1,280	1,020	468	446	638	170	255
21	173	*503	b560	408	b780	1,460	988	441	485	826	156	263
22	*178	485	b530	716	b740	1,640	*980	414	503	1,020	116	232
23	230	474	497	875	664	*1,780	958	370	468	1,230	128	239
24	251	458	468	b980	b580	1,810	935	360	446	1,400	159	255
25	276	414	b440	1,020	b530	1,730	905	355	424	1,440	137	259
26	345	397	b420	b950	509	1,620	875	330	430	1,410	157	247
27	452	397	392	847	491	1,530	861	311	436	1,320	182	222
28	474	430	386	b730	458	1,420	875	284	468	1,200	185	214
29	497	539	392	683	-	1,380	935	*279	491	1,110	162	159
30	509	618	370	638	---------	1,310	1,020	263	458	1,030	188	124
31	515	--------	370	624	--------	1,230	--------	255	--------	965	284	--------
Total	12,442	15,081	19,916	16,125	16,119	41,675	38,912	19,319	11,110	21,492	10,707	9,968
Mean	401	503	642	520	576	1,344	1,297	623	370	693	345	332
(†)	129	185	233	151	166	416	366	156	107	210	92.7	106
Adjusted for wastage and diversion (figures represent net discharge from net drainage area)												
Mean	272	318	410	369	410	928	931	467	264	484	253	226
Cfsm	0.872	1.02	1.31	1.18	1.31	2.97	2.98	1.50	0.846	1.55	0.811	0.724
In.	1.01	1.14	1.51	1.36	1.37	3.43	3.33	1.73	0.94	1.79	0.93	0.81

		Observed				Adjusted				
Calendar year 1958	Max	3,100	Min	113	Mean	818	Mean	576	Cfsm	1.85	In.	25.05
Water year 1958-59:	Max	2,010	Min	116	Mean	638	Mean	445	Cfsm	1.43	In.	19.35

* Discharge measurement made on this day.
† Water wasted from 92.6 sq mi in basins of Sudbury River and Lake Cochituate and diversion for use of city of Lowell, equivalent in cubic feet per second. Records furnished by Water Division of Metropolitan District Commission and by city of Lowell.
b Stage-discharge relation affected by ice.
Note.--Backwater from aquatic vegetation Oct. 1 to Jan. 7, May 8 to Sept. 30.

1000. Merrimack River below Concord River, at Lowell, Mass.

Location.--Lat 42°38'45", long 71°17'56", on right bank 1,100 ft downstream from Concord River, at Lowell, Middlesex County.
Drainage area.--Total above gage, 4,635 sq mi; net above gage, 4,425 sq mi (diversions as needed from 210 sq mi for use of Boston metropolitan district and city of Worcester).
Records available.--June 1923 to September 1959.
Gage.--Water-stage recorder. Datum of gage is 5.18 ft above mean sea level, datum of 1929. Prior to Mar. 7, 1934, at Boott Mills 1,800 ft upstream and 700 ft above mouth of Concord River, in same gage pool and at same datum; gage-height record (furnished by Proprietors of the Locks and Canals on Merrimack River) was indicative of flow including that of Concord River.
Average discharge.--36 years, 7,196 cfs (adjusted for wastage into Merrimack River).
Extremes.--Maximum discharge during year, 47,400 cfs Apr. 5 (gage height, 51.62 ft); minimum daily, 671 cfs June 14.
1923-59: Maximum discharge, 173,000 cfs Mar. 20, 1936 (gage height, 68.4 ft, from floodmarks); minimum daily, 199 cfs Sept. 23, 1923.
Remarks.--Records excellent except those for periods of ice effect and those below 1,000 cfs, which are good. Daily discharge includes water wasted from 210 sq mi in basins of Sudbury and South Branch Nashua Rivers and Lake Cochituate. Flow regulated by powerplants, by Franklin Falls Reservoir since 1942, and by Squam, Newfound, Winnipesaukee, Winnisquam, and other lakes and reservoirs above station. See p. 81,109, for description and month-end usable contents of many of these reservoirs. Records of water temperatures for the water year 1959 are given in WSP 1641.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

41.4	580	44.0	7,820
41.7	977	46.0	16,400
42.0	1,520	48.0	26,400
42.5	2,740	50.0	37,500
43.0	4,270	52.0	49,800

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,080	3,420	7,190	b1,550	4,950	2,960	12,800	12,100	3,050	4,890	2,690	3,970
2	3,020	2,940	6,850	2,940	b4,900	3,740	15,700	11,400	3,080	4,370	1,260	5,230
3	2,890	4,350	5,980	2,770	4,210	3,860	28,200	9,880	3,150	4,270	*2,740	5,870
4	2,180	3,940	5,400	2,630	4,530	4,820	43,700	9,120	3,680	2,180	2,590	5,670
5	1,750	3,770	5,870	b3,000	5,870	6,660	46,700	8,660	3,570	1,120	2,270	5,090
6	2,910	4,110	7,120	b3,500	6,620	7,540	43,900	8,620	3,120	1,680	2,080	4,300
7	3,060	3,920	6,890	b3,200	6,340	11,200	38,400	7,700	2,690	2,860	1,970	2,880
8	2,850	3,310	6,480	3,030	5,190	11,000	33,100	8,020	3,320	2,560	1,610	3,180
9	2,850	2,890	6,740	2,610	4,720	10,400	29,500	7,230	3,170	1,620	1,090	3,090
10	2,740	4,020	6,050	2,160	4,490	9,630	31,000	6,590	2,850	2,180	1,860	2,970
11	1,760	5,230	5,260	1,820	4,410	8,750	30,700	6,410	2,240	2,600	2,120	2,700
12	1,030	4,560	4,790	2,570	3,960	7,420	29,400	6,120	2,050	2,400	2,480	1,630
13	2,300	4,270	3,890	2,420	3,640	6,440	27,100	5,730	1,590	2,440	2,710	977
14	2,730	4,010	3,390	2,360	3,150	6,190	23,400	6,660	671	2,740	2,630	1,820
15	2,190	3,550	4,430	2,450	4,120	6,190	20,900	7,150	2,400	2,910	2,110	1,780
16	1,990	3,170	4,110	2,580	4,950	6,410	18,800	6,620	5,090	2,940	1,020	2,110
17	1,990	4,460	3,760	2,320	4,820	6,930	17,000	5,400	5,090	2,830	2,320	2,520
18	1,400	4,430	3,610	1,960	4,690	8,140	15,700	5,120	5,600	2,130	2,310	2,590
19	693	4,270	3,770	3,380	5,600	8,380	15,900	4,590	5,940	1,380	2,010	2,040
20	1,930	3,990	3,420	3,160	b5,500	8,910	15,900	4,760	5,430	3,030	1,850	1,200
21	1,940	*3,710	3,220	3,990	3,670	12,300	16,900	4,460	5,700	5,770	1,780	2,000
22	1,970	3,200	3,750	6,260	3,210	15,100	15,100	4,490	6,160	6,810	1,310	1,720
23	2,330	2,490	3,430	8,660	3,920	*16,000	13,000	4,820	5,430	6,850	777	1,690
24	2,690	3,420	2,970	10,400	4,270	15,900	11,500	4,590	4,590	6,700	1,250	2,040
25	3,550	3,260	b2,000	10,500	3,720	15,300	10,600	4,590	4,490	5,020	1,300	2,440
26	3,450	3,440	b2,800	9,290	3,670	14,900	9,880	4,080	4,430	1,870	1,330	1,810
27	3,610	2,680	2,420	7,780	3,730	15,400	10,600	3,810	3,550	3,630	1,510	845
28	4,280	3,580	2,380	b6,400	2,940	14,600	11,300	3,610	1,520	3,560	1,480	1,640
29	4,790	5,870	3,100	5,460	-	12,500	11,800	*3,450	4,690	3,590	1,420	1,520
30	4,850	7,740	3,120	5,360	---------	12,000	11,700	2,550	4,760	3,640	948	1,470
31	5,090	--------	2,810	5,400	--------	11,900	--------	2,350	--------	3,450	2,550	--------
Total	83,893	118,000	137,000	131,910	125,790	301,470	660,180	190,680	113,101	104,020	57,375	78,792
Mean	2,706	3,933	4,419	4,255	4,492	9,725	22,010	6,151	3,770	3,355	1,851	2,626
(†)	139	194	242	161	176	426	375	164	115	230	118	117

Adjusted for wastage (figures represent net discharge from net drainage area)

Mean	2,568	3,739	4,177	4,094	4,317	9,299	21,630	5,987	3,656	3,125	1,733	2,509
Cfsm	0.580	0.845	0.944	0.925	0.976	2.10	4.89	1.35	0.826	0.706	0.392	0.567
In.	0.67	0.94	1.09	1.07	1.02	2.42	5.45	1.56	0.92	0.81	0.45	0.63

	Observed			Adjusted			
Calendar year 1958:	Max 35,400	Min 457	Mean 8,064	Mean 7,811	Cfsm 1.77	In. 23.97	
Water year 1958-59:	Max 46,700	Min 671	Mean 5,759	Mean 5,554	Cfsm 1.26	In. 17.03	

* Discharge measurement made on this day.
† Water wasted from 210 sq mi in basins of Sudbury and South Branch Nashua Rivers and Lake Cochituate, equivalent in cubic feet per second. Records furnished by Water Division of Metropolitan District Commission.
b Stage-discharge relation affected by ice.
Note.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

Reservoirs in Merrimack River basin

775. Newfound Lake on Newfound River, 1 2/3 miles north of Bristol, N. H., used for recreation and for storage of water for power, has usable capacity of 1,690,000,000 cu ft. Records furnished by Public Service Co. of New Hampshire.

785. Franklin Falls Reservoir on Pemigewasset River, 2 miles north of Franklin, N. H., completed in 1942, used for flood control, has usable capacity of 6,640,000,000 cu ft. Records furnished by Corps of Engineers.

790. Merrymeeting Lake on Merrymeeting River, 2½ miles northeast of Alton, N. H., used for recreation and for storage of water for power, has usable capacity of 368,000,000 cu ft. Records furnished by Public Service Co. of New Hampshire.

795. Lake Wentworth above Lake Winnipesaukee, at Wolfeboro Falls, N. H., used for recreation and for storage of water for power, has usable capacity of 854,000,000 cu ft. Records furnished by O. P. Berry Co.

800. Lake Winnipesaukee on Winnipesaukee River (see p. 81).

825. Edward MacDowell Reservoir on Nubanusit Brook, at West Peterboro, 2 miles northwest of Peterboro, N. H., completed in 1950, used for flood control, has usable capacity of 558,000,000 cu ft. Records furnished by Corps of Engineers.

865. Blackwater Reservoir on Blackwater River, at Swett's Mills, 1 mile south of Webster, N. H., completed in 1941, used for flood control, has usable capacity of 2,004,000,000 cu ft. Records furnished by Corps of Engineers.

925. Tower Hill Pond on Maple Falls Brook, 2¼ miles north of Auburn, N. H., completed in 1939, used for storage of water for municipal supply and for power, has usable capacity of 182,000,000 cu ft. Records furnished by Manchester Water Works.

935. Massabesic Lake on Cohas Brook, 2½ miles southeast of Manchester, N. H., used for storage of water for municipal supply, has usable capacity of 724,000,000 cu ft. Records furnished by Manchester Water Works.

Month-end usable contents, in millions of cubic feet, water year October 1958 to September 1959

Date	Newfound Lake	Franklin Falls Reservoir	Merrymeeting Lake	Lake Wentworth	Edward MacDowell Reservoir	Blackwater Reservoir	Tower Hill Pond	Massabesic Lake
Sept.30, 1958..	940	*107	252	553	13.0	0.3	173.5	461
Oct. 31.....	871	113	249	436	1.3	.9	41.0	380
Nov. 30.....	907	124	244	416	20.8	2.3	8.0	327
Dec. 31.....	860	111	238	416	19.1	.4	2.1	247
Jan. 31, 1959..	929	120	233	436	47.5	1.0	7.8	318
Feb. 28.....	889	118	244	457	19.1	.6	3.3	380
Mar. 31.....	745	142	249	568	20.8	2.4	85.3	594
Apr. 30.....	1,631	157	341	905	9.4	2.8	182.5	880
May 31.....	1,698	113	352	840	4.9	.5	178.9	827
June 30.....	1,604	120	341	834	14.4	.5	178.1	862
July 31.....	1,335	118	325	758	15.1	.2	177.1	577
Aug. 31.....	1,120	120	303	708	17.5	.2	173.5	515
Sept.30.....	965	120	287	628	10.1	.2	169.1	457

* Revised from contents shown in WSP 1551 to exclude 19 mcf dead storage.

1010. Parker River at Byfield, Mass.

Location.--Lat 42°45'10", long 70°56'46", on left bank 1,400 ft downstream from dam, half a mile south of Byfield, Essex County, 0.7 mile upstream from Wheeler Brook, and 5½ miles southwest of Newburyport.

Drainage area.--21.6 sq mi.

Records available.--October 1945 to September 1959.

Gage.--Water-stage recorder and concrete control. Datum of gage is 23.46 ft above mean sea level, datum of 1929 (levels by Massachusetts Department of Public Works).

Average discharge.--14 years, 35.4 cfs.

Extremes.--Maximum discharge during year, 217 cfs Mar. 7 (gage height, 3.77 ft): minimum daily, 4.0 cfs Aug. 28.
1945-59: Maximum discharge, 479 cfs Jan. 27, 1958 (gage height, 5.49 ft): minimum daily, 0.09 cfs Sept. 25-30, Oct. 3-6, 1957.

Remarks.--Records excellent except those for periods of ice effect, which are good, and those for periods of no gage-height record, which are fair. Diurnal fluctuation caused by mill above station. Some regulation at low flow by ponds above station.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 21				Mar. 22 to Sept. 30			
1.5	4.5	2.5	64	1.4	2.7	2.0	24
1.6	7.2	3.0	119	1.5	4.5	2.5	62
1.7	11	4.0	249	1.6	7.2	3.0	115
2.0	26			1.8	14	3.5	179

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	44	41	14	24	23	67	65	15	24	22	7.2
2	20	40	39	17	20	28	71	64	16	23	20	6.6
3	20	41	36	18	*19	34	89	62	*18	21	18	10
4	20	40	39	19	24	70	104	58	18	19	*16	12
5	20	39	43	19	30	117	100	55	19	17	14	13
6	20	39	49	b17	32	136	95	52	19	15	14	12
7	16	38	b50	b15	29	196	91	50	19	14	13	10
8	17	36	50	b14	23	181	82	47	19	13	12	*8.8
9	16	36	46	b12	b21	146	80	45	18	12	12	8.2
10	15	36	b41	b11	20	115	79	42	17	11	13	7.2
11	14	36	b36	b10	20	104	80	40	15	19	13	6.9
12	13	36	34	b9.0	19	73	77	37	14	20	13	6.0
13	11	35	30	b9.0	19	57	73	38	14	24	12	5.4
14	9.7	34	28	b9.0	20	60	70	40	15	27	12	4.5
15	9.4	32	27	b9.0	31	60	64	36	19	28	10	6.9
16	*7.9	31	26	b10	39	*60	58	33	21	28	8.8	8.2
17	7.2	29	25	13	47	60	52	30	23	26	7.9	8.8
18	6.6	28	24	12	48	57	48	28	28	23	7.5	9.8
19	6.0	27	23	11	b47	b57	44	27	33	23	6.9	9.5
20	5.5	26	23	9.7	b46	71	42	26	36	27	6.3	8.5
21	5.0	25	22	15	b40	126	42	25	38	39	6.0	7.0
22	4.7	24	20	35	b35	160	43	23	36	50	6.0	6.0
23	5.7	23	20	58	31	b135	43	22	34	55	6.0	5.7
24	7.2	22	19	58	28	126	*43	21	*31	50	6.9	5.3
25	10	*22	17	43	26	113	42	20	29	44	7.2	4.7
26	18	22	16	34	24	103	41	19	27	38	6.7	4.3
27	28	22	16	28	24	96	43	18	25	34	5.5	4.3
28	45	22	16	25	22	88	50	16	28	32	4.0	4.6
29	53	34	15	23	-	79	57	15	28	30	4.5	4.2
30	52	38	15	24	-------	72	62	14	27	27	6.0	4.2
31	48	-------	15	24	-------	67	-------	14	-------	24	6.5	-------
Total	550.9	957	901	624.7	808	2,870	1,932	1,082	699	837	316.7	219.8
Mean	17.8	31.9	29.1	20.2	28.9	92.6	64.4	34.9	23.3	27.0	10.2	7.33
Cfsm	0.824	1.48	1.35	0.935	1.34	4.29	2.98	1.62	1.08	1.25	0.472	0.339
In.	0.95	1.65	1.55	1.08	1.39	4.94	3.33	1.86	1.20	1.44	0.55	0.38

Calendar year 1958: Max 454 Min 2.7 Mean 51.8 Cfsm 2.40 In. 32.55
Water year 1958-59: Max 196 Min 4.0 Mean 32.3 Cfsm 1.50 In. 20.32

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Apr. 13 to June 2, Aug. 26 to Sept. 7, Sept. 19-30; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in state when available, and records for Ipswich River near Ipswich and South Middleton.

1015. Ipswich River at South Middleton, Mass.

Location.--Lat 42°34'10", long 71°01'39", on right bank 700 ft downstream from Boston Street Bridge at South Middleton, Essex County, 1.3 miles downstream from Wills Brook, and 2 miles south of Middleton.

Drainage area.--43.4 sq mi.

Records available.--June 1938 to September 1959. Extremely low adjusted monthly figures of discharge in cubic feet per second per square mile, and runoff in inches, previously published in water-supply papers for 1938-58, may be subject to error because of uncertainty concerning proper adjustments.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 45 ft (from topographic map).

Average discharge.--21 years, 69.6 cfs (adjusted for diversions).

Extremes.--Maximum discharge during year, 354 cfs Mar. 7 (gage height, 4.715 ft); minimum, 1.0 cfs Jan. 14, 15.
1938-59: Maximum discharge, 682 cfs Jan. 27, 1958 (gage height, 6.49 ft); minimum, 0.1 cfs Sept. 24, Oct. 1, 1957.

Remarks.--Records good. Water diverted above station for municipal supplies of Reading, Lynn, and Peabody. Occasional regulation by mill above station.

Revisions (water years).--WSP 1301: 1942(M). See also Records available.

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Feb. 20; shifting-control method used Oct. 29)

Oct. 1-29		Oct. 30 to Mar. 6		Mar. 7 to Sept. 30			
0.6	18	0.17	0.95	0.22	1.4	1.0	54
1.0	54	.2	1.4	.3	3.5	2.0	93
1.6	88	.3	3.8	.4	7.4	3.0	170
		.4	7.4	.5	12	4.0	265
				.7	27	5.0	395

Note.--Same as following table above 0.4 ft.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	81	*74	4.7	23	25	128	116	*3.2	55	48	16
2	46	79	73	*11	19	50	128	115	1.5	53	39	15
3	52	82	72	20	*25	67	*224	106	26	51	33	23
4	55	*84	72	19	37	122	231	103	34	48	*28	*26
5	55	82	74	22	45	167	215	95	32	42	35	24
6	*49	79	83	28	39	208	213	*86	24	*40	24	24
7	46	76	92	9.2	28	344	199	81	46	37	22	23
8	41	74	90	5.8	27	290	181	76	48	33	19	21
9	37	74	73	5.4	27	240	166	72	43	30	21	18
10	33	76	70	3.9	39	*204	149	67	40	26	22	16
11	28	76	64	2.7	38	175	143	62	34	51	22	14
12	25	74	55	1.35	36	152	138	58	29	68	22	13
13	21	72	44	1.1	33	115	127	60	29	62	21	11
14	26	72	37	1.1	27	92	118	64	40	60	19	9.8
15	32	70	31	1.0	54	83	111	48	58	70	18	10
16	29	69	27	3.6	59	92	104	44	53	80	17	12
17	28	66	26	16	57	108	99	41	49	78	14	12
18	26	64	24	13	65	115	93	38	58	75	14	11
19	24	62	22	9.8	88	120	90	35	69	73	13	10
20	22	61	22	7.8	74	153	90	32	75	80	12	9.5
21	20	58	21	16	65	238	92	29	72	103	12	9.2
22	18	55	18	71	51	288	88	26	69	108	11	8.8
23	22	51	14	74	44	280	85	22	66	103	9.8	9.0
24	31	48	13	68	38	263	82	21	62	103	9.8	9.2
25	37	45	12	58	31	244	80	19	56	101	10	9.0
26	44	44	8.2	52	27	209	75	16	58	94	9.2	9.0
27	68	46	5.6	43	24	184	78	12	59	87	8.2	9.2
28	74	45	3.9	29	22	153	92	11	55	81	7.6	10
29	85	72	2.7	24	-	138	102	8.2	56	72	7.8	7.9
30	82	78	3.6	26	-------	129	113	8.5	56	64	9.8	8.1
31	*82	-------	5.2	29	-------	127	-------	7.6	-------	56	14	-------
Total	1,273	2,015	1,232.2	676.45	1,142	5,175	3,834	1,579.3	1,400.7	2,084	572.2	407.7
Mean	41.1	67.2	39.7	21.8	40.8	167	128	50.9	46.7	67.2	18.5	13.6
(†)	10.7	1.78	17.4	19.3	18.1	7.27	1.91	14.2	7.53	2.29	2.55	2.22

	Observed			Adjusted			
Calendar year 1958:	Max 675	Min 2.6	Mean 94.4	Mean 105	Cfsm 2.42	In. 32.78	
Water year 1958-59:	Max 344	Min 1.0	Mean 58.6	Mean 67.4	Cfsm 1.55	In. 21.07	

* Discharge measurement made on this day.
† Diversions for municipal supplies of Reading, Lynn, and Peabody, equivalent in cubic feet per second; records furnished by municipalities.

1020. Ipswich River near Ipswich, Mass.

Location.--Lat 42°39'35", long 70°53'39", on left bank 200 ft downstream from Willowdale Dam, 1½ miles downstream from Howlett Brook, and 4 miles upstream from Ipswich, Essex County.

Drainage area.--124 sq mi.

Records available.--June 1930 to September 1959. Prior to October 1930, published as "at Willowdale." Extremely low adjusted monthly figures of discharge, in cubic feet per second per square mile, and runoff in inches, previously published in water-supply papers for 1930-58, may be subject to error because of uncertainty concerning proper adjustments.

Gage.--Water-stage recorder and concrete control. Datum of gage is 20.63 ft above mean sea level, datum of 1929.

Average discharge.--29 years, 200 cfs (adjusted for diversions).

Extremes.--Maximum discharge during year, 934 cfs Mar. 8 (gage height, 5.19 ft); minimum, 17 cfs Sept. 28, 29.
1930-59: Maximum discharge, 2,610 cfs Mar. 15, 1936 (gage height, 7.70 ft); minimum, 1.0 cfs Oct. 5-7, 1957.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are good. Diversions above station for municipal supplies of Reading, Lynn, Peabody, Danvers, Salem, and Beverly. Some regulation by reservoirs.

Revisions.--WSP 781: Drainage area. See also Records available.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.8	17	4.0	240
3.0	32	4.5	490
3.3	68	5.0	810
3.6	122	5.5	1,130

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	199	174	47	105	97	375	335	68	160	177	35
2	99	202	186	52	92	114	380	345	70	154	163	36
3	101	205	196	62	*82	151	442	345	*88	146	146	40
4	101	205	208	72	94	295	538	330	99	139	*132	52
5	101	205	230	76	107	484	628	307	107	132	118	54
6	101	199	244	73	118	641	608	284	109	124	105	53
7	101	199	225	72	122	816	563	268	116	120	96	50
8	99	193	245	66	116	790	496	252	116	112	85	*47
9	97	196	236	*55	105	764	448	240	116	105	76	43
10	94	196	220	47	96	602	414	230	114	96	72	39
11	88	193	205	41	96	544	402	216	112	113	74	36
12	82	190	185	36	96	413	386	199	109	124	72	32
13	76	190	160	32	97	280	370	180	103	134	67	28
14	67	186	145	31	105	284	345	166	107	146	62	26
15	59	183	135	30	129	302	325	154	122	174	58	26
16	*55	183	125	35	166	*325	302	152	134	202	48	33
17	55	174	115	50	212	340	284	152	146	212	43	36
18	55	171	110	56	205	335	268	152	171	208	39	34
19	54	166	105	56	208	350	252	146	199	205	37	32
20	51	160	105	53	190	397	248	139	219	208	35	29
21	48	154	95	60	166	544	244	136	233	226	32	27
22	46	149	90	108	152	686	252	127	236	236	31	24
23	48	144	84	129	132	712	256	120	233	248	30	23
24	59	139	79	179	118	712	*260	114	*222	260	29	22
25	76	*132	72	208	116	615	252	109	205	268	29	20
26	93	132	65	193	112	563	240	103	190	264	28	18
27	122	129	58	160	107	532	240	96	177	252	27	18
28	136	129	54	136	101	496	248	87	174	233	25	18
29	160	152	48	120	-	454	272	77	171	219	23	18
30	177	163	45	116	--------	402	302	68	168	205	21	18
31	193	--------	47	112	--------	375	--------	67	--------	190	25	--------
Total	2,790	5,218	4,291	2,563	3,545	14,415	10,640	5,696	4,434	5,615	2,005	967
Mean	90.0	174	138	82.7	127	465	355	184	148	181	64.7	32.2
(†)	13.9	4.36	19.9	22.1	27.5	10.1	23.3	23.5	10.0	4.69	5.33	4.74

	Observed			Adjusted		
Calendar year 1958:	Max 1,940	Min 12	Mean 275	Mean 292	Cfsm 2.35	In. 31.96
Water year 1958-59:	Max 816	Min 18	Mean 170	Mean 184	Cfsm 1.48	In. 20.19

* Discharge measurement made on this day.
† Diversions for municipal supplies of Reading, Lynn, Peabody, Danvers, Salem, and Beverly, equivalent in cubic feet per second. Records furnished by various municipalities.
Note.--No gage-height record Aug. 18 to Sept. 7; discharge estimated on basis of weather records, recorded range in stage, and records for nearby streams. Stage-discharge relation affected by ice Dec. 7, 8, Dec. 10 to Jan. 21, Feb. 20.

1025. Aberjona River at Winchester, Mass.

Location.--Lat 42°26'50", long 71°08'22", on left bank at Winchester, Middlesex County, 0.5 mile upstream from head of Mystic Lakes.

Drainage area.--23.3 sq mi (excludes 1.4 sq mi drained by Winchester Reservoirs).

Records available.--April 1939 to September 1959.

Gage.--Water-stage recorder and concrete control. Datum of gage is at mean sea level, datum of 1929.

Average discharge.--20 years, 27.4 cfs.

Extremes.--Maximum discharge during year, 170 cfs Mar. 6 (gage height, 11.96 ft); minimum, 1.05 cfs Jan. 28; minimum daily, 2.5 cfs Sept. 26-30.
1939-59: Maximum discharge, 835 cfs Aug. 19, 1955 (gage height, 13.64 ft), from rating curve extended above 330 cfs by logarithmic plotting; maximum gage height, 13.72 ft Aug. 20, 1955 (backwater from Mystic Lake); no flow for part of Oct. 10, 12, 1950, caused by pumpage from gage pool; minimum daily discharge, 0.25 cfs Oct. 10, 1950.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow affected by diversions for industrial use and for municipal supply of Woburn and Winchester, and by wastage and leakage from Winchester Reservoirs. Occasional regulation by Winchester at dam above station.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

10.4	2.2	11.0	25
10.5	4.0	11.2	42
10.6	6.5	11.5	79
10.8	14	11.8	133

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	20	37	9.1	13	41	38	51	4.3	26	19	15
2	40	18	28	54	14	90	47	44	8.0	24	16	13
3	35	35	23	44	11	61	102	40	*25	20	*13	31
4	30	34	44	38	*23	102	92	33	17	16	12	*19
5	25	28	46	23	33	99	73	27	15	13	12	15
6	22	23	51	18	27	113	55	24	37	14	12	8.9
7	19	20	48	13	20	131	52	18	26	13	11	7.7
8	17	18	37	9.5	14	78	49	15	16	9.5	10	10
9	16	24	31	*8.4	8.2	62	33	14	12	7.7	13	15
10	15	28	26	7.6	15	45	42	12	9.7	6.4	13	11
11	13	27	23	6.4	26	37	47	13	7.0	74	15	8.4
12	11	24	20	5.5	21	b30	45	16	5.8	73	13	5.4
13	9.	20	18	5.6	22	b27	40	21	9.5	55	12	4.1
14	7.5	19	16	5.8	32	b27	31	17	22	38	9.3	5.2
15	6.	18	16	6.0	101	b30	38	14	29	57	7.6	4.4
16	*3.6	17	16	15	85	b61	33	13	20	55	6.0	5.0
17	5.0	16	16	26	57	85	32	10	17	45	9.4	3.2
18	5.0	15	16	19	74	78	25	11	25	33	18	4.7
19	6.1	15	16	15	90	68	26	10	38	35	12	3.6
20	6.3	15	16	11	63	88	42	7.1	31	57	15	2.7
21	2.7	14	15	44	38	121	38	7.0	24	95	19	4.3
22	5.0	13	13	99	25	111	30	8.4	29	81	14	2.8
23	13	12	11	85	20	81	19	7.2	*39	81	9.1	2.6
24	16	12	11	46	19	66	*18	8.4	25	84	11	2.6
25	19	*12	10	29	16	45	16	8.6	20	59	19	2.6
26	31	12	8.9	21	14	*43	17	5.6	52	48	13	2.5
27	44	16	8.4	11	13	52	31	5.6	68	37	11	2.5
28	42	11	7.7	16	13	43	43	5.6	62	30	5.8	2.5
29	36	59	7.7	10	-	37	59	5.6	49	25	5.7	2.5
30	31	49	8.6	11	-------	27	54	5.2	38	22	13	2.5
31	24	-------	9.5	16	-------	46	-------	4.8	-------	20	21	-------
Total	585.2	644	654.8	727.9	907.2	2,025	1,267	482.1	780.3	1,253.6	389.9	219.7
Mean	18.9	21.5	21.1	23.5	32.4	65.3	42.2	15.6	26.0	40.4	12.6	7.32
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 346 Min 1.35 Mean 39.9 Cfsm - In. -
Water year 1958-59: Max 131 Min 2.5 Mean 27.2 Cfsm - In. -

Peak discharge (base, 170 cfs).--Mar. 6 (5 to 6:30 p.m.) 170 cfs (11.96 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 1-16, 27-30; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for stations on nearby streams.

1035. Charles River at Charles River Village, Mass.

Location.--Lat 42°15'23", long 71°15'42", on right bank 0.25 mile downstream from highway bridge at Charles River Village, Norfolk County, 0.8 mile downstream from Noanet Brook, and 1.3 miles northeast of Dover.

Drainage area.--184 sq mi.

Records available.--October 1937 to September 1959.

Gage.--Water-stage recorder and concrete control. Datum of gage is 89.76 ft above mean sea level, datum of 1929.

Average discharge.--22 years, 301 cfs (adjusted for diversions).

Extremes.--Maximum discharge during year, 981 cfs Mar. 9 (gage height, 3.87 ft); minimum, 40 cfs Aug. 25.
1937-59: Maximum discharge, 3,220 cfs Aug. 23, 1955 (gage height, 9.24 ft); minimum, 0.5 cfs Oct. 24, 1952.
Flood in March 1936 reached a discharge of 3,170 cfs, by computation of flow over dam at site a quarter of a mile above station.

Remarks.--Records excellent except those for periods of no gage-height record, which are fair. Diversion above station for municipal supply of Wellesley and Needham. Occasional diversion since 1951 from Sudbury River basin to Charles River.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.7	44	2.0	420
.8	65	3.0	720
1.0	126	4.0	1,020
1.5	282		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	340	210	273	126	163	222	525	555	120	157	296	228
2	350	192	282	166	150	374	540	567	129	182	210	255
3	348	204	270	195	133	492	699	564	231	166	176	294
4	332	213	288	216	183	669	759	543	288	150	153	264
5	303	213	329	225	240	723	855	516	318	129	146	228
6	258	216	384	220	270	840	933	474	323	123	143	192
7	219	207	366	192	230	939	945	432	300	133	140	166
8	192	195	410	163	222	930	909	389	258	126	143	143
9	*173	195	438	143	176	975	855	356	207	126	136	116
10	157	210	390	126	173	948	801	326	179	120	133	104
11	143	237	370	113	179	867	777	285	150	264	133	91
12	116	255	350	104	179	710	735	252	133	340	126	88
13	104	255	320	100	189	680	708	243	129	353	116	85
14	100	249	300	100	219	600	678	255	157	340	110	74
15	100	237	280	100	366	522	642	264	204	406	100	71
16	97	222	260	123	403	522	600	264	225	447	100	71
17	91	207	250	160	444	546	558	258	231	423	91	71
18	85	195	240	170	507	573	519	250	261	392	82	71
19	82	189	230	166	585	609	486	240	303	382	80	71
20	82	182	230	153	540	669	483	228	323	495	74	68
21	80	179	215	169	510	720	468	219	320	666	71	65
22	77	170	200	300	455	759	456	201	318	699	68	63
23	94	163	185	345	382	765	444	182	309	744	61	59
24	116	157	170	358	291	771	426	173	297	762	57	57
25	143	143	160	345	*228	744	409	170	255	759	57	52
26	170	140	150	295	204	702	398	170	219	732	65	50
27	210	140	140	234	189	660	409	160	198	690	65	48
28	225	*142	130	*180	179	612	435	163	192	615	61	48
29	237	213	125	163	-	570	483	*146	186	525	68	52
30	237	246	*123	163	-------	540	*516	133	*176	441	97	*66
31	*231	-------	123	166	-------	*528	-------	123	-------	*356	*166	-------
Total	5,492	5,976	7,981	5,779	7,989	20,781	18,451	9,101	6,939	12,243	3,524	3,311
Mean	177	199	257	186	285	670	615	294	231	395	114	110
(†)	5.26	6.02	5.98	4.64	5.53	5.61	4.88	7.10	6.24	0.65	7.03	6.49
Adjusted for diversions												
Mean	182	205	263	191	291	676	620	301	238	394	121	117
Cfsm	0.989	1.11	1.43	1.04	1.58	3.67	3.37	1.64	1.29	2.14	0.658	0.636
In.	1.14	1.24	1.65	1.20	1.65	4.24	3.76	1.88	1.44	2.47	0.76	0.71

	Observed			Adjusted			
Calendar year 1958:	Max 1,750	Min 44	Mean 392	Mean 397	Cfsm 2.16	In. 29.30	
Water year 1958-59:	Max 975	Min 48	Mean 295	Mean 300	Cfsm 1.63	In. 22.14	

* Discharge measurement made on this day.
† Diversions for municipal supply of Wellesley and Needham and diversion from Sudbury River basin to Charles River, equivalent in cubic feet per second; records furnished by municipalities and Water Division of the Metropolitan District Commission.
Note.--No gage-height record Dec. 11-29, May 18, 19; discharge estimated on basis of weather records, recorded range in stage when available, and records for Ipswich River near Ipswich. Stage-discharge relation affected by ice Dec. 8, 10, Jan. 5, 6, 26, 28, Feb. 7, 20-22, Mar. 12-14, and at times during period of no gage-height record in December.

1040. Mother Brook at Dedham, Mass.

Location.--Lat 42°15'19", long 71°09'58", on right bank at upstream side of East Street Bridge, at Dedham, Norfolk County, 0.4 mile downstream from point of diversion from Charles River.

Records available.--October 1931 to September 1959.

Gage.--Float gage read twice daily. Datum of gage is 0.03 ft below mean sea level, datum of 1929. Prior to Dec. 9, 1931, water-stage recorder at same site and datum.

Average discharge.--28 years, 85.5 cfs.

Extremes.--Maximum discharge during year, 290 cfs June 20 (gage height, 87.67 ft, from graph based on gage readings); no flow for many days, caused by construction work upstream.
1931-59: Maximum discharge, 970 cfs Aug. 24, 1955 (gage height, 92.90 ft, from graph based on gage readings); no flow at times.

Remarks.--Records fair except those for periods of indefinite stage-discharge relation, which are poor. Mother Brook is a diversion from Charles River to Neponset River through Dedham and Hyde Park.

Revisions (water years).--WSP 1301: 1932(M).

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	0.2	0.9	0	0	0	0	193	145	202	40	20
2	.5	.2	1.1	.6	0	2	0	128	144	193	32	24
3	.5	.2	1.1	.2	.1	2	0	94	171	142	24	15
4	.5	.2	1.9	0	0	.6	0	75	195	58	18	6
5	1	.2	.7	0	.5	.7	0	64	219	21	15	9
6	2	.2	.1	0	.3	.7	0	69	243	5.7	15	5
7	2.5	.2	.7	.3	0	.3	0	138	266	.6	14	3
8	1.7	.2	.3	.3	0	0	0	195	*272	9.8	14	3
9	*1.1	.2	.3	0	0	1	0	214	266	14	13	3
10	.8	.2	.4	0	.2	.7	.3	216	250	9.2	13	7
11	.5	.3	.4	0	.4	1	.4	212	230	34	13	*3
12	.5	.3	.6	.3	0	.8	.3	219	210	40	12	4
13	.5	.3	.5	.3	0	1	.3	232	202	40	9.8	5
14	.5	.3	.5	0	.3	.7	.3	241	203	43	8.2	*3
15	.5	.3	.2	.3	0	0	.3	*243	212	52	7.5	1
16	.4	.3	.3	.3	.4	.8	.4	238	219	55	6.5	2
17	.4	.2	.2	0	.2	.9	.5	220	228	*48	5.9	2
18	.4	.2	.4	0	0	.5	.6	207	241	37	5.7	1
19	.4	.2	.2	.3	.2	0	.6	209	261	31	5.5	2
20	.4	.2	.1	.2	0	0	.7	218	282	66	4.9	2
21	.4	.2	.2	0	0	0	24	233	286	108	5.1	1
22	.3	.2	.2	.3	0	0	38	231	288	116	5.3	1
23	.3	.2	.1	.1	.8	.5	*62	214	281	111	3.8	1
24	.3	.2	.2	0	.5	.5	112	199	174	109	3.3	2
25	.3	.2	0	0	0	0	127	187	175	119	*3.6	2
26	.3	4.4	.5	.3	0	0	138	183	195	116	*3.3	2
27	.3	3.4	.1	.3	.1	0	151	179	204	111	2.6	2
28	.2	2.4	0	0	0	0	179	*174	209	102	2.5	1
29	.2	1.6	.4	0	-	0	198	168	210	90	3.2	1
30	.2	.9	.4	.1	-------	1	204	162	207	71	7.5	2
31	.2	-------	.4	0	-------	.9	-------	153	-------	54	13	-------
Total	18.6	18.3	13.4	4.2	4.0	16.6	1,237.7	5,708	6,688	2,208.3	330.2	135
Mean	0.60	0.61	0.43	0.14	0.14	0.54	41.3	184	223	71.2	10.7	4.5
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 608 Min 0 Mean 109 Cfsm - In. -
Water year 1958-59: Max 288 Min 0 Mean 44.9 Cfsm - In. -

* Discharge measurement made on this day.
Note.--Stage-discharge relation indefinite Oct. 1-6, Oct. 10 to Nov. 25, Dec. 23 to Apr. 9, Sept. 3-30; discharge estimated on basis of 2 discharge measurements, observer's readings, and notes about pump operations, gate operations, and channel conditions.

1045. Charles River at Waltham, Mass.

Location.--Lat 42°22'20", long 71°14'03", on right bank 800 ft downstream from Moody Street Bridge in Waltham, Middlesex County, and a third of a mile upstream from Beaver Brook.

Drainage area.--227 sq mi, excludes 23.6 sq mi drained by Stony Brook from which flow is diverted for municipal supply of Cambridge.

Records available.--October 1903 to October 1909 (figures of average weekly discharge, equivalent to records of unadjusted discharge at present site), August 1931 to September 1959.

Gage.--Water-stage recorder and concrete control. Datum of gage is 20.02 ft above mean sea level, datum of 1929. Prior to July 10, 1904, at dam 700 ft upstream and July 10, 1904, to Oct. 2, 1909, at dam 0.7 mile downstream at different datums; discharge computed from flow over dam and through wheels and gates of Boston Manufacturing Co. and Waltham Bleachery, respectively.

Average discharge.--28 years (1931-59), 374 cfs (adjusted for diversions, wastage, and leakage).

Extremes.--Maximum discharge during year, 1,460 cfs Mar. 6 (gage height, 4.04 ft); minimum, 6.3 cfs Nov. 6; minimum daily, 20 cfs June 11.
1931-59: Maximum discharge, 2,540 cfs Mar. 19, 1936 (gage height, 4.79 ft); maximum gage height, 5.35 ft Aug. 19, 1955; minimum discharge, 0.1 cfs Oct. 1, 12, 1943; minimum daily, 0.2 cfs Oct. 4, 1943.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow affected by wastage from Stony Brook Reservoir, wastage and leakage from Norumbega Reservoir, diversion at times from Lake Cochituate and also at times since 1951 from Sudbury River basin, diversion to Mother Brook, and diversions for municipal supply of Wellesley, Needham, and Dedham, all above station. Some regulation by mills upstream. Low flow completely regulated by Boston Edison Co. powerplant above station prior to 1954.

Revisions (water years).--WSP 781: 1933(M). WSP 851: Drainage area. WSP 971: 1942.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	338	330	278	60	220	305	700	601	*27	26	366	223
2	338	306	296	70	203	412	694	848	36	66	289	250
3	346	296	306	180	186	390	827	796	76	241	229	346
4	358	272	358	250	251	624	974	742	42	334	203	330
5	354	136	378	400	272	869	1,030	672	30	247	*170	303
6	354	36	382	350	159	1,060	1,060	596	25	226	173	275
7	305	70	366	250	245	1,020	1,180	160	23	415	170	241
8	134	243	417	*226	363	1,180	1,180	150	23	102	168	*203
9	73	275	450	197	366	1,170	1,180	194	22	125	170	173
10	68	334	470	183	300	1,140	1,110	223	21	150	173	152
11	265	346	455	165	113	1,170	1,060	207	20	319	165	130
12	127	326	440	139	*59	1,140	1,000	111	22	354	170	111
13	98	358	404	72	72	848	953	83	29	354	158	98
14	102	322	374	48	111	784	862	50	42	342	142	104
15	118	303	350	40	507	890	808	30	60	399	135	98
16	140	292	318	76	574	904	766	42	43	450	123	77
17	140	282	289	390	568	*841	724	93	43	435	116	87
18	183	269	275	342	667	748	684	100	66	422	102	87
19	214	143	263	227	790	754	623	59	83	430	78	85
20	184	83	260	96	685	808	634	44	85	505	75	91
21	98	71	247	310	706	904	596	36	73	684	87	93
22	66	172	230	408	656	1,000	505	59	75	814	91	69
23	80	306	220	426	606	1,030	435	75	*111	820	83	64
24	85	*314	210	417	540	981	282	85	535	712	81	62
25	171	289	200	422	445	953	318	71	138	650	77	60
26	263	256	190	390	370	932	334	42	43	656	75	58
27	296	223	180	366	322	925	374	30	38	612	75	58
28	394	215	170	314	289	869	342	31	36	596	75	58
29	294	282	160	256	-	808	*417	32	33	552	81	60
30	303	260	150	229	------	742	540	32	29	490	116	74
31	300	------	100	*215	------	706	------	30	------	430	176	------
Total	6,589	7,410	9,186	7,514	10,645	26,907	22,192	6,324	1,929	12,958	4,392	4,120
Mean	213	247	296	242	380	868	740	204	64.3	418	142	137
(†)	9.94	10.0	10.1	9.84	9.91	10.4	51.2	198	230	38.8	22.7	17.0

Adjusted for diversions, wastage, and leakage

Mean	222	257	306	252	390	878	791	402	295	457	164	154
Cfsm	0.978	1.13	1.35	1.11	1.72	3.87	3.48	1.77	1.30	2.01	0.722	0.678
In.	1.13	1.26	1.56	1.28	1.79	4.46	3.89	2.04	1.45	2.32	0.83	0.76

	Observed			Adjusted		
Calendar year 1958:	Max 1,580	Min 35	Mean 390	Mean 451	Cfsm 1.99	In. 26.98
Water year 1958-59:	Max 1,180	Min 20	Mean 329	Mean 381	Cfsm 1.68	In. 22.77

* Discharge measurement made on this day.
† Diversion to Mother Brook, diversions for municipal supply of Wellesley, Needham, and Dedham, wastage from Stony Brook Reservoir, diversion from Lake Cochituate, diversion from Sudbury River basin, and wastage and leakage from Norumbega Reservoir, equivalent in cubic feet per second. Records furnished by Water Division of Metropolitan District Commission and by municipalities.
Note.--No gage-height record Dec. 22 to Jan. 7, Sept. 23-30; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for station at Charles River Village.

1050. Neponset River at Norwood, Mass.

Location.--Lat 42°10'39", long 71°12'05", on left bank 200 ft upstream from Pleasant Street Bridge, 200 ft downstream from New York, New Haven & Hartford Railroad bridge, 0.45 mile downstream from Hawes Brook, and 0.5 mile south of Norwood, Norfolk County.

Drainage area.--35.2 sq mi.

Records available.--October 1939 to September 1959. October 1939 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 44.04 ft above mean sea level, unadjusted.

Average discharge.--20 years, 51.4 cfs.

Extremes.--Maximum discharge during year, 321 cfs Mar. 7 (gage height, 10.25 ft); minimum daily, 12 cfs Jan. 13, Aug. 16.
1939-59: Maximum discharge, 1,490 cfs Aug. 19, 1955 (gage height, 14.65 ft, from floodmarks); minimum daily, 1.8 cfs Sept. 1, 1957.
Flood of July 24, 1938, reached a stage of 11.05 ft, from floodmarks.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow regulated by mills and reservoirs above station. Several diversions above station for municipal and industrial use.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

7.1	10	9.0	163
7.2	15	10.0	286
7.5	33	10.5	356
8.0	71		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	83	36	72	24	27	74	108	123	27	42	41	38
2	84	31	65	70	20	172	118	121	44	34	34	35
3	70	54	49	74	18	166	220	100	91	41	31	33
4	57	57	78	63	39	181	232	89	103	46	27	32
5	51	53	88	59	65	172	184	81	78	32	25	27
6	42	52	95	36	55	231	161	78	65	*17	24	32
7	32	33	90	32	25	311	141	72	52	29	25	19
8	28	41	80	25	27	223	124	65	45	27	33	24
9	*28	52	70	19	28	158	131	56	41	23	16	24
10	29	30	68	22	37	129	127	55	33	23	28	21
11	22	45	56	17	61	111	135	55	19	97	29	18
12	24	53	44	13	35	a95	131	48	28	93	21	19
13	23	62	49	12	47	a98	121	57	29	77	19	19
14	16	54	43	15	77	a100	108	59	55	65	23	21
15	13	44	43	18	118	a105	100	*63	96	93	13	21
16	13	24	45	27	104	*139	*92	48	84	100	12	27
17	15	a26	47	56	82	156	72	48	74	*91	16	24
18	20	a40	36	45	84	141	69	44	88	73	17	21
19	13	*49	53	38	118	118	61	47	95	67	24	21
20	17	69	29	35	90	116	85	31	95	120	23	20
21	16	68	37	44	68	126	89	47	77	258	21	20
22	18	52	37	77	44	145	81	29	68	231	18	20
23	42	42	34	75	a31	130	67	33	69	169	18	17
24	34	42	*34	68	37	112	65	32	61	132	24	18
25	47	36	25	53	39	101	65	38	57	102	24	16
26	58	44	22	48	22	93	62	23	52	81	*24	17
27	75	43	30	27	31	95	75	25	48	81	23	15
28	73	35	28	31	31	92	100	29	45	60	19	18
29	59	81	13	30	-	86	119	33	48	55	25	30
30	52	78	27	*33	-------	87	118	24	52	52	33	20
31	41	-------	19	35	-------	100	-------	21	-------	46	39	-------
Total	1,195	1,426	1,506	1,221	1,460	4,163	3,361	1,674	1,819	2,457	749	687
Mean	38.5	47.5	48.6	39.4	52.1	134	112	54.0	60.6	79.3	24.2	22.9
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 362 Min 7.8 Mean 75.7 Cfsm - In. -
Water year 1958-59: Max 311 Min 12 Mean 59.5 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for East Branch Neponset River at Canton.

1055. East Branch Neponset River at Canton, Mass.

Location.--Lat 42°09'16", long 71°08'47", on right bank 100 ft downstream from Washington Street Bridge at Canton, Norfolk County, 200 ft downstream from Forge Pond Dam, and 900 ft downstream from Massapoag Brook.

Drainage area.--26.7 sq mi.

Records available.--October 1952 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 85 ft (from topographic map).

Average discharge.--7 years, 59.3 cfs.

Extremes.--Maximum discharge during year, 293 cfs Mar. 7 (gage height, 3.44 ft); minimum daily, 9.8 cfs Aug. 29, 30, Sept. 13, 14.
1952-59: Maximum discharge, 1,790 cfs Aug. 19, 1955 (gage height, 8.18 ft), from rating curve extended above 690 cfs by logarithmic plotting; minimum daily, 0.6 cfs July 7, Sept. 1, 1957.

Remarks.--Records good. Flow regulated by Forge, Bolivar, and Massapoag Reservoirs, and other ponds above station. Diversions above station for municipal supply of Canton and Stoughton.

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 6				Mar. 7 to Sept. 30			
1.1	14	2.0	82	0.9	7.4	2.0	85
1.2	19	2.5	140	1.0	11	2.5	141
1.5	39	3.0	215	1.2	21	3.0	215
				1.5	42	3.5	304

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	37	50	32	31	55	94	89	21	36	33	13
2	82	34	45	60	25	139	91	89	26	40	33	20
3	65	58	41	72	24	113	149	80	85	41	32	20
4	54	60	60	57	50	119	151	73	74	36	30	19
5	45	42	99	46	64	109	124	68	51	32	21	17
6	38	50	92	37	45	146	114	62	38	*33	19	15
7	34	48	74	32	34	235	109	58	37	32	21	14
8	32	46	64	29	32	137	103	57	38	29	22	13
9	32	49	61	28	29	115	107	52	34	26	23	12
10	32	63	58	27	40	110	107	51	27	24	24	11
11	23	68	53	25	50	100	112	37	24	85	24	11
12	27	60	52	25	40	94	110	44	23	81	22	11
13	26	52	50	25	46	103	98	44	27	60	21	9.8
14	*24	50	47	25	68	99	89	53	68	49	21	9.8
15	24	47	48	25	109	90	83	*50	84	82	18	10
16	24	46	47	32	84	*150	*78	44	67	99	16	13
17	22	44	46	58	60	164	75	41	53	*84	12	18
18	22	43	45	44	60	125	71	41	68	76	12	18
19	19	*43	43	33	84	109	68	40	70	68	13	17
20	19	43	44	29	60	107	75	38	70	77	13	16
21	16	42	42	37	50	108	86	34	62	105	12	16
22	16	39	37	81	43	123	76	34	55	89	12	15
23	25	37	35	61	42	110	68	34	58	70	11	16
24	43	38	*37	44	42	99	63	32	54	62	11	18
25	42	36	35	38	41	93	60	30	65	55	11	18
26	45	36	32	35	40	87	58	26	39	49	*11	17
27	60	37	30	33	40	86	72	24	16	46	11	16
28	51	37	30	31	40	85	96	25	40	42	10	15
29	54	68	32	29	-	80	97	29	42	38	9.8	24
30	49	63	32	*33	-------	79	95	24	40	37	9.8	21
31	42	-------	34	37	-------	89	-------	22	-------	35	10	-------
Total	1,143	1,416	1,495	1,200	1,373	3,458	2,779	1,425	1,456	1,718	548.6	463.6
Mean	36.9	47.2	48.2	38.7	49.0	112	92.6	46.0	48.5	55.4	17.7	15.5
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 320 Min 6.1 Mean 67.1 Cfsm - In. -
Water year 1958-59: Max 235 Min 9.8 Mean 50.6 Cfsm - In. -

* Discharge measurement made on this day.

1057. Indian Head Brook near Hanson, Mass.

Location.--Lat 42°05'13", long 70°51'26", on right bank 40 ft upstream from bridge on Washington Street, 0.3 mile upstream from mouth, and 1½ miles northeast of Hanson, Plymouth County.
Drainage area.--4.39 sq mi.
Records available.--July 1958 to September 1959.
Gage.--Water-stage recorder. Altitude of gage is 50 ft (from topographic map).
Extremes.--1958: Maximum discharge during period July to September, 16 cfs Sept. 28 (gage height, 1.93 ft); minimum not determined; minimum daily, 1.7 cfs Sept. 15, 16.
1958-59: Maximum discharge during water year, 24 cfs Apr. 3 (gage height, 2.32 ft); minimum, 0.30 cfs Aug. 28.
Remarks.--Records good. Some regulation by ponds above station.

Rating table, July 11, 1958, to Sept. 30, 1959, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	0.45	1.4	4.2
1.1	.55	1.7	11
1.2	1.2	2.0	17
1.3	2.2	2.3	23

Discharge, in cubic feet per second, 1958

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1	-	6.0	6.0	9	-	3.0	2.6	17	2.8	2.7	3.5	25	2.4	6.0	3.8
2	-	6.5	4.7	10	-	2.6	2.4	18	2.5	2.4	10	26	2.4	*8.1	*3.6
3	-	6.0	3.8	11	2.5	2.4	2.4	19	2.4	2.2	11	27	2.4	8.3	6.0
4	-	5.5	3.2	12	2.5	2.2	1.90	20	2.0	2.0	8.5	28	2.2	7.2	15
5	-	7.0	2.9	13	2.6	2.3	1.80	21	1.90	1.9	7.0	29	6.5	8.7	13
6	-	5.2	2.4	14	2.6	2.4	1.80	22	1.75	1.9	5.7	30	6.4	8.5	10
7	-	4.0	2.5	15	2.6	2.5	1.7	23	2.8	1.8	4.8	31	5.0	7.4	-
8	-	3.5	2.9	16	2.6	2.7	1.7	24	2.8	1.8	4.1				

Total	-	134.7	150.70
Mean	-	4.35	5.02
Cubic feet per second per square mile	-	0.991	1.14
Runoff in inches	-	1.14	1.28

Peak discharge (base, 22 cfs).--No peak above base.

* Discharge measurement made on this day.
Note.--No gage-height record July 31 to Aug. 25, Sept. 13-25; discharge estimated on basis of weather records, recorded range in stage when available, and records for Poor Meadow Brook at South Hanson.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	8.0	7.4	b4.0	b3.5	6.1	15	13	2.8	4.9	3.6	3.3
2	12	7.1	*6.8	7.5	3.2	12	14	13	3.7	6.9	3.2	2.8
3	10	12	6.2	7.2	3.0	*14	22	12	9.4	6.9	2.8	2.8
4	8.8	13	9.7	6.4	7.1	16	20	10	7.6	5.6	2.4	2.5
5	7.7	11	13	b5.7	7.7	12	16	9.3	6.2	4.7	2.4	2.2
6	6.5	9.6	12	3.2	6.4	17	*14	8.5	9.5	4.4	2.5	2.0
7	6.0	*8.7	9.6	2.6	b5.3	21	14	8.0	7.8	4.3	2.2	1.85
8	6.0	8.0	8.7	2.2	4.8	b14	12	7.5	6.4	3.6	2.1	1.65
9	5.6	8.8	8.5	1.95	b4.2	11	12	5.6	5.2	3.4	2.2	1.55
10	5.2	10	a6.5	1.85	8.3	10	12	4.9	4.3	2.8	2.5	1.50
11	4.7	10	a5.2	1.90	9.5	b9.1	14	*6.2	3.6	9.9	2.2	1.45
12	4.2	9.3	a4.6	1.95	b8.0	11	13	6.2	*3.0	11	2.1	1.30
13	5.3	8.6	a4.3	2.2	8.7	16	12	6.5	4.2	*9.3	1.95	1.10
14	3.9	8.0	a4.1	2.2	9.3	12	11	8.0	6.6	8.2	1.80	.95
15	3.6	7.4	a4.0	2.2	14	12	10	6.9	9.1	16	1.40	1.00
16	3.5	7.1	a3.9	3.4	b11	19	10	4.8	7.4	15	1.45	1.15
17	3.5	6.5	a3.8	b6.2	9.3	18	10	4.4	6.4	12	1.35	1.00
18	3.3	6.2	a3.7	b5.2	9.3	16	9.9	5.1	7.7	11	1.30	.95
19	3.6	6.1	a3.7	4.2	b10	13	9.4	5.6	9.5	9.9	1.15	.90
20	3.3	5.8	a4.5	3.9	b8.0	13	12	4.3	9.3	11	.90	.90
21	3.1	5.4	a3.9	*5.3	6.4	13	13	3.2	7.1	10	.75	.90
22	2.9	5.2	a3.5	9.4	5.3	21	9.5	2.9	6.0	9.2	.85	.80
23	4.7	4.8	b3.3	7.7	b5.0	16	6.9	2.8	8.3	8.5	.75	.75
24	6.9	4.8	b3.2	b5.3	*b4.8	14	6.9	3.1	7.0	8.0	*.75	.75
25	8.3	4.5	2.8	4.9	b4.6	16	8.1	2.6	6.1	7.5	.75	.75
26	10	4.8	3.0	b4.4	b4.4	15	8.3	3.3	6.5	6.9	.60	.75
27	12	5.2	3.1	b3.9	4.4	14	10	2.2	6.2	6.0	.75	.80
28	10	4.9	3.1	b3.6	4.4	14	13	2.2	6.2	5.1	.50	.85
29	10	10	3.0	b3.4	-	12	14	3.4	6.8	4.4	.75	a.9
30	9.2	9.1	3.9	4.0	--------	12	13	3.3	6.0	4.2	1.70	a1.0
31	8.6	--------	4.5	4.2	--------	14	--------	3.1	--------	3.8	3.1	--------
Total	203.4	229.9	167.5	132.05	189.9	433.2	365.0	181.9	195.9	234.4	52.75	41.10
Mean	6.56	7.66	5.40	4.26	6.78	14.0	12.2	5.87	6.53	7.56	1.70	1.37
Cfsm	1.49	1.74	1.23	0.970	1.54	3.19	2.78	1.34	1.49	1.72	0.387	0.312
In.	1.72	1.95	1.42	1.12	1.61	3.67	3.09	1.54	1.66	1.99	0.45	0.35

Calendar year 1958: Max - Min - Mean - Cfsm - In. -
Water year 1958-59: Max 22 Min 0.50 Mean 6.65 Cfsm 1.51 In. 20.57

Peak discharge (base, 22 cfs).--Mar. 7 (12:30 to 2:30 a.m.) 23 cfs (2.30 ft); Mar. 16 (6 to 8 p.m.) 22 cfs (2.24 ft); Mar. 22 (7 to 9 a.m.) 22 cfs (2.22 ft); Apr. 3 (9 a.m.) 24 cfs (2.32 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage when available, and records for Poor Meadow Brook at South Hanson.
b Stage-discharge relation affected by ice.

1058. Pudding Brook at East Pembroke, Mass.

Location.--Lat 42°05'13", long 70°45'28", on left bank 300 ft upstream from Spring Street, 500 ft downstream from Randall Pond, 0.6 mile northeast of East Pembroke, Plymouth County, and 3 miles northeast of Pembroke.
Drainage area.--1.38 sq mi.
Records available.--July 1958 to September 1959.
Gage.--Water-stage recorder. Altitude of gage is 45 ft (from topographic map).
Extremes.--1958: Maximum discharge during period July to September, 7.5 cfs Sept. 28 (gage height, 0.945 ft); minimum daily, 0.57 cfs Aug. 9.
1958-59: Maximum discharge during water year, 7.3 cfs Mar. 15 (gage height, 0.935 ft); maximum gage height, 0.96 ft Nov. 3 (backwater from debris); minimum daily discharge, 1.3 cfs July 9, 10.
Remarks.--Records fair. Flow regulated by Randall Pond.

Rating table, July 11, 1958, to Sept. 30, 1959 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Aug. 3, 4, 7, 8, 13-28, Sept. 6-15, 18, 19, 22-26, 29, 30, 1959)

0.40	0.42	0.6	2.05
.45	.70	.8	4.8
.5	1.05	.9	6.6

Discharge, in cubic feet per second, 1958

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1	-	3.1	2.25	9	-	0.57	1.9	17	1.05	1.7	4.7	25	1.7	3.2	1.75
2	-	1.75	1.85	10	-	.75	2.05	18	.90	2.2	5.1	26	1.5	*4.0	*1.65
3	-	1.21	1.9	11	1.09	.86	2.05	19	1.35	2.2	3.6	27	1.35	3.6	2.7
4	-	.98	1.85	12	1.35	.98	1.75	20	2.0	2.05	2.9	28	1.25	2.8	6.4
5	-	.90	1.75	13	1.85	1.5	1.65	21	1.85	1.8	2.6	29	3.8	4.1	3.7
6	-	.76	1.75	14	1.5	1.3	1.55	22	1.65	1.7	2.5	30	2.75	3.9	2.6
7	-	.70	2.0	15	1.35	1.3	1.45	23	2.5	1.4	2.2	31	2.1	2.8	-
8	-	.70	2.2	16	1.13	1.55	1.5	24	2.25	1.3	1.9				
Total													-	57.66	73.75
Mean													-	1.86	2.46
Cubic feet per second per square mile													-	1.35	1.78
Runoff in inches													-	1.55	1.99

* Discharge measurement made on this day.
Note.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	2.15	2.2	1.8	1.45	2.9	3.6	3.7	2.9	1.65	1.6	3.0
2	3.7	2.1	*2.05	2.7	1.35	4.1	3.2	3.4	3.0	3.0	1.45	2.5
3	2.6	3.5	2.0	2.35	1.35	*4.0	5.1	2.9	5.1	1.55	1.45	2.25
4	2.25	4.4	3.5	2.0	2.6	4.2	3.6	2.6	3.4	1.9	1.45	2.25
5	2.05	3.0	3.8	1.9	2.15	3.2	3.0	2.45	2.6	1.65	1.65	2.15
6	1.85	2.6	3.1	1.65	1.7	4.7	*3.1	2.45	4.2	1.65	1.7	2.0
7	2.0	*2.35	2.4	1.6	1.6	4.8	3.0	2.4	3.4	1.65	1.65	1.85
8	1.9	2.2	2.2	1.75	1.55	3.0	3.0	2.4	2.6	1.45	1.6	1.75
9	1.85	2.8	2.1	1.5	1.5	2.8	3.0	2.35	2.25	1.3	1.8	1.75
10	1.8	3.3	2.1	1.4	3.3	2.8	3.0	2.25	2.05	1.3	2.1	1.8
11	1.75	2.0	2.05	1.35	2.8	2.6	3.5	*2.25	1.85	4.9	1.8	1.75
12	1.75	2.45	2.05	1.35	2.1	3.2	3.3	2.35	1.75	3.6	1.55	1.65
13	1.8	2.2	2.05	1.4	2.45	3.7	3.0	2.45	2.3	*2.6	1.5	1.55
14	1.85	2.15	2.05	1.4	2.35	3.0	2.8	3.2	3.5	2.45	1.45	1.55
15	1.75	2.15	2.05	1.4	3.5	3.8	2.7	2.6	3.8	5.8	1.55	1.7
16	1.7	2.15	2.05	1.95	2.4	4.8	2.6	2.45	2.8	3.8	1.55	2.0
17	1.6	2.05	2.0	2.3	2.1	3.8	2.6	2.4	2.35	2.8	1.6	1.75
18	1.55	2.05	1.9	1.65	2.4	3.2	1.65	2.2	3.4	2.35	1.75	1.7
19	1.55	2.05	1.9	1.45	2.25	2.9	2.15	2.45	3.8	2.2	1.75	1.65
20	1.6	2.05	2.15	*1.5	1.9	3.2	3.2	2.35	3.0	2.8	1.65	1.55
21	1.55	2.0	2.05	2.05	1.7	3.3	3.2	2.25	2.35	2.5	1.65	1.55
22	1.55	2.0	2.05	2.5	1.75	4.9	2.7	2.2	2.25	2.25	1.7	1.5
23	2.25	2.0	1.9	1.9	1.7	3.2	2.6	2.05	2.8	2.1	1.6	1.4
24	3.0	1.9	1.8	1.65	*1.95	2.9	2.6	2.2	2.2	2.1	*1.75	1.4
25	3.1	1.9	1.75	1.6	1.9	2.8	2.45	2.15	*2.0	2.0	1.8	1.4
26	3.7	2.0	1.65	1.55	1.9	2.6	2.5	1.9	2.15	1.8	1.7	1.45
27	3.9	2.15	1.65	1.5	2.0	2.9	3.4	1.75	2.15	1.65	1.6	1.35
28	3.0	2.0	1.7	1.5	2.05	3.0	4.0	1.9	2.25	1.6	1.6	1.45
29	3.0	3.7	1.65	1.5	-	2.8	3.8	1.9	2.2	1.55	2.8	*1.5
30	2.5	2.7	2.0	1.75	-------	2.8	3.5	2.35	1.9	1.6	4.2	1.55
31	2.25	-------	1.9	1.65	-------	3.6	-------	4.0	-------	1.6	2.4	-------
Total	69.30	72.95	65.80	53.55	57.75	105.5	91.85	76.25	82.30	71.15	55.40	52.70
Mean	2.24	2.43	2.12	1.73	2.06	3.40	3.06	2.45	2.74	2.30	1.79	1.76
Cfsm	1.62	1.76	1.54	1.25	1.49	2.46	2.22	1.78	1.99	1.67	1.30	1.28
In.	1.87	1.97	1.77	1.44	1.56	2.84	2.48	2.05	2.22	1.92	1.49	1.42

Calendar year 1958: Max - Min - Mean - Cfsm - In. -
Water year 1958-59: Max 5.8 Min 1.3 Mean 2.34 Cfsm 1.70 In. 23.03

* Discharge measurement made on this day.
Note.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

1060. Adamsville Brook at Adamsville, R. I.

Location.--Lat 41°33'30", long 71°07'47", on right bank 0.2 mile upstream from milldam at Adamsville, Newport County, and 0.7 mile upstream from mouth.

Drainage area.--8.6 sq mi, approximately.

Records available.--October 1940 to September 1959.

Gage.--Water-stage recorder. Concrete control since Sept. 16, 1942. Altitude of gage is 15 ft (from topographic map).

Average discharge.--19 years, 13.8 cfs.

Extremes.--Maximum discharge during year, 143 cfs Mar. 7; maximum gage height, 5.52 ft Feb. 20 (backwater from ice); minimum discharge, 0.22 cfs Sept. 27, 28, 29.
1940-59: Maximum discharge, 301 cfs Apr. 7, 1958 (gage height, 6.26 ft); from rating curve extended above 210 cfs by logarithmic plotting; minimum, 0.03 cfs Sept. 23, 24, Oct. 3, 4, 1950.

Remarks.--Records good except those for period of no gage-height record, which are fair.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Feb. 19)

3.05	0.22	3.4	7.7
3.07	.30	3.5	12
3.10	.50	3.7	25
3.15	1.04	4.0	50
3.2	1.85	4.5	101
3.3	4.2	5.0	161

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	11	23	9.8	8.1	20	38	a23	5.2	7.7	4.4	0.98
2	19	9.3	17	24	6.5	54	31	a19	5.2	*6.7	4.6	.91
3	16	12	14	41	5.8	50	46	a16	16	5.9	4.2	.85
4	14	13	18	35	12	57	53	a14	20	5.1	3.6	.85
5	12	13	33	18	17	48	38	a12	16	4.6	3.6	.79
6	9.1	13	38	12	15	63	28	a11	15	4.2	3.8	.68
7	7.7	12	28	8.9	12	124	28	a10	14	4.1	3.5	.58
8	6.7	9.8	20	7.5	9.8	64	25	a9.6	12	3.5	3.2	.50
9	6.1	12	16	6.7	9.1	*38	23	a9.2	8.9	3.1	5.1	.42
10	5.6	18	13	6.1	29	28	*21	a9.0	6.9	2.9	6.9	.39
11	4.8	25	11	5.6	57	23	28	a8.8	5.4	12	7.9	.36
12	4.4	25	9.8	5.1	36	23	31	a8.5	4.6	26	6.1	.30
13	4.1	20	9.1	5.0	22	28	28	8.5	6.9	33	4.8	.28
14	3.9	16	8.7	5.0	20	35	23	16	24	27	3.9	.28
15	3.8	13	8.7	5.2	42	45	18	16	36	93	3.5	.33
16	3.5	12	8.5	8.0	42	62	17	15	30	92	3.0	.30
17	3.5	11	*8.3	13	28	73	15	12	20	54	2.5	.58
18	3.4	10	8.5	12	23	51	14	*11	17	30	2.35	.68
19	3.0	9.6	8.3	8.7	19	35	13	9.3	15	20	2.05	.63
20	3.2	8.9	9.6	8.1	15	27	16	9.3	14	16	1.75	.63
21	*3.1	8.7	8.9	11	11	24	22	8.9	11	*13	1.5	.50
22	3.1	7.9	7.7	22	9.3	30	23	10	10	11	1.25	.42
23	9.6	7.5	7.3	21	9.3	33	18	15	20	10	1.11	.36
24	20	8.3	7.3	14	11	28	15	14	23	8.9	1.04	.33
25	28	*8.3	6.9	12	11	23	13	11	20	7.9	*1.04	.33
26	27	9.1	6.1	*10	10	20	12	8.9	20	6.9	.91	.33
27	25	11	5.8	9.3	10	21	12	7.5	16	5.8	.79	.28
28	21	11	5.4	8.3	11	23	a15	6.9	14	5.1	.68	.22
29	18	22	5.4	7.7	-	23	a18	7.1	12	4.5	.63	.24
30	15	26	8.1	8.9	-------	23	a18	6.3	9.6	4.1	.74	.24
31	12	-------	9.8	8.9	-------	32	-------	5.6	-------	3.9	.98	-------
Total	335.6	393.4	389.2	377.8	510.9	1,228	700	348.4	447.7	531.9	91.42	14.57
Mean	10.8	13.1	12.6	12.2	18.2	39.6	23.3	11.2	14.9	17.2	2.95	0.486
Cfsm	1.26	1.52	1.47	1.42	2.12	4.60	2.71	1.30	1.73	2.00	0.343	0.057
In.	1.45	1.70	1.68	1.63	2.21	5.31	3.03	1.51	1.94	2.30	0.40	0.06

Calendar year 1958: Max 276 Min 0.91 Mean 22.4 Cfsm 2.60 In. 35.32
Water year 1958-59: Max 124 Min 0.22 Mean 14.7 Cfsm 1.71 In. 23.22

Peak discharge (base, 120 cfs).--Mar. 7 (4:30 to 5 a.m.) 143 cfs (4.86 ft); July 15 (4:30 p.m.) 122 cfs (4.68 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for stations on nearby streams.

1065. Matfield River at Elmwood, Mass.

Location.--Lat 42°00'55", long 70°57'42", on right bank 20 ft upstream from bridge on State Highway 18 at Elmwood, Plymouth County, 0.6 mile upstream from Satucket River, and 1.2 miles south of East Bridgewater.

Drainage area.--40.6 sq mi.

Records available.--July 1958 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 30 ft (from topographic map).

Extremes.--1958: Maximum discharge during period July to September, 265 cfs Sept. 28 (gage height, 4.09 ft); minimum daily, 15 cfs July 10, 11.
1958-59: Maximum discharge during water year, 473 cfs Mar. 7 (gage height, 6.51 ft); minimum daily, 8.8 cfs Sept. 27.

Remarks.--Records fair. Some diurnal fluctuation at low flow by powerplant above station. Slight regulation by ponds above station. Small diversions to basin for water supply of several towns supplied by Brockton.

Discharge, in cubic feet per second, 1958

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1	-	75	37	9	-	22	27	17	50	24	98	25	23	*36	41
2	-	49	34	10	15	22	28	18	24	24	111	26	20	51	30
3	-	38	30	11	15	23	30	19	23	22	91	27	19	49	28
4	-	35	27	12	16	21	24	20	21	21	73	28	22	46	221
5	-	32	23	13	21	32	21	21	20	20	65	29	51	60	*118
6	-	30	21	14	20	26	21	22	19	20	67	30	42	57	60
7	-	28	25	15	20	24	22	23	28	19	57	31	43	47	-
8	-	26	38	16	24	24	21	24	26	19	42				
Total													-	1,022	1,531
Mean													-	33.0	51.0
Cubic feet per second per square mile													-	0.813	1.26
Runoff in inches													-	0.94	1.40

* Discharge measurement made on this day.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	106	89	24	28	60	157	221	24	32	24	26
2	190	64	*72	137	23	*280	143	243	35	56	21	23
3	*112	176	69	149	18	233	361	193	142	66	21	23
4	88	216	130	89	137	286	327	157	103	50	18	20
5	65	147	270	60	152	242	236	132	72	42	18	18
6	43	*103	237	40	85	287	209	108	71	45	18	16
7	30	95	159	31	48	421	*181	90	56	38	17	15
8	30	60	106	26	44	272	148	75	44	28	16	17
9	38	95	78	22	35	214	128	63	34	24	16	16
10	34	167	57	19	172	165	115	58	27	22	17	15
11	25	182	50	17	174	120	148	54	22	190	19	14
12	21	142	45	17	92	94	143	*50	*20	189	17	13
13	19	102	40	17	138	127	123	50	26	*121	16	12
14	19	70	38	17	188	125	94	110	155	90	14	12
15	17	63	37	18	348	144	73	81	170	258	12	12
16	18	93	37	40	233	371	58	59	136	297	12	17
17	16	82	37	136	180	359	44	48	107	225	13	14
18	15	66	38	56	162	290	43	47	133	162	15	12
19	15	47	42	46	213	217	61	40	180	126	17	10
20	15	37	48	*34	135	181	96	38	157	125	14	9.2
21	14	39	36	67	86	160	123	35	121	159	13	9.7
22	14	35	31	222	56	296	100	33	108	133	14	*10
23	39	32	29	144	39	234	84	27	127	108	13	9.5
24	52	39	28	93	34	184	70	24	93	90	14	9.9
25	52	46	24	70	28	150	63	30	69	72	*15	11
26	106	39	19	51	26	125	53	26	62	57	13	9.2
27	166	41	19	37	26	108	94	24	52	50	13	8.8
28	118	33	19	30	25	106	195	26	47	41	12	9.9
29	172	164	19	25	-	90	217	33	48	35	11	12
30	139	137	24	30	-------	95	221	25	40	31	29	12
31	111	-------	28	35	-------	144	-------	25	-------	27	22	-------
Total	1,909	2,718	1,955	1,799	2,925	6,180	4,108	2,225	2,461	2,989	504	416.2
Mean	61.6	90.6	63.1	58.0	104	199	137	71.8	82.0	96.4	16.3	13.9
Cfsm	1.52	2.23	1.55	1.43	2.56	4.90	3.37	1.77	2.02	2.37	0.401	0.342
In.	1.75	2.49	1.79	1.65	2.68	5.66	3.76	2.04	2.25	2.74	0.46	0.38

Calendar year 1958: Max - Min - Mean - Cfsm - In. -
Water year 1958-59: Max 421 Min 8.8 Mean 82.7 Cfsm 2.04 In. 27.65

Peak discharge (base, 410 cfs).--Feb. 15 (10:30 a.m.) 422 cfs (5.81 ft); Mar. 7 (12:30 a.m.) 473 cfs (6.51 ft); Mar. 16 (1:30 p.m.) 434 cfs (6.16 ft); Apr. 3 (9:30 a.m.) 431 cfs (6.13 ft).

* Discharge measurement made on this day.

1069. Poor Meadow Brook at South Hanson, Mass.

Location.--Lat 42°02'32", long 70°53'56", on right bank 20 ft downstream from bridge on State Highway 27, 0.9 mile west of South Hanson, Plymouth County, and 2½ miles south of Hanson.

Drainage area.--14.8 sq mi.

Records available.--July 1958 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 50 ft (from topographic map).

Extremes.--1958: Maximum discharge during period July to September, 62 cfs Sept. 29 (gage height, 3.81 ft), backwater from temporary dams; minimum, 6.1 cfs July 22, 23.
1958-59: Maximum discharge during water year, 132 cfs Mar. 7 (gage height, 4.94 ft); minimum not determined; minimum daily, 3.5 cfs Sept. 28.

Remarks.--Records good except those for periods of backwater from temporary dams, which are fair. Small diversion to basin for Whitman water supply.

Discharge, in cubic feet per second, 1958

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1	-	13	13	9	-	9.0	s.4	17	7.4	s.6	10	25	7.5	8.4	12
2	-	14	11	10	-	8.4	8.8	18	7.2	8.4	21	26	7.2	12	11
3	-	13	9.7	11	6.9	7.8	9.1	19	7.0	7.7	c33	27	7.2	*18	12
4	-	12	8.8	12	6.7	7.4	9.0	20	6.7	7.7	c34	28	7.4	18	c42
5	-	15	8.0	13	7.0	7.5	s.6	21	6.4	7.5	c29	29	9.1	18	c59
6	-	13	7.7	14	7.0	7.5	8.0	22	6.3	7.2	23	30	10	19	c48
7	-	11	7.4	15	7.0	7.7	7.7	23	6.6	6.7	18	31	11	16	-
8	-	9.7	7.7	16	6.9	8.0	7.4	24	7.2	6.4	14				
Total													-	333.6	506.3
Mean													-	10.8	16.9
Cubic feet per second per square mile													-	0.730	1.14
Runoff in inches													-	0.84	1.27

* Discharge measurement made on this day.
c Backwater from temporary dams.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	42	42	15	14	16	60	59	9.9	18	10	12
2	59	35	*32	22	12	60	58	61	11	19	10	11
3	*54	42	26	43	9.9	*112	108	48	30	20	9.5	10
4	45	67	33	47	23	119	114	34	37	17	8.5	9.0
5	35	60	80	34	59	108	92	26	32	15	8.0	8.0
6	26	52	92	21	46	101	67	22	28	14	7.5	7.0
7	20	*43	73	14	27	128	*54	20	26	14	7.3	6.5
8	16	36	54	12	17	109	44	18	22	12	7.2	5.8
9	14	34	40	11	14	85	37	17	18	11	7.0	5.4
10	13	41	31	9.3	25	59	33	16	16	10	7.2	5.0
11	12	50	24	8.6	49	39	40	*15	14	24	7.3	4.7
12	12	50	21	8.0	38	31	46	14	12	52	7.0	4.5
13	11	44	20	8.2	30	40	41	14	12	*56	6.7	4.3
14	12	38	19	8.4	52	47	34	20	22	46	6.5	4.1
15	13	34	18	8.8	97	59	29	20	50	61	6.3	4.0
16	16	31	18	12	110	104	25	18	67	79	6.1	5.0
17	18	29	18	27	74	124	22	16	52	73	5.8	5.5
18	19	27	17	31	53	109	20	15	42	60	5.7	5.1
19	19	26	17	16	66	80	18	14	45	45	5.5	4.8
20	19	26	19	*13	62	62	22	14	52	36	5.3	4.5
21	19	25	19	14	40	56	31	13	43	36	5.2	4.3
22	18	24	16	50	21	95	28	12	33	37	5.2	4.0
23	21	22	14	74	16	98	24	12	34	36	5.2	3.9
24	29	21	14	54	14	75	20	11	31	35	5.2	3.8
25	34	21	13	23	13	56	18	11	*25	30	5.3	3.7
26	42	19	12	17	13	43	17	9.9	23	23	5.1	3.7
27	60	19	11	15	13	37	21	9.3	22	17	4.9	3.6
28	61	18	10	13	13	36	43	10	20	14	4.7	3.5
29	62	36	10	12	-	35	56	13	20	12	4.5	3.7
30	60	52	13	14	--------	36	65	11	20	11	5.4	4.2
31	50	--------	16	17	--------	47	--------	10	--------	11	8.0	--------
Total	931	1,064	842	672.3	1,020.9	2,206	1,287	603.2	868.9	944	203.1	164.6
Mean	30.0	35.5	27.2	21.7	36.5	71.2	42.9	19.5	29.0	30.5	6.55	5.49
Cfsm	2.03	2.40	1.84	1.47	2.47	4.81	2.90	1.32	1.96	2.06	0.443	0.371
In.	2.34	2.67	2.12	1.69	2.57	5.54	3.23	1.52	2.18	2.37	0.51	0.41

Calendar year 1958: Max - Min - Mean - Cfsm - In. -
Water year 1958-59: Max 128 Min 3.5 Mean 29.6 Cfsm 2.00 In. 27.15

* Discharge measurement made on this day.
Note.--Backwater from temporary dams Oct. 1-6, Oct. 24 to Nov. 22, Nov. 29, 30, July 11-25, July 30 to Sept. 30.

1080. Taunton River at State Farm, Mass.

Location.--Lat 41°56'05", long 70°57'18", on right bank at State Farm, Plymouth County, 1 mile upstream from Saw Mill Brook and 3½ miles northwest of Middleboro.

Drainage area.--260 sq mi.

Records available.--October 1929 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 9.61 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1931, inverted staff gage at site 40 ft downstream with zero of gage at 10.02 ft on present gage. Oct. 1, 1931, to June 8, 1934, staff gage and June 9, 1934, to Oct. 12, 1939, water-stage recorder, at site 40 ft downstream at present datum.

Average discharge.--30 years, 477 cfs (adjusted for diversions).

Extremes.--Maximum discharge during year, 1,760 cfs Mar. 8 (gage height, 7.10 ft); minimum, 58 cfs Sept. 27, 28; minimum daily, 59 cfs Sept. 27.
1929-59: Maximum discharge, 4,010 cfs Aug. 21, 1955 (gage height, 13.02 ft); minimum, 8 cfs Sept. 10, 1944; minimum daily, 9 cfs Sept. 9-12, 1944.

Remarks.--Records excellent. Water diverted above station from Nemasket River for municipal supply of Taunton and New Bedford; water diverted from Silver Lake by pumpage into Taunton River basin above station for municipal supply of Brockton and several towns. Flow regulated by reservoirs and small powerplants above station.

Revisions (water years).--WSP 756: Drainage area. WSP 781: 1934. WSP 1051: 1933. WSP 1201: 1931. WSP 1301: 1930(M), 1933(M), 1935(M).

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 7				Mar. 8 to Sept. 30			
3.7	148	6.0	1,220	3.2	55	4.0	275
4.0	265	7.0	1,670	3.4	86	6.0	1,310
				3.6	130	7.0	1,720

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	690	600	605	324	332	432	1,160	1,010	275	346	295	170
2	825	530	555	404	306	875	1,180	1,110	271	231	287	178
3	745	595	530	615	283	1,090	1,420	1,040	450	356	271	170
4	610	770	540	565	364	1,190	1,630	930	540	342	243	178
5	590	785	785	475	615	1,260	1,560	826	495	307	231	157
6	550	670	900	360	575	1,260	1,410	742	480	287	219	139
7	525	620	835	396	450	1,660	*1,320	670	455	291	199	123
8	404	605	765	337	418	1,680	1,220	586	410	259	178	116
9	288	565	720	301	350	1,410	1,140	510	369	235	174	106
10	*373	620	565	278	596	*1,240	1,080	470	320	227	178	96
11	373	710	510	260	885	1,070	1,070	470	275	428	174	88
12	355	705	530	216	745	950	1,100	*410	*243	760	170	81
13	274	675	495	178	720	950	1,060	392	231	694	157	71
14	247	645	470	204	810	970	1,010	460	396	628	148	69
15	292	545	440	216	1,000	1,060	950	495	574	898	125	69
16	283	475	360	242	1,070	*1,300	880	446	640	1,160	120	86
17	278	520	391	440	945	1,540	844	410	616	1,090	120	86
18	252	505	409	440	885	1,510	700	396	628	950	118	79
19	247	510	400	386	900	1,370	658	405	736	790	125	94
20	242	495	404	346	710	1,230	742	378	814	706	125	86
21	220	400	404	355	690	1,150	850	364	742	682	113	111
22	189	440	*382	630	550	1,360	826	369	652	*658	106	106
23	247	368	360	715	475	1,440	766	360	688	598	100	96
24	409	247	350	600	436	1,370	724	333	646	556	104	79
25	382	*373	324	520	400	1,260	706	320	556	525	*111	78
26	485	373	310	*440	386	1,180	664	299	515	480	102	72
27	705	368	292	378	382	1,100	664	279	525	446	96	59
28	695	350	288	346	378	1,080	850	247	470	410	90	61
29	710	540	288	324	-	1,040	945	263	505	364	88	63
30	715	685	301	319	-------	1,020	1,010	275	475	333	124	71
31	600	-------	324	342	-------	1,070	-------	279	-------	311	160	-------
Total	13,800	16,289	14,832	11,952	16,656	37,117	30,139	15,544	14,992	16,348	4,851	3,038
Mean	445	543	478	386	595	1,197	1,005	501	500	527	156	101
(†)	26.4	24.8	25.3	24.2	26.1	25.6	26.9	28.4	28.3	26.8	31.0	29.9

Adjusted for diversions

Mean	472	568	504	410	621	1,223	1,032	530	528	554	187	131
Cfsm	1.82	2.18	1.94	1.58	2.39	4.70	3.97	2.04	2.03	2.13	0.719	0.504
In.	2.09	2.44	2.23	1.82	2.49	5.42	4.43	2.35	2.27	2.46	0.83	0.56

	Observed			Adjusted			
Calendar year 1958:	Max 1,990	Min 110	Mean 665	Mean 690	Cfsm 2.65	In. 36.01	
Water year 1958-59:	Max 1,680	Min 59	Mean 536	Mean 563	Cfsm 2.17	In. 29.39	

* Discharge measurement made on this day.
† Diversions, equivalent in cubic feet per second, from Nemasket River for municipal supply of Taunton and New Bedford and from Silver Lake into Taunton River basin for municipal supply of Brockton and several towns. Records furnished by various municipalities.

1085. Wading River at West Mansfield, Mass.

Location.--Lat 42°00'00", long 71°15'38", on right bank 200 ft downstream from Balcolm Street Bridge at West Mansfield, Bristol County, 2 miles upstream from Hodges Brook, and 3 miles southwest of Mansfield.

Drainage area.--19.2 sq mi.

Records available.--October 1953 to September 1959. Adjusted monthly figures of discharge, in cubic feet per second per square mile, and runoff in inches, previously published in water-supply papers for 1953-58, may be subject to error because of regulation upstream.

Gage.--Water-stage recorder and concrete control. Datum of gage is 120.85 ft above mean sea level, datum of 1929.

Average discharge.--6 years, 39.0 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 132 cfs Mar. 7 (gage height, 5.03 ft); minimum daily, 0.6 cfs Sept. 30.
1953-59: Maximum discharge, 519 cfs Aug. 20, 1955 (gage height, 6.22 ft); no flow Oct. 22-24, 1957 (caused by temporary storage upstream).

Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by Lake Mirimichi. Diversion above station for municipal supply of Attleboro.

Revisions.--See Records available.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.3	0.5	3.5	22
2.4	1.1	4.0	46
2.5	1.9	4.5	79
3.0	9.0	5.1	141
3.3	15		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	16	24	11	12	30	57	62	11	15	14	8.7
2	24	15	20	19	10	62	59	66	11	14	12	10
3	24	20	19	32	9.5	77	81	62	28	14	9.8	12
4	18	23	31	32	17	83	92	56	43	13	8.8	11
5	15	23	41	29	27	89	92	52	42	12	8.2	9.2
6	12	21	44	24	23	96	92	47	38	11	8.0	7.8
7	10	21	40	21	17	129	93	40	30	11	8.0	6.8
8	9.0	18	37	17	16	124	87	38	24	11	7.5	5.8
9	8.6	19	34	14	11	116	76	34	19	10	7.6	3.5
10	8.0	24	32	12	18	100	69	30	15	8.8	8.1	4.1
11	6.9	27	28	11	28	85	71	30	12	11	8.2	4.4
12	6.2	26	26	9.6	25	86	74	26	9.6	19	8.1	2.5
13	5.2	24	27	9.3	26	85	74	30	11	24	7.5	1.2
14	*5.8	24	24	9.2	32	76	69	35	24	22	6.6	1.5
15	10	15	23	9.0	49	68	59	38	36	36	5.7	3.1
16	14	6.9	22	11	49	78	*55	33	40	51	6.0	3.9
17	18	15	21	16	48	*88	55	32	38	54	4.5	2.4
18	15	14	20	13	48	86	51	32	38	48	4.1	1.1
19	11	14	19	11	55	85	49	29	42	40	3.1	1.1
20	9.9	*15	19	11	46	82	52	27	41	40	3.1	1.1
21	9.0	15	17	12	37	81	56	24	36	48	2.9	1.2
22	8.1	14	*15	27	33	82	51	*21	33	*50	3.0	2.8
23	9.2	13	15	25	29	76	46	18	34	51	3.0	1.5
24	12	12	15	21	28	73	44	17	*30	50	2.4	.7
25	14	12	14	21	27	71	42	16	26	44	3.1	.8
26	13	12	13	20	24	69	40	16	26	40	1.9	.8
27	14	11	12	17	22	66	43	15	25	33	*2.8	1.0
28	14	12	12	*16	21	66	50	12	22	24	2.2	2.5
29	16	22	12	15	-	61	56	14	19	18	2.0	1.4
30	17	26	12	14	---------	52	52	14	17	19	4.5	.6
31	17	--------	12	15	--------	54	--------	14	--------	16	6.0	--------
Total	390.9	529.9	700	524.1	787.5	2,476	1,887	980	820.6	857.8	182.7	114.5
Mean	12.6	17.7	22.6	16.9	28.1	79.9	62.9	31.6	27.4	27.7	5.89	3.82
(†)	2.86	2.59	3.97	4.17	4.26	2.76	2.76	3.01	3.99	2.91	4.37	4.06

	Observed			Adjusted		
Calendar year 1958:	Max 175	Min 0.5	Mean 40.2	Mean 42.9	Cfsm 2.23	In. 30.37
Water year 1958-59:	Max 129	Min 0.6	Mean 28.1	Mean 31.6	Cfsm 1.65	In. 22.33

* Discharge measurement made on this day.
† Diversion, equivalent in cubic feet per second, for municipal supply of Attleboro. Records furnished by city of Attleboro.
Note.--Stage-discharge relation affected by ice Dec. 8, Dec. 10 to Jan. 2, Jan. 5-7, 18, 19, 24, 28, 29, Feb. 1-3, 7, 9, 10, 12, 15, 16, 20-22, 25, 26.

1090. Wading River near Norton, Mass.

Location.--Lat 41°56'51", long 71°10'38", on left bank 200 ft downstream from bridge on State Highway 140, 0.9 mile upstream from confluence with Rumford River, and 1½ miles southeast of Norton, Bristol County.

Drainage area.--42.4 sq mi.

Records available.--June 1925 to September 1959. Monthly figures of discharge, in cubic feet per second per square mile, and runoff in inches, previously published in water-supply papers for 1925-58, may be subject to error because of regulation upstream.

Gage.--Water-stage recorder. Datum of gage is 49.63 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1930, staff gage at same site at datum 0.62 ft higher. Oct. 1, 1930, to May 4, 1933, staff gage at present site and datum.

Average discharge.--34 years, 72.0 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 380 cfs Mar. 7 (gage height, 8.03 ft); minimum, 3.8 cfs Sept. 27, 28; minimum daily, 3.8 cfs Sept. 27.
1925-59: Maximum discharge, 1,170 cfs Aug. 20, 1955 (gage height, 10.98 ft); minimum, 0.3 cfs Sept. 10, 1926.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by powerplants and ponds above station. Diversion above station for municipal supply of Attleboro.

Revisions (water years).--WSP 871: 1938. WSP 1301: 1929-33(M). See also Records available.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 6				Mar. 7 to Sept. 30			
5.1	13	6.0	81	4.8	3.7	5.5	36
5.3	22	7.0	212	4.9	5.8	6.0	81
5.5	36	8.0	390	5.1	12	7.0	200
				5.3	22	8.0	374

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*85	45	75	30	b32	55	150	133	28	38	31	16
2	124	38	52	61	28	127	146	158	42	33	25	5.8
3	106	48	47	102	22	b165	215	120	53	44	22	14
4	99	55	100	99	53	200	250	105	69	34	17	19
5	83	53	180	b80	94	228	225	101	71	27	17	11
6	64	53	164	62	63	250	200	112	62	25	17	14
7	42	49	132	52	b43	370	187	105	51	32	15	12
8	47	45	119	44	45	284	181	91	44	26	14	10
9	29	50	105	35	b34	236	173	82	35	18	15	9.0
10	25	98	83	29	80	225	152	78	31	14	17	7.7
11	26	96	63	24	108	185	152	71	25	47	16	7.1
12	28	96	56	21	b90	128	134	69	20	70	15	5.3
13	26	62	57	19	90	125	130	62	22	75	15	5.3
14	25	54	79	17	98	134	123	72	78	93	13	5.3
15	22	55	79	16	124	135	120	78	127	111	12	5.8
16	23	47	66	27	b130	193	135	66	129	148	10	5.6
17	27	32	47	52	116	244	125	58	114	148	10	5.3
18	27	39	40	b46	141	236	115	56	92	122	11	4.6
19	25	40	37	b49	146	193	105	53	101	100	9.8	4.4
20	22	46	35	56	b88	189	110	53	93	85	6.3	4.0
21	24	72	34	51	b115	196	130	43	78	114	4.8	4.4
22	40	54	33	92	95	215	120	23	67	128	5.3	4.6
23	31	32	32	98	77	190	110	33	67	114	5.1	4.6
24	48	31	32	59	63	164	100	33	75	84	5.8	4.6
25	47	27	b30	50	*b46	150	95	32	68	75	6.3	4.8
26	72	27	b30	b49	b46	137	88	30	82	66	6.5	4.2
27	77	28	b28	58	45	121	98	28	77	48	6.0	3.8
28	67	*31	b23	*52	42	125	110	28	71	50	6.0	4.0
29	71	70	26	b33	--	147	135	*26	63	44	5.8	4.4
30	68	80	*29	35	--------	141	*130	25	*56	36	5.8	*4.6
31	*64	--------	33	37	--------	*146	--------	27	--------	*32	*10	--------
Total	1,564	1,553	1,946	1,535	2,154	5,634	4,244	2,051	1,991	2,081	375.5	215.2
Mean	50.5	51.8	62.8	49.5	76.9	182	141	66.2	66.4	67.1	12.1	7.17
(†)	2.86	2.59	3.97	4.17	4.26	2.76	2.76	3.01	3.99	2.91	4.37	4.06

	Observed			Adjusted			
Calendar year 1958:	Max 485	Min 3.2	Mean 95.4	Mean 98.2	Cfsm 2.32	In. 31.43	
Water year 1958-59:	Max 370	Min 3.8	Mean 69.4	Mean 72.9	Cfsm 1.72	In. 23.34	

Peak discharge (base, 280 cfs).--Mar. 7 (5 to 6 a.m., 12 m. to 1 p.m.) 380 cfs (8.03 ft).

* Discharge measurement made on this day.
† Diversion, equivalent in cubic feet per second, for municipal supply of Attleboro. Records furnished by city of Attleboro.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Nov. 29 to Dec. 5, Dec. 16-22, Jan. 6-15, Feb. 2, 3, Apr. 16-30; discharge estimated on basis of 1 discharge measurement, weather records, and records for station at West Mansfield.

1095. Kettle Brook at Worcester, Mass.

Location.--Lat 42°13'55", long 71°50'07", on right bank 75 ft downstream from Webster Street Bridge at Worcester, Worcester County, 1 mile upstream from Beaver Brook.

Drainage area.--31.3 sq mi.

Records available.--August 1923 to September 1959. Prior to October 1950, published as Blackstone River at Worcester. Adjusted monthly discharge, in cubic feet per second per square mile, and runoff in inches, previously published in water-supply papers for 1923-58, may be subject to error because of regulation upstream.

Gage.--Water-stage recorder. Concrete control since Oct. 28, 1937. Datum of gage is 472.86 ft above mean sea level, datum of 1929.

Average discharge.--36 years, 53.7 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 747 cfs Apr. 3 (gage height, 5.13 ft); minimum, 9.8 cfs June 12, 13.
1923-59: Maximum discharge, 3,970 cfs Aug. 19, 1955 (gage height, 12.78 ft, from floodmark), from rating curve extended above 1,700 cfs on basis of computation of peak flow over dam; minimum, 0.2 cfs May 17, 1940.

Remarks.--Records excellent except those for periods of no gage-height record, which are fair. City of Worcester diverts flow from about 7.0 sq mi of drainage area above station. Flow regulated by reservoirs above station.

Revisions (water years).--WSP 1301: 1927(M). See also Records available.

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 3				Apr. 4 to Sept. 30			
2.5	16	3.5	155	2.3	9.0	3.2	89
2.7	27	4.0	305	2.5	15	3.5	155
2.9	45	5.0	695	2.7	24	4.0	305
3.2	90			2.9	43	4.5	495

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	34	70	26	33	28	121	82	15	13	32	110
2	50	32	53	40	29	48	139	68	24	13	29	73
3	43	44	49	43	26	64	595	58	66	12	28	56
4	37	52	58	37	70	119	379	52	48	12	28	*46
5	34	43	82	32	65	118	216	47	27	11	28	38
6	30	38	121	26	41	*167	158	42	20	12	28	32
7	28	35	88	21	33	362	137	38	19	14	28	28
8	26	31	61	20	31	131	119	34	17	13	27	28
9	26	50	53	18	28	98	121	30	15	13	28	25
10	25	78	45	17	34	88	125	28	13	14	27	24
11	23	70	40	17	33	76	148	26	11	91	24	25
12	21	58	39	16	29	76	144	28	10	62	21	24
13	19	50	37	17	42	73	117	37	18	53	19	24
14	17	46	33	17	52	68	*100	38	28	71	18	a22
15	16	44	35	21	104	68	89	30	32	82	17	a25
16	*16	43	35	45	76	82	82	25	25	71	15	27
17	18	41	35	85	50	94	75	24	21	50	17	a25
18	20	*41	*34	45	52	83	66	25	24	32	20	a22
19	19	41	33	33	62	68	60	24	27	40	17	a20
20	20	40	33	30	42	106	75	23	28	140	14	a19
21	19	40	33	61	34	192	85	*22	23	402	15	a19
22	20	37	36	234	29	246	73	19	*20	251	17	a21
23	34	35	35	156	29	158	60	17	23	134	13	23
24	57	32	35	75	29	112	56	17	18	87	16	a20
25	50	28	34	57	26	98	51	15	18	71	20	a18
26	48	29	32	55	26	94	50	15	18	64	17	a16
27	62	38	31	54	26	98	56	14	19	*58	17	a14
28	60	39	30	50	26	90	76	13	18	52	17	a13
29	52	176	30	*49	-	76	93	13	18	50	56	19
30	43	136	32	45	--------	73	97	14	15	44	112	a42
31	38	--------	33	41	--------	76	--------	15	--------	38	123	--------
Total	1,010	1,501	1,395	1,483	1,157	3,330	3,763	933	678	2,070	888	898
Mean	32.6	50.0	45.0	47.8	41.3	107	125	30.1	22.6	66.8	28.6	29.9
(†)	8.68	8.13	8.22	7.79	7.69	8.11	10.2	10.9	8.88	8.68	8.90	8.44

	Observed			Adjusted		
Calendar year 1958:	Max 571	Min 5.8	Mean 59.9	Mean 68.5	Cfsm 2.19	In. 29.72
Water year 1958-59:	Max 595	Min 10	Mean 52.3	Mean 61.1	Cfsm 1.95	In. 26.48

Peak discharge (base, 250 cfs).--Jan. 22 (4 to 6 p.m.) 264 cfs (3.88 ft); Mar. 7 (3 a.m.) 483 cfs (4.47 ft); Mar. 22 (6:30 to 7:30 a.m.) 274 cfs (3.91 ft); Apr. 3 (12 m.) 747 cfs (5.13 ft); July 21 (4:30 a.m.) 479 cfs (4.46 ft).

* Discharge measurement made on this day.
† Diversion for municipal supply of Worcester, equivalent in cubic feet per second. Records furnished by city of Worcester.
a No gage-height record; discharge estimated on basis of weather records recorded range in stage, and records for Blackstone River at Northbridge and Quaboag River at West Brimfield.

1100. Quinsigamond River at North Grafton, Mass.

Location.--Lat 42°13'49", long 71°42'41", on right bank 800 ft downstream from dam at outlet of Flint Pond at North Grafton, Worcester County, and 0.3 mile upstream from Bummett Brook.

Drainage area.--25.5 sq mi.

Records available.--October 1939 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 335 ft (from topographic map). Prior to Dec. 7, 1939, staff gage at same site and datum.

Average discharge.--20 years, 42.3 cfs.

Extremes.--Maximum discharge during year, 268 cfs July 22 (gage height, 3.15 ft); minimum daily, 13 cfs Oct. 21, July 9.
1939-59: Maximum discharge, 820 cfs Aug. 20, 1955 (gage height, 5.15 ft); minimum daily, 0.3 cfs Oct. 14-17, 1942.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Some regulation at Lake Quinsigamond and ponds above station.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from trees Aug. 31, Sept. 1, 4-6)

1.1	11	2.0	78
1.2	15	2.5	150
1.4	25	3.0	240
1.7	47	3.5	334

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	24	44	39	50	48	73	82	25	18	39	81
2	40	22	52	43	45	52	94	72	27	17	34	22
3	36	25	55	43	44	52	148	60	44	18	32	22
4	34	24	71	42	50	67	133	50	39	18	30	*56
5	33	23	79	30	47	67	124	55	34	17	29	61
6	28	40	95	29	45	*94	130	61	34	15	28	60
7	25	51	71	31	30	166	126	57	33	16	25	28
8	24	44	78	31	42	150	118	55	28	15	25	26
9	33	50	77	30	39	132	111	51	27	13	26	26
10	39	49	73	29	39	120	104	45	25	14	26	26
11	37	47	68	28	38	105	112	43	25	36	26	25
12	28	44	65	27	36	103	104	52	28	35	25	24
13	21	46	63	26	37	91	87	58	29	32	24	24
14	17	51	60	27	39	72	*90	56	32	32	22	22
15	16	60	59	28	48	66	84	52	36	40	22	21
16	*21	58	56	32	44	72	73	48	33	39	22	22
17	28	52	54	39	44	73	58	43	31	36	21	22
18	25	*54	*52	35	46	72	49	39	34	34	20	21
19	20	58	52	32	50	67	57	36	35	37	20	21
20	15	52	52	30	41	74	60	36	35	73	18	20
21	13	52	49	45	79	86	54	34	32	226	18	20
22	14	47	46	85	71	103	47	33	*29	262	19	19
23	24	41	44	75	62	88	54	30	29	233	17	19
24	27	36	44	68	58	84	61	28	26	197	16	19
25	25	33	44	64	55	92	52	*24	24	163	19	17
26	26	32	42	63	52	94	46	21	24	136	17	18
27	26	32	41	62	50	98	47	19	24	*52	16	18
28	23	31	39	62	48	95	63	17	23	46	14	16
29	24	48	39	*62	-	79	78	24	21	42	15	16
30	25	42	40	61	-------	71	83	29	20	40	21	16
31	23	-------	41	56	-------	70	-------	28	-------	39	43	-------
Total	809	1,268	1,745	1,354	1,329	2,703	2,520	1,338	886	1,991	730	808
Mean	26.1	42.3	56.3	43.7	47.5	87.2	84.0	43.2	29.5	64.2	23.5	26.9
Cfsm	1.02	1.66	2.21	1.71	1.86	3.42	3.29	1.69	1.16	2.52	0.922	1.05
In.	1.18	1.85	2.54	1.97	1.94	3.94	3.68	1.95	1.29	2.90	1.06	1.18

Calendar year 1958: Max 240 Min 13 Mean 59.6 Cfsm 2.34 In. 31.70
Water year 1958-59: Max 262 Min 13 Mean 47.9 Cfsm 1.88 In. 25.48

* Discharge measurement made on this day.
Note.--No gage-height record Dec. 22, 23, 26-31, Jan. 6-29; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for Kettle Brook at Worcester. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

1105. Blackstone River at Northbridge, Mass.

Location.--Lat 42°09'13", long 71°39'09", on left bank 800 ft downstream from Paul Whitin Co. dam at Northbridge, Worcester County, and 3 miles downstream from Quinsigamond River.
Drainage area.--139 sq mi.
Records available.--October 1939 to September 1959. October and November 1939 monthly discharge only, published in WSP 1301.
Gage.--Water-stage recorder. Altitude of gage is 260 ft (from topographic map).
Average discharge.--20 years, 241 cfs (adjusted for diversion).
Extremes.--Maximum discharge during year, 2,870 cfs Mar. 7 (gage height, 8.25 ft); minimum daily, 61 cfs Sept. 27.
1939-59: Maximum discharge, 16,900 cfs Aug. 20, 1955 (gage height, 16.74 ft), from rating curve extended above 3,800 cfs on basis of computation of flow over dam at gage height 13.7 ft and slope-area measurement at gage height 16.74 ft; maximum gage height, 17.53 ft Aug. 20, 1955 (backwater from debris); minimum daily discharge, 2 cfs Aug. 29, 1941, Sept. 5, 1942, Aug. 28, 1957.
Flood of Mar. 19, 1936, reached a stage of 13.7 ft, from floodmarks (discharge, 7,510 cfs, by computation of flow over dam 800 ft above station).
Remarks.--Records good except those for period of no gage-height record, which are fair. Flow regulated by mills and reservoirs above station. Daily discharge includes flow diverted from Nashua River basin to Blackstone River basin for municipal supply of Worcester.
Revisions (water years).--WSP 1301: 1940(M).

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from aquatic vegetation June 22 to July 10, July 18, 19, July 28 to Aug. 29, Sept. 2-30)

2.5	54	5.0	970
3.0	160	6.0	1,570
3.5	300	8.0	2,720
4.0	480		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	370	208	393	168	197	197	492	460	106	113	173	705
2	362	189	315	282	181	346	558	448	177	127	138	468
3	282	314	288	318	170	412	2,140	368	496	106	136	267
4	253	297	396	253	440	787	1,620	309	270	89	127	*233
5	221	238	575	208	351	639	976	270	205	75	131	235
6	191	227	800	180	238	1,130	705	247	178	78	138	250
7	176	244	556	150	186	2,010	620	253	186	112	146	168
8	165	247	416	130	168	817	538	256	150	90	136	136
9	165	357	379	115	163	524	583	238	141	77	158	131
10	173	468	330	105	202	456	556	216	129	78	158	115
11	173	404	297	95	216	390	650	200	115	688	148	111
12	148	327	270	90	173	386	606	210	113	404	134	95
13	138	282	264	85	262	337	508	258	163	300	120	85
14	155	270	264	80	341	285	*428	273	222	337	122	85
15	155	279	256	85	684	285	393	210	238	484	111	100
16	*148	288	244	200	432	546	362	202	183	432	104	115
17	155	247	233	350	300	504	337	200	163	309	109	100
18	155	*235	230	250	334	432	321	181	202	241	113	93
19	148	247	224	200	379	379	330	170	219	197	111	77
20	143	233	219	180	250	614	416	168	216	1,020	104	77
21	143	227	219	350	233	940	396	*173	183	2,220	104	83
22	131	244	208	1,200	261	1,000	340	208	146	1,630	138	89
23	256	219	197	700	227	640	285	108	*181	1,040	81	85
24	343	210	194	500	205	424	268	64	150	740	85	81
25	264	194	178	350	191	432	269	124	141	574	109	71
26	279	221	176	300	183	404	297	122	138	464	83	64
27	348	227	176	290	181	428	312	118	143	368	75	61
28	306	208	168	270	173	440	416	111	118	*258	75	64
29	279	1,050	178	*230	-	365	537	102	124	221	234	84
30	244	714	183	276	------	303	484	104	124	205	779	205
31	216	------	186	250	------	400	------	104	------	176	906	------
Total	6,685	9,115	9,012	8,240	7,321	17,252	16,743	6,475	5,320	13,253	5,286	4,533
Mean	216	304	291	266	261	557	558	209	177	428	171	151
(†)	2.07	21.8	16.5	17.4	20.7	9.65	4.31	8.39	25.6	23.5	20.6	21.0
Adjusted for diversion												
Mean	195	282	274	248	241	547	554	200	152	404	150	130
Cfsm	1.40	2.03	1.97	1.78	1.73	3.94	3.99	1.44	1.09	2.91	1.08	0.935
In.	1.62	2.26	2.27	2.06	1.80	4.54	4.45	1.66	1.22	3.35	1.24	1.04

	Observed			Adjusted		
Calendar year 1958:	Max 2,080	Min 59	Mean 354	Mean 338	Cfsm 2.43	In. 32.94
Water year 1958-59:	Max 2,220	Min 61	Mean 299	Mean 282	Cfsm 2.03	In. 27.51

* Discharge measurement made on this day.
† Diversion from Nashua River basin to Blackstone River basin for municipal supply of Worcester, equivalent in cubic feet per second. Records furnished by city of Worcester.
Note.--No gage-height record Jan. 6-28; discharge estimated on basis of weather records, recorded range in stage, and records for Kettle Brook at Worcester and Blackstone River at Woonsocket, R. I. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

1115. Branch River at Forestdale, R. I.

Location.--Lat 41°59'47", long 71°33'47", on left bank 20 ft upstream from abandoned bridge, 400 ft downstream from milldam at Forestdale, Providence County, 1 mile east of Slatersville, and 1.6 miles upstream from mouth.

Drainage area.--93.3 sq mi.

Records available.--September to December 1909 and January 1912 to July 1913 (gage heights only), January 1940 to September 1959. Published as "at Branch Village" 1909, 1912-13.

Gage.--Water-stage recorder. Altitude of gage is 180 ft (from topographic map). Prior to July 28, 1913, staff gage at site 1 mile downstream at different datum.

Average discharge.--19 years, 163 cfs.

Extremes.--Maximum discharge during year, 1,640 cfs May 7 (gage height, 6.68 ft); minimum daily, 34 cfs Aug. 15, 16.

1940-59: Maximum discharge, 4,240 cfs Aug. 19, 1955 (gage height, 10.52 ft), from rating curve extended above 2,100 cfs on basis of computation of peak flow over dam 400 ft above station; minimum daily, 5.2 cfs Oct. 7, 1948.

Maximum discharge known since at least 1886, about 5,800 cfs Mar. 19, 1936, by computation of flow over dam 1 mile above station.

Remarks.--Records excellent. Flow regulated by mills and reservoirs above station.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

1.9	29	3.0	198
2.0	38	4.0	490
2.4	82	6.0	1,300

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	180	105	182	115	105	178	463	285	61	60	68	54
2	200	98	145	179	92	369	449	291	113	59	55	53
3	166	128	126	221	85	341	1,270	250	238	60	52	53
4	137	147	162	182	168	430	950	223	236	60	50	53
5	119	137	274	153	223	407	694	198	203	54	51	52
6	103	131	344	126	153	615	560	180	59	48	50	52
7	96	115	258	110	120	1,210	490	171	101	48	49	51
8	90	106	200	100	110	556	423	164	95	45	47	51
9	98	126	182	95	102	407	394	157	*81	35	48	45
10	87	180	164	82	145	357	376	149	72	39	51	41
11	79	193	147	74	177	268	436	147	60	214	50	46
12	69	166	143	68	141	258	423	145	57	279	47	46
13	69	145	137	67	173	233	366	145	58	179	41	46
14	69	*135	129	71	261	221	329	198	75	145	38	45
15	69	131	131	71	382	216	*302	186	99	214	34	44
16	69	126	131	92	299	369	282	157	104	317	34	47
17	*61	124	128	171	226	*459	262	143	91	238	36	46
18	58	124	*126	124	259	385	238	134	99	182	38	45
19	61	120	124	98	385	320	223	130	117	155	51	45
20	52	119	126	88	231	363	253	126	119	200	57	46
21	58	113	122	114	175	490	279	123	110	484	55	47
22	71	108	110	329	151	592	253	113	92	476	52	46
23	96	124	119	245	141	440	233	98	101	285	52	46
24	162	126	124	157	139	372	210	90	141	203	52	46
25	143	105	124	129	131	348	189	*87	178	157	52	47
26	137	96	115	119	128	326	173	79	48	135	51	46
27	175	98	110	*110	124	335	193	79	42	115	*51	46
28	166	99	108	103	124	308	274	72	52	*101	51	47
29	143	277	108	98	-	288	314	63	43	95	52	47
30	120	279	110	106	-------	293	314	61	69	84	57	46
31	113	-------	120	122	-------	360	-------	57	-------	79	59	-------
Total	3,296	4,081	4,629	3,919	4,950	12,114	11,615	4,501	3,014	4,845	1,531	1,425
Mean	106	136	149	126	117	391	387	145	100	156	49.4	47.5
Cfsm	1.14	1.46	1.60	1.35	1.90	4.19	4.15	1.55	1.07	1.67	0.529	0.509
In.	1.31	1.63	1.85	1.56	1.97	4.83	4.63	1.79	1.20	1.93	0.61	0.57

Calendar year 1958: Max 1,300 Min 27 Mean 211 Cfsm 2.26 In. 30.71
Water year 1958-59: Max 1,270 Min 34 Mean 164 Cfsm 1.76 In. 23.88

Peak discharge (base, 880 cfs).--Mar. 7 (4 to 5 a.m.) 1,640 cfs (6.68 ft); Apr. 3 (1:30, 3 p.m.) 1,580 cfs (6.56 ft).

* Discharge measurement made on this day.

Note.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

1125. Blackstone River at Woonsocket, R. I.

Location.--Lat 42°00'22", long 71°30'13", on right bank at Woonsocket, Providence County, 50 ft downstream from Peters River.

Drainage area.--416 sq mi.

Records available.--February 1929 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 107.42 ft above mean sea level, datum of 1929.

Average discharge.--30 years, 720 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 5,390 cfs Apr. 3 (gage height, 7.71 ft); minimum daily, 182 cfs Sept. 28.

1929-59: Maximum discharge, 32,900 cfs Aug. 19, 1955 (gage height, 21.8 ft, from floodmarks), from rating curve extended above 15,000 cfs on basis of slope-area measurement of peak flow, affected by failure of Horseshoe Dam on Mill River; minimum daily, 21 cfs Aug. 11, 1934, flow diverted around station in Hamlet Trench not included.

Maximum stage known since at least 1645, that of Aug. 19, 1955.

Remarks.--Records good except those for period of ice effect, which are fair. Flow regulated by powerplants and reservoirs above station. Extremes and figures of daily discharge include flow diverted from Nashua River basin to Blackstone River basin for supply of city of Worcester, Mass., and flow diverted around station in Hamlet Trench.

Revisions (water years).--WSP 756: Drainage area. WSP 781: 1931(M). WSP 1051: 1931.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from aquatic vegetation Aug. 18-29)

1.6	163	4.0	1,460
2.0	284	6.0	3,760
2.5	488	8.0	5,760
3.0	755		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	733	470	1,120	494	508	626	1,560	1,440	254	312	432	978
2	917	417	860	677	476	1,240	1,680	1,370	383	326	342	886
3	811	497	749	s93	476	1,390	3,880	1,310	978	342	308	631
4	617	777	840	s34	676	1,680	4,640	1,070	1,040	280	338	527
5	504	594	1,210	641	1,080	2,000	3,370	993	780	234	334	454
6	476	525	1,590	b560	737	2,380	2,510	882	491	216	338	398
7	436	492	1,410	b500	546	4,730	2,150	823	468	213	306	361
8	402	484	1,190	b460	480	2,980	1,890	799	433	222	312	315
9	394	517	1,050	b430	490	1,820	1,720	781	411	199	304	304
10	353	872	847	b405	606	1,460	1,770	761	358	191	319	312
11	345	962	767	b380	713	1,220	1,800	679	323	774	315	280
12	304	833	743	b365	586	1,120	1,900	679	288	1,380	304	263
13	353	694	653	b355	621	1,080	1,680	667	268	779	287	237
14	365	620	689	b355	935	978	1,480	805	374	669	259	234
15	349	580	611	b350	1,380	894	1,420	739	473	900	253	222
16	357	561	659	b420	1,470	1,310	1,220	623	536	1,270	222	266
17	*357	571	*647	860	1,030	*1,770	1,190	563	462	1,120	216	270
18	311	596	611	749	1,060	1,600	1,010	558	485	731	231	247
19	272	566	601	536	1,470	1,330	1,030	553	546	581	247	237
20	330	*541	576	462	1,000	1,420	1,100	543	556	920	244	210
21	338	532	503	574	768	1,970	1,380	529	476	2,630	244	210
22	319	490	541	1,570	648	2,460	1,190	*482	406	3,300	244	219
23	431	467	581	1,900	617	2,160	1,070	456	445	2,280	237	222
24	746	494	561	1,070	612	1,610	1,030	351	*480	1,590	213	225
25	686	499	522	854	572	1,390	856	340	518	1,170	234	222
26	692	467	494	683	542	1,330	868	367	361	977	240	205
27	764	472	454	*653	523	1,310	909	355	322	767	*222	191
28	818	470	513	596	500	1,270	1,240	344	304	665	210	182
29	746	1,100	571	551	-	1,190	1,440	317	280	546	250	199
30	662	1,590	518	556	-------	1,120	1,560	282	330	494	630	297
31	574	-------	546	611	-------	1,220	-------	260	-------	476	970	-------
Total	15,762	18,750	23,227	20,344	21,122	50,058	50,543	20,741	13,849	26,574	9,605	9,804
Mean	508	625	749	656	754	1,615	1,685	669	462	857	310	327
(†)	20.7	21.8	16.5	17.4	20.7	9.65	4.31	8.39	25.6	23.5	20.6	21.0
Adjusted for diversion												
Mean	488	603	733	639	734	1,605	1,680	661	436	834	289	306
Cfsm	1.17	1.45	1.76	1.54	1.76	3.86	4.04	1.59	1.05	2.00	0.695	0.736
In.	1.35	1.62	2.03	1.77	1.84	4.45	4.51	1.83	1.17	2.31	0.80	0.82

	Observed			Adjusted			
Calendar year 1958:	Max 4,780	Min 151	Mean 959	Mean 943	Cfsm 2.27	In. 30.76	
Water year 1958-59:	Max 4,730	Min 182	Mean 768	Mean 751	Cfsm 1.81	In. 24.50	

Peak discharge (base, 3,400 cfs).--Mar. 7 (10 a.m. to 12 m.) 5,210 cfs (7.57 ft); Apr. 3 (10 to 11 p.m.) 5,390 cfs (7.71 ft); July 22 (12:30 a.m.) 3,740 cfs (6.35 ft).

* Discharge measurement made on this day.
† Diversion, equivalent in cubic feet per second, from Nashua River basin for municipal supply of Worcester, Mass. Records furnished by city of Worcester.
b Stage-discharge relation affected by ice.

1145. Woonasquatucket River at Centerdale, R. I.

Location.--Lat 41°51'32", long 71°29'16", on right bank 75 ft downstream from bridge on U. S. Highway 44, at Centerdale, Providence County, and 6½ miles upstream from mouth.

Drainage area.--38.3 sq mi.

Records available.--July 1941 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 95 ft (from topographic map).

Average discharge.--18 years, 69.4 cfs.

Extremes.--Maximum discharge during year, 580 cfs Mar. 6 (gage height, 5.16 ft); minimum daily, 21 cfs Sept. 27.
1941-59: Maximum discharge, 1,100 cfs Sept. 11, 1954 (gage height, 7.03 ft), minimum daily, 3.4 cfs Oct. 13, 19, 1941.
Flood in March 1936 reached a discharge of 1,000 cfs, by computation of flow over dam three-quarters of a mile below station.

Remarks.--Records good. Flow regulated by mills and reservoirs above station. Discharge includes leakage through bypass canal.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	31	47	39	44	96	156	143	32	33	36	45
2	55	29	43	94	48	166	164	133	43	34	31	36
3	44	43	37	80	43	174	319	121	76	32	34	34
4	35	43	55	66	66	*206	304	110	69	29	34	32
5	32	38	65	59	63	187	261	98	62	26	32	30
6	36	36	58	51	53	341	225	90	53	29	34	28
7	35	34	52	48	44	405	189	83	53	34	32	27
8	32	31	51	47	44	293	171	89	52	30	30	29
9	31	33	49	45	50	225	156	75	*42	29	30	29
10	31	45	46	41	93	191	152	47	36	28	32	30
11	26	43	42	43	84	157	175	56	32	107	33	29
12	22	44	42	46	63	156	171	59	31	91	32	28
13	*24	40	38	44	78	153	159	63	39	92	30	27
14	29	38	38	43	82	131	142	78	51	86	30	27
15	31	33	45	42	123	126	*127	73	58	155	28	28
16	29	32	43	53	90	189	117	64	50	167	26	30
17	28	37	40	54	78	204	109	63	44	139	26	26
18	26	38	*40	47	90	191	97	*72	48	109	28	24
19	23	36	39	50	120	172	95	80	50	88	27	24
20	26	34	36	46	114	169	106	50	46	87	27	22
21	31	34	36	58	101	175	109	46	43	*137	27	24
22	30	31	40	83	90	193	105	53	47	112	26	26
23	46	30	39	64	84	175	98	50	50	98	25	26
24	44	*34	34	49	77	159	92	52	44	94	26	26
25	35	35	33	49	68	143	84	58	42	76	27	26
26	33	33	37	53	63	133	83	50	42	62	26	25
27	42	30	32	47	64	135	93	43	37	57	25	21
28	41	34	31	48	56	130	109	44	34	50	*24	22
29	38	64	33	46	-	122	134	42	39	43	54	25
30	36	52	38	*50	--------	125	131	39	36	42	45	27
31	33	--------	36	44	--------	151	--------	31	--------	41	50	--------
Total	1,061	1,115	1,295	1,629	2,073	5,573	4,433	2,155	1,381	2,237	967	835
Mean	34.2	37.2	41.8	52.5	74.0	180	148	69.5	46.0	72.2	31.2	27.8
Cfsm	0.893	0.971	1.09	1.37	1.93	4.70	3.86	1.81	1.20	1.89	0.815	0.726
In.	1.03	1.08	1.26	1.58	2.01	5.41	4.30	2.09	1.34	2.17	0.94	0.81

Calendar year 1958: Max 476 Min 22 Mean 88.9 Cfsm 2.32 In. 31.53
Water year 1958-59: Max 405 Min 21 Mean 67.8 Cfsm 1.77 In. 24.02

* Discharge measurement made on this day.
Note.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

1160. South Branch Pawtuxet River at Washington, R. I.

Location.--Lat 41°41'24", long 71°33'59", on right bank 150 ft downstream from highway bridge at Washington, Kent County, and 0.9 mile upstream from outlet of Tiogue Lake.

Drainage area.--63.8 sq mi.

Records available.--October 1940 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 230 ft (from topographic map).

Average discharge.--19 years, 129 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 602 cfs Mar. 7; maximum gage height, 3.20 ft Jan. 7 (backwater from ice); minimum daily discharge, 9.4 cfs Sept. 27.
1940-59: Maximum discharge, 1,320 cfs Sept. 12, 1954 (gage height, 4.11 ft); minimum daily, 2.8 cfs Aug. 27, 1944.
Flood in March 1936 reached a discharge of 1,810 cfs, by computation of flow over dam just above gage.

Remarks.--Records good. Flow regulated by Flat River Reservoir (usable capacity, 250,000,000 cu ft) and smaller reservoirs. Diversion above station from Carr Pond for municipal supply of Coventry, Warwick, and West Warwick.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Jan. 6, 7)

1.2	6.2	1.8	96
1.3	12	2.0	175
1.4	20	3.0	885
1.6	49		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	216	64	149	51	41	92	248	197	114	101	18	84
2	214	24	157	157	111	162	248	202	99	94	19	75
3	206	194	162	166	128	157	313	197	114	85	99	75
4	47	229	166	162	144	*166	425	191	126	28	86	70
5	24	229	175	153	140	162	404	175	139	32	101	13
6	192	229	171	130	139	226	361	175	61	85	111	10
7	229	218	162	210	39	551	341	171	67	84	80	11
8	229	48	162	202	30	468	307	165	115	87	17	117
9	224	24	162	197	76	347	287	91	105	94	54	65
10	224	178	162	152	123	293	280	85	*93	84	134	64
11	61	213	162	57	207	261	287	113	79	172	70	57
12	16	213	162	91	213	248	293	99	80	197	72	12
13	*26	*207	162	79	213	248	287	*112	28	255	67	10
14	192	202	157	78	180	242	274	174	92	213	15	121
15	207	41	157	76	80	242	267	154	175	229	11	69
16	207	21	157	91	94	261	261	43	166	261	11	71
17	196	136	157	32	142	280	*255	70	135	242	126	59
18	34	166	153	27	162	300	248	157	118	202	82	70
19	17	166	143	89	166	280	235	186	117	166	67	12
20	139	166	28	78	161	267	175	155	80	*153	66	10
21	140	162	37	78	171	261	171	113	88	140	69	104
22	116	34	*140	85	166	274	180	95	131	144	12	74
23	140	18	157	70	166	274	235	24	135	144	11	73
24	149	155	126	35	166	261	235	38	124	131	92	71
25	51	197	44	35	124	248	235	122	128	83	77	66
26	45	191	128	90	120	242	208	92	123	72	76	11
27	197	47	60	92	117	248	149	89	67	107	65	9.4
28	213	131	44	103	65	248	157	94	88	94	*75	73
29	213	56	126	82	-	242	162	81	93	90	14	59
30	213	39	144	*98	-------	242	162	22	131	82	13	33
31	224	-------	141	44	-------	248	-------	29	-------	82	127	-------
Total	4,601	3,998	4,213	3,090	3,684	8,041	7,690	3,711	3,211	4,033	1,937	1,648.4
Mean	148	133	136	99.7	132	259	256	120	107	130	62.5	54.9
(†)	-10.8	-1.39	-18.3	+11.4	+11.2	+21.2	+3.32	+6.35	+3.94	-3.10	-22.3	-24.0

Adjusted for diversion and change in reservoir contents

Mean	138	132	118	111	143	281	260	126	111	127	40.2	31.0
Cfsm	2.16	2.07	1.85	1.74	2.24	4.40	4.08	1.97	1.74	1.99	0.630	0.486
In.	2.49	2.31	2.13	2.01	2.33	5.07	4.54	2.28	1.94	2.29	0.73	0.54

	Observed			Adjusted			
Calendar year 1958:	Max 730	Min 16	Mean 189	Mean 187	Cfsm 2.93	In. 39.80	
Water year 1958-59:	Max 551	Min 9.4	Mean 137	Mean 135	Cfsm 2.12	In. 28.66	

* Discharge measurement made on this day.
† Diversion above station from Carr Pond for municipal supply of Coventry, Warwick, and West Warwick, and change in contents in Flat River Reservoir, equivalent in cubic feet per second; records furnished by Kent County Water Authority and Quidnick Reservoir Co.

1165. Pawtuxet River at Cranston, R. I.

Location.--Lat 41°45'03", long 71°26'44", on left bank at Cranston, Providence County, 0.7 mile upstream from Pocasset River.

Drainage area.--200 sq mi.

Records available.--December 1939 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 10 ft (from topographic map).

Average discharge.--19 years (1940-59), 401 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 1,770 cfs Mar. 6, 7 (gage height, 7.60 ft); minimum daily, 58 cfs Sept. 20.
1939-59: Maximum discharge, 2,090 cfs Nov. 6, 1955 (gage height, 9.10 ft); minimum daily, 22 cfs Sept. 4, 1944.

Remarks.--Records good. Flow regulated by powerplants and by Scituate, Flat River, and other reservoirs (combined usable capacity, about 5 1/3 billion cubic feet). Diversion above station from Scituate Reservoir for municipal supply of Providence, North Providence, Cranston, Johnston, Smithfield, and Warwick.

Revisions (water years).--WSP 971: 1940-42. WSP 1381: 1940-41(M).

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	692	321	317	208	107	229	670	510	151	231	242	273
2	934	125	460	501	223	685	650	388	207	195	138	198
3	670	350	455	428	320	490	988	320	281	191	134	195
4	332	585	520	281	505	535	1,050	422	266	149	234	191
5	131	560	590	324	455	490	1,030	430	244	113	220	155
6	312	545	415	500	377	913	960	377	188	110	273	80
7	590	530	300	550	228	1,390	890	359	152	188	244	70
8	605	284	396	470	110	985	820	354	211	191	207	96
9	570	140	455	450	198	*790	785	238	231	201	152	*198
10	540	337	450	324	575	690	765	185	201	191	223	155
11	288	391	425	170	630	595	825	273	198	675	266	161
12	95	481	425	260	515	650	820	316	198	440	227	119
13	64	540	300	310	595	650	800	*326	170	505	231	68
14	246	535	251	301	470	600	745	425	191	505	161	80
15	505	321	372	304	382	500	720	365	304	805	101	191
16	505	122	401	328	368	785	705	202	292	775	80	173
17	505	258	410	254	368	1,010	*685	134	266	740	124	161
18	222	440	406	131	455	924	630	288	248	401	270	146
19	70	475	410	230	500	840	401	296	251	296	244	128
20	182	440	258	308	360	790	500	341	188	410	220	58
21	*388	440	116	364	322	760	535	258	167	430	224	80
22	341	262	247	455	262	900	515	234	234	445	164	176
23	582	116	396	368	357	820	530	167	270	401	88	161
24	630	*234	372	200	406	760	560	113	256	368	118	170
25	290	450	200	131	354	730	440	203	220	308	201	161
26	173	470	171	237	341	710	346	204	284	185	179	125
27	475	253	230	312	337	720	406	201	195	257	182	62
28	605	267	110	300	233	685	460	204	170	292	179	95
29	585	465	254	312	-	410	510	207	308	277	155	211
30	555	211	382	*292	--------	525	470	140	251	*272	110	198
31	530	--------	382	200	--------	670	--------	107	--------	273	134	--------
Total	13,212	10,948	10,876	9,803	10,353	22,211	20,211	8,587	6,793	10,820	5,725	4,335
Mean	426	365	351	316	370	716	674	277	226	349	185	144
(†)	+64.7	+57.1	+16.2	+44.1	+131	+288	+141	+55.1	+68.5	+89.6	-75.2	-65.9
Adjusted for diversion and change in reservoir contents												
Mean	491	422	367	360	500	1,004	815	332	295	439	109	78.6
Cfsm	2.46	2.11	1.84	1.80	2.50	5.02	4.08	1.66	1.48	2.20	0.545	0.393
In.	2.83	2.35	2.12	2.08	2.61	5.79	4.55	1.91	1.65	2.53	0.63	0.44

	Observed			Adjusted			
Calendar year 1958:	Max 1,630	Min 50	Mean 499	Mean 599	Cfsm 3.00	In. 40.64	
Water year 1958-59:	Max 1,390	Min 58	Mean 367	Mean 434	Cfsm 2.17	In. 29.49	

* Discharge measurement made on this day.
† Diversion above station from Scituate Reservoir for municipal supply of Providence, North Providence, Cranston, Johnston, Smithfield, and Warwick, and change in contents in Scituate and Flat River Reservoirs, equivalent in cubic feet per second. Records furnished by Providence Water Supply Board and Quidnick Reservoir Co.

1170. Potowomut River near East Greenwich, R. I.

Location.--Lat 41°38'28", long 71°26'45", on right bank 45 ft upstream from Old Forge Dam in North Kingstown, Washington County, 1½ miles south of village of East Greenwich, Kent County, and 2½ miles upstream from mouth.

Drainage area.--23.0 sq mi.

Records available.--August 1940 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 10 ft (from topographic map).

Average discharge.--19 years, 43.3 cfs (unadjusted).

Extremes.--Maximum discharge during year, 375 cfs Mar. 6 (gage height, 2.42 ft); minimum, 3.1 cfs about Sept. 29.

1940-59: Maximum discharge, 450 cfs Sept. 12, 1954 (gage height, 2.63 ft); maximum gage height, 6.78 ft Aug. 31, 1954 (backwater from hurricane tidal wave); no flow Oct. 24-26, 1947 (due to closing of gage at Old Forge Dam).

Maximum stage known, about 8.5 ft Sept. 21, 1938, from information by local resident (backwater from hurricane tidal wave).

Revisions.--The minimum discharge for the water year 1958 has been revised to 0.8 cfs Oct. 2, 3, 1957 (gage height, 1.05 ft), superseding figure published in WSP 1551.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Diversions above station for supply of East Greenwich, North Kingstown, Warwick, and U. S. Naval establishments.

Revisions.--Revised figures of discharge, in cubic feet per second, for water years 1957 and 1958, superseding those published in WSP 1501 and 1551, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1957		1957-Con.		1957-Con.		1957-Con.		1957-Con.	
June 10	14	July 18	2.8	Aug. 27	5.6	Oct. 1	1.8	Nov. 7	7.4
11	13	19	2.8	28	4.4	2	1.5	8	7.2
15	11	20	2.4	29	3.6	3	1.5	9	13
16	10	21	2.4	30	3.5	4	3.5	10	11
17	8.0	22	2.4	31	4.7	5	4.3	11	8.0
18	7.0	23	1.9	Sept. 1	4.3	6	4.6	12	7.0
19	7.0	24	1.1	2	3.9	7	7.4	13	5.8
20	6.4	25	1.6	3	2.4	8	9.6	14	5.1
21	6.0	28	19	4	1.9	9	6.7	15	15
22	5.1	29	11	5	1.9	10	5.8	16	14
23	5.1	30	9.6	6	1.6	11	4.7	17	11
24	5.1	31	8.5	7	2.1	12	5.0	18	8.4
25	5.1	Aug. 1	7.0	8	3.9	13	7.0	19	11
26	5.1	2	6.0	9	3.2	14	6.0	20	15
27	4.7	3	5.1	10	1.8	15	4.9	21	12
28	4.7	4	6.4	11	1.8	16	7.1	22	10
29	4.3	5	5.6	12	2.3	17	9.6	23	9.0
30	3.9	6	4.7	13	1.7	18	11	24	8.5
July 1	3.5	7	4.3	14	2.2	20	23	25	8.5
2	3.0	8	3.9	15	2.8	21	17	26	7.0
3	3.4	9	3.9	16	2.1	22	12	27	7.4
4	4.3	10	5.1	17	1.9	23	11	28	7.6
5	3.5	11	6.4	18	1.6	24	12	29	8.0
6	3.5	12	6.0	19	1.7	26	17	30	11
7	3.1	13	4.8	20	1.5	27	14	Dec. 1	17
8	3.1	14	4.7	21	2.0	28	11	2	12
9	4.7	15	4.3	22	3.1	29	9.9	3	11
10	3.6	16	5.4	23	3.2	30	9.5	4	9.6
11	2.6	17	6.0	24	2.4	31	8.9	5	10
12	2.6	18	5.6	25	3.3	Nov. 1	7.2	6	9.0
13	3.8	19	3.8	26	3.1	2	14	7	10
14	4.7	20	2.6	27	3.1	3	24	8	12
15	2.9	23	2.1	28	3.1	4	18		
16	2.5	25	5.1	29	3.1	5	11		
17	3.1	26	6.4	30	2.8	6	10		

Month	Cfs-days	Maximum	Minimum	Mean
June 1957	323.5	22	3.9	10.8
July	180.4	42	1.1	5.82
August	144.9	7.0	2.1	4.67
September	75.8	4.3	1.5	2.53
Water year 1956-57	-	232	1.1	31.5
October 1957	283.3	23	1.5	9.14
November	312.1	24	5.1	10.4
December	1,040.6	96	9.0	33.6
Calendar year 1957	-	232	1.1	29.3
Water year 1957-58	-	281	1.5	60.1

1170. Potowomut River near East Greenwich, R. I.--Continued

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 6		Mar. 7 to Sept. 30			
1.2	15	1.1	4.3	1.5	68
1.4	49	1.2	15	1.8	154
1.6	99	1.3	30	2.2	298
1.9	191				

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	90	41	57	27	24	74	102	78	23	22	16	21
2	95	40	47	75	21	171	93	78	27	24	16	17
3	60	47	43	88	21	108	157	65	61	22	14	15
4	40	51	58	55	65	*105	138	60	50	22	14	14
5	33	45	83	38	75	94	110	55	35	20	15	11
6	30	42	76	28	45	176	99	49	29	18	16	10
7	27	40	60	26	33	291	93	46	30	18	15	8.5
8	*26	40	49	25	32	157	83	49	26	16	14	8.0
9	26	44	47	25	29	110	83	46	22	14	17	7.4
10	25	57	43	24	88	93	*88	44	*20	15	20	7.4
11	24	59	39	23	120	83	105	43	18	83	18	7.0
12	24	49	38	22	63	83	99	42	19	78	14	6.4
13	22	*43	37	23	68	93	90	*42	29	48	12	6.4
14	21	40	35	23	78	88	78	59	59	37	11	6.0
15	22	40	36	24	111	88	73	51	45	70	11	6.0
16	23	39	35	32	83	154	68	44	35	66	9.0	13
17	25	36	35	52	65	154	65	40	32	47	8.0	16
18	21	37	35	35	66	116	62	39	41	36	6.4	14
19	21	38	35	25	76	93	63	37	43	30	6.4	12
20	20	35	36	25	51	88	80	37	38	*28	6.0	10
21	19	35	31	40	46	88	88	36	31	26	5.6	8.6
22	23	35	*27	70	43	141	78	35	26	23	6.4	8.0
23	44	33	28	50	42	113	67	33	44	21	6.4	7.2
24	86	32	28	34	43	93	61	32	39	18	6.4	6.0
25	61	31	25	30	41	88	58	29	34	18	7.0	5.3
26	61	32	24	29	41	80	56	27	37	18	7.0	4.9
27	78	37	24	29	42	83	60	26	34	16	6.0	4.7
28	67	35	24	23	45	88	73	24	32	14	*6.0	4.6
29	56	89	25	*23	-	83	83	25	30	13	11	4.5
30	48	83	31	28	-------	83	80	26	26	14	25	5.0
31	43	-------	33	28	-------	105	-------	24	-------	14	26	-------
Total	1,259	1,305	1,224	1,079	1,557	3,464	2,533	1,321	1,015	907	371.6	274.9
Mean	40.6	43.5	39.5	34.8	55.6	112	84.4	42.6	33.8	29.3	12.0	9.16
(†)	5.00	4.38	4.64	4.81	5.00	4.68	4.80	5.07	5.13	5.65	5.68	5.30

Calendar year 1958: Max 281 Min 9.9 Mean 66.0 † 4.88
Water year 1958-59: Max 291 Min 4.5 Mean 44.7 † 5.02

Peak discharge (base, 190 cfs).--Mar. 2 (5 to 7 a.m.) 205 cfs (1.94 ft); Mar. 6 (11 to 12 p.m.) 375 cfs (2.42 ft).

* Discharge measurement made on this day.
† Diversions, equivalent in cubic feet per second, for supply of East Greenwich, North Kingstown, Warwick, and U. S. Naval establishments; records furnished by U. S. Navy and Kent County Water Authority.

Note.--No gage-height record Oct. 1-7, Sept. 16-30; discharge estimated on basis of weather records, recorded range in stage, and records for Wood River at Hope Valley. Stage-discharge relation affected by ice Dec. 12 to Feb. 10.

1175. Pawcatuck River at Wood River Junction, R. I.

Location.--Lat 41°26'42", long 71°40'53", on right bank at downstream side of bridge on Alton-Carolina road, 0.8 mile northeast of Wood River Junction, 1½ miles southwest of Carolina, Washington County, and 2.9 miles upstream from Wood River.

Drainage area.--100 sq mi.

Records available.--October 1940 to September 1959. October and November 1940 monthly discharge only, published in WSP 1301. Prior to October 1943, published as Charles River at Wood River Junction.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 40 ft (from topographic map).

Average discharge.--19 years, 187 cfs.

Extremes.--Maximum discharge during year, 596 cfs Mar. 8, 9 (gage height, 4.70 ft); minimum not determined; minimum daily, 44 cfs Sept. 30.
1940-59: Maximum discharge, 1,040 cfs Mar. 17, 1953 (gage height, 5.83 ft); maximum gage height, 6.23 ft Sept. 13, 14, 1954; minimum discharge, 7.4 cfs Oct. 10, 1947; minimum daily, 15 cfs Oct. 11, 1947.

Remarks.--Records excellent except those for periods of no gage-height record, which are fair. Flow regulated by powerplant and mills above station.

Revisions (water years).--WSP 1051: Drainage area. WSP 1201: 1948.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

1.9	40	3.0	265
2.1	66	4.0	461
2.5	139	5.0	664

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	226	226	218	151	144	206	400	296	153	173	107	85
2	260	216	216	211	139	*301	403	301	156	163	112	92
3	265	216	206	244	128	326	444	288	173	151	114	*96
4	265	210	213	247	146	357	468	275	188	128	107	90
5	255	206	247	211	183	351	475	265	188	131	105	84
6	234	203	252	184	188	405	451	247	176	128	112	79
7	208	198	239	186	168	542	417	239	163	128	107	74
8	193	188	239	163	158	590	*391	229	158	118	94	71
9	180	190	223	153	151	573	380	218	139	110	107	68
10	173	213	208	146	188	506	373	213	139	110	135	72
11	158	216	193	141	242	437	386	206	128	188	120	80
12	153	223	183	139	213	395	391	200	120	221	116	85
13	146	213	173	139	239	389	393	198	133	236	105	83
14	146	208	170	139	242	402	377	213	203	236	90	82
15	141	196	176	137	286	415	357	216	218	260	90	83
16	137	193	168	151	283	430	335	213	213	268	90	90
17	135	190	168	176	278	452	317	206	200	265	94	88
18	122	183	170	163	270	470	303	196	*190	249	89	80
19	126	180	*163	156	268	446	291	188	198	226	87	74
20	*133	176	168	146	210	418	296	188	218	203	80	70
21	120	170	168	156	226	395	305	186	218	188	79	66
22	120	161	163	200	203	452	308	180	208	176	60	64
23	147	161	151	206	196	468	305	186	229	168	72	60
24	190	166	149	188	198	466	291	183	229	156	76	54
25	200	153	146	176	190	436	273	176	226	144	76	52
26	226	153	151	168	183	408	260	163	226	141	74	49
27	260	151	128	158	183	393	260	158	218	141	71	47
28	262	156	133	*151	180	393	265	158	210	126	71	46
29	273	198	141	146	-	375	281	151	200	120	75	45
30	265	213	149	151	--------	368	291	158	188	116	82	44
31	247	--------	158	149	--------	389	--------	161	--------	114	85	--------
Total	5,966	5,726	5,630	5,232	5,683	12,954	10,487	6,455	5,606	5,282	2,882	2,153
Mean	192	191	182	169	203	418	350	208	187	170	93.0	71.8
Cfsm	1.92	1.91	1.82	1.69	2.03	4.18	3.50	2.08	1.87	1.70	0.930	0.718
In.	2.22	2.13	2.09	1.95	2.11	4.82	3.90	2.40	2.08	1.96	1.07	0.80

Calendar year 1958: Max 764 Min 71 Mean 277 Cfsm 2.77 In. 37.60
Water year 1958-59: Max 590 Min 44 Mean 203 Cfsm 2.03 In. 27.53

* Discharge measurement made on this day.
Note.--No gage-height record Aug. 29 to Sept. 2, Sept. 10-30; discharge estimated on basis of weather records, recorded range in stage, and records for Wood River at Hope Valley.

1180. Wood River at Hope Valley, R. I.

Location.--Lat 41°29'58", long 71°42'57", on right bank 0.2 mile downstream from highway bridge at Hope Valley, Washington County, and 6.6 miles upstream from mouth.

Drainage area.--72.4 sq mi.

Records available.--August to December 1909 (gage heights only), March 1941 to September 1959. Records of daily discharge for August to December 1909, published in WSP 261, have been found to be unreliable and should not be used.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 65 ft (from topographic map). August to December 1909, staff gage at site 1,000 ft upstream at different datum.

Average discharge.--18 years, 150 cfs.

Extremes.--Maximum discharge during year, 901 cfs Mar. 7 (gage height, 5.58 ft); minimum, 28 cfs Sept. 28-30; minimum daily, 28 cfs Sept. 29, 30.
1941-59: Maximum discharge, 1,470 cfs Sept. 12, 1954 (gage height, 7.45 ft); minimum, 4.4 cfs Oct. 18, 1941; minimum daily, 10 cfs Oct. 13, 1941.
Maximum stage known since 1711, at least 12.4 ft in February 1886.

Remarks.--Records excellent except those for period of no gage-height record, which are fair. Some regulation at low flow by mills and ponds above station; regulation greater prior to 1948.

Revisions (water years).--WSP 1201: 1948(P). See also Records available.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

1.8	23	4.0	512
2.1	56	5.0	750
2.4	105	5.5	880
3.0	265		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a250	176	206	107	99	165	304	254	80	92	80	48
2	a420	165	181	195	90	*273	292	254	81	83	73	59
3	a360	173	165	251	86	248	544	234	132	78	66	59
4	a290	181	178	195	140	257	616	209	151	73	63	62
5	a220	168	240	149	209	265	507	195	119	67	63	55
6	a195	159	248	109	165	416	431	187	103	66	69	48
7	a175	154	220	128	133	789	395	176	99	72	67	42
8	162	144	198	114	128	563	358	173	96	69	63	40
9	154	151	184	105	112	426	333	159	86	63	64	38
10	141	181	165	99	194	356	320	151	78	63	72	38
11	133	184	149	96	287	298	348	149	72	257	70	39
12	121	*170	151	92	209	282	348	149	66	358	64	50
13	114	154	141	94	212	309	330	149	97	276	59	47
14	110	146	131	92	215	296	304	187	220	226	56	41
15	105	141	138	90	276	279	276	178	181	287	52	42
16	105	138	133	105	262	364	282	159	136	304	51	59
17	103	126	128	157	226	441	248	149	116	251	50	56
18	101	128	128	136	220	378	237	144	121	206	48	48
19	96	128	123	112	245	326	229	*141	138	176	46	43
20	94	123	*128	110	182	298	257	144	138	157	44	42
21	92	121	123	123	189	287	282	138	114	146	43	41
22	92	116	112	189	165	351	257	136	105	149	42	40
23	150	110	114	192	149	333	240	146	149	149	40	36
24	290	110	114	154	149	293	215	128	141	138	40	34
25	254	107	107	141	138	268	209	110	126	131	41	33
26	237	107	99	128	133	259	201	103	144	116	41	31
27	298	116	96	116	128	257	203	97	131	103	39	30
28	265	112	97	*107	128	262	226	94	123	96	36	29
29	229	233	97	103	-	245	251	90	116	*88	43	28
30	209	265	105	107	-------	248	262	90	103	80	50	28
31	184	-------	116	110	-------	290	-------	86	-------	76	46	-------
Total	5,749	4,487	4,515	4,006	4,869	10,124	9,285	4,759	3,562	4,496	1,681	1,286
Mean	185	150	146	129	174	327	310	154	119	145	54.2	42.9
Cfsm	2.56	2.07	2.02	1.78	2.40	4.52	4.28	2.13	1.64	2.00	0.749	0.593
In.	2.95	2.30	2.32	2.06	2.50	5.20	4.77	2.44	1.83	2.31	0.86	0.66

Calendar year 1958: Max 750 Min 57 Mean 216 Cfsm 2.98 In. 40.42
Water year 1958-59: Max 789 Min 28 Mean 161 Cfsm 2.22 In. 30.20

Peak discharge (base, 550 cfs).--Mar. 7 (8 to 9 a.m.) 901 cfs (5.58 ft); Apr. 3 (12 p.m.) 683 cfs (4.73 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for Pawcatuck River at Wood River Junction.

1183. Pendleton Hill Brook near Clarks Falls, Conn.

Location.--Lat 41°28'29", long 71°50'05", on left bank just upstream from twin culverts on Grindstone Hill Road, 0.1 mile west of State Highway 49 in township of North Stonington, New London County, 1.6 miles northwest of Clarks Falls, and 3.4 miles northeast of village of North Stonington.

Drainage area.--4.20 sq mi.

Records available.--July 1958 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 152.90 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during year, 116 cfs Mar. 6 (gage height, 3.65 ft); minimum, 0.21 cfs Sept. 27-30 (gage height, 0.73 ft).
1958-59: Maximum discharge, that of Mar. 6, 1959; minimum, that of Sept. 27-30, 1959.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are good.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 6				Mar. 7 to Sept. 30			
1.1	3.3	1.6	13	0.7	0.11	1.4	8.3
1.2	4.6	2.2	32	.8	.54	1.6	13
1.4	8.3	2.8	60	.9	1.2	2.2	32
				1.1	3.2	2.8	60

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	9.4	10	b4.9	b4.1	12	18	a14	2.6	3.8	6.0	1.6
2	*36	8.7	8.5	25	b3.6	19	17	a12	3.6	3.3	3.5	2.2
3	22	10	7.7	19	b3.3	13	60	a10	11	3.1	2.6	1.9
4	16	10	*16	b11	13	17	33	a9	7.3	2.8	2.2	3.9
5	12	9.2	23	b8.1	11	15	24	a8	4.9	2.5	3.2	2.5
6	10	8.5	18	b5.8	7.3	*59	20	a7.5	3.9	2.6	4.6	1.6
7	9.4	8.1	13	5.3	b6.0	48	19	a7	4.2	3.0	3.2	1.1
8	9.0	7.5	11	4.6	5.4	25	17	7.3	3.2	2.5	2.6	*.91
9	8.3	9.0	10	4.5	b4.9	19	*16	7.1	2.6	2.1	4.3	.78
10	7.9	11	8.7	4.0	19	17	16	6.5	2.2	2.7	4.6	.72
11	6.7	10	7.7	3.8	*b17	15	21	6.5	1.9	63	3.5	.66
12	6.0	8.7	7.7	3.7	b9.8	13	18	6.3	1.7	35	2.6	.60
13	5.8	7.7	7.3	4.0	11	20	16	7.1	12	22	2.1	.48
14	5.6	7.3	6.7	4.2	12	18	14	12	20	18	1.9	.43
15	5.4	7.1	6.9	4.2	25	17	12	9.0	*10	30	1.6	.43
16	*5.3	6.9	6.9	8.4	b15	33	12	7.5	6.5	23	1.6	.91
17	5.1	6.7	6.7	11	12	27	10	6.5	5.4	17	1.4	.91
18	4.8	6.7	6.5	b6.1	12	21	9.8	6.0	6.7	12	1.3	.72
19	4.6	a6.5	6.9	b4.8	b13	17	9.6	6.3	9.5	11	1.2	.60
20	4.3	a6.3	6.1	4.8	b9.2	16	14	7.3	9.8	9.6	1.1	.54
21	4.2	6.0	5.4	12	a8.0	16	15	6.3	6.3	8.7	1.0	.48
22	4.2	5.8	b5.1	18	a7.0	26	12	6.5	6.0	*7.9	.91	.43
23	19	5.6	5.1	9.6	a6.0	19	10	7.7	11	6.9	.84	.38
24	23	5.4	5.3	b6.1	a5.5	16	9.6	6.0	7.7	6.1	.84	.33
25	15	5.3	4.8	b6.1	a5.1	14	9.2	5.1	8.7	5.4	1.0	.29
26	16	5.3	4.0	b5.6	a4.6	14	9.0	4.5	9.4	4.6	1.0	.25
27	21	5.4	3.8	b5.1	4.8	14	9.6	4.0	7.3	4.3	.84	.21
28	16	5.7	4.0	b4.8	5.4	14	12	3.8	6.3	3.8	*.66	*.21
29	13	22	4.3	b4.5	-	13	16	3.3	5.8	3.2	.66	.21
30	11	15	6.3	b5.3	-------	14	a12	3.2	4.6	3.1	.66	.21
31	10	-------	6.7	b5.3	-------	21	-------	3.0	-------	3.0	.84	-------
Total	375.6	246.8	250.1	229.6	260.0	622	490.8	216.3	202.1	326.0	64.35	26.49
Mean	12.1	8.23	8.07	7.41	9.29	20.1	16.4	6.98	6.74	10.5	2.08	0.883
Cfsm	2.88	1.96	1.92	1.76	2.21	4.79	3.90	1.66	1.60	2.50	0.495	0.210
In.	3.32	2.19	2.21	2.03	2.30	5.52	4.35	1.91	1.78	2.88	0.57	0.23

Calendar year 1958: Max - Min - Mean - Cfsm - In. -
Water year 1958-59: Max 63 Min 0.21 Mean 9.07 Cfsm 2.16 In. 29.29

Peak discharge (base, 70 cfs).--Mar. 6 (4 to 5 p.m.) 116 cfs (3.65 ft); Apr. 3 (4 a.m.) 81 cfs (3.13 ft); July 11 (6 to 7 a.m.) 108 cfs (3.56 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and recorded range in stage.
b Stage-discharge relation affected by ice.

1185. Pawcatuck River at Westerly, R. I.

Location.--Lat 41°23'01", long 71°50'01", on left bank at Westerly, Washington County, 2.1 miles downstream from Shunock River.

Drainage area.--295 sq mi.

Records available.--November 1940 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is at mean sea level (from topographic map).

Average discharge.--19 years, 563 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 2,030 cfs Mar. 7 (gage height, 6.89 ft); minimum daily discharge, 82 cfs Aug. 28.

1940-59: Maximum discharge, 3,510 cfs Mar. 16, 1953 (gage height, 8.83 ft): maximum gage height, 12.16 ft Aug. 31, 1954 (backwater from tide); minimum daily discharge, 25 cfs Aug. 17, 1941.

Flood in March 1936 reached a discharge of 3,150 cfs, by computation of flow over dam 1½ miles upstream from station. Maximum discharge known since 1886 occurred in November 1927 and was possibly more than twice that of March 1936. Maximum stage known since at least 1635, 15.0 ft Sept. 21, 1938 (due to hurricane tidal wave).

Remarks.--Records good. Regulation at low flow by mills above station. Diversion above station for municipal supply of Westerly.

Revisions.--WSP 1051: Drainage area.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	836	705	803	492	390	570	1,190	866	315	468	340	202
2	1,390	656	698	740	366	*943	1,180	838	320	420	330	240
3	1,340	656	656	1,030	340	990	1,590	803	432	366	305	*245
4	1,150	649	719	936	438	1,030	1,770	761	486	335	290	235
5	974	628	958	726	588	1,080	1,730	684	480	325	300	215
6	845	594	982	570	588	1,350	1,610	642	426	320	350	194
7	733	564	922	630	522	1,990	1,460	614	390	280	340	194
8	670	528	852	620	462	1,960	*1,320	600	372	280	285	146
9	614	534	789	552	438	1,840	1,220	570	360	295	320	130
10	582	628	726	492	663	1,620	1,180	540	325	290	384	158
11	504	656	663	408	958	1,420	1,220	528	290	990	396	142
12	486	*649	635	396	845	1,270	1,260	504	260	1,440	345	124
13	468	607	607	396	747	1,250	1,250	510	355	1,310	280	124
14	456	576	576	372	796	1,220	1,130	576	677	1,130	270	146
15	432	552	588	384	1,040	1,200	1,060	607	747	1,210	260	150
16	426	540	588	438	1,090	1,340	966	564	635	1,280	235	109
17	408	540	576	552	936	1,530	915	540	*540	1,170	235	134
18	378	522	564	528	859	1,500	838	522	*516	998	235	138
19	360	510	552	474	894	1,390	796	*486	528	866	225	134
20	396	510	552	432	768	1,270	845	492	607	768	198	127
21	355	486	550	468	670	1,200	915	468	576	733	198	121
22	345	456	520	621	621	1,390	901	456	522	628	194	124
23	*504	450	504	698	582	1,460	831	450	635	588	182	115
24	887	462	486	607	582	1,360	775	450	663	552	170	115
25	908	462	470	546	540	1,260	705	444	614	504	186	115
26	880	450	450	516	522	1,170	684	408	614	462	220	112
27	936	402	432	474	498	1,120	677	384	594	438	201	106
28	958	438	420	*438	498	1,120	726	345	564	420	82	109
29	901	663	420	420	-	1,070	803	330	540	*340	88	103
30	838	824	468	426	--------	1,040	845	335	504	345	103	100
31	761	--------	522	426	--------	1,130	--------	335	--------	350	124	--------
Total	21,721	16,897	19,248	16,808	18,241	40,083	32,392	16,652	14,887	19,901	7,671	4,407
Mean	701	563	621	542	651	1,293	1,080	537	496	642	247	147
(†)	2.54	2.45	2.56	2.59	2.70	2.65	2.71	2.95	2.98	3.43	3.56	3.07

Adjusted for diversion

Mean	703	566	623	545	654	1,296	1,082	540	499	645	251	150
Cfsm	2.38	1.92	2.11	1.85	2.22	4.39	3.67	1.83	1.69	2.19	0.851	0.508
In.	2.75	2.14	2.44	2.13	2.31	5.06	4.09	2.11	1.89	2.52	0.98	0.57

	Observed			Adjusted			
Calendar year 1958:	Max 2,380	Min 247	Mean 848	Mean 851	Cfsm 2.88	In. 39.16	
Water year 1958-59:	Max 1,990	Min 82	Mean 627	Mean 630	Cfsm 2.14	In. 28.99	

* Discharge measurement made on this day.

† Diversion, equivalent in cubic feet per second, for municipal supply of Westerly; records furnished by Westerly Board of Water Commissioners.

1190. Great Brook at Poquonock Bridge, Conn.

Location.--Lat 41°20'57", long 72°02'17", in midchannel on upstream side of weir-gate structure, 800 ft downstream from Groton Reservoir dam, a quarter of a mile upstream from bridge on U. S. Highway 1 at head of Poquonock River, a quarter of a mile northwest of Poquonock Bridge, New London County, and 2.3 miles east of Groton.

Drainage area.--14.3 sq mi.

Records available.--January 1946 to September 1959.

Gage.--Point gage above three sharp-crested weirs; gage read three times daily. Venturi meters at filter plant to measure diversion and wash water. Staff gages on Groton, Pohegnut and Ledyard Reservoirs and Smith Lake to determine changes in contents. Datum of point gage is 2.78 ft above mean sea level, datum of 1929.

Average discharge.--13 years, 26.9 cfs.

Extremes.--1946-59: Maximum discharge, 464 cfs (300 mgd) 1 a.m. Sept. 12, 1954 (gage height, 5.1 ft, from floodmarks), uncorrected for storage and diversion.

Remarks.--Records adjusted for change in contents in Groton, Pohegnut and Ledyard Reservoirs and Smith Lake, and for diversion for water supply of the borough of Groton.

Cooperation.--Venturi-meter records and gage readings furnished by the borough of Groton, Department of Utilities.

Monthly discharge, water year October 1958 to September 1959

Month	Runoff (millions of gallons)	Mean		Discharge per square mile		Runoff in inches
		Millions of gallons per day	Cubic feet per second	Millions of gallons per day	Cubic feet per second	
October	931.8	30.1	46.6	2.10	3.25	3.75
November	567.3	18.9	29.2	1.32	2.04	2.28
December	572.0	18.5	28.6	1.29	2.00	2.31
Calendar year 1958	9,108.3	25.0	38.7	1.75	2.71	36.66
January	491.2	15.8	24.4	1.10	1.70	1.96
February	565.3	20.2	31.2	1.41	2.18	2.27
March	1,092.6	35.2	54.5	2.46	3.81	4.39
April	962.2	32.1	49.7	2.24	3.47	3.87
May	421.0	13.6	21.0	.951	1.47	1.70
June	437.9	14.6	22.6	1.02	1.58	1.76
July	527.1	17.0	26.3	1.19	1.84	2.12
August	146.3	4.72	7.30	.330	.511	.59
September	122.7	4.09	6.33	.286	.442	.49
Water year 1958-59	6,837.4	18.7	28.9	1.31	2.03	27.49

1195. Willimantic River near South Coventry, Conn.

Location.--Lat 41°45'02", long 72°15'58", on left bank 700 ft upstream from highway bridge, 1 mile downstream from Mill Brook, 2.4 miles southeast of South Coventry, Tolland County, 2.8 miles upstream from Hop River, and 6.3 miles upstream from mouth.

Drainage area.--121 sq mi.

Records available.--September 1931 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 239.05 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--28 years, 213 cfs.

Extremes.--Maximum discharge during year, 2,840 cfs Mar. 7, Apr. 3; maximum gage height, 9.22 ft Mar. 7; minimum discharge, 34 cfs July 9 (gage height, 3.39 ft); minimum daily, 36 cfs July 9, 10.
1931-59: Maximum discharge, 24,200 cfs Aug. 19, 1955 (gage height, 18.66 ft, from floodmark), from rating curve extended above 3,600 cfs on basis of computation of flow over dam at gage height 12.2 ft and contracted-opening measurement of peak flow; minimum, 2.0 cfs Aug. 21, 22, 1949 (gage height, 1.60 ft); minimum daily, 2.5 cfs Sept. 18, 1949.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Flow regulated by mills and reservoirs upstream.

Revisions (water years).--WSP 781: 1934(m), drainage area. WSP 851: 1935-36. WSP 1201: 1932(M,m), 1933-34, 1937, 1939-42.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 7				Mar. 8 to Sept. 30			
3.7	66	6.0	725	3.4	35	6.0	725
4.0	120	7.0	1,110	3.6	62	7.0	1,110
4.5	235	8.0	1,730	4.0	131	8.0	1,730
5.0	380	8.8	2,430	4.5	243	8.8	2,430
				5.0	385		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	300	154	428	126	106	142	518	403	66	66	79	*220
2	428	136	350	239	100	198	842	346	122	64	58	150
3	299	146	302	272	82	212	2,430	296	480	70	52	112
4	200	296	344	212	240	475	1,140	266	324	58	59	303
5	156	235	456	150	302	475	742	240	189	43	64	369
6	144	205	532	130	190	1,230	602	223	140	42	72	171
7	158	180	398	110	120	1,760	532	213	114	54	68	105
8	154	160	320	100	116	528	*473	206	101	38	65	86
9	136	222	290	90	108	358	459	180	*99	36	59	80
10	124	377	235	85	544	343	470	163	87	36	88	76
11	104	317	200	84	468	288	620	176	70	227	139	74
12	86	245	200	82	225	246	550	180	71	308	103	68
13	84	210	170	76	248	246	466	194	94	122	72	55
14	*91	190	160	78	263	230	406	280	125	182	70	48
15	91	175	180	80	546	228	370	238	114	251	55	58
16	89	168	190	154	353	542	340	192	114	272	45	72
17	89	175	190	335	252	550	319	167	105	171	42	66
18	82	170	185	230	228	436	305	167	108	114	54	62
19	66	168	180	160	210	340	282	160	103	86	70	61
20	72	170	175	130	124	427	346	160	116	*174	64	49
21	79	162	150	196	114	620	379	150	89	724	56	48
22	95	148	140	760	91	742	308	139	82	556	65	52
23	318	132	135	538	87	448	269	122	118	302	54	*52
24	452	136	145	252	100	367	251	107	103	206	48	*52
25	281	146	130	208	93	340	236	116	94	180	58	49
26	248	142	120	178	91	364	236	120	94	131	59	49
27	272	180	115	146	98	340	291	107	112	116	122	42
28	238	172	115	120	102	305	406	101	94	103	162	42
29	205	1,020	*130	120	-	266	459	91	92	94	87	54
30	180	708	135	*156	-------	291	433	82	*92	87	157	61
31	158	-------	144	165	-------	400	-------	74	-------	82	228	-------
Total	5,479	7,045	6,944	5,762	5,601	13,737	15,280	5,659	3,712	4,995	2,474	2,786
Mean	177	235	224	186	200	443	509	183	124	161	79.8	92.9
Cfsm	1.46	1.94	1.85	1.54	1.65	3.66	4.21	1.51	1.02	1.33	0.660	0.768
In.	1.68	2.17	2.13	1.77	1.72	4.22	4.70	1.74	1.14	1.54	0.76	0.86

Calendar year 1958: Max 1,300 Min 26 Mean 245 Cfsm 2.02 In. 27.50
Water year 1958-59: Max 2,430 Min 36 Mean 218 Cfsm 1.80 In. 24.43

Peak discharge (base, 1,100 cfs).--Nov. 29 (11 a.m.) 1,240 cfs (7.25 ft); Mar. 7 (1:30 a.m.) 2,840 cfs (9.22 ft); Apr. 3 (11:30 a.m.) 2,840 cfs (9.20 ft).

* Discharge measurements made on this day.
Note.--Stage-discharge relation affected by ice Dec. 11-30, Jan. 5-15, 18-20, 24-29, Jan. 31 to Feb. 4, Feb. 6-9, 12, 14, Feb. 16 to Mar. 1, Mar. 9-14.

1200. Hop River near Columbia, Conn.

Location.--Lat 41°43'39", long 72°18'10", on right bank 1,500 ft downstream from abandoned dam at village of Hop River, 2 miles north of Columbia, Tolland County, and 4.2 miles upstream from mouth.

Drainage area.--76.2 sq mi.

Records available.--September 1932 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 249.25 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--27 years, 130 cfs.

Extremes.--Maximum discharge during year, 2,630 cfs Apr. 3 (gage height, 11.14 ft); minimum, 11 cfs Sept. 15 (gage height, 3.15 ft); minimum daily, 12 cfs Sept. 15.
1932-59: Maximum discharge, 6,450 cfs Sept. 21, 1938 (gage height, 16.25 ft, from floodmarks), by computation of peak flow over dam a quarter of a mile upstream; minimum, 1.4 cfs Oct. 4, 1957 (gage height, 3.00 ft); minimum daily, 2.0 cfs July 26, Aug. 13, 19, 1957; minimum gage height, 2.49 ft Aug. 3, 1936.

Remarks.--Records excellent except those for periods of ice effect, which are good. Occasional regulation at low flow.

Revisions (water years).--WSP 781: 1933(M), drainage area. WSP 1111: 1947(m). WSP 1301: 1935-36(M).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 6				Mar. 7 to Sept. 30			
3.6	36	5.0	285	3.1	9.6	5.0	271
4.0	86	7.0	800	3.3	17	7.0	800
4.5	174	8.0	1,120	3.5	28	8.0	1,120
				3.7	48	10.0	2,010
				4.0	93		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	318	133	310	82	68	114	310	252	39	44	31	88
2	420	121	240	184	64	174	377	227	58	41	26	67
3	231	266	193	202	56	141	1,820	180	382	47	22	49
4	174	273	252	144	214	338	789	153	199	34	20	58
5	135	199	360	100	164	290	498	134	124	28	20	42
6	111	176	448	85	105	856	385	123	95	26	24	32
7	95	156	261	75	76	1,320	322	112	82	35	25	26
8	86	139	210	65	70	422	*271	*106	63	22	22	*23
9	82	198	180	60	59	263	267	98	51	19	23	20
10	79	285	150	56	452	242	271	91	41	18	34	18
11	78	229	130	54	353	187	435	85	35	225	37	18
12	69	187	130	54	160	143	348	85	*30	145	28	16
13	72	162	120	51	180	140	280	88	48	93	23	15
14	*78	148	105	42	227	135	235	152	104	114	20	14
15	76	139	110	*42	451	134	205	123	69	248	19	12
16	75	131	115	91	236	*352	185	104	60	208	17	17
17	73	122	110	196	170	410	169	91	53	140	15	19
18	72	122	110	120	146	310	153	85	58	104	17	16
19	68	121	105	100	115	227	146	77	63	79	47	15
20	66	117	100	78	78	300	183	77	69	67	27	14
21	64	106	90	132	70	398	203	74	52	310	20	43
22	63	89	*85	560	56	485	167	71	45	233	23	34
23	304	83	76	267	54	280	146	67	58	169	19	25
24	422	80	76	174	60	235	133	58	48	*131	17	*22
25	238	79	76	148	54	209	124	53	45	152	18	19
26	322	79	70	104	56	194	118	48	48	96	15	16
27	348	107	68	89	58	196	136	45	54	69	*19	16
28	250	107	66	78	70	180	224	41	56	52	29	13
29	195	1,050	66	78	-	160	271	38	52	42	33	20
30	166	548	66	*85	-------	171	241	39	69	36	93	31
31	144	-------	70	78	-------	263	-------	46	-------	33	127	-------
Total	4,974	5,752	4,548	3,674	3,922	9,269	9,412	3,023	2,250	3,060	910	818
Mean	160	192	147	119	140	299	314	97.5	75.0	98.7	29.4	27.3
Cfsm	2.10	2.52	1.93	1.56	1.84	3.92	4.12	1.28	0.984	1.30	0.386	0.358
In.	2.43	2.81	2.22	1.79	1.91	4.52	4.59	1.48	1.10	1.49	0.44	0.40

Calendar year 1958: Max 950 Min 13 Mean 173 Cfsm 2.27 In. 30.78
Water year 1958-59: Max 1,820 Min 12 Mean 141 Cfsm 1.85 In. 25.18

Peak discharge (base, 900 cfs).--Nov. 29 (12 m.) 1,270 cfs (8.45 ft); Mar. 7 (12:15 a.m.) 2,510 cfs (10.88 ft); Apr. 3 (8:30 a.m.) 2,630 cfs (11.14 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 8-31, Jan. 8-12, 18, 19, Feb. 1-3, 7-9, 12, 13, 19-28, Mar. 13, 14.

1205. Safford Brook near Woodstock Valley, Conn.

Location.--Lat 41°55'35", long 72°03'37", on right bank on downstream side of town road bridge, 0.3 mile downstream from Bradford Brook, 0.3 mile upstream from mouth, 1.2 miles southeast of Woodstock Valley, Windham County, and 2 miles southwest of West Woodstock.

Drainage area.--4.08 sq mi.

Records available.--June 1950 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 552.92 ft above mean sea level, datum of 1929.

Average discharge.--9 years, 8.99 cfs.

Extremes.--Maximum discharge during year, 402 cfs Apr. 3 (gage height, 5.36 ft); minimum, less than 0.1 cfs Sept. 14, 22-28; minimum gage height, 1.33 ft Sept. 24.
1950-59: Maximum discharge, 1,000 cfs Aug. 19, 1955 (gage height, 6.68 ft), from rating curve extended above 270 cfs on basis of contracted opening and flow-over-road measurement of peak flow; practically no flow Aug. 17, 1957; minimum gage height, 1.17 ft Sept. 4-12, 1953.

Remarks.--Records good except those for periods of ice effect and those below 2.0 cfs, which are poor. Occasional regulation at extreme low flow from unknown source upstream.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	6.2	b12	2.8	b3.1	17	34	14	1.2	0.9	1.0	1.9
2	24	5.6	9.5	14	b1.7	31	68	12	3.6	1.2	.7	1.2
3	12	*11	8.0	16	b1.3	17	142	8.6	16	1.0	.5	.7
4	8.0	10	14	8.0	33	44	33	7.0	6.4	.5	.4	*.5
5	6.4	7.6	22	6.2	11	*15	20	5.9	3.7	.7	.5	.4
6	5.2	6.4	b26	b4.9	b4.9	130	17	*5.4	2.8	.3	.9	.4
7	3.9	5.9	b12	b2.8	b3.1	b44	14	4.9	2.6	.3	.7	.2
8	*3.7	5.2	b8.6	b2.9	b2.2	b20	13	4.4	2.0	.2	.4	.1
9	3.7	16	*b7.6	b2.7	3.9	b16	15	3.9	1.3	.2	.6	.1
10	3.5	20	b6.7	b2.5	34	b15	17	3.7	.9	*.2	1.4	.1
11	3.1	13	b6.2	b2.4	b18	b13	26	*3.5	.5	13	1.2	.2
12	3.0	9.5	5.6	b2.1	b4.9	b16	20	3.5	.5	6.0	.6	.1
13	2.8	7.6	4.9	b1.9	b22	b19	*14	3.5	2.0	3.5	.4	.1
14	2.8	7.0	4.6	b1.7	20	b15	11	5.4	4.4	2.6	.3	.1
15	2.6	6.4	4.6	*b1.3	42	13	9.5	*4.1	2.8	7.0	.2	.1
16	2.6	6.4	4.6	b14	b11	b39	8.6	3.7	2.2	7.1	.1	.1
17	2.6	5.9	4.6	b36	6.7	b33	8.0	3.3	*2.2	3.9	.1	.2
18	2.4	5.9	4.4	b9.8	8.9	b22	7.0	3.0	3.1	2.2	.1	.1
19	2.2	5.9	4.2	b4.2	b7.0	b19	7.0	2.8	3.7	2.1	.1	.1
20	2.2	6.2	4.2	2.8	b2.0	b38	14	2.8	3.0	18	.1	.1
21	2.2	5.4	3.9	*33	b1.7	b45	14	2.6	1.9	*66	.1	.1
22	2.2	5.2	3.7	72	e1.5	b32	8.9	2.4	1.9	14	.1	.1
23	35	4.4	3.7	b18	e1.4	b19	7.0	1.9	2.6	7.5	.1	.1
24	30	4.4	3.5	b9.5	e1.3	b14	6.4	2.2	1.6	6.2	.2	.1
25	13	4.2	3.5	b6.2	e1.4	14	5.6	1.9	1.3	8.6	.4	.1
26	14	4.9	b3.5	b4.4	e1.4	14	5.9	1.6	1.7	4.9	*.2	.1
27	17	6.2	b3.7	*b3.3	e1.5	13	10	1.3	4.9	3.3	.1	.1
28	12	9.6	3.3	b2.8	e1.9	b11	16	1.0	3.1	2.4	.1	.1
29	9.5	98	3.0	b1.9	-	b11	20	.7	2.4	1.9	.1	.1
30	8.0	22	3.1	5.0	-------	b11	14	1.0	1.6	1.4	.9	.1
31	6.7	-------	3.1	5.6	-------	31	-------	1.6	-------	1.3	2.8	-------
Total	277.3	332.0	212.3	300.7	252.8	791	605.9	123.6	87.9	188.4	15.4	7.8
Mean	8.95	11.1	6.85	9.70	9.03	25.5	20.2	3.99	2.93	6.08	0.497	0.260
Cfsm	2.19	2.72	1.68	2.38	2.21	6.25	4.95	0.978	0.718	1.49	0.122	0.064
In.	2.53	3.03	1.94	2.74	2.30	7.21	5.52	1.13	0.80	1.72	0.14	0.07

Calendar year 1958: Max 78 Min 0.11 Mean 9.32 Cfsm 2.28 In. 31.03
Water year 1958-59: Max 142 Min 0.1 Mean 8.75 Cfsm 2.14 In. 29.13

Peak discharge (base, 150 cfs).--Nov. 29 (4:30 a.m.) 190 cfs (4.20 ft); Mar. 6 (4 p.m.) 340 cfs (5.03 ft); Apr. 3 (12:30 a.m.) 402 cfs (5.36 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
e Stage-discharge relation indefinite; discharge estimated on basis of records for stations on nearby streams.

1210. Mount Hope River near Warrenville, Conn.

Location.--Lat 41°50'37", long 72°10'10", on left bank 250 ft downstream from Knowlton Brook, 700 ft upstream from bridge on State Highway 89, 1¾ miles south of Warrenville, Windham County, and 3¼ miles southwest of Ashford.

Drainage area.--29.1 sq mi.

Records available.--July 1940 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 335.57 ft above mean sea level, datum of 1929.

Average discharge.--19 years, 50.2 cfs.

Extremes.--Maximum discharge during year, 1,690 cfs Apr. 3 (gage height, 7.90 ft); minimum, 2.0 cfs Sept. 24 (gage height, 1.35 ft).
1940-59: Maximum discharge, 5,590 cfs Aug. 19, 1955 (gage height, 10.41 ft), from rating curve extended above 890 cfs on basis of contracted-opening measurement of peak flow; minimum, 0.15 cfs Aug. 25, 1957; minimum gage height, 0.99 ft Aug. 26-29, 1949.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Occasional regulation from ponds upstream. Records of chemical analyses for the water year 1959 are given in WSP 1641.

Revisions (water years).--WSP 1331: 1941(M), 1951-53(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	1.0	3.0	160
1.4	3.1	3.5	225
1.5	6.3	4.0	275
1.7	16	5.0	430
2.0	34	6.0	675
2.3	63	7.0	1,090
2.6	101		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	154	37	108	24	25	58	160	93	9.7	9.7	9.7	29
2	149	35	81	109	19	93	226	75	39	12	7.6	18
3	84	80	69	108	17	83	799	61	144	13	5.9	14
4	62	71	112	69	158	218	272	53	51	8.9	5.2	16
5	56	53	143	40	76	119	190	47	28	6.3	6.7	12
6	47	46	154	29	36	536	157	42	22	5.2	11	8.9
7	43	40	88	23	31	280	133	40	22	6.7	8.9	8.0
8	*41	36	67	24	27	100	114	40	18	5.2	7.2	5.6
9	40	114	*62	22	24	71	124	41	14	3.9	11	4.5
10	38	134	54	21	226	70	127	33	12	3.4	20	3.9
11	35	91	47	20	138	*55	186	32	9.7	105	18	3.9
12	33	64	43	20	61	52	134	33	8.9	44	11	3.4
13	28	53	39	19	69	74	*107	36	22	25	8.4	2.9
14	25	49	37	18	84	54	91	56	34	24	6.7	2.7
15	25	47	37	*18	218	49	79	40	24	65	5.2	2.4
16	25	45	37	90	88	179	71	33	19	52	4.5	4.9
17	24	41	37	173	62	156	64	30	*18	29	3.9	4.5
18	24	42	36	69	58	98	60	28	24	19	6.6	3.4
19	22	45	35	45	46	85	58	27	25	16	12	3.1
20	27	44	34	31	36	155	98	27	22	31	6.7	2.9
21	32	41	32	*95	28	211	87	24	16	213	4.9	2.7
22	30	36	31	353	25	192	64	21	16	90	6.7	2.4
23	152	33	30	88	23	101	58	18	24	45	5.2	*2.4
24	147	33	29	46	24	80	52	19	16	*37	4.5	2.2
25	69	31	28	40	23	80	47	18	15	40	7.6	2.2
26	87	34	27	32	22	79	46	16	18	27	*5.9	2.4
27	96	46	26	*31	24	76	68	15	25	20	5.2	2.7
28	69	52	26	29	31	65	96	14	21	16	6.7	2.9
29	54	442	24	27	-	59	118	13	18	13	5.6	3.9
30	46	165	25	36	-------	68	89	13	14	11	12	6.3
31	40	-------	25	35	-------	151	-------	11	-------	9.7	60	-------
Total	1,804	2,080	1,623	1,784	1,699	3,747	3,975	1,049	749.3	1,006.0	300.5	184.1
Mean	58.2	69.3	52.4	57.5	60.7	121	132	33.8	25.0	32.5	9.69	6.14
Cfsm	2.00	2.38	1.80	1.98	2.09	4.16	4.54	1.16	0.859	1.12	0.333	0.211
In.	2.31	2.66	2.07	2.28	2.17	4.79	5.08	1.34	0.96	1.29	0.38	0.24

Calendar year 1958: Max 380 Min 4.1 Mean 65.8 Cfsm 2.26 In. 30.68
Water year 1958-59: Max 799 Min 2.2 Mean 54.8 Cfsm 1.88 In. 25.57

Peak discharge (base, 400 cfs).--Nov. 29 (4:30 a.m.) 780 cfs (6.30 ft); Jan. 22 (2:30 a.m.) 540 cfs (5.48 ft); Mar. 6 (6 p.m.) 1,340 cfs (7.44 ft); Apr. 3 (2:30 a.m.) 1,690 cfs (7.90 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 1, 2, 7, 8, Dec. 10 to Jan. 1, Jan. 7-16, 18-21, 24-26, 28-30, Feb. 1-3, 5-8, 12-14, Feb. 17 to Mar. 4, Mar. 8-15, 17-19, 23, 24, 29.

1220. Natchaug River at Willimantic, Conn.

Location.--Lat 41°43'14", long 72°11'52", on right bank 200 ft downstream from New York, New Haven and Hartford Railroad bridge, 500 ft upstream from bridge on U. S. Highway 6, 1 mile northeast of Willimantic, Windham County, 1.7 miles upstream from mouth, and 4 miles downstream from Mount Hope River.
Drainage area.--169 sq mi.
Records available.--October 1930 to September 1959.
Gage.--Water-stage recorder. Datum of gage is 150.31 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).
Average discharge.--29 years, 302 cfs (adjusted for storage).
Extremes.--Maximum discharge during year not determined; maximum daily, 2,300 cfs Apr. 7; minimum, 3.5 cfs Sept. 30 (gage height, 2.03 ft); minimum daily, 3.5 cfs Sept. 30.
1930-59: Maximum discharge, 32,000 cfs Sept.21, 1938 (gage height, 16.39 ft, from floodmarks), by computation of peak flow over dam 2 miles upstream; minimum, about 0.3 cfs Aug. 6, 1937; minimum daily, 2.3 cfs Sept. 11, 12, 1943.
Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. City of Willimantic diverts an average of about 1,000,000 gal of water a day for municipal supply from reservoir 2 miles upstream. Operation of water wheels at this location causes diurnal fluctuation at low flow. Flow regulated since March 1952 by Mansfield Hollow Reservoir (see p. 158).
Revisions (water years).--WSP 1301: 1934-35(M), 1937(M).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 29		Nov. 30 to Sept. 30			
2.6	83	2.0	1.8	3.0	198
3.0	189	2.1	8.3	4.0	600
4.0	590	2.2	18	6.0	1,600
5.0	1,070	2.4	48	8.0	2,780
		2.6	90		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	400	240	1,000	165	b162	240	*775	528	*91	*88	90	215
2	795	229	645	281	b148	478	800	510	92	82	69	142
3	612	299	488	460	b114	447	528	412	512	80	38	111
4	415	423	501	328	288	518	367	356	487	79	63	*92
5	315	343	750	b230	564	*900	a1,900	316	248	36	54	97
6	257	284	825	b180	b293	981	a2,100	282	174	77	64	90
7	219	254	700	b160	b195	469	a2,300	265	154	28	72	40
8	199	229	524	b140	189	867	2,000	248	139	68	43	52
9	189	285	420	b130	b140	1,450	1,600	230	117	36	77	39
10	180	635	*b308	b120	528	1,600	1,400	214	103	36	69	45
11	158	576	b282	105	975	1,220	1,000	*208	84	302	94	38
12	144	431	290	104	b447	515	950	204	83	406	98	28
13	140	347	b254	91	368	349	775	220	77	214	74	30
14	*124	303	b230	97	501	348	625	316	131	168	63	25
15	122	291	268	99	750	312	524	296	145	307	27	31
16	120	276	b265	159	b700	572	474	234	119	396	35	33
17	117	268	272	462	434	850	442	201	109	262	60	42
18	112	250	268	b340	360	700	408	198	121	168	54	26
19	104	254	262	b244	b348	478	388	177	139	127	29	32
20	108	261	262	180	b224	546	442	177	138	132	83	32
21	110	243	b214	204	b180	850	555	168	110	576	19	16
22	110	229	b198	862	b171	1,050	465	151	107	759	62	37
23	293	212	192	950	160	875	400	137	112	656	40	23
24	895	212	201	b442	154	586	360	117	121	420	35	*45
25	656	206	b174	320	b148	488	332	132	99	282	40	50
26	447	199	b151	b240	b146	460	308	116	93	214	37	90
27	522	250	b143	183	b146	465	344	110	123	165	34	62
28	443	265	146	b177	157	424	510	102	135	*132	93	17
29	355	1,050	157	b171	-	364	578	99	130	114	92	4.0
30	295	1,400	162	*198	-------	396	582	92	113	99	32	3.5
31	254	-------	180	224	-------	510	-------	79	-------	89	*152	-------
Total	9,210	10,744	10,732	8,046	8,990	20,308	24,232	6,895	4,406	6,598	1,892	1,587.5
Mean	297	358	346	260	321	655	808	222	147	213	61.0	52.9
(†)	-0.2	+13.4	-13.1	0	0	+3.5	-2.3	-1.5	0	0	+0.4	-0.5

Adjusted for change in reservoir contents

Mean	297	371	333	260	321	658	806	220	147	213	61.4	52.4
Cfsm	1.76	2.20	1.97	1.54	1.90	3.89	4.77	1.30	0.869	1.26	0.363	0.310
In.	2.03	2.46	2.27	1.78	1.98	4.48	5.32	1.50	0.97	1.45	0.42	0.35

	Observed			Adjusted		
Calendar year 1958:	Max 1,930	Min 15	Mean 365	Mean 365	Cfsm 2.16	In. 29.28
Water year 1958-59:	Max 2,300	Min 3.5	Mean 311	Mean 311	Cfsm 1.84	In. 25.01

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Mansfield Hollow Reservoir; furnished by Corps of Engineers.
a No gage-height record; discharge estimated on basis of records for other stations in the Shetucket River basin.
b Stage-discharge relation affected by ice.

1225. Shetucket River near Willimantic, Conn.

Location.--Lat 41°42'01", long 72°10'57", on right bank at downstream side of Bingham Bridge, 500 ft upstream from New York, New Haven and Hartford Railroad bridge, 500 ft downstream from Potash Brook, 1.3 miles downstream from confluence of Willimantic and Natchaug Rivers, 1½ miles southeast of Willimantic, Windham County, and at mile 16.5.

Drainage area.--401 sq mi.

Records available.--April 1904 to December 1905, October 1919 to September 1921, September 1928 to September 1959. Published as "at South Windham" October 1919 to September 1921, September 1928 to September 1933. Monthly discharge only for some periods, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 131.40 ft above mean sea level, datum of 1929 (levels by Corps of Engineers). Apr. 4, 1904, to Dec. 31, 1905, chain gage at same site and about the same datum. October 1919 to Sept. 30, 1921, and Sept. 1, 1928, to Sept. 30, 1933, water-stage recorder at site 1½ miles downstream at different datum.

Average discharge.--34 years, 706 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 5,490 cfs Mar. 7 (gage height, 8.75 ft); minimum, 64 cfs Sept. 28, 29 (gage height, 1.65 ft); minimum daily, 79 cfs Sept. 29.

1904-5, 1919-21, 1928-59: Maximum discharge, 52,200 cfs Sept. 21, 1938 (gage height, 27.6 ft, from floodmarks), from rating curve extended above 11,000 cfs on basis of computation of peak flow over Scotland and Baltic Dams, 5 and 9 miles downstream, respectively, adjusted for flow from intervening area; minimum, 15 cfs Aug. 29, 1949 (gage height, 1.34 ft); minimum daily, 19 cfs Aug. 22, Oct. 24, 1949; minimum gage height, 1.32 ft Oct. 20, 1935.

Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by mills on Willimantic River, on Natchaug River by pumping for municipal supply of city of Willimantic, and by Mansfield Hollow Reservoir (see p. 158).

Revisions (water years).--WSP 781: 1934(m). WSP 801: 1935. WSP 1201: 1905(M), 1920-21, 1931-32, 1934-35(M), 1937(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.8	92	4.0	990
2.0	140	6.0	2,410
2.5	300	9.0	5,750

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	952	595	1,790	420	396	624	1,680	1,240	245	251	234	*565
2	1,720	560	1,270	728	360	1,020	1,720	1,210	284	218	188	420
3	1,180	805	1,020	1,020	b310	915	4,680	990	1,370	230	141	308
4	865	1,060	1,090	790	752	1,400	3,170	890	1,140	216	165	411
5	675	865	1,580	524	*1,150	1,790	3,170	790	680	149	163	565
6	575	740	1,790	b450	705	2,640	3,170	725	482	168	185	355
7	528	665	1,440	b390	452	4,470	3,170	680	416	149	194	216
8	496	590	1,090	b350	480	2,110	*2,870	650	362	159	162	190
9	468	715	*965	b305	374	2,150	2,410	575	321	116	177	171
10	432	1,300	765	b296	1,430	2,230	1,950	528	272	129	215	170
11	400	1,150	730	b293	2,080	1,750	2,150	545	*235	783	291	156
12	352	915	725	b286	990	1,020	2,030	540	225	870	266	136
13	340	790	660	268	890	865	1,640	555	239	520	210	125
14	*340	710	b580	272	1,120	865	1,360	840	400	492	181	109
15	336	665	b620	279	1,790	790	1,210	765	376	890	127	122
16	324	635	610	444	1,400	1,460	1,090	600	332	1,020	119	148
17	324	630	635	1,040	990	1,990	1,040	524	296	695	137	152
18	312	610	640	790	865	1,610	965	516	316	468	133	129
19	279	605	610	560	815	1,150	915	480	360	352	188	131
20	282	605	b580	468	506	1,330	1,020	480	372	*223	203	115
21	286	580	540	573	b440	1,950	1,240	460	290	1,410	131	126
22	296	520	480	2,170	b380	2,410	1,040	427	262	1,630	174	150
23	759	480	480	1,650	b340	1,750	915	406	316	1,190	142	130
24	1,950	495	495	1,000	b360	1,270	840	336	308	840	123	*140
25	1,300	495	b430	790	b350	1,120	790	355	268	690	137	142
26	1,040	480	b380	640	b350	1,060	740	339	278	508	136	176
27	1,210	580	b360	508	381	1,090	840	306	320	400	153	142
28	1,020	610	372	444	419	1,020	1,210	292	332	328	354	86
29	840	2,820	396	440	-	890	1,360	270	304	282	238	79
30	730	2,970	420	496	-------	965	1,360	263	316	254	292	104
31	640	-------	452	540	-------	1,240	-------	250	-------	240	525	-------
Total	21,251	25,240	23,995	19,224	20,875	46,944	51,745	17,827	11,717	15,870	6,084	5,969
Mean	686	841	774	620	746	1,514	1,725	575	391	512	196	199
(†)	-0.2	+13.4	-13.1	0	0	+3.5	-2.3	-1.5	0	0	+0.4	-0.5
Adjusted for change in reservoir contents												
Mean	686	854	761	620	746	1,518	1,723	574	391	512	196	198
Cfsm	1.71	2.13	1.90	1.55	1.86	3.79	4.30	1.43	0.975	1.28	0.489	0.494
In.	1.97	2.38	2.19	1.79	1.94	4.37	4.80	1.65	1.09	1.48	0.56	0.55

	Observed			Adjusted		
Calendar year 1958:	Max 3,700	Min 97	Mean 850	Mean 850	Cfsm 2.12	In. 28.79
Water year 1958-59:	Max 4,680	Min 79	Mean 731	Mean 731	Cfsm 1.82	In. 24.77

* Discharge measurement made on this day.

† Change in contents, equivalent in cubic feet per second, in Mansfield Hollow Reservoir; furnished by Corps of Engineers.

b Stage-discharge relation affected by ice.

1230. Little River near Hanover, Conn.

Location.--Lat 41°40'18", long 72°03'10", in Windham County, on left bank 800 ft upstream from bridge on town road, 0.7 mile downstream from Peck Brook, 2.3 miles northeast of Hanover, New London County, and 6.5 miles upstream from mouth.

Drainage area.--29.8 sq mi.

Records available.--July 1951 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 221.19 ft above mean sea level, datum of 1929.

Average discharge.--8 years, 64.1 cfs.

Extremes.--Maximum discharge during year, 1,240 cfs Mar. 6 (gage height, 6.12 ft); minimum, 3.2 cfs Aug. 16 (gage height, 1.00 ft), caused by a minor and temporary regulation from an unknown source upstream.

1951-59: Maximum discharge, 1,400 cfs Aug. 19, 1955 (gage height, 6.48 ft), from rating curve extended above 820 cfs by logarithmic plotting; minimum, that of Aug. 16, 1959.

Remarks.--Records excellent except those for periods of ice effect, which are good.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 21		Jan. 22 to Apr. 2				Apr. 3 to Sept. 30			
1.4	16	1.5	27	3.0	255	1.1	5.3	2.5	156
1.6	27	1.7	44	3.5	380	1.3	12	3.0	255
2.0	65	2.0	77	4.0	515	1.5	23	4.0	515
2.5	140	2.5	156	4.5	665	2.0	75	6.0	1,200
3.0	255								
3.5	380								

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	105	47	92	31	38	98	156	117	20	17	11	*19
2	140	42	73	78	37	155	182	110	25	18	10	15
3	80	72	63	84	27	*94	857	85	110	19	9.8	11
4	58	75	88	60	119	180	375	71	61	15	9.4	10
5	47	58	134	31	94	132	225	65	38	14	9.4	9.0
6	40	51	144	29	52	514	171	60	31	12	11	7.7
7	33	47	90	29	41	626	*138	56	29	15	11	7.1
8	31	41	71	33	40	166	115	*54	26	14	10	6.8
9	29	64	*63	27	31	110	104	48	23	11	10	6.8
10	*28	102	62	23	260	114	109	44	20	10	11	6.5
11	25	78	63	22	209	87	205	43	18	119	11	6.5
12	24	62	50	20	90	73	166	42	*16	72	10	6.5
13	23	52	44	20	95	84	129	43	20	40	9.0	6.2
14	23	49	41	21	112	77	109	81	36	33	8.0	5.9
15	22	47	41	22	248	73	96	66	26	96	7.4	6.2
16	23	44	41	43	112	209	89	54	23	92	6.8	7.4
17	22	41	41	111	80	209	82	46	21	54	6.8	8.3
18	21	40	40	51	86	151	78	44	26	35	7.1	7.1
19	21	40	40	38	102	107	75	41	28	27	14	6.8
20	20	40	40	31	69	129	89	40	28	24	9.8	6.5
21	20	39	40	65	55	164	94	37	22	54	8.7	6.2
22	20	38	34	241	44	199	79	34	20	43	9.0	6.2
23	137	35	31	112	40	120	71	34	26	32	8.3	5.9
24	227	34	33	81	37	98	65	29	22	*26	8.0	*5.6
25	94	33	31	57	38	90	61	28	21	27	8.7	5.3
26	96	33	30	51	38	87	57	26	24	22	8.7	5.3
27	128	41	27	*46	35	90	65	24	28	18	7.4	5.6
28	92	42	27	43	40	86	101	23	28	16	7.1	5.6
29	72	318	26	40	-	78	127	26	24	14	7.1	5.6
30	61	181	28	40	-------	86	109	23	23	12	8.0	5.6
31	52	-------	31	42	-------	134	-------	21	-------	12	12	-------
Total	1,814	1,886	1,659	1,622	2,269	4,620	4,379	1,515	863	1,013	285.5	223.2
Mean	58.5	62.9	53.5	52.3	81.0	149	146	48.9	28.8	32.7	9.21	7.44
Cfsm	1.96	2.11	1.80	1.76	2.72	5.00	4.90	1.64	0.966	1.10	0.309	0.250
In.	2.26	2.35	2.07	2.02	2.83	5.77	5.46	1.89	1.08	1.26	0.36	0.28

Calendar year 1958: Max 430 Min 12 Mean 73.5 Cfsm 2.47 In. 33.51
Water year 1958-59: Max 857 Min 5.3 Mean 60.7 Cfsm 2.04 In. 27.63

Peak discharge (base, 400 cfs).--Feb. 10 (7 p.m.) 418 cfs (3.66 ft); Mar. 6 (10:30 p.m.) 1,240 cfs (6.12 ft); Apr. 3 (11 a.m.) 1,120 cfs (5.82 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 10-16, 18-22, 25-27, Jan. 1, 2, 5-8, 17-19, 24, 27-29, Feb. 1-4, 7, 9, 11-14, 20-28, Mar. 13, 14.

1235. Quinebaug River at Westville, Mass.

Location.--Lat 42°04'23", long 72°04'28", on right bank 350 ft upstream from highway bridge, 0.45 mile downstream from Breakneck Brook, 0.6 mile west of Westville, Worcester County, and 1¾ miles west of Southbridge.

Drainage area.--93.8 sq mi.

Records available.--July 1939 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 537.66 ft above mean sea level, unadjusted (levels by Corps of Engineers).

Average discharge.--20 years, 164 cfs.

Extremes.--Maximum discharge during year, 1,160 cfs Apr. 3, 4 (gage height, 6.21 ft); maximum gage height, 6.36 ft Jan. 6 (backwater from ice); minimum daily discharge, 17 cfs Aug. 27, 28.

1939-59: Maximum discharge, 17,500 cfs Aug. 19, 1955 (gage height, 16.11 ft, from floodmarks), from rating curve extended above 1,300 cfs on basis of slope-area measurement of peak flow; minimum daily, 2.2 cfs June 26, 1949.

Flood in September 1938 reached a discharge of 8,400 cfs, by slope-area measurement.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Medium and low flows regulated by mills and reservoirs above station.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.1	16	4.0	340
2.3	30	5.0	640
2.5	51	6.0	1,060
3.0	123	6.5	1,320
3.5	220		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	128	117	461	92	120	82	309	345	61	*100	52	55
2	147	102	387	115	*105	92	439	327	79	84	47	77
3	137	125	319	140	92	121	1,060	304	185	70	39	86
4	121	154	304	145	159	246	1,100	277	199	60	33	120
5	102	164	335	125	199	*324	834	256	199	51	32	162
6	86	158	419	110	187	570	640	240	179	44	32	160
7	74	150	395	100	150	978	530	220	164	41	33	132
8	68	147	348	92	123	722	455	205	149	38	32	*104
9	64	184	309	84	105	485	434	181	121	34	35	83
10	63	244	265	80	100	348	425	166	100	34	39	63
11	58	267	240	75	100	275	470	154	84	72	41	49
12	50	254	215	71	100	220	476	149	73	86	40	39
13	46	227	190	70	120	220	*431	158	73	96	39	31
14	42	207	180	69	140	195	389	177	88	90	34	26
15	*41	189	175	68	230	179	340	175	100	109	32	23
16	42	177	160	85	249	249	270	168	100	115	29	26
17	48	*170	165	170	216	306	270	154	92	113	26	26
18	42	170	165	160	189	324	263	147	90	101	26	21
19	40	166	*170	150	160	279	254	134	92	90	24	19
20	40	162	160	130	110	314	279	*130	92	103	22	19
21	44	158	145	165	135	455	299	123	89	227	21	19
22	51	149	135	440	105	563	284	115	83	265	21	19
23	90	139	125	458	92	491	265	107	82	*258	19	28
24	152	136	125	340	88	395	244	100	78	227	19	32
25	168	130	115	233	86	330	222	94	77	189	19	34
26	168	132	110	185	83	302	212	88	74	154	18	28
27	166	147	105	155	78	289	231	82	95	125	17	29
28	158	160	100	140	77	265	272	77	123	102	17	31
29	149	422	95	120	-	231	330	70	134	84	18	36
30	137	518	96	123	-------	210	343	65	121	70	20	59
31	125	-------	98	130	-------	231	-------	63	-------	61	39	-------
Total	2,847	5,625	6,611	4,620	3,698	10,291	12,370	5,051	3,276	3,293	915	1,636
Mean	91.8	188	213	149	132	332	412	163	109	106	29.5	54.5
Cfsm	0.979	2.00	2.27	1.59	1.41	3.54	4.39	1.74	1.16	1.13	0.314	0.581
In.	1.13	2.23	2.62	1.83	1.47	4.08	4.90	2.00	1.30	1.31	0.36	0.65

Calendar year 1958: Max 1,020 Min 18 Mean 195 Cfsm 2.08 In. 28.29
Water year 1958-59: Max 1,100 Min 17 Mean 165 Cfsm 1.76 In. 23.88

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 10-27, Jan. 1-3, 5-12, 16-19, 21, 22, 24, 26-29, Feb. 1-3, 7, 9-15, 19-23, 25-28, Mar. 13, 14. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

1240. Quinebaug River at Quinebaug, Conn.

Location.--Lat 42°01'20", long 71°57'22", on right bank at Quinebaug, Windham County, 500 ft upstream from bridge on State Highway 197, 0.25 mile downstream from Massachusetts-Connecticut State line, 7.8 miles upstream from French River, and at mile 46.

Drainage area.--157 sq mi.

Records available.--September 1931 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 341.52 ft above mean sea level, datum of 1929.

Average discharge.--28 years, 277 cfs.

Extremes.--Maximum discharge during year, 2,940 cfs Apr. 3 (gage height, 6.84 ft); minimum, 19 cfs Aug. 28, 29 (gage height, 2.12 ft); minimum daily, 21 cfs Aug. 29. 1931-59: Maximum discharge, 49,300 cfs Aug. 19, 1955 (gage height, 18.96 ft, from floodmarks), from rating curve extended above 5,100 cfs on basis of slope-area measurement of peak flow; minimum, about 1 cfs Sept. 9, 1943, July 12, 1949, Sept. 17, 18, 1950, July 9, 1951, Sept. 4, Oct. 29, 1956; minimum daily, about 1 cfs Sept. 4, 1956; minimum gage height, 1.74 ft Aug. 20, 1940.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Flow regulated by mills upstream.

Revisions (water years).--WSP 851: 1936(M). WSP 1201: 1939-43, 1947, 1949. WSP 1381: 1938(M).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 6				Mar. 7 to Sept. 30			
2.4	45	3.5	480	2.1	17	3.5	475
2.6	92	4.0	790	2.2	29	4.0	755
2.8	150	5.0	1,530	2.4	62	5.0	1,410
3.0	225			2.7	128	7.0	3,120
				3.0	240		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	270	166	684	120	164	117	558	530	82	121	84	93
2	292	154	564	217	157	168	846	497	144	111	72	109
3	245	*197	468	233	126	217	2,580	448	370	93	66	109
4	209	229	492	217	351	563	1,850	405	325	80	58	*144
5	178	229	570	175	310	528	1,270	370	280	70	55	172
6	147	221	720	155	261	1,470	968	*343	244	68	53	180
7	126	205	618	140	201	1,900	815	312	232	62	53	147
8	*120	197	*534	130	154	1,030	690	298	196	53	49	121
9	103	307	456	120	140	701	678	260	150	49	57	100
10	100	402	396	110	150	530	*668	240	128	46	68	82
11	87	396	315	105	140	*420	755	228	111	176	68	68
12	80	360	288	105	141	334	731	220	95	154	62	55
13	72	310	265	100	201	320	662	240	103	184	58	*44
14	70	283	253	97	245	260	585	272	128	204	53	41
15	67	257	249	97	522	264	530	272	141	232	49	38
16	65	245	237	120	402	470	436	236	128	224	41	34
17	72	245	233	250	320	563	420	200	*123	208	41	36
18	65	233	237	230	292	546	390	204	128	160	40	32
19	60	229	240	210	230	475	385	188	128	131	36	29
20	60	221	220	168	180	624	458	176	118	226	34	24
21	60	213	200	268	193	755	475	154	114	*678	30	24
22	67	205	185	895	160	968	436	147	109	574	28	25
23	210	185	175	666	130	737	395	138	111	475	24	*27
24	288	185	175	474	120	602	361	134	102	370	28	40
25	265	178	160	330	106	514	338	128	100	302	29	40
26	265	182	155	240	98	486	316	116	*102	244	*25	38
27	278	189	145	190	95	470	361	109	123	180	24	34
28	257	228	140	160	98	410	442	97	154	154	23	40
29	237	948	144	*145	-	356	546	100	172	126	21	48
30	233	825	135	185	-------	343	541	95	147	109	29	58
31	193	-------	106	160	-------	415	-------	91	-------	93	80	-------
Total	4,841	8,424	9,759	6,812	5,687	17,556	20,486	7,248	4,588	5,957	1,438	2,032
Mean	156	281	315	220	203	566	683	234	153	192	46.4	67.7
Cfsm	0.994	1.79	2.01	1.40	1.29	3.61	4.35	1.49	0.975	1.22	0.296	0.431
In.	1.15	2.00	2.31	1.61	1.35	4.16	4.85	1.72	1.09	1.41	0.34	0.48

Calendar year 1958: Max 1,930 Min 26 Mean 304 Cfsm 1.94 In. 26.29
Water year 1958-59: Max 2,580 Min 21 Mean 260 Cfsm 1.66 In. 22.47

Peak discharge (base, 1,000 cfs).--Nov. 29 (5 a.m.) 1,100 cfs (4.43 ft); Mar. 6 (7:30 p.m.) 3,160 cfs (6.98 ft); Mar. 22 (1:30 a.m.) 1,100 cfs (4.54 ft); Apr. 3 (4 a.m.) 2,940 cfs (6.84 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 11-29 (no gage-height record Dec. 18-28), Dec. 31, Jan. 1, 4-19, 24, 26-29, Jan. 31 to Feb. 3, Feb. 7-14, 19-28, Mar. 12-16, 21.

1245. Little River at Buffumville, Mass.

Location (revised).--Lat 42°06'57", long 71°53'26", on left bank 0.6 mile upstream from mouth, 0.8 mile east of Buffumville, Worcester County, 1.1 miles downstream from Buffumville Reservoir, and 1.5 miles west of Oxford.

Drainage area.--27.7 sq mi.

Records available.--July 1939 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 457.00 ft above mean sea level, unadjusted (levels by Corps of Engineers).

Average discharge.--20 years, 48.0 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 429 cfs Apr. 7 (gage height, 5.04 ft); minimum, 2.8 cfs Sept. 23; minimum daily, 3.8 cfs Sept. 23.
1939-59: Maximum discharge, 8,340 cfs Aug. 19, 1955 (gage height, 15.53 ft), from rating curve extended above 1,200 cfs on basis of computation of peak flow over dam; minimum, 0.1 cfs Sept. 25, 26, 1957; minimum daily, 0.1 cfs Sept. 25, 1957.

Remarks.--Records good. Flow regulated by Buffumville Reservoir, completed by Corps of Engineers in 1958 for flood control. Prior to 1958, flow regulated by mill above station.

Revisions (water years).--WSP 1201: 1940, 1948.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

2.2	3.0	3.2	61
2.4	6.2	3.5	108
2.6	11	4.0	197
2.8	21	5.0	419
3.0	37		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	47	116	27	34	26	91	99	13	20	24	42
2	56	38	90	33	*32	32	128	91	16	19	21	46
3	56	33	67	36	30	37	95	80	33	17	18	45
4	52	32	57	38	40	69	80	67	52	15	16	37
5	44	34	61	40	49	*102	296	58	51	13	15	32
6	38	33	85	35	54	132	364	48	42	12	14	24
7	47	32	93	32	46	53	401	42	37	11	13	20
8	53	28	87	29	38	13	268	40	32	9.7	12	*18
9	54	30	77	27	34	54	142	38	27	8.6	13	15
10	54	42	61	25	35	128	171	35	23	8.2	13	13
11	52	64	53	24	33	123	177	33	19	21	13	11
12	49	69	48	24	32	123	158	32	16	47	13	8.9
13	48	61	45	24	36	117	*142	33	15	57	13	8.2
14	46	53	41	24	30	114	120	40	17	82	11	7.2
15	*45	48	39	24	54	110	102	42	20	126	11	7.0
16	44	42	38	30	69	106	90	41	23	122	9.7	6.6
17	42	*40	38	44	69	90	80	37	24	100	9.1	6.2
18	32	38	37	51	60	91	74	34	25	72	8.9	5.8
19	20	37	*37	52	56	93	69	32	27	51	8.4	5.5
20	15	37	37	44	48	85	74	30	28	58	9.4	5.3
21	13	32	36	46	42	69	83	*28	29	199	8.2	5.2
22	11	27	33	91	35	133	85	27	27	267	7.2	5.0
23	17	24	32	137	32	156	77	24	24	219	6.6	3.8
24	26	23	32	118	30	126	67	24	23	151	6.4	4.3
25	37	22	32	82	28	108	60	22	21	106	6.6	4.4
26	53	22	29	56	27	96	53	21	20	75	6.2	4.4
27	61	22	28	45	26	72	54	20	22	*57	6.2	4.3
28	63	26	27	38	25	49	69	18	22	46	5.8	4.2
29	56	72	27	34	-	57	90	17	24	37	5.6	4.4
30	60	118	27	33	-------	57	100	15	23	32	7.6	4.4
31	52	-------	27	34	-------	64	-------	14	-------	27	28	-------
Total	1,350	1,226	1,537	1,377	1,124	2,685	3,860	1,182	775	2,085.5	359.9	408.1
Mean	43.5	40.9	49.6	44.4	40.1	86.6	129	38.1	25.8	67.3	11.6	13.6
(†)	-0.22	+2.43	-2.87	+0.11	-0.12	+23.5	+0.35	-3.29	+0.69	0	+0.63	-2.35
Adjusted for change in contents in Buffumville Reservoir												
Mean	43.3	43.3	46.7	44.5	40.0	110	129	34.8	26.5	67.3	12.2	11.2
Cfsm	1.56	1.56	1.69	1.61	1.44	3.97	4.66	1.26	0.957	2.43	0.440	0.404
In.	1.80	1.74	1.94	1.85	1.50	4.58	5.20	1.45	1.07	2.80	0.51	0.45

	Observed			Adjusted		
Calendar year 1958:	Max 366	Min 6.6	Mean 61.8	Mean 61.8	Cfsm 2.23	In. 30.26
Water year 1958-59:	Max 401	Min 3.8	Mean 49.2	Mean 50.8	Cfsm 1.83	In. 24.89

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Buffumville Reservoir.

1250. French River at Webster, Mass.

Location.--Lat 42°03'03", long 71°53'08", on right bank 50 ft upstream from Pleasant Street Bridge at Webster, Worcester County, and 1.1 miles upstream from Potash Brook.

Drainage area.--85.3 sq mi.

Records available.--December 1948 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 406.74 ft above mean sea level, datum of 1929.

Average discharge.--10 years (1949-59), 170 cfs.

Extremes.--Maximum discharge during year, 954 cfs July 22 (gage height, 7.51 ft); minimum daily, 4.6 cfs Aug. 29, Sept. 20, 27.
1948-59: Maximum discharge, 14,400 cfs Aug. 19, 1955 (gage height, 26.05 ft, from floodmarks), from rating curve extended above 2,400 cfs on basis of computation of peak flow over dam; minimum daily, 2.9 cfs Sept. 30, 1951.
Flood of Mar. 19, 1936, reached a discharge of 4,700 cfs, by computation of flow over dam about half a mile upstream.

Remarks.--Records good. Flow regulated by mills and by Lake Chaubunagungamaug (estimated usable capacity, 207,000,000 cu ft) and by smaller reservoirs above station. High flow affected by Buffumville Reservoir on Little River since 1958.

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 23)

Oct. 1 to Jan. 23		Jan. 24 to Sept. 30			
4.9	43	4.4	4.1	5.2	98
5.2	97	4.5	7.3	5.5	192
5.6	218	4.6	12	6.0	400
6.0	362	4.7	20	7.0	755
6.5	520	4.9	43	7.5	950

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	219	110	393	97	103	111	276	312	78	72	71	160
2	227	110	315	139	*118	144	385	312	71	70	71	158
3	213	130	265	150	87	171	744	280	95	82	91	145
4	172	127	278	142	105	297	830	209	148	52	71	126
5	147	134	297	120	180	*360	720	177	145	43	70	98
6	140	126	344	110	158	478	762	128	118	40	66	87
7	130	118	362	100	119	640	738	138	106	40	59	72
8	134	80	337	104	111	513	685	146	120	38	8.9	*99
9	139	113	304	95	116	380	472	124	102	27	29	79
10	136	173	258	86	110	324	458	101	90	6.6	77	71
11	120	210	225	82	109	340	510	126	82	53	67	63
12	120	208	200	72	100	340	520	113	74	137	63	8.6
13	129	184	179	72	105	330	*496	114	25	150	60	16
14	117	157	166	72	113	330	444	126	52	177	54	75
15	*113	128	166	71	214	320	384	136	98	324	6.2	62
16	110	122	160	105	248	348	340	106	90	344	13	60
17	103	*134	114	182	212	372	304	108	90	296	68	56
18	72	117	122	150	197	352	235	132	92	218	58	40
19	71	114	*130	133	202	328	222	136	99	170	56	5.5
20	92	115	130	120	157	352	244	*142	62	214	39	4.6
21	79	110	114	150	133	404	266	103	76	535	38	56
22	73	76	110	337	116	496	276	91	110	906	6.2	54
23	76	86	110	480	127	514	258	46	*91	*858	5.5	48
24	93	112	112	475	108	420	231	67	83	626	60	36
25	109	96	102	340	98	316	192	104	74	475	50	32
26	133	88	100	255	95	248	185	84	73	336	38	5.2
27	164	56	97	197	102	244	201	74	38	228	35	4.6
28	177	110	97	165	76	209	205	68	58	192	24	56
29	172	242	97	149	-	196	253	63	94	143	4.6	59
30	154	379	102	118	-------	214	300	9.8	79	122	20	39
31	141	-------	107	98	-------	205	-------	30	-------	112	116	-------
Total	4,075	4,065	5,893	4,966	3,719	10,296	12,136	3,905.8	2,613	7,086.6	1,495.4	1,875.5
Mean	131	136	190	160	133	332	405	126	87.1	229	48.2	62.5
Cfsm	1.54	1.59	2.23	1.88	1.56	3.89	4.75	1.48	1.02	2.68	0.565	0.733
In.	1.78	1.77	2.57	2.17	1.62	4.49	5.29	1.70	1.14	3.09	0.65	0.82

Calendar year 1958: Max 990 Min 5.2 Mean 196 Cfsm 2.30 In. 31.20
Water year 1958-59: Max 906 Min 4.6 Mean 170 Cfsm 1.99 In. 27.09

* Discharge measurement made on this day.
Note.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

1255. Quinebaug River at Putnam, Conn.

Location.--Lat 41°54'34", long 71°54'48", on right bank at Putnam, Windham County, 0.15 mile downstream from Little River, 0.3 mile upstream from New York, New Haven and Hartford Railroad bridge, 2.8 miles downstream from French River, and at mile 35.7.

Drainage area.--331 sq mi.

Records available.--December 1929 to September 1959. October and November 1929 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 216.76 ft above mean sea level, datum of 1929. Prior to Aug. 1, 1958, at same site on left bank at same datum.

Average discharge.--30 years, 571 cfs.

Extremes.--Maximum discharge during year, 5,510 cfs Apr. 3 (gage height, 10.06 ft); minimum, 32 cfs Sept. 21 (gage height, 1.87 ft); minimum daily, 40 cfs Aug. 22.
1929-59: Maximum discharge, 48,000 cfs Aug. 19, 1955 (gage height, 26.5 ft, from floodmarks), from rating curve extended above 2,500 cfs on basis of computation of flow over dam at gage heights 17.28 and 19.45 ft and slope-area measurement of peak flow; minimum, 8.0 cfs Aug. 9, 1953 (gage height, 1.54 ft); minimum daily, 11 cfs Oct. 5, 12, 1930.

Remarks.--Records excellent except those for Dec. 10-30, which are good, and those for Aug. 3-26, which are fair. City of Putnam diverts an average of less than 1 mgd from Little River for municipal supply. Large diurnal fluctuations, particularly during low flow, caused by many dams and reservoirs upstream, largest of which is Lake Chaubunagungamaug with an estimated usable capacity of 207,000,000 cu ft.

Revisions (water years).--WSP 781: Drainage area, 1934(M). WSP 1301: 1931-33(M), 1935(M).

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 31, Jan. 1, 5, 7, 8, 11, 12, 18, 19, 22, 28)

1.9	35	4.0	600
2.0	46	5.0	1,120
2.2	74	7.0	2,570
2.5	128	10.0	5,400
3.0	250		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	662	417	1,480	313	375	347	1,090	1,050	130	289	262	190
2	755	368	1,190	490	358	536	1,360	950	181	295	228	310
3	662	428	970	620	316	640	4,730	900	596	185	200	305
4	552	476	940	540	605	1,140	*4,040	800	572	141	180	330
5	470	480	1,120	466	708	1,330	2,880	700	524	124	170	313
6	417	470	1,480	375	596	2,160	2,350	600	438	141	160	304
7	358	445	1,300	438	438	4,080	2,060	548	424	212	150	240
8	*340	417	*1,120	420	410	2,320	1,840	512	382	172	100	172
9	322	508	970	334	325	1,480	1,550	484	334	88	160	210
10	304	730	800	304	428	1,090	1,440	452	*295	82	210	218
11	280	780	680	280	508	910	1,620	438	268	298	200	202
12	250	755	600	265	410	830	1,620	434	215	368	190	104
13	256	662	560	262	500	755	1,480	484	162	434	180	74
14	242	600	520	259	600	708	1,260	500	192	466	160	68
15	242	532	500	256	1,100	685	1,120	480	225	671	80	68
16	238	508	470	344	940	1,070	940	456	280	730	130	128
17	242	496	450	805	755	1,370	880	400	292	640	120	162
18	200	473	460	600	685	1,260	780	403	298	512	120	130
19	124	470	470	500	708	1,060	730	386	304	414	110	59
20	160	459	450	424	620	1,160	830	378	259	576	100	55
21	183	448	420	457	508	1,620	910	364	188	*1,640	90	52
22	176	428	400	1,670	400	1,990	855	354	215	1,900	40	54
23	357	400	370	1,580	358	1,660	780	286	277	1,770	70	66
24	640	403	370	1,190	316	1,330	708	232	265	1,260	80	88
25	600	354	350	880	295	1,060	640	225	259	940	90	87
26	576	316	320	640	298	940	600	301	*238	730	80	82
27	620	382	310	532	280	880	700	286	190	536	*71	64
28	600	489	310	424	262	805	800	268	220	450	74	60
29	576	1,740	300	*417	-	708	1,000	262	274	368	66	128
30	524	1,700	300	414	-------	708	1,050	168	319	307	60	*178
31	480	-------	300	403	-------	805	-------	143	-------	280	80	-------
Total	12,408	17,134	20,280	16,902	14,102	37,437	42,643	14,244	8,816	17,019	4,011	4,501
Mean	400	571	654	545	504	1,208	1,421	459	294	549	129	150
Cfsm	1.21	1.73	1.98	1.65	1.52	3.65	4.29	1.39	0.888	1.66	0.390	0.453
In.	1.39	1.93	2.28	1.90	1.58	4.21	4.79	1.60	0.99	1.91	0.45	0.51

Calendar year 1958: Max 3,660 Min 68 Mean 673 Cfsm 2.03 In. 27.57
Water year 1958-59: Max 4,730 Min 40 Mean 574 Cfsm 1.73 In. 23.54

Peak discharge (base, 2,000 cfs).--Mar. 7 (2 a.m.) 5,400 cfs (10.00 ft); Mar. 22 (6:30 a.m.) 2,310 cfs (6.36 ft); Apr. 3 (11 a.m.) 5,510 cfs (10.06 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 25, 26, Dec. 10-30, Jan. 9, 10, 13-15, Feb. 2, 3, 13, 20, 21, Apr. 26 to May 6, July 22, 28, Aug. 3-26, Aug. 30 to Sept. 4; discharge estimated on basis of recorded range in stage, weather records, and records for station at Quinebaug and French River at Webster, Mass.

1260. Five Mile River at Killingly, Conn.

Location.--Lat 41°50'14", long 71°53'09", at upstream left abutment of New York, New Haven and Hartford Railroad bridge, 0.5 mile upstream from Whetstone Brook, 0.6 mile south of Killingly, Windham County, and 3.2 miles upstream from mouth.

Drainage area.--58.2 sq mi.

Records available.--October 1937 to September 1959. Monthly discharge only for October 1937, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 222.22 ft above mean sea level, datum of 1929.

Average discharge.--22 years, 106 cfs.

Extremes.--Maximum discharge during year, 795 cfs Apr. 3 (gage height, 4.72 ft); minimum, 5.6 cfs Sept. 14, 15 (gage height, 0.75 ft); minimum daily, 6.2 cfs Sept. 15.
1937-59: Maximum discharge, 2,480 cfs July 24, 1938 (gage height, 8.52 ft); minimum, 3.8 cfs Aug. 24, 1941 (gage height, 0.44 ft); minimum daily, 5.5 cfs Sept. 21, Oct. 5, 1957.
Flood of Mar. 12, 1936, reached a discharge of 1,600 cfs, by computation of flow over dam at Danielson.

Remarks.--Records excellent except those for periods of no gage-height record, which are fair. Flow regulated by dams and reservoirs upstream. Records of chemical analyses for the water year 1959 are given in WSP 1641.

Revisions (water years).--WSP 921: 1938-40. WSP 951: 1938-41.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

0.7	4.3	2.0	145
.8	7.0	2.5	260
1.0	15	3.0	360
1.2	29	4.0	585
1.5	62	5.0	885

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	81	131	79	75	106	218	187	52	44	61	42
2	135	66	123	108	60	140	261	179	43	40	59	34
3	116	67	116	117	66	a130	724	163	135	37	62	23
4	96	68	131	100	109	a300	630	158	109	27	58	9.9
5	90	55	163	88	110	a270	510	157	80	34	57	18
6	74	58	169	76	82	a400	420	139	56	33	58	17
7	72	68	161	71	62	a580	*370	128	47	34	57	15
8	67	64	*148	74	63	a400	320	109	57	33	47	23
9	*71	75	139	68	62	a240	290	103	50	30	57	8.1
10	64	88	119	61	111	a220	280	100	56	*31	58	22
11	63	88	116	65	113	200	290	93	50	109	42	17
12	50	84	114	68	80	184	290	90	45	98	43	7.0
13	37	81	101	65	100	171	260	92	24	73	41	11
14	36	76	100	64	132	159	238	120	46	68	30	28
15	35	73	100	64	175	159	215	119	58	102	16	6.2
16	48	63	97	80	142	217	202	105	*44	121	27	17
17	54	62	96	124	126	224	188	100	49	126	31	51
18	46	46	96	88	137	200	173	90	49	90	13	38
19	43	47	92	78	150	181	169	85	53	68	38	37
20	45	47	93	73	120	191	179	84	56	70	36	42
21	38	64	90	91	108	230	182	82	48	117	35	46
22	53	82	88	168	100	250	126	71	55	129	29	47
23	74	64	84	133	86	214	95	61	52	142	35	37
24	109	60	70	98	83	200	119	54	52	154	41	42
25	90	38	72	94	78	189	110	64	45	126	34	41
26	93	42	70	83	77	181	84	60	49	106	20	31
27	98	66	76	79	81	179	83	61	56	*88	*17	40
28	96	79	79	79	79	175	108	54	56	81	8.8	46
29	96	156	78	*78	-	165	116	48	57	75	14	45
30	90	159	81	82	-------	162	150	17	45	68	21	*42
31	83	-------	82	82	-------	189	-------	32	-------	68	40	-------
Total	2,210	2,167	3,275	2,678	2,767	6,806	7,400	3,005	1,674	2,422	1,185.8	883.2
Mean	71.3	72.2	106	86.4	98.8	220	247	96.9	55.8	78.1	38.3	29.4
Cfsm	1.23	1.24	1.82	1.48	1.70	3.78	4.24	1.66	0.959	1.34	0.658	0.505
In.	1.41	1.38	2.09	1.71	1.77	4.35	4.73	1.92	1.07	1.55	0.76	0.56

Calendar year 1958: Max 690 Min 8.8 Mean 129 Cfsm 2.22 In. 30.09
Water year 1958-59: Max 724 Min 6.2 Mean 99.9 Cfsm 1.72 In. 23.30

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for stations on nearby streams.

1265. Moosup River at Moosup, Conn.

Location.--Lat 41°42'37", long 71°53'11", on right bank at outlet of tailrace from Majestic Metal Specialties, Inc. (formerly Aldrich Bros.) mill at Moosup, Windham County, 100 ft upstream from New York, New Haven and Hartford Railroad bridge, 0.5 mile downstream from Ekonk Brook, and 3.8 miles upstream from mouth.

Drainage area.--83.5 sq mi.

Records available.--October 1932 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 196.64 ft above mean sea level, datum of 1929.

Average discharge.--27 years, 164 cfs.

Extremes.--Maximum discharge during year, 1,350 cfs Apr. 3 (gage height, 4.89 ft); minimum, 1.3 cfs Aug. 16 (gage height, 0.56 ft); minimum daily, 6.4 cfs Aug. 16.
1932-59: Maximum discharge, 4,260 cfs Mar. 12, 1936 (gage height, 8.35 ft), from sharp, short rise of unknown origin; maximum natural discharge, 4,100 cfs July 24, 1938 (gage height, 8.20 ft), from rating curve extended above 1,500 cfs on basis of computation of flow over dam a quarter of a mile upstream at gage heights 6.9 and 8.2 ft; minimum, 0.1 cfs Feb. 3, 1934; minimum gage height, 0.36 ft Oct. 17, 1947; minimum daily discharge, 1.1 cfs Aug. 24, 1949.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Low flow completely regulated by mills upstream.

Revisions (water years).--WSP 781: Drainage area. WSP 851: 1933, 1934(M), 1935-37.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	6.0	2.5	255
1.0	9.0	3.0	435
1.2	18	4.0	875
1.5	44	5.0	1,410
2.0	117		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	367	169	296	64	b65	234	403	280	70	74	35	14
2	515	135	185	201	b122	443	491	272	62	65	30	30
3	447	211	202	237	b90	370	1,230	249	210	55	29	37
4	318	181	207	189	213	395	995	192	170	22	46	49
5	213	184	332	b180	650	374	672	120	120	31	48	13
6	226	157	364	b210	186	827	495	186	90	76	40	13
7	147	153	304	b130	115	1,120	*427	180	84	69	65	12
8	128	109	258	b100	89	700	381	160	80	65	16	38
9	134	132	210	b90	*123	423	339	150	70	38	26	38
10	*131	223	136	b100	417	342	328	140	60	42	80	23
11	123	202	132	b110	515	272	451	135	54	226	38	22
12	62	168	140	b84	346	249	443	130	48	318	35	12
13	115	158	b111	b61	276	240	388	135	56	320	35	*11
14	98	164	b121	b64	272	234	332	170	94	229	34	11
15	88	103	b143	64	439	237	294	160	74	320	13	11
16	119	102	b130	83	374	528	258	150	*90	353	6.4	11
17	96	146	b117	153	269	592	231	140	84	318	41	33
18	72	116	b112	130	b210	491	225	130	92	276	44	27
19	64	112	b108	162	b195	374	207	120	99	218	17	12
20	102	134	b105	97	b165	332	196	110	80	165	21	11
21	86	115	b74	131	b165	342	227	100	65	206	24	15
22	70	75	b108	363	b65	399	207	95	107	225	9.8	12
23	180	80	b72	294	b90	350	171	86	86	165	11	11
24	304	111	b80	192	b126	290	160	82	85	124	34	11
25	264	105	b78	272	b106	252	149	94	80	85	35	11
26	261	80	b96	144	b99	246	105	86	95	88	33	11
27	332	76	b56	122	b121	246	189	80	91	*117	*13	12
28	302	122	67	b113	100	231	192	76	106	52	9.0	12
29	239	327	108	b105	-	219	246	70	118	81	9.2	16
30	216	336	87	95	-------	228	262	50	102	46	11	*14
31	200	-------	103	100	-------	342	-------	58	-------	48	40	-------
Total	6,019	4,486	4,642	4,440	6,003	11,922	10,694	4,186	2,722	4,517	928.4	553
Mean	194	150	150	143	214	385	356	135	90.7	146	29.9	18.4
Cfsm	2.32	1.80	1.80	1.71	2.56	4.61	4.26	1.62	1.09	1.75	0.358	0.220
In.	2.68	2.00	2.07	1.98	2.67	5.31	4.76	1.86	1.21	2.01	0.41	0.25

Calendar year 1958: Max 1,170 Min 12 Mean 228 Cfsm 2.73 In. 37.01
Water year 1958-59: Max 1,230 Min 6.4 Mean 167 Cfsm 2.00 In. 27.21

Peak discharge (base, 800 cfs).--Mar. 6 (8:30 p.m.) 1,320 cfs (4.87 ft); Apr. 3 (7:30 a.m.) 1,350 cfs (4.89 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record May 7 to June 16; discharge estimated on basis of recorded range in stage, weather records, and records for other stations in the Thames River basin.

1270. Quinebaug River at Jewett City, Conn.

Location.--Lat 41°35'52", long 71°59'05", on left bank in rear of high school on Slater Avenue at Jewett City, New London County, 570 ft downstream from outlet of canal from Wedgewood Mills (formerly Fisk Mills, Inc.) at mouth of Pachaug River, 1,000 ft downstream from railroad bridge, and at mile 6.1.

Drainage area.--711 sq mi.

Records available.--July 1918 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 63.07 ft above mean sea level, datum of 1929.

Average discharge.--41 years, 1,253 cfs.

Extremes.--Maximum discharge during year, 9,900 cfs Apr. 3 (gage height, 14.74 ft); minimum, 133 cfs Aug. 30 (gage height, 4.28 ft); minimum daily, 137 cfs Aug. 30.
1918-59: Maximum discharge, 40,700 cfs Aug. 20, 1955 (gage height, 29.0 ft, from floodmarks), from rating curve extended above 11,000 cfs by computation of peak flows over three nearby dams at gage heights 21.7, 22.5, 24.0 and 29.0 ft; minimum daily, 18 cfs Aug. 28, Dec. 11, 1949.

Remarks.--Records excellent except those for period of no gage-height record, which are good. Flow regulated by many ponds and reservoirs upstream, the largest of which are Lake Chaubunagungamaug, Pachaug Pond, and since October 1958 by Buffumville Reservoir.

Revisions (water years).--WSP 781: Drainage area. WSP 1301: 1919-26(M).

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to July 22				July 23 to Sept. 30			
4.8	295	8.0	2,200	4.3	137	6.0	790
5.2	450	11.0	5,160	4.6	212	7.0	1,370
6.0	860	14.0	8,900	5.0	337	9.0	3,060

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,540	a1,300	2,610	695	750	1,070	*2,520	*2,280	*472	*640	508	*224
2	2,200	a1,150	2,280	1,070	750	2,000	2,790	2,280	495	615	456	402
3	2,080	1,160	1,920	1,540	668	*1,890	7,540	2,080	980	575	423	461
4	1,720	1,250	1,890	1,310	1,220	2,180	*8,620	1,860	1,470	434	403	452
5	1,470	1,220	2,360	1,130	1,890	2,880	6,330	1,640	1,190	390	411	427
6	1,310	1,190	2,700	950	1,500	3,620	4,940	1,540	1,010	418	348	373
7	1,190	1,130	2,520	805	1,070	8,620	4,280	1,370	920	434	323	359
8	1,100	1,040	2,280	695	980	5,760	3,760	1,250	860	422	323	323
9	1,010	1,070	2,000	695	*860	3,760	3,260	1,160	778	326	320	313
10	*980	1,540	*1,720	585	1,590	2,880	3,060	1,070	668	312	359	303
11	890	1,640	1,400	540	2,360	2,360	3,460	1,130	615	868	403	300
12	805	1,580	1,440	570	1,500	2,120	3,560	1,040	555	1,470	407	271
13	805	1,440	1,370	550	1,470	1,920	3,260	1,040	540	1,340	384	207
14	805	1,310	1,280	540	1,780	1,860	2,880	1,220	580	1,250	320	198
15	805	1,220	1,340	536	2,520	1,780	2,520	1,280	668	1,610	259	207
16	832	1,130	1,250	615	2,610	2,670	2,280	1,130	668	2,040	226	224
17	778	1,160	1,220	1,250	1,960	3,560	2,080	1,010	668	1,750	226	244
18	695	1,070	1,220	1,280	1,750	3,260	2,000	1,040	590	1,470	256	262
19	a620	1,040	1,190	1,070	2,040	2,610	1,820	980	722	1,190	247	262
20	a600	1,040	1,190	920	1,380	2,520	1,890	980	722	1,040	238	259
21	a600	980	1,070	950	1,280	2,880	2,120	920	590	1,720	300	224
22	a580	980	1,010	2,220	1,100	3,560	2,000	890	615	2,520	287	355
23	a900	890	980	2,880	980	3,360	1,780	832	668	2,490	235	359
24	a1,700	980	980	2,040	950	2,790	1,640	695	668	2,050	224	348
25	a1,850	950	890	1,680	860	2,360	1,540	668	668	1,580	250	317
26	a1,600	890	832	1,400	805	2,160	1,440	640	668	1,270	244	317
27	a1,700	778	750	1,100	832	2,120	1,470	668	615	*1,120	209	290
28	a1,800	860	778	980	805	2,040	1,780	640	640	840	155	293
29	a1,700	2,100	832	890	-	1,860	2,000	555	722	740	144	327
30	a1,600	3,060	805	920	-------	1,860	2,200	508	695	640	137	320
31	a1,450	-------	832	920	-------	2,080	-------	513	-------	526	172	-------
Total	37,715	37,148	44,939	33,326	38,260	86,390	90,820	34,909	21,720	34,090	9,197	9,221
Mean	1,217	1,238	1,450	1,075	1,366	2,787	3,027	1,126	724	1,100	297	307
Cfsm	1.71	1.74	2.04	1.51	1.92	3.92	4.26	1.58	1.02	1.55	0.418	0.432
In.	1.97	1.94	2.35	1.68	2.00	4.52	4.75	1.82	1.14	1.79	0.48	0.48

Calendar year 1958: Max 7,070 Min 302 Mean 1,654 Cfsm 2.33 In. 31.57
Water year 1958-59: Max 8,620 Min 137 Mean 1,309 Cfsm 1.84 In. 24.92

Peak discharge (base, 4,500 cfs).--Mar. 7 (11:30 a.m.) 9,320 cfs (14.34 ft); Apr. 3 (10:30 p.m.) 9,900 cfs (14.74 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage and sum of records for Quinebaug River at Putnam, Five Mile River at Killingly, and Moosup River at Moosup.

1275. Yantic River at Yantic, Conn.

Location.--Lat 41°33'31", long 72°07'19", on left bank at Yantic, New London County, 700 ft downstream from stone-arch highway bridge, 1 mile downstream from Susquetonscut Brook, and 4.8 miles upstream from mouth.

Drainage area.--88.6 sq mi.

Records available.--October 1930 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 94.46 ft above mean sea level, datum of 1929.

Average discharge.--29 years, 161 cfs.

Extremes.--Maximum discharge during year, 3,130 cfs Mar. 6 (gage height, 9.00 ft); minimum, 11 cfs Sept. 13; minimum gage height, 0.98 ft Aug. 29; minimum daily discharge, 12 cfs Sept. 13.
1930-59: Maximum discharge, 13,500 cfs Sept. 21, 1938 (gage height, 14.66 ft, from floodmark), by computation of flow over two dams 2½ miles upstream and 3 miles downstream from station, respectively; minimum, 2.3 cfs sometime during period July 21 to Aug. 11, 1949; minimum gage height, 0.41 ft Oct. 13, 1930; minimum daily discharge, 3.3 cfs Oct. 13, 1930.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are good. Low flow completely regulated by mills upstream.

Revisions (water years).--WSP 781: Drainage area. WSP 1051: 1931-36. WSP 1301: 1934(M).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Sept. 3-31)

Oct. 1 to July 11				July 12 to Sept. 30	
1.1	14	4.0	445	1.0	13
1.5	36	5.0	740	1.5	40
2.0	81	6.0	1,120	2.0	84
3.0	225	8.0	2,250	3.2	265

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	328	a190	319	b109	b78	197	321	279	50	34	28	30
2	420	a180	227	388	b62	358	390	265	51	33	22	39
3	299	a230	182	358	b57	277	2,240	210	143	39	20	30
4	202	a260	*270	249	325	377	1,120	175	134	30	18	69
5	150	a210	395	b160	319	345	645	152	86	22	19	70
6	115	a180	432	b110	182	1,540	470	141	61	22	23	37
7	105	a160	299	b90	123	1,610	408	127	50	46	23	24
8	95	a150	225	b80	105	538	345	119	42	34	20	*18
9	83	a200	190	b70	*82	345	*305	110	36	24	26	15
10	*86	a270	160	b65	422	285	325	103	27	24	30	15
11	83	a220	b132	b60	515	235	470	98	29	276	34	14
12	68	a190	b142	b55	249	208	432	93	24	247	30	13
13	56	a160	b131	b56	228	214	341	112	33	164	25	*12
14	60	a150	b124	59	243	208	285	168	85	110	22	14
15	60	a140	b123	62	581	206	251	152	*53	206	20	39
16	60	a135	b126	120	370	560	225	124	42	249	18	44
17	57	a130	b127	263	231	605	200	115	32	194	15	43
18	a88	a130	b118	b188	205	445	187	99	45	124	14	41
19	a80	a130	b113	b122	209	323	180	82	55	90	16	24
20	a71	131	b118	92	b137	317	206	82	63	71	23	19
21	a65	122	b105	168	122	370	231	78	45	95	23	18
22	a62	115	b101	470	b98	470	198	74	36	*93	19	27
23	a500	106	108	332	85	370	175	82	47	82	17	31
24	a900	103	106	187	87	293	157	68	42	62	17	32
25	a400	98	b86	145	b70	255	145	56	49	75	18	31
26	a520	98	b78	121	b70	251	138	50	67	67	17	29
27	a520	112	87	104	b76	267	154	42	60	48	14	18
28	a370	114	78	b83	b92	259	211	42	53	42	*13	*13
29	a290	716	78	b74	-	237	293	54	47	30	17	26
30	a240	568	93	95	-------	241	275	43	38	29	23	32
31	a210	-------	109	b98	-------	313	-------	67	-------	32	26	-------
Total	6,643	5,698	4,982	4,633	5,423	12,519	11,323	3,462	1,625	2,694	650	867
Mean	214	190	161	149	194	404	377	112	54.2	86.9	21.0	28.9
Cfsm	2.42	2.14	1.82	1.68	2.19	4.56	4.26	1.26	0.612	0.981	0.237	0.326
In.	2.79	2.39	2.10	1.94	2.28	5.26	4.75	1.45	0.68	1.13	0.27	0.36

Calendar year 1958: Max 1,390 Min 16 Mean 213 Cfsm 2.40 In. 32.66
Water year 1958-59: Max 2,240 Min 12 Mean 166 Cfsm 1.87 In. 25.40

Peak discharge (base, 1,000 cfs).--Sept. 23 (time unknown) 1,120 cfs (6.00 ft); Mar. 6 (8 p.m.) 3,130 cfs (9.00 ft); Apr. 3 (5 a.m.) 2,830 cfs (8.70 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for Salmon River near East Hampton and East Branch Eightmile River near North Lyme.
b Stage-discharge relation affected by ice.

Reservoirs in Thames River basin

1215. Mansfield Hollow Reservoir on Natchaug River at Mansfield Hollow, Conn., 3½ miles northeast of Willimantic, completed in March 1952 for flood control, has usable capacity of 2,260,000,000 cu ft. Records furnished by Corps of Engineers.

1244. Buffumville Reservoir on Little River at Buffumville, Mass., 2¼ miles west of Oxford, completed in 1958 for flood control, has usable capacity of 492,000,000 cu ft. Records furnished by Corps of Engineers.

Month-end contents, in millions of cubic feet, water year October 1958 to September 1959

Date	Mansfield Hollow Reservoir	Buffumville Reservoir
Sept.30, 1958	1.8	6.1
Oct. 31	1.3	5.5
Nov. 30	36.0	11.8
Dec. 31	.9	4.1
Jan. 31, 1959	1.0	4.4
Feb. 28	1.0	4.1
Mar. 31	10.4	67.1
Apr. 30	4.5	68.0
May 31	.5	59.2
June 30	.5	61.0
July 31	.5	61.0
Aug. 31	1.5	62.7
Sept.30	.3	56.6

1285. Connecticut River at First Connecticut Lake, near Pittsburg, N. H.

Location.--Lat 45°05'15", long 71°17'35", on right bank a quarter of a mile downstream from dam at First Connecticut Lake and 6 miles northeast of Pittsburg, Coos County.

Drainage area.--83.0 sq mi.

Records available.--April 1917 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 1,560 ft (from topographic map). Prior to Jan. 1, 1918, discharge computed from flow through gates at dam a quarter of a mile upstream. Jan. 1 to July 28, 1918, staff gage at present site and datum.

Average discharge.--42 years, 195 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 1,140 cfs June 29 (gage height, 3.82 ft); minimum daily, 8.1 cfs Mar. 25 to Apr. 1.
1917-59: Maximum discharge, 7,200 cfs June 16, 1943 (gage height, 6.25 ft), from rating curve extended above 1,900 cfs on basis of computation of flow over dam at gage height, 6.12 ft; maximum gage height, 6.35 ft May 5, 1925 (backwater from logging operations); minimum daily discharge, 3.1 cfs Mar. 17, 18, 1929.

Remarks.--Records good except those below 20 cfs, which are fair. Flow regulated by First Connecticut and Second Connecticut Lakes (see p. 242).

Revisions (water years).--WSP 756: Drainage area. WSP 1001: 1931-39. WSP 1231: 1921-23(M), 1925-26.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.4	8.1	2.2	142
1.5	15	2.6	280
1.7	38	3.0	480
2.0	92	3.6	920

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	444	15	534	157	160	88	8.1	13	16	18	175	166
2	444	15	528	157	160	77	8.7	13	16	18	175	166
3	444	183	522	229	160	73	8.7	13	16	20	175	163
4	438	540	534	320	160	71	8.7	13	16	77	179	89
5	438	534	534	320	157	104	9.3	13	16	145	179	18
6	432	528	528	316	157	142	9.9	13	16	221	179	18
7	432	375	522	312	234	160	9.9	13	16	272	179	18
8	432	15	516	312	320	172	9.9	14	16	264	179	18
9	*432	349	516	316	316	188	9.9	14	16	264	179	18
10	426	540	510	325	312	188	9.9	14	16	260	179	18
11	426	534	528	320	316	188	9.9	14	16	260	179	18
12	426	528	547	316	316	212	9.9	14	16	260	179	18
13	420	528	540	316	312	230	9.9	*14	16	156	179	18
14	420	528	534	312	302	230	9.9	14	16	108	175	116
15	420	*283	534	316	289	230	9.9	14	17	106	175	160
16	420	15	540	320	206	226	11	14	18	108	175	*160
17	220	15	547	316	108	222	11	14	20	108	175	160
18	15	15	540	312	106	222	11	14	*22	110	175	157
19	15	510	386	307	b108	219	11	14	20	108	*179	157
20	161	758	166	316	b108	188	11	14	17	108	179	157
21	432	*774	166	242	108	166	11	14	18	168	179	157
22	432	750	163	66	106	b150	11	14	18	*185	179	157
23	284	736	160	157	106	b82	11	14	18	185	179	157
24	15	750	160	160	106	b8.7	11	14	18	182	179	157
25	15	743	157	160	106	b8.1	12	14	18	175	185	157
26	15	666	157	160	104	b8.1	12	14	18	179	188	157
27	15	540	157	160	104	8.1	12	14	18	175	188	157
28	15	534	157	160	99	b8.1	12	14	20	175	188	157
29	15	298	157	160	-	b8.1	12	14	896	175	239	157
30	15	281	157	157	-------	8.1	12	15	149	175	272	157
31	15	-------	157	157	-------	8.1	-------	15	-------	175	231	-------
Total	8,573	12,880	11,854	7,654	5,148	3,893.4	313.5	429	1,529	4,940	5,755	3,383
Mean	277	429	382	247	184	126	10.4	13.8	51.0	159	186	113
(†)	-77.6	-290	-327	-154	-130	-69.5	+647	+395	+301	-82.5	-115	-86.3
Adjusted for change in reservoir contents												
Mean	199	139	55.0	92.8	54.2	56.1	657	409	352	76.8	70.9	26.5
Cfsm	2.40	1.67	0.663	1.12	0.653	0.676	7.92	4.93	4.24	0.925	0.854	0.319
In.	2.76	1.87	0.76	1.29	0.68	0.78	8.84	5.69	4.73	1.07	0.99	0.36

	Observed			Adjusted		
Calendar year 1958:	Max 774	Min 7.5	Mean 230	Mean 186	Cfsm 2.24	In. 30.38
Water year 1958-59:	Max 896	Min 8.1	Mean 182	Mean 182	Cfsm 2.19	In. 29.82

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes.
b Stage-discharge relation affected by ice.

1292. Connecticut River below Indian Stream, near Pittsburg, N. H.

Location.--Lat 45°02'25", long 71°26'35", on right bank 1,200 ft downstream from Indian Stream and 2.5 miles west of Pittsburg, Coos County.

Drainage area.--254 sq mi.

Records available.--October 1956 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 1,150 ft (from topographic map).

Extremes.--Maximum discharge during year, 2,450 cfs June 15 (gage height, 5.32 ft); minimum daily, 49 cfs Sept. 13.
1956-59: Maximum discharge, 3,310 cfs Apr. 22, 1958 (gage height, 6.06 ft); minimum daily, 41 cfs Sept. 12, 13, 1957.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow regulated by First Connecticut and Second Connecticut Lakes and Lake Francis (see p. 242).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	38	3.0	470
2.0	86	3.5	760
2.3	163	4.0	1,140
2.5	234	5.0	2,100

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	893	302	1,080	b335	b405	350	99	592	173	a350	395	508
2	980	250	1,090	335	b400	410	173	503	311	a290	390	486
3	924	449	1,090	455	b395	*450	435	492	234	a255	385	420
4	893	1,170	1,090	634	390	440	604	440	166	a240	380	300
5	872	1,160	1,090	b630	390	580	694	440	130	a230	375	93
6	893	1,160	1,080	b630	b390	622	736	415	113	227	375	75
7	879	874	1,080	b630	b535	628	736	385	118	242	380	64
8	872	139	1,080	622	865	429	*688	345	133	259	375	58
9	*865	745	1,070	628	b850	b195	700	254	349	219	375	54
10	872	1,130	1,070	634	851	b220	676	212	249	183	400	51
11	988	1,120	1,060	634	851	b240	718	190	160	170	425	51
12	980	1,110	1,060	628	844	b240	604	216	128	170	425	51
13	940	1,110	1,060	622	844	b310	508	*194	118	197	420	49
14	908	1,120	1,060	628	844	b350	508	160	152	283	405	210
15	893	*813	1,060	634	837	b345	586	145	1,460	569	390	335
16	916	212	1,060	634	740	345	688	139	1,330	558	385	*330
17	1,310	166	*1,070	634	460	316	1,070	128	492	552	390	330
18	505	160	1,060	634	455	b285	908	116	*a350	547	395	330
19	316	1,090	865	634	b455	b290	1,160	101	a295	542	*410	325
20	472	1,770	b355	634	b455	288	1,000	106	a265	542	405	325
21	964	1,700	b355	*542	b455	298	694	156	a240	450	410	325
22	940	1,690	b350	166	b455	b310	564	1,150	230	*395	542	325
23	711	1,650	345	445	b455	b195	700	780	219	395	445	325
24	204	1,660	345	b490	657	b88	956	395	197	395	415	325
25	242	1,660	345	b515	837	b95	1,170	380	177	390	410	325
26	223	1,470	b340	b490	837	b95	1,260	267	160	390	405	320
27	201	1,120	340	b465	691	84	1,030	204	163	385	395	320
28	216	1,090	340	b440	355	b88	676	180	232	385	400	320
29	316	708	340	425	-	b84	592	154	1,490	385	514	316
30	280	781	340	415	---------	b76	547	148	604	380	569	316
31	227	--------	340	b410	---------	80	--------	230	--------	395	492	--------
Total	21,695	29,579	24,310	16,652	16,998	8,826	21,480	9,617	10,438	10,970	12,877	7,662
Mean	700	986	784	537	607	285	716	310	348	354	415	255
(†)	-122	-534	-599	-302	-450	-129	+1,373	+621	+664	+92.1	-230	-162
Adjusted for change in reservoir contents												
Mean	578	451	186	235	157	156	2,089	932	1,012	262	186	93.8
Cfsm	2.28	1.78	0.732	0.925	0.618	0.614	8.22	3.67	3.98	1.03	0.732	0.369
In.	2.62	1.98	0.84	1.07	0.64	0.71	9.18	4.23	4.45	1.19	0.84	0.41

	Observed			Adjusted			
Calendar year 1958:	Max 3,010	Min 55	Mean 639	Mean 557	Cfsm 2.19	In. 29.75	
Water year 1958-59:	Max 1,770	Min 49	Mean 524	Mean 527	Cfsm 2.07	In. 28.16	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes and Lake Francis.
a No gage-height record; discharge estimated on basis of 1 discharge measurement, weather records, records for station at North Stratford, and records of outflow from Lake Francis.
b Stage-discharge relation affected by ice.

1295. Connecticut River at North Stratford, N. H.

Location.--Lat 44°44'55", long 71°37'55", on left bank at North Stratford, Coos County, 400 ft downstream from Nulhegan River.

Drainage area.--799 sq mi.

Records available.--August 1930 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 880.17 ft above mean sea level, datum of 1929.

Average discharge.--29 years, 1,556 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 7,680 cfs Apr. 19 (gage height, 7.74 ft); maximum gage height, 16.11 ft Apr. 3 (ice jam); minimum daily discharge, 169 cfs Sept. 14. 1930-59: Maximum discharge, 28,700 cfs June 16, 1943 (gage height, 14.67 ft), from rating curve extended above 15,000 cfs; maximum gage height, 16.66 ft Mar. 13, 1936 (ice jam); minimum daily discharge, 112 cfs Aug. 28, 1948.

Remarks.--Records excellent except those for period of ice effect, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes and Lake Francis (see p. 242).

Revisions (water years).--WSP 781: 1934(M). WSP 891: Drainage area.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.9	167	5.0	2,400
3.3	341	6.0	4,170
3.6	540	8.0	8,250
4.0	970		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,530	2,110	1,700	570	1,100	820	900	3,410	828	1,560	782	1,150
2	1,990	1,810	2,000	680	950	800	1,300	2,850	944	1,330	625	1,260
3	1,680	1,470	2,250	770	900	820	4,000	2,560	1,060	1,640	533	931
4	1,470	1,840	2,250	820	930	840	6,000	2,400	905	1,200	489	1,010
5	1,430	2,080	1,900	850	960	820	6,500	2,370	665	970	460	620
6	1,540	2,050	1,800	800	960	920	7,300	2,260	557	625	454	408
7	1,460	2,040	1,700	780	920	950	6,000	2,220	608	840	460	320
8	*1,360	1,280	1,650	840	1,050	920	*5,510	2,050	540	828	511	210
9	1,330	983	1,600	880	1,200	750	6,490	1,610	714	625	533	229
10	1,310	2,000	1,600	900	1,250	660	5,590	1,330	866	511	605	235
11	1,860	2,000	1,600	920	1,250	660	5,650	1,240	566	447	1,150	222
12	1,900	1,880	1,450	920	1,250	650	4,790	1,280	447	408	1,010	270
13	1,630	1,820	1,450	920	1,250	620	4,020	1,240	414	592	759	218
14	1,490	*2,020	1,450	920	1,250	660	4,020	*1,060	518	474	736	169
15	1,440	2,710	1,450	920	1,250	700	4,420	817	4,880	625	608	*306
16	1,510	1,810	1,500	920	1,200	720	4,690	828	6,910	786	566	408
17	3,380	1,350	1,550	1,000	1,000	700	6,550	759	*3,540	736	600	427
18	2,560	1,200	1,550	1,100	900	660	6,710	684	2,270	714	879	401
19	1,540	1,600	1,300	1,100	850	640	7,290	608	2,260	724	794	401
20	1,180	2,710	1,000	1,000	820	680	6,650	625	1,880	794	*635	401
21	1,470	2,590	850	1,000	800	850	4,690	875	1,940	*714	616	401
22	1,570	2,540	700	1,500	820	1,100	3,700	2,950	1,350	616	770	414
23	1,530	2,370	700	2,200	800	1,100	3,980	2,710	1,190	566	736	408
24	1,720	2,400	630	2,050	850	1,050	4,890	1,680	996	540	645	421
25	1,680	2,340	630	1,900	1,100	950	5,690	1,630	747	518	817	434
26	1,490	2,240	640	1,700	1,200	900	5,990	1,310	714	518	694	414
27	1,460	2,140	660	1,500	1,200	850	5,370	983	918	504	600	401
28	1,750	1,740	680	1,400	1,050	800	3,770	794	1,240	467	600	395
29	2,850	1,600	660	1,300	-	760	3,160	724	4,200	474	817	395
30	2,480	1,000	660	1,250	--------	750	2,980	704	3,460	460	828	401
31	1,920	--------	600	1,200	--------	770	--------	1,090	--------	512	770	--------
Total	53,510	57,723	40,160	34,610	29,060	24,870	148,600	47,651	48,127	22,318	21,082	13,680
Mean	1,726	1,924	1,295	1,116	1,038	802	4,953	1,537	1,604	720	680	456
(†)	-122	-534	-599	-302	-450	-129	+1,373	+621	+664	-92.1	-230	-162

Adjusted for change in reservoir contents

Mean	1,640	1,390	697	814	588	674	6,327	2,159	2,268	628	450	294
Cfsm	2.01	1.74	0.872	1.02	0.736	0.844	7.92	2.70	2.84	0.786	0.563	0.368
In.	2.31	1.94	1.01	1.17	0.77	0.97	8.83	3.11	3.17	0.91	0.65	0.41

	Observed			Adjusted			
Calendar year 1958:	Max 14,800	Min 365	Mean 1,688	Mean 1,606	Cfsm 2.01	In. 27.29	
Water year 1958-59:	Max 7,300	Min 169	Mean 1,483	Mean 1,487	Cfsm 1.86	In. 25.25	

Peak discharge (base, 10,000 cfs).--No peak above base.

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes and Lake Francis.
Note.--Stage-discharge relation affected by ice Nov. 29 to Apr. 7.

1300. Upper Ammonoosuc River near Groveton, N. H.

Location.--Lat 44°37'30", long 71°28'10", on left bank 75 ft upstream from highway bridge, 0.2 mile downstream from Nash Stream, and 2¾ miles northeast of Groveton, Coos County.

Drainage area.--232 sq mi.

Records available.--August 1940 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 920 ft (from topographic map).

Average discharge.--19 years, 478 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 2,560 cfs Apr. 19 (gage height, 5.96 ft); maximum gage height, 6.55 ft Apr. 4 (ice jam); minimum discharge, 54 cfs Sept. 27, 28.
1940-59: Maximum discharge, 9,950 cfs Mar. 27, 1953 (gage height, 9.44 ft), from rating curve extended above 5,800 cfs by logarithmic plotting; minimum, 32 cfs Sept. 14, 1948.
Flood in March 1936 reached a stage of about 10.6 ft, from information by local residents.

Remarks.--Records excellent except those for period of ice effect, which are fair. Some regulation by pond on Nash Stream. Small diversion above station for municipal supply of Berlin.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.6	44	4.0	645
2.9	115	5.0	1,480
3.2	211	6.0	2,610
3.5	345		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	298	884	240	120	320	145	450	1,060	335	395	115	166
2	474	750	250	125	280	145	700	988	330	360	102	173
3	350	631	240	125	270	*145	1,500	940	320	360	84	270
4	277	556	230	125	270	145	2,300	908	268	300	75	444
5	254	498	220	120	300	145	2,100	900	234	259	72	273
6	250	474	250	115	300	140	2,000	948	230	230	70	176
7	227	474	240	115	250	155	*1,950	988	234	238	67	135
8	*208	439	220	110	230	155	1,900	1,010	234	227	67	112
9	194	428	205	110	210	160	2,100	800	223	197	89	99
10	194	498	205	105	200	150	1,910	687	197	180	181	89
11	330	468	210	105	200	145	1,900	673	176	166	345	127
12	330	417	210	100	190	150	1,700	*800	163	170	238	130
13	272	380	200	95	185	165	1,440	736	163	176	170	110
14	242	*412	185	95	185	155	1,370	638	243	160	138	107
15	219	624	175	95	180	145	1,450	568	1,690	147	110	*107
16	230	666	170	110	175	155	1,520	498	2,080	138	107	105
17	703	542	170	130	170	155	1,890	450	*1,250	132	166	99
18	860	444	170	150	165	150	2,190	395	956	124	*211	92
19	562	439	165	150	165	145	2,360	340	1,120	121	150	84
20	444	439	165	*120	160	150	2,430	345	964	132	118	75
21	385	395	160	130	160	350	1,930	370	800	*127	110	70
22	310	375	160	400	155	700	1,480	908	631	163	102	72
23	305	325	160	800	155	800	1,420	785	542	130	89	70
24	584	330	155	750	155	650	1,550	589	439	115	92	67
25	815	300	150	600	150	520	1,740	523	375	110	110	61
26	645	285	145	470	145	430	1,880	439	345	102	105	57
27	876	340	140	410	150	380	1,840	400	355	94	89	54
28	1,200	270	135	380	145	350	1,420	335	518	89	79	57
29	1,610	280	135	360	-	320	1,200	295	892	84	87	63
30	1,310	260	130	360	-------	310	1,080	325	589	79	107	75
31	980	-------	130	380	-------	310	-------	412	-------	92	115	-------
Total	15,938	13,623	5,720	7,360	5,620	8,120	50,700	20,053	16,896	5,397	3,760	3,619
Mean	514	454	185	237	201	262	1,690	647	563	174	121	121
(†)	2.41	2.39	1.88	2.37	2.16	2.68	2.39	2.61	2.32	2.39	2.68	2.63

Adjusted for diversion

Mean	517	456	186	240	203	265	1,692	649	566	176	124	123
Cfsm	2.23	1.97	0.802	1.03	0.875	1.14	7.29	2.80	2.44	0.759	0.534	0.530
In.	2.57	2.20	0.93	1.19	0.91	1.31	8.14	3.23	2.72	0.88	0.62	0.59

	Observed			Adjusted		
Calendar year 1958:	Max 5,870	Min 115	Mean 536	Mean 538	Cfsm 2.32	In. 31.51
Water year 1958-59:	Max 2,430	Min 54	Mean 430	Mean 432	Cfsm 1.86	In. 25.29

Peak discharge (base, 2,900 cfs).--No peak above base.

* Discharge measurement made on this day.
† Diversion, equivalent in cubic feet per second, for municipal supply of Berlin. Records furnished by city of Berlin.
Note.--Stage-discharge relation affected by ice Nov. 26 to Apr. 9.

1315. Connecticut River near Dalton, N. H.

Location.--Lat 44°24'35", long 71°43'00", on left bank 250 ft upstream from highway bridge, 1,200 ft downstream from dam of Gilman Paper Co., and 1¼ miles downstream from Dalton, Coos County.

Drainage area.--1,514 sq mi.

Records available.--March 1927 to September 1959. Published as "at Waterford, Vt." 1927-35. Records published for both sites January to September 1935.

Gage.--Water-stage recorder. Datum of gage is 799.89 ft above mean sea level, datum of 1929. Prior to Sept. 30, 1935, chain gage at bridge 10½ miles downstream at mean sea level. Jan. 1, 1935, to June 29, 1937, chain gage at bridge 250 ft downstream at present datum.

Average discharge.--32 years, 2,884 cfs (adjusted to drainage area at present site and for storage).

Extremes.--Maximum discharge during year, 14,700 cfs Apr. 7 (gage height, 15.85 ft); minimum daily, 431 cfs Sept. 20.
1927-59: Maximum discharge, 48,300 cfs Mar. 20, 1936 (gage height, 25.6 ft); minimum daily, 115 cfs Oct. 3, 1937.

Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis (see p. 242), and other reservoirs. These reservoirs have a combined usable capacity of about 8 1/3 billion cubic feet.

Revisions (water years).--WSP 891: Drainage area. WSP 1231: 1935. WSP 1301: 1928-35(M).

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,110	3,790	1,650	770	1,800	1,350	1,950	5,940	1,930	3,910	1,230	1,220
2	2,790	3,480	1,800	750	1,550	1,150	2,800	5,800	1,860	2,740	916	*1,760
3	2,920	*3,120	2,000	940	1,450	950	7,560	5,130	1,670	2,410	700	1,970
4	2,530	*2,800	2,050	820	1,400	1,100	10,700	4,730	1,720	2,310	722	2,210
5	2,180	*2,990	2,300	910	1,400	1,100	11,300	4,500	1,680	2,080	722	2,180
6	*2,080	3,130	2,500	1,300	1,500	1,100	12,300	4,440	1,300	*1,520	715	1,120
7	2,130	3,080	2,200	1,100	1,450	1,300	*13,000	4,400	1,130	*1,600	662	585
8	2,070	2,940	2,050	920	1,400	1,400	12,500	4,370	1,170	*1,610	514	843
9	2,010	2,410	1,950	900	1,350	1,350	12,600	3,900	1,210	*1,310	542	786
10	1,910	*2,240	1,950	1,220	1,600	1,150	12,600	3,240	1,310	1,210	873	672
11	2,100	2,920	1,950	960	1,600	1,000	13,000	*2,840	1,330	1,010	1,500	601
12	2,280	2,900	1,600	1,100	1,650	900	11,400	2,650	990	895	1,820	600
13	2,460	2,760	1,800	1,100	1,600	900	9,420	2,970	854	1,020	1,500	599
14	2,390	2,740	1,500	1,150	1,600	850	8,110	2,750	870	1,260	1,250	560
15	2,130	3,420	1,650	1,150	1,600	800	8,010	2,480	4,140	1,130	1,010	556
16	1,950	3,750	1,800	1,100	1,600	920	8,270	2,080	10,900	1,010	854	674
17	*2,800	3,050	1,850	1,200	1,500	1,000	9,000	1,840	10,100	1,030	1,050	790
18	5,160	2,600	1,850	1,200	1,450	1,050	11,000	1,860	6,230	1,260	1,300	831
19	3,610	2,440	1,800	1,550	1,250	950	12,000	1,520	5,480	958	1,330	*795
20	2,750	2,710	1,800	1,600	1,050	950	12,700	1,280	4,850	*1,080	1,250	431
21	2,430	3,440	1,500	1,550	1,150	1,350	11,800	1,380	4,390	1,290	1,040	661
22	2,450	3,460	1,000	1,800	1,100	1,800	9,040	2,590	*3,740	1,110	958	753
23	2,390	3,270	1,000	3,280	940	2,300	7,350	4,680	3,110	974	806	657
24	2,390	3,120	860	4,040	970	2,300	7,490	3,860	2,640	838	1,040	664
25	2,990	3,120	860	3,700	1,050	2,200	8,390	3,140	2,430	782	1,150	651
26	2,920	2,940	900	3,200	1,050	2,100	9,290	2,860	1,920	782	1,090	651
27	3,000	3,060	920	2,800	1,500	1,850	9,960	2,460	1,730	782	1,040	551
28	3,580	2,870	880	2,500	1,400	1,700	8,810	2,080	1,550	752	894	468
29	4,550	2,430	840	2,200	-	1,350	6,770	1,920	*3,060	745	926	565
30	5,480	1,900	980	2,200	---------	1,650	5,840	1,220	5,480	708	1,240	655
31	4,620	--------	1,000	2,000	---------	1,650	--------	1,550	--------	692	1,200	--------
Total	87,160	88,860	48,790	51,010	38,960	41,520	284,960	96,680	90,774	40,808	31,844	26,059
Mean	2,812	2,962	1,574	1,645	1,391	1,339	9,499	3,119	3,026	1,316	1,027	869
(†)	-122	-534	-599	-302	-450	-129	+1,373	+621	+664	-92.1	-230	-162

Adjusted for change in reservoir contents

Mean	2,690	2,428	975	1,343	941	1,211	10,870	3,740	3,690	1,224	797	707
Cfsm	1.78	1.60	0.644	0.887	0.622	0.800	7.18	2.47	2.44	0.808	0.526	0.467
In.	2.05	1.79	0.74	1.02	0.65	0.92	8.01	2.85	2.72	0.93	0.61	0.52

	Observed			Adjusted			
Calendar year 1958:	Max 27,100	Min 622	Mean 3,084	Mean 3,002	Cfsm 1.98	In. 26.92
Water year 1958-59:	Max 13,000	Min 431	Mean 2,541	Mean 2,544	Cfsm 1.68	In. 22.81

Peak discharge (base, 16,500 cfs).--No peak above base.

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes and Lake Francis.
Note.--Stage-discharge relation affected by ice Nov. 30 to Jan. 22, Jan. 26 to Mar. 30.

1330. East Branch Passumpsic River near East Haven, Vt.

Location.--Lat 44°38'02", long 71°53'53", on right bank in Burke, Caledonia County, 2.1 miles south of East Haven, Essex County.

Drainage area.--53.8 sq mi.

Records available.--July 1939 to October 1945, October 1948 to September 1959. Prior to October 1951, published as Passumpsic River near East Haven.

Gage.--Water-stage recorder. Datum of gage is 945.88 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--17 years, 100 cfs.

Extremes.--Maximum discharge during year, 692 cfs Apr. 19 (gage height, 3.78 ft); minimum, 19 cfs July 30, 31.
1939-45, 1948-59: Maximum discharge, 2,180 cfs May 28, 1940 (gage height, 6.21 ft); minimum, 13 cfs Sept. 1-5, 1953.
Maximum stage known, about 12.6 ft sometime in November 1927, from information by local resident.

Remarks.--Records good except those for period of ice effect, which are fair.

Revisions.--WSP 1141: Drainage area.

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 19				Apr. 20 to Sept. 30			
0.9	24	2.0	163	0.8	18	2.0	160
1.0	30	3.0	415	1.0	29	3.0	415
1.2	47	4.0	780	1.2	43	4.0	780
1.5	80			1.6	87		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92	136	65	31	70	42	95	292	86	59	142	128
2	92	114	60	31	65	41	145	240	94	63	60	77
3	65	104	58	30	65	40	485	218	80	64	41	99
4	56	96	65	30	70	40	335	202	68	52	32	90
5	57	90	67	28	65	39	305	194	61	46	28	62
6	58	90	75	27	60	40	364	182	58	43	27	48
7	*52	84	68	27	56	42	312	174	58	54	26	40
8	49	81	60	26	53	41	318	158	58	47	34	35
9	47	86	55	25	51	*40	370	136	55	40	36	34
10	50	97	50	25	50	39	352	124	48	37	127	31
11	91	86	45	24	50	38	382	120	43	34	148	58
12	67	80	42	24	49	37	322	134	41	39	82	44
13	56	*75	39	23	48	37	*282	118	52	50	68	35
14	52	117	37	23	48	37	308	107	66	39	53	31
15	52	132	36	23	48	36	345	99	290	35	39	30
16	71	114	36	29	48	40	391	94	*210	33	65	30
17	246	98	35	60	47	39	496	88	136	31	*98	29
18	148	93	35	70	47	38	524	*84	124	28	77	*29
19	102	94	35	58	46	39	596	80	132	38	48	29
20	83	88	36	50	46	44	469	83	102	44	39	28
21	72	84	35	55	48	70	341	128	107	34	37	27
22	66	79	*34	130	47	145	319	272	109	50	37	28
23	75	74	35	200	46	130	364	142	99	33	30	28
24	202	72	35	140	46	67	430	128	75	*29	60	27
25	139	66	34	*110	45	60	439	122	66	28	65	25
26	114	75	33	90	44	57	463	99	63	28	47	24
27	205	70	33	80	43	55	355	86	73	25	39	23
28	192	65	33	85	42	55	288	78	90	23	62	24
29	255	75	33	90	-	60	265	72	106	21	45	25
30	179	70	33	90	-------	55	298	107	73	20	38	27
31	139	-------	32	80	-------	65	-------	108	-------	92	46	-------
Total	3,224	2,685	1,369	1,814	1,443	1,608	10,758	4,269	2,723	1,259	1,776	1,245
Mean	104	89.5	44.2	58.5	51.5	51.9	359	138	90.8	40.6	57.3	41.5
Cfsm	1.93	1.66	0.822	1.09	0.957	0.965	6.67	2.57	1.69	0.755	1.07	0.771
In.	2.23	1.86	0.95	1.25	1.00	1.11	7.44	2.95	1.88	0.87	1.23	0.86

Calendar year 1958: Max 995 Min 29 Mean 105 Cfsm 1.95 In. 26.46
Water year 1958-59: Max 596 Min 20 Mean 93.6 Cfsm 1.74 In. 23.63

Peak discharge (base, 800 cfs).--No peak above base.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26 to Apr. 3.

1345. Moose River at Victory, Vt.

Location.--Lat 44°30'40", long 71°50'15", on right bank at Victory, Essex County, 2.7 miles upstream from highway bridge.

Drainage area.--75.2 sq mi.

Records available.--January 1947 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 1,103.99 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--12 years, 139 cfs.

Extremes.--Maximum discharge during year, 1,160 cfs Apr. 4 (gage height, 7.90 ft); minimum, 6.1 cfs Aug. 7.
1947-59: Maximum discharge, 2,940 cfs Apr. 21, 1950 (gage height, 10.89 ft), from rating curve extended above 1,600 cfs by logarithmic plotting; minimum, 3.7 cfs Sept. 16, 17, 1948.

Remarks.--Records good except those for periods of ice effect, which are fair.

Revisions.--WSP 1381: Drainage area.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.5	5.5	4.5	150
2.7	10	5.0	225
3.0	20	6.0	443
3.5	50	7.0	765
4.0	92	8.0	1,210

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	87	189	54	32	90	41	127	371	82	56	8.8	42
2	202	159	58	34	75	*41	209	311	102	49	9.0	45
3	113	137	57	34	64	40	530	257	80	62	8.3	90
4	79	119	56	34	62	40	1,010	234	62	46	7.2	111
5	69	110	54	33	65	42	912	223	48	36	6.6	62
6	82	103	66	32	64	43	785	206	50	30	6.3	35
7	*68	98	62	31	59	56	820	194	98	49	6.3	24
8	59	91	57	30	56	70	750	178	66	50	7.6	19
9	52	90	52	29	54	62	797	146	53	35	11	16
10	49	115	52	28	52	54	793	125	42	27	24	14
11	96	110	53	28	51	50	841	115	32	22	87	26
12	100	95	53	27	49	48	716	*138	29	21	40	44
13	77	*85	49	26	49	48	*572	126	28	25	*24	27
14	64	96	46	26	48	47	530	109	36	32	21	20
15	58	194	44	26	48	43	587	98	412	26	16	*17
16	64	167	44	30	47	46	625	91	*590	20	13	17
17	324	130	43	40	47	53	720	85	320	18	58	16
18	494	109	43	60	46	48	958	78	186	16	46	15
19	258	105	42	80	46	44	966	71	197	15	29	14
20	155	109	42	66	45	48	1,020	72	153	48	19	14
21	119	97	41	52	45	80	698	72	137	*30	15	13
22	99	95	41	120	44	200	518	220	129	20	14	14
23	93	81	41	350	44	350	485	176	151	17	12	14
24	235	78	40	300	43	250	548	120	96	15	14	13
25	227	74	39	220	43	150	611	127	73	14	37	12
26	174	59	38	170	41	125	622	96	63	14	26	11
27	260	78	37	130	42	106	590	78	82	13	19	9.3
28	324	58	36	110	41	95	412	67	81	11	15	8.6
29	346	60	*36	100	-	86	326	57	120	9.8	14	9.3
30	300	58	35	95	-------	83	300	71	82	8.8	15	10
31	215	-------	35	100	-------	89	-------	143	-------	8.1	15	-------
Total	4,942	3,149	1,446	2,473	1,460	2,578	19,378	4,455	3,680	843.7	644.1	782.2
Mean	159	105	46.6	79.8	52.1	83.2	646	144	123	27.2	20.8	26.1
Cfsm	2.11	1.40	0.620	1.06	0.693	1.11	8.59	1.91	1.64	0.362	0.277	0.347
In.	2.44	1.56	0.72	1.22	0.72	1.27	9.58	2.20	1.82	0.42	0.32	0.39

Calendar year 1958: Max 1,680 Min 13 Mean 138 Cfsm 1.84 In. 24.91
Water year 1958-59: Max 1,020 Min 6.3 Mean 126 Cfsm 1.68 In. 22.66

Peak discharge (base, 1,000 cfs).--Apr. 4 (5 p.m.) 1,160 cfs (7.90 ft); Apr. 20 (8:30 to 10 a.m.) 1,100 cfs (7.76 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Mar. 26, Apr. 3, 7, 8.

1350. Moose River at St. Johnsbury, Vt.

Location.--Lat 44°25'20", long 72°00'05", on left bank at St. Johnsbury, Caledonia County, half a mile upstream from mouth.

Drainage area.--128 sq mi.

Records available.--August 1928 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 585 ft (from topographic map). Prior to Nov. 16, 1934, chain gage at site a quarter of a mile upstream at different datum.

Average discharge.--31 years, 220 cfs.

Extremes.--Maximum discharge during year, 1,750 cfs Apr. 4 (gage height, 3.81 ft), from rating curve extended above 930 cfs; maximum gage height, 4.74 ft Jan. 23 (backwater from ice); minimum discharge, 8.2 cfs Aug. 6, 7.
1928-59: Maximum discharge, 5,800 cfs Apr. 30, 1929 (gage height, 8.3 ft, from graph based on gage readings, site and datum then in use), from rating curve extended above 3,400 cfs; minimum, 6.2 cfs Sept. 17, 18, 1948, Aug. 27, 28, 1949.

Remarks.--Records good except those for periods of ice effect, which are fair.

Revisions (water years).--WSP 1231: 1929-30, 1931-34(M). WSP 1381: Drainage area.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 31

1.8	30	3.2	265	1.29	8.7	2.5	94	3.5	640		
2.0	45	3.5	470	1.3	8.9	2.8	144	3.6	890		
2.5	94	3.6	600	1.5	15	3.1	228	3.8	1,700		
2.9	165			1.7	25	3.3	368				
				2.0	45	3.4	476				

Apr. 1 to Sept. 30

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	124	245	62	41	120	58	170	622	116	80	9.9	55
2	257	215	85	43	110	58	280	535	122	87	10	114
3	165	184	80	43	96	57	750	417	110	76	10	*145
4	113	165	74	42	92	57	1,300	343	84	67	9.9	173
5	94	154	70	41	90	58	1,350	312	67	53	8.9	105
6	104	144	76	40	88	60	1,300	286	89	48	8.7	62
7	91	138	80	39	82	77	1,110	266	150	60	9.4	43
8	79	131	72	38	78	98	1,140	241	105	70	11	34
9	70	134	66	37	76	*95	1,070	199	81	52	11	28
10	68	157	66	36	74	91	1,110	173	64	39	41	24
11	*127	159	68	36	72	80	1,110	159	49	33	102	55
12	140	*140	68	35	70	72	1,210	170	40	32	70	62
13	108	125	62	34	68	70	962	176	40	34	40	48
14	88	138	59	34	67	66	998	152	45	43	30	35
15	79	237	56	34	66	62	926	138	541	39	26	31
16	81	241	56	38	65	66	*926	127	*782	33	28	30
17	354	189	55	50	64	68	1,140	116	566	28	56	28
18	568	165	54	75	64	68	1,180	108	266	24	69	*26
19	349	159	53	100	64	63	1,140	98	247	22	48	24
20	202	159	52	82	63	70	1,070	*95	206	36	32	23
21	157	148	52	64	62	100	1,070	97	176	45	26	22
22	131	140	51	150	61	250	890	216	173	33	21	22
23	120	120	*51	400	60	450	782	242	199	26	18	22
24	270	118	50	450	60	330	836	159	138	22	26	22
25	298	100	49	320	58	210	890	159	104	18	38	20
26	229	91	48	250	58	170	926	133	88	17	43	18
27	310	115	46	200	58	150	863	105	95	17	32	16
28	397	84	45	170	58	135	686	90	108	15	29	16
29	434	85	45	150	-	125	550	77	141	*13	28	15
30	411	83	45	140	-------	120	535	80	116	12	26	17
31	292	-------	44	135	-------	125	-------	162	-------	11	26	-------
Total	6,310	4,463	1,840	3,347	2,044	3,559	28,270	6,253	5,108	1,165	943.8	1,335
Mean	204	149	59.4	108	73.0	115	942	202	170	37.6	30.4	44.5
Cfsm	1.59	1.16	0.464	0.844	0.570	0.898	7.36	1.58	1.33	0.294	0.238	0.348
In.	1.83	1.30	0.53	0.97	0.59	1.03	8.21	1.82	1.48	0.34	0.27	0.39

Calendar year 1958: Max 2,840 Min 17 Mean 211 Cfsm 1.65 In. 22.33
Water year 1958-59: Max 1,350 Min 8.7 Mean 177 Cfsm 1.38 In. 18.76

Peak discharge (base, 1,700 cfs).--Apr. 4 (11 p.m.) 1,750 cfs (3.81 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 25 to Mar. 7, Mar. 11 to Apr. 6.

1355. Passumpsic River at Passumpsic, Vt.

Location.--Lat 44°21'55", long 72°02'20", on right bank 0.7 mile upstream from Andrick Brook and 1 mile downstream from dam and village of Passumpsic, Caledonia County.

Drainage area.--436 sq mi.

Records available.--October 1928 to September 1959. October 1928 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Altitude of gage is 490 ft (from topographic map).

Average discharge.--31 years, 726 cfs.

Extremes.--Maximum discharge during year, about 5,700 cfs Apr. 3 (occurred during period of ice effect); maximum gage height, 11.15 ft Apr. 3 (backwater from ice); minimum daily discharge, 79 cfs Sept. 26.
1928-59: Maximum discharge, 16,000 cfs Mar. 18, 1936 (gage height, 21.23 ft), from rating curve extended above 9,200 cfs on basis of computation of peak flow over dam; minimum daily, 13 cfs Sept. 12, 1948.
Maximum stage known, about 31.5 ft in November 1927, from information by local resident.

Remarks.--Records excellent except those for period of ice effect, which are fair. Flow regulated by powerplants above station.

Revisions (water years).--WSP 781: 1933(M). WSP 871: Drainage area. WSP 1231: 1929, 1930-31(M).

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	69	3.0	535
1.8	116	5.0	1,880
2.2	193	8.0	4,130
2.5	292	10.0	5,730

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	412	879	360	200	500	275	750	1,980	530	326	242	460
2	778	759	340	205	450	270	1,300	1,590	618	263	174	579
3	502	681	330	205	430	270	5,000	1,380	524	326	139	470
4	361	612	340	200	430	270	4,800	1,260	410	292	128	546
5	309	574	360	195	450	275	4,500	1,190	355	219	100	411
6	358	557	400	190	430	290	4,100	1,110	365	232	88	218
7	317	513	370	185	410	330	3,730	1,030	425	240	127	244
8	278	496	330	180	390	350	3,570	977	371	262	87	179
9	273	513	310	175	360	330	4,150	808	318	218	131	172
10	234	669	310	170	340	320	3,650	741	283	211	217	145
11	*423	590	320	170	330	*310	3,970	687	262	159	760	226
12	475	*520	320	165	320	300	3,350	747	214	159	410	291
13	352	486	290	160	320	290	2,730	729	223	250	243	169
14	312	524	270	160	315	290	2,660	651	260	206	215	188
15	277	879	260	160	310	280	*2,890	601	1,230	188	184	151
16	292	837	260	180	310	300	3,010	574	1,630	161	*139	148
17	1,400	663	260	270	305	310	3,450	535	1,080	150	542	140
18	1,470	574	260	350	305	300	3,930	*513	717	124	430	149
19	886	579	250	320	300	290	4,150	460	711	127	268	118
20	601	590	250	290	300	310	3,990	463	623	253	185	122
21	496	535	250	280	300	500	2,870	460	562	217	173	162
22	415	513	245	600	295	1,100	2,320	1,650	590	173	127	122
23	472	455	245	1,500	295	1,300	2,310	1,050	723	173	146	113
24	1,450	445	*240	1,150	290	1,000	2,490	741	508	*151	182	*133
25	1,100	420	235	900	290	750	2,640	753	385	98	335	134
26	824	371	230	700	285	630	2,730	618	*339	116	234	79
27	1,220	420	220	*600	280	550	2,550	521	396	153	203	106
28	1,350	400	215	560	275	520	1,940	445	425	87	188	128
29	1,650	310	215	600	-	500	1,670	395	568	108	261	122
30	1,400	400	215	600	-------	520	1,700	454	465	96	181	111
31	1,030	-------	210	550	-------	580	-------	747	-------	104	204	-------
Total	21,717	16,764	8,710	12,170	9,615	13,910	92,900	25,860	16,110	5,842	7,043	6,336
Mean	701	559	281	393	343	449	3,097	834	537	188	227	211
Cfsm	1.61	1.28	0.644	0.901	0.787	1.03	7.10	1.91	1.23	0.431	0.521	0.484
In.	1.85	1.43	0.74	1.04	0.82	1.19	7.92	2.21	1.37	0.50	0.60	0.54

Calendar year 1958: Max 6,830 Min 122 Mean 732 Cfsm 1.68 In. 22.78
Water year 1958-59: Max 5,000 Min 79 Mean 649 Cfsm 1.49 In. 20.21

Peak discharge (base, 5,000 cfs).--Apr. 3 (about 10 p.m.) about 5,700 cfs.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Apr. 6.

1375. Ammonoosuc River at Bethlehem Junction, N. H.

Location.--Lat 44°16'10", long 71°37'50", on left bank 0.25 mile upstream from Pierce Bridge and Bethlehem Junction, 0.8 mile upstream from unnamed tributary entering from left, 3 miles east of Bethlehem, Grafton County, and 3.4 miles downstream from Little River.

Drainage area.--87.6 sq mi.

Records available.--August 1939 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 1,180.74 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--20 years, 209 cfs.

Extremes.--Maximum discharge during year, about 2,400 cfs Apr. 3; maximum gage height, 6.92 ft Jan. 22 (ice jam); minimum discharge, 28 cfs Aug. 5, 7, 8.
1939-59: Maximum discharge, 10,500 cfs Mar. 27, 1953 (gage height, 11.22 ft), from rating curve extended above 4,100 cfs by logarithmic plotting; minimum, 16 cfs Nov. 14, 1952 (caused by anchor ice upstream).

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.0	27	3.0	395
1.2	42	4.0	740
1.5	75	5.0	1,310
2.0	150	6.0	2,110
2.5	255		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	113	200	97	47	90	52	144	353	123	112	35	159
2	152	152	92	47	100	*51	390	319	143	110	33	103
3	95	130	85	48	125	50	1,700	314	130	106	30	170
4	80	116	110	45	135	50	708	342	111	94	30	125
5	73	111	110	40	135	49	527	404	98	84	28	78
6	*83	127	130	42	110	49	*628	461	92	80	30	63
7	71	142	105	41	94	52	455	558	102	99	29	55
8	65	117	90	39	80	52	474	516	94	87	30	51
9	61	117	80	39	76	50	639	333	85	74	30	49
10	70	*185	75	38	73	48	502	294	75	67	52	46
11	90	133	70	37	72	48	520	*356	69	68	100	55
12	110	112	65	36	69	*46	425	452	63	69	*51	52
13	90	102	60	35	72	47	345	404	75	71	40	45
14	75	124	58	35	69	47	342	333	152	70	36	*41
15	70	233	*56	34	69	46	374	276	*1,800	61	32	44
16	65	278	56	40	67	51	404	236	1,120	58	33	50
17	80	189	55	45	68	54	610	208	572	52	52	45
18	91	159	55	90	65	49	661	195	593	48	63	42
19	79	163	55	100	63	48	864	178	831	49	55	40
20	70	152	55	*90	60	65	697	236	488	*59	40	40
21	66	143	54	70	63	150	413	241	434	50	38	38
22	63	133	53	1,100	61	190	365	483	330	46	37	37
23	63	117	53	520	59	140	389	308	273	44	34	36
24	120	117	53	235	59	101	473	248	222	41	40	35
25	115	104	52	185	56	83	534	268	191	40	52	34
26	110	100	50	120	54	76	708	210	176	40	42	33
27	250	160	50	115	53	76	564	179	163	37	36	32
28	275	95	50	*120	52	70	389	163	159	36	36	32
29	265	160	*49	120	-	70	353	147	163	34	37	31
30	200	135	49	130	-------	73	345	136	133	33	39	46
31	161	-------	49	115	-------	85	-------	138	-------	33	38	-------
Total	3,371	4,306	2,121	3,798	2,149	2,118	15,942	9,289	9,060	1,952	1,258	1,707
Mean	109	144	68.4	123	76.8	68.3	531	300	302	63.0	40.6	56.9
Cfsm	1.24	1.64	0.781	1.40	0.877	0.780	6.06	3.42	3.45	0.719	0.463	0.650
In.	1.43	1.83	0.90	1.61	0.91	0.90	6.77	3.94	3.85	0.83	0.53	0.72

Calendar year 1958: Max 3,390 Min 35 Mean 214 Cfsm 2.44 In. 33.14
Water year 1958-59: Max 1,800 Min 28 Mean 156 Cfsm 1.78 In. 24.22

Peak discharge (base, 2,700 cfs).--No peak above base.

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 4, 5, 7-17, 20-30; discharge estimated on basis of weather records, recorded range in stage, and records for Ammonoosuc River near Bath and Pemigewasset River at Woodstock. Stage-discharge relation affected by ice Nov. 26 to Feb. 13, Feb. 18, 19, Mar. 7-9, 20-23, 25, 26, 28-30, Apr. 2, 3.

1380. Ammonoosuc River near Bath, N. H.

Location.--Lat 44°09'15", long 71°59'10", on left bank 0.4 mile downstream from Wild Ammonoosuc River and 1½ miles downstream from Bath, Grafton County.

Drainage area.--395 sq mi.

Records available.--September 1935 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 454.14 ft above mean sea level, datum of 1929 (levels by Connecticut River Power Co.).

Average discharge.--24 years, 669 cfs.

Extremes.--Maximum discharge during year, about 9,200 cfs Apr. 3 (backwater from ice); maximum gage height not determined, occurred Apr. 3; minimum daily discharge, 80 cfs Jan. 15.
1935-59: Maximum discharge, 27,900 cfs Mar. 18, 1936 (gage height, 15.40 ft), from rating curve extended above 13,000 cfs; minimum daily, 35 cfs Sept. 15, 1957.

Remarks.--Records good except those for period of ice effect, which are fair, and those for period of doubtful gage-height record, which are poor. Diurnal fluctuation at low flow caused by small powerplants above station.

Revisions.--WSP 871: Drainage area.

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 21				Jan. 22 to Sept. 30			
1.0	70	2.5	431	1.1	84	4.0	1,400
1.5	157	3.0	630	1.5	163	5.0	2,230
2.0	275			2.0	309	7.0	4,690
				3.0	770		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	201	489	250	105	215	135	550	1,040	278	269	108	136
2	456	442	275	110	260	135	1,500	898	292	230	106	266
3	315	357	220	110	300	135	7,000	825	306	210	84	496
4	224	312	245	105	325	140	4,560	825	269	189	98	568
5	193	283	255	98	300	150	3,430	892	224	166	97	284
6	176	281	310	100	270	160	3,780	1,030	218	158	97	212
7	182	318	250	96	250	200	2,680	1,190	265	176	98	158
8	172	300	220	94	220	250	2,390	1,250	263	156	100	119
9	147	289	200	91	205	230	3,030	830	227	156	104	123
10	*149	338	180	89	195	*210	2,520	690	188	125	186	123
11	200	*341	170	87	185	185	2,550	737	170	117	377	145
12	239	303	160	85	180	170	2,060	1,010	158	132	221	169
13	196	254	150	83	175	160	1,610	1,000	188	140	156	147
14	172	262	145	81	170	155	*1,430	803	231	142	*110	125
15	165	427	145	80	165	150	1,440	759	3,910	140	87	127
16	151	630	140	100	165	155	1,410	620	3,830	115	92	132
17	170	543	135	130	165	160	1,710	545	1,830	115	106	140
18	191	403	135	200	160	170	2,010	502	1,350	102	113	125
19	193	376	135	235	160	165	2,140	438	2,060	119	121	108
20	174	366	130	180	155	180	2,180	479	1,300	121	117	140
21	161	332	130	170	150	430	1,390	*585	988	136	111	*127
22	153	326	130	700	150	800	1,090	1,020	770	125	94	98
23	149	278	130	800	145	600	1,010	910	660	125	95	102
24	282	270	125	550	145	500	1,120	620	510	111	110	108
25	315	265	125	400	140	400	1,280	630	*425	113	115	110
26	244	236	120	350	140	350	1,610	525	339	104	123	95
27	552	380	120	*275	135	380	1,580	425	351	*110	110	102
28	640	260	120	285	135	300	1,070	374	538	100	113	108
29	616	400	115	295	-	275	904	328	502	100	121	98
30	690	450	*115	300	-------	260	922	299	362	97	125	117
31	524	-------	110	255	-------	320	-------	317	-------	87	132	-------
Total	8,392	10,511	5,190	6,639	5,360	8,010	61,956	22,396	23,002	4,286	3,827	4,908
Mean	271	350	167	214	191	258	2,065	722	767	138	123	164
Cfsm	0.686	0.886	0.423	0.542	0.484	0.653	5.23	1.83	1.94	0.349	0.311	0.415
In.	0.79	0.99	0.49	0.63	0.50	0.75	5.83	2.11	2.17	0.40	0.36	0.46

Calendar year 1958: Max 7,330 Min 97 Mean 688 Cfsm 1.74 In. 23.64
Water year 1958-59: Max 7,000 Min 80 Mean 451 Cfsm 1.14 In. 15.48

Peak discharge (base, 6,500 cfs).--Apr. 3 (about 11 a.m.) about 9,200 cfs.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Apr. 3 (no gage-height record Dec. 21-30, Jan. 1-5, 7-21, Mar. 28, 29; discharge estimated on basis of 1 discharge measurement, weather records, and records for Ammonoosuc River at Bethlehem Junction, N. H., Wells River at Wells River, Vt., and stations on other nearby streams). Doubtful gage-height record July 15 to Sept. 30.

1385. Connecticut River at Wells River, Vt.

Location.--Lat 44°09'15", long 72°02'35", on right bank 200 ft downstream from bridge on U. S. Highway 302, at Wells River, Orange County, 400 ft upstream from Wells River, and 1,200 ft downstream from Ammonoosuc River.

Drainage area.--2,644 sq mi.

Records available.--October 1949 to September 1959. Monthly discharge only October and November 1949, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 399.75 ft above mean sea level, datum of 1929.

Average discharge.--10 years, 4,836 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 21,500 cfs Apr. 6 (gage height, 8.37 ft); minimum daily, 390 cfs Aug. 9.
1949-59: Maximum discharge, 54,000 cfs Mar. 27, 1953 (gage height, 15.96 ft); minimum daily, 337 cfs Aug. 7, 1955.

Remarks.--Records good. Flow regulated by powerplants, by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir, and Comerford Station Pond (see p. 242), and other reservoirs (combined usable capacity, about $14\frac{2}{4}$ billion cubic feet).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 5				Apr. 6 to Sept. 30			
1.4	600	4.0	5,030	0.8	390	4.0	5,030
2.0	1,270	6.0	10,900	1.5	890	6.0	10,900
2.5	1,990	8.0	19,800	2.0	1,500	9.0	24,300
3.0	2,960			3.0	3,030		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,440	4,540	3,380	600	2,000	1,070	5,550	9,850	3,410	6,260	832	1,870
2	4,630	3,600	4,460	2,050	4,600	1,800	8,840	7,970	3,560	5,820	397	2,200
3	3,220	5,960	3,820	1,970	5,700	2,900	17,300	4,480	3,660	3,600	1,090	2,960
4	2,320	6,050	3,960	1,000	5,820	3,050	19,800	5,780	3,250	1,180	1,530	3,100
5	2,320	5,600	3,480	2,180	5,550	3,100	17,800	6,530	2,760	962	1,380	2,540
6	2,660	5,400	2,700	3,500	5,550	2,750	17,700	7,010	2,560	1,390	1,420	1,200
7	3,360	5,580	1,350	3,100	3,200	1,560	19,100	6,780	1,090	2,360	1,170	599
8	3,480	3,050	2,470	2,500	1,300	996	18,600	6,780	1,660	2,340	668	1,450
9	3,620	2,600	4,350	2,500	3,900	2,550	20,400	4,440	2,440	2,260	390	1,970
10	*2,700	4,430	4,370	2,000	4,880	2,950	19,200	2,590	2,380	2,650	1,210	1,640
11	2,030	*2,640	3,820	1,100	4,200	2,700	19,900	5,360	2,300	1,930	2,400	2,060
12	1,480	4,500	3,960	2,500	3,050	2,520	16,800	5,430	1,960	943	2,320	1,300
13	2,270	4,850	2,340	3,000	3,160	2,130	15,300	6,180	1,770	1,870	2,200	624
14	4,240	4,940	1,300	3,000	2,010	1,550	*13,200	6,100	834	3,360	1,720	1,100
15	4,740	4,120	2,960	2,750	1,000	999	13,500	4,850	7,510	3,200	1,290	1,720
16	4,330	4,390	3,780	2,120	2,900	1,900	13,500	3,170	12,200	2,170	935	1,770
17	3,820	5,480	3,780	1,960	3,600	3,400	14,400	2,100	10,800	2,220	1,330	1,460
18	4,390	5,750	3,220	1,050	3,500	3,140	16,300	3,250	8,270	1,170	2,720	1,100
19	4,850	5,700	2,780	2,500	3,500	3,060	15,000	3,420	9,440	505	2,430	826
20	4,900	5,680	1,950	4,300	4,000	3,160	16,500	3,520	6,960	1,410	1,780	650
21	4,810	5,650	1,100	3,900	2,200	2,900	15,100	3,620	3,640	2,110	1,960	*661
22	4,960	3,320	2,300	4,400	1,000	2,000	14,000	*4,060	6,870	1,920	812	1,270
23	5,140	2,520	3,100	4,600	2,300	3,420	11,500	3,220	5,520	2,160	468	1,290
24	5,920	4,750	2,300	3,200	3,100	5,580	11,500	1,900	4,590	2,120	*1,210	1,280
25	4,460	4,940	700	1,900	3,500	5,780	11,000	4,260	*4,440	1,870	1,270	1,300
26	2,040	5,700	1,650	5,000	3,100	5,200	9,820	5,080	4,500	795	1,290	930
27	4,890	2,890	1,410	5,200	2,500	5,100	12,700	4,880	2,780	*1,580	1,250	582
28	7,580	4,120	856	6,400	1,820	4,000	13,100	4,520	1,860	1,410	1,790	686
29	7,640	3,600	2,260	6,130	-	1,370	11,700	4,180	4,570	1,180	959	978
30	9,820	2,560	2,600	5,850	--------	3,810	10,600	1,680	6,780	*1,250	649	1,050
31	8,330	--------	1,860	2,800	--------	4,700	--------	860	--------	1,250	1,280	--------
Total	135,390	134,910	84,366	95,060	92,940	91,145	439,710	143,850	134,364	65,245	42,150	42,166
Mean	4,367	4,497	2,721	3,066	3,319	2,940	14,660	4,640	4,479	2,105	1,360	1,406
(†)	-118	-464	-780	-520	-1,283	-611	+2,155	+1,319	+820	-309	-99.3	-160
Adjusted for change in reservoir contents												
Mean	4,249	4,033	1,942	2,546	2,036	2,329	16,810	5,959	5,299	1,796	1,260	1,245
Cfsm	1.61	1.53	0.734	0.963	0.770	0.881	6.36	2.25	2.00	0.679	0.477	0.471
In.	1.85	1.70	0.85	1.11	0.80	1.02	7.09	2.60	2.24	0.78	0.55	0.53

	Observed				Adjusted			
Calendar year 1958:	Max	43,300	Min	432	Mean	5,211	Mean	5,118	Cfsm	1.94	In.	26.27
Water year 1958-59:	Max	20,400	Min	390	Mean	4,113	Mean	4,113	Cfsm	1.56	In.	21.12

Peak discharge (base, 23,000 cfs).--No peak above base.

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir, and Comerford Station Pond.
Note.--Stage-discharge relation affected by ice Dec. 14, 20-26, 30, Jan. 6-15, 18-28, Jan. 31 to Feb. 3, Feb. 7-9, 12, 16-27, Mar. 4-6, 9-11, 14, 22, 26-28.

1390. Wells River at Wells River, Vt.

Location.--Lat 44°09'05", long 72°04'00", on right bank 800 ft upstream from railroad bridge, 0.8 mile west of village of Wells River, Orange County, and 1.5 miles upstream from mouth.

Drainage area.--98.4 sq mi.

Records available.--August 1940 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 505.53 ft above mean sea level, datum of 1929 (levels by Connecticut River Power Co.).

Average discharge.--19 years, 140 cfs.

Extremes.--Maximum discharge during year, about 1,050 cfs Apr. 3 (backwater from ice); maximum gage height, 4.70 ft Apr. 3 (ice jam); minimum discharge, 12 cfs Aug. 23, 24; minimum daily, 12 cfs Aug. 23.
1940-59: Maximum discharge, 3,230 cfs June 2, 1952 (gage height, 8.12 ft), from rating curve extended above 1,300 cfs on basis of computation of peak flow over dam; minimum, 5.1 cfs Oct. 6, 1948; minimum daily, 8.3 cfs Sept. 5, 1953.

Remarks.--Records good except those for periods of ice effect, which are fair. Some diurnal fluctuation at low flow caused by small powerplant above station. Flow partly regulated by Groton and Ricker Ponds.

Revisions (water years).--WSP 1171: Drainage area. WSP 1201: 1942(P), 1944-45(M), 1946-47(P), 1948(M), 1950.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	12	3.0	311
1.6	30	3.5	517
1.8	50	4.0	780
2.0	77	4.5	1,080
2.5	175		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	123	64	43	110	53	200	290	51	58	22	45
2	80	97	64	40	100	53	375	233	62	50	19	37
3	56	87	60	45	95	53	920	207	69	48	15	82
4	49	85	62	49	92	53	860	182	60	40	14	106
5	46	73	64	45	88	55	810	170	54	36	14	44
6	46	67	66	44	80	60	906	159	50	34	14	30
7	40	64	64	41	76	80	804	150	66	34	16	24
8	38	62	63	39	72	72	682	142	58	37	52	22
9	35	64	62	38	68	64	882	129	55	34	29	21
10	34	93	60	37	64	*62	762	121	48	31	*65	19
11	50	*83	58	36	62	58	852	113	43	30	92	68
12	51	*71	58	35	60	55	720	127	38	29	44	51
13	*43	63	57	35	59	54	570	127	36	28	29	31
14	36	71	55	35	58	54	536	117	41	30	24	24
15	34	100	54	36	57	54	*565	111	*81	28	*21	24
16	35	131	54	40	57	68	565	106	88	26	19	33
17	44	106	53	46	57	62	620	97	76	25	18	29
18	50	93	53	70	56	56	704	93	70	24	17	25
19	43	87	52	60	55	56	704	88	77	22	16	24
20	40	83	50	55	55	68	640	93	70	22	14	22
21	41	74	49	52	55	155	476	*91	62	22	14	*22
22	38	73	49	300	54	240	390	113	62	22	13	21
23	49	64	51	350	54	200	350	102	70	22	12	21
24	230	62	50	260	54	150	336	88	54	21	21	19
25	194	62	48	200	54	120	325	83	49	21	40	18
26	146	58	47	140	54	105	325	74	46	19	24	17
27	200	80	47	150	53	105	299	67	106	*18	19	16
28	161	46	47	160	53	98	264	62	116	17	18	15
29	202	62	46	150	--	95	236	58	106	17	18	15
30	209	63	*46	140	-------	96	258	54	76	16	29	21
31	148	-------	45	125	-------	115	-------	56	-------	15	27	-------
Total	2,521	2,347	1,698	2,896	1,852	2,669	16,936	3,703	1,940	876	791	946
Mean	81.3	78.2	54.8	93.4	66.1	86.1	565	119	64.7	28.3	25.5	31.5
Cfsm	0.826	0.795	0.557	0.949	0.672	0.875	5.74	1.21	0.658	0.288	0.259	0.320
In.	0.95	0.89	0.64	1.09	0.70	1.01	6.40	1.40	0.73	0.33	0.30	0.36

Calendar year 1958: Max 1,660 Min 20 Mean 151 Cfsm 1.53 In. 20.83
Water year 1958-59: Max 920 Min 12 Mean 107 Cfsm 1.09 In. 14.80

Peak discharge (base, 980 cfs).--Apr. 3 (about 4 p.m.) about 1,050 cfs; Apr. 6 (10 to 11 p.m.) 996 cfs (4.36 ft); Apr. 9 (1:30 to 3 a.m.) 990 cfs (4.35 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26, Nov. 28 to Apr. 4.

1398. East Orange Branch at East Orange, Vt.

Location.--Lat 44°05'35", long 72°20'10", on left bank 0.3 mile east of East Orange, Orange County, 1.6 miles upstream from mouth, and 5 miles southwest of Orange.
Drainage area.--8.95 sq mi.
Records available.--June 1958 to September 1959.
Gage.--Water-stage recorder. Altitude of gage is 1,180 ft (from topographic map).
Extremes.--1958: Maximum discharge during period June to September, 59 cfs July 29 (gage height, 2.48 ft); minimum, 0.9 cfs Sept. 9, 10.
1958-59: Maximum discharge, 164 cfs Apr. 8 (gage height, 3.12 ft), from rating curve extended above 70 cfs by logarithmic plotting; maximum gage height, 6.35 ft Jan. 22 (ice jam); minimum discharge, 0.6 cfs Aug. 5.
Remarks.--Records good except those for periods of ice effect, which are fair. Occasional diurnal fluctuation at low flow caused by mill upstream.

Rating table, June 26, 1958, to Sept. 30, 1959, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.44	0.6	1.7	4.0	2.3	40
1.5	1.0	1.8	7.0	2.6	74
1.6	2.1	2.0	16	2.8	104

Discharge, in cubic feet per second, 1958

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	-	4.2	4.0	1.1	11	-	12	3.1	2.0	21	-	4.4	1.6	4.2
2	-	3.5	2.9	1.3	12	-	15	2.4	2.1	22	-	3.1	1.7	12
3	-	3.3	2.4	1.1	13	-	9.0	2.1	1.8	23	-	4.0	1.5	5.0
4	-	3.1	2.4	1.1	14	-	5.0	2.0	1.7	24	-	3.3	1.4	3.5
5	-	2.9	2.4	1.2	15	-	4.4	1.8	1.4	25	-	2.7	5.6	3.1
6	-	3.3	2.0	1.1	16	-	4.4	1.6	1.5	26	7.8	3.5	2.7	2.7
7	-	3.5	1.8	1.4	17	-	3.5	1.4	2.1	27	*8.2	2.9	2.0	5.2
8	-	15	11	1.1	18	-	2.7	1.7	24	28	5.6	5.2	1.6	6.2
9	-	8.0	6.2	*1.0	19	-	10	2.1	9.8	29	5.0	29	1.4	3.7
10	-	*4.0	5.0	1.9	20	-	6.6	1.6	5.3	30	4.7	9.2	1.3	3.1
										31	-	5.3	1.1	-
Total											-	196.0	81.8	112.7
Mean											-	6.32	2.64	3.76
Cubic feet per second per square mile											-	0.706	0.295	0.420
Runoff in inches											-	0.81	0.34	0.47

Peak discharge (base, 140 cfs).--No peak above base.
* Discharge measurement made on this day.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.1	11	8.5	5.0	10	7.0	23	40	7.8	3.5	1.5	4.0
2	5.9	8.2	8.4	4.8	10	7.2	37	36	9.8	3.3	.9	5.3
3	4.2	9.0	8.4	4.8	9.6	7.0	73	33	*11	3.1	.8	7.4
4	3.7	8.2	8.0	5.0	9.3	7.0	53	30	9.4	2.7	.7	4.0
5	3.5	7.8	8.5	5.5	9.0	6.8	58	29	9.8	2.2	.9	2.1
6	3.1	7.4	9.0	5.2	8.7	8.0	66	28	7.7	2.2	1.4	1.7
7	2.9	7.0	8.5	5.0	8.4	10	54	25	5.6	3.1	1.5	1.3
8	2.7	7.0	8.2	5.0	8.2	9.2	85	23	5.0	2.7	5.7	1.1
9	2.4	9.6	8.0	4.9	8.0	8.3	62	22	4.2	*2.9	3.6	1.2
10	3.2	11	8.0	4.7	7.8	8.3	80	21	3.5	7.0	14	1.3
11	6.0	9.8	7.6	4.6	7.6	7.9	71	21	2.9	1.8	*7.3	11
12	4.2	8.6	7.6	4.4	7.4	7.9	61	21	3.3	1.7	2.4	2.7
13	4.0	7.8	7.3	4.4	7.3	7.5	62	20	4.4	2.1	1.7	1.8
14	3.1	12	7.0	*4.4	7.2	7.0	67	18	4.8	1.7	1.4	1.5
15	*3.0	12	7.0	4.7	7.2	7.0	67	17	25	1.5	1.1	2.8
16	3.1	14	7.0	5.3	7.0	10	70	16	14	1.4	1.3	2.9
17	5.3	11	6.6	9.0	7.0	8.2	88	16	10	1.3	1.4	2.2
18	4.4	10	6.6	8.1	7.0	7.5	82	14	13	1.1	1.1	2.1
19	3.7	10	6.4	7.2	6.8	7.5	91	14	12	1.5	1.1	4.6
20	3.5	9.4	6.0	6.6	6.8	15	70	16	7.4	1.8	1.6	3.3
21	3.3	9.8	5.8	10	6.8	23	66	13	7.8	1.6	1.7	1.5
22	3.3	9.4	5.6	40	6.6	19	64	20	9.0	1.5	1.4	*1.1
23	27	9.0	5.8	30	6.6	15	62	15	5.6	1.2	.8	1.0
24	25	9.0	5.5	22	6.6	12	60	15	4.4	1.5	9.0	.9
25	14	9.4	5.5	17	6.6	11	58	13	4.0	1.4	4.2	.8
26	9.4	10	5.4	14	*6.6	*11	58	11	4.2	1.2	2.1	.8
27	16	11	5.4	12	6.6	10	49	9.8	4.7	1.0	1.3	.8
28	11	10	5.2	12	6.6	9.4	45	9.4	9.0	.9	1.2	.8
29	16	8.3	5.0	11	-	9.4	45	8.2	7.0	.8	1.4	.9
30	14	8.7	5.0	12	-------	9.8	*51	9.0	4.4	.8	1.6	13
31	11	-------	5.0	11	-------	14	-------	8.2	-------	.8	3.1	-------
Total	231.0	285.4	211.8	299.6	213.3	307.9	1,878	591.6	230.7	61.3	79.2	85.9
Mean	7.45	9.51	6.83	9.66	7.62	9.93	62.6	19.1	7.69	1.98	2.55	2.86
Cfsm	0.832	1.06	0.763	1.08	0.851	1.11	6.99	2.13	0.859	0.221	0.285	0.320
In.	0.96	1.19	0.88	1.24	0.89	1.28	7.80	2.46	0.96	0.25	0.33	0.36

Calendar year 1958: Max - Min - Mean - Cfsm - In. -
Water year 1958-59: Max 91 Min 0.7 Mean 12.3 Cfsm 1.37 In. 18.60

Peak discharge (base, 140 cfs).--Apr. 8 (3:30 p.m.) 164 cfs (3.12 ft); Apr. 17 (3:30 p.m.) 140 cfs (3.00 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 23-26, Nov. 28 to Jan. 11, Jan. 16-23, Jan. 27 to Feb. 21, Mar. 1-23, 29.

1415. Ompompanoosuc River at Union Village, Vt.

Location.--Lat 43°47'20", long 72°15'20", on right bank 100 ft upstream from covered bridge at Union Village, Orange County, a quarter of a mile downstream from Avery Brook, and 0.3 mile downstream from Union Village Reservoir.

Drainage area.--130 sq mi.

Records available.--September 1940 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 435 ft (from topographic map).

Average discharge.--19 years, 198 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 1,950 cfs Apr. 5 (gage height, 7.38 ft); minimum, 10 cfs Aug. 4, 5; minimum daily, 11 cfs Aug. 2-5.
1940-59: Maximum discharge, 4,800 cfs June 3, 1947 (gage height, 9.65 ft), from rating curve extended above 2,400 cfs on basis of slope-area measurement of peak flow; minimum, 1.7 cfs Oct. 14, 1949; minimum daily, 2.0 cfs Oct. 20, 1949.
Maximum stage known, about 14.5 ft in November 1927, from information by local resident.

Remarks.--Records good except those for period of ice effect, which are fair. Flow regulated by Union Village Reservoir (see p. 242) since October 1949. Some regulation by Lake Fairlee.

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 5				Apr. 6 to Sept. 30			
3.1	25	5.0	520	2.7	8.6	3.1	32
3.3	44	6.0	1,020	2.8	12	3.5	92
3.5	76	7.0	1,660	2.9	17	4.0	187
4.0	185	7.5	2,050	3.0	24	4.5	328
4.5	328						

Note.--Same as preceding table above 4.5 ft.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	143	80	32	115	70	298	332	66	32	12	*146
2	62	124	85	70	105	72	596	302	76	29	11	90
3	42	122	65	95	115	72	1,210	250	87	28	11	287
4	35	113	120	75	115	72	1,600	230	*67	27	11	167
5	32	104	90	65	100	73	1,840	218	55	25	11	116
6	31	98	80	55	80	74	1,790	201	50	24	12	92
7	30	92	70	52	90	75	1,500	188	49	32	14	78
8	29	85	65	50	90	76	1,180	174	45	29	18	68
9	28	90	65	46	85	77	1,360	161	39	24	19	61
10	28	122	64	50	90	78	1,350	152	34	22	86	54
11	38	109	62	52	90	80	1,390	146	30	21	145	120
12	41	94	61	*50	88	81	1,250	165	28	22	61	95
13	32	89	60	47	86	82	916	152	50	34	39	72
14	29	104	60	44	84	82	855	142	50	*27	30	58
15	27	126	59	40	82	80	800	133	114	22	25	68
16	*26	150	58	35	82	76	800	123	102	19	28	97
17	50	129	57	55	82	105	932	116	94	18	96	73
18	62	117	56	75	80	145	888	113	87	17	55	62
19	48	113	75	75	*78	90	725	106	97	18	39	61
20	42	107	62	75	76	110	691	136	82	20	32	56
21	38	102	57	140	73	180	556	118	79	20	28	50
22	37	104	54	400	70	210	452	228	72	19	27	48
23	89	90	60	420	70	270	444	148	68	18	25	43
24	336	92	55	300	72	310	396	129	54	17	71	39
25	178	85	53	200	70	225	370	118	46	18	88	38
26	143	96	52	150	70	*190	352	105	39	16	52	35
27	178	147	52	130	70	190	315	94	48	14	39	31
28	175	100	52	130	70	190	318	86	50	14	32	*28
29	199	90	40	120	-	190	*305	76	52	14	30	28
30	202	85	35	120	--------	190	312	74	42	12	45	32
31	161	--------	33	120	--------	185	--------	73	--------	12	80	--------
Total	2,485	3,222	1,937	3,368	2,378	3,990	25,791	4,789	1,852	664	1,272	2,293
Mean	80.2	107	62.5	109	84.9	129	860	154	61.7	21.4	41.0	76.4
(†)	+0.30	+5.56	+1.98	+1.19	-.54	+5.04	-9.80	-3.62	-.23	-.15	+.63	-.42

Adjusted for change in contents in Union Village Reservoir

Mean	80.5	113	64.5	110	84.4	134	850	151	61.5	21.3	41.7	76.0
Cfsm	0.619	0.869	0.496	0.846	0.649	1.03	6.54	1.16	0.473	0.164	0.321	0.585
In.	0.71	0.97	0.57	0.97	0.68	1.19	7.29	1.34	0.53	0.19	0.37	0.65

	Observed			Adjusted		
Calendar year 1958:	Max 1,790	Min 20	Mean 209	Mean 208	Cfsm 1.60	In. 21.73
Water year 1958-59:	Max 1,840	Min 11	Mean 148	Mean 148	Cfsm 1.14	In. 15.46

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Union Village Reservoir.
Note.--Stage-discharge relation affected by ice Nov. 28 to Mar. 31.

1425. Ayers Brook at Randolph, Vt.

Location.--Lat 43°56'05", long 72°39'30", on right bank 55 ft upstream from bridge on State Highway 12, just north of village limits of Randolph, Orange County, 0.4 mile upstream from Adams Brook, and 1.2 miles upstream from mouth.

Drainage area.--30.5 sq mi.

Records available.--July 1939 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 632.75 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--20 years, 46.3 cfs.

Extremes.--Maximum discharge during year, 606 cfs Apr. 8 (gage height, 3.79 ft); minimum, 2.1 cfs July 31.

1939-59: Maximum discharge, 3,490 cfs June 1, 1952 (gage height, 7.58 ft), from rating curve extended above 500 cfs by logarithmic plotting; minimum, 1.2 cfs Aug. 27, 1949.

Maximum stage known, about 16 ft in November 1927, from information by local residents.

Remarks.--Records good except those for periods of ice effect or backwater from beaver dam, which are fair.

Rating tables, water year 1958-59, except periods of ice effect or backwater from beaver dam (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 8				Apr. 9 to Sept. 30					
0.4	5.4	2.0	129	0.1	1.7	0.7	16	2.5	212
.6	10	2.5	212	.2	2.8	1.0	34	3.0	330
1.0	30	3.0	330	.3	4.4	1.5	78	3.5	490
1.5	74	3.6	530	.5	8.8	2.0	134		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	32	20	15	39	22	88	84	20	11	2.6	21
2	15	29	22	16	38	26	170	73	25	11	2.8	9.8
3	11	29	20	18	40	25	500	66	26	11	2.8	12
4	9.6	27	22	17	43	26	390	61	21	9.1	3.0	8.8
5	9.0	26	22	15	43	26	375	57	18	8.3	3.8	5.9
6	9.3	24	24	16	38	28	420	54	16	7.3	6.3	5.4
7	8.4	22	21	17	34	50	312	51	16	*8.3	6.8	5.7
8	7.9	22	21	16	34	35	400	48	15	8.3	8.6	6.8
9	7.9	22	22	15	25	27	396	45	14	6.6	8.6	8.6
10	7.4	25	17	15	33	29	333	43	12	5.9	44	9.1
11	9.3	24	18	14	32	26	324	41	11	5.2	36	30
12	8.7	22	20	14	30	24	242	45	10	5.0	15	16
13	8.2	20	19	15	29	27	206	43	15	5.9	9.5	11
14	*7.6	24	18	*15	28	26	193	40	13	5.9	6.8	9.8
15	7.6	28	19	15	28	25	184	38	24	5.0	5.4	14
16	9.8	31	19	17	24	27	183	37	28	4.6	8.4	16
17	18	26	18	20	*28	26	202	35	26	4.2	16	12
18	15	*24	18	18	26	26	193	34	23	3.8	8.3	10
19	11	24	19	19	24	25	183	32	25	5.2	6.3	10
20	10	24	18	20	21	47	161	37	20	9.8	*4.8	8.8
21	9.8	23	17	21	26	85	134	34	20	6.3	4.2	8.3
22	9.3	22	18	135	23	82	118	77	19	5.7	4.4	7.6
23	47	20	19	90	24	60	110	42	19	5.0	3.4	6.8
24	89	20	18	56	24	*56	104	36	14	4.6	17	6.6
25	45	20	16	62	22	54	99	34	13	4.6	15	7.3
26	36	21	17	48	22	54	96	30	13	3.8	7.0	5.9
27	46	29	17	43	22	56	88	27	18	3.1	4.8	5.7
28	42	18	16	46	21	52	80	25	24	2.7	4.4	5.5
29	48	26	16	44	-	48	*87	22	19	2.4	4.4	5.5
30	42	23	16	48	-------	49	94	22	14	2.4	6.8	*25
31	35	-------	16	64	-------	56	-------	22	-------	2.2	17	-------
Total	651.8	721	583	984	821	1,223	6,465	1,335	551	184.2	294.2	314.9
Mean	21.0	24.0	18.8	31.7	29.3	39.5	216	43.1	18.4	5.94	9.49	10.5
Cfsm	0.689	0.787	0.616	1.04	0.961	1.30	7.08	1.41	0.603	0.195	0.311	0.344
In.	0.79	0.88	0.71	1.20	1.00	1.49	7.88	1.63	0.67	0.22	0.36	0.38

Calendar year 1958: Max 578 Min 3.0 Mean 44.2 Cfsm 1.45 In. 19.69
Water year 1958-59: Max 500 Min 2.2 Mean 38.7 Cfsm 1.27 In. 17.21

Peak discharge (base, 350 cfs).--Apr. 3 (about 7 a.m.) 570 cfs; Apr. 5 (8 to 9 p.m.) 546 cfs (3.64 ft); Apr. 8 (8 to 9 p.m.) 606 cfs (3.79 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 28, 29, Dec. 10 to Apr. 3 (no gage-height record Dec. 11 to Jan. 14; discharge estimated on basis of weather records, recorded range in stage, and records for Dog River at Northfield Falls, Part 4, White River at West Hartford, and Wells River at Wells River). Backwater from beaver dam Aug. 21 to Sept. 24.

1440. White River at West Hartford, Vt.

Location.--Lat 43°42'45", long 72°25'10", on left bank 500 ft upstream from highway bridge at West Hartford, Windsor County, and 7 miles upstream from mouth.

Drainage area.--690 sq mi.

Records available--June 1915 to September 1959. October 1927 to September 1928 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 374.53 ft above mean sea level, datum of 1929. Prior to Oct. 30, 1927, staff gage at same site and datum.

Average discharge.--44 years, 1,189 cfs.

Extremes.--Maximum discharge during year, 11,300 cfs Apr. 3 (gage height, 10.60 ft); maximum gage height, 16.37 ft Jan. 22 (ice jam); minimum discharge, 80 cfs Aug. 3, 4; minimum daily, 85 cfs Aug. 3.
1915-59: Maximum discharge, 120,000 cfs Nov. 4, 1927 (gage height, 29.3 ft, from floodmarks), from rating curve extended above 29,000 cfs on basis of slope-area measurement of peak flow; minimum observed, about 35 cfs Aug. 4, 1918; minimum daily, 64 cfs Aug. 4, 1918.

Remarks.--Records good except those for periods of ice effect or doubtful gage-height record, which are fair. Some diurnal fluctuation at low flow caused by powerplant above station.

Revisions (water years).--WSP 756: Drainage area. WSP 781: 1928(M). WSP 1031: 1916(m), 1923. WSP 1301: 1916-26(M), 1929(M).

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.5	72	5.0	1,390
2.7	117	6.0	2,440
3.0	203	8.0	5,630
3.5	378	10.0	9,600
4.0	620	11.0	12,400

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	339	1,090	440	250	750	460	2,000	2,190	*456	295	100	*597
2	506	954	500	280	700	480	3,300	1,850	*485	267	95	525
3	438	882	520	290	750	480	10,300	1,660	570	270	*85	416
4	378	810	550	290	750	500	8,380	1,510	510	254	93	447
5	343	740	590	270	750	480	7,300	1,390	420	234	89	335
6	324	680	690	250	720	580	8,550	1,310	374	231	95	260
7	306	626	560	270	680	860	7,120	1,240	378	234	110	228
8	288	587	500	280	660	780	7,200	1,170	351	228	136	203
9	270	576	500	260	620	660	8,740	1,050	332	212	141	188
10	267	614	410	240	660	630	7,240	978	302	197	305	173
11	286	598	340	230	650	550	7,770	922	274	188	565	258
12	347	560	340	240	630	550	6,260	1,070	264	173	335	347
13	313	520	390	245	630	580	4,990	1,020	320	*197	225	250
14	288	515	350	245	600	580	4,660	922	351	*200	182	203
15	267	668	360	240	590	550	4,730	842	420	185	161	218
16	*270	754	360	*270	600	600	4,830	782	854	167	141	288
17	392	754	350	280	580	600	6,130	740	734	158	206	274
18	834	674	330	290	560	570	5,990	710	668	153	200	237
19	555	644	350	270	*520	560	5,540	668	680	136	173	228
20	456	674	320	290	490	900	5,030	826	680	141	141	200
21	407	620	300	310	460	2,000	3,570	874	692	194	128	206
22	370	620	300	3,000	450	2,800	d3,000	1,470	620	209	115	200
23	452	560	340	2,500	450	1,900	d2,850	1,230	576	179	117	176
24	2,620	525	310	1,500	470	1,600	d2,600	970	485	167	194	*164
25	1,760	535	290	1,350	450	1,350	d2,500	866	416	191	426	164
26	1,290	495	280	1,000	450	1,200	d2,450	740	374	161	278	164
27	1,340	850	290	850	460	1,250	d2,450	668	378	141	206	153
28	1,520	560	290	850	440	1,100	d2,150	604	374	136	197	141
29	1,850	530	280	800	~	1,000	*1,970	555	382	120	173	144
30	1,600	530	290	800	--------	*1,100	2,140	520	351	110	297	153
31	1,260	--------	280	850	--------	1,200	--------	520	--------	110	328	--------
Total	21,936	19,745	12,000	19,090	16,520	28,450	151,740	31,867	14,071	5,838	6,037	7,540
Mean	708	658	387	616	590	918	5,058	1,028	469	188	195	251
Cfsm	1.03	0.954	0.561	0.893	0.855	1.33	7.33	1.49	0.680	0.272	0.283	0.364
In.	1.18	1.06	0.65	1.03	0.89	1.53	8.18	1.72	0.76	0.31	0.33	0.41

Calendar year 1958: Max 17,400 Min 120 Mean 1,173 Cfsm 1.70 In. 23.07
Water year 1958-59: Max 10,300 Min 85 Mean 917 Cfsm 1.33 In. 18.05

Peak discharge (base, 11,600 cfs)--No peak above base.

* Discharge measurement made on this day.
d Doubtful gage-height record; discharge computed on basis of recorder chart, weather records, and records for Dog River at Northfield Falls.
Note.--Stage-discharge relation affected by ice Nov. 28 to Apr. 3.

1445. Connecticut River at White River Junction, Vt.

Location.--Lat 43°38'50", long 72°18'45", on right bank 50 ft downstream from railroad bridge at White River Junction, Windsor County, and 500 ft downstream from White River.
Drainage area.--4,092 sq mi.
Records available.--October 1911 to September 1959.
Gage.--Water-stage recorder. Datum of gage is 321.52 ft above mean sea level, datum of 1929. Prior to June 16, 1918, painted staff gage on downstream side of pier of railroad bridge 50 ft upstream at same datum. June 16, 1918, to Nov. 2, 1930, chain gage at various locations on upstream and downstream sides of railroad bridge at same datum.
Average discharge.--48 years, 7,168 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 36,900 cfs Apr. 3 (gage height, 16.66 ft, from graph based on twice-daily wire-weight-gage readings); maximum gage height, 23.08 ft Jan. 22 (ice jam); minimum daily discharge, 110 cfs Aug. 2.
1911-59: Maximum discharge, 136,000 cfs Nov. 4, 1927 (gage height, 35.0 ft, present site), from rating curve extended above 70,000 cfs by logarithmic plotting; minimum daily, that of Aug. 2, 1959.
Remarks.--Records good except those below 1,000 cfs, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir and Comerford Station Pond, Union Village Reservoir (see p. 242), and other reservoirs (combined usable capacity, about 17¼ billion cubic feet).
Cooperation.--Wire-weight-gage readings furnished by U. S. Weather Bureau.
Revisions (water years).--WSP 741: 1932 (adjusted monthly and yearly figures only). WSP 781: 1928(M). WSP 891: Drainage area. WSP 1301: 1922-26(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.4	101	5.0	2,150
2.7	183	6.0	3,730
3.0	301	8.0	8,180
3.5	585	12.0	20,000
4.0	990	17.0	38,300

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,560	7,940	5,260	450	1,800	1,300	9,500	13,500	3,940	6,000	g131	3,500
2	4,330	3,800	4,350	3,400	6,800	4,300	g14,000	13,000	4,200	7,200	g110	3,000
3	5,000	6,960	4,700	2,200	6,600	3,600	g32,000	8,800	4,500	3,170	1,260	4,600
4	2,330	6,650	4,620	700	6,200	3,600	g35,900	8,000	4,000	g531	1,630	4,780
5	1,690	6,720	4,450	3,400	6,400	3,500	g34,300	8,800	4,210	g267	1,450	2,610
6	3,210	5,840	3,000	3,300	6,600	4,200	g33,500	9,000	1,500	3,130	1,260	g415
7	3,420	6,090	2,600	3,000	4,600	3,500	g33,900	8,700	800	2,300	1,380	g632
8	3,610	4,060	4,300	2,900	2,400	1,200	g32,400	8,600	2,900	3,100	g463	2,150
9	3,970	2,770	4,330	2,800	4,200	3,900	g35,900	6,800	3,100	2,300	g134	2,080
10	3,900	4,810	4,800	1,800	5,000	3,800	g33,900	2,100	3,000	2,700	3,780	2,110
11	g1,230	4,300	3,800	1,200	4,400	3,600	g34,700	7,000	2,000	1,430	4,970	2,920
12	1,870	5,280	4,770	3,100	4,600	3,400	g32,400	7,600	1,900	460	2,600	g1,020
13	3,610	5,230	2,270	3,200	3,900	3,500	g26,800	7,200	1,700	2,700	2,200	g566
14	4,360	5,710	1,200	3,100	2,600	1,000	g23,000	7,100	1,270	3,900	1,840	2,070
15	4,250	4,800	4,100	3,500	650	1,400	g22,600	7,000	7,050	3,340	912	2,320
16	4,680	5,080	3,600	3,000	4,800	4,200	g22,300	4,840	g14,700	3,300	g154	2,010
17	4,740	6,160	3,800	1,600	4,100	4,600	g24,200	2,000	g15,300	3,000	2,600	1,720
18	5,300	6,410	4,000	1,200	4,300	4,000	g26,000	4,200	10,000	753	2,700	1,700
19	4,660	6,140	3,800	3,700	4,100	3,700	25,400	4,000	9,700	g170	1,900	g524
20	4,880	6,080	2,300	4,400	4,000	4,700	24,700	4,300	9,400	2,450	1,700	560
21	4,820	6,460	1,100	6,000	3,100	6,000	24,300	5,200	5,270	2,000	1,800	1,500
22	*4,800	4,260	3,100	11,000	1,600	6,200	20,500	6,400	8,650	2,100	518	1,500
23	4,800	2,860	5,600	8,600	3,300	6,600	17,000	4,800	6,600	2,200	g148	1,100
24	9,710	5,540	2,700	6,600	3,800	7,200	15,500	2,300	5,200	2,300	2,000	1,200
25	8,800	5,090	1,200	4,800	3,600	7,400	16,000	5,630	4,880	455	1,400	1,700
26	2,060	5,830	1,900	4,700	4,000	7,200	15,000	6,350	4,890	g177	2,500	g187
27	6,650	3,500	2,200	6,600	3,400	7,800	15,000	5,800	2,950	1,700	1,700	520
28	9,070	6,410	1,500	7,000	1,100	6,400	*19,200	4,800	1,520	1,900	1,700	1,700
29	8,880	5,170	3,200	7,200	-	6,000	16,000	4,000	5,860	1,600	g161	2,200
30	11,100	1,700	3,000	7,000	---------	5,000	16,000	2,400	6,550	1,500	862	1,300
31	10,600	--------	2,300	5,400	---------	6,200	--------	1,500	--------	1,500	1,900	--------
Total	156,890	157,650	101,850	126,850	111,950	139,000	731,900	191,720	157,540	69,633	47,863	54,194
Mean	5,061	5,255	3,285	4,092	3,998	4,484	24,400	6,185	5,251	2,246	1,544	1,806
(†)	-118	-458	-778	-519	-1,284	-606	+2,145	+1,316	+820	-309	-98.7	-160
Adjusted for change in reservoir contents												
Mean	4,943	4,797	2,508	3,573	2,714	3,878	26,540	7,500	6,071	1,937	1,445	1,646
Cfsm	1.21	1.17	0.613	0.873	0.663	0.948	6.49	1.83	1.48	0.473	0.353	0.402
In.	1.39	1.31	0.71	1.01	0.69	1.09	7.24	2.11	1.66	0.55	0.44	0.45

	Observed			Adjusted		
Calendar year 1958:	Max 56,700	Min 219	Mean 7,351	Mean 7,258	Cfsm 1.77	In. 24.07
Water year 1958-59:	Max 35,900	Min 110	Maan 5,608	Mean 5,608	Cfsm 1.37	In. 18.62

Peak discharge (base, 34,000 cfs).--Apr. 3 (4 p.m.) 36,900 cfs (16.66 ft).

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir and Comerford Station Pond, and Union Village Reservoir.
g Computed from twice-daily wire-weight gage readings.
Note.--Stage-discharge relation affected by ice Nov. 30, Dec. 6-8, Dec. 14 to Apr. 3 (no gage-height record Jan. 25 to Feb. 19; discharge estimated on basis of weather records, powerplant records, and records for White River at West Hartford).

1450. Mascoma River at West Canaan, N. H.

Location.--Lat 43°39'00", long 72°04'50", on right bank 45 ft downstream from Boston and Maine Railroad bridge, 0.9 mile east of West Canaan, Grafton County, 1.2 miles downstream from Indian River, and 3½ miles west of Canaan.

Drainage area.--80.5 sq mi.

Records available.--July 1939 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 835 ft (from topographic map).

Average discharge.--20 years, 120 cfs.

Extremes.--Maximum discharge during year, 1,190 cfs Apr. 3 (gage height, 5.24 ft); maximum gage height, 5.36 ft Apr. 3 (backwater from ice); minimum discharge, 5.4 cfs Aug. 4, 5.
1939-59: Maximum discharge, 3,780 cfs Mar. 27, 1953 (gage height, 8.94 ft), from rating curve extended above 1,900 cfs on basis of slope-area measurement at gage height 9.6 ft; minimum, 3.3 cfs Aug. 3, 4, 1953.
Flood in September 1938 reached a stage of 9.6 ft, from floodmarks (discharge, 4,310 cfs, from rating curve extended above 1,900 cfs as explained above).

Remarks.--Records good except those for period of ice effect, which are fair.

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct 1 to Apr. 3		Apr. 4 to Sept. 30			
0.6	7.5	0.4	4.8	2.0	130
.9	17	.5	6.1	2.5	225
1.2	34	.6	8.0	3.0	338
1.5	60	.9	19	4.0	635
2.0	122	1.2	36	5.0	1,070
		1.6	74		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	51	47	16	35	18	150	*208	54	42	7.2	131
2	26	44	40	15	34	19	250	167	63	49	6.7	65
3	20	40	36	16	33	20	900	142	77	45	5.8	98
4	15	42	36	17	34	20	1,020	126	58	34	5.6	123
5	12	38	38	*17	35	22	830	107	*43	28	5.6	66
6	10	34	80	16	33	22	774	97	35	*23	8.2	50
7	10	30	55	16	32	26	646	88	34	27	8.3	42
8	9.8	26	40	15	31	39	550	83	32	24	11	34
9	9.1	27	35	15	28	36	670	74	30	19	9.7	28
10	9.3	38	30	15	26	33	656	66	24	17	62	25
11	7.5	34	28	14	26	31	649	63	20	32	154	21
12	7.8	28	26	14	25	28	553	74	18	36	67	19
13	*8.8	25	25	14	25	28	419	77	22	42	42	15
14	8.5	29	24	14	24	29	375	72	27	37	*31	13
15	8.3	44	23	14	24	28	388	70	105	28	22	24
16	8.5	61	22	15	23	28	399	63	121	23	18	42
17	11	*50	21	23	23	32	451	61	101	21	21	32
18	13	42	21	29	23	32	505	58	108	18	25	23
19	12	34	20	27	22	30	460	52	165	16	21	20
20	11	30	20	25	21	32	430	64	177	16	17	18
21	10	27	20	24	21	60	321	63	127	17	13	*17
22	9.6	28	19	70	21	115	255	308	101	17	13	15
23	13	27	19	110	20	130	221	177	90	14	11	14
24	61	28	18	85	*20	105	202	112	67	13	18	13
25	44	25	18	72	19	95	186	93	55	17	44	12
26	31	24	17	60	19	90	180	74	49	14	28	12
27	59	42	17	50	18	82	*173	67	50	11	19	11
28	77	35	16	45	18	75	204	55	60	9.7	15	10
29	77	60	16	40	-	70	174	47	73	8.8	17	9.4
30	79	56	16	39	-------	*70	192	74	50	8.0	67	11
31	63	-------	16	38	-------	90	-------	70	-------	7.2	71	-------
Total	753.2	1,099	859	980	713	1,535	13,183	2,952	2,036	713.7	864.1	1,013.4
Mean	24.3	36.6	27.7	31.6	25.5	49.5	439	95.2	67.9	23.0	27.9	33.8
Cfsm	0.302	0.455	0.344	0.393	0.317	0.615	5.45	1.18	0.843	0.286	0.347	0.420
In.	0.35	0.51	0.40	0.45	0.33	0.71	6.09	1.36	0.94	0.33	0.40	0.47

Calendar year 1958: Max 1,800 Min 5.0 Mean 124 Cfsm 1.54 In. 20.92
Water year 1958-59: Max 1,020 Min 5.6 Mean 73.2 Cfsm 0.909 In. 12.34

Peak discharge (base, 950 cfs).--Apr. 3 (12 p.m.) 1,190 cfs (5.24 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge affected by ice Nov. 28 to Apr. 3.

1505. Mascoma River at Mascoma, N. H.

Location.--Lat 43°39'00", long 72°11'05", on left bank at Mascoma, Grafton County, 250 ft downstream from railroad bridge and 1,000 ft downstream from outlet of Mascoma Lake.

Drainage area.--153 sq mi.

Records available.--August 1923 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 740 ft (from topographic map).

Average discharge.--36 years, 215 cfs (adjusted for storage since October 1928).

Extremes.--Maximum discharge during year, 1,290 cfs Apr. 6, 7 (gage height, 3.55 ft); minimum daily, 3 cfs Nov. 22.
1923-59: Maximum discharge, 5,840 cfs Mar. 19, 1936 (gage height, 7.50 ft), from rating curve extended above 2,500 cfs on basis of computations of flow over dams at gage heights 6.85 and 7.50 ft; minimum daily, 2 cfs Feb. 3, 1929, Sept. 1, 1940.

Remarks.--Records excellent except those for periods of no gage-height record, which are good. Flow regulated by Mascoma and Crystal Lakes and Goose and Grafton Ponds (see p. 242).

Revisions (water years).--WSP 726: Drainage area. WSP 801: 1925(M).

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

-0.35	3.0	1.0	118
-.3	3.9	1.5	241
-.1	8.8	2.0	412
.1	17	2.5	620
.4	36	3.0	900
.7	68	4.0	1,660

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	94	36	79	69	76	67	202	*229	162	160	61	85
2	84	44	79	64	76	92	260	256	162	155	78	90
3	74	94	79	36	76	90	382	256	160	130	78	110
4	36	94	79	47	76	90	758	232	160	84	78	133
5	47	94	71	75	75	89	1,120	235	139	82	94	101
6	82	94	26	74	75	96	1,270	189	85	82	89	82
7	81	85	33	74	75	76	1,190	162	81	82	71	82
8	78	36	82	74	76	82	1,070	162	107	81	36	112
9	76	43	82	*68	76	105	1,030	162	107	81	43	153
10	66	81	82	36	76	105	1,060	126	*92	*79	*79	133
11	36	81	82	43	76	105	1,060	105	84	79	92	131
12	40	78	73	74	76	124	1,030	105	72	78	92	128
13	66	78	27	71	76	114	764	112	50	76	90	126
14	71	75	36	69	76	110	475	128	60	76	71	122
15	69	27	80	71	76	108	272	105	81	75	40	122
16	69	37	80	66	76	114	275	105	82	75	50	122
17	*63	81	80	40	76	116	361	105	84	63	87	122
18	36	81	78	46	76	114	559	99	84	35	85	90
19	46	79	68	71	76	114	640	96	128	42	84	31
20	75	79	27	72	76	114	764	105	110	76	82	39
21	75	65	33	72	76	114	730	105	112	76	67	72
22	75	3	74	53	72	116	436	261	150	81	37	78
23	75	33	74	54	71	*133	266	315	164	89	48	82
24	65	79	63	36	68	148	241	116	164	89	79	96
25	36	78	72	41	67	153	241	114	162	59	78	*97
26	46	78	66	75	67	176	241	114	147	55	78	33
27	84	76	36	75	66	215	244	155	42	90	76	63
28	85	66	43	76	64	202	235	107	91	90	60	103
29	87	31	71	76	-	191	226	107	162	89	33	128
30	89	40	71	76	-------	184	226	97	162	89	40	155
31	84	-------	71	76	-------	179	-------	91	-------	84	76	-------
Total	2,090	1,946	2,007	1,950	2,068	3,836	17,628	4,656	3,446	2,582	2,152	3,021
Mean	67.4	64.9	64.7	62.9	73.9	124	588	150	115	83.3	69.4	101
(†)	-32.0	-25.5	-2.43	+9.71	-27.4	+0.75	+255	+10.7	-0.19	-55.5	-9.93	-42.9

Adjusted for change in reservoir contents

Mean	35.5	39.4	62.3	72.6	46.4	124	843	161	115	27.8	59.5	57.8
Cfsm	0.232	0.258	0.407	0.475	0.303	0.810	5.51	1.05	0.752	0.182	0.389	0.378
In.	0.27	0.29	0.47	0.55	0.32	0.94	6.15	1.21	0.84	0.21	0.45	0.42

	Observed			Adjusted		
Calendar year 1958:	Max 2,180	Min 3	Mean 243	Mean 221	Cfsm 1.44	In. 19.61
Water year 1958-59:	Max 1,270	Min 3	Mean 130	Mean 136	Cfsm 0.889	In. 12.12

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Mascoma and Crystal Lakes and Goose and Grafton Ponds.
Note.--No gage-height record Nov. 15, 22, 29, Dec. 2 to Jan. 4; discharge estimated on basis of recorded range in stage when available, observer's weekly gage reading, records of gate operation and pond elevations at Mascoma Lake, and records for periods when gate openings were greatly reduced.

1515. Ottauquechee River at North Hartland, Vt.

Location.--Lat 43°36'05", long 72°21'20", on left bank 300 ft upstream from highway bridge at North Hartland, Windsor County, and 1 mile upstream from mouth.

Drainage area.--221 sq mi.

Records available.--October 1930 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 336.77 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--29 years, 396 cfs.

Extremes.--Maximum discharge during year, about 6,700 cfs Apr. 3 (backwater from ice); maximum gage height, 10.51 ft Apr. 3 (ice jam); minimum discharge, 14 cfs Aug. 1, 3; minimum daily, 30 cfs Aug. 1, 2.

1930-59: Maximum discharge, 24,400 cfs Sept. 21, 1938 (gage height, 17.68 ft), from rating curve extended above 6,200 cfs on basis of computations of flow over dams at gage heights 15.58, 17.68, and 21.5 ft; minimum, 2.9 cfs July 31, 1933; minimum daily, 3.8 cfs July 3, 1933.

Maximum stage known, 21.5 ft in November 1927, from floodmarks (discharge, 30,400 cfs, by computation of peak flow over dam).

Remarks.--Records excellent except those for period of ice effect, which are fair. Flow regulated by powerplants above station. Small seasonal storage in reservoir at Plymouth.

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	27	4.0	695
1.9	46	4.5	970
2.2	75	5.0	1,360
2.5	123	6.0	2,420
3.0	273	8.0	5,150

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	242	120	80	230	130	700	790	199	114	30	248
2	70	212	130	90	215	130	1,300	655	231	102	30	128
3	75	205	140	94	240	135	5,000	582	290	99	34	129
4	53	184	150	94	240	145	3,720	524	218	94	40	110
5	55	167	170	90	230	145	2,900	483	*175	78	40	83
6	58	161	200	80	220	150	3,060	456	158	82	44	63
7	50	145	160	82	210	220	2,440	426	167	96	47	51
8	54	137	140	86	205	250	2,750	426	147	84	51	66
9	55	137	140	*84	200	210	3,320	382	128	74	57	41
10	51	161	120	78	210	195	2,750	344	115	*67	198	52
11	52	164	100	78	205	180	2,840	337	98	59	227	54
12	61	151	100	80	200	175	2,210	378	95	68	101	83
13	67	135	115	78	190	175	1,700	359	107	76	68	58
14	54	133	110	82	185	170	1,560	322	135	63	53	58
15	52	150	110	80	185	170	1,590	301	178	58	35	76
16	54	190	110	84	190	180	1,690	280	301	55	42	168
17	*60	190	105	120	175	190	2,080	259	256	53	51	111
18	93	167	105	150	165	190	1,850	266	280	41	43	92
19	89	158	105	130	155	170	1,720	238	315	48	48	76
20	80	164	100	115	*145	210	1,480	301	340	53	46	75
21	66	145	95	120	140	450	998	312	355	52	40	74
22	66	140	90	600	135	750	822	706	287	84	33	72
23	76	133	100	950	135	580	735	586	256	53	34	63
24	484	137	92	570	140	510	705	394	199	55	*67	61
25	355	130	88	445	135	500	665	348	160	55	133	*58
26	256	131	86	360	135	480	655	298	168	58	82	50
27	280	270	82	270	130	*550	670	259	166	55	60	51
28	378	150	86	270	130	460	*715	231	155	42	50	58
29	461	140	88	260	-	400	680	199	161	41	47	53
30	374	140	92	240	-------	430	770	270	139	40	67	66
31	287	-------	88	260	-------	480	-------	259	-------	32	121	-------
Total	4,322	4,869	3,517	6,200	5,075	9,110	54,075	11,971	5,979	2,031	2,019	2,428
Mean	139	162	113	200	181	294	1,802	386	199	65.5	65.1	80.9
Cfsm	0.629	0.733	0.511	0.905	0.819	1.33	8.15	1.75	0.900	0.296	0.295	0.366
In.	0.73	0.82	0.59	1.04	0.85	1.53	9.10	2.01	1.01	0.34	0.34	0.41

Calendar year 1958: Max 6,970 Min 40 Mean 389 Cfsm 1.76 In. 23.89
Water year 1958-59: Max 5,000 Min 30 Mean 306 Cfsm 1.38 In. 18.77

Peak discharge (base, 5,500 cfs).--Apr. 3 (about 3 a.m.) about 6,700 cfs.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Apr. 3.

1525. Sugar River at West Claremont, N. H.

Location.--Lat 43°23'15", long 72°21'45", on right bank 0.2 mile downstream from Redwater Brook at West Claremont, Sullivan County.

Drainage area.--269 sq mi.

Records available.--May 1928 to September 1959. Published as "at Claremont" prior to October 1928.

Gage.--Water-stage recorder. Datum of gage is 358.78 ft above mean sea level, datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1928, chain gage at site 0.8 mile upstream at different datum.

Average discharge.--31 years, 395 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 5,360 cfs Apr. 3 (gage height, 6.38 ft); maximum gage height, 7.49 ft Jan. 22 (ice jam); minimum daily discharge, 38 cfs Oct. 13.
1928-59: Maximum discharge, 14,000 cfs Mar. 19, 1936 (gage height, 10.92 ft), from rating curve extended above 6,700 cfs on basis of computations of flow over dam at gage heights 10.49 and 10.92 ft; maximum gage height, 11.80 ft Mar. 12, 1936 (ice jam); minimum daily discharge, 21 cfs Sept. 1, 1957.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Flow regulated by mills above station and by Sunapee Lake (see p. 242).

Revisions (water years).--WSP 711: 1930(M). WSP 756: Drainage area.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.0	31	3.0	885
1.2	63	4.0	1,750
1.6	175	5.0	3,020
2.0	325	6.0	4,660
2.5	565		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	153	241	83	200	95	756	655	113	125	58	89
2	86	136	210	87	190	100	1,370	601	108	143	56	102
3	84	137	170	90	180	105	4,250	506	137	128	52	170
4	70	134	178	85	205	120	3,680	448	140	102	52	265
5	68	143	206	80	240	120	2,850	390	119	100	54	178
6	70	156	250	76	205	125	2,700	353	108	100	63	119
7	63	162	210	*80	170	160	*2,070	333	84	89	65	97
8	61	125	180	82	140	170	1,860	317	100	86	68	79
9	59	131	150	80	130	160	2,390	273	86	77	61	72
10	59	165	130	78	150	150	2,190	241	81	77	93	65
11	100	146	120	76	140	140	2,170	253	79	113	122	*63
12	49	128	130	76	*130	150	1,820	285	74	134	119	59
13	38	122	95	79	120	140	1,460	289	79	91	91	50
14	54	116	135	80	125	135	1,300	281	84	94	79	54
15	54	119	130	78	130	140	1,250	269	194	89	70	84
16	*56	209	120	94	140	135	1,230	241	277	81	61	108
17	58	216	120	150	120	*170	1,280	223	202	77	70	94
18	54	*172	115	190	115	150	1,280	199	199	72	77	81
19	54	153	115	240	120	145	1,200	*192	301	65	70	70
20	59	149	110	200	110	230	1,150	209	382	77	*65	68
21	54	131	105	230	115	480	1,020	223	305	86	59	72
22	54	128	100	500	110	700	850	216	273	97	54	65
23	74	105	110	800	110	670	718	216	245	84	42	63
24	138	122	100	600	110	610	607	172	199	81	68	61
25	131	116	92	450	105	565	530	185	159	79	91	59
26	131	125	88	350	100	577	495	165	172	70	84	56
27	159	220	86	280	100	595	506	149	178	70	74	50
28	220	206	90	230	100	480	607	128	169	*65	70	58
29	321	464	93	190	-	407	613	122	169	61	65	56
30	241	349	96	200	-------	403	643	100	143	59	65	52
31	195	-------	90	215	-------	453	-------	110	-------	58	86	-------
Total	2,991	4,938	4,165	6,129	3,910	8,780	44,845	8,344	4,959	2,730	2,204	2,559
Mean	96.5	165	134	198	140	283	1,495	269	165	88.1	71.1	85.3
(†)	-29.5	+2.70	-13.8	+12.7	-1.65	+34.3	+124	-10.5	-17.0	-38.8	-30.2	-47.5

Adjusted for change in contents in Sunapee Lake

Mean	67.0	167	121	210	138	318	1,619	259	148	49.2	40.9	37.8
Cfsm	0.249	0.621	0.450	0.781	0.513	1.18	6.02	0.963	0.550	0.183	0.152	0.141
In.	0.29	0.69	0.52	0.90	0.53	1.36	6.72	1.11	0.62	0.21	0.18	0.16

	Observed			Adjusted		
Calendar year 1958:	Max 4,480	Min 38	Mean 432	Mean 417	Cfsm 1.55	In. 21.04
Water year 1958-59:	Max 4,250	Min 38	Mean 265	Mean 263	Cfsm 0.978	In. 13.29

Peak discharge (base, 3,000 cfs).--Apr. 3 (12 m.) 5,360 cfs (6.38 ft).

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Sunapee Lake.
Note.--Stage-discharge relation affected by ice Dec. 2, 3, Dec. 6 to Mar. 24 (no gage-height record Jan. 24 to Feb. 5; discharge estimated on basis of weather records and records for West River at Jamaica, Vt., Ottauquechee River at North Hartland, Vt., and records for stations on other nearby streams).

1530. Black River at North Springfield, Vt.

Location.--Lat 43°20'00", long 72°30'55", on right bank at North Springfield, Windsor County, 1,300 ft upstream from Great Brook.

Drainage area.--158 sq mi.

Records available.--October 1929 to September 1959. October 1929 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 445.79 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--30 years, 281 cfs.

Extremes.--Maximum discharge during year, about 4,500 cfs Apr. 3; maximum gage height, 7.36 ft Apr. 3 (affected by ice); minimum daily discharge, 14 cfs Oct. 18.
1929-59: Maximum discharge, 15,500 cfs Sept. 22, 1938 (gage height, 17.68 ft), from rating curve extended above 3,200 cfs on basis of computations of flow over dams at gage heights 16.41 and 17.68 ft; minimum daily, 10 cfs Oct. 17, 1937.

Remarks.--Records good except those for period of ice effect, which are fair. Flow regulated by mills above station.

Revisions (water years).--WSP 756: Drainage area. WSP 781: 1931(M), 1934(M).

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 2				Apr. 3 to Sept. 30			
1.6	13	2.5	183	1.5	17	3.0	405
1.7	21	3.0	370	1.7	30	4.0	1,100
1.9	45	3.5	655	1.9	54	6.0	3,260
2.2	103	4.0	1,010	2.2	113	7.0	4,900
				2.5	192		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	174	140	45	160	90	500	644	101	130	25	119
2	34	140	120	43	150	95	900	496	86	132	26	100
3	29	124	110	48	145	100	3,500	438	122	114	21	131
4	31	115	120	55	165	110	2,740	375	109	70	24	131
5	32	101	150	51	185	110	2,070	319	84	71	22	84
6	30	103	200	45	170	120	2,180	278	79	70	28	63
7	32	83	140	45	160	145	*1,690	245	75	91	29	52
8	51	74	100	*40	150	170	1,760	237	86	74	32	43
9	42	84	97	36	145	160	2,240	199	44	65	31	38
10	31	97	85	36	155	140	1,870	192	37	69	103	39
11	30	104	75	35	150	135	1,950	175	36	198	97	*38
12	29	82	80	37	145	130	1,440	202	37	113	58	43
13	20	82	85	37	140	125	1,100	205	41	102	35	34
14	19	78	77	38	145	125	996	182	39	72	36	28
15	20	80	74	38	140	130	1,010	171	58	70	26	58
16	*34	166	74	48	135	140	1,070	149	77	57	29	94
17	29	134	70	75	125	140	1,220	158	86	43	28	59
18	14	*121	67	150	120	135	1,140	127	99	55	29	48
19	20	115	64	110	110	120	1,100	*131	146	48	27	52
20	27	104	59	90	105	180	1,000	182	208	52	*29	45
21	45	104	50	120	100	350	776	195	319	82	*26	37
22	32	104	47	350	95	550	618	240	257	159	18	30
23	68	98	49	700	95	450	533	229	253	89	20	28
24	245	82	50	450	100	380	490	206	170	72	53	26
25	170	85	42	350	95	360	444	175	131	64	64	28
26	183	92	39	250	95	350	427	154	161	54	44	22
27	204	212	39	200	93	400	449	151	180	*43	31	26
28	257	160	42	190	91	330	585	125	206	34	30	70
29	305	250	44	180	-	280	618	98	331	29	33	63
30	260	180	48	160	-------	270	706	97	183	32	93	148
31	209	-------	49	180	-------	320	-------	88	-------	23	73	-------
Total	2,568	3,528	2,486	4,232	3,664	6,640	37,122	6,863	3,841	2,377	1,220	1,777
Mean	82.8	118	80.2	137	131	214	1,237	221	128	76.7	39.4	59.2
Cfsm	0.524	0.747	0.508	0.867	0.829	1.35	7.83	1.40	0.810	0.485	0.249	0.375
In.	0.60	0.83	0.59	1.00	0.86	1.56	8.74	1.62	0.90	0.56	0.29	0.42

Calendar year 1958: Max 4,860 Min 13 Mean 281 Cfsm 1.78 In. 24.13
Water year 1958-59: Max 3,500 Min 14 Mean 209 Cfsm 1.32 In. 17.97

Peak discharge (base, 3,600 cfs).--Apr. 3 (about 6 a.m.) about 4,500 cfs.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28 to Apr. 3 (no gage-height record Dec. 1 to Jan. 7; discharge estimated on basis of weather records, recorded range in stage, and records for Ottauquechee River at North Hartland, Vt., Sugar River at West Claremont, N. H., and records for stations on other nearby streams.

1535. Williams River at Brockway Mills, Vt.

Location.--Lat 43°12'30", long 72°31'05", on left bank 25 ft upstream from highway bridge at Brockway Mills, Windham County, 4 miles downstream from Hall Brook, 4.6 miles upstream from mouth, and 6 miles northwest of Bellows Falls.

Drainage area.--103 sq mi.

Records available.--June 1940 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 430 ft (from topographic map).

Average discharge.--19 years, 164 cfs.

Extremes.--Maximum discharge during year, 3,230 cfs Apr. 3 (gage height, 7.77 ft); maximum gage height, 9.08 ft Jan. 22 (ice jam); minimum discharge, 8.8 cfs Aug. 4.
1940-59: Maximum discharge, 8,910 cfs June 1, 1952 (gage height, 13.39 ft), from rating curve extended above 3,300 cfs on basis of slope-area measurement at gage height 13.31 ft; minimum not determined, occurred Dec. 11, 1941, during period of ice effect; minimum daily, 3.6 cfs Aug. 27, 1949.
Flood in September 1938 reached a stage of 22.7 ft, from floodmarks.

Remarks.--Records excellent except those for period of ice effect, which are fair.

Revisions (water years).--WSP 1031: 1943-44(P). WSP 1301: 1941-42(M).

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 2				Apr. 3 to Sept. 30			
1.0	9.5	2.5	235	0.9	8.8	2.5	225
1.2	18	3.0	390	1.0	12	3.0	381
1.5	37	4.0	770	1.2	20	4.0	770
1.7	59	5.0	1,280	1.5	39	5.0	1,280
2.0	105			1.7	56	7.0	2,610
				2.0	99		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	52	62	21	95	41	489	347	31	42	15	92
2	17	44	53	20	90	43	977	260	46	86	12	58
3	15	43	50	24	92	46	2,310	222	119	65	10	86
4	14	46	53	25	100	52	1,680	190	58	109	9.4	68
5	13	41	60	22	110	50	1,280	165	43	34	9.7	41
6	13	37	150	21	100	100	1,370	150	37	29	16	33
7	12	34	90	20	90	300	990	137	37	*33	19	29
8	12	32	75	*18	85	250	*1,250	126	34	28	27	25
9	12	36	63	17	80	130	1,420	113	30	24	55	22
10	12	45	55	17	85	100	1,160	103	26	25	78	21
11	12	45	45	16	80	*82	1,120	103	23	97	57	24
12	11	38	47	16	77	63	779	158	21	48	31	22
13	11	35	43	15	*75	73	612	126	23	45	24	19
14	11	*33	39	17	77	68	581	117	28	39	20	18
15	11	35	35	17	75	63	585	109	26	31	18	54
16	*12	63	34	26	70	105	624	101	31	27	19	*68
17	13	54	32	90	66	94	702	90	38	24	30	39
18	14	45	30	150	62	82	573	92	54	21	34	33
19	13	45	27	150	58	84	518	82	83	21	27	31
20	12	43	24	70	54	155	442	109	100	29	*20	28
21	12	40	21	70	52	460	347	115	52	28	19	25
22	12	41	20	500	50	540	287	111	41	24	44	24
23	49	36	22	400	50	330	254	89	52	21	28	22
24	152	36	23	200	52	285	225	72	38	21	50	22
25	78	33	20	160	48	310	208	58	31	26	59	21
26	59	46	19	120	47	360	208	*50	35	21	33	20
27	130	136	18	100	46	350	221	45	39	19	26	20
28	168	57	19	95	44	260	296	41	56	18	23	19
29	150	240	23	90	-	225	357	38	176	16	39	20
30	85	110	28	95	-------	235	395	36	65	15	73	21
31	63	-------	26	110	-------	290	-------	35	-------	15	84	-------
Total	1,214	1,621	1,306	2,712	2,010	5,626	22,260	3,590	1,473	1,081	1,009.1	1,025
Mean	39.2	54.0	42.1	87.5	71.8	181	742	116	49.1	34.9	32.6	34.2
Cfsm	0.381	0.524	0.409	0.850	0.697	1.76	7.20	1.13	0.477	0.339	0.317	0.332
In.	0.44	0.59	0.47	0.98	0.73	2.03	8.04	1.30	0.53	0.39	0.36	0.37

Calendar year 1958: Max 2,010 Min 6.6 Mean 154 Cfsm 1.50 In. 20.31
Water year 1958-59: Max 2,310 Min 9.4 Mean 123 Cfsm 1.19 In. 16.23

Peak discharge (base, 2,600 cfs).--Apr. 3 (2:30 to 3:30 a.m.) 3,230 cfs (7.77 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28 to Mar. 31.

1540. Saxtons River at Saxtons River, Vt.

Location.--Lat 43°08'15", long 72°29'15", on right bank 130 ft upstream from highway bridge, 0.8 mile east of Saxtons River, Windham County, 1.4 miles upstream from Bundy Brook, and 3.9 miles upstream from mouth.

Drainage area.--72.2 sq mi.

Records available.--June 1940 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 390 ft (from topographic map).

Average discharge.--19 years, 116 cfs.

Extremes.--Maximum discharge during year, 2,520 cfs Apr. 3 (gage height, 8.03 ft); maximum gage height, 12.34 ft Jan. 22 (ice jam); minimum discharge, 4.8 cfs Aug. 4, 5; minimum daily, 5.0 cfs Aug. 5.
1940-59: Maximum discharge, 5,430 cfs June 1, 1952 (gage height, 11.37 ft), from rating curve extended above 1,800 cfs on basis of slope-area measurements at gage heights 10.51 and 11.37 ft; minimum, 1.9 cfs July 25, 1949; minimum daily, 2.4 cfs Aug. 6, 1955.
Flood in September 1938 reached a stage of 17.9 ft, from floodmarks.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Occasional diurnal fluctuation at low flow caused by sawmill above station; fluctuation more frequent prior to 1946.

Revisions (water years).--WSP 1301: 1948-49(M).

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 2				Apr. 3 to Sept. 30			
2.2	8.1	3.5	155	2.0	3.1	3.5	155
2.3	12	4.0	276	2.1	5.2	4.0	276
2.6	31	5.0	620	2.2	8.1	5.0	620
3.0	72	6.0	1,100	2.3	12	6.0	1,100
				2.6	29	7.0	1,750
				3.0	68		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	38	44	15	65	30	336	195	21	20	6.5	a85
2	16	31	37	16	62	30	834	155	33	23	6.0	a55
3	13	33	35	19	64	32	1,590	133	95	26	5.2	a78
4	12	35	38	17	68	36	1,120	116	42	18	5.2	a60
5	10	31	43	16	76	34	808	103	31	15	5.0	a40
6	9.9	30	105	*15	68	70	812	93	26	13	7.8	a25
7	9.5	27	63	14	63	210	616	87	25	16	12	a20
8	9.1	25	53	13	59	180	*704	82	22	14	13	a17
9	9.1	28	45	12	56	100	890	74	18	12	23	a15
10	8.7	34	39	12	60	70	696	68	16	23	56	14
11	9.1	33	32	12	57	*50	684	66	14	84	40	14
12	8.7	28	34	11	55	47	477	100	13	37	20	16
13	8.4	25	31	11	*52	52	360	79	16	36	16	14
14	8.1	25	28	12	54	46	322	69	18	*32	13	12
15	8.1	27	25	12	52	45	316	62	18	23	11	*32
16	*8.1	40	24	18	50	74	340	60	19	19	9.1	48
17	8.4	36	23	63	47	65	397	55	23	16	12	28
18	8.7	31	21	110	44	58	319	57	35	14	23	22
19	8.4	*30	19	110	41	58	287	51	46	13	21	21
20	8.1	29	17	95	39	110	255	57	44	20	14	19
21	8.1	28	15	90	37	350	205	51	28	24	*11	17
22	8.1	27	14	370	36	360	173	49	23	20	21	16
23	33	24	15	340	35	225	153	43	23	16	14	14
24	79	24	16	160	37	200	141	40	20	14	19	14
25	46	23	14	115	35	205	127	38	16	14	31	12
26	38	38	13	85	34	250	124	*33	24	12	18	11
27	82	88	13	70	33	235	137	30	28	9.9	14	11
28	109	49	14	65	31	165	170	26	39	8.7	12	10
29	90	180	16	62	-	140	215	23	55	8.1	54	11
30	60	82	20	66	-------	145	220	23	28	7.4	66	12
31	44	-------	19	76	-------	182	-------	23	-------	6.5	a75	-------
Total	792.6	1,179	925	2,102	1,410	3,854	13,828	2,139	859	614.6	653.8	763
Mean	25.6	39.3	29.8	67.8	50.4	124	461	69.0	28.6	19.8	21.1	25.4
Cfsm	0.355	0.544	0.413	0.939	0.698	1.72	6.39	0.956	0.396	0.274	0.292	0.352
In.	0.41	0.61	0.48	1.08	0.73	1.99	7.12	1.10	0.44	0.32	0.34	0.39

Calendar year 1958: Max 1,300 Min 4.5 Mean 109 Cfsm 1.51 In. 20.48
Water year 1958-59: Max 1,590 Min 5.0 Mean 79.8 Cfsm 1.11 In. 15.01

Peak discharge (base, 1,750 cfs).--Apr. 3 (12:30 a.m.) 2,520 cfs (8.03 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for Williams River at Brockway Mills and stations on other nearby streams.
Note.--Stage-discharge relation affected by ice Nov. 28 to Mar. 30.

1545. Connecticut River at North Walpole, N. H.

Location.--Lat 43°07'35", long 72°26'15", on left bank at North Walpole, Cheshire County, 100 ft upstream from Saxtons River and 0.7 mile downstream from Vilas Bridge between Bellows Falls, Vt., and North Walpole, N. H. Records include flow of Saxtons River.

Drainage area.--5,493 sq mi, includes that of Saxtons River.

Records available.--March 1942 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 218.63 ft above mean sea level, datum of 1929.

Average discharge.--17 years, 9,282 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 83,700 cfs Apr. 4 (gage height, 27.70 ft); minimum daily, 226 cfs Aug. 2.
1942-59: Maximum discharge, 97,000 cfs Mar. 27, 1953 (gage height, 30.37 ft); minimum daily, 115 cfs Aug. 31, 1952, Sept. 2, 1957.
Maximum stage known, 43.8 ft Mar. 19, 1936, from floodmarks.

Remarks.--Records excellent except those for periods of ice effect, which are good. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir and Comerford Station Pond (see p. 242), and other reservoirs (combined usable capacity, about 19½ billion cubic feet).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

4.0	202	7.0	4,230
4.5	488	10.0	11,700
5.0	930	15.0	28,500
5.5	1,510	20.0	48,700
6.0	2,270	25.0	71,200

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,470	11,600	5,700	1,490	4,000	1,900	11,100	19,500	4,990	6,520	236	3,610
2	4,830	5,380	5,850	4,820	7,000	3,600	20,300	17,500	4,660	6,590	226	5,170
3	5,170	6,680	5,430	2,440	7,500	4,800	43,600	13,900	5,240	5,690	1,530	6,210
4	2,060	7,440	5,980	1,110	8,000	4,800	68,100	12,200	5,260	1,870	1,710	6,390
5	1,930	7,800	5,860	3,800	8,000	4,100	52,800	10,700	5,550	412	1,620	3,720
6	3,650	6,650	5,630	4,100	8,000	5,500	48,700	11,000	2,430	3,570	1,330	744
7	3,840	6,380	1,450	3,500	8,000	5,100	47,400	11,800	670	2,880	1,880	756
8	4,190	6,580	6,520	3,100	5,000	3,300	42,200	10,500	3,950	3,660	546	2,630
9	3,770	2,530	5,450	3,800	4,600	5,100	47,500	11,400	3,580	2,440	650	2,590
10	4,320	5,600	5,230	1,700	5,400	4,800	48,600	3,160	3,660	3,340	3,290	2,690
11	1,960	4,060	4,500	960	5,500	4,600	47,400	6,360	2,800	2,610	7,180	3,340
12	434	5,980	5,200	3,600	5,800	5,300	44,500	8,770	2,630	756	5,060	1,100
13	5,120	6,430	2,320	3,200	5,000	4,570	38,300	10,200	1,700	3,800	2,670	814
14	4,130	6,510	2,060	3,500	4,200	3,140	33,000	9,260	1,220	4,670	2,180	2,750
15	4,850	5,280	4,790	4,300	2,500	1,200	*29,700	8,740	6,480	4,200	922	2,770
16	4,930	5,270	3,940	4,500	4,500	4,100	28,200	7,800	11,700	3,820	239	3,480
17	*5,780	6,800	4,540	2,800	5,500	5,500	28,200	3,200	16,200	3,530	2,530	*2,270
18	4,700	7,040	4,710	800	5,200	6,450	29,700	4,850	12,100	1,210	2,780	2,220
19	4,550	*6,940	4,690	5,400	4,900	5,600	32,200	4,950	11,500	291	2,900	969
20	4,910	6,800	3,380	5,100	4,700	5,620	30,800	5,140	11,100	3,150	2,350	623
21	5,250	6,840	1,700	6,200	3,800	7,740	29,600	6,220	8,700	3,400	2,570	1,890
22	5,730	5,980	4,000	11,500	2,200	10,900	26,700	6,310	9,010	2,520	332	1,810
23	5,800	3,080	4,100	17,000	4,100	11,500	23,500	8,310	8,550	2,990	310	1,650
24	8,460	5,970	2,850	12,500	3,900	10,800	18,600	3,760	8,430	2,330	2,570	1,540
25	10,400	5,830	1,750	7,100	4,400	10,900	19,800	7,270	6,400	836	2,100	1,900
26	3,750	6,280	3,700	8,500	4,200	12,500	18,800	*7,230	5,500	*236	2,780	729
27	7,070	4,040	2,130	6,700	4,900	12,500	18,200	7,310	3,960	2,170	2,600	408
28	8,910	7,280	910	8,600	2,200	11,900	21,900	5,580	1,560	1,860	2,490	2,400
29	10,600	8,690	4,100	7,700	-	6,470	21,200	5,950	6,560	1,930	640	2,760
30	11,500	2,390	3,600	8,800	--------	7,410	20,400	2,000	7,940	1,970	1,090	2,120
31	11,600	--------	3,100	9,200	--------	8,940	--------	2,910	--------	2,180	2,950	--------
Total	169,664	184,130	125,170	167,820	143,000	200,640	991,000	253,780	184,030	87,431	62,261	72,053
Mean	5,473	6,138	4,038	5,414	5,107	6,472	33,030	8,186	6,134	2,820	2,008	2,402
(†)	-179	-481	-794	-496	-1,313	-571	+2,525	+1,316	+803	-403	-139	-251
Adjusted for change in reservoir contents												
Mean	5,294	5,656	3,244	4,917	3,794	5,901	35,560	9,502	6,937	2,417	1,870	2,151
Cfsm	0.964	1.03	0.591	0.895	0.691	1.07	6.47	1.73	1.26	0.440	0.340	0.392
In.	1.11	1.15	0.68	1.03	0.72	1.24	7.22	1.99	1.41	0.51	0.39	0.44

	Observed			Adjusted		
Calendar year 1958:	Max 75,400	Min 188	Mean 9,543	Mean 9,414	Cfsm 1.71	In. 23.25
Water year 1958-59:	Max 68,100	Min 226	Mean 7,236	Mean 7,241	Cfsm 1.32	In. 17.89

Peak discharge (base, 44,000 cfs).--Apr. 4 (4:45 a.m.) 83,700 cfs (27.70 ft).

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir, and Comerford Station Pond, Union Village Reservoir, 4 reservoirs in Mascoma River basin, and Sunapee Lake.
Note.--Stage-discharge relation affected by ice Dec. 7, 12, 21-23, 25, 26, 29-31, Jan. 5 to Mar. 12, Mar. 15.

1550. Cold River at Drewsville, N. H.

Location.--Lat 43°07'55", long 72°23'25", on left bank 50 ft upstream from bridge on State Highway 101 at Drewsville, Cheshire County, 1.0 mile upstream from Great Brook, 2.7 miles east of Bellows Falls, Vt., and 3.4 miles upstream from mouth.

Drainage area.--82.7 sq mi.

Records available.--June 1940 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 375 ft (from topographic map).

Average discharge.--19 years, 114 cfs.

Extremes.--Maximum discharge during year, about 2,200 cfs Apr. 3 (backwater from ice); maximum gage height, 7.68 ft Apr. 3 (ice jam); minimum discharge, 5.3 cfs Aug. 4, 5. 1940-59: Maximum discharge, 8,160 cfs Nov. 26, 1950 (gage height, 10.29 ft), from rating curve extended above 3,400 cfs by logarithmic plotting; minimum, 1.3 cfs Sept. 23, 1940.

Remarks.--Records excellent except those for period of ice effect, which are fair. Occasional diurnal fluctuation at low flow caused by sawmill above station; fluctuation more frequent prior to 1945.

Revisions (water years).--WSP 1431: 1952(P).

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 2		Apr. 3 to Sept. 30			
1.6	8.8	1.4	4.2	4.0	248
1.9	18	1.6	7.3	4.5	395
2.2	30	1.9	15	5.0	605
2.5	48	2.2	26	5.5	870
3.0	91	2.5	42	6.0	1,220
		3.0	87	6.5	1,600
		3.5	155		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	38	50	17	61	24	330	208	24	28	8.4	30
2	40	32	43	17	57	24	770	172	35	23	7.3	30
3	28	33	40	20	58	27	1,650	149	78	20	6.6	33
4	23	40	43	19	61	30	1,260	128	47	17	5.8	30
5	19	44	50	18	65	29	858	114	34	15	5.5	21
6	17	47	120	17	60	50	786	104	28	14	8.1	16
7	15	46	74	16	52	90	614	97	25	17	9.2	13
8	13	39	50	16	45	80	*574	91	22	16	8.1	11
9	12	38	38	*15	41	55	756	80	19	13	7.7	9.4
10	11	44	29	15	44	45	685	73	17	17	22	9.2
11	11	39	25	15	42	*40	614	70	15	63	23	9.4
12	13	34	30	14	38	41	443	107	14	46	15	8.4
13	13	31	30	14	*37	39	324	104	15	52	11	7.5
14	13	*31	28	15	36	37	280	91	17	39	8.6	7.0
15	*13	36	25	15	39	39	270	79	51	31	7.3	16
16	11	49	24	18	38	38	272	71	62	26	6.3	*28
17	11	44	23	30	36	50	280	63	43	22	8.4	20
18	10	39	22	40	34	45	260	60	52	17	20	16
19	9.6	36	21	40	32	45	231	55	88	17	*20	14
20	9.3	35	20	37	31	79	219	57	94	26	15	13
21	9.0	33	18	40	30	230	198	58	107	*33	12	11
22	8.8	31	17	500	29	380	169	55	71	27	14	10
23	14	28	17	350	28	265	146	51	58	21	9.9	9.4
24	33	28	18	180	29	240	132	47	43	17	19	9.0
25	28	27	17	150	28	235	122	42	35	18	32	8.8
26	24	30	16	95	27	270	124	37	35	16	21	7.7
27	32	66	16	80	25	230	142	*33	38	13	15	7.3
28	39	41	16	68	24	170	189	30	37	12	14	7.0
29	58	185	17	58	-	130	210	27	56	11	13	17
30	61	100	18	62	-------	130	219	26	38	9.6	12	19
31	46	-------	20	66	-------	170	-------	26	-------	9.0	14	-------
Total	675.7	1,344	975	2,057	1,127	3,357	13,127	2,405	1,298	705.6	399.2	448.1
Mean	21.8	44.8	31.5	66.4	40.2	108	438	77.6	43.3	22.8	12.9	14.9
Cfsm	0.264	0.542	0.381	0.803	0.486	1.31	5.30	0.938	0.524	0.276	0.156	0.180
In.	0.30	0.60	0.44	0.93	0.51	1.51	5.90	1.08	0.58	0.32	0.18	0.20

Calendar year 1958: Max 1,540 Min 5.0 Mean 117 Cfsm 1.41 In. 19.15
Water year 1958-59: Max 1,650 Min 5.5 Mean 76.5 Cfsm 0.925 In. 12.55

Peak discharge (base, 1,000 cfs).--Apr. 3 (about 2 a.m.) about 2,200 cfs.

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 28 to Apr. 3 (no gage-height record Jan. 30 to Mar. 11, Mar. 13-17; discharge estimated on basis of 2 discharge measurements, weather records, recorded range in stage, and records for Saxtons River at Saxtons River, Vt., Ashuelot River near Gilsum, N. H., and records for stations on other nearby streams).

1555. West River at Jamaica, Vt.

Location.--Lat 43°06'30", long 72°46'30", on left bank a quarter of a mile upstream from highway bridge at Jamaica, Windham County, and 0.4 mile upstream from Ball Mountain Brook.

Drainage area.--179 sq mi.

Records available.--October 1946 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 640 ft (from topographic map).

Average discharge.--13 years, 359 cfs.

Extremes.--Maximum discharge during year, 4,070 cfs Apr. 8 (gage height, 8.56 ft); maximum gage height, 9.35 ft Jan. 22 (ice jam); minimum discharge, 11 cfs Aug. 5.
1946-59: Maximum discharge, 29,500 cfs Dec. 31, 1948 (gage height, 14.87 ft), from rating curve extended above 9,800 cfs by logarithmic plotting, verified by slope-area measurement of peak flow; minimum, 5.0 cfs Aug. 28, 1949.

Remarks.--Records good except those for period of ice effect, which are fair.

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 8				Apr. 9 to Sept. 30			
4.0	31	5.5	440	3.6	10	5.0	225
4.2	51	6.0	750	3.8	20	5.5	440
4.5	98	7.0	1,680	4.0	36	6.0	750
5.0	225	8.0	3,060	4.2	58	7.0	1,680
				4.5	104	8.0	3,060

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	204	280	73	270	130	575	1,050	66	80	17	91
2	78	175	210	77	240	135	1,250	659	74	138	15	88
3	65	165	170	80	220	140	2,920	496	257	128	13	64
4	52	168	180	78	260	150	2,720	390	145	83	12	64
5	49	158	190	76	320	150	2,130	327	97	64	12	48
6	50	142	320	70	290	190	2,320	272	77	59	14	38
7	46	130	200	73	250	250	1,740	246	114	62	17	32
8	41	111	150	74	220	300	2,470	219	95	56	18	29
9	40	113	140	70	180	230	*3,030	192	74	48	34	26
10	38	138	120	68	230	210	2,320	178	59	53	43	25
11	37	155	110	68	220	190	2,310	172	50	61	50	26
12	37	130	93	70	210	160	1,590	341	44	50	45	24
13	37	111	110	68	200	175	1,180	256	44	44	37	21
14	33	109	105	70	210	185	1,180	213	52	40	30	23
15	33	128	105	68	*200	180	1,320	192	53	35	25	*40
16	34	195	100	90	210	210	1,650	182	105	32	22	131
17	*37	188	96	120	180	220	2,220	165	121	29	32	76
18	41	145	96	150	160	*190	1,800	160	190	26	61	54
19	40	*145	94	200	155	180	1,650	143	300	25	59	45
20	37	158	92	160	150	300	1,360	*202	284	38	50	40
21	36	150	88	180	145	700	876	195	155	39	*36	38
22	36	162	86	1,500	140	950	652	231	123	*36	31	35
23	104	132	92	900	135	660	556	192	136	*32	29	32
24	505	125	85	600	140	460	508	155	100	32	34	31
25	276	125	76	450	135	440	470	148	78	32	100	26
26	201	190	76	350	130	460	496	127	108	31	63	23
27	400	591	78	300	130	500	580	108	168	29	44	21
28	617	245	80	260	130	360	694	93	148	26	36	21
29	502	740	82	230	-	290	868	80	184	24	42	21
30	322	355	82	260	-------	280	1,110	72	119	20	108	24
31	228	-------	80	300	-------	320	-------	72	-------	19	83	-------
Total	4,103	5,783	3,866	7,133	5,460	9,295	44,545	7,528	3,620	1,471	1,212	1,257
Mean	132	193	125	230	195	300	1,485	243	121	47.5	39.1	41.9
Cfsm	0.737	1.08	0.698	1.28	1.09	1.68	8.30	1.36	0.676	0.265	0.218	0.234
In.	0.85	1.20	0.80	1.48	1.13	1.93	9.26	1.56	0.75	0.31	0.25	0.26

Calendar year 1958: Max 4,940 Min 11 Mean 321 Cfsm 1.79 In. 24.31
Water year 1958-59: Max 3,030 Min 12 Mean 261 Cfsm 1.46 In. 19.78

Peak discharge (base, 4,500 cfs).--No peak above base.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28 to Mar. 31 (no gage-height record Feb. 2-15, Mar. 1-18; discharge estimated on basis of weather records, recorded range in stage, and records for West River at Newfane and Ottauquechee River at North Hartland).

1560. West River at Newfane, Vt.

Location.--Lat 42°59'45", long 72°38'20", on right bank 600 ft downstream from highway bridge and 1 mile northeast of Newfane, Windham County.

Drainage area.--308 sq mi.

Records available.--September 1919 to September 1923, October 1928 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 384.21 ft above mean sea level, datum of 1929. Prior to June 27, 1931, chain gage at site 600 ft upstream at same datum.

Average discharge.--35 years, 613 cfs.

Extremes.--Maximum discharge during year, 7,230 cfs Apr. 3 (gage height, 9.11 ft); maximum gage height, 12.95 ft Jan. 22 (ice jam); minimum discharge, 20 cfs Aug. 4, 5.
1919-23, 1928-59: Maximum discharge, 52,300 cfs Sept. 21, 1938 (gage height, 22.81 ft, from floodmarks), from rating curve extended above 20,000 cfs on basis of contracted-opening measurement at gage height 19.3 ft and slope-area measurements at gage heights 19.46 and 22.81 ft; minimum, 13 cfs Sept. 17, 18, 1948, Aug. 27, 28, 1949.
Flood of Nov. 3, 1927, reached a stage of 23.0 ft, from floodmarks, at chain-gage site (discharge, 45,000 cfs, from rating curve extended by logarithmic plotting and on basis of computation of flow over dam at West Dummerston).

Remarks.--Records excellent except those for period of ice effect, which are fair. Records of water temperatures for the water year 1959 are given in WSP 1641.

Revisions (water years).--WSP 756: Drainage area. WSP 1231: 1922-23, 1929-31(M).

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.75	21	5.5	910
3.8	26	6.0	1,410
4.0	62	7.0	2,710
4.2	118	8.0	4,550
4.5	240	9.0	6,920
5.0	530		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	85	350	410	125	480	220	1,000	1,580	106	122	29	129
2	106	312	350	130	440	230	2,180	1,070	109	124	26	125
3	112	280	300	135	400	240	6,080	820	355	200	24	109
4	90	280	290	130	480	255	4,990	677	273	129	22	94
5	80	260	330	125	560	260	3,730	586	170	94	21	74
6	77	240	500	120	510	270	3,950	516	132	77	25	60
7	72	218	390	125	450	380	3,000	454	143	85	31	50
8	65	195	300	125	390	500	3,760	430	154	77	34	44
9	62	187	260	*120	320	440	*5,470	378	118	65	37	40
10	60	222	220	115	400	370	3,930	334	94	60	80	37
11	56	250	200	115	400	320	3,990	318	80	96	80	35
12	56	226	170	120	340	270	2,730	537	72	88	68	35
13	58	195	190	115	340	300	1,960	474	70	77	54	34
14	54	183	180	120	360	310	1,850	389	80	72	46	31
15	50	204	180	115	*360	300	1,990	345	74	60	39	*40
16	50	275	175	145	370	350	2,340	323	106	54	34	127
17	*52	296	170	190	310	370	3,180	296	154	46	35	128
18	56	250	160	240	280	*320	2,650	280	265	42	58	82
19	58	*222	160	320	270	290	2,380	255	356	42	77	68
20	54	255	155	300	260	450	2,030	*290	488	50	62	58
21	52	240	150	290	250	1,100	1,390	345	270	68	56	52
22	52	265	145	2,300	240	1,600	1,060	345	191	60	*44	50
23	90	222	155	1,500	230	1,300	901	334	191	*52	39	46
24	742	200	145	1,000	240	950	812	255	166	48	42	44
25	502	204	135	760	230	830	756	236	118	48	84	40
26	372	281	130	600	220	870	740	208	129	44	96	37
27	556	1,030	135	470	220	900	856	187	226	42	62	34
28	982	520	135	450	220	700	1,030	158	208	39	50	32
29	865	1,300	140	400	-	600	1,290	136	231	35	50	31
30	565	720	140	440	-------	580	1,580	122	187	32	97	31
31	412	-------	135	510	-------	620	-------	112	-------	31	132	-------
Total	6,543	9,682	6,635	11,750	9,570	16,495	73,605	12,790	5,316	2,159	1,634	1,797
Mean	211	329	214	379	342	532	2,454	413	177	69.6	52.7	59.9
Cfsm	0.685	1.07	0.695	1.23	1.11	1.73	7.97	1.34	0.575	0.226	0.171	0.194
In.	0.79	1.19	0.80	1.42	1.16	1.99	8.89	1.54	0.64	0.26	0.20	0.22

Calendar year 1958: Max 9,330 Min 25 Mean 576 Cfsm 1.87 In. 25.36
Water year 1958-59: Max 6,080 Min 21 Mean 433 Cfsm 1.41 In. 19.10

Peak discharge (base, 8,800 cfs).--No peak above base.

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 28 to Apr. 1 (no gage-height record Dec. 11 to Jan. 9, Feb. 20, 21; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for Ottauquechee River at North Hartland, West River at Jamaica, and records for stations on other nearby streams).

1565. Connecticut River at Vernon, Vt.

Location.--Lat 42°46'10", long 72°30'50", on right bank just downstream from Vernon Dam at Vernon, Windham County, 2 miles upstream from Ashuelot River.

Drainage area.--6,266 sq mi.

Records available.--February to April 1936 (in WSP 798), September and October 1938 (in WSP 867), October 1944 to September 1959.

Gage.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929. Prior to Jan. 20, 1948, at datum 94.13 ft higher.

Average discharge.--15 years (1944-59), 10,630 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 80,600 cfs Apr. 4 (gage height, 203.40 ft); minimum daily, 230 cfs Sept. 27.
1936, 1938, 1944-59: Maximum discharge, 176,000 cfs Mar. 19, 20, 1936 (gage height, 128.8 ft, datum then in use), from rating curve extended above 86,000 cfs; minimum daily, 99 cfs Oct. 8, 1944.

Remarks.--Records good except those below 1,000 cfs, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir and Comerford Station Pond (see p. 242), and other reservoirs (combined usable capacity, about 20 billion cubic feet).

Revisions.--WSP 1031: Drainage area.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,060	9,980	6,090	1,000	6,400	1,700	12,600	21,100	6,150	6,840	305	4,570
2	5,680	3,930	6,780	6,000	7,000	4,900	21,400	18,600	5,510	7,310	305	4,830
3	5,480	8,720	6,920	2,100	8,200	4,600	53,500	15,100	5,820	6,820	1,720	6,450
4	1,950	8,380	7,140	1,300	7,600	5,300	74,800	13,600	6,090	1,480	1,520	8,030
5	864	8,690	6,610	5,000	10,000	4,500	64,100	13,200	6,280	359	1,640	3,500
6	4,110	8,200	6,520	4,000	9,200	7,000	57,900	12,200	2,820	3,750	1,600	984
7	4,200	7,190	1,960	4,000	10,500	7,200	55,600	12,100	789	3,140	1,790	1,180
8	4,370	7,030	7,810	3,100	4,600	4,100	50,300	11,600	4,390	3,970	736	2,880
9	4,090	1,910	7,940	3,400	7,000	6,800	58,000	11,600	4,450	2,780	1,130	2,230
10	4,340	5,750	6,920	2,400	5,800	6,800	57,200	4,360	4,630	4,020	3,520	3,040
11	1,280	4,010	5,200	1,200	5,800	5,400	56,300	7,290	3,660	2,710	8,310	4,550
12	266	5,750	5,200	3,500	6,000	6,200	52,100	9,330	3,430	1,440	6,590	*844
13	5,380	6,310	2,300	3,600	6,600	5,700	44,800	11,300	1,860	4,530	3,630	793
14	5,320	7,070	2,000	3,500	4,400	3,200	*39,000	11,200	907	4,750	2,320	3,400
15	5,420	6,000	5,000	4,000	2,700	2,300	34,900	10,400	7,160	4,410	300	3,120
16	4,960	5,830	4,200	6,500	5,700	5,770	33,200	8,830	12,100	4,310	295	3,490
17	5,230	7,580	4,100	2,700	5,500	6,600	33,100	3,820	16,500	3,800	3,020	2,410
18	*4,030	7,580	3,800	1,300	6,000	7,000	34,700	5,620	13,300	972	3,060	2,670
19	4,160	7,210	6,250	5,800	5,200	*6,800	36,900	6,600	12,500	310	2,510	1,050
20	5,490	*7,560	3,400	5,800	6,200	6,600	35,600	6,760	12,300	4,420	2,430	645
21	5,560	7,190	2,180	6,600	5,000	11,000	33,500	6,870	7,510	2,930	2,520	2,500
22	6,270	7,190	5,200	18,000	1,500	14,000	29,800	*6,810	9,400	3,300	576	3,360
23	7,310	3,180	4,500	24,000	4,400	14,000	25,800	7,120	8,500	2,910	234	2,440
24	10,200	6,770	2,900	15,000	5,500	13,500	20,500	1,710	7,900	2,860	2,480	1,790
25	10,900	6,930	2,100	11,000	4,500	12,000	21,000	7,790	8,150	*772	2,510	2,800
26	1,920	6,740	3,000	7,900	4,900	13,900	17,500	8,170	6,430	436	2,880	241
27	6,910	5,000	2,500	8,600	5,100	14,600	18,400	7,300	3,960	2,300	2,790	230
28	11,300	7,730	1,100	10,000	2,700	14,100	23,000	5,920	1,520	2,440	2,440	2,630
29	12,400	12,300	4,400	7,200	-	9,610	22,700	5,620	5,620	2,120	239	3,050
30	13,400	3,290	3,700	8,600	--------	9,090	21,500	2,880	9,510	2,240	550	2,620
31	13,400	--------	3,800	10,500	--------	11,700	--------	2,650	--------	2,220	3,210	--------
Total	182,250	201,000	141,520	197,600	164,000	245,970	1,139,700	227,450	199,146	96,649	67,160	82,327
Mean	5,879	6,700	4,565	6,374	5,857	7,935	37,990	8,950	6,638	3,118	2,166	2,744
(†)	-179	-481	-794	-496	-1,313	-571	+2,525	+1,316	+803	-403	-139	-251

Adjusted for change in reservoir contents

Mean	5,700	6,219	3,771	5,878	4,544	7,363	40,510	10,270	7,441	2,715	2,028	2,493
Cfsm	0.910	0.992	0.602	0.938	0.725	1.18	6.47	1.64	1.19	0.433	0.324	0.398
In.	1.05	1.11	0.69	1.08	0.76	1.35	7.21	1.89	1.32	0.50	0.37	0.44

	Observed			Adjusted			
Calendar year 1958:	Max 83,400	Min 266	Mean 10,700	Mean 10,570	Cfsm 1.69	In. 22.91
Water year 1958-59:	Max 74,800	Min 230	Mean 8,205	Mean 8,210	Cfsm 1.31	In. 17.77

Peak discharge (base, 50,000 cfs).--Apr. 4 (12 m.) 80,600 cfs (203.40 ft).

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir and Comerford Station Pond, Union Village Reservoir, 4 reservoirs in Mascome River basin, and Sunapee Lake.
Note.--Stage-discharge relation affected by ice Dec. 11-18, Dec. 22 to Mar. 15, Mar. 17-25.

1570. Ashuelot River near Gilsum, N. H.

Location.--Lat 43°02'20", long 72°16'15", on right bank 50 ft downstream from White Brook, 60 ft upstream from stone-arch bridge just off Keene-Newport road, and 0.7 mile downstream from Gilsum, Cheshire County.

Drainage area.--71.1 sq mi.

Records available.--August 1922 to September 1959.

Gage.--Water-stage recorder. Concrete control since Oct. 13, 1942. Datum of gage is 773.86 ft above mean sea level (levels by Corps of Engineers).

Average discharge.--37 years, 125 cfs.

Extremes.--Maximum discharge during year, 1,590 cfs Apr. 3 (gage height, 7.12 ft); maximum gage height, 7.69 ft Jan. 22 (ice jam); minimum discharge, 7.6 cfs Aug. 4-6.
1922-59: Maximum discharge, 5,220 cfs Sept. 21, 1938 (gage height, 11.24 ft in gage well), from rating curve extended above 2,000 cfs on basis of float measurements at gage heights 10.66 and 10.72 ft and slope-area measurement at gage height 11.24 ft; maximum gage height, 12.80 ft Mar. 19, 1936; minimum discharge, about 1 cfs Oct. 6, 1922, July 10, 1923, Nov. 14, 1952.

Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by reservoir above station. Diurnal fluctuation caused by powerplant above station prior to 1938.

Revisions (water years).--WSP 661: Drainage area. WSP 781: 1934(M). WSP 1231: 1923-27(M), 1928, 1929-30(M), 1931, 1932(M).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 2				Apr. 3 to Sept. 30			
1.4	5.3	2.5	88	1.3	6.7	3.0	173
1.5	8.2	3.0	163	1.5	11	4.0	394
1.7	17	4.0	387	1.7	20	5.0	715
2.0	38	5.0	715	2.0	42	6.0	1,060
				2.5	98	7.0	1,350

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	120	190	30	85	24	244	253	19	37	11	66
2	28	89	130	33	70	27	550	222	29	32	9.0	47
3	20	88	100	36	64	31	1,500	189	75	26	8.1	41
4	17	101	80	36	55	33	1,380	156	56	22	7.6	40
5	15	102	85	*30	60	35	1,100	130	36	19	7.6	36
6	13	111	170	25	60	50	936	114	29	17	8.1	31
7	12	109	170	22	56	130	740	102	25	18	8.3	26
8	11	91	150	21	52	120	656	93	22	16	8.1	22
9	11	94	110	21	48	94	782	80	19	15	8.3	19
10	11	109	85	21	44	74	*820	71	17	15	20	17
11	9.4	*97	70	21	41	62	750	70	15	16	19	16
12	9.0	82	60	20	38	54	614	107	14	15	15	14
13	8.2	67	55	20	36	*55	472	115	16	16	12	12
14	*7.9	63	50	21	35	55	384	106	17	36	11	11
15	7.9	66	45	21	37	52	339	92	26	26	9.7	16
16	7.9	74	40	30	39	67	318	78	30	22	9.0	*19
17	8.2	74	37	60	38	72	330	68	32	22	10	18
18	8.2	69	34	80	35	62	344	63	45	15	12	15
19	8.2	65	32	50	33	57	342	55	71	15	*11	15
20	8.2	62	30	45	31	110	325	54	84	22	9.7	14
21	7.9	58	28	47	30	420	291	*52	81	30	9.7	13
22	7.9	52	27	600	29	520	238	49	94	25	12	13
23	14	46	28	764	27	508	202	43	84	20	9.2	12
24	26	43	30	600	26	387	184	38	63	17	14	12
25	24	42	28	439	27	297	166	35	50	18	17	11
26	24	45	26	269	25	278	161	32	50	*16	14	11
27	56	74	25	160	24	249	182	*29	45	15	12	11
28	69	84	25	130	24	201	220	26	45	14	11	10
29	98	286	26	100	-	175	260	24	54	13	14	10
30	140	262	31	80	-------	135	271	23	48	12	23	10
31	144	-------	35	86	-------	146	-------	22	-------	11	54	-------
Total	849.9	2,725	2,032	3,918	1,169	4,580	15,101	2,591	1,291	613	404.4	608
Mean	27.4	90.8	65.5	126	41.8	148	503	83.6	43.0	19.8	13.0	20.3
Cfsm	0.385	1.28	0.921	1.77	0.588	2.08	7.07	1.18	0.605	0.278	0.183	0.286
In.	0.44	1.43	1.06	2.05	0.61	2.40	7.90	1.36	0.68	0.32	0.21	0.32

Calendar year 1958: Max 1,320 Min 5.5 Mean 119 Cfsm 1.67 In. 22.63
Water year 1958-59: Max 1,500 Min 7.6 Mean 98.3 Cfsm 1.38 In. 18.78

Peak discharge (base, 1,000 cfs).--Apr. 3 (6 a.m.) 1,590 cfs (7.12 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 2 to Jan. 5, Jan. 7-22, Jan. 27 to Mar. 9, Mar. 20-22, 29.

1580. Ashuelot River below Surry Mountain Dam, near Keene, N. H.

Location.--Lat 42°59'45", long 72°18'40", on right bank 600 ft downstream from Surry Mountain Dam, 2½ miles upstream from Sturtevant Brook, and 4½ miles north of Keene, Cheshire County.

Drainage area.--101 sq mi.

Records available.--September 1945 to September 1959.

Gage.--Water-stage recorder and concrete control. Datum of gage is 480.00 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Average discharge.--14 years, 169 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 1,160 cfs Apr. 7 (gage height, 9.15 ft); minimum daily, 7.8 cfs July 31.
1945-59: Maximum discharge, that of Apr. 7, 1959; minimum daily, 0.8 cfs Dec. 4-7, 1948.

Remarks.--Records excellent. Flow regulated by Surry Mountain Reservoir (see p. 242).

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

4.2	5.9	7.0	402
4.4	10	7.5	579
4.7	20	8.0	760
5.0	36	8.5	935
5.5	82	9.0	1,110
6.0	154	9.5	1,280
6.5	257		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	166	265	34	255	40	346	396	26	51	9.2	88
2	35	162	257	34	88	40	536	298	27	51	8.5	142
3	48	162	247	34	62	40	315	265	27	51	8.5	115
4	52	161	170	34	63	41	596	207	60	51	8.2	87
5	36	135	143	34	64	56	1,000	169	68	35	8.2	52
6	28	118	199	34	98	64	*1,070	171	68	28	8.7	44
7	20	118	247	34	114	64	1,140	124	67	28	10	36
8	17	118	184	33	112	98	1,150	107	65	28	10	32
9	17	118	151	32	80	116	1,130	107	36	28	9.8	32
10	17	118	124	32	*64	*136	1,130	107	26	28	10	25
11	17	119	91	32	65	157	1,120	107	26	27	9.2	20
12	16	149	75	32	65	154	1,100	125	26	27	9.2	20
13	*16	135	68	32	65	110	1,070	154	26	27	9.6	13
14	16	111	68	32	65	85	1,040	152	26	27	9.8	9.4
15	16	90	68	32	65	86	988	152	26	27	9.0	9.4
16	16	78	68	32	65	86	935	152	26	27	8.9	9.4
17	15	*78	67	47	65	88	882	121	44	*28	10	*9.4
18	15	80	67	81	66	90	830	*90	68	28	*19	9.4
19	15	100	67	92	81	102	676	61	78	28	19	15
20	15	108	67	92	72	114	575	61	103	28	19	18
21	15	108	67	114	65	195	399	61	112	28	19	18
22	15	80	66	133	56	368	324	61	112	28	19	18
23	15	66	58	171	52	500	321	60	111	28	18	18
24	13	66	52	257	51	590	312	60	111	28	18	18
25	15	65	47	284	43	533	242	60	83	28	18	18
26	16	65	47	326	40	434	211	60	76	28	18	18
27	29	66	47	377	40	424	214	60	75	28	18	18
28	65	67	40	428	40	309	216	43	56	27	18	17
29	109	164	35	458	-	223	292	38	51	27	18	17
30	154	268	35	472	-------	214	386	38	51	24	18	17
31	168	-------	*35	468	-------	223	-------	30	-------	7.8	24	-------
Total	1,069	3,439	3,222	4,327	2,061	5,780	20,546	3,697	1,757	934.8	419.8	963.0
Mean	34.5	115	104	140	73.6	186	685	119	58.6	30.2	13.5	32.1
(†)	+2.24	+3.74	-11.9	+7.39	-5.83	-5.30	+13.7	-2.20	+2.74	-3.99	+5.90	-6.10

Adjusted for change in contents in Surry Mountain Reservoir

Mean	36.7	118	92.0	147	67.8	181	699	117	61.3	26.2	19.4	26.0
Cfsm	0.363	1.17	0.911	1.46	0.671	1.79	6.92	1.16	0.607	0.259	0.192	0.257
In.	0.42	1.31	1.05	1.68	0.70	2.07	7.72	1.34	0.68	0.30	0.22	0.29

	Observed			Adjusted		
Calendar year 1958:	Max 980	Min 4.5	Mean 178	Mean 174	Cfsm 1.72	In. 23.38
Water year 1958-59:	Max 1,150	Min 7.8	Mean 132	Mean 132	Cfsm 1.31	In. 17.78

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Surry Mountain Reservoir.

1586. Otter Brook below Otter Brook Dam, near Keene, N. H.

Location.--Lat 42°56'45", long 72°14'15", on right bank 450 ft downstream from Otter Brook Dam, 2 miles northeast of Keene, Cheshire County, and 2.4 miles upstream from Minnewawa Brook.

Drainage area.--47.2 sq mi.

Records available.--May 1958 to September 1959.

Gage.--Water-stage recorder and concrete control. Datum of gage is 658.65 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Extremes.--Maximum discharge during year, 685 cfs Apr. 20 (gage height, 8.59 ft); minimum, 0.6 cfs Dec. 12; minimum daily, 3.6 cfs Aug. 9.
1958-59: Maximum discharge, that of Apr. 20, 1959; minimum, about 0.2 cfs Sept. 16-20, 22, 1958 (gates closed at Otter Brook Dam); minimum daily, 1.4 cfs Sept. 19, 1958.

Remarks.--Records good. Flow regulated by Otter Brook Reservoir (see p. 242).

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 19				Apr. 20 to Sept. 30			
5.8	7.2	7.0	138	5.6	3.1	6.8	98
6.0	17	7.5	268	5.7	4.4	7.0	138
6.3	38	8.0	430	5.8	6.7	7.5	268
6.6	69	8.5	640	6.0	15	8.0	430
				6.2	27	8.6	690
				6.5	55		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	22	108	28	170	23	158	154	15	26	5.3	114
2	10	28	86	21	149	23	313	130	16	23	5.1	77
3	11	40	69	21	65	23	48	114	47	23	4.4	59
4	11	63	65	21	54	22	76	98	40	19	4.3	55
5	11	67	63	23	59	26	101	88	32	15	4.1	42
6	11	69	105	27	65	28	108	80	26	13	4.0	33
7	11	73	94	27	58	36	110	73	22	12	4.0	25
8	12	63	75	26	42	50	183	68	20	11	3.9	20
9	12	67	67	23	36	*56	187	62	18	9.6	3.6	17
10	12	88	53	19	*32	57	*210	56	15	*8.9	11	15
11	12	*77	43	19	33	56	295	54	11	8.9	44	13
12	12	*101	35	15	34	56	331	88	9.6	8.9	27	10
13	12	22	34	13	35	55	382	114	9.6	8.5	19	9.2
14	*10	45	34	13	34	46	450	95	19	8.1	*17	8.5
15	10	50	41	13	34	41	530	81	21	8.5	13	8.9
16	10	53	44	14	34	41	618	71	26	9.2	11	17
17	9.8	52	44	21	33	43	650	66	24	8.9	9.9	*16
18	9.8	49	43	34	33	53	636	60	32	8.5	15	14
19	9.8	47	43	40	34	53	631	56	48	8.5	18	13
20	8.9	46	43	40	34	53	650	53	57	8.9	14	11
21	8.5	42	30	40	34	65	613	*50	47	13	11	10
22	8.1	41	20	43	34	103	530	45	40	15	17	9.9
23	8.1	36	20	59	26	160	346	40	38	15	16	9.2
24	7.6	35	20	101	22	238	138	36	31	13	19	8.5
25	8.1	34	20	120	22	280	95	33	26	11	37	7.4
26	8.5	36	20	140	23	271	91	31	30	9.6	27	6.7
27	8.9	54	20	180	23	220	102	28	35	8.5	20	6.0
28	8.9	52	20	193	23	124	138	25	32	7.1	17	5.8
29	9.8	203	*20	153	-	96	152	22	44	6.2	15	5.6
30	11	166	21	183	---	93	163	19	38	5.6	27	5.3
31	14	---	29	178	---	96	---	17	---	5.3	64	---
Total	316.6	1,821	1,429	1,848	1,275	2,587	9,035	2,007	869.2	356.7	507.6	652.0
Mean	10.2	60.7	46.1	59.6	45.5	83.5	301	64.7	29.0	11.5	16.4	21.7
(†)	+7.21	+1.47	-0.41	+8.55	-9.14	-11.2	+11.7	-1.31	+0.27	-0.71	+1.34	-1.39
Adjusted for change in contents in Otter Brook Reservoir												
Mean	17.4	62.2	45.7	68.2	36.4	72.2	313	63.4	29.2	10.8	17.7	20.3
Cfsm	0.369	1.32	0.968	1.44	0.771	1.53	6.63	1.34	0.619	0.229	0.375	0.430
In.	0.43	1.47	1.12	1.66	0.80	1.76	7.40	1.55	0.69	0.26	0.43	0.48

	Observed			Adjusted		
Calendar year 1958:	Max -	Min -	Mean -	Mean -	Cfsm -	In. -
Water year 1958-59:	Max 650	Min 3.6	Mean 62.2	Mean 62.8	Cfsm 1.33	In. 18.05

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Otter Brook Reservoir.

1600. South Branch Ashuelot River at Webb, near Marlboro, N. H.

Location.--Lat 42°52'20", long 72°12'55", on right bank 15 ft downstream from bridge, 800 ft southwest of Webb station on Boston & Maine Railroad, and 2½ miles south of Marlboro, Cheshire County.

Drainage area.--36.0 sq mi.

Records available.--October 1920 to September 1959. October 1920 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Concrete control since July 18, 1938. Datum of gage is 667.11 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--39 years, 59.6 cfs.

Extremes.--Maximum discharge during year, 2,070 cfs Apr. 3 (gage height, 6.40 ft); minimum, 5.7 cfs Aug. 17; minimum daily, 6.2 cfs Aug. 3-5.
1920-59: Maximum discharge, 5,960 cfs Sept. 21, 1938 (gage height, 7.89 ft), from rating curve extended above 3,300 cfs on basis of contracted-opening and slope-area measurements of peak flow; maximum gage height, 9.70 ft Mar. 12, 1936 (ice jam); practically no flow Mar. 22, 1931; minimum daily discharge, 0.4 cfs Sept. 15-17, 1926.

Remarks.--Records good except those for period of ice effect, which are fair. Flow regulated by powerplant and several small reservoirs above station. Records of water temperatures for the water year 1959 are given in WSP 1641.

Revisions (water years).--WSP 641: 1925(M). WSP 871: Drainage area. WSP 1231: 1921-24(M), 1926(M), 1929, 1933-34(M), 1939.

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 2				Apr. 3 to Sept. 30			
1.9	6.4	3.5	60	1.9	5.5	3.8	86
2.0	8.3	3.8	86	2.0	7.7	4.0	122
2.3	17	4.0	122	2.2	13	4.4	255
2.5	24	4.4	255	2.5	22	5.1	615
3.0	40	5.1	615	3.0	40	5.8	1,220
				3.5	60		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	16	110	18	55	16	168	122	22	20	8.2	160
2	44	15	74	20	49	16	440	96	21	19	6.8	81
3	31	27	45	24	44	20	1,130	82	76	20	6.2	46
4	24	50	39	23	39	23	522	72	51	17	6.2	37
5	17	46	42	*18	42	21	345	62	29	12	6.2	27
6	13	40	110	17	39	45	310	56	24	*11	6.4	17
7	11	34	71	16	36	80	223	51	28	12	6.6	13
8	9.7	36	53	15	33	72	201	49	26	12	6.6	11
9	9.3	44	46	14	31	60	268	42	19	10	6.4	11
10	8.8	*61	39	14	30	37	264	44	17	9.4	18	10
11	8.8	53	35	13	*28	31	296	45	14	14	41	9.4
12	7.7	41	32	13	26	30	212	86	12	14	22	8.2
13	*7.2	38	30	13	25	*32	*146	88	13	12	13	6.8
14	7.9	38	27	13	23	29	118	80	50	12	*10	*7.5
15	8.3	34	25	14	24	26	103	66	44	10	8.4	11
16	8.3	40	23	22	27	40	98	50	37	9.4	6.6	33
17	8.8	34	22	90	25	39	100	46	33	9.0	7.0	28
18	8.8	23	21	100	23	34	95	*44	45	8.2	11	20
19	7.7	23	20	50	21	31	94	36	64	12	11	17
20	7.4	23	20	30	20	50	107	42	57	67	9.2	15
21	7.0	21	19	39	19	170	107	38	35	102	8.2	14
22	7.0	20	18	600	18	400	85	33	33	51	8.0	16
23	10	21	19	350	18	230	73	31	31	29	7.3	17
24	28	19	20	200	19	130	68	28	28	21	9.2	14
25	23	19	18	130	18	95	60	27	24	16	13	12
26	19	23	17	100	17	115	64	24	35	12	13	11
27	22	45	15	80	17	110	86	22	38	10	10	9.4
28	25	38	15	68	16	90	127	20	30	9.7	8.7	8.7
29	24	213	16	62	-	75	160	18	31	9.2	8.7	8.2
30	23	158	17	56	-------	68	149	17	24	9.0	9.0	7.7
31	20	-------	18	60	-------	75	-------	16	-------	8.7	47	-------
Total	478.7	1,293	1,076	2,282	782	2,290	6,219	1,533	991	587.6	358.9	686.9
Mean	15.4	43.1	34.7	73.6	27.9	73.9	207	49.5	33.0	19.0	11.6	22.9
Cfsm	0.428	1.20	0.964	2.04	0.775	2.05	5.75	1.38	0.917	0.528	0.322	0.636
In.	0.49	1.34	1.11	2.36	0.81	2.37	6.42	1.58	1.02	0.61	0.37	0.71

Calendar year 1958: Max 603 Min 4.1 Mean 65.9 Cfsm 1.83 In. 24.86
Water year 1958-59: Max 1,130 Min 6.2 Mean 50.9 Cfsm 1.41 In. 19.19

Peak discharge (base, 550 cfs).--Jan. 22 (time and discharge unknown); Apr. 3 (3 a.m.) 2,070 cfs (6.40 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 1 to Mar. 29 (no gage-height record Jan. 22 to Feb. 10, Mar. 23, 24; discharge estimated on basis of weather records and records for Ashuelot River near Gilsum, Ashuelot River at Hinsdale, and records for stations on other nearby streams).

1610. Ashuelot River at Hinsdale, N. H.

Location.--Lat 42°47'05", long 72°29'10", on left bank 40 ft upstream from highway bridge at Hinsdale, Cheshire County, a quarter of a mile downstream from dam, and 1¼ miles upstream from mouth.

Drainage area.--420 sq mi.

Records available.--March 1907 to December 1911, July 1914 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 201.32 ft above mean sea level (levels by Corps of Engineers). Prior to Sept. 29, 1933, chain gage on highway bridge at same datum.

Average discharge.--49 years, 654 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 5,320 cfs Apr. 3 (gage height, 7.71 ft); minimum, 31 cfs Aug. 2; minimum daily, 73 cfs Aug. 4.
1907-11, 1914-59: Maximum discharge, 18,500 cfs Mar. 29, 1920 (gage height, 10.1 ft, from graph based on gage readings), from rating curve extended above 8,000 cfs; maximum gage height, 20.2 ft Mar. 19, 1936, from floodmarks (backwater from Connecticut River); minimum discharge, 10 cfs Sept. 9, 1953; minimum daily, 12 cfs Sept. 15, 1929.

Remarks.--Records excellent except those for periods of ice effect, which are good. Flow regulated by mills above station. High flow affected by Surry Mountain Reservoir since 1942 and by Otter Brook Reservoir since March 1958 (see p. 242).

Revisions (water years).--WSP 661: Drainage area. WSP 781: 1907-10, 1914-34. WSP 1301: 1915(M), 1917-19(M), 1921-33(M). WSP 1331: 1920(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.0	64	4.5	700
3.2	97	5.0	1,070
3.5	172	6.0	2,170
3.8	283	7.0	3,790
4.1	445	8.0	5,990

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	158	292	862	190	900	190	1,240	1,410	177	222	110	506
2	227	267	700	190	720	190	2,140	1,280	192	216	90	654
3	235	321	620	190	520	210	4,860	1,060	325	238	81	544
4	212	505	590	195	420	280	4,640	968	433	195	73	433
5	163	538	580	175	450	320	3,600	848	321	160	74	321
6	133	505	690	140	470	420	3,180	777	267	139	85	227
7	143	493	730	160	470	650	2,950	728	227	133	79	175
8	133	463	720	170	430	650	2,720	654	232	142	88	146
9	116	385	620	160	370	600	2,790	576	211	135	84	149
10	128	481	470	*155	320	560	2,940	538	182	128	101	146
11	117	524	390	150	290	500	3,050	505	140	130	245	130
12	84	421	320	155	260	470	3,000	661	136	114	258	120
13	81	454	270	140	280	450	2,730	908	133	114	186	102
14	78	368	230	140	*290	450	*2,540	878	160	114	114	97
15	88	358	230	140	330	370	2,400	784	216	120	95	99
16	103	278	240	175	360	410	2,360	680	262	118	86	126
17	99	297	220	270	350	499	2,320	596	235	118	84	185
18	*108	316	210	310	340	550	2,250	524	242	112	101	*179
19	78	297	200	360	310	*505	2,120	475	336	97	133	163
20	74	*325	200	370	290	661	2,010	445	427	140	133	114
21	98	321	190	410	270	1,120	2,000	457	363	308	116	105
22	97	302	160	1,500	250	1,710	1,730	445	316	321	*116	99
23	116	231	180	1,950	240	1,800	1,430	403	316	232	99	95
24	175	205	180	1,510	220	1,750	1,200	325	297	182	90	92
25	209	238	190	1,210	210	1,770	998	*311	271	160	145	88
26	144	231	170	1,050	200	1,780	848	288	262	113	163	83
27	151	316	160	968	200	1,770	885	275	311	110	140	76
28	163	352	160	982	200	1,470	1,070	258	267	120	123	79
29	205	864	155	1,010	-	1,090	1,250	234	267	*120	126	76
30	242	1,140	165	1,010	---	990	1,430	227	283	116	128	76
31	279	---	190	1,050	---	960	---	198	---	112	204	---
Total	4,417	12,088	10,992	16,585	9,960	25,145	68,681	18,716	7,807	4,779	3,750	5,485
Mean	142	403	355	535	356	811	2,289	604	260	154	121	183
(†)	+9.45	+5.21	-12.3	+15.9	-15.0	-16.5	+25.4	-3.51	+3.01	-4.70	+7.24	-7.48

Adjusted for change in reservoir contents

Mean	152	408	342	551	341	795	2,315	600	263	149	128	175
Cfsm	0.362	0.971	0.814	1.31	0.812	1.89	5.51	1.43	0.626	0.355	0.305	0.417
In.	0.42	1.08	0.94	1.51	0.84	2.18	6.15	1.65	0.70	0.41	0.35	0.47

	Observed			Adjusted		
Calendar year 1958:	Max 3,130	Min 55	Mean 635	Mean 632	Cfsm 1.50	In. 20.42
Water year 1958-59:	Max 4,860	Min 73	Mean 516	Mean 517	Cfsm 1.23	In. 16.70

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Surry Mountain and Otter Brook Reservoirs.
Note.--Stage-discharge relation affected by ice Dec. 2 to Jan. 22, Feb. 1 to Mar. 16.

1615. Tarbell Brook near Winchendon, Mass.

Location.--Lat 42°42'45", long 72°05'09", on left bank 0.1 mile downstream from Spud Brook, 0.3 mile downstream from Massachusetts-New Hampshire State line, and 2¾ miles northwest of Winchendon, Worcester County.

Drainage area.--18.2 sq mi.

Records available.--May 1916 to September 1959. Prior to October 1950, published as Sip Pond Brook near Winchendon.

Gage.--Water-stage recorder. Datum of gage is 872.82 ft above mean sea level, datum of 1929. May 29 to June 29, 1916, staff gage, June 30 to Dec. 12, 1916, water-stage recorder, and Dec. 13, 1916, to June 26, 1917, staff gage, all at site 450 ft downstream at same datum.

Average discharge.--43 years, 29.8 cfs.

Extremes.--Maximum discharge during year, 388 cfs Apr. 4 (gage height, 9.72 ft); minimum, 1.0 cfs Oct. 13.
1916-59: Maximum discharge, 2,630 cfs Sept. 21, 1938 (gage height, 13.72 ft), from rating curve extended above 1,200 cfs on basis of critical-depth study at control section; minimum, 0.1 cfs Aug. 25, 1924.

Remarks.--Records good except those for periods of ice effect or those below 8 cfs, which are fair. Flow regulated by Pearly and Sip Ponds, Damon Reservoirs, and small mill above station.

Revisions (water years).--WSP 781: 1934. WSP 871: Drainage area. WSP 1051: 1928(M), 1933-34. WSP 1301: 1917(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from beaver dams Sept. 21-26, 29, 30; shifting-control method used Oct. 17, 18, 20-25, Oct. 27 to Nov. 1, Nov. 3-21, 25, 26, 28, Apr. 20-24, June 15, June 17 to July 17, July 19-29, Aug. 11, Aug. 31 to Sept. 30)

5.0	1.3	6.5	42
5.1	2.2	7.0	68
5.3	4.9	8.0	144
5.6	11	9.0	262
6.0	22	10.0	455

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	4.3	35	9.5	25	7.0	68	52	10	9.8	5.2	10
2	9.4	3.5	28	8.0	21	9.0	124	42	11	10	3.9	*8.6
3	6.4	8.5	24	5.5	16	10	338	37	15	6.4	7.1	10
4	5.1	10	22	5.8	27	10	354	33	20	4.5	5.8	8.2
5	3.9	10	21	6.2	28	14	256	29	19	4.8	6.3	6.6
6	4.0	15	24	*6.5	30	22	197	23	12	6.5	7.2	6.6
7	3.5	29	27	8.0	23	27	170	22	9.3	*6.5	7.4	7.4
8	4.4	19	29	9.6	23	29	144	23	13	5.9	4.3	9.5
9	2.4	20	24	9.2	17	33	134	25	11	4.1	3.6	10
10	1.9	27	17	6.0	*18	28	139	25	11	4.5	6.5	9.0
11	2.0	24	20	5.8	18	27	145	31	10	4.9	8.0	7.2
12	1.7	18	18	6.0	15	27	138	37	8.4	3.4	6.9	4.1
13	3.6	18	13	8.0	15	30	107	50	7.5	7.2	6.1	3.6
14	4.1	16	13	8.0	11	24	83	48	6.1	7.7	5.2	8.0
15	3.5	13	14	7.0	19	22	75	44	11	7.9	6.2	9.5
16	2.6	9.9	13	8.0	20	28	67	35	9.3	4.1	4.3	6.3
17	3.5	11	12	6.0	17	25	60	30	11	5.5	6.0	6.6
18	3.1	13	13	6.6	17	25	56	29	12	4.2	5.9	5.0
19	2.2	*13	13	10	19	24	52	23	13	4.9	3.2	3.4
20	3.9	13	10	13	18	30	52	23	12	10	3.8	3.0
21	*6.0	12	9.4	21	10	44	*51	23	13	18	3.5	4.9
22	3.0	7.8	9.0	90	10	60	48	21	16	29	3.4	5.9
23	6.4	6.1	9.0	103	12	54	40	16	14	18	2.8	4.7
24	7.1	9.3	9.0	69	13	53	37	16	11	15	5.9	2.9
25	3.6	10	8.0	58	13	*59	33	20	9.8	9.7	4.5	5.0
26	2.6	12	10	47	12	60	31	17	11	7.2	3.8	3.3
27	4.8	8.8	9.5	38	10	70	39	*15	8.1	8.9	3.0	2.8
28	7.0	12	6.2	33	8.0	63	46	13	6.3	9.0	2.8	7.6
29	7.2	32	9.0	29	-	54	53	10	12	*8.1	3.1	16
30	5.9	42	9.5	31	-------	50	58	8.2	11	7.4	6.1	24
31	6.3	-------	6.2	29	-------	50	-------	7.6	-------	7.0	11	-------
Total	141.1	447.2	484.8	700.7	485.0	1,068.0	3,195	827.8	343.8	260.1	162.8	219.7
Mean	4.55	14.9	15.6	22.6	17.3	34.5	106	26.7	11.5	8.39	5.25	7.32
Cfsm	0.250	0.819	0.857	1.24	0.951	1.90	5.82	1.47	0.632	0.461	0.288	0.402
In.	0.29	0.91	0.99	1.43	0.99	2.18	6.53	1.69	0.70	0.53	0.33	0.45

Calendar year 1958: Max 210 Min 1.0 Mean 27.7 Cfsm 1.52 In. 20.67
Water year 1958-59: Max 354 Min 1.7 Mean 22.8 Cfsm 1.25 In. 17.02

Peak discharge (base, 150 cfs).--Jan. 22 (8:30 p.m.) 154 cfs (5.10 ft); Apr. 4 (1 to 3 a.m.) 388 cfs (9.72 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 15 to Jan. 22, Jan. 26 to Mar. 5 (no gage-height record Feb. 21 to Mar. 1).

1620. Millers River near Winchendon, Mass.

Location.--Lat 42°41'03", long 72°05'02", on right bank 10 ft downstream from Nolan Bridge, a third of a mile downstream from Tarbell Brook, and 2 miles west of Winchendon, Worcester County.

Drainage area.--83.0 sq mi.

Records available.--June 1916 to September 1959. March to May 1917 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Concrete control since Oct. 6, 1933. Datum of gage is 826.66 ft above mean sea level, datum of 1929. Prior to July 27, 1916, chain gage at bridge at same datum.

Average discharge.--43 years, 142 cfs.

Extremes.--Maximum discharge during year, 1,340 cfs Apr. 3 (gage height, 8.55 ft); minimum daily, 8.2 cfs Aug. 23.
1916-59: Maximum discharge, 8,500 cfs Sept. 22, 1938 (gage height, 21.55 ft, from floodmarks), from rating curve extended above 2,900 cfs on basis of computation of peak flow over dam; practically no flow because of regulation Sept. 20, 1918, Jan. 14, 1925.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by Lake Monomonac and other reservoirs and, prior to 1957, by powerplant.

Revisions (water years).--WSP 451: 1916. WSP 871: Drainage area. WSP 1051: 1919, 1920-21(M), 1922-24, 1928(M), 1933-34.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from aquatic vegetation or debris Nov. 2-28, Aug. 31 to Sept. 11)

3.6	7.0	5.0	290
3.7	12	6.0	480
3.8	20	7.0	740
4.0	43	8.0	1,100
4.2	73	8.5	1,320
4.5	140		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	185	35	119	37	180	41	359	284	26	33	18	152
2	155	31	94	40	165	44	526	290	28	25	13	*170
3	75	56	81	45	90	47	1,210	239	70	21	14	164
4	73	71	77	45	140	50	1,270	194	103	16	13	143
5	73	63	82	43	145	70	1,040	143	90	14	13	96
6	67	59	122	42	105	100	861	130	63	15	14	60
7	79	63	115	39	78	250	731	96	57	17	15	46
8	137	54	105	36	78	170	650	88	56	15	12	35
9	132	62	90	32	66	130	628	82	42	*14	9.7	30
10	124	79	75	29	*60	105	618	77	33	14	12	26
11	117	71	66	27	56	94	650	81	27	14	16	22
12	110	68	60	30	54	86	625	117	23	12	17	19
13	105	56	54	33	54	80	558	194	20	15	14	17
14	101	36	54	33	54	90	443	218	21	*17	11	15
15	94	43	56	31	58	80	339	215	38	17	11	17
16	77	42	50	40	66	120	312	179	44	14	12	42
17	63	38	47	46	60	125	292	149	44	12	11	47
18	62	40	45	43	54	105	254	117	51	12	13	40
19	56	*43	42	41	50	90	233	94	60	12	9.2	34
20	*50	43	36	44	48	200	212	105	63	57	9.2	29
21	44	40	34	90	45	400	*200	105	56	298	9.7	28
22	34	35	34	750	43	500	170	84	47	295	9.2	29
23	31	30	35	696	43	420	119	62	43	164	8.2	27
24	43	30	33	525	47	350	107	53	35	84	11	31
25	38	33	29	400	44	*300	99	51	29	62	12	34
26	33	36	33	320	42	321	94	47	29	46	12	33
27	36	47	33	280	41	339	124	*44	31	36	10	27
28	44	47	29	240	39	317	173	43	26	31	9.2	23
29	43	170	31	220	-	281	215	36	34	27	8.7	22
30	38	150	35	200	-------	251	257	30	49	*24	17	50
31	36	-------	34	210	-------	266	-------	27	-------	21	104	-------
Total	2,355	1,671	1,830	4,687	2,005	5,822	13,369	3,674	1,338	1,454	468.1	1,608
Mean	76.0	55.7	59.0	151	71.6	188	446	119	44.6	46.9	15.1	53.3
Cfsm	0.916	0.671	0.711	1.82	0.863	2.27	5.37	1.43	0.537	0.565	0.182	0.606
In.	1.06	0.75	0.82	2.10	0.90	2.61	5.99	1.65	0.60	0.65	0.21	0.68

Calendar year 1958: Max 976 Min 10 Mean 144 Cfsm 1.73 In. 23.60
Water year 1958-59: Max 1,270 Min 8.2 Mean 110 Cfsm 1.33 In. 18.02

Peak discharge (base, 690 cfs).--Jan. 22 (3 p.m.) 966 cfs (7.66 ft); Apr. 3 (11 to 12 p.m.) 1,340 cfs (8.55 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Jan. 26-30, Feb. 10 to Mar. 25; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage when available, and records for Priest Brook near Winchendon, North Nashua River near Leominster, and records for stations on other nearby streams. Stage-discharge relation affected by ice Nov. 30, Dec. 7, Dec. 11 to Jan. 22, Jan. 25 to Feb. 9, and at times during period of no gage-height record Feb. 10 to Mar. 25.

1625. Priest Brook near Winchendon, Mass.

Location.--Lat 42°40'57", long 72°06'56", on right bank 100 ft downstream from highway bridge, 3 miles upstream from mouth, and 3½ miles west of Winchendon, Worcester County.

Drainage area.--19.4 sq mi.

Records available.--May 1916 to September 1959. Monthly discharge only October 1917 to July 1918, published in WSP 1301.

Gage.--Water-stage recorder. Concrete control since September 1936. Datum of gage is 849.67 ft above mean sea level, datum of 1929. Prior to Mar. 22, 1933, staff gage and Mar. 22, 1933, to Sept. 11, 1936, float gage, on left bank at same datum.

Average discharge.--43 years, 33.2 cfs.

Extremes.--Maximum discharge during year, 646 cfs Apr. 3 (gage height, 5.99 ft); maximum gage height, 6.02 ft Apr. 3 (backwater from ice); minimum discharge, 0.8 cfs at times during period Aug. 21-30.
1916-59: Maximum discharge, 3,000 cfs Sept. 21, 1938 (gage height, 9.90 ft), from rating curve extended above 330 cfs on basis of contracted-opening measurements at gage heights 8.4 and 9.90 ft; minimum, 0.08 cfs several times in September 1929.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by ponds and mill above station.

Revisions (water years).--WSP 451: 1916. WSP 871: Drainage area. WSP 1051: 1919, 1922-24. WSP 1301: 1917(M), 1919-24(M), 1926-27(M), 1929(M), 1931-35(M).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 3

2.8	19	4.0	159
3.0	33	5.0	358
3.5	86	6.0	650

Note.--Same as following table below 2.8 ft.

Apr. 4 to Sept. 30

2.1	0.3	3.0	31
2.2	1.1	3.5	76
2.3	2.4	4.0	143
2.4	4.2	5.0	346
2.6	9.8	6.0	625
2.8	19		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	8.8	50	6.8	19	7.6	72	74	7.0	8.9	3.6	18
2	24	4.4	34	8.0	23	8.6	132	62	8.2	8.9	3.3	*16
3	18	7.4	27	10	26	10	517	52	21	8.6	3.0	17
4	16	12	24	10	38	13	408	44	24	7.3	2.8	14
5	9.8	10	24	9.2	52	15	259	37	22	6.0	2.9	11
6	8.2	12	44	8.8	38	37	183	32	16	6.0	3.2	8.6
7	7.1	15	42	8.6	34	110	153	31	11	*6.3	2.6	7.0
8	12	13	34	8.4	28	120	126	28	16	6.7	2.3	6.2
9	10	8.2	32	8.2	19	85	117	21	17	4.2	1.9	5.2
10	4.7	10	23	8.0	*17	72	121	20	15	2.9	2.2	4.7
11	3.4	16	16	7.8	17	50	145	22	12	3.0	3.5	4.4
12	2.6	9.8	15	7.6	16	29	132	33	6.4	3.2	4.0	3.8
13	2.2	13	13	7.2	16	28	105	51	6.0	2.7	2.5	3.4
14	2.0	11	13	7.0	16	31	86	58	7.6	2.4	2.0	3.0
15	2.0	9.2	12	6.6	18	21	66	51	8.2	2.2	1.7	3.8
16	2.0	6.4	12	9.2	19	42	59	41	8.6	2.2	1.4	7.3
17	1.8	6.0	12	16	18	43	55	33	8.6	1.8	1.2	5.7
18	1.8	9.5	13	18	17	33	53	26	16	1.5	1.5	5.2
19	1.4	*15	11	16	15	26	52	24	18	1.5	1.3	4.4
20	1.4	7.6	8.0	15	14	52	51	20	16	10	1.1	3.8
21	*1.4	6.0	5.6	19	13	135	*53	20	16	40	1.0	3.6
22	1.4	5.4	6.2	130	12	190	49	20	20	27	.9	3.4
23	2.5	4.4	7.8	299	11	140	44	18	18	16	.9	3.0
24	6.2	4.4	9.2	264	13	*110	40	15	14	12	1.3	2.6
25	6.2	4.4	8.2	173	11	84	36	13	11	9.0	1.4	2.4
26	5.2	5.2	8.0	104	9.2	72	34	11	12	7.6	1.1	2.0
27	4.7	7.9	8.0	67	8.4	66	39	11	15	6.6	1.0	2.0
28	4.4	8.9	7.4	50	7.8	64	47	9.0	13	5.6	.9	2.0
29	4.7	46	7.0	35	-	60	66	8.2	16	4.8	.9	1.8
30	8.0	58	7.4	32	-------	56	81	8.2	14	*4.4	2.0	1.8
31	15	-------	6.8	31	-------	52	-------	7.6	-------	4.0	10	-------
Total	214.1	354.9	540.6	1,400.4	545.4	1,862.4	3,381	901.0	413.6	233.3	69.4	177.1
Mean	6.91	11.8	17.4	45.2	19.5	60.1	113	29.1	13.8	7.53	2.24	5.90
Cfsm	0.356	0.608	0.897	2.33	1.01	3.10	5.82	1.50	0.711	0.388	0.115	0.304
In.	0.41	0.68	1.04	2.68	1.05	3.57	6.48	1.73	0.79	0.45	0.13	0.34

Calendar year 1958: Max 246 Min 1.0 Mean 31.6 Cfsm 1.63 In. 22.11
Water year 1958-59: Max 517 Min 0.9 Mean 27.7 Cfsm 1.43 In. 19.35

Peak discharge (base, 150 cfs).--Jan. 23 (4 to 5 p.m.) 368 cfs (5.04 ft); Mar. 22 (12:30 to 2 p.m.) 222 cfs (4.36 ft); Apr. 3 (6 a.m.) 646 cfs (5.99 ft); Apr. 11 (3 to 6 p.m.) 153 cfs (4.06 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Mar. 23, 24, July 19 to Sept. 1; discharge estimated on basis of 2 discharge measurements, weather records, recorded range in stage when available, and records for Millers River near Winchendon, North Nashua River near Leominster, and other nearby streams. Stage-discharge relation affected by ice Nov. 30, Dec. 1, 6, 7, Dec. 9 to Jan. 22, Jan. 28 to Feb. 10, Feb. 15 to Mar. 31. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

1640. Millers River at South Royalston, Mass.

Location.--Lat 42°37'47", long 72°09'03", on right bank 500 ft downstream from bridge in South Royalston, Worcester County, 0.4 mile downstream from Beaver Brook, and 1.7 miles downstream from Birch Hill Dam.

Drainage area.--187 sq mi.

Records available.--July 1939 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 792.00 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--20 years, 314 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 2,140 cfs Apr. 6 (gage height, 7.29 ft); maximum gage height, 9.42 ft Jan. 24 (backwater from ice); minimum daily discharge, 30 cfs Aug. 17.
1939-59: Maximum discharge, 4,400 cfs Apr. 13, 1940 (gage height, 8.40 ft); minimum daily, 9.3 cfs Aug. 4, 1956.
Maximum stage known, 15.9 ft Sept. 21 or 22, 1938, from floodmarks.

Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by Lake Monomonac and other reservoirs, by mills and powerplants prior to 1955, and at high flow by Birch Hill Reservoir (see p. 242).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from aquatic vegetation Oct. 6, 7, 17-23, 26, 27, Nov. 2, July 24 to Sept. 1)

Oct. 1 to Apr. 6				Apr. 7 to Sept. 30			
4.0	63	6.0	880	3.6	26	5.5	570
4.5	149	6.5	1,280	3.8	42	6.0	880
5.0	335	7.2	2,030	4.1	79	6.5	1,280
5.5	570			4.5	163	7.2	2,030
				5.0	333		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	344	125	540	86	310	105	603	631	82	98	52	293
2	425	101	450	92	270	100	838	620	89	82	46	301
3	278	137	310	100	210	125	1,320	545	191	76	39	305
4	217	228	254	110	240	170	1,650	470	249	68	39	286
5	196	217	262	100	270	200	1,900	380	216	59	36	232
6	*161	192	358	98	220	320	2,020	341	171	54	38	158
7	147	188	400	94	180	720	1,770	282	150	57	39	120
8	224	172	350	90	160	760	1,800	256	138	57	38	91
9	246	169	270	86	*170	740	1,770	239	123	52	34	79
10	224	224	230	82	165	400	1,410	219	102	46	*39	68
11	202	228	210	78	160	350	1,250	*216	91	51	44	62
12	185	202	190	78	150	280	1,190	301	78	54	43	57
13	172	196	170	76	140	270	*1,080	450	73	50	39	51
14	166	144	160	74	145	280	940	510	84	52	35	46
15	158	135	160	74	155	320	745	495	112	52	32	46
16	137	132	150	130	170	*320	637	416	131	52	31	66
17	101	121	140	300	160	330	576	341	*131	46	30	86
18	96	119	130	270	150	330	540	289	150	44	57	79
19	86	132	*125	230	140	300	510	239	188	44	60	70
20	77	130	120	190	135	350	485	242	197	109	45	62
21	71	117	105	250	130	560	485	239	169	496	39	57
22	66	110	100	1,000	125	757	460	222	143	608	38	58
23	68	98	110	1,500	120	932	388	180	131	480	36	56
24	123	*92	100	950	130	817	346	153	114	293	36	*58
25	125	96	92	800	120	752	309	143	96	182	48	63
26	112	106	90	700	115	727	289	136	108	123	47	62
27	110	158	96	600	115	709	341	127	136	94	42	59
28	125	161	92	500	110	673	485	116	116	79	37	54
29	132	425	88	420	-	592	550	106	112	68	36	49
30	137	510	86	330	--------	530	631	100	129	62	39	64
31	142	--------	92	350	--------	490	--------	93	--------	56	185	--------
Total	5,053	5,165	6,030	9,838	4,665	14,309	27,318	9,097	4,000	3,744	1,399	3,138
Mean	163	172	195	317	167	462	911	293	133	121	45.1	105
(†)	-0.75	+2.82	-2.87	+1.01	0	+2.05	+0.39	-3.43	+0.15	-0.26	+1.12	-1.04

Adjusted for change in contents in Birch Hill Reservoir

Mean	162	175	192	318	167	464	911	290	134	121	46.3	104
Cfsm	0.866	0.936	1.03	1.70	0.893	2.48	4.87	1.55	0.717	0.647	0.248	0.556
In.	1.00	1.04	1.18	1.96	0.93	2.86	5.44	1.79	0.80	0.74	0.29	0.62

	Observed			Adjusted		
Calendar year 1958:	Max 1,580	Min 31	Mean 327	Mean 327	Cfsm 1.75	In. 23.76
Water year 1958-59:	Max 2,020	Min 30	Mean 257	Mean 257	Cfsm 1.37	In. 18.65

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Birch Hill Reservoir.
Note.--Stage-discharge relation affected by ice Dec. 1-3, Dec. 7 to Mar. 21.

1650. East Branch Tully River near Athol, Mass.

Location.--Lat 42°38'32", long 72°13'34", on right bank 300 ft downstream from Tully Dam, 1.3 miles downstream from Lawrence Brook, and 3½ miles north of Athol, Worcester County.

Drainage area.--50.4 sq mi.

Records available.--October 1915 to September 1959. Monthly discharge only October 1915 to May 1916, published in WSP 1301.

Gage.--Water-stage recorder and concrete control. Datum of gage is 613.71 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark). Prior to Oct. 26, 1948, staff gage at site 0.2 mile upstream at datum 14.40 ft higher.

Average discharge.--44 years, 83.2 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 492 cfs Apr. 11 (gage height, 4.73 ft); minimum, 0.3 cfs Feb. 2; minimum daily, 2.9 cfs Aug. 21-23, 29.
1915-59: Maximum discharge, 5,140 cfs Sept. 21, 1938 (gage height, 8.60 ft, from floodmarks, site and datum then in use), from rating curve extended above 1,500 cfs on basis of contracted-opening measurement and computation of peak flow over dam; minimum, 0.03 cfs Jan. 4, Mar. 3, 1949, Aug. 21, 22, 1955; minimum daily, 0.04 cfs Aug. 21, 1955.

Remarks.--Records excellent. Flow regulated by Tully Reservoir since 1948 (see p. 242).

Revisions (water years).--WSP 451: 1916. WSP 891: Drainage area. WSP 1051: 1916(M), 1928. WSP 1301: 1917-35(M), 1937(M).

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

2.5	2.9	3.1	50
2.55	4.2	3.5	118
2.6	6.2	4.0	238
2.7	12	4.7	480
2.9	28		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	20	33	32	135	28	159	173	19	20	5.4	50
2	42	19	34	32	*81	28	224	161	19	18	5.0	49
3	39	27	34	31	40	14	370	139	56	18	4.2	37
4	31	38	43	31	28	5.0	428	120	74	16	3.6	39
5	25	36	87	31	29	38	432	102	51	13	3.6	36
6	*19	37	108	31	46	56	432	91	40	11	3.6	26
7	16	37	106	24	57	57	436	82	37	10	4.0	20
8	15	31	106	19	57	58	440	74	31	8.4	4.0	15
9	13	26	82	19	56	58	448	66	26	6.7	4.0	12
10	12	27	53	18	56	78	452	60	21	6.2	5.0	9.7
11	9.7	28	51	18	56	91	460	*57	17	8.4	9.0	8.4
12	8.4	28	36	18	45	93	400	82	15	10	9.0	6.2
13	6.7	28	28	18	32	91	292	137	15	9.7	*7.2	5.4
14	6.2	28	28	18	53	91	246	148	21	9.0	5.8	4.6
15	6.2	28	*28	18	64	89	206	131	26	7.8	4.6	4.6
16	5.8	28	28	19	63	*87	173	108	28	6.7	4.2	9.7
17	5.8	28	28	20	63	87	*150	87	*28	5.8	3.6	12
18	5.8	28	28	20	50	85	141	74	31	5.0	3.4	10
19	5.4	28	28	24	31	84	137	63	38	4.2	3.4	8.4
20	5.0	28	28	35	31	194	133	61	45	10	3.2	7.2
21	5.0	28	28	41	31	183	137	60	40	69	2.9	6.2
22	5.0	28	28	122	31	224	128	56	33	72	2.9	*5.8
23	8.4	28	28	150	31	241	118	48	32	44	2.9	5.4
24	33	*26	25	159	31	206	106	42	27	31	3.2	5.0
25	34	27	16	163	31	198	94	37	22	24	4.0	4.6
26	29	27	15	161	30	198	89	33	20	17	4.2	4.0
27	26	27	15	159	28	201	98	30	26	13	3.6	3.6
28	25	27	15	154	28	195	131	28	27	10	3.2	3.4
29	24	28	15	150	-	161	157	25	26	8.4	2.9	3.2
30	23	31	15	150	-------	137	178	24	25	6.7	4.4	3.2
31	22	-------	23	143	-------	128	-------	21	-------	5.8	28	-------
Total	536.4	855	1,220	2,028	1,314	3,484.0	7,395	2,420	916	504.8	158.0	414.6
Mean	17.3	28.5	39.4	65.4	46.9	112	246	78.1	30.5	16.3	5.10	13.8
(†)	0	+6.91	+0.75	+1.12	-2.07	-6.57	+0.31	-0.41	0	-0.04	+0.07	-0.08

Adjusted for change in contents in Tully Reservoir

Mean	17.3	35.4	40.1	66.5	44.9	106	247	77.6	30.5	16.3	5.16	13.8
Cfsm	0.343	0.702	0.796	1.32	0.891	2.10	4.90	1.54	0.605	0.323	0.102	0.274
In.	0.40	0.78	0.92	1.52	0.93	2.42	5.46	1.78	0.68	0.37	0.12	0.30

	Observed			Adjusted			
Calendar year 1958:	Max 464	Min 1.6	Mean 69.0	Mean 69.0	Cfsm 1.37	In. 18.59
Water year 1958-59:	Max 460	Min 2.9	Mean 58.2	Mean 58.2	Cfsm 1.15	In. 15.68

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Tully Reservoir.
Note.--Discharge for Dec. 11-15, 26-31, Mar. 6-16, Mar. 23 to Apr. 6, computed from once-daily remote-registering stage-indicator readings and records of gate operation at Tully Reservoir.

1655. Moss Brook at Wendell Depot, Mass.

Location.--Lat 42°36'10", long 72°21'36", on left bank a quarter of a mile upstream from mouth and a quarter of a mile north of Wendell Depot, Franklin County.

Drainage area.--12.3 sq mi.

Records available.--June 1909 to August 1910, June 1916 to September 1959. Published as "at Wendell" 1909-10.

Gage.--Staff gage read once or twice daily. Crest-stage indicator since July 11, 1958. Datum of gage is 508.9 ft above mean sea level, datum of 1929. Prior to April 1910, staff gage at site 1,200 ft downstream at different datum. April to August 1910 staff gage and sharp-crested weir at site 300 ft downstream at different datum.

Average discharge.--43 years (1916-59), 20.8 cfs.

Extremes.--Maximum discharge during year, 544 cfs Apr. 3 (gage height, 4.54 ft); minimum, 0.7 cfs Aug. 4.
1916-59: Maximum discharge, 1,540 cfs Mar. 19, 1936 (gage height, 6.30 ft, from floodmarks), from rating curve extended above 400 cfs on basis of slope-area measurements at gage heights 5.62 and 6.30 ft; minimum, 0.2 cfs Sept. 4, 5, 1929.

Remarks.--Records good except those for periods of ice effect, which are fair.

Revisions (water years).--WSP 821: 1936(M). WSP 891: Drainage area. WSP 1051: 1917, 1919-24, 1929(m). WSP 1231: 1917-21(M), 1922, 1923(M), 1924-26, 1927-28(M), 1929, 1930-35(M), 1939(M), 1941(M), 1944(M), 1949(M).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 2				Apr. 3 to Sept. 30					
1.1	1.4	2.1	36	0.97	0.7	1.7	13	3.5	235
1.2	2.2	2.5	72	1.0	.8	1.9	21	4.0	364
1.4	4.8	3.0	138	1.1	1.4	2.2	42	4.5	530
1.6	9.4	3.5	235	1.2	2.4	2.5	72		
1.8	17			1.4	5.2	3.0	138		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.1	3.7	38	4.5	14	4.3	49	44	8.3	3.3	1.1	32
2	11	3.4	27	5.0	10	4.6	115	33	8.6	3.3	1.0	16
3	6.8	10	17	6.2	8.0	5.6	416	26	33	3.6	.8	9.8
4	4.7	18	13	6.2	14	8.0	203	22	26	2.9	.7	8.6
5	3.7	17	11	5.6	*15	8.9	119	21	14	2.0	.8	6.0
6	3.1	9.1	21	5.2	17	13	95	17	12	1.8	1.1	4.0
7	*2.7	7.8	37	5.0	13	16	70	16	13	1.7	1.1	2.9
8	2.6	7.1	24	4.7	10	27	66	15	8.8	1.4	1.0	2.4
9	2.4	7.6	17	4.5	8.5	45	76	14	6.6	1.4	1.3	1.8
10	2.3	11	13	4.1	7.4	20	84	13	5.1	1.2	4.0	1.6
11	2.0	9.8	9.3	3.8	7.2	14	92	13	4.2	2.6	*5.8	1.5
12	1.9	7.8	8.4	3.6	7.2	11	82	28	3.6	1.9	3.6	1.1
13	1.8	6.4	7.6	3.5	7.2	11	64	51	3.9	1.8	2.5	1.0
14	1.7	5.8	7.4	3.5	7.4	10	44	44	6.0	1.7	1.7	1.1
15	1.9	6.0	7.4	3.6	9.0	10	38	*33	10	1.4	1.3	1.6
16	1.9	5.8	7.0	4.5	9.6	11	37	28	9.6	1.4	1.1	3.0
17	1.8	5.6	6.4	7.4	9.6	14	30	20	8.3	1.2	.9	2.4
18	1.7	5.4	*6.2	6.9	8.6	17	*26	16	9.0	1.1	1.5	*1.7
19	1.7	6.2	5.8	6.6	7.6	15	29	14	12	1.2	1.2	1.4
20	1.6	6.4	5.6	6.4	6.5	20	30	15	12	8.6	1.0	1.4
21	1.6	6.0	5.4	10	6.1	50	31	14	7.8	47	.8	1.2
22	1.6	5.2	5.0	90	5.8	120	26	13	6.3	21	1.1	1.1
23	8.6	4.5	4.8	185	4.5	70	25	10	7.0	9.0	1.1	1.0
24	16	4.2	5.1	180	4.7	51	21	9.0	5.1	5.4	1.4	.9
25	11	4.0	4.9	140	4.9	49	19	8.8	*4.4	4.2	1.8	1.0
26	7.1	*4.3	4.6	90	4.3	54	18	8.3	5.1	3.3	1.3	1.0
27	5.6	7.6	4.5	54	3.9	55	26	6.8	6.8	2.4	1.1	.9
28	5.4	7.8	4.3	30	4.0	44	43	6.0	6.0	1.8	1.0	.8
29	5.2	32	4.4	20	-	39	51	5.8	5.1	1.6	1.4	1.0
30	4.7	44	4.5	18	---------	35	52	21	4.4	1.4	3.6	1.0
31	4.0	---------	4.6	19	---------	24	---------	14	---------	1.2	21	---------
Total	134.2	279.5	341.2	936.8	235.0	876.4	2,077	599.7	272.0	143.8	69.1	111.2
Mean	4.33	9.32	11.0	30.2	8.39	28.3	89.2	19.3	9.07	4.64	2.23	3.71
Cfsm	0.352	0.758	0.894	2.46	0.682	2.30	5.63	1.57	0.737	0.377	0.181	0.302
In.	0.41	0.85	1.03	2.83	0.71	2.65	6.28	1.81	0.82	0.43	0.21	0.34

Calendar year 1958: Max 220 Min 0.8 Mean 17.0 Cfsm 1.38 In. 18.73
Water year 1958-59: Max 416 Min 0.7 Mean 16.6 Cfsm 1.35 In. 18.37

Peak discharge (base, 160 cfs).--Jan. 22 (about 8 p.m.) about 240 cfs; Apr. 3 (4 a.m.) 544 cfs (4.54 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 10 to Jan. 22, Jan. 25 to Mar. 23, Mar. 29.

1665. Millers River at Erving, Mass.

Location.--Lat 42°35'51", long 72°26'19", on right bank 75 ft downstream from bridge at Farley, 0.6 mile upstream from Mormon Hollow Brook, 2.4 miles downstream from Erving, Franklin County, and 5.5 miles upstream from mouth.
Drainage area.--375 sq mi.
Records available.--August 1914 to September 1959.
Gage.--Water-stage recorder. Altitude of gage is 380 ft (from topographic map). Prior to June 30, 1915, staff gage, June 30, 1915, to Sept. 20, 1938, water-stage recorder, and Sept. 21 to Dec. 31, 1938, staff gage, at site 2.2 miles upstream at different datum. Jan. 1 to Mar. 29, 1939, staff gage and Mar. 30, 1939, to Sept. 12, 1941, water-stage recorder, at site 0.4 mile downstream at different datum.
Average discharge.--45 years, 628 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 4,900 cfs Apr. 3 (gage height, 6.85 ft); minimum daily, 51 cfs Aug. 15.
1914-59: Maximum discharge, 29,000 cfs Sept. 22, 1938 (gage height, 13.37 ft, from floodmarks, site and datum then in use), mean of two slope-area measurements; practically no flow at times during 1915 and 1916 because of regulation; minimum daily, 8 cfs Sept. 6, 1926.
Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by powerplants, Lake Monomonac and other reservoirs, and high flow, by Birch Hill and Tully Reservoirs (see p. 242).
Revisions (water years).--WSP 641: 1920(M). WSP 756: Drainage area. WSP 781: 1928(M), 1933(M). WSP 1301: 1915(M).

Rating table, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	44	4.0	1,120
2.0	103	5.0	2,080
2.5	221	6.0	3,420
3.0	430	6.6	4,420

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	382	193	666	160	540	200	1,240	1,250	183	178	98	556
2	450	186	680	170	450	190	2,040	1,200	187	155	94	514
3	300	248	544	190	380	250	4,350	1,100	408	134	99	484
4	250	354	466	210	420	320	3,660	900	484	125	81	509
5	220	345	520	190	450	400	3,450	800	398	115	70	385
6	200	302	673	180	370	900	3,450	650	363	107	75	253
7	190	272	580	170	340	1,560	3,120	550	306	98	76	199
8	*222	250	687	165	300	1,080	2,920	500	264	172	156	175
9	279	247	624	160	320	1,230	2,900	470	231	139	91	117
10	264	311	400	160	310	841	2,570	450	199	105	80	68
11	237	321	350	155	300	722	2,430	430	170	98	94	77
12	221	319	370	155	280	514	2,240	600	154	105	*77	81
13	218	286	310	150	270	526	1,870	900	140	103	74	89
14	221	254	280	150	280	562	1,690	*1,000	161	98	74	100
15	204	215	280	150	290	574	1,420	925	193	94	51	87
16	201	224	260	220	310	680	*1,190	806	221	93	69	99
17	180	234	240	550	280	736	1,050	701	218	88	86	111
18	154	225	230	520	270	694	992	586	240	86	72	121
19	152	227	220	400	260	645	918	502	286	88	82	94
20	163	262	210	320	250	857	897	484	319	252	92	96
21	150	236	200	450	240	*1,570	904	472	286	925	74	127
22	135	201	190	2,000	230	1,930	869	430	250	1,000	57	75
23	189	193	200	2,800	230	1,840	785	363	224	806	63	*70
24	263	201	190	1,900	240	1,620	700	315	207	420	91	88
25	250	188	180	1,500	220	1,520	620	290	183	345	77	90
26	224	*200	170	1,250	215	1,520	580	260	186	247	81	83
27	213	218	180	1,050	210	1,510	740	243	204	199	79	91
28	211	272	170	900	205	1,310	950	224	210	168	68	101
29	222	714	165	750	-	1,120	1,100	210	199	148	62	86
30	222	799	160	620	--------	1,010	1,250	231	*188	131	83	83
31	211	--------	170	660	--------	939	--------	204	--------	112	321	--------
Total	6,998	8,497	10,565	18,405	8,460	29,370	52,895	18,046	7,262	6,934	2,747	5,109
Mean	226	283	341	594	302	947	1,763	582	242	224	88.6	170
(†)	-0.75	+9.72	-2.13	+2.13	-2.07	-4.52	+0.69	-3.85	+0.15	-0.30	+1.19	-1.12

Adjusted for change in reservoir contents

Mean	225	293	339	596	300	943	1,764	578	242	223	89.8	169
Cfsm	0.600	0.781	0.904	1.59	0.800	2.51	4.70	1.54	0.645	0.595	0.239	0.451
In.	0.69	0.87	1.04	1.83	0.83	2.90	5.25	1.78	0.72	0.69	0.28	0.50

	Observed			Adjusted		
Calendar year 1958:	Max 3,160	Min 72	Mean 600	Mean 600	Cfsm 1.60	In. 21.71
Water year 1958-59:	Max 4,350	Min 51	Mean 480	Mean 480	Cfsm 1.28	In. 17.38

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Birch Hill and Tully Reservoirs.
Note.--No gage-height record Oct. 2-7, Jan. 21 to Feb. 3, Apr. 24 to May 14; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage when available, and records for Millers River near Winchendon, North Nashua River near Leominster, Millers River at South Royalston, and records for stations on other nearby streams. Stage-discharge relation affected by ice Dec. 10 to Mar. 6.

1670. Connecticut River at Turners Falls, Mass.

Location.--Lat 42°36'40", long 72°33'20", at dam of Western Massachusetts Electric Co., at Turners Falls, Franklin County, 0.2 mile upstream from Falls River.

Drainage area.--7,163 sq mi.

Records available.--January 1915 to September 1959.

Average discharge.--44 years, 11,860 cfs (adjusted for storage).

Remarks.--Discharge computed by adding flow over and through dam, flow for factories through canal that diverts around dam, and flow through power stations 1 and 2 of Western Massachusetts Electric Co. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir and Comerford Station Pond (see p. 242), and other reservoirs (combined usable capacity, about 25½ billion cubic feet).

Cooperation.--Records furnished by Western Massachusetts Electric Co.

Revisions (water years).--WSP 741: 1932. WSP 891: Drainage area.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,650	10,500	8,550	1,930	9,230	1,920	14,200	24,700	6,880	8,730	138	6,370
2	6,660	5,640	8,410	6,820	8,610	6,860	21,900	21,300	6,080	8,030	138	6,660
3	6,910	9,750	8,330	2,500	9,790	5,140	60,400	17,200	7,240	7,920	2,150	7,760
4	3,100	9,650	8,200	1,420	8,970	6,410	82,500	15,600	7,320	1,370	2,260	9,840
5	138	8,840	9,420	5,490	10,600	6,500	73,000	15,400	8,280	138	1,550	5,550
6	4,670	8,870	7,220	4,680	11,000	7,420	63,000	14,100	3,040	4,370	1,860	352
7	4,700	8,380	4,560	5,120	11,400	10,200	65,100	13,700	1,090	3,610	2,060	976
8	5,210	7,550	8,020	4,000	7,160	7,180	56,700	12,900	5,360	4,190	138	4,160
9	4,800	2,890	10,200	4,100	8,040	9,160	62,600	13,000	5,230	3,030	1,260	3,270
10	5,350	7,220	9,990	3,120	6,460	8,240	64,000	5,840	5,060	5,040	4,200	2,370
11	1,060	5,130	6,660	543	6,650	8,180	61,400	9,020	4,190	3,670	9,120	5,540
12	138	7,650	7,290	4,830	7,020	7,140	58,900	10,600	5,220	465	6,650	322
13	6,230	7,330	2,880	4,240	7,680	8,000	51,100	12,900	2,150	4,670	4,020	158
14	6,000	7,860	2,020	4,480	6,430	5,820	45,600	13,000	724	5,180	4,130	4,630
15	5,710	7,280	6,280	4,800	3,830	4,030	39,800	13,000	6,910	4,590	165	3,470
16	5,860	5,340	5,020	6,270	7,000	5,960	37,200	10,300	11,400	4,860	138	3,630
17	6,240	8,900	5,250	3,830	6,580	7,560	36,200	4,980	16,100	5,210	2,810	2,540
18	4,880	8,300	5,450	2,170	7,210	8,680	38,500	8,080	14,900	138	3,580	3,140
19	3,490	8,040	7,180	6,580	6,940	8,520	40,400	7,900	13,000	237	2,970	1,430
20	6,220	8,170	3,730	6,910	7,110	8,020	40,400	7,800	12,800	6,410	3,200	258
21	5,460	8,100	1,830	7,610	6,540	13,700	37,700	7,950	10,800	3,470	2,860	3,220
22	6,530	7,650	5,370	17,600	1,190	17,400	33,600	8,330	9,850	4,620	622	3,430
23	8,100	3,480	5,870	26,000	6,930	18,100	29,000	8,170	9,360	4,070	138	3,020
24	10,800	7,480	4,990	18,400	5,790	17,200	23,900	2,570	8,160	4,950	3,420	1,660
25	11,100	7,360	1,590	14,300	4,520	17,300	23,000	8,360	9,400	350	2,870	3,670
26	3,840	8,020	4,780	11,700	6,250	17,000	19,700	8,920	6,860	407	3,510	138
27	8,080	5,750	3,380	10,500	6,760	18,500	19,200	8,620	5,010	3,920	3,040	138
28	11,400	8,710	472	11,500	3,270	15,800	22,600	7,720	1,340	2,590	2,930	2,470
29	12,400	13,000	5,550	8,900	-	13,000	25,600	5,860	7,120	2,920	138	3,540
30	14,000	5,440	4,310	11,100	--------	11,900	24,400	4,860	9,250	2,880	258	2,840
31	13,800	--------	4,310	11,300	--------	13,100	--------	2,100	--------	2,860	4,090	--------
Total	198,526	228,280	177,112	232,743	198,960	313,940	‡1,271.2	324,780	220,124	114,895	76,413	96,552
Mean	6,404	7,609	5,713	7,508	7,106	10,130	42,370	10,480	7,337	3,706	2,465	3,218
(†)	-171	-466	-809	-478	-1,330	-592	+2,551	+1,308	+806	-408	-130	-259

Adjusted for change in reservoir contents

Mean	6,234	7,143	4,905	7,029	5,776	9,535	44,920	11,790	8,143	3,298	2,335	2,959
Cfsm	0.870	0.997	0.685	0.981	0.806	1.33	6.27	1.65	1.14	0.460	0.326	0.413
In.	1.00	1.11	0.79	1.13	0.84	1.53	7.00	1.90	1.27	0.53	0.38	0.46

	Observed			Adjusted		
Calendar year 1958:	Max 90,500	Min 60	Mean 12,210	Mean 12,080	Cfsm 1.69	In. 22.88
Water year 1958-59:	Max 82,500	Min 138	Mean 9,462	Mean 9,467	Cfsm 1.32	In. 17.94

† Change in contents, equivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir and Comerford Station Pond, Union Village Reservoir, 4 reservoirs in Mascoma River basin Sunapee Lake, and Surry Mountain, Otter Brook, Birch Hill, and Tully Reservoirs.

‡ Expressed in thousands.

1685. Deerfield River at Charlemont, Mass.

Location.--Lat 42°37'33", long 72°51'20", on left bank 1 mile downstream from Charlemont, Franklin County, and 2.5 miles downstream from Chickley River.

Drainage area.--362 sq mi.

Records available.--June 1913 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 517.36 ft above mean sea level, datum of 1929.

Average discharge.--46 years, 894 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 5,140 cfs Jan. 22 (gage height, 5.96 ft); minimum daily, 38 cfs Sept. 13, 27.
1913-59: Maximum discharge, 56,300 cfs Sept. 21, 1938 (gage height, 20.17 ft, from floodmarks), from rating curve extended above 31,000 cfs on basis of slope-area and contracted-opening measurements at gage heights 17.75 and 20.17 ft; minimum daily, 5 cfs June 17, 1921.

Remarks.--Records good. Flow regulated by Somerset Reservoir, since 1924 by Harriman Reservoir (see p. 242), and by several powerplants above station.

Revisions (water years).--WSP 781: 1915(M). WSP 1301: 1918(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	29	3.0	910
1.5	70	4.0	1,980
1.7	125	5.0	3,430
2.0	235	6.0	5,210
2.5	500		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	706	222	912	182	1,110	1,040	1,230	1,630	165	463	195	516
2	742	433	1,150	882	1,090	1,040	2,120	1,350	202	540	60	420
3	452	766	1,120	836	1,100	1,040	3,340	801	283	372	182	509
4	119	450	1,120	154	*1,140	1,060	2,410	854	304	76	50	347
5	93	520	1,140	600	1,160	1,070	2,020	859	294	57	360	79
6	451	592	900	1,000	1,110	1,510	2,340	825	125	102	242	57
7	738	704	300	1,000	1,090	1,640	1,810	808	116	279	192	50
8	*700	404	974	950	1,070	1,240	2,150	808	276	264	73	307
9	701	486	1,100	990	1,060	1,110	3,220	359	304	249	68	424
10	664	622	1,070	650	1,050	1,090	2,580	203	364	256	385	412
11	183	1,080	1,050	200	1,080	926	3,140	422	210	278	134	431
12	68	1,050	1,070	800	1,080	814	2,050	668	274	261	*272	86
13	154	1,050	540	1,000	1,070	842	1,310	*743	93	237	512	38
14	576	1,050	322	1,010	1,070	287	1,230	777	184	296	522	170
15	586	414	718	1,000	1,200	151	1,240	791	200	255	250	442
16	575	354	*1,050	1,040	1,150	694	*1,610	444	106	218	150	256
17	583	673	1,050	594	1,110	1,130	2,110	366	226	100	532	373
18	156	1,050	1,050	228	1,090	1,090	2,210	342	*168	57	572	194
19	63	1,070	1,040	786	1,050	911	1,850	495	204	104	540	261
20	328	1,090	656	1,040	1,040	1,130	1,500	740	158	666	589	209
21	338	1,070	248	1,220	960	*1,110	982	946	96	938	588	185
22	454	456	850	3,740	920	872	999	624	480	882	408	262
23	892	399	1,070	1,890	900	1,070	486	274	451	826	142	*330
24	1,010	646	1,000	962	980	1,270	452	169	456	668	492	247
25	352	*1,060	160	509	990	1,320	352	322	420	86	550	283
26	263	1,110	920	1,120	1,000	1,470	270	246	690	135	379	50
27	837	708	693	1,120	1,040	1,430	850	282	343	316	416	38
28	545	1,020	364	1,120	1,040	906	1,170	304	102	410	488	372
29	394	1,510	663	1,120	-	484	1,670	195	389	517	289	550
30	302	680	1,020	1,180	--------	738	1,540	142	409	559	94	404
31	237	--------	992	1,170	--------	1,210	--------	108	--------	526	412	--------
Total	14,262	22,739	26,312	30,093	29,750	31,695	50,241	17,897	8,092	10,991	10,138	8,302
Mean	460	758	849	971	1,062	1,022	1,675	577	270	355	327	277
(†)	-63.5	-79.3	-432	+33.9	-628	-253	+1,600	+112	+97.9	-204	-176	-154

Adjusted for change in reservoir contents

Mean	397	679	417	1,005	435	770	3,275	690	368	150	151	123
Cfsm	1.10	1.88	1.15	2.78	1.20	2.13	9.05	1.91	1.02	0.414	0.417	0.340
In.	1.26	2.09	1.33	3.20	1.25	2.45	10.09	2.20	1.13	0.48	0.48	0.38

	Observed			Adjusted		
Calendar year 1958:	Max 5,600	Min 42	Mean 853	Mean 798	Cfsm 2.20	In. 29.91
Water year 1958-59:	Max 3,740	Min 38	Mean 714	Mean 702	Cfsm 1.94	In. 26.34

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Somerset and Harriman Reservoirs.
Note.--Stage-discharge relation affected by ice Nov. 30, Dec. 7, 22, 26, Jan. 5-13, Feb. 10, 21-26.

1690. North River at Shattuckville, Mass.

Location.--Lat 42°38'18", long 72°43'32", on right bank in Shattuckville, Franklin County, 1¼ miles south of Griswoldville and 1.3 miles upstream from mouth.

Drainage area.--88.4 sq mi.

Records available.--October 1939 to September 1959. Monthly discharge only October, November 1939, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 458.36 ft above mean sea level, datum of 1929.

Average discharge.--20 years, 177 cfs.

Extremes.--Maximum discharge during year, 2,960 cfs Apr. 3 (gage height, 6.39 ft); minimum, 9.0 cfs Sept. 26; minimum daily, 10 cfs Sept. 28.
1939-59: Maximum discharge, 13,200 cfs Oct. 15, 1955 (gage height, 10.37 ft), from rating curve extended above 5,700 cfs by logarithmic plotting; minimum daily, 5.1 cfs Oct. 3, 1948.

Remarks.--Records good except those for periods of ice effect, which are fair. Diurnal fluctuation at low flow caused by mill above station; prior to 1950, greater regulation by mill.

Revisions (water years).--WSP 1111: 1945(M).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 2				Apr. 3 to Sept. 30			
1.6	14	3.0	211	1.5	9.5	3.5	360
1.7	20	3.5	360	1.7	20	4.0	580
1.9	36	4.0	580	2.0	42	5.0	1,250
2.2	68	5.0	1,250	2.5	103	6.0	2,380
2.5	109			3.0	207		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	63	130	50	120	55	448	339	50	27	17	36
2	71	56	120	53	105	60	954	261	60	38	17	30
3	43	107	100	57	110	66	2,030	223	154	33	16	31
4	35	130	102	60	*115	70	1,440	194	80	27	15	31
5	30	153	116	57	145	70	1,100	170	60	24	22	23
6	26	163	230	56	115	155	1,070	157	54	23	28	19
7	25	138	150	50	105	275	798	178	49	29	34	17
8	*24	102	120	47	95	180	923	262	43	26	25	20
9	23	100	100	45	90	130	1,320	175	39	22	23	15
10	20	104	80	45	95	100	1,050	148	34	23	98	14
11	19	93	70	43	94	85	1,340	140	28	36	63	13
12	19	79	70	40	84	73	731	239	28	28	*34	13
13	18	72	75	40	80	90	535	*245	33	59	26	12
14	18	68	75	42	80	85	479	194	44	101	23	12
15	19	69	75	43	110	80	476	157	38	41	20	14
16	19	74	*73	60	115	170	*516	138	36	32	18	31
17	19	68	71	200	100	150	540	127	44	28	31	21
18	19	65	68	200	90	120	454	122	65	24	67	17
19	19	68	65	150	84	120	396	110	80	30	34	16
20	19	72	63	100	66	244	416	142	70	61	23	15
21	18	67	60	170	70	*427	339	122	53	109	20	15
22	18	68	60	1,000	68	476	273	105	43	54	19	17
23	160	60	65	428	66	301	237	87	40	36	18	*13
24	221	58	62	227	64	260	215	87	*34	30	21	12
25	109	*64	57	190	61	289	197	80	30	35	28	12
26	93	72	53	140	59	368	190	70	39	32	22	13
27	118	155	55	125	57	348	243	64	48	25	18	12
28	162	90	55	110	55	243	308	58	44	22	17	10
29	128	546	54	115	-	201	526	57	40	21	23	11
30	93	190	55	130	-------	186	420	83	32	18	23	12
31	74	-------	53	155	-------	234	-------	60	-------	17	26	-------
Total	1,732	3,214	2,582	4,228	2,498	5,711	19,964	4,594	1,492	1,111	869	527
Mean	55.9	107	83.3	136	89.2	184	665	148	49.7	35.8	28.0	17.6
Cfsm	0.632	1.21	0.942	1.54	1.01	2.08	7.52	1.67	0.562	0.405	0.317	0.199
In.	0.73	1.35	1.09	1.78	1.05	2.40	8.40	1.93	0.63	0.47	0.37	0.22

Calendar year 1958: Max 1,710 Min 8.6 Mean 157 Cfsm 1.78 In. 24.19
Water year 1958-59: Max 2,030 Min 10 Mean 133 Cfsm 1.50 In. 20.42

Peak discharge (base, 1,880 cfs).--Apr. 3 (1 to 2 a.m.) 2,960 cfs (6.39 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28, Nov. 30 to Dec. 3, Dec. 6 to Jan. 22, Jan. 25 to Mar. 19, Mar. 24.

1700. Deerfield River near West Deerfield, Mass.

Location.--Lat 42°32'09", long 72°39'14", on right bank 0.4 mile downstream from South River, 1¼ miles west of West Deerfield, Franklin County, and 2½ miles west of Deerfield.

Drainage area.--558 sq mi.

Records available.--March 1904 to December 1905 (gage heights only), October 1940 to September 1959. Published as "at Deerfield" 1904-5.

Gage.--Water-stage recorder. Altitude of gage is 155 ft (from topographic map). Prior to Dec. 16, 1905, chain gage at site 1.5 miles downstream at different datum.

Average discharge.--19 years (1940-59), 1,282 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 11,100 cfs Apr. 3 (gage height, 7.17 ft); minimum daily, 56 cfs Sept. 27.
1940-59: Maximum discharge, 48,500 cfs Dec. 31, 1948 (gage height, 15.43 ft); minimum daily, 46 cfs Aug. 3, 1947, Oct. 4, 1953.

Remarks.--Records excellent except those for periods of ice effect, which are good. Flow regulated by Somerset and Harriman Reservoirs (see p. 242), and by several powerplants above station.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	56	3.0	1,130
1.6	84	4.0	2,670
1.8	155	5.0	4,690
2.1	310	6.0	7,370
2.5	605		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	699	323	1,210	440	1,300	1,200	2,220	2,380	335	511	307	655
2	844	364	1,340	956	1,200	1,250	4,140	2,160	337	750	101	470
3	825	1,260	1,450	1,230	*1,300	1,250	7,350	1,530	504	542	144	650
4	210	748	1,470	350	1,500	1,300	5,170	1,120	487	155	207	626
5	72	828	1,420	550	1,550	1,300	4,040	1,270	402	94	273	188
6	528	972	1,470	1,000	1,400	2,200	4,240	1,140	354	144	339	123
7	698	939	550	1,150	1,300	2,550	3,510	1,200	113	220	284	94
8	762	700	1,020	1,150	1,350	1,710	3,660	1,230	406	310	198	265
9	*741	754	1,460	1,200	1,250	1,450	5,240	847	405	417	252	426
10	750	740	1,350	800	1,300	1,370	4,460	588	537	386	442	540
11	325	1,290	1,300	450	1,300	1,130	5,340	502	366	374	419	469
12	71	1,280	1,350	950	1,250	888	3,590	1,030	264	247	288	176
13	163	1,260	950	1,200	1,300	834	2,510	1,260	192	272	*516	99
14	564	1,180	530	1,150	1,350	681	2,220	*1,200	150	473	693	130
15	472	705	810	1,150	1,600	372	2,060	1,100	380	371	317	478
16	658	520	1,300	1,400	1,450	982	2,460	839	176	280	204	414
17	578	742	1,350	1,000	1,350	1,590	*2,930	634	368	240	518	339
18	557	1,260	1,250	500	1,350	1,390	3,300	602	337	132	877	333
19	102	1,220	1,300	750	1,300	1,230	2,670	614	440	196	658	238
20	262	1,300	910	1,300	1,300	*1,890	2,470	963	224	1,160	724	298
21	333	*1,290	400	1,850	1,250	2,280	1,760	1,140	115	1,540	592	208
22	542	688	950	6,500	1,150	2,340	1,670	878	611	1,190	500	369
23	1,070	440	1,330	3,100	1,100	1,490	1,040	623	*509	827	242	260
24	1,860	718	1,290	1,500	1,250	1,940	854	356	608	1,170	542	*300
25	526	1,300	500	950	1,200	2,030	905	409	415	206	583	404
26	331	1,190	800	1,250	1,200	2,380	662	417	706	75	443	77
27	1,040	1,050	800	1,350	1,250	2,310	1,230	348	602	238	438	56
28	964	1,100	600	1,400	1,250	1,460	1,980	390	202	440	577	371
29	580	2,950	750	1,450	-	1,090	2,740	402	494	590	510	472
30	475	908	1,300	1,600	--------	1,090	2,530	278	346	614	343	511
31	438	--------	1,210	1,550	--------	1,820	--------	208	--------	678	552	--------
Total	18,040	30,019	33,720	41,176	36,650	46,797	88,951	27,658	11,385	14,842	13,083	10,039
Mean	582	1,001	1,088	1,328	1,309	1,510	2,965	892	380	479	422	335
(†)	-63.5	-79.3	-432	+33.9	-628	-253	+1,600	+112	+97.9	-204	-176	-154
Adjusted for change in reservoir contents												
Mean	518	921	656	1,362	681	1,257	4,565	1,004	477	274	246	181
Cfsm	0.928	1.65	1.18	2.44	1.22	2.25	8.18	1.80	0.855	0.491	0.441	0.324
In.	1.07	1.84	1.35	2.81	1.27	2.60	9.13	2.08	0.95	0.57	0.51	0.36

	Observed			Adjusted			
Calendar year 1958:	Max 7,750	Min 59	Mean 1,206	Mean 1,151	Cfsm 2.06	In. 27.99	
Water year 1958-59:	Max 7,350	Min 56	Mean 1,020	Mean 1,009	Cfsm 1.81	In. 24.54	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Somerset and Harriman Reservoirs.
Note.--Stage-discharge relation affected by ice Dec. 7, 11-22, 25-30, Jan. 1, Jan. 4 to Mar. 6.

1705. Connecticut River at Montague City, Mass.

Location.--Lat 42°34'48", long 72°34'30", on left bank 75 ft downstream from New York, New Haven and Hartford Railroad bridge at Montague City, Franklin County, and 1,000 ft downstream from Deerfield River.

Drainage area.--7,865 sq mi.

Records available.--March 1904 to September 1959. Prior to October 1929, published as "at Sunderland." Records published for both sites October 1929 to September 1932.

Gage.--Water-stage recorder. Datum of gage is 99.87 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1917, chain gage; Oct. 1, 1917, to Oct. 8, 1921, water-stage recorder used for low stages, chain gage otherwise; and Oct. 9, 1921, to Sept. 30, 1929, water-stage recorder, at site 9 miles downstream at datum 1.00 ft lower. Gages at both sites in operation Oct. 1, 1929, to Sept. 30, 1932.

Average discharge.--55 years, 13,710 cfs (adjusted for storage since October 1923).

Extremes.--Maximum discharge during year, 93,500 cfs Apr. 4 (gage height, 30.70 ft); minimum daily, 250 cfs Sept. 27.

1904-59: Maximum discharge, 236,000 cfs Mar. 19, 1936 (gage height, 49.2 ft, from floodmarks); minimum daily, 215 cfs Aug. 31, Sept. 1, 1958.

Remarks.--Records good except those for periods of ice effect or those below 1,500 cfs, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir and Comerford Station Pond (see p. 242), and other reservoirs (combined usable capacity, about 33½ billion cubic feet).

Revisions (water years).--WSP 471: 1904-17. WSP 741: 1930-32. WSP 781: 1928(M). WSP 891: Drainage area. WSP 1051: 1905, 1909-10, 1912-14, 1920, 1922-23, 1925-26, 1928, drainage area at Sunderland. WSP 1301: 1905(M), 1914-19(M), 1930-31(M).

Rating tables, water year 1958-59, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 4				Apr. 5 to Sept. 30			
4.1	325	8.0	5,250	3.8	240	8.0	5,300
4.5	565	10.0	9,260	4.0	355	12.0	14,800
5.0	1,000	16.0	28,000	5.0	1,110	20.0	43,800
6.0	2,170	30.0	90,000	6.0	2,200	30.0	90,000

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,280	11,700	9,820	2,500	a10,500	3,200	14,700	29,200	7,000	8,480	824	7,070
2	7,780	5,660	9,880	6,800	a10,000	8,000	28,700	25,400	6,560	9,410	a370	7,140
3	7,840	10,700	10,100	3,000	a11,000	6,400	65,200	21,300	7,520	8,320	2,370	8,450
4	3,470	11,200	10,300	1,800	10,500	7,800	87,000	17,600	7,760	1,670	2,460	10,400
5	a379	11,000	10,300	6,000	12,000	7,800	83,000	17,600	8,910	a489	1,730	5,960
6	4,750	10,700	8,990	5,700	12,500	10,500	71,900	16,100	3,770	4,440	2,350	a812
7	5,720	9,810	5,290	6,200	13,000	13,000	68,800	15,200	1,390	3,960	2,510	1,220
8	5,720	8,420	8,560	5,200	8,600	9,000	62,500	14,800	5,770	4,580	a360	4,290
9	*5,660	4,160	12,100	5,300	9,300	10,500	68,000	14,700	5,720	3,560	1,540	3,890
10	6,240	7,900	10,600	4,000	7,800	9,600	71,600	7,070	5,440	5,390	4,730	2,930
11	1,400	6,350	8,000	1,050	8,000	9,600	69,300	9,510	4,570	4,210	9,830	5,850
12	a375	8,870	8,600	5,800	8,300	8,000	65,300	*12,100	5,480	889	7,220	948
13	6,140	8,650	3,500	6,400	9,000	8,800	56,600	14,700	2,400	4,990	*4,630	a400
14	6,510	9,080	2,600	5,600	8,000	6,400	49,000	15,000	1,070	5,910	4,750	4,660
15	6,120	8,080	7,000	6,000	4,500	4,500	44,100	14,700	7,350	5,210	700	3,940
16	6,400	6,190	6,300	7,700	8,400	7,000	41,500	11,800	12,100	5,360	a540	3,850
17	6,720	9,890	6,600	5,000	8,000	9,000	*41,000	6,140	16,700	5,510	3,030	2,940
18	5,540	9,680	6,800	2,700	8,500	10,000	43,000	8,450	16,400	a450	4,300	3,700
19	3,370	9,500	8,100	7,400	8,300	9,600	44,200	8,730	13,900	a500	3,490	1,680
20	6,440	9,570	4,000	8,300	8,400	*10,000	43,500	9,170	13,600	7,450	3,780	692
21	5,970	*9,550	2,300	9,500	7,800	16,000	41,000	9,510	11,500	6,000	3,460	3,450
22	7,210	8,620	6,400	25,000	2,400	20,000	37,700	9,530	10,500	5,990	1,340	3,740
23	9,950	4,340	7,200	30,000	8,000	20,000	32,500	8,930	10,200	5,310	a674	3,500
24	12,900	7,760	6,400	a20,000	7,000	19,500	25,800	3,120	9,180	6,010	3,680	1,980
25	11,500	8,960	2,200	a15,000	5,800	19,500	24,800	8,930	10,100	*1,000	3,490	3,910
26	3,980	9,320	5,600	a13,000	7,400	19,500	22,300	9,290	7,550	a650	3,920	a530
27	8,740	6,870	4,200	a12,000	8,000	20,500	22,200	8,950	5,740	3,870	3,510	a250
28	12,400	9,990	1,100	a13,000	4,500	17,500	28,100	8,210	1,830	2,910	3,530	2,680
29	13,300	17,100	6,300	a10,500	-	15,000	31,600	6,300	7,490	3,310	924	4,050
30	15,200	7,290	5,600	a13,000	--------	10,600	29,300	5,290	9,770	3,300	1,000	3,410
31	14,600	--------	5,600	a13,000	--------	13,200	--------	2,570	--------	3,530	4,530	--------
Total	218,604	266,910	210,340	276,450	235,500	358,000	‡1,414.2	369,900	237,270	132,658	91,572	108,322
Mean	7,052	8,897	6,785	8,918	8,411	11,550	47,140	11,930	7,909	4,279	2,954	3,611
(†)	-234	-546	-1,241	-445	-1,958	-845	+4,151	+1,421	+904	-613	-306	-413
Adjusted for change in reservoir contents												
Mean	6,818	8,351	5,544	8,473	6,453	10,700	51,290	13,350	8,813	3,667	2,648	3,197
Cfsm	0.867	1.06	0.705	1.08	0.820	1.36	6.52	1.70	1.12	0.466	0.337	0.406
In.	1.00	1.18	0.81	1.24	0.85	1.57	7.28	1.96	1.25	0.54	0.39	0.45

	Observed			Adjusted			
Calendar year 1958:	Max 98,500	Min 215	Mean 13,870	Mean 13,680	Cfsm 1.74	In. 23.61	
Water year 1958-59:	Max 87,000	Min 250	Mean 10,740	Mean 10,730	Cfsm 1.36	In. 18.52	

Peak discharge (base, 61,000 cfs).--Apr. 4 (7 to 8 p.m.) 93,500 cfs (30.70 ft).

* Discharge measurement made on this day.

† Change in contents, equivalent in cubic feet per second, in all reservoirs from First Connecticut and Second Connecticut Lakes to 2 reservoirs in Deerfield River basin listed on page

‡ Expressed in thousands.

a No gage-height record; discharge estimated on basis of weather records, shape of normal recession graph, and records for Connecticut River at Turners Falls and Deerfield River near West Deerfield.

Note.--Stage-discharge relation affected by ice Dec. 11 to Mar. 28.

1715. Mill River at Northampton, Mass.

Location.--Lat 42°19'05", long 72°39'21", on right bank at Northampton, Hampshire County, 3½ miles upstream from mouth.

Drainage area.--52.8 sq mi.

Records available.--October 1938 to September 1959. October 1938 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 140 ft (from topographic map).

Average discharge.--21 years, 95.9 cfs.

Extremes.--Maximum discharge during year, 1,930 cfs Apr. 3 (gage height, 5.64 ft); maximum gage height, 7.18 ft Jan. 22 (ice jam); minimum discharge, 8.1 cfs Sept. 27, 28; minimum daily, 8.3 cfs Sept. 27.
1938-59: Maximum discharge, 6,300 cfs Aug. 19, 1955 (gage height, 11.78 ft), from rating curve extended above 3,700 cfs on basis of computation of peak flow over dam; minimum, 2.2 cfs Oct. 1, 1950; minimum daily, 4.2 cfs Aug. 21, 23, 24, 1957.

Remarks.--Records excellent except those for period of backwater from debris, which are good, and those for periods of ice effect, which are fair. Flow regulated by mill above station prior to 1956.

Revisions (water years).--WSP 921: 1940. WSP 1231: 1940-42(M), 1944-45(M), 1948(M), 1949.

Rating table, water year 1958-59, except periods of ice effect or backwater from debris (gage height, in feet, and discharge, in cubic feet per second)

1.4	6.2	3.0	277
1.5	8.8	3.5	500
1.7	18	4.0	765
2.0	43	4.5	1,080
2.3	86	5.0	1,420
2.6	151		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	37	84	24	60	34	285	205	25	17	15	90
2	*53	34	78	28	50	37	622	164	25	16	13	46
3	35	108	68	30	*40	45	1,150	141	138	19	11	41
4	27	129	76	27	50	70	628	125	54	15	11	44
5	24	103	84	23	85	50	432	116	34	13	14	31
6	21	96	145	20	80	100	405	109	28	12	29	22
7	19	79	92	26	65	200	301	107	27	12	23	18
8	18	61	78	20	50	120	317	99	26	11	19	16
9	17	62	70	20	35	86	392	94	24	*11	17	16
10	17	69	60	20	50	*74	309	88	21	12	49	14
11	15	55	52	20	54	62	414	78	20	82	50	14
12	14	49	62	21	45	56	266	84	19	33	30	12
13	14	44	56	23	45	68	215	97	18	28	21	11
14	15	44	52	24	50	65	*193	101	15	24	17	11
15	23	*44	54	25	70	62	182	86	16	23	14	12
16	32	47	54	55	60	110	175	74	16	19	12	12
17	32	45	50	130	53	110	173	68	19	18	12	13
18	32	47	48	100	50	80	159	63	28	15	11	15
19	31	50	40	80	42	80	141	58	30	14	11	12
20	25	51	35	50	35	233	162	59	37	229	9.8	11
21	17	48	29	80	37	357	151	56	28	423	9.8	11
22	13	45	31	650	34	389	127	47	22	116	9.2	11
23	186	51	40	280	32	150	116	39	22	*66	8.8	11
24	151	54	34	150	35	140	105	38	19	42	9.8	11
25	62	53	25	130	34	192	99	39	19	32	9.8	9.8
26	71	55	26	100	33	233	104	36	19	27	11	9.2
27	90	71	28	80	33	200	174	33	24	23	11	8.3
28	79	66	30	70	33	135	263	*31	28	20	9.8	8.8
29	61	349	27	56	-	115	301	28	25	19	20	9.2
30	48	115	28	70	-------	110	270	33	22	17	60	9.2
31	41	-------	27	85	-------	161	-------	30	-------	16	94	-------
Total	1,317	2,161	1,663	2,517	1,340	3,924	8,631	2,426	848	1,424	642.0	559.5
Mean	42.5	72.0	53.6	81.2	47.9	127	288	78.3	28.3	45.9	20.7	18.6
Cfsm	0.805	1.36	1.02	1.54	0.907	2.41	5.45	1.48	0.536	0.869	0.392	0.352
In.	0.93	1.52	1.17	1.77	0.94	2.76	6.08	1.71	0.60	1.00	0.45	0.39

Calendar year 1958: Max 988 Min 8.8 Mean 89.3 Cfsm 1.69 In. 22.96
Water year 1958-59: Max 1,150 Min 8.3 Mean 75.2 Cfsm 1.42 In. 19.32

Peak discharge (base, 1,250 cfs).--Apr. 3 (4 to 4:30 a.m.) 1,930 cfs (5.64 ft); July 20 (10:30 to 11 p.m.) 1,360 cfs (4.92 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 30 to Mar. 9, Mar. 11-19, 23, 24, 27-30. Backwater from debris Apr. 15 to Sept. 27.

1725. Ware River near Barre, Mass.

Location.--Lat 42°25'35", long 72°01'30", on left bank 700 ft downstream from Barre Falls Reservoir, 1.6 miles upstream from Burnshirt River, and 4 miles east of Barre, Worcester County.

Drainage area.--55.0 sq mi.

Records available.--July 1946 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 745 ft (from topographic map).

Average discharge.--13 years, 94.8 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 999 cfs Apr. 3 (gage height, 5.37 ft); minimum, 1.6 cfs July 21; minimum daily, 12 cfs July 10, Aug. 16, 17.
1946-59: Maximum discharge, 1,890 cfs Oct. 16, 1955 (gage height, 6.31 ft), from rating curve extended above 960 cfs by logarithmic plotting; minimum, 0.8 cfs July 1, 1958; minimum daily, 1.2 cfs Sept. 4-6, 12, 1953.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Some regulation by Long Pond and other small reservoirs. Flow regulated by Barre Falls Reservoir (see p. 242) since 1958.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 2				Apr. 3 to Sept. 30			
2.4	13	3.6	168	2.4	12	3.6	168
2.7	29	4.0	286	2.6	20	4.0	286
3.0	51	4.5	485	2.8	31	4.5	485
3.3	97			3.0	49	5.0	755
				3.3	97		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	48	221	39	76	27	204	215	19	*23	31	*168
2	108	43	166	39	62	32	320	184	21	21	25	150
3	97	55	125	48	32	38	451	163	49	20	21	148
4	78	72	119	54	51	56	411	146	45	18	19	138
5	64	72	138	54	66	a93	505	129	36	16	18	106
6	50	64	176	50	78	a115	602	117	40	15	20	73
7	42	58	195	45	57	a320	607	106	58	18	19	52
8	38	50	165	40	40	a290	492	95	45	16	18	41
9	36	62	120	35	46	a155	254	88	35	14	18	35
10	31	93	100	a33	48	134	245	80	28	12	21	31
11	27	93	80	a31	47	91	257	73	23	22	22	29
12	24	78	78	a30	53	61	264	75	20	25	20	26
13	22	64	74	a30	43	50	227	89	27	27	19	23
14	21	58	68	a31	51	78	198	97	65	29	28	22
15	20	53	62	a32	63	84	179	93	91	27	16	22
16	20	52	64	a45	82	82	160	80	91	27	12	27
17	20	51	64	a62	88	97	153	68	75	22	12	25
18	19	*50	64	a68	75	97	148	58	78	18	20	22
19	18	50	62	a60	58	89	141	52	84	24	29	21
20	*17	49	62	a50	48	112	*158	52	84	107	29	20
21	17	46	55	58	48	218	171	50	67	106	21	19
22	17	43	50	230	43	410	158	47	52	495	18	18
23	23	40	45	389	34	331	143	42	48	535	16	17
24	42	38	47	390	33	*251	129	39	40	467	16	17
25	43	38	46	a250	36	233	119	37	33	349	18	15
26	46	40	43	180	25	239	115	*33	33	110	17	15
27	62	57	40	105	28	221	143	30	38	80	15	15
28	72	59	41	100	30	182	207	27	35	59	14	15
29	70	135	43	71	-	158	239	24	33	*46	13	15
30	63	242	44	70	-------	146	245	22	28	39	30	15
31	55	-------	46	78	-------	143	-------	21	-------	34	125	-------
Total	1,340	1,953	2,703	2,797	1,441	4,633	7,645	2,432	1,421	2,821	720	1,340
Mean	43.2	65.1	87.2	90.2	51.5	149	255	78.5	47.4	91.0	23.2	44.7
(†)	-0.15	+0.77	-0.82	+6.72	-3.22	-3.40	0	-0.49	+0.08	0	+0.22	-0.31

Adjusted for change in contents in Barre Falls Reservoir

Mean	43.1	65.9	86.4	96.9	48.2	146	255	78.0	47.4	91.0	23.5	44.4
Cfsm	0.784	1.20	1.57	1.76	0.876	2.65	4.64	1.42	0.862	1.65	0.427	0.807
In.	0.90	1.34	1.81	2.03	0.91	3.06	5.17	1.63	0.96	1.91	0.49	0.90

	Observed			Adjusted			
Calendar year 1958:	Max 767	Min 7.7	Mean 103	Mean 103	Cfsm 1.87	In. 25.49	
Water year 1958-59:	Max 607	Min 12	Mean 85.6	Mean 85.6	Cfsm 1.56	In. 21.11	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Barre Falls Reservoir.
a No gage-height record; discharge estimated on basis of weather records and records for Barre Falls Reservoir and station at Coldbrook.
Note.--Stage-discharge relation affected by ice Dec. 3, Dec. 7 to Jan. 22, Jan. 24, 26-29, Jan. 31 to Feb. 3, Feb. 6, 7, 9, 11, 12, 16, 19-23, 25-27, Mar. 11, 13, 14.

1730. Ware River at Coldbrook, Mass.

Location.--Lat 42°23'30", long 72°03'40", on right bank above diversion dam at Ware River intake works at Coldbrook, Worcester County, 2 miles east of South Barre and 2.7 miles downstream from Burnshirt River.

Drainage area.--96.8 sq mi.

Records available.--January 1928 to September 1959.

Gage.--Venturi meters and water-stage recorder. Datum of gage is 5.65 ft below mean sea level, datum of 1929. Prior to Feb. 1, 1936, water-stage recorder at site 0.2 mile downstream at datum 631.91 ft above mean sea level, unadjusted.

Average discharge.--31 years, 168 cfs.

Extremes.--Maximum daily discharge during year, 1,260 cfs Apr. 3; minimum daily, 19 cfs July 9, 10.
1928-59: Maximum discharge, 14,000 cfs Sept. 21, 1938 (gage height, 664.28 ft), by computation of flow over dam; minimum daily, 4.7 cfs Sept. 6, 1953.

Remarks.--Records good. Figures of discharge include diversion as needed for Boston metropolitan district during period Oct. 15 to June 14 of each year; diversion began in March 1931. Flow regulated by Barre Falls Reservoir (see p. 242), since 1958.

Cooperation.--Computations of daily discharge made in cooperation with Water Division, Metropolitan District Commission, which collected gage-height and venturi-meter records.

Revisions (water years).--WSP 781: Drainage area. WSP 1031: 1944.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	141	78	354	76	155	94	456	367	50	38	47	253
2	167	73	253	87	139	82	946	308	62	37	39	215
3	164	117	196	104	116	103	1,260	267	117	35	34	237
4	151	129	207	106	178	160	839	214	103	31	32	210
5	132	120	273	93	230	220	838	212	90	26	31	154
6	103	107	323	80	177	524	914	200	99	28	31	115
7	82	93	341	76	160	769	853	183	109	28	31	91
8	71	82	259	69	131	553	653	174	90	23	28	78
9	64	130	204	67	110	306	450	160	74	19	30	67
10	57	158	129	64	108	250	456	149	63	19	41	61
11	50	145	135	61	107	176	471	144	54	35	43	58
12	44	123	136	59	108	135	428	151	47	39	40	54
13	41	108	134	60	105	131	374	175	80	43	36	49
14	39	98	127	63	118	138	324	188	122	40	43	47
15	39	93	110	63	135	171	300	177	133	40	32	50
16	38	94	114	87	183	188	235	155	135	38	26	59
17	37	91	117	113	160	217	258	142	116	32	32	52
18	36	91	116	114	147	157	218	138	105	26	56	48
19	35	92	114	117	139	183	227	127	106	60	55	45
20	33	89	112	98	112	273	295	122	110	295	53	43
21	32	83	99	150	102	570	296	106	92	404	42	41
22	30	77	89	682	91	779	274	108	84	679	37	40
23	30	70	92	658	76	554	249	95	80	700	32	40
24	31	70	95	589	79	413	215	90	68	559	34	39
25	73	67	84	354	43	401	201	85	61	400	37	35
26	87	80	77	241	47	438	212	77	61	152	34	34
27	110	109	77	166	41	380	296	72	67	110	30	32
28	122	164	71	160	54	296	388	69	68	87	26	31
29	115	429	76	137	-	257	450	64	65	70	29	31
30	102	373	77	155	---	217	414	61	52	60	87	31
31	88	---	80	134	---	287	---	55	---	55	257	---
Total	2,344	3,633	4,671	5,083	3,351	9,422	13,790	4,635	2,563	4,208	1,405	2,340
Mean	75.6	121	151	164	120	304	460	150	85.4	136	45.3	78.0
(†)	-0.15	+0.77	-0.82	+6.72	-3.22	-3.40	0	-0.49	+0.08	0	+0.22	-0.31

Adjusted for change in contents in Barre Falls Reservoir

Mean	75.5	122	150	171	116	301	460	149	85.5	136	45.5	77.7
Cfsm	0.780	1.26	1.55	1.77	1.20	3.11	4.75	1.54	0.883	1.40	0.470	0.803
In.	0.90	1.40	1.78	2.03	1.25	3.58	5.30	1.77	0.99	1.62	0.54	0.90

	Observed			Adjusted		
Calendar year 1958:	Max 1,380	Min 20	Mean 197	Mean 198	Cfsm 2.05	In. 27.68
Water year 1958-59:	Max 1,260	Min 19	Mean 157	Mean 157	Cfsm 1.62	In. 22.06

† Change in contents, equivalent in cubic feet per second, in Barre Falls Reservoir.

1735. Ware River at Gibbs Crossing, Mass.

Location.--Lat 42°14'07", long 72°16'45", on right bank half a mile upstream from Gibbs Crossing, Hampshire County, 1.8 miles upstream from Beaver Brook, and 2½ miles southwest of Ware.
Drainage area.--199 sq mi.
Records available.--August 1912 to September 1959.
Gage.--Water-stage recorder. Datum of gage is 379.79 ft above mean sea level, datum of 1929. Prior to Mar. 1, 1930, at site half a mile downstream at different datum.
Average discharge.--47 years, 324 cfs (adjusted for diversion).
Extremes.--Maximum discharge during year, 2,400 cfs Jan. 22 (gage height, 5.36 ft); minimum, 22 cfs Aug. 29; minimum daily, 48 cfs Sept. 27.
1912-59: Maximum discharge, 22,700 cfs Sept. 21, 1938 (gage height, 18.2 ft, from floodmarks), from rating curve extended above 4,600 cfs on basis of contracted-opening measurement at gage height 12.83 ft and slope-area measurement at gage height 18.2 ft: minimum, 5.0 cfs Oct. 26, 1914; minimum daily, 6.0 cfs Oct. 4, 1914.
Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by mills above station. Diversion at times since March 1931 from 97 sq mi in Ware River basin for supply of Boston metropolitan district. Regulation by Barre Falls Reservoir since 1958.
Revisions (water years).--WSP 661: Drainage area. WSP 1031: 1944. WSP 1301: 1914(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from aquatic vegetation Aug. 29, Sept. 9-30)

1.8	34	3.0	420
2.0	62	3.5	760
2.2	105	4.0	1,180
2.6	235	5.0	2,080

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	264	156	620	145	250	95	516	474	141	105	103	624
2	426	153	444	165	*220	108	620	396	111	81	88	432
3	340	213	330	207	210	246	2,030	350	204	95	*104	*350
4	240	290	298	190	408	559	1,120	350	*204	65	73	372
5	190	282	378	200	444	666	768	378	179	52	79	266
6	274	259	624	200	360	1,080	603	378	159	66	87	204
7	189	236	468	170	290	1,550	522	340	214	*75	82	159
8	146	186	355	150	246	547	480	325	253	75	70	163
9	150	172	320	130	235	*372	510	276	164	64	59	101
10	132	305	250	125	190	310	516	200	132	59	111	88
11	*123	366	230	123	205	263	*610	320	99	75	81	103
12	77	289	250	126	175	228	575	282	105	96	94	81
13	123	236	230	114	190	249	504	345	98	112	71	60
14	108	257	170	120	224	270	444	384	141	114	69	67
15	100	172	210	120	502	246	408	378	260	120	49	58
16	108	172	240	172	426	512	372	330	210	120	64	78
17	93	224	230	240	330	540	355	212	196	105	79	90
18	98	*214	214	270	310	450	350	302	176	78	70	71
19	75	196	210	230	274	335	340	256	210	82	86	51
20	113	193	200	210	220	569	414	224	196	236	113	78
21	87	196	165	338	180	920	432	218	144	1,380	73	65
22	92	162	180	1,670	160	1,020	360	207	215	952	59	59
23	136	162	165	829	140	534	340	165	161	960	66	63
24	235	162	170	450	138	426	306	147	150	784	85	58
25	176	162	170	325	130	444	294	210	132	631	67	50
26	162	156	165	270	98	462	278	162	115	438	69	59
27	207	176	130	250	86	462	438	147	147	306	66	48
28	218	242	130	220	88	340	582	141	153	186	75	57
29	204	936	*150	220	-	290	617	138	178	141	49	59
30	264	928	150	290	--------	340	540	95	123	137	131	54
31	204	--------	165	300	--------	340	--------	103	--------	126	727	--------
Total	5,354	7,855	8,011	8,569	6,729	14,773	16,244	8,233	4,970	7,916	3,099	4,068
Mean	173	262	258	276	240	477	541	266	166	255	100	136
(†)	-0.15	+0.77	+36.5	+66.4	+3.01	+167	+303	+17.7	+0.08	0	+0.22	-0.31

Adjusted for diversion and change in contents

Mean	173	263	295	343	243	644	845	283	166	255	100	135
Cfsm	0.869	1.32	1.48	1.72	1.22	3.24	4.25	1.42	0.834	1.28	0.503	0.678
In.	1.00	1.47	1.71	1.99	1.27	3.73	4.74	1.64	0.93	1.48	0.58	0.76

	Observed			Adjusted			
Calendar year 1958:	Max 1,560	Min 40	Mean 268	Mean 359	Cfsm 1.80	In. 24.49
Water year 1958-59:	Max 2,030	Min 48	Mean 263	Mean 312	Cfsm 1.57	In. 21.30

Peak discharge (base, 1,300 cfs).--Jan. 22 (12:30 p.m.) 2,400 cfs (5.36 ft); Mar. 6 (10 p.m.) 2,350 cfs (5.30 ft); Apr. 3 (2 p.m.) 2,350 cfs (5.30 ft); July 21 (1 to 2 p.m.) 1,670 cfs (4.54 ft).

* Discharge measurement made on this day.
† Diversion from 97 sq mi in Ware River basin for supply of Boston metropolitan district, and change in contents in Barre Falls Reservoir, equivalent in cubic feet per second. Diversion records furnished by Metropolitan District Commission.
Note.--Stage-discharge relation affected by ice Dec. 1, 9-17, 19-29, Jan. 1, 4-10, 17-19, 26-29, Jan. 31 to Feb. 3, Feb. 7, 9-12, 20-23, 25, 26, Mar. 14

1740. Hop Brook near New Salem, Mass.

Location.--Lat 42°28'42", long 72°20'05", on right bank 1.5 miles upstream from mouth and 1½ miles south of New Salem, Franklin County.

Drainage area.--3.39 sq mi.

Records available.--October 1947 to September 1959. October 1947 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 725 ft (from topographic map).

Average discharge.--12 years, 6.20 cfs.

Extremes.--Maximum discharge during year, 225 cfs Apr. 2 (gage height, 2.98 ft), from rating curve extended above 78 cfs by logarithmic plotting; maximum gage height, 3.06 ft Mar. 6 (backwater from ice); minimum discharge, 0.05 cfs Aug. 17, 20, 21.
1947-59: Maximum discharge, 275 cfs Aug. 19, 1955 (gage height, 3.13 ft), from rating curve extended above 78 cfs by logarithmic plotting; minimum, 0.004 cfs Aug. 3, 9, 10, 1955.

Remarks.--Records good except those for periods of ice effect, which are fair.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 6				Mar. 7 to Aug. 30				Aug. 31 to Sept. 30			
0.7	0.71	1.6	17.1	0.45	0.05	1.2	4.4	0.5	0.15	1.2	4.5
.8	1.20	1.8	29	.5	.10	1.4	8.4	.6	.37	1.4	8.4
1.0	2.6	2.0	45	.6	.24	1.6	15.4	.7	.71	1.6	15.4
1.2	4.6	2.1	54	.7	.54	1.9	33	.8	1.20	1.8	26
1.4	9.0			.8	.97	2.3	75	1.0	2.6		
				1.0	2.3						

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.6	2.5	6.1	1.7	4.2	1.7	23	9.9	1.3	0.34	0.23	5.2
2	3.8	2.25	5.7	3.6	3.5	2.3	63	8.4	4.6	.76	.10	3.1
3	2.35	8.6	5.0	3.3	3.0	5.5	58	7.5	9.9	.48	.07	3.1
4	1.9	5.7	5.7	2.6	12.0	9.0	30	6.8	3.0	.26	.06	2.5
5	1.65	4.1	10.2	2.1	6.6	6.0	20	6.3	2.0	.17	.25	1.4
6	1.4	3.5	12.5	1.85	5.1	50	17.8	5.9	1.9	.20	.37	.99
7	*1.4	3.1	7.0	1.65	4.4	25	14.6	5.8	2.1	.31	.30	.75
8	1.4	2.9	5.1	1.45	3.9	8.0	14.2	5.2	1.4	.14	.17	.59
9	1.4	5.6	4.7	1.4	3.0	5.5	17.0	4.9	1.03	.10	.68	.52
10	1.25	5.2	4.3	1.4	3.3	4.8	14.6	4.7	.76	.10	3.5	.55
11	1.25	4.0	4.0	1.4	3.4	4.4	17.8	4.7	.60	1.11	*1.4	.59
12	1.15	3.4	3.8	1.4	3.1	4.2	13.0	7.4	.57	.43	.45	.34
13	1.10	3.1	3.7	1.45	3.6	4.1	11.1	6.9	1.95	.54	.24	.29
14	1.10	3.1	3.5	1.5	3.5	3.8	9.9	7.8	2.0	.37	.16	.29
15	1.10	3.3	3.4	1.8	14.0	4.0	9.3	*5.8	3.1	.34	.12	.41
16	1.10	3.5	3.6	3.5	5.4	12.0	8.7	4.9	2.0	.30	.08	1.06
17	1.10	3.4	*4.0	8.0	4.0	7.0	8.7	4.4	2.0	.14	.07	.55
18	1.10	4.0	3.9	6.0	3.8	5.4	*8.2	4.0	2.8	.10	.46	.49
19	1.05	4.5	3.9	3.8	3.2	5.6	8.2	3.9	*3.4	3.0	.16	.49
20	.99	3.9	3.6	3.4	2.8	18.0	9.6	3.8	2.1	25	.07	.40
21	.94	3.3	3.1	12.0	2.6	40	8.2	3.2	1.20	12.7	.05	.32
22	.94	3.0	2.8	54	2.4	*18.0	7.2	2.8	1.14	3.2	.25	*.29
23	17.3	2.8	2.4	14.3	2.2	11.0	7.0	2.5	1.21	1.7	.11	.24
24	6.9	2.9	2.8	10.0	2.0	12.0	6.6	2.9	.68	1.19	.51	.22
25	3.6	2.6	2.5	9.7	1.9	15.4	6.1	2.5	.68	.82	.67	.22
26	3.2	*4.1	2.2	7.2	1.75	17.6	6.7	2.15	2.1	.57	.18	.18
27	3.8	4.4	2.0	5.6	1.65	11.1	15.4	1.9	1.5	.37	.08	.18
28	4.2	6.3	2.2	4.8	1.6	7.5	12.2	1.7	1.3	.26	.26	.18
29	3.3	26	2.3	4.5	-	7.9	16.5	1.8	1.02	.18	1.35	.22
30	2.9	7.6	2.2	6.4	-------	7.2	11.1	2.8	.50	.17	3.7	.24
31	2.6	-------	2.0	5.1	-------	14.7	-------	1.6	-------	.18	26	-------
Total	83.87	142.65	130.2	186.90	111.90	348.7	473.7	144.85	59.84	55.53	42.10	25.90
Mean	2.71	4.76	4.20	6.03	4.00	11.2	15.8	4.67	1.99	1.79	1.36	0.863
Cfsm	0.799	1.40	1.24	1.78	1.18	3.30	4.66	1.38	0.587	0.528	0.401	0.255
In.	0.92	1.57	1.43	2.05	1.23	3.83	5.20	1.59	0.66	0.61	0.46	0.28

Calendar year 1958: Max 52 Min 0.18 Mean 5.92 Cfsm 1.75 In. 23.73
Water year 1958-59: Max 63 Min 0.05 Mean 4.95 Cfsm 1.46 In. 19.83

Peak discharge (base, 72 cfs).--Jan. 22 (time unknown) about 110 cfs; Mar. 6 (4 to 5 p.m.) about 145 cfs; Mar. 21 (9:30 p.m.) 116 cfs (2.54 ft); Apr. 2 (8 p.m.) 225 cfs (2.98 ft); July 20 (7:30 p.m.) 114 cfs (2.53 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 6-17, Dec. 20 to Jan. 1, Jan. 5-22, Jan. 27 to Feb. 15, Feb. 20 to Mar. 24, Mar. 28, 29 (no gage-height record Jan. 6-18, 28, 29, Feb. 1, 2, Feb. 25 to Mar. 2; discharge estimated on basis of weather records and records for Ware River near Barre and Rocky Brook near Sterling).

1745. East Branch Swift River near Hardwick, Mass.

Location.--Lat 42°23'36", long 72°14'21", on left bank 100 ft above spillway of regulating dam and 4.6 miles northwest of Hardwick, Worcester County.

Drainage area.--43.7 sq mi.

Records available.--January 1937 to September 1959. Published as "near Dana" January 1937 to September 1939.

Gage.--Water-stage recorder. Concrete spillway since Mar. 12, 1940. Datum of gage is 504.70 ft above mean sea level, datum of 1929.

Average discharge.--22 years, 70.4 cfs.

Extremes.--Maximum discharge during year, 948 cfs Apr. 3 (gage height, 21.06 ft); minimum, 4.4 cfs Aug. 24, 29.
1937-59: Maximum discharge, 6,780 cfs Sept. 21, 1938, average of slope-area and contracted-opening measurements; maximum gage height, 22.49 ft June 25, 1944; no flow at times in 1939, 1949, 1953, 1957.

Remarks.--Records good except those for period of no gage-height record, which are fair.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

19.25	3.8	19.6	67
19.3	7.2	20.0	239
19.35	12	20.5	540
19.4	18	21.0	900
19.5	36		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	36	132	28	59	25	150	166	25	16	13	146
2	75	31	94	40	45	26	258	134	25	15	11	105
3	69	41	76	46	34	31	799	113	50	13	8.8	62
4	51	59	78	48	73	70	495	97	56	11	8.4	45
5	39	59	86	42	138	105	304	94	46	8.8	9.3	31
6	30	53	136	34	99	176	219	80	42	7.6	10	24
7	24	44	121	31	65	484	181	71	38	8.4	11	19
8	23	36	92	29	51	244	155	67	31	7.6	10	15
9	23	42	76	27	42	142	161	62	26	6.0	11	13
10	23	57	57	25	48	99	168	57	23	5.3	15	11
11	19	61	50	24	48	71	181	59	19	8.4	17	9.8
12	18	54	46	24	40	71	181	67	15	8.8	14	7.2
13	17	48	44	23	36	61	153	99	16	12	11	6.4
14	16	42	39	23	40	53	128	111	20	13	9.3	5.7
15	18	40	44	30	64	48	111	103	19	13	8.8	6.0
16	19	44	44	40	80	69	99	88	19	13	7.2	8.8
17	19	42	42	56	71	97	96	73	21	11	7.2	8.4
18	19	42	42	60	61	97	92	65	23	8.8	8.8	8.4
19	19	44	40	55	53	75	92	59	31	9.5	8.0	8.0
20	17	40	40	50	40	86	97	59	32	98	6.8	8.0
21	16	38	38	58	34	208	107	56	31	617	6.0	7.2
22	16	34	35	429	31	404	105	53	28	300	6.8	8.0
23	30	31	33	399	29	238	92	46	28	140	5.0	8.4
24	64	32	33	192	28	155	86	40	24	82	5.7	8.0
25	65	30	32	121	28	144	82	38	21	54	6.4	7.6
26	56	32	31	88	26	164	78	33	21	35	5.7	6.4
27	46	40	29	67	25	190	107	32	22	28	5.3	9.3
28	46	50	27	54	25	140	181	30	22	22	5.0	8.8
29	46	206	27	50	-	103	200	31	22	19	4.7	9.8
30	45	210	27	51	-------	94	200	35	19	16	9.3	9.8
31	46	-------	28	64	-------	90	-------	33	-------	14	118	-------
Total	1,059	1,618	1,719	2,308	1,413	4,060	5,358	2,151	815	1,621.2	383.5	631.0
Mean	34.2	53.9	55.5	74.5	50.5	131	179	69.4	27.2	52.3	12.4	21.0
Cfsm	0.783	1.23	1.27	1.70	1.16	3.00	4.10	1.59	0.622	1.20	0.284	0.481
In.	0.90	1.38	1.46	1.96	1.20	3.46	4.56	1.83	0.69	1.38	0.33	0.54

Calendar year 1958: Max 603 Min 3.8 Mean 67.4 Cfsm 1.54 In. 20.93
Water year 1958-59: Max 799 Min 4.7 Mean 63.4 Cfsm 1.45 In. 19.69

Peak discharge (base, 350 cfs).--Jan. 22 (6 to 9 p.m.) 624 cfs (20.62 ft); Mar. 7 (4 a.m.) 582 cfs (20.56 ft); Mar. 22 (6 a.m.) 440 cfs (20.35 ft); Apr. 3 (9 to 10 a.m.) 948 cfs (21.06 ft); July 21 (6 to 8 a.m.) 708 cfs (20.74 ft).

Note.--No gage-height record Jan. 11-19; discharge estimated on basis of weather records, recorded range in stage, and records for Ware River near Barre, and Ware River at Coldbrook.

1755. Swift River at West Ware, Mass.

Location.--Lat 42°16'04", long 72°19'59", on left bank at West Ware, Hampshire County, 1.4 miles downstream from Quabbin Reservoir and 3½ miles east of Belchertown.

Drainage area.--188 sq mi, includes 1.6 sq mi drained by Beaver Brook, flow of which is diverted from Ware River basin. Prior to January 1937, 186 sq mi.

Records available.--July 1910 to September 1912 (twice-daily gage heights and corresponding discharges), October 1912 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 365.18 ft above mean sea level, datum of 1929. Prior to Aug. 25, 1912, chain gage at site 400 ft upstream at same datum.

Average discharge.--47 years (1912-59), 306 cfs (adjusted for storage and diversions).

Extremes.--Maximum discharge during year, 225 cfs Mar. 6 (gage heights, 3.20 ft); minimum daily, 32 cfs July 4.
1910-59: Maximum discharge, 7,590 cfs Mar. 19, 1936 (gage height, 15.00 ft); minimum, 2.5 cfs Sept. 20, 1940; minimum daily, 15 cfs Sept. 20, 1940.

Remarks.--Records good. Flow regulated since August 1939 by Quabbin Reservoir (see p. 242). Diversion from Ware River to Quabbin Reservoir since 1940, from Quabbin Reservoir to Chicopee Valley aqueduct since 1950.

Revisions (water years).--WSP 401: Drainage area. WSP 451: 1916. WSP 871: 1919. WSP 1031: 1944 (changes in reservoir contents and adjusted figures only). WSP 1301: 1925(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.9	26
2.2	52
2.5	92
3.0	184

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	108	56	109	35	43	43	103	102	*106	101	95	103
2	108	45	101	110	107	109	112	59	101	*99	122	103
3	105	109	99	57	b101	101	112	46	101	99	129	104
4	97	100	100	44	105	109	61	110	99	32	101	102
5	130	98	102	109	100	101	47	102	99	42	102	99
6	140	100	60	b104	101	121	112	102	53	108	101	126
7	105	99	45	b101	b58	59	103	101	44	99	100	126
8	106	57	110	b102	44	45	103	101	106	99	94	134
9	105	46	100	b102	108	105	103	57	97	98	126	102
10	102	109	46	b58	100	99	58	43	99	98	137	101
11	*95	37	34	43	103	100	61	109	97	88	117	101
12	124	108	42	107	101	99	46	102	99	117	113	94
13	124	99	42	99	99	100	*112	104	54	130	101	122
14	134	101	41	97	56	54	103	102	44	99	101	143
15	100	*57	110	99	49	44	103	103	107	97	93	128
16	100	44	88	104	107	114	89	56	98	99	124	129
17	99	106	85	59	100	102	103	43	98	100	132	127
18	87	100	85	43	98	100	59	110	97	95	100	101
19	122	100	85	107	99	101	45	101	99	121	101	126
20	132	99	50	98	b101	109	46	102	53	139	99	126
21	105	101	42	107	57	65	113	100	42	104	97	126
22	102	57	93	107	42	47	101	103	105	101	96	126
23	103	44	85	101	42	109	101	58	99	101	126	126
24	98	109	96	b58	107	103	101	44	101	*102	154	126
25	96	98	34	43	98	100	57	107	100	94	128	126
26	113	100	107	106	99	102	45	100	102	126	128	126
27	117	36	55	98	97	105	114	96	55	133	128	126
28	104	109	42	b98	56	57	40	100	43	96	126	126
29	101	65	107	b99	-	45	85	98	106	94	107	119
30	102	44	100	*100	-------	111	103	35	97	96	130	127
31	97	-------	100	56	-------	104	-------	42	-------	100	151	-------
Total	3,361	2,433	2,395	2,651	2,378	2,763	2,539	2,638	2,601	3,107	3,559	3,551
Mean	108	81.1	77.3	85.5	84.9	89.1	84.6	85.1	86.7	100	115	118
(†)	-2.4	+166	+67.9	+245	+166	+523	+661	+152	+100	+217	+39.6	-123

Adjusted for diversion and change in reservoir contents‡

Mean	106	247	145	330	251	612	745	237	187	317	154	-4.83
Cfsm	0.564	1.31	0.771	1.76	1.34	3.26	3.96	1.26	0.995	1.69	0.819	-0.026
In.	0.65	1.47	0.89	2.03	1.39	3.75	4.42	1.45	1.11	1.94	0.95	-0.03

	Observed			Adjusted		
Calendar year 1958:	Max 144	Min 30	Mean 81.1	Mean 295	Cfsm 1.57	In. 21.33
Water year 1958-59:	Max 154	Min 32	Mean 93.1	Mean 277	Cfsm 1.47	In. 20.02

* Discharge measurement made on this day.
† Change in contents in Quabbin Reservoir (adjusted for diversion from Ware River), diversion to Wachusett Reservoir, and diversion to Chicopee Valley Aqueduct, equivalent in cubic feet per second.
‡ Negative figures indicate that evaporation and seepage from reservoir exceeded inflow.
b Stage-discharge relation affected by ice.

1760. Quaboag River at West Brimfield, Mass.

Location.--Lat 42°10'56", long 72°15'51", on right bank 10 ft upstream from abandoned highway bridge at West Brimfield, Hampden County, 0.9 mile upstream from Blodgett Mill Brook, and 3½ miles northeast of Palmer.

Drainage area.--151 sq mi.

Records available.--August 1909 to August 1912 (twice-daily gage heights and corresponding discharges), September 1912 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 390 ft (from topographic map). Prior to Aug. 19, 1912, staff gage and Aug. 19, 1912, to Oct. 31, 1955, water-stage recorder, at several sites 0.5 mile downstream at different datum.

Average discharge.--47 years (1912-59), 244 cfs.

Extremes.--Maximum discharge during year, 1,080 cfs Mar. 6 (gage height, 5.87 ft); maximum gage height, 6.10 ft Jan. 22 (ice jam); minimum daily discharge, 37 cfs Sept. 29, 30.
1909-59: Maximum discharge, 12,800 cfs Aug. 19, 1955 (gage height, 15.36 ft, from floodmarks, present site and datum), from rating curve extended above 2,700 cfs on basis of slope-area measurement of peak flow; minimum daily, 6.6 cfs Sept. 28, 29, 1957.

Remarks.--Records good except those for periods of ice effect, which are fair. Slight diurnal fluctuation at low flow caused by mill above station prior to 1956; regulation much greater prior to 1938.

Revisions (water years).--WSP 451: 1916. WSP 711: Drainage area. WSP 1301: 1918(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.5	36	4.0	339
2.8	75	5.0	690
3.1	129	6.0	1,150
3.5	214		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	223	147	312	150	260	125	464	431	85	99	203	160
2	244	141	360	180	*230	150	540	416	92	94	181	147
3	230	183	345	205	200	180	928	397	147	90	162	168
4	219	196	367	215	230	360	1,000	376	*131	85	149	223
5	205	183	416	180	285	397	1,010	356	123	80	141	199
6	190	177	481	160	275	650	950	334	121	77	135	188
7	183	170	382	145	210	878	847	315	170	*75	125	172
8	177	164	480	140	185	682	788	286	160	70	116	157
9	168	196	430	135	165	*788	734	264	141	68	118	141
10	160	226	370	125	155	694	702	251	125	64	114	127
11	147	226	320	120	155	586	710	239	114	84	108	112
12	133	219	290	120	155	498	670	242	105	87	101	99
13	131	214	270	120	170	322	*630	256	110	87	97	89
14	*127	216	250	120	230	304	590	254	118	92	92	84
15	125	214	235	120	391	379	538	230	108	110	85	75
16	120	210	220	200	360	448	502	216	110	121	82	70
17	116	201	230	270	331	461	464	207	112	118	77	64
18	110	*194	230	260	310	425	441	196	116	114	75	60
19	105	192	230	240	271	397	416	188	121	118	70	59
20	103	183	190	230	152	478	431	183	120	237	68	56
21	97	177	210	330	220	610	425	174	114	419	63	54
22	96	166	200	660	185	674	397	155	110	431	63	50
23	147	162	190	660	165	646	376	133	121	475	62	47
24	177	162	190	640	150	630	353	135	112	475	62	46
25	151	153	190	550	140	594	334	127	106	441	63	43
26	149	160	175	400	135	546	317	123	110	400	60	40
27	151	172	165	320	130	516	342	116	123	*359	57	39
28	151	177	165	270	125	468	388	108	125	323	57	38
29	153	451	*160	240	-	428	435	105	118	261	55	37
30	153	382	160	235	-------	409	438	99	108	254	90	37
31	149	-------	155	240	-------	425	-------	96	-------	226	141	-------
Total	4,790	6,014	8,368	7,980	5,970	15,148	17,160	7,008	3,576	6,034	3,072	2,881
Mean	155	200	270	257	213	489	572	226	119	195	99.1	96.0
Cfsm	1.03	1.32	1.79	1.70	1.41	3.24	3.79	1.50	0.788	1.29	0.656	0.636
In.	1.18	1.48	2.06	1.97	1.47	3.73	4.23	1.73	0.88	1.49	0.76	0.71

Calendar year 1958: Max 1,220 Min 51 Mean 287 Cfsm 1.90 In. 25.76
Water year 1958-59: Max 1,010 Min 37 Mean 241 Cfsm 1.60 In. 21.69

Peak discharge (base, 840 cfs).--Mar. 6 (10 p.m.) 1,080 cfs (5.87 ft); Apr. 3 (4:30 a.m.) 1,020 cfs (5.75 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 2, 3, Dec. 8 to Feb. 14, Feb. 16, 18, Feb. 21 to Mar. 3, Mar. 6.

1770. Chicopee River at Indian Orchard, Mass.

Location.--Lat 42°09'38", long 72°30'52", on left bank 1,000 ft downstream from West Street Bridge at Indian Orchard, Hampden County, and 1.1 miles upstream from Fuller Brook.
Drainage area.--688 sq mi.
Records available.--August 1928 to September 1959. Published as "at Bircham Bend" prior to November 1938.
Gage.--Water-stage recorder. Altitude of gage is 125 ft (from topographic map). Prior to Nov. 1, 1938, at site 1¾ miles downstream at different datum.
Average discharge.--31 years, 1,106 cfs (adjusted to present drainage area and for storage and diversions).
Extremes.--Maximum discharge during year, 5,280 cfs Mar. 7 (gage height, 9.40 ft); minimum daily, 55 cfs Oct. 11.
1928-59: Maximum discharge, 45,200 cfs Sept. 21, 1938, by computation of flow over dam; minimum daily, 16 cfs several times in 1929-31.
Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are good. Diversion since 1941 from 186 sq mi in Swift River basin and at times since 1931 from 97 sq mi in Ware River basin for Boston metropolitan district, since 1950, for city of Chicopee, and since 1952, for South Hadley. Diversion from Ludlow Reservoir for Springfield and, prior to 1952, for Chicopee. Flow regulated by powerplants above station, by Quabbin Reservoir on Swift River since 1939 (see p. 242), by Barre Falls Revervoir on Ware River since 1958, and by smaller reservoirs.
Revisions (water years).--WSP 711: Drainage area. WSP 1231: 1934.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.3	52	5.0	640
3.7	115	6.0	1,340
4.1	217	8.0	3,450
4.5	368	9.0	4,720

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	940	410	1,360	426	608	396	1,570	1,450	492	397	522	1,590
2	983	578	1,260	808	626	472	1,700	1,360	474	440	298	1,200
3	1,230	664	1,140	680	802	812	4,170	1,000	751	300	436	973
4	452	878	1,100	b620	*817	1,130	3,900	1,200	702	270	505	1,750
5	584	804	1,160	b450	1,360	1,830	2,640	1,050	568	210	415	1,220
6	938	772	1,560	b520	1,070	2,010	2,200	1,200	554	220	330	698
7	742	703	1,280	b350	643	4,490	1,900	1,050	602	260	440	694
8	570	471	1,150	b590	760	1,970	1,800	1,000	780	600	370	670
9	604	614	1,140	b410	753	1,600	1,800	800	658	330	250	539
10	668	882	928	b350	490	1,540	1,900	900	478	*308	500	490
11	55	986	825	b290	930	*1,340	2,100	650	454	350	510	410
12	476	899	856	b390	796	1,200	1,800	950	368	276	216	340
13	594	714	808	480	714	968	1,650	1,200	412	403	326	328
14	*509	754	664	430	846	929	1,550	1,100	428	393	316	462
15	486	584	705	439	1,130	962	*1,450	1,000	533	524	482	338
16	405	610	821	602	1,280	1,230	1,380	1,150	768	511	220	400
17	440	754	659	1,050	1,060	1,660	1,290	360	455	410	330	376
18	268	678	750	878	990	1,490	1,250	920	568	497	387	368
19	318	694	766	b580	942	1,190	1,200	900	567	232	227	325
20	508	702	672	743	660	1,320	1,170	800	598	713	280	276
21	448	629	657	914	556	2,270	1,400	600	506	2,040	350	386
22	421	471	588	2,840	b480	2,760	1,280	680	475	2,230	220	361
23	444	646	742	2,740	b500	1,870	1,190	810	650	1,720	160	294
24	622	624	517	1,600	b580	1,600	1,200	258	658	1,710	420	318
25	594	615	654	1,300	b450	1,490	998	484	438	1,420	370	310
26	641	559	b360	1,170	b440	1,460	862	620	439	1,180	220	264
27	815	571	b460	1,050	492	1,460	1,000	360	650	1,040	380	379
28	796	644	510	661	521	1,320	1,500	520	450	841	290	240
29	742	1,570	530	850	-	1,170	1,580	466	580	608	282	204
30	662	2,070	575	950	-------	1,120	1,640	338	630	487	476	308
31	655	-------	*533	994	-------	985	-------	282	-------	646	1,240	-------
Total	18,610	22,550	25,730	26,155	21,296	46,044	51,070	25,458	16,686	21,566	11,768	16,511
Mean	600	752	830	844	761	1,485	1,702	821	556	696	380	550
(†)	+1.48	+173	+102	+314	+171	+696	+966	+170	+102	+216	+41.1	-126
Adjusted for diversion and change in reservoir contents												
Mean	602	925	932	1,158	932	2,181	2,668	991	658	912	421	425
Cfsm	0.875	1.34	1.35	1.68	1.35	3.17	3.88	1.44	0.956	1.33	0.612	0.618
In.	1.01	1.50	1.56	1.94	1.41	3.66	4.33	1.66	1.07	1.53	0.70	0.69

	Observed			Adjusted			
Calendar year 1958:	Max 3,800	Min 55	Mean 900	Mean 1,209	Cfsm 1.76	In. 23.83	
Water year 1958-59:	Max 4,490	Min 55	Mean 831	Mean 1,067	Cfsm 1.55	In. 21.06	

* Discharge measurement made on this day.
† Diversion from Ware River, change in contents in Quabbin Reservoir (adjusted for diversion from Ware River), diversion to Wachusett Reservoir and to Chicopee and South Hadley, change in contents in Barre Falls and Ludlow Reservoirs, and diversion from Ludlow Reservoir, equivalent in cubic feet per second.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 29, 30, Apr. 6-15, 27, 28, May 4-21, 26-28, June 28-30, July 2-9, Aug. 6-11, 20-28; discharge estimated on basis of 1 discharge measurement, weather records, and powerplant records.

1795. Westfield River at Knightville, Mass.

Location.--Lat 42°17'16", long 72°51'53", on left bank at Knightville, Hampshire County, 0.2 mile downstream from Knightville Dam, 0.2 mile upstream from Sykes Brook, 2.4 miles upstream from Middle Branch, and 3.5 miles north of Huntington.

Drainage area.--162 sq mi.

Records available.--August 1909 to September 1959.

Gage.--Water-stage recorder and concrete control. Datum of gage is 461.25 ft above mean sea level, datum of 1929 (levels by Corps of Engineers). Prior to Jan. 11, 1935, chain gage at site 0.5 mile upstream at different datum. Jan. 11, 1935, to May 20, 1940, water-stage recorder at site 700 ft upstream at datum 10.57 ft higher. May 21 to Dec. 19, 1940, staff gage at site 700 ft upstream at datum 18.75 ft higher.

Average discharge.--50 years, 324 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 2,850 cfs Apr. 5 (gage height, 5.72 ft); minimum, 10 cfs July 20; minimum daily, 22 cfs Sept. 29.
1909-59: Maximum discharge, 37,900 cfs Sept. 21, 1938 (gage height, 29.58 ft, from floodmarks, site and datum then in use), from rating curve extended above 3,800 cfs on basis of slope-area measurements at gage heights 24.07 and 29.58 ft; minimum, 0.6 cfs Aug. 11, 1941; minimum daily, 4 cfs Aug. 10, 1913.

Remarks.--Records excellent. Flow regulated by Knightville Reservoir since 1941 (see p. 242).

Revisions (water years).--WSP 415: 1909-12. WSP 1001: 1941-43. WSP 1231: 1910, 1912, 1913(M), 1914-15, 1916-19(M), 1921-23(M), 1925-27(M), 1929-33(M), 1935(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.9	18	4.0	765
2.2	46	4.5	1,220
2.5	93	5.0	1,810
3.0	225	6.0	3,310
3.5	440		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	135	178	304	116	495	124	782	698	80	50	42	93
2	243	159	284	114	390	121	1,040	525	88	45	39	84
3	146	352	277	143	185	121	735	440	336	84	35	167
4	110	495	261	124	198	159	1,350	381	190	55	32	224
5	91	607	261	b125	288	176	2,220	334	124	44	96	105
6	77	648	476	b93	313	178	2,680	304	131	38	157	69
7	70	594	350	b110	292	441	2,540	280	136	39	128	54
8	65	415	277	118	197	562	2,290	261	106	*40	93	44
9	62	362	265	106	b170	468	2,020	239	84	33	161	39
10	59	352	b200	105	148	279	1,430	222	70	44	148	36
11	55	317	b145	93	b145	158	1,710	212	59	120	151	34
12	51	269	178	106	b155	167	1,240	247	52	75	102	31
13	50	243	176	79	159	176	797	309	55	67	72	28
14	47	232	b140	80	178	136	*676	304	67	65	59	27
15	47	225	159	93	199	161	627	243	70	67	50	26
16	47	215	170	137	265	184	627	212	62	52	43	32
17	49	199	148	192	284	250	662	190	67	44	40	42
18	47	193	184	261	277	292	614	173	95	37	75	36
19	49	*199	184	250	b210	250	549	156	119	31	73	34
20	49	236	178	187	b140	255	578	161	141	377	49	33
21	49	206	b135	178	b82	617	583	156	91	1,510	40	33
22	49	212	b115	356	b79	993	435	138	70	791	37	34
23	362	184	150	368	122	879	381	124	67	214	32	35
24	770	176	161	473	136	555	348	124	62	136	32	34
25	304	176	136	598	126	588	322	121	54	133	40	29
26	327	173	b110	690	116	854	313	108	54	104	40	31
27	468	232	112	655	89	805	551	99	110	77	35	27
28	507	182	112	620	110	478	904	*89	106	65	31	26
29	352	1,110	114	588	-	366	984	84	86	56	27	22
30	254	644	114	555	---------	352	888	129	65	47	44	29
31	203	--------	116	531	--------	409	--------	101	--------	44	59	--------
Total	5,194	9,785	5,992	8,244	5,548	11,554	30,876	7,164	2,897	4,584	2,062	1,538
Mean	168	326	193	266	198	373	1,029	231	96.6	148	66.5	51.3
(†)	0	+3.24	-0.15	+16.6	-18.1	-3.02	+0.66	-0.93	0	-0.04	+0.04	0
Adjusted for change in contents in Knightville Reservoir												
Mean	168	329	193	283	180	370	1,030	230	96.6	148	66.5	51.3
Cfsm	1.04	2.03	1.19	1.75	1.11	2.28	6.36	1.42	0.596	0.914	0.410	0.317
In.	1.19	2.27	1.37	2.01	1.16	2.63	7.09	1.64	0.67	1.05	0.47	0.35

	Observed			Adjusted		
Calendar year 1958:	Max 3,580	Min 18	Mean 336	Mean 335	Cfsm 2.07	In. 28.08
Water year 1958-59:	Max 2,680	Min 22	Mean 261	Mean 261	Cfsm 1.61	In. 21.90

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Knightville Reservoir.
b Stage-discharge relation affected by ice.

1800. Sykes Brook at Knightville, Mass.

Location.--Lat 42°17'27", long 72°52'15", on right bank 200 ft downstream from bridge on State Highway 112 at Knightville, Hampshire County, 0.4 mile upstream from mouth, 0.4 mile west of Knightville Dam, and 3.5 miles north of Huntington.

Drainage area.--1.64 sq mi.

Records available.--June 1945 to September 1959.

Gage.--Water-stage recorder and concrete control. Datum of gage is 641.40 ft above mean sea level, datum of 1929.

Average discharge.--14 years, 2.70 cfs.

Extremes.--Maximum discharge during year, 53 cfs Apr. 2 (gage height, 2.38 ft); maximum gage height, 2.72 ft Mar. 6 (backwater from ice); minimum discharge, 0.09 cfs Aug. 27-30. 1945-59: Maximum discharge, 680 cfs Aug. 19, 1955 (gage height, 4.485 ft), from rating curve extended above 80 cfs; minimum, 0.03 cfs Aug. 31, Sept. 1, 1953.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-23

1.2	0.12	1.6	1.95
1.3	.25	1.7	3.8
1.4	.48	1.8	6.4
1.5	.93		

Oct. 24 to Sept. 30

1.1	0.07	1.7	3.8
1.2	.17	1.8	6.4
1.3	.31	1.9	10.0
1.4	.55	2.0	15.0
1.5	1.11	2.2	31
1.6	2.2		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.36	1.31	2.9	0.92	1.2	0.80	9.9	5.0	0.42	0.29	a0.22	1.06
2	1.10	1.11	2.5	1.36	1.1	.90	20	4.1	1.49	.33	a.19	*.58
3	.72	4.8	2.2	1.23	1.05	1.5	26	7.3	3.8	.26	a.16	4.6
4	.65	3.7	2.2	1.15	2.5	1.2	17.0	3.6	1.36	.21	a.15	2.5
5	.47	3.4	2.9	.90	2.1	1.4	11.5	1.78	1.03	.20	a.70	1.11
6	.36	3.3	3.7	.70	1.8	7.0	10.5	1.72	1.88	.22	a.90	.72
7	.32	2.8	2.5	.80	1.5	4.0	8.0	2.1	1.94	.18	a.60	.58
8	.32	2.2	2.2	.70	1.2	3.0	8.2	2.3	1.11	*.17	a.40	.69
9	.32	2.2	2.0	.60	1.0	2.2	9.6	2.0	.82	.17	a.45	.62
10	.30	1.90	1.7	.58	1.1	1.84	9.2	1.96	.62	1.55	a.50	.38
11	.26	1.78	1.4	.56	1.2	1.5	11.4	1.96	.50	1.80	a.39	.26
12	.24	1.60	1.8	.56	1.1	1.3	7.4	2.2	.45	.92	a.27	.19
13	.23	1.55	1.5	.56	1.2	1.7	5.8	2.2	.58	3.3	.20	.17
14	.22	1.60	1.4	.56	1.2	1.60	*5.0	2.2	.55	2.1	.19	.17
15	*.22	1.50	1.6	.58	1.8	1.50	4.4	1.84	.46	1.27	.18	.21
16	.24	2.3	1.3	1.5	1.5	2.5	4.0	1.84	.42	.86	.17	.26
17	.26	1.37	1.2	2.2	1.3	2.0	3.6	1.55	.56	.64	.16	.19
18	.30	1.03	1.2	1.4	1.2	1.72	3.5	1.50	.66	.46	.17	.17
19	.24	*1.36	1.2	1.1	1.1	2.3	3.5	1.45	.92	.37	.14	.17
20	.23	1.31	1.15	1.0	.95	10.2	5.0	1.55	.76	4.9	.14	.16
21	.23	1.23	1.1	4.5	.85	13.7	3.9	1.27	.56	5.4	.16	.15
22	.23	1.45	1.05	17	.80	8.0	3.0	1.07	.50	2.8	.17	.14
23	6.2	1.63	1.1	7.0	.75	4.2	2.9	.88	.46	1.55	.12	.14
24	3.2	1.35	1.1	3.4	.80	5.1	2.8	.82	.37	1.07	.19	.15
25	2.1	1.07	1.0	3.0	.75	6.4	2.6	.80	.37	.80	.17	.16
26	3.8	1.31	.88	2.0	.75	7.6	3.3	.76	.41	.52	.12	.14
27	3.5	1.36	.82	1.6	.75	5.0	7.1	.72	.73	.39	.10	.13
28	2.8	2.8	.99	1.3	.80	3.7	6.2	.62	.64	.30	.10	.13
29	2.2	9.8	1.07	1.2	-	3.2	7.7	.63	.49	.28	.11	.14
30	1.84	4.3	1.03	2.0	-------	2.9	5.6	.74	.35	.26	1.18	.14
31	1.55	-------	.99	1.4	-------	4.9	-------	.55	-------	.24	1.23	-------
Total	36.01	68.42	49.68	63.36	33.35	114.86	228.6	59.01	25.21	33.81	9.93	16.21
Mean	1.16	2.28	1.60	2.04	1.19	3.71	7.62	1.90	0.840	1.09	0.320	0.540
Cfsm	0.707	1.39	0.976	1.24	0.726	2.26	4.65	1.16	0.512	0.665	0.195	0.329
In.	0.82	1.55	1.13	1.44	0.76	2.60	5.18	1.34	0.57	0.77	0.23	0.37

Calendar year 1958: Max 31 Min 0.07 Mean 2.76 Cfsm 1.68 In. 22.83
Water year 1958-59: Max 26 Min 0.10 Mean 2.02 Cfsm 1.23 In. 16.76

Peak discharge (base, 35 cfs).--Apr. 2 (10:30 to 11:30 p.m.) 53 cfs (2.38 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for West Branch Westfield River at Huntington and Mill River at Northampton.
Note.--Stage-discharge relation affected by ice Nov. 30, Dec. 6, 7, 10-25, Jan. 5 to Mar. 9, Mar. 11-13, 19, 22, 23, 29.

1805. Middle Branch Westfield River at Goss Heights, Mass.

Location.--Lat 42°15'31", long 72°52'23", on right bank at upstream side of highway bridge at Goss Heights, Hampshire County, 0.35 mile upstream from mouth and 1.7 miles north of Huntington.

Drainage area.--52.6 sq mi.

Records available.--July 1910 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 400.30 ft above mean sea level, datum of 1929. Prior to Sept. 8, 1912, chain gage at same site. Prior to June 25, 1930, at datum 1.00 ft higher.

Average discharge.--49 years, 104 cfs.

Extremes.--Maximum discharge during year, 2,000 cfs Apr. 3 (gage height, 4.20 ft); maximum gage height, 5.97 ft Jan. 22 (backwater from ice); minimum discharge, 4.2 cfs Sept. 28-30. 1910-59: Maximum discharge, 19,900 cfs Sept. 21, 1938 (gage height, 10.61 ft), from rating curve extended above 3,200 cfs on basis of mean of two contracted-opening measurements of peak flow; maximum gage height, 13.87 ft Mar. 12, 1936 (ice jam); practically no flow Sept. 3, 22, Oct. 20, 1910, July 30, 1912, Oct. 26, 27, 1914.

Remarks.--Records good except those for periods of ice effect, which are fair. Some diurnal fluctuation at low flow prior to 1952 caused by mill above station.

Revisions (water years).--WSP 415: 1910-13. WSP 781: 1933(M), drainage area.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.1	4.4	1.5	185
.2	7.4	2.0	357
.3	11	2.5	575
.5	22	3.0	860
.7	39	3.5	1,260
1.0	77		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79	71	126	30	54	36	384	210	16	11	10	g27
2	102	61	115	32	43	36	653	165	21	10	9.3	*20
3	56	192	100	36	*40	46	1,090	142	88	11	7.7	130
4	42	216	95	33	70	55	724	g122	40	9.7	7.0	90
5	34	259	99	28	86	48	537	g103	31	8.1	g25	34
6	28	280	182	23	75	190	533	g86	50	7.4	g38	21
7	26	223	115	32	65	240	402	g84	57	7.4	g32	15
8	24	151	93	25	50	110	499	g81	34	*7.4	22	12
9	22	128	82	26	37	72	585	g76	26	6.4	g26	10
10	22	122	71	25	50	*58	449	g68	20	38	g36	8.9
11	20	107	62	24	54	50	533	g65	16	33	g27	8.5
12	18	91	78	23	52	45	333	79	14	16	20	7.4
13	18	81	66	23	52	55	239	86	15	25	14	6.4
14	18	79	61	24	60	53	*205	95	16	34	12	6.1
15	*17	77	64	25	77	50	188	76	16	20	9.7	6.1
16	18	74	58	31	68	80	182	66	14	15	8.1	8.1
17	18	68	57	80	61	77	185	59	16	11	7.4	8.1
18	18	66	54	75	57	65	172	54	20	9.3	9.3	6.7
19	17	*71	49	50	47	61	160	50	25	7.7	12	6.1
20	16	86	46	43	36	160	188	52	28	289	8.9	6.1
21	16	79	32	52	41	350	162	46	20	364	7.7	6.1
22	16	79	35	800	36	350	g137	41	15	98	7.7	5.8
23	211	68	46	300	33	185	g122	37	14	49	6.4	5.5
24	247	64	40	150	35	155	g111	38	13	33	6.4	4.9
25	117	65	29	125	34	208	g103	36	11	26	8.1	4.6
26	145	65	28	100	34	291	g95	32	12	22	7.4	4.6
27	216	88	34	80	33	250	219	29	19	19	6.1	4.6
28	232	70	34	66	34	160	284	26	30	15	6.1	4.4
29	146	524	*32	57	-	120	329	*23	25	13	6.1	4.4
30	105	191	32	64	-------	110	259	21	16	11	16	4.6
31	82	-------	31	72	-------	146	-------	18	-------	10	16	-------
Total	2,146	3,796	2,046	2,554	1,414	3,912	10,062	2,166	738	1,236.4	435.4	487.0
Mean	69.2	127	66.0	82.4	50.5	126	335	69.9	24.6	39.9	14.0	16.2
Cfsm	1.32	2.41	1.25	1.57	0.960	2.40	6.37	1.33	0.468	0.759	0.266	0.308
In.	1.52	2.68	1.45	1.81	1.00	2.77	7.11	1.53	0.52	0.87	0.31	0.34

Calendar year 1958: Max 992 Min 4.6 Mean 104 Cfsm 1.98 In. 26.94
Water year 1958-59: Max 1,090 Min 4.4 Mean 84.9 Cfsm 1.61 In. 21.91

Peak discharge (base, 1,650 cfs).--Apr. 3 (1 a.m.) 2,000 cfs (4.20 ft).

* Discharge measurement made on this day.
g Computed from graph based on once-daily chain-gage readings.
Note.--Stage-discharge relation affected by ice Nov. 28, Dec. 2, 3, Dec. 7 to Mar. 24, Mar. 29, 30.

1810. West Branch Westfield River at Huntington, Mass.

Location.--Lat 42°14'14", long 72°53'46", on left bank at Huntington, Hampshire County, 0.4 mile downstream from Roaring Brook and 1½ miles upstream from mouth.

Drainage area.--93.7 sq mi.

Records available.--September 1935 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 388.60 ft above mean sea level, datum of 1929.

Average discharge.--24 years, 189 cfs.

Extremes.--Maximum discharge during year, 3,890 cfs Apr. 2 (gage height, 5.85 ft); minimum, 9.4 cfs Sept. 28-30.
1935-59: Maximum discharge, 26,100 cfs Aug. 19, 1955 (gage height, 15.27 ft), from rating curve extended above 9,500 cfs on basis of slope-area measurement of peak flow; minimum, 3.3 cfs Aug. 9, 1955, Nov. 27, 1957.

Remarks.--Records good except those for periods of ice effect, which are fair. Prior to 1950, some diurnal fluctuation at low flow caused by mill above station.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.5	7.7	2.0	245
.6	11	2.5	550
.8	21	3.0	950
1.1	44	4.0	1,780
1.4	78	4.5	2,280
1.7	140		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	190	128	229	60	100	65	527	386	37	29	18	51
2	230	113	198	64	80	65	1,310	306	46	26	16	*37
3	122	441	170	72	*76	82	1,800	265	206	30	14	234
4	93	475	170	67	130	99	1,110	229	94	25	*13	149
5	78	494	191	57	160	85	806	205	65	19	35	60
6	65	466	348	46	140	344	822	188	68	17	62	38
7	60	369	221	64	120	432	614	174	81	18	48	29
8	54	260	180	49	95	200	710	170	62	*18	38	24
9	54	225	164	51	68	130	830	149	47	15	45	21
10	50	205	140	49	94	*105	670	135	39	40	51	18
11	45	177	120	47	96	92	806	128	32	76	39	17
12	42	149	155	47	94	80	529	158	29	39	28	16
13	40	132	130	47	92	100	386	194	29	51	22	14
14	40	135	120	47	100	95	*344	205	33	59	19	13
15	*39	138	125	49	140	90	312	161	32	38	17	13
16	39	135	113	62	125	145	300	135	29	29	15	17
17	39	122	113	160	110	140	295	120	31	23	13	18
18	40	122	109	150	105	115	280	113	40	19	13	15
19	39	*128	99	100	85	110	270	105	48	16	16	14
20	38	152	93	83	65	288	347	109	55	314	14	13
21	36	130	65	102	75	621	322	95	39	640	12	13
22	37	128	70	1,300	65	624	255	86	31	173	14	12
23	336	111	93	572	60	328	225	78	31	90	12	11
24	386	105	83	280	63	279	205	74	28	61	12	10
25	194	107	58	245	62	377	191	71	26	47	16	10
26	295	105	57	184	61	508	198	64	28	39	15	10
27	431	135	70	150	60	450	440	58	75	33	12	11
28	394	116	70	125	61	280	529	53	80	27	11	*9.8
29	250	883	64	105	-	214	550	*47	58	23	10	9.4
30	188	341	*65	120	-------	198	445	45	41	20	25	9.4
31	149	-------	64	140	-------	242	-------	41	-------	19	31	-------
Total	4,093	6,727	3,947	4,694	2,582	6,983	16,428	4,347	1,540	2,073	706	916.6
Mean	132	224	127	151	92.2	225	548	140	51.3	66.9	22.8	30.6
Cfsm	1.41	2.39	1.36	1.61	0.984	2.40	5.85	1.49	0.547	0.714	0.243	0.327
In.	1.62	2.67	1.57	1.86	1.02	2.77	6.52	1.73	0.61	0.82	0.28	0.36

Calendar year 1958: Max 1,860 Min 13 Mean 186 Cfsm 1.99 In. 26.88
Water year 1958-59: Max 1,800 Min 9.4 Mean 151 Cfsm 1.61 In. 21.83

Peak discharge (base, 2,700 cfs).--Apr. 2 (12 p.m.) 3,890 cfs (5.85 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 10, 11, 21, 22, 25, 26, Jan. 5-19, 22, Jan. 27 to Feb. 22, Mar. 8-19.

1830. Westfield Little River at outlet of Cobble Mountain Reservoir, near Westfield, Mass.

Location.--Lat 42°07'34", long 72°53'37", at Cobble Mountain Dam, 7½ miles west of Westfield, Hampden County.

Drainage area.--45.8 sq mi.

Records available.--July 1905 to September 1959. Published as "near Blandford" 1905-11 and as "near Westfield" 1912-35.

Gage.--Venturi meters at outlet tunnel at powerhouse 2.4 miles downstream. Prior to Mar. 1, 1910, staff or chain gages at site a quarter of a mile upstream and Mar. 1, 1910, to Sept. 30, 1935, water-stage recorder at diversion dam 2⅔ miles downstream.

Average discharge.--49 years (1910-59), 90.7 cfs (adjusted to present drainage area).

Remarks.--Discharge computed on basis of flow through venturi meters and flow over reservoir spillway or through bypass tunnel. Flow regulated by Borden Brook Reservoir since 1910 and Cobble Mountain Reservoir since August 1931 (see p. 242); discharge adjusted for effect of this regulation.

Cooperation.--Records furnished by Board of Water Commissioners, Springfield.

Revisions.--WSP 501: Drainage area.

Monthly discharge, in cubic feet per second, water year October 1958 to September 1959

Month	Mean	Per square mile	Runoff in inches
October	63.4	1.38	1.60
November	94.2	2.06	2.29
December	43.2	.943	1.09
Calendar year 1958	97.4	2.13	28.87
January	75.0	1.64	1.89
February	36.8	.803	.84
March	129	2.82	3.24
April	256	5.59	6.25
May	51.0	1.11	1.28
June	22.8	.498	.56
July	18.4	.402	.46
August	6.19	.135	.16
September	12.5	.273	.31
Water year 1958-59	67.3	1.47	19.97

1835. Westfield River near Westfield, Mass.

Location.--Lat 42°06'24", long 72°41'58", on left bank 0.7 mile downstream from Great Brook and 3 miles east of Westfield, Hampden County.

Drainage area.--497 sq mi.

Records available.--June 1914 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 98.25 ft above mean sea level, datum of 1929. Prior to Nov. 3, 1933, on right bank at same datum.

Average discharge.--45 years, 949 cfs (adjusted for diversion and, since October 1931, for storage).

Extremes.--Maximum discharge during year, 8,880 cfs Apr. 3 (gage height, 11.57 ft); minimum, 80 cfs Aug. 24; minimum daily, 95 cfs Sept. 28.
1914-59: Maximum discharge, 70,300 cfs Aug. 19, 1955 (gage height, 34.2 ft, from floodmarks), from rating curve extended above 18,000 cfs on basis of computations of flow over dam at gage heights 27.20, 29.40, and 34.2 ft; minimum, 9 cfs Oct. 2, 1921.

Remarks.--Records excellent except those for periods of ice effect, which are good. Flow regulated by diversion from Westfield Little River for municipal supply of Springfield and by Borden Brook Reservoir, Cobble Mountain Reservoir since 1931, and Knightville Reservoir since 1941 (see p. 242).

Revisions (water years).--WSP 601: 1924(M). WSP 756: Drainage area. WSP 1051: 1919-21(M), 1925(M). WSP 1231: 1915-16(M), 1920.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.8	85	5.0	945
3.1	133	6.0	1,690
3.5	233	8.0	3,720
4.0	420	10.0	6,440
4.5	645		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	404	550	978	280	800	320	1,890	1,750	273	197	151	270
2	850	484	844	380	900	370	3,630	1,390	273	215	133	266
3	541	1,010	772	370	500	410	6,030	1,170	820	179	133	370
4	433	1,500	724	330	*700	480	4,290	1,040	625	174	129	870
5	302	1,630	784	450	800	460	3,980	938	404	249	141	371
6	341	1,610	1,240	500	720	1,200	4,610	868	348	186	352	228
7	243	1,500	1,040	500	620	1,700	4,070	784	383	158	274	187
8	253	1,090	1,020	600	500	1,100	3,840	754	400	145	278	171
9	250	900	1,130	600	780	900	4,040	667	350	*141	246	151
10	236	893	984	300	790	660	*3,290	610	244	114	367	141
11	215	802	954	230	800	500	3,660	635	209	271	332	149
12	198	706	934	400	780	520	2,900	645	196	246	270	128
13	230	600	664	470	580	540	2,060	808	179	203	206	109
14	190	600	488	350	520	500	1,730	850	206	266	176	126
15	195	577	810	550	620	450	1,560	742	221	220	135	124
16	*203	577	938	720	821	650	1,480	595	198	118	141	117
17	192	590	961	684	778	700	1,490	546	215	160	133	135
18	181	541	917	625	1,070	650	1,420	564	255	171	129	129
19	171	541	900	903	914	620	1,290	492	306	126	153	126
20	215	595	600	660	800	1,100	1,490	492	344	313	155	110
21	200	*582	400	560	400	2,270	1,540	514	269	2,870	145	124
22	176	532	800	3,300	300	2,880	1,220	437	231	1,680	143	135
23	654	510	748	1,980	300	1,900	1,070	395	232	612	127	109
24	2,010	518	555	1,230	380	1,400	984	332	203	391	115	115
25	912	445	300	1,050	370	1,510	893	387	181	302	135	124
26	874	611	330	1,140	360	1,990	850	348	184	277	122	126
27	1,470	568	336	1,040	321	2,140	1,280	310	208	262	216	109
28	1,480	572	336	984	291	1,340	2,270	325	336	179	188	95
29	1,110	2,710	627	930	-	971	2,220	284	313	176	147	128
30	796	1,770	804	920	--------	1,010	2,140	227	240	158	135	129
31	630	--------	*474	940	--------	1,020	--------	284	--------	162	329	--------
Total	16,155	26,114	23,392	23,976	17,515	32,261	73,217	20,183	8,846	10,921	5,836	5,472
Mean	521	870	755	773	626	1,041	2,441	651	295	352	188	182
(†)	+58.7	+91.6	-162	-8.21	-117	+128	+266	+50.9	+21.6	+18.3	+3.02	+12.7

Adjusted for diversion and change in reservoir contents

Mean	580	962	592	765	508	1,169	2,706	702	316	371	191	195
Cfsm	1.17	1.94	1.19	1.54	1.02	2.35	5.44	1.41	0.636	0.746	0.384	0.392
In.	1.34	2.16	1.37	1.78	1.06	2.71	6.08	1.63	0.71	0.86	0.44	0.44

	Observed			Adjusted			
Calendar year 1958:	Max 6,350	Min 105	Mean 945	Mean 1,003	Cfsm 2.02	In. 27.38	
Water year 1958-59:	Max 6,030	Min 95	Mean 723	Mean 754	Cfsm 1.52	In. 20.58	

* Discharge measurement made on this day.
† Diversion from Westfield Little River and change in contents in Knightville, Borden Brook, and Cobble Mountain Reservoirs, equivalent in cubic feet per second.
Note.--Stage-discharge relation affected by ice Dec. 19-22, 25, 26, Jan. 1-16, 20, 21, Jan. 29 to Feb. 15, Feb. 20-25, Mar. 1-20.

1840. Connecticut River at Thompsonville, Conn.

Location.--Lat 41°59'14", long 72°36'21", on right bank just upstream from Enfield Dam and 1 mile downstream from Thompsonville, Hartford County.

Drainage area.--9,661 sq mi.

Records available.--July 1928 to September 1959.

Gage.--Water-stage recorder on river and on canal of Connecticut Light and Power Co. Datum of gage is 38.48 ft above mean sea level, datum of 1929.

Average discharge.--31 years, 16,430 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 99,700 cfs Apr. 5 (gage height, 6.86 ft); minimum daily, 1,360 cfs Aug. 16.
1928-59: Maximum discharge, 282,000 cfs Mar. 20, 1936 (gage height, 16.6 ft, from floodmarks); minimum daily, 1,060 cfs Aug. 28, 1949, Sept. 27, 1953.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Discharge includes water diverted around station by canal of Connecticut Light & Power Co. Flow regulated by powerplants, by diversion from Chicopee River basin, and by First Connecticut and Second Connecticut Lakes, Lake Francis, Comerford Station Pond and Moore Reservoir, Quabbin Reservoir (see p. 242), and other reservoirs (combined usable capacity, about 97½ billion cubic feet).

Revisions (water years).--WSP 741: 1932. WSP 891: Drainage area.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,700	16,200	12,400	5,840	b15,200	5,250	20,500	33,900	4,810	9,680	2,650	8,720
2	9,490	12,000	13,900	6,350	b11,600	5,580	27,800	32,000	7,240	8,340	1,600	9,910
3	10,400	9,610	13,600	8,640	12,500	7,880	58,000	27,900	*8,490	9,300	2,810	9,910
4	7,800	15,400	13,700	5,540	13,300	9,390	87,900	23,400	9,100	5,700	2,960	14,000
5	4,680	14,700	13,900	b5,220	14,600	12,000	98,000	20,600	8,710	1,980	2,990	11,900
6	4,710	14,400	14,800	a6,300	15,700	13,500	87,100	19,500	7,660	3,290	*2,680	5,050
7	6,530	13,800	12,600	a6,800	b13,300	24,200	79,500	17,800	3,980	4,210	2,500	2,200
8	7,100	12,700	9,950	a6,700	b12,200	19,200	73,400	17,000	4,450	4,090	2,140	3,780
9	7,260	10,000	13,300	a6,600	b11,500	14,300	70,300	16,600	6,290	4,460	1,430	5,470
10	7,020	8,380	13,900	a5,900	11,100	14,000	77,900	15,600	5,940	3,870	4,510	4,660
11	5,760	10,500	11,200	a4,750	9,490	12,400	76,800	8,490	5,450	5,390	8,300	4,840
12	2,430	9,890	b11,600	a4,390	b9,580	11,300	74,800	11,400	4,960	3,230	10,700	4,000
13	4,070	11,400	9,930	6,090	9,780	10,900	66,100	14,900	4,190	3,580	6,660	1,430
14	7,340	11,500	5,810	6,460	10,100	10,800	56,700	17,100	2,860	5,650	4,860	3,240
15	7,990	10,800	6,760	6,620	10,200	7,870	50,400	16,900	3,890	5,950	4,050	5,110
16	*7,460	10,600	8,790	7,820	9,710	8,410	46,200	15,900	10,000	5,380	1,360	5,180
17	7,980	10,100	8,790	11,200	10,700	11,500	44,700	11,600	13,200	5,400	2,230	4,420
18	6,860	11,700	8,790	8,180	10,100	13,200	44,900	8,710	16,900	3,260	3,850	4,000
19	6,670	12,400	9,390	6,360	b9,590	12,200	46,100	9,300	15,700	1,490	4,580	2,590
20	5,780	12,000	10,200	9,500	b11,600	13,400	47,500	10,400	14,300	3,690	4,060	4,700
21	7,980	*12,000	6,590	10,800	b9,510	18,900	46,100	10,500	13,700	13,400	4,300	3,010
22	7,890	11,500	6,130	23,600	b6,250	28,300	43,100	10,700	11,100	11,600	3,320	4,810
23	9,640	9,250	7,650	38,700	4,270	27,400	38,200	10,400	10,900	8,610	1,590	4,190
24	16,500	7,920	8,070	33,100	6,070	25,200	33,900	8,470	9,690	7,740	2,810	4,000
25	15,800	10,300	7,620	23,000	5,730	25,800	26,700	5,520	10,200	5,170	4,660	3,570
26	13,600	11,300	5,600	b19,100	5,390	25,600	28,000	10,100	8,890	3,080	4,180	2,740
27	8,790	10,900	5,910	b15,600	5,670	27,700	25,000	9,500	7,150	3,760	4,310	1,380
28	13,200	11,000	5,250	14,600	6,180	25,300	*28,500	9,300	4,340	4,290	4,310	2,750
29	16,300	19,700	5,150	15,000	-	22,000	35,300	8,120	4,800	3,690	3,240	3,610
30	16,700	21,700	6,910	14,100	---------	17,200	36,400	5,720	9,380	3,450	2,480	4,540
31	17,000	--------	6,940	15,600	---------	16,900	--------	5,660	--------	3,340	6,050	--------
Total	279,430	363,650	295,130	358,460	280,920	497,580	‡1,575,8	442,990	248,270	166,070	118,170	149,710
Mean	9,014	12,120	9,520	11,560	10,030	16,050	52,530	14,290	8,276	5,357	3,812	4,990
(†)	-229	-340	-1,357	-194	-1,965	-77.7	+5,321	+1,565	+949	-459	-343	-601

Adjusted for change in reservoir contents and diversion

Mean	8,785	11,780	8,164	11,370	8,068	15,970	57,850	15,860	9,224	4,898	3,469	4,389
Cfsm	0.909	1.22	0.845	1.18	0.835	1.65	5.99	1.64	0.955	0.507	0.359	0.454
In.	1.05	1.36	0.97	1.36	0.87	1.91	6.68	1.89	1.07	0.58	0.41	0.51

	Observed						Adjusted					
Calendar year 1958:	Max	108,000	Min	1,300	Mean	16,950	Mean	17,070	Cfsm	1.77	In.	23.98
Water year 1958-59:	Max	98,000	Min	1,360	Mean	13,090	Mean	13,280	Cfsm	1.37	In.	18.66

* Discharge measurement made on this day.
† Change in contents in all reservoirs from First Connecticut and Second Connecticut Lakes to Borden Brook and Cobble Mountain Reservoirs, listed on page 242, and diversion from Chicopee River basin, equivalent in cubic feet per second.
‡ Expressed in thousands.
a No gage-height record; discharge estimated on basis of weather records and weekly regulation pattern.
b Stage-discharge relation affected by ice.

1845. Scantic River at Broad Brook, Conn.

Location.--Lat 41°54'42", long 72°33'48", on left bank 300 ft upstream from bridge on State Highway 140, half a mile downstream from Broad Brook, 1 mile southwest of town of Broad Brook, Hartford County, and 8¼ miles upstream from mouth.

Drainage area.--98.4 sq mi.

Records available.--August 1928 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 26.23 ft above mean sea level, datum of 1929.

Average discharge.--31 years, 142 cfs.

Extremes.--Maximum discharge during year, 1,130 cfs Apr. 4 (gage height, 7.79 ft); minimum, 37 cfs Aug. 5 (gage height, 0.70 ft); minimum daily, 44 cfs Aug. 4, 27.
1928-59: Maximum discharge, 13,300 cfs Aug. 19, 1955 (gage height, 19.9 ft, from floodmarks), from rating curve extended above 1,200 cfs on basis of computation of flow over dams, 7 and 9 miles above station, at gage heights 13.9 and 14.4 ft, adjusted for flow from intervening area on basis of computation of flow over dam on Broad Brook and by slope-area measurement of peak flow; minimum, 10 cfs Aug. 13, 14, 1944; minimum daily, 16 cfs Aug. 13, 1944.

Remarks.--Records excellent. Flow regulated by mills and small reservoirs upstream. Records of chemical analyses, water temperatures, and suspended sediment loads for the water year 1959 are given in WSP 1641.

Revisions (water years).--WSP 726: 1931. WSP 781: Drainage area. WSP 851: 1936(M). WSP 921: 1940. WSP 1201: 1929(M), 1934(M), 1938-39, 1948-49.

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from ice Dec. 11, 16, 21, 22, 25, 26, Jan. 28, Feb. 12, 20)

Oct. 1 to Nov. 28		Nov. 29 to Apr. 4, Sept. 18-30				Apr. 5 to Sept. 17	
0.9	62	0.7	41	6.0	706	0.7	37
1.2	97	2.1	193	7.3	986	2.1	193
2.2	206	4.0	440			4.0	440
						6.0	706

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	144	104	459	88	93	112	*278	297	*59	*58	57	336
2	206	98	278	200	102	117	350	252	85	62	53	245
3	181	146	212	232	81	163	782	219	238	63	50	279
4	149	200	212	181	216	343	977	*187	200	59	44	414
5	115	193	272	138	238	*388	562	163	148	54	45	512
6	98	173	349	171	187	543	440	148	99	52	58	363
7	*87	144	310	115	98	860	388	139	94	54	65	186
8	84	125	252	89	105	572	342	130	88	52	61	122
9	81	130	206	80	78	271	310	125	*76	48	63	*97
10	80	175	158	71	98	212	316	117	69	46	143	86
11	74	179	149	69	143	187	401	*113	62	69	166	79
12	70	157	148	69	135	162	414	116	57	80	86	73
13	68	133	135	68	117	139	362	136	67	72	66	69
14	67	122	125	69	112	144	304	170	96	75	62	65
15	68	120	125	72	407	152	264	161	95	91	57	63
16	69	119	126	131	353	372	245	137	84	110	52	67
17	68	117	126	316	252	488	226	117	78	86	50	64
18	67	115	126	304	200	401	212	109	80	69	50	65
19	66	118	123	222	146	278	206	102	92	65	54	63
20	66	120	123	113	106	252	238	102	99	122	57	62
21	66	118	108	146	93	290	264	99	87	430	50	61
22	64	111	108	717	85	368	264	90	73	342	51	60
23	133	104	105	669	79	323	219	82	79	238	53	56
24	177	100	105	379	78	252	193	78	81	133	50	54
25	170	97	96	206	82	219	175	79	73	108	51	53
26	201	99	95	146	81	200	164	75	73	89	50	53
27	187	122	86	112	78	212	178	71	94	*76	44	52
28	161	146	88	114	88	212	232	66	86	69	47	50
29	138	571	89	105	-	193	297	64	80	64	77	*58
30	121	560	*90	*113	-------	193	310	64	77	59	113	63
31	*111	-------	96	128	-------	252	-------	67	-------	57	323	-------
Total	3,437	4,816	5,080	5,633	3,931	8,870	9,913	3,875	2,769	3,052	2,248	3,870
Mean	111	161	164	182	140	286	330	125	92.3	98.5	72.5	129
Cfsm	1.13	1.64	1.67	1.85	1.42	2.91	3.35	1.27	0.938	1.00	0.737	1.31
In.	1.30	1.83	1.92	2.13	1.48	3.36	3.74	1.46	1.05	1.15	0.85	1.46

Calendar year 1958: Max 586 Min 30 Mean 159 Cfsm 1.62 In. 21.88
Water year 1958-59: Max 977 Min 44 Mean 158 Cfsm 1.61 In. 21.73

Peak discharge (base, 550 cfs).--Nov. 29 (9 to 10 a.m.) 673 cfs (5.84 ft); Jan. 23 (4 a.m.) 778 cfs (6.41 ft); Mar. 7 (8 to 9 p.m.) 986 cfs (7.27 ft); Mar. 16 (10 p.m.) 599 cfs (5.28 ft); Apr. 4 (5 to 7 a.m.) 1,130 cfs (7.79 ft); Sept. 5 (4 to 6 p.m.) 560 cfs (4.99 ft).

* Discharge measurement made on this day.

1855. West Branch Farmington River near New Boston, Mass.

Location.--Lat 42°04'45", long 73°04'24", on left bank 5 ft downstream from highway bridge, 0.3 mile downstream from Clam River, and 1 mile south of New Boston, Berkshire County.
Drainage area.--92.0 sq mi.
Records available.--May 1913 to September 1959. Prior to October 1948, published as Farmington River near Near New Boston.
Gage.--Water-stage recorder. Datum of gage is 758.21 ft above mean sea level, datum of 1929.
Average discharge.--46 years, 183 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 2,440 cfs Apr. 2 (gage height, 6.84 ft); minimum daily, 6.0 cfs Aug. 29.
1913-59: Maximum discharge, 34,300 cfs Aug. 19, 1955 (gage height, 14.06 ft), from rating curve extended above 9,600 cfs on basis of slope-area measurement of peak flow; minimum daily, 2.4 cfs Aug. 20, 21, 1957.
Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by Otis Reservoir (see p. 243).
Revisions (water years).--WSP 641: 1924(M). WSP 756: Drainage area. WSP 781: 1928(M). WSP 1231: 1914.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.0	3.7	3.5	203
2.1	7.1	4.0	360
2.3	18	4.5	570
2.5	32	5.0	840
2.8	64	6.0	1,600
3.1	112		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	294	200	290	130	80	50	388	300	40	*23	18	66
2	304	178	240	140	62	50	958	250	*70	30	15	*37
3	211	314	222	145	60	62	1,300	200	358	26	14	135
4	171	381	219	140	100	76	846	175	130	20	12	175
5	151	435	250	130	120	68	585	150	116	16	42	91
6	142	415	339	125	110	260	610	135	122	16	77	72
7	137	350	180	135	90	350	530	125	133	22	55	47
8	129	278	140	125	70	165	540	115	78	19	30	22
9	118	250	130	125	52	110	595	110	56	15	42	16
10	*114	227	115	125	70	*90	*555	100	43	15	42	14
11	110	203	100	120	74	76	635	96	35	28	33	12
12	105	186	120	120	72	64	498	110	30	25	24	11
13	101	180	130	120	74	78	392	160	37	34	20	10
14	99	178	180	120	80	74	350	190	50	36	20	9.0
15	98	173	180	120	110	72	300	150	37	28	14	9.4
16	96	186	170	130	100	115	244	120	33	23	13	12
17	98	171	165	180	85	105	227	105	35	18	12	11
18	94	178	160	120	80	92	222	95	48	15	13	10
19	92	183	*150	80	66	88	220	90	62	13	15	9.9
20	91	*193	145	65	50	180	350	92	58	123	9.9	9.0
21	91	186	140	80	58	500	300	82	43	594	9.4	9.0
22	99	176	140	1,000	50	450	230	70	39	290	9.0	10
23	302	164	160	450	46	260	195	60	52	140	7.6	9.9
24	353	160	150	210	48	225	175	56	39	71	8.5	9.0
25	281	153	140	180	48	280	165	52	49	47	9.0	11
26	494	164	135	150	48	380	160	47	83	33	8.0	9.9
27	550	183	145	120	46	328	230	47	74	30	7.1	9.0
28	463	185	145	105	47	222	370	40	55	28	6.3	7.6
29	350	784	140	*90	-	164	380	43	43	23	6.0	58
30	274	400	140	100	---------	148	330	78	31	22	11	60
31	230	--------	135	110	---------	182	--------	52	--------	20	55	--------
Total	6,242	7,414	5,195	5,090	1,996	5,364	12,880	3,495	2,079	1,843	657.8	971.7
Mean	201	247	168	164	71.3	173	429	113	69.3	59.5	21.2	32.4
(†)	-44.9	-23.6	-40.2	-28.4	+29.3	+40.2	+56.7	+14.3	+3.0	-1.4	0.0	-10.4
Adjusted for change in contents in Otis Reservoir												
Mean	156	224	127	138	101	213	486	127	72.3	58.1	21.2	22.0
Cfsm	1.70	2.43	1.38	1.50	1.10	2.32	5.28	1.38	0.786	0.632	0.230	0.239
In.	1.96	2.71	1.60	1.73	1.14	2.67	5.89	1.59	0.88	0.73	0.27	0.27

		Observed				Adjusted				
Calendar year 1958:	Max	1,400	Min	10	Mean	195	Mean	198	Cfsm	2.15	In.	29.31
Water year 1958-59:	Max	1,300	Min	6.0	Mean	146	Mean	145	Cfsm	1.58	In.	21.44

Peak discharge (base, 1,400 cfs).--Jan. 22 (time and discharge unknown); Mar. 6 (5 p.m.) 1,620 cfs (6.02 ft); Apr. 2 (12 p.m.) 2,440 cfs (6.84 ft).

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Otis Reservoir.
Note.--No gage-height record Jan. 25-29, Apr. 19 to June 2; discharge estimated on basis of 2 discharge measurements, weather records, recorded range in stage when available, and records for West Branch Westfield River at Huntington, records of discharge released from Otis Reservoir, and records for station at Riverton, Conn. Stage-discharge relation affected by ice Nov. 30 to Dec. 2, Dec. 7 to Mar. 26.

1860. West Branch Farmington River above Still River, at Riverton, Conn.

Location.--Lat 41°57'46", long 73°01'05", on right bank at downstream side of bridge on State Highway 20 at Riverton, Litchfield County, 0.3 mile upstream from Still River, 2.0 miles downstream from Hogback Dam, and at mile 52.0.

Drainage area.--130 sq mi.

Records available.--August 1955 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 485.60 ft above mean sea level, datum of 1929. Prior to Mar. 29, 1957, wire-weight gage at same site and datum.

Extremes.--Maximum discharge during year, 4,200 cfs Apr. 2 (gage height, 9.06 ft); maximum gage height, 9.26 ft Jan. 22 (ice jam); minimum discharge, 9.5 cfs July 6 (gage height, 2.66 ft).

1955-59: Maximum discharge observed, 10,600 cfs Oct. 16, 1955 (gage height, 12.47 ft); minimum discharge, 2.9 cfs Sept. 16, 1957 (gage height, 2.43 ft).

Flood of Aug. 19, 1955, reached a stage of 21.1 ft, from floodmarks (discharge, 57,200 cfs, by slope-area measurement 1.5 miles upstream).

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by Otis Reservoir (see p. 243), and by Hogback Dam during its construction.

Revisions (water years).--WSP 1501: 1956. WSP 1551: 1957.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.6	10	4.0	252
2.8	27	4.5	410
3.0	54	5.0	620
3.3	105	6.0	1,180
3.5	143	7.0	1,930

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	320	252	389	145	120	80	601	430	60	40	27	128
2	375	222	337	190	90	90	1,460	358	92	57	24	73
3	252	379	296	200	90	110	1,930	291	541	54	21	189
4	198	*486	276	180	150	150	1,150	257	241	38	20	342
5	173	544	316	170	180	130	770	211	170	32	51	143
6	157	514	514	150	130	1,100	798	194	185	27	107	100
7	153	438	288	170	100	*647	695	181	285	31	91	78
8	143	350	227	160	80	279	695	177	157	33	*54	44
9	139	318	196	150	70	200	825	163	109	28	60	35
10	135	291	169	150	100	159	745	151	78	25	73	32
11	130	260	160	155	120	120	910	*143	67	33	57	27
12	126	237	150	150	115	100	695	165	57	38	42	26
13	120	225	205	150	120	95	522	234	60	56	32	25
14	113	218	200	140	140	130	450	285	92	57	31	24
15	111	216	195	140	200	118	396	220	68	48	26	*21
16	109	234	190	200	160	177	330	183	60	38	22	22
17	109	213	190	250	120	189	305	159	59	31	22	24
18	107	213	190	160	100	*145	296	145	77	27	22	22
19	105	222	200	100	80	153	294	*134	87	26	27	21
20	103	244	190	130	70	368	493	139	92	78	22	21
21	103	227	180	200	80	883	450	122	70	843	19	21
22	103	218	170	1,350	70	725	327	105	59	364	18	20
23	353	210	180	730	60	389	276	89	72	189	17	20
24	460	200	170	392	65	344	244	84	65	100	16	18
25	330	190	165	280	70	456	234	78	54	68	17	17
26	626	180	160	190	70	574	227	70	101	52	17	18
27	745	247	165	150	65	484	316	68	145	38	16	17
28	588	230	170	140	70	302	534	60	91	38	15	16
29	442	1,100	*160	135	-	229	562	64	78	32	14	33
30	340	577	150	145	-------	204	482	141	57	28	18	*62
31	285	-------	140	170	-------	253	-------	78	-------	27	77	-------
Total	7,553	9,455	6,688	7,122	2,885	9,383	18,012	5,179	3,429	2,576	1,075	1,639
Mean	244	315	216	230	103	303	600	167	114	83.1	34.7	54.6
(†)	-44.9	-23.6	-40.2	-26.4	+29.3	+40.2	+56.7	+14.3	+3.0	-1.4	0	-10.4
Adjusted for change in contents in Otis Reservoir												
Mean	199	291	176	204	132	343	657	181	117	81.7	34.7	44.2
Cfsm	1.53	2.24	1.35	1.57	1.02	2.64	5.05	1.39	0.900	0.628	0.267	0.340
In.	1.76	2.50	1.56	1.80	1.06	3.04	5.64	1.61	1.01	0.72	0.31	0.38

	Observed			Adjusted			
Calendar year 1958:	Max 2,160	Min 15	Mean 264	Mean 268	Cfsm 2.06	In. 27.97
Water year 1958-59:	Max 1,930	Min 14	Mean 205	Mean 204	Cfsm 1.57	In. 21.39

Peak discharge (base, 1,800 cfs).--Jan. 22 (2 p.m.) 1,930 cfs (7.00 ft); Mar. 6 (5 p.m.) 3,570 cfs (8.65 ft); Mar. 21 (9 p.m.) 2,020 cfs (7.10 ft); Apr. 2 (11 p.m.) 4,200 cfs (9.06 ft).

* Discharge measurement made on this day.

† Change in contents, equivalent in cubic feet per second, in Otis Reservoir; furnished by The Collins Co.

Note.--Stage-discharge relation affected by ice Dec. 13 to Jan. 22, Jan. 25 to Mar. 6, Mar. 11-14 (no gage-height record Dec. 22-28, Jan. 1, 2, 16, Feb. 16-23; discharge estimated on basis of 1 discharge measurement and records for station at New Boston, Mass.).

1861. Mad River at Winsted, Conn.

Location.--Lat 41°55'51", long 73°04'56", on left bank at Winsted, Litchfield County, by U. S. Highway 44, 0.2 mile upstream from Indian Meadow Brook, 0.2 mile downstream from Winsted city line, and 1.8 mile upstream from mouth.

Drainage area.--18.4 sq mi.

Records available.--October 1956 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 764.18 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during year, 1,420 cfs Mar. 6 (gage height, 6.25 ft); minimum, 1.8 cfs Sept. 26 (gage height, 0.58 ft).
1956-59: Maximum discharge, that of Mar. 6, 1959; minimum, 0.3 cfs July 24-28, Sept. 15, 16, Oct. 6, 1957 (gage height, 0.46 ft).
Flood of Aug. 19, 1955, reached a stage of 11.8 ft, from floodmarks (discharge, 10,200 cfs, by slope-area measurement half a mile upstream).

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by storage and diversion for municipal water supply of city of Winsted.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 6				Mar. 6 to Sept. 30			
1.0	6.7	3.0	200	0.6	2.0	1.5	31
1.2	12	3.5	310	.7	3.2	2.0	76
1.5	23	4.0	450	.8	4.6	2.5	141
1.9	49	4.5	620	1.0	8.3	3.0	230
2.5	115			1.2	14	3.5	345

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	31	59	a14	b15	b11	111	50	11	7.3	6.0	73
2	55	28	40	a25	b10	b12	245	40	37	27	5.5	33
3	31	57	34	b22	b10	b20	293	33	129	17	5.3	22
4	24	*69	35	19	b60	b60	141	29	50	9.1	5.1	*26
5	19	63	50	b14	b45	b45	91	27	83	6.5	20	16
6	15	53	80	b12	32	b480	87	27	75	6.0	22	12
7	13	43	b60	11	a15	145	68	17	48	6.3	14	10
8	13	37	b40	11	a14	b41	72	*11	32	5.8	8.8	12
9	12	36	b35	10	a13	b26	102	9.9	21	5.6	10	27
10	11	36	b30	10	a270	21	103	12	16	5.8	12	38
11	11	32	b25	10	b120	b22	130	13	13	6.5	9.1	38
12	10	29	b25	9.1	b51	b16	86	12	12	5.8	9.4	5.0
13	9.7	26	b25	9.1	43	29	62	29	16	8.5	7.7	2.8
14	9.7	26	b25	9.7	37	23	51	*29	21	7.7	7.1	2.6
15	9.7	25	b27	9.7	b70	16	49	12	13	7.1	6.9	2.8
16	10	26	b26	b32	b35	44	45	9.9	7.5	6.7	12	3.2
17	9.7	24	b25	b70	b25	48	46	9.4	8.1	6.0	11	3.1
18	8.9	25	*b24	41	b20	*34	44	8.3	11	5.6	11	2.7
19	8.4	25	b21	20	b15	b35	45	8.3	11	6.8	10	2.7
20	8.4	24	19	12	b11	78	96	9.4	12	73	10	2.7
21	7.9	24	17	b26	b10	202	80	9.9	7.7	156	9.9	2.6
22	7.9	23	b15	b330	b9	136	57	9.4	7.7	58	9.9	2.5
23	51	20	b16	b90	b10	52	47	8.3	16	36	9.6	*2.6
24	56	20	16	b41	b9	*50	41	7.9	11	20	13	*2.7
25	34	19	15	b20	b8	76	34	7.9	9.1	*12	13	2.4
26	101	21	14	b15	b9	93	27	7.5	15	8.3	12	2.0
27	114	29	13	b15	10	66	38	7.3	51	6.9	10	2.0
28	72	28	14	b15	b11	35	63	6.9	27	5.8	9.6	2.0
29	54	193	14	b15	-	32	74	*8.1	16	5.8	9.9	2.1
30	43	79	14	b20	-------	27	59	27	12	5.5	19	2.2
31	35	-------	14	b20	-------	47	-------	23	-------	5.6	42	-------
Total	917.3	1,171	867	977.6	987	2,022	2,487	*519.4	799.1	550.0	360.8	357.7
Mean	29.6	39.0	28.0	31.5	35.2	65.2	82.9	16.8	26.6	17.7	11.6	11.9
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1958: Max 360 Min 1.5 Mean 38.2 Cfsm - In. -
Water year 1958-59: Max 480 Min 2.0 Mean 32.9 Cfsm - In. -

Peak discharge (base, 400 cfs).--Jan. 22 (6 a.m.) about 530 cfs; Mar. 6 (2 p.m.) 1,420 cfs (6.25 ft); Mar. 21 (9 p.m.) 415 cfs (3.75 ft); Apr. 2 (12 p.m.) 660 cfs (4.52 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby streams.
b Stage-discharge relation affected by ice.

1865. Still River at Robertsville, Conn.

Location.--Lat 41°58'04", long 73°02'03", on left bank 1,500 ft downstream from Sandy Brook, 1 mile southeast of Robertsville, Litchfield County, 1 mile northwest of Riverton, and 1 mile upstream from mouth.

Drainage area.--84.4 sq mi.

Records available.--July 1948 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 510.24 ft above mean sea level, datum of 1929.

Average discharge.--11 years, 185 cfs.

Extremes.--Maximum discharge during year, 2,940 cfs Mar. 6 (gage height, 6.77 ft); maximum gage height, 7.25 ft Jan. 22 (ice jam); minimum discharge, 5.8 cfs Sept. 23, 24 (gage height, 1.25 ft); minimum daily, 7.8 cfs Sept. 19.
1948-59: Maximum discharge, 44,000 cfs Aug. 19, 1955 (gage height, 16.48 ft, from floodmark), from rating curve extended above 5,600 cfs on basis of slope-area measurement of peak flow; minimum, 0.2 cfs Sept. 14, 1957; minimum daily, 0.3 cfs Sept. 14, 1957; minimum gage height, 0.29 ft Aug. 8, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Ordinary flow regulated by powerplant upstream.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	7.3	2.5	132
1.4	11	3.0	252
1.6	22	4.0	620
1.8	36	5.0	1,200
2.1	66	6.0	2,080

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	228	137	253	55	90	50	397	246	74	46	24	175
2	270	128	202	90	50	75	817	213	103	76	22	107
3	185	276	177	110	120	90	1,370	188	400	64	42	130
4	124	317	165	105	200	274	670	179	236	43	51	173
5	101	300	212	95	190	217	416	148	221	35	86	66
6	89	271	329	85	140	1,160	380	134	207	52	80	*50
7	86	237	224	90	85	*735	321	112	186	50	101	38
8	78	165	203	a70	75	302	301	131	132	39	*39	63
9	70	146	176	a65	55	191	412	80	96	42	50	61
10	72	164	135	a65	150	146	420	82	81	34	90	74
11	54	138	105	a65	235	113	552	*112	69	30	65	70
12	49	142	105	a75	151	91	384	106	54	28	69	23
13	66	122	105	a70	144	103	302	143	50	55	27	14
14	70	118	115	a60	121	108	259	190	70	60	64	39
15	72	92	125	55	208	124	233	134	87	33	21	26
16	62	106	130	150	181	198	213	112	59	44	28	41
17	64	136	*120	270	138	198	218	80	61	28	60	23
18	38	118	110	200	124	167	191	105	65	18	42	30
19	41	110	105	a140	106	122	188	91	62	35	39	7.8
20	57	130	85	a100	90	*356	360	88	66	158	52	11
21	64	131	85	a95	70	690	369	105	49	529	30	31
22	57	100	65	940	65	431	294	77	58	232	32	25
23	245	98	70	468	65	296	235	53	*89	140	24	16
24	283	123	75	235	70	233	193	65	59	76	54	13
25	176	92	70	188	65	300	188	77	64	*63	24	*15
26	391	117	55	130	60	369	184	57	57	44	45	11
27	515	107	60	90	55	316	213	69	160	65	45	11
28	383	129	75	90	50	174	285	49	110	40	26	18
29	286	739	80	90	-	144	333	55	86	42	30	24
30	221	363	70	115	-------	140	284	54	64	38	30	26
31	184	-------	70	95	-------	195	-------	54	-------	39	106	-------
Total	4,681	5,352	3,956	4,551	3,153	8,108	10,982	3,389	3,175	2,278	1,498	1,411.8
Mean	151	178	128	147	113	262	366	109	106	73.5	48.3	47.1
Cfsm	1.79	2.11	1.52	1.74	1.34	3.10	4.34	1.29	1.26	0.871	0.572	0.558
In.	2.06	2.36	1.74	2.01	1.39	3.57	4.84	1.49	1.40	1.00	0.66	0.62

Calendar year 1958: Max 1,780 Min 14 Mean 181 Cfsm 2.14 In. 29.16
Water year 1958-59: Max 1,370 Min 7.8 Mean 144 Cfsm 1.71 In. 23.14

Peak discharge (base, 1,300 cfs).--Mar. 6 (7:30 p.m.) 2,940 cfs (6.77 ft); Mar. 21 (9:30 p.m.) 1,310 cfs (5.15 ft); Apr. 3 (2 a.m.) 2,360 cfs (6.27 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby streams.
Note.--Stage-discharge relation affected by ice Dec. 10 to Jan. 7, Jan. 15-18, 22, Jan. 26 to Feb. 10, Feb. 20 to Mar. 2.

1880. Burlington Brook near Burlington, Conn.

Location.--Lat 41°47'10", long 72°57'55", on left bank 1¼ miles north of Burlington, Hartford County, 3 miles upstream from mouth, and 3 miles southwest of Collinsville.

Drainage area.--4.12 sq mi.

Records available.--September 1931 to September 1959.

Gage.--Water-stage recorder and sharp-edged square orifice and rectangular weir. Datum of gage is 714.00 ft above mean sea level, datum of 1929.

Average discharge.--28 years, 8.18 cfs.

Extremes.--Maximum discharge during year, 354 cfs Mar. 6 (gage height, 5.27 ft); minimum, 0.22 cfs June 11 (gage height, 0.16 ft); minimum daily, 0.81 cfs Aug. 27, 28.
1931-59: Maximum discharge, 1,690 cfs Aug. 19, 1955 (gage height, 9.22 ft), from rating curve extended above 100 cfs on basis of one current-meter measurement and form of theoretical rating; minimum, 0.13 cfs (regulated) June 21, 1933; minimum daily, 0.46 cfs July 18, 1957; minimum gage height, 0.03 ft Oct. 11, 13, 1943 (orifice plate removed).

Remarks.--Records excellent except those for periods of ice effect or backwater from leaves, which are good. Occasional regulation at low flow.

Revisions (water years).--WSP 1171: Drainage area. WSP 1301: 1933-45(M).

Rating table, water year 1958-59, except periods of ice effect or backwater from leaves (gage height, in feet, and discharge, in cubic feet per second)

0.4	0.81	1.3	10.3
.7	1.85	1.7	29.0
1.0	3.11	2.1	53
1.1	4.55	2.8	106

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28.0	8.32	10.3	b3.20	b2.8	4.55	25.3	c12.2	2.05	1.47	2.32	6.03
2	21.0	7.71	8.95	6.86	b2.3	6.82	37.5	9.60	7.94	2.09	1.70	3.29
3	9.93	18.2	8.32	7.13	b2.1	11.4	68	8.32	21.6	1.66	1.29	43.2
4	8.32	16.9	9.27	5.26	b18.6	45.8	22.7	7.13	6.30	1.44	1.47	27.0
5	7.13	11.9	13.9	b4.0	6.30	12.5	15.1	6.85	3.57	1.13	4.47	6.03
6	5.77	9.60	21.5	b3.5	4.33	101	14.2	6.57	3.14	1.29	4.78	3.42
7	5.52	*8.32	10.3	b3.1	b3.15	21.4	11.9	6.30	2.67	1.40	4.13	3.46
8	5.26	7.41	8.32	2.93	3.29	b6.6	11.5	6.03	2.33	1.06	2.80	2.67
9	5.02	8.32	8.00	2.76	b2.9	7.13	12.2	5.52	2.09	.99	4.38	2.37
10	4.78	8.95	b7.0	2.42	b20.8	9.27	15.5	5.26	1.81	2.00	*3.40	2.29
11	c4.33	8.00	b6.6	2.37	b12.8	6.3	30.1	5.02	1.33	8.16	2.37	2.13
12	c3.93	7.13	b6.3	2.37	b5.3	9.3	16.4	5.77	1.07	2.89	1.74	1.81
13	c3.93	6.57	6.03	2.71	6.56	c14.6	12.6	6.03	2.33	3.86	1.44	1.70
14	c3.74	6.57	b5.5	2.84	7.41	7.4	10.3	6.85	2.54	7.71	1.29	1.58
15	c3.74	6.30	5.52	3.02	21.6	6.3	9.60	5.77	2.01	7.41	1.23	1.62
16	c3.74	6.57	5.26	10.3	8.63	15.6	8.95	5.02	1.93	4.90	.99	*2.25
17	c3.74	5.77	5.02	12.4	7.71	13.4	8.63	4.55	2.45	3.22	1.06	1.74
18	c3.74	6.30	5.02	b4.8	8.00	9.9	8.32	4.33	2.97	2.25	1.85	1.62
19	3.57	6.30	5.02	b3.4	b5.0	10.3	c8.32	*4.13	3.50	1.93	1.74	1.58
20	3.57	5.77	5.02	3.20	b3.0	34.4	c16.9	4.33	2.98	2.62	1.23	1.47
21	3.57	5.52	b3.93	9.07	b2.3	43.6	c12.6	3.74	2.17	3.72	1.19	1.44
22	3.74	5.02	3.74	b48.0	b2.0	24.3	c9.27	3.57	2.05	23.5	1.16	1.33
23	26.6	4.78	3.93	b8.0	b1.8	7.1	c8.32	3.11	2.62	24.7	.96	1.29
24	20.1	4.78	4.33	b5.3	b2.0	8.6	c7.71	3.02	1.93	7.13	1.06	1.19
25	11.5	4.78	b3.57	4.13	b2.2	11.1	c7.13	2.80	2.47	4.65	1.13	1.13
26	48.1	6.03	3.20	b4.1	b2.4	10.7	c7.13	2.67	2.67	3.09	.90	1.16
27	30.8	8.00	3.29	b3.7	3.16	9.6	c10.3	2.58	2.93	2.42	.81	1.13
28	16.0	7.58	3.42	b3.3	4.33	7.5	c14.2	2.37	2.92	1.97	.81	1.09
29	11.9	66	3.57	b3.15	-	6.0	c18.2	2.25	2.88	1.77	4.57	1.40
30	9.93	16.3	3.74	5.52	--------	9.0	c11.9	2.37	1.85	1.66	2.76	1.16
31	8.95	--------	3.74	4.78	--------	*16.8	--------	2.13	--------	2.24	12.4	--------
Total	329.95	299.70	201.61	187.62	172.77	508.27	470.78	156.19	101.10	136.33	73.43	129.58
Mean	10.6	9.99	6.50	6.05	6.17	16.4	15.7	5.04	3.37	4.40	2.37	4.32
Cfsm	2.57	2.42	1.58	1.47	1.50	3.98	3.81	1.22	0.818	1.07	0.575	1.05
In.	2.96	2.70	1.82	1.70	1.56	4.59	4.25	1.41	0.91	1.23	0.66	1.17

Calendar year 1958: Max 71 Min 1.19 Mean 9.88 Cfsm 2.40 In. 32.51
Water year 1958-59: Max 101 Min 0.81 Mean 7.58 Cfsm 1.84 In. 24.96

Peak discharge (base, 140 cfs).--Mar. 6 (4:30 p.m.) 354 cfs (5.27 ft); Apr. 3 (12:30 a.m.) 159 cfs (3.40 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
c Backwater from leaves.

1890. Pequabuck River at Forestville, Conn.

Location.--Lat 41°40'23", long 72°54'04", on left bank 700 ft upstream from station of New York, New Haven and Hartford Railroad at Forestville, Hartford County, a quarter of a mile downstream from Copper Mine Brook, and 6½ miles upstream from mouth.
Drainage area.--45.2 sq mi.
Records available.--July 1941 to September 1959.
Gage.--Water-stage recorder. Datum of gage is 197.72 ft above mean sea level, datum of 1929 (levels by Connecticut State Water Commission).
Average discharge.--18 years, 87.1 cfs (adjusted for storage and diversion).
Extremes.--Maximum discharge during year, 2,110 cfs Mar. 6 (gage height, 5.27 ft); minimum, 20 cfs Sept. 28 (gage height, 0.93 ft).
1941-59: Maximum discharge, 11,700 cfs Aug. 19, 1955 (gage height, 13.22 ft, from high-water mark in gage house), from rating curve extended above 2,100 cfs on basis of slope-area measurements at gage heights 7.3 and 13.22 ft; minimum, 6.5 cfs Sept. 21, 22, 1941 (gage height, 0.64 ft).
Flood in September 1938 reached a stage of about 7.3 ft, from floodmarks (discharge, 3,800 cfs, on basis of slope-area measurement of peak flow and computation of peak flow over dam).
Remarks.--Records good except those for period of no gage-height record, which are fair. Flow regulated by Whigville Reservoir (see p. 243) and mills upstream. Diversion for municipal water supply of city of New Britain from Copper Mine Brook.
Revisions (water years).--WSP 971: 1941-42. WSP 1111: 1947.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Feb. 1, 2, 7, 9; backwater from aquatic growth May 3 to June 1)

0.8	14	1.5	101
1.0	23	2.0	262
1.1	30	3.0	770
1.3	60	3.6	1,030

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	187	75	111	39	36	50	164	124	26	24	29	53
2	126	70	97	161	35	60	326	99	100	32	24	31
3	70	160	*90	112	35	73	591	88	148	24	24	211
4	48	126	111	62	185	353	254	81	55	22	24	140
5	46	124	149	46	73	114	176	75	39	22	39	52
6	48	86	173	52	52	988	154	71	38	22	34	36
7	48	75	104	36	36	338	129	77	29	22	30	30
8	46	70	90	35	38	126	121	81	29	22	29	29
9	46	81	88	34	31	106	121	68	29	22	56	*29
10	53	90	77	30	195	111	157	60	29	32	*34	28
11	52	90	64	29	122	88	242	62	27	70	26	26
12	48	79	73	30	62	75	170	79	26	26	25	25
13	45	71	68	30	122	97	143	81	45	56	24	24
14	43	66	58	31	101	79	126	81	31	77	24	25
15	45	64	68	31	302	75	114	53	29	46	23	31
16	40	a65	62	119	106	173	99	52	28	34	22	38
17	34	a60	55	135	*106	154	97	46	33	28	24	29
18	31	a66	55	48	86	126	94	48	31	25	25	26
19	29	a66	53	38	66	148	92	*46	34	27	23	25
20	29	a62	52	40	47	209	137	50	27	26	24	24
21	26	a58	42	102	40	232	118	43	24	41	26	26
22	25	a56	39	410	36	204	99	43	26	44	23	30
23	205	a54	46	94	36	111	86	38	27	39	22	30
24	118	a53	48	57	39	108	81	35	26	76	22	23
25	98	a52	38	53	36	99	77	35	34	62	23	22
26	473	a60	38	48	36	94	75	29	29	34	23	22
27	209	a80	38	42	45	106	109	28	28	29	24	21
28	140	a100	39	40	58	90	126	28	29	26	31	22
29	*104	a500	39	40	-	75	148	27	28	26	38	26
30	86	a180	48	62	--------	86	111	26	26	26	25	22
31	79	--------	45	57	--------	*140	--------	25	--------	26	56	--------
Total	2,677	2,839	2,158	2,143	2,162	4,888	4,537	1,779	1,110	1,088	876	1,156
Mean	86.4	94.6	69.6	69.1	77.2	158	151	57.4	37.0	35.1	28.3	38.5
(†)	+13.8	+11.0	+4.9	+6.6	+6.8	+7.7	+7.5	+9.2	+9.0	+8.7	+7.5	+6.2

Adjusted for diversion and change in reservoir contents

Mean	100	106	74.5	75.7	84.0	166	158	66.6	46.0	43.8	35.8	44.7
Cfsm	2.21	2.35	1.65	1.67	1.86	3.67	3.50	1.47	1.02	0.969	0.792	0.989
In.	2.55	2.62	1.90	1.92	1.94	4.23	3.90	1.70	1.14	1.12	0.91	1.10

	Observed			Adjusted		
Calendar year 1958:	Max 597	Min 22	Mean 95.7	Mean 103	Cfsm 2.28	In. 31.07
Water year 1958-59:	Max 988	Min 21	Mean 75.1	Mean 83.3	Cfsm 1.84	In. 25.03

Peak discharge (base, 660 cfs).--Nov. 29 (about 1 a.m.) 792 cfs (3.03 ft); Jan. 22 (12:30 a.m.) 705 cfs (2.86 ft); Mar. 6 (2 p.m.) 2,110 cfs (5.27 ft); Apr. 3 (1 a.m.) 915 cfs (3.35 ft); Sept. 3 (4:30 p.m.) 1,110 cfs (3.75 ft).

* Discharge measurement made on this day.
† Change in contents in Whigville Reservoir, diversion for municipal supply of city of New Britain from Whigville Reservoir, and at Whites Bridge pumping plant, equivalent in cubic feet per second.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for stations on nearby streams.

1895. Salmon Brook near Granby, Conn.

Location.--Lat 41°56'14", long 72°46'36", on left bank 50 ft upstream from New York, New Haven and Hartford Railroad bridge, 0.5 mile downstream from confluence of East Branch and West Branch, 1.2 miles southeast of Granby, Hartford County, and 1.9 miles upstream from mouth.

Drainage area.--66.8 sq mi.

Records available.--July 1946 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 147.54 ft above mean sea level, datum of 1929.

Average discharge.--13 years, 130 cfs.

Extremes.--Maximum discharge during year, 4,080 cfs Mar. 6 (gage height, 9.47 ft); minimum, 13 cfs Sept. 23, 24; minimum gage height, 2.09 ft July 29.
1946-59: Maximum discharge, about 40,000 cfs Aug. 19, 1955, from a comparison of unit runoff of tributary and nearby streams; maximum gage height, 23.58 ft Aug. 19 (prior to destruction of railroad bridge); minimum discharge, about 5 cfs Aug. 18, 1957; minimum gage height, 1.42 ft Aug. 26, 1949.

Remarks.--Records good except those below 50 cfs, which are fair. Occasional regulation at low flow.

Revisions.--WSP 1431: Drainage area.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	70	148	b57	b82	68	308	167	55	51	26	38
2	103	67	*120	77	b77	84	496	142	77	54	24	34
3	74	94	100	84	b69	110	1,200	131	241	59	24	33
4	64	103	97	74	170	450	490	118	118	57	26	33
5	58	85	130	b76	121	272	368	111	87	55	35	28
6	52	77	223	b91	91	1,300	318	106	73	52	44	24
7	50	71	150	b67	b80	568	275	*101	68	50	43	22
8	48	68	124	b55	71	253	243	97	63	48	38	21
9	50	69	107	b48	b57	169	260	92	59	47	40	*19
10	48	71	b97	b45	b74	142	253	88	56	46	*49	18
11	46	67	b97	b43	73	113	355	86	49	59	44	18
12	44	64	b86	b42	b68	84	270	87	50	59	39	19
13	43	62	b78	b42	80	107	229	95	53	55	34	18
14	43	60	b80	42	90	93	201	108	64	56	32	17
15	43	60	b78	*43	270	90	179	93	60	60	31	18
16	42	60	*b79	105	165	*191	163	83	59	60	31	18
17	42	59	b74	204	114	203	153	78	57	56	30	17
18	41	59	72	b99	107	167	144	74	67	55	29	17
19	41	58	70	b78	88	160	139	72	71	48	31	20
20	41	59	b70	61	b79	404	236	74	71	74	26	20
21	41	56	b70	75	b70	539	223	70	63	114	21	19
22	41	56	b69	832	b63	421	175	68	60	59	22	17
23	103	55	65	361	b57	247	150	64	64	46	20	15
24	128	55	63	b209	55	209	135	63	63	38	22	14
25	80	54	b61	144	b55	221	126	62	58	36	24	15
26	152	55	b59	113	b55	221	121	59	64	34	24	16
27	161	65	b57	b95	54	203	139	59	85	33	21	20
28	108	63	56	b90	57	153	177	57	72	28	20	19
29	91	437	53	b83	-	141	213	55	67	26	22	20
30	80	223	55	93	-------	146	187	63	59	24	23	21
31	73	-------	56	94	-------	202	-------	59	-------	24	36	-------
Total	2,124	2,502	2,744	3,622	2,492	7,731	7,926	2,682	2,153	1,563	931	628
Mean	68.5	83.4	88.5	117	89.0	249	264	86.5	71.8	50.4	30.0	20.9
Cfsm	1.03	1.25	1.32	1.75	1.33	3.73	3.95	1.29	1.07	0.754	0.449	0.313
In.	1.18	1.39	1.53	2.02	1.39	4.30	4.41	1.49	1.20	0.87	0.52	0.35

Calendar year 1958: Max 1,080 Min 16 Mean 121 Cfsm 1.81 In. 24.58
Water year 1958-59: Max 1,300 Min 14 Mean 102 Cfsm 1.53 In. 20.65

Peak discharge (base, 1,000 cfs).--Jan. 22 (11 a.m.) 1,080 cfs (6.00 ft); Mar. 6 (7 p.m.) 4,080 cfs (9.47 ft); Apr. 3 (3:30 a.m.) 2,390 cfs (8.20 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1900. Farmington River at Rainbow, Conn.

Location.--Lat 41°54'41", long 72°41'16", on left bank at Rainbow, Hartford County, 300 ft from Stevens Paper Mill, 0.4 mile downstream from Farmington River Power Co. dam, 1.3 miles upstream from Poquonock, 6.4 miles downstream from Salmon Brook, and 8 miles upstream from mouth.

Drainage area.--591 sq mi.

Records available.--August 1928 to September 1959. Prior to 1940, published as "at Tariffville."

Gage.--Water-stage recorder. Datum of gage is 35.36 ft above mean sea level, datum of 1929. Prior to July 1, 1939, at site 5½ miles upstream at datum 94.85 ft higher.

Average discharge.--31 years, 1,080 cfs (adjusted to present site; adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 7,380 cfs Apr. 4 (gage height, 6.88 ft); minimum daily, 77 cfs Sept. 27.

1928-59: Maximum discharge, 69,200 cfs Aug. 19, 1955 (gage height, 23.5 ft, from floodmarks), by computation of flow over Rainbow Dam; minimum daily, 5.1 cfs Mar. 5, 1944, Oct. 28, Nov. 11, 1945, Feb. 22, 1947.

Remarks.--Records good. Flow regulated by powerplant, by Otis, Barkhamsted, East Branch, Nepaug, and Whigville Reservoirs, having a combined capacity of about 6,720,000,000 cu ft, corrected (see p. 243), and by diversions for domestic water supply from Barkhamsted, Nepaug, and Whigville Reservoirs, and Whites Bridge pumping plant. Records of water temperatures for the water year 1959 are given in WSP 1641.

Revisions (water years).--WSP 851: 1936. WSP 1051: 1945(m). WSP 1301: 1937-43 (adjusted figures of monthly and yearly discharge and runoff). WSP 1431: Drainage area.

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 29		Nov. 30 to Sept. 30			
1.5	255	1.1	57	3.0	1,400
2.0	590	1.2	85	5.0	4,090
3.0	1,480	1.5	200	7.0	7,580
4.0	2,630	2.0	490		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,010	838	1,960	624	286	502	1,770	1,670	528	296	103	484
2	1,390	830	1,120	790	400	501	2,630	1,570	616	619	134	907
3	1,340	911	1,080	640	466	1,150	5,920	1,040	1,340	333	216	731
4	790	1,500	1,150	712	664	1,590	7,080	1,210	1,680	335	218	1,210
5	659	1,470	1,060	587	1,280	2,270	5,280	912	994	302	842	1,430
6	531	1,700	1,660	442	1,540	2,470	3,210	918	817	264	418	289
7	577	1,030	1,560	496	762	*6,420	*3,050	*982	482	284	678	100
8	514	968	1,190	518	394	3,930	2,450	900	602	220	452	468
9	648	788	*912	632	670	1,730	2,160	816	851	221	443	*377
10	853	822	801	575	860	1,060	2,550	526	749	221	*462	468
11	585	1,080	601	368	831	890	3,080	631	458	195	273	368
12	334	830	674	365	1,110	708	3,210	886	577	231	336	456
13	390	a720	776	464	846	678	2,550	843	594	270	357	482
14	463	a860	638	636	871	590	2,300	972	146	413	346	230
15	506	a700	674	*474	910	862	1,700	1,030	429	454	336	748
16	551	a600	784	776	1,580	845	1,490	735	226	345	262	500
17	680	a840	764	1,260	1,150	1,360	1,470	568	572	290	380	486
18	494	a840	755	857	1,130	1,200	1,370	831	402	181	266	277
19	394	a780	792	524	801	920	1,040	629	694	112	324	361
20	384	a840	680	537	710	1,430	1,550	568	260	250	430	217
21	376	a900	546	830	404	2,380	2,010	498	250	1,070	451	264
22	694	a450	529	2,010	254	3,880	1,890	626	641	1,620	433	274
23	942	a390	608	3,330	405	2,470	1,730	708	548	1,080	141	309
24	1,530	a780	640	2,070	681	1,620	1,200	628	844	372	218	358
25	1,580	a600	733	1,170	466	1,350	1,140	229	574	412	136	444
26	1,270	838	718	826	472	1,590	1,050	558	348	286	407	460
27	1,920	658	560	680	365	1,940	1,000	467	166	303	402	77
28	2,450	895	130	533	490	1,780	1,490	495	396	390	436	180
29	1,720	2,110	491	711	-	1,000	1,890	587	850	385	389	254
30	1,100	2,920	600	828	-------	1,020	2,140	172	296	148	240	356
31	984	-------	668	668	-------	*1,060	-------	449	-------	461	375	-------
Total	27,659	29,488	25,854	25,933	20,798	51,196	71,400	23,654	17,730	12,363	10,904	13,565
Mean	892	983	834	837	743	1,651	2,380	763	591	399	352	452
(†)	+45	+135	+39	+61	+52	+262	+132	+50	-1	+31	-105	-156

Adjusted for diversion and change in reservoir contents

Mean	937	1,118	873	898	795	1,913	2,512	813	590	430	247	296
Cfsm	1.59	1.89	1.48	1.52	1.35	3.24	4.25	1.38	0.998	0.728	0.418	0.501
In.	1.83	2.11	1.71	1.75	1.41	3.74	4.74	1.59	1.11	0.84	0.48	0.56

	Observed			Adjusted		
Calendar year 1958:	Max 6,410	Min 70	Mean 1,099	Mean 1,229	Cfsm 2.08	In. 28.22
Water year 1958-59:	Max 7,080	Min 77	Mean 906	Mean 951	Cfsm 1.61	In. 21.87

* Discharge measurement made on this day.

† Change in contents in Otis, Barkhamsted, East Branch, Nepaug and Whigville Reservoirs, and diversion from Barkhamsted, Nepaug and Whigville Reservoirs and Whites Bridge pumping plant, equivalent in cubic feet per second; furnished by The Collins Co., Water Bureau of Hartford Metropolitan District Commission and Board of Water Commissioners of New Britain.

a No gage-height record; discharge computed on basis of records furnished by Farmington River Power Co.

1901. Piper Brook at Newington Junction, Conn.

Location.--Lat 41°42'43", long 72°44'15", on right bank just upstream from Willard Avenue Bridge at Newington Junction, 0.6 mile south of Hartford-Newington town line, 1¼ miles northwest of Newington, Hartford County, 0.6 mile upstream from Mill Brook, and 1.4 miles upstream from mouth.

Drainage area.--14.4 sq mi.

Records available.--May 1958 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 58.00 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during year, 632 cfs Mar. 6 (gage height, 7.03 ft); minimum, 0.3 cfs Sept. 13, 14, 20, 21, 27, 28; minimum gage height, 1.13 ft Aug. 23, 24.

1958-59: Maximum discharge, that of Mar. 6, 1959; minimum, that of Sept. 13, 14, 20, 21, 27, 28, 1959; minimum gage height, that of Aug. 23, 24, 1959.

Revisions.--Maximum and minimum discharges for the period May to September 1958 have been revised as follows: maximum discharge, 386 cfs July 11, 1958 (gage height, 5.54 ft); minimum, 1.1 cfs Sept. 14, 15, 1958 (gage height, 1.17 ft), superseding figures published in WSP 1551.

Remarks.--Records good except those for periods of ice effect, which are fair. Occasional regulation at low flow from unknown source upstream.

Revisions.--Revised figures of discharge, in cubic feet per second, for period May to September 1958, superseding those published in WSP 1551, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge
1958		1958-Con.		1958-Con.	
May 6	50	June 2	20	July 31	32
7	83	26	34	Aug. 13	40
8	54	July 5	105	25	49
9	43	6	114	Sept. 7	20
14	30	8	27	17	51
17	27	11	72	18	57
18	27	12	104	27	64
19	34	16	24		
25	99	27	46		

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
May 1958	1,014.5	99	6.1	32.7	2.27	2.62
June	417.2	34	6.7	13.9	.965	1.08
July	810.8	114	6.1	26.2	1.82	2.10
August	383.9	49	3.8	12.4	.861	.99
September	485.0	64	1.5	16.2	1.12	1.25

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	33	18	3.2	b4.4	13	25	28	6.2	8.0	6.2	24
2	37	32	*16	82	b3.8	18	*100	16	56	18	3.5	*16
3	27	92	15	17	b3.2	20	152	13	*82	5.6	5.0	*76
4	22	44	34	10	*86	104	45	*13	*15	3.8	6.8	58
5	19	40	53	b8.0	17	22	36	13	9.2	3.8	20	10
6	20	*38	37	b6.0	12	274	38	12	9.2	*8.0	14	4.4
7	*20	36	16	b5.5	b8.0	54	35	12	3.8	8.0	9.8	2.6
8	21	34	15	b5.5	6.8	36	33	12	5.0	8.0	5.0	8.3
9	21	46	15	b5.0	b8.0	36	37	8.6	5.0	8.0	23	*14
10	20	41	14	b4.8	b34	*36	51	8.0	4.4	9.8	14	5.5
11	17	38	b11	b4.8	32	34	55	12	4.4	47	8.0	4.9
12	16	36	11	*b6.2	b15	b34	41	21	3.8	6.8	7.4	1.6
13	18	34	9.0	7.4	33	b36	46	25	16	6.2	6.8	.3
14	19	34	b7.3	7.4	23	36	48	24	7.4	16	7.4	2.1
15	21	32	10	8.0	136	39	45	13	6.2	17	4.0	5.5
16	39	32	10	64	b27	84	43	9.2	6.8	8.6	2.5	24
17	40	33	10	b32	34	55	43	7.4	11	6.8	6.2	5.5
18	38	35	10	b8.0	25	42	41	9.8	11	5.0	9.8	4.4
19	38	34	10	b9.8	17	41	40	16	15	4.5	7.4	1.6
20	39	31	8.4	9.2	b11	46	50	11	6.2	10	6.2	.3
21	36	14	b6.7	52	b27	44	43	9.8	4.8	43	12	2.1
22	27	11	b7.3	120	b28	47	41	12	7.4	16	6.8	3.8
23	*152	9.0	7.9	b17	b28	b35	18	6.8	9.8	*14	2.0	3.8
24	43	11	5.5	b11	b28	34	15	5.6	8.0	20	4.0	3.8
25	40	11	b3.2	8.0	b28	37	12	8.0	16	12	5.0	1.1
26	166	20	b2.6	9.2	b28	34	12	8.0	11	5.6	5.0	.3
27	59	14	b2.6	9.2	b29	27	30	8.6	9.8	7.4	6.2	2.6
28	42	71	2.6	b10	20	22	25	8.6	9.8	9.2	6.8	9.6
29	39	220	5.5	8.6	-	17	34	6.2	9.8	9.8	55	*19
30	37	25	7.9	16	-------	25	19	5.0	9.8	9.2	42	29
31	36	-------	6.7	7.4	-------	32	-------	4.4	-------	12	46	-------
Total	1,262	1,181.0	388.2	572.2	752.2	1,414	1,253	367.0	379.8	367.1	363.8	344.1
Mean	40.7	39.4	12.5	18.5	26.9	45.6	41.8	11.8	12.7	11.8	11.7	11.5
Cfsm	2.83	2.74	0.868	1.28	1.87	3.17	2.90	0.819	0.882	0.819	0.813	0.799
In.	3.26	3.06	1.00	1.48	1.95	3.66	3.24	0.94	0.98	0.94	0.94	0.89

Calendar year 1958: Max - Min - Mean - Cfsm - In. -
Water year 1958-59: Max 274 Min 0.3 Mean 23.7 Cfsm 1.65 In. 22.34

Peak discharge (base, 350 cfs).--Nov. 29 (2:30 a.m.) 492 cfs (6.22 ft); Mar. 6 (4 p.m.) 632 cfs (7.03 ft); Apr. 2 (12 p.m.) 372 cfs (5.40 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1902. Mill Brook at Newington, Conn.

Location.--Lat 41°42'16", long 72°43'34", on left bank just upstream from culvert under Dowd Street, half a mile north of Newington, Hartford County, and 1.2 miles upstream from mouth.

Drainage area.--4.51 sq mi.

Records available.--April 1958 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 47.58 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during year, 200 cfs Mar. 6 (gage height, 4.56 ft); minimum, 0.8 cfs Sept. 19-30; minimum gage height, 0.82 ft Aug. 20-27.
1958-59: Maximum discharge, that of Mar. 6, 1959; minimum, that of Sept. 19-30, 1959; minimum gage height, that of Aug. 20-27, 1959.

Remarks.--Records good except those for period of no gage-height record, which are fair.

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-26				Oct. 26 to Mar. 6				Mar. 6 to Sept. 30			
0.9	1.2	1.6	10	0.8	0.5	2.0	24	0.8	0.7	2.0	28
1.1	2.8	2.0	21	1.1	3.8	2.5	45	1.0	3.7	2.5	50
1.3	5.2	2.5	41	1.3	6.6	3.0	73	1.5	14		
				1.6	12	3.5	107				

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	3.2	3.4	2.2	1.3	2.2	5.5	5.3	2.0	1.4	1.4	2.9
2	9.6	3.0	*3.1	22	1.2	3.2	*30	3.2	7.3	2.5	1.3	*2.0
3	3.0	24	2.6	5.1	1.1	3.0	39	2.6	*19	1.4	1.1	*10
4	2.5	7.1	5.8	2.6	*20	*24	7.6	*2.4	*2.9	1.3	1.1	21
5	2.1	4.2	13	2.0	2.7	2.6	5.3	2.4	1.7	1.3	2.3	2.6
6	1.8	*3.8	11	1.6	1.7	88	5.1	2.4	1.5	*1.3	2.3	1.5
7	*1.8	3.3	3.8	1.5	1.5	10	4.4	2.4	1.5	1.3	1.8	1.4
8	1.8	3.0	3.1	1.4	1.5	2.9	3.9	2.4	1.4	*1.3	1.5	1.4
9	1.8	5.4	3.0	1.4	1.5	2.6	4.6	2.3	1.4	1.3	4.1	*1.4
10	1.8	5.7	2.6	1.3	2.5	2.5	7.0	2.1	1.4	1.4	2.9	1.3
11	1.8	4.1	2.3	1.3	3.0	2.0	11	2.1	1.4	9.8	1.7	1.3
12	1.8	3.2	2.2	*1.3	2.4	1.8	5.5	2.7	1.4	2.3	1.4	1.1
13	1.8	3.0	2.0	1.5	3.5	1.7	4.2	3.1	2.6	1.7	1.4	1.0
14	1.8	2.8	1.9	1.6	5.0	2.0	4.1	3.5	2.1	2.9	1.3	1.0
15	1.8	2.8	2.0	1.8	33	2.5	3.7	2.1	1.5	2.9	1.3	1.1
16	1.8	2.8	2.0	13	4.7	22	2.9	2.0	1.5	2.1	1.1	2.6
17	1.8	3.2	2.0	9.7	8.3	10	2.7	1.8	1.8	1.5	1.1	1.3
18	1.8	3.6	2.0	2.2	4.2	7	2.6	1.8	2.1	1.4	1.4	1.0
19	1.7	3.2	2.2	1.6	2.5	6	2.6	1.7	2.1	1.7	1.1	.8
20	1.6	3.0	2.3	1.5	1.7	7	4.2	1.7	2.0	2.3	1.0	.8
21	1.6	2.8	1.9	11	1.5	9	3.4	1.7	1.8	7.3	1.5	.8
22	1.6	2.6	1.7	32	1.2	11	2.9	2.1	1.7	2.4	1.3	.8
23	22	2.5	1.8	2.8	1.0	6	2.7	2.1	1.7	*1.7	1.1	.8
24	7.4	2.6	1.9	1.7	.9	5	2.4	2.0	1.5	2.4	1.1	.8
25	3.0	2.5	1.9	1.5	1.1	5.5	2.3	1.8	2.1	2.1	1.1	.8
26	40	3.1	1.8	1.5	1.2	5.5	2.3	1.8	2.0	1.5	1.0	.8
27	13	3.6	1.8	1.4	2.0	6	4.1	1.8	2.1	1.4	1.0	.8
28	6.6	16	1.9	1.3	3.9	6.5	5.9	2.0	2.1	1.3	1.1	.8
29	4.8	66	2.0	1.3	-	5	7.5	2.1	1.7	1.4	5.6	*1.0
30	3.8	5.4	2.5	2.0	-------	5.5	3.4	2.1	1.4	1.4	17	.8
31	3.4	-------	2.5	1.7	-------	6.5	-------	2.1	-------	1.7	12	-------
Total	173.1	201.5	94.0	134.8	116.1	274.5	192.8	71.6	76.7	67.7	76.4	65.7
Mean	5.58	6.72	3.03	4.35	4.15	8.85	6.43	2.31	2.56	2.18	2.46	2.19
Cfsm	1.24	1.49	0.672	0.965	0.920	1.96	1.43	0.512	0.568	0.483	0.545	0.486
In.	1.43	1.66	0.77	1.11	0.96	2.26	1.60	0.59	0.63	0.56	0.63	0.54

Calendar year 1958: Max - Min - Mean - Cfsm - In. -
Water year 1958-59: Max 88 Min 0.8 Mean 4.23 Cfsm 0.938 In. 12.74

Peak discharge (base, 60 cfs).--Oct. 26 (12 m.) 64 cfs (2.85 ft); Nov. 29 (2:30 a.m.) 180 cfs (4.35 ft); Mar. 6 (3 p.m.) 200 cfs (4.56 ft); Apr. 2 (12 p.m.) 123 cfs (3.65 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Mar. 10 to Apr. 1; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.

1903. Trout Brook at West Hartford, Conn.

Location.--Lat 41°46'13", long 72°44'15", on left bank 250 ft upstream from Fern Street Bridge, three-quarters of a mile northeast of West Hartford, Hartford County.

Drainage area.--14.7 sq mi.

Records available.--May 1958 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 78.39 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during year, 675 cfs Mar. 6 (gage height, 5.60 ft); minimum, 2.1 cfs May 31 (gage height, 1.08 ft); minimum daily, 3.8 cfs Sept. 25.
1958-59: Maximum discharge, that of Mar. 6, 1959; minimum, that of May 31, 1959; minimum daily, that of Sept. 25, 1959.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Some regulation by dams upstream and by storage and diversion at Hartford water-supply reservoirs on headwater streams.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to June 2				June 3 to Sept. 30			
1.2	5.0	3.0	161	1.0	1.9	1.6	26
1.3	8.5	4.0	320	1.2	7.0	2.0	53
1.5	18	5.0	525	1.3	10	2.3	79
2.0	51						

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	62	26	41	10	b8.5	13	53	34	11	6.7	5.6	13
2	62	36	*29	69	b40	24	*142	28	56	8.2	5.4	*8.5
3	a29	92	26	29	b24	30	228	38	*72	6.2	5.6	14
4	a21	53	46	b20	*58	*124	92	*26	19	5.4	5.6	15
5	a18	35	73	b15	22	45	70	16	13	5.6	12	9.7
6	a16	*26	71	b12	13	350	60	24	10	*11	9.5	6.7
7	*14	27	54	b10	b9.3	160	53	17	11	5.6	7.0	9.5
8	a14	24	33	b9	8.9	b51	41	15	16	*6.2	7.9	8.8
9	a13	27	27	b8.5	b8.5	b35	43	34	12	8.7	24	6.2
10	a13	36	b21	b8	b8.2	30	57	51	9.1	12	29	5.6
11	a13	25	b19	b7.5	b7.8	23	92	49	8.2	22	12	5.6
12	a12	21	b18	*b7.4	b9.3	27	79	42	7.0	7.0	7.3	6.5
13	a11	19	b17	b7.8	b23	b32	55	29	10	36	6.5	7.0
14	a10	18	b16	b7.1	24	34	37	49	7.9	32	5.9	6.2
15	a9.5	17	b18	b6.4	104	43	38	41	15	38	5.6	5.2
16	a9	18	b17	b62	40	81	36	45	8.5	31	5.9	8.8
17	*8.5	22	b16	b39	39	65	34	56	8.8	14	6.2	5.3
18	a8.5	16	16	b19	26	46	35	45	8.2	8.2	10	4.6
19	a8	19	13	b16	b18	42	45	16	7.6	18	6.2	4.3
20	a8	17	12	10	b12	62	50	9.7	7.0	24	5.6	4.3
21	a7.5	14	b11	80	b11	78	36	16	8.8	20	6.2	4.6
22	7.4	12	b13	131	b8.5	94	29	17	12	48	5.9	4.6
23	68	13	18	35	b7.4	45	25	26	8.2	*23	5.1	4.3
24	57	20	14	b18	b6.4	35	21	66	6.2	14	11	4.1
25	30	16	b12	23	b8.2	41	23	50	8.2	11	13	3.8
26	148	18	b12	24	b8.5	42	40	21	8.2	14	9.1	7.5
27	98	16	b19	b12	12	59	44	20	6.7	22	7.9	4.8
28	53	73	b15	b10	20	66	37	20	6.7	*8.5	5.6	16
29	40	219	b12	b11	-	53	40	18	14	7.0	8.9	*14
30	31	83	10	20	-------	48	30	16	7.9	7.0	11	6.5
31	25	-------	12	-------	-------	51	-------	6.8	-------	5.9	18	-------
Total	924.4	1,058	731	748.7	585.5	1,929	1,665	941.5	404.2	486.2	284.5	225.0
Mean	29.8	35.3	23.6	24.2	20.9	62.2	55.5	30.4	13.5	15.7	91.8	7.50
Cfsm	2.03	2.40	1.61	1.65	1.42	4.23	3.78	2.07	0.918	1.07	0.624	0.510
In.	2.34	2.68	1.86	1.90	1.48	4.88	4.22	2.39	1.02	1.23	0.72	0.57

Calendar year 1958: Max - Min - Mean - Cfsm - In. -
Water year 1958-59: Max 350 Min 3.8 Mean 27.4 Cfsm 1.86 In. 25.29

Peak discharge (base, 400 cfs).--Nov. 28 (12 p.m.) 575 cfs (5.20 ft); Mar. 6 (2:15 p.m.) 675 cfs (5.60 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of existing record, weather records, engineer's notes, and records for stations on nearby streams.
b Stage-discharge relation affected by ice.

1905. South Branch Park River at Hartford, Conn.

Location.--Lat 41°44'02", long 72°42'51", on left bank at upstream side of bridge on Newfield Avenue in Hartford, Hartford County, 0.7 mile downstream from confluence of Trout Brook and Piper Brook, and 3.3 miles upstream from confluence with North Branch.

Drainage area.--40.6 sq mi.

Records available.--October 1936 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 31.07 ft above mean sea level, datum of 1929 (levels by Department of Engineering, city of Hartford).

Average discharge.--23 years, 72.6 cfs.

Extremes.--Maximum discharge during year, 1,790 cfs Mar. 6; maximum gage height, 11.94 ft Mar. 6; minimum discharge, 15 cfs Aug. 23, 24 (gage height, 1.64 ft).
1936-59: Maximum discharge, 5,000 cfs Aug. 19, 1955, from rating curve extended above 800 cfs on basis of records for North Branch Park River and Park River at Hartford; maximum gage height, 19.65 ft Aug. 19, 1955, from floodmarks; minimum discharge, 7 cfs Sept. 2, 1957 (gage height, 1.47 ft).
Flood of Mar. 12, 1936, reached a stage of 12.1 ft, as determined by Hartford city engineers, from floodmarks.

Remarks.--Records good. Some regulation by dams upstream and by storage and diversion at Hartford water-supply reservoirs on headwater streams.

Revisions (water years).--WSP 1201: 1939-40(P), 1941(M), 1943-44(P), 1950. WSP 1431: 1955.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Rate of change in stage used as a factor Oct. 23, 24, 26, 27, Nov. 3, 4, 28-30, Dec. 5, 6, Jan. 2, 16, 17, 21, 22, Mar. 4-7, 16, 17, Apr. 2, 3, June 3; shifting-control method used Mar. 6 to Apr. 3, May 3 to June 2)

Oct. 1 to June 2				June 3 to Sept. 30			
1.7	17	5.0	212	1.6	14	4.0	142
2.0	33	6.0	300	2.0	28	6.0	300
3.0	82	7.0	465	3.0	76		
4.0	142	9.0	965				

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	212	69	85	34	30	50	118	83	25	22	20	58
2	160	75	65	228	33	63	287	58	124	34	17	30
3	77	276	58	90	28	73	*690	56	*298	22	17	72
4	57	149	110	55	203	344	199	50	50	19	18	153
5	50	94	166	42	*70	110	136	41	34	18	42	34
6	51	*80	182	37	42	896	124	*38	30	*25	31	24
7	47	71	94	33	34	530	112	36	28	22	26	21
8	46	68	71	31	32	128	94	34	32	21	20	25
9	47	97	60	27	33	104	103	36	28	21	66	28
10	44	103	53	23	80	101	128	46	27	27	48	*23
11	42	78	49	21	94	82	216	48	25	109	30	22
12	38	65	47	22	48	78	149	46	23	25	23	20
13	46	62	42	*26	78	*98	127	52	33	57	21	18
14	45	60	38	26	75	98	109	64	30	89	*20	20
15	42	57	46	30	355	110	103	45	28	65	19	22
16	*52	56	46	157	118	280	100	41	26	45	17	46
17	56	61	45	152	110	226	91	49	28	30	18	23
18	55	59	45	50	85	144	88	50	32	24	28	20
19	52	58	42	40	56	118	94	38	30	26	22	19
20	54	57	41	34	40	148	127	31	24	37	19	17
21	57	44	34	181	58	165	100	30	22	104	22	18
22	46	38	33	422	64	209	85	30	28	98	25	20
23	277	34	36	80	60	114	60	33	27	49	16	19
24	187	43	36	49	60	98	51	51	22	39	19	19
25	88	40	30	46	59	104	49	51	30	34	26	19
26	466	51	25	49	58	108	60	30	28	25	22	20
27	270	49	34	37	65	121	94	27	25	33	22	16
28	133	166	31	33	64	128	91	29	23	25	20	24
29	103	723	31	32	-	104	107	23	27	22	53	34
30	85	162	31	47	-------	108	68	23	26	22	96	32
31	75	-------	32	35	-------	138	-------	20	-------	22	97	-------
Total	3,060	3,045	1,758	2,169	2,132	5,178	3,960	1,289	1,213	1,211	940	916
Mean	98.7	102	56.1	70.0	76.1	167	132	41.6	40.4	39.1	30.3	30.5
Cfsm	2.43	2.51	1.38	1.72	1.87	4.11	3.25	1.02	0.995	0.963	0.746	0.751
In.	2.80	2.80	1.59	1.98	1.95	4.74	3.63	1.18	1.11	1.11	0.86	0.84

Calendar year 1958: Max 723 Min 13 Mean 87.3 Cfsm 2.15 In. 29.19
Water year 1958-59: Max 896 Min 16 Mean 73.7 Cfsm 1.82 In. 24.59

Peak discharge (base, 650 cfs).--Nov. 29 (3 a.m.) 1,060 cfs (9.23 ft at 6 to 7 a.m.); Jan. 21 (10:30 p.m.) 702 cfs (7.65 ft at 4 to 6 a.m. Jan. 22); Mar. 6 (6 p.m.) 1,790 cfs (11.94 ft at 10 p.m.); Apr. 3 (2 a.m.) 1,070 cfs (8.86 ft at 5 a.m.).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 26-31, Jan. 5-14, Jan. 27 to Feb. 3.

1906. Wash Brook at Bloomfield, Conn.

Location.--Lat 41°49'31", long 72°44'23", on right bank just upstream from bridge on Gabb Road, 0.4 mile south of Bloomfield, Hartford County.

Drainage area.--5.66 sq mi.

Records available.--April 1958 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 103.66 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during year, 265 cfs Mar. 6 (gage height, 4.33 ft); minimum, 0.04 cfs Aug. 28, 29 (gage height, 0.35 ft).
1958-59: Maximum discharge, that of Mar. 6, 1959; minimum, that of Aug. 28, 29, 1959; minimum gage height, 0.35 ft Sept. 5-7, 1958, Aug. 28, 29, 1959.

Remarks.--Records excellent except those for periods of ice effect, no gage-height record, or backwater from leaves or debris, which are good. Infrequent regulation at low flow.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	4.7	5.8	a2.3	2.0	6.4	16	12	1.3	0.90	0.70	3.6
2	18	4.5	*5.6	a27	1.6	7.2	*47	7.7	6.7	1.3	.36	*2.4
3	6.1	18	5.6	a15	1.4	12	110	5.8	*22	1.0	.30	3.6
4	4.5	14	9.4	6.1	*26	*33	24	*4.6	*5.2	.70	.36	4.9
5	3.6	*7.2	27	3.4	9.0	10	15	4.2	2.9	.55	1.7	1.8
6	3.0	5.8	33	2.0	3.1	125	14	3.8	2.3	*.48	2.0	1.2
7	*2.6	4.9	10	1.8	2.0	67	12	3.6	1.8	.70	1.8	.90
8	2.6	4.5	5.6	a1.7	1.2	8.4	11	3.4	1.6	*.48	1.2	.70
9	2.8	5.6	5.4	a1.7	1.3	5.8	11	2.9	1.4	.36	2.2	.62
10	2.8	7.7	4.7	a1.6	2.0	5.3	17	2.7	1.2	.42	10	.62
11	2.8	5.8	3.4	a1.6	4.0	5.0	33	2.9	1.0	2.7	5.0	.62
12	2.5	4.5	3.3	*a1.6	2.3	4.6	16	3.8	.90	1.3	1.8	.42
13	2.3	4.0	3.0	a1.8	9.0	5.0	11	5.0	2.1	4.4	1.2	.42
14	2.2	4.0	2.5	a1.9	11	5.0	8.0	6.1	2.1	4.4	.70	.42
15	2.2	4.0	2.8	a2.0	66	5.0	7.2	4.0	1.6	2.9	.55	.48
16	2.0	4.7	3.1	a20	17	22	6.4	3.0	1.3	2.4	.48	.80
17	*1.9	4.5	3.3	a60	12	30	5.8	2.7	1.7	1.6	.36	.55
18	1.9	4.5	3.3	a15	10	22	5.3	2.5	2.1	1.2	.36	.42
19	1.8	4.7	3.3	a4	5.0	17	5.5	2.5	2.2	1.1	.30	.36
20	1.8	4.3	3.4	a2	a2.7	33	16	2.6	1.8	3.4	.14	.36
21	1.7	4.0	2.8	a25	a2.2	27	11	2.4	1.4	20	.48	.36
22	1.7	3.6	2.3	140	2.0	17	6.4	2.4	1.2	4.1	.70	.36
23	17	3.4	2.3	13	1.8	7.7	5.3	2.1	2.0	*2.4	.25	.36
24	20	3.6	2.5	3.2	2.0	6.6	4.8	1.8	1.4	1.7	.17	.36
25	6.3	3.6	a2.2	3.1	2.1	7.2	4.4	1.7	1.6	1.4	.42	.30
26	26	5.1	a2.0	2.5	2.0	7.4	4.2	1.6	1.8	1.0	.17	.25
27	20	6.6	a1.8	2.2	2.6	10	8.1	1.5	1.7	.80	.14	.25
28	10	15	a1.9	2.2	7.2	8.7	13	1.5	1.7	.70	.05	.36
29	7.2	93	a2.0	2.0	-	8.0	20	1.4	1.6	.90	.30	*.48
30	5.8	12	a2.3	3.6	-------	11	10	1.5	1.2	.70	.90	.30
31	5.1	-------	a2.5	3.3	-------	22	-------	1.4	-------	.70	14	-------
Total	204.2	271.8	168.1	372.6	210.5	561.3	478.4	105.1	78.80	66.69	49.09	28.57
Mean	6.59	9.06	5.42	12.0	7.52	18.1	15.9	3.39	2.63	2.15	1.58	0.952
Cfsm	1.16	1.60	0.958	2.12	1.33	3.20	2.81	0.599	0.465	0.380	0.279	0.168
In.	1.34	1.78	1.10	2.44	1.38	3.69	3.14	0.69	0.52	0.44	0.32	0.19

Calendar year 1958: Max - Min - Mean - Cfsm - In. -
Water year 1958-59: Max 140 Min 0.05 Mean 7.11 Cfsm 1.26 In. 17.03

Peak discharge (base, 150 cfs).--Jan. 22 (9 a.m.) 210 cfs (3.82 ft); Mar. 6 (7 p.m.) 265 cfs (4.33 ft); Apr. 3 (4 a.m.) 190 cfs (3.53 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for station on North Branch Park River at Hartford.
Note.--Stage-discharge relation affected by ice Dec. 6-8, Jan. 4, 5, 7, 23, 24, Jan. 31 to Feb. 5-7, 9, 10, 14-19, Mar. 8-13, 17-19, 21-23. Backwater from leaves or debris Oct. 12-23, Nov. 5, Nov. 28 to Dec. 2, Mar. 4-6.

1910. North Branch Park River at Hartford, Conn.

Location.--Lat 41°47'03", long 73°42'31", on right bank 60 ft downstream from stone-arch bridge on Albany Avenue, Hartford, Hartford County, and 3 miles upstream from confluence with South Branch.

Drainage area.--25.3 sq mi.

Records available.--October 1936 to September 1959.

Gage.--Water-stage recorder and masonry control. Datum of gage is 34.20 ft above mean sea level, datum of 1929 (levels by Department of Engineering, city of Hartford).

Average discharge.--23 years, 38.0 cfs.

Extremes.--Maximum discharge during year, 1,320 cfs Mar. 6; maximum gage height, 7.67 ft Mar. 6; minimum discharge, 2.0 cfs Aug. 3 (gage height, 1.13 ft).
1936-59: Maximum discharge, 10,000 cfs Aug. 19, 1955, from rating curve extended above 1,600 cfs on basis of slope-area measurement of peak flow 2.6 miles upstream; maximum gage height, 18.8 ft Aug. 19, 1955, from floodmark; minimum discharge, 0.04 cfs Sept. 24, 25, 1943 (gage height, 0.75 ft); minimum daily, 0.04 cfs Sept. 24, 1943.
Flood of Mar. 12, 1936, reached a stage of 11.2 ft as determined from floodmarks by city engineers of Hartford (discharge, about 2,800 cfs).

Remarks.--Records good. Some regulation at small dams upstream and by storage and diversion at a Hartford water-supply reservoir on headwater stream.

Revisions (water years).--WSP 891: 1939. WSP 1201: 1937(M), 1938, 1939(M), 1940, 1941(M), 1942(P), 1943, 1944(M), 1945, 1946(P), 1947(M), 1948-49(P), 1950. WSP 1501: 1956.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Rate of change in stage used as a factor Nov. 28, 29, Jan. 17, 22, Feb. 15, Mar. 4, 6, 7, Apr. 2, 3; backwater from rocks and debris Apr. 22, Aug. 17 to Sept. 29)

Oct. 1 to Mar. 6				Mar. 7 to Sept. 30			
1.3	3.9	2.2	59	1.1	1.6	2.3	67
1.4	6.0	2.6	127	1.2	3.0	2.6	119
1.6	11	3.5	340	1.4	7.4	3.0	215
1.9	28	5.0	640	1.7	18	3.5	340
				2.0	36	4.5	540

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	115	16	39	9.4	9.2	30	67	45	5.7	5.6	5.6	18
2	87	14	*28	122	7.9	34	215	30	48	6.3	3.4	12
3	28	109	22	78	6.7	53	527	22	132	5.9	*2.3	29
4	18	65	35	25	b130	300	141	*18	*28	3.7	3.0	20
5	13	*38	97	13	*45	81	79	16	15	3.0	7.0	9.9
6	10	29	132	b8.4	15	625	66	16	11	3.0	9.3	6.1
7	10	22	b45	b6.2	10	345	55	16	8.3	4.1	9.0	4.8
8	10	18	b30	b5.6	10	50	*50	15	7.7	4.1	6.3	4.5
9	10	28	25	b5.0	6.5	29	48	13	8.0	3.4	12	5.9
10	*10	35	24	b4.3	11	32	77	12	7.4	4.1	41	*5.6
11	9.2	26	16	b4.3	34	25	168	12	7.0	16	21	5.2
12	7.0	20	16	*b4.1	22	15	82	16	5.6	6.7	10	4.1
13	6.5	15	14	b4.5	29	*20	54	21	8.0	52	8.0	3.0
14	6.5	14	12	b5.0	58	20	43	26	9.9	25	7.4	3.0
15	6.7	14	13	b5.4	b300	22	35	18	7.0	20	6.3	3.7
16	8.2	14	14	b70	b100	141	29	14	6.7	15	5.0	6.7
17	8.2	13	14	b240	85	140	27	12	7.7	10	5.2	5.9
18	7.7	14	14	49	52	80	24	10	10	7.4	10	5.6
19	7.0	15	13	15	22	64	22	11	9.9	5.6	6.1	5.4
20	6.2	14	14	10	13	105	51	12	9.0	11	5.2	3.2
21	7.4	13	11	b50	10	94	41	12	6.7	86	5.6	2.7
22	7.9	11	9.7	b600	9	82	24	20	6.5	26	6.3	5.2
23	101	10	10	b115	8.5	b31	20	20	9.6	16	3.7	8.0
24	70	10	10	b32	8	28	18	12	8.0	12	2.7	9.6
25	27	11	9.2	16	8.5	28	17	9.6	8.0	8.6	4.5	9.6
26	144	16	8.2	12	7.9	29	16	9.0	9.0	6.3	5.0	5.9
27	95	26	7.9	10	9.4	45	28	9.0	8.0	5.9	5.2	5.4
28	48	66	8.2	10	38	44	49	9.0	7.0	5.2	5.4	5.6
29	32	545	8.4	8.9	-	43	72	9.2	*7.4	5.9	6.3	*5.2
30	22	78	10	20	-------	53	40	7.3	7.7	5.9	8.0	5.2
31	20	-------	11	18	-------	103	-------	7.3	-------	5.9	37	-------
Total	958.5	1,319	720.6	1,576.1	1,065.6	2,791	2,185	479.4	429.8	395.6	272.8	224.0
Mean	30.9	44.0	23.2	50.8	38.1	90.0	72.8	15.5	14.3	12.8	8.80	7.47
Cfsm	1.22	1.74	0.917	2.01	1.51	3.56	2.88	0.613	0.554	0.506	0.348	0.295
In.	1.41	1.94	1.06	2.32	1.57	4.10	3.21	0.71	0.62	0.58	0.40	0.33

Calendar year 1958: Max 545 Min 1.5 Mean 40.1 Cfsm 1.58 In. 21.52
Water year 1958-59: Max 625 Min 2.3 Mean 34.0 Cfsm 1.34 In. 18.25

Peak discharge (base, 500 cfs).--Nov. 29 (4 a.m.) 960 cfs (6.47 ft at 5:30 a.m.); Jan. 22 (8 a.m.) about 800 cfs; Mar. 6 (7 p.m.) 1,320 cfs (7.67 ft at 8:30 p.m.); Apr. 3 (1:30 a.m.) 930 cfs (6.40 ft at 3 a.m.).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1915. Park River at Hartford, Conn.

Location.--Lat 41°45'36", long 72°41'42", on left bank at downstream side of plate-girder footbridge on Riverside Street in Hartford, Hartford County, 1,300 ft downstream from confluence of North and South Branches, 1,300 ft upstream from Capitol Avenue Bridge, 0.9 mile upstream from inlet of Park River conduit, and 2.0 miles upstream from mouth.

Drainage area.--74.0 sq mi.

Records available.--October 1936 to September 1959.

Gage.--Water-stage recorder above spillway of timber dam. Datum of gage is 27.13 ft above mean sea level, datum of 1929 (levels by Department of Engineering, city of Hartford).

Average discharge.--23 years, 121 cfs.

Extremes.--Maximum discharge during year, 2,530 cfs Mar. 6 (gage height, 6.62 ft); minimum, 15 cfs July 8 (gage height, 2.32 ft).

1936-59: Maximum discharge, 14,000 cfs Aug. 19, 1955 (gage height, 16.36 ft, from floodmark in gage house), from rating curve extended above 3,600 cfs on basis of slope-area measurement of peak flow; minimum, about 4 cfs Sept. 23, 1937; minimum gage height, 1.58 ft July 23, Aug. 15, 1943, result of temporary diversions upstream; minimum daily discharge, 11 cfs Oct. 6, 1941, Aug. 18, 1957.

Flood of Mar. 12, 1936, reached a stage of 9.0 ft, as determined from floodmarks by city engineers of Hartford (discharge, 5,400 cfs). A stage of 10.7 ft, from floodmarks, was caused by backwater from Connecticut River on Mar. 21, 1936.

Remarks.--Records good. Some regulation by dams upstream and by storage and diversion at Hartford water-supply reservoirs on small headwater streams.

Revisions (water years).--WSP 1431: 1955.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

2.3	16	3.5	460
2.4	34	4.0	710
2.6	83	5.0	1,320
3.0	219		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	302	103	138	48	43	103	219	148	36	32	29	112
2	337	106	*103	308	46	95	350	106	210	55	23	60
3	128	417	89	215	41	148	*1,310	92	*548	32	23	122
4	89	286	160	89	331	588	420	78	103	25	27	228
5	75	*158	282	60	*154	272	249	62	60	23	64	65
6	70	128	400	48	70	1,100	211	60	50	*30	57	39
7	65	112	162	41	46	1,150	192	*57	41	29	48	30
8	62	106	122	36	48	196	162	55	46	29	34	39
9	67	141	100	32	41	144	162	50	39	30	96	41
10	62	166	92	27	82	144	205	62	41	41	116	*34
11	57	134	78	25	151	118	435	70	34	162	70	30
12	52	103	75	25	86	106	267	67	32	41	39	30
13	57	92	65	*27	96	*125	200	86	43	104	32	25
14	60	83	57	29	144	122	169	112	46	155	*30	27
15	55	80	65	30	581	141	151	75	36	112	27	32
16	*65	78	70	170	266	408	141	62	36	78	23	70
17	70	80	67	390	183	430	128	67	36	50	25	34
18	70	80	73	98	180	267	125	73	52	39	48	30
19	65	80	65	65	100	173	128	55	46	34	36	27
20	65	80	65	52	57	262	196	52	41	62	27	23
21	67	65	57	144	73	291	158	48	30	232	30	25
22	55	55	50	980	75	335	122	50	36	154	41	29
23	377	48	52	198	75	162	92	60	43	83	21	30
24	352	57	50	80	78	134	78	67	36	57	23	32
25	138	55	43	67	78	141	73	75	46	55	34	32
26	624	73	39	67	75	144	83	48	46	34	29	32
27	486	89	52	52	83	166	128	43	39	46	32	21
28	219	164	50	48	98	192	166	43	32	34	29	32
29	158	1,320	50	46	-	158	203	41	36	29	72	48
30	128	320	50	67	-------	158	122	36	41	30	131	41
31	112	-------	52	70	-------	249	-------	36	-------	30	187	-------
Total	4,591	4,859	2,873	3,634	3,381	8,222	6,645	2,036	1,961	1,947	1,503	1,420
Mean	148	162	92.7	117	121	265	222	65.7	65.4	62.8	48.5	47.3
Cfsm	2.00	2.19	1.25	1.58	1.64	3.58	3.00	0.888	0.884	0.849	0.655	0.639
In.	2.31	2.44	1.44	1.82	1.71	4.13	3.35	1.02	0.99	0.98	0.76	0.71

Calendar year 1958: Max 1,320 Min 18 Mean 142 Cfsm 1.92 In. 25.93
Water year 1958-59: Max 1,320 Min 21 Mean 118 Cfsm 1.59 In. 21.66

Peak discharge (base, 1,000 cfs).--Nov. 29 (8:30 a.m.) 1,810 cfs (5.72 ft); Jan. 22 (10 a.m.) 1,280 cfs (4.95 ft); Mar. 6 (11 p.m.) 2,530 cfs (6.62 ft); Apr. 3 (6 a.m.) 1,780 cfs (5.67 ft).

* Discharge measurement made on this day.

1925. Hockanum River near East Hartford, Conn.

Location.--Lat 41°46'59", long 72°35'16", on left bank 700 ft downstream from dam at Case Bros., Inc., papermill, 1½ miles downstream from Hop Brook, and 2¾ miles east of East Hartford, Hartford County.

Drainage area.--74.5 sq mi.

Records available.--September 1919 to September 1921, July 1928 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 54.5 ft above mean sea level, datum of 1929 (levels by Department of Engineering, city of Hartford).

Average discharge.--33 years, 117 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 1,270 cfs Mar. 6 (gage height, 7.16 ft); minimum, 35 cfs Sept. 14, 15, 23, 24 (gage height, 1.30 ft); minimum daily, 35 cfs Sept. 23.
1919-21, 1928-59: Maximum discharge, 5,160 cfs Sept. 21, 1938 (gage height, 13.78 ft, from floodmark), by computation of flow over dam just above gage; practically no flow at times caused by regulation; minimum daily, 1.2 cfs Sept. 2, 1920.

Remarks.--Records excellent except those for periods of no gage-height record, which are good. Flow regulated by Shenipsit Lake (see p. 243), other small reservoirs and industrial plants upstream.

Revisions (water years).--WSP 781: Drainage area. WSP 851: 1934(M), 1936(M). WSP 1051: 1920-21, 1928-45 (monthly and yearly discharge and runoff). WSP 1201: 1920(M), 1929(M), 1931, 1932-34(m), 1944.

Rating tables, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1, 2)

Oct. 1 to Mar. 6				Mar. 7 to Sept. 30			
1.6	53	3.0	230	1.3	35	3.0	230
2.0	87	5.0	650	2.0	105	5.1	675
2.5	139			2.5	157		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	167	82	182	76	72	118	176	189	81	70	78	111
2	176	78	148	228	a70	115	223	169	122	90	72	84
3	149	182	135	172	a70	125	691	154	337	79	71	*78
4	64	146	186	108	a200	336	520	143	148	64	70	108
5	61	108	236	88	*a150	276	430	*138	104	63	87	80
6	74	94	290	a80	92	614	360	127	92	82	93	61
7	76	87	222	a70	74	660	310	110	87	77	79	55
8	78	83	190	a68	77	254	280	103	80	71	72	60
9	82	112	157	a66	72	186	260	102	*73	68	95	54
10	69	140	157	a66	122	196	260	102	71	68	102	52
11	66	112	132	a66	164	169	330	104	69	236	88	53
12	63	96	134	a66	96	167	280	106	65	125	71	48
13	64	91	131	a64	107	155	*240	105	81	91	65	45
14	*63	86	124	74	169	147	212	123	100	95	63	37
15	64	88	132	74	418	153	196	117	82	111	59	36
16	*68	85	127	168	272	338	186	116	78	116	55	55
17	67	82	122	201	180	350	169	112	78	82	57	50
18	64	83	114	103	168	221	157	97	86	74	65	50
19	61	82	111	a90	123	176	152	80	85	67	72	50
20	61	82	111	a85	90	183	176	80	86	*72	57	48
21	61	79	99	199	87	207	178	78	75	208	57	47
22	61	76	84	520	83	250	161	85	71	140	65	40
23	160	74	92	250	84	182	149	83	84	110	51	35
24	163	78	92	134	86	154	143	78	75	93	49	40
25	95	82	83	123	81	130	138	74	*75	87	51	45
26	159	92	77	117	82	128	135	72	75	75	50	45
27	135	110	82	97	83	137	154	69	80	67	49	46
28	105	125	83	77	104	137	204	69	78	69	50	46
29	93	552	82	76	-	125	217	106	73	69	65	*55
30	90	292	*86	87	-------	131	186	114	88	70	82	55
31	84	-------	85	90	-------	165	-------	107	-------	79	148	-------
Total	2,843	3,561	4,086	3,783	3,476	6,685	7,273	3,312	2,779	2,868	2,188	1,669
Mean	91.7	119	132	122	124	216	242	107	92.6	92.5	70.6	55.6
(†)	+1.1	+14.9	-12.2	+2.2	+5.7	+23.5	-3.0	-4.6	-1.7	-5.6	-17.2	-8.0

Adjusted for change in contents in Shenipsit Lake

Mean	92.8	134	120	124	130	240	239	102	90.9	86.9	53.4	47.6
Cfsm	1.25	1.80	1.61	1.66	1.74	3.22	3.21	1.37	1.22	1.17	0.717	0.639
In.	1.44	2.01	1.86	1.91	1.81	3.71	3.58	1.58	1.36	1.35	0.83	0.71

	Observed			Adjusted	
Calendar year 1958:	Max 552	Min 45	Mean 136	Mean 137	Cfsm 1.84 In. 25.00
Water year 1958-59:	Max 691	Min 35	Mean 122	Mean 122	Cfsm 1.64 In. 22.15

Peak discharge (base, 900 cfs).--Mar. 6 (10 p.m.) 1,270 cfs (7.16 ft).

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Shenipsit Lake; furnished by Rockville Water & Aqueduct Co.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for stations on nearby streams.

1935. Salmon River near East Hampton, Conn.

Location.--Lat 41°33'11", long 72°26'57", on right bank at Old Comstock Bridge, a short distance downstream from New London-Middlesex County line, 0.6 mile downstream from Dickinson Creek, and 3½ miles southeast of East Hampton, Middlesex County.

Drainage area.--105 sq mi.

Records available.--July 1928 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 69.50 ft above mean sea level, datum of 1929.

Average discharge.--31 years (1928-59), 181 cfs.

Extremes.--Maximum discharge during year, 3,360 cfs Mar. 6 (gage height, 5.00 ft); minimum, 9 cfs Sept. 27-29 (gage height, 0.59 ft).
1928-59: Maximum discharge, 12,400 cfs Sept. 21, 1938 (gage height, 10.96 ft), by computation of flow over dam half a mile upstream; minimum, 1.0 cfs Oct. 31, 1935 (gage height, -0.17 ft); minimum daily, about 1 cfs Oct. 13, 1929.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Slight regulation at low flow by mills upstream.

Revisions (water years).--WSP 1021: 1929.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 3-23)

0.6	10	1.5	195
.7	19	2.0	380
.9	47	3.0	1,020
1.2	109	4.1	2,160

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	319	173	b348	b120	b90	235	a360	340	63	42	32	67
2	416	161	282	b400	b80	352	a410	316	103	36	26	69
3	252	274	246	544	b75	238	*2,120	249	384	38	19	63
4	180	293	330	320	b280	446	900	212	232	32	17	195
5	138	238	450	b200	*303	368	580	189	130	26	22	102
6	107	205	465	b130	173	1,670	485	195	91	26	38	67
7	91	180	328	b110	b119	1,310	425	167	82	51	38	51
8	85	164	263	b95	b114	435	376	158	67	35	31	40
9	81	218	235	b85	109	328	344	135	56	26	40	34
10	78	308	186	b80	626	320	360	127	47	20	60	29
11	70	263	b170	b75	490	263	574	*122	40	329	54	27
12	63	218	b170	b70	228	215	460	127	36	248	38	24
13	*62	189	b150	b75	238	228	372	152	63	127	27	22
14	60	173	b150	b75	b274	242	320	246	144	126	26	19
15	60	164	b150	b85	640	228	285	195	*93	394	20	a23
16	60	158	b150	280	328	616	263	155	71	332	19	a35
17	62	152	b150	569	242	592	242	132	65	195	17	a40
18	66	155	*b140	b350	215	430	228	122	88	119	19	a30
19	63	155	b130	230	183	328	221	109	86	86	71	a24
20	58	150	b125	173	b109	380	263	112	82	69	47	a20
21	57	141	b115	b267	b114	455	282	104	61	167	31	a18
22	55	130	b110	b694	b109	564	232	102	51	164	24	*16
23	505	125	b120	320	b107	368	205	100	65	107	19	14
24	575	122	b110	189	b104	304	192	86	52	96	17	13
25	328	119	b95	173	b102	278	180	78	63	164	20	11
26	465	119	b90	135	b104	278	173	71	82	104	18	10
27	450	144	b85	b117	b109	289	218	63	67	65	14	9
28	328	168	b90	b115	b122	a260	304	60	61	*51	17	9
29	263	1,290	b95	b125	-	a230	372	61	56	42	29	11
30	218	598	b130	132	--------	a220	316	88	52	36	27	12
31	192	--------	b140	127	--------	a360	--------	80	--------	32	*42	--------
Total	5,807	6,947	5,798	6,460	5,787	12,830	12,062	4,453	2,633	3,385	919	1,104
Mean	187	231	187	208	207	414	402	144	87.8	109	29.6	36.8
Cfsm	1.78	2.20	1.78	1.98	1.97	3.94	3.83	1.37	0.836	1.04	0.282	0.350
In.	2.05	2.46	2.05	2.28	2.05	4.54	4.27	1.58	0.93	1.20	0.32	0.39

Calendar year 1958: Max 1,540 Min 29 Mean 238 Cfsm 2.27 In. 30.79
Water year 1958-59: Max 2,120 Min 9 Mean 187 Cfsm 1.78 In. 24.12

Peak discharge (base, 1,300 cfs).--Nov. 29 (7 a.m.) 1,640 cfs (3.66 ft); Mar. 6 (5 p.m.) 3,360 cfs (5.00 ft); Apr. 3 (5 a.m.) 2,870 cfs (4.67 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for stations on nearby streams.
b Stage-discharge relation affected by ice.

1940. Eightmile River at North Plain, Conn.

Location.--Lat 41°26'30", long 72°20'00", at center of span on downstream side of bridge on State Highway 82 at North Plain, Middlesex County, 500 ft downstream from Strongs Brook, 0.8 mile upstream from confluence with East Branch, and 6 miles upstream from mouth.

Drainage area.--18.6 sq mi.

Records available.--September 1937 to September 1959. Prior to October 1938, published as West Branch Eightmile River near North Lyme, October 1938 to September 1954 published as West Branch Eightmile River at North Plain.

Gage.--Wire-weight gage and, since Nov. 2, 1952, crest-stage indicator; gage read once daily. Datum of gage is 57.74 ft above mean sea level, datum of 1929. Prior to May 1, 1939, staff gage at bridge 0.7 mile downstream at datum 12.17 ft lower.

Average discharge.--22 years, 40.3 cfs (adjusted to present site).

Extremes.--Maximum discharge during year, 980 cfs Apr. 3 (gage height, 6.19 ft); minimum observed, 1.0 cfs Sept. 25 (gage height, 1.80 ft).
1937-59: Maximum discharge, 2,350 cfs Oct. 15, 1955 (gage height, 7.72 ft), from rating curve extended above 1,200 cfs on basis of computation of peak flow through highway bridge and over road; minimum observed, 0.05 cfs Sept. 12, 1944 (gage height, 1.60 ft).

Remarks.--Records good except those for periods of ice effect, which are fair.

Revisions (water years).--WSP 1141: 1948. WSP 1331: 1940-41(M), 1943(M), 1948(M), 1951(M), 1952-53(P).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 3				Apr. 4 to Sept. 30			
2.3	14	4.0	154	1.8	1.0	3.2	63
2.8	35	4.5	265	1.9	2.3	3.4	78
3.2	60	5.0	415	2.0	4.2	3.8	122
3.6	96	5.5	605	2.1	7.0	4.2	194
				2.7	33		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	135	46	64	22	24	36	64	60	18	11	6.4	9.0
2	125	44	53	89	19	56	120	56	20	9.8	4.8	12
3	68	56	*46	64	18	40	*540	48	43	9.8	4.2	9.8
4	50	53	72	50	100	71	184	42	30	7.8	3.8	28
5	41	45	102	34	60	56	122	41	21	6.2	5.6	15
6	32	43	90	26	43	410	97	38	19	8.2	6.4	9.4
7	29	40	64	23	35	240	87	37	21	12	5.6	7.8
8	30	38	53	23	30	102	74	35	16	6.7	6.2	*6.2
9	28	60	53	22	30	77	66	31	13	5.0	15	5.6
10	25	72	50	20	92	68	70	30	11	5.0	11	4.8
11	24	56	46	20	77	56	92	30	8.6	84	7.0	4.2
12	21	46	46	20	56	50	82	30	7.8	50	5.3	3.1
13	*20	42	45	19	46	53	70	36	16	32	4.8	1.6
14	19	40	44	18	50	56	63	47	33	26	4.2	2.3
15	19	38	41	20	120	53	60	38	19	63	3.6	2.3
16	20	38	36	30	72	120	56	36	15	60	3.2	2.7
17	20	36	34	58	53	102	50	32	15	42	3.2	2.3
18	19	38	32	44	50	86	48	26	22	30	3.1	1.9
19	19	37	32	27	45	72	47	26	24	24	7.0	2.2
20	18	35	36	29	42	72	60	26	20	21	4.8	3.6
21	17	32	33	47	36	77	56	23	15	36	3.6	2.3
22	16	32	32	91	34	86	50	23	*15	*27	3.1	*1.9
23	175	29	30	60	30	68	49	34	21	22	2.9	1.9
24	145	28	31	50	30	61	44	27	13	18	2.9	1.3
25	86	28	30	40	30	56	45	22	17	16	3.4	1.0
26	120	27	23	30	30	56	38	19	24	13	2.9	1.5
27	120	30	24	28	29	56	43	17	20	10	2.3	1.4
28	86	34	25	*27	26	56	53	16	17	8.6	*1.9	1.9
29	72	155	24	25	-	53	64	15	17	7.8	2.0	1.6
30	60	96	30	30	-------	53	60	20	16	6.4	12	1.5
31	53	-------	26	30	-------	77	-------	28	-------	6.4	8.6	-------
Total	1,712	1,394	1,347	1,116	1,307	2,575	2,554	989	567.4	684.7	160.8	150.1
Mean	55.2	46.5	43.5	36.0	46.7	83.1	85.1	31.9	18.9	22.1	5.19	5.00
Cfsm	2.97	2.50	2.34	1.94	2.51	4.47	4.58	1.72	1.02	1.19	0.279	0.269
In.	3.42	2.79	2.69	2.23	2.61	5.15	5.11	1.98	1.13	1.37	0.32	0.30

Calendar year 1958: Max 382 Min 4.7 Mean 53.1 Cfsm 2.85 In. 38.72
Water year 1958-59: Max 540 Min 1.0 Mean 39.9 Cfsm 2.15 In. 29.10

Peak discharge (base, 350 cfs).--Oct. 23 (about 11 a.m.) 382 cfs (4.91 ft); Mar. 6 (about 2 p.m.) 860 cfs (6.04 ft); Apr. 3 (about 1 a.m.) 980 cfs (6.19 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 11-18, 23, 24, 28-31, Jan. 7-20, 28, Feb. 23 to Mar. 1.

1945. East Branch Eightmile River near North Lyme, Conn.

Location.--Lat 41°25'40", long 72°20'05", on left bank at bridge on State Highway 156, 0.4 mile upstream from mouth, 1.1 miles north of North Lyme, New London County, 1.2 miles south of North Plain, and 5½ miles upstream from mouth of Eightmile River.

Drainage area.--22.0 sq mi.

Records available.--September 1937 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 55.21 ft above mean sea level, datum of 1929.

Average discharge.--22 years, 46.5 cfs.

Extremes.--Maximum discharge during year, 640 cfs Apr. 3 (gage height, 3.90 ft); minimum, 1.6 cfs Sept. 26-28 (gage height, 0.19 ft).
1937-59: Maximum discharge, 2,950 cfs Sept. 21, 1938 (gage height, 7.00 ft), computed on basis of study of flow at contracted control section; no flow Sept. 3, 1938, result of regulation; minimum daily, about 0.03 cfs Oct. 2, 1941.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are good. Occasional regulation at low flow.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from leaves on control Sept. 16-22)

Oct. 1-23				Oct. 24 to Sept. 30			
0.5	12.5	1.5	116	0.2	1.7	1.0	51
.8	34	2.0	182	.3	3.3	1.5	116
1.0	51	3.0	345	.4	6.1	2.0	182
				.5	12.5	3.0	345
				.8	34	3.5	470

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	62	72	28	b22	44	84	62	25	12	6.1	11
2	193	55	56	80	b20	97	101	66	23	8.6	5.3	12
3	113	60	*49	117	b17	67	*470	51	49	9.2	4.4	9.2
4	66	70	66	64	93	78	248	43	42	8.0	4.1	25
5	49	62	130	b36	119	100	166	*39	25	6.1	4.1	20
6	40	53	120	a28	50	221	133	36	20	5.3	5.0	12
7	33	48	83	a24	b33	384	113	34	23	6.5	5.0	8.0
8	29	44	62	22	34	140	95	32	19	8.0	5.3	*5.7
9	28	49	54	21	b25	98	86	30	16	5.7	8.0	4.7
10	25	84	b42	19	86	82	82	28	12	4.7	14	4.1
11	23	80	b40	18	150	68	112	28	9.9	85	12	3.7
12	20	62	41	17	b64	b53	107	27	8.6	113	7.5	3.3
13	*18	51	40	18	53	62	87	28	14	46	6.1	3.1
14	18	46	b38	18	63	69	74	42	36	32	4.4	2.9
15	18	44	38	20	144	66	64	38	25	51	3.9	2.7
16	18	42	37	33	101	146	58	31	19	74	3.5	2.6
17	18	41	36	66	67	178	52	27	16	49	3.1	2.3
18	18	42	36	b46	56	133	48	26	*21	30	2.9	2.3
19	18	42	34	b31	b54	93	46	25	26	24	3.7	2.2
20	16	40	37	26	b37	88	54	26	26	21	3.3	2.1
21	16	38	34	37	b36	93	70	25	18	35	3.1	2.1
22	15	36	b28	106	b32	120	55	22	16	*32	2.9	*2.1
23	107	34	28	79	28	97	46	33	25	24	2.7	1.9
24	255	33	29	b43	b23	77	42	25	19	20	2.5	1.8
25	139	32	b26	39	b28	68	39	21	19	18	2.9	1.7
26	136	32	22	34	b28	64	38	19	28	15	2.7	1.7
27	172	34	21	29	b28	70	42	17	22	12	2.3	1.6
28	130	34	*22	b28	32	73	53	16	20	9.2	*2.2	1.7
29	97	126	22	b26	-	66	69	14	18	7.5	2.1	2.1
30	80	135	28	28	------	63	72	16	16	6.5	11	2.3
31	68	------	32	30	------	83	------	40	------	6.1	9.2	------
Total	2,069	1,611	1,403	1,211	1,528	3,141	2,806	967	656.5	784.4	155.3	157.9
Mean	66.7	53.7	45.3	39.1	54.6	101	93.5	31.2	21.9	25.3	5.01	5.26
Cfsm	3.03	2.44	2.06	1.78	2.48	4.59	4.25	1.42	0.995	1.15	0.228	0.239
In.	3.49	2.72	2.38	2.05	2.58	5.29	4.74	1.64	1.11	1.33	0.26	0.27

Calendar year 1958: Max 415 Min 5.3 Mean 63.6 Cfsm 2.89 In. 39.27
Water year 1958-59: Max 470 Min 1.6 Mean 45.2 Cfsm 2.05 In. 27.86

Peak discharge (base, 300 cfs).--Mar. 7 (2 a.m.) 575 cfs (3.77 ft); Apr. 3 (12 m.) 640 cfs (3.90 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated from recorded range in stage and records for stations on nearby streams.
b Stage-discharge relation affected by ice.

Reservoirs in Connecticut River basin

1280. First Connecticut and Second Connecticut Lakes on Connecticut River are operated as a unit for storage of water for power. The reservoirs, in downstream order and usable capacity of each, are as follows: Second Lake, 12 miles northeast of Pittsburg, N. H., 506,000,000 cu ft; First Lake, 5 2/3 miles northeast of Pittsburg, N. H., 3,330,000,000 cu ft. Records furnished by New England Power Co.

1290. Lake Francis on Connecticut River at Pittsburg, N. H., completed in March 1940, used for storage of water for power, has usable capacity of 4,326,000,000 cu ft. Records furnished by New England Water Resources Board.

1325. Moore Reservoir and Comerford Station Pond on Connecticut River are operated as a unit for storage of water for hydroelectric power development. The reservoirs, in downstream order and usable capacity of each, are as follows: Moore Reservoir, 4½ miles northwest of Littleton, N. H., filled in April 1956, 4,970,000,000 cu ft; Comerford Station Pond, 4½ miles northeast of Barnet, Vt., completed in 1930, 1,279,000,000 cu ft. Records furnished by New England Power Co.

1410. Union Village Reservoir on Ompompanoosuc River, 1¼ miles north of Union Village, Vt., completed in 1949 for flood control, has usable capacity of 1,660,000,000 cu ft. Records furnished by Corps of Engineers.

1500. Lakes and ponds in Mascoma River basin.--These reservoirs are operated as a unit for storage of water for power. The reservoirs and usable capacity of each are as follows: Goose Pond, 5½ miles northeast of Mascoma, N. H., 509,000,000 cu ft; Grafton Pond, 8½ miles southeast of Mascoma, 144,000,000 cu ft; Crystal Lake, 5¾ miles southeast of Mascoma, 75,000,000 cu ft; Mascoma Lake at Mascoma, 337,000,000 cu ft; total usable capacity of the four reservoirs, 1,060,000,000 cu ft. Records furnished by New England Power Co.

1520. Sunapee Lake on Sugar River at Sunapee, N. H., used for recreation and storage of water for power, has usable capacity of 862,000,000 cu ft. Records collected by Geological Survey.

1575. Surry Mountain Reservoir on Ashuelot River, 4½ miles north of Keene, N. H., completed in 1942 for flood control, has usable capacity of 1,420,000,000 cu ft. Records furnished by Corps of Engineers.

1585.5. Otter Brook Reservoir on Otter Brook, 2½ miles northeast of Keene, N. H., completed in 1958 for flood control, has usable capacity of 798,000,000 cu ft. Records furnished by Corps of Engineers.

1635. Birch Hill Reservoir on Millers River, 1 mile east of South Royalston, Mass., completed in 1941 for flood control, has usable capacity of 2,180,000,000 cu ft. Records furnished by Corps of Engineers.

1645. Tully Reservoir on East Branch Tully River, 3½ miles north of Athol, Mass., completed in 1948 for flood control, has usable capacity of 958,000,000 cu ft. Records furnished by Corps of Engineers.

1680. Somerset and Harriman Reservoirs in Deerfield River basin are operated as a unit for storage of water for hydroelectric power development. The downstream order and usable capacity of each are as follows: Somerset Reservoir on East Branch Deerfield River, 2½ miles northeast of Somerset, Vt., 2,500,000,000 cu ft; Harriman Reservoir on Deerfield River at Davis Bridge, Vt., 5,060,000,000 cu ft. Records furnished by New England Power Co.

1724. Barre Falls Reservoir on Ware River, 4 miles east of Barre, Mass., completed in 1958 for flood control, has usable capacity of 1,050,000,000 cu ft. Records furnished by Corps of Engineers.

1750. Quabbin Reservoir on Swift River, 3¼ miles east of Belchertown, Mass., completed in August 1939 for storage of water for municipal supply, has usable capacity of 55,700,000,000 cu ft. Records furnished by Water Division, Metropolitan District Commission.

1765. Ludlow Reservoir in Chicopee River basin, 3¼ miles northwest of Three Rivers, Mass., completed in 1875 for storage of water for municipal supply, has usable capacity of 201,000,000 cu ft. Records furnished by Board of Water Commissioners, Springfield, Mass.

1775. Watershops Pond on Mill River in Springfield, Mass., completed in 1857 for storage of water for power, has usable capacity of 70,600,000 cu ft. Records furnished by Ordnance Department, Department of the Army.

1790. Knightville Reservoir on Westfield River, 4 miles north of Huntington, Mass., completed in 1941 for flood control, has usable capacity of 2,130,000,000 cu ft. Records furnished by Corps of Engineers.

1825. Borden Brook and Cobble Mountain Reservoirs in Westfield Little River basin are operated as a unit for storage of water for municipal supply and for hydroelectric power development. The downstream order and usable capacity of each are as follows: Borden Brook Reservoir on Borden Brook, 3½ miles south of Blandford, Mass., 344,000,000 cu ft; Cobble Mountain Reservoir on Westfield Little River, 6½ miles west of Westfield, Mass., 3,050,000,000 cu ft. Records furnished by Board of Water Commissioners, Springfield, Mass.

Reservoirs in Connecticut River basin--Continued

1850. Otis Reservoir in Farmington River basin, lat 42°09'35", long 73°03'33", 1 mile northeast of Cold Spring, Berkshire County, Mass. Drainage area, 17.2 sq mi. Completed in 1865 for storage of water for power. Usable capacity, 780,000,000 cu ft. Records available, April 1913 to September 1959. Records furnished by The Collins Co., Collinsville, Conn.

1875. Barkhamsted Reservoir on East Branch Farmington River in Farmington River basin, Lat 41°54'38", long 72°57'15", 1¼ miles south of Barkhamsted, Litchfield County, Conn. Drainage area, 53.8 sq mi. Completed in 1939 for storage of water for municipal supply. Total capacity, 4,250,000,000 cu ft. Records available, March 1940 to September 1959. Records furnished by Water Bureau, Metropolitan District Commission, Hartford, Conn.

1876. East Branch Reservoir on East Branch Farmington River in Farmington River basin, lat 41°52'49", long 72°57'30", 1 mile east of New Hartford, Litchfield County, Conn. Drainage area, including Barkhamsted Reservoir, 61.2 sq mi. Completed in 1919 for storage of water to compensate for water diverted from the river. Total capacity, 400,000,000 cu ft. Records available, August 1928 to September 1959. Records furnished by Water Bureau, Metropolitan District Commission, Hartford, Conn.

1879. Nepaug Reservoir on Nepaug River in Farmington River basin, lat 41°49'37", long 72°56'34", 1½ miles northwest of Collinsville, Hartford County, Conn. Drainage area, 32.0 sq mi. Completed in 1918 for storage of water for municipal supply. Total capacity, 1,280,000,000 cu ft. Records available, August 1928 to September 1959. Records furnished by Water Bureau, Metropolitan District Commission, Hartford, Conn.

1885. Whigville Reservoir on Whigville Brook in Pequabuck River basin, lat 41°44'08", long 72°57'02", at Whigville, Hartford County, Conn. Drainage area, 3.95 sq mi. Completed in 1908 for storage of water for domestic water supply. Total capacity, 8,650,000 cu ft. Records available, July 1928 to September 1959. Records furnished by Board of Water Commissioners, New Britain, Conn.

1920. Shenipsit Lake on Hockanum River, lat 41°52'06", long 72°25'59", three-quarters of a mile east of Rockville, Tolland County, Conn. Drainage area, 16.5 sq mi. Dam raised to its present crest elevation in 1871, providing a usable capacity of 250,000,000 cu ft for municipal supply and power; total capacity of lake, 730,000,000 cu ft. Capacities based on lake survey by Connecticut State Board of Fisheries and Game. Records available, September 1919 to September 1921, July 1928 to September 1959. Records furnished by Rockville Water & Aqueduct Co.

Month-end usable contents, in millions of cubic feet, water year October 1958 to September 1959

Date	First and Second Connecticut Lakes	Lake Francis	Moore Reservoir and Comerford Station Pond	Union Village Reservoir	Lakes and ponds in Mascoma River basin	Sunapee Lake
Sept.30, 1958.....	2,879.3	3,381.0	5,853.5	1.5	602.7	303
Oct. 31.....	2,671.5	3,262.4	5,863.6	2.3	517.1	224
Nov. 30.....	1,920.2	2,628.3	6,046.3	16.7	451.0	231
Dec. 31.....	1,043.4	1,901.9	5,560.7	22.0	444.5	194
Jan. 31, 1959.....	630.7	1,504.9	4,977.4	25.2	470.5	228
Feb. 28.....	317.0	729.1	2,962.3	23.9	404.1	224
Mar. 31.....	130.8	570.7	1,669.4	37.4	406.1	316
Apr. 30.....	1,807.3	2,454.1	3,694.6	12.0	1,068.2	638
May 31.....	2,866.5	3,059.4	5,563.3	2.3	1,096.8	610
June 30.....	3,646.3	4,000.8	5,967.8	1.7	1,096.3	566
July 31.....	3,425.2	3,975.3	5,387.7	1.3	947.6	462
Aug. 31.....	3,118.0	3,667.0	5,737.2	3.0	921.0	381
Sept.30.....	2,894.4	3,471.7	5,741.2	1.9	809.7	258

Date	Surry Mountain Reservoir	Otter Brook Reservoir	Birch Hill Reservoir	Tully Reservoir	Somerset and Harriman Reservoirs	Barre Falls Reservoir
Sept.30, 1958.....	57.4	10.6	4.2	0.1	5,203.9	2.6
Oct. 31,.....	63.4	29.9	2.2	.1	5,033.9	2.2
Nov. 30.....	73.1	33.7	9.5	18.0	4,828.3	4.2
Dec. 31.....	41.2	32.6	1.8	20.0	3,670.6	2.0
Jan. 31, 1959.....	61.0	55.5	4.5	23.0	3,761.3	20.0
Feb. 28.....	46.9	33.4	4.5	18.0	2,242.1	12.2
Mar. 31.....	32.7	3.3	10.0	.4	1,565.5	3.1
Apr. 30.....	68.1	33.7	11.0	1.2	5,713.0	3.1
May 31.....	62.2	30.2	1.8	.1	6,013.7	1.8
June 30.....	69.3	30.9	2.2	.1	6,267.5	2.0
July 31.....	58.6	29.0	1.5	0	5,720.1	2.0
Aug. 31.....	74.4	32.6	4.5	.2	5,248.8	2.6
Sept.30.....	58.6	29.0	1.8	0	4,849.7	1.8

Reservoirs in Connecticut River basin--Continued

Month-end usable contents, in millions of cubic feet, water year October 1958 to September 1959

Date	Quabbin Reservoir†	Ludlow Reservoir	Watershops Pond	Knightville Reservoir	Borden Brook and Cobble Mountain Reservoirs	Otis Reservoir
Sept.30, 1958.....	49,296	179.4	30.4	0.5	2,688.7	688
Oct. 31.....	48,354	183.0	52.2	.5	2,720.0	568
Nov. 30.....	47,561	192.2	48.4	8.9	2,838.3	506
Dec. 31.....	47,747	179.4	56.3	8.5	2,286.7	399
Jan. 31, 1959.....	48,344	181.1	66.3	52.9	2,100.8	328
Feb. 28.....	48,531	181.1	59.9	9.1	1,751.6	399
Mar. 31.....	50,288	190.4	68.9	1.0	1,978.1	506
Apr. 30.....	52,758	188.5	68.2	2.7	2,541.3	654
May 31.....	52,184	183.0	67.6	.2	2,524.1	692
June 30.....	50,879	183.0	67.6	.2	2,424.6	700
July 31.....	50,778	181.1	67.6	.1	2,298.9	696
Aug. 31.....	50,558	183.0	68.9	.2	2,133.1	696
Sept.30.....	49,257	175.8	71.8	.2	2,008.3	669

	Barkhamsted, East Branch and Nepaug Reservoirs	Whigville Reservoir	Shenipsit Lake			
Sept.30, 1958.....	5,281	7.1	640.4			
Oct. 31.....	5,309	8.5	643.3			
Nov. 30.....	5,534	8.7	682.0			
Dec. 31.....	5,567	5.3	649.2			
Jan. 31, 1959.....	5,619	6.5	655.0			
Feb. 28.....	5,507	5.1	668.8			
Mar. 31.....	5,914	8.7	731.8			
Apr. 30.....	5,914	8.8	723.9			
May 31.....	5,804	5.1	711.6			
June 30.....	5,580	6.5	707.3			
July 31.....	5,427	7.1	692.3			
Aug. 31.....	4,923	4.7	646.2			
Sept.30.....	4,331	4.0	625.4			

† Affected by diversion from Ware River and diversion to Wachusett Reservoir and Chicopee Valley aqueduct.

1950. Menunketesuck River near Clinton, Conn.

Location.--Lat 41°18'10", long 72°31'00", on right bank at Fairy Dell, 100 ft downstream from Cobb's Bridge, 1.7 miles north of Clinton, Middlesex County, 2.4 miles downstream from Kelseytown Reservoir, and 4.9 miles upstream from mouth.
Drainage area.--11.6 sq mi.
Records available.--June 1941 to September 1959.
Gage.--Water-stage recorder. Datum of gage is 23.64 ft above mean sea level, datum of 1929.
Average discharge.--18 years, 22.3 cfs (adjusted).
Extremes (unadjusted for storage or diversion).--Maximum discharge during year, 395 cfs Apr. 3 (gage height, 4.59 ft); minimum, 0.06 cfs Aug. 4, 5 (gage height, 0.77 ft).
1941-59: Maximum discharge, 1,500 cfs Sept. 11, 1954 (gage height, 8.51 ft), from rating curve extended above 270 cfs on basis of computation of peak flow over Kelseytown dam; no flow at times during August and September 1944, July and August 1957.
Remarks.--Records excellent except those for periods of ice effect or backwater from leaves or aquatic vegetation, which are good, and those below 4.0 cfs, which are poor. The daily discharge record for all periods except those of low flow is a summation of daily flow at gaging station and daily diversion from Kelseytown Reservoir as measured by venturi meter. During periods of low flow, diversions from Kelseytown Reservoir are compensated for by release of water from Killingworth Reservoir which is located about 2.5 miles upstream from Kelseytown Reservoir on a small tributary of Menunketesuck River. The drainage area of Killingworth Reservoir is so small that its yield is considered negligible during periods of low flow when it becomes necessary to draw upon it. Therefore, the daily discharge record for periods of low flow July 1-11, July 27 to Aug. 9, Aug. 14 to Sept. 2, and Sept. 14-30 is a summation of daily flow at gaging station and daily diversion from Kelseytown Reservoir, minus daily draft on Killingworth Reservoir adjusted for daily change in contents in Kelseytown Reservoir. Change in contents in Kelseytown Reservoir and draft on Killingworth Reservoir are determined from a continuous chart record of Kelseytown Reservoir water surface. No account is taken of evaporation from the reservoir surfaces. Flow at recording gage station regulated by Killingworth and Kelseytown Reservoirs and by diversion for domestic water supply from Kelseytown Reservoir.
Cooperation.--Venturi-meter records and some other data furnished by the Guilford-Chester Water Co.
Revisions (water years).--WSP 1301: 1942-44(M).

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	29	32	12	b12	17	44	33	5.6	4.5	2.3	4.7
2	91	25	26	49	11	32	45	32	5.1	3.9	2.1	4.8
3	38	29	*22	55	10	27	267	26	20	3.5	1.9	4.0
4	26	29	39	35	26	43	110	22	17	3.1	1.8	7.7
5	19	25	61	b23	37	45	68	18	11	2.7	2.1	9.8
6	15	22	50	20	22	139	52	18	8.0	2.5	2.1	7.3
7	12	20	36	13	b16	179	44	17	8.4	2.3	2.3	4.8
8	11	18	28	11	15	67	39	18	7.9	2.2	2.5	3.8
9	10	22	24	10	b13	46	*35	15	5.8	2.1	3.0	3.2
10	9.6	36	b21	9.1	46	41	35	14	4.5	2.5	7.5	2.8
11	8.1	33	b18	8.3	78	35	49	14	3.9	18	7.6	2.3
12	8.0	25	19	7.6	b37	35	45	14	3.6	17	6.3	2.1
13	*6.8	21	18	8.3	30	39	39	15	4.2	12	4.9	2.0
14	5.9	19	16	8.5	35	35	34	27	8.3	11	3.3	1.8
15	6.0	18	16	9.1	73	35	29	22	6.6	22	2.6	1.7
16	6.0	19	16	18	47	69	27	17	5.1	*39	2.2	1.6
17	6.0	18	16	39	35	86	24	15	4.3	22	1.9	1.5
18	6.0	18	16	b22	33	66	22	13	*4.8	14	1.7	1.4
19	5.6	18	15	15	29	48	22	12	6.1	10	2.0	1.3
20	5.4	18	15	13	b22	46	27	13	6.4	8.1	2.1	1.2
21	5.3	17	14	20	b17	48	33	13	5.7	15	2.0	1.2
22	5.4	15	11	54	b15	60	26	13	4.4	13	1.9	1.1
23	59	14	11	b35	14	45	22	14	11	9.3	1.8	1.1
24	106	13	11	b22	15	39	20	13	9.2	7.5	1.7	1.0
25	50	13	10	19	b14	34	18	9.8	6.8	6.2	1.8	1.0
26	138	13	9.3	18	b12	33	18	8.3	6.8	5.5	1.7	.9
27	130	13	8.0	15	13	35	20	8.0	7.3	4.6	1.6	.9
28	67	13	8.3	*14	14	37	29	7.3	6.4	3.9	1.5	1.2
29	48	64	8.4	14	-	32	36	7.9	5.6	3.3	1.7	1.1
30	39	51	12	14	-------	32	34	7.6	5.3	2.9	4.8	*1.0
31	33	-------	14	15	-------	48	-------	6.9	-------	2.5	*4.3	-------
Total	1,030.1	688	621.0	625.9	741	1,573	1,313	483.8	215.1	276.1	87.0	80.3
Mean	33.2	22.9	20.0	20.2	26.5	50.7	43.8	15.6	7.17	8.91	2.81	2.68
Cfsm	2.86	1.97	1.72	1.74	2.28	4.37	3.78	1.34	0.618	0.768	0.242	0.231
In.	3.30	2.20	1.98	2.01	2.37	5.04	4.22	1.54	0.69	0.89	0.28	0.26

Calendar year 1958: Max 244 Min 1.5 Mean 31.3 Cfsm 2.70 In. 36.64
Water year 1958-59: Max 267 Min 0.9 Mean 21.2 Cfsm 1.83 In. 24.78

Peak discharge (base, 200 cfs, unadjusted for storage and diversion).--Oct. 26 (8 p.m.) 212 cfs (3.55 ft); Mar. 6 (10:30 p.m.) 365 cfs (4.47 ft); Apr. 3 (9 a.m.) 395 cfs (4.59 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from leaves or aquatic vegetation Oct. 1-13, May 2 to Sept. 30.

1965. Quinnipiac River at Wallingford, Conn.

Location.--Lat 41°26'58", long 72°50'29", on right bank 0.8 mile downstream from Quinnipiac Street Bridge in Wallingford, New Haven County, and 2 miles upstream from Worton Brook.

Drainage area.--109 sq mi.

Records available.--October 1930 to September 1959.

Gage.--Water-stage recorder and timber control. Datum of gage is 20.24 ft above mean sea level, datum of 1929.

Average discharge.--29 years, 207 cfs.

Extremes.--Maximum discharge during year, 2,070 cfs Mar. 7 (gage height, 7.45 ft); minimum, 39 cfs Aug. 17 (gage height, -0.08 ft).
1930-59: Maximum discharge, 5,230 cfs Sept. 21, 1938 (gage height, 9.55 ft), by computation of flow over dam 1 mile upstream; minimum, 8 cfs Nov. 2, 1930; minimum gage height observed, -0.16 ft Aug. 10, 21, 1957.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Low flow regulated by mills upstream.

Revisions (water years).--WSP 781: Drainage area. WSP 851: 1933, 1936. WSP 971: 1940-42. WSP 1171: 1947 (calendar year mean). WSP 1201: 1931(M), 1932, 1934-35, 1937, 1949-50(M). WSP 1381: 1936, 1938, 1940-41, 1943-44, 1949.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

0.1	53	3.0	540
1.0	136	5.0	1,030
1.5	205	7.0	1,830
2.0	325		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	300	223	406	119	117	128	315	298	93	86	96	76
2	420	209	295	522	100	136	440	275	100	103	86	81
3	189	202	248	400	98	144	1,300	223	305	90	67	90
4	139	246	300	242	427	380	1,010	196	308	78	64	201
5	117	240	350	164	421	430	590	178	242	70	75	169
6	100	205	540	114	200	849	460	*169	149	74	82	102
7	95	186	a350	123	151	1,820	400	166	125	75	89	a85
8	92	172	a250	118	127	800	350	160	a110	67	80	a80
9	89	186	a230	111	119	375	325	154	a105	67	111	a80
10	88	215	a200	102	260	298	338	144	a100	70	114	a80
11	88	207	*a175	98	450	245	480	142	a95	225	96	a75
12	76	*182	180	97	260	235	460	148	a90	142	78	a65
13	*73	167	171	98	238	211	410	211	a115	108	68	a60
14	74	162	155	100	295	211	338	260	119	101	60	a62
15	75	158	163	103	675	219	300	205	82	115	59	a75
16	78	153	162	195	440	228	270	164	91	119	59	a85
17	79	149	162	394	265	262	250	147	93	102	56	a80
18	74	152	160	216	221	191	230	136	110	90	68	a75
19	74	155	158	143	186	325	219	134	122	81	67	a70
20	73	152	157	133	159	338	238	132	104	80	59	a65
21	72	143	144	215	142	400	242	130	90	147	59	a65
22	72	135	122	480	124	450	217	124	93	118	57	a70
23	474	127	129	409	120	*362	198	117	88	134	59	a75
24	452	129	129	185	121	282	187	108	86	119	60	a70
25	325	126	120	168	117	255	178	106	103	104	60	*a60
26	724	128	109	147	*109	250	178	105	106	100	58	58
27	765	136	110	133	113	275	203	105	102	84	60	56
28	502	171	106	119	121	288	292	103	99	a75	60	58
29	350	950	107	117	-	252	325	100	98	a70	56	62
30	275	688	122	128	-------	258	285	98	101	a65	59	59
31	240	-------	128	143	-------	312	-------	95	-------	*a85	*59	-------
Total	6,644	6,454	6,138	5,836	6,176	11,209	11,028	4,833	3,624	3,044	2,181	2,389
Mean	214	215	198	188	221	362	368	156	121	98.2	70.4	79.6
Cfsm	1.96	1.97	1.82	1.72	2.03	3.32	3.38	1.43	1.11	0.901	0.646	0.730
In.	2.26	2.20	2.10	1.98	2.11	3.83	3.77	1.65	1.24	1.04	0.74	0.81

Calendar year 1958: Max 1,090 Min 72 Mean 245 Cfsm 2.25 In. 30.46
Water year 1958-59: Max 1,820 Min 56 Mean 191 Cfsm 1.75 In. 23.73

Peak discharge (base, 900 cfs).--Nov. 29 (6 a.m.) 1,220 cfs (5.55 ft); Mar. 7 (11 a.m.) 2,070 cfs (7.45 ft); Apr. 3 (8:30 p.m.) 1,380 cfs (5.98 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for stations on nearby streams.

1970. East Branch Housatonic River at Coltsville, Mass.

Location.--Lat 42°28'10", long 73°11'49", on right bank at Coltsville, Berkshire County, 1¼ miles upstream from Unkamet Brook and 2 miles northeast of Pittsfield.

Drainage area.--57.1 sq mi.

Records available.--March 1936 to September 1959. Prior to October 1945, published as Housatonic River at Coltsville.

Gage.--Water-stage recorder. Datum of gage is 993.49 ft above mean sea level, datum of 1929.

Average discharge.--23 years, 115 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 1,730 cfs Jan. 22 (gage height, 6.78 ft); minimum daily, 22 cfs July 10, Aug. 2, 3.
1936-59: Maximum discharge, 6,400 cfs Sept. 21, 1938 (gage height, 10.80 ft), from rating curve extended above 2,300 cfs on basis of computation of peak flow over dam; minimum daily, 4.4 cfs Aug. 15, 1936.
Maximum stage known since at least 1755, that of Sept. 21, 1938.

Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by powerplants above station and, since 1949, by Cleveland Brook Reservoir. Diversion above station from Cleveland Brook Reservoir for municipal supply of Pittsfield since May 1950.

Revisions (water years).--WSP 851: 1936(M).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Apr. 3 to Sept. 30
Oct. 1-23,

2.0	17	2.6	77
2.1	23	3.0	152
2.3	39	3.5	267

Note.--Same as following table above 3.5 ft.

Oct. 24 to Apr. 2

2.1	23	3.5	267
2.3	41	4.0	412
2.6	82	5.0	800
3.0	155	6.0	1,260

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	109	76	116	35	67	47	205	171	34	39	27	70
2	177	63	92	45	b63	51	459	123	40	66	22	60
3	87	172	80	48	57	65	908	100	89	47	22	157
4	60	225	82	42	76	63	606	91	51	31	23	175
5	47	244	94	b40	85	56	432	77	38	26	65	92
6	43	230	159	b37	90	90	442	71	34	27	65	52
7	42	196	b120	b38	73	157	336	64	41	27	56	44
8	40	139	90	b36	61	100	342	58	37	26	54	44
9	43	112	82	b35	b52	87	455	54	35	23	85	43
10	*41	111	70	b33	60	73	*375	50	29	22	68	42
11	36	107	57	b30	61	63	455	57	27	27	58	39
12	33	93	63	b33	61	51	302	81	27	28	49	39
13	34	79	60	37	61	59	213	106	30	51	40	35
14	35	*80	53	38	60	60	182	100	31	48	35	36
15	40	82	57	39	80	54	169	80	31	34	33	39
16	40	74	59	53	84	108	173	70	29	28	27	41
17	38	72	57	73	78	100	184	61	29	26	31	38
18	34	74	*57	b68	70	82	173	60	32	24	58	38
19	26	87	56	b64	64	76	148	57	46	60	40	39
20	30	107	53	54	51	135	177	60	47	96	30	35
21	33	96	42	141	51	239	171	*55	34	294	28	36
22	30	98	b44	1,210	42	264	121	50	30	158	29	38
23	116	76	48	480	46	205	104	50	31	64	24	37
24	270	73	47	207	48	163	91	47	30	47	27	37
25	143	74	39	133	47	188	80	42	28	46	32	39
26	123	74	38	b95	47	252	76	43	33	34	28	36
27	192	82	38	80	47	237	145	41	99	34	26	34
28	232	76	37	68	49	153	252	39	123	31	*31	34
29	161	345	40	*61	-	107	237	35	66	*28	54	36
30	114	206	43	80	--------	100	216	49	*50	26	44	*38
31	87	--------	41	82	--------	116	--------	39	--------	26	48	--------
Total	2,536	3,623	2,014	3,515	1,731	3,581	8,229	2,081	1,281	1,544	1,259	1,523
Mean	81.8	121	65.0	113	61.8	116	274	67.1	42.7	49.8	40.6	50.8
(†)	6.91	9.41	11.4	11.4	7.65	7.33	7.78	8.71	9.16	11.2	10.7	11.8

		Observed			Adjusted for diversion			
Calendar year 1958:	Max	854	Min 9.1	Mean 103	Mean	111	Cfsm 1.94	In. 26.39
Water year 1958-59:	Max	1,210	Min 22	Mean 90.2	Mean	99.7	Cfsm 1.75	In. 23.69

Peak discharge (base, 1,150 cfs).--Jan. 22 (11 a.m.) 1,730 cfs (6.78 ft).

* Discharge measurement made on this day.
† Diversion above station from Cleveland Brook Reservoir for municipal supply of Pittsfield, equivalent in cubic feet per second. Records furnished by city of Pittsfield.
b Stage-discharge relation affected by ice.

1975. Housatonic River near Great Barrington, Mass.

Location.--Lat 42°13'55", long 73°21'19", on left bank at upstream side of highway bridge at Van Deusenville, 0.5 mile upstream from Williams River and 2 miles north of Great Barrington, Berkshire County.

Drainage area.--280 sq mi.

Records available.--May 1913 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 683.04 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1931, staff gage at same site and datum.

Average discharge.--46 years, 526 cfs.

Extremes.--Maximum discharge during year, 3,710 cfs Jan. 22 (gage height, 7.90 ft); minimum daily, 27 cfs Sept. 17.
1913-59: Maximum discharge, 12,200 cfs Jan. 1, 1949 (gage height, 12.08 ft), from rating curve extended above 5,300 cfs on basis of computations of flow over dams at gage heights 11.72 and 12.08 ft; minimum daily, 1.0 cfs Oct. 18, 1914.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by powerplants above station.

Revisions (water years).--WSP 415: 1913-14. WSP 781: 1928(M). WSP 1051: 1928, 1933. WSP 1301: 1914-15(M), 1917-27(M), 1929-31(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.8	26	4.0	735
2.1	48	5.0	1,500
2.5	97	6.0	2,200
3.0	209	8.0	3,820
3.5	407		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	456	501	938	206	370	216	826	1,040	a220	209	120	180
2	842	428	735	240	b400	287	1,400	850	*209	212	58	203
3	682	855	572	244	317	298	2,660	652	272	200	78	300
4	472	1,270	519	186	461	402	2,700	645	361	108	137	519
5	347	1,320	513	b250	495	330	2,300	545	243	109	*109	420
6	356	1,290	795	b250	423	626	1,910	478	239	136	224	169
7	313	1,190	645	b250	343	1,360	1,650	455	112	155	206	180
8	294	986	600	194	274	686	1,450	444	241	158	172	212
9	282	750	507	222	b300	508	1,510	388	209	125	138	*159
10	*278	728	444	180	321	402	*1,560	302	172	124	239	168
11	249	622	407	133	384	338	1,590	370	175	107	189	168
12	158	519	402	228	313	351	1,500	434	79	118	198	168
13	260	478	388	186	305	305	1,280	532	168	127	141	73
14	217	484	275	211	301	305	1,000	526	125	165	138	170
15	180	501	362	180	350	235	834	466	208	170	99	146
16	249	428	343	207	465	494	765	402	162	137	129	107
17	215	482	338	407	384	622	750	316	137	124	82	27
18	192	460	369	262	374	532	728	367	155	114	123	107
19	164	449	347	b330	317	407	675	319	160	93	193	107
20	256	*495	340	274	b260	633	795	345	193	178	117	74
21	194	484	214	338	249	1,270	834	274	132	765	137	112
22	178	466	b300	2,140	182	1,450	712	301	173	660	137	126
23	262	347	290	3,120	b230	1,020	600	294	154	384	66	99
24	735	424	276	2,380	234	788	532	251	166	260	132	123
25	742	393	b260	1,260	220	842	478	280	242	203	114	152
26	578	370	b260	b800	232	1,040	422	256	162	176	100	149
27	842	388	b240	539	242	1,120	742	256	202	180	119	94
28	1,060	462	223	484	235	890	1,100	246	127	144	112	165
29	994	1,180	263	*434	-	615	1,140	a220	266	113	114	134
30	788	1,290	253	470	-------	593	1,110	a240	242	113	67	162
31	565	-------	199	526	-------	600	-------	a200	-------	140	229	-------
Total	13,400	20,040	12,617	17,131	8,981	19,565	35,553	12,694	5,706	6,007	4,217	4,973
Mean	432	668	407	553	321	631	1,185	409	190	194	136	166
Cfsm	1.54	2.39	1.45	1.98	1.15	2.25	4.23	1.46	0.679	0.693	0.486	0.593
In.	1.78	2.66	1.68	2.28	1.19	2.60	4.72	1.69	0.76	0.80	0.56	0.66

Calendar year 1958: Max 2,760 Min 35 Mean 509 Cfsm 1.82 In. 24.68
Water year 1958-59: Max 3,120 Min 27 Mean 441 Cfsm 1.58 In. 21.38

Peak discharge (base, 2,400 cfs).--Jan. 22 (11:30 p.m.) 3,710 cfs (7.90 ft); Apr. 4 (3 to 6 a.m.) 2,770 cfs (6.87 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for East Branch Housatonic River at Coltsville.
b Stage-discharge relation affected by ice.

1980. Green River near Great Barrington, Mass.

Location.--Lat 42°11'31", long 73°23'28", on left bank 250 ft downstream from Seekonk Road highway bridge, 0.2 mile downstream from Seekonk Brook, 1½ miles west of Great Barrington, Berkshire County, and 3 miles upstream from mouth.

Drainage area.--52.5 sq mi.

Records available.--October 1951 to September 1959.

Gage.--Water-stage recorder. Altitude of gage is 690 ft (from topographic map).

Average discharge.--8 years, 88.8 cfs.

Extremes.--Maximum discharge during year, 1,280 cfs Mar. 6 (gage height, 6.38 ft), from rating curve extended above 880 cfs by logarithmic plotting; minimum, 4.6 cfs Sept. 24, 28-30.

1951-59: Maximum discharge, 1,790 cfs Apr. 17, 1956 (gage height, 7.65 ft), from rating curve extended above 880 cfs by logarithmic plotting; minimum, 3.0 cfs Sept. 2-5, 1953.

Remarks.--Records good except those for periods of ice effect, which are fair.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 3				Nov. 4 to Sept. 30			
2.5	25	3.5	203	2.24	4.6	3.5	181
2.7	47	4.0	339	2.3	7.0	4.0	321
3.0	99	4.5	505	2.4	13	5.0	700
				2.7	43	5.5	900
				3.0	85		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	187	183	165	27	73	40	258	167	31	*10	9.1	7.5
2	195	160	152	33	69	39	440	148	*35	14	8.5	7.0
3	137	418	139	36	70	48	623	133	62	15	8.5	14
4	115	385	135	33	139	79	420	122	46	12	8.0	12
5	99	364	139	31	88	73	278	110	35	10	13	9.7
6	86	315	174	30	69	*445	284	101	34	10	14	9.1
7	75	254	124	29	60	268	214	95	34	13	12	8.0
8	66	214	110	28	55	106	209	96	30	12	11	7.5
9	59	191	104	27	48	79	224	84	26	10	10	*7.5
10	*53	172	91	26	84	66	*211	76	23	10	12	9.1
11	52	150	82	25	79	53	260	73	21	11	11	9.7
12	52	133	82	24	55	56	201	133	20	10	*9.7	9.7
13	46	118	76	22	55	53	170	145	21	9.7	9.1	9.7
14	43	111	67	20	53	50	152	139	23	31	8.5	9.7
15	40	110	69	20	96	46	139	120	21	22	8.0	9.7
16	37	104	64	69	69	115	131	113	20	16	8.0	10
17	36	96	62	67	60	118	126	101	20	13	7.5	9.7
18	35	96	59	41	62	90	118	95	22	12	8.0	8.0
19	33	99	*56	40	52	78	122	88	24	10	8.0	7.5
20	32	*101	53	33	46	207	158	87	27	31	7.5	7.0
21	30	95	44	131	43	341	148	78	21	64	7.5	5.9
22	29	91	46	894	40	244	128	72	18	30	7.5	5.4
23	87	84	43	298	37	125	122	66	21	25	7.0	5.0
24	158	78	43	165	34	129	115	62	17	19	7.5	5.0
25	129	78	40	143	33	191	111	55	16	16	7.5	5.0
26	250	76	37	115	32	238	113	47	16	14	6.6	5.0
27	327	79	36	99	30	192	174	42	15	12	6.6	5.0
28	348	79	33	93	34	122	211	39	14	12	6.6	5.0
29	288	396	32	*84	-	98	201	36	13	10	6.6	4.6
30	244	206	31	98	-------	96	170	36	12	9.7	7.0	4.6
31	208	-------	29	88	-------	118	-------	33	-------	9.7	7.0	-------
Total	3,576	5,036	2,417	2,869	1,665	4,003	6,231	2,792	738	503.1	268.8	232.6
Mean	115	168	78.0	92.5	59.5	129	208	90.1	24.6	16.2	8.67	7.75
Cfsm	2.19	3.20	1.49	1.76	1.13	2.46	3.96	1.72	0.469	0.309	0.165	0.148
In.	2.53	3.57	1.71	2.03	1.18	2.84	4.41	1.98	0.52	0.36	0.19	0.16

Calendar year 1958: Max 988 Min 7.8 Mean 97.6 Cfsm 1.86 In. 25.22
Water year 1958-59: Max 894 Min 4.6 Mean 83.1 Cfsm 1.58 In. 21.48

Peak discharge (base, 750 cfs).--Jan. 22 (1 to 1:30 p.m.) 1,240 cfs (6.31 ft); Mar. 6 (8:30 p.m.) 1,280 cfs (6.38 ft); Apr. 3 (2 a.m.) 1,070 cfs (5.93 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 11, 14, 21, 22, 25-27, Jan. 1, 5-13, 17-19, 24, 26, 28, 29, Jan. 31 to Feb. 3, Feb. 6, 7, 9-12, 19-26, Mar. 11-14, 23, 29.

1985. Blackberry River at Canaan, Conn.

Location.--Lat 41°01'26", long 73°20'32", on right bank downstream from highway bridge on U. S. Highway 44, 0.7 mile southwest of Canaan, Litchfield County, and 1¼ miles upstream from mouth.

Drainage area.--48.2 sq mi.

Records available.--July 1949 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 645.72 ft above mean sea level, datum of 1929.

Average discharge.--10 years, 84.8 cfs.

Extremes.--Maximum discharge during year, about 2,800 cfs Mar. 6; maximum gage height, 9.50 ft Mar. 6 (ice jam); minimum, 5.5 cfs Aug. 21 (gage height, 1.70 ft).
1949-59: Maximum discharge, 14,200 cfs Aug. 19, 1955 (gage height, 13.01 ft), from rating curve extended above 2,400 cfs on basis of slope-area measurement of peak flow; minimum, 2.2 cfs Aug. 28, 1949, July 25, 26, 27, 28, 1957; minimum gage height, 1.12 ft Aug. 28, 1949; minimum daily discharge, 2.3 cfs Aug. 28, 1949.
Flood of Dec. 31, 1948, reached a stage of 12.0 ft, from floodmarks (discharge, 7,000 cfs, from slope-area measurement at East Canaan, 2.5 miles upstream, adjusted for intervening drainage area).

Remarks.--Records good except those for periods of ice effect, which are fair. Infrequent regulation at low flow.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 1-5)

Oct. 1 to Jan. 26				Jan. 26 to Apr. 29			
1.8	26	3.0	142	1.7	5.5	4.0	275
2.0	41	4.0	305	2.0	13	5.0	505
2.5	86	5.0	505	2.3	31	6.0	770
				2.6	63	7.0	1,190
				3.0	112		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	180	88	98	39	b19	27	220	92	17	20	9.8	79
2	164	82	86	47	b12	21	442	80	40	30	8.8	38
3	105	154	75	b40	b12	33	648	71	175	27	8.0	68
4	82	168	*75	b35	b277	82	294	65	73	19	*6.9	*93
5	72	190	99	b30	b57	88	178	58	47	17	33	41
6	63	178	138	b25	b23	b944	160	56	43	17	34	30
7	60	136	99	b24	b26	384	121	53	43	18	26	25
8	61	114	82	b23	b30	118	120	55	29	13	17	26
9	59	107	72	b22	b20	82	197	49	23	12	21	21
10	52	108	61	b22	346	67	204	46	20	11	21	20
11	53	93	b54	b20	b115	b47	278	*43	16	11	15	18
12	44	86	b50	b19	*b51	b29	174	51	14	10	12	16
13	40	79	b47	b18	59	44	121	74	20	13	11	17
14	36	77	b45	b18	48	47	103	99	31	15	9.5	15
15	35	77	b45	b20	142	41	92	77	21	13	8.5	15
16	33	79	b45	126	b53	136	87	59	19	12	7.5	19
17	32	76	b45	120	47	103	87	49	19	11	6.9	18
18	32	75	b40	b54	46	*69	92	43	21	9.2	6.7	14
19	30	80	b38	b43	36	b66	83	42	40	8.8	6.5	8.8
20	30	86	b35	37	b23	243	246	44	39	97	6.5	7.5
21	30	78	b32	b250	b22	421	194	42	26	360	6.1	6.9
22	29	73	b30	b600	b20	293	114	*38	21	103	6.7	6.5
23	92	67	b30	b150	19	116	91	35	29	64	6.3	7.3
24	115	65	b33	b75	b18	*104	79	32	23	39	6.9	*6.3
25	92	59	b30	b55	b15	144	70	30	21	29	7.8	6.1
26	306	66	b28	b45	b15	177	71	27	29	24	6.7	6.1
27	297	77	b27	b40	17	130	94	23	87	19	6.3	6.1
28	194	71	b25	*b34	20	80	117	21	55	14	6.5	6.1
29	138	435	b27	b34	-	63	128	19	37	12	7.1	5.9
30	115	167	b28	51	--------	57	107	25	*29	11	19	5.9
31	99	--------	b30	b47	--------	108	--------	20	--------	9.8	80	--------
Total	2,770	3,291	1,649	2,163	1,588	4,364	5,012	1,518	1,107	1,068.8	435.0	652.5
Mean	89.4	110	53.2	69.8	56.7	141	167	49.0	36.9	35.6	14.0	21.8
Cfsm	1.85	2.28	1.10	1.45	1.18	2.93	3.46	1.02	0.766	0.739	0.290	0.452
In.	2.14	2.54	1.27	1.67	1.23	3.37	3.87	1.17	0.85	0.82	0.34	0.50

Calendar year 1958: Max 885 Min 4.4 Mean 87.8 Cfsm 1.82 In. 24.76
Water year 1958-59: Max 944 Min 6.1 Mean 70.2 Cfsm 1.46 In. 19.77

Peak discharge (base, 800 cfs).--Feb. 10 (11:30 a.m.) 840 cfs (6.20 ft); Mar. 6 (6 p.m.) about 2,800 cfs; Mar. 21 (9 p.m.) 1,010 cfs (6.62 ft); Apr. 3 (1 a.m.) 1,190 cfs (7.00 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1990. Housatonic River at Falls Village, Conn.

Location.--Lat 41°56'56", long 73°22'05", on left bank 0.6 mile downstream from hydroelectric plant of Connecticut Power Co. at Falls Village, Litchfield County, 2 miles downstream from Hollenbeck River, and at mile 75.3.

Drainage area.--632 sq mi.

Records available.--July 1912 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 522.34 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--47 years, 1,074 cfs.

Extremes.--Maximum discharge during year, 5,840 cfs Mar. 7 (gage height, 10.10 ft); minimum, 27 cfs Aug. 14 (gage height, 0.47 ft); minimum daily, 116 cfs Aug. 15, 16.
1912-59: Maximum discharge, 23,900 cfs Jan. 1, 1949 (gage height, 22.9 ft, from floodmarks); practically no flow at times when powerplant was shut down; minimum daily, 24 cfs Oct. 15, 1914, Sept. 18, 1932.

Remarks.--Records good. Low flow completely regulated by powerplant of Connecticut Power Co. Records of water temperatures for the water year 1959 are given in WSP 1641.

Revisions.--WSP 781: Drainage area.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	101	6.0	2,650
1.5	252	9.0	4,900
3.0	955		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,080	1,420	2,280	450	1,000	556	1,700	2,050	350	461	278	641
2	1,690	1,270	1,910	520	800	538	2,440	1,880	450	421	246	506
3	1,770	1,440	1,700	672	700	650	4,570	1,690	966	412	203	417
4	1,250	2,270	1,390	620	1,300	974	4,820	1,420	919	240	180	1,010
5	986	2,720	1,340	500	1,600	1,180	4,420	1,290	676	246	285	907
6	784	2,720	1,620	400	1,200	1,800	3,780	1,190	499	237	414	542
7	740	2,530	1,760	300	950	3,770	3,280	1,140	543	629	510	354
8	694	2,230	1,490	400	800	2,400	2,790	1,060	405	320	445	368
9	659	1,990	1,300	450	700	1,550	2,790	1,020	489	292	384	394
10	570	1,820	1,180	400	1,300	1,070	2,790	894	408	252	380	278
11	590	1,640	950	350	1,700	874	3,140	789	336	252	*458	361
12	550	1,440	1,000	320	1,100	744	3,000	956	341	268	372	277
13	396	1,270	940	350	907	692	2,590	1,190	370	268	360	250
14	556	1,190	920	400	808	686	2,230	1,380	377	268	186	184
15	500	1,170	800	350	1,380	696	1,930	1,310	322	302	116	317
16	429	1,170	820	500	1,260	918	1,750	1,120	380	313	116	255
17	516	1,080	*840	900	1,100	1,480	1,700	960	330	278	343	239
18	472	1,100	*840	800	1,010	1,420	1,560	854	331	237	153	191
19	332	1,100	840	650	880	1,100	1,530	944	406	222	137	146
20	406	1,140	840	500	700	1,260	1,650	820	453	262	270	160
21	450	1,120	700	900	550	2,520	1,990	814	428	1,480	198	226
22	426	1,100	500	3,200	500	3,350	1,820	670	344	1,880	294	205
23	529	1,010	580	3,800	350	2,480	1,570	669	462	1,400	137	210
24	1,150	874	720	3,500	600	*1,930	1,390	631	374	1,160	277	146
25	1,430	932	600	2,700	550	1,820	1,280	602	326	825	146	164
26	1,590	880	500	2,000	540	2,010	1,200	576	472	530	148	266
27	2,170	906	480	1,600	530	2,230	1,260	502	594	427	192	196
28	2,410	790	530	1,300	544	1,930	1,820	*450	498	392	204	268
29	2,290	2,210	480	1,100	-	1,600	2,350	439	384	302	192	187
30	2,050	2,790	550	1,000	-------	1,290	2,170	402	486	285	182	240
31	1,880	-------	520	900	-------	1,310	-------	299	-------	259	514	-------
Total	31,345	45,322	30,970	31,832	25,359	46,828	71,310	30,011	13,719	15,120	8,320	9,905
Mean	1,011	1,511	999	1,027	906	1,511	2,377	968	457	488	268	330
Cfsm	1.60	2.39	1.58	1.62	1.43	2.39	3.76	1.53	0.723	0.772	0.424	0.522
In.	1.84	2.67	1.82	1.87	1.49	2.76	4.20	1.77	0.81	0.89	0.49	0.58

Calendar year 1958: Max 6,200 Min 160 Mean 1,143 Cfsm 1.81 In. 24.51
Water year 1958-59: Max 4,820 Min 116 Mean 986 Cfsm 1.56 In. 21.19

Peak discharge (base, 3,600 cfs).--Jan. 22 (10 p.m.) about 4,000 cfs; Mar. 7 (5:30 a.m.) 5,840 cfs (10.10 ft); Apr. 3 (6 p.m.) 4,980 cfs (9.12 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 10-19, 21-23, Dec. 25 to Jan. 2, Jan. 5 to Feb. 12, Feb. 20-26 (no gage-height record Jan. 24-30).

2000. Tenmile River near Gaylordsville, Conn.

Location.--Lat 41°39'32", long 73°31'44", on right bank 0.1 mile downstream from Deuel Hollow Brook, 1.2 miles upstream from New York-Connecticut State line, 1.7 miles upstream from mouth, and 2½ miles northwest of Gaylordsville, Litchfield County.

Drainage area.--204 sq mi.

Records available.--October 1929 to September 1959. Monthly discharge only for October to December 1929, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 304.4 ft above mean sea level, datum of 1929 (levels by Connecticut Light & Power Co.).

Average discharge.--30 years, 297 cfs.

Extremes.--Maximum discharge during year, 4,020 cfs Jan. 22 (gage height, 7.70 ft); minimum, 27 cfs Sept. 28, 29 (gage height, 0.79 ft); minimum daily, 27 cfs Sept. 28.
1929-59: Maximum discharge, 17,400 cfs Aug. 19, 1955 (gage height, 14.9 ft, from high-water mark), from rating curve extended above 9,800 cfs by logarithmic plotting; minimum, 5 cfs Sept. 8, 1957; minimum gage height, 0.52 ft Sept. 24, 26, 1939; minimum daily discharge, 7 cfs Oct. 7, 1957.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Infrequent regulation at low flow. Records for chemical analyses and water temperatures for the water year 1959 are published in WSP 1641.

Revisions (water years).--WSP 1201: 1939.

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1, 2		Oct. 3 to Apr. 3				Apr. 4 to Sept. 30			
1.7	180	1.1	72	3.0	600	0.7	20	2.0	242
2.3	340	1.5	143	5.0	1,660	1.0	47	3.0	600
		2.0	263			1.5	125	4.0	1,070

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	187	513	592	170	188	170	443	386	79	89	53	117
2	319	454	524	210	120	170	501	340	109	112	48	106
3	234	623	485	180	150	170	975	318	424	129	44	191
4	200	762	468	150	600	594	788	291	273	94	42	279
5	176	721	508	130	350	697	644	267	201	76	85	201
6	154	667	658	110	250	1,320	572	253	163	67	145	152
7	131	600	450	105	210	1,520	512	239	133	69	101	117
8	123	536	350	100	170	573	460	245	116	63	84	92
9	118	510	320	95	143	432	464	224	101	57	96	73
10	118	513	300	90	1,510	380	515	209	89	53	103	62
11	118	485	250	90	1,490	291	784	204	79	52	92	55
12	110	432	230	85	*498	255	694	248	72	49	73	52
13	103	398	220	80	447	237	600	294	86	48	62	46
14	*96	374	210	75	467	230	540	306	121	49	54	43
15	96	365	210	70	935	240	492	273	99	53	51	*41
16	95	371	210	170	465	749	452	245	86	57	45	42
17	91	353	200	500	371	764	420	219	81	52	42	41
18	90	362	180	300	350	572	390	204	91	46	40	39
19	85	356	170	290	297	422	379	189	98	43	40	39
20	83	338	150	200	200	620	488	186	106	62	39	36
21	82	320	140	550	170	752	504	172	92	499	37	36
22	80	306	130	3,000	150	712	416	*160	83	250	36	35
23	107	283	130	950	130	450	390	160	103	216	34	34
24	190	277	140	510	120	401	351	145	103	156	35	33
25	190	271	170	335	110	371	321	131	92	131	39	32
26	969	266	130	265	110	*365	318	117	104	108	39	30
27	1,250	300	120	230	120	371	358	112	112	94	35	29
28	1,040	288	110	180	150	332	432	101	139	78	33	27
29	816	959	120	170	-	291	440	96	125	*66	32	*29
30	690	780	130	220	-------	311	412	89	110	59	42	29
31	584	-------	140	230	-------	365	-------	86	-------	55	62	-------
Total	8,725	13,783	8,145	9,840	10,271	15,127	15,055	6,509	3,670	3,032	1,763	2,138
Mean	281	459	263	317	367	488	502	210	122	97.8	56.9	71.3
Cfsm	1.38	2.25	1.29	1.55	1.80	2.39	2.46	1.03	0.598	0.479	0.279	0.350
In.	1.59	2.51	1.48	1.79	1.87	2.76	2.74	1.19	0.67	0.55	0.32	0.39

Calendar year 1958: Max 2,390 Min 27 Mean 349 Cfsm 1.71 In. 23.24
Water year 1958-59: Max 3,000 Min 27 Mean 269 Cfsm 1.32 In. 17.86

Peak discharge (base, 1,400 cfs).--Jan. 22 (2 p.m.) 4,020 cfs (7.70 ft); Feb. 10 (12 p.m.) 2,630 cfs (6.29 ft); Mar. 6 (7 p.m.) 2,310 cfs (5.94 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 7-13, Jan. 2-22, 25-31, Feb. 2-8, Feb. 21 to Mar. 3. No gage-height record Dec. 14 to Jan. 1; discharge estimated on basis of records for stations on nearby streams.

2005. Housatonic River at Gaylordsville, Conn.

Location.--Lat 41°39'11", long 73°29'25", on left bank 0.4 mile downstream from hydroelectric plant of Connecticut Light & Power Co., 0.5 mile upstream from bridge on U. S. Highway 7 at Gaylordsville, Litchfield County, 1½ miles downstream from Tenmile River, and at mile 50.6.

Drainage area.--994 sq mi.

Records available.--October 1900 to December 1904 (fragmentary), January 1905 to December 1908 (gage heights only), January 1909 to December 1912 (fragmentary), January 1913 to October 1914 (gage heights only), November 1914 (fragmentary), July 1940 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 236.78 ft above mean sea level, datum of 1929. October 1900 to November 1914, chain gage on covered bridge 0.6 mile downstream at different datum.

Average discharge.--19 years (1940-59), 1,659 cfs.

Extremes.--Maximum discharge during year, 9,820 cfs Mar. 6 (gage height, 8.55 ft); minimum daily, 170 cfs Aug. 16.

1900-14, 1940-59: Maximum discharge, 51,800 cfs Aug. 19, 1955 (gage height, 18.58 ft); minimum observed, about 30 cfs Oct. 28, 1914 (gage height, 2.18 ft, site and datum then in use); minimum daily since July 1940, about 60 cfs Aug. 31, 1944, Sept. 20, 1949.

Flood in May 1854 reached a stage of 21 ft 3 in., former site and datum; reported by observer in 1902. Flood of Sept. 22, 1938, reached a stage of 14.5 ft, from floodmarks, at present site (discharge, 37,000 cfs, by computation of peak flow over dam 2½ miles upstream adjusted for flow from intervening area).

Remarks.--Records good except those below 200 cfs, which are fair. Ordinary flow regulated by powerplants upstream.

Revisions (water years).--WSP 1301: 1949.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.2	165	3.0	1,000
1.3	198	4.0	1,920
1.5	260	6.0	4,600
2.0	450	8.0	8,450
2.5	680		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,360	2,240	3,180	729	b1,350	944	2,610	2,800	542	646	422	897
2	2,130	2,000	2,800	929	b1,250	872	3,370	2,610	623	738	314	806
3	2,130	2,370	2,470	1,040	b1,100	968	6,380	2,370	1,740	806	382	774
4	1,670	3,250	2,220	936	2,310	2,020	6,380	2,030	1,540	599	194	1,220
5	1,300	3,820	2,190	b950	2,490	2,370	5,810	1,880	1,230	422	434	1,240
6	1,110	3,820	2,690	b800	1,760	4,850	5,100	1,730	968	406	686	1,030
7	1,010	3,530	2,520	b600	b1,330	6,570	4,440	1,680	753	418	581	694
8	930	3,120	2,150	b530	1,200	3,740	3,820	1,610	815	763	643	426
9	870	2,800	1,940	b700	b1,100	2,430	3,740	1,490	696	474	592	540
10	863	2,610	1,640	b700	b3,700	1,840	3,970	1,380	644	424	614	455
11	792	2,370	1,550	624	3,940	1,450	4,760	1,310	534	382	511	308
12	764	2,150	1,470	b530	1,880	1,250	4,440	1,370	530	373	*568	474
13	712	1,850	1,400	528	1,580	1,130	3,820	1,650	504	380	504	328
14	624	1,760	1,310	558	1,610	1,080	3,390	1,990	594	426	430	241
15	704	1,770	b1,160	562	2,630	1,180	2,920	1,920	539	428	258	*269
16	665	1,740	b1,200	798	1,870	1,980	2,610	1,670	562	470	170	345
17	618	1,660	1,220	1,690	1,690	2,620	2,550	1,400	578	422	229	398
18	670	1,700	1,150	b1,250	1,600	2,410	2,370	1,370	527	386	336	308
19	606	1,640	1,200	b1,100	b1,370	1,850	2,310	1,340	516	326	266	278
20	510	1,650	1,220	828	b1,100	2,430	2,670	1,310	672	450	262	231
21	512	1,640	b1,100	1,140	b900	3,820	2,990	1,180	634	1,850	308	272
22	570	1,600	b960	7,620	b850	4,760	2,730	1,120	691	2,370	228	372
23	665	1,520	847	5,450	b850	3,600	2,430	1,060	536	1,820	358	279
24	1,120	1,390	b1,000	4,600	b730	2,800	2,140	980	663	1,450	254	220
25	1,660	1,320	b900	4,120	b800	*2,490	2,030	902	570	1,170	443	260
26	3,450	1,360	b800	2,920	b750	2,670	1,920	852	614	878	194	267
27	4,120	1,390	b720	2,080	b760	2,990	1,920	860	851	664	262	294
28	3,970	1,340	764	b1,450	b840	2,670	2,670	*740	888	590	250	268
29	3,530	3,630	767	b1,400	-	2,250	2,920	672	776	538	281	292
30	3,120	4,120	788	1,370	--------	1,840	2,990	678	671	384	294	280
31	2,730	--------	b750	b1,500	--------	1,940	--------	539	----	410	468	--------
Total	45,485	67,160	46,076	50,032	43,340	75,814	102,200	44,493	22,001	21,863	11,736	14,066
Mean	1,467	2,239	1,486	1,614	1,548	2,446	3,407	1,435	733	705	379	469
Cfsm	1.48	2.25	1.49	1.62	1.56	2.46	3.43	1.44	0.737	0.709	0.381	0.472
In.	1.70	2.51	1.72	1.87	1.62	2.84	3.82	1.66	0.82	0.82	0.44	0.53

Calendar year 1958: Max 9,580 Min 238 Mean 1,750 Cfsm 1.76 In. 23.89
Water year 1958-59: Max 7,620 Min 170 Mean 1,491 Cfsm 1.50 In. 20.35

Peak discharge (base, 4,500 cfs).--Jan. 22 (3 p.m.) 9,120 cfs (8.31 ft); Feb. 10 (7 p.m.) 5,630 cfs (6.65 ft); Mar. 6 (6 p.m.) 9,820 cfs (8.55 ft); Mar. 22 (2:30 a.m.) 5,100 cfs (6.33 ft); Apr. 3 (7 p.m.) 6,970 cfs (7.28 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

2015. Still River near Lanesville, Conn.

Location.--Lat 41°31'12", long 73°25'07", on left bank at upstream side of highway bridge, a quarter of a mile east of U. S. Highway 7, 1.1 miles south of Lanesville, Litchfield County, 3 miles upstream from mouth, and 4 miles south of New Milford.

Drainage area.--68.5 sq mi.

Records available.--October 1931 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 213.05 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--28 years, 122 cfs.

Extremes.--Maximum discharge during year, 1,180 cfs Mar. 7 (gage height, 8.11 ft); minimum, 19 cfs Sept. 28 (gage height, 1.18 ft); minimum daily, 20 cfs Sept. 28.
1931-59: Maximum discharge, 7,980 cfs Oct. 16, 1955 (gage height, 14.11 ft, from floodmarks), from rating curve extended above 3,000 cfs by logarithmic plotting; minimum, 5 cfs Oct. 20, 1946; minimum daily, 8 cfs Sept. 27, 1948; minimum gage height, 0.77 ft Aug. 10, 1939.

Remarks.--Records good except those for periods of ice effect or backwater from aquatic vegetation, which are fair. Some diurnal fluctuation caused by mills at Brookfield and Danbury. Records of chemical analyses and water temperatures for the water year 1959 are given in WSP 1641.

Revisions (water years).--WSP 781: Drainage area. WSP 801: 1931-35. WSP 851: 1936. WSP 871: 1938. WSP 1031: 1944. WSP 1081: 1946. WSP 1301: 1944(M). WSP 1331: 1936(M), 1938(M), 1941(M).

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	120	380	55	45	55	186	149	34	65	76	*106
2	167	107	153	201	40	50	173	157	42	72	42	90
3	94	195	138	257	37	60	380	127	200	73	26	79
4	66	330	153	110	160	162	422	110	173	61	23	97
5	54	228	141	80	274	219	268	100	72	54	25	66
6	46	161	161	70	98	270	209	95	138	51	43	48
7	45	138	178	60	60	934	191	92	104	62	33	39
8	43	124	*161	50	60	457	173	95	68	57	29	*35
9	*43	120	130	45	55	196	173	86	52	55	45	36
10	43	134	115	42	218	161	173	78	45	55	86	38
11	41	134	110	40	422	130	258	76	40	95	50	35
12	39	116	100	38	*219	113	253	80	37	101	36	31
13	36	107	90	40	138	116	200	107	41	78	31	27
14	*37	101	80	43	196	113	186	127	80	72	28	25
15	38	101	85	47	343	110	165	104	59	70	26	28
16	39	98	85	84	267	190	149	83	47	69	24	34
17	39	95	82	255	127	174	138	72	44	64	21	32
18	39	101	80	114	113	214	127	*68	*48	58	42	28
19	38	101	78	78	100	149	124	66	49	49	68	27
20	36	101	75	78	75	165	134	66	51	42	52	25
21	37	92	65	88	65	191	149	62	43	52	41	24
22	38	86	65	293	60	196	124	58	41	61	35	25
23	64	80	65	212	50	149	110	54	49	50	31	25
24	127	80	65	100	45	127	107	48	51	44	29	25
25	92	80	60	80	40	124	101	46	67	37	43	24
26	276	80	55	65	40	*124	95	*45	157	31	37	24
27	565	89	55	60	45	134	113	43	101	*26	35	22
28	510	86	55	55	55	141	186	42	76	25	37	20
29	238	350	55	52	-	124	191	42	72	25	40	*24
30	161	465	65	60	-------	124	165	41	76	24	51	26
31	138	-------	55	65	-------	182	-------	37	-------	27	54	-------
Total	3,309	4,200	3,235	2,917	3,447	5,654	5,423	2,456	2,157	1,705	1,239	1,165
Mean	107	140	104	94.1	123	182	181	79.2	71.9	55.0	40.0	38.8
Cfsm	1.56	2.04	1.52	1.37	1.80	2.66	2.64	1.16	1.05	0.803	0.584	0.566
In.	1.80	2.28	1.75	1.58	1.87	3.07	2.94	1.34	1.17	0.92	0.67	0.63

Calendar year 1958: Max 975 Min 22 Mean 143 Cfsm 2.09 In. 28.41
Water year 1958-59: Max 934 Min 20 Mean 101 Cfsm 1.47 In. 20.02

Peak discharge (base, 600 cfs).--Oct. 27 (7:30 p.m.) 655 cfs (7.16 ft); Mar. 7 (10 a.m.) 1,180 cfs (8.11 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 10 to Jan. 1, Jan. 5-16, Jan. 24 to Feb. 4, Feb. 7-9, Feb. 19 to Mar. 3. Backwater from aquatic vegetation Oct. 1-23, May 5 to Aug. 29.

2025. Shepaug River at Woodville, Conn.

Location.--Lat 41°43'24", long 73°17'37", on left end of dam at outlet of Shepaug Reservoir, 1 mile north of Woodville, Litchfield County, and 3.5 miles upstream from Bantam River.

Drainage area.--38.0 sq mi.

Records available.--October 1935 to September 1959.

Gage.--Nonrecording gage at dam or at auxiliary artificial control below dam; read usually once daily.

Average discharge.--24 years, 85.9 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 1,460 cfs Mar. 6; minimum, 2.4 cfs on many days (result of regulation).
1935-59: Maximum discharge observed, 13,800 cfs Aug. 19, 1955; no flow at times (result of regulation).

Remarks.--Records good. Discharge computed on basis of flow over spillway, through floodgates, and through fountain at toe of dam. Rating curves for floodgates and fountain computed by means of a temporary sharp-crested weir below dam. Rating curve for spillway computed for discharges below 18.5 cfs by means of same weir, and for discharges above 18.5 cfs by a formula selected to fit the spillway-crest sections. At times of ice effect on spillway, flow computed from gage readings at permanent artificial control below the dam, which was calibrated with the sharp-crested weir. Water diverted from Shepaug River for municipal supply of Waterbury. Flow regulated since September 1933 by Shepaug Reservoir (see p. 266).

Cooperation.--Records furnished by Bureau of Engineering, city of Waterbury.

Revisions (water years).--WSP 971: 1936-42. WSP 1231: 1937(M), 1940-41(M), 1943-45(M), 1947, 1948(M), 1950(M). WSP 1301: 1936.

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	226	90	104	21	37	29	169	128	2.4	6.9	24	2.4
2	280	82	79	29	29	28	371	113	55	4.6	17	2.4
3	128	170	64	29	21	35	678	98	218	13	11	2.4
4	90	198	62	35	110	72	334	90	90	6.1	2.4	2.4
5	62	176	103	29	98	141	218	82	57	2.9	8.6	2.4
6	53	148	184	17	64	716	180	76	51	2.4	44	2.4
7	42	125	90	2.6	38	462	151	71	33	2.4	2.4	2.4
8	37	98	59	2.4	33	174	125	46	11	2.4	14	2.4
9	35	90	55	2.4	29	104	125	38	5.3	2.4	24	2.4
10	33	101	51	2.4	808	82	156	31	2.4	2.4	46	2.4
11	29	84	51	2.4	286	71	372	29	2.4	2.4	18	2.4
12	26	74	46	2.4	88	57	238	33	2.4	2.4	6.9	2.4
13	21	67	42	2.4	84	40	169	53	2.4	2.4	2.5	2.4
14	20	62	38	2.4	116	42	128	64	2.4	2.4	2.4	2.4
15	20	59	37	2.4	255	40	119	71	2.4	7.8	2.4	2.4
16	20	57	37	2.4	99	128	107	55	2.4	24	2.4	2.4
17	20	57	37	2.4	71	165	104	46	2.4	17	2.4	2.4
18	18	59	38	8.8	67	108	98	46	2.4	6.1	2.4	2.4
19	16	57	38	14	53	94	101	42	2.4	2.4	2.4	2.4
20	16	57	37	20	35	219	180	42	2.4	2.4	2.4	2.4
21	14	51	35	38	31	388	191	46	2.4	61	2.4	2.4
22	14	49	31	762	28	280	138	38	2.4	57	2.4	2.4
23	86	42	26	243	24	148	125	37	2.4	71	2.4	2.4
24	138	42	26	110	21	122	107	33	2.4	84	2.4	2.4
25	114	40	24	76	20	110	101	29	2.4	49	2.4	2.4
26	454	42	24	62	18	125	95	6.1	2.4	26	2.4	2.4
27	416	74	21	53	18	107	107	2.9	2.4	17	2.4	2.4
28	250	164	18	40	21	74	158	2.4	2.4	20	2.4	2.4
29	176	532	16	31	-	64	173	2.4	11	17	2.4	2.4
30	141	194	18	35	--------	64	151	2.4	16	14	2.4	2.4
31	113	--------	21	40	--------	105	--------	2.4	--------	13	2.4	--------
Total	3,108	3,141	1,512	1,719.4	2,602	4,394	5,469	1,455.6	595.3	543.8	264.0	72.0
Mean	100	105	48.8	55.5	92.9	142	182	47.0	19.8	17.5	8.52	2.40
(†)	+0.3	+2.0	+5.0	+10.8	-0.1	+2.7	+0.1	+7.3	+22.7	+12.5	+8.1	+9.8

Adjusted for diversion and change in contents in Shepaug Reservoir

Mean	100	107	53.8	66.3	92.8	145	182	54.3	42.5	30.0	16.6	12.2
Cfsm	2.63	2.82	1.42	1.74	2.44	3.82	4.79	1.43	1.12	0.789	0.437	0.321
In.	3.03	3.15	1.64	2.01	2.54	4.40	5.34	1.65	1.25	0.91	0.50	0.36

	Observed			Adjusted				
Calendar year 1958:	Max 983	Min 2.4	Mean 85.7	Mean 90.9	Cfsm 2.39	In. 32.48		
Water year 1958-59:	Max 808	Min 2.4	Mean 68.2	Mean 75.0	Cfsm 1.97	In. 26.78		

† Diversion from, and change in contents, equivalent in cubic feet per second, in Shepaug Reservoir.

2030. Shepaug River near Roxbury, Conn.

Location.--Lat 41°32'59", long 73°19'49", on right bank at downstream side of Wellers highway bridge on Wellers Bridge road, half a mile south of Roxbury Station, 1¼ miles southwest of village of Roxbury, Litchfield County, and 2.4 miles upstream from Jack's Brook.

Drainage area.--133 sq. mi.

Records available.--October 1930 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 281.98 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--29 years, 249 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 3,220 cfs Mar. 6 (gage height, 6.85 ft); minimum, 14 cfs Aug. 30 (gage height, 1.08 ft).

1930-59: Maximum discharge, 50,300 cfs Aug. 19, 1955 (gage height, 17.2 ft, from floodmarks), from rating curve extended above 3,500 cfs on basis of computation of flow over dam at gage heights 10.77 and 12.8 ft and slope-area measurement of peak flow; minimum, 2 cfs Oct. 6, 1951; minimum gage height, 1.01 ft Aug. 14, 15, 18-21, 1957.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Water diverted from Shepaug Reservoir for municipal supply of city of Waterbury. Flow regulated by Shepaug Reservoir (see p. 266). Diurnal fluctuations from an unknown cause during low flow. Records of chemical analyses and water temperatures for the water year 1959 are given in WSP 1641.

Revisions (water years).--WSP 801: 1931-36. WSP 971: 1936, 1939-40, 1942. WSP 1301: 1936(M), 1947(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.0	8	2.0	190
1.1	15	2.5	350
1.2	24	3.0	550
1.4	51	4.0	1,040
1.7	111	6.0	2,480

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	211	354	414	120	150	140	466	386	34	60	85	125
2	502	322	358	210	120	140	638	340	87	65	75	78
3	322	580	322	170	100	*135	1,360	315	402	58	64	88
4	262	550	*329	140	514	605	805	284	238	53	51	138
5	229	494	389	120	322	354	630	268	185	40	81	81
6	196	442	530	80	210	1,730	570	253	199	35	140	67
7	178	394	390	85	160	1,020	514	238	163	39	120	60
8	166	354	300	75	140	494	470	220	138	34	93	55
9	*158	340	270	70	120	406	462	193	109	30	98	51
10	148	346	250	60	1,490	374	526	178	91	29	126	58
11	150	322	240	55	705	308	855	172	81	51	89	52
12	133	290	220	55	340	274	680	187	77	45	73	32
13	125	271	200	55	340	271	550	211	93	79	62	40
14	123	259	190	55	340	250	494	229	91	168	55	*46
15	116	250	180	60	784	235	446	217	75	111	46	35
16	113	247	180	180	380	568	410	193	71	98	34	36
17	107	235	180	300	312	486	390	175	64	89	44	41
18	102	250	180	160	274	398	370	160	67	75	38	28
19	93	241	180	140	210	346	354	150	64	62	39	31
20	91	226	170	160	180	754	494	150	58	58	28	30
21	102	211	160	250	150	755	526	142	51	114	25	32
22	71	199	160	1,220	130	687	426	135	48	140	20	29
23	193	187	150	542	110	442	374	128	51	145	22	28
24	276	181	150	425	100	386	346	123	40	250	21	26
25	268	175	140	350	95	382	322	*111	51	217	26	28
26	1,150	190	130	270	90	390	312	69	64	152	21	20
27	855	238	120	220	90	398	350	69	89	123	20	22
28	590	292	110	160	120	326	414	51	64	113	26	22
29	498	1,080	120	130	-	290	474	34	71	*102	17	25
30	442	569	*140	180	--------	294	406	31	83	93	14	*25
31	394	--------	130	190	--------	394	--------	32	--------	89	43	--------
Total	8,364	10,089	6,982	6,287	8,076	14,032	15,434	5,444	2,999	2,817	1,696	1,429
Mean	270	336	225	203	288	453	514	176	100	90.9	54.7	47.6
(†)	+0.3	+2.0	+5.0	+10.8	-0.1	+2.7	+0.1	+7.3	+22.7	+12.5	+8.1	+9.8
Mean	270	338	230	214	288	456	514	183	123	103	62.8	57.4
Cfsm	2.03	2.54	1.73	1.61	2.17	3.43	3.86	1.38	0.925	0.774	0.472	0.432
In.	2.34	2.83	1.99	1.86	2.26	3.95	4.31	1.59	1.03	0.89	0.54	0.48

Adjusted for diversion and change in contents in Shepaug Reservoir

	Observed			Adjusted		
Calendar year 1958:	Max 2,120	Min 12	Mean 286	Mean 291	Cfsm 2.19	In. 29.70
Water year 1958-59:	Max 1,730	Min 14	Mean 229	Mean 236	Cfsm 1.77	In. 24.07

Peak discharge (base, 1,500 cfs).--Oct. 26 (3 p.m.) 1,500 cfs (4.76 ft); Jan. 22 (11 a.m.) 1,540 cfs (4.82 ft); Feb. 10 (10 a.m.) 2,570 cfs (6.12 ft); Mar. 6 (8 p.m.) 3,220 cfs (6.85 ft); Apr. 3 (4 a.m.) 1,780 cfs (5.17 ft).

* Discharge measurement made on this day.

† Diversion from, and change in contents, equivalent in cubic feet per second, in Shepaug Reservoir.

Note.--Stage-discharge relation affected by ice Dec. 8 to Jan. 22, Jan. 24 to Feb. 3, Feb. 6-9, 12-14, 16, Feb. 19 to Mar. 1, Mar. 3, 14.

2040. Pomperaug River at Southbury, Conn.

Location.--Lat 41°28'50", long 73°13'30", on right bank 200 ft upstream from highway bridge, 800 ft downstream from Bullet Hill Brook, 0.6 mile west of Southbury, New Haven County, and 5.8 miles upstream from mouth.

Drainage area.--75.3 sq mi.

Records available.--June 1932 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 165.60 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--27 years, 129 cfs.

Extremes.--Maximum discharge during year, 2,400 cfs Mar. 6 (gage height, 8.67 ft); minimum, 9.6 cfs Sept. 26-28 (gage height, 2.59 ft).
1932-59: Maximum discharge, 29,400 cfs Aug. 19, 1955 (gage height, 21.8 ft, from floodmarks), from rating curve extended above 1,200 cfs by computation of flow over dam at gage height 16.0 ft and by slope-area measurement of peak flow; minimum, 3.3 cfs Aug. 27, 1949; minimum gage height, 2.31 ft Aug. 10, 1957.

Remarks.--Records excellent except those for periods of ice effect, which are good. Occasional regulation at low flow by mill upstream.

Revisions (water years).--WSP 781: Drainage area. WSP 851: 1934(M), 1936(M). WSP 1201: 1933-34, 1935(M), 1937(M).

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.6	10	4.0	206
2.8	20	4.5	337
3.0	40	5.0	515
3.5	111	6.4	1,170

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	229	141	196	b56	b52	66	208	181	25	32	38	41
2	197	123	175	290	b46	62	305	152	54	59	26	61
3	120	356	156	151	b46	*69	768	133	250	46	21	99
4	95	263	185	b97	440	527	370	118	94	32	20	115
5	77	198	243	b60	130	157	281	106	91	25	28	52
6	66	175	279	b49	86	1,040	252	103	103	25	44	34
7	61	154	179	b54	62	380	219	97	73	25	*34	27
8	57	139	152	49	63	175	206	100	56	22	29	23
9	53	142	146	a40	44	142	206	88	44	20	56	20
10	49	*156	123	a35	1,160	144	234	82	34	21	50	19
11	46	139	114	a32	321	116	410	80	29	61	33	17
12	41	123	116	a32	137	100	286	99	25	37	26	16
13	40	116	b111	33	183	116	238	146	41	95	22	15
14	40	111	108	34	158	101	208	144	61	127	20	*14
15	39	108	100	37	554	101	187	108	39	100	19	15
16	38	106	b100	276	156	365	173	95	33	73	17	20
17	37	100	98	240	123	279	159	84	32	54	16	19
18	36	114	89	92	114	201	152	79	39	43	18	16
19	34	114	88	74	92	180	146	73	39	34	16	15
20	33	101	b82	62	64	251	186	*74	43	34	15	14
21	31	94	b73	107	b69	240	167	66	32	66	14	14
22	30	88	b72	660	b58	252	141	60	27	69	14	14
23	170	82	70	146	b50	154	128	53	31	77	14	12
24	150	82	70	97	50	141	120	46	26	188	14	12
25	124	79	b60	89	b43	133	111	44	50	148	19	10
26	877	86	b60	b73	b43	139	111	40	57	83	17	10
27	454	114	56	b58	b46	157	143	37	54	57	15	9.6
28	265	117	52	b58	66	139	183	34	46	a44	14	10
29	210	809	54	b58	-	125	223	32	48	39	14	12
30	175	273	63	82	---------	143	171	29	53	*31	14	10
31	152	---------	62	86	---------	217	---------	27	---------	32	19	---------
Total	4,026	4,803	3,532	3,307	4,456	6,412	6,692	2,610	1,629	1,799	716	765.6
Mean	130	160	114	107	159	207	223	84.2	54.3	58.0	23.1	25.5
Cfsm	1.73	2.12	1.51	1.42	2.11	2.75	2.96	1.12	0.721	0.770	0.307	0.339
In.	1.99	2.36	1.74	1.64	2.20	3.17	3.30	1.29	0.80	0.89	0.35	0.38

Calendar year 1958 : Max 1,110 Min 12 Mean 146 Cfsm 1.94 In. 26.32
Water year 1958-59 : Max 1,160 Min 9.6 Mean 112 Cfsm 1.49 In. 20.11

Peak discharge (base, 1,400 cfs).--Nov. 29 (6 a.m.) 1,470 cfs (7.00 ft); Feb. 10 (12 m.) 1,960 cfs (7.90 ft); Mar. 6 (5:30 p.m.) 2,400 cfs (8.67 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

2048. Copper Mill Brook near Monroe, Conn.

Location.--Lat 41°21'46", long 73°13'08", on right bank just upstream from twin culverts on Hammertown Road, 700 ft upstream from mouth, 1¼ miles west of Connecticut Highway 111, 2.2 miles northwest of Monroe, Fairfield County, and 2.2 miles east of Bottsford.

Drainage area.--2.50 sq mi.

Records available.--June 1958 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 331.05 ft above mean sea level.

Extremes.--Maximum discharge during year, 255 cfs Mar. 6 (gage height, 5.37 ft), from rating curve extended above 40 cfs; minimum, 0.12 cfs Aug. 28, 29 (gage height, 0.39 ft).
1958-59: Maximum discharge, that of Mar. 6, 1959; minimum, that of Aug. 28, 29, 1959.

Remarks.--Records good except those for period of no gage-height record, which are fair.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.38	0.12	0.9	5.0
.4	.16	1.2	10.7
.45	.31	1.6	21
.5	.53	2.2	46
.55	.79	3.0	90
.6	1.2		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	4.2	6.1	1.9	1.9	2.5	*9.1	8.1	0.79	1.4	0.48	0.92
2	5.0	4.8	5.7	38	*1.3	3.1	31	6.3	3.4	1.2	.27	.92
3	2.5	12	5.2	6.8	1.1	3.1	46	5.0	11	.92	3.4	.63
4	1.9	7.0	16	4.4	*26	16	16	4.4	2.5	.53	.48	.43
5	1.6	5.2	14	b2.6	5.5	5.2	12	3.7	2.1	.58	1.2	.39
6	1.2	4.7	12	1.6	3.3	85	10	3.3	1.8	.48	1.7	.35
7	1.1	4.2	6.6	1.6	2.5	18	8.9	3.0	1.8	.48	.63	.24
8	1.1	3.7	5.5	1.6	2.4	b5.9	8.1	3.3	1.1	.39	.48	.21
9	1.2	5.0	a5.0	1.5	2.1	b5.5	8.1	2.9	.85	.31	16	.16
10	1.1	5.9	a4.5	1.5	24	6.3	9.3	2.5	.63	1.1	3.3	.14
11	.79	4.5	a4.2	1.5	13	5.4	14	2.6	.48	7.1	1.4	.16
12	.79	*3.9	a3.9	1.5	6.1	b3.7	8.7	4.5	.53	3.1	.79	.14
13	*.73	3.4	a3.6	1.6	7.8	5.7	9.5	8.5	2.4	1.6	.58	.14
14	.73	3.4	a3.4	1.6	5.5	4.7	8.3	9.5	2.6	1.6	.48	.14
15	.79	3.4	a3.3	1.8	17	5.5	6.8	4.8	1.0	2.1	.43	.14
16	.85	3.4	a3.3	7.8	5.0	18	6.1	3.7	.85	1.6	.35	*.35
17	.85	3.1	a3.2	6.0	4.2	12	5.7	3.3	1.0	1.2	.31	.35
18	.85	3.9	a3.1	2.5	4.0	9.1	5.0	3.6	1.2	.73	.39	.27
19	.79	4.0	a3.0	1.6	3.1	b8.1	5.0	3.3	1.5	.68	.35	.24
20	.79	3.4	a3.0	1.7	2.1	12	6.4	*3.1	1.4	1.4	.27	.24
21	.79	3.0	a2.6	8.1	1.6	12	5.7	2.1	.79	4.4	.27	.24
22	.85	2.8	a2.3	13	1.5	11	4.7	2.4	.79	1.6	.27	.21
23	20	2.5	a2.4	4.2	1.6	6.8	4.2	2.1	1.8	1.4	.21	.21
24	*6.4	2.6	a2.4	2.8	1.8	6.8	4.2	1.8	.79	1.2	.39	.21
25	7.6	2.5	a2.3	2.6	1.8	6.8	3.7	1.6	3.8	.63	.48	.21
26	52	3.0	a2.1	2.4	1.8	7.6	4.0	1.6	2.2	.48	.27	.21
27	*18	3.0	a2.0	2.1	2.1	8.1	8.3	1.4	1.6	.39	.16	.21
28	8.1	8.0	a2.1	1.9	2.5	7.6	9.5	.92	1.6	.35	.14	.18
29	5.9	50	a2.2	1.7	-	6.8	9.5	1.3	3.9	.27	.18	.39
30	5.4	8.7	*2.5	3.0	-------	8.9	6.3	1.1	4.1	*.27	3.7	.27
31	4.5	-------	2.2	2.4	-------	13	-------	.85	-------	.48	1.1	---------
Total	164.20	179.2	139.7	133.3	152.6	330.2	294.1	106.57	60.30	39.97	40.46	8.90
Mean	5.30	5.97	4.51	4.30	5.45	10.7	9.80	3.44	2.01	1.29	1.31	0.30
Cfsm	2.12	2.39	1.80	1.72	2.18	4.28	3.92	1.38	0.804	0.516	0.524	0.120
In.	2.44	2.67	2.08	1.98	2.27	4.93	4.37	1.59	0.90	0.59	0.60	0.13

Calendar year 1958: Max - Min - Mean - Cfsm - In. -
Water year 1958-59: Max 85 Min 0.14 Mean 4.52 Cfsm 1.81 In. 24.55

Peak discharge (base, 100 cfs).--Nov. 29 (2 a.m.) 129 cfs (3.58 ft); Mar. 6 (2:30 p.m.) 255 cfs (5.37 ft); Apr. 2 (11 p.m.) 115 cfs (3.39 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby streams.
b Stage-discharge relation affected by ice.

2055. Housatonic River at Stevenson, Conn.

Location.--Lat 41°23'05", long 73°10'05", on left bank in New Haven County, 0.2 mile downstream from dam of Connecticut Light & Power Co. at Stevenson, Fairfield County, 0.2 mile upstream from Eightmile Brook, and at mile 19.2.
Drainage area.--1,545 sq mi.
Records available.--August 1928 to September 1959.
Gage.--Water-stage recorder. Datum of gage is 24.98 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).
Average discharge.--31 years, 2,604 cfs (adjusted for storage and diversion).
Extremes.--Maximum discharge during year, 19,900 cfs Mar. 6 (gage height, 13.00 ft); minimum, 58 cfs Sept. 11 (gage height, 0.67 ft); minimum daily, 86 cfs Aug. 2.
1928-59: Maximum discharge, 75,800 cfs Oct. 16, 1955 (gage height, 24.50 ft), from rating curve extended above 35,000 cfs on basis of computations of flow at Stevenson and Derby Dams and slope-area measurements at gage heights 21.5 and 23.5 ft; practically no flow at times, result of regulation.
Remarks.--Records excellent. Ordinary flow completely regulated by Stevenson hydroelectric plant. Flow regulated by Lake Candlewood, Lake Lillinonah, Lake Zoar, and Shepaug Reservoir, having a combined usable capacity of 6,840,000,000 cu ft (see p. 266), and by small diversion from basin at Shepaug Reservoir.
Revisions (water years).--WSP 711: 1929(M). WSP 781: Drainage area. WSP 1231: 1951. WSP 1301: 1933-34(M), 1936-37.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)

0.9	82	4.0	1,250
1.0	94	5.0	2,130
1.5	170	7.0	4,860
2.0	285	10.0	11,200
3.0	660	11.0	13,700

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,310	3,240	6,280	1,230	97	1,710	3,780	4,510	1,400	212	1,040	200
2	4,260	3,090	4,600	3,260	1,530	1,110	4,960	4,460	2,020	241	86	199
3	3,210	3,780	3,200	1,810	1,570	687	10,500	3,330	2,810	475	482	279
4	2,950	4,460	3,520	1,670	3,690	3,590	*10,700	3,970	2,420	420	186	229
5	541	5,210	3,030	1,600	4,600	5,000	7,750	2,990	2,210	145	750	1,740
6	2,670	6,280	4,130	1,120	2,850	9,190	6,350	2,510	1,180	990	306	202
7	706	4,540	3,860	551	2,210	12,200	6,050	2,690	103	872	562	180
8	250	5,350	2,830	729	734	7,270	5,590	2,520	2,530	799	1,130	824
9	137	3,240	2,950	948	2,400	3,230	5,640	2,880	1,870	238	98	590
10	1,070	3,150	3,130	858	7,570	3,320	5,560	447	2,310	1,270	2,000	401
11	1,040	3,960	2,150	401	8,180	2,270	7,310	3,070	1,730	735	1,100	160
12	1,040	2,960	2,910	1,070	3,300	3,420	5,770	3,330	1,260	166	*869	220
13	1,100	2,780	2,060	649	2,800	3,600	6,070	3,000	718	788	1,220	230
14	823	3,250	716	772	2,820	1,870	5,250	2,840	88	908	776	304
15	1,180	2,250	2,070	1,520	4,390	3,890	4,270	3,030	876	460	1,050	315
16	1,070	1,880	1,530	1,270	4,920	3,720	3,700	2,890	870	616	310	*513
17	1,250	3,140	2,120	3,910	1,950	4,090	3,690	552	1,030	1,310	2,270	552
18	250	2,390	1,780	1,840	1,980	3,380	3,640	2,320	348	376	1,790	412
19	842	2,460	1,500	1,020	2,550	3,150	3,100	1,610	398	110	1,580	748
20	934	2,430	1,800	1,580	1,960	2,570	4,330	2,010	346	2,420	1,910	131
21	*832	4,250	1,860	2,620	490	4,670	4,900	2,400	93	1,810	1,860	228
22	1,540	1,070	1,840	13,600	607	5,870	4,280	2,770	2,350	1,850	180	252
23	1,830	1,420	956	10,400	2,020	5,050	4,160	133	1,170	3,250	154	230
24	2,310	2,730	1,070	5,900	1,550	3,360	4,270	286	1,070	2,380	246	312
25	3,440	2,640	1,240	4,610	1,420	3,460	3,220	1,850	2,230	1,000	258	372
26	5,420	2,530	1,590	3,010	832	3,600	90	*1,690	1,320	1,100	224	134
27	8,160	787	900	2,460	1,030	5,520	3,910	864	690	1,400	450	173
28	6,840	2,910	384	1,740	1,380	5,600	3,580	602	92	1,630	688	215
29	4,140	6,330	2,060	2,730	-	2,070	4,600	973	1,860	1,900	150	956
30	5,410	7,080	1,030	2,560	--------	*2,810	4,600	98	558	1,220	170	422
31	3,500	--------	737	2,500	--------	2,990	--------	102	--------	2,060	206	--------
Total	70,055	101,587	69,833	79,938	71,430	124,267	151,620	66,727	37,950	33,151	24,101	11,723
Mean	2,260	3,386	2,253	2,579	2,551	4,009	5,054	2,152	1,265	1,069	777	391
(†)	+72	+43	-35	-188	+87	+129	+41	-51	-38	-23	-207	+228
Adjusted for diversion and change in reservoir contents												
Mean	2,332	3,429	2,218	2,391	2,638	4,138	5,095	2,101	1,227	1,046	570	619
Cfsm	1.51	2.22	1.44	1.55	1.71	2.68	3.30	1.36	0.794	0.677	0.369	0.401
In.	1.74	2.48	1.66	1.79	1.78	3.09	3.68	1.57	0.89	0.78	0.43	0.45

		Observed				Adjusted				
Calendar year 1958:	Max	15,400	Min	93	Mean	2,861	Mean	2,865	Cfsm	1.85	In.	25.16
Water year 1958-59:	Max	13,600	Min	86	Mean	2,308	Mean	2,311	Cfsm	1.50	In.	20.34

* Discharge measurement made on this day.
† Change in contents in Candlewood, Lillinonah, and Zoar Lakes, Shepaug Reservoir, and small diversion from basin at Shepaug Reservoir, equivalent in cubic feet per second; furnished by Connecticut Light & Power Co., and city of Waterbury.

2056. West Branch Naugatuck River at Torrington, Conn.

Location.--Lat 41°48'03", long 73°07'26", on downstream side of Prospect Street Bridge in Torrington, Litchfield County, half a mile upstream from confluence with East Branch and 3 miles downstream from Stillwater Pond.

Drainage area.--33.4 sq mi.

Records available.--August 1956 to September 1959.

Gage.--Wire-weight gage read twice daily. Crest-stage indicator since Dec. 18, 1956. Datum of gage is 540.54 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during year, 2,080 cfs Mar. 6 (gage height, 8.57 ft); minimum observed, 8.8 cfs Sept. 26 (gage height, 4.09 ft).
1956-59: Maximum discharge, that of Mar. 6, 1959; minimum observed, 4.4 cfs July 14, 20, 21, Aug. 3, 11, 1957; minimum gage height observed, 3.61 ft Aug. 19, 1956.

Remarks.--Records good. City of Torrington diverts an average of about 4,000,000 gal of water a day for municipal supply from North Pond, Reuben Hart and Hatchaloosie Reservoirs. Regulation at low flow by Stillwater Pond.

Revisions (water years).--WSP 1551: 1957.

Rating table, water year 1958-59 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used June 18 to July 10, Aug. 2-4, Aug. 6 to Sept. 9, Sept. 20-30)

4.3	7.7	5.5	140
4.5	13	6.0	315
4.7	24	6.7	690
5.0	54		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	300	53	76	24	23	30	*152	87	20	17	18	39
2	110	51	63	54	21	30	390	68	45	19	13	30
3	53	152	63	41	16	39	620	57	212	16	10	39
4	43	114	62	32	135	210	165	48	58	13	9.1	26
5	34	99	90	a25	52	70	112	43	43	13	a27	22
6	29	93	131	a19	34	680	110	39	36	13	33	20
7	24	*64	82	20	24	180	92	39	30	12	23	16
8	23	57	*62	19	23	58	89	40	26	12	19	12
9	22	62	59	15	21	51	118	39	20	11	23	12
10	22	62	44	14	240	47	165	37	19	11	20	a12
11	20	54	40	13	118	36	284	32	17	21	16	*11
12	19	43	44	16	39	a32	140	31	16	16	12	10
13	17	43	34	16	50	36	97	31	32	16	*11	9.1
14	*18	42	38	15	54	38	85	39	25	16	10	a9.5
15	19	42	40	16	142	32	70	37	18	18	9.5	a10
16	20	44	30	140	62	108	70	31	16	18	9.3	a12
17	18	42	34	99	42	84	67	30	18	14	9.1	a11
18	18	42	31	36	42	59	a64	30	19	13	9.8	a10
19	18	44	34	a24	27	52	a66	30	20	16	9.8	a9.5
20	16	42	32	19	24	a220	a140	30	19	35	9.1	9.5
21	18	40	26	240	19	a400	a110	*28	18	174	9.3	9.1
22	14	39	24	640	17	174	a80	27	17	85	9.1	9.5
23	200	32	24	79	18	67	a70	28	20	118	9.1	9.5
24	103	34	24	47	18	73	a65	24	18	52	9.3	9.5
25	93	27	a22	40	*16	92	a60	22	19	33	11	9.3
26	510	38	a20	31	18	114	62	22	22	28	10	9.1
27	220	44	18	30	20	a112	80	21	26	21	9.3	9.5
28	120	120	20	23	29	57	107	21	23	14	9.3	*10
29	85	480	22	23	-	42	129	29	18	14	12	9.8
30	70	127	23	41	-------	44	96	28	16	16	9.1	9.5
31	59	-------	20	32	-------	94	-------	23	-------	16	18	-------
Total	2,335	2,226	1,332	1,883	1,344	3,361	3,955	1,091	906	891	416.2	424.4
Mean	75.3	74.2	43.0	60.7	48.0	108	132	35.2	30.2	28.7	13.4	14.1
Cfsm	2.25	2.22	1.29	1.82	1.44	3.23	3.95	1.05	0.904	0.859	0.401	0.422
In.	2.59	2.48	1.49	2.10	1.50	3.72	4.41	1.21	1.01	0.99	0.46	0.47

Calendar year 1958: Max 762 Min 5.4 Mean 66.6 Cfsm 1.99 In. 27.02
Water year 1958-59: Max 680 Min 9.1 Mean 55.2 Cfsm 1.65 In. 22.43

Peak discharge (base, 1,200 cfs).--Nov. 29 (about 1 a.m.) about 1,220 cfs (7.5 ft); Mar. 6 (about 1 p.m.) 2,080 cfs (8.57 ft); Mar. 21 (about 5 p.m.) 1,290 cfs (7.60 ft); Apr. 3 (about 1 a.m.) about 1,610 cfs (about 8.0 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for stations on East Branch and Naugatuck River near Thomaston.

2057. East Branch Naugatuck River at Torrington, Conn.

Location.--Lat 41°48'12", long 73°07'06", on upstream side of Wall Street Bridge in Torrington, Litchfield County, 0.3 mile downstream from Troy Brook, and 0.6 mile upstream from confluence with West Branch.

Drainage area.--13.8 sq mi.

Records available.--August 1956 to September 1959.

Gage.--Wire-weight gage and crest-stage indicator; gage read twice daily. Datum of gage is 539.26 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during year, 1,130 cfs Mar. 6 (gage height, 4.33 ft); minimum, 1.5 cfs Sept. 27.

1956-59: Maximum discharge, that of Mar. 6, 1959; minimum observed, 0.3 cfs Oct. 20, 1956.

Flood of Aug. 19, 1955, reached a peak discharge of 6,210 cfs at a point 1½ miles upstream, drainage area, 10.2 sq mi.

Revisions.--The maximum discharge for the water year 1958 has been revised to 740 cfs Apr. 6, 1958 (gage height, 3.58 ft), superseding figure published in WSP 1551.

Remarks.--Records good except those for periods of ice effect and shifting control, which are fair. Some regulation at low flow.

Revisions.--The figures of peak discharge for the water year 1958 have been revised as shown below, superseding those published in WSP 1551.

Revised peak discharge.--1957-58: Dec. 21 (about 2 a.m.) about 690 cfs (about 3.5 ft); Dec. 26 (about 5 p.m.) about 530 cfs (about 3.15 ft); Apr. 6 (about 7 p.m.) 740 cfs (3.58 ft).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second) (Shifting-control method used Sept. 15-30)

Oct. 1 to Mar. 6				Mar. 7 to Sept. 30			
1.1	2.9	1.6	37	1.0	1.8	1.5	25
1.2	5.3	1.8	70	1.1	3.6	1.7	52
1.3	9.5	2.0	115	1.2	6.6	2.0	115
1.4	16	3.0	465	1.3	11	2.3	205

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	117	21	b35	b8.5	b9	b13	*66	40	6.6	6.0	7.0	9.2
2	35	20	26	b17	b7	13	150	35	92	13	6.0	5.1
3	21	61	23	14	b7	24	136	31	74	8.4	6.3	13
4	17	42	27	b11	b37	115	74	27	21	6.6	5.1	6.6
5	15	32	42	b9	18	25	46	27	15	6.0	27	3.9
6	13	27	57	b8	11	430	49	26	15	5.7	15	2.9
7	13	*24	b25	b9	b8	57	37	25	11	7.0	12	2.7
8	12	21	b25	b7	b8	b18	42	24	10	6.0	8.4	3.1
9	12	23	25	b6	b7	b19	43	22	9.2	5.7	16	3.1
10	11	25	b20	b5.5	b135	21	70	20	7.9	5.4	11	2.9
11	11	21	b17	b5	23	b15	96	19	6.6	13	8.4	*2.9
12	9.5	20	*b17	b6	b12	b17	52	31	6.0	7.5	*7.5	2.3
13	8.7	20	b15	b6	b25	b23	43	25	23	7.9	*6.6	1.8
14	9.5	19	b15	b6.5	24	b22	43	32	8.8	8.4	6.0	2.5
15	9.5	17	b16	b7	35	14	40	22	6.6	9.2	3.9	2.5
16	10	20	b15	b65	b22	57	44	19	6.0	8.8	3.2	2.5
17	9.5	17	b14	52	16	46	40	16	8.4	8.4	4.2	2.3
18	8.7	19	b13	b20	15	23	43	16	9.2	7.5	3.6	2.2
19	8.2	18	b12	b11	b11	b25	44	17	9.2	6.6	3.4	1.6
20	9.1	17	b11	b8	b9	130	108	17	9.2	16	3.2	1.7
21	8.7	16	b10	b80	b7.5	195	63	*16	6.6	25	3.2	2.3
22	8.7	15	b9	160	b6.5	42	50	11	7.5	55	2.9	2.2
23	59	14	b10	b30	b7	b25	46	13	10	23	2.3	2.2
24	26	15	b11	b16	b7	23	40	10	6.6	19	2.9	2.2
25	30	15	b9	b13	*b6	30	33	9.2	8.4	13	3.2	2.2
26	315	20	b8	b11	b7	32	36	8.4	8.8	9.2	2.9	1.7
27	105	21	b8	b10	b9	26	46	7.9	16	9.2	2.9	1.5
28	49	85	b8.5	b10	b12	22	46	7.5	12	7.9	2.7	*1.8
29	33	136	b9	b11	-	b18	68	13	11	7.5	5.1	2.0
30	30	68	9.5	b15	--------	18	43	13	7.5	7.5	3.2	2.0
31	24	--------	b9.5	13	--------	49	--------	8.4	--------	11	6.3	--------
Total	1,048.1	889	551.5	650.5	501.0	1,587	1,737	608.4	449.1	350.4	201.4	94.9
Mean	33.8	29.6	17.8	21.0	17.9	51.2	57.9	19.6	15.0	11.3	6.50	3.16
Cfsm	2.45	2.14	1.29	1.52	1.30	3.71	4.20	1.42	1.09	0.819	0.471	0.229
In.	2.82	2.39	1.49	1.75	1.35	4.28	4.69	1.64	1.22	0.94	0.54	0.26

Calendar year 1958: Max 315 Min 2.2 Mean 27.8 Cfsm 2.01 In. 27.28
Water year 1958-59: Max 430 Min 1.5 Mean 23.7 Cfsm 1.72 In. 23.37

Peak discharge (base, 500 cfs).--Oct. 26 (about 6 a.m.) 740 cfs (3.68 ft); Mar. 6 (about 1 p.m.) 1,130 cfs (4.33 ft); Mar. 21 (about 5 p.m.) about 690 cfs (about 3.5 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

2060. Naugatuck River near Thomaston, Conn.

Location.--Lat 41°42'15", long 73°03'53", on right bank near downstream side of Twomile Bridge, 250 ft downstream from New York, New Haven and Hartford Railroad bridge, 0.4 mile upstream from Leadmine Brook, 2 miles north of Thomaston, Litchfield County, and at mile 31.

Drainage area.--71.9 sq mi.

Records available.--October 1930 to September 1959 (discontinued).

Gage.--Water-stage recorder. Datum of gage is 389.44 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--29 years, 144 cfs.

Extremes.--Maximum discharge during year, 3,870 cfs Mar. 6 (gage height, 7.00 ft); minimum, 15 cfs Sept. 24, 25, 26; minimum gage height, 0.45 ft July 9; minimum daily discharge, 17 cfs Sept. 27.
1930-59: Maximum discharge, 41,600 cfs Aug. 19, 1955 (gage height, 24.0 ft, from floodmark), from rating curve extended above 6,000 cfs on basis of slope-area measurement of peak flow; minimum, about 7 cfs Mar. 12, 1940 (result of freezeup); minimum daily, 9.5 cfs Sept. 29, 1957; minimum gage height, 0.25 ft Sept. 30, Oct. 6, 1957.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Diurnal fluctuation at low flow.

Revisions (water years).--WSP 741: 1931-32. WSP 781: Drainage area. WSP 821: 1936(M). WSP 1111: 1939(M).

Rating tables, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Aug. 3				Aug. 3 to Sept. 30	
0.5	17	2.0	365	0.6	17
.7	36	3.0	785	.8	35
1.0	78	4.2	1,490	1.1	74
1.5	205			1.4	131

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	433	142	193	b45	b50	64	334	208	44	38	57	112
2	315	124	161	b160	b45	60	505	178	190	36	36	*70
3	164	316	137	155	b45	86	1,010	155	482	60	32	86
4	124	277	155	100	b320	503	428	144	156	40	25	79
5	103	232	279	b40	121	184	295	129	103	33	*100	55
6	86	193	398	b60	72	1,480	271	119	114	33	*100	37
7	76	*158	202	92	b50	474	235	112	76	40	76	31
8	75	137	164	b60	b50	139	214	119	61	22	55	29
9	73	144	144	b46	b40	121	238	103	51	22	76	27
10	70	147	*114	b37	557	134	312	92	45	26	71	24
11	70	131	b105	b35	242	84	543	90	40	53	50	23
12	61	114	b115	b39	b80	b95	337	*105	37	35	39	23
13	57	103	b100	b46	b170	b120	256	119	70	61	34	19
14	55	100	b95	b47	129	82	220	139	58	53	32	20
15	55	98	b100	b54	380	73	202	119	45	53	28	21
16	*54	107	b95	b300	129	308	190	96	38	46	27	27
17	53	98	b90	b190	96	*247	184	82	44	38	31	23
18	53	103	b85	b80	92	161	175	78	51	30	38	20
19	43	103	b80	b60	b64	151	178	72	53	27	34	19
20	53	96	b70	b50	b36	422	400	73	60	62	26	18
21	47	90	b60	b260	b50	565	326	78	45	260	24	19
22	43	84	b60	965	b42	441	229	70	43	213	26	*19
23	310	78	b65	202	45	161	193	68	55	310	23	19
24	247	82	b60	b85	48	147	172	63	46	119	24	19
25	175	82	b45	b75	*45	199	150	57	50	90	27	19
26	823	105	b52	b65	46	235	142	51	54	60	24	18
27	583	131	b50	b65	48	229	190	47	72	50	23	17
28	326	230	b52	b63	68	126	256	46	66	43	22	19
29	235	910	*b54	b58	-	96	295	121	66	38	73	23
30	187	320	b57	98	-------	110	232	102	53	35	29	19
31	158	-------	b50	b73	-------	238	-------	54	-------	53	43	-------
Total	5,207	5,035	3,487	3,705	3,160	7,535	8,712	3,089	2,368	2,079	1,305	954
Mean	168	168	112	120	113	243	290	99.6	78.9	67.1	42.1	31.8
Cfsm	2.34	2.34	1.56	1.67	1.57	3.38	4.03	1.39	1.10	0.933	0.586	0.442
In.	2.70	2.61	1.80	1.92	1.64	3.90	4.50	1.60	1.23	1.08	0.68	0.49

Calendar year 1958: Max 1,400 Min 20 Mean 161 Cfsm 2.24 In. 30.50
Water year 1958-59: Max 1,480 Min 17 Mean 128 Cfsm 1.78 In. 24.15

Peak discharge (base, 1,500 cfs).--Nov. 29 (2 a.m.) 1,770 cfs (4.58 ft); Mar. 6 (3:30 p.m.) 3,870 cfs (7.00 ft); Apr. 3 (2 to 3 a.m.) 1,990 cfs (4.89 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

2064. Leadmine Brook near Harwinton, Conn.

Location.--Lat 41°43'46", long 73°03'13", on left bank just upstream from bridge on Poverty Hollow Road at Roraback Lodge, 2.8 miles upstream from mouth, and 3.0 miles south of Harwinton, Litchfield County.

Drainage area.--18.9 sq mi.

Records available.--February to September 1959.

Gage.--Water-stage recorder. Datum of gage is 514.58 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during period, 990 cfs Mar. 6 (gage height, 6.41 ft); minimum, 0.4 cfs Sept. 28 (gage height, 1.04 ft).

Remarks.--Records good. Occasional low water regulation.

Rating tables, Feb. 24 to Sept. 30, 1959 (gage height, in feet, and discharge, in cubic feet per second)

Feb. 24 to May 12				May 12 to Sept. 30			
1.4	7	2.5	102	1.0	0.2	1.9	23
1.5	10	3.0	175	1.1	.8	2.2	42
1.7	21	4.1	385	1.3	3.2	2.5	67
2.0	45			1.6	8.8	3.0	110

Discharge, in cubic feet per second, February to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					-	25	105	51	6.3	5.0	6.0	12
2					-	27	170	41	42	5.6	4.3	*8.1
3					-	41	289	35	112	5.5	3.1	20
4					-	188	126	31	34	3.8	2.4	21
5					-	85	79	29	20	2.9	*11	8.6
6					-	379	68	27	15	2.7	14	5.6
7					-	122	56	25	12	3.4	13	4.5
8					-	a50	51	24	8.8	2.4	8.6	3.5
9					-	a37	52	23	7.2	2.0	9.2	3.5
10					-	a40	83	21	6.0	2.0	11	4.2
11					-	a31	150	20	5.0	6.8	7.0	*2.4
12					-	a29	83	*22	4.5	5.3	5.3	1.9
13					-	a37	60	*23	7.4	15	4.0	1.5
14					-	a32	50	27	12	23	3.1	1.1
15					-	a30	44	21	7.2	17	2.6	1.5
16					-	81	40	17	6.2	14	2.2	2.0
17					-	*75	39	16	7.2	8.1	1.7	2.3
18					-	a57	36	15	11	6.3	2.9	1.7
19					-	a65	36	14	8.8	5.1	4.6	1.4
20					-	162	92	16	8.3	5.6	2.8	1.3
21					-	181	65	14	6.5	25	3.4	1.1
22					-	110	44	12	5.6	40	2.2	1.0
23					-	52	38	10	7.8	59	1.7	*.9
24					*12	99	34	8.8	6.2	24	1.3	.8
25					11	47	30	*7.9	7.0	18	1.6	.6
26					9.7	49	30	7.2	8.6	11	1.5	.5
27					12	46	46	7.0	10	7.4	1.5	.5
28					24	34	54	6.3	10	6.0	1.6	.5
29					-	35	78	6.2	9.2	5.1	7.9	.6
30		--------			--------	34	52	12	6.7	4.3	5.5	.9
31		--------			--------	89	--------	7.6	--------	5.6	7.2	--------
Total					-	2,389	2,180	597.0	418.5	346.9	154.2	115.5
Mean					-	76.4	72.7	19.3	14.0	11.2	4.97	3.85
Cfsm					-	4.04	3.85	1.02	0.741	0.593	0.263	0.204
In.					-	4.66	4.30	1.18	0.83	0.68	0.30	0.23

Calendar year	: Max	Min	Mean	Cfsm	In.
Water year	: Max	Min	Mean	Cfsm	In.

Peak discharge (base, 500 cfs).--Mar. 6 (3:30 p.m.) 990 cfs (6.41 ft); Apr. 3 (12:30 a.m.) 650 cfs (5.21 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby streams.

2065. Leadmine Brook near Thomaston, Conn.

Location.--Lat 41°42'06", long 73°03'28", on left bank 10 ft downstream from highway bridge, 0.4 mile upstream from mouth, and 2¼ miles northeast of Thomaston, Litchfield County.

Drainage area.--24.0 sq mi.

Records available.--September 1930 to September 1959 (discontinued).

Gage.--Water-stage recorder. Datum of gage is 401.23 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--29 years, 48.1 cfs.

Extremes.--Maximum discharge during year, 1,260 cfs Mar. 6 (gage height, 7.48 ft); minimum, 1.0 cfs Sept. 28 (gage height, 2.28 ft).
1930-59: Maximum discharge, 10,400 cfs Aug. 19, 1955 (gage height, 13.1 ft, from floodmarks in gage house), from rating curve extended above 2,600 cfs on basis of contracted-opening measurement of peak flow; minimum, about 0.04 cfs Aug. 21, 1957; minimum gage height, 1.60 ft at times during period Sept. 12-15, 1931, and on July 30, Aug. 12, 1933.

Remarks.--Records excellent except those for periods of ice effect or shifting control, which are good. Occasional low water regulation.

Revisions (water years).--WSP 781: Drainage area. WSP 1301: 1947. WSP 1331: 1931(M), 1933(M), 1934, 1935(M), 1936, 1937(M), 1938, 1939-40(P), 1942-44(P), 1945, 1947(M), 1949, 1951(P), 1953(P).

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	191	55	70	14	18	25	126	53	7.7	6.5	12	16
2	126	48	54	50	16	22	202	43	37	8.5	7.4	11
3	65	129	46	45	15	28	323	38	104	7.7	5.1	37
4	50	102	52	25	110	220	128	34	33	5.2	4.1	24
5	42	73	101	15	40	90	79	32	22	3.9	9.1	11
6	40	61	144	17	25	480	69	30	18	3.6	*18	7.5
7	32	*53	69	14	21	147	56	28	15	4.4	17	5.7
8	30	47	53	13	18	62	53	28	12	3.5	12	4.9
9	29	49	45	11	20	48	54	26	9.8	2.8	17	4.5
10	27	53	*40	10	140	52	84	25	8.1	3.1	16	5.4
11	30	47	35	9.8	60	39	157	24	7.0	9.9	10	*3.8
12	26	43	33	9.8	30	37	84	*26	6.5	7.0	7.9	3.2
13	25	39	27	*11	80	47	62	25	9.6	25	6.1	2.8
14	24	38	30	11	40	41	52	27	15	28	4.8	2.6
15	24	37	30	11	150	39	47	22	9.8	22	3.9	2.5
16	24	38	24	100	47	108	44	20	8.3	17	3.2	3.6
17	24	37	26	90	38	*92	41	18	9.0	11	2.8	3.5
18	23	38	23	35	35	68	39	17	12	8.5	3.4	2.9
19	22	38	21	20	25	58	38	16	12	7.2	7.2	2.5
20	22	35	19	16	21	206	89	17	11	8.5	4.4	2.3
21	22	33	17	90	20	220	63	16	8.5	25	4.1	2.2
22	21	31	15	300	17	132	46	15	7.7	37	2.8	*2.0
23	184	29	17	60	15	57	39	14	10	68	2.1	*1.8
24	108	28	18	40	*16	54	36	12	8.3	31	1.9	1.7
25	76	28	16	30	15	59	34	11	9.8	24	2.0	1.5
26	452	35	14	23	15	62	34	10	12	16	1.8	1.3
27	252	48	13	21	17	60	47	9.8	13	11	1.6	1.2
28	134	76	14	19	26	47	60	9.0	14	9.0	1.8	1.1
29	92	423	15	18	-	41	80	8.5	12	7.7	6.7	1.6
30	72	110	18	27	-------	47	53	13	9.0	6.2	6.8	1.8
31	60	-------	15	27	-------	106	-------	9.5	-------	10	12	-------
Total	2,349	1,901	1,112	1,182.6	1,090	2,794	2,319	676.8	471.1	438.2	215.0	172.9
Mean	75.8	63.4	35.9	38.1	38.9	90.1	77.3	21.8	15.7	14.1	6.94	5.76
Cfsm	3.16	2.64	1.50	1.59	1.62	3.75	3.22	0.908	0.654	0.588	0.289	0.240
In.	3.64	2.94	1.73	1.83	1.69	4.32	3.59	1.05	0.73	0.68	0.33	0.27

Calendar year 1958: Max 452 Min 1.1 Mean 62.0 Cfsm 2.58 In. 35.07
Water year 1958-59: Max 480 Min 1.1 Mean 40.3 Cfsm 1.68 In. 22.80

Peak discharge (base, 650 cfs).--Nov. 29 (3 a.m.) 860 cfs (6.72 ft); Mar. 6 (3:30 p.m.) 1,260 cfs (7.48 ft); Apr. 3 (12:30 a.m.) 700 cfs (6.50 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 10-31, Jan. 2-6, Jan. 16 to Mar. 5, Mar. 12-15, 19, 23, 24, 29. Shifting-control method used Apr. 2 to Sept. 6.

2085. Naugatuck River at Beacon Falls, Conn.

Location.--Lat 41°26'32", long 73°03'47", on left bank at downstream side of Bridge Street highway bridge at Beacon Falls, New Haven County, 0.4 mile upstream from Bronson Brook and at mile 10.1.

Drainage area.--261 sq mi.

Records available.--June 1918 to September 1924, September 1928 to September 1955 (published as "near Naugatuck"), October 1955 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 117.28 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1955, water-stage recorder at site 2.5 miles upstream at datum 37.89 ft higher. Oct. 1, 1955, to Mar. 21, 1957, wire-weight or chain gage at present site and datum.

Average discharge.--37 years (1918-24, 1928-59), 475 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 10,200 cfs Mar. 6 (gage height, 10.97 ft); minimum, 80 cfs Sept. 27 (gage height, 1.50 ft); minimum daily, 85 cfs Sept. 27.
1918-24, 1928-59: Maximum discharge, 106,000 cfs Aug. 19, 1955 (gage height, 25.7 ft, from floodmarks), from rating curve extended above 9,000 cfs on basis of slope-area measurements at gage heights 12.4 and 25.7 ft (site and datum then in use); minimum, 24 cfs Oct. 21, 1935; minimum daily, 40 cfs Oct. 5, 12, 1930, Sept. 7, 1936; minimum gage height (present site and datum), 1.43 ft Oct. 6, 1957.
Flood in November 1927 reached a stage of 14 ft, site and datum then in use (discharge, about 26,000 cfs).

Remarks.--Records excellent except those for periods of no gage-height record, which are good. Flow regulated by industrial plants upstream during low stages, and by Pitch, Morris, and Wigwam Reservoirs having a combined capacity of 550,000,000 cu ft (see p. 266). Flow increased by diversion from Shepaug Reservoir into Naugatuck River basin.

Revisions (water years).--WSP 781: Drainage area. WSP 1171: 1918-24, 1928-49. WSP 1501: 1956(P).

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a1,500	519	a850	208	210	273	1,000	765	161	163	171	202
2	a1,200	462	625	769	188	242	1,470	645	273	185	135	226
3	a600	924	555	555	184	293	3,730	560	1,210	173	123	355
4	a450	960	650	374	1,080	1,350	1,630	500	563	143	123	426
5	a350	728	782	260	611	858	1,120	450	337	124	166	235
6	a290	625	1,260	a225	358	4,330	1,000	418	319	127	237	152
7	240	546	728	a270	242	2,380	880	392	269	135	*202	129
8	226	482	600	200	248	790	790	400	224	130	163	132
9	218	506	560	184	177	635	820	360	202	119	234	140
10	212	573	470	159	1,860	650	920	322	181	202	226	143
11	210	524	394	145	1,230	520	1,630	326	163	388	177	129
12	192	450	*422	147	506	481	1,200	454	150	224	156	112
13	186	410	390	164	588	468	910	580	201	177	135	100
14	181	398	324	184	755	440	790	580	229	294	129	*107
15	179	394	370	172	1,580	432	715	468	197	a212	118	112
16	186	390	339	429	728	958	665	388	165	195	105	135
17	184	382	332	922	510	1,040	635	337	165	175	113	126
18	164	398	335	358	482	825	600	312	188	145	152	119
19	140	402	317	254	390	625	595	295	214	133	130	107
20	145	374	313	237	a300	1,010	808	*298	214	123	124	94
21	155	350	254	341	a300	1,440	880	291	181	381	127	99
22	151	324	237	2,570	a270	1,540	675	257	169	333	124	107
23	857	299	260	786	a230	*734	585	229	183	678	96	107
24	860	303	260	406	a220	620	535	204	175	330	120	111
25	621	303	208	335	a200	630	490	*204	220	427	120	106
26	3,000	317	202	296	a200	660	472	192	224	229	120	97
27	2,000	430	205	248	205	715	595	186	212	179	117	85
28	1,120	625	205	228	228	590	790	179	222	159	120	96
29	810	3,200	215	223	-	486	880	161	230	143	134	121
30	675	a1,340	260	276	---	560	740	247	206	121	158	*109
31	573	---	248	a400	---	734	---	171	---	171	159	---
Total	17,875	17,938	13,170	12,325	14,080	27,309	28,550	11,171	7,647	6,718	4,514	4,319
Mean	577	598	425	398	503	881	952	360	255	217	146	144
(†)	-3.1	-3.6	-6.9	-6.2	-4.4	+1.9	-0.3	-9.4	-21.6	-13.6	-20.2	-20.2

Adjusted for diversion and change in reservoir contents

Mean	574	594	418	392	499	883	952	351	233	203	125	124
Cfsm	2.20	2.28	1.60	1.50	1.91	3.38	3.65	1.34	0.893	0.778	0.479	0.475
In.	2.54	2.54	1.84	1.73	1.99	3.90	4.07	1.54	1.00	0.90	0.55	0.53

	Observed			Adjusted		
Calendar year 1958:	Max 4,000	Min 71	Mean 593	Mean 588	Cfsm 2.25	In. 30.56
Water year 1958-59:	Max 4,330	Min 85	Mean 454	Mean 445	Cfsm 1.70	In. 23.13

Peak discharge (base, 4,000 cfs).--Oct. 26 (3 p.m.) 4,100 cfs (7.38 ft); Jan. 22 (4:30 a.m.) 4,100 cfs (7.43 ft); Mar. 6 (6:30 p.m.) 10,200 cfs (10.97 ft); Apr. 3 (4 a.m.) 5,870 cfs (8.64 ft).

* Discharge measurement made on this day.
† Diversion from Shepaug Reservoir and change in contents in Wigwam, Morris, and Pitch Reservoirs, equivalent in cubic feet per second; furnished by city of Waterbury.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for station near Thomaston and other nearby streams.

Reservoirs in Housatonic River Basin

2010. Lake Candlewood (Rocky River Reservoir) on Rocky River, lat 41°35'00", long 73°26'00", 2 miles west of New Milford, Litchfield County, Conn. Drainage area, 40.4 sq mi. Completed in 1928 for storage of water for power; impounds water pumped from the Housatonic River during offpeak power periods. Usable capacity, 6,210,000,000 cu ft. Records available, August 1928 to September 1959. Records furnished by The Connecticut Light & Power Co.

2020. Shepaug Reservoir on Shepaug River, lat 41°43'24", long 73°17'37", 1 mile north of Woodville, Litchfield County, Conn. Drainage area, 38.0 sq mi. Completed in 1933 for storage of water for municipal supply. Usable capacity, 77,000,000 cu ft. Records available, February 1933 to September 1959. Records furnished by Bureau of Engineering, city of Waterbury, Conn.

2035. Lake Lillinonah on Housatonic River, lat 41°26'52", long 73°17'49", in Litchfield County, 2.3 miles north of Newtown, Fairfield County, Conn. Drainage area, 1,392 sq mi. Completed in 1955 for storage of water for power. Usable capacity, 219,000,000 cu ft. Records available, February 1955 to September 1959. Records furnished by The Connecticut Light & Power Co.

2050. Lake Zoar on Housatonic River, lat 41°23'05", long 73°09'55", at Stevenson, Fairfield County, Conn. Drainage area, 1,545 sq mi. Completed in 1919 for storage of water for power. Usable capacity, 331,000,000 cu ft. Records available, August 1928 to September 1959. Records furnished by The Connecticut Light & Power Co.

2070. Pitch Reservoir on Branch Brook, lat 41°41'34", long 73°09'04", 4 miles northwest of Thomaston, Litchfield County, Conn. Drainage area, 5.74 sq mi. Completed in 1943 for storage of water for municipal supply. Total capacity, 190,000,000 cu ft. Records available, November 1943 to September 1959. Records furnished by Bureau of Engineering, city of Waterbury, Conn.

2075. Morris Reservoir on Branch Brook, lat 41°40'29", long 73°08'39", 3½ miles west of Thomaston, Litchfield County, Conn. Drainage area, including Pitch Reservoir, 13.3 sq mi. Completed in 1913 for storage of water for municipal supply. Total capacity, 265,000,000 cu ft. Records available, May 1918 to September 1924, September 1928 to September 1959.

2080. Wigwam Reservoir on Branch Brook, lat 41°39'50", long 73°07'41", 3 miles west of Thomaston, Litchfield County, Conn. Drainage area, including Pitch and Morris Reservoirs, 18.1 sq mi. Used for storage of water for municipal supply. Total capacity, 97,000,000 cu ft. Records available, May 1918 to September 1924, September 1928 to September 1959. Records furnished by Bureau of Engineering, city of Waterbury, Conn.

Month-end contents, water year October 1958 to September 1959

Date	Contents (m.c.f.)	Change in contents (equivalent in cfs)	Contents (m.c.f.)	Change in contents (equivalent in cfs)	Contents (m.c.f.)	Change in contents (equivalent in cfs)
	Lake Candlewood (Rocky River Reservoir)		Shepaug Reservoir		Lake Lillinonah	
Sept.30	5,858	-	98.0	-	2,855	-
Oct. 31	5,931	+27.3	98.4	+.1	3,018	+60.9
Nov. 30	6,004	+28.2	99.0	+.2	2,965	-20.4
Dec. 31	5,798	-76.9	96.9	-.8	3,120	+57.9
Calendar year 1958	-	-7.3	-	-.1	-	+7.7
Jan. 31	5,750	-17.9	97.3	+.1	2,700	-156.8
Feb. 28	5,666	-34.7	97.0	-.1	2,935	+97.1
Mar. 31	6,028	+135.2	98.7	+.6	2,921	-5.2
Apr. 30	6,052	+9.3	98.9	+.1	3,003	+31.6
May 31	5,750	-112.8	93.9	-1.9	3,136	+49.7
June 30	5,834	+32.4	96.6	+1.0	2,891	-94.5
July 31	5,834	0	96.9	+.1	2,805	-32.1
Aug. 31	5,368	-174.0	77.9	-7.1	2,680	-46.7
Sept.30	5,678	+119.6	51.5	-10.2	2,958	+107.3
Water year 1958-59	-	-5.7	-	-1.5	-	+3.3
	Lake Zoar		Pitch, Morris, and Wigwam Reservoirs			
Sept.30	321.6	-	552.3	-		
Oct. 31	276.1	-17.0	544.5	-2.9		
Nov. 30	363.3	+33.6	539.8	-1.8		
Dec. 31	307.9	-20.7	536.8	-1.1		
Calendar year 1958	-	-1.2	-	+.5		
Jan. 31	244.6	-23.6	548.5	+4.4		
Feb. 28	303.3	+24.3	537.8	-4.4		
Mar. 31	294.1	-3.4	548.5	+4.0		
Apr. 30	294.1	0	547.6	-.3		
May 31	307.9	+5.2	546.8	-.3		
June 30	312.5	+1.8	546.9	0		
July 31	303.3	-3.4	543.8	-1.2		
Aug. 31	317.0	+5.1	527.5	-6.1		
Sept.30	294.1	-8.8	526.9	-.2		
Water year 1958-59	-	-.9	-	-.8		

2095. Saugatuck River near Westport, Conn.

Location.--Lat 41°10'15", long 73°22'00", on left bank on old Ford Road (Clinton Ave.), 400 ft downstream from West Branch, 600 ft downstream from Aspetuck River and dam of Dorr Co., 2 miles north of Westport, Fairfield County, and 5½ miles upstream from mouth.
Drainage area.--77.5 sq mi.
Records available.--September 1932 to September 1959.
Gage.--Water-stage recorder. Datum of gage is 18.16 ft above mean sea level, datum of 1929.
Average discharge.--27 years, 143 cfs (adjusted for storage in and diversion from Saugatuck Reservoir since October 1941).
Extremes.--Maximum discharge during year, 1,600 cfs Mar. 6 (gage height, 6.67 ft); minimum, 6.6 cfs Aug. 4, 5 (gage height, 2.21 ft); minimum daily, 5.9 cfs Sept. 26, 27.
1932-59: Maximum discharge, 14,800 cfs Oct. 16, 1955 (gage height, 15.93 ft, from high-water marks in gage house), from rating curve extended above 2,400 cfs on basis of computation of peak flow over dam at gage height 10.28 ft and contracted-opening measurement of peak flow; minimum, 0.2 cfs Oct. 19, 1953; minimum gage height, 1.92 ft Oct. 19, 1953, July 9, 1957; minimum daily discharge, 1.0 cfs Aug. 11, 1939.
Remarks.--Records excellent except those for period of no gage-height record, which are poor. Flow regulated by storage and diversion at Saugatuck Reservoir (total capacity, 11,900,000,000 gal) and Aspetuck Reservoir. At Aspetuck Reservoir, Bridgeport Hydraulic Co. diverts an indeterminable amount of water for domestic supply from about 17 sq mi of Saugatuck River basin through Hemlocks Reservoir in Mill River basin. Occasional regulation at dam of Dorr Co.
Revisions (water years).--WSP 781: Drainage area. WSP 1301: 1936.

Rating table, water year 1958-59, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Feb. 20, 21)

2.1	3.0	3.0	88
2.2	6.2	3.5	195
2.3	10.5	4.0	335
2.5	25	5.0	700
2.7	45	5.8	1,070

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	64	139	a35	a50	55	268	190	16	16	8.4	*18
2	58	64	156	a300	a45	57	335	170	30	14	7.9	17
3	36	132	165	a330	a40	58	808	148	114	12	7.5	13
4	29	124	322	a150	*185	241	562	120	54	12	7.1	12
5	25	99	372	a100	177	153	428	96	31	10	10	11
6	21	80	357	a70	102	872	360	86	26	9.6	12	10
7	19	66	262	a55	68	1,040	302	78	25	12	10	8.8
8	19	57	213	a45	61	593	268	88	26	9.2	9.2	7.9
9	19	58	188	a40	52	329	251	68	21	8.4	65	7.5
10	20	*68	153	a35	220	262	262	59	16	8.8	38	7.9
11	17	62	a140	a30	354	205	320	59	15	21	20	7.5
12	16	52	a130	a30	196	222	305	69	14	19	15	7.1
13	15	45	a120	a31	158	189	273	83	17	16	12	7.1
14	15	45	110	a33	182	156	237	126	29	27	11	6.6
15	*16	45	a100	a35	324	170	198	109	19	30	9.2	6.2
16	16	52	a100	a100	230	338	172	69	16	24	8.8	6.2
17	16	46	a95	a170	158	354	158	54	14	17	8.8	6.2
18	16	45	a90	a80	133	314	144	*49	14	14	8.8	6.2
19	16	45	a85	a60	111	248	159	45	14	12	9.2	6.2
20	16	42	a75	a50	77	293	160	46	14	12	8.8	6.2
21	16	40	a70	a90	64	354	144	44	13	31	7.9	6.2
22	16	37	a60	a200	57	382	122	37	12	20	7.9	6.2
23	59	34	a55	a130	55	273	107	40	22	16	7.5	6.2
24	53	34	a50	a90	59	232	96	32	16	14	10	6.2
25	53	34	a47	a70	52	208	88	28	22	12	10	6.2
26	386	35	a43	a60	49	200	88	22	35	10	8.8	5.9
27	424	36	a40	a50	49	*235	140	20	28	*9.2	8.4	5.9
28	154	48	a40	a50	52	259	229	19	28	8.8	7.5	6.2
29	100	341	a42	a50	-	185	232	18	33	8.4	8.4	7.1
30	82	207	a45	a55	-------	212	182	17	25	7.9	10	8.8
31	69	-------	a40	a60	-------	317	-------	16	-------	7.9	11	-------
Total	1,875	2,135	3,904	2,684	3,360	9,006	7,378	2,105	759	449.2	384.1	243.5
Mean	60.5	71.2	126	86.6	120	291	246	67.9	25.3	14.5	12.4	8.12
(†)	+44.4	+67.8	+2.8	+10.5	+10.9	+12.1	+8.5	+8.6	+23.9	+4.2	+12.7	+6.24

Adjusted for diversion and change in contents in Saugatuck Reservoir

Mean	105	139	129	97.1	131	303	254	76.5	49.2	18.7	25.1	14.4
Cfsm	1.35	1.79	1.66	1.25	1.69	3.91	3.28	0.987	0.635	0.241	0.324	0.186
In.	1.56	2.00	1.91	1.44	1.76	4.51	3.66	1.14	0.71	0.28	0.37	0.21

	Observed			Adjusted		
Calendar year 1958:	Max 1,450	Min 6.0	Mean 157	Mean 174	Cfsm 2.25	In. 30.48
Water year 1958-59:	Max 1,040	Min 5.9	Mean 93.9	Mean 112	Cfsm 1.45	In. 19.55

Peak discharge (base, 900 cfs).--Mar. 6 (8 p.m.) 1,600 cfs (6.67 ft).

* Discharge measurement made on this day.
† Change in contents and diversion, equivalent in cubic feet per second, from Saugatuck Reservoir for domestic water supply.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, engineer's notes, and records for nearby streams.

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

Records collected at partial-record stations are generally presented in two tables. However, no records at crest-stage partial-record stations are available for the 1959 water year. A table of discharge measurements at low-flow partial-record stations is given first, followed by a table of measurements made at miscellaneous sites for both low flow and high flow.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1959

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Housatonic River basin				
1994	Webatuck Creek near South Amenia, N. Y.	Lat 41°46'46", long 73°33'12", at bridge on Pump House Rd., 200 ft above confluence with Wassaic Creek and 1.6 miles southwest of South Amenia.	81.0	1956-59	7-29-59	27.0
1994.1	Wassaic Creek at Wassaic, N. Y.	Lat 41°47'36", long 73°33'06", at bridge, 0.7 miles southeast of Wassaic and 1.0 mile above confluence with Webatuck Creek.	36.6	1956-59	4-24-59 7-29-59	56.2 12.1
1994.2	Tenmile River near Wassaic, N. Y.	Lat 41°46'45", long 73°33'34", at county bridge A-30, 0.2 mile below confluence of Wassaic and Webatuck Creeks and 1.6 miles south of Wassaic.	120	1956-59	6- 2-59 6-29-59 7-29-59 9- 8-59 9- 8-59 9-24-59	39.2 76.6 38.6 28.5 27.4 12.6
		Rippowam River basin				
2098	Mill River at Scott Corners, N. Y.	Lat 41°10'42", long 73°33'14", at bridge on Trinity Pass Rd., 1.0 mile south of Scott Corners.	13.2	1956-59	11- 8-58 1-26-59 5-27-59 8- 4-59	15.1 10.5 4.16 2.27
		Mianus River basin				
2100	Mianus River at Bedford, N. Y.	Lat 41°12'06", long 73°38'00" (revised), at bridge on Middle Patent Rd., 0.6 mile east of Bedford.	10.7	1903, 1956-59	11- 8-58 1-26-59 5-27-59 8- 4-59	13.3 10.9 7.18 2.20
		Byram River basin				
2113	Byram River at Armonk, N. Y.	Lat 41°07'28", long 73°42'09", at bridge on State Highways 22 and 128, 0.6 mile east of Armonk.	3.78	1956-59	11- 8-58 1-26-59 5-27-59 7- 9-59 8- 4-59	3.26 3.20 1.70 .70 .84

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

Discharge measurements made at miscellaneous sites during water year 1959

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Crane River basin						
Beaver Brook.	Crane River..	Lat 42°34'02", long 70°56'42", at Pickering Street Bridge, at Danvers, Mass.	2.05		7-30-59 8-17-59 9-14-59	1.83 .65 .41
Danvers River basin						
Bass River...	Danvers River	Lat 42°33'50", long 70°53'51", at Marine Corps golf-course bridge, at Beverly, Mass.	1.20		7-30-59 8-17-59 9-14-59	0.89 .29 .20
Charles River basin						
Fuller Brook.	Charles River	Lat 42°17'45", long 71°17'18", at Brook Street Bridge, at Wellesley, Mass.	4.12		7-29-59 8-18-59 9-14-59	5.16 1.44 1.40
Neponset River basin						
Traphole Brook.	Neponset River.	Lat 42°09'36", long 71°11'46", at Sumner Street Bridge, at East Walpole, Mass.	3.33		7-29-59 8-18-59 9-14-59 9-22-59	4.18 2.81 1.82 2.09
Purgatory Brook.	....do.....	Lat 42°12'54", long 71°11'24", at bridge on U. S. Highway 1A at Islington, Mass.	1.24		7-29-59 8-18-59 9-14-59	2.03 .27 .07
Weymouth Back River basin						
Old Swamp River.	Weymouth Back River.	Lat 42°10'57", long 70°56'08", below Pine Street Bridge, at South Weymouth, Mass.	3.70		7-28-59 8-17-59 9-15-59 9-22-59	3.26 .63 .65 .45
Plymouth River basin						
Plymouth River.	Hingham Bay (Atlantic Ocean).	Lat 42°11'54", long 70°54'19", at Plymouth River Road Bridge, 1½ miles southeast of East Weymouth, Mass.	2.86		7-28-59 8-17-59 9-22-59	4.00 1.69 .80
Connecticut River basin						
Mattabesset River.	Connecticut River.	Lat 41°36'04", long 72°41'54", at highway bridge near State Highway 72, at Little River village, near Middletown, Conn.	57.7		9-17-59	48.1
Housatonic River basin						
Whiting River	Blackberry River.	Lat 42°00'42", long 73°16'24", at bridge on U. S. Highway 44 near East Canaan, Conn.	18.5		9-29-59	1.65
Hollenbeck River.	Housatonic River.	Lat 41°58'31", long 73°21'27", at bridge on State Highway 126 near Falls Village, Conn.	41.4		9-29-59	8.05
Salmon Creek.	....do.....	Lat 41°55'39", long 73°22'28", at bridge on State Highway 112 near Lime Rock, Conn.	38.5		9-29-59	7.28
Carse Brook..	....do.....	Lat 41°51'18", long 73°22'35", at bridge on U. S. Highway 7 near West Cornwall, Conn.	7.0		9-29-59	.43
Kent Falls Brook.	....do.....	Lat 41°46'35", long 73°25'10", at bridge on U. S. Highway 7 near North Kent, Conn.	7.5		9-29-59	.86
Macedonia Brook.	....do.....	Lat 41°43'42", long 73°29'16", at bridge on State Highway 341 near Kent, Conn.	17.6		9-29-59	4.50
Swamp River..	Tenmile River	Lat 41°42'55", long 73°34'32", at highway bridge near mouth, near Dover Plains, N. Y.	49.9		9-29-59	7.25
Rocky River..	Housatonic River.	Lat 41°35'00", long 73°26'31", at bridge on U. S. Highway 7 near New Milford, Conn.	.5		9-29-59	.18
West Aspetuck River.	....do.....	Lat 41°35'18", long 73°25'35", at highway bridge near mouth, near New Milford, Conn.	24.6		9-29-59	2.81
East Aspetuck River.	....do.....	Lat 41°35'33", long 73°25'17", at highway bridge near mouth, near New Milford, Conn.	25.4		9-29-59	10.0
Beaver Brook.	Still River..	Lat 41°25'17", long 73°25'13", at bridge on U. S. Highway 7 near Danbury, Conn.	14.6		9-29-59	1.06
Naugatuck River.	Housatonic River.	Lat 41°40'25", long 73°04'13", at U. S. Highway 6 at Thomaston, Conn.	107	1957-58	8- 7-59 9- 2-59 9-22-59	98.2 79.1 22.0

INDEX

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