Surface Water Supply of the United States 1958

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

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

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1551

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

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PREFACE

This report was prepared by the Geological Survey in cooperation with the States of Connecticut, Maine, Massachusetts, New Hampshire, 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, 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 ..... Hartford, Conn.
G. S. Hayes ..... Augusta, Maine
C. E. Knox ..... Boston, Mass.

CALENDAR FOR WATER YEAR 1958

OCTOBER 1957

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 1957

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 1957

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 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	

FEBRUARY 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	

MARCH 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					

APRIL 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			

MAY 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

JUNE 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					

JULY 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		

AUGUST 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						

SEPTEMBER 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				

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ILLUSTRATIONS

SURFACE WATER SUPPLY OF NORTH ATLANTIC SLOPE BASINS, MAINE TO CONNECTICUT, 1958

SCOPE OF WORK

This volume is one of a series of 18 reports presenting measurements of stage, discharge, and content of streams, lakes, and reservoirs in the United States during the water year ending September 30, 1958. Since 1888, when the United States Geological Survey first studied streamflow in relation to problems of irrigation, similar measurements have been made at more than 14,000 gaging stations in the 48 States and at many others in the Territories of Alaska and Hawaii. On September 30, 1958, the Geological Survey and cooperating organizations were maintaining 7,090 gaging stations, including those in Alaska and Hawaii. 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 water year October 1, 1957, to September 30, 1958, 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. Organizatiors 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, 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, J. C. Wilks, chairman, and G. W. Wood, chief engineer; city of Torrington, W. T. Carroll, mayor, succeeded by A. C. Gelormino, and W. F. Neirintz, city engineer, succeeded by G. F. Mahoney.

Maine: Maine Public Utilities Commission, T. E. Delehanty, chairman.

Massachusetts: State Department of Public Health, S. B. Kirkwood, commissioner, and C. I. Sterling, Jr., chief sanitary engineer; State Department of Public Works, A. N. DiNatale, commissioner; Metropolitan District Commission, C. W. Greenough, commissioner, and H. J. Toole, director and chief engineer of Water Division.

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

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	420 Statehouse.
Massachusetts c/	Boston	141 Milk Street.
New Hampshire d/	Boston, Mass.	Do.
Rhode Island	....do	Do.
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 periods of 7, 15, 30, 60, 120, and 183 consecutive days in each year; and (3) the highest mean discharge for periods of 3, 7, 15, 30, and 120 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 has eight digits, 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 in the two places 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 water year 1958 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 or 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

To facilitate publication of the annual series of reports, the area of the United States is divided into 14 parts whose boundaries coincide with certain natural drainage lines. Formerly, the results of streamflow measurements were published in 14 volumes, one for each of the 14 parts. Beginning with the reports for 1951, the records are 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.
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.

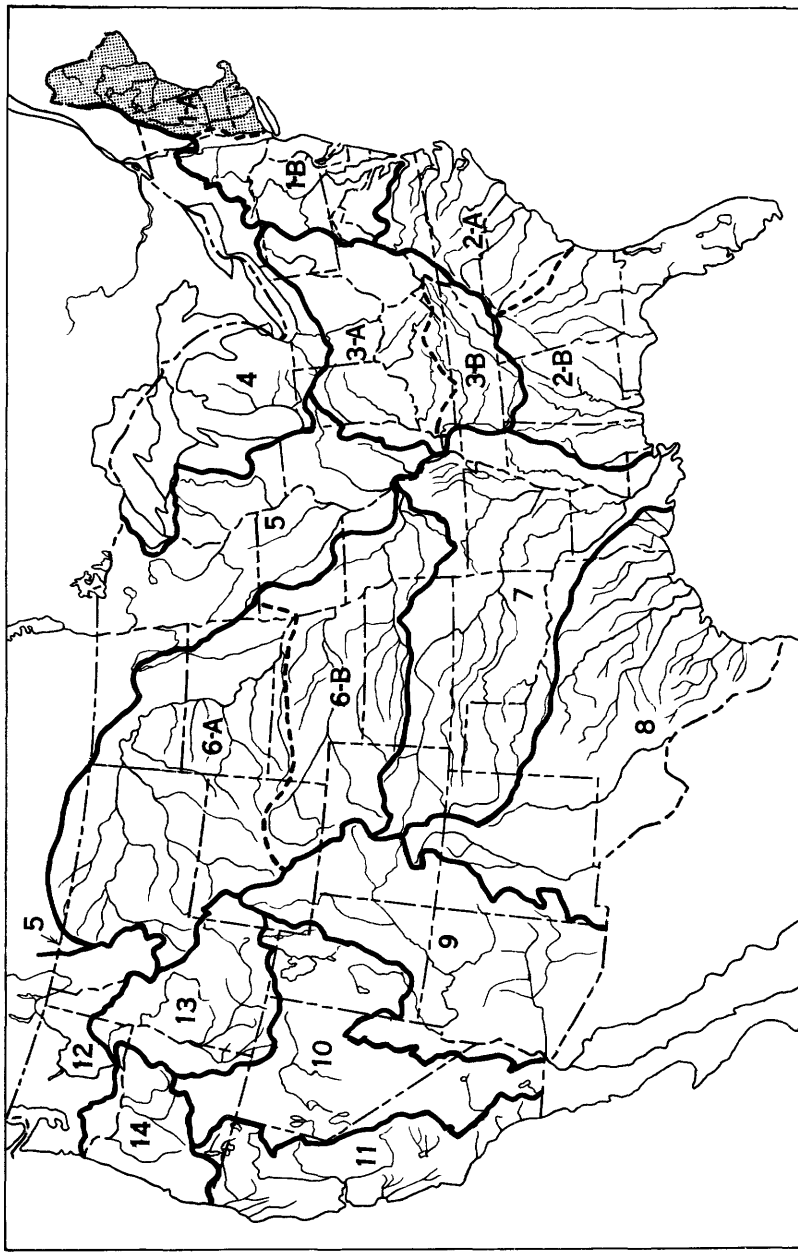

Figure 1.--Map of the United States showing areas covered by the 18 annual volumes on surface-water supply. The area covered by this report is shaded.

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

(A = Annual Report; B = Bulletin)

Report	Character of data	Year
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 Commecticut, 1899-1958

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		
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.
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.

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 water year October 1957 to September 1958 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.....	1929-58	Central Maine Power Co.
Kennebec River.....	Bingham, Maine.....	1931-58	Do.
Do.....	Indian Pond, Maine.....	1954-58	Do.
Penobscot River.....	Old Town, Maine.....	1915-58	Bangor Hydro-Electric Co.
Race Brook.....	Orange, Conn.....	1911-58	New Haven Water Co.
Saco River.....	Hiram, Maine.....	1930-58	Central Maine Power Co.
Do.....	West Buxton, Maine.....	1940-58	Do.
Stillwater Branch Penobscot River.	Stillwater, Maine.....	1915-58	Bangor Hydro-Electric Co.
Wepawaug River.....	Orange, Conn.....	1911-58	New Haven Water Co.
West River.....	Guilford, Conn.....	1930-58	Do.

HYDROLOGIC CONDITIONS

The drought which began in April 1957 continued through October; partial relief occurred during November. Streamflow became excessive in December; monthly mean discharges at two key gaging stations in Maine and one in New Hampshire were record high for the month. In January two key stations in Maine and one in Massachusetts had record-high monthly mean discharges. Again in April streamflow was excessive throughout New England; peak flows at several stations in Maine were the greatest in 15 to 30 years of record. Excessive flow occurred in northern Maine during August.

Figure 2 below, for which records for two long-term representative gagirg stations were used, shows a comparison of the monthly and yearly mean discharges during the 1958 water year with the median discharge for the period 1921-45.

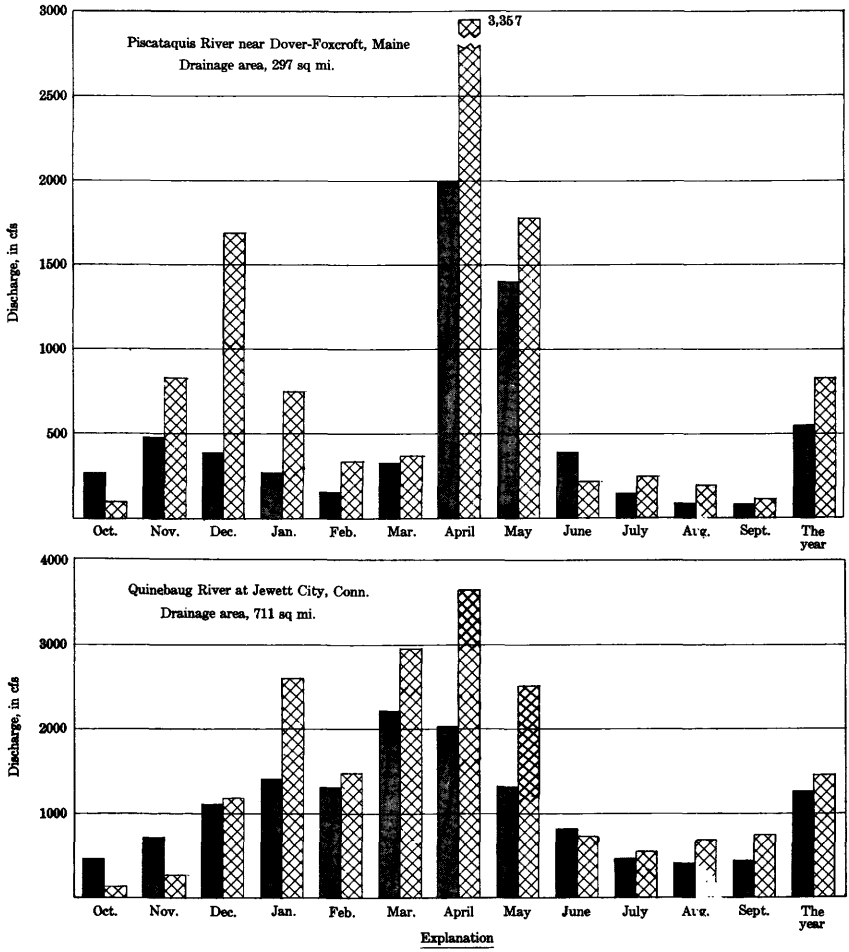

Figure 2. Comparison of discharge at two key gaging stations during 1958 water year with median discharge for 25-year period.

ST. JOHN RIVER BASIN

100. St. John River at Ninemile Bridge, Maine

Location.--Lat 46°42'00", long 69°43'00", T. 12, R. 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 1958.

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

Average discharge.--7 years (1951-58), 2,218 cfs.

Extremes.--Maximum discharge during year, 34,200 cfs Apr. 25 (gage height, 10.97 ft); maximum gage height, 14.26 ft (from floodmarks) Dec. 21 (backwater from ice); minimum discharge, 213 cfs Oct. 18, 19 (gage height, 0.92 ft).
1950-58: Maximum discharge, that of Apr. 25, 1958; 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 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	206	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	9.0	23,600
3.0	2,180	10.0	28,800
4.0	4,230	10.9	33,800

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	732	1,150	1,980	3,530	550	315	370	10,400	946	1,440	*3,000	1,460
2	618	1,060	1,930	2,800	530	310	380	10,700	1,160	3,020	2,130	1,430
3	581	1,150	1,720	2,020	520	310	385	10,200	2,180	5,390	1,500	1,340
4	544	2,050	1,430	1,120	505	315	390	8,660	1,900	4,410	1,150	1,100
5	484	3,250	1,260	930	485	320	425	7,480	1,420	2,920	1,330	946
6	429	*3,350	1,180	1,870	460	320	445	6,510	1,140	1,980	1,660	919
7	384	2,800	1,160	2,350	440	315	490	5,860	1,050	1,600	1,690	1,540
8	344	2,330	1,120	2,180	425	315	530	5,860	946	1,560	2,750	3,270
9	320	2,580	1,080	2,000	405	310	540	10,300	801	1,460	8,540	3,100
10	295	3,710	1,240	1,840	385	310	530	12,500	690	1,330	10,800	2,510
11	278	3,270	1,570	1,680	375	*305	540	10,600	649	1,070	8,290	2,600
12	267	2,620	2,020	1,540	365	315	545	8,480	1,460	928	5,310	2,280
13	251	2,150	2,130	1,430	355	320	565	7,120	1,810	864	3,690	1,860
14	244	1,870	2,050	1,350	350	325	625	6,000	2,010	732	3,080	1,460
15	237	1,860	1,870	1,290	350	350	775	5,120	3,690	603	2,660	1,150
16	230	3,510	1,640	1,230	345	385	1,870	4,460	3,180	580	2,800	956
17	220	4,210	1,490	1,160	345	395	4,230	4,060	2,570	2,130	2,660	828
18	213	5,060	1,340	1,060	340	395	7,380	3,990	2,130	3,620	2,420	752
19	248	5,040	1,280	975	340	385	11,500	4,660	1,700	2,820	4,140	846
20	1,020	6,610	1,570	880	*335	345	16,700	6,330	1,280	2,770	5,950	965
21	1,820	6,670	2,350	*790	335	320	18,100	5,890	1,600	3,400	5,010	855
22	1,620	5,500	4,490	790	330	315	*22,000	4,750	1,010	2,790	4,800	749
23	1,260	4,330	10,300	790	325	310	*26,100	3,810	1,290	1,930	4,110	*984
24	1,170	3,440	8,410	775	320	290	31,800	3,140	1,190	1,310	3,000	1,010
25	3,090	2,530	7,890	750	315	280	33,700	2,600	946	974	2,920	846
26	3,900	1,570	7,650	730	315	290	29,600	2,150	1,110	882	5,420	698
27	3,060	1,180	7,450	705	310	300	22,100	1,820	4,770	1,870	4,620	649
28	2,390	1,160	6,890	675	320	305	16,300	1,530	4,230	2,050	3,330	566
29	1,880	1,720	5,980	650	-	315	11,900	1,300	2,960	1,980	2,460	538
30	1,530	1,870	5,010	620	-------	325	10,300	1,160	2,070	3,580	1,870	511
31	1,290	-------	4,230	580	-------	345	-------	1,050	-------	3,990	1,580	-------
Total	30,949	89,600	101,710	41,090	10,775	10,055	271,115	178,490	53,888	65,983	114,670	38,698
Mean	998	2,987	3,281	1,325	385	324	9,038	5,758	1,796	2,128	3,699	1,290
Cfsm	0.774	2.32	2.54	1.03	0.298	0.251	7.01	4.46	1.39	1.65	2.87	1.00
In.	0.89	2.59	2.93	1.19	0.31	0.29	7.82	5.14	1.55	1.90	3.31	1.12

Calendar year 1957: Max 15,000 Min 100 Mean 1,754 Cfsm 1.36 In. 18.47
Water year 1957-58: Max 33,700 Min 213 Mean 2,759 Cfsm 2.14 In. 29.04

Peak discharge (base, 10,000 cfs).--Dec. 23 (time and discharge unknown); Apr. 25 (8 a.m.) 34,200 cfs (10.97 ft); May 10 (6 a.m.) 12,700 cfs (6.51 ft); Aug. 10 (1 to 4 a.m.) 11,200 cfs (6.13 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 25 to Apr. 19 (no gage-height record Dec. 21 to Jan. 21; discharge estimated on basis of 1 discharge measurement, weather records, and flow at downstream gaging stations).

105. St. John River at Dickey, Maine

Location.--Lat 47°06'40", long 69°05'15", on right bank at Dickey, Aroostook 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 1958.

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.--12 years (1946-58), 4,616 cfs.

Extremes.--Maximum discharge during year, 71,200 cfs Apr. 25 (gage height, 16.58 ft); minimum daily, 650 cfs Feb. 20; minimum gage height, 2.03 ft Oct. 18, 19.
1910-11, 1946-58: Maximum discharge, that of Apr. 25, 1958; 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.0	630	8.0	15,200
2.5	1,190	10.0	24,500
3.0	1,860	12.0	36,000
4.0	3,600	14.0	50,000
5.0	5,810	16.0	66,100
6.0	8,500	16.5	70,500

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,920	2,660	3,420	6,080	1,170	680	1,010	21,000	3,480	4,730	7,040	4,920
2	1,720	2,510	3,440	5,500	1,090	680	1,010	21,600	4,050	5,930	5,280	4,800
3	1,550	2,650	3,030	3,680	1,050	680	1,000	21,200	5,590	11,400	4,010	4,280
4	1,450	4,740	2,760	1,800	985	680	1,000	18,400	6,380	11,100	3,210	3,720
5	1,370	7,340	2,440	2,070	950	680	1,090	16,100	5,350	7,910	2,780	3,190
6	1,270	7,620	2,410	3,500	915	680	1,190	14,200	4,600	5,550	2,760	2,820
7	1,150	6,550	2,390	3,880	875	680	1,260	12,800	4,150	4,220	2,960	4,610
8	1,070	5,380	2,340	3,660	850	695	1,320	12,600	3,450	3,630	3,170	9,070
9	974	5,810	2,270	3,360	840	705	1,350	20,100	2,800	3,600	7,420	8,740
10	928	8,200	2,200	3,210	830	705	1,320	26,300	*2,450	3,740	16,800	7,040
11	862	8,200	2,310	3,030	765	715	1,310	22,800	2,010	3,540	14,700	6,520
12	840	6,520	2,850	2,850	755	725	1,310	18,200	2,070	3,390	10,300	6,420
13	798	5,280	3,440	2,710	745	735	1,350	15,500	2,980	3,050	7,560	5,380
14	746	4,500	3,640	2,600	735	810	1,450	13,400	3,880	2,790	8,140	4,430
15	735	4,260	3,460	2,480	725	875	1,650	11,600	6,650	2,230	7,790	3,720
16	724	5,860	3,070	2,340	705	950	4,650	10,300	7,480	2,230	8,060	3,120
17	672	8,740	2,780	2,220	695	1,050	9,400	9,490	6,450	4,330	7,710	2,750
18	662	10,300	2,630	2,140	680	*1,050	16,800	9,130	5,350	7,220	6,650	2,460
19	735	10,400	2,540	2,040	660	1,050	26,400	9,220	4,430	6,910	11,900	2,260
20	1,480	11,600	2,850	1,980	650	1,000	32,600	10,800	3,600	7,540	19,600	2,170
21	2,890	13,100	7,070	1,900	660	975	33,900	11,400	2,960	8,440	17,300	2,270
22	3,640	11,200	17,700	1,830	660	950	39,500	9,940	2,920	7,540	15,200	2,140
23	3,100	9,100	30,000	1,750	660	940	48,800	8,230	3,880	5,640	14,600	*2,140
24	2,710	7,310	19,500	1,690	660	915	64,600	6,810	4,220	4,210	10,700	2,340
25	3,560	6,050	16,000	1,590	660	895	70,200	5,910	3,580	3,270	8,350	2,360
26	6,940	4,430	14,400	1,520	670	875	66,000	4,890	3,540	2,800	10,100	2,170
27	6,550	2,760	13,500	1,450	680	860	50,900	4,220	9,210	3,070	11,100	2,030
28	5,150	2,320	11,800	1,410	680	850	35,500	3,700	12,200	4,410	8,590	1,900
29	4,090	3,120	10,100	1,320	-	850	25,400	3,400	9,070	4,980	6,520	1,790
30	3,360	3,290	8,710	1,270	--------	840	20,800	3,190	6,300	7,180	5,240	1,660
31	2,900	--------	7,020	1,190	--------	895	--------	3,010	--------	8,590	4,720	--------
Total	66,546	191,800	212,070	78,050	22,000	25,670	564,070	379,440	145,080	165,250	270,260	113,220
Mean	2,147	6,393	6,841	2,518	786	828	18,800	12,240	4,836	5,331	8,718	3,774
Cfsm	0.795	2.37	2.53	0.933	0.291	0.307	6.96	4.53	1.79	1.97	3.23	1.40
In.	0.92	2.64	2.92	1.08	0.30	0.35	7.76	5.22	2.00	2.27	3.72	1.56

Calendar year 1957: Max 33,400 Min 200 Mean 3,955 Cfsm 1.46 In. 19.86
Water year 1957-58: Max 70,200 Min 650 Mean 6,119 Cfsm 2.27 In. 30.74

Peak discharge (base, 27,000 cfs).--Dec. 23 (time and discharge unknown); Apr. 25 (9 p.m.) 71,200 cfs (16.58 ft); May 10 (9 to 10 a.m.) 27,000 cfs (10.47 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 4-20, Jan. 10 to Apr. 18. No gage-height record Dec. 21-27, June 6-10; discharge estimated on basis of weather records and records for nearby stations.

110. Allagash River near Allagash, Maine

Location.--Lat 47°04'15", long 69°04'50", on left bank a quarter of a mile upstream from Allagash Inn and 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 1958.

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.--27 years (1931-58), 1,911 cfs.

Extremes.--Maximum discharge during year, 19,000 cfs Apr. 25 (gage height, 10.25 ft); minimum, 294 cfs Oct. 17.
1910-11, 1931-58: 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 table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.1	299	6.0	6,090
2.4	480	7.0	8,540
3.0	990	8.0	11,400
3.5	1,590	9.0	14,500
4.0	2,300	10.2	18,800
5.0	4,000		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	531	576	1,670	3,890	1,330	695	465	9,830	2,210	1,490	2,610	3,810
2	495	561	1,410	3,500	1,320	690	460	9,490	2,390	2,000	2,330	3,540
3	480	623	1,180	2,820	1,280	670	455	8,810	2,300	2,710	2,120	3,170
4	446	1,680	1,330	2,550	1,270	665	445	9,010	2,030	2,690	1,900	2,640
5	412	2,440	1,430	2,340	1,220	630	590	12,300	1,860	2,550	1,850	2,320
6	406	2,260	1,500	2,390	1,200	610	670	13,600	1,730	2,360	1,720	2,240
7	388	2,020	1,520	2,440	1,190	560	655	13,300	1,580	2,160	1,690	2,510
8	371	1,860	1,370	2,110	1,180	555	590	13,100	1,470	2,000	2,060	2,610
9	353	2,380	1,160	1,760	1,140	545	575	15,300	1,370	1,920	4,700	2,240
10	353	3,020	1,180	1,690	1,120	525	585	14,100	*1,210	1,790	5,580	2,030
11	353	2,530	1,230	1,630	1,100	540	600	12,600	1,140	1,720	5,040	2,090
12	337	2,220	1,360	1,600	1,100	560	615	11,600	1,470	1,600	4,590	1,940
13	321	2,040	1,490	1,580	*1,070	590	640	10,600	1,510	1,490	4,370	1,730
14	315	1,920	1,560	1,590	1,060	575	695	9,400	1,720	1,320	4,130	1,590
15	304	1,930	1,630	1,630	1,000	555	740	8,490	2,080	1,210	4,190	1,430
16	299	2,470	1,660	*1,710	990	545	845	7,660	1,850	1,160	4,850	1,320
17	299	2,580	*1,690	1,670	950	525	1,160	6,940	1,720	1,760	4,290	1,210
18	299	2,930	1,670	1,640	930	*515	2,770	6,540	1,580	2,020	4,620	1,120
19	331	2,980	1,660	1,620	890	515	5,540	6,420	1,400	1,960	9,100	1,090
20	487	3,520	1,640	1,590	880	515	6,840	6,490	1,250	2,850	9,660	990
21	623	3,520	2,450	1,560	855	510	7,140	6,310	1,140	2,850	8,180	930
22	524	3,240	7,010	1,540	810	500	*9,670	5,980	1,340	2,480	7,560	900
23	480	3,000	7,740	1,510	800	485	13,800	5,450	1,660	2,160	6,490	930
24	509	2,770	7,310	1,470	790	485	17,700	4,790	1,460	1,900	5,580	900
25	791	2,550	6,220	1,460	755	485	18,600	4,060	1,320	1,670	5,430	836
26	920	2,060	5,500	1,460	740	485	17,600	3,650	1,550	1,550	5,430	827
27	791	1,800	5,850	1,460	720	485	14,400	3,290	2,340	1,690	4,810	783
28	706	1,860	5,670	1,430	715	480	12,100	2,980	2,090	1,670	4,310	757
29	672	1,830	5,250	1,410	-	475	10,400	2,790	1,800	2,080	4,000	722
30	623	1,750	4,590	1,400	--------	475	10,100	2,610	1,640	3,120	3,770	774
31	600	--------	3,920	1,360	--------	475	--------	2,360	--------	2,880	3,630	--------
Total	14,819	66,920	90,850	57,810	28,405	16,920	157,445	249,850	50,210	62,810	140,590	49,979
Mean	478	2,231	2,931	1,865	1,014	546	5,248	8,060	1,674	2,026	4,535	1,666
Cfsm	0.382	1.78	2.34	1.49	0.811	0.437	4.20	6.45	1.34	1.62	3.63	1.33
In.	0.44	1.99	2.70	1.72	0.84	0.50	4.69	7.44	1.50	1.87	4.18	1.48

Calendar year 1957: Max 7,740 Min 144 Mean 1,347 Cfsm 1.08 In. 14.64
Water year 1957-58: Max 18,600 Min 299 Mean 2,703 Cfsm 2.16 In. 29.35

Peak discharge (base, 5,700 cfs).--Dec. 22 (6 p.m.) 8,120 cfs (6.84 ft); Apr. 25 (11 p.m.) 19,000 cfs (10.25 ft); May 9 (2 p.m.) 15,700 cfs (9.34 ft); Aug. 19 (10 p.m.) 10,400 cfs (7.68 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 4-22, Jan. 10 to Apr. 19.

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.--496 sq mi.

Records available.--October 1951 to September 1958.

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

Average discharge.--7 years, 921 cfs.

Extremes.--Maximum discharge during year, 10,800 cfs Apr. 26 (gage height, 13.21 ft); minimum, 239 cfs Mar. 11 (gage height, 2.73 ft).
1951-58: Maximum discharge, that of Apr. 26, 1958; minimum, 98 cfs Jan. 21, 1957 (gage height, 2.20 ft).

Remarks.--Records excellent. Lake area above station has not been developed for storage.

Cooperation.--This station is one of the international gaging stations maintained by Canada under agreement with the United States.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.7	229	8.0	4,480
3.0	334	9.0	5,580
3.5	551	10.0	6,720
4.0	827	11.0	7,920
5.0	1,530	12.0	9,220
7.0	3,400	13.2	10,800

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	659	576	920	2,050	435	273	397	5,540	926	1,470	815	1,790
2	617	*561	852	1,850	427	269	414	5,190	945	1,440	802	1,700
3	556	581	777	1,640	423	265	427	4,900	1,000	1,410	759	1,620
4	517	676	708	1,420	414	262	443	4,590	1,140	1,350	708	1,510
5	479	877	659	1,230	401	259	480	4,200	1,220	1,270	654	1,370
6	453	1,120	627	1,120	389	252	531	3,800	1,210	1,160	601	1,230
7	423	1,270	612	1,060	376	249	601	3,440	1,150	1,050	551	1,240
8	406	1,290	617	1,040	380	242	659	3,180	1,080	964	522	1,290
9	380	1,330	612	983	389	242	703	3,240	1,020	901	596	1,350
10	364	1,430	601	928	376	242	708	3,610	945	852	714	1,360
11	349	1,560	633	883	361	242	703	4,000	889	808	901	1,370
12	330	1,590	622	839	349	249	686	3,960	846	765	1,000	1,360
13	312	1,510	622	784	342	259	686	3,670	790	725	1,010	1,320
14	297	1,400	622	731	342	266	697	3,320	796	676	977	1,260
15	286	1,310	617	686	330	287	748	2,990	796	633	901	1,170
16	276	1,290	617	681	323	312	895	2,720	889	612	839	1,080
17	262	1,370	612	681	319	327	1,270	2,480	1,000	665	771	996
18	255	1,540	612	665	315	334	2,120	2,280	1,060	643	737	920
19	262	1,700	612	638	312	338	3,570	2,140	1,070	659	858	846
20	283	1,820	617	612	308	342	5,110	2,040	1,010	719	1,320	777
21	294	1,900	725	586	*301	334	5,970	2,010	957	771	2,380	719
22	327	1,910	1,250	566	293	342	6,360	1,990	945	815	3,130	692
23	368	1,830	2,400	551	290	342	7,170	*1,880	932	827	3,450	654
24	401	1,700	3,640	531	283	338	8,660	1,780	945	808	3,610	627
25	453	1,550	4,010	*507	279	334	10,200	1,630	977	748	3,520	596
26	493	1,330	3,780	488	276	334	10,700	1,510	1,020	697	3,270	581
27	566	1,170	3,460	475	273	334	*10,200	1,340	1,160	661	3,030	551
28	617	1,090	3,120	461	265	342	8,800	1,230	1,390	649	2,740	541
29	633	1,010	2,810	448	-	353	7,310	1,140	1,580	676	2,420	522
30	617	967	2,540	440	-------	372	*6,210	1,060	1,590	737	2,140	502
31	601	-------	2,270	440	-------	385	-------	983	-------	777	1,920	-------
Total	13,136	39,258	43,176	28,012	9,571	9,321	103,428	87,843	31,278	26,958	47,646	31,544
Mean	424	1,309	1,393	839	342	301	3,448	2,834	1,043	870	1,537	1,051
Cfsm	0.855	2.64	2.81	1.69	0.690	0.607	6.95	5.71	2.10	1.75	3.10	2.12
In.	0.98	2.94	3.24	1.95	0.72	0.70	7.75	6.59	2.35	2.02	3.57	2.37

Calendar year 1957: Max 5,250 Min 100 Mean 796 Cfsm 1.60 In. 21.79
Water year 1957-58: Max 10,700 Min 242 Mean 1,285 Cfsm 2.59 In. 35.18

* Discharge measurement made on this day.

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 1958. 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.--34 years (1903-8, 1929-58), 1,357 cfs.

Extremes.--Maximum discharge during year, 12,000 cfs Apr. 26 (gage height, 10.81 ft); minimum, 160 cfs Oct. 15-18 (gage height, 2.50 ft).
1903-8, 1911, 1929-58: Maximum discharge, that of Apr. 26, 1958; minimum, 46 cfs Oct. 9, 10, 1950.

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

Revisions.--WSP 1001: Drainage area.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.5	160	6.0	3,420
2.7	228	7.0	5,020
3.0	354	8.0	6,660
3.5	625	9.0	8,510
4.0	990	10.0	10,400
5.0	2,000	10.7	11,800

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	251	259	1,750	3,610	1,010	555	811	9,120	1,810	1,560	1,080	3,210
2	240	263	1,690	3,470	982	530	833	8,690	1,830	1,750	1,060	2,900
3	224	301	1,570	3,210	973	520	857	8,300	1,720	1,750	1,030	2,740
4	218	443	1,490	3,000	922	510	939	7,860	1,620	1,700	959	2,560
5	214	514	1,420	2,800	905	510	1,030	7,400	1,560	1,640	948	2,340
6	204	542	1,370	2,650	849	500	1,120	6,950	1,430	1,580	914	2,220
7	196	589	1,340	2,490	849	485	1,210	6,540	1,370	1,520	873	2,620
8	193	638	1,310	2,360	811	475	1,280	6,270	1,300	1,450	922	2,480
9	193	889	1,280	2,250	810	470	1,320	6,510	1,190	1,430	1,580	2,390
10	193	973	1,290	2,130	810	470	1,360	6,470	1,120	1,390	1,860	2,390
11	186	1,030	1,630	2,010	810	480	1,390	6,320	*1,050	1,340	2,010	2,360
12	176	1,090	1,780	1,920	795	510	1,440	6,080	1,010	1,280	2,120	2,260
13	170	1,140	1,830	1,810	755	535	1,500	5,840	973	1,220	2,180	2,170
14	163	1,170	1,870	1,720	720	565	1,640	5,600	1,040	1,150	2,210	2,040
15	160	1,280	1,890	1,680	720	585	1,820	5,290	1,050	1,090	2,270	1,950
16	160	1,450	1,890	*1,650	710	600	2,170	5,050	1,070	1,120	2,510	1,830
17	160	1,650	1,890	1,660	690	640	2,860	4,800	1,070	1,300	2,510	1,740
18	160	1,810	1,840	1,650	690	640	3,820	4,520	1,040	1,240	2,670	1,640
19	170	1,950	1,820	1,550	675	*640	5,000	4,270	1,020	1,230	4,460	1,540
20	210	2,180	1,870	1,470	655	630	5,550	4,080	982	1,270	4,620	1,450
21	207	2,300	2,530	1,460	640	645	5,980	3,850	939	1,240	4,750	1,390
22	204	2,350	3,210	1,440	625	650	7,130	3,680	1,030	1,190	4,810	1,350
23	200	2,380	3,440	1,400	620	665	*9,130	3,470	1,060	1,140	4,620	1,300
24	207	2,380	3,680	1,310	605	665	10,600	3,210	1,040	1,080	4,400	1,250
25	275	2,270	3,740	1,260	590	675	11,800	3,020	1,040	1,010	4,350	1,200
26	267	2,140	3,740	1,220	570	690	*11,800	2,740	1,280	1,020	4,200	1,140
27	255	1,990	3,900	1,170	565	700	11,100	2,560	1,480	1,030	3,980	1,090
28	255	1,920	3,980	1,120	560	720	10,400	2,390	1,530	999	3,790	1,060
29	251	1,820	3,930	1,080	-	750	9,760	2,250	1,550	1,110	3,580	999
30	255	1,780	3,870	1,050	-------	770	9,430	2,060	1,570	1,130	3,390	982
31	259	-------	3,720	1,020	-------	785	-------	1,900	-------	1,110	3,360	-------
Total	6,476	41,491	72,560	58,620	20,916	18,565	135,080	157,090	37,774	40,069	84,073	56,591
Mean	209	1,383	2,341	1,891	747	599	4,503	5,067	1,259	1,293	2,712	1,886
Cfsm	0.240	1.59	2.69	2.17	0.858	0.688	5.17	5.82	1.45	1.48	3.11	2.17
In.	0.28	1.77	3.10	2.50	0.89	0.79	5.77	6.71	1.62	1.71	3.53	2.42

Calendar year 1957: Max 6,100 Min 160 Mean 1,066 Cfsm 1.22 In. 16.61
Water year 1957-58: Max 11,800 Min 160 Mean 1,998 Cfsm 2.29 In. 31.14

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Feb. 9 to Mar. 28 (no gage-height record Jan. 5-16; discharge estimated on basis of recorded range in stage, weather records, and records for nearby streams).

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 Fort 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 1958.

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.--32 years, 9,556 cfs.

Extremes.--Maximum discharge during year, 118,000 cfs Apr. 26 (gage height, 24.55 ft); minimum, 1,590 cfs Oct. 18, 19 (gage height, 1.79 ft).
1926-58: 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 one of the international gaging stations maintained by the United States under agreement with Canada.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	1,500	6.5	10,100	16.0	53,000
2.0	1,800	8.0	14,900	18.0	67,000
3.0	2,980	10.0	22,900	20.0	81,000
4.0	4,540	12.0	32,000	22.0	96,000
5.0	6,560	14.0	42,000	24.4	117,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,920	4,720	7,480	14,900	3,960	2,160	2,870	49,500	8,540	10,900	13,100	14,500
2	3,600	4,470	7,530	13,100	3,830	2,160	2,880	48,400	9,140	11,600	11,000	13,800
3	3,290	4,590	7,360	9,860	3,700	2,150	2,900	46,600	10,900	17,500	9,310	12,500
4	3,040	6,760	7,020	8,780	3,550	2,140	2,910	43,400	11,600	19,500	8,130	11,300
5	2,840	*11,000	6,720	8,560	3,510	2,130	2,920	42,800	10,300	15,900	7,300	10,200
6	2,670	12,500	6,740	8,680	3,440	2,110	2,950	42,200	9,140	12,400	6,810	9,330
7	2,510	11,800	6,810	9,570	3,400	2,110	3,150	39,900	8,200	10,400	6,810	11,400
8	2,380	10,400	6,970	9,640	3,320	2,110	3,520	38,200	7,570	9,240	7,140	16,000
9	2,230	10,700	6,810	8,950	3,300	2,110	3,670	45,000	7,070	8,900	11,500	16,900
10	2,130	13,700	6,450	8,660	3,200	2,120	3,830	54,500	*6,450	8,950	24,800	14,700
11	2,040	15,100	6,790	8,470	3,180	2,150	3,960	50,600	5,950	8,520	25,300	13,700
12	1,980	13,100	7,250	8,230	3,120	2,210	3,980	44,100	5,930	8,200	21,100	13,300
13	1,950	11,400	7,940	7,990	3,100	2,320	3,990	39,800	6,380	7,690	17,100	12,300
14	1,790	10,300	8,540	7,890	3,100	2,440	4,050	35,600	5,720	7,040	16,700	10,800
15	1,730	9,840	9,240	7,710	3,100	2,510	5,490	31,800	9,860	6,360	16,400	9,690
16	1,680	11,100	9,360	7,360	3,050	2,570	8,900	28,200	12,300	5,990	17,300	8,830
17	1,630	14,400	*9,140	7,090	3,000	2,580	13,400	25,800	11,400	8,010	16,900	8,010
18	1,590	17,600	8,860	6,810	3,000	*2,640	30,700	24,400	10,200	11,000	15,500	7,340
19	1,640	19,000	8,610	6,580	2,910	2,660	43,600	23,800	9,140	12,200	25,200	6,900
20	2,130	20,200	8,080	6,340	2,850	2,680	55,000	24,200	8,110	12,500	37,800	6,430
21	3,410	22,900	9,620	6,120	2,750	2,700	59,000	25,200	7,110	14,100	37,000	6,270
22	4,930	21,600	22,100	5,910	2,660	2,710	66,900	23,500	7,040	13,600	34,000	6,100
23	4,810	19,100	48,800	5,620	2,600	2,720	*83,200	21,100	7,850	11,700	32,800	*5,910
24	4,340	16,500	47,900	5,410	2,520	2,740	104,000	18,700	8,640	9,740	27,900	5,720
25	4,850	14,300	41,700	5,190	2,480	2,750	116,000	16,500	8,230	8,230	24,300	5,830
26	7,600	12,200	33,400	4,940	2,360	2,780	114,000	14,300	8,230	7,250	24,300	5,570
27	9,160	10,400	30,400	4,770	2,260	2,790	*97,200	12,800	12,200	7,140	25,300	5,250
28	7,600	9,020	26,500	4,590	*2,200	2,800	77,600	11,600	19,200	8,060	22,400	5,050
29	6,580	7,710	22,900	4,450	-	2,810	60,800	10,700	16,500	9,380	18,800	4,830
30	5,640	7,250	19,700	4,290	-------	2,830	51,700	9,840	13,000	*12,100	16,100	4,560
31	5,050	-------	17,300	4,120	-------	2,840	-------	9,140	-------	14,200	14,900	-------
Total	110,920	373,660	473,820	230,580	85,450	76,530	1,035,050	951,780	281,900	328,300	593,000	283,020
Mean	3,578	12,460	15,280	7,438	3,052	2,469	34,500	30,700	9,397	10,590	19,130	9,434
Cfsm	0.629	2.19	2.69	1.31	0.536	0.434	6.06	5.40	1.65	1.86	3.36	1.66
In.	0.73	2.44	3.10	1.51	0.56	0.50	6.76	6.23	1.84	2.14	3.87	1.85

Calendar year 1957: Max 49,000 Min 805 Mean 7,908 Cfsm 1.39 In. 18.88
Water year 1957-58: Max 116,000 Min 1,590 Mean 13,220 Cfsm 2.32 In. 31.53

Peak discharge (base, 45,000 cfs).--Dec. 23 (time unknown) about 51,000 cfs; Apr. 26 (2 a.m.) 118,000 cfs (24.55 ft); May 10 (12 m.) 55,700 cfs (16.39 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 11-23, Jan. 3 to Apr. 17. No gage-height record Nov. 26 to Dec. 7, Dec. 28 to Jan. 3; discharge estimated on basis of weather records and records for nearby streams.

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 1958.
Gage.--Water-stage recorder. Datum of gage is 530.0 ft above mean sea level, datum of 1929.
Extremes.--1957: Maximum discharge during period in September, 631 cfs Sept. 25 (gage height, 3.84 ft); minimum, 69 cfs Sept. 16 (gage height, 2.08 ft).
1957-58: Maximum discharge during water year, 21,500 cfs Apr. 25 (gage height, 16.30 ft); maximum recorded gage height, 16.44 ft Dec. 23 (ice jam); minimum discharge, 86 cfs Oct. 17, 18, 19 (gage height, 2.19 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, Sept. 14, 1957, to Sept. 30, 1958, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.1	72	6.0	2,020
2.3	106	8.0	4,000
2.6	172	10.0	6,540
3.0	288	12.0	9,650
4.0	710	14.0	14,200
5.0	1,300	16.3	21,500

Discharge, in cubic feet per second, 1957

Sept.14	80	Sept.23	225
15	77	24	557
16	74	25	603
17	78	26	512
18	85	27	396
19	82	28	312
20	80	29	269
21	78	30	226
22	83		

Note.--Result of discharge measurement made Sept. 13, 1957, 82 cfs.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	195	315	1,940	2,210	600	735	860	*9,300	1,070	910	1,590	1,310
2	182	392	1,900	2,040	595	720	885	8,930	1,150	1,140	1,190	1,180
3	165	790	1,850	1,940	590	700	905	8,080	1,360	1,580	924	1,050
4	158	1,860	1,800	1,790	585	680	930	6,960	1,240	1,370	752	918
5	146	3,000	1,760	1,680	575	670	1,030	6,230	1,020	1,120	641	784
6	137	*2,960	1,730	1,590	575	655	1,140	5,580	1,130	872	589	762
7	133	2,490	1,710	1,510	575	640	1,260	5,060	989	805	617	726
8	124	2,190	1,710	1,440	580	625	1,280	5,050	680	827	1,010	767
9	120	2,000	1,710	1,360	605	615	1,240	7,430	612	800	1,640	680
10	118	2,230	1,760	1,300	630	610	1,190	9,280	557	794	1,800	631
11	114	2,190	1,940	1,230	710	610	1,150	8,300	*512	660	1,610	690
12	106	1,940	2,550	1,180	870	645	1,110	7,000	508	750	1,330	715
13	118	1,720	3,040	1,140	990	670	1,100	6,120	495	404	1,090	675
14	118	1,550	2,840	1,100	1,110	710	1,170	5,440	548	675	971	607
15	95	1,500	2,740	1,050	*1,170	720	1,510	4,760	746	690	889	557
16	93	1,960	2,370	1,060	1,170	710	2,940	4,210	794	650	930	517
17	88	2,290	2,000	1,070	1,150	700	8,480	3,760	757	377	895	478
18	88	2,550	*1,820	1,090	1,110	710	8,320	3,470	752	625	1,490	449
19	99	2,340	1,730	1,100	1,050	*740	7,850	3,560	655	635	6,410	440
20	165	2,980	1,900	1,090	1,000	730	8,300	3,460	685	508	7,970	424
21	315	3,810	2,370	1,000	970	720	8,900	3,220	589	1,020	6,500	392
22	347	3,540	4,450	930	930	700	10,800	3,050	626	945	5,310	385
23	312	3,030	7,400	855	885	680	15,400	2,770	1,290	945	4,200	388
24	308	2,580	6,680	795	860	675	*20,100	2,470	1,400	918	3,230	*385
25	416	2,250	5,450	730	820	680	21,400	2,170	1,180	757	2,710	400
26	575	1,580	4,690	700	800	705	20,300	1,930	1,220	552	2,620	392
27	557	1,510	4,000	645	780	720	17,100	1,600	1,500	650	2,350	366
28	474	1,480	3,340	620	750	750	12,800	*1,310	1,440	695	2,000	362
29	404	1,620	3,140	*610	-	775	9,440	1,270	955	690	1,720	362
30	351	1,820	2,760	605	---------	815	8,610	1,500	910	1,840	1,510	351
31	319	--------	2,440	600	--------	845	--------	1,350	--------	*1,960	1,430	--------
Total	6,940	62,467	87,520	36,060	23,035	21,660	197,500	144,620	27,370	27,164	67,918	18,143
Mean	224	2,082	2,823	1,163	823	699	6,583	4,665	912	876	2,191	605
(†)	0	+157	+163	+33	-208	-88	+307	-21	-24	-6	+29	-25
Adjusted for change in contents in Millinocket Lake												
Mean	224	2,239	2,986	1,196	615	611	6,890	4,644	888	870	2,220	580
Cfsm	0.252	2.52	3.36	1.35	0.693	0.688	7.76	5.23	1.00	0.980	2.50	0.653
In.	0.29	2.81	3.87	1.56	0.72	0.79	8.66	6.03	1.12	1.13	2.88	0.73

	Observed			Adjusted		
Calendar year 1957:	Max -	Min -	Mean -	Mean -	Cfsm -	In. -
Water year 1957-58:	Max 21,400	Min 88	Mean 1,974	Mean 2,001	Cfsm 2.25	In. 30.59

* 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. 27 to Apr. 19 (no gage-height record Dec. 25 to Jan. 17, Jan. 20-24, Feb. 9-15; discharge estimated on basis of weather records, storage records, and records for nearby gaging stations).

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 1958.

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

Average discharge.--7 years, 585 cfs.

Extremes.--Maximum discharge during year, 8,180 cfs Apr. 25 (gage height, 7.75 ft); maximum gage height, 8.37 ft Dec. 23 (backwater from ice); minimum discharge, 29 cfs Oct. 16 (gage height, 0.48 ft).
1951-58: Maximum discharge, 16,600 cfs June 29, 1954 (gage height, 11.94 ft), from rating curve extended above 8,000 cfs by logarithmic plotting; minimum, 5.4 cfs Sept. 17, 1952 (gage height, 0.64 ft).

Remarks.--Records excellent except those for periods 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.

Revisions.--WSP 1501: Drainage area.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 22				Dec. 23 to Sept. 30			
0.4	19	2.0	735	0.6	38	2.5	1,160
.5	31	2.5	1,180	.8	76	3.0	1,630
.7	70	3.0	1,630	1.0	131	4.0	2,680
1.0	157	4.0	2,720	1.3	246	5.0	3,990
1.3	280	4.5	3,340	1.6	411	6.0	5,420
1.6	445			2.0	706	7.8	8,270

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	176	480	1,830	126	48	184	*2,800	280	385	492	660
2	40	176	580	1,680	120	45	184	2,820	460	505	451	698
3	40	227	910	1,490	116	43	184	2,760	515	400	393	603
4	38	405	780	1,350	112	41	184	2,610	250	550	339	500
5	36	778	655	1,190	110	41	225	2,200	615	505	295	431
6	36	*719	545	1,060	108	41	265	1,970	410	399	275	380
7	36	632	510	925	104	43	290	1,730	445	470	280	399
8	33	640	495	800	100	46	280	1,800	445	500	387	411
9	34	769	490	705	128	48	275	3,100	380	405	748	393
10	33	760	510	610	154	55	265	3,720	500	370	906	393
11	33	838	1,270	500	148	76	245	3,330	*112	355	1,090	368
12	30	960	1,540	430	142	100	240	2,800	290	350	1,120	317
13	31	940	1,400	360	130	128	235	2,060	440	365	1,080	280
14	31	838	1,220	295	122	128	245	1,560	270	435	970	246
15	30	829	1,040	250	*116	122	270	1,590	300	545	952	229
16	116	982	735	270	108	100	350	1,370	435	495	906	237
17	174	1,080	580	315	96	100	705	1,370	315	490	799	261
18	220	1,160	490	350	88	100	1,540	1,020	410	485	1,090	245
19	275	1,220	445	330	84	100	2,610	1,270	425	345	2,500	266
20	61	1,550	1,090	295	76	104	3,510	1,400	545	134	2,280	242
21	61	1,790	1,830	255	72	104	4,060	1,320	240	148	2,270	233
22	405	1,620	3,340	230	68	104	4,910	1,340	490	148	2,090	224
23	225	1,330	5,720	205	63	104	6,730	1,110	505	655	1,740	224
24	250	1,130	6,170	188	59	100	*7,930	960	460	782	1,440	*212
25	80	1,050	6,040	172	55	130	8,120	535	395	444	1,370	199
26	118	829	6,160	162	53	166	7,220	385	515	270	1,310	188
27	223	711	4,230	154	52	172	5,460	695	740	70	1,170	180
28	214	580	3,220	*152	50	180	4,020	*245	550	76	1,020	176
29	208	460	2,760	146	-	188	3,120	405	605	290	906	173
30	190	420	2,360	138	-------	188	2,820	610	440	674	745	165
31	183	-------	2,130	130	-------	188	-------	650	-------	*580	573	-------
Total	3,523	25,599	59,725	16,967	2,760	3,133	66,676	51,535	12,782	12,625	31,987	9,533
Mean	114	853	1,927	547	98.6	101	2,223	1,662	426	407	1,032	318
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 6,170 Min 23 Mean 499 Cfsm 1.51 In. 20.51
Water year 1957-58: Max 8,120 Min 30 Mean 813 Cfsm 2.46 In. 33.46

Peak discharge (base, 3,200 cfs).--Dec. 26 (4 a.m.) 6,850 cfs (6.93 ft); Apr. 25 (5 a.m.) 8,180 cfs (7.75 ft); May 10 (10 a.m.) 3,810 cfs (4.87 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28 to Dec. 24, Jan. 1 to Apr. 18.

170. Aroostook River at Washburn, Maine

Location.--Lat 46°46'35", long 66°09'30", on right bank just upstream from Bango- and 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 1958.
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.--28 years, 2,567 cfs (unadjusted).
Extremes.--Maximum discharge during year, 35,400 cfs Apr. 25 (gage height, 12.40 ft); maximum gage height, 14.90 ft Dec. 21 (backwater from ice); minimum discharge, 184 cfs Oct. 17 (gage height, 1.54 ft).
1930-58: 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 periods of ice effect or no gage-height record, 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.
Revisions (water years).--WSP 951: 1935. WSP 1301: 1933-50 (adjusted monthly runoff). WSP 1501: Drainage area.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 24

1.6	220	6.0	7,990
2.0	520	7.0	11,000
2.5	1,010	8.0	14,500
3.0	1,640	10.0	23,000
4.0	3,210	12.4	35,400
5.0	5,300		

Apr. 25 to Sept. 30

2.2	800	4.0	3,240
2.6	1,250	5.0	5,300
3.0	1,750		

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

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	416	682	2,590	6,500	1,170	1,410	3,250	14,300	1,800	1,650	2,640	2,450
2	424	770	2,080	5,300	1,170	1,370	3,280	13,900	1,760	1,910	2,080	2,340
3	376	1,080	1,890	4,810	1,170	1,370	3,250	13,200	2,270	2,420	1,650	2,100
4	368	*2,200	1,920	4,360	1,170	1,360	3,230	11,700	1,780	2,320	1,360	1,830
5	346	4,540	1,980	3,950	1,170	1,360	4,050	10,200	1,880	1,940	1,140	1,580
6	353	4,810	2,010	3,650	1,140	1,360	4,700	8,990	1,590	1,660	1,080	1,440
7	318	3,970	2,060	3,390	1,140	1,360	4,700	8,070	1,790	1,380	1,270	1,580
8	339	3,410	2,020	3,120	1,140	1,340	4,580	7,940	1,330	1,500	1,360	1,710
9	241	3,650	2,080	2,900	1,140	1,330	4,470	11,000	*1,150	1,360	3,510	1,580
10	248	3,530	2,460	2,700	1,370	1,330	4,260	14,800	1,350	1,410	4,330	1,420
11	297	3,590	4,580	2,540	1,890	1,330	4,190	14,000	998	1,170	3,690	1,590
12	283	3,300	6,560	2,380	*1,920	1,340	4,170	11,900	1,080	1,210	3,140	1,560
13	332	3,120	6,910	2,280	1,920	1,360	4,150	10,000	1,020	1,130	2,630	1,420
14	297	2,770	6,370	2,160	1,880	1,410	4,360	8,260	1,270	945	2,330	1,250
15	269	2,770	6,450	2,070	1,810	1,450	4,930	7,830	1,520	1,350	2,300	1,120
16	269	3,610	5,830	2,220	1,640	1,450	6,340	6,720	1,390	1,320	2,420	1,020
17	315	4,260	5,300	2,380	1,420	*1,450	8,910	5,880	1,610	1,180	2,230	1,210
18	365	4,740	4,580	2,460	1,300	1,450	11,400	5,220	1,240	1,090	3,500	943
19	480	4,670	3,950	2,540	1,270	1,450	14,200	5,280	1,370	1,250	14,400	910
20	750	5,640	4,810	2,070	1,240	1,440	15,800	5,830	1,230	910	15,000	875
21	740	7,020	9,400	1,920	1,230	1,420	16,600	5,400	1,290	1,110	12,600	835
22	720	6,420	13,800	1,810	1,220	1,420	19,700	5,380	1,150	1,300	10,500	*800
23	700	5,400	14,500	1,750	1,200	1,410	28,200	4,490	1,800	1,200	8,260	822
24	720	4,400	14,900	1,640	1,200	1,420	*34,000	3,930	2,300	1,940	6,100	1,060
25	700	3,870	12,900	1,560	1,300	1,420	35,300	3,310	1,890	1,540	5,430	1,020
26	770	2,680	11,700	1,470	1,370	1,450	33,400	2,800	2,060	1,130	5,400	888
27	900	1,980	10,300	1,420	1,500	1,500	27,900	2,690	2,860	910	4,810	855
28	890	2,400	10,800	*1,370	1,500	1,530	20,900	2,120	2,540	943	4,010	888
29	911	2,680	10,300	1,300	-	1,640	16,200	1,880	2,330	1,290	3,270	833
30	830	2,720	9,110	1,240	--------	1,710	14,000	2,190	1,680	2,910	2,830	833
31	860	--------	7,500	1,190	--------	3,210	--------	2,290	--------	3,290	2,560	--------
Total	15,827	106,682	201,640	80,450	38,590	45,850	364,420	231,500	49,308	46,668	137,890	38,762
Mean	511	3,556	6,505	2,595	1,378	1,479	12,150	7,468	1,644	1,505	4,448	1,292
(†)	-92	+272	+379	+87	-278	-267	+529	+34	-28	+22	+47	-98

Adjusted for change in reservoir contents

Mean	419	3,828	6,884	2,682	1,100	1,212	12,680	7,502	1,616	1,527	4,495	1,194
Cfsm	0.254	2.32	4.17	1.62	0.666	0.734	7.68	4.54	0.978	0.924	2.72	0.723
In.	0.29	2.59	4.81	1.87	0.69	0.85	8.57	5.23	1.09	1.07	3.14	0.81

	Observed			Adjusted			
Calendar year 1957:	Max 14,900	Min 150	Mean 2,107	Mean 2,126	Cfsm 1.29	In. 17.46	
Water year 1957-58:	Max 35,300	Min 241	Mean 3,719	Mean 3,771	Cfsm 2.28	In. 31.01	

Peak discharge (base, 13,000 cfs).--Dec. 24 (time unknown) about 15,000 cfs; Apr. 25 (8 p.m.) 35,400 cfs (12.40 ft); May 10 (6 p.m.) 15,100 cfs (8.16 ft); Aug. 19 (9:30 p.m.) 15,900 cfs (8.37 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 Dec. 3-21, Jan. 16 to Apr. 15. No gage-height record Dec. 22-27, Jan. 3-15, Sept. 20-22; discharge estimated on basis of weather records and records for nearby stations.

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 1958. 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.--18 years, 280 cfs.

Extremes.--Maximum discharge during year, 6,620 cfs Apr. 23 (gage height, 9.30 ft); minimum, 11 cfs Oct. 16-18 (gage height, 2.26 ft).
1940-58: Maximum discharge, that of Apr. 23, 1958; 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 periods of ice effect or no gage-height record, which are fair.

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

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 22

2.2	6.8	3.5	400
2.3	14	4.0	650
2.4	25	5.0	1,360
2.5	40	6.0	2,320
2.7	82	7.0	3,400
3.0	175	8.7	5,700

Apr. 23 to Sept. 30

2.4	21
2.5	34
2.7	76
3.0	175

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

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	46	415	630	215	148	465	1,570	147	98	365	59
2	18	61	400	590	210	148	510	1,160	199	84	233	50
3	17	225	385	580	210	144	520	889	220	74	152	43
4	17	*605	375	570	205	140	595	728	175	57	114	39
5	16	752	365	520	205	140	710	635	141	47	160	38
6	15	615	360	480	205	140	875	560	117	41	175	38
7	14	455	555	440	205	140	917	510	101	38	130	36
8	14	341	425	390	210	140	847	635	87	38	104	34
9	13	323	630	350	220	144	722	1,110	*82	48	96	33
10	13	365	535	315	270	176	645	1,090	74	47	87	127
11	13	323	900	295	280	269	605	840	66	41	74	203
12	13	274	1,250	250	*270	400	630	645	62	41	62	167
13	12	242	1,060	215	265	485	630	550	59	45	52	127
14	12	220	952	200	260	545	710	480	98	47	50	101
15	12	251	840	*188	250	515	882	425	130	43	45	84
16	11	465	*892	190	240	475	1,280	385	111	41	41	71
17	11	495	575	220	225	430	2,080	341	101	39	38	66
18	11	520	535	270	215	350	2,900	318	90	36	48	62
19	12	520	515	305	215	323	3,520	310	76	33	350	62
20	20	847	580	315	210	318	3,170	305	66	57	415	57
21	30	1,020	1,640	320	205	305	*2,460	278	57	69	305	50
22	31	777	2,850	310	190	287	2,590	251	87	52	215	*48
23	31	595	2,170	300	182	264	5,470	224	134	43	164	48
24	34	490	1,720	290	180	260	5,600	199	111	36	120	45
25	68	415	1,360	275	176	287	3,430	179	84	30	104	41
26	90	370	1,260	260	172	336	2,300	167	87	30	117	36
27	77	335	1,320	250	168	375	1,580	152	145	45	114	34
28	66	305	1,570	240	158	415	1,180	141	145	52	98	39
29	53	282	1,240	230	-	440	1,020	160	111	245	84	45
30	48	420	917	225	------	440	1,420	171	93	640	69	45
31	46	------	704	215	------	450	------	152	------	570	64	------
Total	856	12,954	28,895	10,228	6,016	9,429	50,263	15,560	3,256	2,807	4,245	1,928
Mean	27.6	432	932	330	215	304	1,676	502	109	90.5	137	64.3
Cfsm	0.158	2.47	5.33	1.89	1.23	1.74	9.58	2.87	0.623	0.517	0.783	0.367
In.	0.18	2.76	6.14	2.18	1.28	2.01	10.69	3.31	0.70	0.60	0.90	0.41

Calendar year 1957: Max 2,850 Min 6.8 Mean 240 Cfsm 1.37 In. 18.64
Water year 1957-58: Max 5,600 Min 11 Mean 401 Cfsm 2.29 In. 31.16

Peak discharge (base, 2,100 cfs).--Dec. 22 (1 p.m.) 3,480 cfs (7.05 ft); Apr. 19 (9 a.m.) 3,600 cfs (7.17 ft); Apr. 23 (11 p.m.) 6,620 cfs (9.30 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 26-28, Dec. 2-8, 15, 18, 19, 22, Jan. 4 to Mar. 10. No gage-height record Dec. 23-27, Sept. 7-9; discharge estimated on basis of weather records and records for nearby streams.

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 1958.

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

Average discharge.--30 years, 685 cfs.

Extremes.--Maximum discharge during year, 4,350 cfs May 6, 7 (gage height, 9.16 ft); minimum, 62 cfs Apr. 9 (gage height, 2.83 ft).
1928-58: 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 periods of no gage-height record, which are good. Flow regulated by Chiputneticook Lakes (combined usable capacity, about 13,200,000,000 cu ft).

Revisions.--WSP 1431: Drainage area.

Cooperation.--This station is one of the international gaging stations maintained by the United States under agreement with Canada.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

3.5	157	6.0	1,180
4.0	257	7.0	2,010
4.5	385	8.0	3,000
5.0	561	9.0	4,150
5.5	815	9.1	4,270

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	244	200	186	248	521	1,560	382	2,040	410	1,530	455	456
2	246	200	186	255	517	1,530	379	2,340	410	1,520	455	456
3	246	200	186	210	521	1,510	376	2,500	800	955	455	456
4	235	210	186	265	517	1,480	379	3,030	1,400	706	455	456
5	233	214	186	334	521	1,450	382	3,710	1,600	700	520	456
6	231	214	188	465	645	1,430	382	4,000	900	700	600	460
7	229	214	188	595	722	1,410	385	4,270	410	1,340	600	460
8	227	210	192	595	722	1,390	388	3,550	410	1,490	595	463
9	227	180	194	600	728	1,360	350	2,620	900	1,480	595	466
10	227	157	200	600	722	1,340	353	2,500	1,900	1,460	595	466
11	227	157	265	600	722	*1,330	356	1,860	1,890	945	590	470
12	224	157	181	600	716	1,110	356	1,310	1,880	711	590	470
13	220	157	188	600	711	362	359	940	1,860	706	590	470
14	218	157	190	720	711	362	365	510	1,850	706	585	480
15	*216	157	194	1,000	711	362	365	423	1,840	706	585	514
16	214	159	198	960	706	365	*370	423	1,830	700	580	*506
17	210	161	202	755	706	368	370	423	1,820	706	580	506
18	210	162	204	761	706	368	376	419	1,810	700	580	506
19	208	164	206	761	700	368	379	*416	1,800	690	575	506
20	220	170	208	761	800	370	385	416	1,280	675	575	506
21	212	171	212	761	1,070	370	391	416	887	675	570	506
22	208	173	214	761	1,380	370	470	416	1,290	670	570	510
23	206	175	220	761	1,360	370	970	416	1,910	670	570	510
24	204	177	222	761	1,350	373	*2,330	413	1,980	670	565	580
25	212	181	224	761	1,340	376	2,960	413	1,940	670	565	680
26	206	179	227	761	1,320	376	3,450	413	1,550	665	570	675
27	206	181	233	610	1,310	376	3,380	413	955	665	452	675
28	204	179	235	514	1,440	376	2,700	415	815	665	452	670
29	204	179	239	514	-	379	2,380	700	809	600	456	670
30	200	181	244	514	--------	379	1,830	1,200	1,150	456	456	830
31	200	--------	246	517	--------	382	--------	700	--------	460	456	--------
Total	6,774	5,376	6,444	18,920	23,895	23,952	28,228	43,615	40,286	25,992	16,837	15,835
Mean	219	179	208	610	853	773	941	1,407	1,343	838	543	528
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 1,320 Min 120 Mean 450 Cfsm - In. -
Water year 1957-58: Max 4,270 Min 157 Mean 702 Cfsm - In. -

* Discharge measurement made on this day.
Note.--No gage-height record May 28 to June 17, Aug. 1-24; discharge estimated on basis of recorded range in stage and record 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 1958.

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

Average discharge.--30 years, 350 cfs.

Extremes.--Maximum discharge during year, 2,250 cfs May 9 (gage height, 5.61 ft); minimum, 62 cfs Nov. 10 (gage height, 1.43 ft).
1928-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	83	3.0	541
1.7	99	3.5	790
1.9	141	4.0	1,080
2.2	225	5.0	1,760
2.5	326	5.1	1,840

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	410	207	97	125	159	175	154	1,010	355	310	330	377
2	397	210	94	b130	159	175	149	850	435	204	755	420
3	385	216	94	b130	159	178	144	840	1,050	204	750	590
4	369	242	94	b136	162	178	144	615	985	195	745	580
5	365	238	94	b140	162	181	144	498	445	192	860	575
6	354	235	93	141	162	181	146	275	330	189	1,240	570
7	347	228	94	134	162	181	149	310	280	187	1,210	566
8	340	219	96	141	164	178	149	985	265	187	1,150	566
9	336	222	97	141	170	175	149	1,780	261	192	1,180	566
10	330	142	103	139	167	178	149	1,590	258	192	1,160	735
11	322	94	114	139	167	181	149	1,330	261	310	1,130	585
12	312	91	127	b140	167	181	151	1,060	258	575	1,110	580
13	305	86	132	141	167	181	151	1,090	255	390	1,080	566
14	298	86	112	139	167	181	151	675	255	270	1,070	595
15	*288	88	103	139	170	181	151	479	238	680	1,050	595
16	284	89	103	146	170	181	*154	474	235	823	1,030	*850
17	271	89	107	154	167	181	154	445	238	a835	1,010	840
18	268	91	107	151	167	181	154	319	238	a820	1,000	840
19	261	91	108	b150	170	181	154	235	238	a795	1,010	840
20	278	96	108	b150	170	181	151	195	238	801	990	828
21	258	94	112	b150	170	181	157	195	238	790	966	818
22	248	94	112	149	170	184	162	192	232	785	790	806
23	245	94	112	151	170	184	310	189	222	780	615	806
24	238	94	112	151	173	184	1,270	184	222	775	566	796
25	251	94	b114	151	173	184	1,650	181	213	765	566	780
26	235	93	b114	154	173	181	1,750	189	490	760	570	775
27	235	91	125	159	173	184	1,650	189	1,120	755	435	765
28	228	89	120	159	173	184	1,480	335	1,200	745	361	765
29	222	89	120	159	-	184	1,470	800	590	750	361	755
30	210	93	123	159	------	184	1,490	670	410	360	358	700
31	207	------	123	159	------	187	------	1,010	------	195	365	------
Total	9,097	3,985	3,364	4,507	4,683	5,611	14,386	19,189	12,055	15,811	25,813	20,430
Mean	293	133	109	145	167	181	480	619	402	510	833	681
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 660 Min 78 Mean 238 Cfsm - In. -
Water year 1957-58: Max 1,780 Min 86 Mean 381 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage.
b Stage-discharge relation affected by ice.

(International gaging station)

200. St. Croix River near Baileyville, Maine

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 1958.

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

Average discharge.--39 years, 2,196 cfs.

Extremes.--Maximum discharge during year, 11,000 cfs Apr. 25 (gage height, 7.43 ft); minimum daily, 64 cfs Oct. 13.
1919-58: Maximum discharge, about 23,300 cfs May 1, 1923 (gage height, 13.90 ft); minimum daily, that of 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).

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

Cooperation.--This station is one of the international gaging stations maintained by the United States under agreement with Canada.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 24

-0.1	55	0.9	418	5.0	6,030
0.0	74	1.2	613	6.0	7,850
.1	96	1.5	855	7.0	9,950
.3	150	2.0	1,400	7.1	10,200
.5	220	3.0	2,840		
.7	310	4.0	4,340		

Apr. 25 to Sept. 30

1.4	855	2.0	1,450
1.6	1,040	3.0	2,840
1.8	1,230		

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

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	734	643	660	3,430	3,030	2,620	2,780	8,550	1,280	2,820	2,750	1,040
2	785	613	930	4,070	1,550	1,320	2,750	8,730	1,460	2,820	2,990	1,660
3	794	430	1,780	3,530	1,890	1,220	2,810	7,500	2,800	2,940	1,400	1,950
4	820	478	2,040	3,320	2,560	2,640	2,610	6,120	2,690	1,140	1,610	1,850
5	550	599	1,990	1,570	2,530	2,330	2,810	5,870	2,770	1,240	2,630	1,930
6	202	578	1,980	2,180	2,400	2,800	1,750	5,030	2,570	1,320	2,490	2,500
7	545	628	1,990	2,290	2,660	2,250	1,750	3,530	2,560	1,940	2,430	1,450
8	620	752	730	2,450	2,820	2,200	2,780	3,900	1,180	2,570	2,270	1,520
9	578	995	1,390	2,780	2,470	1,380	3,470	6,620	1,650	2,610	2,420	2,380
10	564	855	*1,210	2,740	2,580	1,990	3,540	7,450	2,680	2,740	1,260	2,430
11	560	305	1,700	2,820	*2,680	*2,480	3,400	6,570	2,730	2,720	1,340	2,110
12	557	931	3,730	1,250	2,760	2,790	3,510	6,840	2,630	2,690	1,980	1,930
13	64	*838	4,720	2,000	2,370	2,810	2,570	6,440	2,750	1,640	2,160	1,770
14	350	795	3,630	*2,720	2,570	2,510	3,250	5,230	2,860	1,720	2,330	1,050
15	636	1,350	3,000	2,170	2,540	2,530	*4,630	3,840	1,130	2,470	2,200	1,360
16	650	1,670	2,660	2,630	1,320	1,640	4,610	3,290	1,650	2,840	2,210	*2,250
17	592	605	2,360	3,080	1,900	1,690	4,690	3,050	2,620	2,670	995	2,150
18	599	470	2,330	3,490	2,570	3,120	5,250	1,510	2,660	2,800	1,080	2,190
19	643	1,450	2,600	3,620	2,660	2,360	6,000	*1,950	2,720	2,750	2,310	2,380
20	*225	2,530	2,310	3,620	2,870	2,620	5,630	2,960	2,530	*1,230	2,660	2,170
21	265	2,940	3,290	2,500	2,810	2,740	5,770	3,020	2,160	1,640	*2,700	885
22	628	3,120	3,920	2,110	2,740	2,510	5,560	2,360	1,140	2,960	2,510	1,060
23	613	3,110	3,520	2,620	2,960	1,580	7,000	2,310	1,630	2,930	2,660	2,100
24	666	1,460	3,010	2,740	2,800	1,590	*9,130	2,310	2,540	3,050	1,240	1,820
25	592	1,630	1,740	3,200	2,740	2,440	10,200	1,200	2,450	2,800	1,840	1,630
26	599	2,110	2,510	2,260	2,550	2,600	9,590	1,350	2,400	2,860	2,430	1,580
27	245	2,020	4,550	2,790	2,690	2,690	8,200	2,400	2,580	1,330	2,430	1,560
28	255	2,060	5,690	3,700	2,740	1,410	7,800	2,440	2,760	1,620	2,530	880
29	712	1,770	4,380	3,630	-	2,720	7,430	2,780	1,320	2,680	2,380	1,520
30	592	1,900	4,200	3,130	--------	1,450	7,900	2,570	1,350	2,800	1,490	1,550
31	599	--------	2,860	3,290	--------	1,750	--------	2,710	--------	2,880	1,260	--------
Total	16,894	39,635	83,410	87,730	70,760	68,780	149,170	130,430	66,250	73,220	64,985	52,655
Mean	545	1,321	2,691	2,830	2,527	2,219	4,972	4,207	2,208	2,362	2,096	1,755
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 5,690 Min 64 Mean 1,688 Cfsm - In. -
Water year 1957-58: Max 10,200 Min 64 Mean 2,476 Cfsm - In. -

* Discharge measurement made on this day.

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212. Dennys River at Dennysville, Maine

Location.--Lat 44°54'05", long 67°14'55", on right bank just above 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 1958.

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

Extremes.--Maximum discharge during year, 1,520 cfs Jan. 17 (gage height, 5.59 ft); minimum, 8.4 cfs Oct. 1 (gage height, 0.28 ft).
1955-58: Maximum discharge, that of Jan. 17, 1958; minimum, that of Oct. 1, 1957.

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 1958 are given in WSP 1571.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.2	6.0	2.0	230
.3	9.0	2.5	345
.4	13	3.0	490
.7	32	4.0	830
1.0	65	5.2	1,330
1.5	140		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.7	14	265	355	256	190	340	800	182	102	142	110
2	11.0	20	292	580	214	188	348	530	216	113	86	125
3	11.0	30	272	b345	220	166	360	362	332	77	70	95
4	9.8	100	240	b250	208	196	415	298	264	58	60	54
5	9.8	90	158	b210	168	200	454	260	214	57	110	37
6	9.4	61	148	b190	180	194	487	256	186	102	59	35
7	9.0	42	152	b170	208	186	635	230	167	57	38	58
8	9.4	32	196	b595	265	212	652	360	160	50	30	78
9	9.8	46	180	670	590	216	487	499	152	72	36	71
10	11	86	*205	440	440	260	388	412	143	68	50	*76
11	11	61	575	302	*312	403	350	308	138	53	46	122
12	11	44	760	238	268	535	338	460	140	71	38	101
13	11	35	640	210	218	469	454	550	138	126	27	54
14	*11	30	b330	196	212	418	460	406	146	126	25	98
15	12	38	b250	188	168	335	*502	295	143	125	24	74
16	14	95	b200	340	210	295	529	240	134	63	27	108
17	14	89	b190	1,320	180	246	559	214	167	45	44	122
18	14	86	b180	1,100	194	236	574	210	143	39	70	106
19	13	91	b210	740	198	224	517	200	128	39	116	144
20	14	380	226	b430	200	226	409	208	122	44	100	114
21	14	320	275	b270	184	236	320	196	125	45	77	100
22	14	188	472	280	190	222	348	174	118	32	53	80
23	12	128	388	375	182	218	460	172	128	26	51	132
24	11	95	308	315	174	236	574	152	137	25	50	101
25	13	152	254	330	182	288	460	110	120	37	106	86
26	13	174	210	455	186	308	382	215	130	80	196	88
27	12	182	430	1,090	190	315	320	256	134	114	234	88
28	13	168	505	980	186	338	260	226	140	101	167	128
29	13	132	418	565	-	325	400	282	125	225	110	178
30	12	89	424	345	-------	302	1,010	260	119	382	106	160
31	12	-------	350	282	-------	312	-------	200	-------	258	106	-------
Total	362.9	3,098	9,703	14,156	6,383	8,495	13,792	9,341	4,691	2,812	2,454	2,923
Mean	11.7	103	313	457	228	274	460	301	156	90.7	79.2	97.4
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 760 Min 8.6 Mean 122 Cfsm 1.32 In. 17.88
Water year 1957-58: Max 1,320 Min 8.7 Mean 214 Cfsm 2.32 In. 31.49

Peak discharge (base, 600 cfs).--Dec. 12 (5 p.m.) 850 cfs (4.05 ft); Jan. 2 (9 a.m.) 604 cfs (3.38 ft); Jan. 8 (6 p.m.) 982 cfs (4.38 ft); Jan. 17 (3 p.m.) 1,520 cfs (5.59 ft); Jan. 28 (1 a.m.) 1,150 cfs (4.79 ft); Feb. 9 (1 p.m.) 638 cfs (3.48 ft); Apr. 7 (8:30 p.m.) 732 cfs (3.75 ft); Apr. 30 (12:30 p.m.) 1,190 cfs (4.90 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

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 1958. 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.--45 years (1905-21, 1929-58), 938 cfs.

Extremes.--Maximum discharge during year, 4,730 cfs Apr. 25 (gage height, 8.80 ft); minimum, 19 cfs Aug. 11 (gage height, 2.34 ft).
1905-21, 1929-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.5	30	4.5	950
2.7	50	5.0	1,430
3.0	97	6.0	2,380
3.3	175	7.0	3,160
3.6	295	8.0	4,010
4.0	520	8.7	4,640

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	97	435	1,490	2,140	576	1,340	4,320	722	259	680	246
2	38	128	835	2,230	1,850	576	1,580	3,850	1,250	214	550	246
3	38	200	1,180	2,010	b1,630	534	1,790	3,310	2,120	214	378	246
4	38	441	1,170	1,520	b1,360	508	1,830	2,640	2,080	277	400	250
5	38	638	365	1,220	b1,240	501	1,820	2,190	1,760	254	384	250
6	39	548	210	959	b1,120	520	1,890	2,310	1,280	214	350	380
7	46	423	286	1,020	b1,020	583	2,220	2,390	1,120	151	335	525
8	51	455	372	1,820	1,110	606	2,720	2,760	1,040	182	300	230
9	55	365	520	2,700	1,910	646	2,280	3,860	780	315	356	325
10	59	250	679	2,210	*2,270	822	1,700	3,990	475	378	340	500
11	63	378	1,810	1,700	b1,820	1,340	1,420	3,400	394	446	108	405
12	62	340	2,840	b1,350	1,440	1,910	1,450	3,240	400	275	145	226
13	60	410	2,960	*1,000	1,180	1,730	1,890	3,770	406	500	238	234
14	*63	280	2,000	959	b1,040	1,520	2,050	3,880	406	380	412	222
15	72	235	1,570	920	b850	1,300	*2,060	3,360	423	367	265	93
16	74	210	1,130	1,040	b805	b1,120	2,110	2,800	458	483	226	150
17	86	465	950	2,890	813	1,070	2,300	2,020	435	514	277	*206
18	97	514	705	3,950	b805	b950	2,320	1,040	235	514	425	250
19	59	483	590	3,400	b740	b830	2,400	730	172	335	495	295
20	51	1,070	670	2,560	b705	757	2,280	950	250	275	735	367
21	*51	1,490	794	1,750	b680	748	2,210	940	254	160	815	335
22	56	1,140	1,240	1,540	670	785	2,260	1,070	254	189	562	320
23	69	765	1,300	1,820	b640	822	2,800	714	310	234	295	423
24	70	505	1,080	1,960	b590	959	4,140	860	330	242	242	215
25	78	367	900	1,750	590	1,150	4,640	959	300	186	400	230
26	76	362	630	1,820	b605	1,230	4,410	1,220	272	175	630	126
27	76	295	1,300	3,140	b590	1,280	3,740	1,280	282	178	1,030	254
28	76	350	2,480	4,100	576	1,390	3,090	1,150	350	200	860	365
29	76	340	2,180	3,630	-	1,360	2,800	1,340	350	565	605	483
30	106	340	2,010	2,900	-------	1,280	3,930	1,570	300	1,930	650	464
31	111	-------	1,750	2,470	-------	1,290	-------	1,040	-------	1,300	390	-------
Total	1,972	13,884	36,941	63,828	30,789	30,693	73,470	68,953	19,208	11,906	13,878	8,861
Mean	63.6	463	1,192	2,059	1,100	990	2,449	2,224	640	384	448	295
Cfsm	0.139	1.01	2.61	4.51	2.41	2.17	5.36	4.87	1.40	0.840	0.980	0.646
In.	0.16	1.13	3.01	5.20	2.51	2.50	5.98	5.62	1.56	0.97	1.13	0.72

Calendar year 1957: Max 2,560 Min 38 Mean 582 Cfsm 1.27 In. 17.27
Water year 1957-58: Max 4,640 Min 38 Mean 1,026 Cfsm 2.25 In. 30.49

Peak discharge (base, 3,200 cfs).--Jan 18 (time unknown) about 4,100 cfs; Jan. 28 (time unknown) about 4,200 cfs; Apr. 25 (1 p.m.) 4,730 cfs (8.80 ft); May 1 (2 to 3 a.m.) 4,470 cfs (8.51 ft); May 10 (1 a.m.) 4,130 cfs (8.13 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 18, 28; discharge estimated on basis of weather records and records for nearby stations.

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 September 1958.

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 year, 1,800 cfs Feb. 1 (gage height, 6.50 ft); minimum observed, 23 cfs Oct. 18-20; minimum gage height, 0.97 ft Oct. 19, 20.
1926-58: 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, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	20	2.5	208
1.1	29	3.0	310
1.3	41	4.0	595
1.5	58	5.0	1,010
1.7	81	6.0	1,500
2.0	124	6.5	1,800

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	28	305	1,110	1,800	362	761	1,600	636	190	350	221
2	32	29	319	1,140	1,680	357	825	1,630	614	190	367	210
3	30	35	324	1,300	1,440	352	900	1,540	682	188	352	195
4	30	44	335	1,360	1,300	345	963	1,440	686	185	343	183
5	28	51	350	1,060	1,200	338	1,020	1,430	670	182	322	173
6	28	58	357	1,110	1,160	333	1,090	1,350	659	170	298	164
7	28	66	364	1,140	1,110	338	1,220	1,300	602	156	261	159
8	28	74	340	1,180	945	333	1,250	1,280	566	161	241	154
9	28	81	315	1,320	1,060	343	1,350	1,300	524	170	237	148
10	28	89	357	1,280	1,040	357	1,350	1,340	476	176	221	143
11	28	94	407	1,250	1,010	367	1,310	1,330	439	173	203	138
12	27	102	447	1,140	960	461	1,310	1,370	412	168	188	134
13	26	108	491	1,110	900	524	1,340	1,430	394	182	178	127
14	*28	112	531	*1,140	840	524	*1,340	1,440	382	190	170	122
15	26	118	595	1,180	770	559	1,340	1,420	352	187	161	116
16	24	137	670	1,200	720	650	1,330	1,370	328	187	150	114
17	24	143	769	1,230	670	709	1,350	1,330	310	190	140	*109
18	23	148	814	1,280	630	693	1,350	1,250	296	182	148	108
19	23	156	892	1,280	600	670	1,370	1,180	274	170	156	114
20	23	173	1,200	1,290	560	640	1,330	1,120	257	170	163	118
21	24	183	1,330	1,250	540	625	1,260	1,030	245	168	153	110
22	24	190	909	1,280	510	617	1,280	945	237	159	146	112
23	25	206	883	1,290	480	602	1,300	874	232	153	142	118
24	25	226	878	1,300	455	595	1,360	793	226	151	135	118
25	26	253	861	1,300	430	602	1,380	773	212	148	148	115
26	26	283	831	1,420	410	625	1,370	753	201	145	175	110
27	26	301	874	1,530	390	647	1,310	773	197	137	213	108
28	25	322	900	1,620	375	670	1,270	741	204	143	224	116
29	24	310	991	1,650	-	701	1,300	709	199	173	234	130
30	26	298	1,080	1,730	-------	725	1,540	701	190	230	234	137
31	26	-------	1,100	1,750	-------	741	-------	662	-------	315	228	-------
Total	819	4,418	20,819	40,220	23,985	16,405	37,469	36,204	11,702	5,499	6,681	4,124
Mean	26.4	147	672	1,297	857	529	1,249	1,168	390	177	216	137
Cfsm	0.105	0.586	2.68	5.17	3.41	2.11	4.98	4.65	1.55	0.705	0.861	0.546
In.	0.12	0.65	3.09	5.96	3.55	2.43	5.56	5.36	1.73	0.81	0.99	0.61

Calendar year 1957: Max 1,330 Min 23 Mean 315 Cfsm 1.25 In. 17.04
Water year 1957-58: Max 1,800 Min 23 Mean 571 Cfsm 2.27 In. 30.86

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Feb. 12-28.

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 mouth of West Branch of Narraguagus River.

Drainage area.--232 sq mi.

Records available.--February 1948 to September 1958.

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.--10 years, 483 cfs.

Extremes.--Maximum discharge during year, 3,530 cfs Apr. 24 (gage height, 13.19 ft); minimum, 27 cfs Oct. 6 (gage height, 6.98 ft).
1948-58: Maximum discharge, 7,250 cfs Nov. 28, 1950 (gage height, 15.81 ft); minimum, that of Oct. 6, 1957.

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

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

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

7.0	28	9.0	425
7.2	40	9.5	620
7.4	58	10.0	850
7.7	96	11.0	1,460
8.0	149	12.0	2,250
8.5	270	13.1	3,420

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	42	430	975	1,020	279	902	2,030	425	160	290	192
2	29	56	425	1,470	855	302	994	1,700	612	145	219	164
3	28	73	300	1,120	726	290	1,200	1,280	961	147	174	137
4	28	106	240	796	654	284	1,310	1,050	763	137	141	115
5	28	127	215	668	538	296	1,280	918	578	122	122	105
6	28	113	180	607	476	399	1,210	801	480	110	104	95
7	28	102	202	542	454	538	1,530	749	399	106	93	88
8	28	88	290	1,100	507	518	1,700	1,150	344	120	86	92
9	30	108	323	1,330	1,110	566	1,380	1,660	314	209	83	88
10	32	188	499	1,010	*978	*782	1,110	1,400	279	192	83	88
11	32	162	1,010	801	768	1,120	951	1,130	262	153	82	99
12	31	133	1,350	633	624	1,130	956	1,310	253	168	77	104
13	*30	113	1,400	*500	534	913	1,220	1,480	237	185	73	98
14	28	100	1,110	410	450	881	*1,250	1,300	245	174	72	93
15	28	102	816	345	435	745	1,170	1,050	267	155	69	83
16	28	188	633	659	425	686	1,130	855	234	151	67	82
17	28	199	526	2,020	420	616	1,160	740	214	170	65	82
18	29	209	425	2,120	400	538	1,240	659	194	151	74	93
19	30	216	425	1,750	380	503	1,290	599	183	139	221	143
20	41	565	425	1,260	360	503	1,260	*554	168	155	276	147
21	*48	646	515	972	335	488	1,190	518	157	155	239	137
22	42	507	754	924	317	476	1,150	480	170	137	197	129
23	40	379	722	1,280	305	480	1,820	443	224	122	172	131
24	39	299	620	1,070	275	595	3,310	412	216	110	141	118
25	46	259	530	881	287	745	3,020	382	190	100	221	108
26	48	211	432	1,090	300	782	2,090	454	168	93	412	98
27	45	180	1,080	1,970	275	855	1,510	439	183	96	469	92
28	43	177	1,400	1,970	284	961	1,170	429	209	96	469	127
29	40	162	1,270	1,730	-	913	1,270	582	190	260	363	194
30	39	219	1,210	1,460	-------	860	1,890	554	170	503	287	183
31	40	-------	961	1,210	-------	876	-------	472	-------	382	232	-------
Total	1,062	6,029	20,718	34,673	14,492	19,920	42,663	27,580	9,289	5,103	5,673	3,505
Mean	34.3	201	668	1,118	518	643	1,422	890	310	165	183	117
Cfsm	0.148	0.866	2.88	4.82	2.23	2.77	6.13	3.84	1.34	0.711	0.789	0.504
In.	0.17	0.97	3.32	5.56	2.32	3.19	6.84	4.43	1.50	0.82	0.91	0.56

Calendar year 1957: Max 1,830 Min 28 Mean 295 Cfsm 1.27 In. 17.25
Water year 1957-58: Max 3,310 Min 28 Mean 522 Cfsm 2.25 In. 30.59

Peak discharge (base, 1,500 cfs).--Dec. 12 (10 p.m.) 1,540 cfs (11.11 ft); Jan. 17 (10 p.m.) 2,380 cfs (12.13 ft); Jan. 27 (11 p.m.) 2,070 cfs (11.80 ft); Apr. 8 (2 a.m.) 1,790 cfs (11.45 ft); Apr. 24 (6 p.m.) 3,530 cfs (13.19 ft); May 9 (6 a.m.) 1,700 cfs (11.34 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 3-6, 19, Jan. 13-15, Feb. 15-21, 23, 24, 26, 27.

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 1958. 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.--39 years, 259 cfs.

Extremes.--Maximum discharge during year, 1,500 cfs Apr. 23 (gage height, 6.73 ft); minimum, 5.3 cfs Oct. 17, 18.
1909-19, 1929-58: Maximum discharge, 4,140 cfs Apr. 13, 1940 (gage height, 9.58 ft); maximum gage height, 10.41 ft Mar. 9, 1943 (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, debris on control, 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 1957-58, except periods of ice effect and backwater from debris (gage height, in feet, and discharge, in cubic feet per second)

2.8	3.5	3.6	66
2.9	5.9	4.0	155
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

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.4	8.6	174	792	540	182	544	958	229	150	295	115
2	7.0	13	160	958	490	177	475	876	272	129	260	103
3	7.0	17	150	913	430	166	590	792	302	119	214	86
4	6.7	30	142	810	415	158	630	734	272	105	174	75
5	6.1	27	130	710	360	155	695	668	247	103	145	68
6	5.9	29	117	615	345	158	775	594	220	92	122	64
7	5.9	34	103	540	319	158	915	540	188	84	103	60
8	5.9	37	150	467	316	158	900	559	168	82	99	66
9	5.9	64	174	435	436	158	835	679	155	82	99	60
10	5.9	71	223	395	467	*177	775	615	107	77	88	60
11	5.9	68	584	355	444	253	750	589	122	90	80	64
12	5.9	66	792	325	426	341	775	746	*112	119	75	64
13	*5.9	64	790	305	414	380	820	774	105	105	64	64
14	5.9	63	685	295	368	418	*815	718	105	99	63	66
15	5.9	79	609	279	327	418	845	*652	105	95	61	64
16	5.6	99	559	292	319	422	890	594	88	91	58	63
17	5.3	105	496	409	302	376	960	530	84	90	49	58
18	5.3	119	449	510	275	341	1,000	472	82	89	71	66
19	5.9	139	405	515	250	316	1,040	422	75	86	139	79
20	8.6	211	349	510	225	305	1,030	380	70	94	147	82
21	8.3	214	449	480	220	292	1,030	341	66	92	163	88
22	7.4	206	609	450	215	295	*1,030	312	79	84	166	92
23	7.0	188	584	440	210	295	1,350	292	84	80	150	94
24	7.0	166	544	420	200	305	1,430	266	82	75	124	88
25	10	147	496	380	185	327	1,420	241	82	66	145	82
26	9.4	122	431	460	182	353	1,360	241	84	63	158	75
27	8.6	106	827	600	180	380	1,220	214	119	61	202	70
28	8.3	94	870	670	174	422	1,070	205	147	53	185	84
29	8.0	90	839	660	-	431	991	208	163	187	174	84
30	8.0	110	863	620	--------	462	1,060	214	160	292	155	79
31	8.3	--------	769	590	--------	496	--------	220	--------	295	132	--------
Total	214.2	2,788.6	14,522	16,200	9,034	9,275	28,120	15,646	4,174	3,324	4,160	2,263
Mean	6.31	93.0	468	523	323	299	937	505	139	107	134	75.4
Cfsm	0.047	0.628	3.16	3.53	2.18	2.02	6.33	3.41	0.939	0.723	0.905	0.509
In.	0.05	0.70	3.64	4.07	2.27	2.33	7.06	3.93	1.05	0.83	1.04	0.57

Calendar year 1957: Max 870 Min 5.3 Mean 168 Cfsm 1.14 In. 15.36
Water year 1957-58: Max 1,430 Min 5.3 Mean 301 Cfsm 2.03 In. 27.54

Peak discharge (base, 1,000 cfs).--Apr. 23 (10:30 p.m.) 1,500 cfs (6.73 ft); Apr. 30 (2 p.m.) 1,100 cfs (6.00 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27, Dec. 2-5, 13, 14, Jan. 9-13, Feb. 3-5, 20-24, 26, 27, and by debris on control Apr. 2-25. No gage-height record Jan. 4-6, Jan. 20 to Feb. 2, July 15-18; discharge estimated on basis of recorded range in stage and weather records.

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 & 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 1958. Monthly discharge only for some periods, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 394.74 ft above mean sea level, datum of 1929. Prior to June 30, 1929, chain gage on railroad bridge at same datum.

Average discharge.--56 years, 1,883 cfs (unadjusted).

Extremes.--Maximum discharge during year, 24,800 cfs Apr. 24 (gage height, 13.49 ft); minimum, 205 cfs Oct. 17 (gage height, 4.12 ft).
1902-58: Maximum discharge, 37,000 cfs Apr. 30, 1923 (gage height, 16.9 ft, site then in use, present datum); minimum daily (1914-58), 77 cfs Nov. 19, 1924.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Flow partly regulated by Chamberlain, Telos, Second and Grand Lakes, and Round Pond (see p. 42).

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

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

4.1	197	8.0	6,020
4.4	325	9.0	8,600
4.9	650	10.0	11,600
5.5	1,260	12.0	18,600
6.0	1,970	13.5	24,800
7.0	3,800		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	278	435	3,010	5,490	2,460	2,440	2,070	12,200	1,320	731	1,270	2,430
2	287	474	2,480	4,990	2,380	2,530	2,080	11,100	1,670	1,050	1,020	2,270
3	278	1,320	2,310	3,640	2,340	2,620	2,030	10,100	2,500	1,240	850	2,020
4	269	2,920	2,130	3,460	2,290	2,600	2,150	9,280	2,150	1,120	677	1,960
5	265	3,260	1,970	3,340	2,260	2,570	2,380	8,710	1,180	1,020	659	1,610
6	256	2,430	2,000	3,200	2,180	2,510	2,640	7,970	1,040	970	602	1,820
7	248	1,760	2,080	3,070	2,130	2,590	2,620	7,100	970	970	563	2,110
8	244	1,450	2,390	3,010	2,180	3,280	2,660	6,650	1,240	900	749	2,270
9	244	1,950	1,590	2,930	2,230	3,560	2,530	8,800	1,960	950	970	2,210
10	239	2,660	1,300	2,860	2,290	4,070	2,460	9,420	1,110	910	1,570	1,920
11	235	2,030	3,070	2,820	2,340	3,760	2,320	8,460	*740	642	2,680	1,910
12	231	1,670	5,170	2,780	2,410	3,540	2,240	7,600	695	556	2,920	1,860
13	227	1,470	4,970	2,710	2,430	3,120	2,480	7,080	870	602	1,240	1,680
14	224	1,380	4,640	2,690	2,410	2,990	2,660	6,650	740	514	642	1,570
15	220	1,460	3,970	2,680	2,430	3,030	3,120	6,280	880	448	578	1,530
16	216	2,390	2,990	3,010	2,380	2,690	3,760	6,000	749	423	563	1,590
17	212	2,230	2,780	3,280	2,340	2,640	5,470	5,740	890	454	521	1,610
18	212	2,290	2,750	3,720	2,410	2,710	7,230	5,120	860	423	890	1,680
19	231	2,210	2,590	4,010	2,390	2,480	9,360	5,240	812	423	5,980	1,680
20	417	4,340	3,070	4,400	2,290	2,290	9,650	5,540	776	900	7,940	1,460
21	542	4,480	6,750	4,950	2,230	2,240	9,390	5,030	740	1,270	5,260	1,310
22	423	3,500	13,700	5,240	2,180	2,070	13,100	4,810	1,110	890	3,820	1,300
23	365	2,780	10,600	4,950	2,160	1,990	19,500	4,460	2,260	570	4,090	1,320
24	360	2,270	8,820	4,730	2,030	2,030	24,000	3,420	1,510	487	3,340	1,320
25	1,180	2,020	7,550	4,180	1,990	1,970	21,900	3,620	970	435	2,900	1,130
26	980	1,470	5,530	3,740	1,970	1,970	19,800	2,920	960	461	3,680	970
27	570	1,360	7,430	3,440	1,990	1,970	*16,200	3,010	1,140	454	3,480	970
28	429	1,310	8,400	2,920	2,020	2,020	13,200	2,590	1,080	480	3,050	1,030
29	474	1,640	7,620	2,750	-	2,020	11,500	2,440	870	910	2,640	1,040
30	442	2,480	6,920	2,620	--------	2,110	12,500	1,780	713	2,530	2,590	1,030
31	429	--------	6,000	2,500	--------	2,110	--------	1,450	--------	2,050	2,530	--------
Total	11,227	63,419	146,580	110,110	63,140	80,520	233,000	190,570	34,305	25,763	70,244	48,610
Mean	362	2,114	4,728	3,552	2,255	2,597	7,767	6,147	1,144	831	2,266	1,620
(†)	-107	+723	+96	-582	-548	-803	+1,231	+753	+65	+13	-370	-902
Adjusted for change in reservoir contents												
Mean	255	2,837	4,824	2,970	1,707	1,794	8,998	6,900	1,209	844	1,896	718
Cfsm	0.238	2.65	4.51	2.78	1.60	1.68	8.41	6.45	1.13	0.789	1.77	0.671
In.	0.27	2.96	5.20	3.20	1.67	1.94	9.38	7.44	1.26	0.91	2.04	0.75

	Observed			Adjusted		
Calendar year 1957:	Max 13,700	Min 212	Mean 1,506	Mean 1,560	Cfsm 1.46	In. 19.80
Water year 1957-58:	Max 24,000	Min 212	Mean 2,952	Mean 2,917	Cfsm 2.73	In. 37.02

* 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, Dec. 4-6, Jan. 4-16, 20, 21, Feb. 3-7, 10, 11.

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, $1\frac{1}{4}$ miles upstream from Mattaseunk Brook, and $4\frac{1}{4}$ 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 1958.

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

Average discharge.--18 years, 5,503 cfs (unadjusted).

Extremes.--Maximum discharge during year, 36,100 cfs Apr. 24 (gage height, 11.62 ft); minimum daily, 2,060 cfs Oct. 13.
1940-58: Maximum discharge, 40,200 cfs May 21, 1945 (gage height, 11.09 ft); minimum daily, 1,430 cfs Aug. 17, 1941.

Remarks.--Records good. Flow regulated by several reservoirs above station (see p. 42).

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,470	2,880	5,400	8,850	4,610	4,510	5,600	*17,400	5,600	3,130	*5,200	4,760
2	2,110	2,960	4,860	8,400	4,460	4,660	5,850	15,800	5,750	3,390	4,710	5,200
3	2,240	3,610	4,360	5,350	4,510	4,860	6,000	14,400	5,900	3,700	4,360	5,650
4	2,210	5,850	4,320	5,150	4,510	4,950	5,800	13,600	6,050	3,300	4,710	5,700
5	2,730	6,450	4,270	5,250	3,840	4,610	5,750	12,800	4,860	3,520	4,030	5,650
6	2,270	5,300	4,560	5,950	3,790	5,000	6,000	11,900	4,560	3,300	4,510	4,610
7	2,370	4,560	5,050	6,700	3,740	4,950	6,000	12,500	4,810	3,300	4,030	6,000
8	2,240	4,320	5,250	6,300	3,650	5,500	7,000	11,500	4,760	3,610	4,410	6,250
9	2,540	4,220	4,360	5,400	4,070	5,350	6,700	11,600	5,550	3,980	4,860	5,950
10	2,650	5,400	4,070	6,250	4,560	5,850	6,950	15,100	5,050	4,410	5,050	6,000
11	2,370	4,610	5,750	6,350	4,810	5,750	6,700	14,600	4,070	4,220	5,800	5,850
12	2,240	4,460	9,150	6,950	5,150	5,850	6,800	15,100	4,410	3,930	6,400	5,850
13	2,060	4,070	8,550	6,400	4,660	6,000	6,700	16,600	4,610	4,270	5,200	5,250
14	2,330	4,460	8,050	6,450	5,100	5,950	7,100	18,200	4,950	4,460	4,510	5,600
15	*2,400	4,860	7,150	6,300	5,100	6,100	7,950	18,100	5,450	3,740	4,610	4,610
16	2,270	4,900	5,450	5,850	4,860	5,950	8,350	17,400	4,320	3,930	3,840	5,500
17	2,370	5,100	5,750	5,200	5,150	5,650	10,600	16,300	4,510	4,070	4,510	4,710
18	2,470	5,250	5,500	6,000	4,610	5,700	12,800	14,800	4,680	4,170	5,350	5,200
19	2,580	5,300	5,250	5,650	4,510	5,550	16,000	13,600	5,100	3,980	10,600	4,510
20	2,580	6,650	6,000	4,710	4,320	*5,450	15,800	10,300	5,350	4,120	12,600	4,760
21	3,090	8,700	9,150	5,500	4,760	5,000	15,000	12,200	5,100	4,460	9,450	5,050
22	2,840	7,150	18,400	6,100	4,710	5,350	18,900	12,900	4,170	4,460	7,650	5,250
23	2,730	5,900	16,000	6,050	4,560	5,350	32,000	12,800	4,270	3,430	7,850	5,500
24	2,730	5,300	13,400	5,450	4,460	5,350	35,000	12,900	5,800	3,980	6,900	5,150
25	3,520	5,000	11,200	5,500	4,560	5,200	30,000	13,200	4,460	3,740	6,600	*5,250
26	3,650	4,170	8,050	5,000	4,030	5,450	27,200	12,000	4,710	3,740	7,000	5,000
27	2,880	3,520	10,800	5,450	4,270	5,700	23,900	8,950	4,710	3,650	6,900	5,250
28	3,000	3,650	13,200	5,200	4,560	5,950	18,800	6,350	4,510	3,930	6,700	5,200
29	2,620	4,560	11,800	5,200	-	5,300	16,200	6,500	5,130	4,950	6,150	5,250
30	2,650	5,150	10,600	5,150	---------	5,550	17,200	5,350	3,000	6,200	5,850	5,550
31	2,730	--------	9,400	4,510	---------	5,450	--------	5,700	--------	5,650	5,050	--------
Total	79,940	148,310	245,100	182,570	125,920	167,840	394,650	400,450	144,180	124,720	185,190	160,060
Mean	2,579	4,944	7,906	5,889	4,497	5,414	13,160	12,920	4,806	4,023	5,974	5,335
(†)	-1,582	+2,844	+5,379	+49	-2,011	-2,804	+11,520	+5,940	-1,296	-981	-862	-3,669

Adjusted for change in reservoir contents

Mean	997	7,788	13,280	5,938	2,486	2,610	24,680	18,860	3,510	3,042	5,112	1,666
Cfsm	0.301	2.35	4.01	1.79	0.751	0.789	7.46	5.70	1.06	0.919	1.54	0.503
In.	0.35	2.62	4.62	2.06	0.78	0.91	8.32	6.57	1.18	1.06	1.78	0.56

	Observed			Adjusted		
Calendar year 1957:	Max 18,400	Min 1,800	Mean 4,148	Mean 4,346	Cfsm 1.31	In. 17.84
Water year 1957-58:	Max 35,000	Min 2,060	Mean 6,463	Mean 7,518	Cfsm 2.27	In. 30.81

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, of reservoirs on East and West Branches of Penobscot River.
Note.--Stage-discharge relation affected by aquatic vegetation or ice Oct. 1 to Dec. 19, Jan. 3-5, 20, 21, Feb. 5 to Mar. 7, June 27 to Sept. 30.

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 1958.

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

Average discharge.--24 years, 2,366 cfs.

Extremes.--Maximum discharge during year, 25,400 cfs Apr. 26 (gage height, 13.90 ft); minimum, 124 cfs Oct. 18, 19 (gage height, 0.43 ft).
1934-58: 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 periods of ice effect or no gage-height record, which are fair.

Revisions.--WSP 1501: Drainage area.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.4	113	4.0	2,860
.5	150	6.0	6,080
1.0	375	10.0	15,400
2.0	1,040	14.0	25,700
3.0	1,820		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	258	496	2,760	8,000	2,070	995	3,390	16,200	1,350	692	3,790	800
2	244	615	2,620	7,140	1,980	988	3,670	14,900	1,340	615	3,200	760
3	231	1,220	2,440	5,760	1,900	972	3,730	13,400	1,420	650	2,700	730
4	226	2,720	2,280	4,670	1,850	972	3,920	11,900	1,450	664	2,100	720
5	226	4,100	2,220	4,270	1,800	965	4,370	10,200	1,350	582	1,800	715
6	204	4,640	2,100	3,780	1,740	995	4,990	8,620	1,240	496	1,700	715
7	191	4,640	1,960	3,420	1,680	1,000	5,660	7,180	1,100	436	1,650	720
8	187	4,370	2,410	3,190	1,630	1,030	6,180	6,300	980	419	1,400	775
9	179	4,000	2,820	2,690	1,720	1 040	6,400	6,640	902	466	1,200	980
10	175	3,860	2,900	2,430	2,000	1,070	6,240	7,610	804	508	1,050	1,200
11	175	3,740	3,940	2,420	2,260	1,210	5,970	8,180	*734	496	940	1,000
12	162	3,520	5,590	2,310	2,320	1,560	5,760	8,000	629	478	860	900
13	150	3,180	6,640	2,170	2,310	1,990	5,760	7,200	563	685	820	830
14	146	2,840	7,350	2,120	2,150	2,360	5,970	6,260	496	958	780	800
15	146	2,660	7,200	2,030	1,970	2,590	6,440	5,290	520	937	760	780
16	143	2,880	6,850	1,910	1,960	2,540	7,180	4,320	576	811	800	760
17	135	3,370	6,260	1,800	1,840	2,580	8,640	3,620	596	720	850	770
18	128	3,820	5,640	1,960	1,760	2,630	10,900	3,210	563	629	920	820
19	128	4,030	4,840	2,280	1,640	2,820	13,600	2,970	544	550	1,150	880
20	166	4,480	4,770	2,510	1,560	2,800	15,800	2,850	508	596	1,600	910
21	213	5,350	6,220	2,600	1,440	2,580	16,600	2,700	466	685	2,500	920
22	262	6,200	9,820	3,500	1,310	2,360	17,500	2,510	466	699	4,400	850
23	289	6,420	12,400	2,450	1,250	2,260	20,200	2,320	582	636	3,200	790
24	312	6,060	13,100	2,400	1,190	2,260	23,300	2,130	762	550	2,300	730
25	380	5,380	12,900	2,500	1,150	2,190	24,900	1,970	783	472	1,800	680
26	520	4,550	11,700	2,600	1,090	2,160	25,400	1,800	734	414	1,400	643
27	629	3,460	11,200	2,420	1,090	2,390	24,700	1,660	790	397	1,200	596
28	629	2,910	11,200	2,400	1,050	2,680	22,800	1,540	881	386	1,050	608
29	576	2,900	11,000	2,360	-	2,910	*20,300	1,500	895	720	950	622
30	538	2,820	10,200	2,260	-------	3,080	18,000	1,520	811	1,030	880	622
31	502	-------	9,170	2,160	-------	3,240	-------	1,460	-------	3,740	840	-------
Total	8,450	111,231	202,500	93,510	47,710	61,217	348,270	175,960	24,835	22,117	50,590	23,626
Mean	273	3,708	6,532	3,016	1,704	1,975	11,610	5,676	828	713	1,632	788
Cfsm	0.193	2.61	4.61	2.13	1.20	1.39	8.19	4.00	0.584	0.503	1.15	0.556
In.	0.22	2.91	5.32	2.46	1.25	1.60	9.14	4.61	0.65	0.58	1.33	0.62

Calendar year 1957: Max 13,100 Min 128 Mean 1,950 Cfsm 1.38 In. 18.64
Water year 1957-58: Max 25,400 Min 128 Mean 3,206 Cfsm 2.26 In. 30.69

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Jan. 6-8, 10-16. No gage-height record Jan. 21-27, Aug. 1 to Sept. 25; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.

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 1958.

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.--56 years, 584 cfs.

Extremes.--Maximum discharge during year, 13,300 cfs Apr. 23 (gage height, 13.00 ft); minimum, 27 cfs Sept. 5 (gage height, 1.67 ft).
1902-58: 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 periods of ice effect, which are fair. Low flow regulated by operation of powerplants 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	29	4.0	1,060
1.8	40	5.0	1,990
2.0	72	6.0	3,100
2.5	209	8.0	5,560
3.0	415	10.0	8,400
3.5	700	12.0	11,800

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79	96	674	1,120	585	*190	713	4,120	402	80	430	76
2	72	109	587	1,060	550	190	765	3,460	*536	61	338	68
3	68	435	520	870	525	190	765	2,800	570	59	231	61
4	59	1,040	455	780	500	190	985	2,300	455	124	196	54
5	56	842	405	700	470	192	1,220	2,020	361	92	249	50
6	53	599	380	625	455	205	1,580	1,780	313	79	196	53
7	51	465	395	575	435	210	1,570	1,750	261	76	155	54
8	46	379	435	525	415	215	1,460	2,280	234	66	143	130
9	44	875	465	510	395	240	1,160	5,430	203	149	245	149
10	44	1,060	475	490	370	277	1,030	3,840	180	168	301	106
11	48	726	1,060	430	*355	321	1,040	2,650	171	132	261	102
12	46	553	1,790	395	345	*482	1,080	2,430	165	165	199	102
13	41	460	1,220	*355	325	553	1,210	2,450	149	650	165	87
14	40	402	958	340	315	492	1,480	1,990	165	504	146	72
15	39	630	842	325	305	425	1,760	1,680	177	321	155	67
16	38	1,170	*720	315	300	420	2,590	1,440	149	257	177	61
17	37	870	642	635	295	397	3,980	1,260	130	352	155	*58
18	36	835	570	1,550	290	384	5,010	1,170	116	261	180	90
19	38	965	593	1,270	270	379	5,780	1,180	109	196	352	397
20	112	3,180	965	988	245	374	5,450	1,400	98	231	305	325
21	209	2,170	6,190	877	230	370	4,570	1,210	94	234	238	220
22	155	1,410	7,520	800	225	370	*6,190	1,060	174	199	206	174
23	130	1,050	4,300	950	215	361	10,800	905	241	168	174	168
24	122	877	2,330	935	210	370	9,890	779	168	143	165	146
25	231	752	1,700	746	205	402	7,920	687	141	122	119	119
26	241	510	1,460	732	200	430	5,760	605	130	177	135	106
27	187	635	5,630	1,080	196	440	3,960	531	158	190	146	92
28	149	487	3,800	1,020	192	509	3,160	504	152	174	127	114
29	130	*476	2,320	863	-	575	3,050	564	127	480	109	146
30	114	629	1,630	748	-------	617	4,790	509	*104	1,040	92	138
31	*102	-------	1,380	*661	-------	674	-------	420	-------	648	85	-------
Total	2,817	24,687	52,391	23,268	9,418	11,444	100,698	55,204	6,431	7,698	6,175	3,585
Mean	90.9	823	1,690	751	336	369	3,357	1,781	214	248	199	119
Cfsm	0.306	2.77	5.69	2.53	1.13	1.24	11.3	6.00	0.721	0.835	0.670	0.404
In.	0.35	3.09	6.56	2.92	1.18	1.43	12.61	6.92	0.80	0.96	0.77	0.45

Calendar year 1957: Max 7,520 Min 38 Mean 453 Cfsm 1.53 In. 20.68
Water year 1957-58: Max 10,800 Min 36 Mean 832 Cfsm 2.80 In. 38.04

Peak discharge (base, 4,000 cfs).--Dec. 21 (10 p.m.) 11,000 cfs (11.67 ft); Dec. 27 (2 p.m.) 7,520 cfs (9.42 ft); Apr. 23 (7 p.m.) 13,300 cfs (13.00 ft); Apr. 30 (12:30 p.m.) 5,860 cfs (8.23 ft); May 9 (9 a.m.) 6,100 cfs (8.41 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26, 27, Dec. 3-11, Jan. 2-17, Feb. 1 to Mar. 9.

325. 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 1958.

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.--34 years, 608 cfs (unadjusted).

Extremes.--Maximum discharge during year, 5,680 cfs Apr. 24 (gage height, 9.60 ft); minimum, 118 cfs Oct. 4, 5, 6 (gage height, 2.13 ft).
1924-58: Maximum discharge, 11,400 cfs Mar. 20, 1936 (gage height, 14.46 ft), from rating curve extended above 5,000 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 except those for periods of no gage-height record, which are fair. Flow partly regulated by Sebec Lake and other reservoirs above station.

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

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.1	109	4.5	1,460
2.3	173	5.0	1,790
2.5	251	6.0	2,500
3.0	495	7.0	3,260
3.5	810	8.0	4,130
4.0	1,140	9.5	5,580

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	347	195	456	2,230	642	649	752	3,640	568	203	292	495
2	337	210	451	2,020	636	623	758	3,430	*574	203	301	495
3	333	239	446	1,800	636	598	778	3,060	580	206	314	490
4	178	264	446	a1,640	623	580	810	2,720	568	206	333	478
5	118	278	506	a1,300	610	574	804	2,420	556	203	366	478
6	220	282	568	a960	598	556	810	2,130	556	203	361	468
7	305	287	568	a700	592	544	919	1,920	539	199	364	468
8	301	287	580	a610	592	539	1,030	1,880	534	199	462	468
9	296	305	586	a605	592	534	1,070	2,300	517	199	574	468
10	292	314	586	a600	586	580	1,090	2,530	330	203	586	462
11	287	314	604	a600	568	610	1,100	2,400	210	203	580	500
12	278	328	710	a595	556	610	1,130	2,280	210	210	568	534
13	269	347	784	a590	556	610	1,170	2,070	210	214	562	522
14	256	347	810	592	556	610	1,230	1,130	206	222	562	517
15	243	352	845	586	544	610	1,320	592	203	243	544	506
16	222	342	845	586	534	610	1,480	656	199	247	517	506
17	206	347	852	586	642	610	1,830	696	199	247	517	495
18	199	352	817	592	703	604	2,150	710	199	251	517	*495
19	199	371	804	604	682	598	2,940	745	199	251	522	495
20	222	400	855	604	662	592	3,270	764	199	256	534	495
21	214	420	1,600	598	636	586	3,360	790	199	251	534	495
22	210	430	3,170	604	623	586	*3,510	778	203	251	528	495
23	210	440	3,290	610	604	586	4,550	771	203	251	528	455
24	214	440	2,980	610	592	695	5,560	731	203	256	528	405
25	239	440	2,790	604	592	745	5,550	682	203	256	522	512
26	226	446	2,500	610	586	731	5,110	668	203	260	522	506
27	226	446	2,880	630	580	724	4,380	642	203	264	522	500
28	222	440	3,470	642	616	724	3,810	616	203	264	522	495
29	218	440	3,170	649	-	724	3,490	616	203	269	517	495
30	206	446	a2,800	656	--------	731	3,640	598	203	274	512	495
31	*203	--------	a2,540	649	--------	745	--------	574	--------	282	506	--------
Total	7,496	10,549	44,309	25,262	16,939	19,418	69,401	45,539	9,382	7,246	15,114	14,688
Mean	242	352	1,429	815	605	626	2,313	1,469	313	234	488	490
(†)	-264	+657	+123	-125	-237	-212	+610	-101	-113	+87	-100	-327

Adjusted for change in reservoir contents

Mean	-22	1,009	1,552	690	368	414	2,923	1,368	200	321	388	163
Cfsm	-0.067	3.09	4.75	2.11	1.13	1.27	8.94	4.18	0.612	0.982	1.19	0.498
In.	-0.08	3.45	5.48	2.43	1.18	1.46	9.97	4.82	0.68	1.13	1.37	0.56

	Observed			Adjusted		
Calendar year 1957:	Max 3,470	Min 94	Mean 424	Mean 460	Cfsm 1.41	In. 19.08
Water year 1957-58:	Max 5,560	Min 118	Mean 782	Mean 781	Cfsm 2.39	In. 32.45

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Sebec Lake and Wilson Pond.
a No gage-height record; discharge estimated on basis of weather records and records for nearby streams.
Note.--Negative figures of adjusted discharge and runoff indicate that evaporation and seepage exceeded inflow.

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 1958.

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.--38 years, 692 cfs.

Extremes.--Maximum discharge during year, 14,100 cfs Apr. 23 (gage height, 9.83 ft); minimum, 98 cfs Oct. 15, 16, 17 (gage height, 1.70 ft).
1920-58: 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 periods 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	98	4.0	1,990
1.8	128	5.0	3,520
2.0	202	6.0	5,300
2.5	480	7.0	7,330
3.0	875	8.0	9,610
3.5	1,370	9.0	12,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	161	304	866	1,260	680	315	600	4,940	637	250	734	304
2	161	332	770	1,120	600	320	615	3,890	*734	221	528	266
3	161	1,090	685	975	550	315	684	3,130	742	250	436	245
4	151	1,770	590	895	515	315	803	2,640	621	216	442	221
5	144	1,590	535	795	480	310	1,000	2,320	541	190	592	221
6	141	1,260	475	700	435	320	1,300	2,030	480	165	448	207
7	138	1,000	460	645	415	350	1,450	1,910	411	185	365	258
8	128	821	550	605	405	385	1,340	2,440	376	212	348	751
9	128	1,430	590	550	375	405	1,100	4,930	359	320	645	521
10	128	2,000	620	505	365	430	938	4,380	337	277	584	423
11	122	1,480	875	475	*335	455	920	3,150	310	250	442	461
12	110	1,140	1,610	440	335	495	929	2,550	304	272	365	411
13	107	929	1,390	415	335	*555	1,080	2,180	299	592	326	348
14	101	794	1,200	395	325	530	1,340	1,910	328	507	359	299
15	101	925	1,070	*370	315	500	1,770	1,670	365	371	359	255
16	98	1,490	965	635	315	505	2,400	1,480	332	310	365	250
17	101	1,330	*920	1,160	310	495	3,380	1,350	310	310	342	231
18	104	1,300	900	2,120	310	480	4,240	1,290	293	283	540	*272
19	113	1,330	895	1,830	310	465	5,050	1,440	250	255	1,990	474
20	299	3,570	965	1,550	305	460	4,960	1,680	250	480	1,480	442
21	388	3,080	3,180	1,320	305	455	*4,250	1,540	250	521	1,040	371
22	310	3,110	8,300	1,180	305	450	5,720	1,420	365	405	839	326
23	255	1,610	4,560	1,160	300	455	11,200	1,240	455	320	668	342
24	250	1,290	2,810	985	290	465	11,500	1,080	382	272	534	293
25	541	1,100	2,020	875	295	480	8,160	965	310	236	487	250
26	692	911	1,590	700	305	495	6,300	875	310	528	563	221
27	563	850	4,490	875	310	500	4,290	794	400	436	548	202
28	461	760	4,320	1,060	305	530	3,200	768	382	365	467	240
29	394	684	2,810	945	-	540	3,020	893	315	1,190	417	245
30	348	821	2,040	855	-------	550	5,470	803	272	1,900	365	221
31	*315	-------	1,560	740	-------	565	-------	684	-------	1,080	337	-------
Total	7,214	39,101	54,611	28,135	10,410	13,870	99,009	62,372	11,718	13,153	17,955	9,571
Mean	233	1,303	1,762	908	372	447	3,300	2,012	391	424	579	319
Cfsm	0.724	4.05	5.47	2.82	1.16	1.39	10.2	6.25	1.21	1.32	1.80	0.991
In.	0.83	4.52	6.31	3.25	1.21	1.60	11.38	7.21	1.35	1.52	2.08	1.11

Calendar year 1957: Max 8,300 Min 98 Mean 579 Cfsm 1.80 In. 24.43
Water year 1957-58: Max 11,500 Min 98 Mean 1,006 Cfsm 3.12 In. 42.37

Peak discharge (base, 3,700 cfs).--Nov. 20 (3 p.m.) 4,100 cfs (5.34 ft); Dec. 21 (11:30 p.m.) 9,780 cfs (8.07 ft); Dec. 27 (5 p.m.) 6,000 cfs (6.35 ft); Apr. 23 (9:30 p.m.) 14,100 cfs (9.83 ft); Apr. 30 (3 p.m.) 6,100 cfs (6.40 ft); May 9 (2 p.m.) 5,200 cfs (5.95 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27, 28, Dec. 2-21, Jan. 1 to Apr. 2.

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 1958.

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.--34 years, 2,274 cfs.

Extremes.--Maximum discharge during year, 36,300 cfs Apr. 24 (gage height, 11.88 ft); minimum, 341 cfs Oct. 18, 19 (gage height, 1.83 ft).
1924-58: 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 periods 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.8	324	5.0	4,880
2.0	440	6.0	7,720
2.5	840	7.0	11,300
3.0	1,340	8.0	15,700
3.5	1,980	10.0	25,500
4.0	2,770	12.0	37,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	545	628	2,080	5,570	2,210	1,120	2,930	16,200	1,850	644	1,750	1,010
2	573	678	1,840	5,260	2,080	1,110	3,100	12,900	*1,940	588	1,380	912
3	612	1,330	1,740	4,760	1,980	1,100	3,160	10,700	2,160	652	1,150	831
4	468	3,040	1,640	4,350	1,870	1,110	3,550	9,000	2,010	612	1,030	813
5	447	3,330	1,590	3,780	1,810	1,120	4,310	7,850	1,760	580	1,210	804
6	428	2,590	1,580	3,290	1,740	1,130	5,290	6,910	1,610	545	1,260	795
7	503	1,920	1,510	2,950	1,710	1,130	5,620	6,260	1,460	531	1,100	804
8	468	1,620	1,740	2,520	1,660	1,150	5,680	6,940	1,380	538	1,000	1,380
9	461	1,920	1,980	2,380	1,610	1,190	4,830	13,100	1,320	660	1,190	1,400
10	468	3,510	2,020	2,210	1,580	1,270	4,330	13,400	1,090	723	1,440	1,230
11	475	2,780	3,310	2,010	1,580	1,350	4,280	9,140	867	696	1,440	1,140
12	531	2,370	5,310	1,900	*1,580	*1,940	4,420	8,450	840	705	1,310	1,030
13	510	2,090	4,570	1,760	1,570	2,290	4,960	7,920	813	1,420	1,200	990
14	475	1,780	4,080	*1,740	1,560	2,300	5,730	6,610	813	1,830	1,180	940
15	398	1,800	3,250	1,710	1,540	2,120	6,670	4,860	876	1,340	1,170	960
16	392	3,140	2,900	1,710	1,500	1,980	8,460	3,990	840	1,010	1,170	990
17	392	2,990	2,330	2,120	1,470	1,990	11,500	3,570	777	1,010	1,030	930
18	346	2,860	1,610	2,770	1,460	1,880	14,700	3,390	723	1,010	1,110	*858
19	346	2,770	1,410	3,530	1,360	1,800	17,100	3,450	696	867	3,430	1,250
20	475	6,610	2,580	3,950	1,340	1,780	17,700	4,150	678	1,050	2,900	1,670
21	660	7,230	9,420	3,570	1,310	1,780	*15,400	4,100	652	1,150	2,210	1,410
22	750	4,880	25,600	3,060	1,260	1,740	17,100	3,720	732	1,020	1,880	1,240
23	636	3,660	16,800	2,740	1,230	1,750	25,500	3,270	1,020	894	1,610	1,130
24	628	3,010	10,600	2,500	1,210	1,800	35,300	2,930	1,010	795	1,400	1,020
25	910	2,620	8,000	2,430	1,170	2,020	29,300	2,600	849	723	1,330	960
26	1,340	2,150	6,360	2,430	1,150	2,160	23,100	2,430	804	894	1,410	912
27	1,210	1,740	12,200	2,810	1,140	2,220	16,400	2,240	876	960	1,470	867
28	1,020	1,610	15,400	3,330	1,130	2,400	12,200	2,140	894	894	1,340	912
29	840	1,710	10,400	2,950	-	2,570	11,400	2,220	813	1,620	1,210	1,020
30	*869	2,050	7,810	2,800	-------	2,670	15,200	2,200	705	3,690	1,130	1,070
31	644	-------	6,320	2,320	-------	2,820	-------	1,950	-------	2,730	1,070	-------
Total	18,620	80,416	177,980	91,010	42,810	54,790	339,220	188,590	32,858	32,381	44,510	31,278
Mean	601	2,681	5,741	2,936	1,529	1,767	11,310	6,084	1,095	1,045	1,436	1,043
Cfsm	0.518	2.31	4.94	2.53	1.32	1.52	9.74	5.24	0.943	0.900	1.24	0.898
In.	0.60	2.58	5.70	2.92	1.38	1.75	10.87	6.04	1.05	1.04	1.43	1.00

Calendar year 1957: Max 25,600 Min 346 Mean 1,710 Cfsm 1.47 In. 20.00
Water year 1957-58: Max 35,300 Min 346 Mean 3,108 Cfsm 2.68 In. 36.36

Peak discharge (base, 13,000 cfs).--Dec. 22 (time unknown) about 28,000 cfs; Dec. 28 (12:30 a.m.) 17,700 cfs (8.44 ft); Apr. 24 (11 a.m.) 36,300 cfs (11.88 ft); Apr. 30 (11 p.m.) 17,700 cfs (8.45 ft); May 9 (8 to 9 p.m.) 15,200 cfs (7.90 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 1-6, 13-19, Jan. 4 to Mar. 11.

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 1958. Records prior to 1910 republished with some revisions in WSP 279.

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.--56 years (1902-58), 11,530 cfs (unadjusted).

Extremes.--Maximum discharge during year, 104,000 cfs Apr. 24 (gage height, 19.22 ft); minimum daily, 3,130 cfs Oct. 17; minimum gage height, 1.87 ft Oct. 19.
1901-58: 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 vegetation, which are fair. Flow regulated by several reservoirs above station (see p. 42).

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

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

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,940	4,500	10,500	25,400	11,300	6,220	14,100	58,900	9,560	5,110	13,200	8,440
2	3,900	4,960	10,300	24,200	10,800	6,340	14,800	50,800	9,240	5,250	11,900	7,680
3	3,570	5,450	9,120	19,500	10,400	6,710	15,000	44,700	9,790	*5,660	10,100	8,140
4	3,550	9,270	7,690	14,800	9,820	6,910	15,700	39,900	10,200	5,840	8,950	8,330
5	3,570	14,300	7,310	13,900	9,320	7,210	17,000	38,600	9,560	5,310	8,800	7,920
6	3,900	15,000	8,050	13,600	8,720	8,000	18,800	31,400	7,650	5,360	8,750	7,650
7	3,590	13,100	8,490	13,200	8,410	8,550	20,800	28,000	7,840	5,000	*8,490	7,180
8	3,610	11,900	9,700	11,900	8,270	8,550	22,200	28,000	7,550	5,110	7,890	9,180
9	3,420	11,400	11,100	10,600	8,300	8,830	22,600	34,200	7,810	5,570	8,220	9,970
10	3,690	12,500	10,800	9,260	8,610	9,410	21,400	38,400	7,630	6,410	8,160	9,790
11	3,850	12,700	*13,100	9,120	8,980	10,400	20,800	37,800	6,410	6,390	8,580	10,200
12	3,460	11,400	20,000	10,300	9,410	11,400	20,500	34,800	*5,930	6,290	9,150	10,300
13	3,530	10,400	23,000	11,000	9,410	*12,300	21,100	35,200	6,220	7,010	9,120	9,970
14	3,360	9,700	22,000	*10,900	9,260	13,200	21,700	35,500	6,340	8,660	7,470	9,410
15	3,230	9,560	21,300	10,300	9,180	13,200	23,800	32,900	6,660	8,160	7,240	9,030
16	*3,460	11,100	20,800	9,700	8,830	13,000	26,500	*29,900	6,910	7,110	7,110	8,240
17	3,130	12,700	18,000	9,850	8,550	12,900	31,800	27,500	6,150	6,840	6,610	7,970
18	3,250	13,100	15,400	10,200	8,270	12,800	39,400	24,600	6,170	6,860	7,290	8,050
19	3,340	13,400	14,100	10,800	8,000	12,500	46,600	22,400	6,220	6,680	13,400	8,610
20	3,900	15,600	*14,500	11,700	7,730	12,200	53,300	20,800	6,760	6,510	21,800	8,980
21	3,710	21,600	21,200	11,500	7,600	11,900	53,400	19,000	7,140	7,060	20,200	8,830
22	4,420	20,800	53,500	11,400	7,340	10,900	53,700	20,600	6,410	7,390	16,800	8,190
23	4,270	18,200	57,100	11,500	7,210	10,900	71,400	19,700	6,120	6,860	15,500	8,240
24	4,130	16,200	44,300	11,400	6,960	*11,200	99,500	19,100	7,080	5,750	14,300	8,050
25	4,520	14,600	38,700	11,400	7,210	11,500	98,400	18,500	7,550	6,150	12,300	*7,600
26	5,660	13,100	31,600	11,500	7,210	11,700	88,600	17,700	6,610	5,890	12,500	7,240
27	6,120	10,100	32,100	12,200	6,960	12,000	79,500	15,100	7,060	6,030	12,900	7,160
28	5,380	9,030	43,700	13,300	6,580	12,600	*82,900	11,400	7,240	5,980	12,100	7,420
29	5,110	9,030	39,100	13,600	-	13,200	55,600	10,400	6,880	6,940	11,400	7,290
30	4,610	9,970	33,400	13,000	---------	13,600	56,400	10,500	5,360	13,500	9,820	7,680
31	4,630	---------	28,700	12,100	--- ---	13,700	---------	9,440	---------	15,500	9,320	---------
Total	123,810	364,670	698,660	393,130	238,640	333,830	‡1,207.3	865,740	218,050	212,180	339,370	252,740
Mean	3,994	12,160	22,540	12,680	8,523	10,770	40,240	27,930	7,268	6,845	10,950	8,425
(†)	-1,846	+3,501	+5,503	-77	-2,248	-3,017	+12,130	+5,839	-1,409	-894	-962	-3,996

Adjusted for change in reservoir contents

Mean	2,148	15,660	28,040	12,600	6,275	7,753	52,370	33,770	5,859	5,951	9,988	4,429
Cfsm	0.325	2.37	4.25	1.91	0.951	1.17	7.93	5.12	0.888	0.902	1.51	0.671
In.	0.37	2.64	4.90	2.20	0.99	1.35	8.85	5.90	0.99	1.04	1.74	0.75

	Observed				Adjusted			
Calendar year 1957:	Max 57,100	Min 3,130	Mean 8,858		Mean 9,092	Cfsm 1.38	In. 18.69	
Water year 1957-58:	Max 99,500	Min 3,130	Mean 14,380		Mean 15,430	Cfsm 2.34	In. 31.72	

* 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.
‡ Expressed in thousands.
Note.--Stage-discharge relation affected by ice Jan. 6-26, Feb. 7 to Mar. 11. Backwater from aquatic vegetation Oct. 1-30, Aug. 10-18, Aug. 27 to Sept. 30.

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 1958.

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.--43 years, 490 cfs.

Extremes.--Maximum discharge during year, 2,350 cfs Apr. 25 (gage height, 5.50 ft); minimum, 51 cfs Oct. 19 (gage height, 0.72 ft).
1915-58: 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 periods of ice effect, which are fair.

Revisions.--WSP 821: Drainage area.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.7	48	2.5	560
.8	62	3.0	780
.9	78	3.5	1,050
1.1	114	4.0	1,340
1.5	205	5.5	2,350
2.0	365		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73	95	241	1,060	676	365	745	1,870	865	411	*690	321
2	72	104	265	1,070	644	375	790	1,840	900	384	676	283
3	68	130	260	965	620	365	820	1,820	930	395	620	252
4	65	187	255	860	600	365	855	1,780	930	376	544	232
5	64	264	245	760	580	375	910	1,730	910	343	460	213
6	62	318	240	665	550	370	1,040	1,640	860	307	384	200
7	62	328	235	580	530	365	1,200	1,570	815	280	318	189
8	61	310	229	560	520	373	1,260	1,550	765	264	283	200
9	61	300	287	550	530	376	1,260	1,540	694	264	271	208
10	61	300	350	550	560	388	1,230	1,520	612	264	264	218
11	59	290	660	540	600	430	1,180	1,500	520	267	252	252
12	58	271	915	535	630	*524	1,180	1,540	476	280	241	271
13	56	244	1,060	530	640	600	1,200	1,580	460	304	224	277
14	55	218	1,060	530	610	640	1,210	1,580	457	324	213	267
15	54	213	1,020	530	570	676	1,250	1,530	449	324	205	252
16	*54	229	954	525	530	620	1,310	1,470	433	314	200	238
17	52	267	870	520	490	628	1,410	1,400	418	314	195	226
18	52	304	765	524	450	628	1,510	1,330	403	307	208	241
19	54	339	660	555	420	596	1,600	1,260	380	296	318	293
20	61	392	620	580	*405	564	1,640	1,200	354	293	433	358
21	62	441	735	660	385	532	1,670	1,130	332	293	492	392
22	65	457	925	685	375	524	1,710	1,070	343	290	496	395
23	65	441	1,020	584	365	516	2,020	966	339	274	464	380
24	70	403	1,060	568	360	516	2,290	855	332	255	414	354
25	81	358	1,040	552	335	540	2,340	755	321	238	380	328
26	95	307	960	556	335	568	2,300	680	343	216	376	307
27	104	260	1,080	616	330	592	2,200	632	411	202	403	293
28	108	229	1,170	690	330	628	*2,040	604	468	195	422	293
29	106	216	1,180	712	-	662	1,930	636	480	265	418	296
30	99	213	1,160	716	-------	685	1,900	726	453	480	399	300
31	97	-------	1,100	698	-------	716	-------	810	-------	632	361	-------
Total	2,156	8,428	22,621	20,028	13,970	16,102	44,000	40,114	16,453	9,651	11,624	8,329
Mean	69.5	281	730	648	499	519	1,467	1,294	548	311	375	278
Cfsm	0.232	0.940	2.44	2.16	1.67	1.74	4.91	4.33	1.83	1.04	1.25	0.930
In.	0.27	1.05	2.81	2.49	1.74	2.01	5.48	4.99	2.04	1.20	1.44	1.04

Calendar year 1957: Max 1,180 Min 52 Mean 344 Cfsm 1.15 In. 15.60
Water year 1957-58: Max 2,340 Min 52 Mean 585 Cfsm 1.96 In. 26.56

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27, Dec. 2-7, 13, 18, 19, Jan. 1-6, 8-17, 19-22, Feb. 3 to Mar. 6.

360. Penobscot River at Passadumkeag, Maine

Location.--Lat 45°10'55", long 68°37'20", on left bank at Passadumkeag, Penobscot County, at head of Passadumkeag Rips, 1,200 ft downstream from Passadumkeag River.

Drainage area.--7,000 sq mi, approximately (including about 240 sq mi drained by Chamberlain Lake through Telos Canal).

Records available.--October 1938 to September 1958 (discontinued). October, November 1938 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 123.6 ft above mean sea level, unadjusted.

Average discharge.--20 years, 12,180 cfs (unadjusted).

Extremes.--Maximum discharge during year, 113,000 cfs Apr. 24 (gage height, 12.81 ft); minimum daily, 3,480 cfs Oct. 17.
1938-58: Maximum discharge, 126,000 cfs Apr. 14, 1940 (gage height, 13.62 ft); minimum, 2,600 cfs Sept. 1, 1941 (gage height, 2.44 ft).

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by several reservoirs above station (see p. 42).

Revisions (water years).--WSP 1171: 1940.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.7	3,370	6.0	19,700
3.0	4,060	7.0	28,200
3.5	5,650	9.0	50,600
4.0	7,500	11.0	79,500
5.0	12,800	12.5	107,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,220	4,680	10,800	27,100	12,700	6,740	15,600	61,700	11,200	5,510	14,000	8,730
2	4,090	5,220	10,600	26,000	11,600	6,670	16,600	54,000	10,800	5,610	12,400	7,950
3	3,800	6,120	9,400	21,800	10,500	6,740	16,600	47,600	11,400	6,150	10,500	8,260
4	3,770	11,400	8,300	17,200	9,620	7,120	17,600	42,200	11,800	6,260	9,140	8,450
5	3,800	16,100	7,800	15,900	9,350	7,700	19,200	38,100	11,000	5,690	9,040	8,130
6	4,090	15,800	7,500	15,300	9,140	8,130	21,700	33,900	8,930	5,690	8,780	7,700
7	3,820	14,500	9,200	13,200	9,090	8,690	23,300	30,400	8,990	5,290	8,540	7,120
8	3,840	12,800	10,500	11,900	8,930	8,830	25,100	30,500	8,640	5,400	7,830	9,350
9	3,700	11,800	11,500	11,000	9,250	9,090	24,400	36,700	8,880	5,830	8,170	10,300
10	3,890	13,000	11,200	10,100	9,460	9,900	22,900	40,300	8,450	6,560	8,400	10,100
11	4,110	13,200	14,000	10,500	9,900	10,500	22,300	39,700	7,230	6,590	8,730	10,600
12	3,770	12,200	23,400	11,100	10,300	11,600	22,200	37,000	*6,700	6,520	9,300	10,600
13	3,800	11,000	24,100	11,200	10,100	12,800	23,300	37,300	6,890	7,270	9,460	10,300
14	3,660	10,200	23,100	11,200	9,900	13,600	24,400	37,600	7,080	8,690	7,750	9,620
15	3,520	10,000	22,400	11,000	9,570	14,100	26,900	*35,300	7,270	8,310	7,390	9,300
16	*3,730	12,000	22,100	10,500	9,190	14,200	29,900	32,400	7,580	7,230	7,230	8,310
17	3,480	13,000	18,800	10,200	8,830	14,200	36,500	29,900	6,080	7,040	6,700	8,130
18	3,590	13,600	16,700	10,600	8,450	14,300	44,000	27,000	6,820	6,970	7,230	8,040
19	3,680	15,000	15,600	11,800	8,130	13,900	52,000	25,000	6,780	6,740	13,900	8,990
20	4,250	18,500	16,400	12,500	7,910	13,400	56,500	23,300	7,200	6,670	22,600	9,350
21	4,010	22,200	27,000	12,400	7,500	13,000	54,600	21,200	7,580	7,120	20,700	9,250
22	4,650	21,000	55,200	12,400	7,420	11,800	57,300	23,000	6,970	7,390	17,200	8,590
23	4,500	19,000	58,100	12,300	7,350	12,300	78,000	22,000	6,630	6,970	15,800	8,540
24	4,300	17,000	44,800	12,200	7,460	12,200	107,000	21,000	7,500	5,900	14,700	8,310
25	4,910	15,200	36,200	12,100	7,660	12,700	107,000	20,300	8,000	6,150	12,800	7,700
26	6,150	14,000	32,800	11,600	8,000	12,600	94,000	19,400	7,010	5,940	12,900	7,420
27	6,480	11,800	33,200	12,800	7,500	13,200	80,400	16,500	7,580	6,080	13,500	7,270
28	5,720	9,400	47,300	14,600	7,120	14,000	67,400	12,600	7,750	5,970	12,700	7,580
29	5,510	9,300	41,000	15,300	-	14,900	59,300	11,800	7,350	6,860	12,000	7,460
30	4,810	10,300	35,300	14,600	--------	14,700	59,500	12,000	5,940	13,700	10,300	7,790
31	4,840	--------	31,100	13,500	--------	15,400	--------	11,000	--------	15,800	9,680	--------
Total	132,490	389,320	735,400	423,900	251,930	359,010	‡1,305.5	930,700	242,030	217,900	349,370	259,240
Mean	4,274	12,980	23,720	13,670	8,998	11,580	43,520	30,020	8,068	7,029	11,270	8,641
(†)	-1,846	+3,501	+5,503	-77	-2,248	-3,017	+12,130	+5,839	-1,409	-894	-962	-3,996

Adjusted for change in reservoir contents

Mean	2,428	16,480	29,220	13,590	6,750	8,563	55,650	35,860	6,659	6,135	10,310	4,645
Cfsm	0.347	2.35	4.17	1.94	0.964	1.22	7.95	5.12	0.951	0.876	1.47	0.664
In.	0.40	2.62	4.81	2.24	1.00	1.41	8.87	5.90	1.06	1.01	1.70	0.74

	Observed			Adjusted		
Calendar year 1957:	Max 58,100	Min 3,480	Mean 9,482	Mean 9,696	Cfsm 1.39	In. 18.79
Water year 1957-58:	Max 107,000	Min 3,480	Mean 15,330	Mean 16,380	Cfsm 2.34	In. 31.76

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in reservoirs in West and East Branches of Penobscot River, also Sebec Lake and Wilson Pond in Piscataquis River basin.
‡ Expressed in thousands.
Note.--Stage-discharge relation affected by ice Dec. 13-15, Jan. 5-28, Feb. 2 to Mar. 17. No gage-height record Nov. 7 to Dec. 12, Dec. 24-26; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.

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 1958.

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

Average discharge.--17 years, 308 cfs.

Extremes.--Maximum discharge during year, 3,120 cfs Apr. 24 (gage height, 8.94 ft); minimum, 2.1 cfs Oct. 11.
1941-58: 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 into Kenduskeag Stream; at low stages of Souadabscook Stream all flow continues down its own channel.

Rating tables, water year 1957-58, except periods of ice effect or backwater from aquatic growth (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 7				Apr. 8 to Sept. 30	
1.0	1.0	2.5	153	4.0	560
1.2	6.0	3.0	263	6.0	1,480
1.3	11	4.0	560	9.0	3,160
1.5	25	6.0	1,380	Note.--Same as preceding table below 4.0 ft.	
1.7	42	8.0	2,370		
2.0	76				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	12	194	578	630	80	1,250	1,560	293	47	126	41
2	2.8	17	239	967	580	90	1,350	1,030	398	39	84	32
3	2.6	31	207	835	525	91	1,540	728	512	36	54	26
4	2.4	80	142	670	480	93	1,660	616	398	35	39	23
5	2.4	91	106	560	445	104	1,880	529	306	30	31	21
6	2.3	77	75	430	415	122	2,190	440	221	27	28	22
7	2.4	62	66	340	400	152	2,340	384	159	25	*24	30
8	2.3	49	122	390	385	194	2,570	525	124	26	26	56
9	2.4	46	232	459	460	265	2,000	1,380	104	30	29	96
10	2.4	61	232	459	525	340	1,660	1,280	87	31	28	68
11	2.3	58	660	416	430	490	1,640	827	76	30	24	56
12	2.3	50	*1,010	378	370	630	1,620	1,080	71	31	22	47
13	2.3	46	943	322	315	835	1,880	1,520	*64	40	19	39
14	2.3	41	839	270	265	875	*1,960	1,090	70	55	17	32
15	2.4	45	670	253	240	790	2,000	792	83	45	17	28
16	2.3	170	470	278	210	710	2,130	*600	66	39	16	23
17	*2.6	161	322	459	178	630	2,370	492	58	43	16	22
18	2.6	194	344	762	152	580	2,380	422	51	51	19	*22
19	4.1	173	305	812	136	525	2,190	375	46	42	176	50
20	7.5	361	305	746	*114	490	1,890	456	40	36	188	130
21	9.0	361	1,140	645	104	*445	1,540	434	38	42	112	108
22	10	273	2,330	595	94	430	*1,390	392	50	34	86	86
23	10	205	1,740	710	90	420	2,180	311	120	27	64	70
24	10	163	1,050	630	80	490	2,980	249	96	23	48	53
25	10	137	746	560	76	595	2,080	203	68	19	42	44
26	11	98	592	630	80	710	1,360	192	68	18	73	38
27	17	96	1,190	835	80	835	926	169	110	22	90	36
28	15	75	1,240	1,230	80	875	724	151	100	26	80	39
29	12	76	919	1,040	-	955	858	198	75	60	70	55
30	11	119	718	875	--------	1,040	1,550	369	58	280	56	51
31	11	--------	612	*710	--------	1,120	--------	304	--------	198	48	--------
Total	182.1	3,428	19,760	18,844	7,939	16,001	54,088	19,098	4,010	1,487	1,732	1,444
Mean	5.87	114	637	608	284	516	1,803	616	134	48.0	56.5	48.1
Cfsm	0.033	0.640	3.58	3.42	1.60	2.90	10.1	3.46	0.753	0.270	0.317	0.270
In.	0.04	0.71	4.13	3.94	1.67	3.34	11.27	3.99	0.84	0.31	0.37	0.30

Calendar year 1957: Max 2,330 Min 2.3 Mean 204 Cfsm 1.15 In. 15.54
Water year 1957-58: Max 2,980 Min 2.3 Mean 406 Cfsm 2.28 In. 30.91

Peak discharge (base, 1,600 cfs).--Dec. 22 (3 p.m.) 2,500 cfs (8.21 ft); Apr. 8 (2 a.m.) 2,700 cfs (8.24 ft); Apr. 17 (6 p.m.) 2,430 cfs (7.79 ft); Apr. 24 (8 a.m.) 3,120 cfs (8.94 ft); Apr. 30 (9 p.m.) 1,850 cfs (6.74 ft); May 13 (4 a.m.) 1,640 cfs (6.32 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 3-8, Jan. 21 to Apr. 2. Backwater from aquatic growth Oct. 1 to Nov. 15, June 10 to Sept. 30 (no gage-height record Aug. 26 to Sept. 26; discharge estimated on basis of 1 measurement, recorded range in stage, weather records, and records for nearby streams.

270. Reservoirs in Penobscot River basin, Maine

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, 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.

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, for power and log driving; usable capacity of reservoir, 15,000,000,000 cu ft. Records furnished by Great Northern Paper Co.

Chamberlain and Telos Lakes and Round Pond in East Branch Penobscot River basin are controlled by dams in outlet of Chamberlain and Telos Lakes, although regulation is at Telos Dam, in T. 6, R. 11, Piscataquis County. 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.

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; usable capacity, 1,785,000,000 cu ft between elevations 643.0 and 655.0 ft. Records furnished by Bangor Hydro-Electric Co.

Sebec Lake on Sebec River at Sebec, Piscataquis County, 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.

Wilson Pond on Wilson Stream, 2¾ miles east of Greenville, Piscataquis County, 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.

Month-end contents, in millions of cubic feet, water year October 1957 to September 1958

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, 1957	8,737	3,936	1,531
Oct. 31	4,876	3,650	824
Nov. 30	10,283	5,525	2,526
Dec. 31	24,433	5,781	2,856
Jan. 31, 1958	26,121	4,223	2,520
Feb. 28	22,583	2,897	1,947
Mar. 31	17,223	747	1,378
Apr. 30	43,899	3,939	2,960
May 31	57,789	5,956	2,689
June 30	54,261	6,125	2,396
July 31	51,598	6,161	2,630
Aug. 31	50,282	5,189	2,362
Sept. 30	43,111	2,830	1,514

† 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 1958.

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

Average discharge.--20 years, 233 cfs.

Extremes.--Maximum discharge during year, 1,460 cfs Apr. 23 (gage height, 5.87 ft); minimum, 5.1 cfs Oct. 3 (gage height, 1.67 ft).
1938-58: 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 1958 are given in WSP 1571.

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

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	3.3	2.6	93
1.7	5.9	3.0	180
1.9	14	3.5	325
2.0	20	4.0	520
2.2	38	5.0	970
2.4	62	6.0	1,550

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.9	15	217	800	692	178	800	865	*185	46	180	102
2	5.6	22	132	890	624	173	850	740	214	53	161	97
3	5.4	64	112	672	540	168	855	660	229	59	147	90
4	5.4	83	85	588	476	166	880	652	188	53	140	85
5	5.6	54	72	508	420	173	885	600	166	49	131	83
6	5.9	39	64	444	360	182	890	512	149	49	122	77
7	7.0	32	61	376	319	192	1,130	476	138	53	118	76
8	7.0	29	77	372	301	190	1,080	690	127	68	147	88
9	8.9	34	83	339	286	190	1,000	800	108	80	185	90
10	8.5	37	88	304	*275	220	930	664	97	71	151	83
11	8.9	32	305	280	260	342	875	632	90	87	131	102
12	8.9	29	368	259	250	432	865	830	82	116	118	95
13	8.9	26	289	229	240	424	900	790	77	99	110	83
14	8.9	26	262	208	225	448	*845	672	68	85	106	77
15	8.9	64	250	200	215	432	795	600	62	80	101	72
16	9.2	97	244	223	200	424	755	548	57	110	101	71
17	9.6	80	232	328	192	392	740	500	56	313	97	71
18	10	79	205	372	186	364	785	452	54	192	101	93
19	12	104	198	342	176	360	780	420	54	166	140	149
20	15	151	223	336	168	360	765	404	53	217	129	118
21	16	106	525	322	161	353	750	353	62	182	112	99
22	15	88	584	450	156	364	760	319	62	170	110	90
23	13	77	464	850	154	396	1,290	289	57	166	114	85
24	13	71	444	684	151	480	1,300	265	53	158	106	74
25	16	68	424	656	161	532	1,160	244	52	142	129	66
26	16	58	410	880	182	548	1,040	238	59	138	185	64
27	16	52	865	1,050	178	592	910	214	57	154	168	61
28	14	47	688	965	173	636	835	202	52	154	147	90
29	13	59	664	925	-	616	920	214	48	230	129	95
30	*13	101	692	860	-------	640	1,000	217	47	304	118	76
31	14	-------	632	785	-------	696	-------	188	-------	112	122	-------
Total	324.5	1,824	9,959	16,497	7,721	11,663	27,370	15,250	2,803	4,055	4,046	2,602
Mean	10.5	60.8	321	532	276	376	912	492	93.4	131	131	86.7
Cfsm	0.071	0.411	2.17	3.59	1.86	2.54	6.16	3.32	0.631	0.885	0.885	0.586
In.	0.08	0.46	2.50	4.14	1.94	2.93	6.87	3.83	0.70	1.02	1.02	0.65

Calendar year 1957: Max 865 Min 5.4 Mean 145 Cfsm 0.980 In. 13.30
Water year 1957-58: Max 1,300 Min 5.4 Mean 285 Cfsm 1.93 In. 26.14

Peak discharge (base, 1,100 cfs).--Apr. 7 (1 to 3 p.m.) 1,160 cfs (5.37 ft); Apr. 23 (6 to 8 p.m.) 1,460 cfs (5.87 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 2, 3, 5, 6, Feb. 5, 6, 10-20, 23.

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 1958.

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, 17.52 ft June 17, 18; minimum observed, 12.47 ft Oct. 31 to Nov. 2.
1895-1958: Maximum gage height, 18.0 ft May 30, 1902; minimum, 10.0 ft or lower, present datum, Mar. 20-20, 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. During April to September some water was diverted through gates in dam at West Outlet.

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

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

Capacity table, water year 1957-58 (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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.96	12.47	14.01	16.56	16.80	15.60	13.86	15.10	17.40	16.98	17.06	16.62
2	13.92	12.47	14.10	16.69	16.78	15.61	13.76	15.35	17.50	16.97	17.05	16.60
3	13.86	12.51	14.15	16.75	16.72	15.60	13.62	15.55	17.50	16.97	17.05	16.55
4	13.82	12.56	14.20	16.75	16.66	15.57	13.55	15.79	17.47	16.98	17.04	16.49
5	13.80	12.60	14.27	16.73	16.62	15.54	13.47	16.00	17.45	16.95	17.06	16.46
6	13.72	12.63	14.28	16.73	16.55	15.48	13.39	16.16	17.44	16.92	17.02	16.40
7	13.63	12.63	14.35	16.73	16.48	15.43	13.35	16.34	17.42	16.88	16.95	16.40
8	13.58	12.70	14.42	16.78	16.47	15.35	13.27	16.50	17.39	16.89	16.92	16.39
9	13.53	12.74	14.45	16.90	16.53	15.33	13.21	16.85	17.37	16.92	16.92	16.35
10	13.47	12.78	14.52	16.88	16.49	15.29	13.11	17.05	17.35	16.91	16.91	16.30
11	13.38	12.80	14.70	16.88	16.46	15.22	13.04	17.20	17.33	16.91	16.91	16.27
12	13.30	12.80	14.74	16.91	16.40	15.18	12.95	17.38	17.37	16.91	16.87	16.23
13	13.20	12.79	14.90	16.90	16.34	15.14	12.88	17.38	17.39	16.91	16.81	16.17
14	13.12	12.79	14.94	16.89	16.30	15.08	12.84	17.36	17.42	16.91	16.83	16.12
15	13.02	12.85	15.00	16.88	16.24	15.03	12.76	17.39	17.47	16.89	16.80	16.07
16	12.97	12.88	15.02	16.96	16.16	15.07	12.68	17.41	17.51	16.89	16.79	16.02
17	12.92	12.93	15.10	16.96	16.15	15.04	12.67	17.39	17.52	16.89	16.76	15.98
18	12.87	13.02	15.13	16.98	16.05	14.98	12.65	17.42	17.52	16.90	16.76	15.97
19	12.82	13.05	15.13	16.98	15.97	14.90	12.65	17.50	17.47	16.86	16.77	15.96
20	12.88	13.25	15.23	16.98	15.88	14.83	12.66	17.48	17.40	16.90	16.77	15.95
21	12.78	13.33	15.32	16.97	15.81	14.77	12.77	17.48	17.33	16.91	16.77	15.88
22	12.77	13.41	15.60	16.96	15.74	14.64	12.93	17.50	17.36	16.90	16.77	15.82
23	12.70	13.50	15.78	16.98	15.67	14.64	13.11	17.51	17.34	16.89	16.77	15.80
24	12.68	13.56	15.82	16.96	15.58	14.55	13.43	17.50	17.29	16.88	16.76	15.78
25	12.70	13.63	15.95	16.96	15.57	14.48	13.70	17.49	17.25	16.87	16.72	15.72
26	12.70	13.70	16.01	16.95	15.60	14.40	14.00	17.47	17.20	16.88	16.72	15.68
27	12.65	13.75	16.21	16.95	15.58	14.30	14.16	17.45	17.17	16.88	16.71	15.61
28	12.57	13.81	16.38	16.93	15.54	14.22	14.35	17.42	17.13	16.87	16.70	15.61
29	12.55	13.88	16.43	16.90	-	14.13	14.58	17.42	17.09	16.91	16.65	15.57
30	12.50	13.98	16.47	16.87	------	14.05	14.83	17.40	17.03	17.03	16.63	15.52
31	12.47	------	16.52	16.84	------	13.95	------	17.41	------	17.06	16.63	------
(†)	7,713	12,474	20,577	21,606	17,436	12,379	15,172	23,444	22,218	22,314	20,930	17,372
(‡)	-4,824	+4,761	+8,103	+1,029	-4,170	-5,057	+2,793	+8,272	-1,226	+96	-1,384	-3,558

Calendar year 1957..... ‡ 6,611
Water year 1957-58..... ‡ 4,835

† Contents, in millions of cubic feet, at end of month.
‡ Change in contents, in millions of cubic feet.
Note.--Diversion through West Outlet: April, 170 cfs; May, 480 cfs; June, 80 cfs; July, 70 cfs; August, 70 cfs; September, 50 cfs.

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 1958.

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.--39 years, 1,860 cfs (unadjusted).

Extremes.--Maximum discharge during year, 6,200 cfs June 3 (gage height, 6.35 ft); minimum, 91 cfs Nov. 16 (gage height, 2.07 ft).
1919-58: 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 p. 44) and by Brassua Lake and Second and First Roach Ponds (see p. 55).

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

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.0	70	4.0	1,750
2.2	130	4.5	2,500
2.4	220	5.0	3,360
2.7	420	5.5	4,340
3.0	650	6.0	5,410
3.5	1,110	6.5	6,560

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,550	1,260	310	150	2,280	2,950	*4,320	3,460	1,440	2,550	1,070	1,860
2	1,540	1,260	112	b146	2,220	2,930	4,300	4,550	2,470	2,340	901	1,860
3	1,540	1,280	380	b430	2,900	3,490	4,420	3,600	3,520	1,380	892	2,260
4	1,790	635	602	1,110	2,920	3,800	4,380	1,940	2,420	1,260	1,470	2,360
5	2,300	170	300	1,390	2,880	3,820	4,360	2,010	1,730	1,540	1,960	2,370
6	2,480	175	112	1,390	2,850	3,800	4,360	1,760	1,870	1,740	2,140	2,360
7	2,440	175	112	1,400	2,830	3,800	4,340	2,020	1,820	2,830	2,480	2,340
8	2,420	175	280	1,420	2,320	3,530	4,340	2,140	1,900	2,850	2,180	2,340
9	2,400	180	682	1,420	2,230	3,780	4,340	4,290	1,160	2,530	1,480	2,320
10	2,610	175	320	1,420	3,100	3,820	4,340	5,410	805	2,440	1,360	2,310
11	2,690	170	118	1,400	3,340	3,800	4,380	4,390	315	2,440	1,670	*2,310
12	2,560	415	121	1,600	3,320	3,840	4,360	4,230	166	2,280	1,940	2,280
13	3,090	562	b120	2,250	3,290	3,900	3,150	5,010	166	1,750	1,940	1,970
14	2,960	1 080	b120	2,500	3,270	3,860	3,410	4,150	166	2,170	1,920	1,790
15	2,640	760	b120	2,500	3,250	3,840	4,280	3,940	162	1,940	1,900	2,090
16	2,650	265	415	2,500	3,320	3,840	3,990	5,040	162	1,950	1,900	2,260
17	2,310	100	766	2,480	3,680	4,120	3,820	5,130	730	1,960	1,900	1,960
18	2,280	100	766	1,860	3,840	4,260	3,820	2,700	2,220	1,950	1,900	1,680
19	2,110	103	775	1,400	3,780	4,240	3,170	4,970	2,390	1,780	1,950	1,670
20	2,060	109	775	2,020	3,740	4,300	2,600	5,630	2,360	1,510	1,920	1,670
21	1,900	106	370	2,500	3,700	4,300	2,470	5,650	1,760	1,950	1,900	1,620
22	1,690	106	146	2,520	3,660	4,320	2,450	5,700	1,960	1,950	1,900	1,710
23	1,670	103	150	2,500	3,630	4,300	1,600	5,700	2,390	1,940	1,900	1,820
24	1,650	100	150	2,500	3,310	4,300	1,050	4,540	2,390	1,940	1,890	1,870
25	1,550	100	146	1,710	2,930	4,260	480	870	2,530	1,940	1,890	2,000
26	1,330	103	146	1,420	2,930	4,260	357	4,240	2,660	1,680	1,900	1,980
27	1,320	b106	158	2,720	2,930	4,280	590	4,260	2,680	1,480	1,890	1,960
28	1,290	106	150	2,900	2,930	4,280	1,770	4,280	2,660	1,940	1,890	1,950
29	1,270	103	146	2,900	-	4,300	3,480	3,510	2,630	1,190	1,890	1,950
30	1,260	365	146	2,790	--------	4,300	3,180	2,290	2,560	162	1,880	1,920
31	1,260	--------	150	2,660	--------	*4,300	--------	2,650	-------	585	1,880	--------
Total	62,610	10,447	9,164	57,906	87,380	122,920	97,907	120,060	52,192	57,947	55,683	60,840
Mean	2,020	348	296	1,868	3,121	3,965	3,264	3,873	1,740	1,869	1,796	2,028
(†)	-1,789	+1,970	+3,621	+597	-2,046	-2,761	+4,336	+4,141	-437	-695	-708	-1,410

Adjusted for diversion and change in reservoir contents

Mean	231	2,318	3,917	2,465	1,075	1,204	7,600	8,014	1,303	1,174	1,088	618
Cfsm	0.186	1.87	3.16	1.99	0.867	0.971	6.13	6.46	1.05	0.947	0.877	0.498
In.	0.21	2.09	3.64	2.29	0.90	1.12	6.84	7.45	1.17	1.09	1.01	0.56

	Observed			Adjusted			
Calendar year 1957:	Max 3,910	Min 70	Mean 1,445	Mean 1,676	Cfsm 1.35	In. 18.33
Water year 1957-58:	Max 5,700	Min 100	Mean 2,178	Mean 2,592	Cfsm 2.09	In. 28.37

* 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.
b Stage-discharge relation affected by ice.

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 1958.

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.--57 years, 3,539 cfs (unadjusted).

Extremes.--Maximum discharge during year, 13,000 cfs Apr. 25 (gage height, 7.95 ft); minimum daily, 340 cfs June 14, 22.
1901-58: Maximum discharge, about 23,700 cfs June 18, 1917 (gage height, 10.1 ft, site and datum then in use); minimum, 85 cfs Sept. 3, 1953 (gage height, 1.02 ft).

Remarks.--Records excellent. Flow regulated by Moosehead Lake (see p. 44), Brassua Lake, and Moxie, Indian, Second and First Roach Ponds (see p. 55).

Revisions (water years).--WSP 198: Drainage area. WSP 1231: 1903-4, 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 table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

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	6.0	8,170
3.5	2,300	7.5	11,900

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,610	*2,690	1,010	1,880	2,940	2,900	*5,800	7,110	1,530	2,770	1,720	2,190
2	1,780	1,450	1,120	1,990	1,820	3,180	5,680	7,540	2,260	2,070	1,490	1,280
3	1,520	1,710	1,190	1,350	3,690	4,510	5,470	6,920	*3,420	3,000	1,220	2,760
4	2,520	2,320	1,260	1,700	3,800	4,680	5,480	2,620	2,620	715	2,700	3,820
5	3,100	1,570	965	2,400	3,450	4,140	4,880	4,340	2,420	1,800	2,220	2,870
6	3,250	1,020	785	2,090	3,430	3,800	2,560	4,230	1,870	2,140	2,480	2,480
7	2,450	1,280	840	1,980	2,830	3,860	5,170	4,850	1,900	2,550	3,000	1,190
8	2,880	1,160	725	2,580	3,110	3,420	5,320	4,320	2,480	3,080	3,020	2,740
9	3,040	620	1,400	2,270	2,100	3,240	5,390	8,290	1,210	1,860	1,420	2,410
10	3,120	545	1,180	1,840	3,660	4,120	6,010	10,400	795	2,920	1,070	1,950
11	2,760	505	1,300	2,200	4,200	3,750	5,790	8,770	695	3,540	2,300	2,920
12	2,840	1,410	1,480	2,040	3,840	5,150	5,440	8,040	610	1,230	2,450	2,430
13	2,490	1,130	1,120	3,310	3,850	4,890	2,370	8,180	350	1,150	2,940	2,650
14	2,780	1,590	970	3,040	3,900	4,700	5,160	7,240	340	3,070	2,710	1,200
15	2,780	1,000	1,150	3,090	4,120	3,380	5,920	7,610	345	2,390	3,130	2,290
16	2,780	760	1,180	3,290	3,960	2,850	5,490	7,310	460	2,980	2,110	2,800
17	2,580	720	1,960	3,170	3,900	5,160	6,160	6,530	2,100	2,660	2,070	2,910
18	2,250	1,200	1,180	2,680	3,920	5,770	7,570	4,500	2,900	1,930	3,600	2,520
19	2,000	1,040	1,490	2,210	3,710	5,490	7,570	6,300	3,320	1,540	2,040	1,880
20	2,060	1,490	1,420	3,520	3,540	5,500	6,390	7,180	2,580	1,250	2,610	1,660
21	2,220	1,950	4,440	2,800	4,400	4,720	7,490	7,770	2,850	2,590	2,110	615
22	2,250	1,710	3,680	3,020	4,290	4,760	10,000	7,540	340	2,770	2,880	*2,230
23	2,000	1,370	3,750	2,920	3,640	1,670	8,360	7,410	2,950	2,320	2,180	2,530
24	2,520	1,210	2,910	2,980	4,300	4,900	*9,400	7,170	2,800	1,280	1,520	2,750
25	1,640	1,400	1,900	2,050	2,430	4,770	11,000	4,360	3,540	2,450	3,210	2,540
26	1,310	1,340	1,740	2,820	2,880	5,030	7,490	5,100	3,040	3,070	1,910	2,090
27	1,300	825	3,250	3,340	3,540	5,010	3,870	5,360	2,890	1,320	2,310	2,380
28	1,570	710	3,440	3,500	3,600	*4,210	7,460	5,940	2,730	2,860	1,650	545
29	1,360	935	2,460	3,630	-	3,810	7,570	4,820	1,700	2,520	2,480	2,600
30	1,470	1,300	1,740	3,550	--------	4,440	7,530	2,620	3,170	1,380	2,830	2,410
31	1,330	--------	1,860	3,120	--------	5,430	--------	2,840	--------	*2,760	1,640	--------
Total	69,560	37,960	54,895	82,360	98,850	133,240	189,700	194,610	60,215	69,965	71,000	67,640
Mean	2,224	1,265	1,771	2,657	3,530	4,298	6,323	6,278	2,007	2,257	2,290	2,255
(†)	-1,918	+2,034	+3,624	+410	-2,098	-2,770	+4,303	+3,738	-524	-691	-801	-1,498

Adjusted for change in reservoir contents

Mean	326	3,299	5,395	3,067	1,432	1,528	10,630	10,020	1,483	1,566	1,489	757
Cfsm	0.208	2.10	3.44	1.95	0.912	0.973	6.77	6.38	0.945	0.997	0.948	0.482
In.	0.24	2.34	3.97	2.25	0.95	1.12	7.55	7.36	1.05	1.15	1.09	0.54

	Observed						Adjusted					
Calendar year 1957:	Max	4,440	Min	325	Mean	1,792	Mean	2,024	Cfsm	1.29	In.	17.51
Water year 1957-58:	Max	11,000	Min	340	Mean	3,096	Mean	3,425	Cfsm	2.18	In.	29.61

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Brassua and Moosehead Lakes, 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 1958. October to December 1939 monthly discharge only, 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.--19 years, 808 cfs (unadjusted).

Extremes.--Maximum discharge during year, 7,360 cfs June 12 (gage height, 9.02 ft); minimum daily, 2.9 cfs Nov. 28.
1939-58: Maximum discharge, 18,000 cfs Sept. 12, 1954 (gage height, 11.50 ft); no flow part of July 31, 1949, when flow was completely shut off by cofferdam during construction of Flagstaff Lake dam.

Remarks.--Records good except those for periods of backwater from pulpwood or no gage-height record, which are fair. Flow regulated by Flagstaff Lake (see p. 55).

Rating tables, water year 1957-58, except periods of backwater from pulpwood (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to June 12

3.4	1.9	4.5	120
3.5	4.3	5.0	285
3.6	7.7	5.5	550
3.7	12	6.0	942
3.9	26	7.0	2,230
4.1	48	8.0	4,320
4.3	78	8.5	5,690

June 13 to Sept. 30

3.4	2.4
3.5	4.9
3.6	8.1
3.7	12

Note.--Same as preceding table above 3.7 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	940	550	675	8.1	3.7	2,490	1,460	1,820	1,090	955	4.6	985
2	935	545	1,350	8.1	110	2,450	1,410	3,180	1,520	905	745	974
3	300	275	2,090	8.5	887	2,440	1,350	2,520	1,180	1,280	1,710	964
4	122	77	2,060	735	1,310	2,380	1,310	2,100	2,080	1,220	1,350	953
5	122	5.8	1,210	1,930	1,520	2,350	1,260	635	1,940	1,190	380	942
6	122	5.8	775	2,060	1,520	2,330	1,230	38	1,600	860	4.6	1,260
7	122	6.1	2,000	1,030	1,520	2,300	1,200	855	2,180	4.1	4.6	1,400
8	122	6.1	1,980	618	1,520	2,280	1,180	1,630	1,880	205	790	795
9	122	4.9	2,000	618	1,520	2,250	1,150	4,490	1,860	676	1,180	869
10	122	4.0	1,850	230	1,520	2,200	1,120	5,540	2,620	676	1,050	860
11	525	335	385	380	1,520	2,170	1,080	5,490	2,010	676	1,020	851
12	915	575	8.1	618	1,510	2,130	1,050	5,490	2,520	698	1,220	843
13	895	575	7.3	618	1,510	2,120	1,020	5,520	2,440	698	1,230	834
14	895	196	8.9	618	1,500	2,090	1,020	4,480	2,610	683	415	826
15	605	4.6	8.5	618	1,500	2,060	1,020	2,310	2,080	683	5.1	817
16	430	5.5	735	*618	1,490	2,020	1,070	3,630	3,000	315	4.9	809
17	240	6.1	1,030	270	1,490	1,980	1,200	2,470	1,510	5.7	690	1,070
18	130	6.1	1,030	6.5	1,470	1,950	1,340	2,560	29	4.9	860	980
19	130	5.2	*1,020	8.5	1,470	1,890	1,190	4,990	9.3	4.9	690	370
20	130	4.3	360	255	1,470	1,860	815	3,380	5.8	4.9	960	4.3
21	130	5.8	23	654	1,460	1,820	1,040	4,520	3.8	405	1,030	645
22	130	6.5	7.7	654	1,460	1,810	1,380	3,630	4.1	950	355	996
23	130	6.5	5.8	250	1,460	1,750	1,310	3,200	4.3	1,290	4.6	985
24	*130	4.9	6.5	4.9	2,310	1,710	680	605	4.6	1,280	670	974
25	420	3.4	7.7	4.0	2,640	1,680	*1,030	1,040	1,400	1,270	1,040	1,350
26	575	3.7	11	5.2	2,620	1,650	430	1,350	4.6	1,260	1,040	2,000
27	585	4.0	8.9	5.8	2,560	1,630	950	1,390	4.1	1,540	1,040	1,230
28	585	2.9	6.5	5.8	2,510	1,590	2,270	1,090	4.3	920	1,030	896
29	*585	1,140	6.5	4.6	-	1,560	4,500	1,880	4.3	240	1,020	1,130
30	1,120	2,070	6.5	4.3	--------	1,550	2,530	1,260	1,050	*5.4	1,010	1,680
31	1,190	--------	8.1	4.0	--------	1,510	--------	1,310	--------	4.3	996	--------
Total	13,504	6,440.2	20,681.0	12,852.3	43,380.7	62,000	39,595	84,403	36,648.2	20,909.2	23,549.4	29,292.3
Mean	436	215	667	415	1,549	2,000	1,320	2,723	1,222	674	760	976
(†)	-316	+470	+1,097	+239	-1,096	-1,527	+3,170	+978	-681	0	-357	-696

Adjusted for change in contents in Flagstaff Lake

Mean	120	685	1,764	654	453	473	4,490	3,701	541	674	403	280
Cfsm	0.231	1.32	3.39	1.26	0.871	0.910	8.63	7.12	1.04	1.30	0.775	0.538
In.	0.27	1.47	3.91	1.45	0.91	1.05	9.63	8.21	1.16	1.50	0.89	0.60

	Observed			Adjusted			
Calendar year 1957:	Max 2,330	Min 0.8	Mean 484	Mean 618	Cfsm 1.19	In. 16.14
Water year 1957-58:	Max 5,540	Min 2.9	Mean 1,077	Mean 1,189	Cfsm 2.29	In. 31.05

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Flagstaff Lake.
Note.--No gage-height record Oct. 1-24; discharge estimated on basis of recorded range in stage and records at storage dam upstream. Backwater from pulpwood Oct. 25 to Nov. 3, Nov. 11-14, 29.

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 1958. 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.--53 years (1902-7, 1910-58), 1,416 cfs (unadjusted).

Extremes.--Maximum discharge during year, 10,600 cfs Apr. 25 (gage height, 6.60 ft); minimum daily, 210 cfs Oct. 6.
1901-7, 1910-58: 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. 55).

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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.8	190	4.0	3,440
2.0	326	5.0	5,810
2.4	713	6.0	8,700
3.0	1,550	7.0	12,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,100	*1,170	1,970	978	345	2,420	1,720	5,310	1,810	1,960	627	1,160
2	1,100	1,140	1,100	874	345	2,380	1,690	6,430	1,970	500	665	1,130
3	1,100	1,170	2,550	670	835	2,400	1,620	6,190	*2,130	1,420	1,700	1,100
4	865	1,260	2,550	705	1,240	2,380	1,600	4,460	3,330	1,330	1,790	1,100
5	262	1,170	2,460	2,120	1,690	2,340	1,670	3,460	2,800	1,320	1,130	1,100
6	210	900	680	2,750	1,750	2,310	1,750	2,330	2,310	1,320	326	1,240
7	216	713	2,440	1,970	1,800	2,290	1,790	2,670	2,720	410	242	1,530
8	216	605	2,380	1,020	1,800	2,270	1,770	3,980	2,330	222	415	1,390
9	216	648	2,360	1,020	1,800	2,230	1,690	7,440	2,370	730	1,450	1,050
10	216	750	2,380	952	1,790	2,230	1,620	9,650	2,780	900	1,550	1,050
11	280	713	1,980	637	1,790	2,250	1,570	8,920	2,430	887	1,240	1,060
12	1,020	1,160	1,340	965	1,790	2,250	1,550	8,330	2,870	913	1,420	1,050
13	1,020	1,110	978	990	1,790	2,230	1,520	8,420	2,840	1,070	1,440	1,020
14	1,020	965	823	1,020	1,770	2,200	1,570	7,520	2,850	1,060	1,290	1,010
15	887	595	786	1,030	1,770	2,200	1,720	5,210	2,570	952	456	992
16	534	900	845	1,050	1,770	2,110	2,140	5,160	3,390	848	418	978
17	465	848	1,390	980	1,770	2,070	3,010	4,840	1,940	475	520	1,030
18	255	926	*1,420	515	1,750	2,070	4,250	4,070	456	475	1,340	1,340
19	255	1,010	1,420	420	*1,750	2,050	5,510	5,060	305	376	840	1,180
20	465	1,420	1,410	*420	1,750	2,000	5,280	6,710	255	376	1,280	992
21	503	1,330	2,760	990	1,750	1,960	5,060	6,740	229	437	1,300	990
22	401	1,020	4,460	1,100	1,740	1,930	7,400	5,830	255	1,090	1,080	*1,690
23	334	811	2,830	965	1,740	1,890	9,110	6,050	262	1,470	1,500	1,580
24	326	691	1,960	525	2,250	1,890	*9,270	3,620	236	1,450	1,230	1,170
25	409	616	1,470	430	2,590	1,870	9,200	1,700	1,500	1,450	1,240	1,170
26	887	534	1,230	400	2,540	1,820	6,550	2,200	312	1,530	1,380	2,070
27	835	437	2,360	410	2,500	1,770	5,490	2,090	248	1,690	1,340	1,640
28	811	484	2,160	435	2,440	1,750	5,190	1,910	248	1,410	1,260	1,070
29	786	940	1,640	410	-	1,750	7,400	2,400	222	1,210	1,240	1,070
30	1,050	2,630	1,270	375	--------	1,770	6,630	2,470	290	1,270	1,210	1,670
31	1,650	--------	1,070	350	--------	1,750	--------	2,070	--------	913	1,180	--------
Total	19,694	28,666	56,472	27,476	48,645	64,830	116,340	153,240	48,258	31,464	34,099	36,622
Mean	635	956	1,822	886	1,737	2,091	3,878	4,943	1,609	1,015	1,100	1,221
(†)	-330	+351	+1,136	+200	-1,096	-1,527	+3,477	+974	-727	+13	-343	-724

Adjusted for change in reservoir contents

Mean	305	1,307	2,958	1,086	641	564	7,355	5,917	882	1,028	757	497
Cfsm	0.350	1.50	3.39	1.25	0.735	0.647	8.43	6.79	1.01	1.18	0.868	0.570
In.	0.40	1.67	3.91	1.44	0.77	0.75	9.40	7.82	1.13	1.36	1.00	0.64

	Observed			Adjusted		
Calendar year 1957:	Max 4,460	Min 124	Mean 942	Mean 1,077	Cfsm 1.24	In. 16.76
Water year 1957-58:	Max 9,650	Min 210	Mean 1,824	Mean 1,946	Cfsm 2.23	In. 30.29

* 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. 17-19, Jan. 12 to Feb. 28.

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 1958.

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

Average discharge.--27 years, 173 cfs.

Extremes.--Maximum discharge during year, 5,180 cfs Dec. 21 (gage height, 10.96 ft); minimum, 6.9 cfs Oct. 11.
1931-58: 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, backwater from rocks on control, or no gage-height record, which are fair.

Revisions.--WSP 1171: Drainage area.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	*30	160	396	88	73	154	1,300	131	30	135	*18
2	12	38	134	315	84	71	157	1,100	183	31	91	17
3	11	265	108	232	84	70	166	912	*199	36	63	17
4	10	675	126	206	82	68	210	740	156	29	60	15
5	9.5	450	124	176	81	65	287	662	121	24	83	14
6	8.2	265	120	148	81	67	384	618	100	22	71	14
7	7.8	174	106	126	81	67	413	613	81	23	53	23
8	7.8	130	110	118	81	64	361	915	71	28	54	89
9	7.8	385	110	108	81	60	305	2,000	65	48	93	64
10	7.5	400	124	104	81	62	282	1,330	58	34	89	54
11	7.2	260	401	100	81	81	287	880	52	40	59	60
12	7.5	178	396	96	*79	106	300	824	51	84	47	47
13	7.8	138	324	90	79	*113	335	873	44	321	41	46
14	7.8	116	289	88	79	106	407	708	48	222	41	33
15	7.8	270	235	84	79	102	523	589	48	135	34	30
16	7.5	455	178	*96	79	98	842	510	41	114	33	27
17	*7.5	360	150	184	79	92	1,350	446	38	190	*32	25
18	7.5	285	*120	220	79	90	1,860	410	35	141	40	46
19	14	435	112	305	78	84	2,330	424	31	107	54	*143
20	84	1,280	280	635	78	81	2,220	533	29	118	51	128
21	77	850	3,390	595	78	81	2,210	*492	29	91	41	87
22	58	500	3,180	305	78	78	2,940	415	45	62	36	71
23	44	360	1,600	200	78	*79	*4,440	340	52	50	32	70
24	44	289	968	160	76	84	*3,350	278	41	40	32	55
25	*112	230	619	148	74	94	2,660	233	36	41	30	42
26	100	162	538	146	73	94	1,800	202	33	70	28	34
27	75	120	2,760	160	73	96	1,140	170	37	76	25	33
28	56	136	1,770	134	71	106	899	156	35	68	24	43
29	44	*142	1,010	112	-	119	1,590	153	30	270	22	54
30	41	166	627	98	-------	132	*1,430	140	*27	371	21	46
31	34	-------	466	92	-------	148	-------	119	-------	*222	19	-------
Total	937.2	9,544	20,635	5,977	2,215	2,731	35,632	19,085	1,947	3,138	1,542	1,445
Mean	30.2	318	666	193	79.1	88.1	1,188	616	64.9	101	49.7	48.2
Cfsm	0.332	3.49	7.31	2.12	0.868	0.967	13.0	6.76	0.712	1.11	0.546	0.529
In.	0.38	3.89	8.43	2.44	0.90	1.15	14.99	7.79	0.74	1.28	0.63	0.55

Calendar year 1957: Max 3,390 Min 5.0 Mean 157 Cfsm 1.72 In. 23.37
Water year 1957-58: Max 4,440 Min 7.2 Mean 287 Cfsm 3.15 In. 43.17

Peak discharge (base, 1,200 cfs).--Nov. 20 (7 a.m.) 1,370 cfs (8.10 ft); Dec. 21 (5 p.m.) 5,180 cfs (10.96 ft); Dec. 27 (10 a.m.) 3,000 cfs (9.54 ft); Apr. 23 (3:30 p.m.) 4,880 cfs (10.78 ft); Apr. 30 (7 p.m.) 1,540 cfs (8.89 ft); May 9 (7 to 8 a.m.) 2,180 cfs (9.52 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 4-6, 18-20, Jan. 5 to Feb. 28. Backwater from rocks on control Oct. 1 to Dec. 20. No gage-height record Aug. 25 to Sept. 7, Sept. 15-17; discharge estimated on basis of 1 discharge measurement and weather records.

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, and 1¾ miles downstream from Wyman Dam.

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

Records available.--June 1907 to June 1910, October 1930 to September 1958.

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.--30 years (1907-9, 1930-58), 4,270 cfs (unadjusted).

Extremes.--Maximum discharge during year, 34,200 cfs Apr. 23 (gage height, 11.89 ft); minimum daily, 710 cfs Nov. 17.
1907-10, 1930-58: 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. Flow regulated by Moosehead Lake (see p. 44) and by Brassua, Flagstaff, and Spencer Lakes, Second Roach, First Roach, Indian, Moxie and Wyman Ponds (see p. 55). Considerable diurnal fluctuation caused by powerplant above station.

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

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 21				Dec. 22 to Sept. 30			
5.2	650	7.5	5,930	6.0	1,940	8.5	10,600
5.6	1,200	8.0	7,790	6.5	3,090	9.0	13,200
6.0	1,910	8.5	10,000	7.0	4,500	10.0	19,300
6.5	2,980	9.0	12,200	7.5	6,270	11.5	30,700
7.0	4,310			8.0	8,320		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,420	2,560	1,990	4,010	3,960	5,920	7,400	15,700	4,600	3,400	3,260	2,050
2	3,330	2,720	2,970	3,880	3,410	4,990	7,590	16,200	4,250	3,300	2,980	3,670
3	3,340	1,440	3,150	3,320	4,610	6,710	7,360	16,000	4,710	3,220	2,660	3,500
4	3,000	3,620	3,350	3,300	4,800	7,080	7,240	9,380	6,680	2,970	3,910	3,790
5	2,880	3,860	3,290	3,360	4,760	6,960	6,850	9,200	5,690	3,280	3,620	3,850
6	2,090	3,300	3,360	3,640	4,650	7,320	4,880	8,990	4,610	3,100	3,500	3,460
7	2,960	2,670	3,050	3,990	4,850	6,920	6,620	8,640	4,520	3,450	3,570	2,860
8	3,020	2,720	1,960	4,240	4,460	6,410	8,010	10,700	4,810	3,500	3,500	3,540
9	3,200	2,050	3,470	4,120	3,370	4,670	7,860	19,700	3,740	3,380	3,430	3,770
10	3,210	880	3,320	4,010	4,940	6,760	7,500	23,000	3,420	3,560	2,980	3,480
11	3,050	2,040	3,380	3,810	5,060	7,190	7,700	21,200	3,380	3,190	3,520	3,600
12	2,870	2,680	3,670	3,230	5,070	8,170	7,860	18,500	3,120	3,520	3,700	3,550
13	2,100	2,800	2,640	4,220	*5,200	6,250	5,050	19,100	3,630	2,850	3,390	3,430
14	2,860	2,940	2,380	4,460	6,090	6,320	6,270	17,200	3,530	3,300	3,780	3,070
15	2,910	2,300	1,880	4,050	5,780	5,250	7,960	14,000	2,930	3,480	3,750	3,600
16	2,830	1,420	2,870	4,100	4,550	4,740	8,230	14,100	3,830	3,420	3,790	3,650
17	3,040	710	3,230	4,080	6,090	6,340	11,800	13,100	4,310	3,310	*3,020	3,680
18	3,100	2,870	3,160	4,210	6,150	8,020	15,300	9,590	3,500	3,270	3,520	3,430
19	2,620	3,090	3,200	3,380	5,920	7,800	17,800	13,500	3,480	3,370	3,310	3,540
20	2,100	5,070	3,180	3,780	5,890	7,710	15,700	15,000	3,250	2,820	3,710	3,340
21	2,690	4,140	11,800	4,120	5,500	7,340	16,600	*15,700	3,210	3,530	3,290	2,930
22	2,540	3,650	13,500	4,160	4,790	7,370	24,000	14,200	2,620	3,430	3,590	3,520
23	2,750	2,650	9,450	4,060	4,440	*5,350	*29,100	14,400	3,790	3,430	3,470	3,550
24	2,920	1,840	7,250	4,240	5,740	6,550	*26,100	10,700	3,380	3,470	2,860	3,620
25	2,580	2,770	4,320	3,930	5,670	6,730	27,800	8,150	3,560	3,610	3,760	3,410
26	2,450	2,490	3,520	3,330	5,870	7,350	18,500	7,010	3,470	3,170	3,650	3,550
27	2,120	2,780	11,100	3,870	6,260	6,940	12,300	8,360	3,400	2,770	3,740	3,630
28	2,970	3,200	8,820	4,110	6,350	*6,730	15,200	8,100	3,380	3,450	3,890	2,710
29	2,560	2,760	6,300	4,260	-	6,580	17,400	7,440	2,950	4,100	3,890	3,780
30	2,670	2,330	4,700	4,080	--------	4,330	18,700	6,070	3,380	5,260	3,820	3,300
31	2,670	--------	3,610	4,230	--------	6,530	--------	4,810	--------	3,310	2,660	--------
Total	86,850	79,350	143,870	121,580	144,330	201,360	380,680	397,740	115,130	105,220	107,520	102,660
Mean	2,802	2,645	4,641	3,922	5,155	6,495	12,690	12,830	3,838	3,394	3,468	3,422
(†)	-2,226	+2,424	+4,823	+580	-3,177	-4,356	+7,842	+4,716	-1,313	-586	-1,257	-2,142
Adjusted for change in reservoir contents												
Mean	576	5,069	9,464	4,502	1,978	2,139	20,530	17,550	2,525	2,798	2,211	1,280
Cfsm	0.213	1.87	3.49	1.66	0.730	0.789	7.58	6.48	0.932	1.03	0.816	0.472
In.	0.25	2.09	4.02	1.91	0.76	0.91	8.46	7.47	1.04	1.19	0.94	0.53

	Observed			Adjusted			
Calendar year 1957:	Max 13,500	Min 710	Mean 2,981	Mean 3,357	Cfsm 1.24	In. 16.81	
Water year 1957-58:	Max 29,100	Min 710	Mean 5,442	Mean 5,901	Cfsm 2.18	In. 29.57	

* 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.

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 1958. 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.--37 years (1902-6, 1925-58), 690 cfs.

Extremes.--Maximum discharge during year, 16,600 cfs Dec. 21 (gage height, 14.80 ft); minimum, 28 cfs Oct. 17 (gage height, 2.28 ft).
1902-7, 1925-58: Maximum discharge, 30,800 cfs Mar. 19, 1936, corrected (gage height, 21.17 ft); minimum, 18 cfs Oct. 29, 1929 (gage height, 2.02 ft).

Remarks.--Records excellent except those for periods 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 tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 22				Apr. 23 to Sept. 30			
2.4	40	4.0	460	2.7	74	6.0	2,030
2.6	61	5.0	1,070	3.0	128	7.0	3,230
2.8	90	6.0	2,020	3.5	270	8.0	4,530
3.1	150	7.0	3,230	4.0	490	10.0	7,670
3.5	265			5.0	1,160	13.5	14,100

Note.--Same as following table above 7.0 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	101	375	902	555	220	745	4,000	817	154	612	92
2	53	108	370	853	500	220	795	3,790	1,390	151	470	99
3	51	385	360	845	465	225	888	3,000	1,290	154	375	95
4	51	1,170	355	835	445	220	1,110	2,280	934	142	320	92
5	45	733	345	810	425	220	1,370	2,170	*740	128	362	87
6	50	505	345	795	400	220	1,690	2,060	649	126	304	79
7	57	402	335	770	395	220	1,860	2,150	554	149	266	79
8	50	339	330	800	385	215	1,780	2,390	470	176	235	97
9	50	645	340	805	360	215	1,210	4,690	445	216	281	108
10	52	811	370	785	350	220	993	3,700	398	213	266	101
11	50	541	615	770	330	330	1,130	2,850	367	179	242	108
12	45	426	735	735	320	630	1,230	3,620	349	289	198	114
13	48	366	555	725	325	615	1,410	3,500	320	1,040	179	92
14	51	328	485	720	*310	*550	1,670	2,570	312	630	167	85
15	48	580	440	725	295	505	1,940	1,910	333	440	167	90
16	47	1,060	400	740	285	485	2,970	1,760	278	380	174	87
17	45	763	380	*845	280	475	4,720	1,530	252	600	156	85
18	45	673	370	1,210	275	455	5,970	1,980	232	450	179	146
19	54	815	*470	935	265	435	7,000	2,490	220	337	238	630
20	390	2,620	830	805	250	425	5,910	2,350	201	455	213	384
21	245	1,600	12,900	745	245	420	5,690	1,740	204	416	184	249
22	157	1,090	7,100	720	230	400	9,010	1,370	289	316	161	223
23	124	853	3,380	830	225	385	*14,000	1,220	274	256	151	289
24	*118	721	2,120	805	220	365	10,700	1,090	223	223	128	223
25	179	600	1,230	750	220	340	9,120	1,010	196	193	142	174
26	231	455	965	775	225	315	5,990	981	196	610	158	149
27	155	400	7,140	915	220	330	3,780	927	213	475	154	137
28	132	365	3,620	855	210	470	3,140	845	193	371	133	151
29	120	360	2,310	765	-	555	3,000	997	166	1,460	119	179
30	110	370	1,540	690	-------	625	5,080	912	156	*1,450	106	156
31	106	-------	1,020	615	-------	685	-------	760	-------	890	101	-------
Total	3,011	20,185	52,130	24,875	9,010	11,990	115,901	66,642	12,661	13,069	6,970	4,680
Mean	97.1	673	1,682	802	322	387	3,863	2,150	422	422	225	156
Cfsm	0.274	1.90	4.75	2.27	0.910	1.09	10.9	6.07	1.19	1.19	0.635	0.441
In.	0.32	2.12	5.48	2.62	0.95	1.26	12.16	7.00	1.33	1.37	0.73	0.49

Calendar year 1957: Max 12,900 Min 44 Mean 476 Cfsm 1.34 In. 18.29
Water year 1957-58: Max 14,000 Min 45 Mean 935 Cfsm 2.64 In. 35.83

Peak discharge (base, 6,000 cfs).--Dec. 21 (3:30 p.m.) 16,600 cfs (14.80 ft); Dec. 27 (5:30 to 8 p.m.) 10,300 cfs (11.50 ft); Apr. 23 (2 p.m.) 16,200 cfs (14.61 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 25 to Dec. 20, Jan. 4 to Apr. 2.

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 1958.

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

Average discharge.--30 years, 923 cfs.

Extremes.--Maximum discharge during year, 16,100 cfs Apr. 23 (gage height, 11.04 ft); minimum, 40 cfs Oct. 11 (gage height, 2.30 ft).
1928-58: 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 periods of ice effect, which are fair.

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

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.3	40	5.0	1,540
2.5	61	6.0	2,960
2.8	111	7.0	4,920
3.0	160	8.0	7,270
3.5	352	9.0	9,950
4.0	650	11.0	16,000
4.5	1,040		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	94	400	1,380	1,180	500	1,220	4,830	713	216	657	113
2	53	107	385	1,220	1,090	500	1,540	4,240	1,150	197	496	107
3	49	166	350	1,060	1,000	495	1,920	3,440	1,910	245	400	98
4	49	725	325	915	925	490	2,420	2,770	1,170	300	347	92
5	49	795	300	788	875	485	2,900	2,750	899	249	368	90
6	49	508	285	835	810	480	3,610	2,480	750	210	422	87
7	49	384	295	915	770	480	3,610	2,440	657	190	318	89
8	49	304	325	980	740	475	3,130	2,980	577	193	278	100
9	49	309	395	990	720	465	2,440	5,640	526	227	342	98
10	48	590	490	980	690	460	2,200	4,040	514	249	405	116
11	41	514	795	955	650	685	2,520	2,930	473	245	314	118
12	43	368	1,540	955	635	1,430	2,500	4,720	461	249	264	111
13	48	291	1,150	945	*625	1,320	2,820	5,100	444	725	227	118
14	47	264	1,020	955	605	1,200	3,600	3,130	394	758	220	107
15	46	318	875	980	585	1,060	3,690	2,430	363	455	210	96
16	43	1,040	780	1,070	585	1,020	5,320	2,170	342	357	203	90
17	44	851	720	*1,190	570	*965	7,480	1,950	318	650	213	86
18	46	706	692	2,060	565	945	*8,740	1,920	304	671	193	107
19	44	650	643	1,430	545	905	9,360	2,070	269	422	223	410
20	150	2,250	*765	1,180	540	875	8,390	2,560	260	394	278	623
21	444	1,800	8,060	1,130	535	850	6,840	1,960	260	502	230	384
22	249	1,080	9,610	1,130	525	820	9,320	1,620	368	389	197	273
23	175	827	3,520	1,380	520	805	14,400	1,340	433	309	169	249
24	142	685	2,510	1,540	515	780	12,500	1,160	347	260	163	328
25	*125	590	1,950	1,320	510	735	9,750	1,030	295	227	157	245
26	152	496	1,580	1,540	510	715	6,530	998	333	355	157	190
27	203	357	8,260	1,790	510	700	4,020	907	352	671	172	160
28	157	335	4,490	1,600	500	765	3,580	835	338	485	166	163
29	125	310	2,660	1,450	-	860	4,260	835	278	855	150	206
30	109	350	1,950	1,340	-------	970	6,790	899	230	*1,910	134	213
31	103	-------	1,620	1,270	-------	1,090	-------	788	-------	980	125	-------
Total	3,035	18,064	58,740	37,273	18,830	24,325	157,400	76,962	15,728	14,145	8,198	5,267
Mean	97.9	602	1,895	1,202	672	785	5,247	2,483	524	456	264	176
Cfsm	0.190	1.17	3.69	2.34	1.31	1.53	10.2	4.83	1.02	0.887	0.514	0.342
In.	0.22	1.30	4.25	2.70	1.36	1.76	11.38	5.57	1.14	1.02	0.59	0.38

Calendar year 1957: Max 9,610 Min 41 Mean 607 Cfsm 1.18 In. 16.02
Water year 1957-58: Max 14,400 Min 41 Mean 1,200 Cfsm 2.33 In. 31.67

Peak discharge (base, 6,000 cfs).--Dec. 21 (11 to 12 p.m.) 15,800 cfs (10.92 ft); Dec. 27 (4 p.m.) 11,700 cfs (9.60 ft); Apr. 23 (9 p.m.) 16,100 cfs (11.04 ft); Apr. 30 (1 p.m.) 7,760 cfs (8.19 ft); May 9 (1 p.m.) 6,290 cfs (7.60 ft); May 13 (2 a.m.) 6,190 cfs (7.56 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28 to Dec. 17, Jan. 1-4, Jan. 8 to Apr. 2.

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 1958.

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

Average discharge.--29 years (1929-58), 928 cfs.

Extremes.--Maximum discharge during year, 7,290 cfs Apr. 26 (gage height, 8.99 ft); minimum daily, 5.3 cfs Oct. 12, 13.
1928-58: 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 powerplant 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 tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 26

0.7	4.6	2.5	279
.9	10	3.0	500
1.2	25	3.5	850
1.4	42	4.0	1,300
1.6	65	6.0	3,400
1.8	95	9.0	7,300
2.0	134		

Apr. 27 to Sept. 30

2.0	134	3.5	874
2.5	284	4.0	1,340
3.0	524	6.0	3,400

Note.--Same as preceding table below 2.0 ft and above 6.0 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	88	535	2,840	2,120	667	2,510	4,900	*649	210	420	184
2	85	6.0	520	2,720	1,970	704	2,560	4,650	775	205	405	295
3	76	6.2	490	2,540	1,800	738	2,510	4,250	850	194	7.2	385
4	150	23	465	2,290	1,750	712	2,700	3,860	765	220	270	225
5	6.0	8.2	430	2,040	1,700	674	2,970	3,420	645	7.5	275	146
6	5.8	12	410	1,770	1,560	712	3,300	2,990	550	8.4	350	7.8
7	132	13	400	1,500	1,440	728	3,780	2,650	9.1	300	154	7.8
8	79	172	405	1,250	1,340	696	4,180	2,470	200	190	345	172
9	78	11	390	1,250	1,280	680	4,500	2,700	565	188	10	108
10	72	10	410	1,160	*1,240	680	4,610	2,810	435	184	46	184
11	152	85	700	1,010	1,200	688	4,500	2,930	420	188	345	275
12	5.3	142	1,000	904	1,140	832	4,410	3,190	400	7.8	294	235
13	5.3	164	1,090	760	1,090	1,150	4,380	3,400	395	16	330	6.7
14	112	186	1,100	688	1,060	1,330	4,440	3,410	194	330	295	6.7
15	100	365	1,070	622	1,010	1,460	4,500	3,220	8.1	225	250	210
16	*95	41	1,040	622	995	1,440	4,600	2,890	415	210	9.4	108
17	83	315	975	622	960	1,440	4,860	2,520	405	345	9.7	*275
18	164	310	875	590	760	1,390	*5,170	2,300	275	385	260	186
19	6.7	415	775	800	795	1,340	5,510	2,120	6.4	8.8	270	180
20	6.4	445	915	1,010	840	1,320	5,840	1,950	170	13	355	6.9
21	132	600	1,420	1,030	760	1,300	6,040	1,830	7.2	320	260	7.5
22	84	755	2,240	1,090	704	1,300	5,980	1,700	12	*210	390	220
23	85	825	2,960	1,210	675	1,260	6,210	1,580	235	200	6.9	225
24	93	830	3,220	1,300	635	1,290	6,700	1,350	230	275	7.8	220
25	160	805	3,200	1,450	640	1,370	7,160	1,290	225	290	425	220
26	5.8	730	2,990	1,590	675	1,450	7,200	1,260	225	7.5	390	215
27	7.8	640	3,050	1,800	538	1,520	6,800	1,060	295	7.8	365	6.9
28	146	535	3,200	2,020	485	1,620	6,180	959	225	310	160	7.5
29	81	510	3,330	2,190	-	1,710	5,430	950	23	295	240	350
30	74	490	3,270	2,260	-------	1,700	5,120	810	235	425	7.8	194
31	75	-------	3,080	2,230	-------	1,960	-------	605	-------	425	7.8	-------
Total	2,469.1	9,537.4	45,955	45,158	31,162	35,859	144,650	76,024	9,843.8	6,200.8	6,960.6	4,869.8
Mean	79.6	318	1,482	1,457	1,113	1,157	4,822	2,452	328	200	225	162
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 3,330 Min 5.3 Mean 544 Cfsm 0.940 In. 12.73
Water year 1957-58: Max 7,200 Min 5.3 Mean 1,147 Cfsm 1.98 In. 26.87

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Feb. 9-20, 23-26.

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 1958.

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

Average discharge.--68 years, 326 cfs.

Extremes.--Maximum daily discharge during year, 305 cfs Feb. 4, 8, Mar. 11, May 4, 5, 13, 15; minimum daily, 10 cfs Nov. 29, Dec. 25, May 30, June 29 to July 6, Aug. 31, Sept. 1.
1890-1958: 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	200	195	215	275	290	285	295	280	240	10	180	10
2	200	185	215	275	280	280	295	295	245	10	180	210
3	200	185	210	270	300	275	300	300	240	10	180	195
4	190	190	215	275	305	285	295	305	240	10	180	190
5	185	195	205	280	300	290	300	305	240	10	190	195
6	190	190	210	280	295	290	290	300	245	10	180	195
7	190	190	205	275	285	300	300	300	245	190	185	195
8	190	185	210	280	305	290	295	295	250	180	190	190
9	185	185	215	275	295	295	290	290	245	185	180	195
10	180	190	215	265	290	290	290	290	250	175	195	195
11	190	205	215	265	290	305	285	285	245	170	190	200
12	185	195	225	260	290	295	295	295	240	175	185	200
13	185	195	225	265	285	280	285	305	240	180	190	195
14	190	195	225	265	295	280	285	290	240	180	195	195
15	190	195	235	255	295	280	290	305	235	190	185	210
16	185	200	215	260	300	285	290	295	215	190	190	210
17	190	195	215	260	285	290	290	295	220	185	195	215
18	185	200	215	260	285	290	285	285	215	190	190	220
19	185	195	215	260	295	295	270	290	230	175	190	220
20	180	200	215	255	290	275	300	285	230	190	190	225
21	185	200	220	260	285	290	280	290	210	175	185	215
22	195	200	235	265	295	300	285	290	200	180	190	220
23	180	200	240	275	300	300	280	295	205	185	195	220
24	185	200	235	280	295	300	290	280	210	180	190	220
25	195	205	10	280	300	300	280	280	200	185	195	225
26	190	215	230	300	295	295	285	285	210	175	195	225
27	180	205	230	300	290	300	280	295	200	175	195	220
28	190	200	245	300	290	300	300	290	210	190	190	225
29	190	10	255	295	-	300	280	270	10	195	195	220
30	190	215	260	300	-------	295	300	10	10	195	195	225
31	185	-------	260	290	-------	295	-------	250	-------	185	10	-------
Total	5,840	5,715	6,735	8,500	8,205	9,030	8,685	8,725	6,415	4,635	5,675	6,075
Mean	188	191	217	274	293	291	290	281	214	150	183	202
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 305 Min 10 Mean 220 Cfsm - In. -
Water year 1957-58: Max 305 Min 10 Mean 231 Cfsm - In. -

Smaller reservoirs in Kennebec River basin, Maine

385. Brassua Lake on Moose River, 4 miles southwest of Rockwood, 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, 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, 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. 44).

415. Indian Pond on Kennebec River, 13 miles downstream from East Outlet of Moosehead Lake, 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, 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, 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, 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, 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 1957 to September 1958

Date	Brassua Lake	Second Roach Pond	First Roach Pond	Indian Pond	Moxie Pond	Flagstaff Lake	Spencer Lake	Wyman Pond
Sept.30, 1957	0	22.2	664	3,258	703	4,005	345	8,690
Oct. 31	15	0	705	3,222	392	3,160	307	8,750
Nov. 30	736	0	329	3,186	595	4,378	0	8,850
Dec. 31	2,506	22.2	131	3,150	640	7,316	103	9,020
Jan. 31, 1958	3,229	0	0	3,078	210	7,955	0	8,940
Feb. 28	2,450	0	0	1,132	30	5,304	0	8,980
Mar. 31	114	0	0	3,078	60	1,215	0	8,820
Apr. 30	7,250	110	760	2,817	676	9,432	795	8,980
May 31	8,540	174	938	3,060	640	12,050	785	8,990
June 30	8,499	182	856	3,042	640	10,284	666	8,830
July 31	6,343	0	1,049	3,150	730	10,284	702	9,050
Aug. 31	5,823	0	870	3,150	667	9,328	739	8,750
Sept.30	5,842	0	624	3,060	658	7,524	666	8,960

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 1958.

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

Average discharge.--17 years, 344 cfs.

Extremes.--Maximum discharge during year, 4,600 cfs Apr. 23 (gage height, 8.32 ft); minimum, 34 cfs Oct. 16-18; minimum gage height, 1.48 ft Oct. 17, 18.
1941-58: 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, which are fair.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.4	28	4.0	705
1.7	53	5.0	1,270
2.0	89	6.0	2,010
2.5	185	7.0	3,000
3.0	320	8.1	4,310

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	102	326	298	62	63	131	1,570	410	86	346	61
2	44	106	255	252	62	63	118	1,620	1,010	95	257	54
3	44	280	185	173	63	69	110	1,180	635	187	209	53
4	44	850	175	161	64	72	133	880	402	128	180	49
5	42	547	170	154	64	71	195	875	314	85	175	47
6	41	413	162	140	63	68	274	845	292	114	141	44
7	49	298	162	130	62	69	257	944	257	445	122	47
8	74	237	210	124	61	65	237	1,190	222	385	190	90
9	57	680	260	166	61	64	183	1,730	207	420	359	75
10	48	535	359	210	61	64	157	1,260	185	237	239	76
11	41	333	1,470	185	60	68	163	1,100	171	240	161	114
12	40	257	935	160	58	75	163	2,290	161	510	126	115
13	38	*219	450	140	57	75	161	1,700	137	945	109	88
14	37	207	378	128	57	71	229	1,010	*265	438	130	71
15	35	625	365	118	57	66	269	790	263	277	128	63
16	34	615	323	112	68	64	570	775	168	615	161	120
17	34	539	283	112	74	66	1,350	723	197	1,190	117	133
18	34	679	226	140	74	69	2,140	820	207	507	102	475
19	170	735	237	180	74	*68	2,620	966	154	424	107	695
20	440	1,120	615	210	74	70	2,210	825	126	770	122	311
21	219	640	3,390	215	*74	71	2,670	614	124	745	104	197
22	131	442	2,680	160	71	71	4,230	491	152	424	107	255
23	102	359	1,170	*122	69	70	4,310	435	130	298	92	320
24	126	311	770	104	65	70	4,180	375	104	239	76	192
25	450	252	572	89	64	71	*3,570	317	90	455	143	*137
26	260	152	472	80	62	70	*2,260	289	95	770	204	178
27	163	150	785	75	62	75	1,220	252	157	495	122	166
28	128	207	572	68	62	82	1,020	226	122	362	94	207
29	110	270	468	65	-	89	850	320	90	1,200	76	171
30	101	491	368	64	-------	109	1,840	326	79	1,040	69	131
31	96	-------	323	63	-------	128	-------	286	-------	515	65	-------
Total	3,280	12,651	19,116	4,398	1,805	2,266	37,820	27,024	6,926	14,641	4,633	4,735
Mean	106	422	617	142	64.5	73.1	1,261	872	231	472	149	158
Cfsm	0.693	2.76	4.03	0.928	0.422	0.478	8.24	5.70	1.51	3.08	0.974	1.03
In.	0.80	3.08	4.65	1.07	0.44	0.55	9.19	6.57	1.68	3.55	1.12	1.15

Calendar year 1957: Max 3,390 Min 25 Mean 295 Cfsm 1.93 In. 26.17
Water year 1957-58: Max 4,310 Min 34 Mean 382 Cfsm 2.50 In. 33.85

Peak discharge (base, 3,600 cfs).--Dec. 21 (10 p.m.) 4,240 cfs (8.05 ft); Apr. 23 (6 p.m.) 4,600 cfs (8.32 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 5-9, Jan. 5 to Feb. 28.

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 1958. October 1922 to November 1943 monthly discharge only, 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.--53 years, 1,882 cfs (adjusted).

Extremes.--Maximum discharge during year, 7,520 cfs Apr. 26 (gage height, 6.09 ft); minimum daily, 350 cfs Nov. 4.
1905-58: 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 except those for period of backwater from pulpwood, which are good. Flow regulated by Kennebago, Rangeley, Mooselookmeguntic, Richardson, Umbagog and Aziscohos Lakes (see p. 65).

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

Revisions.--WSP 1001: Drainage area.

Rating table, water year 1957-58, except period of backwater from pulpwood (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

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,810	1,670	1,360	2,020	2,740	3,130	1,890	3,730	1,890	2,200	1,710	2,080
2	1,810	1,490	1,600	2,070	2,760	3,290	1,850	2,670	2,340	2,140	1,850	2,280
3	1,800	1,070	1,720	2,180	2,740	3,460	1,810	2,150	3,560	1,850	1,930	2,310
4	1,800	350	1,640	2,320	2,800	3,700	1,790	1,400	2,770	1,710	1,940	2,290
5	1,790	805	1,660	2,360	2,840	3,720	1,720	1,080	2,460	1,720	1,960	2,290
6	1,790	1,060	1,730	2,360	2,880	3,770	1,670	995	2,110	1,710	1,990	2,310
7	1,770	1,130	1,680	2,310	2,910	3,760	1,590	1,220	1,970	1,640	2,030	2,280
8	1,760	1,130	1,260	2,320	2,840	3,590	1,490	1,410	1,930	1,570	1,990	2,250
9	1,760	945	1,460	2,360	2,830	3,530	1,390	1,800	1,730	1,440	1,850	2,270
10	1,750	940	1,240	2,350	2,900	3,640	1,330	2,070	2,080	1,590	1,880	2,230
11	1,750	1,190	548	2,290	2,900	3,720	1,270	2,500	2,060	1,510	1,990	2,160
12	1,790	1,240	910	2,310	2,880	3,640	1,260	3,700	2,060	1,230	2,020	2,200
13	1,810	*1,230	1,510	2,350	2,870	3,440	1,280	4,620	2,110	1,100	2,010	2,230
14	1,820	1,230	1,380	2,310	2,840	3,000	1,330	4,580	*2,070	1,410	2,010	2,230
15	1,810	865	1,220	2,280	2,880	2,760	1,360	4,330	2,110	1,490	1,980	2,230
16	1,800	730	1,180	2,230	2,880	2,560	1,380	4,440	2,160	1,480	1,990	2,200
17	1,790	645	1,330	2,200	2,880	2,490	1,520	4,560	2,110	1,500	1,980	2,190
18	1,770	775	1,620	2,240	2,870	2,360	1,970	4,350	2,050	1,560	1,970	1,750
19	1,620	695	1,650	2,290	2,880	2,220	2,630	4,580	1,990	1,500	1,960	1,450
20	1,470	425	1,300	2,360	2,910	2,080	3,340	4,370	2,030	1,410	1,960	1,860
21	1,590	785	1,590	2,390	2,910	2,050	3,840	4,130	2,030	1,470	2,030	1,930
22	1,640	1,300	4,700	2,340	2,870	2,030	4,740	4,130	2,030	1,510	2,070	1,980
23	1,670	1,360	3,720	2,250	2,840	2,020	6,050	3,620	1,970	1,490	2,080	1,930
24	1,610	1,260	*3,350	2,290	2,870	2,010	7,080	3,230	1,860	1,530	2,100	2,030
25	1,470	1,260	2,400	2,290	2,880	1,980	*7,460	2,800	1,800	*1,620	2,060	*2,060
26	1,520	1,500	1,820	2,240	2,900	1,990	7,190	2,090	1,730	1,480	2,060	2,100
27	1,580	1,630	1,750	2,250	2,880	2,010	5,680	1,740	1,710	1,150	2,010	2,140
28	1,630	1,610	2,080	2,380	2,990	2,020	4,480	2,060	1,760	1,400	2,060	2,050
29	1,660	1,430	1,910	2,460	-	1,980	4,310	1,980	2,110	1,260	2,070	2,110
30	1,670	1,380	1,970	2,550	--------	1,940	4,220	1,830	2,230	1,210	2,070	2,160
31	1,700	--------	1,980	2,640	--------	1,920	--------	1,910	--------	1,630	2,080	--------
Total	53,010	33,130	55,268	71,590	80,170	85,810	88,920	90,075	62,820	47,510	61,700	63,580
Mean	1,710	1,104	1,783	2,309	2,863	2,768	2,964	2,906	2,094	1,533	1,990	2,119
(†)	-1,193	+1,355	+2,572	-1,029	-2,262	-2,347	+4,904	+2,838	-747	+624	-1,080	-1,438

Adjusted for change in reservoir contents

Mean	517	2,459	4,355	1,280	601	421	7,868	5,744	1,347	2,157	900	681
Cfsm	0.495	2.35	4.17	1.22	0.575	0.403	7.53	5.50	1.29	2.06	0.861	0.652
In.	0.57	2.62	4.81	1.41	0.60	0.46	8.40	6.34	1.44	2.38	0.99	0.73

	Observed			Adjusted			
Calendar year 1957:	Max 4,700	Min 250	Mean 1,463	Mean 1,783	Cfsm 1.71	In. 23.16
Water year 1957-58:	Max 7,460	Min 350	Mean 2,174	Mean 2,364	Cfsm 2.26	In. 30.75

* Discharge measurement made on this day.
† Change in reservoir contents, equivalent in cubic feet per second, in Kennebago, Rangeley, Mooselookmeguntic, Richardson, Umbagog, and Aziscohos Lakes.
Note.--Stage-discharge relation affected by pulpwood on control Oct. 1-18.

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 1958. October 1922 to February 1929 monthly discharge only, 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.--45 years, 2,442 cfs (adjusted).

Extremes.--Maximum discharge during year, 13,800 cfs Apr. 23, 24 (gage height, 8.80 ft); minimum daily, 1,540 cfs Nov. 18.
1913-58: 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 no gage-height record, which are fair. Flow regulated by powerplants above station and by Kennebago, Rangeley, Mooselookmeguntic, Richardson, Umbagog, and Aziscohos Lakes (see p. 65).

Revisions.--WSP 1001: Drainage area.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

3.2	1,500	7.0	8,430
4.0	2,460	8.0	11,100
5.0	4,050	9.0	14,500
6.0	6,000		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,820	1,790	1,870	2,640	2,910	3,230	2,500	7,400	2,640	2,400	2,100	2,190
2	1,810	1,780	1,820	2,560	2,990	3,440	2,480	6,200	3,680	2,390	2,060	2,160
3	1,790	2,050	1,880	2,390	2,970	3,530	2,400	4,880	4,940	2,390	2,090	2,270
4	1,790	2,780	1,900	2,320	2,940	3,810	2,520	3,810	4,500	2,000	2,110	2,330
5	1,780	1,950	1,810	2,550	3,050	3,900	2,620	3,020	3,410	1,900	2,180	2,320
6	1,780	1,840	1,810	2,670	3,070	3,910	2,760	2,850	3,090	1,950	2,140	2,330
7	1,820	1,760	1,940	2,720	3,090	4,020	2,760	2,900	2,600	1,900	2,150	2,350
8	1,820	1,560	1,950	2,580	3,130	3,980	2,560	3,710	2,460	1,990	2,220	2,360
9	1,800	1,690	1,900	2,610	2,970	3,810	2,320	5,020	2,390	1,920	2,330	2,350
10	1,790	1,740	2,050	2,670	3,070	3,880	2,190	4,760	2,180	1,800	2,150	2,400
11	1,780	1,580	3,070	2,660	3,050	3,980	2,180	4,360	*2,420	1,920	2,140	2,380
12	1,780	*1,630	2,460	2,550	3,070	3,980	2,140	3,340	2,520	2,190	2,160	2,320
13	1,800	1,610	2,140	2,520	3,070	3,860	2,110	7,870	2,380	2,180	2,160	2,350
14	1,810	1,590	2,320	2,610	2,970	3,610	2,380	6,860	2,430	1,830	2,190	2,330
15	1,820	1,800	2,110	2,600	2,960	3,230	2,610	6,180	2,320	1,870	2,160	2,350
16	1,810	1,940	1,880	2,600	3,070	3,010	3,230	5,710	2,390	1,830	2,180	2,360
17	1,790	1,690	1,800	2,520	3,040	2,760	4,410	5,940	2,400	1,940	2,160	2,400
18	1,790	1,540	1,750	2,480	3,040	2,740	6,110	5,920	2,280	1,890	2,180	2,640
19	1,940	1,830	2,100	2,490	3,020	*2,600	7,770	6,000	2,260	1,890	2,180	2,760
20	2,070	1,860	2,480	2,480	3,090	2,480	8,140	6,090	2,200	1,920	2,150	2,420
21	1,860	1,680	6,120	2,550	3,090	2,390	9,080	5,440	2,240	2,010	2,090	2,320
22	1,820	1,730	8,330	*2,660	3,090	2,350	12,000	5,140	2,240	1,830	2,160	2,330
23	1,790	1,990	6,860	2,640	3,050	2,320	13,300	4,880	2,190	1,860	2,180	2,320
24	1,810	1,870	*5,040	2,600	3,040	2,330	13,300	4,070	2,040	*1,800	2,140	2,220
25	1,950	1,720	4,190	2,610	3,070	2,330	13,300	3,880	1,980	1,830	2,200	2,280
26	1,900	1,670	3,230	2,610	3,070	2,350	*11,700	3,130	1,900	2,120	2,240	*2,240
27	1,780	1,750	4,020	2,540	3,070	2,400	9,430	2,580	1,930	2,260	2,230	2,290
28	1,790	1,870	3,390	2,610	3,100	2,480	7,300	2,350	1,890	*1,740	2,140	2,380
29	1,760	1,870	3,180	2,700	-	2,500	6,400	2,700	2,010	2,280	2,220	2,310
30	1,750	1,860	3,720	2,760	--------	2,540	7,940	2,640	2,290	2,520	2,160	2,310
31	1,800	--------	2,720	2,800	--------	2,550	--------	2,380	--------	2,070	2,180	--------
Total	56,400	54,020	90,840	80,300	85,150	96,300	169,920	142,010	76,200	62,420	67,130	70,370
Mean	1,819	1,801	2,930	2,590	3,041	3,106	5,664	4,581	2,540	2,014	2,165	2,346
(†)	-1,193	+1,355	+2,572	-1,029	-2,262	-2,347	+4,904	+2,838	-747	+624	-1,090	-1,438

Adjusted for reservoir contents

Mean	626	3,156	5,502	1,561	779	759	10,570	7,419	1,793	2,638	1,075	908
Cfsm	0.459	2.32	4.04	1.15	0.572	0.557	7.75	5.44	1.32	1.94	0.789	0.666
In.	0.53	2.59	4.66	1.33	0.60	0.64	8.65	6.27	1.47	2.24	0.91	0.74

	Observed						Adjusted					
Calendar year 1957:	Max	8,330	Min	1,490	Mean	1,930	Mean	2,250	Cfsm	1.65	In.	22.42
Water year 1957-58:	Max	13,300	Min	1,540	Mean	2,880	Mean	3,070	Cfsm	2.25	In.	30.63

* 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.--No gage-height record July 22-28; discharge estimated on basis of 2 discharge measurements and records for station at Errol.

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 1958. October 1903 to September 1904 monthly discharge only, 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.--66 years, 3,671 cfs (adjusted).

Extremes.--Maximum daily discharge during year, 32,500 cfs Apr. 23; minimum daily, 1,670 cfs Nov. 27.
1892-1958: 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. 65).

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

Revisions.--WSP 1001: Drainage area.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,780	2,090	2,890	4,670	3,490	3,300	3,710	15,500	3,930	2,640	3,030	2,610
2	1,810	1,870	2,250	3,900	3,550	3,480	3,570	13,800	6,240	2,660	2,670	2,440
3	1,770	4,800	1,720	2,500	3,420	3,700	3,620	11,100	7,080	2,760	2,520	2,230
4	1,680	6,550	1,800	2,270	3,300	3,880	3,850	8,790	6,510	2,800	2,800	2,390
5	1,720	4,230	1,890	2,600	3,350	4,140	4,960	7,590	5,080	2,380	2,780	2,450
6	1,770	2,840	1,920	3,220	3,380	4,170	5,660	6,930	4,260	2,580	2,660	2,350
7	1,760	2,520	2,440	3,580	3,380	4,210	5,350	7,370	3,640	2,490	2,390	2,460
8	1,760	2,350	2,950	2,980	3,380	4,210	4,700	8,930	3,360	2,050	2,490	2,390
9	1,890	3,450	2,990	3,120	3,250	4,120	3,990	12,200	3,270	2,350	3,030	2,350
10	1,760	3,410	3,290	3,290	3,180	4,180	3,630	10,600	3,090	2,220	2,950	2,440
11	1,760	2,560	9,040	3,630	3,230	4,520	3,850	9,420	2,820	2,040	2,600	2,600
12	1,690	2,110	6,390	3,220	3,280	4,770	4,040	16,300	3,140	2,850	2,350	2,390
13	1,730	2,170	3,330	3,320	3,330	4,580	4,270	15,400	3,200	3,420	2,400	2,400
14	1,760	1,970	3,610	3,120	3,270	4,370	5,040	12,300	2,880	2,800	2,480	2,360
15	1,750	3,740	3,800	3,070	3,200	3,920	6,140	10,200	2,900	2,180	2,410	2,370
16	1,770	4,420	3,470	3,200	3,260	3,650	9,300	9,290	2,940	2,200	2,400	2,380
17	1,770	3,440	3,020	3,590	3,260	3,450	14,200	9,210	2,810	2,420	2,350	2,420
18	1,780	3,140	2,380	3,480	3,240	3,450	18,200	10,400	2,860	2,320	2,680	3,310
19	2,540	3,700	2,660	3,190	3,320	3,350	21,200	11,500	2,460	2,200	2,460	4,110
20	3,670	6,130	5,470	2,910	3,320	3,280	20,100	11,400	2,600	2,440	2,400	3,210
21	2,560	4,130	30,700	3,060	3,320	3,140	22,200	9,280	2,580	2,600	2,280	2,830
22	2,030	3,170	19,800	3,190	3,310	2,930	29,600	7,840	2,750	2,360	2,340	2,660
23	1,900	2,990	12,800	3,710	3,390	2,910	32,500	7,320	2,960	2,280	2,270	2,910
24	1,930	3,160	9,300	3,680	3,290	3,070	31,400	6,490	2,470	2,030	2,250	2,480
25	2,430	2,790	7,510	3,470	3,320	3,010	29,500	5,910	2,360	2,170	2,430	2,440
26	2,310	2,110	8,370	3,600	3,380	3,050	23,900	5,450	2,400	3,500	2,670	2,410
27	2,010	1,670	18,200	3,580	3,380	3,490	17,400	4,340	2,360	3,920	2,600	2,450
28	1,860	2,590	9,810	3,420	3,390	3,180	13,900	3,880	2,290	3,170	2,360	2,690
29	1,910	2,820	6,860	3,340	-	3,470	12,200	4,360	2,250	4,420	2,140	2,690
30	1,820	2,670	5,490	3,400	---------	3,800	17,600	4,030	2,500	5,130	2,560	2,560
31	1,840	--------	4,770	3,430	---------	3,800	--------	3,610	--------	3,650	2,600	--------
Total	60,520	95,590	200,920	102,740	93,170	114,580	379,580	280,740	99,990	85,030	78,390	77,780
Mean	1,952	3,186	6,481	3,314	3,328	3,696	12,650	9,056	3,333	2,743	2,529	2,593
(†)	-1,193	+1,355	+2,572	-1,029	-2,262	-2,347	+4,904	+2,838	-747	+824	-1,090	-1,438

Adjusted for change in reservoir contents

Mean	759	4,541	9,053	2,285	1,066	1,349	17,550	11,890	2,586	3,367	1,439	1,155
Cfsm	0.367	2.20	4.38	1.11	0.516	0.653	8.49	5.75	1.25	1.63	0.696	0.559
In.	0.42	2.46	5.05	1.28	0.54	0.75	9.47	6.63	1.40	1.88	0.80	0.62

	Observed						Adjusted					
Calendar year 1957:	Max	30,700	Min	1,620	Mean	2,898	Mean	3,218	Cfsm	1.56	In.	21.15
Water year 1957-58:	Max	32,500	Min	1,670	Mean	4,573	Mean	4,763	Cfsm	2.30	In.	31.30

† Change in 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 1958.

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

Average discharge.--29 years, 196 cfs.

Extremes.--Maximum discharge during year, about 7,200 cfs Dec. 21; minimum, 12 cfs Oct. 17 (gage height, 1.05 ft).
1929-58: 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 or no gage-height record, 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second).

1.0	9.8	3.0	437
1.2	19	3.5	680
1.4	33	4.0	1,010
1.7	69	5.0	1,810
2.0	124	6.0	2,890
2.5	255	7.1	4,350

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	35	112	220	69	43	176	947	380	49	147	24
2	14	50	104	199	69	50	173	940	715	51	108	21
3	14	210	93	156	69	51	159	680	429	141	86	20
4	14	395	88	132	69	51	217	555	272	72	78	20
5	14	*188	86	130	69	51	312	595	208	49	90	20
6	14	134	86	124	69	53	349	600	178	44	68	20
7	14	100	86	116	69	53	320	675	154	65	56	22
8	14	84	93	104	68	53	249	1,030	139	65	90	25
9	14	265	134	108	66	54	188	1,340	128	88	134	21
10	14	196	335	124	63	55	180	863	116	61	86	24
11	13	126	1,220	110	59	69	220	995	118	79	61	41
12	13	97	437	102	55	86	217	2,010	112	235	53	32
13	13	88	236	97	55	88	249	1,070	*91	280	48	26
14	13	83	205	91	51	86	330	715	100	120	54	24
15	13	510	188	86	50	78	398	565	95	83	44	20
16	13	368	168	83	48	83	*745	536	78	130	61	24
17	13	288	150	79	44	74	1,270	517	76	330	47	45
18	14	242	137	97	*43	*74	1,670	751	72	128	110	235
19	280	475	161	124	43	81	1,760	884	66	106	99	220
20	350	765	*600	140	43	81	1,370	709	59	163	69	106
21	116	342	4,230	124	43	84	1,870	570	76	130	53	66
22	69	223	1,110	*106	44	84	3,010	450	112	88	47	138
23	53	176	521	104	44	84	*3,610	390	78	69	41	132
24	50	154	383	95	43	88	2,440	327	61	58	34	68
25	145	128	302	90	43	102	2,060	320	53	166	42	47
26	95	104	510	86	42	102	1,070	309	83	420	61	41
27	63	88	1,860	84	42	124	686	275	104	268	48	40
28	51	86	570	78	41	145	642	258	69	193	36	78
29	44	95	379	72	-	156	565	371	54	875	32	61
30	40	124	281	69	-------	180	1,190	285	44	440	28	44
31	38	-------	229	69	-------	196	-------	220	-------	226	26	-------
Total	1,639	6,219	15,094	3,399	1,513	2,659	27,695	20,752	4,320	5,272	2,037	1,705
Mean	52.9	207	487	110	54.0	85.8	923	669	144	170	65.7	56.8
Cfsm	0.552	2.16	5.08	1.15	0.564	0.896	9.63	6.98	1.50	1.77	0.686	0.593
In.	0.64	2.42	5.86	1.33	0.59	1.03	10.74	8.05	1.67	2.04	0.79	0.66

Calendar year 1957: Max 4,230 Min 11 Mean 164 Cfsm 1.71 In. 23.28
Water year 1957-58: Max 4,230 Min 13 Mean 253 Cfsm 2.64 In. 35.82

Peak discharge (base, 2,400 cfs).--Dec. 21 (time unknown) about 7,200 cfs; Dec. 27 (1 a.m.) 3,420 cfs (6.43 ft); Apr. 23 (8 to 9 a.m.) 4,160 cfs (6.97 ft); May 12 (10:30 a.m.) 2,460 cfs (5.62 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Dec. 9, Jan. 24 to Mar. 12, Mar. 19, 20. No gage-height record Dec. 21, Jan. 4-23; discharge estimated on basis of 1 discharge measurement, weather records, and records for nearby streams.

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 1958.

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

Average discharge.--17 years, 301 cfs.

Extremes.--Maximum discharge during year, 3,000 cfs Apr. 24 (gage height, 5.47 ft); minimum, 15 cfs Oct. 4, 5 (gage height, 0.95 ft).
1941-58: 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 periods of ice effect or no gage-height record, which are fair.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	13	2.5	375
1.1	26	3.0	620
1.3	47	4.0	1,350
1.6	98	5.0	2,390
2.0	195	5.5	3,040

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	30	267	598	656	225	936	1,220	260	70	232	31
2	17	40	246	810	570	220	999	1,040	480	102	158	29
3	16	120	205	715	550	215	992	910	450	85	120	26
4	15	331	170	645	510	198	1,050	790	365	71	100	25
5	15	292	142	565	465	196	1,240	698	285	63	94	25
6	16	198	128	375	440	225	1,520	609	*210	58	93	24
7	18	138	122	295	410	260	1,680	560	*168	55	78	24
8	20	108	140	284	380	260	1,560	635	174	60	75	27
9	22	110	162	311	365	245	1,230	957	165	75	73	29
10	21	129	200	375	340	284	1,050	978	155	70	70	47
11	22	118	765	375	305	393	1,070	782	150	68	58	57
12	20	*102	1,040	335	295	565	1,080	716	152	87	50	57
13	20	87	908	290	270	576	1,190	978	145	104	53	53
14	19	80	680	265	255	598	1,400	950	133	112	94	49
15	19	160	540	265	235	510	1,450	734	125	89	96	46
16	19	327	400	280	225	470	1,670	609	114	122	78	41
17	20	295	300	345	215	452	*2,080	540	106	216	66	41
18	21	239	265	440	*205	406	2,290	490	98	148	61	71
19	28	236	240	470	200	384	2,170	455	94	116	58	122
20	53	490	230	470	196	380	1,930	500	89	116	52	122
21	66	520	1,220	485	196	367	1,560	450	89	102	46	102
22	52	363	2,220	475	190	355	1,500	390	127	84	43	94
23	42	267	1,330	650	186	355	2,360	355	127	*80	39	89
24	40	213	810	810	182	406	2,820	330	104	77	34	78
25	39	177	598	824	180	*505	2,120	320	89	68	43	66
26	37	145	505	950	196	525	1,700	325	84	60	49	57
27	37	112	1,260	1,290	205	587	1,140	270	85	71	50	49
28	35	116	1,260	1,150	225	680	831	225	80	104	46	57
29	32	136	866	950	-	698	1,100	230	70	235	41	66
30	30	168	638	803	-------	761	1,220	210	63	485	37	57
31	30	-------	540	710	-------	887	-------	190	-------	367	34	-------
Total	857	5,847	18,397	17,605	8,647	13,188	44,938	18,446	4,836	3,620	2,221	1,661
Mean	27.6	195	593	568	309	425	1,498	595	161	117	71.6	55.4
Cfsm	0.161	1.14	3.47	3.32	1.81	2.49	8.76	3.48	0.942	0.684	0.419	0.324
In.	0.19	1.27	4.00	3.83	1.88	2.87	9.77	4.01	1.05	0.79	0.48	0.36

Calendar year 1957: Max 2,220 Min 15 Mean 206 Cfsm 1.20 In. 16.35
Water year 1957-58: Max 2,820 Min 15 Mean 384 Cfsm 2.25 In. 30.50

Peak discharge (base, 1,700 cfs).--Dec. 22 (10 a.m.) 2,370 cfs (4.98 ft); Apr. 24 (6 a.m.) 3,000 cfs (5.47 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 3-6, 14-20, Jan. 3-6, 10-24, Feb. 4 to Mar. 9. No gage-height record Apr. 25-27, Apr. 29 to May 4, May 18 to June 5; discharge estimated on basis of recorded range in stage, weather records, and records for nearby streams.

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 1958.

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.--37 years (1913-23, 1931-58), 137 cfs.

Extremes.--Maximum discharge during year, 2,090 cfs Dec. 21 (gage height, 7.49 ft); minimum, 3.6 cfs Oct. 5 (gage height, 1.49 ft).
1913-24, 1931-58: 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 saw and gristmills above station.

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

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	3.8	3.5	170
1.6	5.8	4.0	272
1.8	11	4.5	412
2.0	18	5.0	595
2.5	49	6.0	1,100
3.0	97	7.0	1,710

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.4	14	150	*219	170	72	325	720	81	17	91	10
2	4.4	20	104	260	156	74	325	456	122	22	58	8.9
3	4.2	136	80	186	142	71	304	339	143	22	44	7.6
4	3.8	284	64	126	122	71	*365	299	103	18	36	7.3
5	3.8	170	55	108	122	74	474	263	81	14	63	7.1
6	3.8	108	50	98	110	77	559	227	*75	14	49	6.7
7	4.8	74	50	102	104	85	544	236	72	14	33	6.7
8	5.6	60	63	104	105	83	456	306	70	14	29	6.7
9	6.0	90	73	117	104	76	350	436	66	18	43	6.5
10	6.5	104	172	105	95	86	319	314	64	18	36	7.3
11	5.6	80	849	102	86	158	374	234	62	15	28	9.8
12	5.4	*63	475	90	83	219	383	455	60	32	23	9.8
13	5.2	49	315	89	82	170	422	432	54	84	27	8.3
14	5.2	44	235	84	77	192	571	294	50	47	60	7.6
15	5.8	176	184	87	75	163	639	234	45	31	38	7.3
16	5.4	234	142	103	73	170	*896	215	42	37	29	6.9
17	5.2	151	126	240	75	143	1,170	215	39	50	23	6.7
18	5.2	126	106	258	75	*125	1,270	192	37	32	22	16
19	15	158	101	205	74	125	1,280	190	35	29	24	37
20	77	446	200	163	71	126	1,090	260	33	35	22	24
21	39	282	1,470	148	67	124	896	196	32	26	18	18
22	26	177	1,060	155	67	121	1,110	158	50	20	17	20
23	20	134	478	284	65	118	1,620	131	40	20	14	26
24	18	109	342	242	65	136	1,210	118	35	*20	14	20
25	26	92	238	201	68	172	829	113	30	17	14	15
26	26	74	225	296	69	172	551	119	29	42	18	13
27	22	63	900	393	69	205	377	103	26	67	18	11
28	18	62	536	309	68	236	339	93	23	63	14	17
29	16	65	347	251	-	240	480	97	18	255	13	20
30	15	90	251	215	-------	272	1,090	90	17	279	11	16
31	14	-------	209	194	-------	322	-------	76	-------	153	11	-------
Total	422.3	3,735	9,650	5,534	2,539	4,478	20,618	7,611	1,634	1,525	940	384.2
Mean	13.6	124	311	179	90.7	144	687	246	54.5	49.2	30.3	12.8
Cfsm	0.178	1.63	4.08	2.35	1.19	1.89	9.02	3.23	0.715	0.646	0.398	0.168
In.	0.21	1.82	4.70	2.71	1.24	2.18	10.06	3.72	0.80	0.74	0.46	0.19

Calendar year 1957: Max 1,470 Min 3.8 Mean 99.0 Cfsm 1.30 In. 17.65
Water year 1957-58: Max 1,620 Min 3.8 Mean 162 Cfsm 2.13 In. 28.83

Peak discharge (base, 1,000 cfs).--Dec. 21 (3:30 p.m.) 2,090 cfs (7.49 ft); Apr. 23 (3 p.m.) 1,860 cfs (7.20 ft); Apr. 30 (10:30 a.m.) 1,220 cfs (6.23 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 2, 3, 12-15, 17, 18, Jan. 2-6. No gage-height record June 6-27; discharge estimated on basis of weather records and records for stations on nearby streams.

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 1958.

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

Average discharge.--18 years, 555 cfs (adjusted).

Extremes.--Maximum discharge during year, 3,460 cfs Apr. 24 (gage height, 6.77 ft); minimum, 29 cfs Oct. 12, 13 (gage height, 1.22 ft).
1940-58: 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. Flow regulated by Pennsesseewassee and Thompson Lakes (see p. 65) and several powerplants above station.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 22				Dec. 23 to Sept. 30			
1.2	26	3.0	565	1.2	27	4.0	1,150
1.5	71	4.0	1,120	1.5	73	5.0	1,880
2.0	190	5.1	1,910	2.0	198	6.0	2,710
2.5	356			2.5	377	6.7	3,380
				3.0	597		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	114	426	1,110	1,430	573	1,510	2,560	540	79	369	59
2	40	213	394	1,240	1,320	531	1,680	2,210	592	68	365	69
3	38	284	364	1,110	1,270	481	1,740	1,700	632	48	369	97
4	38	*294	364	1,040	1,110	472	1,750	1,450	587	39	369	102
5	36	341	316	825	1,050	468	1,860	1,290	535	39	346	102
6	35	334	264	583	980	531	2,070	1,130	481	39	296	95
7	36	288	258	540	847	637	2,620	1,030	434	39	275	69
8	34	241	258	540	808	612	2,600	1,160	401	46	271	85
9	34	238	264	607	787	535	2,250	1,430	381	73	261	97
10	34	225	350	597	740	517	1,940	1,440	358	64	237	100
11	31	219	935	559	698	734	1,820	1,290	342	89	214	97
12	29	232	1,330	477	662	931	1,940	1,230	334	135	198	95
13	29	229	1,230	438	637	1,060	1,990	1,320	*315	156	179	95
14	31	222	1,010	421	632	1,140	2,050	1,240	289	200	170	69
15	34	298	838	421	617	1,040	2,160	1,110	264	286	179	73
16	36	316	738	446	587	892	2,260	1,000	240	293	173	87
17	42	349	596	573	*573	886	*2,530	931	230	293	159	95
18	51	349	494	734	531	792	2,870	908	240	286	151	125
19	79	386	386	803	512	808	3,030	880	233	282	148	120
20	97	529	402	750	490	836	3,010	836	230	261	138	115
21	108	675	1,010	683	468	830	2,820	792	240	244	138	159
22	126	625	1,880	730	455	814	2,540	708	250	254	135	113
23	117	485	2,170	1,040	442	803	2,910	617	264	*250	104	111
24	108	390	1,650	1,120	434	869	3,320	563	254	237	68	111
25	103	345	1,250	1,130	468	*920	3,180	563	237	224	89	106
26	94	316	1,040	1,360	521	965	2,510	568	220	211	104	106
27	90	251	1,520	1,820	573	1,070	1,970	526	217	224	106	102
28	90	216	1,740	1,930	583	1,040	1,660	526	208	227	102	81
29	88	268	1,610	*1,820	-	1,130	1,750	517	237	289	102	85
30	88	305	1,280	1,640	---------	1,210	2,320	531	180	373	100	106
31	88	--------	1,050	1,550	---------	1,330	--------	508	--------	405	71	--------
Total	1,928	9,577	27,407	28,637	20,205	25,457	68,660	32,564	9,965	5,753	5,936	2,926
Mean	62.2	319	884	924	722	821	2,289	1,050	332	186	193	97.5
(†)	-37	+22	+133	+97	-131	+39	+142	+10	-37	-35	-52	-53

Adjusted for change in reservoir contents

Mean	25.2	341	1,017	1,021	591	860	2,431	1,062	295	151	131	44.5
Cfsm	0.077	1.04	3.10	3.11	1.80	2.62	7.41	3.24	0.899	0.460	0.399	0.136
In.	0.09	1.16	3.57	3.58	1.87	3.02	8.27	3.74	1.00	0.53	0.46	0.15

	Observed				Adjusted			
Calendar year 1957:	Max 2,170	Min 29	Mean 373		Mean 382	Cfsm 1.16	In. 15.80	
Water year 1957-58:	Max 3,320	Min 29	Mean 655		Mean 663	Cfsm 2.02	In. 27.44	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Pennesseewassee and Thompson Lakes.

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 1958. October 1928 monthly discharge only, published in WSP 1301.
Gage.--Water-stage recorder. Datum of gage is 109.18 ft above mean sea level, datum of 1929.
Average discharge.--30 years, 5,981 cfs (unadjusted).
Extremes.--Maximum discharge during year, 46,700 cfs Apr. 24 (gage height, 13.89 ft); minimum daily, 405 cfs Sept. 1.
1928-58: 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 good. Flow regulated by powerplants above station and by Kennebago, Rangeley, Moosehead-lookmeguntic, Richardson, Umbagog, Aziscohos, Pennesseewassee, and Thompson Lakes, and Gulf Island Pond (see p. 65).
Revisions (water years).--WSP 781: 1930, 1933-34. WSP 1301: 1932-36.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.5	392	6.0	11,100
1.0	695	8.0	18,900
1.5	1,100	10.0	28,700
2.0	1,650	12.0	38,400
3.0	3,240	14.0	47,200
4.0	5,350		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,680	*2,300	4,280	9,980	7,670	5,650	9,620	29,600	6,180	2,930	5,240	405
2	2,640	1,250	4,520	10,100	7,550	4,950	10,100	25,100	6,270	3,200	4,350	3,390
3	2,690	1,020	4,760	7,400	7,370	5,480	9,740	21,400	9,500	3,350	3,550	4,140
4	2,620	6,320	4,080	4,900	6,810	5,500	9,900	17,600	9,930	2,950	4,070	3,720
5	1,000	7,940	3,500	3,610	6,580	5,750	11,100	15,100	8,800	3,160	4,550	3,240
6	520	6,490	3,880	5,240	6,480	5,900	13,300	13,700	7,610	2,380	4,440	1,170
7	2,880	4,830	2,260	5,620	6,270	6,560	15,100	12,700	6,600	2,840	4,340	610
8	2,650	4,700	860	6,370	6,400	6,450	14,500	13,700	6,360	3,780	4,340	3,360
9	2,600	3,070	3,950	6,070	5,950	6,330	12,300	17,200	5,370	3,310	2,410	3,760
10	2,570	1,940	4,720	5,620	5,690	6,530	10,700	19,200	5,180	3,240	815	3,780
11	2,580	4,570	6,380	5,000	5,650	7,440	10,300	16,300	4,850	3,230	4,430	3,730
12	950	4,440	13,900	5,630	5,450	7,970	10,700	16,600	4,260	2,760	4,380	3,690
13	550	4,440	10,800	5,530	5,690	8,250	11,300	24,000	*4,600	2,540	4,390	1,680
14	2,710	3,800	7,160	5,290	5,830	8,860	12,300	21,300	4,820	4,340	4,380	560
15	2,470	3,940	6,000	5,520	5,960	8,260	13,100	17,600	3,440	4,570	4,250	3,420
16	2,400	4,250	5,800	5,560	5,340	7,210	15,300	15,200	4,060	4,050	1,730	3,760
17	2,360	4,430	5,400	6,040	5,420	7,710	*20,700	14,100	4,550	3,970	575	3,740
18	2,290	5,340	4,900	8,280	5,400	7,360	27,200	13,700	4,080	4,130	3,480	3,940
19	1,030	4,950	4,300	6,440	5,360	7,010	30,800	15,100	4,100	3,480	4,410	4,860
20	1,390	7,050	8,000	6,660	5,080	6,760	32,200	15,900	4,080	1,720	4,320	3,730
21	4,760	9,200	15,000	6,030	5,080	6,560	30,700	15,700	3,600	4,040	4,170	780
22	4,200	7,070	37,600	6,850	5,120	5,600	33,600	16,900	2,640	4,140	3,630	3,580
23	3,550	5,370	26,000	7,730	5,170	4,680	42,700	11,800	4,260	4,040	1,190	3,900
24	3,070	4,720	17,300	7,890	4,920	6,150	46,300	10,600	4,020	4,000	525	3,700
25	3,070	4,700	13,200	8,060	5,250	6,770	44,000	9,510	4,230	3,950	3,360	3,500
26	1,280	4,860	11,300	8,630	5,440	6,840	*41,500	9,240	4,050	1,990	4,340	3,300
27	1,090	4,810	20,300	10,500	5,230	7,180	34,100	8,600	4,040	1,900	4,330	1,500
28	3,550	2,290	*24,500	10,100	5,800	7,220	27,000	7,680	3,100	4,580	4,420	600
29	3,180	3,320	15,000	8,980	-	7,240	23,500	7,080	2,240	5,200	4,350	3,770
30	3,020	3,590	12,000	8,550	--------	8,180	25,900	7,000	2,940	7,680	1,700	3,810
31	2,400	--------	9,910	8,100	--------	9,140	--------	6,400	--------	7,020	495	--------
Total	74,750	137,000	311,560	216,280	163,960	211,490	649,560	465,610	149,760	114,480	106,960	89,125
Mean	2,411	4,567	10,050	6,977	5,856	6,822	21,650	15,020	4,992	3,693	3,450	2,971
(†)	-1,310	+1,481	+2,774	-866	-2,470	-2,272	+5,076	+2,774	-843	+606	-1,272	-1,432

Adjusted for reservoir contents

Mean	1,101	6,048	12,820	6,111	3,386	4,550	26,730	17,790	4,149	4,299	2,178	1,539
Cfsm	0.338	1.86	3.94	1.88	1.04	1.40	8.21	5.46	1.27	1.32	0.669	0.473
In.	0.39	2.08	4.54	2.17	1.08	1.61	9.16	6.30	1.42	1.52	0.77	0.53

	Observed			Adjusted			
Calendar year 1957:	Max 37,600	Min 420	Mean 4,518	Mean 4,847	Cfsm 1.49	In. 20.21	
Water year 1957-58:	Max 46,300	Min 405	Mean 7,371	Mean 7,570	Cfsm 2.32	In. 31.57	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Kennebago, Rangeley, Moosehead-lookmeguntic, Richardson, Umbagog, Aziscohos, Auburn, Pennesseewassee, and Thompson Lakes, and Gulf Island Pond.
Note.--No gage-height record Oct. 31, Nov. 1, Dec. 15-21, Sept. 24-28; discharge estimated on basis of records at Gulf Island power station and 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 1957 to September 1958

Date	Kennebago Lake†	Rangeley Lake†	Mooselookmeguntic Lake†	Upper and Lower Richardson Lakes†	Aziscohos Lake†
Sept.30, 1957.....	*480	559	3,110	3,751	5,456
Oct. 31.....	*480	278	1,565	3,051	4,968
Nov. 30.....	*480	308	1,998	3,954	6,240
Dec. 31.....	*480	1,018	4,539	5,125	8,140
Jan. 31, 1958.....	*480	643	5,160	4,084	7,276
Feb. 28.....	*480	224	1,765	3,566	6,198
Mar. 31.....	*480	110	155	2,430	3,674
Apr. 30.....	928	1,115	5,444	3,603	7,332
May 31.....	957	1,299	8,046	5,500	9,253
June 30.....	928	1,282	7,545	5,050	9,407
July 31.....	951	1,339	8,010	5,162	9,717
Aug. 31.....	842	1,242	6,866	4,787	8,965
Sept.30.....	704	1,004	5,550	4,176	8,036

	Umbagog Lake†	Gulf Island Pond‡	Lake Auburn†	Pennesseewassee Lake††	Thompson Lake‡‡
Sept.30, 1957.....	1,772	2,369	270	55	1,390
Oct. 31.....	1,542	2,194	230	49	1,296
Nov. 30.....	2,417	2,431	260	116	1,287
Dec. 31.....	2,982	2,480	397	93	1,666
Jan. 31, 1958.....	1,884	2,485	568	107	1,913
Feb. 28.....	1,722	2,437	532	55	1,647
Mar. 31.....	820	2,485	580	93	1,714
Apr. 30.....	1,958	2,503	640	176	1,998
May 31.....	2,924	2,435	508	111	2,094
June 30.....	1,830	2,329	463	111	1,998
July 31.....	2,534	2,397	441	111	1,904
Aug. 31.....	2,091	2,131	386	107	1,742
Sept.30.....	1,596	2,327	342	93	1,618

* No gage heights available from Sept. 30, 1956, to Apr. 30, 1958; flow records adjusted on basis of no change in contents from Sept. 30, 1956, to Mar. 31, 1958.
† 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. on last day of month.

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 1958.

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

Average discharge.--9 years, 291 cfs.

Extremes.--Maximum discharge during year, 3,140 cfs Jan. 27 (gage height, 4.61 ft); minimum, 31 cfs Oct. 1 (gage height, 1.00 ft).
1949-58: 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 or no gage-height record, which are fair. Some diurnal fluctuation at low flow caused by mill above station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.0	31	2.0	385
1.1	47	2.5	705
1.3	92	3.0	1,140
1.6	196	4.5	2,970

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	84	550	800	570	180	878	836	124	68	98	55
2	36	200	414	1,210	490	184	1,030	544	250	66	82	53
3	34	340	230	555	425	194	1,050	375	425	62	73	49
4	34	*395	184	335	370	188	1,000	385	285	60	68	47
5	34	240	128	250	315	214	887	364	184	58	73	47
6	34	148	100	230	265	254	828	309	144	58	68	47
7	36	103	95	152	230	319	1,660	319	120	58	62	49
8	39	82	109	138	210	314	1,440	515	109	64	62	51
9	47	78	120	140	182	319	905	887	*106	130	68	53
10	51	75	160	152	188	380	628	609	100	114	70	55
11	42	66	710	140	176	750	518	408	100	156	62	58
12	39	60	796	138	168	1,140	596	431	109	276	58	58
13	37	58	505	120	156	1,010	796	414	100	196	55	58
14	37	56	364	110	156	950	*663	323	95	130	53	58
15	37	138	249	114	148	622	538	280	85	100	53	58
16	37	276	196	140	138	499	461	262	78	90	53	58
17	39	192	180	267	*128	431	425	267	75	87	51	58
18	39	141	160	375	124	375	385	258	73	80	51	64
19	47	176	138	355	114	402	349	244	73	82	51	103
20	64	375	200	275	112	419	314	267	73	92	51	92
21	64	309	700	225	106	385	290	236	78	82	53	78
22	58	205	1,010	635	102	380	285	205	98	70	55	73
23	52	148	596	1,790	100	436	980	180	92	68	55	75
24	50	117	349	1,630	98	628	1,280	159	80	68	55	70
25	48	106	272	1,080	106	796	655	152	73	66	58	68
26	60	90	230	1,840	156	772	414	171	73	64	70	66
27	82	70	1,080	*2,970	168	844	319	163	95	75	73	78
28	72	73	880	2,300	170	923	350	148	85	80	68	88
29	60	98	596	1,320	-	796	890	155	75	138	62	92
30	55	174	596	887	--------	765	1,210	144	68	205	58	80
31	60	--------	414	712	--------	820	--------	127	--------	130	58	--------
Total	1,458	4,672	12,311	21,385	5,681	16,679	22,024	10,197	3,525	3,073	1,927	1,939
Mean	47.0	156	397	690	203	538	734	329	117	99.1	62.2	64.6
Cfsm	0.331	1.10	2.80	4.86	1.43	3.79	5.17	2.32	0.824	0.698	0.438	0.455
In.	0.38	1.23	3.23	5.60	1.49	4.37	5.77	2.68	0.93	0.80	0.50	0.51

Calendar year 1957: Max 1,080 Min 29 Mean 162 Cfsm 1.14 In. 15.54
Water year 1957-58: Max 2,970 Min 34 Mean 287 Cfsm 2.02 In. 27.49

Peak discharge (base, 1,500 cfs).--Jan. 23 (8 p.m.) 1,880 cfs (3.66 ft); Jan. 27 (2:30 p.m.) 3,140 cfs (4.61 ft); Apr. 7 (12:30 p.m.) 1,830 cfs (3.62 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 3-16, 20-22, Feb. 1 to Mar. 2. No gage-height record Oct. 21 to Nov. 4, Dec. 3, 5, 18, Jan. 18, 19, Feb. 24-27, Sept. 27, 28; discharge estimated on basis of recorded range in stage and weather records.

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 1958.

Gages.--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.--71 years, 662 cfs (unadjusted).

Remarks.--Discharge computed from Allen meter records for each of 3 pairs of water wheels and from records of openings of 2 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 Crystal, 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	333	261	206	187	500	668	834	1,750	272	0	828	239
2	266	261	348	185	554	664	828	1,750	832	0	826	787
3	266	179	328	305	556	665	832	1,930	832	0	827	839
4	266	261	319	322	575	667	831	2,390	833	0	828	840
5	266	262	322	341	588	666	784	2,490	832	0	823	840
6	254	263	322	352	638	664	663	2,200	833	461	829	841
7	259	310	321	435	669	650	700	1,540	0	750	829	836
8	266	307	321	343	670	537	767	1,390	945	767	784	726
9	264	296	323	392	668	449	796	1,390	832	796	825	844
10	265	306	308	362	670	632	779	1,210	834	776	827	841
11	265	306	250	346	669	557	799	907	833	775	823	835
12	175	309	278	343	669	481	833	833	829	860	828	838
13	130	308	327	377	669	467	765	823	827	810	823	837
14	263	309	327	348	669	499	774	835	777	819	818	805
15	263	284	325	375	669	516	889	834	724	832	860	836
16	263	268	326	391	670	516	835	833	835	807	786	838
17	263	282	326	357	668	699	833	0	832	779	706	831
18	262	265	314	385	672	598	832	792	831	587	638	833
19	263	243	305	338	670	804	0	824	824	714	812	836
20	256	228	307	348	670	790	797	834	829	546	739	596
21	263	267	234	414	671	772	833	837	529	549	757	453
22	262	290	290	266	672	785	1,110	831	410	553	754	834
23	262	302	305	168	668	787	1,710	829	832	545	739	836
24	262	265	188	196	670	769	1,970	670	837	543	675	836
25	258	267	0	192	669	764	2,240	493	832	538	554	833
26	262	279	263	103	668	768	2,240	834	832	536	554	832
27	272	309	186	191	669	762	1,880	834	757	624	554	759
28	263	309	251	313	660	762	1,460	837	417	814	581	592
29	264	309	252	344	-	801	1,870	832	0	815	559	830
30	261	309	253	412	---------	840	1,810	833	0	820	558	838
31	260	---------	253	447	---------	836	---------	538	---------	824	0	---------
Total	7,997	8,414	8,678	9,878	18,130	20,835	32,294	33,923	20,632	18,240	23,344	23,361
Mean	258	280	280	319	648	672	1,076	1,094	688	588	721	779
(†)	-434	+426	+572	+1,481	+40	+334	+1,648	+437	-574	-458	-783	-513

Adjusted for diversion and change in reservoir contents

Mean	-176	706	852	1,800	688	1,006	2,724	1,531	114	130	-62	266
Cfsm	-0.404	1.62	1.95	4.13	1.58	2.31	6.25	3.51	0.261	0.298	-0.142	0.610
In.	-0.47	1.81	2.25	4.76	1.64	2.66	6.97	4.05	0.29	0.34	-0.16	0.68

	Observed			Adjusted		
Calendar year 1957:	Max 786	Min 0	Mean 395	Mean 443	Cfsm 1.02	In. 13.81
Water year 1957-58:	Max 2,490	Min 0	Mean 616	Mean 798	Cfsm 1.83	In. 24.82

† 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 of adjusted discharge and runoff 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 1958.

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.--35 years (1903-9, 1929-58), 927 cfs.

Extremes.--Maximum discharge during year, 19,500 cfs Dec. 21 (gage height, 11.17 ft); minimum, 78 cfs Oct. 17 (gage height, 1.92 ft).
1903-9, 1929-58: 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 periods of ice effect or no gage-height record, which are fair.

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

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.9	74	5.0	2,200
2.1	115	6.0	3,840
2.5	228	7.0	5,950
3.0	420	8.0	8,500
3.5	685	10.0	15,000
4.0	1,050		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	91	212	1,240	1,480	470	270	750	5,000	1,190	276	325	122
2	91	325	1,050	1,310	460	300	750	4,720	1,610	248	269	106
3	91	910	820	1,050	450	300	744	4,030	1,430	231	238	97
4	91	1,890	720	946	450	295	820	3,200	1,030	223	225	100
5	91	970	635	813	440	290	978	3,370	914	215	262	95
6	91	685	570	735	430	275	1,280	3,100	820	205	225	95
7	91	537	540	625	410	275	1,270	3,340	744	203	202	95
8	95	466	785	570	395	270	1,200	3,460	673	221	198	102
9	102	1,810	1,340	560	385	270	1,080	4,620	637	280	262	97
10	97	1,140	2,490	625	375	305	970	3,700	575	276	252	100
11	91	750	4,940	665	350	375	1,050	3,160	*603	248	208	132
12	89	614	2,640	590	345	450	1,090	5,930	586	317	202	142
13	87	*537	1,620	560	335	386	1,060	4,310	527	402	195	142
14	87	511	1,100	505	330	511	1,290	3,100	496	313	174	125
15	82	2,080	785	465	345	501	1,490	2,540	466	248	160	115
16	80	1,820	570	440	385	481	2,340	2,300	425	235	148	108
17	80	1,070	445	420	400	448	4,230	2,050	416	221	145	102
18	84	890	300	430	400	425	5,610	2,820	420	203	155	130
19	400	1,110	820	450	370	425	6,940	3,960	394	202	205	440
20	820	2,320	2,800	515	345	*429	6,240	3,910	376	252	183	309
21	372	1,430	14,000	553	330	448	7,090	2,720	389	389	160	221
22	266	1,050	9,640	608	305	457	10,300	2,160	416	284	145	205
23	215	876	3,100	*1,050	300	443	*11,200	1,860	372	242	145	336
24	215	792	2,430	962	285	457	9,240	1,630	340	215	135	242
25	1,140	711	1,970	778	275	486	8,920	1,520	321	193	135	208
26	548	675	1,900	685	270	500	6,260	1,490	321	284	186	*186
27	364	625	7,930	615	265	530	4,050	1,380	325	293	195	168
28	298	580	3,280	560	*260	570	3,500	1,250	306	309	165	195
29	262	875	2,340	515	-	605	3,040	1,560	280	505	148	215
30	231	1,450	1,880	485	-------	645	7,200	1,400	266	750	130	177
31	221	-------	1,580	475	-------	750	-------	1,150	-------	429	122	-------
Total	6,963	29,711	76,260	21,040	10,160	13,272	111,982	90,740	17,668	8,934	5,899	4,907
Mean	225	990	2,460	679	363	428	3,733	2,927	589	283	190	164
Cfsm	0.583	2.56	6.37	1.76	0.940	1.11	9.67	7.58	1.53	0.746	0.492	0.425
In.	0.67	2.86	7.34	2.03	0.98	1.28	10.79	8.74	1.71	0.86	0.57	0.47

Calendar year 1957: Max 14,000 Min 80 Mean 719 Cfsm 1.86 In. 25.28
Water year 1957-58: Max 14,000 Min 80 Mean 1,089 Cfsm 2.82 In. 38.30

Peak discharge (base, 8,700 cfs).--Dec. 21 (time unknown) 19,500 cfs (11.17 ft); Dec. 27 (6:30 a.m.) 12,000 cfs (9.14 ft); Apr. 23 (5 p.m.) 11,800 cfs (9.11 ft); Apr. 30 (9 a.m.) 8,730 cfs (8.10 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Jan. 6-20, Jan. 26 to Mar. 12 (no gage-height record Feb. 5-22; discharge estimated on basis of recorded range in stage and weather records). No gage-height record Nov. 17, 18, Nov. 26 to Dec. 23, Mar. 26-30; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.

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 1958.

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

Average discharge.--16 years, 731 cfs.

Extremes.--Maximum discharge during year, 5,350 cfs Apr. 24 (gage height, 8.81 ft); minimum, 82 cfs Oct. 12, 13; minimum daily, 83 cfs Oct. 13.
1942-58: 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 except those for period of no gage-height record, which are good. Flow regulated by Ossipee and Silver Lakes and Pine River Pond (combined capacity, 1,430,000,000 cu ft).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.5	82	4.0	840
2.0	160	5.0	1,380
2.5	266	7.0	2,950
3.0	420	9.0	5,670

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92	203	496	a1,300	1,190	551	804	4,000	595	269	376	231
2	138	205	741	a1,100	1,180	535	865	3,920	603	269	254	229
3	220	210	705	a900	1,160	523	955	3,630	611	266	254	227
4	233	209	499	a740	1,130	511	1,050	3,310	615	266	254	186
5	199	117	527	a670	*1,100	503	1,150	3,030	615	247	254	106
6	156	120	620	a600	1,080	487	1,310	2,740	603	168	254	106
7	147	*122	615	a540	1,040	483	1,510	2,520	595	168	254	106
8	142	123	611	567	950	471	1,690	2,360	587	170	254	106
9	149	125	611	571	935	467	1,780	1,900	515	170	252	106
10	146	127	668	571	910	463	1,780	1,500	375	170	252	106
11	130	128	1,100	571	880	467	1,770	1,520	375	185	249	106
12	117	128	1,920	638	860	487	1,790	1,810	375	266	249	106
13	83	130	1,780	768	836	*523	1,790	1,930	375	416	249	106
14	85	356	1,530	754	804	555	1,830	1,620	375	388	247	106
15	86	519	1,460	750	786	607	1,940	1,440	372	312	247	106
16	86	848	*1,350	826	759	633	2,150	1,400	368	289	244	106
17	87	1,100	1,110	990	750	646	*2,540	1,370	359	259	244	106
18	87	975	822	975	728	646	3,120	1,330	346	222	242	180
19	90	1,050	750	965	710	642	3,700	1,170	264	179	242	284
20	92	1,260	688	870	687	633	4,140	925	*187	179	242	330
21	95	1,180	1,850	804	660	624	4,280	*925	166	179	240	259
22	96	990	3,270	845	638	642	4,540	865	164	179	240	220
23	98	700	3,460	945	615	642	4,950	840	164	179	238	220
24	99	700	3,080	965	595	638	5,300	831	164	179	238	220
25	101	792	2,280	975	583	642	5,250	822	164	179	238	220
26	101	547	1,930	1,040	559	646	4,900	728	166	*179	*235	218
27	102	543	2,180	1,170	543	651	4,330	595	168	179	235	216
28	103	522	1,970	1,190	547	669	3,830	595	170	179	235	216
29	112	372	a1,750	1,210	-	692	3,500	603	170	315	233	216
30	203	372	a1,400	1,220	-------	723	3,610	603	218	567	233	*216
31	203	-------	a1,000	1,210	-------	759	-------	595	-------	579	231	-------
Total	3,878	14,773	42,773	27,240	23,215	18,161	82,154	51,427	10,824	7,751	7,709	5,266
Mean	125	492	1,380	879	829	586	2,738	1,659	361	250	249	176
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 3,460 Min 83 Mean 514 Cfsm 1.56 In. 21.15
Water year 1957-58: Max 5,300 Min 83 Mean 809 Cfsm 2.45 In. 33.27

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Ossipee River at Cornish, Maine.

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 1958.

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.--42 years, 878 cfs.

Extremes.--Maximum discharge during year, 6,260 cfs Apr. 23 (gage height, 8.54 ft); minimum, 36 cfs Oct. 15 (gage height, 0.66 ft); minimum daily, 91 cfs Oct. 16.
1916-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 22				Dec. 23 to Sept. 30			
1.0	81	3.0	8.0	1.2	115	4.0	1,490
1.3	135	4.0	1,430	1.5	183	5.0	2,300
1.5	182	6.0	3,100	2.0	351	7.0	4,270
2.0	338			3.0	844	8.5	6,200

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	121	227	664	1,260	1,520	710	1,240	4,700	809	318	574	266
2	125	241	832	1,540	1,470	705	1,380	4,520	860	318	347	273
3	140	286	810	1,340	1,440	700	1,490	4,140	849	318	295	263
4	241	444	658	1,060	1,400	694	1,580	3,780	809	306	335	260
5	244	370	579	1,000	1,320	694	1,740	3,460	774	310	347	215
6	220	215	695	925	1,280	699	1,980	3,160	749	292	318	148
7	182	186	669	870	1,210	694	2,600	2,910	729	196	314	130
8	180	190	690	824	1,160	689	2,610	2,810	714	240	303	146
9	158	182	695	820	1,120	679	2,510	2,720	719	318	310	142
10	182	194	826	815	1,100	679	2,480	1,910	*554	250	299	144
11	156	190	1,650	820	1,080	714	2,520	1,860	*539	245	318	149
12	156	186	2,020	840	1,060	794	2,540	1,960	529	378	295	151
13	132	205	2,120	925	1,040	824	2,590	2,210	514	605	280	138
14	140	*180	1,680	1,020	1,020	854	*2,720	2,010	504	574	295	126
15	106	618	1,590	1,010	990	875	*2,840	1,690	459	454	280	146
16	91	733	1,470	1,160	950	891	3,180	1,640	494	425	280	118
17	112	1,090	1,280	1,160	920	891	*3,650	1,600	454	360	263	156
18	106	1,060	1,020	1,320	910	865	4,170	1,540	449	335	306	152
19	110	992	920	1,280	880	865	4,650	1,510	430	266	280	270
20	156	1,390	810	1,250	870	*865	4,940	1,170	290	260	280	369
21	174	1,280	1,720	1,220	850	875	5,110	1,120	273	234	277	387
22	128	1,100	2,980	1,200	830	875	5,300	1,080	256	220	292	300
23	122	865	3,660	1,230	805	880	5,920	1,020	231	234	280	260
24	110	664	3,340	*1,360	790	901	*6,190	992	237	231	270	270
25	144	865	2,820	1,330	770	923	5,990	392	222	222	277	275
26	150	653	2,080	1,530	750	928	5,540	998	228	213	280	275
27	132	588	*2,170	1,910	740	962	4,890	809	225	234	288	275
28	136	584	2,390	1,810	710	1,000	4,490	799	222	250	280	288
29	134	527	2,080	1,700	-	1,030	4,290	809	210	*292	277	284
30	120	513	1,710	1,620	-------	1,090	4,800	779	219	569	273	*273
31	215	-------	1,190	1,570	-------	1,190	-------	769	-------	709	266	-------
Total	4,623	16,818	47,818	37,719	28,985	26,035	105,840	61,467	14,551	10,176	9,379	6,649
Mean	149	561	1,543	1,217	1,035	840	3,528	1,983	485	328	303	222
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 3,660 Min 91 Mean 613 Cfsm 1.35 In. 18.36
Water year 1957-58: Max 6,190 Min 91 Mean 1,014 Cfsm 2.24 In. 30.37

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Jan. 3, 5-7, 9-15, 21, 22, Feb. 4-7, Feb. 10 to Mar. 3. No gage-height record for Sept. 23-27; discharge estimated on basis of fragmentary gage heights 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 1958.

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.--42 years, 2,703 cfs.

Extremes.--Maximum discharge during year, 20,200 cfs Apr. 25 (gage height, 12.38 ft); minimum, 130 cfs Oct. 18 (gage height, 1.04 ft).
1916-58: 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 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 tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 24				Apr. 25 to Sept. 30			
1.5	240	5.0	3,240	1.6	359	3.0	1,090
1.7	303	6.0	4,950	2.0	557	4.0	1,930
2.1	455	7.0	7,000	2.5	773		
2.5	656	8.0	9,360				
3.0	973	10.0	14,100	Note.--Same as preceding table above 4.0 ft.			
4.0	1,930	12.4	20,200				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	334	764	2,270	7,370	4,280	2,210	3,270	14,300	3,270	974	1,400	527
2	331	788	2,380	7,180	4,040	1,930	3,550	14,100	3,280	980	1,100	541
3	379	885	2,230	6,160	3,710	1,910	3,740	13,700	3,260	974	967	532
4	443	1,150	1,970	5,500	3,550	1,990	3,980	12,900	3,090	954	1,010	536
5	447	1,690	1,760	4,950	3,390	2,000	4,300	11,900	3,060	954	987	522
6	391	1,590	1,700	4,120	3,240	2,050	4,800	11,000	2,910	820	954	439
7	398	1,510	1,750	3,580	3,160	2,050	5,820	10,200	2,720	736	954	427
8	383	1,440	1,930	3,420	2,950	2,010	6,030	9,620	2,560	762	948	448
9	379	1,400	1,970	3,360	2,810	1,920	5,970	9,310	2,460	902	948	439
10	383	1,540	2,150	3,200	2,550	1,940	5,970	8,200	*2,150	841	865	500
11	379	1,730	3,820	2,910	2,420	1,990	6,140	8,040	2,060	762	941	486
12	353	1,740	4,680	2,650	2,420	2,170	6,200	8,110	1,970	948	908	386
13	324	1,610	5,160	2,710	2,480	2,270	6,330	8,300	1,860	1,070	795	439
14	338	*1,470	4,370	2,810	2,620	2,430	6,580	8,200	1,780	1,240	685	473
15	331	2,220	4,320	2,620	2,730	2,450	*6,790	7,970	1,660	1,120	690	509
16	320	2,380	4,390	2,360	2,710	2,510	7,420	7,690	1,610	1,080	645	486
17	277	2,960	4,320	2,550	2,690	2,560	8,390	7,370	1,520	934	889	491
18	245	3,010	4,010	3,100	2,620	2,450	9,480	6,870	1,490	877	695	545
19	270	2,920	3,580	3,030	2,550	2,410	10,600	6,370	1,320	818	710	752
20	570	3,470	3,340	2,910	2,500	2,390	11,700	5,820	1,220	600	700	934
21	651	3,530	4,600	2,840	2,320	2,380	13,200	5,620	1,200	757	720	980
22	629	3,450	6,540	2,810	2,190	2,370	14,700	5,520	1,180	741	664	865
23	629	3,280	8,860	3,240	2,170	2,380	17,100	5,400	1,150	812	674	762
24	634	2,850	10,100	*3,450	2,170	2,390	19,000	5,180	1,100	818	669	757
25	656	2,980	10,000	3,530	2,070	2,420	20,100	4,910	1,070	853	659	757
26	624	2,690	8,960	4,140	2,030	2,450	19,900	4,700	1,030	580	664	768
27	510	2,300	*8,680	4,860	*2,030	2,510	18,800	4,070	1,000	555	694	768
28	673	2,210	*8,640	4,820	2,210	2,630	17,000	3,810	980	765	684	773
29	706	2,120	8,560	4,590	-	2,690	15,500	3,630	902	941	649	762
30	701	2,040	8,390	4,440	-------	2,870	15,200	3,420	922	1,220	550	*725
31	753	-------	7,580	4,460	-------	3,090	-------	3,320	-------	1,630	582	-------
Total	14,441	63,697	153,010	119,670	76,610	71,820	297,540	239,550	55,784	28,018	25,000	18,329
Mean	466	2,123	4,936	3,860	2,736	2,317	9,918	7,727	1,859	904	806	611
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 10,100 Min 245 Mean 1,913 Cfsm 1.47 In. 20.00
Water year 1957-58: Max 20,100 Min 245 Mean 3,188 Cfsm 2.46 In. 33.33

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 3-23, Feb. 3-26.

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 1958.

Gage.--Water-stage recorder. Altitude of gage is 260 ft (from topographic map).

Average discharge.--18 years, 296 cfs.

Extremes.--Maximum discharge during year, 2,230 cfs Apr. 8 (gage height, 4.87 ft); minimum daily, 47 cfs July 22.
1940-58: 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 or no gage-height record, which are fair. Flow regulated by Little Ossipee Lake, Ledgemere and Balch Ponds (combined capacity, 581,000,000 cu ft).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	42	3.5	835
1.8	58	4.0	1,260
2.0	104	4.5	1,770
2.5	269	4.9	2,270
3.0	509		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	66	159	495	740	390	598	1,540	209	124	135	124
2	58	68	192	648	721	374	784	1,190	224	122	132	124
3	58	73	202	567	655	350	888	895	328	120	132	124
4	58	77	188	477	580	342	895	769	365	116	132	124
5	60	126	165	370	550	346	942	741	332	114	132	124
6	60	159	159	246	530	346	1,110	500	285	110	129	121
7	60	135	159	242	530	350	1,720	166	245	130	129	121
8	64	112	159	260	532	355	2,170	82	225	146	126	121
9	64	112	159	254	520	350	1,780	96	215	146	126	121
10	64	112	172	224	285	342	1,440	460	200	170	124	121
11	64	112	380	195	290	369	1,330	585	192	210	121	121
12	64	110	705	213	285	419	1,320	579	192	240	121	121
13	64	110	530	209	346	445	1,310	573	146	245	144	121
14	64	*110	290	213	400	460	1,370	550	110	230	162	121
15	64	115	281	242	395	471	1,400	521	126	215	159	118
16	64	115	258	265	390	471	*1,440	504	121	210	159	118
17	64	115	242	319	390	466	1,560	471	115	166	156	118
18	64	112	220	342	390	455	1,610	445	115	158	153	124
19	66	115	206	350	385	439	1,540	335	112	150	150	124
20	73	121	213	186	545	429	1,420	302	115	150	147	124
21	73	124	410	162	538	419	1,260	298	126	98	144	124
22	68	141	641	415	521	408	1,130	277	132	47	141	159
23	66	144	604	579	505	403	1,090	216	124	62	138	199
24	66	138	498	648	485	413	1,210	209	118	73	135	199
25	66	126	360	686	466	429	1,120	242	115	77	135	195
26	66	118	281	942	440	445	926	290	132	84	132	192
27	64	115	535	1,470	424	460	762	305	136	102	132	192
28	64	115	560	1,700	403	477	728	315	126	162	129	192
29	64	118	471	1,480	-	487	966	290	126	250	129	*188
30	64	121	398	1,130	-------	498	1,400	254	126	126	126	185
31	64	-------	360	850	-------	526	-------	224	-------	148	126	-------
Total	1,980	3,435	10,157	16,379	13,241	12,934	37,219	14,224	5,233	4,521	4,236	4,260
Mean	63.9	114	328	528	473	417	1,241	459	174	146	137	142
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 705 Min 52 Mean 183 Cfsm - In. -
Water year 1957-58: Max 2,170 Min 47 Mean 350 Cfsm - In. -

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Jan. 8, 20, 21, Feb. 1, 3-7, 9-12, 14-20, 23, 24, 26, Mar. 1. No gage-height record May 26-29, June 6-10, 26, 27, June 30 to July 19; discharge estimated on basis of partly recorded range in stage, weather records, and records of gate operation at dam upstream.

695. Mousam River near West Kennebunk, Maine

Location.--Lat 43°25'05", long 70°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 1958.

Gage.--Water-stage recorder. Altitude of gage is 170 ft (from topographic map).

Average discharge.--19 years, 181 cfs (unadjusted).

Extremes.--Maximum discharge during year, 1,480 cfs Jan. 27 (gage height, 3.76 ft); minimum, 8.6 cfs Oct. 3-7 (gage height, 0.45 ft).
1939-58: 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 good except those for period of 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 1957-58 (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	3.7	1,440

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.5	39	150	290	531	220	521	650	142	36	75	44
2	9.0	60	130	370	484	206	606	565	205	33	68	38
3	8.6	96	112	256	421	202	617	502	275	30	66	33
4	8.6	79	102	192	378	206	639	488	212	32	75	38
5	8.6	62	94	145	362	209	666	447	181	29	122	43
6	8.6	49	92	128	345	223	724	399	168	68	96	42
7	8.6	48	90	128	333	238	1,250	438	142	79	86	46
8	29	40	90	148	325	234	1,110	521	136	131	81	49
9	47	54	91	131	290	230	892	555	*136	116	75	40
10	14	43	100	116	290	245	772	470	125	92	68	48
11	13	41	116	114	282	310	736	425	131	104	62	52
12	12	39	190	102	275	383	754	421	128	144	59	36
13	11	38	162	96	260	358	748	399	119	195	57	42
14	13	38	148	92	241	383	*742	366	122	164	52	39
15	16	*94	130	112	241	341	718	345	102	148	54	43
16	16	80	122	112	230	317	736	337	94	131	44	42
17	20	72	120	131	227	302	742	321	92	114	38	46
18	23	69	118	148	230	279	730	306	90	102	44	79
19	48	68	120	148	220	275	712	294	90	128	43	68
20	52	110	140	134	216	275	644	241	84	114	30	52
21	35	95	200	131	209	290	586	216	88	99	36	49
22	34	80	270	250	212	310	540	195	96	79	50	62
23	34	75	235	370	209	317	596	188	88	81	39	54
24	36	72	205	408	209	345	*576	168	68	77	30	49
25	49	70	176	391	223	366	521	184	62	71	52	48
26	36	69	*168	830	220	370	434	198	84	69	50	49
27	34	69	279	1,440	216	395	387	181	116	77	46	57
28	35	69	238	1,090	223	425	438	181	146	75	42	*81
29	38	85	227	797	-	416	581	174	158	102	40	59
30	26	110	230	661	--------	430	754	148	50	92	39	49
31	32	--------	202	591	--------	479	--------	142	--------	81	42	--------
Total	764.5	2,013	4,847	10,052	7,902	9,579	20,472	10,465	3,730	2,913	1,761	1,477
Mean	24.7	67.1	156	324	282	309	682	338	124	94.0	56.8	49.2
(†)	-16.7	+10.6	+55.4	+82.2	-33.1	+25.0	+67.7	-26.7	-23.0	-30.8	-24.6	-17.4
Adjusted for change in reservoir contents												
Mean	8.0	77.7	211	406	249	334	750	311	101	63.2	32.2	31.8
Cfsm	0.076	0.740	2.01	3.87	2.37	3.18	7.14	2.96	0.962	0.602	0.307	0.303
In.	0.09	0.83	2.32	4.46	2.47	3.67	7.97	3.41	1.07	0.69	0.35	0.34

	Observed			Adjusted			
Calendar year 1957:	Max 441	Min 8.6	Mean 118	Mean 117	Cfsm 1.11	In. 15.04	
Water year 1957-58:	Max 1,440	Min 8.6	Mean 208	Mean 214	Cfsm 2.04	In. 26.67	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Square Pond and Mousam Lake.
Note.--No gage-height record Nov. 10 to Dec. 26; discharge estimated on basis of 2 discharge measurements, recorded range in stage, and weather records.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 179.60 ft above mean sea level, datum of 1929.

Average discharge.--29 years (1929-58), 241 cfs (unadjusted).

Extremes.--Maximum discharge during year, 1,840 cfs Apr. 7 (gage height, 5.97 ft); minimum, 11 cfs Oct. 25.
1928-58: Maximum discharge, 5,490 cfs Mar. 19, 1936 (gage height, 12.31 ft); minimum, 4.7 cfs Aug. 28, 1950.

Remarks.--Records good. 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 6				Apr. 7 to Sept. 30			
1.1	9.2	2.0	187	1.3	25	3.0	635
1.2	16	2.5	400	1.5	52	4.0	1,100
1.4	37	3.0	655	1.7	92	5.6	1,690
1.6	70	4.0	1,230	2.0	187		
1.8	119						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	44	102	545	682	368	470	1,180	100	74	88	31
2	79	30	170	580	822	373	568	1,010	214	66	38	122
3	46	42	120	455	600	384	606	642	246	44	52	120
4	21	102	114	355	584	350	547	770	199	31	114	56
5	30	102	63	230	558	380	537	675	160	35	100	95
6	27	66	50	375	552	373	640	525	164	40	83	72
7	90	77	102	370	521	382	1,610	530	187	61	110	38
8	88	66	95	380	485	388	1,680	567	169	92	74	138
9	83	29	122	355	490	378	1,490	580	180	106	38	116
10	72	27	182	360	521	386	1,200	554	*173	81	44	114
11	52	52	430	275	547	485	1,030	590	180	81	126	70
12	22	92	215	182	547	516	1,000	535	180	138	100	46
13	20	68	190	370	485	495	996	530	138	180	102	83
14	88	68	162	345	475	500	978	505	138	144	81	32
15	77	*70	79	330	485	480	*982	463	42	126	52	114
16	63	79	230	340	470	436	1,060	368	162	116	68	100
17	61	44	225	350	470	418	1,190	226	129	110	33	100
18	63	90	205	295	460	414	1,320	222	122	106	132	70
19	27	97	220	162	465	414	1,410	214	111	108	110	63
20	23	156	220	400	465	414	1,460	222	95	79	100	72
21	70	100	430	380	440	404	1,250	214	97	56	74	40
22	88	83	295	405	418	414	1,110	210	48	95	52	136
23	66	68	305	510	404	440	1,220	245	150	122	81	100
24	63	32	280	420	396	470	1,300	234	120	97	38	110
25	42	95	270	375	378	460	1,170	203	120	70	138	66
26	15	95	*300	620	364	*436	860	246	110	35	110	48
27	21	90	530	*1,040	*350	480	495	230	132	57	120	83
28	59	48	530	*895	368	470	530	214	114	*116	83	50
29	77	44	565	1,020	-	445	650	214	38	120	81	*85
30	57	63	530	895	--------	470	990	118	102	114	79	97
31	56	--------	470	776	--------	505	--------	81	--------	100	37	--------
Total	1,723	2,119	7,801	14,390	13,602	13,228	30,349	13,317	4,120	2,800	2,538	2,467
Mean	55.6	70.6	252	464	486	427	1,012	430	137	90.3	81.9	82.2
(†)	-40.9	+61.0	+146	+62.3	-152	+18.4	+208	+5.9	-38.0	-11.4	-83.5	-72.3

Adjusted for change in reservoir contents

Mean	14.7	132	398	526	334	445	1,220	436	99.0	78.9	-1.6	9.9
Cfsm	0.100	0.898	2.71	3.58	2.27	3.03	8.30	2.97	0.673	0.537	-0.011	0.067
In.	0.12	1.00	3.12	4.13	2.36	3.49	9.26	3.42	0.75	0.62	-0.01	0.07

	Observed			Adjusted	
Calendar year 1957:	Max 732	Min 15	Mean 175	Mean 166	Cfsm 1.13 In. 15.40
Water year 1957-58:	Max 1,680	Min 15	Mean 297	Mean 307	Cfsm 2.09 In. 28.33

* 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 Townhouse) Ponds.
Note.--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 1958. October and November 1934 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 70 ft (from topographic map).

Average discharge.--24 years, 19.6 cfs.

Extremes.--Maximum discharge during year, about 400 cfs Jan. 27; maximum gage height, 3.86 ft Jan. 27 (affected by ice); minimum discharge, 0.58 cfs Oct. 1, 2, 3, 4.
1934-58: 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 tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 26				Jan. 27 to Sept. 30			
0.04	0.58	0.7	18	0.07	1.25	1.0	34
.1	1.1	1.0	36	.1	1.45	1.5	76
.2	2.35	1.5	76	.2	2.6	2.0	141
.3	4.1	2.0	141	.3	4.1	3.0	315
.5	9.5	3.0	315	.4	6.2	3.5	419
				.6	12		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.58	1.55	27	52	74	30	83	59	8.6	2.5	4.2	1.4
2	.62	5.6	13	49	64	31	*110	44	25	2.3	3.3	1.3
3	.62	16	9.4	33	54	31	123	35	38	2.4	2.8	1.3
4	*.62	9.6	8.3	21	45	31	99	36	23	2.6	2.6	1.3
5	.75	4.8	7.0	18	37	34	87	32	18	2.35	2.6	1.3
6	.75	3.0	5.8	16	32	41	91	28	15	2.35	*2.3	1.25
7	1.05	2.25	6.2	17	28	44	206	*47	12	2.35	2.1	1.35
8	1.95	2.0	7.7	17	26	39	123	66	9.9	5.2	1.95	1.45
9	2.05	2.9	8.6	18	24	38	84	72	*3.5	*11	1.9	1.3
10	1.05	2.6	30	18	21	42	67	53	8.7	5.2	1.8	*1.6
11	.97	2.05	56	17	20	57	61	40	8.8	6.8	1.7	1.5
12	.92	1.8	40	16	19	68	74	34	8.6	10	1.6	1.4
13	.83	*1.7	28	16	19	65	69	30	7.5	7.8	1.55	1.35
14	.92	1.6	22	15	18	60	58	26	7.5	5.6	1.6	1.3
15	.87	6.9	19	15	17	54	50	24	6.5	5.0	1.55	1.25
16	.87	6.0	17	17	17	61	44	22	5.6	4.5	1.5	1.25
17	.97	4.6	16	20	16	57	39	21	5.2	3.8	1.5	1.55
18	.97	3.4	12	19	15	53	35	20	4.8	3.2	1.55	5.5
19	2.1	7.7	13	17	15	52	31	18	4.7	3.7	1.45	4.2
20	2.1	14	*16	15	16	50	28	18	4.8	3.8	1.4	2.7
21	1.25	7.6	55	*20	17	40	26	17	4.9	3.0	1.5	2.1
22	1.05	5.5	55	39	16	54	25	15	4.8	2.6	3.0	3.0
23	1.05	4.6	41	68	15	65	43	13	4.2	2.8	2.2	2.8
24	1.05	4.1	32	59	15	70	41	12	3.8	2.8	1.8	2.1
25	1.7	3.9	26	59	16	70	34	13	3.5	2.5	2.2	1.9
26	1.35	3.4	27	300	17	70	27	15	3.5	2.5	2.5	1.7
27	1.25	2.8	46	*350	17	77	24	12	3.8	3.2	2.4	2.5
28	1.3	2.8	34	175	20	80	51	12	3.2	3.1	1.95	7.2
29	1.25	5.1	37	118	-	74	76	11	2.9	6.3	1.8	4.2
30	1.2	13	36	99	-------	73	82	10	2.6	6.2	1.65	3.0
31	1.35	-------	29	88	-------	76	-------	9.2	-------	4.4	1.55	-------
Total	35.36	152.85	780.0	1,801	710	1,687	1,991	864.2	268.9	131.85	63.50	66.05
Mean	1.14	5.10	25.2	58.1	25.4	54.4	66.4	27.9	8.96	4.25	2.05	2.20
Cfsm	0.094	0.421	2.08	4.80	2.10	4.50	5.49	2.31	0.740	0.351	0.169	0.182
In.	0.11	0.47	2.40	5.54	2.18	5.19	6.12	2.66	0.83	0.41	0.20	0.20

Calendar year 1957: Max 60 Min 0.50 Mean 11.2 Cfsm 0.926 In. 12.61
Water year 1957-58: Max 350 Min 0.58 Mean 23.4 Cfsm 1.93 In. 26.31

Peak discharge (base, 170 cfs).--Jan. 27 (4 to 5 a.m.) about 400 cfs; Apr. 7 (4 a.m.) 235 cfs (2.57 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 13, Jan. 2-21, 26-28, Feb. 9-26 (no gage-height record Jan. 5-20; discharge estimated on basis of weather records, recorded range in stage, and records for Lamprey River near Newmarket, N. H., and Squannacook River near West Groton, Mass.).

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 1958.

Gage.--Water-stage recorder. Altitude of gage is 40 ft (from topographic map).

Average discharge.--24 years, 282 cfs.

Extremes.--Maximum discharge during year, 2,790 cfs Jan. 27 (gage height, 8.87 ft); minimum daily, 3.5 cfs Oct. 1.
1934-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 30, Dec. 2, 5-9)

Oct. 1 to Jan. 27				Jan. 28 to Sept. 30			
0.1	3.1	0.9	26	0.6	9.2	3.0	392
.3	5.6	1.2	53	.8	18	4.0	635
.5	9.2	1.5	92	1.1	40	6.0	1,370
.7	15			1.5	92	9.0	2,830
				2.0	176		

Note.--Same as following table above 1.5 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	28	207	598	1,230	363	1,030	886	145	33	84	17
2	3.8	49	183	682	1,030	394	1,200	854	180	29	68	15
3	3.8	84	180	580	864	399	1,390	706	333	28	55	12
4	*3.6	98	185	490	739	387	1,390	610	324	32	46	11
5	3.6	69	154	420	633	392	1,330	549	292	31	40	11
6	3.6	64	140	360	558	439	1,290	502	242	28	*36	11
7	3.9	54	147	300	510	480	*1,820	*590	198	28	32	11
8	4.2	46	132	230	460	465	2,020	724	171	35	29	12
9	5.2	45	128	260	420	454	1,980	906	*144	*114	27	12
10	8.5	42	206	280	380	470	1,520	858	133	104	25	*13
11	11	38	475	270	350	566	1,200	739	123	174	23	14
12	12	33	552	260	340	694	1,130	613	123	254	22	14
13	12	*31	600	245	330	742	1,110	527	113	213	21	13
14	14	29	558	235	310	778	1,030	460	104	178	22	11
15	15	40	411	230	300	679	942	408	94	151	28	11
16	15	58	337	240	290	790	844	372	78	125	26	9.9
17	15	51	300	260	275	766	772	351	49	100	24	29
18	15	50	244	275	275	706	718	328	40	84	23	100
19	15	63	244	275	275	649	679	309	39	86	21	109
20	18	115	*236	260	290	622	613	309	49	70	18	94
21	33	121	436	250	300	578	558	300	58	78	17	86
22	38	137	616	370	300	589	502	292	58	64	26	92
23	38	133	649	580	300	649	510	262	50	56	25	92
24	33	118	607	640	300	709	518	230	45	55	19	84
25	40	106	499	760	300	751	505	209	40	48	18	77
26	37	95	424	1,570	305	781	449	232	44	44	20	71
27	33	77	527	2,510	274	851	377	224	48	43	23	75
28	32	79	530	2,710	282	938	432	217	48	47	24	109
29	32	81	555	2,460	-	956	706	205	42	58	23	102
30	30	96	555	2,000	-------	959	805	183	37	101	21	89
31	29	-------	518	1,550	-------	980	-------	163	-------	92	19	-------
Total	560.7	2,130	11,535	22,150	12,220	19,976	29,370	14,118	3,444	2,583	905	1,406.9
Mean	18.1	71.0	372	715	436	644	979	455	115	83.3	29.2	46.9
Cfsm	0.099	0.388	2.03	3.91	2.38	3.52	5.35	2.49	0.628	0.455	0.160	0.256
In.	0.11	0.43	2.34	4.50	2.48	4.06	5.97	2.87	0.70	0.52	0.18	0.29

Calendar year 1957: Max 670 Min 2.4 Mean 161 Cfsm 0.880 In. 11.96
Water year 1957-58: Max 2,710 Min 3.5 Mean 330 Cfsm 1.80 In. 24.45

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 3, 4, 13, Jan. 3-24, Feb. 9-26. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 615 ft (from topographic map).

Average discharge.--19 years, 518 cfs.

Extremes.--Maximum discharge during year, 24,600 cfs Dec. 21 (gage height, 12.43 ft), from rating curve extended above 9,300 cfs by logarithmic plotting; minimum daily, 64 cfs Oct. 6.
1939-58: Maximum discharge, that of Dec. 21, 1957; minimum daily, 42 cfs Feb. 11, 1948.

Remarks.--Records good except those for periods of ice effect or doubtful gage-height record, which are fair. Some diurnal fluctuation caused by powerplant above station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.2	61	5.0	1,540
2.5	113	6.0	2,750
3.0	273	7.0	4,380
3.5	470	8.0	6,570
4.0	720	10.0	13,200

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	153	350	590	220	126	326	1,980	838	162	259	78
2	68	168	295	510	217	126	318	1,870	1,680	136	210	73
3	73	419	248	370	*200	123	314	1,530	1,140	138	172	73
4	68	899	231	300	180	128	406	1,350	750	126	159	70
5	66	542	200	330	185	136	492	1,350	620	116	138	73
6	64	406	172	450	180	133	546	1,160	560	113	118	68
7	70	322	252	400	180	128	533	1,280	492	116	116	72
8	76	273	575	350	180	123	470	2,070	438	128	175	79
9	76	1,200	436	300	160	d120	382	2,500	410	*238	305	73
10	76	593	912	280	155	d130	350	1,590	374	141	182	104
11	70	406	3,030	290	150	d150	378	1,670	442	175	147	138
12	70	342	1,000	240	150	162	374	3,780	414	330	118	125
13	67	306	570	270	150	153	386	2,020	362	378	105	95
14	68	*277	500	270	150	168	466	1,390	350	214	103	90
15	67	1,890	450	280	145	159	620	1,120	314	165	97	83
16	68	1,000	400	270	150	153	*1,090	1,100	288	159	93	79
17	68	690	370	280	155	141	1,920	1,010	306	153	91	79
18	73	585	330	230	150	138	2,610	1,490	*284	128	145	204
19	539	760	*370	190	145	141	2,990	2,680	256	141	*123	270
20	531	1,270	3,580	185	140	150	2,500	*2,070	238	224	111	150
21	273	708	12,400	230	140	150	3,930	1,640	238	210	93	116
22	175	542	3,080	305	145	147	5,990	1,200	242	147	93	443
23	141	466	1,560	680	140	153	*6,140	1,010	220	141	91	320
24	366	422	1,110	438	140	150	4,530	829	200	128	84	175
25	1,350	378	850	318	135	156	4,080	780	186	113	165	133
26	427	314	1,290	326	130	156	2,440	780	182	239	178	120
27	295	245	3,400	330	128	206	1,480	702	196	267	113	113
28	238	299	1,180	284	126	242	1,250	660	172	228	97	178
29	203	354	843	259	-	277	1,370	1,080	153	676	90	147
30	178	430	684	242	-------	314	3,690	780	144	598	84	120
31	156	-------	600	231	-------	366	--------	655	--------	350	81	--------
Total	6,130	16,659	41,270	10,028	4,426	5,105	52,371	45,126	12,489	6,778	4,136	3,941
Mean	198	555	1,331	323	158	165	1,746	1,456	416	219	133	131
Cfsm	1.03	2.88	6.90	1.67	0.819	0.855	9.05	7.54	2.16	1.13	0.689	0.679
In.	1.18	3.21	7.95	1.93	0.85	0.98	10.09	8.70	2.41	1.31	0.80	0.76

Calendar year 1957: Max 12,400 Min 62 Mean 455 Cfsm 2.36 In. 32.00
Water year 1957-58: Max 12,400 Min 64 Mean 571 Cfsm 2.96 In. 40.17

Peak discharge (base, 7,100 cfs).--Dec. 21 (9 a.m.) 24,600 cfs (12.43 ft); Apr. 23 (1:30 p m.) 7,380 cfs (8.29 ft).

* Discharge measurement made on this day.
d Doubtful gage-height record; discharge estimated on basis of 1 discharge measurement, appearance of recorder chart, weather records, and records for Ammonoosuc River at Bethlehem Junction and Baker River near Rumney.
Note.--Stage-discharge relation affected by ice Dec. 1, 8, 13-17, Jan. 3-23, Feb. 3-26.

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 1958. 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.--30 years, 259 cfs.

Extremes.--Maximum discharge during year, 9,260 cfs Dec. 21 (gage height, 10.03 ft), from rating curve extended above 3,800 cfs as explained below; minimum, 19 cfs Sept. 5-7.
1928-58: Maximum discharge, 21,400 cfs June 15, 1949 (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 or no gage-height record, which are fair.

Revisions (water years).--WSP 726: Drainage area. WSP 781: 1934(M). WSP 1231: 1929-33(M), 1934.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.3	18	4.0	720
2.4	30	5.0	1,620
2.7	87	6.0	2,670
3.0	175	8.0	5,400
3.5	395		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	44	208	395	265	115	406	1,040	252	38	83	22
2	24	52	165	360	240	115	417	886	596	38	65	21
3	22	543	130	240	216	115	434	741	552	35	54	20
4	21	893	113	110	*182	115	608	748	344	30	46	20
5	21	406	97	135	180	120	769	643	270	30	41	19
6	21	248	87	170	170	115	894	524	220	29	38	19
7	22	179	125	185	170	115	986	608	182	30	35	19
8	25	142	195	170	165	110	755	885	158	32	43	21
9	32	302	212	160	160	105	545	1,270	149	63	110	21
10	33	252	398	150	150	115	486	755	130	48	72	24
11	29	175	2,110	145	140	*125	552	601	162	*46	57	32
12	26	139	730	135	140	135	517	1,030	149	110	44	29
13	24	125	460	130	140	145	587	692	125	174	40	26
14	24	*113	390	125	135	160	769	510	110	87	36	24
15	22	888	300	130	130	165	1,060	428	95	65	32	22
16	21	523	261	140	125	155	*1,760	474	85	57	30	21
17	21	370	*228	145	125	145	2,550	462	*83	50	29	22
18	21	296	160	145	120	139	2,910	428	78	44	40	38
19	70	354	205	135	120	135	2,800	*456	74	48	44	69
20	128	538	841	120	115	140	2,240	422	67	69	36	48
21	74	344	5,080	125	115	140	2,680	354	67	56	32	38
22	56	252	a2,500	150	110	142	3,680	301	72	44	32	95
23	46	212	a1,000	440	110	149	*3,340	261	65	40	33	98
24	46	182	a700	498	110	152	2,150	228	57	38	29	57
25	118	162	a450	434	110	158	1,830	212	54	36	*40	43
26	92	125	a800	390	115	168	1,170	228	52	104	57	36
27	67	86	*2,190	504	115	216	755	197	52	85	41	35
28	56	119	814	450	115	274	727	175	48	67	33	50
29	48	142	566	380	-	325	839	293	44	213	29	50
30	46	205	428	334	-------	375	1,820	261	41	250	26	41
31	44	-------	354	296	-------	434	-------	205	-------	128	24	-------
Total	1,324	8,411	22,097	7,426	4,088	5,117	41,036	16,318	4,433	2,184	1,351	1,080
Mean	42.7	280	713	240	146	165	1,368	526	148	70.5	43.6	36.0
Cfsm	0.299	1.96	4.99	1.68	1.02	1.15	9.57	3.68	1.03	0.493	0.305	0.252
In.	0.34	2.19	5.75	1.93	1.06	1.33	10.67	4.24	1.15	0.57	0.35	0.28

Calendar year 1957: Max 5,080 Min 14 Mean 208 Cfsm 1.45 In. 19.72
Water year 1957-58: Max 5,080 Min 19 Mean 315 Cfsm 2.20 In. 29.86

Peak discharge (base, 3,600 cfs).--Dec. 21 (11:30 a.m.) 9,260 cfs (10.03 ft); Apr. 22 (2 a.m.) 4,720 cfs (7.57 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 Smith River near Bristol.
Note.--Stage-discharge relation affected by ice Nov. 27, Dec. 12-15, 18, Jan. 2-23, Feb. 5 to Mar. 14, Mar. 19-21.

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 1958. 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.--55 years, 1,361 cfs.

Extremes.--Maximum discharge during year, 33,600 cfs Dec. 21; maximum gage height, 17.15 ft Dec. 21; minimum discharge, 126 cfs Oct. 6; minimum daily, 129 cfs Oct. 6, 17.
1903-58: 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 periods of ice effect, which are fair. Some diurnal fluctuation caused by powerplants above station.

Revisions (water years).--WSP 471: 1912-13 calendar years. WSP 726: Drainage area. WSP 1231: 1904-11, 1913-14, 1915-16(M), 1917-18, 1919(M), 1920-25, 1926-27(M), 1929-31(M). See also Records available.

Rating tables, water year 1957-58, 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 Dec. 11, 20-22, 27, Apr. 17-26, 30)

Oct. 1 to Dec. 21				Dec. 22 to Sept. 30			
0.0	129	2.0	1,820	0.1	130	1.0	810
.2	207	6.0	7,150	.3	213	2.0	2,150
.5	370	10.0	14,400	.5	330	6.0	7,150
1.0	790	15.0	25,400	.8	564	11.0	16,400

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	154	328	1,060	2,070	950	490	1,670	5,770	1,620	305	516	163
2	147	364	820	2,040	900	480	1,660	4,740	2,750	299	419	160
3	140	1,120	650	1,250	850	480	1,620	4,020	2,850	268	357	156
4	143	2,940	600	900	760	490	1,990	3,760	1,880	268	318	156
5	136	1,580	540	970	720	510	2,390	3,480	1,540	252	293	156
6	129	1,070	500	1,100	700	500	2,930	2,980	1,330	240	268	156
7	140	817	580	1,050	680	480	3,160	3,110	1,140	240	246	156
8	154	682	930	960	720	470	2,600	4,320	986	252	262	156
9	186	1,660	1,100	900	670	460	1,990	6,160	912	*364	496	160
10	186	1,360	1,250	850	620	500	1,740	4,180	797	350	411	167
11	165	943	9,410	850	580	550	1,910	3,290	955	287	330	230
12	147	763	3,780	800	580	600	1,850	6,370	940	479	274	224
13	143	673	1,800	760	600	600	1,900	4,640	771	742	246	213
14	136	619	1,550	730	570	680	2,350	3,270	693	484	224	185
15	136	3,980	1,650	740	560	660	2,790	2,670	622	370	218	172
16	133	3,390	1,500	770	560	640	4,630	2,650	554	343	204	163
17	129	1,740	1,200	800	560	600	7,220	2,570	536	330	195	163
18	140	1,430	1,000	760	560	564	8,990	2,770	*536	299	252	226
19	526	1,570	1,100	700	550	576	10,000	3,660	478	299	*293	435
20	1,220	2,830	5,000	600	540	610	8,370	3,900	447	384	240	330
21	628	1,810	24,600	650	520	599	9,240	2,940	447	390	213	262
22	412	1,330	12,200	1,100	510	599	14,300	2,400	455	330	208	593
23	340	1,120	4,880	1,900	500	610	15,400	2,070	433	293	204	763
24	322	988	3,410	1,700	500	645	*11,600	1,840	*397	280	185	412
25	1,730	889	2,640	1,500	490	668	9,870	1,710	377	257	224	311
26	907	720	2,510	1,400	490	706	6,440	1,740	357	348	357	274
27	592	*510	*10,300	1,600	490	897	4,090	1,580	337	404	280	252
28	472	709	4,610	1,450	*490	*1,180	3,510	*1,460	330	411	224	293
29	405	790	3,000	1,300	-	1,390	*3,500	1,920	324	1,100	195	324
30	*364	1,020	2,400	1,150	-------	1,580	9,340	1,800	305	1,580	185	*268
31	334	-------	2,070	1,050	-------	1,800	-------	1,470	-------	797	172	-------
Total	10,896	39,745	108,640	34,400	17,220	21,614	159,050	99,240	26,099	13,045	8,509	7,679
Mean	351	1,325	3,505	1,110	615	697	5,302	3,201	870	421	274	256
Cfsm	0.564	2.13	5.64	1.78	0.989	1.12	8.52	5.15	1.40	0.677	0.441	0.412
In.	0.65	2.38	6.50	2.06	1.03	1.29	9.51	5.93	1.56	0.78	0.51	0.46

Calendar year 1957: Max 24,600 Min 114 Mean 1,060 Cfsm 1.70 In. 23.13
Water year 1957-58: Max 24,600 Min 129 Mean 1,496 Cfsm 2.41 In. 32.66

Peak discharge (base, 12,600 cfs).--Dec. 21 (2:30 p.m.) 33,600 cfs; Dec. 27 (7 a.m.) 13,400 cfs; Apr. 23 (5:30 p.m.) 16,000 cfs.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26, 27, Dec. 2-10, 13-20, Jan. 3 to Mar. 17.

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 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 545 ft (from topographic map).

Average discharge.--19 years, 91.4 cfs.

Extremes.--Maximum discharge during year, 199 cfs Mar. 10-18, 20, 21, 24-30, 31 (gage height, 11.00 ft); minimum daily, 26 cfs July 9-12.
1939-58: 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

10.0	20	10.4	73
10.1	30	10.6	107
10.2	43	11.0	199

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	51	60	71	73	134	133	65	105	71	73	73
2	57	54	60	71	73	134	100	93	105	71	73	73
3	57	59	60	71	83	134	100	75	105	71	73	73
4	56	60	60	71	*91	134	100	73	105	71	73	71
5	56	59	60	71	91	134	102	73	105	71	73	71
6	56	59	60	71	91	131	102	73	105	71	73	71
7	60	59	60	71	91	131	102	73	105	71	73	71
8	60	59	60	71	91	131	102	91	105	46	73	70
9	60	59	60	71	91	131	102	103	105	26	73	70
10	60	57	62	71	91	168	102	103	105	*26	73	70
11	59	56	63	71	91	199	102	103	105	26	71	70
12	59	54	63	71	91	*199	102	105	86	26	71	70
13	57	54	63	71	93	199	103	105	73	52	71	70
14	56	*56	63	71	93	199	103	105	73	70	71	70
15	56	62	63	71	93	199	*84	105	73	70	71	70
16	54	62	63	71	93	199	75	105	73	70	71	70
17	54	62	63	71	93	199	75	105	73	70	71	70
18	54	60	63	71	93	199	75	105	73	70	71	70
19	57	60	63	71	93	194	75	105	73	70	*73	70
20	57	60	65	71	93	180	75	*105	73	70	73	68
21	57	60	71	71	93	196	76	105	73	70	73	68
22	57	60	67	73	93	196	76	105	73	70	73	68
23	57	59	68	73	93	196	76	105	73	70	73	68
24	56	59	71	73	93	196	76	105	*73	71	73	68
25	56	59	71	73	109	199	76	105	73	71	73	68
26	54	60	71	73	134	199	67	105	73	73	73	68
27	54	60	71	73	134	199	60	105	73	73	73	68
28	54	60	71	73	134	199	53	105	73	73	73	68
29	53	60	71	73	-	199	47	105	73	73	73	67
30	51	60	71	73	-------	196	59	105	73	73	73	67
31	53	-------	71	73	-------	196	-------	105	-------	73	73	-------
Total	1,744	1,759	2,008	2,221	2,675	5,499	2,580	3,025	2,555	1,979	2,247	2,089
Mean	56.3	58.6	64.8	71.6	95.5	177	86.0	97.6	85.2	63 8	72.5	69.6
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 93 Min 51 Mean 63.9 Cfsm - In. -
Water year 1957-58: Max 199 Min 26 Mean 83.2 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 1958.

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.--40 years, 143 cfs.

Extremes.--Maximum discharge during year, 1,680 cfs Apr. 19 (gage height, 6.67 ft); minimum daily, 8.6 cfs Sept. 15, 16.
1918-58: 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 good. 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 tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 20		Dec. 21 to Sept. 30			
4.0	380	1.9	8.6	3.5	207
5.0	860	2.0	12	4.0	380
Note.--Same as following table below 4.0 ft.		2.3	29	5.0	840
		2.7	64	6.0	1,340
		3.1	118	6.6	1,640

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.7	20	144	218	176	82	323	925	116	28	56	10
2	9.0	32	120	*254	164	83	319	686	262	33	43	10
3	9.0	210	b86	176	144	82	327	510	443	32	35	9.7
4	9.0	290	74	129	*132	82	412	497	273	27	31	9.7
5	9.0	181	54	101	127	87	533	425	176	24	33	9.7
6	9.0	108	47	95	120	92	614	330	131	23	40	9.4
7	9.7	79	58	102	116	92	654	342	107	23	33	10
8	12	65	73	99	116	88	610	582	92	50	30	11
9	29	114	94	95	112	85	488	736	88	146	25	10
10	27	115	206	92	104	89	425	605	82	*95	25	11
11	21	80	715	91	98	*102	461	412	96	70	22	10
12	17	66	575	82	95	122	434	488	104	104	19	9.4
13	15	60	308	83	98	122	456	438	85	92	18	9.0
14	14	*58	224	83	92	131	605	319	74	64	17	9.0
15	13	159	199	84	88	131	*740	*263	64	49	16	8.6
16	12	232	164	91	b88	127	995	260	56	41	15	8.6
17	12	146	142	98	b85	115	1,310	273	54	36	14	9.4
18	12	108	b110	b90	b84	108	1,520	232	50	31	18	28
19	38	123	115	b80	b84	104	1,620	218	45	30	*19	27
20	65	184	219	b72	b82	108	1,450	210	44	28	18	23
21	46	146	1,000	b78	b80	108	1,330	174	46	26	16	19
22	35	108	990	b96	b79	110	1,400	149	47	24	14	27
23	28	91	708	287	b77	113	*1,460	129	43	24	12	26
24	26	80	434	290	b76	118	*1,290	116	*40	21	12	23
25	31	73	266	286	b76	122	985	113	36	25	14	19
26	36	b64	305	273	80	129	755	132	35	27	15	16
27	33	b48	704	304	82	157	564	120	30	31	16	17
28	26	54	713	297	82	194	456	105	29	33	14	21
29	23	62	564	247	-	224	596	113	33	83	13	*19
30	21	83	334	215	--------	266	1,080	120	28	151	12	18
31	20	--------	244	194	--------	327	--------	101	--------	87	12	--------
Total	676.4	3,239	9,989	4,782	2,837	3,900	24,212	10,123	2,809	1,558	677	447.5
Mean	21.8	108	322	154	101	126	807	327	93.6	50.3	21.8	14.9
Cfsm	0.254	1.26	3.75	1.79	1.18	1.47	9.41	3.81	1.09	0.586	0.254	0.174
In.	0.29	1.40	4.33	2.07	1.23	1.69	10.49	4.39	1.22	0.68	0.29	0.19

Calendar year 1957: Max 1,000 Min 6.9 Mean 99.3 Cfsm 1.16 In. 15.68
Water year 1957-58: Max 1,620 Min 8.6 Mean 179 Cfsm 2.09 In. 28.27

Peak discharge (base, 1,150 cfs).--Dec. 21 (9 a.m.) 1,280 cfs (5.87 ft); Apr. 19 (2 a.m.) 1,680 cfs (6.67 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

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 1958. Prior to November 1937 month-end contents only, determined from gage at Lakeport, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 500.02 ft above mean sea level, datum of 1929.

Extremes.--Maximum daily gage height during year, 4.77 ft May 4; minimum daily, 1.94 ft Mar. 13.
1937-58: 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 between elevations 494.55 ft (bottom of flume at Lakeport) and 504.22 ft (top of flashboards at outlet in Lakeport). Draft limited by law to an average of 250 cfs during the seven 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. 110), 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 1957-58 (gage height, in feet, and contents, in millions of cubic feet)

1.0	11,930	4.0	17,840
2.0	13,880	5.0	19,850
3.0	15,840		

Mean gage height, in feet, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.43	2.25	2.38	3.44	3.81	2.49	2.36	4.75	4.50	4.19	4.12	3.37
2	2.39	2.30	2.40	3.45	3.78	2.44	2.42	4.75	4.54	4.15	4.09	3.32
3	2.35	2.32	2.41	3.47	3.73	2.39	2.49	4.76	4.56	4.16	4.08	3.30
4	2.37	2.34	2.43	3.45	3.69	2.36	2.55	4.77	4.55	4.14	4.05	3.27
5	2.34	2.30	2.40	3.46	3.64	2.31	2.61	4.76	4.52	4.13	4.01	3.24
6	2.35	2.28	2.41	3.49	3.57	2.24	2.70	4.73	4.48	4.13	3.98	3.23
7	2.36	2.27	2.40	3.50	3.53	2.18	2.86	4.73	4.47	4.11	3.95	3.22
8	2.37	2.28	2.41	3.61	3.50	2.13	2.96	4.70	4.45	4.14	3.93	3.21
9	2.39	2.27	2.44	3.65	3.45	2.09	3.03	4.68	4.43	4.19	3.88	3.18
10	2.38	2.24	2.53	3.63	3.40	2.04	3.10	4.67	4.43	4.20	3.89	3.16
11	2.36	2.23	2.69	3.61	3.34	2.00	3.18	4.66	4.42	4.22	3.86	3.13
12	2.32	2.22	2.76	3.60	3.27	1.97	3.28	4.68	4.40	4.27	3.84	3.12
13	2.29	2.22	2.80	3.60	3.20	1.94	3.35	4.65	4.39	4.29	3.81	3.09
14	2.31	2.22	2.83	3.58	3.11	1.95	3.42	4.63	4.30	4.29	3.79	3.07
15	2.25	2.29	2.84	3.61	3.07	2.01	3.50	4.61	4.27	4.29	3.76	3.05
16	2.26	2.30	2.85	3.63	3.03	2.02	3.58	4.58	4.24	4.28	3.75	3.04
17	2.26	2.29	2.84	3.63	2.98	2.03	3.70	4.55	4.23	4.22	3.72	3.05
18	2.29	2.29	2.87	3.60	2.93	2.03	3.81	4.51	4.23	4.22	3.71	3.12
19	2.33	2.35	2.89	3.57	2.85	2.04	3.91	4.47	4.23	4.21	3.64	3.10
20	2.33	2.38	2.92	3.54	2.77	2.04	4.01	4.48	4.23	4.18	3.63	3.07
21	2.32	2.38	3.05	3.51	2.72	2.06	4.10	4.46	4.22	4.19	3.59	3.07
22	2.28	2.37	3.11	3.56	2.66	2.10	4.21	4.45	4.20	4.18	3.59	3.09
23	2.27	2.38	3.18	3.64	2.60	2.10	4.35	4.43	4.20	4.17	3.56	3.07
24	2.27	2.37	3.18	3.64	2.57	2.12	4.45	4.45	4.20	4.16	3.56	3.05
25	2.29	2.34	3.20	3.63	2.52	2.14	4.45	4.46	4.19	4.16	3.54	3.04
26	2.30	2.33	3.26	3.66	2.52	2.14	4.45	4.47	4.19	4.20	3.52	3.03
27	2.29	2.29	3.24	3.70	2.48	2.15	4.46	4.48	4.17	4.19	3.49	3.05
28	2.27	2.29	3.30	3.76	2.50	2.19	4.52	4.48	4.18	4.17	3.46	3.04
29	2.22	2.32	3.34	3.80	-	2.22	4.57	4.46	4.18	4.18	3.44	3.00
30	2.23	2.36	3.36	3.84	-------	2.26	4.69	4.46	4.17	4.15	3.42	2.99
31	2.23	-------	3.37	3.83	-------	2.30	-------	4.47	-------	4.14	3.40	-------
(†)	14,350	14,660	16,640	17,480	14,880	14,540	19,330	18,780	18,200	18,120	16,600	15,830
(‡)	-153	+120	+739	+314	-1,075	-127	+1,848	-205	-224	-29.9	-568	-297

Calendar year 1957..... ‡ +29.5
Water year 1957-58..... ‡ +33.9

† Contents, in millions of cubic feet, at 12 p.m. on last day of month.
‡ Change in contents, equivalent in cubic feet per second.
Note.--Gage heights for period Oct. 3 to Nov. 4 estimated on basis of records for station at Lakeport.

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 1958.

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.--25 years, 539 cfs (adjusted for storage).

Extremes.--Maximum daily discharge during year, 1,990 cfs Feb. 4; minimum daily, 135 cfs Jan. 5.
1933-58: Maximum daily discharge, 2,890 cfs Mar. 31, 1936; minimum daily, 5 cfs several days during April, May, and June 1957.

Remarks.--Records good except those for periods of shifting-control or indefinite deflection-velocity relationship, which are fair. Flow completely regulated by Winnipesaukee (see preceding page), Wentworth, Merrymeeting (see p. 110), 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	160	260	220	145	1,540	1,290	265	1,630	330	275	540	290
2	160	275	280	305	1,530	1,260	215	1,660	470	270	545	485
3	170	210	260	300	*1,860	1,460	290	1,650	595	300	545	530
4	220	275	255	225	1,990	1,510	285	1,660	590	270	750	530
5	160	255	260	135	1,960	1,430	270	1,780	570	260	625	440
6	160	245	280	285	1,970	1,530	275	1,920	600	260	540	290
7	205	250	225	270	1,950	1,590	300	1,770	545	300	550	290
8	150	270	225	265	1,870	1,560	260	1,690	525	275	470	290
9	150	290	285	595	1,860	1,530	265	1,500	580	280	305	285
10	145	220	260	790	1,880	1,490	265	1,430	555	285	305	285
11	205	220	250	655	1,800	1,460	275	1,430	545	275	520	285
12	170	280	250	650	1,790	*1,430	280	1,400	540	325	565	285
13	170	250	280	790	1,770	1,180	285	1,260	575	265	565	290
14	195	*260	240	*790	1,750	610	295	1,320	580	300	560	285
15	150	*290	245	795	1,670	485	*255	*1,430	585	265	460	320
16	150	225	305	1,000	1,650	485	245	*1,430	650	245	295	275
17	145	225	*265	1,100	1,660	545	250	1,410	380	250	295	290
18	210	280	260	1,030	1,630	515	270	1,410	320	255	500	295
19	180	250	260	955	1,600	490	280	1,150	330	255	540	280
20	180	250	305	1,090	1,570	485	285	890	*350	255	*530	290
21	200	255	250	1,090	1,540	515	310	750	*325	255	525	290
22	150	275	250	1,100	1,480	485	260	545	325	255	435	325
23	150	210	300	1,090	1,460	485	280	420	355	255	300	295
24	150	210	210	1,050	1,460	505	1,030	280	335	*255	300	300
25	230	280	140	845	1,430	470	1,570	280	315	255	490	295
26	305	250	295	845	1,410	475	1,560	250	335	250	535	290
27	245	275	300	975	1,380	*405	1,600	270	295	250	525	270
28	265	215	215	970	1,350	295	1,580	335	265	370	525	285
29	245	370	145	935	-	270	1,570	345	265	530	450	*320
30	250	220	295	975	--------	270	1,600	335	295	535	295	*300
31	240	--------	225	1,240	--------	300	--------	330	--------	535	295	--------
Total	5,865	7,640	7,835	23,285	46,810	26,810	16,770	33,960	13,325	9,210	14,680	9,580
Mean	189	255	253	751	1,672	865	559	1,095	444	297	474	319
(†)	-153	+120	+739	+314	-1,075	-127	+1,848	-205	-224	-29.9	-568	-297

Adjusted for change in contents in Lake Winnipesaukee ‡

Mean	36.1	374	992	1,065	597	738	2,407	890	220	267	-93.9	22.3
Cfsm	0.099	1.03	2.73	2.93	1.64	2.03	6.63	2.45	0.606	0.736	-0.259	0.061
In.	0.11	1.15	3.15	3.38	1.71	2.34	7.40	2.83	0.68	0.85	-0.30	0.07

	Observed			Adjusted		
Calendar year 1957:	Max 1,550	Min 5	Mean 341	Mean 371	Cfsm 1.02	In. 13.87
Water year 1957-58:	Max 1,990	Min 135	Mean 591	Mean 625	Cfsm 1.72	In. 23.37

* 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.
Note.--Deflection-velocity relationship indefinite Oct. 5, 6, 12, 13, Feb. 16 to Mar. 13; discharge computed on basis of 2 discharge measurements, gage-height record, appearance of deflection graph, record of gate openings, and estimates of discharge through the canal. Shifting-control method used Apr. 24 to May 19.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 441.87 ft above mean sea level, unadjusted.

Average discharge.--21 years, 703 cfs.

Extremes.--Maximum discharge during year, 2,700 cfs May 1 (gage height, 6.78 ft); minimum daily, 190 cfs Oct. 13.
1937-58: 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. 82), Winnisquam, Wentworth, Merrymeeting (see p. 110), and other lakes above station.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from debris Oct. 1 to Nov. 2)

Oct. 1 to Apr. 30				May 1 to Sept. 30			
2.9	190	5.0	1,230	3.0	240	5.0	1,250
3.1	245	6.0	2,000	3.5	424	6.0	2,000
3.5	400	6.5	2,450	4.0	660	6.8	2,720
4.0	830						

Discharge, in cubic feet per second, water year October 1957 to Septemter 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	200	214	695	432	1,680	1,750	828	2,640	433	276	558	344
2	207	239	722	*454	1,680	1,720	876	2,490	591	276	558	492
3	209	359	392	458	1,700	1,680	912	2,360	745	280	558	511
4	209	576	332	585	1,740	1,690	912	2,320	710	273	630	334
5	204	578	316	490	1,840	1,700	936	2,240	760	264	730	296
6	204	494	312	328	1,940	1,700	996	2,220	645	264	577	292
7	204	312	312	392	1,990	1,710	1,290	2,280	591	264	544	292
8	230	288	320	645	2,070	1,700	1,400	2,320	650	286	525	299
9	266	316	332	786	2,070	1,690	1,260	2,370	784	379	334	292
10	236	316	478	792	2,060	1,880	1,100	2,270	755	544	492	292
11	226	304	954	792	2,050	1,680	1,220	2,150	596	549	535	286
12	214	296	1,160	790	2,040	1,690	1,240	2,120	572	610	535	286
13	190	292	840	792	2,040	1,660	1,100	2,050	610	620	535	286
14	197	296	640	792	2,040	1,480	630	1,980	630	596	535	286
15	214	348	615	900	2,000	1,150	680	1,900	615	511	478	286
16	223	356	605	1,080	1,980	1,010	858	1,850	554	327	306	289
17	223	328	522	1,110	1,980	894	1,020	1,840	535	299	350	286
18	214	316	364	1,130	1,940	984	1,300	1,820	530	286	511	302
19	239	328	340	1,130	1,940	942	1,220	1,820	*530	283	521	292
20	256	450	463	1,120	1,900	740	1,010	1,840	*540	283	*525	286
21	233	522	974	1,130	1,860	715	990	1,140	456	280	525	286
22	230	364	1,310	1,240	1,830	625	1,120	1,070	302	280	446	289
23	209	336	1,030	1,540	1,780	810	1,120	886	280	280	296	286
24	230	320	680	1,620	1,750	680	1,090	549	276	*280	350	286
25	242	320	630	1,590	1,750	834	1,120	346	276	280	521	283
26	233	316	620	1,570	1,760	750	1,260	327	273	299	535	327
27	214	308	680	1,600	*1,740	*765	1,270	*367	276	292	535	309
28	209	308	660	1,610	1,760	715	1,400	535	283	306	502	289
29	209	*320	625	1,600	-	680	1,900	535	280	525	313	283
30	209	364	610	1,570	-------	670	*2,410	433	276	568	283	*283
31	*209	-------	522	*1,570	-------	710	-------	516	-------	554	280	-------
Total	6,792	10,482	19,055	31,618	52,890	37,004	34,468	49,394	15,354	11,414	14,923	9,250
Mean	219	349	615	1,020	1,889	1,194	1,149	1,593	512	368	481	308
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 1,880 Min 117 Mean 447 Cfsm - In. -
Water year 1957-58: Max 2,640 Min 190 Mean 802 Cfsm - In. -

* Discharge measurement made on this day.

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 1958.

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.--53 years (1905-58), 2,791 cfs.

Extremes.--Maximum discharge during year, 19,400 cfs Apr. 24 (gage height, 14.80 ft); minimum daily, 262 cfs Oct. 12.
1903-58: Maximum discharge, 83,000 cfs Mar. 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 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 82 and 110 for description and month-end contents of many of these reservoirs.

Revisions (water years).--WSP 401: 1913 calendar year. 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 1957-58, except periods of ice effect and backwater from aquatic vegetation (gage height, in feet, and discharge, in cubic feet per second)

3.1	228	9.0	8,060
3.5	420	11.0	12,300
4.0	735	13.0	16,100
5.0	1,630	15.0	19,800
7.0	4,270		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*551	773	2,600	3,360	3,400	2,540	3,640	14,000	2,320	928	1,890	614
2	559	681	2,280	*3,660	3,350	2,630	3,800	10,900	3,410	957	933	932
3	559	1,170	1,740	3,070	3,420	2,800	3,970	9,410	4,840	1,020	1,100	860
4	483	3,260	1,400	b2,320	3,360	2,740	4,160	8,720	3,700	366	1,210	722
5	271	3,360	1,450	b2,030	3,430	2,800	5,060	8,120	3,010	502	1,330	788
6	501	2,290	1,440	b1,730	3,490	2,930	5,980	7,340	2,550	655	1,130	551
7	584	1,730	761	2,100	3,530	2,810	7,280	7,200	2,260	823	1,130	539
8	680	1,610	1,340	2,400	3,520	2,640	6,880	6,180	2,220	1,010	1,030	732
9	764	1,730	1,960	b2,430	3,500	2,300	5,600	10,400	2,200	1,430	734	742
10	700	2,020	2,070	b2,420	3,400	2,630	4,670	9,780	2,080	1,200	1,160	796
11	539	1,860	8,100	b2,300	b3,460	2,940	4,680	7,940	1,780	1,250	1,230	865
12	262	1,710	9,890	b2,100	b3,430	2,970	4,950	8,840	1,960	1,050	1,180	854
13	501	1,220	5,000	b2,350	3,260	3,190	4,770	9,490	1,940	1,640	1,160	335
14	583	1,310	3,260	2,160	b3,170	3,500	4,820	7,600	1,770	1,810	1,170	661
15	583	2,160	2,940	2,280	b3,070	2,320	5,520	6,320	1,480	1,440	1,030	774
16	552	5,130	2,860	2,540	2,840	2,580	7,460	5,200	1,520	1,080	336	776
17	535	3,430	2,580	2,400	3,190	2,420	10,300	5,520	1,530	924	641	800
18	473	2,520	2,140	2,590	b3,320	2,510	13,300	5,350	1,470	784	1,050	819
19	877	2,360	1,970	2,350	b3,130	2,500	14,400	5,730	*1,440	508	1,130	874
20	1,570	3,440	2,660	b2,500	3,140	2,290	14,500	6,800	1,470	886	*1,100	889
21	1,380	3,590	12,600	2,540	2,930	2,280	13,500	5,460	870	1,040	1,030	758
22	818	2,650	17,100	2,830	2,320	1,930	15,300	4,290	1,030	907	1,010	1,190
23	618	2,030	17,300	4,060	2,770	1,680	17,600	3,650	1,130	920	370	1,240
24	615	1,900	10,900	4,350	2,800	1,920	*18,500	3,110	1,050	*918	704	1,080
25	1,260	1,810	5,540	4,080	3,160	2,480	15,900	2,580	1,030	*806	1,120	925
26	1,970	1,620	4,370	4,130	3,000	2,430	13,600	2,680	952	478	1,120	839
27	1,320	1,570	9,250	4,300	*2,890	*2,690	10,100	*2,470	958	1,040	1,180	623
28	701	1,340	11,100	4,370	2,910	2,840	8,120	2,500	371	1,150	1,160	869
29	796	*1,320	7,170	4,110	-	3,080	7,610	2,460	782	1,310	834	805
30	660	1,500	5,260	*4,000	--------	3,210	*12,200	2,980	930	2,420	492	*901
31	*751	-------	3,990	3,950	--------	3,470	--------	2,540	--------	2,260	446	--------
Total	23,016	63,094	163,021	91,810	89,190	82,050	268,170	197,560	54,063	33,512	31,400	24,153
Mean	742	2,103	5,259	2,962	3,185	2,647	8,939	6,373	1,802	1,081	1,013	805
Cfsm	0.492	1.40	3.49	1.97	2.11	1.76	5.93	4.23	1.20	0.717	0.672	0.534
In.	0.57	1.56	4.02	2.27	2.20	2.02	6.62	4.88	1.33	0.83	0.77	0.60

Calendar year 1957: Max 17,300 Min 209 Mean 2,005 Cfsm 1.33 In. 18.07
Water year 1957-58: Max 18,500 Min 262 Mean 3,071 Cfsm 2.04 In. 27.67

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from aquatic vegetation Oct. 1 to Nov. 28. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 740 ft (from topographic map).

Average discharge.--13 years, 123 cfs.

Extremes.--Maximum discharge during year, 1,240 cfs Apr. 18 (gage height, 4.56 ft); minimum daily, 6.5 cfs Oct. 4, 6, 7.
1945-58: 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 1957-58, 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	4.5	1,200
2.0	133		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	11	82	110	220	91	223	564	48	22	49	21
2	12	17	90	168	190	82	231	430	102	37	36	16
3	7.1	56	73	140	170	100	262	335	127	36	28	12
4	6.5	51	95	115	170	91	280	363	110	18	29	13
5	14	40	82	90	145	*87	324	320	90	19	32	34
6	6.5	30	83	100	125	110	380	312	81	19	32	16
7	6.5	26	54	100	110	110	627	374	34	21	20	16
8	9.0	26	26	100	100	90	495	433	30	38	27	18
9	23	36	34	100	105	95	*412	422	75	69	18	13
10	*12	38	180	90	115	105	405	305	88	39	12	38
11	8.6	32	324	80	120	93	412	253	96	47	23	37
12	9.2	27	246	87	90	115	374	276	*80	60	18	27
13	7.4	32	168	94	74	110	391	259	77	43	18	23
14	7.8	17	124	90	90	115	499	*250	31	63	*23	14
15	7.8	31	120	85	80	92	622	211	28	53	40	16
16	8.2	29	129	75	80	110	876	193	73	*30	19	33
17	7.8	29	110	67	84	105	1,060	172	71	54	22	43
18	7.8	38	*106	56	90	94	1,100	109	49	33	39	67
19	18	90	96	75	84	90	1,070	161	64	31	18	64
20	15	*164	167	100	75	80	990	166	69	35	14	33
21	20	115	547	87	75	80	984	154	26	72	13	26
22	13	94	386	75	70	77	942	163	23	20	21	54
23	16	40	235	140	65	77	888	144	52	40	18	52
24	26	30	140	130	76	110	725	107	48	46	16	48
25	16	31	88	125	72	130	543	64	58	49	36	23
26	12	26	176	275	78	130	440	157	59	121	24	19
27	11	72	312	500	68	150	377	152	52	67	16	27
28	11	20	168	430	87	165	444	141	34	51	16	55
29	15	22	161	370	-	177	535	123	18	50	16	81
30	11	36	152	310	-------	190	780	50	16	44	24	59
31	12	-------	130	260	-------	217	-------	79	-------	49	25	-------
Total	371.2	1,306	4,884	4,624	2,908	3,468	17,691	7,242	1,809	1,396	742	998
Mean	12.0	43.5	158	149	104	112	590	234	60.3	45.0	23.9	33.3
Cfsm	0.176	0.639	2.32	2.19	1.53	1.64	8.66	3.44	0.885	0.661	0.351	0.489
In.	0.20	0.71	2.67	2.53	1.59	1.89	9.66	3.95	0.99	0.76	0.41	0.55

Calendar year 1957: Max 547 Min 6.2 Mean 76.5 Cfsm 1.12 In. 15.25
Water year 1957-58: Max 1,100 Min 6.5 Mean 130 Cfsm 1.91 In. 25.91

Peak discharge (base, 700 cfs).--Dec. 21 (3 to 3:30 p.m.) 820 cfs (3.86 ft); Apr. 18 (9:30 to 10:30 p.m.) 1,240 cfs (4.56 ft); Apr. 30 (6 a.m.) 918 cfs (4.03 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 2-4, Jan. 3 to Mar. 28.

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 1958. 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.--24 years, 85.0 cfs.

Extremes.--Maximum discharge during year, 661 cfs Apr. 29 (gage height, 4.42 ft); minimum daily, 6.0 cfs Oct. 27, Aug. 31.
1920-31, 1945-58: 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, Nubanusit Lake, Edward MacDowell Reservoir since March 1950 (see p. 110), and other reservoirs above station.

Revisions (water years).--WSP 561: 1921(M). WSP 1051: Drainage area.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.65	5.4	2.0	113
.7	6.6	3.0	286
.9	13	4.0	535
1.2	29	4.5	685
1.5	54		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	27	62	147	175	56	206	481	55	12	50	6.6
2	35	7.7	75	161	170	61	208	422	66	13	38	38
3	41	11	65	171	165	70	210	371	83	14	11	45
4	43	31	54	158	160	67	215	294	60	12	40	46
5	23	40	48	142	150	*75	236	241	55	11	47	36
6	7.4	40	44	134	145	82	280	213	54	11	47	7.9
7	28	40	25	140	135	83	340	200	45	36	46	9.0
8	36	35	38	136	130	79	381	217	14	46	45	9.1
9	36	13	54	123	125	77	*388	241	50	47	28	8.8
10	*37	12	70	126	125	82	376	239	47	50	9.9	11
11	37	35	160	112	115	91	366	217	*49	67	38	9.5
12	22	30	206	88	110	101	343	205	47	91	47	8.8
13	8.8	31	181	86	105	104	331	182	46	85	47	8.8
14	30	29	161	74	100	112	352	*136	44	76	*46	8.8
15	38	36	148	65	96	106	337	104	11	56	29	8.8
16	37	53	134	64	88	113	187	128	48	49	8.2	9.1
17	38	63	124	72	83	115	196	127	45	*45	8.5	21
18	39	65	*116	64	80	109	221	126	47	45	37	24
19	25	73	86	65	70	100	318	132	47	36	44	*24
20	9.1	*105	90	73	62	99	450	136	45	9.9	44	24
21	29	120	123	62	55	96	462	140	44	36	44	10
22	38	106	141	78	44	94	496	136	11	45	46	23
23	39	83	196	122	45	97	526	120	48	44	22	24
24	40	67	303	153	51	105	589	78	46	45	9.9	22
25	44	62	331	158	53	110	625	58	47	51	43	22
26	17	48	330	144	58	123	631	80	47	73	62	23
27	6.0	40	121	66	57	138	625	81	47	95	55	12
28	26	21	139	110	61	152	634	79	25	87	53	12
29	35	35	130	153	-	153	625	81	9.9	70	36	22
30	35	36	147	*176	--------	163	478	64	11	57	9.1	22
31	35	--------	150	181	--------	198	--------	71	--------	51	6.0	--------
Total	949.3	1,394.7	4,052	3,604	2,813	3,211	11,632	5,400	1,273.9	1,485.9	1,096.6	556.2
Mean	30.6	46.5	131	116	100	104	388	174	42.5	47.3	35.4	18.5
Cfsm	0.652	0.991	2.79	2.47	2.13	2.22	8.27	3.71	0.906	1.01	0.755	0.394
In.	0.75	1.11	3.21	2.86	2.23	2.55	9.22	4.28	1.01	1.16	0.87	0.44

Calendar year 1957: Max 331 Min 5.2 Mean 60.0 Cfsm 1.28 In. 17.34
Water year 1957-58: Max 634 Min 6.0 Mean 103 Cfsm 2.20 In. 29.69

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 12-14, 18-22, Feb. 1-7, 9-15, 17-20, 23, 24, Mar. 8-10, 17, 19, 24. 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 1958.

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.--34 years, 101 cfs.

Extremes.--Maximum discharge during year, 1,420 cfs Apr. 23 (gage height, 5.86 ft); minimum, 1.3 cfs Oct. 6, 7.
1924-58: 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, 1943, 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 22

0.0	1.4	2.0	123
.1	2.4	2.5	203
.3	5.4	3.0	304
.6	12	4.0	580
1.0	30	5.0	985
1.5	67	6.0	1,500

Apr. 23 to Sept. 30

0.26	3.8	0.4	6.6
.3	4.6	.6	12

Note.--Same as preceding table above 0.6 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	58	81	259	125	58	134	608	46	5.3	71	12
2	1.9	70	83	225	115	58	138	524	46	4.6	57	11
3	1.7	108	80	*160	105	56	143	456	62	4.2	47	8.8
4	1.6	183	73	140	100	56	158	407	71	4.0	37	7.4
5	1.5	144	74	115	93	60	190	361	68	4.2	30	6.8
6	1.4	84	105	90	89	*62	222	319	60	4.0	24	6.2
7	1.7	52	126	80	85	64	286	304	52	3.8	20	8.0
8	2.4	34	136	76	81	62	270	322	44	6.6	19	13
9	3.5	38	140	78	77	60	*230	338	38	13	17	11
10	3.1	42	176	77	75	58	255	317	34	11	14	13
11	2.7	35	378	74	72	58	265	293	34	14	12	19
12	2.6	27	373	70	68	64	263	280	33	47	10	14
13	2.4	22	335	65	66	70	259	257	31	72	9.1	13
14	2.3	19	304	62	63	76	302	*176	28	65	12	11
15	2.1	31	261	60	62	79	371	95	24	57	20	9.7
16	10	45	216	63	60	80	507	71	20	50	14	8.6
17	67	43	185	68	58	76	705	53	17	*42	11	8.1
18	77	33	165	68	58	72	900	47	14	34	12	18
19	90	*40	149	60	58	70	1,120	48	13	28	16	30
20	88	73	203	54	58	68	1,200	56	11	26	15	30
21	80	73	439	54	56	67	1,240	71	11	21	*15	26
22	72	54	533	65	54	70	*1,360	74	11	18	20	28
23	68	41	491	110	52	70	1,370	71	9.4	18	20	27
24	78	38	427	120	51	71	1,240	65	8.6	18	17	24
25	90	38	351	105	53	72	954	62	7.4	16	18	20
26	87	42	313	145	56	76	737	68	*6.4	61	18	18
27	83	43	421	180	56	84	583	65	8.1	127	16	18
28	77	41	427	175	56	92	503	60	8.1	118	14	28
29	71	45	371	*165	-	100	488	58	7.4	102	12	31
30	65	56	322	150	-------	111	632	56	6.4	104	11	28
31	61	-------	280	135	-------	126	-------	48	-------	84	11	-------
Total	1,196.8	1,652	8,018	3,348	2,002	2,246	17,025	6,030	829.8	1,182.7	639.1	506.6
Mean	38.6	55.1	259	108	71.5	72.5	568	195	27.7	38.2	20.6	16.9
Cfsm	0.704	1.01	4.73	1.97	1.30	1.32	10.4	3.56	0.505	0.697	0.376	0.308
In.	0.81	1.12	5.44	2.27	1.36	1.52	11.55	4.09	0.56	0.80	0.43	0.34

Calendar year 1957: Max 533 Min 1.4 Mean 76.8 Cfsm 1.40 In. 19.03
Water year 1957-58: Max 1,370 Min 1.4 Mean 122 Cfsm 2.23 In. 30.29

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27, Dec. 3, 5, 6, 18, Jan. 2 to Mar. 29, Apr. 8-11 (no gage-height record Feb. 11, 13, 16-21). 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°55'35", 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 1958. October 1945 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Altitude of gage is 595 ft (from topographic map).

Average discharge.--13 years, 96.9 cfs.

Extremes.--Maximum discharge during year, 1,180 cfs Apr. 18 (gage height, 4.99 ft); maximum gage height, 5.23 ft Jan. 23 (affected by ice); minimum discharge, 2.7 cfs Oct. 6, 7. 1945-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 18

1.1	2.3	1.7	19	3.0	308
1.2	3.7	1.8	26	3.5	500
1.3	5.3	2.0	46	4.0	705
1.4	7.2	2.2	76	5.0	1,180
1.5	9.9	2.6	170		

Apr. 19 to Sept. 30

1.35	6.6	1.5	11
1.4	7.9	1.7	19

Note.--Same as preceding table above 1.7 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.7	8.8	110	186	180	63	240	508	38	14	31	11
2	3.5	28	95	200	160	62	242	356	57	10	24	9.8
3	3.1	132	71	160	140	60	257	267	132	9.5	17	9.0
4	3.1	167	60	135	125	60	301	282	114	9.0	14	8.2
5	2.9	102	48	110	110	64	365	239	77	9.0	12	7.9
6	2.7	63	43	90	105	*68	428	195	49	9.2	16	7.9
7	2.8	43	43	80	95	70	516	208	39	7.9	21	9.8
8	3.7	35	60	76	90	66	460	293	33	17	18	13
9	8.7	56	74	80	86	62	*390	364	31	40	17	9.5
10	13	62	150	78	82	64	367	264	28	27	16	9.5
11	9.9	48	580	75	76	70	397	201	28	36	15	10
12	7.2	40	370	67	72	86	360	189	32	78	14	9.0
13	6.4	34	250	62	72	92	360	170	28	74	13	8.4
14	5.8	32	205	59	68	96	472	*145	24	46	18	7.9
15	5.6	71	150	62	64	96	616	122	20	35	80	7.1
16	5.3	95	120	66	64	92	844	120	17	*28	52	6.6
17	5.0	73	110	71	61	88	1,020	124	15	21	32	6.8
18	5.0	56	*91	71	60	82	1,040	108	14	16	26	21
19	16	*81	91	64	61	80	990	102	13	14	25	35
20	30	140	169	60	60	80	885	99	13	15	20	25
21	19	110	715	56	58	75	822	89	13	13	*17	20
22	14	82	584	80	56	80	858	76	13	11	21	21
23	12	66	360	165	54	81	854	68	13	12	16	21
24	11	56	253	220	51	90	714	59	11	13	14	17
25	13	55	189	190	53	93	500	57	9.5	14	17	14
26	14	45	190	205	60	106	364	66	*9.5	28	20	14
27	12	35	536	360	60	132	260	60	15	32	18	13
28	11	37	390	310	60	155	253	52	13	31	17	18
29	9.2	45	282	250	-	170	345	55	11	40	15	18
30	8.9	68	221	*210	-------	195	725	51	12	40	14	15
31	8.3	-------	179	190	-------	225	-------	43	-------	32	13	-------
Total	275.8	1,965.8	6,789	4,088	2,283	2,903	16,243	5,032	922.0	781.6	663	403.4
Mean	8.90	65.5	219	132	81.5	93.6	541	162	30.7	25.2	21.4	13.4
Cfsm	0.161	1.18	3.95	2.38	1.47	1.69	9.77	2.92	0.554	0.455	0.386	0.242
In.	0.19	1.32	4.56	2.74	1.53	1.95	10.90	3.38	0.62	0.52	0.45	0.27

Calendar year 1957: Max 715 Min 2.0 Mean 67.8 Cfsm 1.22 In. 16.62
Water year 1957-58: Max 1,040 Min 2.7 Mean 116 Cfsm 2.09 In. 28.43

Peak discharge (base, 910 cfs).--Dec. 21 (4:30 to 6 p.m.) 985 cfs (4.61 ft); Apr. 18 (1:30 to 3:30 a.m.) 1,180 cfs (4.99 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27, Dec. 3-6, 12-16, 18, 19, Jan. 2 to Mar. 24, Mar. 28 to Apr. 1, Apr. 5.

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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 1958.

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.--19 years, 637 cfs.

Extremes.--Maximum discharge during year, 5,200 cfs Apr. 23, 24 (gage height, 10.92 ft); minimum daily, 51 cfs Oct. 14.

1939-58: 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 or no gage-height record, which are fair. Flow regulated by powerplants, by Nubanusit Lake, Edward MacDowell Reservoir (see p. 110) since March 1950, and by Highland Lake, Jackmar Reservoir, and other reservoirs above station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

4.3	50	7.0	700
4.5	67	8.0	1,320
5.0	129	9.0	2,270
5.5	220	11.0	5,340
6.0	340		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	87	145	308	1,120	1,250	490	1,510	3,870	312	164	265	77
2	93	169	445	1,230	1,150	454	1,570	3,080	408	129	238	71
3	172	318	472	1,120	1,020	533	1,620	2,480	646	116	201	111
4	176	488	494	900	950	548	1,790	2,250	610	98	148	128
5	157	551	454	780	850	470	1,970	2,020	428	72	148	118
6	145	456	384	700	790	*563	2,300	1,690	335	67	142	114
7	114	356	296	650	740	610	2,980	1,620	318	63	147	99
8	72	397	268	600	700	564	3,240	1,910	268	70	152	95
9	64	351	370	620	660	500	*2,780	2,230	223	117	150	113
10	63	312	570	600	620	547	2,400	2,020	265	115	171	126
11	59	192	1,580	580	590	618	2,370	1,620	325	104	124	124
12	56	288	1,790	510	560	750	2,300	1,450	315	236	129	117
13	52	352	1,290	490	540	830	2,270	1,250	340	421	129	116
14	51	378	860	460	520	860	2,440	*1,110	265	452	145	111
15	77	445	700	480	510	700	2,950	1,030	190	*402	229	88
16	92	359	795	510	490	710	3,520	908	194	347	212	168
17	88	272	812	540	480	800	4,220	770	233	265	180	222
18	94	212	*722	540	470	760	4,580	690	220	229	132	250
19	85	286	691	490	470	650	4,520	646	272	186	140	281
20	99	*498	792	440	460	598	4,390	650	288	176	140	182
21	85	610	1,930	450	450	534	4,800	638	203	199	131	171
22	96	526	2,810	550	450	558	4,980	570	188	180	142	239
23	120	409	2,270	900	440	598	5,080	534	247	166	131	271
24	166	322	1,700	1,200	440	650	5,000	492	364	162	120	258
25	134	390	1,380	1,300	450	795	4,220	424	357	179	106	242
26	137	422	1,230	1,400	490	812	3,380	421	*361	302	122	204
27	95	420	2,000	1,650	520	878	2,880	470	396	385	126	148
28	81	270	1,940	*2,000	510	1,030	2,600	454	248	373	128	129
29	165	178	1,510	2,020	-	1,110	2,950	534	184	388	129	232
30	170	190	1,280	1,720	-------	1,250	3,740	424	123	361	126	258
31	150	-------	1,120	1,480	-------	1,420	-------	332	-------	292	99	-------
Total	3,295	10,562	33,263	28,030	17,570	22,190	95,350	38,587	9,126	6,814	4,682	4,863
Mean	106	352	1,073	904	628	716	3,178	1,245	304	220	151	162
Cfsm	0.288	0.957	2.92	2.46	1.71	1.95	8.64	3.38	0.826	0.598	0.410	0.440
In.	0.33	1.07	3.36	2.83	1.78	2.24	9.64	3.90	0.92	0.69	0.47	0.49

Calendar year 1957: Max 2,810 Min 37 Mean 419 Cfsm 1.14 In. 15.45
Water year 1957-58: Max 5,080 Min 51 Mean 752 Cfsm 2.04 In. 27.72

* Discharge measurement made on this day.

Note.--No gage-height record Jan. 4-28; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for other stations in the Contoocook River basin. Stage-discharge relation affected by ice Feb. 1 to Mar. 1. 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 1958.

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.--19 years, 237 cfs.

Extremes.--Maximum discharge during year, 2,070 cfs Apr. 19 (gage height, 7.70 ft); minimum, 8.0 cfs Oct. 3-6.

1939-58: 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 excellent except those for periods of ice effect or backwater from aquatic vegetation and/or debris, which are good. Prior to 1948, slight diurnal fluctuation at low flow caused by mill above station.

Rating table, water year 1957-58, except periods of ice effect or backwater from aquatic vegetation and/or debris (gage height, in feet, and discharge, in cubic feet per second)

3.16	8.0	4.5	178
3.2	9.6	5.0	333
3.3	14	6.0	780
3.5	27	7.0	1,460
3.8	56	8.0	2,360
4.1	98		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.7	34	300	514	522	183	648	1,420	144	39	75	21
2	8.3	71	289	b570	474	183	666	1,160	180	35	61	19
3	8.3	262	b235	b490	423	178	730	907	545	33	52	19
4	8.0	622	203	b435	377	178	791	841	296	31	44	21
5	8.0	474	b180	b335	337	*190	883	760	231	29	40	20
6	8.0	329	b165	b280	303	206	1,030	666	188	28	36	19
7	8.3	250	162	b240	286	211	1,300	622	155	29	33	19
8	12	200	178	b230	269	198	1,260	680	134	42	40	18
9	73	228	203	b240	259	188	1,060	847	123	90	41	19
10	73	259	278	b235	243	190	*931	786	112	69	33	21
11	48	217	918	b225	220	209	931	685	124	65	29	21
12	36	186	b950	b200	211	256	931	622	140	121	25	18
13	31	*162	b700	b190	211	265	931	563	124	119	23	19
14	26	147	594	b180	198	286	1,030	496	112	96	23	19
15	23	208	518	190	188	286	1,130	*440	96	80	30	17
16	23	296	449	198	188	279	1,370	407	83	68	34	15
17	21	276	390	217	180	262	1,700	415	76	*59	28	18
18	21	231	b340	217	178	246	1,970	394	68	48	26	27
19	48	228	303	190	178	234	2,020	353	62	44	28	37
20	101	337	*333	171	176	237	1,910	337	59	43	24	37
21	77	329	876	173	171	237	1,730	311	60	38	*23	31
22	60	269	1,360	209	169	240	1,620	269	59	35	24	34
23	52	225	1,030	432	164	250	1,620	237	*55	35	23	44
24	48	200	802	563	160	276	1,620	209	49	34	22	34
25	52	183	653	536	162	293	1,370	193	47	32	23	28
26	50	166	550	550	176	314	1,080	200	44	39	25	23
27	45	b145	784	725	178	373	841	188	49	76	29	21
28	45	136	901	786	176	444	745	171	47	89	28	28
29	40	153	775	705	-	487	871	173	44	84	24	24
30	37	190	658	*630	-------	536	1,420	171	43	98	22	18
31	35	-------	563	576	-------	608	-------	155	-------	86	21	-------
Total	1,134.6	7,013	16,640	11,432	6,777	8,523	36,139	15,678	3,349	1,814	989	709
Mean	36.6	234	537	369	242	275	1,205	506	112	58.5	31.9	23.6
Cfsm	0.251	1.60	3.68	2.53	1.66	1.88	8.25	3.47	0.767	0.401	0.218	0.162
In.	0.29	1.79	4.24	2.91	1.73	2.17	9.21	3.99	0.85	0.46	0.25	0.18

Calendar year 1957: Max 1,360 Min 8.0 Mean 172 Cfsm 1.18 In. 15.97
Water year 1957-58: Max 2,020 Min 8.0 Mean 302 Cfsm 2.07 In. 28.07

Peak discharge (base, 1,200 cfs).--Dec. 21, 22 (12 p.m. to 2 a.m.) 1,520 cfs (7.07 ft); Apr. 7 (2:30 to 5 p.m.) 1,390 cfs (6.91 ft); Apr. 19 (5 a.m.) 2,070 cfs (7.70 ft); Apr. 30 (3 to 4 p.m.) 1,600 cfs (7.17 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from aquatic vegetation and/or debris July 24 to Sept. 30.

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 1958. 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.--33 years, 215 cfs (adjusted to present site).

Extremes.--Maximum discharge during year, about 2,150 cfs Apr. 25; minimum, 17 cfs Oct. 7; minimum daily, 18 cfs Oct. 6, 7.

1918-20, 1927-58: 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 below 50 cfs and those for periods of ice effect, which are good, and those for periods of no gage-height record, which are fair. High flow regulated by Blackwater Reservoir since 1941 (see p. 110). 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 1957-58, 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	790
2.5	63	6.0	1,420
3.0	135	6.5	1,810
3.5	241		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	40	225	368	365	162	512	1,230	152	60	93	22
2	23	51	251	381	331	164	526	818	189	59	71	22
3	21	164	216	349	299	158	550	690	322	56	55	21
4	21	426	172	232	273	156	578	645	459	51	48	21
5	20	522	130	187	253	162	635	570	371	48	43	21
6	18	394	109	211	241	172	740	512	251	47	40	21
7	18	241	132	236	232	176	893	522	194	47	36	21
8	21	176	121	210	227	172	893	626	160	54	35	24
9	60	176	144	215	223	164	851	840	139	62	34	24
10	86	209	211	215	209	166	*705	823	128	96	32	26
11	85	205	494	215	196	178	617	635	133	102	30	28
12	63	160	779	200	189	205	640	526	150	142	29	28
13	49	133	a810	185	185	223	635	484	150	207	28	28
14	41	118	a600	170	181	230	650	448	143	164	26	27
15	37	151	a460	165	170	232	757	397	125	116	27	26
16	34	246	a380	175	165	234	899	365	108	95	25	26
17	31	288	a320	185	160	220	1,070	371	102	79	24	28
18	29	236	a270	180	160	205	1,220	368	99	64	24	42
19	40	205	a235	170	160	194	1,280	334	93	56	24	62
20	90	258	*230	160	160	192	1,340	318	89	51	25	64
21	115	283	498	155	155	194	1,640	297	88	47	29	60
22	100	248	917	180	155	194	1,790	255	89	43	29	67
23	77	198	1,140	320	155	198	1,450	223	89	*42	26	73
24	64	164	1,000	426	150	214	851	200	84	40	23	66
25	59	148	530	432	150	227	a1,500	185	75	43	24	61
26	56	133	387	445	155	241	a1,700	185	76	49	26	55
27	55	115	480	498	155	270	730	185	82	55	26	52
28	51	106	720	526	155	322	790	168	82	62	27	54
29	48	109	823	515	-	362	1,160	162	77	63	25	55
30	44	144	566	*462	--------	403	1,430	172	68	80	23	52
31	41	--------	413	413	--------	462	--------	166	--------	102	22	--------
Total	1,519	6,047	13,763	8,781	5,609	6,852	29,032	13,718	4,367	2,303	1,029	1,177
Mean	49.0	202	444	283	200	221	968	443	146	74.4	33.2	39.2
Cfsm	0.380	1.57	3.44	2.19	1.55	1.71	7.50	3.43	1.13	0.577	0.257	0.304
In.	0.44	1.74	3.97	2.53	1.62	1.98	8.37	3.95	1.26	0.66	0.30	0.34

Calendar year 1957: Max 1,140 Min 18 Mean 148 Cfsm 1.13 In. 15.34
Water year 1957-58: Max 1,790 Min 18 Mean 258 Cfsm 2.00 In. 27.16

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Warner River at Davisville and Blackwater Reservoir.
Note.--Stage-discharge relation affected by ice Dec. 5, Jan. 8-23, Feb. 15-28.

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 1958. October 1928 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 273.09 ft above mean sea level, datum of 1929.

Average discharge.--30 years, 1,268 cfs.

Extremes.--Maximum discharge during year, 8,500 cfs Apr. 23 (gage height, 5.90 ft); minimum, 81 cfs Oct. 1, 2; minimum daily, 87 cfs Oct. 1.
1928-58: 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, which are fair. Flow regulated by mills and Nubanusit Lake, Edward MacDowell Reservoir since March 1950, and by Highland Lake, Jackman Reservoir, Blackwater Reservoir since 1941 (see p. 110), and other reservoirs above station.

Revisions (water years).--WSP 756: 1933(M), drainage area. WSP 1231: 1929, 1931.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	75	2.5	840
1.4	95	3.0	1,540
1.6	159	4.0	3,400
1.8	252	5.0	5,820
2.1	450	6.0	8,840

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*87	282	988	2,430	2,700	1,110	3,300	7,030	768	282	584	189
2	92	351	1,180	2,650	2,400	1,060	3,400	6,430	876	258	498	163
3	137	705	1,100	2,300	2,200	960	3,550	5,160	1,440	282	443	189
4	196	1,660	1,050	1,800	2,000	1,110	3,770	4,350	1,730	264	377	168
5	227	1,740	950	1,650	1,800	*1,130	4,050	3,980	1,480	237	318	193
6	207	1,520	850	1,500	1,700	1,100	4,560	3,510	1,070	207	293	198
7	202	1,130	800	1,300	1,600	1,300	5,860	3,230	876	202	282	159
8	193	924	732	1,250	1,500	1,230	6,150	3,400	768	217	262	189
9	247	974	780	1,300	1,450	1,170	5,680	4,020	660	351	299	212
10	282	960	1,200	1,300	1,350	1,130	*4,930	4,090	611	399	276	198
11	242	864	2,900	1,250	1,300	1,280	4,640	3,660	670	392	293	217
12	207	700	3,850	1,150	1,250	1,480	4,660	3,150	756	514	264	212
13	163	*744	3,250	1,050	1,200	1,650	4,590	2,800	732	792	258	202
14	133	732	2,650	1,000	1,150	1,750	4,660	2,540	700	864	232	163
15	168	864	2,180	1,000	1,100	1,680	5,080	2,280	593	756	291	189
16	148	1,160	1,810	1,050	1,070	1,620	5,870	2,070	482	690	377	202
17	152	1,040	1,800	1,150	1,050	1,590	6,880	2,000	474	575	331	221
18	168	912	1,450	1,150	1,030	1,590	7,730	1,830	498	474	*299	384
19	193	852	1,490	1,050	1,010	1,490	8,040	*1,680	*466	414	264	450
20	287	1,200	*1,510	980	1,000	1,380	7,850	1,590	506	357	247	450
21	357	1,380	3,050	980	980	1,340	7,790	1,570	514	344	252	351
22	344	1,340	5,370	1,150	970	1,300	8,170	1,410	435	351	237	364
23	276	1,100	5,080	1,750	960	1,370	8,400	1,280	406	*337	237	443
24	305	924	4,230	2,450	950	1,490	7,950	1,160	498	344	202	443
25	337	792	3,270	2,700	1,020	1,610	*7,180	1,060	566	324	232	421
26	305	864	2,670	2,800	1,100	1,830	6,770	1,020	557	406	252	384
27	287	816	3,360	3,470	1,140	1,960	5,940	1,020	620	584	232	344
28	247	732	4,000	4,050	1,160	2,280	5,260	1,000	611	700	227	311
29	227	630	3,710	*3,860	-	2,500	4,860	974	421	690	232	*293
30	299	660	3,170	3,490	-------	2,720	6,070	1,030	392	710	212	377
31	287	-------	2,610	3,130	-------	3,040	-------	888	-------	650	180	-------
Total	7,002	28,552	73,040	58,140	38,140	48,250	173,640	81,212	21,176	13,967	9,003	8,279
Mean	226	952	2,356	1,875	1,362	1,556	5,788	2,620	706	451	290	276
Cfsm	0.295	1.24	3.08	2.45	1.78	2.03	7.56	3.42	0.922	0.589	0.379	0.360
In.	0.34	1.39	3.55	2.82	1.85	2.34	8.43	3.94	1.03	0.68	0.44	0.40

Calendar year 1957: Max 5,370 Min 83 Mean 874 Cfsm 1.14 In. 15.49
Water year 1957-58: Max 8,400 Min 87 Mean 1,535 Cfsm 2.00 In. 27.21

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 3-7, 12-14, 17, 18, Jan. 3-25, Feb. 1-26, Mar. 7-9, 13, 14.

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 1958.

Gage.--Water-stage recorder. Altitude of gage is 290 ft (from topographic map).

Average discharge.--7 years, 123 cfs.

Extremes.--Maximum discharge during year, 1,070 cfs Apr. 7 (gage height, 10.17 ft); minimum, 5.2 cfs Oct. 1.
1951-58: 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 or no gage-height record, which are fair.

Revisions (water years).--WSP 1331: 1952(M).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1)

Oct. 1 to Apr. 7				Apr. 8 to Sept. 30			
4.8	5.2	6.5	102	4.6	8.0	6.1	60
5.1	7.2	7.0	190	4.8	9.0	6.5	108
5.4	12	8.0	420	5.0	11	7.0	190
5.7	23	10.0	1,020	5.3	18	8.0	420
6.0	43			5.7	34	10.0	1,020

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*5.2	15	276	250	248	102	435	519	50	20	31	8.6
2	5.3	32	200	270	232	99	465	380	88	18	25	8.5
3	5.7	88	135	230	198	94	570	290	228	17	20	8.4
4	5.8	164	114	180	170	94	558	338	134	17	17	8.2
5	6.0	98	91	150	155	105	555	258	92	16	15	8.2
6	6.1	68	68	120	*145	119	612	218	70	14	13	8.2
7	7.1	50	82	110	138	125	*963	226	56	15	12	8.4
8	9.6	41	84	100	142	114	*822	248	49	19	13	9.6
9	48	88	85	110	130	108	612	285	47	47	15	9.6
10	35	91	179	110	120	*114	*492	234	41	38	13	9.8
11	20	63	759	110	110	144	474	198	45	32	12	11
12	17	*50	524	98	105	190	507	192	50	76	11	10
13	16	43	345	93	105	188	496	*178	43	67	10	9.7
14	14	39	265	91	98	210	489	156	40	46	10	9.3
15	13	83	225	94	92	192	477	139	35	35	9.9	9.1
16	13	126	190	98	92	186	486	138	31	32	9.6	9.1
17	12	88	165	105	88	164	495	144	28	29	9.2	9.5
18	11	69	145	105	88	151	471	130	27	*25	*9.2	12
19	24	81	130	96	87	147	415	120	25	22	9.0	14
20	68	204	190	88	86	155	358	112	24	23	8.8	12
21	37	168	517	82	85	147	312	100	*25	20	8.8	11
22	27	119	633	130	83	149	275	85	26	17	11	13
23	23	94	385	322	82	162	315	73	24	17	11	16
24	20	79	290	350	80	172	328	64	22	17	9.4	12
25	26	69	230	310	80	204	264	62	20	14	9.6	11
26	29	62	*220	362	86	232	218	80	20	18	11	10
27	23	43	362	498	88	295	184	71	44	23	10	10
28	21	50	330	450	89	322	212	62	34	23	9.6	14
29	18	62	290	370	-	328	362	61	27	31	9.2	*14
30	16	101	260	320	-------	358	651	58	22	55	8.9	12
31	*16	-------	220	282	-------	418	-------	52	-------	40	8.8	-------
Total	597.8	2,428	7,989	6,084	3,302	5,588	13,873	5,251	1,467	894	380.0	316.2
Mean	19.3	80.9	258	196	118	180	462	169	48.9	28.8	12.3	10.5
Cfsm	0.251	1.05	3.36	2.55	1.54	2.34	6.02	2.20	0.637	0.375	0.160	0.137
In.	0.29	1.18	3.87	2.95	1.60	2.71	6.72	2.54	0.71	0.43	0.18	0.15

Calendar year 1957: Max 759 Min 3.8 Mean 84.1 Cfsm 1.10 In. 14.88
Water year 1957-58: Max 963 Min 5.2 Mean 132 Cfsm 1.72 In. 23.33

Peak discharge (base, 700 cfs).--Dec. 11 (1 to 2 p.m.) 846 cfs (9.42 ft); Dec. 22 (12:30 to 1:30 a.m.) 783 cfs (9.21 ft); Apr. 7 (3:30 to 4:30 p.m.) 1,070 cfs (10.17 ft); Apr. 30 (4 to 5 p.m.) 744 cfs (9.08 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Dec. 15-20, 24-26, Dec. 28 to Jan. 1, Jan. 3-7, Feb. 4-6, 10-27; discharge estimated on basis of 2 discharge measurements, weather records, and records for Warner River at Davisville and South Branch Piscataquog River near Goffstown. Stage-discharge relation affected by ice Dec. 3-5, 14, Jan. 2-22, and probably at times during periods of no gage-height record.

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 1958.

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.--37 years (1918-20, 1921-27, 1929-58), 243 cfs.

Extremes.--Maximum discharge during year, 1,930 cfs Apr. 7 (gage height, 8.82 ft); maximum gage height, 9.51 ft Jan. 27 (affected by ice); minimum discharge, 1.8 cfs Oct. 2-7; minimum daily, 1.9 cfs Oct. 1-6.
1918-58: 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 periods of ice effect or no gage-height record, 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.27	1.9	2.8	23	4.5	515
2.3	2.4	3.1	56	5.0	700
2.4	4.4	3.4	113	6.0	950
2.5	7.2	3.7	195	8.0	1,570
2.6	11	4.0	290	9.0	2,020

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	26	538	500	560	230	720	1,230	118	42	40	16
2	1.9	44	402	580	540	220	790	960	173	36	31	15
3	1.9	221	300	500	500	210	890	762	330	36	28	16
4	1.9	350	246	440	460	210	858	720	258	30	29	15
5	1.9	255	200	360	420	240	880	649	204	30	26	16
6	1.9	198	175	290	*390	270	1,030	556	165	30	24	15
7	2.4	149	165	250	360	290	*1,830	556	136	30	23	16
8	5.5	120	177	230	370	260	1,720	646	116	42	24	16
9	16	191	189	250	330	250	1,340	738	104	58	23	15
10	10	189	436	245	290	*260	1,120	628	93	61	21	16
11	8.7	152	1,420	235	260	283	1,080	510	95	64	20	16
12	7.6	*123	1,120	225	240	350	1,100	460	98	142	20	14
13	11	116	800	215	250	350	1,060	*415	91	192	20	13
14	8.3	109	660	205	235	384	1,100	374	80	141	20	13
15	7.2	171	550	210	220	370	1,140	322	72	113	20	16
16	7.6	219	460	220	210	342	1,240	269	62	100	20	33
17	12	198	380	230	200	310	1,400	246	53	82	19	38
18	13	171	320	230	200	286	1,470	222	52	*69	*19	50
19	34	190	300	220	190	280	1,410	207	47	64	18	52
20	52	549	360	205	190	283	1,280	195	47	59	18	44
21	44	397	900	190	190	283	1,120	189	*42	55	18	44
22	31	302	1,110	300	190	286	998	171	46	48	20	56
23	28	249	860	660	190	302	1,050	152	47	47	19	55
24	27	219	682	760	190	338	1,110	136	39	44	18	50
25	34	195	576	700	190	374	960	136	35	39	18	46
26	24	165	*528	900	200	415	780	171	35	33	18	61
27	18	145	768	1,100	210	495	646	160	78	34	18	80
28	26	128	691	1,000	210	560	638	143	72	36	18	106
29	26	171	604	900	-	538	828	149	58	41	18	*104
30	24	243	551	760	-------	596	1,280	138	51	43	17	93
31	*24	-------	465	700	-------	685	-------	123	-------	43	16	-------
Total	512.7	5,955	16,933	13,810	7,985	10,550	32,868	12,333	2,897	1,884	661	1,140
Mean	16.5	198	546	445	285	340	1,096	398	96.6	60.8	21.3	38.0
Cfsm	0.105	1.26	3.48	2.83	1.82	2.17	6.98	2.54	0.615	0.387	0.136	0.242
In.	0.12	1.41	4.01	3.27	1.89	2.50	7.79	2.92	0.69	0.45	0.16	0.27

Calendar year 1957: Max 1,420 Min 1.9 Mean 187 Cfsm 1.19 In. 16.14
Water year 1957-58: Max 1,830 Min 1.9 Mean 295 Cfsm 1.88 In. 25.48

Peak discharge (base, 1,500 cfs).--Dec. 11 (6 to 7 a.m.) 1,530 cfs (7.91 ft); Apr. 7 (4 to 9 p.m.) 1,930 cfs (8.82 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Dec. 12-21; discharge estimated on basis of weather records and records for Soucook River near Concord, Warner River at Davisville, and South Branch Piscataquog River near Goffstown. Stage-discharge relation affected by ice Nov. 27, Dec. 3, 5, 6, Jan. 1 to Mar. 10 (no gage-height record Feb. 12-25).

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 1958.

Gage.--Water-stage recorder. Altitude of gage is 310 ft (from topographic map).

Average discharge.--18 years, 168 cfs.

Extremes.--Maximum discharge during year, 2,210 cfs Apr. 7 (gage height, 7.68 ft); maximum gage height, 8.85 ft Jan. 27 (ice jam); minimum discharge, 4.0 cfs Oct. 2-7.
1940-58: 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. Some regulation at low flow caused by mill above station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.8	3.5	4.5	247
2.9	6.3	5.0	425
3.2	20	6.0	950
3.5	45	8.0	2,500
4.0	120		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.2	12	173	329	400	170	555	728	83	24	83	15
2	*4.2	33	134	385	350	150	610	510	83	23	63	14
3	4.0	180	100	265	310	130	770	405	113	23	50	12
4	4.0	195	83	230	280	135	752	433	96	20	41	12
5	4.0	113	74	145	255	165	800	378	80	21	36	10
6	4.0	82	72	130	230	175	944	324	67	20	32	9.4
7	5.1	60	71	*140	*210	*195	*1,860	409	57	20	28	10
8	7.3	47	74	120	220	175	1,200	506	52	52	26	12
9	9.0	71	86	130	180	165	878	515	52	212	23	12
10	8.2	71	223	120	165	165	752	385	55	106	21	14
11	8.2	63	770	130	150	220	764	310	58	88	19	13
12	7.8	51	487	115	140	286	746	289	63	226	18	13
13	7.5	45	265	110	150	296	722	260	56	200	18	12
14	7.2	42	230	105	135	299	830	223	50	122	20	12
15	6.9	70	192	110	130	263	890	203	42	99	24	12
16	6.3	86	168	115	120	263	1,030	*197	39	*88	23	11
17	9.4	72	156	125	115	232	1,170	209	37	68	23	12
18	20	*60	140	135	115	211	1,090	189	36	51	20	30
19	21	84	128	120	115	200	908	176	33	52	18	50
20	29	232	184	110	110	209	734	195	32	53	16	41
21	19	173	840	100	110	203	620	166	33	42	16	33
22	14	120	794	180	120	203	560	145	34	35	*17	43
23	12	96	433	470	110	214	625	134	31	58	19	47
24	12	83	316	450	110	250	610	113	28	41	20	36
25	15	77	244	400	120	279	453	111	*26	36	22	28
26	17	60	262	580	135	310	363	152	27	82	23	*24
27	14	67	722	1,200	140	374	303	130	28	109	23	27
28	13	53	461	1,050	145	425	432	115	29	100	20	60
29	12	58	355	734	-	421	776	111	28	99	19	52
30	11	78	320	575	-------	453	1,240	104	26	99	18	40
31	11	-------	260	480	-------	530	-------	92	-------	89	16	-------
Total	327.3	2,534	8,817	9,388	4,870	7,766	23,987	8,217	1,474	2,339	815	716.4
Mean	10.6	84.5	284	303	174	251	800	265	49.1	75.4	26.3	23.9
Cfsm	0.102	0.812	2.73	2.91	1.67	2.41	7.69	2.55	0.472	0.725	0.253	0.230
In.	0.12	0.91	3.15	3.36	1.74	2.78	8.58	2.94	0.53	0.84	0.29	0.26

Calendar year 1957: Max 938 Min 4.0 Mean 109 Cfsm 1.05 In. 14.26
Water year 1957-58: Max 1,860 Min 4.0 Mean 195 Cfsm 1.87 In. 25.50

Peak discharge (base, 1,000 cfs).--Dec. 21 (4:30 to 7 p.m.) 1,210 cfs (6.41 ft); Jan. 27 (5:30 p.m.) 1,330 cfs (6.59 ft); Apr. 7 (6:30 to 8 a.m.) 2,210 cfs (7.68 ft); Apr. 17 (6 to 8 a.m.) 1,240 cfs (6.46 ft); Apr. 30 (7 a.m.) 1,520 cfs (6.85 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26, Dec. 3-7, 13, 14, 18, Jan. 3-27, Jan. 31 to Mar. 11, Mar. 19.

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 1958.

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.--19 years, 310 cfs.

Extremes.--Maximum discharge during year, 3,540 cfs Apr. 7 (gage height, 8.53 ft); minimum daily, 6.0 cfs Oct. 6.
1939-58: 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, which are good. Flow regulated by powerplant above station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.7	4.1	3.6	76	6.0	1,090
2.8	6.8	4.0	153	7.0	1,940
2.9	11	4.5	296	8.5	3,500
3.1	21	5.0	496		
3.3	38	5.5	745		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.0	74	260	481	769	169	1,020	1,380	117	59	160	14
2	23	253	280	701	723	221	1,110	992	267	61	81	25
3	8.2	431	143	550	639	361	1,350	793	293	59	60	8.6
4	7.6	559	119	348	540	379	1,360	809	224	9.0	111	44
5	6.2	356	124	165	460	376	1,370	745	165	8.6	100	20
6	6.0	158	180	213	440	390	1,550	723	165	8.6	59	6.2
7	7.2	100	83	326	430	*430	3,090	608	47	42	63	9.9
8	9.0	108	79	225	366	340	2,230	787	8.6	162	47	20
9	9.0	219	224	244	290	165	1,630	926	88	451	8.6	20
10	9.4	7.2	408	226	460	390	1,380	757	152	206	8.2	50
11	11	7.2	985	296	345	457	*1,350	718	125	150	8.6	28
12	9.8	94	891	185	290	497	1,350	524	150	312	9.8	6.2
13	9.4	128	591	170	270	660	1,310	379	107	301	36	14
14	23	183	474	295	280	616	1,390	279	26	157	11	25
15	22	368	399	264	120	628	1,450	338	7.9	166	74	9.8
16	11	32	375	347	280	568	1,600	336	68	*133	51	26
17	63	7.6	364	388	255	450	1,780	274	62	152	9.8	39
18	9.8	115	290	225	275	474	1,740	206	66	61	69	43
19	94	239	251	155	300	340	1,520	352	87	8.2	54	111
20	8.6	*410	456	250	265	341	1,270	370	98	87	28	90
21	62	369	664	270	285	478	1,100	316	7.9	56	10	30
22	22	136	1,340	514	200	461	1,020	308	7.2	62	35	87
23	31	78	859	701	75	420	1,060	310	66	62	66	80
24	60	122	706	844	295	456	1,110	89	56	76	24	93
25	85	205	491	884	284	479	898	146	65	36	48	34
26	7.2	170	547	1,110	280	640	757	301	64	83	26	49
27	7.2	117	919	1,720	405	640	723	235	70	188	43	42
28	31	61	844	1,750	421	655	609	244	8.2	165	18	107
29	39	133	681	1,350	-	670	1,250	238	33	154	93	47
30	7.6	267	646	1,090	---	685	1,960	132	91	235	9.0	66
31	32	---	552	912	---	718	---	137	---	131	7.9	---
Total	740.2	5,507.0	15,205	17,199	10,042	14,554	41,337	14,752	2,791.8	3,841.4	1,433.9	1,244.7
Mean	23.9	184	490	555	359	469	1,378	476	93.1	124	46.3	41.5
Cfsm	0.118	0.911	2.43	2.75	1.78	2.32	6.82	2.36	0.461	0.614	0.229	0.205
In.	0.14	1.01	2.80	3.17	1.85	2.68	7.61	2.72	0.51	0.71	0.26	0.23

Calendar year 1957: Max 1,340 Min 4.6 Mean 190 Cfsm 0.941 In. 12.75
Water year 1957-58: Max 3,090 Min 6.0 Mean 352 Cfsm 1.74 In. 23.69

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 5, 8, 12-14, 18-21, Feb. 4-7, 9-24, 26, 27, Mar. 6-9.

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 1958. October 1936 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Altitude of gage is 105 ft (from topographic map).

Average discharge.--22 years, 5,342 cfs.

Extremes.--Maximum discharge during year, 30,600 cfs Apr. 24 (gage height, 10.78 ft); minimum daily, 259 cfs Sept. 7.

1936-58: 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 excellent except those for periods of ice effect or no gage-height record, which are 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 109 and 81 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	255	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	11.0	31,600

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	836	1,570	4,180	8,520	a10,800	5,080	10,900	25,000	4,240	1,550	3,160	324
2	827	1,460	4,690	9,080	a9,600	5,020	11,500	23,100	4,130	1,650	2,470	1,240
3	818	2,250	4,400	*8,600	a8,400	5,050	12,400	19,200	6,240	1,860	1,010	1,340
4	740	4,610	3,590	6,090	a7,600	5,140	12,900	16,800	7,440	734	1,870	1,260
5	442	5,820	3,140	b5,000	a7,000	5,110	13,300	15,500	6,040	1,070	1,920	1,190
6	330	5,530	2,940	b5,000	a7,200	5,430	15,000	14,300	5,270	666	1,650	812
7	1,090	3,800	2,720	5,160	a7,200	5,880	20,600	13,000	4,210	1,190	1,720	259
8	932	3,290	1,930	b4,800	7,040	5,980	21,700	13,400	3,550	1,550	1,630	1,110
9	1,370	3,570	3,240	4,650	b6,600	5,620	18,700	15,800	3,300	2,890	1,690	1,090
10	1,210	2,960	4,680	b5,200	6,410	4,830	15,800	17,200	3,410	1,940	1,130	1,200
11	870	3,030	9,680	b5,000	6,070	5,320	*14,400	15,500	3,430	1,800	1,550	1,190
12	570	3,020	17,200	b4,500	6,110	a6,000	14,600	13,400	3,130	2,640	1,700	1,340
13	463	2,450	13,600	b4,500	6,140	a6,800	14,600	14,400	3,050	2,450	1,550	852
14	998	2,480	9,500	4,430	b5,800	*a7,400	14,300	13,000	2,570	3,660	1,430	372
15	899	3,820	7,400	4,410	b5,400	7,960	14,800	11,000	2,940	2,770	1,690	1,190
16	876	4,600	6,380	4,630	b5,400	6,450	16,400	9,710	2,410	2,800	1,130	1,220
17	842	6,110	6,070	4,900	b5,100	6,140	19,600	8,760	2,200	2,120	576	1,710
18	911	*5,210	5,430	4,850	b5,200	5,820	23,400	8,720	2,320	1,630	1,500	1,260
19	863	4,350	4,680	b4,800	b5,200	5,750	25,500	8,360	2,280	1,330	1,510	1,460
20	1,780	4,720	5,400	b4,500	b5,400	5,750	25,900	9,080	2,150	880	1,510	1,570
21	2,760	6,180	9,670	b4,600	b5,400	5,370	25,100	9,290	2,230	1,650	1,340	1,590
22	1,340	5,660	23,900	5,590	5,340	5,450	24,600	7,710	928	1,710	1,380	1,440
23	940	4,370	24,700	7,120	5,010	5,190	27,400	6,760	2,130	1,710	1,310	1,670
24	920	3,850	22,100	9,710	4,760	5,080	30,000	5,530	1,920	1,400	459	1,740
25	1,890	3,710	14,400	10,500	5,280	5,320	*28,100	4,840	1,710	1,250	1,580	1,660
26	2,250	3,350	10,300	11,200	5,660	6,860	24,400	4,310	1,800	1,350	1,790	1,500
27	1,950	2,890	11,600	a13,000	5,620	7,260	20,900	4,600	1,730	1,280	1,400	1,770
28	1,360	2,240	17,300	a14,000	5,720	8,160	17,300	4,430	1,760	2,450	1,320	1,130
29	834	2,470	15,500	a13,500	-	8,600	16,800	4,230	824	2,320	1,690	1,480
30	1,070	3,120	12,500	a13,000	-------	8,920	19,600	3,940	1,680	2,930	1,100	1,330
31	1,080	-------	9,800	a12,000	-------	9,760	-------	4,200	-------	3,380	511	-------
Total	34,061	112,490	292,620	222,840	176,460	192,490	570,500	345,070	91,042	58,610	46,278	37,299
Mean	1,099	3,750	9,439	7,188	6,302	6,209	19,020	11,130	3,035	1,891	1,493	1,234
Cfsm	0.355	1.21	3.05	2.32	2.04	2.01	6.15	3.60	0.982	0.612	0.483	0.402
In.	0.41	1.35	3.52	2.68	2.12	2.32	6.86	4.15	1.10	0.70	0.56	0.45

Calendar year 1957: Max 24,700 Min 147 Mean 3,650 Cfsm 1.18 In. 16.02
Water year 1957-58: Max 30,000 Min 259 Mean 5,972 Cfsm 1.93 In. 26.22

Peak discharge (base, 22,000 cfs).--Dec. 22 (5 to 7 p.m.) 25,400 cfs (9.71 ft); Apr. 7 (11 p.m.) 22,400 cfs (9.08 ft); Apr. 24 (7 to 8:30 p.m.) 30,600 cfs (10.78 ft); May 1 (4 to 7 p.m.) 25,600 cfs (9.74 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage when available, powerplant records, and records for Piscataquog River near Goffstown.

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.

930. Clark Brook at Auburn, N. H.

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 1958.

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.--20 years, 40.5 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 291 cfs Apr. 8 (gage height, 1.94 ft); minimum, 0.5 cfs Sept. 15, 16.
1938-58: 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. 110). 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 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.1	0.3	0.7	21
.2	1.0	.9	40
.3	2.4	1.2	79
.4	4.9	1.5	145
.5	8.7	2.0	315

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	22	21	79	87	59	128	140	23	1.8	11	1.2
2	19	22	22	88	74	60	140	120	28	1.7	11	1.1
3	19	24	20	85	67	60	178	98	44	1.5	8.7	1.0
4	19	22	18	76	b56	61	196	92	44	1.4	7.1	.9
5	19	23	16	66	b46	63	190	85	36	1.5	5.2	.8
6	18	20	15	62	*b38	66	187	76	30	1.5	4.0	.7
7	21	17	14	68	b34	*70	258	88	26	1.7	3.2	.7
8	36	15	14	73	b31	67	287	105	23	3.3	2.6	.8
9	36	15	15	76	b30	64	254	128	22	15	2.4	.6
10	35	14	24	73	b30	66	216	116	21	19	2.0	.8
11	34	13	50	84	43	73	*184	96	19	20	1.7	.8
12	33	12	56	93	73	85	169	83	19	34	1.4	.7
13	32	12	48	83	68	90	169	*73	18	38	1.2	.7
14	31	12	39	42	59	88	157	61	19	*30	1.2	.6
15	30	*14	33	27	58	88	*118	55	20	26	1.7	.6
16	30	14	29	22	56	88	90	51	16	22	1.7	.5
17	29	14	26	21	55	88	94	49	13	21	1.5	.6
18	28	14	25	22	54	85	92	46	11	23	1.5	1.4
19	30	16	23	22	52	83	87	44	9.0	21	1.3	1.7
20	27	20	26	20	51	74	81	45	7.2	15	1.1	2.0
21	25	20	44	20	51	78	68	45	6.0	49	1.0	2.0
22	24	19	58	22	52	78	45	40	6.0	26	1.3	3.0
23	23	16	56	34	52	79	48	38	*4.9	9.2	1.3	3.0
24	22	15	50	48	51	83	51	32	4.3	7.1	1.2	3.0
25	22	14	44	55	51	94	66	31	3.5	5.5	1.3	2.6
26	20	14	*40	71	52	100	61	35	3.2	4.6	1.7	*2.4
27	19	12	52	163	52	105	55	35	3.2	4.0	2.0	2.9
28	21	12	74	199	55	116	59	33	3.0	3.7	2.0	6.8
29	27	13	78	154	-	116	94	31	2.8	4.6	1.8	7.7
30	26	15	78	118	--------	113	138	28	2.2	5.2	1.5	16
31	23	--------	74	98	--------	116	--------	25	--------	7.3	1.4	--------
Total	794	484	1,182	2,164	1,478	2,556	3,960	2,024	487.3	424.6	88.0	67.6
Mean	25.6	16.1	38.1	69.8	52.8	82.5	132	65.3	16.2	13.7	2.84	2.25
(†)	-22.6	-11.1	+8.78	+21.0	-1.33	+10.6	+6.91	-3.34	-3.09	0	0	0
Adjusted for change in contents in Tower Hill Pond												
Mean	3.00	5.03	46.9	90.8	51.5	93.1	139	61.9	13.1	13.7	2.84	2.25
Cfsm	0.108	0.181	1.69	3.27	1.85	3.35	5.00	2.23	0.471	0.493	0.102	0.081
In.	0.12	0.20	1.95	3.77	1.93	3.86	5.57	2.57	0.53	0.57	0.12	0.09

	Observed			Adjusted			
Calendar year 1957:	**Max** 88	**Min** 0.2	**Mean** 21.6	**Mean** 23.4	**Cfsm** 0.842	**In.** 11.41
Water year 1957-58:	**Max** 287	**Min** 0.5	**Mean** 43.0	**Mean** 43.6	**Cfsm** 1.57	**In.** 21.28

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Tower Hill Pond.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 4-12, Feb. 11-20, June 17-22; discharge estimated on basis of 1 discharge measurement, weather records, and recorded range in stage.

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 1958.

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.--49 years, 286 cfs.

Extremes.--Maximum discharge during year, 2,970 cfs Apr. 7 (gage height, 7.32 ft); minimum, 14 cfs Oct. 2-5.
1909-58: 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 periods of ice effect, which are fair. Some diurnal fluctuation caused by mill above station.

Revisions (water years).--WSP 431: 1909-13 calendar years, 1914. 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 table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.94	14	3.5	350
2.0	18	4.0	570
2.3	42	5.0	1,120
2.6	86	7.0	2,650
3.0	179		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	25	170	480	735	310	922	1,180	128	48	106	25
2	14	36	224	660	635	280	946	805	128	39	96	23
3	14	106	196	520	552	240	1,100	655	168	38	72	22
4	14	230	157	370	480	270	1,080	690	171	36	48	21
5	14	130	105	220	420	300	1,140	655	140	39	54	26
6	15	79	82	200	400	320	1,300	575	135	41	56	32
7	19	64	80	210	350	350	2,410	710	124	48	42	31
8	22	58	84	185	360	320	2,160	904	90	46	42	31
9	*23	84	98	210	280	282	1,400	940	*90	60	33	26
10	23	104	238	200	260	289	*1,150	695	121	104	36	27
11	22	66	975	210	240	422	1,190	556	130	79	*35	27
12	22	59	785	190	230	548	1,140	543	128	72	31	27
13	20	49	450	185	240	590	1,080	530	126	64	31	25
14	20	46	370	175	220	625	1,240	462	110	68	32	22
15	19	51	247	185	210	530	1,420	*426	79	77	35	22
16	18	102	220	195	200	498	1,670	394	66	69	33	21
17	18	80	215	210	190	466	2,030	386	79	66	31	27
18	18	*72	200	220	185	471	2,000	306	78	58	32	43
19	22	98	185	200	185	444	1,730	282	70	50	30	69
20	32	342	243	180	185	426	1,500	362	66	49	39	72
21	37	326	825	165	180	426	1,330	334	68	46	28	56
22	30	211	1,340	250	190	430	1,250	286	64	51	27	40
23	26	166	730	755	180	382	1,160	258	52	56	28	*64
24	25	102	543	910	180	462	1,130	234	57	121	28	58
25	26	94	394	800	210	585	815	202	62	113	31	64
26	27	86	342	1,010	250	600	655	254	58	92	31	52
27	27	78	1,110	2,050	250	695	548	282	54	94	34	42
28	26	74	832	2,330	260	760	846	247	56	98	33	56
29	26	76	585	1,500	-	740	1,330	237	54	119	30	79
30	25	79	*566	1,100	-------	720	1,620	205	39	124	30	71
31	24	-------	489	898	-------	874	-------	160	-------	110	28	-------
Total	683	3,173	13,080	16,973	8,257	14,655	39,092	14,755	2,791	2,235	1,242	1,201
Mean	22.0	106	422	548	295	473	1,303	476	93.0	72.1	40.1	40.0
Cfsm	0.129	0.620	2.47	3.20	1.73	2.77	7.62	2.78	0.544	0.422	0.235	0.234
In.	0.15	0.69	2.84	3.69	1.80	3.19	8.50	3.21	0.61	0.49	0.27	0.26

Calendar year 1957: Max 1,640 Min 14 Mean 181 Cfsm 1.06 In. 14.39
Water year 1957-58: Max 2,410 Min 14 Mean 324 Cfsm 1.89 In. 25.70

Peak discharge (base, 2,250 cfs).--Jan. 28 (5 a.m.) 2,610 cfs (6.96 ft); Apr. 7 (6 to 8 p.m.) 2,970 cfs (7.32 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26-28, Dec. 5-7, 13, 14, 16-18, Jan. 3-22, Feb. 4 to Mar. 8.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 270.04 ft above mean sea level, datum of 1929.

Average discharge.--23 years, 196 cfs.

Extremes.--Maximum discharge during year, 2,230 cfs Apr. 7 (gage height, 6.46 ft); minimum, 20 cfs Sept. 2; minimum daily, 26 cfs Oct. 6, 13, 28.
1935-58: 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from debris Oct. 19, Nov. 3, 9, 15, 19-23, Nov. 30 to Dec. 2, Dec. 9, 10)

Oct. 1 to Jan. 26				Jan. 27 to Sept. 30			
1.2	22	3.0	350	1.2	24	3.0	360
1.5	46	4.0	740	1.4	42	4.0	740
2.0	115	5.0	1,260	1.7	78	5.0	1,260
2.5	215			2.0	126	6.0	1,890
				2.5	226		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	59	127	342	411	330	659	614	119	53	95	28
2	42	60	84	*347	372	280	664	444	128	49	72	34
3	40	132	80	235	354	278	*695	390	133	53	57	48
4	39	67	77	160	318	300	677	427	114	40	59	48
5	36	62	69	130	292	321	704	372	106	59	63	50
6	26	57	66	142	270	375	929	321	98	45	63	45
7	*47	55	62	146	262	390	1,720	672	86	49	71	46
8	73	53	48	185	272	342	1,140	638	82	*72	80	59
9	54	81	86	172	235	327	910	*550	121	72	74	*54
10	46	45	298	150	245	396	800	399	*119	51	54	69
11	35	38	466	144	204	476	835	324	114	109	53	59
12	40	52	250	128	181	514	825	324	112	126	*57	51
13	26	55	146	135	189	466	790	280	98	104	58	44
14	28	55	148	131	177	483	800	250	87	87	58	37
15	36	93	139	162	173	444	765	226	74	86	76	39
16	38	65	133	162	183	390	915	238	78	78	60	52
17	37	44	128	176	200	363	925	240	75	65	50	105
18	40	44	115	154	195	357	840	211	74	58	57	186
19	82	133	115	137	180	348	713	226	84	89	63	124
20	34	156	186	150	183	360	618	245	90	63	57	81
21	31	*133	727	174	187	366	546	213	101	58	57	72
22	40	112	470	337	194	360	498	189	101	62	87	114
23	42	104	282	441	175	357	622	177	78	121	58	87
24	45	62	215	329	194	411	554	154	78	96	47	71
25	67	52	182	308	222	444	427	209	77	77	102	65
26	40	64	319	1,140	219	510	345	300	75	99	81	63
27	28	61	659	1,480	*187	574	285	224	88	80	74	126
28	20	45	371	1,040	339	554	650	187	65	80	63	156
29	41	53	314	700	-	490	815	173	53	145	60	107
30	44	94	282	554	-------	518	960	144	56	112	50	87
31	44	-------	235	472	-------	606	-------	130	-------	109	40	-------
Total	1,286	2,186	6,879	10,463	6,613	12,730	22,626	9,491	2,764	2,447	1,996	2,207
Mean	41.5	72.9	222	338	236	411	754	306	92.1	78.9	64.4	73.6
Cfsm	0.388	0.681	2.07	3.16	2.21	3.84	7.05	2.86	0.861	0.737	0.602	0.688
In.	0.45	0.76	2.39	3.64	2.30	4.42	7.86	3.30	0.96	0.85	0.69	0.77

Calendar year 1957: Max 1,240 Min 22 Mean 126 Cfsm 1.18 In. 15.97
Water year 1957-58: Max 1,720 Min 26 Mean 224 Cfsm 2.09 In. 28.39

Peak discharge (base, 1,000 cfs).--Dec. 21 (1 to 1:30 p.m.) 1,040 cfs (4.59 ft); Jan. 27 (12 m.) 1,580 cfs (5.54 ft); Apr. 7 (4 a.m.) 2,230 cfs (6.46 ft); Apr. 30 (6: 30 a.m.) 1,080 cfs (4.69 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 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 505 ft (from topographic map).

Average discharge.--12 years, 3.74 cfs.

Extremes.--Maximum discharge during year, 88 cfs Apr. 6 (gage height, 3.45 ft), from rating curve extended above 35 cfs; minimum, 0.02 cfs Oct. 1, 2.
1946-58: Maximum discharge, 395 cfs Sept. 11, 1954 (gage height, 4.58 ft), from rating curve extended above 56 cfs; minimum, 0.003 cfs Aug. 24, 27, 1957.

Remarks.--Records good except those for periods of ice effect, no gage-height record, shifting control, and backwater from rocks, which are all fair. Flow regulated by reservoir from 1949 to 1955.

Rating tables, water year 1957-58, except periods of ice effect, shifting control, or backwater from rocks (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 6

1.7	0.01	2.1	2.05
1.75	.04	2.2	3.2
1.8	.12	2.4	6.9
1.85	.27	2.6	13.1
1.9	.50	2.8	22
2.0	1.15	3.0	36

Apr. 7 to Sept. 30

1.74	0.10	2.0	1.10
1.8	.24	2.1	1.90
1.85	.40	2.2	3.1
1.9	.60	2.4	6.9

Note.--Same as preceding table above 2.4 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.02	0.20	2.3	6.5	7.7	10.7	16.5	9.1	2.6	0.44	1.3	0.22
2	.02	.42	1.15	4.4	6.9	7.2	17.8	7.5	1.9	.30	.92	.14
3	.04	5.7	.80	3.1	6.0	6.0	*17.3	7.5	2.2	.30	.72	.10
4	.04	1.4	.73	2.35	b5.2	6.2	16.9	8.3	2.1	.30	.68	.12
5	.04	.61	.50	1.85	4.8	6.7	18.3	7.2	2.1	.33	.52	.10
6	.04	.31	.40	1.95	4.4	6.9	32	6.4	1.7	.33	.44	.10
7	*.04	.23	.45	2.25	4.2	6.4	34	18.8	1.23	.33	.36	.12
8	.04	.20	.55	2.6	4.8	5.6	21	13.9	.98	.36	.48	.16
9	.04	.69	1.23	2.5	b4.8	5.6	16.0	*10.0	1.3	.56	.68	.13
10	.11	.50	9.1	2.35	4.1	7.9	14.4	7.7	*1.9	.52	.72	.12
11	.35	.27	8.8	2.35	3.6	13.9	15.6	6.4	1.9	.61	.60	.14
12	.14	.20	3.8	2.15	3.3	13.9	16.5	6.2	2.1	2.7	.48	.14
13	.12	.20	2.6	2.15	3.5	13.1	17.8	5.2	2.0	2.1	.40	.14
14	.09	a.16	2.25	2.05	3.2	11.7	15.6	4.8	1.4	1.7	.33	.12
15	.09	a.60	2.15	2.25	3.0	12.4	9.1	4.4	.92	1.3	.33	.10
16	.08	a.55	2.05	2.35	3.2	10.4	8.0	5.0	.77	.88	.52	.10
17	.05	a.32	1.95	2.8	b3.2	9.1	7.7	4.8	.68	.98	.52	.61
18	.05	a.23	1.65	2.7	b3.2	8.9	7.5	4.2	.60	.72	.52	4.1
19	.08	a.50	1.65	2.25	b3.2	9.1	6.9	4.2	.68	.68	.33	2.7
20	.16	a2.1	3.0	2.05	3.2	9.4	6.0	4.4	.92	.68	.30	1.7
21	.23	*1.07	11.6	2.05	3.1	9.1	5.4	3.7	.92	.56	.22	1.45
22	.23	.86	4.9	5.5	3.0	9.1	6.2	3.2	.92	.48	.19	1.8
23	.20	.67	3.3	8.8	2.8	9.4	10.6	3.2	.82	.64	.19	1.7
24	.20	.61	3.0	4.4	2.7	10.4	8.0	3.1	.68	.87	.14	*1.3
25	.20	.50	2.6	4.3	3.3	11.4	6.4	6.4	.60	.72	.34	1.01
26	.20	.45	*6.4	31	3.5	13.5	5.4	7.1	.52	.60	.56	.72
27	.20	.35	9.1	*33	3.2	13.9	4.6	5.4	.87	.82	.68	2.5
28	.20	.31	4.2	21	9.1	13.1	17.5	4.6	.77	.88	.64	5.4
29	.16	.45	4.4	14.4	-	13.5	13.4	4.1	.64	1.85	.48	2.45
30	.44	.91	3.6	10.7	-------	15.2	15.6	3.2	.52	1.7	.36	1.8
31	.25	-------	3.2	9.1	-------	16.5	-------	2.7	-------	1.55	.30	-------
Total	4.15	21.57	103.41	197.20	116.2	316.2	408.0	192.7	37.24	26.89	15.25	31.29
Mean	0.134	0.719	3.34	6.36	4.15	10.2	13.6	6.22	1.24	0.871	0.492	1.04
Cfsm	0.059	0.315	1.46	2.79	1.82	4.47	5.96	2.73	0.544	0.382	0.216	0.456
In.	0.07	0.35	1.69	3.22	1.90	5.16	6.65	3.14	0.61	0.44	0.25	0.51

Calendar year 1957: Max 19.1 Min 0.01 Mean 1.51 Cfsm 0.662 In. 9.00
Water year 1957-58: Max 34 Min 0.02 Mean 4.03 Cfsm 1.77 In. 23.99

Peak discharge (base, 45 cfs).--Apr. 6 (9 p.m.) 88 cfs (3.45 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 Ware River near Barre.
b Stage-discharge relation affected by ice.
Note.--Backwater from rocks Oct. 1-7, July 9 to Sept. 24. Shifting-control method used Nov. 3 to Dec. 10.

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 1958.

Average discharge.--62 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 1957 to September 1958

Month	Runoff (millions of gallons)	Discharge per square mile		Runoff (inches)	Rainfall (inches)
		Millions of gallons per day	Cubic feet per second		
October	282.0	0.084	0.131	0.15	2.98
November	661.5	.205	.317	.35	5.58
December	4,424.4	1.325	2.05	2.36	6.85
Calendar year 1957	28,594.0	.727	1.13	15.28	37.49
January	6,875.4	2.060	3.19	3.67	8.96
February	4,286.7	1.422	2.20	2.29	4.00
March	9,270.3	2.777	4.30	4.95	4.45
April	16,118.6	4.989	7.72	8.61	6.12
May	6,919.5	2.073	3.21	3.70	3.65
June	2,237.4	.693	1.07	1.20	2.14
July	1,800.5	.539	.835	.96	5.24
August	1,042.7	.312	.483	.56	3.25
September	1,530.1	.474	.733	.82	6.27
Water year 1957-58	55,449.1	1.411	2.18	29.62	59.49

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 1958.

Gage.--Water-stage recorder. Datum of gage is 244.27 ft above mean sea level, datum of 1929.

Average discharge.--9 years, 119 cfs.

Extremes.--Maximum discharge during year, 1,370 cfs Apr. 7 (gage height, 5.91 ft); minimum daily, 6.1 cfs Oct. 1, 3-6.
1949-58: 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, which are good. Flow regulated by mill above station. Entire flow from 2.10 sq mi above outlet of Fitchburg Reservoir diverted from municipal supply of Fitchburg during most years.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from debris Oct. 27 to Dec. 10, Dec. 14-20)

1.5	5.6	3.2	182
1.7	12	4.0	366
2.0	27	5.0	760
2.4	61	5.5	1,060
2.8	112		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.1	13	69	165	266	202	422	388	77	21	33	11
2	6.4	20	71	250	234	188	428	282	74	20	29	11
3	6.1	44	53	171	200	163	481	230	80	21	25	9.8
4	6.1	64	45	b115	176	156	*481	250	71	20	22	10
5	6.1	42	39	90	154	171	477	236	63	23	20	10
6	6.1	31	33	85	142	186	523	202	58	23	18	9.8
7	9.1	25	35	89	135	198	1,020	292	52	24	*16	10
8	13	22	36	87	135	171	834	369	48	24	17	11
9	*14	28	40	92	131	156	547	345	50	28	17	11
10	11	29	80	b89	b120	161	452	266	58	33	17	12
11	9.5	25	294	89	b105	198	452	212	58	28	17	*12
12	8.1	21	270	85	b100	263	470	208	*58	29	16	10
13	8.1	20	149	80	106	284	463	202	54	33	16	9.8
14	8.4	*20	104	78	b98	298	466	174	49	33	15	9.8
15	8.4	*27	90	80	b93	261	477	*156	44	29	16	10
16	8.1	36	78	84	96	268	488	154	40	26	16	9.5
17	8.1	33	73	92	96	227	488	174	38	23	14	12
18	9.5	28	68	98	93	196	452	156	36	21	15	25
19	17	37	64	92	89	184	391	143	35	23	14	31
20	16	74	70	82	87	192	335	163	34	21	13	24
21	13	76	220	79	84	194	289	143	34	20	13	20
22	12	53	456	108	84	196	261	118	29	19	17	24
23	11	41	256	232	84	204	291	108	30	23	15	23
24	11	36	172	*305	83	221	330	98	31	33	13	20
25	15	31	136	259	89	247	259	98	29	33	19	16
26	12	29	125	414	108	268	210	159	28	33	18	15
27	13	27	317	854	115	318	182	138	*31	44	18	18
28	12	26	294	890	143	350	218	112	29	41	17	29
29	12	29	204	531	-	343	477	103	25	49	15	31
30	12	35	*186	383	------	353	481	93	20	45	12	24
31	12	------	152	315	------	397	------	83	------	36	12	------
Total	320.2	1,022	4,279	6,463	3,446	7,214	13,145	5,855	1,363	880	535	478.7
Mean	10.3	34.1	138	208	123	233	438	189	45.4	28.6	17.3	16.0
Cfsm	0.164	0.543	2.20	3.31	1.96	3.71	6.97	3.01	0.723	0.455	0.275	0.255
In.	0.19	0.61	2.53	3.83	2.04	4.27	7.78	3.47	0.81	0.53	0.32	0.28

Calendar year 1957: Max 616 Min 5.1 Mean 68.3 Cfsm 1.09 In. 14.79
Water year 1957-58: Max 1,020 Min 6.1 Mean 123 Cfsm 1.96 In. 26.66

Peak discharge (base, 700 cfs).--Jan. 27 (12 p.m.) 1,010 cfs (5.43 ft); Apr. 7 (6 p.m.) 1,370 cfs (5.91 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 169.04 ft above mean sea level, datum of 1929.

Average discharge.--23 years, 538 cfs (adjusted for wastage into Nashua River).

Extremes.--Maximum discharge during year, 3,520 cfs Apr. 8 (gage height, 7.85 ft); minimum daily, 6.4 cfs Dec. 8.

1935-58: 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 no gage-height record or 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 tables, water year 1957-58, except periods of backwater from aquatic vegetation (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 28				Jan. 29 to Sept. 30			
0.37	6.4	1.5	129	0.35	7.1	1.2	82
.4	7.3	2.0	292	.4	8.7	1.5	152
.6	15	2.5	520	.6	18	2.0	321
.8	27	3.0	815	.8	32	3.0	775
1.0	44	8.0	3,610	1.0	52	8.0	3,610
1.2	69						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92	175	8.0	665	1,500	691	1,800	1,910	310	85	585	13
2	105	68	252	1,170	1,180	908	1,900	1,430	708	105	91	223
3	105	66	363	1,070	*1,300	1,170	1,960	1,150	695	130	11	282
4	138	682	355	1,020	1,100	1,000	*1,960	968	551	152	197	236
5	57	502	339	323	1,010	974	1,770	1,330	458	161	172	100
6	25	221	277	254	990	1,000	1,740	1,090	251	115	161	49
7	182	256	70	377	638	953	2,600	1,160	33	164	*161	13
8	235	96	6.4	382	600	1,020	3,390	1,600	7.7	159	170	127
9	297	8.7	222	503	620	820	3,160	1,530	443	195	48	161
10	211	9.4	525	749	929	*1,140	2,540	1,390	448	183	13	161
11	*182	196	1,040	494	874	1,170	2,140	979	371	346	137	*158
12	64	260	1,060	64	695	1,360	1,880	1,190	*485	150	286	62
13	8.4	256	560	437	680	1,480	1,730	1,040	545	254	234	13
14	96	289	203	641	630	1,340	1,600	996	177	692	181	14
15	108	*126	370	520	458	1,430	1,780	*968	7.4	395	162	61
16	118	8.0	840	520	118	1,310	1,880	529	277	250	48	86
17	139	8.4	749	581	738	1,470	1,870	575	320	230	15	261
18	184	181	531	251	660	1,260	1,830	590	272	230	163	393
19	57	331	413	20	526	1,170	1,560	975	272	*61	211	559
20	53	572	433	629	590	1,150	1,280	968	272	11	211	200
21	231	755	333	553	485	1,200	1,440	924	123	190	207	130
22	118	298	601	665	368	1,030	1,240	736	7.4	181	78	593
23	197	9.0	1,160	936	221	1,040	1,230	420	285	150	14	367
24	138	9.4	737	1,030	693	1,430	1,380	262	371	216	15	212
25	217	207	564	637	720	1,470	1,270	145	355	291	245	139
26	80	293	887	1,230	842	1,520	918	953	264	141	313	211
27	9.8	544	a1,000	2,520	869	1,630	760	957	264	13	367	53
28	100	136	a970	3,270	524	1,740	1,160	935	59	175	328	126
29	181	125	a940	3,120	-	1,580	1,600	726	7.1	340	146	453
30	178	70	*a900	2,400	--------	1,430	1,930	123	94	383	13	371
31	175	--------	635	1,770	--------	1,740	--------	206	--------	379	13	--------
Total	4,081.2	6,757.9	17,343.4	28,801	20,558	38,626	53,298	28,755	8,732.6	6,527	4,996	5,827
Mean	132	225	559	929	734	1,246	1,777	928	291	211	161	194
(†)	7.35	7.20	7.30	7.10	7.26	7.29	6.13	17.7	5.94	6.70	7.18	14.1

Adjusted for wastage (figures represent net discharge from net drainage area)

Mean	124	218	552	922	727	1,239	1,770	910	285	204	154	180
Cfsm	0.392	0.690	1.75	2.92	2.30	3.92	5.60	2.88	0.902	0.646	0.487	0.570
In.	0.45	0.77	2.01	3.36	2.40	4.52	6.25	3.32	1.01	0.74	0.56	0.64

	Observed						Adjusted					
Calendar year 1957:	Max	1,880	Min	6.4	Mean	352	Mean	345	Cfsm	1.09	In.	14.80
Water year 1957-58:	Max	3,390	Min	6.4	Mean	615	Mean	606	Cfsm	1.92	In.	26.03

* 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.

a No gage-height record; discharge estimated on basis of 1 discharge measurement, weather records, and records for North Nashua River near Leominster.

Note.--Backwater from aquatic vegetation Oct. 1 to Dec. 10, Dec. 13-16, 18-22, Jan. 12, 13, 18, 19, Feb. 16, 17, 23, May 25, 30, 31, June 7-9, June 14 to Sept. 30.

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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 1958.

Gage.--Water-stage recorder. Altitude of gage is 145 ft (from topographic map).

Average discharge.--17 years, 180 cfs.

Extremes.--Maximum discharge during year, 1,320 cfs Jan. 28 (gage height, 5.38 ft); minimum daily, 2.2 cfs Oct. 15, 26, July 4, Aug. 23, Sept. 6.
1941-58: 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 good except those for periods of doubtful or no gage-height record, which are fair. Low flow regulated by mills above station; greater regulation prior to 1953.

Revisions (water years).--WSP 1231: 1945-46.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 21; backwater from debris or aquatic vegetation Nov. 10-12, 14-27, Nov. 30 to Dec. 6, Dec. 9-28, Aug. 26-30, Sept. 9, 17-30)

Oct. 1-21		Oct. 22 to Sept. 30			
1.4	2.2	1.1	1.2	2.5	159
1.5	4.7	1.2	3.2	3.0	305
1.6	8.6	1.3	6.5	4.0	630
1.8	21	1.5	18	5.0	1,100
		1.8	44	5.5	1,390
		2.1	82		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.6	27	77	270	715	558	602	580	152	63	30	24
2	3.6	35	120	320	614	746	662	485	135	65	11	49
3	3.6	104	96	280	534	688	*684	428	147	35	11	45
4	3.6	77	81	210	452	634	666	416	152	2.2	46	35
5	3.6	33	78	170	404	618	610	416	137	11	34	27
6	3.6	29	78	160	359	630	614	407	120	31	21	2.2
7	*4.0	31	32	170	329	654	872	431	104	72	26	2.8
8	4.9	40	4.5	190	332	642	1,220	530	94	63	27	45
9	21	48	80	180	332	594	1,050	590	104	63	15	*45
10	2.8	51	127	170	323	572	*814	548	118	63	45	38
11	17	55	242	160	290	594	706	470	122	39	70	37
12	2.2	45	335	155	270	654	756	413	120	41	48	36
13	2.4	25	281	155	270	679	828	377	*111	79	52	25
14	3.0	*28	224	150	260	688	810	347	97	103	*46	24
15	4.4	*49	172	145	250	782	728	332	91	79	29	37
16	5.4	33	152	160	260	814	630	308	81	71	3.8	32
17	11	41	147	170	260	751	552	293	62	64	26	57
18	3.6	38	133	180	250	662	488	293	56	36	63	92
19	13	75	124	160	240	614	443	311	58	29	48	175
20	17	57	124	140	230	583	413	275	58	41	38	198
21	14	63	183	140	220	618	401	251	58	70	35	175
22	65	56	266	250	220	602	410	233	58	62	28	162
23	31	48	269	600	220	606	455	221	60	64	2.2	137
24	2.4	44	236	970	220	626	506	203	62	60	2.9	160
25	25	38	183	840	240	662	492	206	60	24	60	75
26	2.2	64	*177	860	270	654	431	263	60	62	69	90
27	2.8	69	236	980	*260	658	383	284	*62	55	82	70
28	5.2	29	236	1,270	350	662	410	287	62	71	78	145
29	9.1	29	220	1,170	-	634	552	239	63	62	95	233
30	10	35	210	975	-------	602	654	203	62	59	55	251
31	7.4	-------	200	*828	-------	576	-------	181	-------	56	31	-------
Total	307.4	1,396	5,123.5	12,578	8,974	20,057	18,842	10,821	2,726	1,695.2	1,227.9	2,524.0
Mean	9.92	46.5	165	406	320	647	628	349	90.9	54.7	39.6	84.1
Cfsm	0.086	0.401	1.42	3.50	2.76	5.58	5.41	3.01	0.784	0.472	0.341	0.725
In.	0.10	0.45	1.64	4.03	2.88	6.43	6.04	3.47	0.87	0.54	0.39	0.81

Calendar year 1957: Max 656 Min 2.2 Mean 111 Cfsm 0.957 In. 13.00
Water year 1957-58: Max 1,270 Min 2.2 Mean 236 Cfsm 2.03 In. 27.65

* Discharge measurement made on this day.
Note.--No gage-height record Dec. 29 to Jan. 27, Feb. 11-27; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage when available, and records for Squannacook River near West Groton and other stations on nearby streams. Doubtful gage-height record Nov. 21 to Dec. 26, Apr. 14-22; discharge computed from gage-height graph adjusted on basis of 1 discharge measurement, appearance of graph, and changes in stage when intake drawdown began on Apr. 14 and when it ended on Dec. 22 and Apr. 22.

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 1958.

Average discharge.--83 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 1957 to September 1958

Month	Runoff (millions of gallons)	Discharge per square mile		Runoff (inches)	Rainfall (inches)
		Millions of gallons per day	Cubic feet per second		
October	-70.8	-0.030	-0.047	-0.05	2.33
November	657.9	.292	.451	.50	5.50
December	2,184.0	.937	1.45	1.67	6.35
Calendar year 1957	15,843.3	.578	.895	12.14	33.10
January	7,043.3	3.021	4.67	5.39	9.23
February	3,929.0	1.866	2.89	3.01	4.30
March	9,019.7	3.869	5.99	6.90	3.95
April	6,910.7	3.063	4.74	5.29	5.84
May	3,961.8	1.699	2.63	3.03	3.28
June	593.7	.263	.407	.45	1.75
July	99.9	.043	.066	.08	4.38
August	144.0	.062	.096	.11	3.81
September	1,022.2	.453	.701	.78	6.27
Water year 1957-58	35,495.4	1.293	2.00	27.16	56.99

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

985. Lake Cochituate Outlet at Cochituate, Mass.

Location.--Lat 42°18'45", long 71°23'15", at outlet three-eighths of a mile north of Cochituate railroad station, Middlesex County, and 1¼ miles upstream from Sudbury River.

Drainage area.--17.40 sq mi since January 1937.

Records available.--January 1863 to September 1958.

Average discharge.--95 years, 26.4 cfs (adjusted to present drainage area).

Remarks.--Records adjusted for change in reservoir contents, diversions, and wastage. Entire flow available, if needed, for use of Boston metropolitan district; no diversion for water supply since 1931.

Cooperation.--Records furnished by Water Division of Metropolitan District Commission.

Monthly discharge and rainfall, water year October 1957 to September 1958

Month	Runoff (millions of gallons)	Discharge per square mile		Runoff (inches)	Rainfall (inches)
		Millions of gallons per day	Cubic feet per second		
October	45.2	0.084	0.130	0.15	2.22
November	283.1	.542	.839	.94	5.64
December	650.8	1.207	1.87	2.15	5.74
Calendar year 1957	5,321.6	.838	1.30	17.59	30.75
January	2,310.1	4.283	6.63	7.64	8.75
February	1,429.6	2.934	4.54	4.73	3.97
March	2,249.0	4.169	6.45	7.44	3.09
April	1,910.8	3.661	5.66	6.32	5.63
May	938.9	1.741	2.69	3.10	3.33
June	238.0	.456	.705	.79	2.01
July	78.7	.146	.226	.26	3.57
August	90.4	.168	.259	.30	2.84
September	417.3	.799	1.24	1.38	5.78
Water year 1957-58	10,641.9	1.676	2.59	35.20	52.57

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 1958. October, Novmeber 1926 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.--22 years, 465 cfs (adjusted to net drainage area).
Extremes.--Maximum discharge during year, 3,120 cfs Jan. 30 (gage height, 7.89 ft); minimum daily, 6.4 cfs Oct. 27.
1936-58: 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, and those for periods of no gage-height record, which are fair. 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 1957-58, except periods of ice effect or backwater from aquatic vegetation (gage height, in feet, and discharge, in cubic feet per second)

3.3	4.0	4.5	204
3.4	8.0	5.0	430
3.5	14	6.0	1,100
3.8	47	7.0	2,040
4.1	98	8.0	3,270

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	49	154	690	2,970	1,080	1,880	1,470	676	198	259	271
2	15	100	251	722	2,800	1,280	1,940	1,450	644	192	275	263
3	16	184	225	722	2,640	*1,480	1,970	1,420	605	179	284	208
4	17	237	218	690	2,440	1,620	1,980	1,380	581	159	284	208
5	14	270	198	b645	2,200	1,740	1,940	1,320	563	159	259	192
6	6.8	264	201	612	2,030	1,830	1,940	*1,260	*521	153	232	179
7	25	240	173	569	1,860	1,870	*1,980	1,240	480	167	204	167
8	28	239	182	419	1,730	1,860	2,100	1,350	463	145	173	185
9	34	241	204	521	1,560	1,870	2,260	1,540	441	156	130	135
10	32	225	223	521	1,490	1,840	2,270	1,620	430	167	140	121
11	*36	243	360	509	b1,400	1,820	2,200	1,630	430	*a190	169	140
12	40	202	491	b490	b1,280	1,800	2,170	1,560	424	a180	143	*132
13	30	190	521	527	1,180	1,810	2,200	1,460	402	a170	131	118
14	65	153	515	485	1,110	1,830	2,230	1,380	365	a180	144	113
15	39	145	503	557	b1,020	1,930	2,200	1,300	350	a210	*141	140
16	33	112	*480	638	b875	2,070	2,150	1,230	325	a180	131	122
17	21	120	441	709	b730	2,180	2,040	a1,170	293	a160	179	122
18	21	185	402	777	b720	a2,140	1,910	a1,120	271	a140	208	229
19	51	161	380	b820	a720	a2,080	1,800	1,080	247	a160	201	284
20	20	178	365	b850	a720	2,110	1,710	1,020	232	a150	211	335
21	99	201	397	890	756	2,120	1,620	950	218	a140	208	380
22	72	*198	458	965	728	2,120	1,510	905	228	a120	201	436
23	53	152	539	1,060	b715	2,140	1,470	847	255	148	145	430
24	34	156	563	*1,140	722	2,150	1,440	791	226	152	140	419
25	89	214	545	1,220	709	2,130	a1,440	763	236	162	197	414
26	54	179	575	1,630	716	2,100	a1,330	777	222	138	174	392
27	6.4	151	593	2,140	749	2,110	1,280	770	218	140	201	397
28	79	99	612	2,640	868	2,110	a1,250	770	192	182	218	503
29	65	166	657	2,950	-	2,070	a1,310	770	208	179	247	557
30	35	103	664	3,100	--------	2,000	a1,390	735	204	208	267	587
31	35	--------	657	3,090	--------	1,910	--------	709	--------	247	279	--------
Total	1,190.2	5,417	12,747	33,298	37,438	59,200	54,870	35,787	10,950	5,211	6,175	8,179
Mean	38.4	181	411	1,074	1,337	1,910	1,829	1,154	365	168	199	273
(†)	4.37	45.3	102	445	363	515	457	281	73.9	44.4	81.9	109

Adjusted for wastage and diversion (figures represent net discharge from net drainage area)

Mean	34.0	135	309	630	974	1,395	1,372	874	291	124	117	164
Cfsm	0.109	0.433	0.990	2.02	3.12	4.47	4.40	2.80	0.933	0.397	0.375	0.526
In.	0.13	0.48	1.14	2.33	3.25	5.15	4.91	3.23	1.04	0.46	0.43	0.59

	Observed					Adjusted				
Calendar year 1957:	Max	1,520	Min	4.0	Mean	395	Mean	276	Cfsm	0.885	In.	12.02
Water year 1957-58:	Max	3,100	Min	6.4	Mean	741	Mean	532	Cfsm	1.71	In.	23.14

* 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.
a No gage-height record; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage when available, and records for Squannacook River near West Groton and Ipswich River at South Middleton.
b Stage-discharge relation affected by ice.
Note.--Backwater from aquatic vegetation Oct. 1 to Jan. 22, July 14 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 1958.
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.--35 years, 7,243 cfs (adjusted for wastage into Merrimack River).
Extremes.--Maximum discharge during year, 36,400 cfs Apr. 25 (gage height, 49.82 ft); minimum daily, 252 cfs Oct. 20.
1923-58: 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 no gage-height record 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 pages 82, 110 for description and month-end usable contents of many of these reservoirs. Records of water temperatures for the water year 1958 are given in WSP 1571.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Jan. 5, 12, 20, Feb. 20)

41.0	234	43.0	4,270
41.2	383	44.0	7,820
41.5	698	46.0	16,400
42.0	1,520	48.0	26,400
42.5	2,740	50.0	37,500

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	860	1,350	4,980	11,800	18,400	8,830	17,800	31,700	5,870	2,400	4,400	1,040
2	896	1,900	5,830	12,800	16,500	9,460	18,600	31,100	6,230	2,200	3,640	2,080
3	915	3,500	5,600	12,700	15,000	9,960	19,800	25,300	7,620	1,200	2,400	1,840
4	918	5,000	4,800	9,000	13,700	10,300	20,900	22,200	9,590	1,350	2,470	1,840
5	626	7,000	4,100	7,200	12,400	10,400	20,800	19,200	8,540	1,550	2,640	1,760
6	538	7,000	4,000	7,380	12,100	11,100	21,800	18,500	*7,460	1,300	2,650	1,390
7	1,010	4,400	3,400	7,380	11,600	11,600	28,900	17,500	5,910	1,750	2,600	457
8	1,270	5,400	2,400	6,770	10,500	11,400	34,600	19,000	5,230	2,200	2,520	1,770
9	1,360	3,600	4,000	6,700	10,800	10,700	30,900	22,000	4,560	3,400	1,580	1,680
10	1,420	2,700	6,000	7,340	11,100	10,400	25,900	23,000	4,430	3,200	962	1,690
11	1,410	3,400	13,000	7,150	9,880	11,000	23,000	21,000	4,950	2,300	2,350	1,700
12	1,090	3,800	20,000	7,000	9,500	12,500	22,500	18,500	4,660	1,200	2,560	1,670
13	570	3,400	16,000	6,930	9,330	13,200	22,800	18,500	4,620	1,100	2,560	1,220
14	995	3,200	11,500	6,410	9,170	14,100	22,400	17,000	3,980	5,020	2,500	817
15	977	4,500	9,500	6,480	8,220	14,500	22,300	16,000	3,300	4,330	*2,120	1,520
16	965	5,200	8,800	6,740	7,820	13,400	23,200	15,000	4,200	3,800	1,440	1,520
17	962	6,200	8,580	7,190	7,980	13,300	25,600	14,000	3,600	3,230	573	1,600
18	1,170	5,800	7,780	7,340	8,020	12,500	29,800	13,000	3,300	2,750	2,190	2,240
19	1,290	5,200	6,410	7,040	7,740	12,300	32,400	12,000	3,100	1,930	2,170	2,540
20	252	5,800	7,040	7,000	7,700	11,900	32,900	12,000	2,900	1,110	2,180	1,910
21	2,380	7,800	9,790	6,850	7,700	11,500	32,200	12,800	2,400	2,560	2,010	1,170
22	2,500	*7,500	24,600	7,700	7,540	11,700	30,800	11,500	2,000	2,500	1,910	2,840
23	1,800	5,570	29,500	10,300	7,380	11,300	31,800	9,920	3,000	2,590	1,320	2,810
24	1,700	3,800	27,100	13,200	6,620	11,900	35,400	8,660	3,100	2,620	859	2,780
25	1,600	4,790	19,800	14,600	7,780	11,900	35,000	6,960	3,000	2,580	2,050	2,740
26	1,300	4,000	14,000	16,500	7,860	13,500	30,600	6,740	2,900	1,680	2,020	2,690
27	2,000	3,500	14,400	22,400	8,700	14,100	25,800	7,700	2,600	948	2,120	2,390
28	2,800	2,590	21,000	27,100	9,330	14,900	22,800	7,500	1,800	2,250	2,310	2,770
29	2,000	3,280	19,000	26,500	-	15,500	22,400	7,230	1,050	2,700	2,250	3,110
30	850	3,360	17,000	23,300	--------	15,600	25,600	6,190	2,300	3,210	1,500	2,940
31	1,550	--------	13,800	20,600	--------	16,400	--------	6,010	--------	4,620	1,140	--------
Total	39,974	134,540	363,710	347,300	280,370	381,150	789,300	477,910	128,200	75,578	66,034	58,524
Mean	1,289	4,485	11,730	11,200	10,010	12,300	26,310	15,420	4,273	2,438	2,131	1,951
(†)	12.9	54.1	111	454	372	525	465	301	82.1	53.2	91.1	125

Adjusted for wastage (figures represent net discharge from net drainage area)

Mean	1,277	4,431	11,620	10,750	9,641	11,770	25,840	15,120	4,191	2,385	2,040	1,826
Cfsm	0.289	1.00	2.63	2.43	2.18	2.66	5.84	3.42	0.947	0.539	0.461	0.413
In.	0.33	1.12	3.03	2.80	2.27	3.07	6.52	3.94	1.06	0.62	0.53	0.46

	Observed			Adjusted			
Calendar year 1957:	Max 29,500	Min 252	Mean 5,039	Mean 4,911	Cfsm 1.11	In. 15.07
Water year 1957-58:	Max 35,400	Min 252	Mean 8,610	Mean 8,390	Cfsm 1.90	In. 25.75

* 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.
Note.--No gage-height record Oct. 22 to Nov. 22, Nov. 26, 27, Dec. 4-16, 28-30, May 4, 6-18, June 16 to July 13; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage when available, and records for other stations in Merrimack River basin. 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. 82).

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, 2½ 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 1957 to September 1958

Date	Newfound Lake	Franklin Falls Reservoir	Merrymeeting Lake	Lake Wentworth	Edward MacDowell Reservoir	Blackwater Reservoir	Tower Hill Pond	Massabesic Lake
Sept.30, 1957..	883	131	48	*200	0	0.2	156.8	332
Oct. 31.....	777	126	17	(†)	2.4	.3	96.2	345
Nov. 30.....	1,076	149	19	(†)	17.5	1.2	67.5	394
Dec. 31.....	1,661	172	84	426	61.3	5.9	91.0	488
Jan. 31, 1958..	1,357	160	176	531	81.9	3.9	147.3	578
Feb. 28.....	871	138	210	585	17.5	1.0	144.1	473
Mar. 31.....	777	162	245	646	25.8	5.1	172.6	621
Apr. 30.....	1,696	527	375	1,015	73.7	30.3	190.5	1,020
May 31.....	1,538	153	352	953	18.3	1.1	181.5	944
June 30.....	1,468	133	328	777	15.1	.5	173.5	650
July 31.....	1,354	153	302	761	15.1	.6	173.5	662
Aug. 31.....	1,113	131	265	646	10.8	.2	173.5	571
Sept.30.....	940	126	252	553	13.0	.3	173.5	461

* Estimated; lake drawn because of reconstruction of dam.
† Contents not determined.

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 1958.

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.--13 years, 35.6 cfs.

Extremes.--Maximum discharge during year, 479 cfs Jan. 27 (gage height, 5.49 ft); minimum daily, 0.09 cfs Oct. 3-6.
1945-58: Maximum discharge, that of Jan. 27, 1958; minimum daily, 0.09 cfs Sept. 25-30, Oct. 3-6, 1957.

Remarks.--Records excellent except those below 1 cfs, which are good. Diurnal fluctuation caused by mill above station. Some regulation at low flow by ponds above station.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 27				Jan. 28 to Sept. 30	
1.1	0.09	1.6	7.2	2.5	64
1.15	.24	1.8	15	3.0	119
1.2	.50	2.1	33	4.0	249
1.25	.85	2.5	64	5.5	481
1.3	1.35	3.0	112		
1.4	2.7	4.0	246	Note.--Same as preceding table below 2.5 ft.	
1.5	4.5	5.5	481		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.17	0.34	26	39	281	64	*124	96	35	9.0	10	5.4
2	.10	.85	28	41	248	80	127	88	34	7.9	10	4.7
3	.09	1.5	21	41	211	99	133	81	35	8.7	10	4.1
4	.09	1.12	8.3	36	179	113	133	76	35	9.0	9.0	3.9
5	.09	.93	7.2	31	152	126	126	72	*36	9.4	8.3	3.7
6	.09	1.35	6.9	29	131	138	119	69	35	8.6	7.2	3.5
7	.35	2.1	6.9	28	113	146	126	73	32	7.6	6.9	3.3
8	.57	2.6	7.2	28	100	137	136	*89	30	7.6	6.6	*3.3
9	.44	4.1	9.0	28	89	124	127	103	30	7.6	6.0	3.2
10	.20	3.7	16	28	80	118	114	102	27	7.2	5.7	3.9
11	.17	3.7	21	28	70	119	113	90	26	7.2	5.4	3.9
12	.14	3.3	26	26	61	121	130	81	24	7.6	7.5	3.7
13	.14	*3.0	27	24	56	119	137	76	23	7.2	5.2	3.5
14	.11	2.8	27	23	53	117	132	70	22	6.9	2.7	3.5
15	.11	4.3	27	37	48	126	120	64	20	6.6	4.2	3.3
16	.11	4.1	26	40	44	136	112	60	20	6.0	4.3	3.5
17	.11	9.3	26	51	39	148	104	59	19	5.2	3.9	4.5
18	.11	15	24	64	39	155	97	57	18	4.5	4.1	6.3
19	.35	19	23	66	40	151	88	55	18	5.2	3.9	6.6
20	.28	23	*23	64	40	146	81	55	18	4.7	3.9	7.2
21	.24	22	26	*59	39	151	75	53	18	4.5	5.7	7.2
22	.20	21	26	82	39	157	70	50	17	4.1	3.9	9.0
23	.20	20	26	130	38	161	69	48	17	5.6	3.7	8.6
24	.17	19	27	137	37	161	72	45	16	5.2	3.3	8.6
25	.20	18	26	143	*37	160	72	45	*15	5.0	4.7	8.3
26	.20	18	26	278	37	159	65	46	14	5.0	5.0	7.9
27	.17	18	30	449	38	153	59	46	13	5.2	5.2	10
28	.14	17	31	*454	51	148	67	45	12	5.2	6.0	14
29	.14	19	34	414	-	139	81	44	11	7.7	6.3	14
30	.14	22	35	366	-------	131	99	42	10	8.3	6.0	17
31	.11	-------	35	323	-------	125	-------	38	-------	9.4	6.0	-------
Total	5.73	300.09	708.5	3,587	2,390	4,128	3,108	2,018	680	208.9	180.6	189.6
Mean	0.185	10.0	22.9	116	85.4	133	104	65.1	22.7	6.74	5.83	6.32
Cfsm	0.009	0.463	1.06	5.37	3.95	6.16	4.81	3.01	1.05	0.312	0.270	0.293
In.	0.01	0.52	1.22	6.18	4.12	7.11	5.35	3.47	1.17	0.36	0.31	0.33

Calendar year 1957: Max 98 Min 0.09 Mean 21.0 Cfsm 0.972 In. 13.22
Water year 1957-58: Max 454 Min 0.09 Mean 48.0 Cfsm 2.22 In. 30.15

* Discharge measurement made on this day.

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 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 45 ft (from topographic map).

Average discharge.--20 years, 69.7 cfs (adjusted for diversions).

Extremes.--Maximum discharge during year, 682 cfs Jan. 27 (gage height, 6.49 ft); minimum, 0.1 cfs Oct. 1
1938-58: Maximum discharge, that of Jan. 27, 1958; 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).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 30 to Jan. 1)

Oct. 1 to Jan. 1				Jan. 2 to Sept. 30			
0.09	0.15	0.5	12	0.2	1.4	2.0	108
.1	.2	.7	27	.3	3.8	3.0	171
.2	1.4	1.0	46	.4	7.2	4.0	265
.3	3.8	1.5	67	.5	12	5.0	395
.4	7.4			.6	18	6.0	570
				1.0	54	6.5	685

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.15	0.95	3.7	63	453	193	*208	185	74	16	28	9.4
2	*.25	.7	6.0	82	394	223	231	177	64	14	26	8.7
3	.25	1.8	*3.8	*76	310	*243	241	168	52	*12	24	*8.4
4	.25	*1.95	2.7	71	*267	281	227	166	44	14	*22	7.8
5	.25	10	1.45	52	211	296	213	*160	*44	14	*19	7.0
6	.3	.45	.45	44	171	282	208	150	41	12	17	6.4
7	.3	.25	.4	*42	149	288	282	162	37	12	16	6.0
8	.5	.75	.4	59	139	253	279	188	33	12	16	6.4
9	.5	.5	.6	46	b140	233	258	206	33	17	17	5.7
10	.75	.25	7.7	33	*118	215	241	197	34	15	15	6.2
11	.95	1.2	31	31	101	204	237	188	33	13	13	6.8
12	.95	5.4	34	28	88	193	291	178	33	15	12	5.9
13	.95	2.5	33	28	69	176	301	165	39	14	11	5.4
14	.95	1.25	32	26	68	178	272	153	47	13	10	4.7
15	.7	.4	33	70	61	247	253	144	44	13	9.6	4.2
16	.25	.4	33	134	b68	258	235	137	42	13	9.4	3.8
17	.35	4.6	32	145	b55	264	217	130	39	12	8.7	8.2
18	.35	.25	37	126	48	268	202	121	36	11	8.0	17
19	.7	.45	37	b109	38	258	185	106	35	12	7.2	20
20	.65	1.45	27	b120	52	244	172	106	36	11	6.4	17
21	.65	.45	32	128	48	272	160	94	35	10	5.9	16
22	.7	1.65	36	199	46	289	155	71	33	9.0	5.7	21
23	.8	.25	35	284	48	304	165	66	31	12	5.2	17
24	.85	1.95	35	247	48	308	162	60	30	14	4.5	10
25	.75	1.05	34	257	52	291	155	65	28	12	12	3.8
26	.55	.5	35	533	55	278	148	90	27	12	17	2.6
27	.5	.6	44	*675	58	269	141	71	26	13	16	3.7
28	.45	.45	46	650	108	257	152	65	24	14	14	33
29	.45	.7	47	600	-	240	188	70	21	24	12	35
30	.5	.65	51	574	--------	222	192	84	18	28	11	30
31	.6	--------	53	528	--------	210	--------	80	--------	28	10	--------
Total	17.10	43.75	804.20	6,060	3,463	7,737	6,371	4,003	1,113	441.0	408.6	337.1
Mean	0.552	1.46	25.9	195	124	250	212	129	37.1	14.2	13.2	11.2
(†)	1.96	15.2	22.7	28.3	22.0	12.6	1.83	6.94	10.2	2.32	2.22	8.98
Adjusted for diversions												
Mean	2.51	16.7	48.7	224	146	262	214	136	47.3	16.5	15.4	20.2
Cfsm	0.058	0.385	1.12	5.16	3.36	6.04	4.93	3.13	1.09	0.380	0.355	0.465
In.	0.07	0.43	1.29	5.94	3.50	6.69	5.51	3.61	1.22	0.44	0.41	0.52

	Observed			Adjusted		
Calendar year 1957:	Max 196	Min 0.1	Mean 33.2	Mean 42.2	Cfsm 0.972	In. 13.21
Water year 1957-58:	Max 675	Min 0.15	Mean 84.4	Mean 95.6	Cfsm 2.20	In. 29.90

* 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.
b Stage-discharge relation affected by ice.

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 1958. Prior to October 1930, published as "at Willowdale."

Gage.--Water-stage recorder and concrete control. Datum of gage is 20.63 ft above mean sea level, datum of 1929.

Average discharge.--28 years, 201 cfs (adjusted for diversions).

Extremes.--Maximum discharge during year, 1,970 cfs Jan. 29 (gage height, 6.88 ft); minimum, 1.0 cfs Oct. 5-7.
1930-58: Maximum discharge, 2,610 cfs Mar. 15, 1936 (gage height, 7.70 ft); minimum, that of Oct. 5-7, 1957.

Remarks.--Records excellent except those for periods of ice effect, which are good. Diversions above station for municipal supplies of Reading, Lynn, Peabody, Danvers, Salem, and Beverly.

Revisions.--WSP 781: Drainage area.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 27, 28)

Oct. 1 to Jan. 28				Jan. 29 to Sept. 30	
2.24	1.0	3.3	68	4.5	490
2.3	1.7	3.6	122	5.0	810
2.4	3.2	4.0	240	6.0	1,430
2.5	5.3	4.5	490	6.9	1,980
2.6	8.2	5.0	830		
2.7	12	6.0	1,530	Note.--Same as preceding table below 4.5 ft.	
3.0	32	6.5	1,880		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	7.2	40	193	1,380	307	*634	532	205	59	72	26
2	*1.2	18	50	208	1,170	520	674	502	199	51	68	22
3	1.1	29	51	205	953	*667	712	478	196	47	64	19
4	1.1	35	47	183	*b830	738	712	448	190	45	59	17
5	1.1	31	41	163	b730	764	680	*424	183	45	51	16
6	1.0	26	34	152	b620	790	634	408	174	43	45	15
7	1.2	24	31	136	b520	804	706	414	163	41	38	14
8	2.4	19	30	118	b470	771	764	466	152	40	36	*14
9	8.0	22	35	129	b450	732	778	526	144	43	36	14
10	12	23	51	127	*b400	680	732	544	136	47	36	14
11	9.8	21	72	118	b360	641	686	526	132	46	*34	15
12	8.2	*18	92	103	b325	608	745	496	127	45	29	16
13	7.2	16	99	105	294	582	804	454	*124	43	28	15
14	6.0	17	103	99	b265	582	804	424	122	41	26	14
15	5.3	22	105	182	b245	667	752	402	118	39	24	14
16	4.6	24	107	324	b180	726	686	380	114	37	24	12
17	4.4	24	105	508	171	804	628	360	109	35	22	15
18	4.2	22	103	502	183	816	576	345	105	31	22	30
19	6.0	27	101	478	183	797	532	325	103	31	20	46
20	11	32	101	460	183	752	496	312	103	31	18	51
21	11	32	107	397	180	790	460	298	103	29	16	50
22	9.0	30	112	466	180	816	436	280	103	27	16	51
23	7.5	27	*114	*669	174	849	442	268	99	31	15	52
24	6.9	25	116	760	171	862	442	256	97	35	14	54
25	6.0	23	116	809	b170	868	436	248	*92	36	21	48
26	5.6	21	118	1,130	b165	842	408	248	90	35	32	37
27	5.8	19	134	1,560	168	804	386	240	85	34	39	39
28	5.6	18	144	1,840	206	784	380	233	80	34	40	68
29	5.3	19	160	*1,940	-	752	424	233	74	50	37	83
30	5.3	24	168	1,860	--------	706	496	226	65	65	37	90
31	5.1	--------	174	1,630	--------	667	--------	216	--------	71	31	--------
Total	170.1	695.2	2,861	17,534	11,326	22,488	18,045	11,512	3,787	1,287	1,050	971
Mean	5.49	23.2	92.3	566	404	725	602	371	126	41.5	33.9	32.4
(†)	4.47	17.1	25.0	65.9	38.8	15.1	4.35	9.55	13.3	5.05	4.83	12.3
Adjusted for diversions												
Mean	9.95	40.3	117	631	443	740	606	381	140	46.6	38.7	44.7
Cfsm	0.080	0.325	0.944	5.09	3.57	5.97	4.89	3.07	1.13	0.376	0.312	0.360
In.	0.09	0.36	1.09	5.87	3.72	6.88	5.45	3.54	1.26	0.43	0.36	0.40

	Observed			Adjusted			
Calendar year 1957:	Max 490	Min 1.0	Mean 110	Mean 123	Cfsm 0.992	In. 13.48	
Water year 1957-58:	Max 1,940	Min 1.0	Mean 251	Mean 269	Cfsm 2.17	In. 29.45	

* 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.
b Stage-discharge relation affected by ice.

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 1958.

Gage.--Water-stage recorder and concrete control. Datum of gage is at mean sea level, datum of 1929.

Average discharge.--19 years, 27.4 cfs.

Extremes.--Maximum discharge during year, about 390 cfs Jan. 26 (gage height, 12.91 ft, affected by backwater from ice and debris); minimum . 0.3 cfs Oct. 30; minimum daily, 0.35 cfs Oct. 3, 4.

1939-58: 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 mills above station.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from debris Jan. 26, 27)

Oct. 1 to Jan. 26

10.2	0.3	11.0	26
10.3	.95	11.3	56
10.4	2.1	11.7	118
10.5	3.7	12.0	183
10.6	6.0	12.5	326
10.7	9.3	13.0	522

Jan. 27 to Sept. 30

10.3	1.05	11.3	53
10.4	2.2	11.7	113
10.5	4.0	12.0	180
10.6	6.5	12.5	326
10.8	14	13.0	522
11.0	25		

Discharge, in cubic feet per second, water year October 1957 to Septemter 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.45	2.4	9.0	32	129	238	78	77	20	3.6	8.4	1.6
2	.4	3.2	8.3	28	111	162	99	63	20	3.2	6.2	1.45
3	*.35	7.7	6.9	*22	100	127	102	57	21	5.1	4.6	2.8
4	.35	1.2	4.5	16	84	113	85	57	20	4.4	7.4	2.0
5	.4	.55	3.6	11	73	109	82	55	*17	6.4	8.1	1.55
6	.45	.55	3.1	9.8	61	*106	87	52	15	4.6	5.5	1.45
7	1.15	.5	2.8	11	61	99	146	75	14	4.4	7.0	1.65
8	1.6	.75	2.6	14	69	84	140	*108	13	6.4	*11	*1.55
9	.5	2.4	9.2	b12	61	74	106	104	17	7.6	9.6	1.55
10	.4	.55	22	b11	52	68	90	82	19	5.4	6.6	2.9
11	.55	.55	21	12	41	64	95	66	19	18	5.2	2.9
12	.4	.5	33	9.6	38	61	133	58	23	20	4.0	2.9
13	.4	.6	20	b10	38	54	140	52	20	15	6.1	2.9
14	.4	.6	15	9.0	b34	65	119	48	17	10	3.7	1.7
15	.4	1.45	12	50	32	109	102	44	12	8.4	4.4	1.35
16	.45	.8	10	80	27	109	89	43	10	6.5	4.9	2.2
17	.45	.5	8.9	75	b27	99	78	38	9.4	5.2	2.9	17
18	.45	*.5	7.4	62	b25	92	73	38	8.1	4.0	3.6	20
19	1.15	2.0	6.9	54	b26	92	64	35	7.1	7.3	2.8	15
20	.5	2.4	8.3	52	b27	88	57	33	9.5	6.0	2.4	10
21	.6	1.2	20	50	b27	113	39	28	11	4.6	2.2	7.0
22	.6	1.5	16	200	b27	125	61	21	9.9	3.6	2.9	7.5
23	.5	1.55	16	*208	28	123	64	25	8.9	17	2.1	7.0
24	.45	1.15	12	126	31	121	48	23	*8.5	10	2.3	5.0
25	.45	1.2	9.3	133	35	121	44	34	5.6	8.4	16	4.0
26	.45	1.05	18	b345	b46	123	45	43	7.7	6.0	9.9	3.5
27	.5	.9	26	*346	41	106	41	43	7.2	5.0	11	17
28	.5	.8	15	279	b205	93	72	35	5.6	5.1	8.8	28
29	.55	1.2	25	224	-	87	95	31	4.5	17	12	25
30	.4	9.7	18	175	-------	81	95	25	4.0	12	5.1	23
31	.5	-------	15	151	-------	*75	-------	22	-------	11	2.1	-------
Total	16.70	49.95	404.8	2,817.4	1,556	3,181	2,569	1,515	384.0	251.2	188.8	221.45
Mean	0.539	1.66	13.1	90.9	55.6	103	85.6	48.9	12.8	8.10	6.09	7.38
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 151 Min 0.35 Mean 15.3 Cfsm - In. -
Water year 1957-58: Max 346 Min 0.35 Mean 36.0 Cfsm - In. -

Peak discharge (base, 170 cfs).--Jan. 22 (1 p.m.) 291 cfs (12.39 ft); Jan. 26 (12 p.m.) about 390 cfs; Feb. 28 (5 p.m.) about 315 cfs.

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 14-22, Sept. 19-30; discharge estimated on basis of weather records, recorded range in stage, and records for Ipswich River at South Middleton, Kettle Brook at Worcester, and other 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 1958.

Gage.--Water-stage recorder and concrete control. Datum of gage is 89.76 ft above mean sea level, datum of 1929.

Average discharge.--21 years, 301 cfs (adjusted for diversions).

Extremes.--Maximum discharge during year, 1,770 cfs Jan. 30 (gage height, 6.09 ft); minimum, 3.3 cfs Oct. 5.
1937-58: 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. 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from debris Jan. 16-25, Feb. 4-8)

0.25	3.3	0.8	65
.3	4.9	1.0	126
.4	9.7	1.5	282
.5	17	2.0	420
.6	29	4.0	1,020
.7	44	6.1	1,770

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.7	31	77	343	1,530	705	822	729	291	85	136	100
2	4.9	48	80	*345	1,370	897	816	747	270	77	133	82
3	4.6	80	80	334	1,210	1,100	816	750	258	74	126	71
4	3.9	65	77	300	1,050	1,170	810	750	243	74	113	61
5	3.6	65	68	b245	934	1,160	795	714	231	80	94	54
6	3.6	65	63	228	822	1,130	801	684	213	77	88	50
7	4.9	57	61	198	723	1,080	930	744	192	80	77	48
8	7.5	48	59	166	684	1,000	969	807	176	82	85	46
9	11	61	71	189	b560	948	1,010	867	176	88	82	44
10	12	54	117	189	b530	891	1,060	909	176	82	77	48
11	12	61	201	192	b540	834	1,080	930	179	82	71	48
12	12	65	252	186	b490	765	1,120	912	182	85	63	50
13	11	61	252	173	453	708	1,140	864	176	80	82	48
14	11	57	234	173	b370	714	1,130	807	163	80	80	48
15	11	61	207	376	361	777	1,120	753	150	77	97	46
16	12	54	182	495	b320	798	1,090	702	140	77	94	46
17	12	54	160	552	b350	834	1,040	648	123	85	85	104
18	13	52	136	606	b345	861	966	603	113	94	82	153
19	16	63	129	648	b330	870	900	561	113	104	74	198
20	18	68	129	b665	b320	855	837	522	116	97	68	213
21	21	71	170	636	306	885	780	474	120	85	63	213
22	24	74	195	732	300	912	741	426	123	80	57	207
23	15	65	213	*792	291	909	732	409	123	97	50	192
24	26	63	219	810	282	927	699	382	123	107	46	173
25	26	61	207	903	294	951	666	369	120	113	82	157
26	18	63	208	1,350	303	960	636	366	110	113	91	140
27	19	*60	270	1,480	326	954	609	353	120	110	110	153
28	24	59	279	*1,630	*545	945	639	*356	107	104	*116	243
29	20	57	315	1,740	-	930	654	353	97	133	140	294
30	17	61	326	1,750	---	894	*705	337	*88	129	140	303
31	*15	---	*320	*1,670	---	*852	---	318	---	*129	120	---
Total	414.7	1,804	5,357	20,096	15,939	28,216	26,113	19,146	4,812	2,860	2,822	3,633
Mean	13.4	60.1	173	648	569	910	870	618	160	92.3	91.0	121
(†)	+4.35	+5.18	+5.57	+5.64	+2.81	+2.82	+3.19	+4.37	+6.42	+6.53	+5.69	+5.69
Adjusted for diversions												
Mean	17.7	65.3	178	654	572	913	874	622	167	98.8	96.7	127
Cfsm	0.096	0.355	0.967	3.55	3.11	4.96	4.75	3.38	0.908	0.537	0.526	0.690
In.	0.11	0.40	1.12	4.10	3.24	5.72	5.30	3.90	1.01	0.62	0.61	0.77

	Observed			Adjusted			
Calendar year 1957:	Max 921	Min 3.6	Mean 192	Mean 197	Cfsm 1.07	In. 14.54	
Water year 1957-58:	Max 1,750	Min 3.6	Mean 359	Mean 364	Cfsm 1.98	In. 26.90	

* Discharge measurement made on this day.
† Diversions for municipal supply of Wellesley and Needham, equivalent in cubic feet per second; records furnished by municipalities and Water Division of Metropolitan District Commission.
b Stage-discharge relation affected by ice.

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 1958.

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.--27 years, 87.0 cfs.

Extremes.--Maximum discharge during year, 616 cfs Jan. 30 (gage height, 90.38 ft, from graph based on gage readings); minimum, 0.1 cfs Aug. 6, 7, Sept. 4-16.
1931-58: Maximum discharge, 970 cfs Aug. 24, 1955 (gage height, 92.90 ft, from graph based on gage readings); no flow at times.

Remarks.--Records good except those for periods of shifting control or 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).

Rating table, water year 1957-58, except periods of shifting control or indefinite stage-discharge relation (gage height, in feet, and discharge, in cubic feet per second)

84.1	0.1	85.5	26
84.2	.4	86.0	48
84.3	1.0	87.0	116
84.4	1.8	88.0	217
84.5	2.8	89.0	355
84.7	5.3	90.0	540
85.0	11	90.4	620

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	6.2	21	108	584	203	290	234	95	29	*0.3	4.5
2	.6	12	20	116	546	238	291	238	93	27	4.6	.5
3	.7	17	20	114	494	281	285	243	94	26	5.0	*.2
4	.6	19	20	109	438	328	276	246	88	25	3.7	.1
5	.5	*18	19	95	387	360	268	244	83	25	.7	.1
6	.5	18	*17	88	346	370	264	236	81	25	.1	.1
7	1.4	16	16	82	308	370	295	247	74	24	.1	.1
8	3.1	15	16	78	294	354	320	264	66	25	.2	.1
9	3.2	17	17	70	256	334	328	278	63	28	1.7	.1
10	2.9	16	26	68	221	316	336	286	60	17	4.3	.1
11	2.8	15	43	67	203	298	352	291	60	1.5	3.7	.1
12	2.5	15	57	67	188	279	374	298	61	2.2	1.6	.1
13	2.2	15	67	63	175	257	385	294	61	1.6	1.2	.1
14	2.0	14	70	60	158	250	384	279	62	1.4	1.6	.1
15	2.0	16	70	114	139	273	379	261	58	.8	7.0	.1
16	2.0	15	64	170	128	270	372	242	54	.7	5.0	.1
17	1.8	15	59	191	105	273	361	227	49	.5	6.7	.2
18	2.0	13	52	204	96	278	349	210	44	3.2	4.7	.3
19	3.4	14	46	209	94	283	330	196	42	6.8	.9	.4
20	4.7	18	44	221	93	283	307	184	41	5.5	1.6	.4
21	4.2	18	50	222	92	298	286	173	41	2.7	1.4	.4
22	3.9	18	56	252	91	310	272	158	41	.4	2.5	.3
23	4.2	17	59	281	90	313	266	149	41	.8	3.5	.2
24	3.7	17	64	*287	87	*313	253	137	39	.4	3.0	.2
25	5.6	16	66	296	88	316	*244	129	38	.4	3.4	.2
26	5.5	16	64	392	94	319	227	126	36	.2	2.3	.2
27	5.2	15	79	486	97	318	215	118	41	.2	5.0	.2
28	5.2	14	84	*542	140	314	209	115	38	.3	7.0	.3
29	5.2	15	93	582	-	308	221	113	34	.4	11	.4
30	4.9	16	99	606	-------	300	230	108	32	.2	9.0	.4
31	4.7	-------	102	608	-------	291	-------	*102	-------	.2	7.9	-------
Total	91.7	466.2	1,580	6,848	6,032	9,298	8,969	6,426	1,710	281.4	110.7	10.6
Mean	2.96	15.5	51.0	221	215	300	299	207	57.0	9.08	3.57	0.353
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 284 Min 0 Mean 52.8 Cfsm - In. -
Water year 1957-58: Max 608 Min 0.1 Mean 115 Cfsm - In. -

* Discharge measurement made on this day.
Note.--Shifting-control method used July 11 to Sept. 3. Stage-discharge relation indefinite Sept. 4-30; discharge estimated on basis of gage heights, engineer's and observer's notes, and weather records.

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 1958.

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.--27 years (1931-58), 374 cfs (adjusted for diversions, wastage, and leakage).

Extremes.--Maximum discharge during year, 1,940 cfs Jan. 26 (gage height, 4.42 ft); minimum, 3.4 cfs Dec. 7; minimum daily, 20 cfs Oct. 31, Dec. 7.
1931-58: 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 period 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. No diversion during year from Sudbury River basin. Low flow completely regulated by Boston Edison Co. powerplant above station.

Revisions (water years).--WSP 781: 1933(M). WSP 851: Drainage area. WSP 971: 1942.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	27	85	326	1,450	612	820	656	306	107	142	200
2	25	52	87	318	1,380	650	841	628	289	85	152	158
3	*24	96	83	314	1,280	748	834	628	256	75	163	89
4	25	83	77	292	1,150	841	814	634	241	71	163	67
5	25	75	273	272	1,020	911	760	628	200	75	150	64
6	26	67	237	*260	918	960	754	618	206	73	138	110
7	36	64	20	253	748	960	967	694	203	73	94	121
8	93	66	42	250	772	911	967	*766	194	73	*73	73
9	71	96	75	232	669	862	946	802	192	75	50	66
10	48	71	128	217	615	802	918	772	176	73	44	75
11	40	64	173	211	552	778	939	766	163	80	40	*73
12	37	*102	208	197	495	766	1,060	760	155	87	36	67
13	36	96	a205	200	445	689	1,090	754	*152	81	38	62
14	35	*83	a200	192	404	712	1,080	718	152	83	36	60
15	32	60	a190	433	382	796	1,090	684	145	100	41	67
16	31	31	a180	495	330	778	1,010	662	138	91	110	65
17	32	44	a170	510	310	766	995	606	125	83	148	138
18	35	96	a165	520	292	778	911	552	104	87	142	297
19	48	111	a160	515	282	784	848	510	93	93	81	194
20	48	71	a160	495	282	808	796	480	71	89	48	197
21	42	67	a170	530	275	890	760	445	100	96	42	211
22	33	67	a185	*645	269	897	730	408	116	96	42	189
23	36	69	a195	718	263	876	736	344	128	121	179	206
24	43	71	200	754	266	876	706	382	128	111	229	214
25	37	87	194	841	275	918	634	390	142	102	220	217
26	37	73	241	1,550	*282	946	579	390	*130	104	138	200
27	40	62	260	*1,580	286	939	535	378	118	111	100	208
28	37	57	250	1,580	555	918	601	354	100	118	48	260
29	31	55	275	1,550	-	890	640	338	85	163	35	266
30	24	66	282	1,510	--------	862	672	322	83	140	22	282
31	20	--------	289	1,480	--------	*834	--------	310	--------	142	235	--------
Total	1,152	2,129	5,459	19,240	16,247	25,758	25,033	17,379	4,691	2,958	3,383	4,496
Mean	37.2	71.0	176	621	580	831	834	561	156	95.4	109	150
(†)	-4.58	+24.3	+59.7	+196	+169	+124	+105	+16.1	+57.5	+21.0	+11.9	+10.4

Adjusted for diversions, wastage, and leakage

Mean	32.6	95.3	236	816	750	955	939	577	214	116	121	160
Cfsm	0.144	0.420	1.04	3.59	3.30	4.21	4.14	2.54	0.943	0.511	0.533	0.705
In.	0.17	0.47	1.20	4.15	3.44	4.85	4.62	2.93	1.05	0.59	0.61	0.79

	Observed						Adjusted					
Calendar year 1957:	Max	770	Min	1.4	Mean	182	Mean	243	Cfsm	1.07	In	14.54
Water year 1957-58:	Max	1,580	Min	20	Mean	350	Mean	416	Cfsm	1.83	In.	24.87

* 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 Conchituate, 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.

a No gage-height record; discharge estimated on basis of 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 1958. 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.--19 years, 50.9 cfs.

Extremes.--Maximum discharge during year, 384 cfs Jan. 27 (gage height, 10.69 ft); minimum daily, 2.1 cfs Oct. 27.
1939-58: 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 tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 16				Jan. 17 to Sept. 30			
6.75	1.8	7.5	33	7.0	6.9	9.0	163
6.8	2.4	8.0	74	7.2	15	10.0	286
6.9	4.2	9.0	172	7.5	33	11.0	432
7.1	10	10.0	289	8.0	71		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.1	12	17	68	182	291	144	153	59	20	38	22
2	7.8	7.5	18	72	163	241	174	127	52	14	20	13
3	7.8	28	15	63	139	203	177	119	49	18	17	*13
4	14	31	10	54	122	194	160	122	41	9.3	26	16
5	8.8	*17	*10	45	109	186	135	121	35	9.3	18	16
6	4.4	9.3	9.3	27	92	174	156	114	45	10	18	15
7	11	8.9	6.9	53	86	158	259	156	34	16	18	15
8	8.5	6.3	6.3	36	117	146	272	214	28	20	*21	19
9	5.1	8.0	28	57	102	134	218	222	39	18	18	23
10	5.1	17	43	29	90	115	180	173	34	17	12	35
11	7.2	7.2	74	a50	76	109	177	144	44	15	12	25
12	5.6	6.9	74	a37	a72	106	238	131	43	9.3	15	24
13	3.0	8.1	55	a30	*a68	100	258	115	30	7.8	21	29
14	5.6	7.8	48	a25	64	120	225	103	39	16	16	11
15	6.3	14	33	a180	60	185	192	98	25	18	20	20
16	5.4	9.0	37	a220	65	186	156	93	20	21	22	29
17	4.2	9.7	36	*a165	64	176	146	87	24	26	16	89
18	4.1	8.1	20	123	a62	161	133	80	35	27	18	81
19	6.6	14	20	111	a60	155	124	72	15	21	15	69
20	3.4	18	27	91	a61	151	108	79	30	8.1	17	46
21	5.1	18	49	93	57	180	117	82	21	15	18	34
22	5.4	18	46	185	55	190	137	72	12	14	17	39
23	4.8	11	48	*232	56	192	155	69	22	32	15	27
24	6.3	7.8	34	195	55	198	142	75	34	29	16	21
25	6.3	8.5	33	190	60	197	113	84	27	29	44	23
26	3.9	8.5	60	348	70	198	99	96	23	22	52	24
27	2.1	10	49	*362	69	189	87	90	24	15	47	37
28	5.0	5.8	53	322	218	172	115	81	9.2	24	49	98
29	5.1	6.6	59	283	--	156	154	74	15	26	35	84
30	5.4	26	57	242	--------	146	174	63	23	26	16	65
31	4.8	--------	52	210	--------	*137	--------	*65	--------	28	22	--------
Total	186.2	368.0	1,127.5	4,198	2,494	5,246	4,925	3,372	931.2	530.8	709	1,062
Mean	6.01	12.3	36.4	135	89.1	169	164	109	31.0	18.7	22.9	35.4
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 218 Min 1.8 Mean 36.4 Cfsm - In. -
Water year 1957-58: Max 362 Min 2.1 Mean 69.0 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 2 discharge measurements, weather records, recorded range in stage when available, 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 85 ft (from topographic map).

Average discharge.--6 years, 60.8 cfs.

Extremes.--Maximum discharge during year, 360 cfs Jan. 26 (gage height, 3.77 ft); minimum daily, 1.7 cfs Oct. 6.
1952-58: 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 ponds above station.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 15				Jan. 16 to Sept. 30			
0.6	1.3	1.2	20	0.8	4.1	2.0	82
.7	2.4	1.5	41	1.0	10	2.5	140
.8	4.6	2.0	90	1.2	19	3.0	215
.9	7.4	3.0	226	1.5	39	4.0	410
1.0	11						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.6	13	23	78	162	239	123	109	43	12	26	23
2	5.5	42	18	92	151	170	168	94	30	10	22	22
3	5.7	50	14	74	143	147	153	87	40	11	18	*18
4	5.3	*19	13	62	127	141	134	94	38	12	16	16
5	2.9	7.3	*11	54	113	143	114	94	33	17	14	14
6	1.7	7.1	11	52	103	140	126	90	29	14	12	14
7	6.8	7.4	11	54	95	134	232	128	24	14	10	13
8	8.4	9.4	12	69	135	120	199	186	23	14	9.8	14
9	7.4	23	19	59	122	110	157	168	25	13	9.4	14
10	7.4	22	48	53	96	103	140	131	28	12	8.8	14
11	8.1	16	82	50	85	98	146	120	26	11	11	14
12	3.7	12	75	45	76	88	205	122	26	11	12	12
13	2.8	11	46	41	*73	71	196	117	25	11	12	11
14	5.8	10	34	40	68	88	168	111	17	11	12	9.8
15	7.3	16	30	215	61	144	153	108	20	11	12	9.4
16	6.5	18	28	217	58	132	140	103	19	15	12	9.8
17	7.4	14	26	*147	65	116	128	101	16	24	12	48
18	7.7	12	23	131	65	110	121	93	15	18	12	74
19	8.0	17	23	120	64	109	115	87	20	14	11	60
20	14	26	23	127	61	105	108	83	29	12	10	35
21	12	22	53	134	57	142	102	79	21	10	8.6	37
22	9.4	16	55	221	56	151	109	75	16	9.8	12	36
23	12	14	43	242	53	148	147	77	27	22	6.1	31
24	14	12	36	177	49	146	130	75	25	29	7.3	27
25	14	11	31	165	57	154	*111	72	17	20	26	23
26	11	10	33	320	63	162	99	79	14	16	37	20
27	10	9.8	96	272	60	154	91	67	15	15	31	42
28	8.8	9.1	65	230	173	137	112	61	14	14	25	86
29	8.1	12	62	225	-	127	151	58	14	*24	36	75
30	7.7	15	61	205	-------	120	131	54	13	26	22	55
31	7.4	-------	54	183	-------	115	-------	*49	-------	24	25	-------
Total	242.4	483.1	1,159	4,154	2,491	4,064	4,209	2,973	702	476.8	500.0	877.0
Mean	7.82	16.1	37.4	134	89.0	131	140	95.9	23.4	15.4	16.1	29.2
Cfsm	0.293	0.603	1.40	5.02	3.33	4.91	5.24	3.59	0.876	0.577	0.603	1.09
In.	0.34	0.67	1.61	5.79	3.47	5.66	5.86	4.14	0.98	0.66	0.70	1.22

Calendar year 1957: Max 190 Min 0.6 Mean 33.3 Cfsm 1.25 In. 16.91
Water year 1957-58: Max 320 Min 1.7 Mean 61.2 Cfsm 2.29 In. 31.10

* Discharge measurement made on this day.

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 1958.

Gage.--Water-stage recorder. Concrete control since Sept. 16, 1942. Altitude of gage is 15 ft (from topographic map).

Average discharge.--18 years, 13.8 cfs.

Extremes.--Maximum discharge during year, 301 cfs Apr. 7 (gage height, 6.265 ft), from rating curve extended above 210 cfs by logarithmic plotting; minimum, 0.05 cfs Oct. 1. 1940-58: Maximum discharge, that of Apr. 7, 1958; minimum, 0.03 cfs Sept. 23, 24, Oct. 3, 4, 1950.

Remarks.--Records good except those for periods of backwater from leaves, which are fair.

Rating table, water year 1957-58, except periods of backwater from leaves (gage height, in feet, and discharge, in cubic feet per second)

3.00	0.07	3.2	1.84	4.0	50
3.03	.14	3.3	4.2	4.5	101
3.06	.26	3.4	7.7	5.0	161
3.10	.50	3.5	12	6.0	272
3.15	1.04	3.7	25	6.1	283

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.07	0.26	3.2	20	24	213	23	76	13	4.1	5.4	13
2	*.08	.90	2.6	23	21	87	35	46	14	3.6	4.8	9.3
3	.08	3.3	2.35	20	18	50	43	33	21	3.6	4.8	6.9
4	.07	3.9	*2.7	14	16	43	36	35	*23	3.2	4.1	5.4
5	.07	2.9	2.6	10	14	54	27	35	18	3.5	3.5	*4.6
6	.07	2.25	2.45	8.1	13	47	32	35	14	5.6	3.0	4.4
7	.14	1.85	3.0	*11	13	35	276	53	11	5.1	2.5	4.1
8	.16	1.65	3.9	70	29	28	192	112	9.8	6.5	2.25	3.9
9	.14	1.4	7.8	83	36	23	72	*89	9.3	8.5	1.65	3.5
10	.14	1.4	18	50	25	20	45	52	8.9	7.9	1.4	3.6
11	.13	1.65	32	30	16	17	41	35	9.8	6.7	1.11	4.1
12	.13	1.6	42	19	13	16	73	30	21	5.9	.91	3.5
13	.12	1.6	33	15	11	15	73	27	31	5.2	.91	3.2
14	.12	1.65	23	14	*11	23	49	23	30	5.0	1.04	2.9
15	.11	3.1	16	104	10	71	35	20	23	4.8	1.25	2.5
16	.12	3.0	12	157	9.3	79	28	19	17	*4.4	1.85	2.35
17	.10	2.5	10	71	8.7	55	25	18	12	3.9	2.5	3.1
18	.10	2.35	8.5	44	11	39	23	17	9.6	3.5	2.6	4.5
19	.18	2.9	7.7	29	13	31	20	16	9.8	3.2	2.45	5.0
20	.16	4.5	6.9	21	12	27	18	18	10	3.0	2.05	5.1
21	.14	3.6	14	17	9.8	60	17	20	11	2.5	1.65	5.2
22	.13	3.2	19	31	9.3	108	21	19	11	2.25	1.5	5.9
23	.12	3.1	17	54	9.3	75	61	20	9.6	2.05	1.18	5.2
24	.12	2.6	14	46	9.3	57	72	19	8.5	1.75	1.11	4.8
25	.18	2.35	11	39	11	46	46	20	7.3	1.6	6.9	4.4
26	.16	2.15	11	67	15	42	30	45	6.5	1.6	19	4.1
27	.14	1.85	17	71	17	43	23	49	6.1	1.75	39	5.7
28	.13	1.75	16	*53	103	*39	30	35	5.4	1.95	32	26
29	.12	2.15	20	41	-	31	99	24	4.8	2.9	25	38
30	.12	2.5	21	33	--------	25	136	18	4.4	3.2	21	30
31	.10	--------	18	28	--------	23	--------	15	--------	3.5	17	--------
Total	3.75	69.91	417.70	1,293.1	507.7	1,522	1,701	1,073	389.8	122.25	215.41	224.25
Mean	0.121	2.33	13.5	41.7	18.1	49.1	56.7	34.6	13.0	3.94	6.95	7.48
Cfsm	0.014	0.271	1.57	4.85	2.10	5.71	6.59	4.02	1.51	0.458	0.808	0.870
In.	0.02	0.30	1.81	5.59	2.20	6.58	7.36	4.64	1.69	0.53	0.93	0.97

Calendar year 1957: Max 189 Min 0.06 Mean 9.41 Cfsm 1.09 In. 14.86
Water year 1957-58: Max 276 Min 0.07 Mean 20.7 Cfsm 2.41 In. 32.62

Peak discharge (base, 120 cfs).--Jan. 16 (3 to 4 a.m.) 194 cfs (5.265 ft); Mar. 1 (1:30 to 4 a.m.) 250 cfs (5.80 ft); Apr. 7 (1 to 3 p.m.) 301 cfs (6.265 ft); Apr. 30 (4:30 to 7 a.m.) 151 cfs (4.92 ft); May 8 (4:30 to 5:30 p.m.) 130 cfs (4.75 ft).

* Discharge measurement made on this day.
Note.--Backwater from leaves Oct. 2-7, Oct. 9 to Nov. 2.

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 1958.

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.--29 years, 474 cfs (adjusted for diversions).

Extremes.--Maximum discharge during year, 2,020 cfs Apr. 13 (gage height, 7.87 ft); minimum, 32 cfs Oct. 5, 6; minimum daily, 32 cfs Oct. 6.
1929-58: 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 table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.9	26	4.0	265
3.1	42	6.0	1,220
3.4	81	8.0	2,070
3.7	148		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	106	110	555	1,140	1,850	940	1,570	745	224	*414	422
2	61	204	114	760	1,010	1,990	1,190	1,410	685	158	414	*346
3	57	155	106	690	895	1,850	1,510	1,230	705	110	368	283
4	48	151	*88	565	785	1,640	1,520	1,200	675	129	328	234
5	33	126	85	445	680	1,450	1,360	1,210	625	143	236	204
6	32	114	74	382	540	1,290	1,230	1,140	570	145	270	181
7	39	103	69	*337	540	1,140	1,620	1,280	520	161	247	174
8	80	*85	76	895	655	1,020	1,940	1,690	475	164	224	216
9	108	110	114	1,130	720	925	1,890	1,900	495	171	200	200
10	90	121	296	1,010	680	840	1,650	1,800	495	168	181	185
11	75	99	545	830	605	770	1,470	1,540	465	164	178	200
12	78	85	580	655	540	640	1,730	1,320	460	140	164	181
13	68	76	530	545	500	640	1,990	1,200	445	143	171	155
14	60	69	422	455	*328	670	1,930	1,070	440	148	181	151
15	62	83	373	935	332	1,180	1,710	1,020	422	148	174	148
16	72	92	324	1,580	328	1,580	1,480	950	396	151	181	140
17	63	83	310	1,710	328	1,590	1,300	895	360	200	181	232
18	60	81	270	1,500	337	1,400	1,190	835	306	168	178	409
19	57	80	220	1,200	337	1,190	1,090	810	301	151	164	432
20	74	99	204	975	337	1,040	1,010	815	314	151	155	414
21	74	106	252	870	342	1,140	*920	790	337	148	143	391
22	66	99	396	915	332	1,430	945	765	368	126	134	373
23	61	94	378	1,210	342	1,610	1,330	785	373	132	129	337
24	69	88	337	1,210	350	1,610	1,580	780	328	148	124	301
25	83	88	296	1,140	373	1,500	1,480	680	306	143	181	265
26	86	81	283	1,380	445	1,410	1,270	875	288	126	342	310
27	83	72	500	1,590	530	1,310	1,110	935	278	117	427	288
28	83	66	525	*1,590	1,040	*1,190	1,090	905	260	119	465	602
29	90	66	515	1,540	-	1,090	1,440	*915	242	197	520	810
30	92	75	565	1,440	--------	1,010	1,600	880	310	288	575	755
31	95	--------	510	1,290	--------	930	--------	815	--------	288	510	--------
Total	2,151	2,957	9,467	31,329	15,371	38,925	42,515	34,010	12,989	4,969	8,219	9,339
Mean	69.4	98.6	305	1,011	549	1,256	1,417	1,097	433	160	265	311
(†)	27.3	25.2	23.2	24.1	24.6	23.8	24.3	23.2	24.1	24.6	28.8	26.9
Adjusted for diversion												
Mean	96.7	124	329	1,035	574	1,279	1,441	1,120	457	185	294	338
Cfsm	0.372	0.477	1.27	3.98	2.21	4.92	5.54	4.31	1.76	0.712	1.13	1.30
In.	0.43	0.53	1.46	4.59	2.30	5.67	6.19	4.97	1.96	0.82	1.30	1.45

	Observed			Adjusted		
Calendar year 1957:	Max 1,920	Min 12	Mean 316	Mean 343	Cfsm 1.32	In. 17.93
Water year 1957-58:	Max 1,990	Min 32	Mean 581	Mean 606	Cfsm 2.33	In. 31.67

* Discharge measurement made on this day.
† Diversion, 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.

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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 1958.

Gage.--Water-stage recorder and concrete control. Datum of gage is 120.85 ft above mean sea level, datum of 1929.

Average discharge.--5 years, 40.4 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 180 cfs Jan. 28 (gage height, 4.94 ft); maximum gage height, 5.21 ft Feb. 17 (ice jam); no flow Oct. 22-24 (caused by temporary storage upstream).
1953-58: Maximum discharge, 519 cfs Aug. 20, 1955 (gage height, 6.22 ft); minimum daily, that of Oct. 22-24, 1957.

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.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from debris Feb. 7, 11-18, 28, Mar. 11-14, Apr. 27, 28, May 2-7, May 10 to June 5, June 7-10, 12, 22-24, Aug. 2, Sept. 22, 23, 28-30)

2.02	0	2.5	2.2	4.0	68
2.1	.05	2.7	5.2	4.5	117
2.2	.2	2.9	10	5.0	191
2.3	.6	3.2	22		
2.4	1.3	3.5	38		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.2	0.5	0.4	19	118	96	90	101	32	9.8	9.5	3.2
2	4.8	2.0	.3	21	104	101	107	93	30	9.0	10	2.5
3	4.5	1.8	.3	23	88	105	109	85	28	7.3	9.0	*2.0
4	3.5	*2.0	.3	29	81	104	103	85	27	4.5	7.3	1.8
5	2.0	1.4	*.3	33	75	96	96	85	17	3.2	6.0	1.5
6	1.4	1.4	.1	32	70	86	95	84	16	5.0	5.0	1.3
7	1.8	1.1	.2	33	66	80	130	93	22	6.2	4.3	1.3
8	1.6	.9	.2	65	76	73	*141	116	19	5.6	*3.4	1.4
9	1.0	1.3	.1	58	73	69	137	126	19	5.2	2.7	1.4
10	.7	3.2	2.9	51	68	63	120	116	19	5.0	2.5	1.4
11	.7	2.3	12	42	62	57	119	107	18	4.5	2.1	1.3
12	1.4	1.4	10	39	57	54	149	99	18	4.3	1.8	1.3
13	1.1	1.5	6.0	*33	53	52	149	90	17	4.2	1.5	1.1
14	.7	1.0	4.0	33	51	57	137	80	16	4.2	1.5	1.1
15	.4	1.1	3.5	68	45	80	126	73	16	4.2	1.5	1.1
16	2.5	1.9	3.4	93	42	87	116	68	15	*4.6	1.6	1.1
17	2.2	1.9	3.2	101	44	85	107	65	13	6.9	1.5	1.6
18	1.2	1.4	3.0	103	42	80	98	63	11	8.7	1.4	6.0
19	.9	.9	2.7	97	40	75	91	60	11	6.2	1.4	8.4
20	1.7	1.8	3.0	86	39	75	84	58	13	5.2	1.2	8.1
21	.4	2.5	7.0	71	37	95	*78	53	14	4.2	1.1	8.4
22	0	1.9	9.3	95	36	109	74	46	16	3.2	1.0	9.5
23	0	1.4	7.1	130	35	108	91	41	17	3.1	.7	9.3
24	0	.9	6.7	126	34	103	95	38	15	3.1	.5	7.5
25	.5	.5	5.0	131	34	102	87	37	14	3.1	.7	4.3
26	.7	.7	5.5	164	34	101	80	40	12	3.1	1.7	3.4
27	1.0	.2	16	175	34	102	71	42	12	3.0	3.2	4.9
28	.8	.5	13	*175	62	*96	76	42	11	2.7	4.0	11
29	.6	.4	12	172	-	92	99	*40	8.1	5.7	3.4	15
30	.8	.3	13	150	---	90	107	39	9.0	6.5	3.4	14
31	.6	---	12	75	---	87	---	36	---	6.9	3.8	---
Total	44.7	40.1	162.5	2,523	1,600	2,660	3,162	2,201	505.1	158.4	98.7	136.2
Mean	1.44	1.34	5.24	81.4	57.1	85.8	105	71.0	16.8	5.11	3.18	4.54
(†)	3.35	3.52	2.87	2.19	1.44	1.33	1.67	1.70	3.19	4.05	4.08	4.05
Adjusted for diversion												
Mean	4.79	4.85	8.12	83.6	58.6	87.1	107	72.7	20.0	9.16	7.26	8.59
Cfsm	0.249	0.253	0.423	4.35	3.05	4.54	5.57	3.79	1.04	0.477	0.378	0.447
In.	0.29	0.28	0.49	5.02	3.18	5.23	6.22	4.37	1.16	0.55	0.44	0.50

	Observed			Adjusted		
Calendar year 1957:	Max 118	Min 0	Mean 20.1	Mean 22.3	Cfsm 1.16	In. 15.73
Water year 1957-58:	Max 175	Min 0	Mean 36.4	Mean 39.2	Cfsm 2.04	In. 27.73

* 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 Jan. 3-5, 8-10, 12-14, 19, 20, Feb. 4, 5, 9-12, 14-24.

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 1958.
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.--33 years, 72.0 cfs (adjusted for diversion).
Extremes.--Maximum discharge during year, 521 cfs Jan. 26 (gage height, 8.63 ft); minimum, 0.9 cfs Oct. 6; minimum daily, 1.0 cfs Oct. 6.
1925-58: 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 below 10 cfs and those for periods of ice effect, no gage-height record, or shifting control, which are good. 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).

Rating tables, water year 1957-58, except periods of ice effect or shifting control (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 22				Jan. 23 to Sept. 30			
4.42	1.0	5.2	20	4.7	3.2	6.0	81
4.5	1.7	5.5	39	4.8	4.8	7.0	212
4.6	3.0	6.0	82	5.0	9.8	8.0	390
4.7	4.7	7.0	197	5.2	17	8.5	492
5.0	12	8.0	344	5.5	36		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.2	4.5	7.6	59	245	378	179	259	74	10	23	20
2	3.2	4.5	9.6	85	209	329	225	217	66	3.4	22	14
3	3.2	3.0	8.3	79	174	276	247	174	49	8.9	18	5.9
4	3.2	3.7	13	64	155	271	218	182	51	9.8	16	5.5
5	2.1	4.4	18	58	129	248	186	192	48	9.8	13	4.6
6	1.0	4.2	13	63	129	217	186	202	41	10	11	3.2
7	2.4	4.0	6.0	68	120	182	329	242	34	10	9.8	3.7
8	4.0	4.0	4.7	b78	154	171	357	329	35	10	7.8	7.6
9	3.8	5.0	6.9	85	139	153	287	352	37	12	5.9	10
10	3.8	2.5	14	79	148	114	257	296	48	12	6.1	10
11	3.8	2.2	31	72	a125	116	247	242	38	9.8	7.0	17
12	3.0	3.2	57	62	a115	108	320	218	38	9.0	8.4	10
13	1.5	4.5	47	60	a105	103	350	191	33	9.5	10	7.6
14	1.7	4.7	27	57	a95	113	318	175	32	9.5	9.2	6.8
15	3.8	5.6	23	176	a88	190	276	147	28	9.8	7.6	7.6
16	4.0	4.7	21	309	a84	225	222	140	28	11	8.4	7.3
17	4.0	4.0	20	284	a90	204	209	144	26	13	9.0	12
18	4.0	5.8	17	245	a84	190	181	122	23	11	9.5	32
19	3.7	6.7	16	196	a80	174	171	116	23	11	8.1	28
20	1.6	8.6	16	b170	a76	161	151	113	21	9.8	7.3	32
21	1.7	8.6	25	152	a74	190	139	108	20	9.2	6.1	28
22	3.8	8.3	36	231	69	242	153	90	21	8.7	4.5	37
23	3.8	7.4	33	359	b62	260	215	89	25	8.4	3.4	44
24	4.0	6.0	27	293	66	264	212	88	24	8.1	4.0	24
25	4.4	7.1	23	275	73	254	191	82	24	6.3	8.6	19
26	3.2	6.9	26	412	80	247	171	103	25	6.6	16	14
27	1.6	*5.8	62	485	73	228	130	98	23	6.8	17	17
28	1.6	4.7	58	*414	*227	192	158	*90	19	8.4	*15	67
29	3.7	5.8	52	372	-	175	278	99	19	12	27	83
30	3.8	5.8	59	320	--------	162	*294	85	*20	12	23	77
31	*3.8	--------	*52	*298	--------	*165	--------	81	--------	*13	2C	--------
Total	96.4	156.2	829.1	5,960	3,268	6,302	6,857	5,066	993	298.8	361.7	654.8
Mean	3.11	5.21	26.7	192	117	203	229	163	33.1	9.64	11.7	21.8
(†)	3.35	3.52	2.87	2.19	1.44	1.33	1.67	1.70	3.19	4.05	4.08	4.05
Adjusted for diversion												
Mean	6.46	8.72	29.6	194	118	205	230	165	36.3	13.7	15.7	25.9
Cfsm	0.152	0.206	0.698	4.58	2.78	4.83	5.42	3.89	0.856	0.323	0.370	0.611
In.	0.18	0.23	0.81	5.29	2.90	5.56	6.06	4.49	0.96	0.37	0.43	0.68

	Observed			Adjusted			
Calendar year 1957:	Max 294	Min 0.9	Mean 43.6	Mean 45.8	Cfsm 1.08	In. 14.67
Water year 1957-58:	Max 485	Min 1.0	Mean 84.5	Mean 87.3	Cfsm 2.06	In. 27.96

Peak discharge (base, 280 cfs).--Jan. 16 (2:30 p.m.) 337 cfs (7.80 ft); Jan. 23 (6 to 7 p.m.) 384 cfs (7.97 ft); Jan. 26 (9 to 9:30 p.m.) 521 cfs (8.63 ft); Mar. 1 (6:30 to 9 p.m.) 386 cfs (7.98 ft); Mar. 24 (5:30 p.m.) 320 cfs (7.62 ft); Apr. 7 (8 p.m.) 392 cfs (8.01 ft); Apr. 13 (2 a.m.) 361 cfs (7.85 ft); Apr. 30 (12 m. to 4:30 p.m.) 298 cfs (7.50 ft); May 8 (10 p.m.) to May 9 (2 a.m.) 365 cfs (7.87 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.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for Wading River at West Mansfield and Charles River at Charles River Village.
b Stage-discharge relation affected by ice.
Note.--Shifting-control method used Oct. 1 to Jan. 22.

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 1958. Prior to October 1950, published as Blackstone River at Worcester.

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.--35 years, 53.5 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 687 cfs Apr. 7 (gage height, 4.98 ft); minimum, 2.3 cfs Nov. 29.
1923-58: 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. 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).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.9	2.2	2.9	45
2.0	3.4	3.2	90
2.1	4.8	3.5	155
2.3	9.4	4.0	305
2.5	16	5.0	695
2.7	27		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	11	5.8	64	83	130	210	130	31	18	10	33
2	12	15	9.9	85	75	125	204	*106	29	17	7.8	20
3	12	27	*12	61	66	121	207	94	21	17	6.8	19
4	12	20	12	40	57	117	198	98	21	15	*5.8	22
5	12	14	12	29	52	110	201	92	20	15	7.1	11
6	12	11	12	26	46	119	245	90	19	14	10	12
7	10	10	12	26	45	123	571	137	18	12	25	29
8	10	11	12	48	52	117	359	150	17	17	60	21
9	12	17	12	32	41	108	246	141	18	23	33	28
10	16	13	36	*28	41	112	198	117	18	17	20	42
11	12	11	96	28	36	132	216	98	18	18	16	23
12	11	9.7	54	26	33	155	228	82	20	20	14	11
13	10	9.7	29	24	33	150	219	64	18	16	15	15
14	10	9.4	20	24	30	162	228	57	15	15	14	15
15	10	14	19	38	29	153	210	61	14	15	14	14
16	11	13	18	33	33	139	195	78	12	16	12	*15
17	12	11	17	33	35	139	189	62	9.7	*15	11	32
18	13	10	15	31	32	128	168	54	13	13	10	75
19	16	17	15	29	*31	121	123	54	23	14	8.1	57
20	15	24	19	25	30	121	130	53	23	11	7.3	36
21	13	23	72	24	28	128	110	48	24	9.7	7.6	26
22	12	23	82	54	26	123	100	39	29	9.4	9.1	29
23	12	23	52	78	29	123	119	40	24	28	10	27
24	12	23	37	70	29	92	119	38	20	24	10	21
25	14	18	29	68	37	*121	100	44	17	19	33	18
26	14	17	43	172	43	134	83	58	22	18	35	17
27	12	7.7	98	246	41	160	73	*51	30	24	39	28
28	12	2.5	76	204	105	158	112	45	26	22	40	82
29	*11	4.4	57	148	-	158	*155	41	21	22	58	62
30	11	6.3	52	112	--------	170	153	35	19	19	42	35
31	11	--------	43	96	--------	192	--------	33	--------	18	34	--------
Total	374	425.7	1,078.7	2,002	1,220	4,141	5,669	2,290	609.7	531.1	624.6	875
Mean	12.1	14.2	34.8	64.6	43.6	134	189	73.9	20.3	17.1	20.1	29.2
(†)	4.63	3.12	5.79	7.26	7.74	8.22	10.4	10.4	8.97	7.99	8.72	8.77
Adjusted for diversion												
Mean	16.7	17.3	40.6	71.8	51.3	142	199	84.3	29.3	25.1	28.9	37.9
Cfsm	0.534	0.553	1.30	2.29	1.64	4.54	6.36	2.69	0.936	0.802	0.923	1.21
In.	0.62	0.62	1.49	2.65	1.71	5.22	7.11	3.10	1.04	0.93	1.06	1.35

	Observed			Adjusted			
Calendar year 1957:	Max 170	Min 2.5	Mean 27.1	Mean 34.0	Cfsm 1.09	In. 14.78	
Water year 1957-58:	Max 571	Min 2.5	Mean 54.4	Mean 62.0	Cfsm 1.98	In. 26.90	

Peak discharge (base, 250 cfs).--Apr. 7 (8:30 a.m.) 687 cfs (4.98 ft); Apr. 11 (11:30 a.m.) 267 cfs (3.89 ft).

* Discharge measurement made on this day.
† Diversion, equivalent in cubic feet per second, for municipal supply of Worcester. Records furnished by city of Worcester.
Note.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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 1958.

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.--19 years, 42.0 cfs.

Extremes.--Maximum discharge during year, 245 cfs Apr. 9 (gage height, 3.03 ft); minimum daily, 0.4 cfs Oct. 3.
1939-58: 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 by Lake Quinsigamond and ponds above station.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.4	0.4	1.2	15
.5	.5	1.4	25
.6	.8	1.7	47
.7	1.3	2.0	78
.8	2.8	2.5	150
1.0	7.6	3.0	240

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	5.3	24	91	226	81	202	*95	39	28	21	21
2	.5	7.0	20	92	213	82	209	104	37	26	20	19
3	.4	17	*11	74	182	84	199	100	37	26	18	17
4	.6	23	12	61	154	87	182	99	36	26	*17	16
5	.9	16	13	48	136	94	152	92	34	26	16	15
6	1.0	12	11	39	124	101	140	111	33	26	15	15
7	1.7	9.2	11	40	114	132	173	120	33	24	18	17
8	1.7	8.4	12	51	114	140	177	121	32	24	29	18
9	1.4	13	13	45	86	135	240	121	30	30	25	19
10	2.6	15	22	41	92	130	226	105	39	28	22	21
11	4.0	10	83	39	84	132	215	95	48	28	19	21
12	3.8	8.0	107	38	73	135	215	88	28	33	16	20
13	4.0	7.7	58	37	68	130	208	79	29	30	17	20
14	2.8	7.3	67	37	58	130	195	71	31	27	16	19
15	1.8	13	65	45	59	143	179	60	26	27	18	17
16	1.4	17	55	49	58	138	150	56	22	27	19	*17
17	3.1	15	50	48	52	135	133	59	19	*31	19	36
18	6.0	11	53	45	48	130	126	58	18	26	18	48
19	8.0	15	59	41	47	128	118	57	17	28	15	44
20	11	24	60	*39	*47	128	100	70	13	25	14	41
21	10	22	74	36	47	133	70	71	13	22	14	37
22	8.6	19	68	49	47	132	31	61	24	19	14	39
23	8.2	15	59	56	45	126	56	59	31	27	14	36
24	7.6	13	60	52	44	121	61	55	30	26	14	34
25	11	11	55	56	45	*121	57	55	28	25	25	32
26	10	9.3	48	99	45	126	51	61	30	25	25	30
27	9.2	8.0	55	115	45	127	45	*62	35	24	25	40
28	8.2	8.0	45	133	68	120	56	59	36	22	25	55
29	*7.0	9.5	61	154	-	114	87	58	34	26	22	44
30	5.9	13	65	154	-------	111	105	52	30	24	22	37
31	5.3	-------	72	157	-------	120	-------	44	-------	22	21	-------
Total	148.3	381.7	1,468	2,061	2,421	3,746	4,158	2,398	892	808	593	845
Mean	4.78	12.7	47.4	66.5	86.5	121	139	77.4	29.7	26.1	19.1	28.2
Cfsm	0.187	0.498	1.86	2.61	3.39	4.75	5.45	3.04	1.16	1.02	0.749	1.11
In.	0.22	0.56	2.14	3.01	3.53	5.46	6.06	3.50	1.30	1.18	0.86	1.23

Calendar year 1957: Max 188 Min 0.4 Mean 26.0 Cfsm 1.02 In. 13.84
Water year 1957-58: Max 240 Min 0.4 Mean 54.6 Cfsm 2.14 In. 29.05

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 30 to Dec. 2, Jan. 5-19; discharge estimated on basis of weather records, recorded range in stage, and records for Kettle Brook at Worcester and Ware River near Barre. 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 1958. 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.--19 years, 239 cfs (adjusted for diversion).
Extremes.--Maximum discharge during year, 2,120 cfs Apr. 7 (gage height, 6.99 ft); minimum daily, 5 cfs Nov. 1.
1939-58: 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from aquatic vegetation Sept. 13-18)

2.0	4	3.0	160
2.1	9	3.5	300
2.2	16	4.0	480
2.3	26	5.0	970
2.5	54	7.0	2,130

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	5	202	408	630	855	982	*606	197	107	152	124
2	69	101	91	448	606	715	1,070	500	186	107	109	122
3	76	218	*93	379	542	700	1,030	492	200	118	89	101
4	68	132	141	261	476	680	1,010	508	134	79	96	129
5	26	116	109	227	428	675	900	472	141	104	91	125
6	46	117	62	210	393	730	976	448	146	102	95	111
7	178	65	66	227	372	775	*2,080	740	129	98	96	106
8	118	44	76	267	390	735	1,800	770	122	102	416	139
9	110	167	76	233	340	685	1,280	690	129	273	210	114
10	52	91	287	*216	318	690	1,110	592	134	130	143	191
11	112	60	476	205	303	750	1,070	464	181	124	129	169
12	36	103	362	186	285	825	1,220	390	165	219	115	128
13	40	39	285	181	264	800	1,190	382	143	127	155	104
14	124	71	183	176	221	840	1,160	337	129	120	129	106
15	70	205	194	247	219	934	970	315	111	131	129	101
16	36	79	189	270	238	840	865	322	59	138	148	*117
17	11	68	184	294	241	770	785	329	88	*211	98	534
18	74	47	168	219	a245	710	670	285	77	118	131	534
19	130	136	165	216	*a215	700	574	313	102	126	97	365
20	85	184	181	*202	216	710	524	279	98	91	70	235
21	61	133	454	200	205	740	488	294	99	89	83	202
22	72	170	404	412	202	720	436	270	106	103	100	258
23	58	59	306	542	200	750	468	276	106	242	104	183
24	93	79	273	428	194	735	488	233	106	173	59	176
25	87	89	208	400	244	*755	428	276	98	141	324	156
26	48	100	265	1,270	288	825	354	358	132	117	280	150
27	36	83	505	1,510	276	895	321	*324	246	124	243	373
28	66	54	376	*1,260	760	865	544	253	134	124	217	630
29	*88	68	324	964	-	820	705	224	109	231	256	362
30	62	86	300	775	--------	805	675	233	104	202	160	270
31	86	--------	276	690	--------	845	--------	189	--------	152	131	--------
Total	2,270	2,969	7,286	13,543	9,311	23,874	26,173	12,164	3,911	4,323	4,655	6,415
Mean	73.2	99.0	235	437	333	770	872	392	130	139	150	214
(†)	16.5	22.8	5.35	10.7	10.7	13.8	0	7.56	12.5	30.8	24.3	26.5

Adjusted for diversion

Mean	56.7	76.2	230	426	322	756	872	385	118	109	126	187
Cfsm	0.408	0.548	1.65	3.06	2.32	5.44	6.27	2.77	0.849	0.784	0.906	1.35
In.	0.47	0.61	1.90	3.53	2.41	6.27	7.00	3.19	0.95	0.90	1.04	1.50

	Observed			Adjusted			
Calendar year 1957:	Max 1,200	Min 2	Mean 178	Mean 154	Cfsm 1.11	In. 15.00	
Water year 1957-58:	Max 2,080	Min 5	Mean 320	Mean 305	Cfsm 2.19	In. 29.77	

* Discharge measurement made on this day.
† Diversion, equivalent in cubic feet per second, from Nashua River basin to Blackstone River basin for municipal supply of Worcester. Records furnished by city of Worcester.
a No gage-height record; discharge estimated on basis of 1 discharge measurement and weather records.
Note.--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 1958. 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.--18 years, 163 cfs.

Extremes.--Maximum discharge during year, 1,590 cfs Jan. 26 (gage height, 6.78 ft); minimum daily, 7.0 cfs Oct. 26, 27.

1940-58: 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 except those for periods of no gage-height record, which are fair. Flow regulated by mills and reservoirs above station.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from tree Jan. 16, 17, Jan. 22 to Feb. 12, Feb. 28 to May 22, May 26-28)

1.5	5.5	3.0	198
1.7	15	4.0	490
2.0	38	6.0	1,300
2.4	82		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	8.3	61	214	470	766	532	494	135	58	64	38
2	19	14	*58	291	401	539	574	*397	120	59	68	35
3	18	36	47	214	357	490	560	357	124	54	56	33
4	18	57	39	168	314	466	494	404	*113	47	46	*33
5	19	42	35	145	291	456	430	391	105	45	41	33
6	19	38	33	*147	253	430	417	366	93	41	38	33
7	24	46	34	143	240	410	1,020	560	92	40	36	35
8	22	39	43	195	279	379	*970	702	87	49	35	34
9	21	61	38	171	258	348	702	612	84	49	35	33
10	20	51	124	171	231	329	553	453	90	47	34	35
11	19	38	243	171	205	317	532	369	90	46	33	32
12	17	42	205	149	189	329	654	332	93	45	32	32
13	18	32	141	137	168	314	698	302	92	45	47	33
14	20	27	109	133	149	348	766	277	85	45	52	33
15	19	46	96	372	141	417	630	253	74	45	38	36
16	18	49	90	682	160	413	536	255	68	*47	40	36
17	20	41	84	522	147	385	473	263	61	45	31	52
18	19	35	75	404	147	357	368	248	59	41	28	131
19	22	46	71	338	166	357	341	240	68	43	27	157
20	15	48	75	293	171	385	308	240	76	38	32	112
21	11	47	181	285	143	459	288	210	81	38	34	90
22	9.3	47	235	523	131	440	285	186	87	38	32	93
23	8.3	59	160	790	131	430	329	180	84	39	33	82
24	11	68	123	539	126	433	320	166	74	38	34	66
25	9.8	58	106	463	141	470	271	164	67	40	49	60
26	7.0	53	134	1,300	*166	518	243	245	64	39	44	55
27	7.0	38	302	1,260	180	*553	231	219	68	38	66	100
28	7.8	36	243	1,010	532	525	335	189	64	38	84	248
29	7.8	38	207	794	-	453	612	180	58	56	93	207
30	*8.3	47	200	638	-------	423	574	162	57	69	101	145
31	7.4	-------	171	553	-------	430	-------	143	-------	58	53	-------
Total	481.7	1,287.3	3,763	13,213	6,289	13,369	15,066	9,559	2,513	1,420	1,436	2,122
Mean	15.5	42.9	121	426	225	431	502	308	83.8	45.8	46.3	70.7
Cfsm	0.166	0.460	1.30	4.57	2.41	4.62	5.38	3.30	0.898	0.491	0.496	0.758
In.	0.19	0.51	1.50	5.27	2.51	5.33	6.01	3.81	1.00	0.57	0.57	0.85

Calendar year 1957: Max 869 Min 7.0 Mean 107 Cfsm 1.15 In. 15.61
Water year 1957-58: Max 1,300 Min 7.0 Mean 193 Cfsm 2.07 In. 28.12

Peak discharge (base, 880 cfs).--Jan. 26 (6:30 to 8 p.m.) 1,590 cfs (6.78 ft); Mar. 1 (12:15 to 1 a.m.) 926 cfs (5.34 ft); Apr. 7 (3 p.m.) 1,160 cfs (5.89 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Aug. 1-12, 14-21; discharge estimated on basis of weather records, recorded range in stage, and records for Blackstone River at Woonsocket and Woonasquatucket River at Centerdale. 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 1958.
Gage.--Water-stage recorder. Datum of gage is 107.42 ft above mean sea level, datum of 1929.
Average discharge.--29 years, 719 cfs (adjusted for diversion).
Extremes.--Maximum discharge during year, 4,970 cfs Jan. 27 (gage height, 7.39 ft); minimum daily, 95 cfs Oct. 6.
1929-58: 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 periods of no gage-height record, 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 tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from aquatic vegetation Oct. 8, 9, Nov. 3-7, 9, 10, 15, 16, 20-23, Dec. 1, 2)

Oct. 1 to Dec. 27				Dec. 28 to Sept. 30			
1.2	78	2.5	520	1.5	138	4.0	1,460
1.6	169	3.0	800	2.0	284	6.0	3,350
2.0	296	4.0	1,530	2.5	488	8.0	5,760
				3.0	755		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	139	146	285	870	2,150	3,120	2,300	2,100	623	256	339	225
2	113	121	*280	1,240	1,930	2,530	2,450	*1,800	553	241	305	207
3	124	282	217	1,010	1,710	2,260	2,390	1,470	613	247	253	205
4	127	307	211	740	1,550	2,230	2,260	1,690	*529	256	207	*182
5	121	215	232	623	1,350	2,220	2,060	1,680	491	213	202	196
6	95	203	199	*603	1,240	2,110	2,000	1,530	459	237	193	205
7	150	197	182	593	1,180	2,160	3,790	1,960	420	228	199	185
8	200	164	193	710	1,310	2,060	*4,550	2,560	374	234	235	185
9	210	230	224	662	1,220	1,890	3,440	2,530	391	322	391	207
10	170	240	434	608	1,050	1,780	2,750	2,060	425	319	270	207
11	160	189	1,000	583	994	1,820	2,600	1,660	429	273	*216	250
12	160	167	996	548	910	1,870	3,010	1,470	455	294	205	228
13	125	187	755	500	869	1,860	3,160	1,390	425	280	260	199
14	130	139	548	491	769	1,950	3,150	1,230	395	234	273	166
15	160	225	458	1,180	667	2,420	2,820	1,090	399	228	244	169
16	150	273	448	1,770	745	2,420	2,460	1,100	316	237	260	188
17	120	174	428	1,580	721	2,190	2,240	1,100	244	327	222	383
18	100	163	401	1,230	757	2,040	1,920	1,130	263	237	182	932
19	150	177	401	1,050	811	1,940	1,700	981	291	231	210	851
20	160	280	414	953	805	1,960	1,570	974	319	213	190	623
21	145	249	744	883	703	2,090	1,410	932	323	188	159	455
22	140	246	1,200	1,470	655	2,110	1,380	877	339	189	171	429
23	140	236	842	2,370	612	2,070	1,520	870	395	228	161	469
24	130	185	689	1,970	607	2,070	1,520	752	327	370	151	378
25	140	188	595	1,690	721	2,120	1,380	764	298	294	237	349
26	140	202	601	3,640	*862	2,260	1,260	1,070	284	230	446	279
27	120	185	1,220	4,780	889	2,400	1,140	967	361	237	403	411
28	115	174	1,060	4,350	1,990	2,370	1,340	844	331	241	383	1,150
29	135	166	925	3,480	-	2,170	2,220	812	284	346	430	1,090
30	*135	191	870	2,780	---------	1,970	2,240	716	247	477	454	775
31	129	--------	704	2,440	---------	2,000	--------	762	--------	374	284	--------
Total	4,333	6,101	17,756	47,397	29,777	66,460	68,030	40,871	11,603	8,391	8,135	11,778
Mean	140	203	573	1,529	1,063	2,144	2,268	1,318	387	271	262	393
(†)	16.5	22.8	5.35	10.7	10.7	13.8	-	7.56	12.5	30.8	24.3	26.5
Adjusted for diversion												
Mean	123	181	567	1,518	1,053	2,130	2,268	1,311	374	240	238	366
Cfsm	0.296	0.435	1.36	3.65	2.53	5.12	5.45	3.15	0.899	0.577	0.572	0.880
In.	0.34	0.48	1.57	4.21	2.64	5.90	6.08	3.63	1.00	0.66	0.66	0.98

	Observed			Adjusted		
Calendar year 1957:	Max 3,180	Min 71	Mean 488	Mean 464	Cfsm 1.12	In. 15.14
Water year 1957-58:	Max 4,780	Min 95	Mean 878	Mean 863	Cfsm 2.07	In. 28.15

Peak discharge (base, 3,400 cfs).--Jan. 27 (12:30 to 2:30 a.m.) 4,970 cfs (7.39 ft); Mar. 1 (4 to 6 a.m.) 3,400 cfs (6.04 ft); Apr. 7, 8 (11 p.m. to 2 a.m.) 4,750 cfs (7.22 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.
Note.--No gage-height record Oct. 9-29, May 1; discharge estimated on basis of 2 discharge measurements, weather records, record of recorded range in stage, and records for station at Northbridge, Mass.

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 1958.

Gage.--Water-stage recorder. Altitude of gage is 95 ft (from topographic map).

Average discharge.--17 years, 69.5 cfs.

Extremes.--Maximum discharge during year, 484 cfs Jan. 27 (gage height, 4.69 ft); minimum daily, 4.4 cfs Oct. 10.
1941-58: 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 except those for period of no gage-height record, which are fair. Flow regulated by mills and reservoirs above station. Discharge includes leakage through bypass canal.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	9.2	12	68	206	311	200	224	66	36	44	25
2	12	11	*10	68	185	274	230	*194	73	34	35	26
3	12	12	9.0	57	162	236	225	177	60	33	30	27
4	11	9.7	9.1	52	141	242	201	193	*54	31	31	*27
5	11	8.3	9.2	48	126	228	177	194	54	30	34	26
6	13	8.3	8.8	*46	115	206	203	188	52	35	31	26
7	15	8.3	10	48	111	187	*382	233	47	35	30	30
8	13	9.3	10	62	148	169	351	300	36	39	30	28
9	19	14	16	56	133	151	283	285	44	39	27	28
10	4.4	9.8	26	53	117	141	242	237	49	35	23	30
11	7.2	8.7	33	52	104	131	256	207	49	33	23	29
12	9.6	8.3	36	48	94	123	314	189	46	32	27	28
13	9.2	7.8	29	46	87	116	321	167	42	29	23	27
14	8.6	7.8	25	47	a78	144	309	149	37	*34	23	26
15	8.1	13	23	174	a74	188	272	137	34	36	30	25
16	8.1	9.8	22	167	a88	185	237	134	37	33	30	26
17	8.6	9.4	23	115	a80	173	209	127	37	31	23	41
18	8.6	9.4	26	97	a78	159	189	123	37	30	23	48
19	17	11	23	84	a74	152	171	120	41	29	23	39
20	11	13	27	75	*70	155	156	114	41	26	27	35
21	9.6	9.8	48	71	66	193	148	104	39	28	27	29
22	9.6	9.4	38	227	65	200	156	96	39	31	27	34
23	9.6	9.4	34	191	63	195	187	97	41	31	23	34
24	10	9.4	37	158	61	194	177	83	45	29	23	30
25	10	9.4	33	203	68	200	161	93	45	30	39	28
26	8.7	9.8	46	437	73	*215	141	114	39	29	37	25
27	8.7	9.4	76	476	77	220	129	98	37	28	34	33
28	8.7	9.4	52	414	261	212	185	92	34	31	31	52
29	8.2	11	54	358	-	199	234	88	30	41	31	48
30	*8.2	12	54	282	------	185	245	68	34	35	23	39
31	7.7	------	54	239	------	181	------	69	------	43	23	------
Total	319.4	297.1	913.1	4,519	3,005	5,865	6,691	4,694	1,319	1,016	923	949
Mean	10.3	9.90	29.5	146	107	189	223	151	44.0	32.8	29.9	31.6
Cfsm	0.269	0.258	0.770	3.81	2.79	4.93	5.82	3.94	1.15	0.856	0.781	0.825
In.	0.31	0.29	0.89	4.39	2.92	5.70	6.50	4.56	1.28	0.99	0.90	0.92

Calendar year 1957: Max 411 Min 4.4 Mean 46.8 Cfsm 1.22 In. 16.59
Water year 1957-58: Max 476 Min 4.4 Mean 83.6 Cfsm 2.18 In. 29.65

* 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 Branch River at Forestdale.
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 1958.

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

Average discharge.--18 years, 129 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 752 cfs Jan. 27 (gage height, 2.83 ft); minimum daily, 7.2 cfs Oct. 5.
1940-58: 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 tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 26

1.2	6.2	1.8	96
1.3	12	2.0	175
1.4	20	3.0	890
1.6	49		

Jan. 27 to Sept. 30

2.0	175
3.0	885

Note.--Same as preceding table below 2.0 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	34	18	80	396	307	307	418	149	75	187	20
2	35	15	54	153	411	280	341	368	180	83	218	106
3	33	17	41	104	418	280	347	334	171	89	191	144
4	31	36	38	223	396	300	347	334	157	25	150	140
5	7.2	35	49	235	280	341	334	334	149	18	88	135
6	8.0	37	42	235	235	341	347	334	128	48	84	36
7	36	*39	14	235	184	327	396	347	80	132	82	18
8	35	40	15	*244	228	307	476	368	96	119	99	105
9	37	20	67	235	248	293	476	404	166	112	22	98
10	35	15	76	230	248	293	418	382	157	89	20	110
11	36	15	*89	42	242	293	404	354	153	80	113	100
12	8.9	50	85	36	242	293	439	341	149	43	109	78
13	8.3	35	72	128	186	287	461	334	135	70	145	18
14	34	37	22	199	118	293	461	117	74	130	133	17
15	35	49	20	312	47	300	432	114	106	123	130	72
16	32	16	108	312	101	300	396	175	171	100	64	78
17	44	14	127	303	255	293	368	213	144	65	28	83
18	38	39	132	303	261	293	368	213	124	88	126	76
19	18	39	124	286	242	*287	368	213	124	30	144	*74
20	15	46	117	336	140	293	271	213	120	36	140	20
21	37	41	71	352	83	293	113	213	42	*73	135	18
22	39	41	229	407	24	300	*233	202	58	61	131	104
23	37	14	211	442	42	300	261	202	128	81	34	104
24	36	13	157	498	131	300	274	197	128	73	20	79
25	38	40	153	336	175	300	274	213	91	72	140	80
26	11	38	153	596	229	300	261	*320	85	20	180	80
27	10	40	211	730	229	300	261	320	82	20	180	192
28	34	15	217	588	320	300	280	287	35	84	175	261
29	37	41	205	483	-	293	334	248	44	93	274	205
30	32	15	157	432	--------	293	432	131	96	93	85	145
31	34	--------	100	389	--------	300	--------	144	--------	103	23	--------
Total	904.4	926	3,174	9,484	6,111	9,280	10,480	8,387	3,522	2,348	3,650	2,796
Mean	29.2	30.9	102	306	218	299	349	271	117	75.7	118	93.2
(†)	-4.26	+14.9	+34.6	+17.2	-18.9	+9.78	+15.5	+0.49	-0.81	-3.14	-7.92	-2.97
Adjusted for diversion and change in reservoir contents												
Mean	24.9	45.7	137	323	199	309	365	271	117	72.6	110	90.2
Cfsm	0.390	0.716	2.15	5.06	3.12	4.84	5.72	4.25	1.83	1.14	1.72	1.41
In.	0.45	0.80	2.48	5.84	3.25	5.59	6.38	4.90	2.04	1.31	1.98	1.58

	Observed			Adjusted			
Calendar year 1957:	Max 414	Min 5.7	Mean 88.7	Mean 88.5	Cfsm 1.39	In. 18.82
Water year 1957-58:	Max 730	Min 7.2	Mean 167	Mean 172	Cfsm 2.70	In. 36.60

* 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 1958.

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

Average discharge.--18 years (1940-58), 399 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 1,770 cfs Feb. 28 (gage height, 7.61 ft); minimum daily, 44 cfs Oct. 6.
1939-58: Maximum discharge, 2,090 cfs Nov. 6, 1955 (gage height, 9.10 ft); minimum daily, 22 cfs Sept. 4, 1944.

Remarks.--Records excellent except those for periods of ice effect or backwater from aquatic vegetation, which are 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).

Rating tables, water year 1957-58, except periods of ice effect or backwater from aquatic vegetation (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 27)

Oct. 1 to Jan. 27				Jan. 28 to Sept. 30			
3.4	34	4.0	185	3.5	50	5.0	620
3.5	50	5.0	540	3.7	95	6.0	1,100
3.7	95	7.1	1,380	4.0	185	7.5	1,730
				4.5	372		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	90	110	294	655	1,130	870	1,280	262	241	550	58
2	68	78	152	392	665	650	924	1,140	337	227	386	194
3	78	68	167	343	740	675	924	988	328	211	308	401
4	78	68	161	259	730	735	870	996	320	190	387	391
5	56	88	164	326	615	775	835	978	296	125	348	*376
6	44	107	164	399	510	755	924	956	284	134	290	209
7	62	*98	122	424	465	685	1,520	1,140	191	233	*290	70
8	92	113	90	524	440	540	*1,930	1,370	188	284	290	210
9	82	101	176	436	440	490	1,570	1,400	277	277	180	347
10	75	64	284	416	b470	575	1,360	1,240	316	273	85	321
11	80	58	*354	270	475	585	1,270	1,050	284	249	180	331
12	60	60	312	173	460	575	1,510	965	320	207	312	298
13	45	101	252	270	435	570	1,510	885	320	158	504	118
14	54	104	167	307	372	630	1,480	735	316	266	281	50
15	80	146	143	1,020	204	605	1,410	570	207	300	328	128
16	78	101	212	980	b190	660	1,240	630	300	277	312	225
17	78	64	252	688	b390	865	1,090	650	316	238	152	316
18	88	95	259	508	485	820	983	665	288	231	231	229
19	82	152	270	444	450	*800	905	670	284	152	379	273
20	56	164	262	b480	377	830	855	675	284	92	360	142
21	58	155	262	508	320	929	640	665	211	179	360	82
22	75	170	336	1,090	191	920	675	640	152	256	330	221
23	65	110	416	*1,090	155	915	870	645	235	245	195	341
24	88	80	322	876	329	929	820	420	300	269	68	322
25	98	137	270	688	412	934	785	324	271	257	278	277
26	68	157	336	1,030	510	952	740	575	254	152	550	304
27	50	176	460	1,360	*500	960	740	555	242	122	580	256
28	45	119	368	1,300	1,260	895	952	520	146	201	560	715
29	54	140	368	1,060	~	825	1,160	490	113	327	535	725
30	75	143	368	895	---------	820	1,230	324	196	322	412	510
31	82	--------	304	785	--------	830	--------	266	--------	371	107	--------
Total	2,184	3,307	7,883	19,635	13,225	23,859	32,292	24,407	7,838	7,066	10,228	8,430
Mean	70.5	110	254	633	472	770	1,076	787	261	228	330	281
(†)	-38.5	-4.64	+153	+495	+144	+282	+130	+13.8	+24.2	-14.5	-20.2	+7.62

Adjusted for diversion and change in reservoir contents

Mean	31.9	106	408	1,128	617	1,052	1,207	801	285	213	319	289
Cfsm	0.160	0.530	2.04	5.64	3.08	5.26	6.04	4.00	1.42	1.06	1.55	1.44
In.	0.18	0.59	2.35	6.50	3.21	6.06	6.73	4.62	1.59	1.23	1.79	1.61

	Observed			Adjusted		
Calendar year 1957:	Max 996	Min 44	Mean 199	Mean 247	Cfsm 1.24	In. 16.80
Water year 1957-58:	Max 1,630	Min 44	Mean 439	Mean 537	Cfsm 2.68	In. 36.46

* 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.
b Stage-discharge relation affected by ice.
Note.--Backwater from aquatic vegetation Oct. 1 to Jan. 10, May 30 to Sept. 30.

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 1958.

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

Average discharge.--18 years, 43.2 cfs (unadjusted).

Extremes.--Maximum discharge during year, 350 cfs Feb. 28 (gage height, 2.35 ft); minimum, 0.5 cfs Oct. 2, 3.

1940-58: 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 gate at Old Forge Dam).

Maximum stage known, about 8.5 ft Sept. 21, 1938, from information by local resident (backwater from hurricane tidal wave).

Remarks.--Records good except those for periods of no gage-height record, which are fair. Diversions above station for supply of East Greenwich, North Kingstown, Warwick, and U. S. Naval establishments.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.05	0.7	1.4	49
1.1	3.4	1.7	128
1.2	14	2.2	298

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	5.9	16	69	94	239	111	165	71	22	58	30
2	1.2	13	11	89	89	149	111	140	68	22	45	26
3	1.2	23	9.2	61	81	122	108	120	78	21	31	23
4	2.8	17	8.1	43	73	128	99	130	67	23	22	21
5	3.4	9.3	8.7	37	67	128	89	120	62	25	19	18
6	3.7	8.7	7.6	35	65	122	99	110	56	42	17	19
7	6.1	6.1	8.7	39	65	105	281	160	50	41	14	19
8	8.1	5.9	11	*122	108	94	216	210	47	34	13	20
9	5.5	11	22	111	b94	91	155	160	51	31	12	21
10	4.7	9.9	53	76	73	89	128	135	53	26	12	21
11	3.8	6.6	*96	61	61	78	140	120	56	24	9.9	22
12	4.1	5.6	78	48	55	73	212	110	89	26	10	19
13	5.6	4.7	49	43	56	69	184	100	73	38	21	16
14	4.8	4.1	36	44	51	83	152	96	81	40	23	14
15	4.0	14	29	256	49	125	134	92	62	34	24	13
16	5.8	12	26	222	b48	128	122	90	48	28	28	12
17	8.1	9.9	24	146	b56	111	116	88	43	25	35	17
18	9.3	7.0	22	111	*b50	96	111	86	41	21	39	25
19	18	9.8	20	89	b49	*89	105	82	48	21	27	*26
20	22	14	22	73	b48	94	96	82	51	20	21	23
21	16	10	45	68	b48	128	94	80	48	*17	18	21
22	11	8.8	56	178	47	140	*99	76	47	16	18	24
23	9.2	7.6	40	196	47	140	143	80	41	18	15	21
24	10	7.1	32	128	45	131	128	74	38	16	14	18
25	18	7.1	26	115	57	125	105	76	36	14	37	16
26	16	5.8	31	188	71	128	89	*155	31	15	71	15
27	12	6.1	63	178	63	128	83	128	30	21	68	20
28	9.6	6.3	51	146	224	119	128	99	30	22	47	50
29	8.5	6.7	47	128	-	111	226	99	26	27	51	90
30	8.0	9.8	44	116	-------	105	200	89	23	33	46	80
31	7.4	-------	38	105	-------	99	-------	78	-------	26	36	-------
Total	249.3	272.8	1,030.3	3,321	1,934	3,567	4,064	3,430	1,545	789	901.9	760
Mean	8.04	9.09	33.2	107	69.1	115	135	111	51.5	25.5	29.1	25.3
Ac-ft	5.15	4.82	5.05	4.86	5.11	4.92	4.94	4.76	4.93	4.95	4.93	5.14

Calendar year 1957: Max 232 Min 0.8 Mean 29.0 † 5.62
Water year 1957-58: Max 281 Min 1.2 Mean 59.9 † 4.96

Peak discharge (base, 190 cfs).--Jan. 15 (3 to 4 p.m.) 344 cfs (2.33 ft); Jan. 22 (6 to 8 p.m.) 269 cfs (2.125 ft); Jan. 26 (4 to 9 p.m.) 205 cfs (1.945 ft); Feb. 28 (6:30 to 8 p.m.) 350 cfs (2.35 ft); Apr. 7 (9 to 11 a.m.) 312 cfs (2.24 ft); Apr. 12 (11 a.m. to 4:30 p.m.) 219 cfs (1.975 ft); Apr. 29 (2 to 4 a.m.) 248 cfs (2.055 ft); May 8 (time unknown) 240 cfs (2.035 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.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Apr. 30 to May 26, Sept. 23-30; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for Wood River at Hope Valley.

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 1958. 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.--18 years, 186 cfs.

Extremes.--Maximum discharge during year, 776 cfs Apr. 8 (gage height, 5.47 ft); minimum, 17 cfs Oct. 6; minimum daily, 19 cfs Oct. 5, 6, 12.
1940-58: 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.6	14	3.0	276
1.8	30	4.0	461
2.1	66	5.0	664
2.5	144	5.5	784

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*20	39	90	250	452	510	454	620	328	142	139	184
2	31	36	110	300	420	590	447	579	320	137	139	157
3	26	94	100	275	388	556	442	524	346	130	139	132
4	26	106	88	245	348	504	427	510	332	128	139	126
5	19	96	78	210	340	492	410	488	316	137	117	121
6	19	80	76	195	322	492	413	488	304	187	113	117
7	38	66	75	200	310	477	657	521	289	209	106	119
8	33	54	96	330	342	447	764	571	276	215	100	123
9	34	73	120	340	311	420	762	596	264	223	71	121
10	31	62	176	280	334	396	701	575	257	204	91	128
11	30	53	254	250	308	373	659	530	271	181	89	149
12	19	64	271	225	283	349	687	495	278	167	80	128
13	24	73	240	200	274	330	685	458	278	160	86	110
14	37	52	210	190	249	340	666	429	283	165	87	113
15	26	64	190	380	254	403	625	407	269	162	96	115
16	23	71	175	*550	234	429	571	391	264	157	87	104
17	29	80	165	620	209	441	523	377	247	149	106	102
18	24	84	155	586	240	*427	486	364	231	139	130	106
19	38	80	150	502	235	405	456	351	223	123	106	121
20	51	90	142	422	230	402	430	346	220	123	102	108
21	53	100	190	382	225	470	410	346	218	128	100	115
22	43	92	260	430	223	521	402	332	218	*110	87	132
23	37	81	250	493	223	534	*429	328	215	110	81	117
24	37	80	225	526	*220	528	444	322	204	108	91	115
25	48	80	205	526	229	515	444	316	192	104	116	106
26	51	77	200	583	247	510	418	359	184	91	187	100
27	48	71	250	614	254	515	389	386	173	126	215	106
28	52	56	235	625	373	515	405	415	162	139	220	190
29	42	62	225	592		495	502	402	157	135	229	220
30	40	70	215	538		466	596	370	149	144	220	223
31	39		210	492		449		348		130	201	
Total	1,068	2,186	5,426	12,351	8,077	14,301	15,704	13,544	7,468	4,563	3,870	3,908
Mean	34.5	72.9	175	398	288	461	523	437	249	147	125	130
Cfsm	0.345	0.729	1.75	3.98	2.88	4.61	5.23	4.37	2.49	1.47	1.25	1.30
In.	0.40	0.81	2.02	4.59	3.00	5.32	5.84	5.04	2.78	1.70	1.44	1.45

Calendar year 1957: Max 550 Min 19 Mean 129 Cfsm 1.29 In. 17.55
Water year 1957-58: Max 764 Min 19 Mean 253 Cfsm 2.53 In. 34.39

* Discharge measurement made on this day.
Note.--No gage-height record Nov. 6 to Dec. 9, Dec. 13 to Jan. 16, Feb. 18-21; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage when available, and records for Pawcatuck River at Westerly and 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 1958. 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.--17 years, 150 cfs.

Extremes.--Maximum discharge during year, 867 cfs Apr. 7 (gage height, 5.45 ft); minimum, 14 cfs Oct. 4-8, 13, 16; minimum daily, 14 cfs Oct. 4-8, 16.
1941-58: 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 periods 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 tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 15				Jan. 16 to Sept. 30			
1.6	11	2.5	128	2.1	56	4.0	512
1.7	16	3.0	260	2.4	105	5.0	750
1.9	32	4.0	488	3.0	265		
2.2	70						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*15	25	70	252	351	583	351	489	201	75	201	136
2	15	29	69	305	323	436	338	412	201	70	206	126
3	15	50	59	250	298	369	325	361	203	69	159	105
4	14	62	56	211	273	385	309	376	187	66	131	96
5	14	53	52	184	257	395	285	358	170	75	110	90
6	14	*42	46	170	245	371	320	351	159	144	92	86
7	14	35	50	181	240	343	750	426	146	154	81	86
8	14	33	60	339	285	315	671	498	138	131	75	105
9	15	47	78	300	271	293	540	473	136	126	67	112
10	16	63	150	234	250	268	443	395	138	107	62	103
11	16	55	260	211	230	259	421	348	151	94	60	105
12	16	46	234	189	210	245	526	317	181	90	57	96
13	15	40	192	170	200	237	512	296	181	126	70	86
14	15	36	151	176	180	268	454	279	184	154	83	80
15	15	51	131	430	185	364	419	262	168	133	90	75
16	14	66	126	*549	170	358	381	257	146	112	103	70
17	15	60	123	421	160	*328	346	254	133	94	138	*76
18	15	51	114	356	150	298	323	245	121	80	178	86
19	34	55	110	301	150	282	301	234	128	75	157	96
20	46	67	105	265	160	306	287	234	138	73	121	88
21	42	70	186	248	155	395	273	229	133	67	99	84
22	34	63	242	486	150	395	285	212	128	63	90	100
23	30	57	200	674	150	383	351	220	119	63	81	89
24	29	52	178	528	154	383	358	217	110	63	73	81
25	41	48	157	489	162	385	312	215	101	62	114	75
26	39	44	151	635	176	395	279	*346	97	63	209	73
27	33	41	229	657	184	421	257	341	94	97	243	78
28	29	40	221	570	434	395	320	285	90	133	209	180
29	27	43	211	500	-	361	546	273	83	141	203	250
30	25	55	205	431	----	328	546	240	78	154	195	200
31	2'	----	189	383	----	323	----	215	----	138	159	----
Total	700	1,479	4,405	11,075	6,153	10,867	11,829	9,658	4,243	3.092	3,916	3,113
Mean	22.6	49.3	142	357	220	351	394	312	141	99.7	126	104
Cfsm	0.312	0.681	1.96	4.93	3.04	4.85	5.44	4.31	1.95	1.38	1.74	1.44
In.	0.36	0.76	2.26	5.69	3.16	5.58	6.08	4.96	2.18	1.59	2.01	1.60

Calendar year 1957: Max 600 Min 14 Mean 101 Cfsm 1.40 In. 18.94
Water year 1957-58: Max 750 Min 14 Mean 193 Cfsm 2.67 In. 36.23

Peak discharge (base, 550 cfs).--Jan. 16 (4 a.m.) 597 cfs (4.37 ft); Jan. 23 (5 to 6 a.m.) 735 cfs (4.94 ft); Jan. 26 (10 to 11 p.m.) 695 cfs (4.78 ft); Mar. 1 (5 a.m.) 638 cfs (4.54 ft); Apr. 7 (7 p.m.) 867 cfs (5.45 ft); Apr. 29 (2 p.m.) 583 cfs (4.31 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Feb. 10-23, Sept. 22-30; discharge estimated on basis of weather records, recorded range in stage when available, and records for Pawcatuck River at Wood River Junction and at Westerly.

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 Connecticut 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 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 152.90 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during period July to September 1958, 22 cfs Sept. 28 (gage height, 1.91 ft); minimum, 1.4 cfs Aug. 12, 13 (gage height, 0.88 ft).

Remarks.--Records excellent except those for period of no gage-height record, which are fair.

Rating table, July 1 to Sept. 30, 1958 (gage height, in feet, and discharge, in cubic feet per second)

0.8	0.9	1.4	8.3
.9	1.5	1.6	13
1.0	2.3	1.9	22
1.2	4.6		

Discharge, in cubic feet per second, July to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1										a2.1	14	4.6
2										a1.9	9.0	3.6
3										a1.7	5.6	3.0
4										a1.6	4.0	2.7
5										a1.6	3.0	2.5
6										a17	2.4	2.7
7										a9.0	2.1	3.3
8										a6.0	2.0	4.6
9										a6.5	1.8	3.8
10										4.1	1.7	4.0
11										*3.1	1.5	4.2
12										2.8	1.4	3.3
13										9.5	1.9	2.7
14										9.4	1.9	2.4
15										6.7	1.9	2.2
16										4.6	3.0	2.1
17										3.3	8.3	3.1
18										2.5	13	4.6
19										2.2	*6.3	*4.3
20										1.9	3.7	3.6
21										*1.6	2.7	3.3
22										1.5	*2.3	6.7
23										1.6	1.9	4.6
24										1.7	1.7	3.6
25										1.5	7.6	3.0
26										1.5	*15	2.6
27										11	13	6.3
28										7.5	8.3	20
29										9.0	11	12
30					-------					6.0	8.7	7.9
31		-------			-------		-------		-------	5.0	6.3	-------
Total										145.4	167.0	137.3
Mean										4.69	5.39	4.58
Cfsm										1.12	1.28	1.09
In.										1.29	1.48	1.22

Calendar year	: Max		Min		Mean	Cfsm	In.
Water year	: Max		Min		Mean	Cfsm	In.

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby streams.

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 1958.

Gage.--Water-stage recorder. Altitude of gage is at mean sea level (from topographic map).

Average discharge.--18 years, 559 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 2,420 cfs Apr. 7, 8; maximum gage height, 7.74 ft Apr. 7 (affected by tide); minimum daily discharge, 34 cfs Oct. 6.

1940-58: 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*80	102	263	829	1,460	1,840	1,360	1,810	871	350	529	633
2	77	113	298	1,060	1,320	1,760	1,340	1,710	850	340	542	563
3	77	195	298	1,000	1,220	1,650	1,300	1,560	906	320	523	475
4	76	288	255	857	1,110	1,600	1,230	1,520	871	271	487	426
5	48	259	227	738	1,010	1,570	1,170	1,470	815	311	420	390
6	34	*231	219	654	934	1,530	1,220	1,440	*766	505	370	365
7	71	184	219	647	885	1,460	2,180	1,560	689	619	355	380
8	102	160	302	1,300	1,010	1,360	2,380	1,720	661	591	330	436
9	89	207	390	1,450	1,020	1,250	2,260	1,770	640	591	263	405
10	70	207	640	1,230	906	1,170	2,070	1,680	619	529	263	410
11	68	184	1,050	1,090	864	1,080	1,970	1,550	752	458	280	410
12	72	192	1,130	941	780	1,010	2,020	1,440	822	420	251	410
13	72	195	990	829	724	948	2,000	1,310	787	420	275	355
14	74	160	836	*787	640	976	1,910	1,210	759	453	251	340
15	68	192	717	1,470	640	1,210	1,790	1,120	724	475	275	355
16	61	219	654	1,850	605	1,340	1,610	1,060	668	453	311	306
17	68	231	584	1,800	563	*1,340	1,500	1,020	605	405	335	*302
18	72	239	535	1,690	619	1,280	1,390	990	556	*360	436	320
19	105	239	523	1,500	619	1,200	1,280	962	542	330	453	355
20	142	271	499	1,220	598	1,200	1,200	934	542	320	415	340
21	153	293	654	1,190	563	1,430	1,150	913	529	302	385	330
22	128	275	913	1,470	563	1,580	1,110	885	529	302	350	395
23	119	247	885	1,830	556	1,620	*1,230	864	517	280	275	375
24	122	239	801	1,790	*549	1,620	1,290	850	493	267	267	355
25	160	235	717	1,750	570	1,590	1,250	843	442	263	415	335
26	125	215	696	1,940	654	1,570	1,150	1,110	442	247	668	320
27	139	211	794	2,010	689	1,610	1,070	1,210	400	415	864	316
28	142	167	829	1,990	1,330	1,580	1,170	1,150	360	481	822	675
29	132	174	794	1,930	-	1,480	1,620	1,150	370	517	857	878
30	102	199	766	1,780	---------	1,380	1,790	1,060	370	493	829	787
31	102	--------	717	1,620	---------	1,320	--------	955	--------	470	745	--------
Total	2,950	6,323	19,195	42,242	23,001	43,554	46,010	38,826	18,897	12,558	13,841	12,742
Mean	95.2	211	619	1,363	821	1,405	1,534	1,252	630	405	446	425
(†)	2.36	2.76	2.25	2.30	2.60	2.70	2.81	2.70	2.75	3.32	3.39	2.73
Adjusted for diversion												
Mean	97.5	214	621	1,365	824	1,408	1,536	1,255	633	408	450	427
Cfsm	0.331	0.725	2.11	4.63	2.79	4.77	5.21	4.25	2.15	1.38	1.53	1.45
In.	0.38	0.81	2.43	5.33	2.91	5.50	5.81	4.91	2.39	1.60	1.76	1.62

	Observed						Adjusted					
Calendar year 1957:	Max	1,840	Min	26	Mean	402	Mean	405	Cfsm	1.37	In.	18.65
Water year 1957-58:	Max	2,380	Min	34	Mean	768	Mean	770	Cfsm	2.61	In.	35.45

* Discharge measurement made on this day.

† Diversion for municipal supply of Westerly, equivalent in cubic feet per second. 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 1958.

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.--12 years, 26.7 cfs.

Extremes.--1946-58: Maximum discharge, 464 cfs or 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 1957 to September 1958

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	92.4	2.98	4.61	0.208	0.322	0.37
November	225.1	7.50	11.6	.524	.811	.90
December	707.4	22.8	35.3	1.59	2.46	2.84
Calendar year 1957	4,585.7	12.6	19.5	.881	1.36	18.43
January	1,428.0	46.1	71.3	3.22	4.98	5.74
February	658.9	23.5	36.4	1.64	2.54	2.64
March	1,253.6	40.4	62.5	2.83	4.38	5.05
April	1,369.9	45.7	70.7	3.20	4.95	5.52
May	917.3	29.6	45.8	2.07	3.20	3.69
June	353.7	11.8	18.3	.825	1.28	1.43
July	277.6	8.95	13.8	.626	.968	1.12
August	401.2	12.9	20.0	.902	1.40	1.61
September	377.0	12.6	19.5	.881	1.36	1.52
Water year 1957-58	8,062.1	22.1	34.2	1.55	2.40	32.43

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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 1958.

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.--27 years, 212 cfs.

Extremes.--Maximum discharge during year, 1,450 cfs Apr. 7 (gage height, 7.58 ft); minimum, 10 cfs Oct. 15-17; minimum gage height, 3.36 ft Oct. 2, 3; minimum daily, 10 cfs Oct. 16. 1931-58: 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 7,880 cfs 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 good except those for period of backwater from leaves, 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 1957-58, except periods of ice effect or backwater from leaves (gage height, in feet, and discharge, in cubic feet per second) (Shifting-control method used May 27 to Aug. 12)

Oct. 1 to Dec. 26				Dec. 27 to Sept. 30			
3.3	9.5	4.5	210	3.4	26	4.5	235
3.5	24	5.0	355	3.5	38	5.0	380
3.7	46	5.3	445	3.7	66	6.0	725
4.0	95			4.0	120	7.4	1,330

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	15	129	356	395	532	585	585	186	74	184	44
2	12	20	95	404	359	420	526	438	183	61	108	41
3	12	44	60	281	305	401	459	380	214	61	69	42
4	12	50	47	192	240	417	410	504	193	61	60	32
5	11	*39	36	150	230	*404	380	484	167	57	60	39
6	11	29	28	140	220	395	486	428	148	131	55	39
7	15	22	39	130	222	410	1,300	778	131	98	49	28
8	15	19	40	130	255	374	1,040	865	117	86	49	36
9	14	44	67	130	202	329	*725	725	117	92	45	44
10	13	46	218	125	198	335	550	550	131	67	30	43
11	13	34	424	120	165	356	568	452	129	61	30	54
12	12	29	265	115	146	401	672	410	176	126	38	47
13	12	21	135	110	155	392	690	362	162	102	79	42
14	11	22	101	110	145	459	690	320	138	*90	*82	26
15	11	47	86	260	135	585	585	299	113	88	82	28
16	10	62	80	380	130	522	494	311	92	81	116	39
17	11	45	73	299	145	428	428	314	84	68	77	160
18	12	36	65	240	170	362	386	287	84	61	60	445
19	13	53	65	210	165	347	344	*275	94	57	54	*371
20	19	117	99	190	160	383	317	290	108	43	48	215
21	20	73	433	180	150	386	305	260	104	38	41	140
22	16	49	418	540	145	380	308	222	113	40	43	150
23	14	39	256	760	145	392	407	230	126	*39	42	134
24	14	31	178	550	156	386	428	228	104	61	28	100
25	42	31	135	487	178	414	320	257	90	61	80	87
26	38	30	271	865	205	470	284	504	90	57	150	77
27	20	24	760	960	198	498	250	399	148	129	165	148
28	17	23	466	848	446	459	470	309	159	181	120	410
29	18	29	320	655	-	417	690	268	108	217	91	266
30	14	53	*275	*536	--------	404	725	232	84	190	76	180
31	13	--------	240	466	--------	445	--------	205	--------	177	48	--------
Total	479	1,176	5,904	10,919	5,765	12,903	15,822	12,171	3,893	2,755	2,259	3,507
Mean	15.5	39.2	190	352	206	416	527	393	130	88.9	72.9	117
Cfsm	0.128	0.324	1.57	2.91	1.70	3.44	4.36	3.25	1.07	0.735	0.602	0.967
In.	0.15	0.36	1.81	3.36	1.77	3.97	4.86	3.75	1.19	0.85	0.69	1.08

Calendar year 1957: Max 1,080 Min 10 Mean 125 Cfsm 1.03 In. 14.01
Water year 1957-58: Max 1,300 Min 10 Mean 212 Cfsm 1.75 In. 23.84

Peak discharge (base, 1,100 cfs).--Apr. 7 (5 to 6 p.m.) 1,450 cfs (7.58).

* Discharge measurement made on this day.
Note.--Backwater from leaves Oct. 1 to Nov. 5. Stage-discharge relation affected by ice Jan. 5-15, 18-21, Feb. 3-6, 13-23.

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 1958.

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.--26 years, 130 cfs.

Extremes.--Maximum discharge during year, 1,120 cfs Jan. 23 (gage height, 7.96 ft); minimum, 1.4 cfs Oct. 4 (gage height, 3.00 ft); minimum gage height, 2.93 ft Oct. 8; minimum daily discharge, 3.9 cfs Oct. 1, 3, 4.
1932-58: 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, that of Oct. 4, 1957; 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 or no gage-height record, which are good. Infrequent 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-5		Oct. 5 to May 7				May 8 to Sept. 30			
3.1	3.2	3.0	5.3	3.9	59	3.2	11	4.0	86
3.2	5.0	3.2	10	4.5	160	3.4	20	4.5	174
3.3	7.2	3.4	17	6.0	535	3.6	36	6.5	660
		3.6	29	7.5	950				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.9	8.1	110	340	300	480	405	405	89	21	278	38
2	4.1	10	69	300	258	338	275	300	82	18	109	30
3	3.9	27	52	160	211	325	238	265	90	16	67	25
4	3.9	26	46	130	170	338	207	365	75	15	44	21
5	5.2	*18	40	120	*156	338	176	338	67	19	34	20
6	5.3	13	35	110	149	338	237	338	62	173	26	20
7	6.1	12	39	110	141	350	826	670	54	98	22	33
8	6.9	11	44	105	198	300	648	635	49	66	20	73
9	8.1	20	64	105	155	238	430	522	49	92	17	57
10	7.1	20	188	100	140	240	312	385	53	63	13	47
11	6.5	14	418	100	125	*262	312	298	52	51	13	46
12	6.5	13	209	95	110	272	430	256	78	133	14	36
13	6.5	13	120	90	110	240	492	*201	71	101	72	28
14	6.5	12	103	90	100	270	548	176	71	*71	*57	24
15	6.3	34	88	220	90	380	380	160	55	60	44	20
16	6.3	48	80	275	85	338	300	160	45	51	90	19
17	6.3	38	78	200	80	288	240	160	37	38	67	118
18	6.5	35	65	160	90	245	*204	146	34	29	48	238
19	8.4	38	53	130	85	242	180	141	35	24	36	206
20	11	93	90	110	80	275	158	180	37	21	28	143
21	12	65	466	105	75	262	149	156	37	18	24	109
22	8.1	47	380	550	70	250	162	126	42	16	24	126
23	7.8	40	214	950	68	262	272	126	40	*16	21	96
24	8.4	36	160	560	69	252	250	114	37	16	18	71
25	19	34	128	468	84	300	193	158	32	15	80	59
26	15	32	*232	854	110	380	154	348	33	16	195	51
27	11	33	758	800	112	392	132	216	59	62	180	138
28	9.5	33	350	672	328	300	327	170	42	47	101	460
29	9.2	38	262	520	-	250	535	141	31	84	88	229
30	8.6	52	204	418	-------	215	560	114	25	100	59	152
31	8.1	-------	158	365	-------	260	-------	98	-------	132	47	-------
Total	242.0	913.1	5,303	9,312	3,749	9,220	9,732	7,868	1,563	1,682	1,936	2,733
Mean	7.81	30.4	171	300	134	297	324	254	52.1	54.3	62.5	91.1
Cfsm	0.102	0.399	2.24	3.94	1.76	3.90	4.25	3.33	0.684	0.713	0.820	1.20
In.	0.12	0.45	2.58	4.54	1.83	4.50	4.74	3.84	0.76	0.82	0.95	1.34

Calendar year 1957: Max 980 Min 2.0 Mean 81.2 Cfsm 1.07 In. 14.44
Water year 1957-58: Max 950 Min 3.9 Mean 149 Cfsm 1.96 In. 26.47

Peak discharge (base, 900 cfs).--Dec. 27 (6 a.m.) 1,020 cfs (7.69 ft); Jan. 23 (5:30 a.m.) 1,120 cfs (7.96 ft); Jan. 26 (4:30 p.m.) 950 cfs (7.50 ft); Apr. 7 (7:30 a.m.) 980 cfs (7.58 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 13, Feb. 4, 9-12, 14-21, 23. No gage-height record Jan. 1-22, Mar. 30 to Apr. 2; discharge estimated on basis of recorded range in stage, weather records and records for stations in the Thames River basin.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 552.92 ft above mean sea level, datum of 1929.

Average discharge.--8 years, 9.02 cfs.

Extremes.--Maximum discharge during year, 188 cfs Apr. 6 (gage height, 4.19 ft); minimum, 0.02 cfs Oct. 1-6, 13-17; minimum gage height, 1.73 ft Oct. 1-3, Aug. 12.
1950-58: 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 below 0.1 cfs, which are poor. Slight regulation from unknown source at extreme low flows.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.02	0.15	8.2	25	b13	30	35	15	3.0	0.67	2.4	1.3
2	.02	.50	3.8	b18	b11	20	24	11	3.2	.59	1.4	1.1
3	c.02	1.8	2.2	b8.8	b8.9	19	21	11	3.6	.51	.97	.86
4	c.02	.74	1.8	b7.9	b8.0	b19	17	16	2.8	.51	.67	.67
5	c.02	*.43	b1.4	b4.5	b7.0	18	16	12	2.5	.67	.51	.59
6	c.02	.37	.91	4.2	b6.4	20	50	12	2.2	1.8	.37	.59
7	c.04	.27	1.1	4.2	b5.9	21	78	29	1.9	1.4	.26	.76
8	.06	.32	2.0	b3.8	b7.0	17	35	24	1.8	1.2	.21	1.2
9	.04	3.1	5.4	b3.5	b5.9	b16	20	17	1.8	.97	.17	.86
10	.04	1.6	26	b3.3	b5.1	20	*15	12	1.9	.76	.14	1.4
11	.04	.82	29	b3.1	b4.6	29	16	9.4	2.2	.67	.14	1.8
12	.04	.58	b10	b2.9	b4.2	30	20	8.6	5.4	1.4	.11	1.1
13	c.02	.50	b5.9	b2.8	b3.7	24	31	7.4	3.0	.97	*3.9	.86
14	c.02	.43	4.0	b2.7	b3.5	22	29	6.6	2.5	.67	3.2	.67
15	c.02	2.2	3.6	b12	b3.3	19	18	6.1	1.9	.67	2.5	.59
16	c.02	2.0	3.5	13	b3.5	17	14	7.1	1.6	*.51	3.8	.51
17	c.02	1.4	*b3.3	10	b4.9	13	12	7.4	1.3	.44	2.6	13
18	c.04	1.0	2.7	8.5	4.6	11	11	6.4	1.2	*.35	2.4	23
19	.19	2.2	3.1	b7.5	3.9	12	9.4	5.9	1.3	.26	1.4	*13
20	.16	5.9	5.9	b6.4	3.5	14	8.6	6.4	1.3	.21	.97	6.7
21	.14	3.1	58	5.7	a2.6	12	8.0	5.9	1.4	.14	.67	4.6
22	.12	2.0	20	b26	a2.4	10	8.6	4.7	3.2	.14	.76	5.6
23	.12	1.4	9.8	b40	a2.3	12	16	5.9	2.5	*.59	.59	4.6
24	.14	1.1	7.3	b26	3.5	14	12	5.2	1.8	.59	.44	3.0
25	.74	.91	5.4	22	*4.4	19	9.1	8.2	1.3	.37	11	2.2
26	.27	.82	36	72	5.4	28	7.4	12	1.3	.31	13	1.9
27	.19	.66	51	72	5.4	30	6.6	7.1	1.9	4.1	8.6	20
28	.15	.58	15	*41	b22	25	26	5.7	1.4	2.6	4.7	46
29	.12	1.1	13	24	-	25	22	4.7	1.1	7.7	3.4	13
30	.10	5.0	10	19	-------	25	29	4.1	.86	4.1	2.5	7.3
31	.10	-------	8.2	16	-------	31	-------	3.6	-------	2.4	1.8	-------
Total	3.06	42.98	357.51	515.8	165.9	622	624.7	297.4	63.16	38.23	75.58	178.76
Mean	0.099	1.43	11.5	16.6	5.92	20.1	20.8	9.59	2.11	1.23	2.44	5.96
Cfsm	0.024	0.350	2.82	4.07	1.45	4.93	5.10	2.35	0.517	0.301	0.598	1.46
In.	0.03	0.39	3.25	4.69	1.51	5.68	5.69	2.71	0.58	0.35	0.69	1.63

Calendar year 1957: Max 127 Min 0.001 Mean 4.79 Cfsm 1.17 In. 15.90
Water year 1957-58: Max 78 Min 0.02 Mean 8.18 Cfsm 2.00 In. 27.20

Peak discharge (base, 120 cfs).--Dec. 26 (11 p.m.) 129 cfs (3.77 ft); Apr. 6 (11:15 p.m.) 188 cfs (4.19 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.
c Backwater from leaves and grass.

1210. Mount Hope River near Warrenville, Conn.

Location.--Lat 41°50'37", long 72°10'10", on right 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 1958.

Gage.--Water-stage recorder. Datum of gage is 335.57 ft above mean sea level, datum of 1929.

Average discharge.--18 years, 49.9 cfs.

Extremes.--Maximum discharge during year, 528 cfs Apr. 6 (gage height, 5.45 ft); minimum discharge, 1.5 cfs Oct. 4-6 (gage height, 1.36 ft).
1940-58: 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, and those for period of backwater from leaves, which are poor. Occasional regulation from ponds upstream.

Revisions (water years).--WSP 1331: 1941(M), 1951-53(M).

Rating tables, water year 1957-58, except periods of ice effect and backwater from leaves (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 6

1.3	1.5	2.6	93
1.4	3.3	3.0	150
1.5	6.1	3.5	225
1.6	9.7	4.0	275
1.8	20	5.0	430
2.2	51		

Apr. 7 to Sept. 30

1.4	4.1	2.5	88
1.5	7.2	3.0	160
1.7	16.5	3.5	225
2.0	38		

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

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	2.5	52	170	100	176	165	136	24	8.1	41	12
2	1.7	5.5	26	124	83	116	117	101	33	6.9	23	10
3	1.7	12	b17	b80	b71	110	102	98	44	6.3	15	8.5
4	1.5	8.5	14	b60	b67	129	89	134	33	6.3	12	7.6
5	1.5	*5	b12	b50	b59	126	78	108	26	7.6	8.9	7.2
6	1.7	4	11	b40	b51	123	149	108	28	25	7.2	6.9
7	4	3	13	35	b49	124	344	225	20	20	6.3	8.1
8	4.5	3	18	b32	b63	102	224	211	18	14	5.6	14
9	4	26	34	b30	b49	89	140	163	20	16	5.0	10
10	3.5	14	110	b28	b42	93	115	109	22	12	4.4	12
11	3	8.3	149	b27	b38	105	144	91	24	16	4.4	14
12	2.5	6.1	b68	b26	34	*107	192	79	68	43	4.1	10
13	2	5.5	b46	b26	b32	92	206	*70	36	23	*60	8.1
14	2	5.0	b35	b25	b30	113	193	63	28	15	26	7.2
15	2	24	29	b120	b28	153	134	58	21	14	21	6.6
16	2	17	b26	162	b29	128	*105	68	16	*12	34	6.3
17	2	10	b25	123	b43	100	89	65	14	8.9	29	90
18	3	7.9	b24	91	b39	85	78	56	13	6.9	26	126
19	8.5	20	24	72	b36	89	70	54	16	6.3	16	*70
20	7.5	43	41	61	b34	102	65	61	18	5.0	12	44
21	4.5	20	236	55	b32	93	61	53	18	4.4	8.9	34
22	3	13	124	266	b31	96	74	44	24	4.1	9.8	44
23	2.5	9.7	69	331	b30	113	134	55	20	6.3	8.5	33
24	5	8.6	49	198	b30	117	101	46	16	8.5	6.9	24
25	10	7.5	41	166	b40	130	74	86	12	6.3	74	20
26	5.5	6.8	133	380	*b47	159	61	116	15	4.3	88	18
27	4	5.8	263	*348	50	153	55	68	25	57	63	92
28	3.5	6.1	117	257	187	124	177	53	16	32	36	208
29	3	12	97	182	-	110	201	46	12	88	26	82
30	2.5	30	78	138	-------	100	219	40	9.8	50	18	50
31	2.5	-------	64	120	-------	117	-------	28	-------	34	15	-------
Total	106.5	349.8	2,045	3,823	1,424	3,574	3,956	2,693	689.8	568.2	695.0	1,083.5
Mean	3.44	11.7	66.0	123	50.9	115	132	86.9	23.0	18.3	22.4	36.1
Cfsm	0.118	0.402	2.27	4.23	1.75	3.95	4.54	2.99	0.790	0.629	0.770	1.24
In.	0.14	0.45	2.62	4.88	1.82	4.55	5.06	3.45	0.88	0.73	0.89	1.38

Calendar year 1957: Max 348 Min 0.2 Mean 29.9 Cfsm 1.03 In. 13.95
Water year 1957-58: Max 380 Min 1.5 Mean 57.6 Cfsm 1.98 In. 26.85

Peak discharge (base, 400 cfs).--Dec. 21 (10 a.m.) 410 cfs (4.90 ft); Dec. 26 (11 p.m.) 480 cfs (5.27 ft); Jan. 23 (1:30 a.m.) 430 cfs (5.02 ft); Jan. 26 (6:30 a.m.) 440 cfs (5.03 ft); Apr. 6 (12 p.m.) 528 cfs (5.45 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from leaves on control Oct. 1 to Nov. 8.

1215. Mansfield Hollow Reservoir at Mansfield Hollow, Conn.

Location.--Lat 41°45'22", long 72°10'57", on Natchaug River at Mansfield Hollow, Tolland County, 0.2 mile downstream from Mount Hope River and 3½ miles northeast of Willimantic, Windham County.

Drainage area.--159 sq mi.

Records available.--March 1952 to September 1958.

Gage.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929 (levels by Corps of Engineers).

Remarks.--Reservoir completed in March 1952 for flood control, has usable capacity of 2,260,000,000 cu ft.

Cooperation.--Records furnished by Corps of Engineers.

Month-end elevation and contents, water year October 1957 to September 1958

Date	Elevation (feet)†	Contents (millions of cubic feet)	Change in contents (millions of cubic feet)
Sept.30	198.1	0	-
Oct. 31	199.2	.2	+0.2
Nov. 30	199.9	.8	+.6
Dec. 31	201.1	2.7	+1.9
Calendar year 1957	-	-	+1.2
Jan. 31	207.8	56.8	+54.1
Feb. 28	204.7	22.9	-33.9
Mar. 31	203.3	12.9	-10.0
Apr. 30	205.7	32.0	+19.1
May 31	200.2	1.2	-30.8
June 30	199.5	.4	-.8
July 31	201.0	2.4	+2.0
Aug. 31	199.6	.5	-1.9
Sept.30	200.6	1.8	+1.3
Water year 1958	-	-	+1.8

† Elevation at 12 p.m.

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 1958.
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.--28 years, 302 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 1,990 cfs Jan. 30 (gage height, 6.82 ft); minimum, 5.5 cfs Oct. 1, 2, 4, 5 (gage height, 2.04 ft); minimum daily, 6.0 cfs Oct. 2, 4.
1930-58: 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 from station; minimum, about 0.3 cfs Aug. 6, 1937; minimum daily, 2.3 cfs Sept. 11, 12, 1943.
Remarks.--Records good. 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. Since March 1952, flow regulated by Mansfield Hollow Reservoir (see preceding page).
Revisions (water years).--WSP 1301: 1934-35(M), 1937(M).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from leaves Oct. 9-11, 14, 15, 17, 19-25)

Oct. 1 to Jan. 30				Jan. 31 to Sept. 30			
2.0	3.5	2.6	84	2.1	9.5	3.0	189
2.1	9.5	3.0	197	2.2	18	4.0	590
2.2	18	5.0	1,070	2.4	45	5.0	1,070
2.4	45	7.0	2,110	2.6	83	7.0	2,110

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.3	37	241	531	1,220	950	845	1,020	170	51	390	82
2	6.0	19	188	812	770	780	845	748	180	58	209	*75
3	27	75	126	*588	522	702	*702	581	200	60	119	57
4	6.0	80	105	342	395	658	635	702	190	15	107	33
5	8.0	*45	81	251	387	725	554	725	155	68	*79	35
6	17	61	75	240	355	658	545	658	135	98	73	46
7	9.5	15	74	230	323	635	1,290	870	121	126	24	43
8	11	60	81	230	395	590	1,570	1,100	107	100	57	77
9	21	54	126	b230	b331	504	1,370	1,070	117	100	26	39
10	20	103	333	b220	b284	486	1,070	845	119	103	42	76
11	28	80	745	b210	b236	514	820	635	120	76	38	33
12	7.3	30	588	b200	b199	568	945	536	201	115	26	72
13	8.0	63	294	b200	b209	558	1,040	464	216	130	41	59
14	16	32	243	b190	b188	568	1,100	400	169	*105	*131	27
15	24	79	208	b190	b177	748	995	390	130	87	106	42
16	7.3	95	178	b260	b150	795	790	380	115	78	128	35
17	19	95	153	800	b152	680	660	420	94	72	132	108
18	7.3	77	147	600	b199	540	560	380	87	36	114	502
19	23	72	144	450	206	510	496	360	84	35	102	534
20	24	140	187	400	196	540	435	380	99	54	86	335
21	22	162	532	350	189	550	399	350	102	32	60	215
22	27	113	961	500	183	520	407	300	106	28	36	215
23	20	88	626	700	180	600	558	330	128	41	55	202
24	23	73	390	1,200	177	610	658	300	105	23	28	147
25	24	74	302	1,300	206	640	522	330	90	57	94	120
26	90	22	320	780	*261	650	415	500	74	25	408	107
27	30	71	1,100	550	270	710	343	440	99	97	359	135
28	8.0	37	1,040	994	600	740	488	320	109	186	228	736
29	33	43	722	1,530	-	680	1,100	290	80	209	173	669
30	30	88	574	1,930	--------	680	1,120	230	83	339	126	383
31	8.0	--------	439	*1,720	--------	640	--------	200	--------	253	89	--------
Total	611.7	2,083	11,323	18,728	8,958	19,729	23,277	16,254	3,785	2,857	3,686	5,239
Mean	19.7	69.4	365	604	320	636	776	524	126	92.2	119	175
(†)	+0.1	+0.2	+0.7	+20.2	-14.0	-3.7	+7.4	-11.5	-0.3	+0.8	-0.7	+0.5

Adjusted for change in contents in Mansfield Hollow Reservoir

Mean	19.8	69.6	366	624	306	632	783	512	126	93.0	118	176
Cfsm	0.117	0.412	2.17	3.69	1.81	3.74	4.63	3.03	0.746	0.550	0.698	1.04
In.	0.13	0.46	2.50	4.25	1.88	4.31	5.17	3.49	0.83	0.63	0.80	1.16

	Observed			Adjusted		
Calendar year 1957:	Max 1,420	Min 4.0	Mean 180	Mean 180	Cfsm 1.07	In. 14.45
Water year 1957-58:	Max 1,930	Min 6.0	Mean 319	Mean 319	Cfsm 1.89	In. 25.61

* 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.
Note.--No gage-height record Jan. 12-27, Feb. 27 to Mar. 2, Mar. 17-31, Apr. 16-18, May 14 to June 5, Aug. 18, 19; discharge estimated on basis of recorded range in stage, weather records, records for Mansfield Hollow dam and for other stations in Shetucket River basin.

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 16.5 miles above mouth.

Drainage area.--401 sq mi.

Records available.--April 1904 to December 1905, October 1919 to September 1921, September 1928 to September 1958. 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.--33 years, 705 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 4,030 cfs Apr. 7 (gage height, 7.57 ft); minimum, 26 cfs Oct. 3 (gage height, 1.36 ft); minimum daily, 29 cfs Oct. 2, 13.
1904-5, 1919-21, 1928-58: 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. 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. 142).

Revisions (water years).--WSP 781: 1934(m). WSP 801: 1935. WSP 1201: 1905(M), 1920-21, 1931-32, 1934-35(M), 1937(M).

Rating tables, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 10				Dec. 11 to Sept. 30			
1.3	19	2.5	275	1.8	92	4.0	990
1.6	56	3.5	740	2.0	140	6.0	2,410
2.0	135			2.5	300	8.0	4,500

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	64	534	1,200	1,990	2,230	1,830	2,150	500	173	999	202
2	29	59	421	1,680	1,470	1,680	1,750	1,610	482	163	558	169
3	49	140	282	1,180	1,150	1,540	1,500	1,300	535	162	341	163
4	30	*181	228	790	940	1,500	1,330	1,640	504	115	268	114
5	30	132	187	a600	890	1,580	1,210	1,640	434	163	216	118
6	40	114	166	a560	840	1,500	1,210	1,540	387	451	190	130
7	34	65	178	a520	790	1,500	3,460	2,360	357	417	134	141
8	36	100	195	a520	965	1,360	3,700	2,770	317	317	154	225
9	47	129	284	a520	790	1,150	*2,680	2,520	326	351	113	187
10	47	191	728	a500	765	1,150	2,030	1,870	354	283	111	197
11	51	143	1,660	a480	630	*1,210	1,750	1,470	358	232	107	173
12	31	98	1,180	a470	565	1,300	2,150	1,270	496	420	97	186
13	29	102	690	a450	570	1,270	2,320	1,120	509	414	185	167
14	39	89	547	a440	496	1,330	2,590	990	437	*318	327	108
15	46	163	481	a670	b450	1,830	2,070	915	351	273	286	118
16	30	218	432	a900	b400	1,750	1,680	915	304	246	387	127
17	42	197	*421	a1,400	b450	1,500	1,400	965	252	214	348	338
18	30	163	360	a1,100	b540	1,240	1,240	890	243	157	272	1,120
19	53	175	347	a900	b540	1,180	1,120	*840	255	142	230	*1,150
20	53	364	a450	a800	b520	1,270	1,020	915	273	142	192	790
21	57	352	a1,500	a740	504	1,300	965	865	285	117	162	533
22	62	243	1,950	1,520	488	1,270	990	740	295	103	129	540
23	49	197	a1,250	2,680	480	1,360	1,270	735	325	117	147	503
24	55	166	a800	2,320	472	1,360	1,470	725	291	113	105	379
25	82	162	a650	2,280	545	1,440	1,180	705	242	151	239	317
26	142	118	a900	2,880	695	1,580	965	1,470	226	118	815	283
27	89	140	2,840	*2,680	700	1,750	840	1,180	320	293	820	369
28	48	114	2,100	2,770	1,360	1,610	1,320	890	336	470	534	1,540
29	65	135	1,400	2,870	-	1,470	2,500	765	256	519	426	1,230
30	63	214	1,150	3,070	--------	1,360	2,590	640	220	690	324	790
31	40	--------	940	2,590	--------	1,360	--------	565	--------	584	236	--------
Total	1,530	4,728	25,251	42,080	20,995	44,930	52,130	38,970	10,470	8,451	9,452	12,407
Mean	49.4	158	815	1,357	750	1,449	1,738	1,257	349	273	305	414
(†)	+0.1	+0.2	+0.7	+20.2	-14.0	-3.7	+7.4	-11.5	-0.3	+0.8	-0.7	+0.5
Adjusted for change in contents in Mansfield Hollow Reservoir												
Mean	49.5	158	816	1,377	736	1,453	1,745	1,246	349	274	304	414
Cfsm	0.123	0.394	2.03	3.43	1.84	3.62	4.35	3.11	0.870	0.683	0.758	1.03
In.	0.14	0.44	2.34	3.95	1.92	4.17	4.85	3.58	0.97	0.79	0.87	1.15

	Observed			Adjusted			
Calendar year 1957:	Max 3,590	Min 29	Mean 436	Mean 436	Cfsm 1.09	In. 14.73	
Water year 1957-58:	Max 3,700	Min 29	Mean 744	Mean 744	Cfsm 1.86	In. 25.17	

* 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 weather records and records for other stations in Shetucket River basin.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 221.19 ft above mean sea level, datum of 1929.

Average discharge.--7 years, 64.6 cfs.

Extremes.--Maximum discharge during year, 500 cfs Jan. 26 (gage height, 3.95 ft); minimum, 5.4 cfs Oct. 1-6 (gage height, 1.05 ft).
1951-58: Maximum discharge, 1,400 cfs Aug. 19, 1955 (gage height, 6.48 ft), from rating curve extended above 820 cfs by logarithmic plotting; minimum, 3.9 cfs Aug. 9, 1957; minimum gage height, 1.03 ft Sept. 10, 11, 1953, Aug. 9, Sept. 10, 1957.

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

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 22		Jan. 23 to Feb. 28		Feb. 29 to Sept. 30	
1.0	4.1	1.6	30	1.3	11
1.2	10	2.0	72	1.6	27
1.5	27	2.5	156	2.0	65
2.0	77	3.0	255	2.5	140
2.5	156	4.0	515	3.0	255
3.5	380			4.0	515

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.4	7.7	40	127	120	274	156	192	40	16	209	18
2	5.7	9.7	24	131	100	146	124	136	36	15	76	16
3	5.4	26	18	b73	83	138	105	117	38	14	45	14
4	5.4	*16	15	b57	b67	148	87	188	33	14	33	13
5	5.4	12	b12	b45	*b59	164	77	164	29	16	26	12
6	5.4	10	b12	b37	57	142	124	174	27	60	22	12
7	7.4	8.7	12	b35	54	130	430	292	25	40	19	15
8	8.7	8.7	16	b33	88	111	285	225	24	28	18	27
9	8.7	28	24	b42	b66	93	166	176	25	40	20	21
10	7.7	20	82	b38	b54	87	120	124	26	30	14	20
11	7.4	14	150	b36	b45	86	140	104	28	23	14	21
12	7.4	11	70	b33	b38	85	225	94	35	47	*12	18
13	7.4	9.7	b41	b32	b35	77	225	82	31	36	16	14
14	7.4	9.3	b29	b32	b33	93	220	75	36	26	18	13
15	7.4	26	27	b104	b32	150	156	69	27	26	18	12
16	7.4	25	26	160	b30	136	120	71	23	23	25	12
17	7.7	18	26	125	b37	112	105	71	20	20	23	32
18	8.0	14	b22	b97	b38	93	*92	65	20	*18	20	58
19	17	15	*21	b77	b34	89	84	62	25	16	16	50
20	16	26	27	b65	b32	100	76	63	29	15	14	36
21	10	20	178	b57	b31	105	71	60	26	14	13	28
22	9.0	16	127	257	b30	112	92	52	29	12	16	32
23	8.4	14	65	430	b32	130	152	60	26	13	19	29
24	8.4	12	48	b215	33	140	248	54	22	14	16	23
25	10	11	40	179	43	158	195	62	20	12	52	20
26	12	10	74	430	*57	180	81	120	20	12	78	18
27	9.7	9.7	225	430	54	176	70	80	29	39	55	32
28	9.0	9.3	98	305	271	142	208	65	23	29	35	160
29	8.4	11	81	215	-	117	345	58	19	42	28	85
30	8.0	16	70	167	--------	105	318	51	17	38	24	51
31	7.7	--------	54	143	--------	106	--------	44	--------	70	20	--------
Total	258.9	443.8	1,754	4,207	1,653	3,925	4,897	3,250	808	818	1,014	912
Mean	8.35	14.8	56.6	136	59.0	127	163	105	26.9	26.4	32.7	30.4
Cfsm	0.280	0.497	1.90	4.56	1.98	4.26	5.47	3.52	0.903	0.886	1.10	1.02
In.	0.32	0.55	2.19	5.26	2.06	4.91	6.10	4.06	1.01	1.02	1.27	1.14

Calendar year 1957: Max 476 Min 4.1 Mean 35.5 Cfsm 1.19 In. 16.34
Water year 1957-58: Max 430 Min 5.4 Mean 65.6 Cfsm 2.20 In. 29.89

Peak discharge (base, 400 cfs).--Jan. 23 (7 a.m.) 485 cfs (3.88 ft); Jan. 26 (9 to 11 p.m.) 500 cfs (3.95 ft); Feb. 28 (6 to 7 p.m.) 430 cfs (3.68 ft); Apr. 7 (10 to 12 a.m.) 455 cfs (3.78 ft); Apr. 29 (1 to 2 a.m.) 422 cfs (3.75 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 537.66 ft above mean sea level, unadjusted (levels by Corps of Engineers).

Average discharge.--19 years, 163 cfs.

Extremes.--Maximum discharge during year, 1,040 cfs Apr. 7, 8 (gage height, 5.97 ft); minimum daily, 5.7 cfs Oct. 1, 2, 4.

1939-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.8	5.4	3.5	220
2.0	12	4.0	340
2.2	22	5.0	640
2.5	51	6.0	1,060
3.0	123		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.7	12	83	332	375	351	521	485	132	58	120	38
2	5.7	16	100	354	330	330	506	387	*107	43	82	30
3	6.0	38	69	327	275	289	512	354	109	36	63	26
4	5.7	48	56	280	250	284	491	364	102	33	51	22
5	6.6	36	46	240	225	289	478	356	94	32	*43	35
6	6.6	24	34	175	200	294	519	337	156	36	38	54
7	11	18	28	160	185	294	934	464	142	39	35	34
8	13	17	60	140	185	299	1,020	554	82	41	34	26
9	12	30	57	*175	150	282	870	581	68	56	32	22
10	11	31	156	180	155	282	710	515	65	68	29	25
11	9.2	22	267	160	150	304	640	443	77	67	26	23
12	8.4	18	260	145	145	340	633	395	94	64	23	22
13	8.8	17	257	145	130	381	622	314	86	61	29	21
14	7.8	16	189	135	115	413	596	258	68	*55	33	19
15	7.2	29	152	154	110	443	554	240	54	51	40	*18
16	7.2	40	130	168	105	437	503	242	46	47	46	18
17	7.2	35	118	170	120	395	467	289	40	41	46	54
18	7.2	27	115	166	130	343	431	296	37	36	41	105
19	13	42	125	140	135	330	375	277	40	34	34	128
20	15	78	137	120	130	*317	314	218	43	30	29	125
21	13	76	262	130	125	327	289	179	44	26	26	107
22	11	58	319	215	125	330	279	162	59	24	26	98
23	9.9	46	356	287	123	324	319	168	61	37	23	84
24	11	38	304	312	121	309	335	187	55	55	22	76
25	17	43	220	317	*137	378	314	212	44	61	36	68
26	13	32	256	392	152	384	270	267	47	49	56	60
27	15	26	491	512	155	398	249	270	107	110	134	80
28	*12	18	515	575	228	437	292	244	157	128	136	132
29	11	18	470	548	-	443	440	251	130	171	118	125
30	11	43	398	494	-------	437	512	249	88	193	82	113
31	10	-------	332	437	-------	461	-------	187	-------	181	51	-------
Total	314.3	992	6,362	8,085	4,766	10,925	14,993	9,745	2,414	1,965	1,584	1,788
Mean	10.1	33.1	205	261	170	352	500	314	80.5	63.4	51.1	59.6
Cfsm	0.108	0.353	2.19	2.78	1.81	3.75	5.33	3.35	0.858	0.676	0.545	0.635
In.	0.12	0.39	2.52	3.21	1.89	4.33	5.94	3.86	0.96	0.78	0.63	0.71

Calendar year 1957: Max 661 Min 4.2 Mean 112 Cfsm 1.19 In. 16.12
Water year 1957-58: Max 1,020 Min 5.7 Mean 175 Cfsm 1.87 In. 25.34

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Jan. 4-6, 8-14, 19-22, Feb. 3-22, 27. 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 highway 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 1958.

Gage.--Water-stage recorder. Datum of gage is 341.52 ft above mean sea level, datum of 1929.

Average discharge.--27 years, 277 cfs.

Extremes.--Maximum discharge during year, 1,970 cfs Apr. 7 (gage height, 5.57 ft); minimum, 3 cfs Oct. 6; minimum daily, 4 cfs Oct. 6.
1931-58: 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 good except those for periods of ice effect, no gage-height record, or backwater from aquatic vegetation, 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).

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*11	12	126	642	612	510	790	708	189	*63	168	60
2	10	27	*132	630	540	534	825	588	160	49	106	47
3	9	72	84	600	b420	510	790	522	160	41	80	41
4	9	80	74	b390	b360	*510	776	558	144	36	*72	*38
5	8	70	52	b330	b350	510	741	534	123	34	60	34
6	4	49	49	b278	b292	528	906	498	150	41	52	60
7	15	36	32	265	b274	540	*1,930	755	174	47	47	52
8	18	31	54	b221	288	522	*1,770	860	109	45	45	43
9	19	70	103	b249	b225	492	1,370	860	92	54	45	38
10	17	56	279	b253	b253	504	1,100	755	87	65	41	38
11	14	47	498	b241	b253	558	1,000	642	87	70	41	40
12	11	38	415	b225	b209	624	1,040	570	109	87	36	34
13	9	32	b296	b217	b205	648	1,000	480	103	65	*41	32
14	12	31	278	b225	b185	708	965	390	87	56	45	31
15	10	67	229	257	b189	741	860	350	70	54	58	29
16	10	70	197	270	b160	708	755	355	54	*49	63	29
17	10	70	178	270	b170	630	684	390	49	49	63	131
18	10	56	157	b249	a180	558	624	396	45	38	58	213
19	34	82	168	b233	a200	528	552	366	47	34	49	217
20	24	144	197	b237	a190	540	474	306	52	31	41	193
21	20	123	605	b225	a180	534	432	257	47	29	38	160
22	18	100	600	408	b170	522	414	225	67	26	41	164
23	15	82	564	546	b180	522	498	233	67	32	34	132
24	15	65	480	540	b190	522	504	237	65	54	32	109
25	43	70	372	552	b210	582	462	288	56	67	82	100
26	27	43	510	860	221	630	390	390	56	60	95	84
27	27	52	930	1,070	217	672	330	360	112	150	160	152
28	22	34	790	*1,070	366	690	504	315	132	144	178	274
29	17	40	720	895	-	702	702	301	144	241	154	225
30	*17	70	624	790	--------	696	790	296	100	225	109	185
31	19	--------	540	702	--------	762	--------	245	--------	217	74	--------
Total	504	1,819	10,333	13,940	7,289	18,237	23,978	14,030	2,937	2,253	2,208	2,985
Mean	16.3	60.6	333	450	260	588	799	453	97.9	72.7	71.2	99.5
Cfsm	0.104	0.386	2.12	2.87	1.66	3.75	5.09	2.89	0.624	0.463	0.454	0.634
In.	0.12	0.43	2.44	3.31	1.73	4.32	5.68	3.33	0.70	0.53	0.52	0.71

Calendar year 1957: Max 1,210 Min 4 Mean 175 Cfsm 1.11 In. 15.15
Water year 1957-58: Max 1,930 Min 4 Mean 275 Cfsm 1.75 In. 23.82

Peak discharge (base, 1,000 cfs).--Dec. 26 (10:30 p.m.) 1,040 cfs (4.35 ft); Jan. 27 (12 m.) 1,210 cfs (4.60 ft); Apr. 7 (10 p.m.) 1,970 cfs (5.57 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for stations at Westville and Putnam.
b Stage-discharge relation affected by ice.
Note.--Backwater from aquatic vegetation Oct. 1 to Dec. 21, June 11 to Sept. 30.

1245. Little River at Buffumville, Mass.

Location.--Lat 42°06'57", long 71°53'26", on left bank 0.6 mile upstream from Boston & Albany Railroad bridge, 0.6 mile upstream from mouth, 0.8 mile east of Buffumville, Worcester County, and 1.5 miles west of Oxford.

Drainage area.--27.7 sq mi.

Records available.--July 1939 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 457.00 ft above mean sea level, unadjusted (levels by Corps of Engineers).

Average discharge.--19 years, 47.8 cfs.

Extremes.--Maximum discharge during year, 396 cfs Apr. 7 (gage height, 4.90 ft); minimum, 0.4 cfs Oct. 30; minimum daily, 0.5 cfs Oct. 30.
1939-58: 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 except those for period of no gage-height record, which are fair. Flow regulated by reservoirs and mill above station.

Revisions (water years).--WSP 1201: 1940, 1948.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from leaves Oct. 24-27)

1.95	0.4	2.8	21
2.0	.8	3.0	37
2.1	1.7	3.2	61
2.2	3.0	3.5	108
2.4	6.2	4.0	197
2.6	11	5.0	419

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.3	1.4	15	96	140	74	185	123	38	8.0	22	14
2	4.6	1.9	19	100	123	94	195	122	*33	7.2	20	11
3	3.4	2.6	20	105	105	104	190	117	31	7.0	17	9.4
4	4.5	4.6	19	96	93	108	183	114	29	6.8	15	14
5	7.0	6.4	17	79	85	112	175	111	27	6.6	12	19
6	5.7	6.0	15	60	77	118	185	108	24	7.4	11	21
7	4.3	5.8	15	51	69	125	*334	112	22	7.2	9.4	19
8	4.3	5.6	15	54	66	125	100	117	20	7.0	8.4	16
9	4.6	6.0	16	52	61	122	267	123	18	7.2	8.0	15
10	4.8	5.2	26	49	56	117	366	123	17	6.8	10	15
11	4.8	5.2	96	46	49	125	366	120	18	7.0	13	15
12	4.6	5.2	162	44	45	151	304	114	18	8.6	14	15
13	4.3	5.0	111	40	40	164	249	108	15	8.4	13	14
14	4.3	4.8	82	38	40	173	221	99	13	8.2	13	14
15	4.3	5.3	58	46	37	180	175	85	11	9.4	13	13
16	4.3	5.2	45	49	41	170	138	74	9.4	10	66	13
17	4.4	5.2	36	49	44	150	179	66	11	*11	63	23
18	4.3	3.1	32	48	42	130	144	61	18	11	33	28
19	4.8	2.2	28	46	40	120	120	58	14	11	20	36
20	4.0	2.1	28	42	37	115	104	54	11	9.4	14	42
21	3.8	1.1	54	*38	36	120	91	36	9.7	8.4	11	40
22	3.7	1.1	98	52	34	125	87	39	11	8.0	9.1	37
23	3.6	1.6	112	71	33	130	88	40	9.4	10	7.7	32
24	3.6	7.3	100	87	30	135	90	44	*8.9	12	6.6	29
25	2.4	9.1	83	100	*33	140	90	60	7.9	15	13	26
26	1.7	9.1	71	154	37	150	88	44	9.1	13	16	24
27	6.2	9.1	96	277	38	160	82	75	10	11	21	25
28	*10	9.7	123	306	54	165	88	48	12	12	24	33
29	5.8	10	126	271	-	165	*102	54	10	21	24	49
30	.5	12	116	205	-------	155	120	67	8.9	24	20	54
31	.8	-------	100	166	-------	165	-------	49	-------	23	17	-------
Total	131.7	158.9	1,934	2,917	1,585	4,187	5,106	2,565	494.3	322.6	564.2	715.4
Mean	4.25	5.30	62.4	94.1	56.6	135	170	82.7	16.5	10.4	18.2	23.8
Cfsm	0.153	0.191	2.25	3.40	2.04	4.87	6.14	2.99	0.596	0.375	0.657	0.859
In.	0.18	0.21	2.60	3.92	2.13	5.62	6.86	3.44	0.66	0.43	0.76	0.96

Calendar year 1957: Max 262 Min 0.1 Mean 29.0 Cfsm 1.05 In. 14.21
Water year 1957-58: Max 366 Min 0.5 Mean 56.7 Cfsm 2.05 In. 27.77

* Discharge measurement made on this day.
Note.--No gage-height record Mar. 15 to Apr. 3; discharge estimated on basis of weather records, recorded range in stage, and records for French River at Webster.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 406.74 ft above mean sea level, datum of 1929.

Average discharge.--9 years (1949-58), 170 cfs.

Extremes.--Maximum discharge during year, 1,160 cfs Apr. 8 (gage height, 8.29 ft); minimum daily, 5.2 cfs July 5.
1948-58: 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 smaller reservoirs above station.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 14		Jan. 15 to Sept. 30			
5.2	97	4.44	5.2	5.2	97
5.6	206	4.5	7.3	5.6	218
6.0	330	4.6	12	6.0	362
Note.--Same as following table below 5.2 ft.		4.7	20	7.0	690
		4.9	43	8.0	1,040

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	21	28	240	412	308	536	402	130	70	96	49
2	42	10	91	284	372	330	556	348	*129	70	61	84
3	34	10	76	271	322	344	533	340	118	58	60	68
4	24	53	69	225	294	348	514	344	111	6.6	94	69
5	8.6	46	60	187	272	348	494	294	101	5.2	80	69
6	9.4	40	46	182	243	358	536	294	94	5.5	73	8.1
7	27	23	11	162	222	372	*894	351	58	70	70	7.7
8	46	26	11	b140	200	358	*990	412	71	64	66	66
9	24	12	80	b150	b190	340	798	428	96	65	20	67
10	25	13	86	b135	193	337	788	412	83	68	72	66
11	19	72	187	b105	179	348	760	372	78	65	98	65
12	8.1	49	327	b110	166	382	725	330	74	7.7	79	58
13	7.3	22	247	b125	147	412	669	297	76	21	82	6.6
14	21	25	169	b105	131	455	638	265	25	*84	71	5.5
15	23	32	133	129	112	488	593	232	49	72	59	*63
16	28	8.6	136	139	b110	458	494	214	90	83	37	64
17	24	11	118	b130	b125	418	501	189	74	81	111	75
18	26	73	104	b115	b125	369	473	186	74	75	102	81
19	14	54	91	122	b125	340	428	204	71	9.1	81	152
20	9.1	52	84	147	113	*344	393	196	65	30	74	169
21	24	58	138	*130	112	348	369	182	8.1	86	63	150
22	27	49	268	162	117	344	355	125	27	72	67	148
23	24	8.1	271	243	139	351	362	106	73	79	7.7	129
24	30	7.3	234	272	152	376	358	146	68	72	8.2	120
25	24	76	187	283	141	393	294	200	69	71	83	112
26	8.6	57	190	446	149	409	254	183	69	8.6	73	101
27	7.3	41	265	739	152	446	240	200	65	42	92	97
28	*49	8.6	318	798	216	476	229	175	9.6	88	93	192
29	45	48	311	690	-	464	326	156	11	85	92	233
30	24	13	280	556	--------	446	389	156	79	93	73	222
31	26	--------	240	464	--------	476	--------	153	--------	90	58	--------
Total	737.4	1,018.6	4,856	7,986	5,231	11,986	15,489	7,892	2,145.7	1,796.7	2,203.9	2,796.9
Mean	23.8	34.0	157	258	187	387	516	255	71.5	58.0	71.2	93.2
Cfsm	0.279	0.399	1.84	3.02	2.19	4.54	6.05	2.99	0.838	0.680	0.835	1.09
In.	0.32	0.44	2.12	3.48	2.28	5.23	6.75	3.44	0.94	0.78	0.96	1.22

Calendar year 1957: Max 571 Min 6.6 Mean 94.4 Cfsm 1.11 In. 15.02
Water year 1957-58: Max 990 Min 5.2 Mean 176 Cfsm 2.06 In. 27.96

* Discharge measurement made on this day.
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.

1255. Quinebaug River at Putnam, Conn.

Location.--Lat 41°54'34", long 71°54'48", on left 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 1958. 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.

Average discharge.--29 years, 571 cfs.

Extremes.--Maximum discharge during year, 3,940 cfs Apr. 8 (gage height, 8.59 ft); minimum, 24 cfs Oct. 19 (gage height, 1.77 ft); minimum daily, 34 cfs Oct. 14, 17, 18.
1929-58: 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 periods of no gage-height record, which are good. 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. Records of chemical analyses and water temperatures for the water year 1958 are given in WSP 1571.

Revisions (water years).--WSP 781: Drainage area, 1934(M). WSP 1301: 1931-33(M), 1935(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.8	26	4.0	595
2.0	46	5.0	1,120
2.2	74	7.0	2,570
2.5	128	8.3	3,660
3.0	250		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	47	225	1,030	1,410	1,220	1,840	1,550	424	160	372	148
2	42	50	230	1,160	1,220	1,260	1,840	1,300	386	128	225	143
3	42	74	235	1,000	1,060	1,260	1,800	1,060	382	110	168	129
4	42	101	200	755	855	1,260	1,740	1,190	361	128	223	118
5	40	95	175	662	805	1,260	1,580	1,120	331	92	172	112
6	40	82	146	580	730	1,260	1,660	1,030	331	106	139	112
7	42	71	124	528	685	1,330	*3,390	1,480	340	108	120	104
8	45	64	118	438	662	1,220	3,660	1,740	232	156	130	90
9	45	99	182	528	580	1,160	2,800	1,800	205	202	108	85
10	46	94	390	512	592	1,120	2,420	1,580	195	128	95	108
11	43	82	880	480	568	1,190	2,280	1,330	238	170	152	115
12	40	76	880	462	512	1,330	2,350	1,160	298	168	128	106
13	37	71	708	466	488	1,410	2,350	970	298	130	188	88
14	34	66	576	466	434	1,550	2,200	830	190	114	160	a80
15	35	101	488	588	428	1,740	1,990	730	152	158	162	a75
16	37	110	*434	662	378	1,660	1,740	730	132	*148	150	a75
17	34	104	389	662	382	1,480	1,550	730	152	146	182	a300
18	34	94	347	600	456	1,300	1,440	730	162	142	202	a400
19	36	112	340	556	480	1,190	1,260	730	122	95	149	a450
20	60	205	368	572	473	1,190	1,090	662	178	79	128	a400
21	45	208	832	540	428	1,190	970	592	185	112	115	a350
22	44	188	1,060	780	410	1,160	970	520	143	111	115	a400
23	43	150	1,000	*1,220	434	1,190	1,060	496	155	120	86	340
24	43	116	830	1,220	438	1,220	1,120	480	146	130	68	298
25	64	112	685	1,190	*466	1,330	970	536	139	162	149	286
26	56	104	655	1,910	524	1,480	830	755	155	114	259	240
27	50	108	1,480	2,720	532	1,580	730	685	242	256	307	272
28	47	94	1,410	2,800	847	1,620	940	640	256	274	340	a700
29	44	87	1,300	2,350	-	1,580	1,410	560	242	375	298	a650
30	*43	104	1,090	1,990	-------	1,550	1,660	532	212	410	250	584
31	43	-------	910	1,700	-------	1,620	-------	473	-------	375	192	-------
Total	1,336	3,069	18,687	31,127	17,277	41,910	51,640	28,721	6,984	5,107	5,532	7,358
Mean	43.1	102	603	1,004	617	1,352	1,721	926	233	165	178	245
Cfsm	0.130	0.308	1.82	3.03	1.86	4.08	5.20	2.80	0.704	0.498	0.538	0.740
In.	0.15	0.34	2.10	3.49	1.94	4.70	5.80	3.23	0.79	0.57	0.62	0.83

Calendar year 1957: Max 2,500 Min 31 Mean 347 Cfsm 1.05 In. 14.23
Water year 1957-58: Max 3,660 Min 34 Mean 599 Cfsm 1.81 In. 24.56

Peak discharge (base, 2,000 cfs).--Jan. 27 (11 p.m.) 3,040 cfs (7.60 ft); Apr. 8 (4 to 6 a.m.) 3,940 cfs (8.59 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 at Quinebaug and Jewett City.

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 1958. 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.--21 years, 106 cfs.

Extremes.--Maximum discharge during year, 765 cfs Jan. 27 (gage height, 4.60 ft); minimum, 5.5 cfs Oct. 5; minimum gage height, 0.80 ft Aug. 19-21, Sept. 15, 16; minimum daily discharge, 5.5 cfs Oct. 5.

1937-58: 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 ice effect or backwater from rocks on control, which are good. Flow regulated by dams and reservoirs upstream.

Revisions (water years).--WSP 921: 1938-40. WSP 951: 1938-41.

Rating table, water year 1957-58, except periods of ice effect or backwater from rocks on control (gage height, in feet, and discharge, in cubic feet per second)

0.7	5.2	2.0	143
.8	8.0	2.5	260
1.0	17	3.5	460
1.2	28	4.4	705
1.5	58		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	6.9	26	118	350	244	310	280	94	23	66	30
2	25	7.7	50	137	310	232	320	228	92	8.3	47	42
3	25	14	18	107	260	238	310	195	86	27	36	31
4	31	22	38	76	235	*244	290	222	83	7.4	50	26
5	5.5	8.8	20	51	215	246	270	228	77	19	31	25
6	5.8	7.4	23	46	198	244	280	232	72	27	36	13
7	24	7.2	14	74	188	240	460	290	57	29	30	24
8	6.0	7.2	22	b101	202	228	485	370	59	26	27	38
9	25	27	44	b94	185	220	410	370	73	27	18	38
10	28	23	45	b83	171	215	*350	310	63	25	23	51
11	28	14	124	80	155	212	340	260	61	23	40	52
12	6.0	24	104	b74	141	210	380	235	81	39	9.2	51
13	6.0	7.7	76	b78	137	208	390	179	74	46	42	35
14	27	7.7	51	82	b129	235	400	151	54	44	40	39
15	5.8	37	34	183	122	270	370	149	54	46	30	37
16	6.0	12	40	222	105	270	330	158	64	45	20	26
17	31	14	42	185	91	250	290	161	44	43	23	85
18	26	35	33	165	b121	235	246	154	46	*40	38	110
19	7.2	11	*44	b161	b124	225	225	149	50	35	8.8	95
20	6.3	51	30	152	b115	235	212	152	60	24	36	83
21	27	34	106	148	116	250	208	146	46	20	9.6	59
22	5.8	26	109	254	112	270	200	133	58	23	39	43
23	25	12	73	380	107	270	228	136	63	27	14	*49
24	17	14	63	340	105	260	218	132	51	32	20	56
25	26	35	58	310	117	260	202	118	45	30	44	45
26	6.3	11	59	548	121	280	185	150	29	28	55	48
27	12	34	142	690	106	290	172	134	38	44	*53	63
28	35	12	120	645	184	300	122	123	19	55	55	126
29	7.2	42	111	548	-	280	300	118	26	54	76	94
30	*6.9	13	102	480	-------	270	324	107	42	65	85	77
31	21	-------	91	*400	-------	280	-------	101	-------	54	40	-------
Total	519.6	577.6	1,912	6,992	4,522	7,711	8,827	5,871	1,761	1,035.7	1,141.6	1,591
Mean	16.8	19.3	61.7	226	162	249	294	189	58.7	33.4	36.8	53.0
Cfsm	0.289	0.332	1.06	3.88	2.78	4.28	5.05	3.25	1.01	0.574	0.632	0.911
In.	0.33	0.37	1.21	4.47	2.90	4.93	5.63	3.75	1.13	0.66	0.73	1.02

Calendar year 1957: Max 640 Min 5.5 Mean 65.0 Cfsm 1.12 In. 15.13
Water year 1957-58: Max 690 Min 5.5 Mean 116 Cfsm 1.99 In. 27.13

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from rocks on control Oct. 1 to Jan. 15.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 196.64 ft above mean sea level, datum of 1929.

Average discharge.--26 years, 164 cfs.

Extremes.--Maximum discharge during year, 1,260 cfs Jan. 27 (gage height, 4.76 ft); minimum, 9.8 cfs Oct. 18 (gage height, 1.02 ft); minimum daily, 10 cfs Oct. 9, 10, 13, 14, 18, 20, 21.

1932-58: 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 excellent except those for periods of ice effect, which are good. Low flow completely regulated by mills upstream. Records of chemical analyses for the water year 1958 are given in WSP 1571.

Revisions (water years).--WSP 781: Drainage area. WSP 851: 1933, 1934(M), 1935-37.

Rating table, water year 1957-58, except periods of ice effect and backwater from leaves (gage height, in feet, and discharge, in cubic feet per second)

1.0	9	2.5	255
1.2	18	3.0	435
1.5	44	4.0	875
2.0	117	4.6	1,170

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	20	19	262	399	718	447	672	124	53	551	87
2	11	25	55	342	346	618	499	495	164	53	415	107
3	11	28	70	283	300	507	455	403	123	53	283	67
4	11	24	43	195	255	470	384	427	121	14	211	73
5	11	41	44	147	231	479	325	427	96	12	146	56
6	11	45	35	117	195	463	419	423	92	62	104	24
7	11	18	16	128	195	423	945	582	48	113	75	47
8	12	18	17	162	249	374	875	672	75	83	70	102
9	10	25	69	b142	231	325	614	596	104	81	63	88
10	10	30	98	b145	195	283	443	467	110	53	18	78
11	11	50	255	b97	162	266	443	370	82	69	81	116
12	11	41	249	b119	147	249	569	318	117	51	65	52
13	10	17	195	b150	139	225	650	276	107	59	82	19
14	10	39	140	b126	117	272	718	249	92	84	68	41
15	11	69	69	422	124	370	610	225	106	73	76	94
16	11	17	142	695	132	367	483	219	146	63	61	60
17	11	17	57	641	b104	336	395	231	56	51	121	116
18	10	45	78	455	b115	290	342	222	82	*35	153	127
19	14	67	80	339	b100	283	300	185	94	16	95	133
20	10	46	92	b266	b125	314	262	183	129	31	76	98
21	10	44	224	216	111	353	243	186	39	70	62	88
22	11	64	332	735	79	360	252	189	93	34	82	142
23	23	20	269	1,040	96	370	353	143	116	37	17	99
24	23	14	162	785	110	374	370	192	100	45	29	81
25	30	32	121	628	150	413	318	155	78	24	199	81
26	24	67	197	1,070	143	491	255	336	64	19	240	70
27	16	41	378	1,170	160	564	237	308	78	143	280	42
28	14	16	336	920	458	528	473	255	20	173	232	268
29	16	46	280	718	-	467	875	204	31	272	174	320
30	22	16	237	564	--------	427	898	183	67	249	82	240
31	*22	--------	195	*475	--------	415	--------	88	--------	235	104	--------
Total	430	1,042	4,554	13,554	5,168	12,403	14,452	9,861	2,754	2,425	4,315	3,016
Mean	13.9	34.7	147	437	185	400	482	318	91.8	78.2	139	101
Cfsm	0.166	0.416	1.76	5.23	2.22	4.79	5.77	3.81	1.10	0.937	1.66	1.21
In.	0.19	0.46	2.03	6.03	2.31	5.52	6.44	4.39	1.23	1.08	1.91	1.35

Calendar year 1957: Max 1,140 Min 6.9 Mean 97.6 Cfsm 1.17 In. 15.85
Water year 1957-58: Max 1,170 Min 10 Mean 203 Cfsm 2.43 In. 32.94

Peak discharge (base, 800 cfs).--Jan. 23 (8 a.m.) 1,120 cfs (4.48 ft); Jan. 27 (8 a.m.) 1,260 cfs (4.76 ft); Apr. 7 (12 p.m.) 970 cfs (4.22 ft); Apr. 30 (7 a.m.) 945 cfs (4.17 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 63.07 ft above mean sea level, datum of 1929.

Average discharge.--40 years, 1,252 cfs.

Extremes.--Maximum discharge during year, 7,350 cfs Apr. 8 (gage height, 12.96 ft); minimum, 83 cfs Oct. 1 (gage height, 4.02 ft); minimum daily, 86 cfs Oct. 1.
1918-58: 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. Flow regulated by many ponds and reservoirs upstream, the largest of which are Lake Chaubunagungamaug and Pachaug Pond.

Revisions (water years).--WSP 781: Drainage area. WSP 1301: 1919-26(M).

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 11		Dec. 11 to Apr. 28		Apr. 29 to Sept. 30	
4.0	79	5.8	660	4.8	295
4.2	116	7.0	1,300	5.2	450
4.6	212	9.0	2,780	6.0	860
5.0	337	11.0	4,810	8.0	2,200
6.1	840	12.8	7,070	10.8	4,940

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	*126	362	1,960	3,230	3,530	3,530	4,500	1,190	508	1,960	615
2	99	135	407	2,600	2,870	3,330	3,730	3,760	1,190	414	1,540	*545
3	103	155	384	2,190	*2,510	3,140	3,530	3,060	1,100	370	1,070	495
4	92	137	491	1,720	2,110	3,050	3,330	3,260	950	338	832	590
5	116	151	411	1,270	1,890	3,050	2,960	3,260	920	340	*750	570
6	229	207	381	1,240	*1,780	2,960	2,960	3,060	890	526	590	536
7	247	175	359	1,240	1,640	2,960	5,770	3,760	778	570	504	540
8	256	148	320	1,060	1,820	2,780	7,070	4,390	750	526	450	615
9	241	207	428	1,180	1,610	2,510	*5,900	4,500	750	555	394	531
10	235	190	823	1,210	1,450	2,430	4,700	3,960	695	560	366	575
11	197	215	1,710	1,150	1,390	*2,350	4,370	3,360	722	495	354	615
12	112	235	1,780	1,090	1,270	2,350	4,810	2,970	832	513	370	590
13	99	215	1,480	1,060	1,240	2,430	4,930	2,610	920	575	442	495
14	97	188	1,210	1,060	1,000	2,600	4,930	2,280	890	540	442	454
15	105	229	950	1,630	1,000	3,230	4,370	2,040	722	508	468	490
16	116	313	900	2,600	925	3,330	3,830	1,920	695	500	545	477
17	103	290	*825	2,600	875	3,050	3,330	1,960	615	464	570	590
18	95	290	705	2,190	925	2,690	2,960	1,890	570	414	615	1,010
19	131	403	682	1,860	1,030	2,510	2,690	1,820	590	398	540	1,130
20	108	465	705	1,580	1,060	2,600	2,350	1,750	536	350	459	1,070
21	93	452	1,410	1,450	1,030	2,780	2,190	1,680	615	*366	459	950
22	97	461	2,270	2,730	975	2,780	2,110	1,500	590	326	438	920
23	110	432	1,960	4,800	925	2,870	2,510	1,440	615	320	394	860
24	133	373	1,610	4,150	1,000	2,960	2,690	1,400	555	326	338	778
25	158	337	1,330	3,530	1,060	3,140	2,430	1,400	518	302	580	722
26	137	355	1,300	5,050	1,270	3,330	2,030	2,040	495	302	920	580
27	131	323	2,480	6,300	1,330	3,630	1,820	2,040	550	615	1,160	560
28	118	287	2,600	6,600	2,300	3,530	2,440	1,820	615	890	1,070	1,400
29	114	306	2,350	5,530	-	3,330	4,610	1,640	508	1,250	980	1,680
30	112	334	2,190	4,480	--------	3,140	4,940	1,470	495	1,340	890	1,400
31	118	--------	1,860	3,830	--------	3,140	--------	1,280	--------	1,190	750	--------
Total	4,188	8,134	36,673	80,940	41,515	91,510	109,820	77,820	21,861	16,691	21,240	22,383
Mean	135	271	1,183	2,611	1,483	2,952	3,661	2,510	729	538	685	746
Cfsm	0.190	0.381	1.66	3.67	2.09	4.15	5.15	3.53	1.03	0.757	0.963	1.05
In.	0.22	0.43	1.91	4.23	2.18	4.78	5.75	4.07	1.15	0.87	1.11	1.17

Calendar year 1957: Max 6,090 Min 57 Mean 790 Cfsm 1.11 In. 15.07
Water year 1957-58: Max 7,070 Min 86 Mean 1,460 Cfsm 2.05 In. 27.87

Peak discharge (base, 4,500 cfs).--Jan. 28 (about 2 a.m.) 6,680 cfs (12.47 ft); Apr. 8 (9 to 10 a.m.) 7,350 cfs (12.96 ft); Apr. 30 (2 to 5 p.m.) 5,050 cfs (10.90 ft); May 8 (7 to 9 p.m.) 4,610 cfs (10.50 ft).

* Discharge measurement made on this day.

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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 Susquetenscut Brook, and 4.8 miles upstream from mouth.

Drainage area.--88.6 sq mi.

Records available.--October 1930 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 94.46 ft above mean sea level, datum of 1929.

Average discharge.--28 years, 161 cfs.

Extremes.--Maximum discharge during year, 1,660 cfs Jan. 23 (gage height, 7.10 ft); minimum, 6.0 cfs Oct. 1 (gage height, 0.75 ft); minimum daily, 6.3 cfs Oct. 1, 3-6.
1930-58: 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 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 1957-58, 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			
0.7	5.3	1.2	22	1.1	14	4.0	445
.8	6.8	1.7	48	1.5	36	5.0	740
1.0	13			2.0	81	7.0	1,600
				3.0	225		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.3	11	121	385	345	860	358	530	95	24	257	51
2	6.6	16	81	432	299	500	325	382	80	20	198	38
3	6.3	48	52	265	251	408	279	335	86	18	132	33
4	6.3	55	40	180	205	420	243	420	73	16	87	30
5	6.3	46	36	135	*186	445	210	395	57	54	65	28
6	6.3	*31	25	117	174	445	376	408	58	276	45	26
7	6.6	20	38	b115	166	408	1,040	740	47	224	42	32
8	8.2	16	62	b121	166	345	772	710	46	146	37	60
9	7.4	95	95	135	210	291	458	545	42	148	32	66
10	7.2	85	280	b127	180	*269	345	395	52	119	27	62
11	7.0	45	395	b128	b142	257	392	321	71	74	25	91
12	6.8	37	265	b110	b122	249	620	285	115	105	*23	78
13	6.8	34	151	b100	b110	231	665	251	100	98	48	59
14	6.8	32	97	113	b100	269	605	212	113	76	31	54
15	6.8	99	91	380	b95	382	445	199	89	78	29	*47
16	6.8	109	81	530	b105	382	*358	193	55	64	49	35
17	6.8	59	*95	458	b120	335	301	196	45	46	64	43
18	6.8	46	89	358	b110	301	269	176	42	31	45	70
19	13	60	73	b277	b105	285	243	168	64	35	42	99
20	9.3	101	85	b235	b100	325	211	164	91	34	28	86
21	8.7	70	430	202	b95	370	194	164	68	*28	23	66
22	8.7	54	370	958	b90	345	243	138	67	39	33	89
23	8.7	45	229	1,340	b90	370	370	141	59	58	35	79
24	9.6	40	158	688	110	370	382	135	42	50	26	63
25	12	36	132	662	138	370	295	142	40	68	117	43
26	11	29	301	1,390	175	420	235	315	36	67	241	45
27	12	30	710	1,080	176	445	200	253	35	138	222	67
28	12	26	420	790	854	382	504	184	56	132	250	301
29	11	26	305	620	-	309	755	154	54	278	106	249
30	11	44	241	485	--------	267	770	128	38	162	87	160
31	10	--------	193	408	--------	275	--------	108	--------	132	64	--------
Total	259.1	1,445	5,741	13,344	5,019	11,330	12,463	8,887	1,916	2,838	2,510	2,250
Mean	8.36	48.2	185	430	179	365	415	287	63.9	91.5	81.0	75.0
Cfsm	0.094	0.544	2.09	4.85	2.02	4.12	4.68	3.24	0.721	1.03	0.914	0.847
In.	0.11	0.61	2.41	5.59	2.10	4.75	5.22	3.74	0.80	1.19	1.05	0.94

Calendar year 1957: Max 1,290 Min 4.3 Mean 96.9 Cfsm 1.09 In. 14.84
Water year 1957-58: Max 1,390 Min 6.3 Mean 186 Cfsm 2.10 In. 28.51

Peak discharge (base, 1,000 cfs).--Dec. 26 (11 p.m.) 1,000 cfs (5.67 ft); Jan. 23 (12:30 a.m.) 1,660 cfs (7.10 ft); Jan. 26 (12 m.) 1,440 cfs (6.69 ft); Feb. 28 (2 p.m.) 1,240 cfs (6.32 ft); Apr. 7 (12:30 a.m.) 1,160 cfs (6.13 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

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 1958.

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.--41 years, 195 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 782 cfs Jan. 31 (gage height, 3.44 ft); minimum daily, 7.5 cfs Mar. 12-14, 17-23, Mar. 29 to Apr. 2.
1917-58: Maximum discharge, 7,200 cfs June 18, 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. 238).

Revisions (water years).--WSP 756: Drainage area. WSP 1001: 1931-39. WSP 1231: 1921-23(M), 1925-26.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.39	7.5	2.2	142
1.4	8.1	2.5	240
1.5	15	3.0	480
1.7	38	3.5	830
2.0	92		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	631	638	16	522	316	7.5	13	14	15	325	264
2	18	631	638	16	325	312	7.5	13	*14	16	325	268
3	18	624	631	16	325	312	8.1	13	14	16	325	272
4	151	321	624	16	325	302	8.1	13	14	16	185	272
5	334	14	571	234	402	260	8.1	14	14	16	17	272
6	330	14	480	415	540	208	8.1	14	14	16	17	272
7	325	14	480	420	547	172	8.1	14	14	16	17	272
8	325	14	486	426	540	145	8.1	14	14	16	188	268
9	325	14	492	503	528	123	8.1	14	14	16	272	268
10	320	14	265	638	528	106	8.1	14	14	16	272	268
11	320	136	14	631	540	39	8.1	14	14	16	272	268
12	316	330	14	631	540	7.5	8.1	14	14	*17	272	264
13	316	*330	57	631	540	7.5	8.1	14	14	18	264	264
14	316	330	142	638	528	7.5	8.1	14	14	17	264	264
15	316	147	142	631	522	8.1	8.1	14	14	17	264	264
16	316	15	142	638	516	8.1	8.7	14	14	18	264	264
17	312	150	142	715	490	7.5	9.3	14	14	18	264	256
18	*316	368	142	750	475	7.5	11	14	14	18	260	248
19	316	15	182	743	440	7.5	9.9	14	14	18	260	113
20	320	15	127	750	348	7.5	9.9	14	14	18	260	18
21	320	15	15	750	320	7.5	11	14	14	23	264	16
22	316	15	15	750	320	7.5	11	14	15	178	260	118
23	316	15	15	750	320	7.5	12	14	15	231	260	260
24	441	15	15	750	316	84	12	14	15	325	260	264
25	624	213	15	750	316	131	12	14	15	325	264	268
26	638	624	16	758	316	110	12	14	15	325	264	272
27	631	624	16	604	316	99	12	14	15	325	264	276
28	631	624	16	330	316	46	13	14	15	325	264	340
29	631	624	16	325	-	7.5	13	14	15	325	264	438
30	624	631	16	325	---------	7.5	13	14	15	320	264	366
31	631	--------	16	494	--------	7.5	--------	14	--------	*284	264	--------
Total	11,131	7,527	6,580	16,044	12,061	2,878.7	290.1	430	429	3,320	7,479	7,535
Mean	359	251	212	518	431	92.9	9.67	13.9	14.3	107	241	251
(†)	-259	+13.0	+159	-457	-396	-44.7	+675	+333	+117	+168	-98.1	-144
Adjusted for change in reservoir contents												
Mean	100	264	372	60.5	34.2	48.2	685	347	132	275	143	107
Cfsm	1.20	3.18	4.48	0.729	0.412	0.581	8.25	4.18	1.59	3.31	1.72	1.29
In.	1.39	3.55	5.16	0.84	0.43	0.67	9.21	4.82	1.77	3.82	1.99	1.44

	Observed			Adjusted		
Calendar year 1957:	Max 638	Min 8.7	Mean 179	Mean 193	Cfsm 2.33	In. 31.61
Water year 1957-58:	Max 758	Min 7.5	Mean 207	Mean 215	Cfsm 2.59	In. 35.09

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes.

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 1958.

Gage.--Water-stage recorder. Altitude of gage is 1,150 ft (from topographic map).

Extremes.--Maximum discharge during year, 3,310 cfs Apr. 22 (gage height, 6.06 ft); minimum daily, 55 cfs Mar. 17-20.
1956-58: Maximum discharge, that of Apr. 22, 1958; minimum daily, 41 cfs Sept. 12, 13, 1957.

Remarks.--Records good. Flow regulated by First Connecticut and Second Connecticut Lakes and Lake Francis (see p. 238).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Jan. 3, 4)

1.8	52	3.0	470
2.0	86	3.5	760
2.3	163	4.0	1,140
2.5	234	6.0	3,240

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	*1,330	1,490	187	1,100	1,070	113	481	108	99	748	558
2	67	1,320	1,430	194	658	1,070	130	430	*225	104	688	552
3	67	1,360	1,380	450	658	1,060	140	340	234	197	658	547
4	227	989	1,360	420	652	1,060	151	302	157	142	670	547
5	640	335	1,250	673	733	1,060	183	*284	126	104	754	542
6	634	345	1,020	879	1,070	1,060	242	238	126	124	664	542
7	634	254	1,040	886	1,070	1,060	271	223	120	201	640	547
8	634	208	1,170	879	1,070	1,050	254	238	106	216	754	*558
9	628	332	1,200	988	1,060	1,050	201	380	99	239	1,140	558
10	628	345	899	1,300	1,070	1,050	173	325	88	177	858	558
11	622	461	1,370	1,300	1,080	423	166	263	84	142	736	569
12	622	767	865	1,290	1,080	86	170	450	93	*480	670	586
13	622	*748	560	1,290	1,080	56	173	385	101	320	670	580
14	622	742	492	1,280	1,070	56	230	293	284	216	760	569
15	628	677	470	1,280	1,070	60	265	234	284	157	718	558
16	634	476	425	1,280	1,080	56	524	219	173	230	788	558
17	628	750	400	*1,480	1,080	55	1,120	212	201	700	682	558
18	*628	1,420	345	1,610	1,080	55	1,730	187	201	360	646	592
19	724	574	355	1,600	1,080	55	2,030	180	154	444	640	513
20	1,050	886	450	1,610	972	55	1,460	163	123	1,010	646	148
21	865	547	1,780	1,610	748	56	1,760	148	110	748	622	108
22	767	370	1,460	1,600	748	56	3,010	142	113	523	616	260
23	730	293	586	1,610	*754	58	2,390	130	110	385	604	664
24	989	250	430	1,610	748	139	1,660	123	99	204	586	616
25	1,740	537	350	1,610	748	288	1,420	110	88	166	616	592
26	1,520	1,360	320	1,600	748	284	842	104	97	349	646	616
27	1,430	1,340	380	1,340	754	288	514	95	197	354	604	610
28	1,390	1,380	305	658	823	195	445	86	142	324	592	700
29	1,370	1,410	259	658	-	*73	400	101	108	1,020	574	900
30	1,360	1,570	219	652	---------	90	658	120	93	*1,180	569	872
31	1,340	--------	194	928	--------	106	--------	110	--------	872	564	--------
Total	24,509	23,376	24,254	34,752	25,884	13,180	22,825	7,096	4,244	11,788	21,123	16,678
Mean	791	779	782	1,121	924	425	761	229	141	380	681	556
(†)	-489	+41.5	+341	-845	-762	-287	+1,445	+589	+213	+440	-256	-295

Adjusted for change in reservoir contents

Mean	301	821	1,124	276	163	138	2,206	818	354	821	425	261
Cfsm	1.19	3.23	4.43	1.09	0.642	0.543	8.69	3.22	1.39	3.23	1.67	1.03
In.	1.37	3.61	5.10	1.25	0.67	0.63	9.69	3.71	1.55	3.73	1.93	1.15

	Observed			Adjusted		
Calendar year 1957:	Max 1,840	Min 41	Mean 530	Mean 563	Cfsm 2.22	In. 30.09
Water year 1957-58:	Max 3,010	Min 55	Mean 629	Mean 643	Cfsm 2.53	In. 34.39

* Discharge measurement made on this day.
† Change in contents, quivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes and Lake Francis.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 880.17 ft above mean sea level, datum of 1929.

Average discharge.--28 years, 1,558 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 16,100 cfs Apr. 23 (gage height, 10.88 ft); minimum daily, 279 cfs Oct. 4.
1930-58: 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 periods of ice effect, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes and Lake Francis (see p. 238).

Revisions (water years).--WSP 781: 1934(M). WSP 891: Drainage area.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 22				Apr. 23 to Sept. 30			
3.1	242	7.0	5,850	3.3	341	7.0	6,150
3.5	467	9.0	10,600	3.6	540	9.0	10,600
4.0	910	11.0	16,500	4.0	970	11.0	16,500
5.0	2,270			5.0	2,400		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	288	1,640	2,620	1,400	1,550	1,200	910	3,210	1,320	365	2,000	759
2	283	1,640	2,270	1,240	1,150	1,300	965	2,830	3,340	389	1,630	736
3	283	1,720	2,020	760	950	1,400	954	2,370	*2,580	607	1,370	724
4	279	2,410	1,850	850	1,000	1,400	1,220	2,110	1,830	608	1,270	714
5	545	1,530	1,750	1,000	1,050	1,400	1,580	1,990	1,160	434	1,540	*714
6	780	1,370	1,600	1,300	1,300	1,400	1,980	1,750	1,090	427	1,310	684
7	800	1,130	1,500	1,400	1,400	1,400	2,100	1,650	996	1,890	1,190	736
8	810	910	2,650	1,500	1,400	1,350	1,960	1,780	828	1,430	1,570	840
9	800	1,360	2,560	1,600	1,400	1,350	1,540	2,610	736	1,500	2,500	817
10	790	1,560	2,400	1,800	1,350	1,300	1,380	2,270	655	983	2,050	817
11	790	1,140	5,670	1,700	1,350	1,250	1,410	1,960	635	*840	1,510	996
12	760	1,350	4,030	1,700	1,350	564	1,370	3,770	635	1,830	1,260	996
13	750	1,370	2,100	1,700	1,350	482	1,450	3,380	566	2,760	1,150	905
14	740	*1,320	*1,860	1,700	1,350	427	1,920	2,320	879	1,510	1,350	828
15	730	2,240	1,860	1,700	1,300	427	2,080	1,900	1,310	970	1,260	794
16	750	2,330	1,640	1,700	1,300	421	3,690	1,780	828	1,370	1,430	1,040
17	730	2,000	1,430	*1,900	1,300	414	6,750	1,780	747	4,080	1,240	1,130
18	*750	3,120	1,190	1,950	1,300	408	9,580	1,580	805	2,110	1,130	1,580
19	1,390	2,650	1,430	1,900	1,300	454	11,700	1,740	685	2,080	1,110	2,300
20	2,700	4,180	3,400	1,900	1,250	454	10,600	1,630	548	4,490	1,100	1,230
21	1,980	2,940	11,100	1,900	1,150	421	11,000	1,360	518	3,750	*1,020	736
22	1,450	1,940	10,300	1,900	*1,100	421	14,500	1,200	548	2,160	1,070	983
23	1,270	1,530	5,050	2,000	1,000	408	14,800	1,100	533	1,650	983	1,420
24	1,270	1,310	3,090	2,100	1,000	421	10,600	996	447	1,160	892	1,240
25	2,720	1,170	2,350	2,050	1,000	540	8,640	866	401	1,200	1,090	1,070
26	2,430	1,590	1,860	2,050	1,000	638	5,870	747	414	2,950	1,400	1,100
27	2,030	1,720	3,850	1,850	1,000	710	3,660	724	608	2,930	1,140	1,200
28	1,900	1,860	2,950	1,400	1,000	*770	2,920	625	600	1,770	983	1,240
29	1,800	2,140	2,290	1,150	-	720	*2,760	1,080	447	3,540	866	1,370
30	1,730	2,780	1,800	1,100	--------	760	3,960	1,160	377	4,770	853	1,330
31	1,680	--------	1,500	1,100	--------	900	--------	996	--------	2,830	770	--------
Total	36,008	55,950	91,970	49,300	33,950	25,510	143,789	55,264	26,826	59,183	40,037	31,029
Mean	1,162	1,865	2,967	1,590	1,212	823	4,793	1,783	894	1,909	1,292	1,034
(†)	-489	+41.5	+341	-845	-762	-287	+1,445	+589	+213	+440	-256	-295

Adjusted for change in reservoir contents

Mean	672	1,906	3,308	745	451	536	6,238	2,372	1,107	2,350	1,035	739
Cfsm	0.841	2.39	4.14	0.932	0.564	0.671	7.81	2.97	1.39	2.94	1.30	0.925
In.	0.97	2.66	4.77	1.08	0.59	0.77	8.71	3.42	1.55	3.39	1.49	1.03

	Observed			Adjusted		
Calendar year 1957:	Max 11,100	Min 145	Mean 1,454	Mean 1,487	Cfsm 1.86	In. 25.26
Water year 1957-58:	Max 14,800	Min 279	Mean 1,778	Mean 1,792	Cfsm 2.24	In. 30.43

Peak discharge (base, 10,000 cfs).--Dec. 21 (3 to 8:30 p.m.) 13,100 cfs (9.88 ft); Apr. 23 (4:30 a.m.) 16,100 cfs (10.88 ft).

* 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 Dec. 4-8, 13, 20, Jan. 4 to Mar. 11.

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 1958.

Gage.--Water-stage recorder. Altitude of gage is 920 ft (from topographic map).

Average discharge.--18 years, 480 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 6,540 cfs Apr. 22 (gage height, 8.06 ft); minimum, 65 cfs Oct. 13.

1940-58: 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 periods 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.7	65	5.0	1,480
2.9	115	6.0	2,610
3.2	211	7.0	4,250
3.5	345	8.0	6,400
4.0	645		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	132	400	500	175	120	350	2,650	816	176	492	130
2	84	141	360	430	170	120	330	2,230	1,950	173	375	138
3	92	266	330	400	160	125	310	1,990	1,840	254	310	138
4	84	1,020	300	340	160	130	380	1,590	1,020	215	290	147
5	82	838	270	300	160	140	470	1,460	750	166	286	*141
6	77	542	250	320	160	140	600	1,340	617	154	246	135
7	79	395	260	300	155	135	624	1,430	562	163	223	141
8	87	325	700	285	150	130	568	1,690	456	200	453	160
9	84	562	620	270	145	130	462	2,200	422	350	652	147
10	79	562	560	250	140	130	422	2,060	*385	254	428	163
11	72	417	1,300	230	135	135	456	1,810	395	*302	315	242
12	70	380	1,550	220	135	135	439	2,980	395	638	254	219
13	67	330	1,100	220	130	135	439	2,910	350	722	268	173
14	77	*295	1,000	220	130	135	568	1,980	375	450	295	144
15	77	630	800	220	130	140	729	1,450	380	315	282	141
16	75	876	660	220	130	140	1,180	1,290	305	272	300	177
17	*70	743	580	210	130	135	1,940	1,190	295	335	246	230
18	72	771	490	200	125	135	2,710	1,220	286	264	230	538
19	184	743	450	190	125	135	3,440	1,370	259	254	234	932
20	462	1,040	1,000	185	120	135	3,460	1,380	238	468	211	556
21	264	822	3,200	180	*115	135	3,620	1,160	234	549	190	375
22	178	562	4,350	200	115	135	5,740	988	254	375	180	365
23	141	462	2,270	230	115	135	5,870	838	234	282	173	428
24	158	412	1,450	260	115	140	5,140	729	208	246	157	310
25	412	370	1,130	240	120	140	4,640	638	190	234	231	246
26	305	250	920	220	125	160	3,670	596	197	539	330	227
27	204	230	1,130	210	120	190	2,440	530	234	*876	246	215
28	166	300	980	205	120	*225	*1,880	474	211	582	194	272
29	144	355	850	195	-	260	1,610	575	180	1,100	166	264
30	138	456	680	190	---------	290	2,490	603	170	1,110	150	219
31	138	--------	560	180	--------	350	--------	510	--------	708	138	--------
Total	4,297	15,227	30,500	7,820	3,810	4,820	56,977	43,861	14,008	12,726	8,545	7,713
Mean	139	508	984	252	136	155	1,899	1,415	467	411	276	257
(†)	2.68	2.06	2.51	2.39	2.83	2.50	2.45	2.42	2.55	2.53	2.63	2.73
Adjusted for diversion												
Mean	141	510	986	255	139	158	1,902	1,417	469	413	278	260
Cfsm	0.608	2.20	4.25	1.10	0.599	0.681	8.20	6.11	2.02	1.78	1.20	1.12
In.	0.70	2.45	4.90	1.27	0.62	0.79	9.15	7.04	2.26	2.05	1.38	1.25

	Observed			Adjusted			
Calendar year 1957:	Max 4,350	Min 63	Mean 437	Mean 439	Cfsm 1.89	In. 25.70
Water year 1957-58:	Max 5,870	Min 67	Mean 576	Mean 579	Cfsm 2.50	In. 33.86

Peak discharge (base 2,900 cfs).--Dec. 22 (4 a.m.) 5,350 cfs (7.53 ft); Apr. 22 (7 to 9 p.m.) 6,540 cfs (8.06 ft); Apr. 30 (12 p.m.) to May 1 (1:30 a.m.) 2,940 cfs (6.25 ft); May 12 (7 to 9 p.m.) 3,580 cfs (6.65 ft).

* 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. 26-29, Dec. 1-12, 14-21, 25, 26, Dec. 28 to Apr. 6.

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 1958. 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.--31 years, 2,895 cfs (adjusted to drainage area at present site and for storage).
Extremes.--Maximum discharge during year, 28,600 cfs Apr. 23 (gage height, 20.63 ft); minimum daily, 494 cfs Oct. 3, 5.
1927-58: 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 period of ice effect, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis (see p. 238), 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).

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Fall used as a factor Nov. 25, Dec. 14-17, 30, 31, May 19, 25-27, June 1, 2, 7-12, June 14, to July 16, July 18, 19, 21-26, 28, 29, Aug. 1-8, 10-15, 17-25, Aug. 30 to Sept. 3, Sept. 7, 8, 12-17, 21-25, 28, 29)

7.0	440	12.0	6,300
8.0	1,190	16.0	15,100
10.0	3,230	21.0	29,800

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	528	2,080	3,910	3,360	1,910	1,500	2,400	9,570	2,390	851	4,540	630
2	507	2,080	3,540	3,140	2,260	1,330	2,600	8,270	6,000	882	3,240	*1,030
3	494	2,190	2,860	2,040	2,060	1,760	2,660	7,050	8,710	872	2,520	1,360
4	500	3,150	2,430	1,720	1,730	1,960	2,970	6,010	6,160	1,010	2,390	1,220
5	494	4,320	2,310	1,130	1,630	1,940	3,610	5,450	4,140	1,160	2,340	1,170
6	507	3,080	2,240	1,660	1,460	1,930	4,500	4,870	3,270	774	2,380	1,300
7	730	2,520	2,230	2,210	1,580	2,070	5,110	4,670	2,720	*1,120	2,150	622
8	998	2,310	2,800	2,420	1,910	1,980	5,290	5,170	2,300	2,120	1,970	1,070
9	1,090	2,050	4,400	2,410	1,970	1,810	4,380	6,900	*1,800	2,070	3,390	1,460
10	1,050	2,260	4,140	2,380	1,700	1,820	3,630	7,320	1,470	2,280	3,800	1,400
11	1,020	2,430	*7,150	2,370	1,550	1,900	3,560	6,300	1,530	1,780	3,040	1,500
12	1,010	2,190	9,020	2,360	1,550	2,040	3,480	9,150	1,940	2,060	*2,440	1,680
13	902	2,050	6,750	2,410	1,700	1,670	3,330	10,600	1,840	3,710	2,060	*1,440
14	862	2,210	4,720	2,420	1,750	1,280	4,030	8,350	1,640	3,920	2,130	857
15	*894	*2,340	3,910	*2,420	1,750	1,130	4,520	6,160	1,770	2,680	2,230	1,120
16	894	4,200	3,740	2,450	1,600	810	6,120	4,900	1,760	1,990	2,240	1,520
17	950	4,040	3,350	2,520	1,350	790	10,700	4,640	1,610	2,680	1,730	1,640
18	958	4,200	2,780	2,590	1,600	942	13,800	4,480	1,430	4,210	1,800	1,880
19	1,370	4,780	2,380	2,630	1,600	942	17,100	4,520	1,610	2,930	1,900	2,940
20	2,390	5,170	3,170	2,640	1,500	910	19,200	4,970	1,480	3,740	1,880	3,460
21	3,150	6,030	11,500	2,480	1,600	1,160	11,700	4,260	1,170	5,860	1,820	2,110
22	2,550	4,430	19,500	2,520	1,550	1,380	22,200	3,690	1,160	4,670	1,480	1,680
23	2,130	3,320	18,100	2,850	1,200	792	*27,100	3,130	696	3,150	1,510	1,930
24	1,850	2,800	11,500	2,980	1,250	745	27,000	2,670	1,110	2,580	1,120	2,170
25	2,050	2,510	7,090	2,930	1,300	934	23,100	2,540	1,110	2,270	1,440	2,210
26	3,000	2,280	5,240	2,880	1,300	*1,150	19,200	2,460	924	2,080	1,930	1,860
27	2,880	1,750	6,210	2,980	1,250	1,660	13,800	2,170	1,010	5,000	2,170	1,700
28	2,530	2,110	7,200	2,990	1,400	1,840	9,060	1,930	1,530	5,040	1,880	1,670
29	2,370	2,850	5,740	2,540	-	1,800	7,330	2,040	878	4,480	1,580	1,700
30	2,300	3,390	4,570	2,200	--------	1,900	8,770	2,270	861	7,390	1,510	1,960
31	2,180	--------	3,840	1,970	--------	2,200	--------	2,420	--------	6,730	1,100	--------
Total	45,138	91,120	178,320	76,600	45,010	46,075	300,250	158,930	66,019	92,089	67,710	48,289
Mean	1,456	3,037	5,752	2,471	1,608	1,486	10,010	5,127	2,201	2,971	2,184	1,610
(†)	-489	+41.5	+341	-845	-762	-287	+1,445	+589	+213	+440	-256	-295
Adjusted for change in reservoir contents												
Mean	967	3,079	6,093	1,626	846	1,199	11,453	5,716	2,413	3,411	1,928	1,315
Cfsm	0.639	2.03	4.02	1.07	0.559	0.792	7.56	3.78	1.59	2.25	1.27	0.869
In.	0.74	2.27	4.64	1.24	0.58	0.91	8.44	4.35	1.78	2.60	1.47	0.97

	Observed			Adjusted		
Calendar year 1957	Max 19,500	Min 154	Mean 2,623	Mean 2,656	Cfsm 1.75	In. 23.82
Water year 1957-58	Max 27,100	Min 494	Mean 3,330	Mean 3,344	Cfsm 2.21	In. 29.99

Peak discharge (base, 16,500 cfs).--Dec. 22 (8:30 to 9:30 p.m.) 20,200 cfs (17.91 ft); Apr. 23 (11 to 11:30 p.m.) 28,600 cfs (20.63 ft).

* 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 Feb. 10 to Mar. 1.

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 1958. 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.--16 years, 101 cfs.

Extremes.--Maximum discharge during year, 1,260 cfs Apr. 22 (gage height, 4.96 ft); minimum, 24 cfs Oct. 12-18.
1939-45, 1948-58: 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 periods of ice effect, which are fair.

Revisions.--WSP 1141: Drainage area.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	24	2.0	163
1.0	30	3.0	415
1.2	47	4.0	780
1.5	80	4.5	1,010

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	39	98	132	60	41	100	222	222	62	83	34
2	28	41	84	110	58	41	97	203	580	60	68	32
3	28	57	75	95	54	42	97	177	271	109	60	*30
4	28	106	65	85	52	44	123	181	173	68	67	29
5	27	77	62	90	54	46	147	163	136	57	65	30
6	26	64	65	110	54	45	161	147	125	54	54	29
7	27	55	80	98	52	43	155	143	112	61	68	42
8	28	52	200	90	50	42	136	175	103	*105	159	47
9	27	116	120	86	48	42	109	238	*98	103	111	39
10	26	83	*130	82	47	42	106	173	94	71	79	55
11	25	64	400	80	46	44	117	221	103	179	63	51
12	24	54	179	75	45	45	117	330	98	255	55	46
13	24	52	135	82	45	44	132	222	86	221	54	39
14	24	51	110	*80	45	44	153	171	112	120	55	39
15	24	174	95	82	44	46	190	147	90	93	52	36
16	*24	*123	90	75	45	45	342	163	79	177	54	91
17	24	134	84	72	45	44	517	151	80	174	47	74
18	24	125	80	65	43	44	660	145	77	103	56	145
19	159	132	90	60	*42	45	656	181	68	183	60	117
20	112	194	330	63	41	45	559	151	66	285	52	74
21	67	127	819	67	40	44	743	145	74	183	47	58
22	52	103	386	80	39	44	995	125	96	123	55	138
23	45	91	238	120	39	44	*764	123	74	102	47	97
24	56	84	185	90	39	46	559	114	63	90	42	64
25	83	77	150	84	42	46	469	104	60	*77	90	54
26	60	57	165	80	41	49	330	102	80	100	81	52
27	52	71	380	75	39	*59	260	93	81	98	57	52
28	46	80	208	70	40	68	248	87	85	86	47	66
29	42	92	165	67	-	80	248	153	56	187	42	54
30	41	114	139	65	-------	88	278	122	59	141	38	47
31	41	-------	127	63	-------	98	-------	106	-------	106	35	-------
Total	1,322	2,689	5,534	2,573	1,289	1,540	9,568	4,978	3,481	3,859	1,943	1,761
Mean	42.6	89.6	179	83.0	46.0	49.7	319	161	116	124	62.7	58.7
Cfsm	0.792	1.67	3.33	1.54	0.855	0.924	5.93	2.99	2.16	2.30	1.17	1.09
In.	0.91	1.86	3.83	1.78	0.89	1.06	6.61	3.44	2.41	2.67	1.34	1.22

Calendar year 1957: Max 819 Min 21 Mean 92.4 Cfsm 1.72 In. 23.31
Water year 1957-58: Max 995 Min 24 Mean 111 Cfsm 2.06 In. 28.02

Peak discharge (base, 800 cfs).--Dec. 21 (9:30 a.m.) 1,080 cfs (4.63 ft); Apr. 18 (9:30 p.m.) 942 cfs (4.36 ft); Apr. 22 (3 a.m.) 1,260 cfs (4.96 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26-28, Dec. 2-11, 13-20, 25, 26, Jan. 2 to Mar. 28.

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 1958.

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.--11 years, 140 cfs.

Extremes.--Maximum discharge during year, 2,180 cfs Dec. 21 (gage height, 9.62 ft); minimum, 11 cfs Oct. 10-12.
1947-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.7	10	5.0	225
3.0	20	6.0	443
3.5	50	7.0	765
4.0	92	9.0	1,750
4.5	150		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	28	125	140	48	33	166	452	152	51	108	19
2	15	28	98	125	46	33	173	362	724	40	73	17
3	15	37	81	110	45	34	156	279	835	69	58	*14
4	15	167	63	90	43	36	200	255	372	51	49	14
5	14	142	57	85	43	40	260	244	203	34	53	13
6	14	95	55	90	42	40	331	203	154	28	40	13
7	13	70	63	85	41	38	320	202	125	33	35	13
8	13	57	224	78	40	36	281	232	105	*79	178	17
9	13	98	250	73	39	36	205	422	96	148	203	19
10	12	109	182	68	38	36	176	410	*83	69	103	22
11	11	75	449	64	37	37	198	287	102	101	66	37
12	11	57	600	62	36	39	184	501	150	263	49	30
13	12	50	423	60	35	38	189	496	108	310	43	24
14	12	49	270	58	35	38	261	304	101	127	62	21
15	*12	*224	190	*58	35	39	269	223	90	133	46	20
16	12	355	153	58	35	38	476	210	69	80	38	33
17	12	242	135	56	35	38	841	216	64	103	31	83
18	12	267	110	54	34	38	1,280	190	64	63	29	127
19	71	223	100	50	*33	39	1,480	197	55	152	33	190
20	162	353	228	47	32	40	1,180	194	48	339	32	89
21	80	291	1,340	45	31	39	1,240	162	49	232	28	60
22	51	178	1,480	50	31	39	1,680	138	104	111	26	173
23	38	136	638	70	31	40	1,480	120	85	80	24	160
24	37	113	365	80	32	42	1,180	106	56	68	21	82
25	96	98	230	65	33	46	940	96	44	52	46	59
26	73	71	210	61	33	*50	676	96	46	67	99	56
27	51	49	406	58	33	70	416	85	60	61	60	55
28	41	59	383	55	33	90	328	76	48	59	39	85
29	36	80	253	53	-	105	*333	118	36	*306	29	72
30	32	144	185	52	-------	130	479	131	35	431	23	54
31	29	-------	150	50	-------	160	-------	102	-------	202	20	-------
Total	1,030	3,945	9,496	2,150	1,029	1,557	17,378	7,109	4,263	3,942	1,744	1,651
Mean	33.2	132	306	69.4	36.8	50.2	579	229	142	127	56.3	55.0
Cfsm	0.441	1.76	4.07	0.923	0.489	0.668	7.70	3.05	1.89	1.69	0.749	0.731
In.	0.51	1.95	4.70	1.06	0.51	0.77	8.59	3.52	2.11	1.95	0.86	0.82

Calendar year 1957: Max 1,480 Min 7.4 Mean 131 Cfsm 1.74 In. 23.60
Water year 1957-58: Max 1,680 Min 11 Mean 151 Cfsm 2.01 In. 27.35

Peak discharge (base, 1,000 cfs).--Dec. 21 (9 to 10:30 p.m.) 2,180 cfs (9.62 ft); Apr. 19 (8 to 9 a.m.) 1,650 cfs (8.84 ft); Apr. 22 (11 a.m.) 1,830 cfs (9.12 ft); June 2 (10 to 11:30 p.m.) 1,140 cfs (7.86 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26, 27, Dec. 2-6, 14, 15, 17-19, 24-26, Dec. 30 to Mar. 30.

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 1958.

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.--30 years, 222 cfs.

Extremes.--Maximum discharge during year, 3,240 cfs Apr. 22 (gage height, 4.09 ft), from rating curve extended above 1,700 cfs; maximum gage height, 5.33 ft Jan. 13 (backwater from ice); minimum discharge, about 15 cfs about Oct. 13.
1928-58: 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, 6.5 cfs Sept. 17, 18, 1948, Aug. 27, 28, 1949.

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

Revisions (water years).--WSP 1331: 1929-30, 1931-34(M). WSP 1381: Drainage area.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	13	3.2	265
1.7	23	3.5	470
2.0	45	3.6	600
2.5	94	3.7	870
2.9	165	4.1	3,300

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	44	175	240	88	60	376	666	228	74	166	26
2	25	48	135	210	86	60	383	500	962	64	111	21
3	23	65	100	130	81	64	376	411	316	67	82	*19
4	23	203	75	82	80	67	443	376	583	79	69	18
5	21	203	68	56	79	72	500	348	328	54	66	18
6	21	138	110	90	77	72	600	292	241	43	59	17
7	20	104	125	100	76	68	666	304	*192	43	50	17
8	19	85	300	96	74	66	552	374	165	*67	205	18
9	19	115	450	95	72	66	425	644	150	173	330	21
10	17	154	310	95	70	66	383	599	136	113	174	35
11	16	111	540	94	67	70	411	477	144	131	106	52
12	16	85	600	94	65	72	418	666	184	300	77	46
13	17	75	*496	100	64	70	418	644	162	404	61	38
14	17	*75	355	99	64	70	490	472	140	241	67	33
15	17	262	265	93	64	72	510	355	134	126	68	29
16	*17	434	230	*99	64	70	806	327	102	106	53	29
17	17	341	205	95	63	70	1,310	327	92	144	45	68
18	18	341	154	90	62	70	2,020	292	88	106	43	119
19	68	309	163	85	61	71	2,780	298	80	112	46	252
20	207	425	360	82	58	72	1,680	292	72	412	48	139
21	124	396	1,350	78	57	72	1,480	245	77	388	47	86
22	79	254	1,930	88	*57	72	2,840	212	148	*195	39	153
23	61	192	770	120	58	75	2,840	187	140	122	34	233
24	59	163	520	140	59	80	1,810	168	90	97	29	126
25	105	146	400	120	60	90	*1,630	157	73	77	50	85
26	106	93	329	110	60	110	1,040	152	71	70	117	74
27	76	67	568	105	60	*160	*644	134	83	83	88	78
28	63	82	510	100	60	210	536	118	76	77	57	108
29	56	115	397	96	-	240	568	170	58	393	43	104
30	50	182	292	93	-------	280	688	195	60	532	36	77
31	47	-------	230	90	-------	348	-------	161	-------	397	30	-------
Total	1,452	5,307	12,512	3,271	1,886	3,105	29,623	10,563	5,975	5,190	2,494	2,139
Mean	46.8	177	404	106	67.4	100	987	341	199	167	80.5	71.3
Cfsm	0.366	1.38	3.16	0.828	0.527	0.781	7.71	2.66	1.55	1.30	0.629	0.557
In.	0.42	1.54	3.64	0.95	0.55	0.90	8.61	3.07	1.74	1.51	0.72	0.62

Calendar year 1957: Max 1,930 Min 12 Mean 178 Cfsm 1.39 In. 18.90
Water year 1957-58: Max 2,840 Min 16 Mean 229 Cfsm 1.79 In. 24.27

Peak discharge (base, 1,700).--Dec. 22 (3 to 5 a.m.) 2,720 cfs (4.01 ft); Apr. 19 (11 a.m.) 3,170 cfs (4.08 ft); Apr. 22 (12:30 to 1 p.m.) 3,240 cfs (4.09 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 1-15, Jan. 28, 30, Feb. 1, 3-21; discharge estimated on basis of weather records and records for station at Victory. Stage-discharge relation affected by ice Nov. 26-29, Dec. 1-11, 14, 16, 20, 21, 23, 25, Dec. 31 to Mar. 30.

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 1958. October 1928 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Altitude of gage is 490 ft (from topographic map).

Average discharge.--30 years, 729 cfs.

Extremes.--Maximum discharge during year, 7,290 cfs Apr. 22 (gage height, 11.77 ft); maximum gage height, 12.37 ft Dec. 21 (ice jam); minimum daily discharge, 91 cfs Oct. 12.
1928-58: 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 below 100 cfs, which are good, and those for periods of ice effect or no gage-height record, 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	84	3.0	535
1.9	132	5.0	1,880
2.2	193	8.0	4,130
2.5	292	12.0	7,500

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	159	188	620	894	420	310	1,150	1,770	1,050	418	538	190
2	130	192	480	865	400	310	1,230	1,500	4,320	326	394	180
3	148	275	400	740	370	310	1,150	1,330	2,850	340	332	170
4	143	633	340	650	350	340	1,500	1,360	1,510	382	306	165
5	130	591	310	500	370	360	1,700	1,230	1,030	295	338	155
6	109	409	290	500	360	350	1,900	1,070	*837	247	279	*141
7	170	326	340	570	350	330	2,080	1,080	735	266	254	122
8	130	271	995	530	340	330	1,720	1,360	640	458	740	202
9	133	500	941	500	330	320	1,280	1,980	634	772	874	178
10	126	536	757	450	320	320	1,150	1,530	569	*504	534	208
11	138	353	2,270	430	310	340	1,300	1,460	634	500	374	263
12	91	310	1,680	420	310	360	1,510	2,620	747	1,360	295	221
13	120	273	*1,050	410	310	350	1,400	1,920	623	1,700	268	*194
14	*130	264	860	*410	300	350	1,690	1,400	601	847	291	177
15	117	992	730	400	300	350	1,810	1,140	590	545	286	178
16	121	*1,140	640	400	300	350	2,780	1,160	460	476	243	171
17	112	880	560	400	300	350	3,980	1,170	461	826	228	374
18	116	910	570	380	*300	360	5,030	998	440	533	229	556
19	466	825	500	360	290	360	5,540	1,110	387	624	267	969
20	739	1,260	1,600	350	290	370	4,590	1,070	369	1,590	252	478
21	444	995	5,600	350	280	360	4,750	942	336	1,240	226	330
22	263	686	4,620	420	280	360	6,830	844	647	722	218	618
23	238	553	2,210	800	290	361	6,220	711	568	518	210	726
24	247	513	1,590	700	300	412	4,920	681	415	446	200	443
25	407	477	1,190	580	320	430	3,640	623	355	392	350	326
26	348	328	1,090	500	320	469	2,710	618	345	393	500	291
27	274	270	2,240	520	310	*635	1,930	562	450	418	330	291
28	255	294	1,570	510	310	772	*1,830	508	424	403	250	394
29	219	423	1,240	490	-	872	2,030	814	284	*1,190	230	376
30	213	645	994	470	--------	970	2,170	798	321	1,280	210	286
31	196	--------	865	450	--------	1,110	--------	640	--------	798	200	--------
Total	6,632	16,310	39,142	15,949	9,030	13,571	81,320	35,999	23,632	20,809	10,246	9,373
Mean	214	544	1,263	514	322	438	2,711	1,161	788	671	331	312
Cfsm	0.491	1.25	2.90	1.18	0.739	1.00	6.22	2.66	1.81	1.54	0.759	0.716
In.	0.57	1.39	3.34	1.36	0.77	1.16	6.94	3.07	2.02	1.77	0.87	0.80

Calendar year 1957: Max 5,600 Min 79 Mean 631 Cfsm 1.45 In. 19.64
Water year 1957-58: Max 6,830 Min 91 Mean 773 Cfsm 1.77 In. 24.06

Peak discharge (base, 5,000 cfs).--Dec. 21 (3:30 p.m.) 7,060 cfs (11.51 ft); Apr. 19 (4:30 a.m.) 6,050 cfs (10.39 ft); Apr. 22 (12 m. to 1 p.m.) 7,290 cfs (11.77 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Dec. 15-17, Aug. 24 to Sept. 5; discharge estimated on basis of weather records, recorded range in stage when available, and records for stations on nearby streams. Stage-discharge relation affected by ice Nov. 27, Dec. 1-7, 13-21, Jan. 3 to Mar. 22.

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 1958.

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.--19 years, 211 cfs.

Extremes.--Maximum discharge during year, 6,110 cfs Dec. 21 (gage height, 8.98 ft); minimum, 33 cfs Oct. 13-19.
1939-58: 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 1957-58, 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	8.0	4,530

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	68	143	260	105	63	108	860	383	84	130	39
2	38	75	110	217	101	63	108	830	798	73	106	*38
3	39	168	91	145	92	62	101	625	527	71	94	38
4	38	458	80	110	83	65	114	552	359	65	85	37
5	37	278	74	120	89	63	143	548	297	60	83	37
6	36	185	70	150	85	63	179	*492	273	58	74	36
7	37	147	100	165	85	62	174	583	*231	*58	69	36
8	37	128	270	155	88	61	163	992	206	75	100	36
9	37	427	*180	145	80	60	128	1,260	193	126	140	35
10	36	243	300	125	79	60	117	712	178	76	94	38
11	36	168	1,150	130	77	64	131	891	179	96	75	50
12	34	*142	368	115	76	66	120	2,120	172	165	65	70
13	33	131	220	*125	76	64	127	902	154	228	60	53
14	*33	123	190	125	75	63	164	590	178	114	59	47
15	34	472	170	130	74	65	217	492	150	88	65	45
16	33	*318	155	120	75	63	444	470	133	94	71	42
17	33	248	145	110	76	62	842	449	148	140	58	44
18	33	224	*120	100	*73	60	1,320	650	138	89	110	70
19	167	241	160	90	72	58	1,410	1,160	122	89	94	140
20	250	378	1,400	92	71	60	1,290	846	112	234	70	110
21	127	248	3,620	95	70	59	2,500	656	111	189	59	70
22	85	193	961	105	70	59	3,390	479	117	122	55	95
23	71	168	506	*160	69	58	3,200	428	105	101	51	100
24	131	155	401	140	68	57	2,160	359	95	95	47	80
25	361	135	300	115	67	*57	2,080	359	89	134	64	65
26	148	105	420	130	65	58	1,060	380	91	*170	69	57
27	108	74	1,580	200	*64	80	618	328	96	154	55	55
28	91	130	520	150	63	89	544	330	85	125	49	63
29	82	147	374	130	-	92	678	513	78	306	45	80
30	75	155	303	119	--------	102	1,840	374	78	260	43	65
31	71	--------	258	110	--------	116	--------	311	--------	172	41	--------
Total	2,410	6,132	14,739	4,183	2,168	2,074	25,470	20,541	5,876	3,911	2,280	1,771
Mean	77.7	204	475	135	77.4	66.9	849	663	196	126	73.5	59.0
Cfsm	0.887	2.33	5.42	1.54	0.884	0.764	9.69	7.57	2.24	1.44	0.839	0.674
In.	1.02	2.60	6.26	1.78	0.92	0.88	10.81	8.72	2.49	1.66	0.97	0.75

Calendar year 1957: Max 3,620 Min 26 Mean 178 Cfsm 2.03 In. 27.60
Water year 1957-58: Max 3,620 Min 33 Mean 251 Cfsm 2.87 In. 38.86

Peak discharge (base, 2,700 cfs).--Dec. 21 (10:30 a.m.) 6,110 cfs (8.98 ft); Dec. 27 (2 a.m.) 3,020 cfs (6.83 ft); Apr. 22 (1 a.m.) 4,100 cfs (7.69 ft); Apr. 30 (3:30 a.m.) 2,960 cfs (6.78 ft); May 12 (1 a.m.) 3,360 cfs (7.12 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Sept. 4-30; 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. 11, 12, 25-28, Dec. 2-10, 13-20, 25, 26, Jan. 3-29, Feb. 5-22, Mar. 1-5, 9-28.

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 1958.

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.--23 years, 678 cfs.

Extremes.--Maximum discharge during year, 13,800 cfs Dec. 21 (gage height, 11.24 ft); minimum daily, 74 cfs Oct. 7.
1935-58: 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 periods of ice effect of no gage-height record, which are fair. Diurnal fluctuation at low flow caused by small powerplants above station.

Revisions.--WSP 871: Drainage area.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 20				Dec. 21 to Sept. 30			
1.4	73	4.0	1,080	1.1	84	5.0	1,980
1.5	87	5.0	1,900	1.5	157	6.0	3,100
2.0	187	6.0	3,100	2.0	275	8.0	6,300
2.5	335	7.0	4,600	3.0	630	10.0	10,700
3.0	545			4.0	1,190		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	105	162	581	1,180	370	260	1,080	2,460	1,180	200	370	100
2	103	164	400	1,250	360	260	*1,180	2,110	4,220	196	272	102
3	95	302	305	600	330	260	1,140	1,780	3,100	153	244	105
4	110	1,170	300	450	300	280	1,320	1,690	a1,500	157	189	*105
5	90	930	230	440	320	300	1,460	1,610	*1,050	153	180	97
6	105	600	200	600	320	290	1,710	1,390	880	143	178	100
7	74	437	280	650	310	280	2,070	1,520	750	141	145	98
8	101	360	760	550	320	270	1,740	2,140	665	174	220	102
9	110	1,020	710	520	300	270	1,230	4,100	616	*323	449	98
10	97	800	700	470	290	270	1,160	2,590	560	252	320	107
11	97	518	3,700	490	280	300	1,210	2,080	590	212	236	135
12	93	390	1,850	450	280	340	1,170	4,950	560	492	180	168
13	100	349	960	470	280	320	1,310	3,380	497	715	163	139
14	90	318	750	470	280	320	1,490	2,240	500	422	157	126
15	95	1,130	680	500	270	320	1,960	1,780	500	283	129	120
16	89	1,170	600	450	280	310	3,010	1,690	396	239	137	113
17	84	770	560	400	280	310	4,570	1,550	373	275	147	118
18	83	705	400	370	270	300	5,370	1,650	380	*272	145	176
19	187	657	540	340	270	320	5,870	2,360	332	232	189	351
20	643	1,030	2,950	330	*270	350	4,680	2,620	300	272	187	265
21	450	800	10,300	360	260	350	5,940	1,950	286	420	145	188
22	*276	*800	4,090	*400	a250	330	7,280	1,600	315	303	135	247
23	200	504	2,070	800	a250	330	7,330	1,320	306	244	118	259
24	190	455	1,540	780	a250	350	*5,370	1,230	257	*207	120	207
25	642	410	1,200	570	250	380	5,130	1,130	236	191	135	172
26	460	310	1,100	460	250	400	3,020	1,140	234	398	151	145
27	289	190	4,510	580	250	547	1,920	1,060	257	442	163	139
28	241	295	2,170	560	250	705	1,740	946	219	363	128	170
29	192	419	1,520	450	-	775	1,780	1,530	212	618	126	205
30	170	455	1,240	420	-------	865	4,000	1,410	191	928	114	174
31	170	-------	1,050	400	-------	1,040	-------	1,150	-------	543	116	-------
Total	5,831	17,438	48,246	16,760	7,990	12,002	88,240	60,156	21,462	9,963	5,688	4,631
Mean	188	581	1,556	541	285	387	2,941	1,941	715	321	183	154
Cfsm	0.476	1.47	3.94	1.37	0.722	0.980	7.45	4.91	1.81	0.813	0.463	0.390
In.	0.55	1.64	4.54	1.58	0.75	1.13	8.31	5.66	2.02	0.94	0.54	0.44

Calendar year 1957: Max 10,300 Min 35 Mean 556 Cfsm 1.41 In. 19.06
Water year 1957-58: Max 10,300 Min 74 Mean 818 Cfsm 2.07 In. 28.10

Peak discharge (base, 6,500 cfs).--Dec. 21 (3:30 to 4 p.m.) 13,800 cfs (11.24 ft); Apr. 19 (1 a.m.) 7,720 cfs (8.71 ft); Apr. 23 (4:30 a.m.) 8,100 cfs (8.88 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for station at Bethlehem Junction.
Note.--Stage-discharge relation affected by ice Nov. 26-28, Dec. 2-20, 25, 26, Jan. 2 to Mar. 26.

1385. Connecticut River at Wells River, Vt.

Location.--Lat 44°09'15", long 72°05'35", 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.--3,644 sq mi.

Records available.--October 1949 to September 1958. October and November 1949 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 399.75 ft above mean sea level, datum of 1929.

Average discharge.--9 years, 4,916 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 45,500 cfs Apr. 24 (gage height, 13.72 ft); minimum daily, 432 cfs July 6.
1949-58: 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. 239), and other reservoirs (combined usable capacity, about $14\frac{3}{4}$ billion cubic feet).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 23				Apr. 24 to Sept. 30			
1.3	520	7.0	15,300	1.1	590	4.0	5,050
2.0	1,240	10.0	28,800	1.5	690	6.0	10,900
3.0	2,660	14.0	46,800	2.0	1,270	10.0	28,800
5.0	7,250			2.5	1,990	14.0	46,800
				3.0	2,960		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,570	3,490	3,470	7,370	2,540	2,320	7,210	15,100	4,310	2,190	6,670	458
2	1,620	2,680	4,650	6,000	1,760	1,170	*7,070	17,800	15,600	2,340	5,680	1,300
3	1,620	1,590	5,120	7,050	4,690	3,850	6,080	10,400	16,800	2,150	1,420	1,740
4	1,720	3,600	4,820	4,000	5,140	4,680	7,210	8,720	*12,200	871	3,450	*1,620
5	1,700	5,550	4,230	3,000	5,590	4,750	8,150	9,780	8,020	584	3,900	1,800
6	895	5,190	3,660	4,500	4,900	4,840	9,100	9,350	7,010	432	3,980	1,600
7	1,080	5,050	2,090	5,050	4,400	4,640	12,300	8,420	4,120	1,240	4,100	1,150
8	1,610	4,800	1,620	4,410	2,770	2,740	12,500	9,110	2,540	2,920	5,240	755
9	1,620	3,370	5,780	5,260	1,920	1,530	10,100	13,400	4,500	4,350	3,650	1,640
10	1,660	2,130	6,080	6,100	3,060	3,210	7,370	12,800	4,440	*3,840	2,600	1,870
11	1,150	1,960	12,700	3,380	4,250	4,010	8,030	8,570	5,780	3,620	4,790	1,720
12	845	3,610	*12,500	1,900	4,300	3,680	7,070	17,700	4,810	2,700	3,960	1,820
13	568	4,840	9,520	4,400	3,800	3,640	5,730	17,100	3,160	3,710	3,640	1,540
14	910	4,340	5,460	4,900	3,200	3,720	9,020	13,900	3,080	3,310	3,520	866
15	1,580	5,660	4,340	4,890	2,500	2,260	11,900	10,100	3,020	4,960	3,140	897
16	1,240	3,600	6,860	4,980	1,300	1,370	14,300	10,700	2,840	3,840	2,460	1,360
17	1,340	2,640	6,580	4,910	2,600	2,700	20,300	8,780	2,880	4,940	1,200	1,650
18	1,290	4,580	7,010	3,170	4,200	2,460	24,200	5,850	2,760	6,610	2,700	2,880
19	912	6,550	6,220	1,520	4,200	2,610	24,800	8,580	2,720	4,020	2,700	5,570
20	1,110	7,850	9,910	5,620	4,200	3,000	19,400	10,300	2,700	2,130	2,600	3,020
21	2,940	7,520	27,000	5,350	4,100	3,710	22,500	8,810	2,660	7,350	2,480	1,630
22	*5,450	*7,510	24,100	5,730	2,540	3,100	30,300	8,180	1,440	7,930	3,200	2,450
23	3,810	8,170	22,200	6,180	1,960	1,440	40,300	6,640	1,470	5,960	2,520	3,900
24	4,200	8,040	17,200	5,900	3,000	1,850	43,300	5,120	2,250	5,280	1,110	3,780
25	4,500	8,710	12,300	3,870	4,000	2,480	35,000	3,520	1,960	3,310	1,810	3,780
26	3,480	8,650	8,430	2,840	3,800	2,430	*28,500	4,940	2,010	2,560	3,660	4,020
27	1,780	8,420	15,000	4,230	3,800	2,750	19,400	5,600	1,970	3,860	3,020	2,780
28	2,090	5,020	12,900	5,760	3,850	3,120	16,600	4,990	1,780	*6,370	2,740	1,220
29	4,640	5,500	8,420	5,260	-	3,190	13,600	5,800	1,480	7,070	2,720	2,560
30	4,660	2,970	7,880	5,120	---------	4,030	16,300	3,960	1,780	9,280	2,170	4,040
31	3,940	--------	7,760	4,270	---------	6,860	--------	3,470	--------	9,170	900	--------
Total	65,990	155,990	285,810	149,520	99,370	96,060	492,440	282,990	129,370	134,867	97,532	65,154
Mean	2,064	4,533	9,220	4,823	3,549	3,099	16,410	9,129	4,312	4,351	3,146	2,172
(†)	-627	+65.4	+603	-1,445	-1,560	-627	+3,039	+750	+247	+469	-367	-301

Adjusted for change in reservoir contents

Mean	1,458	4,619	9,823	3,378	1,989	2,472	19,450	9,879	4,560	4,820	2,779	1,870
Cfsm	0.544	1.75	3.75	1.28	0.752	0.935	7.36	3.74	1.73	1.82	1.05	0.707
In.	0.63	1.95	4.28	1.47	0.78	1.08	8.21	4.31	1.93	2.10	1.21	0.79

	Observed			Adjusted	
Calendar year 1957:	Max 27,000	Min 345	Mean 4,243	Mean 4,276	Cfsm 1.62 In. 21.96
Water year 1957-58:	Max 43,300	Min 432	Mean 5,570	Mean 5,597	Cfsm 2.12 In. 28.73

Peak discharge (base, 23,000 cfs).--Dec. 21 (5 to 6 p.m.) 34,900 cfs (11.55 ft); Apr. 19 (2 a.m.) 27,400 cfs (9.70 ft); Apr. 24 (1 a.m.) 45,500 cfs (13.72 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.
Note.--Stage-discharge relation affected by ice Jan. 5-6, 12-14, 21, Feb. 6, 7, 11-21, 24-28.

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 1958.

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.--18 years, 141 cfs.

Extremes.--Maximum discharge during year, 1,820 cfs Apr. 22 (gage height, 5.68 ft), from rating curve extended above 1,300 cfs on basis of computation of flow over dam at gage height 8.12 ft; minimum, 13 cfs Oct. 15-18; minimum daily, 13 cfs Oct. 15-18.
1940-58: Maximum discharge, 3,230 cfs June 2, 1952 (gage height, 8.12 ft), from rating curve extended above 1,300 as described above; 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 tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 22

1.3	11	3.0	311
1.4	15	3.5	517
1.6	30	4.0	780
1.8	50	5.0	1,400
2.0	77	5.5	1,710
2.5	175		

Apr. 23 to Sept. 30

1.4	17
1.6	30

Note.--Same as preceding table above 1.6 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	21	63	194	96	68	264	450	197	63	74	23
2	14	35	54	165	93	66	287	378	882	54	58	22
3	14	119	51	115	88	70	*287	325	575	50	47	21
4	14	184	47	95	88	78	366	399	332	48	40	20
5	14	97	43	120	90	84	415	325	244	46	39	20
6	14	64	44	180	90	80	450	275	*215	43	31	*20
7	14	48	60	160	85	73	424	305	175	43	31	20
8	17	41	106	135	82	70	378	428	152	58	70	22
9	16	124	93	115	79	70	293	635	146	*97	101	21
10	16	85	100	110	77	72	269	407	131	62	71	24
11	16	56	352	105	75	78	290	354	144	82	58	34
12	16	47	204	90	74	90	296	676	135	126	47	29
13	15	43	175	100	74	80	328	459	119	104	39	24
14	14	41	150	95	74	84	415	354	159	75	40	23
15	13	176	120	100	72	88	494	293	123	62	35	22
16	13	136	100	100	74	88	762	342	107	63	32	21
17	13	95	92	95	74	82	1,100	322	107	74	29	23
18	13	79	80	90	71	80	1,310	266	100	58	28	115
19	61	74	90	85	69	94	1,400	278	88	59	28	136
20	70	104	240	80	*67	87	1,170	272	82	87	26	70
21	37	82	1,250	78	65	87	1,300	238	83	69	24	47
22	*30	*86	755	*120	63	87	1,660	209	111	54	24	81
23	26	59	407	200	62	88	1,580	187	95	*49	24	72
24	25	55	302	140	64	98	*1,250	168	82	48	22	50
25	53	54	215	130	68	109	954	154	77	41	39	45
26	43	37	210	125	66	117	670	154	74	55	43	39
27	30	27	527	115	64	148	486	157	80	67	31	39
28	26	42	322	110	66	175	481	125	70	62	27	67
29	24	54	252	105	-	197	560	205	60	174	25	51
30	22	66	212	100	-------	220	625	170	58	154	24	41
31	21	-------	182	97	-------	249	-------	142	-------	98	23	-------
Total	729	2,201	6,878	3,649	2,110	3,147	20,544	9,432	4,981	2,223	1,233	1,240
Mean	23.5	73.4	222	118	75.4	102	685	304	166	71.7	39.8	41.3
Cfsm	0.239	0.746	2.26	1.20	0.766	1.04	6.96	3.09	1.69	0.729	0.404	0.420
In.	0.28	0.83	2.60	1.38	0.80	1.19	7.76	3.56	1.88	0.84	0.47	0.47

Calendar year 1957: Max 1,250 Min 13 Mean 96.0 Cfsm 0.976 In. 13.24
Water year 1957-58: Max 1,660 Min 13 Mean 160 Cfsm 1.63 In. 22.06

Peak discharge (base, 980 cfs).--Dec. 21 (1 p.m.) 1,630 cfs (5.36 ft); Apr. 19 (1 to 2 a.m.) 1,640 cfs (5.38 ft); Apr. 22 (6 to 7 a.m.) 1,820 cfs (5.68 ft); June 2 (2:30 to 3:30 p.m.) 1,070 cfs (4.49 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26, 27, Nov. 30 to Dec. 6, Dec. 13-21, 25, 26, Jan. 2 to Mar. 21.

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 1958.

Gage.--Water-stage recorder. Altitude of gage is 435 ft (from topographic map).

Average discharge.--18 years, 201 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 1,840 cfs Apr. 19 (gage height, 7.24 ft); minimum, 20 cfs Sept. 6, 7, 9, 10, 16, 17; minimum daily, 20 cfs Sept. 6, 16.
1940-58: 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 periods of ice effect, which are fair. Flow regulated by Union Village Reservoir (see p. 238) since October 1949. Some regulation by Lake Fairlee.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.0	18	4.5	328
3.1	25	5.0	520
3.3	44	6.0	1,020
3.5	76	7.0	1,660
4.0	185	7.5	2,050

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	25	109	552	209	122	504	735	268	37	87	22
2	27	35	90	360	209	111	547	610	*596	29	71	24
3	25	129	90	280	200	109	556	590	367	27	58	23
4	24	217	84	217	140	109	800	655	270	25	58	21
5	24	155	*66	159	105	115	910	520	225	24	58	21
6	23	125	54	150	140	131	938	456	202	24	46	20
7	24	100	92	161	150	136	844	512	175	25	40	22
8	25	90	202	204	150	120	715	705	159	31	105	22
9	25	210	227	219	145	109	578	795	147	52	156	21
10	24	156	236	175	140	111	565	556	136	31	100	22
11	23	122	628	155	120	115	606	508	163	47	76	30
12	22	111	504	155	110	126	588	673	140	73	50	27
13	22	102	292	150	95	126	655	496	117	92	41	24
14	22	96	235	150	110	126	822	432	109	58	*38	22
15	22	342	230	*150	120	138	987	382	90	48	34	21
16	22	255	195	150	120	150	1,310	472	80	43	32	20
17	22	214	178	166	125	150	1,530	404	87	38	31	21
18	22	160	114	155	125	145	1,660	346	80	34	29	*85
19	52	188	102	140	*130	143	*1,790	456	69	38	29	80
20	64	292	416	140	120	*143	*1,740	396	64	46	27	48
21	42	217	582	145	115	143	1,650	367	66	37	26	37
22	35	166	276	143	115	140	1,230	304	68	33	27	63
23	33	161	464	264	115	140	1,480	264	56	31	27	56
24	33	147	628	346	115	161	1,490	235	50	31	24	37
25	41	136	822	315	115	230	1,560	222	46	31	42	31
26	38	126	888	292	130	227	1,430	219	46	54	46	28
27	33	96	916	289	145	270	877	190	52	53	33	28
28	31	94	882	292	145	305	700	195	42	50	28	48
29	29	104	838	286	-	346	855	270	35	289	26	41
30	27	117	785	270	---------	432	1,010	214	35	176	24	33
31	*26	--------	710	225	--------	496	--------	173	--------	109	23	--------
Total	910	4,488	11,935	6,855	3,758	5,425	30,927	13,352	4,040	1,716	1,492	978
Mean	29.4	150	385	221	134	175	1,031	431	135	55.4	48.1	32.6
(†)	-0.07	+3.51	+10.9	-8.77	-1.53	-0.60	-0.58	-2.28	-0.58	+0.04	-0.11	0

Adjusted for change in contents in Union Village Reservoir

Mean	29.3	153	396	212	133	174	1,030	428	134	55.4	48.0	32.6
Cfsm	0.225	1.18	3.05	1.63	1.02	1.34	7.92	3.29	1.03	0.426	0.369	0.251
In.	0.26	1.31	3.51	1.88	1.06	1.55	8.84	3.80	1.15	0.49	0.43	0.28

	Observed			Adjusted		
Calendar year 1957:	Max 916	Min 16	Mean 151	Mean 152	Cfsm 1.17	In. 15.88
Water year 1957-58:	Max 1,790	Min 20	Mean 235	Mean 235	Cfsm 1.81	In. 24.56

* 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 Jan. 10-14, 18-21, Feb. 3-27.

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 1958.

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.--19 years, 46.7 cfs.

Extremes.--Maximum discharge during year, 875 cfs Dec. 21 (gage height, 4.37 ft), from rating curve extended above 500 cfs by logarithmic plotting; minimum daily, 3.0 cfs Sept. 4.

1939-58: 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 dams, which are fair.

Rating tables, water year 1957-58, except periods of ice effect or backwater from beaver dams (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 22

0.2	2.3	1.5	74
.3	3.6	2.0	129
.4	5.4	2.5	212
.5	8.0	3.0	330
.7	16	3.5	490
1.0	32	4.0	700

Apr. 23 to Sept. 30

0.2	2.3	0.7	14
.3	3.6	1.0	30
.5	7.6	1.5	74

Note.--Same as preceding table above 1.5 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.3	8.5	28	70	32	23	94	142	42	12	8.6	3.3
2	4.0	12	26	63	32	23	100	119	120	10	7.6	3.8
3	3.7	17	20	50	30	25	120	125	67	9.6	8.7	3.4
4	3.5	32	14	37	31	28	146	125	51	8.4	7.2	3.0
5	3.3	25	*15	40	31	27	165	103	44	8.2	8.8	3.3
6	3.1	18	13	51	30	26	156	91	42	7.9	8.7	3.2
7	3.8	12	20	50	30	26	143	104	36	9.0	8.8	3.2
8	3.8	11	51	*45	31	26	124	158	34	18	17	3.6
9	3.5	33	32	39	30	26	108	133	33	22	16	3.2
10	3.4	20	34	35	29	26	115	103	32	13	11	4.3
11	3.2	16	89	38	*28	27	119	101	42	17	8.7	6.7
12	3.2	15	51	31	28	30	117	120	35	27	7.4	5.2
13	3.2	15	40	35	28	28	136	94	30	28	8.3	5.5
14	3.1	16	42	33	27	29	155	86	29	16	8.6	4.9
15	3.1	83	40	34	27	30	207	78	26	13	8.2	4.7
16	3.1	40	36	36	26	32	298	78	22	12	4.7	4.6
17	3.1	31	36	34	26	31	418	73	26	11	4.3	*4.5
18	3.5	25	28	32	25	*31	491	68	23	8.7	4.1	44
19	15	43	39	29	25	32	*455	70	21	11	4.3	39
20	10	48	146	26	24	33	357	64	20	13	4.0	18
21	7.0	36	470	28	23	32	369	62	20	11	3.6	12
22	6.0	31	165	35	22	32	578	54	20	8.4	3.8	33
23	5.0	29	114	55	22	32	408	50	18	8.7	3.4	18
24	6.0	28	101	40	22	37	273	45	17	8.7	3.2	12
25	17	27	82	35	23	44	206	43	16	7.2	10	9.3
26	13	23	88	36	23	46	158	42	16	6.7	8.4	7.9
27	10	16	125	39	25	56	132	*38	17	7.2	8.1	9.7
28	8.5	21	86	39	23	68	146	35	14	7.9	8.0	19
29	*7.7	27	79	36	-	77	190	45	13	29	4.5	12
30	7.5	30	72	35	-------	84	194	39	12	*20	4.0	9.6
31	7.5	-------	68	33	-------	91	-------	34	-------	12	3.6	---------
Total	182.1	788.5	2,250	1,219	751	1,158	6,678	2,522	938	401.6	209.6	313.9
Mean	5.87	26.3	72.6	39.3	26.8	37.4	223	81.4	31.3	13.0	6.76	10.5
Cfsm	0.192	0.862	2.38	1.29	0.879	1.23	7.31	2.67	1.03	0.426	0.222	0.344
In.	0.22	0.96	2.74	1.49	0.92	1.41	8.14	3.08	1.14	0.49	0.26	0.38

Calendar year 1957: Max 470 Min 3.1 Mean 32.2 Cfsm 1.06 In. 14.32
Water year 1957-58: Max 578 Min 3.0 Mean 47.7 Cfsm 1.56 In. 21.23

Peak discharge (base, 350 cfs).--Dec. 21 (9 a.m.) 875 cfs (4.37 ft); Apr. 18 (9:30 p.m.) 700 cfs (4.00 ft); Apr. 22 (3 to 4 a.m.) 835 cfs (4.29 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 13, 18, Jan. 3 to Mar. 15. Backwater from beaver dams Oct. 1 to Nov. 15, Nov. 27 to Dec. 3, Sept. 16, 17.

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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 1958. 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.--43 years, 1,196 cfs.

Extremes.--Maximum discharge during year, 20,100 cfs Apr. 22 (gage height, 13.62 ft); minimum, 116 cfs Oct 17; minimum daily, 120 cfs Sept. 7.
1915-58: 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 or no gage-height record, which are fair. Some diurnal fluctuation at low flow caused by power-plant 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.7	113	6.0	2,440
3.0	195	8.0	5,630
3.5	378	10.0	9,600
4.0	620	13.0	18,200
5.0	1,590		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	160	217	670	1,680	700	500	1,920	4,440	906	380	386	128
2	149	234	540	1,570	700	500	2,040	3,600	2,640	350	307	133
3	143	346	470	1,050	640	530	2,010	3,240	2,220	320	255	141
4	151	780	400	660	640	590	2,820	3,650	1,490	300	255	138
5	138	668	*360	710	640	580	3,350	2,980	1,190	290	238	130
6	136	490	320	1,050	630	560	3,890	2,560	1,100	270	217	130
7	138	403	500	1,150	660	560	3,400	2,560	980	270	195	120
8	143	362	1,250	1,000	640	560	2,930	3,710	920	400	287	133
9	150	697	1,150	880	620	560	2,390	4,340	880	630	730	154
10	141	761	1,050	750	600	580	2,320	3,120	850	600	456	157
11	138	545	2,440	860	600	600	2,680	2,680	980	520	334	189
12	133	460	1,670	720	600	640	2,520	3,260	900	900	273	238
13	138	412	1,000	680	600	620	2,540	2,650	800	1,050	238	224
14	123	386	1,050	690	580	640	3,520	2,320	740	800	211	195
15	133	1,490	1,050	720	570	660	4,680	2,080	670	650	192	183
16	126	1,640	920	*760	560	698	7,720	1,980	600	510	180	180
17	126	1,080	900	720	550	668	11,300	1,920	660	410	154	*180
18	130	874	680	680	530	656	13,300	1,720	600	350	160	460
19	187	994	860	600	550	656	13,200	1,890	540	330	174	1,500
20	412	1,600	2,910	530	500	*686	11,000	1,910	500	530	165	833
21	280	1,250	12,800	550	*490	668	13,200	1,700	500	470	146	525
22	227	962	5,560	780	480	644	17,400	1,500	510	340	157	807
23	198	803	3,170	1,200	470	638	*18,700	1,350	470	320	183	912
24	195	716	2,560	800	470	680	8,800	1,210	440	300	157	560
25	398	662	2,090	730	490	796	7,080	1,140	420	280	165	424
26	420	570	2,080	720	500	818	5,210	*1,100	410	265	277	354
27	322	399	3,740	850	500	1,010	3,910	954	450	260	*221	326
28	284	480	2,480	830	*500	1,190	3,810	874	480	315	195	475
29	255	620	2,100	770	-	1,440	4,120	1,040	440	650	165	456
30	234	716	1,840	740	--------	1,660	6,260	1,050	400	1,050	152	366
31	*224	--------	1,670	710	--------	1,880	--------	890	--------	*550	141	--------
Total	6,126	21,619	60,080	26,080	15,990	23,468	182,020	69,418	24,686	14,690	7,366	10,751
Mean	198	721	1,938	841	571	757	6,067	2,239	823	474	238	358
Cfsm	0.287	1.04	2.81	1.22	0.828	1.10	8.79	3.24	1.19	0.687	0.345	0.519
In.	0.33	1.17	3.24	1.41	0.86	1.26	9.81	3.74	1.33	0.79	0.40	0.58

Calendar year 1957: Max 12,800 Min 120 Mean 875 Cfsm 1.27 In. 17.24
Water year 1957-58: Max 17,400 Min 120 Mean 1,267 Cfsm 1.84 In. 24.92

Peak discharge (base, 11,600 cfs).--Dec. 21 (11:30 a.m. to 1 p.m.) 15,800 cfs (12.22 ft); Apr. 22 (6 a.m.) 20,100 cfs (13.62 ft).

* Discharge measurement made on this day.

Note.--Doubtful or no gage-height record June 6 to July 30; discharge estimated on basis of recorder graph, weather records, and records for Ayers Brook at Randolph and Dog River at Northfield Falls. Stage-discharge relation affected by ice Dec. 1-10, 15-19, Jan. 2 to Mar. 15.

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 1958.
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.--47 years, 7,201 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 57,400 cfs Apr. 25 (gage height, 21.33 ft); minimum daily, 219 cfs Sept. 7.
1911-58: 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, 115 cfs Aug. 2, 1953.
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. 238), 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: 1938 (adjusted monthly and yearly figures only). WSP 781: 1928(M). WSP 891: Drainage area. WSP 1301: 1922-26(M).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.8	219	6.0	3,730
3.0	301	8.0	8,180
3.5	585	16.0	34,300
4.0	990	22.0	80,700
5.0	2,150		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,230	4,040	4,370	11,800	4,000	4,250	12,100	24,400	5,290	3,340	9,730	g400
2	2,440	2,330	6,170	11,800	1,500	1,970	11,800	21,100	16,300	2,790	5,330	2,570
3	1,880	1,800	5,960	11,200	7,200	4,820	12,000	18,200	22,300	1,420	900	2,690
4	1,880	7,530	5,000	5,530	6,500	5,830	13,200	16,000	15,700	g250	3,990	2,010
5	g1,130	5,840	4,130	2,920	6,500	6,050	g15,900	14,200	*12,000	g441	4,820	2,510
6	g608	5,630	5,650	5,900	6,200	5,980	g17,500	14,200	10,700	g573	4,640	1,640
7	2,430	5,670	2,550	6,410	6,000	6,540	g19,000	13,400	7,350	3,000	4,190	g219
8	2,230	6,360	2,260	6,440	4,600	4,460	g19,600	16,200	2,910	3,260	4,890	1,510
9	2,160	6,160	*8,020	6,270	2,600	3,040	g17,400	21,300	6,530	5,120	4,410	1,840
10	1,960	1,910	9,160	7,270	5,200	4,930	g14,700	18,800	5,720	3,890	*3,140	2,050
11	1,270	3,670	16,100	5,600	5,000	5,140	g14,500	15,000	6,140	3,610	5,260	2,530
12	g596	5,460	16,300	3,000	4,900	5,500	g13,700	21,900	5,880	3,910	4,160	2,430
13	g594	5,430	12,200	5,600	5,800	5,760	g12,600	23,700	5,400	6,380	3,920	g1,510
14	1,800	4,850	9,660	5,780	4,200	5,670	g15,000	20,000	4,240	*7,890	3,230	g474
15	2,010	8,110	7,380	5,360	4,100	4,440	g19,700	14,400	1,820	5,880	4,830	1,790
16	2,020	8,390	7,260	6,360	2,400	2,010	g26,500	13,600	4,160	4,140	2,480	1,990
17	1,440	4,540	9,230	6,460	4,500	4,860	g35,500	13,800	3,910	5,640	g246	2,660
18	1,490	5,920	8,720	4,700	5,200	4,290	g43,700	11,800	3,640	6,730	2,950	3,670
19	1,380	7,140	8,140	1,700	5,100	4,180	g47,800	9,570	3,660	4,800	3,200	6,750
20	2,260	8,800	12,000	6,300	5,100	4,440	g43,100	13,700	4,350	g1,160	3,480	4,370
21	3,720	9,580	g38,500	6,200	4,200	4,050	g42,900	12,600	2,710	6,550	3,340	1,750
22	4,090	9,600	g37,900	7,000	4,300	3,610	g53,300	11,200	g772	9,190	3,620	3,540
23	4,410	8,760	g31,200	8,200	3,100	2,530	*g54,100	10,900	2,860	6,970	g1,140	4,680
24	4,660	2,970	g27,400	8,400	4,500	4,290	56,700	8,680	2,830	5,450	g608	4,110
25	4,020	6,930	17,600	8,400	5,000	3,840	55,300	4,440	3,060	4,290	3,710	4,300
26	2,690	7,910	13,600	6,000	4,800	5,580	45,100	7,060	3,080	2,370	3,530	4,900
27	1,170	6,980	g22,800	6,600	5,190	6,070	32,500	7,470	2,980	3,400	3,330	3,580
28	4,540	2,870	g20,100	7,600	5,450	6,440	26,800	6,040	1,650	6,530	3,170	g892
29	4,860	6,860	14,800	7,800	-	7,410	24,200	6,990	1,590	7,930	2,000	4,380
30	5,070	6,050	13,100	7,200	--------	7,420	26,400	5,180	2,730	8,900	1,570	4,160
31	3,860	--------	12,400	6,800	--------	10,200	--------	4,420	--------	10,600	g969	--------
Total	76,958	178,150	409,660	207,200	133,140	155,600	842,600	420,250	172,262	146,404	107,383	81,905
Mean	2,483	5,938	13,210	6,684	4,755	5,019	28,090	13,560	5,742	4,723	3,464	2,730
(†)	-627	+89.2	+614	-1,454	-1,562	-627	+3,038	+748	+247	+469	-368	-301

Adjusted for change in reservoir contents

Mean	1,856	6,028	13,830	5,230	3,193	4,392	31,120	14,300	5,989	5,192	3,096	2,429
Cfsm	0.454	1.47	3.38	1.28	0.780	1.07	7.61	3.49	1.46	1.27	0.757	0.594
In.	0.52	1.64	3.90	1.47	0.81	1.24	8.49	4.03	1.63	1.46	0.87	0.66

	Observed			Adjusted			
Calendar year 1957:	Max 38,500	Min 154	Mean 5,752	Mean 5,786	Cfsm 1.41	In. 19.19
Water year 1957-58:	Max 56,700	Min 219	Mean 8,032	Mean 8,059	Cfsm 1.97	In. 26.72

Peak discharge (base, 34,000 cfs).--Dec. 21 (4 to 5 p.m.) 42,500 cfs (17.99 ft); Apr. 25 (3:30 a.m.) 57,400 cfs (21.33 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, Comerford Station Pond, and Union Village Reservoir.
g Computed from twice-daily wire-weight-gage readings.
Note.--Stage-discharge relation affected by ice Jan. 11-13, Jan. 18 to Feb. 26.

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 1958.

Gage.--Water-stage recorder. Altitude of gage is 835 ft (from topographic map).

Average discharge.--19 years, 122 cfs.

Extremes.--Maximum discharge during year, 1,830 cfs Apr. 22 (gage height, 6.27 ft); minimum, 4.8 cfs Sept. 16, 17.

1939-58: 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 periods of ice effect, which are fair.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 22

0.5	5.5	2.5	215
.6	7.7	3.0	334
.9	17	4.0	635
1.2	34	5.0	1,070
1.5	60	6.0	1,640
2.0	122	6.5	1,990

Apr. 23 to Sept. 30

0.4	4.6
.6	7.5
.9	17

Note.--Same as preceding table above 0.9 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.9	15	125	209	145	66	192	632	106	20	28	6.1
2	9.4	28	*99	190	130	66	200	511	202	14	22	6.3
3	8.5	154	75	120	120	66	204	418	248	12	17	6.3
4	8.0	360	60	60	115	67	279	472	*142	10	*17	5.8
5	7.7	178	50	70	110	74	357	395	104	9.8	19	5.8
6	7.5	103	43	88	105	73	439	316	86	9.3	15	5.6
7	7.3	76	55	94	105	71	475	337	70	10	12	5.6
8	8.5	62	77	88	100	68	415	430	62	11	14	*5.8
9	15	103	78	82	95	68	316	576	60	33	28	5.8
10	16	88	131	77	*92	72	279	445	55	20	22	5.7
11	13	65	737	73	82	75	314	314	76	18	18	5.8
12	11	53	468	69	82	80	274	357	74	36	14	5.7
13	9.9	48	272	*66	82	86	304	304	60	48	12	5.6
14	9.7	46	237	64	79	90	433	244	52	27	11	5.2
15	9.4	183	190	68	75	92	508	188	43	20	9.8	*5.2
16	9.4	194	150	72	73	89	774	196	35	17	9.3	5.0
17	8.8	120	120	76	72	*82	1,190	215	33	15	8.8	5.0
18	8.8	95	90	74	70	79	1,490	175	33	13	14	15
19	25	122	105	69	70	79	1,610	158	29	14	15	26
20	50	175	309	63	67	80	1,460	136	26	17	11	19
21	28	122	1,000	65	66	78	1,500	124	26	15	8.8	13
22	21	93	856	76	64	78	1,790	108	29	12	8.3	15
23	18	79	436	235	62	79	1,800	99	24	11	8.0	21
24	17	71	289	270	62	79	1,430	88	22	11	7.0	15
25	30	66	200	245	63	81	*1,160	80	19	9.8	11	11
26	27	50	200	220	68	84	826	97	18	27	17	8.8
27	22	40	769	270	68	102	550	78	18	24	12	8.3
28	*19	47	504	240	67	122	469	68	17	22	9.8	12
29	17	60	296	205	-	143	511	116	15	86	8.0	13
30	16	74	222	180	-------	162	880	112	14	75	7.0	11
31	15	-------	183	160	-------	190	-------	85	-------	41	6.5	-------
Total	482.8	2,970	8,426	3,938	2,389	2,721	22,429	7,874	1,798	711.9	420.3	284.4
Mean	15.6	99.0	272	127	85.3	87.8	748	254	59.9	23.0	13.6	9.48
Cfsm	0.194	1.23	3.38	1.58	1.06	1.09	9.29	3.16	0.744	0.286	0.169	0.118
In.	0.22	1.37	3.89	1.82	1.10	1.26	10.36	3.64	0.83	0.33	0.19	0.13

Calendar year 1957: Max 1,000 Min 5.3 Mean 84.5 Cfsm 1.05 In. 14.24
Water year 1957-58: Max 1,800 Min 5.0 Mean 149 Cfsm 1.85 In. 25.14

Peak discharge (base, 950 cfs).--Dec. 21 (7 to 8 p.m.) 1,360 cfs (5.53 ft); Apr. 22 (6 to 10 a.m.) 1,830 cfs (6.27 ft); Apr. 30 (9 to 10 a.m.) 975 cfs (4.81 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 26-28, Dec. 3-7, 15-19, 25, 26, Jan. 2 to Mar. 17.

1505. Mascoma River at Mascoma, H. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 740 ft (from topographic map).

Average discharge.--35 years, 218 cfs (adjusted for storage since October 1928).

Extremes.--Maximum discharge during year, 2,230 cfs Apr. 24 (gage height, 4.60 ft); minimum daily, 28 cfs Nov. 2.
1923-58: Maximum discharge, 5,840 cfs Mar. 19, 1936 (gage height, 7.50 ft), from rating curve extended above 3,500 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. Flow regulated by Mascoma and Crystal Lakes and Goose and Grafton Ponds (see p. 238).

Revisions (water years).--WSP 726: Drainage area. WSP 801: 1925(M).

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 23

0.3	24	1.5	241
.5	42	2.0	412
.7	65	3.0	900
1.0	114	4.6	2,230

Apr. 24 to Sept. 30

0.4	36	1.0	118
.7	68	1.5	241

Note.--Same as preceding table above 1.5 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	95	80	101	357	390	325	339	1,240	150	105	78	53
2	93	28	101	361	386	322	357	991	174	105	40	84
3	92	39	103	302	386	319	371	720	221	91	51	84
4	85	87	101	266	382	312	401	630	*260	58	107	82
5	32	*95	101	260	353	319	454	650	269	57	115	73
6	46	99	*101	256	308	325	566	620	263	67	105	38
7	95	103	101	253	308	339	698	518	256	105	103	50
8	121	90	101	250	308	357	780	502	207	105	82	101
9	112	37	101	247	308	346	764	803	179	107	41	99
10	101	50	103	*235	305	339	698	858	174	107	*54	97
11	85	87	154	178	302	336	645	650	174	*92	101	96
12	32	87	414	175	295	336	611	482	174	58	101	74
13	37	87	470	188	288	339	588	423	174	70	101	38
14	101	85	405	190	288	339	616	442	172	108	99	53
15	99	85	364	188	285	339	703	405	162	108	79	*90
16	95	89	298	185	285	332	840	346	144	107	39	103
17	95	93	269	188	282	329	1,100	346	141	105	44	85
18	76	95	253	196	275	322	1,440	357	139	93	94	85
19	30	89	266	198	279	312	1,730	343	139	57	90	67
20	44	89	343	204	305	295	1,940	312	137	67	90	36
21	95	93	946	212	315	*282	2,000	292	135	108	89	51
22	95	97	1,380	209	*308	263	2,040	288	135	107	72	82
23	93	97	1,080	215	305	247	2,150	266	135	105	38	82
24	103	99	728	232	302	235	2,180	207	135	103	47	82
25	86	99	405	260	298	226	1,850	204	135	84	82	79
26	29	99	260	266	292	218	1,300	172	135	40	82	66
27	44	99	531	312	305	215	*935	148	121	52	82	36
28	95	97	846	382	325	218	870	146	75	94	82	46
29	93	97	599	390	-	226	764	146	82	96	68	78
30	92	99	397	394	--------	256	882	148	105	97	38	82
31	90	--------	364	390	--------	322	--------	150	--------	97	38	--------
Total	2,481	2,570	11,786	7,939	8,768	9,290	30,612	13,805	4,902	2,755	2,322	2,172
Mean	80.0	85.7	380	256	313	300	1,020	445	163	88.9	74.9	72.4
(†)	-57.3	+100	+110	-29.5	-163	-130	+326	+18.3	-61.5	-54.8	-56.6	-55.7

Adjusted for change in reservoir contents

Mean	22.8	186	490	227	150	169	1,347	464	102	34.0	18.3	16.7
Cfsm	0.149	1.22	3.20	1.48	0.980	1.10	8.80	3.03	0.667	0.222	0.120	0.109
In.	0.17	1.36	3.69	1.71	1.02	1.28	9.82	3.49	0.74	0.26	0.14	0.12

	Observed			Adjusted		
Calendar year 1957:	Max 1,380	Min 26	Mean 144	Mean 150	Cfsm 0.980	In. 13.26
Water year 1957-58:	Max 2,180	Min 28	Mean 272	Mean 268	Cfsm 1.75	In. 23.80

* 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.

1515. Ottauquechee River at North Hartland, Vt.

Location.--Lat 43°36'05", long 72°31'20", on left bank 300 ft upstream from highway bridge at North Hartland, Windsor County, and 1 mile upstream from mouth.

Drainage area.--251 sq mi.

Records available.--October 1930 to September 1958.

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.--28 years, 392 cfs.

Extremes.--Maximum discharge during year, 8,610 cfs Apr. 22 (gage height, 10.13 ft); minimum, 14 cfs Oct. 21; minimum daily, 28 cfs Oct. 3.

1930-58: 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, 2.3 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 periods of ice effect or no gage-height record, which are fair. Flow regulated by powerplants above station. Small seasonal storage in reservoir at Plymouth.

Rating table, water year 1957-58, except periods 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	125	7.0	3,680
3.0	273	10.0	8,380

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	*66	245	604	230	190	618	1,620	284	80	85	46
2	68	68	180	528	230	190	665	1,310	638	75	65	49
3	28	110	145	350	210	200	690	1,250	643	75	62	49
4	59	308	120	200	210	220	886	1,330	*429	70	59	48
5	25	216	105	250	210	230	1,050	1,060	352	65	56	40
6	50	139	*90	340	200	220	1,170	898	313	65	50	42
7	69	114	170	300	200	210	1,090	970	273	65	47	41
8	60	122	350	270	210	205	1,010	1,610	252	90	51	51
9	62	206	320	250	200	200	850	1,580	238	140	122	57
10	63	217	310	240	195	210	844	1,090	221	90	107	53
11	63	166	800	270	190	230	922	934	270	*80	65	53
12	29	126	500	230	190	260	862	1,090	275	145	62	61
13	48	116	300	210	190	240	904	892	280	154	47	44
14	66	110	330	220	180	260	1,210	765	260	108	44	46
15	56	436	300	240	180	255	1,730	685	230	90	*50	52
16	54	474	270	250	180	255	2,880	680	195	85	41	50
17	50	304	250	240	175	270	4,140	640	185	70	41	41
18	49	259	190	220	170	294	5,110	578	160	60	46	*115
19	53	378	240	190	*170	298	5,080	604	150	50	52	206
20	150	510	700	170	165	*304	*4,230	604	145	60	61	115
21	95	374	3,820	190	160	294	5,080	532	135	70	53	81
22	73	294	1,620	250	155	290	6,970	470	135	64	48	90
23	68	248	946	400	150	284	5,420	410	125	48	57	163
24	85	228	775	320	150	300	3,670	386	110	55	63	91
25	94	235	636	240	170	330	2,940	359	105	50	60	71
26	108	165	736	240	180	340	1,980	367	100	45	86	53
27	73	215	1,660	300	185	382	1,380	322	100	50	73	49
28	90	135	916	290	190	431	1,340	294	95	70	60	79
29	69	248	760	250	-	506	1,440	359	90	168	57	92
30	67	248	660	240	-------	564	2,480	315	85	224	41	71
31	60	-------	568	230	-------	618	-------	284	-------	128	46	-------
Total	2,030	6,745	19,013	8,522	5,225	9,080	68,641	24,288	6,879	2,685	1,857	2,099
Mean	65.5	225	613	275	187	293	2,288	783	229	83.6	59.9	70.0
Cfsm	0.296	1.02	2.77	1.24	0.846	1.33	10.4	3.54	1.04	0.392	0.271	0.317
In.	0.34	1.14	3.20	1.43	0.88	1.53	11.55	4.09	1.16	0.45	0.31	0.35

Calendar year 1957: Max 3,820 Min 17 Mean 285 Cfsm 1.29 In. 17.51
Water year 1957-58: Max 6,970 Min 28 Mean 430 Cfsm 1.95 In. 26.43

Peak discharge (base, 5,500 cfs).--Dec. 21 (10 a.m.) 6,040 cfs(8.59 ft); Apr. 18 (12 p.m.) 7,260 cfs (9.34 ft); Apr. 22 (2:30 a.m.) 8,610 cfs (10.13 ft).

* Discharge measurement made on this day.

Note.--No gage-height record June 11 to July 11, July 16-21, 24-28; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for Black River at North Springfield, White River at West Hartford, and stations on other nearby streams. Stage-discharge relation affected by ice Nov. 26, 27, Dec. 2-20, Jan. 3 to Mar. 17, Mar. 22, 24.

1585. 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 1958. 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.--30 years, 399 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 5,100 cfs Apr. 19 (gage height, 6.24 ft); minimum daily, 33 cfs Oct. 5.
1928-58: Maximum discharge, 14,000 cfs Mar. 19, 1936 (gage height, 10.98 ft), from rating curve extended above 6,700 cfs on basis of computations of flow over dam at gage heights 10.49 and 10.98 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. 238).

Revisions (water years).--WSP 711: 1930(M). WSP 756: Drainage area.

Rating table, water year 1957-58, 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61	74	425	744	450	220	857	2,220	321	100	169	54
2	58	94	345	815	420	220	885	1,730	627	63	122	63
3	58	273	250	550	390	220	908	1,510	*1,130	77	101	44
4	54	553	225	340	370	230	1,120	1,850	737	79	89	52
5	52	394	170	310	350	250	1,340	1,410	559	65	97	54
6	33	289	130	340	330	260	1,570	1,220	439	70	63	50
7	42	213	170	320	310	270	1,690	1,290	365	79	*77	63
8	68	172	220	300	300	260	1,580	1,680	313	171	77	54
9	159	199	250	290	280	250	1,300	1,960	297	321	81	61
10	128	234	399	270	270	250	1,220	1,500	269	216	77	59
11	89	192	1,970	280	260	260	1,290	1,270	289	185	56	56
12	72	153	1,170	240	260	300	1,170	1,230	305	220	74	*54
13	70	140	650	250	270	320	1,170	1,130	269	182	54	54
14	70	131	580	240	250	341	1,570	960	245	149	63	47
15	63	307	470	260	250	329	1,960	871	209	122	54	38
16	61	464	400	270	270	341	2,880	857	192	122	63	49
17	59	349	360	280	290	325	3,900	878	172	89	61	49
18	56	293	280	260	*270	313	4,320	796	149	89	72	87
19	94	321	310	240	260	309	*4,480	756	119	84	72	97
20	140	464	720	220	250	321	3,930	673	143	81	68	79
21	128	382	2,520	240	240	317	4,050	577	137	70	56	77
22	100	301	1,940	300	220	309	4,390	506	106	79	56	86
23	87	249	1,230	430	200	313	4,260	458	122	68	56	84
24	84	227	900	510	200	321	3,460	386	108	68	54	77
25	94	213	667	480	220	337	2,780	369	113	70	68	70
26	102	182	619	500	240	373	2,100	403	93	100	72	65
27	94	126	1,600	640	230	*458	1,630	333	105	153	61	65
28	91	149	1,170	620	225	559	1,540	301	91	143	59	77
29	79	202	938	560	-	643	1,750	349	81	185	58	81
30	74	265	756	520	--------	711	3,440	337	91	341	59	70
31	*72	--------	655	480	--------	796	--------	301	--------	216	54	--------
Total	2,492	7,605	22,489	12,099	7,875	10,746	68,540	29,911	8,196	4,057	2,243	1,916
Mean	80.4	254	725	390	281	347	2,285	965	273	131	72.4	63.8
(†)	-1.12	+22.4	+129	-49.3	-43.8	-4.48	+202	-114	-28.9	-15.7	-44.4	-36.7

Adjusted for change in contents in Sunapee Lake

Mean	79.3	276	855	341	237	342	2,486	851	244	115	27.9	27.2
Cfsm	0.295	1.03	3.18	1.27	0.881	1.27	9.24	3.16	0.907	0.428	0.104	0.101
In.	0.34	1.14	3.66	1.46	0.92	1.47	10.31	3.65	1.01	0.49	0.12	0.11

	Observed			Adjusted		
Calendar year 1957:	Max 2,520	Min 21	Mean 262	Mean 275	Cfsm 1.02	In. 13.87
Water year 1957-58:	Max 4,480	Min 33	Mean 488	Mean 489	Cfsm 1.82	In. 24.68

Peak discharge (base, 3,000 cfs).--Dec. 21 (4 p.m.) 3,400 cfs (5.26 ft); Apr. 19 (5 a.m.) 5,100 cfs (6.24 ft); Apr. 22 (3 a.m.) 4,790 cfs (6.07 ft); Apr. 30 (9 to 10 a.m.) 4,160 cfs (5.72 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. 3-9, 13-20, Jan. 3 to Mar. 13.

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 1958. 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.--29 years, 283 cfs.

Extremes.--Maximum discharge during year, 6,460 cfs Dec. 21 (gage height, 7.78 ft), from rating curve extended above 2,400 cfs by logarithmic plotting; minimum daily, 13 cfs Sept. 15.
1929-58: 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 periods of ice effect, no gage-height record, or indefinite stage-discharge relation, which are fair. Flow regulated by mills above station.

Revisions (water years).--WSP 756: Drainage area. WSP 781: 1931(M), 1934(M).

Rating table, water year 1957-58, except periods of ice effect or indefinite stage-discharge relation (gage height, in feet, and discharge, in cubic feet per second)

1.6	13	3.5	655
1.7	21	4.0	1,010
1.9	45	5.0	1,950
2.2	103	6.0	3,240
2.5	183	7.0	4,900
3.0	370		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	46	140	405	160	135	464	*1,230	173	56	107	16
2	20	51	115	380	160	135	514	1,030	627	44	81	14
3	34	158	105	280	150	140	540	930	*687	46	52	14
4	37	177	93	140	150	155	731	978	426	41	59	14
5	36	132	85	175	150	160	867	825	308	38	33	14
6	37	98	80	240	140	150	923	681	260	42	42	14
7	41	80	120	210	140	150	909	741	211	41	*36	17
8	46	80	300	190	150	150	818	1,160	200	*68	33	18
9	58	202	280	180	140	160	648	1,090	189	108	48	17
10	60	155	250	170	135	170	636	783	174	71	34	26
11	47	115	600	170	135	175	681	642	211	62	43	*27
12	43	e90	280	170	135	180	636	707	215	126	29	14
13	47	e81	200	165	135	170	680	572	222	131	32	21
14	54	e76	230	150	125	190	970	480	209	94	25	18
15	43	e450	210	*150	125	185	1,380	415	182	75	25	13
16	40	352	190	160	125	180	2,110	395	156	70	25	14
17	38	268	180	150	120	190	3,120	380	147	56	24	14
18	40	220	*130	135	120	201	4,040	321	130	51	30	66
19	65	309	170	125	115	205	4,020	313	119	41	15	61
20	77	390	500	130	110	208	*3,030	293	115	43	17	54
21	58	325	3,500	150	110	206	3,550	274	107	46	19	31
22	51	260	1,340	220	105	204	4,860	247	106	33	19	53
23	42	215	741	290	105	198	4,460	226	98	39	18	66
24	46	194	548	230	105	210	*2,600	205	89	36	17	53
25	114	177	436	170	120	240	2,070	202	84	33	24	57
26	83	157	592	170	130	253	1,430	215	77	36	29	31
27	63	105	1,450	210	130	*308	954	189	77	32	25	37
28	58	135	776	190	135	361	916	170	70	43	21	44
29	53	190	584	180	-	431	1,060	222	64	189	19	46
30	45	170	464	170	-------	448	1,800	193	59	196	18	35
31	*57	-------	400	160	-------	475	-------	145	-------	132	17	-------
Total	1,576	5,458	15,089	6,015	3,660	6,723	51,417	16,254	5,792	2,119	1,016	919
Mean	50.8	182	487	194	131	217	1,714	524	193	68.4	32.8	30.6
Cfsm	0.322	1.15	3.08	1.23	0.829	1.37	10.8	3.32	1.22	0.433	0.208	0.194
In.	0.37	1.28	3.55	1.42	0.86	1.58	12.10	3.83	1.36	0.50	0.24	0.22

Calendar year 1957: Max 3,500 Min 17 Mean 204 Cfsm 1.29 In. 17.56
Water year 1957-58: Max 4,860 Min 13 Mean 318 Cfsm 2.01 In. 27.31

Peak discharge (base, 3,600 cfs).--Dec. 21 (10 a.m.) 6,460 cfs (7.78 ft); Apr. 18 (9:30 p.m.) 6,120 cfs (7.62 ft); Apr. 23 (2 p.m.) 5,540 cfs (7.33 ft).

* Discharge measurement made on this day.
e Stage-discharge relation indefinite; discharge estimated on basis of Vermont Highway Department employee's notes, appearance or recorder chart, weather records, and records for Ottauquechee River at North Hartland, White River at West Hartford, and Williams River at Brockway Mills.
Note.--No gage-height record Nov. 27 to Dec. 18; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for stations mentioned in footnote "e." Stage-discharge relation affected by ice Dec. 19-21, Jan. 2 to Mar. 17, and at times during periods of no gage-height record.

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 1958.

Gage.--Water-stage recorder. Altitude of gage is 430 ft (from topographic map).

Average discharge.--18 years, 166 cfs.

Extremes.--Maximum discharge during year, 3,070 cfs Dec. 21 (gage height, 7.57 ft); maximum gage height, 7.66 ft Dec. 21 (affected by ice); minimum discharge, 6.6 cfs Sept. 3-7.

1940-58: 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 periods of ice effect, which are fair.

Revisions (water years).--WSP 1031: 1943-44(P). WSP 1301: 1941-42(M).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 21				Dec. 22 to Sept. 30			
0.9	8.1	2.0	119	0.8	5.0	2.5	235
1.0	11	2.5	237	1.0	9.5	3.0	390
1.2	20	3.0	390	1.2	18	4.0	770
1.5	44	4.0	770	1.5	37	5.0	1,280
1.7	67	6.0	1,890	1.7	59	7.0	2,610
				2.0	105		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	18	108	256	130	73	368	636	113	19	33	8.0
2	9.6	23	73	210	125	72	393	508	285	17	26	7.2
3	9.3	132	58	155	115	73	460	491	228	18	20	6.8
4	8.7	111	45	80	101	85	620	540	132	19	18	6.6
5	8.7	60	37	90	95	90	698	410	101	19	16	6.8
6	8.7	43	45	120	92	95	656	342	83	20	14	6.8
7	10	35	55	105	88	100	694	440	72	20	*13	8.6
8	18	32	128	95	82	90	604	702	66	76	16	12
9	64	86	104	95	77	87	467	551	64	*113	19	11
10	29	59	203	90	72	92	464	393	60	40	15	10
11	20	41	514	89	70	118	491	332	83	58	14	*11
12	17	34	215	88	68	145	471	355	78	78	12	9.5
13	15	32	*125	85	67	142	570	289	62	48	11	8.5
14	14	31	135	83	66	155	770	253	54	34	27	8.3
15	14	172	130	82	65	142	1,090	220	47	30	26	7.2
16	13	112	115	86	63	125	1,530	214	42	27	15	7.0
17	13	70	105	*85	62	115	1,860	202	38	24	12	7.9
18	13	56	77	75	62	108	2,010	178	37	21	13	60
19	32	155	95	68	61	105	*1,890	180	35	20	11	52
20	34	166	390	80	60	118	1,620	162	33	21	10	32
21	23	100	1,600	85	59	115	1,810	138	35	19	9.5	22
22	19	75	548	170	58	110	1,800	120	35	17	9.2	37
23	18	62	342	400	57	105	1,820	105	31	17	8.8	30
24	19	57	274	260	56	112	1,180	92	28	18	8.0	20
25	46	53	214	180	65	*142	890	94	27	16	16	16
26	32	45	577	155	70	165	577	115	27	15	19	14
27	24	27	924	250	70	235	433	*87	27	42	16	14
28	21	42	423	220	73	289	471	79	24	31	12	26
29	19	70	326	175	-	329	747	131	22	75	9.8	21
30	*19	95	262	158	-------	358	1,150	94	20	62	9.0	17
31	18	-------	223	142	-------	371	-------	78	-------	36	8.5	-------
Total	618.8	2,094	8,470	4,332	2,129	4,461	28,604	8,531	1,989	1,070	466.8	504.2
Mean	20.0	69.8	273	140	76.0	144	953	275	66.3	34.5	15.1	16.8
Cfsm	0.194	0.678	2.65	1.36	0.738	1.40	9.25	2.67	0.644	0.335	0.147	0.163
In.	0.22	0.76	3.06	1.56	0.77	1.61	10.33	3.08	0.72	0.39	0.17	0.18

Calendar year 1957: Max 1,600 Min 6.4 Mean 106 Cfsm 1.03 In. 13.93
Water year 1957-58: Max 2,010 Min 6.6 Mean 173 Cfsm 1.68 In. 22.85

Peak discharge (base, 2,600 cfs).--Dec. 21 (7 a.m.) 3,070 cfs (7.57 ft); Apr. 18 (7:30 p.m.) 2,990 cfs (7.48 ft); Apr. 23 (11 a.m.) 2,790 cfs (7.22 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 27, 28, Dec. 3-8, 12-20, Jan. 2-29, Feb. 5-27, Mar. 4-10.

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 1958.

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

Average discharge.--18 years, 118 cfs.

Extremes.--Maximum discharge during year, 2,360 cfs Dec. 21 (gage height, 7.82 ft); minimum, 4.5 cfs Sept. 2-6, 16, 17; minimum daily, 4.5 cfs Sept. 3-6, 16.
1940-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 21				Dec. 22 to Sept. 30			
2.1	4.8	3.5	160	2.0	3.1	3.5	155
2.2	7.7	4.0	276	2.1	5.2	4.0	276
2.4	16	5.0	620	2.2	8.1	5.0	620
2.7	40	6.0	1,100	2.3	12	6.0	1,100
3.0	76	7.0	1,750	2.6	31	7.0	1,750
				3.0	72		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.9	14	100	222	110	63	263	460	62	13	32	5.2
2	5.9	24	65	182	100	62	276	360	110	11	21	4.8
3	5.6	127	55	130	95	63	322	347	102	9.9	18	4.5
4	5.4	80	45	70	88	73	410	360	70	9.9	13	4.5
5	5.6	51	35	80	83	78	474	279	*58	13	12	4.5
6	5.4	36	40	105	78	82	484	238	51	15	*9.9	4.5
7	7.1	30	50	90	74	86	620	313	44	14	9.1	5.0
8	15	28	84	85	70	76	488	477	40	18	11	6.0
9	67	74	76	85	67	74	373	404	41	48	13	6.0
10	26	52	152	82	64	80	373	279	40	22	11	6.5
11	16	37	395	80	62	100	400	238	56	25	9.1	6.8
12	13	31	187	*79	61	120	369	242	51	45	7.8	*6.5
13	11	29	*105	76	60	115	428	191	40	30	7.4	6.0
14	10	28	115	74	58	125	576	164	36	21	7.4	5.2
15	9.4	118	100	74	56	120	765	145	32	18	20	5.0
16	9.1	87	90	76	54	110	1,050	139	29	17	9.5	4.5
17	8.8	61	85	80	54	100	1,210	130	27	14	8.4	5.4
18	8.8	49	76	70	53	93	1,300	115	25	12	10	44
19	31	111	82	60	53	90	1,180	117	24	12	8.4	39
20	31	134	307	65	*52	100	*1,010	111	23	12	7.1	23
21	20	86	1,210	80	51	98	1,080	98	23	11	6.5	17
22	16	70	418	160	50	94	1,080	86	24	9.9	6.5	30
23	14	59	260	350	49	90	1,160	78	21	12	6.0	23
24	16	53	205	230	48	96	736	70	20	13	5.4	15
25	42	49	159	160	56	*110	576	71	19	10	11	12
26	28	40	456	150	60	128	390	79	18	12	15	9.9
27	20	27	765	210	60	168	287	65	*18	37	11	11
28	17	46	328	180	63	202	331	62	15	26	8.1	20
29	15	59	250	150	-	230	527	98	14	44	7.1	16
30	*14	77	200	130	-------	248	786	71	13	44	6.5	12
31	14	-------	166	117	-------	260	-------	59	-------	30	5.7	-------
Total	513.0	1,767	6,661	3,782	1,829	3,534	19,304	5,946	1,146	628.7	331.9	362.8
Mean	16.5	58.9	215	122	65.3	114	643	192	38.2	20.3	10.7	12.1
Cfsm	0.229	0.816	2.98	1.69	0.904	1.58	8.91	2.66	0.529	0.281	0.148	0.168
In.	0.26	0.91	3.43	1.95	0.94	1.82	9.94	3.06	0.59	0.32	0.17	0.19

Calendar year 1957: Max 1,210 Min 3.6 Mean 76.4 Cfsm 1.06 In. 14.35
Water year 1957-58: Max 1,300 Min 4.5 Mean 125 Cfsm 1.73 In. 23.58

Peak discharge (base, 1,750 cfs).--Dec. 21 (6:30 a.m.) 2,360 cfs (7.82 ft); Dec. 23 (11 p.m.) 1,860 cfs (7.15 ft); Apr. 18 (6:30 p.m.) 1,880 cfs (7.19 ft); Apr. 23 (10:30 a.m.) 1,800 cfs (7.07 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Feb. 25 to Mar. 25; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for Williams River at Brockway Mills, Vt., Cold River at Drewsville, N. H., and stations on other nearby streams. Stage-discharge relation affected by ice Nov. 26, 27, Dec. 1-7, 13-17, Jan. 3-29, Feb. 1-24.

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 1958.
Gage.--Water-stage recorder. Datum of gage is 218.63 ft above mean sea level, datum of 1929.
Average discharge.--16 years, 9,409 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 76,300 cfs Apr. 23 (gage height, 26.13 ft); minimum daily, 188 cfs Sept. 1.
1942-58: 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 and fragmentary or no gage-height record, 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. 238), and other reservoirs (combined usable capacity, about 19½ billion cubic feet).

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.9	156	7.0	4,230
4.0	202	10.0	11,700
4.5	488	15.0	28,500
5.0	930	20.0	48,700
5.5	1,510	26.0	75,700
6.0	2,270		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,420	4,200	6,490	15,100	8,500	6,400	16,700	35,200	5,670	3,370	11,600	188
2	2,560	2,950	6,850	15,500	4,400	3,700	17,100	31,100	12,600	3,430	8,250	3,100
3	1,900	*2,220	7,000	13,500	6,800	6,020	17,400	28,600	27,600	3,500	1,210	2,920
4	1,760	7,240	6,460	11,600	9,400	6,960	19,500	25,500	21,100	212	3,970	3,300
5	1,410	8,930	5,170	2,410	8,800	7,190	23,400	19,100	14,500	465	4,430	1,840
6	948	6,900	6,670	6,910	7,900	8,830	25,200	16,700	12,400	380	4,600	1,800
7	2,820	6,320	3,160	7,790	7,600	7,780	27,200	19,000	*11,600	2,780	4,480	197
8	2,610	6,570	2,410	8,150	7,200	8,210	27,800	22,100	4,590	3,800	*4,940	1,990
9	3,590	7,770	7,610	8,260	4,900	4,590	24,600	28,800	7,370	6,690	5,590	1,660
10	2,470	2,750	10,600	7,260	6,100	6,430	21,500	27,100	7,450	5,040	4,000	2,320
11	1,550	4,760	20,800	6,700	6,400	6,740	20,900	22,300	7,380	4,570	5,790	2,530
12	832	6,330	21,300	5,700	6,700	6,990	20,000	23,000	7,030	4,630	4,890	1,860
13	384	6,040	15,500	6,700	7,000	7,920	18,800	28,700	7,270	5,610	4,520	2,120
14	2,120	4,760	12,800	6,500	6,600	8,550	21,800	26,400	6,210	8,360	4,100	1,040
15	2,540	6,460	9,970	6,200	5,300	7,770	27,300	20,100	2,520	8,650	5,240	2,350
16	2,020	11,400	9,050	7,000	3,900	4,180	37,500	17,200	4,760	4,640	2,450	*2,420
17	1,760	6,490	a10,000	*8,000	5,400	6,080	50,600	17,600	5,670	6,330	238	2,980
18	1,730	7,390	a11,000	6,800	6,000	6,240	62,600	15,300	4,420	5,720	3,920	3,920
19	1,720	8,630	9,480	3,900	6,500	6,440	70,100	12,600	5,470	6,540	3,520	6,090
20	1,460	9,020	12,900	6,800	6,500	6,430	65,500	15,400	5,000	f625	3,630	6,180
21	4,020	11,600	46,600	6,900	5,800	5,540	61,100	16,100	4,140	6,760	3,940	1,940
22	4,820	11,600	49,100	7,900	6,200	6,180	71,400	13,700	415	8,690	4,100	4,430
23	4,220	11,600	38,200	11,000	4,100	4,390	75,400	12,900	3,240	8,030	962	4,220
24	5,070	3,270	33,000	10,500	5,900	6,290	*74,000	12,500	3,510	6,260	212	4,730
25	5,820	7,370	24,500	11,500	6,200	6,640	70,900	7,530	3,950	5,250	4,200	5,300
26	2,910	8,290	17,400	12,000	6,800	6,700	60,600	7,910	3,760	3,360	4,290	5,080
27	840	8,340	30,000	9,100	6,300	8,520	43,700	9,380	3,900	3,600	3,490	3,820
28	5,410	3,950	27,600	11,000	6,800	*10,100	35,100	9,000	2,200	6,230	3,670	1,280
29	5,200	6,640	20,400	11,500	-	11,800	33,000	8,120	1,810	7,360	3,520	4,560
30	5,290	7,660	16,100	11,500	---------	11,900	38,700	7,820	3,030	9,560	1,280	4,380
31	3,870	--------	14,900	9,700	--------	13,500	--------	7,410	--------	11,600	458	--------
Total	85,874	207,450	513,020	273,380	179,800	225,010	‡1,179.4	562,170	210,565	162,042	121,490	90,545
Mean	2,770	6,915	16,550	8,819	6,421	7,258	39,310	18,130	7,019	5,227	3,919	3,018
(†)	-685	+212	+853	-1,533	-1,768	-762	+3,566	+652	+156	+399	-469	-394

Adjusted for change in reservoir contents

Mean	2,085	7,127	17,400	7,286	4,653	6,496	42,880	18,790	7,175	5,626	3,450	2,624
Cfsm	0.380	1.30	3.17	1.33	0.847	1.18	7.81	3.42	1.31	1.02	0.628	0.478
In.	0.44	1.45	3.65	1.53	0.88	1.36	8.71	3.94	1.46	1.18	0.72	0.53

	Observed					Adjusted				
Calendar year 1957:	Max	49,100	Min	115	Mean	7,195	Mean	7,246	Cfsm	1.32	In.	17.90
Water year 1957-58:	Max	75,400	Min	188	Mean	10,400	Mean	10,460	Cfsm	1.90	In.	25.85

Peak discharge (base, 44,000 cfs).--Dec. 21 (6:15 p.m.) 57,700 cfs (22.00 ft); Apr. 23 (9:30 p.m.) 76,300 (26.13 ft).

* Discharge measurement made on this day.
† Change in contents 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, equivalent in cubic feet per second.
‡ Expressed in thousands.
a No gage-height record; discharge estimated on basis of recorded range in stage, powerplant records, and records for Saxtons River at Saxtons River, Vt.
f Fragmentary gage-height record; discharge computed on basis of recorded graph, powerplant records, and records for Saxtons River at Saxtons River, Vt.
Note.--Stage-discharge relation affected by ice Jan. 11 to Mar. 2.

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 1958.

Gage.--Water-stage recorder. Altitude of gage is 375 ft (from topographic map).

Average discharge.--18 years, 116 cfs.

Extremes.--Maximum discharge during year, 1,970 cfs Apr. 18 (gage height, 6.91 ft); minimum, 5.0 cfs Aug. 14, Sept. 4-6.
1940-58: 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 periods 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 20				Dec. 21 to Sept. 30			
1.4	7.0	2.6	61	1.3	3.6	4.0	248
1.5	9.0	3.0	96	1.6	8.8	4.5	395
1.8	17	3.5	157	1.9	18	5.0	605
2.2	34	4.0	248	2.2	30	5.5	870
Note.--Same as following table above 4.0 ft.				2.5	48	6.0	1,220
				3.0	91	6.5	1,600
				3.5	155		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.8	12	152	289	125	59	298	571	52	9.3	28	5.7
2	7.6	20	95	262	120	57	310	384	101	8.2	19	5.3
3	7.4	60	64	150	105	57	321	330	136	8.4	13	5.1
4	8.5	90	56	80	90	65	423	381	87	8.8	9.8	5.0
5	15	54	38	62	90	72	511	293	*67	10	10	5.0
6	15	39	35	76	82	74	651	240	54	12	8.4	5.0
7	16	32	56	86	78	77	828	293	46	11	6.9	5.3
8	20	29	71	76	76	71	660	489	42	12	8.4	6.1
9	38	60	69	68	70	68	528	511	41	19	*10	6.9
10	28	56	185	72	66	74	503	344	39	15	8.2	*7.8
11	20	41	649	71	64	90	515	270	44	24	7.3	8.8
12	16	35	278	*64	63	*106	431	272	46	49	6.1	7.8
13	13	32	165	62	62	105	459	219	39	35	5.6	6.9
14	12	32	154	56	60	117	635	187	35	23	6.1	6.4
15	11	80	130	60	57	111	883	164	30	18	76	6.1
16	10	82	115	62	55	105	1,280	164	27	17	35	5.7
17	9.5	59	106	62	54	94	1,520	152	25	13	21	6.4
18	9.2	48	80	58	54	88	1,540	121	23	10	16	18
19	31	63	96	55	54	87	1,420	119	21	11	16	24
20	33	103	*342	53	52	94	*1,130	120	20	13	12	19
21	24	75	1,100	52	52	90	1,130	100	21	11	9.8	15
22	19	60	592	75	50	93	1,070	87	21	8.6	12	18
23	16	52	340	175	48	91	1,020	77	19	11	9.8	17
24	16	48	244	167	47	92	730	70	16	11	8.2	13
25	22	45	186	146	55	*99	520	68	15	8.6	13	10
26	21	40	269	191	60	118	367	76	16	8.7	21	9.0
27	18	21	637	238	59	162	277	65	*16	20	16	10
28	16	42	370	212	60	200	338	58	*13	16	11	28
29	17	55	267	179	-	220	546	79	12	16	8.8	29
30	15	83	208	157	-------	250	1,090	68	10	27	7.3	24
31	12	-------	169	140	-------	285	-------	56	-------	28	6.4	-------
Total	524.0	1,548	7,318	3,556	1,908	3,371	21,934	6,428	1,134	492.6	446.1	339.3
Mean	16.9	51.6	236	115	68.1	109	731	207	37.8	15.9	14.4	11.3
Cfsm	0.204	0.624	2.85	1.39	0.823	1.32	8.84	2.50	0.457	0.192	0.174	0.137
In.	0.24	0.70	3.29	1.60	0.86	1.52	9.86	2.89	0.51	0.22	0.20	0.15

Calendar year 1957: Max 1,100 Min 6.2 Mean 78.4 Cfsm 0.948 In. 12.88
Water year 1957-58: Max 1,540 Min 5.0 Mean 134 Cfsm 1.62 In. 22.04

Peak discharge (base, 1,000 cfs).--Dec. 21 (8:30 a.m.) 1,650 cfs (6.56 ft); Apr. 7 (12:30 a.m.) 1,050 cfs (5.76 ft); Apr. 18 (10 p.m.) 1,970 cfs (6.91 ft); Apr. 30 (2:30 a.m.) 1,460 cfs (6.32 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27, Dec. 3-6, 13, Jan. 3-23, Jan. 31 to Feb. 26, Mar. 9, 19, 21, 29.

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 1958.

Gage.--Water-stage recorder. Altitude of gage is 640 ft (from topographic map).

Average discharge.--12 years, 368 cfs.

Extremes.--Maximum discharge during year, 7,000 cfs Dec. 21 (gage height, 9.79 ft); minimum, 11 cfs Sept. 6, 7.
1946-58: 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 periods of ice effect, which are fair.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 22				Apr. 23 to Sept. 30			
3.8	18	5.5	460	3.6	8	5.5	440
4.0	32	6.0	750	3.8	17	6.0	750
4.2	52	7.0	1,680	4.0	31	7.0	1,680
4.5	105	8.0	3,060	4.2	51	8.0	3,060
5.0	243	9.0	5,010	4.5	98	9.0	5,010
				5.0	225		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	52	288	360	260	140	370	1,720	129	*22	185	16
2	22	80	213	320	240	140	383	1,490	524	20	111	14
3	21	807	172	230	220	140	383	1,260	647	19	77	12
4	20	388	138	150	200	150	596	1,360	*288	18	65	12
5	20	240	115	130	190	160	799	1,050	195	22	52	12
6	18	180	90	185	180	155	940	799	160	25	*46	11
7	19	146	200	170	170	150	908	964	135	26	39	14
8	30	126	820	160	160	150	868	1,450	111	44	48	25
9	118	483	495	155	155	150	608	1,320	102	190	84	25
10	75	298	573	150	150	150	566	892	113	76	61	26
11	50	189	1,320	150	150	170	632	708	158	65	49	37
12	40	153	568	145	145	200	535	860	178	210	40	33
13	35	133	370	140	140	190	632	604	132	132	34	26
14	33	126	330	140	140	210	1,090	445	98	72	31	22
15	31	878	300	135	135	200	1,600	372	80	50	37	19
16	29	528	260	140	130	190	2,460	350	72	43	33	*17
17	28	312	250	140	130	175	3,360	327	66	39	29	19
18	29	233	200	130	130	165	3,940	284	61	35	29	212
19	60	644	210	120	130	160	4,190	300	55	34	24	309
20	99	685	1,100	120	125	170	3,680	288	49	51	21	144
21	63	392	4,700	115	125	170	4,190	210	46	54	19	85
22	57	280	1,540	220	125	170	4,940	178	47	36	18	250
23	48	223	820	420	120	160	4,740	158	47	34	16	163
24	49	198	596	440	120	150	*3,200	135	42	35	14	85
25	316	180	455	360	125	165	3,000	138	38	31	26	61
26	153	145	683	330	135	*180	1,910	178	35	35	43	48
27	101	95	1,820	440	135	250	1,250	140	32	809	34	47
28	79	125	813	450	140	296	1,130	116	29	238	26	84
29	*66	250	566	350	-	342	1,200	148	27	530	22	74
30	59	352	435	310	-------	370	2,610	130	24	546	19	54
31	55	-------	356	280	-------	388	-------	102	-------	219	17	---------
Total	1,846	8,921	20,796	7,085	4,305	5,956	56,710	18,476	3,720	3,760	1,349	1,956
Mean	59.5	297	671	229	154	192	1,890	596	124	121	43.5	65.2
Cfsm	0.332	1.66	3.75	1.28	0.860	1.07	10.6	3.33	0.693	0.676	0.243	0.364
In.	0.38	1.85	4.32	1.47	0.89	1.24	11.78	3.84	0.77	0.78	0.28	0.41

Calendar year 1957: Max 4,700 Min 12 Mean 265 Cfsm 1.48 In. 20.12
Water year 1957-58: Max 4,940 Min 11 Mean 370 Cfsm 2.07 In. 28.01

Peak discharge (base, 4,500 cfs).--Dec. 21 (8 to 9 a.m.) 7,000 cfs (9.79 ft); Apr. 22 (8:30 to 9:30 p.m.) 5,600 cfs (9.25 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26-29, Dec. 5-8, 13-20, Jan. 1 to Mar. 27 (no gage-height record Mar. 6-23; discharge estimated on basis of weather records, recorded range in stage, and records for West River at Newfane and Williams River at Brockway Mills).

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 1958.

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.--34 years, 618 cfs.

Extremes.--Maximum discharge during year, 12,600 cfs Dec. 21 (gage height, 10.78 ft); minimum, 25 cfs Sept. 4-7.

1919-23, 1928-58: 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 periods of ice effect, which are fair. Records of water temperatures for the water year 1958 are given in WSP 1571.

Revisions (water years).--WSP 756: Drainage area. WSP 1231: 1922-23, 1929-31(M).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 23				Apr. 24 to Sept. 30			
3.8	24	5.5	910	3.79	25	4.5	240
3.9	38	6.0	1,410	3.8	26	5.0	530
4.1	79	7.0	2,710	4.0	62	5.5	910
4.3	145	8.0	4,550	4.2	118		
4.5	230	10.0	9,980	Note.--Same as preceding table above 5.5 ft.			
5.0	520						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	90	513	676	450	240	740	2,920	195	48	306	32
2	39	111	368	570	310	240	764	2,420	556	*44	204	29
3	38	1,210	285	400	380	240	772	2,060	899	42	140	26
4	36	676	240	270	350	270	1,170	2,200	*436	39	112	26
5	36	420	175	230	330	300	1,510	1,750	312	46	94	26
6	34	308	150	320	310	290	1,760	1,360	245	52	*82	25
7	34	240	272	300	290	280	1,790	1,610	204	54	70	26
8	44	203	1,090	270	280	270	1,690	2,370	179	56	68	31
9	205	584	829	265	270	270	1,240	2,060	170	235	102	42
10	157	520	849	260	260	270	1,120	1,460	174	154	106	44
11	98	330	2,230	255	250	310	1,300	1,180	234	109	82	48
12	79	250	1,100	250	240	370	1,130	1,380	312	349	70	54
13	66	216	620	240	240	360	1,220	1,060	218	240	60	48
14	60	198	560	230	230	380	2,000	804	174	150	56	40
15	56	989	520	230	230	380	3,000	691	147	102	60	35
16	51	921	457	*235	230	340	4,740	642	132	*88	68	*34
17	49	527	450	240	220	310	6,480	614	118	80	54	35
18	49	396	340	215	220	302	7,550	551	115	70	54	201
19	77	822	*357	200	*220	286	7,920	544	102	65	52	481
20	149	1,100	1,540	195	210	308	7,390	551	94	70	46	265
21	111	660	8,320	200	210	302	8,630	442	90	94	42	158
22	87	471	2,840	320	210	302	9,000	367	94	72	39	295
23	87	379	1,510	680	205	302	9,330	323	90	70	34	302
24	76	330	1,110	760	200	280	*5,720	280	82	72	32	162
25	379	302	847	620	210	324	5,060	265	74	62	40	115
26	279	250	1,080	550	230	*357	3,180	318	70	62	72	88
27	173	150	3,590	680	230	457	2,050	280	65	1,010	68	80
28	134	185	1,560	730	240	555	1,940	231	60	450	54	106
29	*111	362	1,100	510	-	653	2,460	260	56	492	46	125
30	101	541	847	540	-------	724	5,680	255	52	817	40	94
31	95	-------	684	490	-------	780	-------	204	-------	356	35	-------
Total	3,029	13,741	36,433	12,031	7,355	11,041	108,336	31,452	5,749	5,650	2,388	3,073
Mean	97.7	458	1,175	388	263	356	3,611	1,015	192	182	77.0	102
Cfsm	0.317	1.49	3.81	1.26	0.854	1.16	11.7	3.30	0.623	0.591	0.250	0.331
In.	0.37	1.66	4.40	1.45	0.89	1.33	13.08	3.80	0.69	0.68	0.29	0.37

Calendar year 1957: Max 8,320 Min 26 Mean 443 Cfsm 1.44 In. 19.52
Water year 1957-58: Max 9,330 Min 25 Mean 658 Cfsm 2.14 In. 29.01

Peak discharge (base, 8,800 cfs).--Dec. 21 (8 a.m.) 12,600 cfs (10.78 ft); Apr. 23 (11 a.m.) 11,800 cfs (10.53 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 27, 28, Dec. 3-6, 13-15, Jan. 2 to Mar. 17 (no gage-height record Feb. 7-13).

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 1958.

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.--14 years (1944-58), 10,800 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 84,200 cfs Apr. 23 (gage height, 204.30 ft); minimum daily, 231 cfs Oct. 13..
1936, 1938, 1944-58: 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. 238), 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,760	4,930	11,000	17,200	11,000	7,800	18,100	43,600	6,760	3,700	11,300	383
2	2,270	3,260	8,040	17,900	6,000	3,500	18,600	37,500	9,690	3,850	9,750	2,590
3	2,450	3,260	7,410	16,600	8,800	6,800	19,600	32,900	26,900	4,090	1,280	2,800
4	1,930	8,240	7,290	11,900	11,500	7,500	21,300	30,600	21,900	504	5,240	2,570
5	1,090	10,400	6,110	5,520	11,500	7,800	26,800	25,300	15,500	970	4,850	2,520
6	1,040	7,090	6,630	6,280	8,700	9,000	28,900	18,700	*13,600	497	5,660	929
7	3,090	6,780	2,630	7,700	8,600	9,300	31,700	21,500	13,000	3,190	4,730	816
8	2,950	7,360	3,400	8,200	7,400	10,500	32,700	24,400	5,870	4,150	*6,100	1,970
9	3,260	9,860	8,500	8,200	6,000	5,560	30,300	32,200	6,960	6,610	5,350	2,080
10	2,740	1,640	12,700	8,600	6,600	7,930	25,200	32,300	8,290	5,300	2,860	2,720
11	2,080	4,270	22,800	8,900	8,000	8,200	23,900	27,000	7,890	4,980	6,030	2,690
12	858	7,220	24,100	7,000	6,600	8,170	23,200	23,900	7,270	6,250	4,820	2,520
13	321	7,300	17,200	7,500	6,800	8,590	21,400	31,000	6,720	5,870	4,310	432
14	2,420	6,430	14,500	8,000	9,000	9,630	24,300	29,600	5,520	7,490	4,470	425
15	2,420	7,480	13,400	6,900	6,000	10,400	29,800	24,300	2,250	10,200	6,030	*2,880
16	2,300	11,800	10,800	7,300	5,300	6,910	38,300	19,200	5,250	5,470	2,930	2,710
17	2,160	9,670	9,780	9,700	6,200	7,840	57,200	18,900	6,090	6,960	504	3,110
18	2,340	7,940	12,200	7,600	7,400	7,650	68,800	17,800	6,040	8,260	4,940	4,900
19	2,220	9,560	12,200	5,500	6,700	7,560	77,300	14,000	6,020	4,520	5,210	6,160
20	2,020	10,500	13,000	7,600	6,800	7,690	75,100	12,800	6,400	*504	4,550	5,730
21	4,170	12,100	44,900	7,500	6,800	8,000	70,800	16,400	2,530	6,940	5,490	3,440
22	4,720	12,200	58,800	9,400	6,200	7,630	76,100	14,700	497	7,930	5,010	5,760
23	4,610	12,200	44,500	11,500	5,400	4,370	83,400	13,900	3,780	7,870	1,330	5,510
24	5,480	5,000	37,500	12,000	7,200	7,480	80,800	13,700	4,030	7,410	494	5,900
25	5,160	7,970	31,300	13,000	6,700	7,820	*76,600	9,550	4,140	6,010	5,620	5,480
26	2,550	9,690	21,100	13,000	7,000	8,410	68,800	8,050	4,490	3,220	5,230	5,990
27	1,130	9,080	33,900	12,500	7,200	9,750	51,600	11,200	3,940	3,520	3,590	5,370
28	5,990	3,300	33,500	13,000	8,500	*12,700	41,700	11,000	2,470	7,540	1,930	*526
29	5,880	6,800	25,700	12,500	-	13,700	39,600	8,480	1,510	8,580	1,930	4,700
30	6,020	6,740	19,800	12,000	---------	14,200	47,600	8,680	1,740	10,300	339	3,970
31	4,810	---------	17,300	11,500	---------	15,200	---------	7,410	---------	11,200	333	---------
Total	93,239	230,070	591,990	312,000	209,700	267,590	‡1,329.5	640,570	217,047	173,885	132,420	97,581
Mean	3,008	7,669	19,100	10,060	7,489	8,632	44,320	20,660	7,235	5,609	4,272	3,253
(†)	-885	+212	+853	-1,533	-1,768	-782	+3,566	+652	+156	+399	-469	-394

Adjusted for change in reservoir contents

Mean	2,323	7,881	19,950	8,532	5,721	7,870	47,880	21,320	7,391	6,008	3,803	2,859
Cfsm	0.371	1.26	3.18	1.36	0.913	1.26	7.64	3.40	1.18	0.959	0.607	0.456
In.	0.43	1.40	3.67	1.57	0.95	1.45	8.53	3.92	1.32	1.11	0.70	0.51

	Observed			Adjusted			
Calendar year 1957:	Max 58,800	Min 260	Mean 8,076	Mean 8,128	Cfsm 1.30	In. 17.60
Water year 1957-58:	Max 83,400	Min 321	Mean 11,770	Mean 11,790	Cfsm 1.88	In. 25.56

Peak discharge (base, 50,000 cfs).--Dec. 22 (1 a.m.) 63,400 cfs (199.09 ft); Apr. 23 (5 to 5:30 p.m.) 84,200 cfs (204.30 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.
‡ Expressed in thousands.
Note.--Stage-discharge relation affected by ice Jan. 7 to Mar. 8.

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 1958.

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.--36 years, 125 cfs.

Extremes.--Maximum discharge during year, 1,390 cfs Apr. 19 (gage height, 6.72 ft); minimum, 5.5 cfs Sept. 15-17.
1922-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 19				Apr. 20 to Sept. 30			
1.3	4.3	1.7	19	1.4	5.3	3.0	163
1.4	6.3	2.0	39	1.5	8.2	4.0	387
1.5	9.2	2.5	88	1.7	17	5.0	715
				2.0	38	6.0	1,060
				2.5	88	7.0	1,530

Note.--Same as following table above 2.5 ft

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	11	154	234	115	49	195	796	41	9.8	33	8.2
2	6.1	15	128	271	102	48	199	564	69	9.0	30	7.9
3	5.8	44	92	205	92	48	197	427	141	9.0	25	6.9
4	5.8	84	75	138	83	51	249	418	116	8.6	22	6.6
5	5.8	70	65	90	75	54	319	374	87	8.6	*19	6.3
6	5.6	68	68	80	68	55	390	316	65	6.9	16	6.0
7	6.1	61	55	72	63	56	522	304	51	7.2	14	12
8	6.5	53	62	66	59	55	457	409	41	12	15	12
9	8.2	80	72	60	56	53	368	526	38	17	15	8.2
10	8.5	89	177	64	53	53	347	442	35	14	12	*8.2
11	8.2	72	676	60	51	62	371	350	35	43	11	8.2
12	7.0	58	*519	56	50	*75	326	314	35	69	9.4	7.2
13	6.8	51	360	53	49	80	314	260	32	43	9.4	6.3
14	6.8	44	271	50	47	86	433	207	29	26	11	6.0
15	6.8	80	197	51	46	89	575	175	24	23	20	5.8
16	6.8	107	148	52	45	89	866	158	21	21	22	5.5
17	6.8	97	121	53	44	82	1,170	154	18	20	24	5.8
18	7.0	80	97	50	44	76	*1,240	143	17	15	24	9.9
19	18	97	94	47	44	74	1,300	138	16	14	21	12
20	20	143	253	46	43	73	1,250	143	15	13	17	11
21	16	130	808	45	43	70	1,230	127	14	12	15	9.0
22	13	100	830	66	42	73	1,320	105	14	10	19	12
23	12	80	519	170	42	73	1,310	83	13	19	16	11
24	12	67	357	205	41	70	1,160	67	12	22	13	9.0
25	15	59	260	160	44	70	908	62	11	13	16	7.9
26	15	50	212	185	49	78	715	65	15	15	17	7.2
27	14	42	439	250	49	101	547	58	24	16	15	8.6
28	13	41	401	250	50	126	466	52	*17	15	12	14
29	12	51	326	193	-	*141	487	55	13	19	11	12
30	11	80	262	158	-------	161	964	*52	11	24	9.8	9.8
31	11	-------	201	132	-------	184	-------	45	-------	23	9.0	-------
Total	302.4	2,104	8,289	3,612	1,589	2,455	20,195	7,389	1,070	589.1	522.6	260.5
Mean	9.75	70.1	267	117	56.8	79.2	673	238	35.7	19.0	16.9	8.68
Cfsm	0.137	0.986	3.76	1.65	0.799	1.11	9.47	3.35	0.502	0.267	0.238	0.122
In.	0.16	1.10	4.34	1.89	0.83	1.28	10.56	3.86	0.56	0.31	0.27	0.14

Calendar year 1957: Max 830 Min 4.2 Mean 87.1 Cfsm 1.23 In. 16.64
Water year 1957-58: Max 1,320 Min 5.5 Mean 133 Cfsm 1.87 In. 25.30

Peak discharge (base, 1,000 cfs).--Dec. 21 (5 p.m.) 1,040 cfs (5.92 ft); Apr. 19 (4 a.m.) 1,390 cfs (6.72 ft); Apr. 30 (11 a.m.) 1,050 cfs (5.95 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27, Dec. 3-6, Jan. 5-28, Feb. 1, 3-15, 17-22, 28, Mar. 10.

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 1958.

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.--13 years, 172 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 1,000 cfs Apr. 17 (gage height, 8.69 ft); minimum daily, 4.5 cfs Sept. 8.
1945-58: Maximum discharge, 1,090 cfs Mar. 31, Apr. 9, 1950 (gage height, 8.94 ft); minimum daily, 0.8 cfs Dec. 4-7, 1948.

Remarks.--Records excellent. Flow regulated by Surry Mountain Reservoir (see p. 238).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

4.1	4.3	6.0	154
4.4	10	6.5	257
4.7	20	7.0	402
5.0	36	8.0	760
5.5	82	9.0	1,110

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.2	*16	96	647	197	99	383	*802	86	17	37	12
2	8.2	21	149	621	180	107	386	932	77	17	37	9.1
3	8.2	55	156	583	164	107	374	921	98	17	37	6.5
4	8.2	108	132	507	146	107	448	907	171	17	*37	5.1
5	8.0	98	103	253	138	119	552	890	168	17	37	4.6
6	7.6	90	66	118	135	138	650	834	135	17	31	4.8
7	8.5	83	56	104	133	141	753	798	98	17	26	4.8
8	9.8	70	76	105	127	114	732	654	72	17	20	*4.5
9	12	108	100	112	122	103	774	665	60	17	16	8.8
10	13	115	128	119	112	118	764	704	60	17	16	12
11	12	99	428	*122	90	132	708	714	60	17	16	22
12	11	78	*658	122	83	152	624	742	60	69	16	26
13	9.8	66	643	98	85	161	496	742	50	95	16	26
14	9.6	60	602	82	*86	180	628	725	47	95	16	19
15	9.8	108	482	82	85	178	742	704	38	59	16	15
16	9.8	136	246	82	100	171	910	679	36	45	15	11
17	9.4	127	201	90	105	169	865	654	32	45	19	9.4
18	9.6	108	189	111	76	178	826	624	31	28	24	8.0
19	24	132	178	121	63	168	837	624	31	22	29	5.4
20	29	182	184	100	78	146	806	606	30	22	35	12
21	25	161	86	90	86	141	823	468	26	22	27	15
22	19	140	167	91	86	141	683	281	22	22	27	15
23	17	115	472	142	85	141	718	162	19	23	27	16
24	16	94	609	232	85	141	767	136	18	23	27	16
25	21	88	613	306	85	146	872	135	*17	22	27	15
26	22	65	471	321	85	161	963	189	17	22	27	15
27	19	45	332	383	85	201	980	201	17	38	27	16
28	18	42	658	326	86	242	848	133	17	45	26	16
29	17	45	647	326	-	*273	802	*95	17	44	21	15
30	16	47	643	273	---	306	795	87	17	36	13	24
31	15	---	658	232	---	341	---	87	---	35	13	---
Total	430.7	2,702	10,229	6,901	2,988	5,022	21,509	16,895	1,627	999	758	389.0
Mean	13.9	90.1	330	223	107	162	717	545	54.2	32.2	24.5	13.0
(†)	0	+6.29	+52.5	-45.2	+0.66	-10.8	+238	-214	+0.85	+1.16	-0.78	+1.23
Adjusted for change in contents in Surry Mountain Reservoir												
Mean	13.9	96.4	382	177	107	151	955	331	55.1	33.4	23.7	14.2
Cfsm	0.138	0.954	3.78	1.75	1.06	1.50	9.46	3.28	0.546	0.331	0.235	0.141
In.	0.16	1.06	4.37	2.02	1.11	1.73	10.54	3.78	0.61	0.38	0.27	0.16

	Observed			Adjusted		
Calendar year 1957:	Max 658	Min 4.8	Mean 115	Mean 119	Cfsm 1.18	In. 15.97
Water year 1957-58:	Max 980	Min 4.5	Mean 193	Mean 195	Cfsm 1.93	In. 26.19

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Surry Mountain Reservoir.

1585. Otter Brook near Keene, N. H.

Location.--Lat 42°57'55", long 72°14'00", on left bank 10 ft downstream from bridge near State Highway 9, 3½ miles northeast of Keene, Cheshire County, and 3½ miles upstream from Minnewawa Brook.

Drainage area.--42.3 sq mi.

Records available.--October 1923 to May 1958 (discontinued).

Gage.--Water-stage recorder. Concrete control since Nov. 17, 1936. Datum of gage is 716.11 ft above mean sea level (levels by Corps of Engineers).

Average discharge.--34 years (1923-57), 71.0 cfs.

Extremes.--Maximum discharge during period October 1957 to May 1958, about 1,000 cfs Apr. 22; maximum gage height not determined, occurred May 1 (backwater from Otter Brook Reservoir); minimum discharge, 1.8 cfs Oct. 13, 17, 18.
1923-58: Maximum discharge, 6,130 cfs Sept. 21, 1938 (gage height, 7.93 ft), from rating curve extended above 1,300 cfs on basis of surface-float measurements and slope-area and contracted-opening measurements at gage heights 7.10 and 7.93 ft; maximum gage height, that of May 1, 1958; minimum discharge, 1.0 cfs Sept. 2, 1957.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated at times by Granite Lake above station.

Revisions (water years).--WSP 871: Drainage area. WSP 1231: 1924(M), 1928, 1933-34(M).

Rating table, Oct. 1, 1957, to May 31, 1958, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from Otter Brook Reservoir Apr. 18 to May 11)

2.0	1.7	3.2	60
2.1	2.6	3.5	113
2.2	3.8	3.8	203
2.4	7.4	4.1	330
2.6	13	4.5	530
2.8	21	5.0	785
3.0	37	5.5	1,060

Discharge, in cubic feet per second, October 1957 to May 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	*5.1	80	139	75	38	123	500				
2	3.2	10	60	139	70	37	126	350				
3	3.1	45	50	125	65	36	123	270				
4	2.9	49	42	90	60	39	154	260				
5	2.8	39	34	70	58	42	196	240				
6	2.6	29	28	60	53	43	243	200				
7	2.3	23	33	55	49	43	360	190				
8	2.1	20	37	50	45	41	283	250				
9	2.4	41	44	47	42	40	241	330				
10	2.7	33	132	50	40	45	230	250				
11	2.3	26	388	*47	39	*50	241	220				
12	2.1	22	254	44	38	58	214	170				
13	2.9	19	185	41	37	59	214	129				
14	2.7	18	*129	38	36	65	279	113				
15	2.0	43	102	40	35	68	405	105				
16	1.9	44	90	41	34	62	625	100				
17	1.9	37	84	41	33	58	780	95				
18	2.0	30	74	38	33	54	800	90				
19	11	51	72	36	33	53	850	85				
20	12	71	203	35	33	56	800	90				
21	6.6	58	560	34	33	*54	800	82				
22	5.2	47	351	65	32	57	850	75				
23	4.5	39	207	160	32	54	850	65				
24	4.5	34	154	150	31	53	750	60				
25	8.8	30	118	135	33	54	550	55				
26	7.2	26	142	170	37	60	450	60				
27	5.6	20	325	170	37	74	350	50				
28	4.9	24	203	150	38	82	300	47				
29	5.1	30	169	125	-	90	300	50				
30	5.6	47	134	105	-------	100	600	45				
31	6.0	-------	111	90	-------	116	-------	40	-------	-------	-------	-------
Total	132.3	1,010.1	4,595	2,580	1,181	1,781	13,087	4,666				
Mean	4.27	33.7	148	83.2	42.2	57.5	436	151				
Cfsm	0.101	0.797	3.50	1.97	0.998	1.36	10.3	3.57				
In.	0.12	0.89	4.04	2.27	1.04	1.57	11.51	4.10				

Calendar year 1957: Max 560 Min 1.1 Mean 48.8 Cfsm 1.15 In. 15.66
Water year 1957-58: Max - Min - Mean - Cfsm - In. -

Peak discharge (base, 600 cfs).--Dec. 21 (9:30 a.m.) 796 cfs (5.02 ft); Apr. 22 (time unknown) about 1,000 cfs.

* Discharge measurement made on this day.

Note.--No gage-height record Feb. 15-22, Apr. 18 to May 12, May 15-31; discharge estimated on basis of weather records and records for Ashuelot River near Gilsum, South Branch Ashuelot River at Webb, near Marlboro, and Ashuelot River at Hinsdale. Stage-discharge relation affected by ice Nov. 26, 27, Dec. 3, 5, 6, 13, 14, 18, Jan. 3 to Mar. 9.

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 to September 1958.

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 period May to September 1958, 182 cfs July 12 (gage height, 5.62 ft); maximum gage height, 6.23 ft Sept. 22 (backwater from construction work at control); minimum discharge, about 0.2 cfs Sept. 16-20, 22, gates closed at Otter Brook Dam; minimum daily, 1.4 cfs Sept. 19.

Remarks.--Records good. Flow regulated by Otter Brook Reservoir (see p. 238).

Rating tables, May 29 to Sept. 30, 1958 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 31, June 1, 6-22, Aug. 16 to Sept. 15; stage-discharge relation indefinite Sept. 16-22)

May 29 to Sept. 22				Sept. 22-30	
4.2	5.9	5.0	63	5.7	5.0
4.5	12	5.5	153	5.9	11
4.7	24				

Discharge, in cubic feet per second, May to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								-	34	8.2	41	5.6
2								-	49	7.6	27	5.1
3								-	86	7.1	22	4.9
4								-	59	7.0	18	4.6
5								-	45	7.1	*16	4.4
6								-	38	7.4	13	4.3
7								-	31	7.4	12	5.2
8								-	27	8.4	11	8.4
9								-	27	12	11	*9.5
10								-	28	11	11	11
11								-	26	38	9.8	12
12								-	26	134	8.4	14
13								-	22	86	8.2	14
14								-	19	53	7.4	14
15								-	19	40	8.5	11
16								-	16	*34	8.5	9.8
17								-	17	23	8.6	5.3
18								-	14	17	8.8	4.8
19								-	*12	15	8.6	1.4
20								-	11	15	8.5	2.5
21								-	11	13	7.7	3.9
22								-	11	11	18	4.5
23								-	10	11	10	8.8
24								-	8.0	13	11	8.8
25								-	*7.0	12	11	7.0
26								-	7.6	15	11	8.8
27								-	15	22	10	8.8
28								-	12	22	10	9.1
29								*55	9.8	24	8.4	9.4
30					---			50	8.9	31	7.1	9.4
31		---			---		---	44		32	6.2	---
Total								-	706.3	744.2	365.7	230.3
Mean								-	23.5	24.0	11.8	7.68
(†)								-	-0.35	+0.34	-0.30	+3.90
Adjusted for change in contents in Otter Brook Reservoir												
Mean								-	23.2	24.3	11.5	11.6
Cfsm								-	0.492	0.515	0.244	0.246
In.								-	0.55	0.59	0.28	0.27

* Discharge measurement made on this day.
† Change in contents, equivalent to cubic feet per second, in Otter Brook Reservoir.
Note.--Discharge computed from twice-daily wire-weight-gage readings May 29 to June 22.

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 and Maine Railroad, and 2½ miles south of Marlboro, Cheshire County.

Drainage area.--36.0 sq mi.

Records available.--October 1920 to September 1958. 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.--38 years, 59.8 cfs.

Extremes.--Maximum discharge during year, 766 cfs Dec. 21 (gage height, 5.32 ft); minimum, 1.8 cfs Oct. 6; minimum daily, 1.9 cfs Oct. 14.
1920-58: 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 ard 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 periods of ice effect or no gage-height record, which are fair. Flow regulated by powerplant and several small reservoirs above station. Records of water temperatures for the water year 1958 are given in WSP 1571.

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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 16				Apr. 17 to Sept. 30			
1.68	1.9	2.2	13	1.7	3.0	3.8	86
1.7	2.1	3.0	40	2.0	8.3	4.0	122
1.9	5.5			3.0	40	4.4	255
				3.5	60	5.1	615

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

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.1	5.3	77	112	84	31	138	260	30	6.6	47	5.5
2	3.3	7.0	47	144	77	32	133	*171	39	5.9	29	5.0
3	3.6	32	33	90	70	33	133	144	35	5.3	18	4.6
4	3.1	43	26	56	64	34	177	177	28	5.7	*13	4.6
5	3.0	25	21	42	57	37	231	152	24	7.5	14	4.6
6	2.0	17	19	46	52	40	307	112	20	8.3	11	4.8
7	2.0	13	17	42	48	46	516	149	18	7.5	9.0	6.4
8	3.0	11	20	39	47	43	375	201	13	14	8.1	*10
9	4.4	57	28	36	45	40	286	212	16	56	7.2	11
10	4.6	46	115	35	42	46	278	136	22	31	5.0	14
11	4.0	26	300	34	39	*51	286	103	22	45	5.1	17
12	3.3	18	120	33	36	64	231	103	22	100	6.4	12
13	2.3	14	80	32	35	68	247	78	18	71	6.4	9.3
14	1.9	11	60	31	33	70	360	74	14	40	6.2	7.4
15	2.8	28	56	31	32	70	435	64	10	40	6.2	6.6
16	4.0	36	49	32	31	64	555	62	9.7	38	5.5	6.8
17	4.2	25	*45	34	30	58	603	59	9.5	28	4.1	8.3
18	4.0	19	39	32	29	48	585	57	9.5	18	4.3	17
19	7.8	40	37	30	28	47	538	67	9.3	18	4.8	26
20	11	105	145	29	28	50	460	90	9.0	21	5.9	21
21	7.3	60	577	28	27	48	430	70	*8.8	17	6.9	15
22	5.9	37	376	120	26	50	395	56	7.4	13	15	18
23	5.5	28	177	300	26	49	410	40	7.2	21	12	20
24	5.5	22	109	300	27	*52	355	36	7.9	29	7.9	14
25	8.2	19	84	250	28	48	227	43	7.7	21	7.9	12
26	9.2	17	111	360	30	58	152	70	13	16	10	10
27	5.3	13	370	400	31	78	118	51	33	27	10	12
28	*3.4	12	190	231	31	98	194	101	22	30	8.8	38
29	4.9	14	136	141	-	95	296	44	10	29	7.4	31
30	5.1	30	105	103	-------	116	455	*34	7.2	26	6.6	22
31	4.9	-------	76	92	-------	141	-------	34	-------	36	6.0	-------
Total	141.6	830.3	3,645	3,285	1,133	1,805	9,906	3,050	502.2	831.8	314.7	393.9
Mean	4.57	27.7	118	106	40.5	58.2	330	98.4	16.7	26.8	10.2	13.1
Cfsm	0.127	0.769	3.28	2.94	1.12	1.62	9.17	2.73	0.464	0.744	0.283	0.364
In.	0.15	0.86	3.77	3.39	1.17	1.86	10.23	3.15	0.52	0.86	0.33	0.41

Calendar year 1957: Max 577 Min 1.9 Mean 44.9 Cfsm 1.25 In. 16.94
Water year 1957-58: Max 603 Min 1.9 Mean 70.8 Cfsm 1.97 In. 26.70

Peak discharge (base, 550 cfs).--Dec. 21 (3 p.m.) 766 cfs (5.32 ft); Apr. 7 (3 to 4 a.m.) 585 cfs (5.05 ft); Apr. 16 (12 p.m.) 701 cfs (5.23 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Dec. 11-14, Feb. 11-22; discharge estimated on basis of weather records, recorded range in stage when available, and records for Ashuelot River near Gilsum and stations on other nearby streams. Stage-discharge relation affected by ice Nov. 27, Dec. 5, 6, 18, 30, 31, Jan. 3-27, Feb. 1 to Mar. 6, Mar. 9, and at times during period of no gage-height record Dec. 11-14.

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 1958.

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.--48 years, 657 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 3,270 cfs Apr. 7 (gage height, 6.71 ft); minimum, 36 cfs Oct. 1, 13; minimum daily, 46 cfs Oct. 15.
1907-11, 1914-58: 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. 238).

Revisions (water years).--WSP 661: Drainage area. WSP 781: 1907-11 calendar years, 1914-34. WSP 1301: 1915(M), 1917-19(M), 1921-33(M). WSP 1331: 1920(M).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.8	40	4.1	445
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

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	68	417	1,500	1,030	490	1,620	2,660	421	105	330	63
2	56	*86	544	1,610	960	493	1,670	2,320	427	97	302	58
3	54	150	487	1,450	860	493	1,630	2,140	609	95	181	55
4	54	279	457	1,200	760	544	1,690	2,170	550	97	158	70
5	54	311	363	968	700	622	1,870	2,140	524	103	152	74
6	51	246	267	784	650	680	2,140	2,070	*463	105	172	74
7	49	205	246	687	610	728	3,060	2,130	374	109	163	72
8	51	182	231	616	570	680	3,130	2,420	295	114	*146	90
9	56	212	279	628	540	583	2,610	2,580	297	216	156	116
10	59	321	554	590	510	596	2,490	2,430	325	248	99	114
11	60	292	*1,660	596	490	714	2,360	2,240	311	178	88	138
12	59	227	2,140	550	475	648	2,310	2,100	336	361	101	133
13	54	192	1,790	*524	460	900	2,100	2,000	306	538	118	126
14	47	166	1,440	493	445	960	1,980	1,670	258	469	124	101
15	46	216	1,230	487	430	952	2,180	1,400	206	*385	116	*87
16	49	363	1,020	493	450	862	2,400	1,330	188	363	114	93
17	51	341	926	499	450	812	2,540	1,350	169	306	84	105
18	51	302	749	493	420	770	2,560	1,370	160	246	66	140
19	76	344	694	487	400	735	2,480	1,250	144	205	73	166
20	99	531	862	460	380	749	2,440	1,200	128	157	84	146
21	101	609	1,960	440	370	728	2,340	1,150	146	141	93	103
22	92	475	2,500	590	360	700	2,320	996	132	133	118	110
23	81	385	2,180	922	320	700	2,380	791	131	182	138	118
24	76	296	1,770	1,090	320	721	2,460	628	138	227	97	110
25	79	258	1,510	1,150	350	805	2,360	570	120	192	84	97
26	84	235	1,410	1,250	410	840	2,080	661	118	169	114	84
27	81	192	1,940	1,530	470	990	1,940	728	160	160	118	92
28	74	156	2,210	1,720	440	1,160	2,010	648	205	185	112	149
29	70	169	1,980	1,540	-	1,260	2,250	564	145	209	108	175
30	69	215	1,690	1,390	--------	1,350	2,660	505	125	231	103	169
31	67	--------	1,520	1,200	--------	1,500	--------	439	--------	250	76	--------
Total	2,001	8,024	36,926	27,937	14,630	24,985	68,280	46,652	7,911	6,576	3 988	3,228
Mean	64.5	267	1,191	901	522	806	2,276	1,505	264	212	129	108
(†)	0	+6.29	+52.5	-45.2	+0.66	-10.1	+381	-353	+0.85	+1.16	-0.78	+1.23
Adjusted for change in reservoir contents												
Mean	64.5	274	1,244	856	523	796	2,657	1,152	265	213	128	109
Cfsm	0.154	0.652	2.96	2.04	1.25	1.90	6.33	2.74	0.631	0.507	0.305	0.260
In.	0.18	0.73	3.41	2.35	1.30	2.18	7.06	3.16	0.70	0.59	0.35	0.29

	Observed			Adjusted		
Calendar year 1957	Max 2,500	Min 25	Mean 469	Mean 473	Cfsm 1.13	In. 15.30
Water year 1957-58	Max 3,130	Min 46	Mean 688	Mean 690	Cfsm 1.64	In. 22.30

* 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 Jan. 20, 21, Feb. 1 to Mar. 1.

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 1958. 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, at site 450 ft downstream at same datum.

Average discharge.--42 years, 29.9 cfs.

Extremes.--Maximum discharge during year, 213 cfs Apr. 18 (gage height, 8.63 ft); minimum, 0.5 cfs Oct. 16.
1916-58: 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, 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 tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from beaver dam Oct. 7, 8; shifting-control method used June 10, 12)

Oct. 1 to Apr. 17				Apr. 18 to Sept. 30			
4.9	0.5	6.0	18	4.9	0.6	6.0	22
5.0	1.0	6.5	37	5.0	1.3	6.5	42
5.1	1.8	7.0	64	5.1	2.2	7.0	68
5.3	4.0	8.0	144	5.3	4.9	8.0	144
5.5	6.8	9.0	262	5.6	11	9.0	262
5.7	10						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.5	1.8	7.5	45	68	16	65	138	13	6.6	10	1.1
2	9.7	3.7	9.9	46	60	16	69	105	15	*7.1	6.2	1.0
3	11	3.8	12	40	53	20	75	86	14	5.6	4.2	1.6
4	8.7	5.6	13	30	44	*20	84	79	14	3.6	5.8	3.3
5	6.4	4.6	13	25	38	19	99	68	11	3.6	6.3	1.9
6	4.5	3.7	13	23	34	20	127	61	10	3.4	8.8	1.6
7	3.2	4.6	9.1	17	32	21	196	66	6.6	5.8	7.6	1.9
8	1.6	2.4	8.5	19	31	18	*196	81	5.4	7.1	9.0	2.6
9	2.0	3.3	16	23	29	19	163	98	9.5	7.5	6.3	2.0
10	2.4	2.3	24	20	29	23	144	87	9.2	5.8	3.9	5.3
11	1.1	6.1	44	17	23	23	149	71	*7.6	5.2	5.2	2.8
12	.9	4.6	56	17	21	30	139	60	8.6	4.3	5.8	1.9
13	.7	4.1	41	18	21	32	123	55	8.1	3.2	*5.9	1.8
14	.8	3.6	26	20	20	32	135	*48	4.8	5.8	6.3	1.9
15	.7	6.2	22	19	15	37	161	42	3.6	6.5	6.8	1.9
16	.6	4.1	25	20	16	38	186	36	4.6	7.4	5.8	*2.8
17	1.9	4.1	22	18	19	36	209	34	9.6	5.7	5.3	3.4
18	4.7	5.6	*18	13	21	31	210	33	7.2	3.8	3.8	4.1
19	3.2	*11	18	14	20	28	197	34	4.5	4.6	2.4	5.1
20	1.5	12	25	17	16	30	175	32	5.8	3.6	2.2	3.2
21	1.4	9.0	93	17	15	26	149	28	4.3	5.0	3.2	2.1
22	2.6	9.0	124	27	13	29	132	26	3.6	7.1	5.2	6.3
23	3.7	8.3	86	43	12	29	133	20	5.6	11	2.6	2.6
24	3.3	5.8	63	40	17	31	137	16	5.4	9.1	1.2	1.7
25	3.2	7.9	50	40	15	32	112	16	5.8	6.9	2.0	1.7
26	2.4	8.8	52	64	17	31	90	27	6.9	7.6	2.8	3.1
27	2.2	8.7	74	92	15	36	66	22	5.8	6.6	5.2	4.5
28	1.9	6.4	68	104	17	42	68	22	4.5	8.1	3.9	5.4
29	1.9	6.4	62	*98	-	45	102	19	4.1	9.6	1.9	5.5
30	5.4	7.3	50	88	-------	51	144	15	5.4	8.6	2.3	3.8
31	3.3	-------	44	76	-------	64	-------	15	-------	10	1.6	-------
Total	105.4	174.8	1,189.0	1,150	731	925	4,035	1,540	223.5	195.8	149.5	87.9
Mean	3.40	5.83	38.4	37.1	26.1	29.8	134	49.7	7.45	6.32	4.82	2.93
Cfsm	0.187	0.320	2.11	2.04	1.43	1.64	7.36	2.73	0.409	0.347	0.265	0.161
In.	0.22	0.36	2.43	2.35	1.49	1.89	8.25	3.15	0.46	0.40	0.31	0.18

Calendar year 1957: Max 124 Min 0.6 Mean 18.6 Cfsm 1.02 In. 13.85
Water year 1957-58: Max 210 Min 0.6 Mean 28.8 Cfsm 1.58 In. 21.49

Peak discharge (base, 150 cfs).--Apr. 7 (4 p.m.) 204 cfs (8.56 ft); Apr. 18 (5 to 7 p.m.) 213 cfs (8.63 ft); Apr. 30 (9:30 p.m.) 163 cfs (8.19 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 1-26, Feb. 1 to Mar. 2. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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 1958. Monthly discharge only March to May 1917, 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.--42 years, 143 cfs.
Extremes.--Maximum discharge during year, 988 cfs Apr. 19, 20 (gage height, 7.72 ft); minimum daily, 5.9 cfs Oct. 9.
1916-58: 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 tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(*Shifting-control method* used Dec. 21)

Oct. 1 to Dec. 21		Dec. 22 to Sept. 30			
4.5	140	3.56	5.6	4.5	140
5.0	311	3.6	7.0	5.0	290
6.0	524	3.7	12	6.0	480
		3.8	20	7.0	740
Note.--Same as following table below 4.5 ft.		4.0	43	8.0	1,100
		4.2	73		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	14	57	245	330	86	310	656	82	14	81	14
2	13	17	60	250	280	90	320	555	82	14	67	13
3	14	34	56	190	230	90	340	472	81	14	54	12
4	16	42	50	155	190	94	390	454	68	12	47	13
5	8.2	38	44	135	160	96	460	428	62	12	43	14
6	16	28	40	115	145	105	550	396	60	12	33	12
7	15	24	38	105	130	120	730	400	53	13	28	12
8	*7.0	21	36	95	130	135	*695	417	47	21	28	13
9	5.9	26	47	91	120	120	659	456	56	44	26	12
10	9.0	24	93	88	115	110	625	418	63	40	19	17
11	22	22	198	86	105	150	635	365	*60	30	19	17
12	20	22	209	85	100	170	618	335	59	36	18	16
13	18	18	155	85	94	185	570	*302	54	38	*18	15
14	17	17	122	86	91	180	615	242	46	34	17	14
15	16	29	112	87	88	170	701	203	38	*46	18	13
16	15	30	114	91	86	175	791	161	34	46	17	*10
17	14	27	*105	98	85	170	903	173	36	40	15	13
18	16	24	92	90	82	140	942	158	33	29	17	26
19	24	*40	92	83	81	135	976	146	29	25	20	47
20	21	67	143	87	79	135	976	137	28	19	20	140
21	17	65	415	110	77	135	906	137	27	17	19	137
22	17	56	508	180	76	135	854	122	24	19	26	137
23	19	44	446	250	75	135	906	107	23	56	24	140
24	21	35	337	230	75	145	872	86	22	62	22	114
25	23	30	254	250	79	155	707	86	20	67	22	42
26	20	29	263	330	85	170	560	130	18	71	27	29
27	18	28	388	520	85	210	450	112	17	81	29	58
28	16	26	378	532	85	240	464	110	15	73	27	86
29	14	23	361	*470	-	250	572	105	14	75	22	107
30	15	34	289	*420	-------	270	689	94	14	73	18	158
31	17	-------	239	390	-------	300	-------	90	-------	79	18	-------
Total	504.1	934	5,741	6,029	3,358	4,801	19,786	8,053	1,265	1,212	859	1,451
Mean	16.3	31.1	185	194	120	155	660	260	42.2	39.1	27.7	48.4
Cfsm	0.196	0.375	2.23	2.34	1.45	1.87	7.95	3.13	0.508	0.471	0.334	0.583
In.	0.23	0.42	2.57	2.70	1.50	2.15	8.87	3.61	0.57	0.54	0.38	0.65

Calendar year 1957: Max 650 Min 5.9 Mean 94.9 Cfsm 1.14 In. 15.52
Water year 1957-58: Max 976 Min 5.9 Mean 148 Cfsm 1.78 In. 24.19

Peak discharge (base, 690 cfs).--Apr. 7 (time unknown) about 770 cfs; 4 p.m. Apr. 19 to 6 a.m. Apr. 20, 988 cfs (7.72 ft); Apr. 30 (3 to 7 p.m.) 698 cfs (6.86 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Feb. 22, 23, Mar. 5 to Apr. 7; discharge estimated on basis of weather records, recorded range in stage when available, and records for Priest Brook near Winchendon and other stations on nearby streams. Stage-discharge relation affected by ice Dec. 5, 13, 18, Jan. 1-27, Jan. 30 to Mar. 4, and during part of periods of no gage-height record in March.

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 1958. 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.--42 years, 33.3 cfs.

Extremes.--Maximum discharge during year, 276 cfs Apr. 7 (gage height, 4.63 ft); minimum, 0.4 cfs Oct. 6.
1916-58: 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, 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), 1928(M), 1931-35(M).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.1	0.3	2.7	15
2.2	1.1	3.0	34
2.3	2.4	3.5	86
2.4	4.4	4.0	159
2.5	7.0	4.5	250

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	5.9	19	53	74	21	75	156	14	7.2	8.8	1.4
2	.6	3.9	23	61	63	22	80	126	13	*2.6	6.4	1.3
3	.5	4.8	18	54	54	22	84	100	14	2.1	4.6	1.1
4	.5	6.1	15	40	46	*23	96	95	12	2.0	3.7	1.1
5	.5	4.4	9.5	30	38	23	110	76	10	2.0	2.8	1.0
6	.4	3.7	8.0	26	35	25	133	72	10	1.8	2.4	1.1
7	.6	3.5	10	24	31	36	242	80	8.8	1.8	2.1	1.3
8	*.6	6.0	12	23	31	39	*215	98	7.7	2.1	2.4	1.4
9	.6	5.1	14	19	30	34	188	121	12	2.9	3.5	1.4
10	.6	5.6	28	23	28	30	156	106	14	2.3	2.4	2.2
11	.6	6.4	94	28	25	37	156	89	*15	2.1	2.0	2.3
12	.6	5.6	71	18	29	42	146	80	14	2.4	1.7	1.8
13	.6	4.8	55	23	31	46	137	*66	15	2.3	1.5	1.5
14	.6	4.4	47	22	18	45	151	56	13	1.8	1.5	1.4
15	.6	6.6	40	23	20	42	176	36	5.9	2.1	1.5	*1.4
16	.6	8.0	37	23	24	44	207	34	5.9	2.1	1.4	1.3
17	.6	8.4	*24	23	24	41	246	28	6.2	1.7	1.4	1.7
18	.6	7.4	21	22	26	35	240	28	4.8	1.4	1.4	14
19	1.2	*13	22	20	24	34	220	30	4.4	2.3	1.2	15
20	1.5	40	42	19	21	34	191	29	3.7	2.1	1.1	9.5
21	1.5	38	131	19	20	32	156	28	3.3	1.7	1.0	4.1
22	1.2	17	190	29	19	34	121	23	3.1	1.3	2.7	7.9
23	1.1	16	151	48	18	34	141	19	3.3	8.8	2.3	12
24	1.2	8.4	110	66	17	36	153	18	9.8	8.4	1.5	14
25	1.7	8.6	73	77	18	37	130	21	9.4	6.1	2.5	10
26	1.5	8.2	65	86	23	41	99	31	6.2	15	3.3	8.7
27	1.4	4.1	110	125	23	51	67	26	5.6	9.4	3.3	24
28	1.6	4.1	110	125	22	58	84	19	2.9	7.0	2.9	34
29	8.8	8.3	95	*120	-	62	124	20	2.6	7.0	3.3	28
30	6.9	12	85	105	-------	65	184	19	3.0	6.4	2.4	25
31	6.7	-------	65	86	-------	72	-------	16	-------	7.0	1.8	-------
Total	46.6	278.3	1,794.5	1,460	832	1,197	4,508	1,746	252.6	125.2	80.8	230.9
Mean	1.50	9.28	57.9	47.1	29.7	38.6	150	56.3	8.42	4.04	2.61	7.70
Cfsm	0.077	0.478	2.98	2.43	1.53	1.99	7.73	2.90	0.434	0.208	0.135	0.397
In.	0.09	0.53	3.44	2.80	1.59	2.29	8.64	3.35	0.48	0.24	0.15	0.44

Calendar year 1957: Max 190 Min 0.4 Mean 23.1 Cfsm 1.19 In. 16.13
Water year 1957-58: Max 246 Min 0.4 Mean 34.4 Cfsm 1.77 In. 24.04

Peak discharge (base, 150 cfs).--12 p.m. Dec. 21 to 1 a.m. Dec. 22, 209 cfs (4.29 ft); Apr. 7 (7 to 8:30 a.m.) 276 cfs (4.63 ft); Apr. 18 (1 to 3 a.m.) 256 cfs (4.53 ft); 10:30 p.m. Apr. 23 to 1:30 a.m. Apr. 24, 161 cfs (4.01 ft); Apr. 30 (10 a.m. to 12 m.) 211 cfs (4.30 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 4, 5, 12-19, Jan. 2 to Mar. 14, Mar. 17, 19, 24, 28, 29. 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 1958.

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.--19 years, 317 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 1,770 cfs Apr. 11 (gage height, 7.10 ft); maximum gage height, 7.41 ft Feb. 20 (backwater from ice); minimum daily discharge, 29 cfs Oct. 6.
1939-58: 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. 238).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from logs or aquatic vegetation Apr. 9-12, 17, June 26 to July 8, July 10-12, 17-23, 25, 26, 28-31, Aug. 2 to Sept. 18, Sept. 25-27)

3.6	26	5.0	335
3.8	42	5.5	570
4.1	76	6.0	880
4.5	149	7.0	1,790

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	50	202	576	810	240	733	1,210	202	40	175	49
2	39	63	210	560	727	260	752	1,200	185	41	147	*43
3	33	95	169	540	610	270	778	1,150	196	39	110	40
4	35	116	137	490	550	280	817	1,090	175	39	83	40
5	35	103	120	420	510	285	880	1,030	152	38	71	41
6	29	84	98	370	450	300	970	955	137	38	56	39
7	44	72	100	*335	410	330	1,140	895	125	37	49	38
8	35	67	100	280	380	348	1,340	880	112	49	46	38
9	32	84	110	270	370	326	1,480	902	*119	103	55	41
10	31	90	223	290	*360	344	1,510	918	161	90	54	43
11	37	79	495	280	330	398	1,580	873	164	72	48	51
12	43	73	581	260	310	456	1,560	810	155	83	43	50
13	43	67	475	270	280	490	1,340	739	144	130	39	42
14	42	63	440	260	250	500	1,250	620	130	*139	38	37
15	40	85	353	250	230	466	1,290	525	106	135	38	35
16	39	110	286	270	220	495	1,390	438	89	117	40	31
17	39	98	254	280	215	*452	1,510	434	83	92	39	38
18	38	89	210	280	210	412	1,270	407	83	65	52	101
19	54	113	217	260	205	384	948	384	73	59	54	169
20	71	242	326	250	200	394	970	394	70	59	50	258
21	60	266	456	280	190	384	1,160	389	68	44	46	282
22	51	206	430	450	180	366	1,330	348	67	42	62	274
23	49	149	764	600	175	376	1,330	304	62	93	68	278
24	50	116	925	640	170	384	1,330	262	60	155	64	262
25	61	100	940	661	180	394	1,320	250	60	130	67	143
26	62	93	846	697	195	420	1,270	384	53	132	83	80
27	58	79	687	824	195	490	1,200	384	53	152	84	104
28	51	80	1,050	910	210	550	1,150	335	49	*144	76	258
29	50	87	955	962	-	592	*1,150	295	46	137	67	250
30	51	106	824	948	-------	637	1,190	266	40	139	60	312
31	53	-------	679	895	-------	697	-------	235	-------	155	54	-------
Total	1,399	3,125	13,662	14,658	9,122	12,720	35,938	19,310	3,219	2,788	2,018	3,467
Mean	45.1	104	441	473	326	410	1,198	623	107	89.9	65.1	116
(†)	0	+0.39	+2.69	+6.83	-9.38	+3.40	+38.7	-41.3	-0.81	+0.37	-0.49	+1.04

Adjusted for change in contents in Birch Hill Reservoir

Mean	45.1	105	443	480	316	414	1,237	582	106	90.3	64.6	117
Cfsm	0.241	0.561	2.37	2.57	1.69	2.21	6.61	3.11	0.567	0.483	0.345	0.626
In.	0.28	0.62	2.73	2.96	1.76	2.55	7.38	3.59	0.64	0.56	0.40	0.70

	Observed			Adjusted				
Calendar year 1957:	Max 1,250	Min 22	Mean 224	Mean 225	Cfsm 1.20	In. 16.30
Water year 1957-58:	Max 1,580	Min 29	Mean 333	Mean 333	Cfsm 1.78	In. 24.17

* 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. 5, 6, 13, 14, 18, Jan. 4-6, 8-24, Feb. 1, Feb. 3 to Mar. 7.

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 1958. October 1915 to May 1916 monthly discharge only, 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.--43 years, 83.8 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 472 cfs Apr. 26 (gage height, 4.68 ft); minimum, 0.7 cfs Oct. 3-6; minimum daily, 0.7 cfs Oct. 4-6.
1915-58: 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 except those for period of no gage-height record, which are good. Flow regulated by Tully Reservoir since 1948 (see p. 238).

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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.37	0.7	2.7	12
2.4	1.1	2.9	28
2.45	1.9	3.1	50
2.5	2.9	3.5	118
2.55	4.2	4.0	238
2.6	6.2	4.7	480

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	3.4	36	180	203	a56	203	308	36	4.2	31	2.7
2	.8	6.2	38	139	195	56	214	292	32	4.2	26	*2.5
3	.8	16	38	139	208	68	211	258	39	4.0	19	2.1
4	.7	20	38	135	188	78	222	219	36	4.0	15	1.7
5	.7	17	38	91	103	78	252	208	31	4.2	12	1.7
6	.7	12	38	63	80	78	278	185	28	4.6	8.4	1.6
7	1.0	9.0	*37	*63	80	78	389	171	*24	*5.0	6.2	1.6
8	1.1	6.7	37	63	82	77	436	180	20	6.2	5.8	1.7
9	1.2	13	37	63	82	75	452	211	25	15	6.2	2.1
10	1.2	27	38	64	*80	91	385	208	32	20	6.2	2.9
11	1.1	21	42	63	80	102	334	208	31	15	5.0	4.2
12	1.0	18	62	63	78	102	330	171	35	15	4.0	5.0
13	1.0	27	112	63	56	104	314	152	37	16	3.6	4.0
14	1.0	32	152	63	46	104	298	124	30	14	3.4	3.6
15	1.0	40	168	54	46	104	308	108	23	13	3.4	2.9
16	1.0	45	148	44	48	104	324	100	18	12	3.6	2.7
17	1.1	34	122	44	46	*104	338	104	16	9.7	3.6	2.9
18	1.2	29	67	45	a48	104	180	96	15	7.2	3.2	8.2
19	2.5	28	44	45	a47	102	2.5	87	14	7.8	2.7	17
20	4.6	33	45	45	a46	93	2.1	85	12	12	2.3	16
21	*4.6	36	24	45	a46	126	109	78	12	10	2.1	12
22	3.6	37	66	46	a46	139	180	69	12	7.2	4.2	13
23	3.4	37	219	48	a46	116	180	61	11	25	7.8	17
24	3.4	36	295	70	a46	91	180	53	9.7	56	6.2	15
25	4.2	36	334	107	a47	91	341	53	7.8	40	6.2	11
26	4.6	36	298	190	a50	102	464	82	7.2	27	9.7	9.0
27	4.6	37	263	193	a50	126	440	77	7.2	24	9.0	10
28	4.2	38	298	203	a52	148	352	61	6.7	*21	6.7	32
29	3.6	37	289	211	-	163	298	57	5.8	23	5.4	35
30	3.4	36	275	214	-------	168	*298	54	5.0	22	4.0	26
31	3.2	-------	238	208	-------	183	-------	46	-------	25	3.4	-------
Total	67.3	803.3	3,936	3,064	2,225	3,211	8,314.6	4,166	618.4	473.3	235.3	267.1
Mean	2.17	26.8	127	98.8	79.5	104	277	134	20.6	15.3	7.59	8.90
(†)	0	+2.58	+4.78	+7.65	-7.44	-7.09	+4.75	-5.64	-0.08	+0.07	-0.07	+0.04

Adjusted for change in contents in Tully Reservoir

Mean	2.17	29.4	132	106	72.0	96.5	282	129	20.5	15.3	7.53	8.94
Cfsm	0.043	0.583	2.62	2.10	1.43	1.91	5.60	2.56	0.407	0.304	0.149	0.177
In.	0.05	0.65	3.01	2.44	1.49	2.21	6.24	2.94	0.45	0.35	0.17	0.20

	Observed			Adjusted			
Calendar year 1957:	Max 334	Min 0.6	Mean 54.9	Mean 54.9	Cfsm 1.09	In. 14.78
Water year 1957-58:	Max 464	Min 0.7	Mean 75.0	Mean 75.0	Cfsm 1.49	In. 20.20

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Tully Reservoir.
a No gage-height record; discharge estimated on basis of weather records and records of pond elevations and gate operations 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 1958. 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.--42 years (1916-58), 20.9 cfs.

Extremes.--Maximum discharge during year, 266 cfs Apr. 7 (gage height, 3.63 ft), from graph based on gage readings; minimum, 0.6 cfs Oct. 1-6.
1916-58: 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 or no gage-height record, 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 21				Dec. 22 to Sept. 30			
0.9	0.4	1.6	10	1.0	0.8	1.8	17
1.0	1.0	1.8	18	1.1	1.4	2.1	36
1.1	1.7	2.1	36	1.2	2.2	2.5	72
1.2	2.4	2.5	72	1.4	4.8	3.0	138
1.4	5.1	3.0	138	1.6	9.4	3.5	235

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	1.2	19	39	41	13	66	80	7.8	1.3	8.4	1.0
2	.6	3.8	12	38	38	14	71	55	*8.6	1.2	4.8	.8
3	.6	8.0	9.0	35	33	14	72	39	11	1.3	2.9	*.8
4	.6	4.8	7.3	27	28	14	74	42	8.9	1.4	2.3	.8
5	.6	3.2	6.0	21	24	15	78	42	7.1	1.6	1.7	.8
6	.6	2.4	*5.0	19	20	16	89	40	6.0	1.8	1.4	.8
7	1.7	2.0	4.6	18	18	20	220	42	5.0	1.7	1.3	.9
8	1.5	1.7	5.8	17	18	24	135	58	4.3	2.0	1.4	1.3
9	1.4	15	11	*20	17	21	84	65	7.6	3.1	1.7	1.2
10	1.1	8.0	23	18	16	19	66	49	10	2.8	1.5	2.0
11	1.0	4.4	92	16	15	24	64	38	8.9	2.5	1.2	1.8
12	.8	3.9	56	16	14	27	64	33	8.4	2.7	1.0	1.3
13	.7	3.0	44	14	*13	29	63	28	7.3	2.4	1.0	1.2
14	.7	3.0	26	14	13	28	61	24	5.6	2.0	1.0	1.0
15	.7	7.8	20	14	12	27	60	24	4.7	2.2	1.3	.9
16	.7	6.6	17	14	12	28	54	24	3.9	2.2	1.8	.9
17	.7	5.0	15	14	12	27	48	27	3.7	1.7	1.5	1.8
18	.8	3.9	14	12	11	24	44	22	2.9	1.4	1.2	6.3
19	3.2	9.6	13	11	11	23	38	20	2.6	2.0	1.0	5.2
20	2.4	23	33	11	11	*22	30	19	2.7	2.4	.8	4.2
21	.7	13	128	11	10	21	26	16	2.8	1.8	.9	3.0
22	1.1	7.6	111	20	10	22	*26	15	3.0	1.6	5.2	4.8
23	*1.0	5.3	61	35	10	22	31	12	2.8	10	3.3	4.7
24	1.2	4.8	39	45	10	23	40	11	2.6	12	2.0	3.0
25	2.3	5.0	30	50	11	25	32	15	2.0	5.0	3.3	2.5
26	1.8	4.5	33	60	14	30	24	22	2.0	3.5	3.9	2.2
27	1.5	3.9	135	78	14	35	22	16	2.0	5.8	3.0	4.2
28	1.3	3.9	82	79	14	45	38	13	1.7	4.7	2.7	11
29	1.2	4.8	54	64	-	50	83	14	1.6	4.0	1.8	7.1
30	1.1	7.1	44	52	-------	55	92	12	*1.5	*4.0	1.4	4.7
31	1.1	-------	33	47	-------	60	-------	8.6	-------	7.1	1.2	---------
Total	35.3	180.2	1,182.7	929	470	817	1,895	925.6	149.0	99.2	67.9	82.2
Mean	1.14	6.01	38.2	30.0	16.8	26.4	63.2	29.9	4.97	3.20	2.19	2.74
Cfsm	0.093	0.489	3.11	2.44	1.37	2.15	5.14	2.43	0.404	0.260	0.178	0.223
In.	0.11	0.54	3.58	2.81	1.42	2.47	5.73	2.80	0.45	0.30	0.21	0.25

Calendar year 1957: Max 135 Min 0.4 Mean 13.0 Cfsm 1.06 In. 14.34
Water year 1957-58: Max 220 Min 0.6 Mean 18.7 Cfsm 1.52 In. 20.67

Peak discharge (base, 160 cfs).--Dec. 21 (8 p.m.) 174 cfs (3.20 ft); Dec. 27 (10 a.m.) 164 cfs (3.15 ft); Apr. 7 (8 a.m.) 266 cfs (3.63 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Feb. 16 to Mar. 31; discharge estimated on basis of 1 discharge measurement, weather records, and records for Priest Brook near Winchendon and Ware River near Barre. Stage-discharge relation affected by ice Nov. 26, 27, Dec. 5, 6, Jan. 3-8, 22-26, Feb. 3-15 and at times during period of no gage-height record.

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 1958.
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.--44 years, 631 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 3,280 cfs Apr. 7 (gage height, 5.91 ft); minimum daily, 27 cfs Oct. 6.
1914-58: 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 discharge, 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. 238).
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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.4	26	3.0	430
1.6	44	4.0	1,120
2.0	103	5.0	2,080
2.5	221	6.0	3,420

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	76	400	1,180	1,500	450	1,680	2,310	388	100	286	100
2	69	84	380	1,120	1,400	470	1,700	2,120	398	101	234	97
3	65	159	310	1,030	1,200	500	1,740	1,990	414	102	207	95
4	75	165	260	792	1,100	510	1,800	1,940	372	78	184	*90
5	31	150	210	700	930	530	1,950	1,750	327	103	154	83
6	27	140	*185	660	780	550	2,140	1,610	290	101	129	79
7	74	115	190	600	680	600	3,160	1,610	260	103	119	72
8	81	100	210	530	650	660	3,060	1,740	231	115	127	98
9	72	210	251	500	620	640	3,010	1,800	*260	180	109	100
10	79	195	508	530	600	660	2,710	1,690	306	188	116	100
11	90	165	1,110	560	570	730	2,640	1,560	354	168	125	108
12	57	140	1,040	460	540	810	2,760	1,440	345	196	111	111
13	54	130	778	410	500	880	2,470	1,310	331	196	95	87
14	92	130	785	480	460	870	2,280	1,100	264	210	89	83
15	103	200	722	520	430	840	2,300	946	221	215	95	95
16	97	210	627	470	420	880	2,360	869	204	210	87	95
17	95	190	550	480	410	860	2,430	841	180	176	100	106
18	89	170	473	480	400	820	2,420	799	178	161	105	157
19	63	250	396	430	390	785	1,420	750	170	252	103	222
20	56	460	678	420	380	*785	1,380	778	163	163	104	231
21	121	440	1,680	500	370	813	1,480	757	150	141	98	290
22	95	330	1,360	900	360	820	*1,930	715	150	115	141	311
23	*79	250	1,380	1,100	350	848	*2,000	610	149	106	138	304
24	75	210	1,520	1,200	350	820	2,070	478	136	279	127	287
25	85	200	1,570	1,300	360	841	2,010	496	138	263	150	254
26	57	180	1,720	1,400	390	904	2,150	715	138	218	158	176
27	84	170	1,780	1,600	410	1,080	1,990	757	128	240	151	161
28	102	175	2,010	1,800	430	1,250	2,130	604	103	250	142	294
29	72	200	1,790	1,750	-	1,320	2,280	586	107	234	195	340
30	69	240	1,610	1,700	--------	1,400	2,480	526	115	*231	146	323
31	73	--------	1,380	1,650	--------	1,570	--------	450	--------	250	109	--------
Total	2,359	5,834	27,863	27,252	16,980	25,496	65,930	35,627	6,970	5,435	4,234	4,949
Mean	76.1	194	899	879	606	822	2,198	1,149	232	175	137	165
(†)	0	+2.97	+7.47	+14.5	-16.8	-3.70	+43.4	-46.9	-0.89	+0.45	-0.56	+1.08

Adjusted for change in reservoir contents

Mean	76.1	197	906	894	590	819	2,241	1,102	231	176	136	166
Cfsm	0.203	0.525	2.42	2.38	1.57	2.18	5.98	2.94	0.616	0.469	0.363	0.443
In.	0.23	0.59	2.79	2.75	1.64	2.52	6.67	3.39	0.69	0.54	0.42	0.49

	Observed			Adjusted		
Calendar year 1957:	Max 2,010	Min 20	Mean 443	Mean 443	Cfsm 1.18	In. 16.02
Water year 1957-58:	Max 3,160	Min 27	Mean 627	Mean 627	Cfsm 1.67	In. 22.72

* 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 Nov. 4 to Dec. 5, Jan. 5-8, Jan. 20 to Feb. 11, Feb. 17 to Mar. 18; discharge estimated on basis of weather records, recorded range in stage, and records for other stations in Millers River basin. Stage-discharge relation affected by ice Dec. 6, 7, Jan. 9-19, Feb. 12-16, and at times during periods of no gage-height record.

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 1958.

Average discharge.--43 years, 11,920 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. 238), 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,940	6,380	10,800	17,800	14,700	9,400	20,400	51,600	8,210	3,840	12,100	60
2	3,010	3,590	9,280	20,800	10,300	5,120	20,600	45,500	9,690	3,960	10,400	3,070
3	2,520	3,030	8,460	19,400	9,490	7,950	21,200	40,200	27,300	4,570	1,590	2,830
4	2,420	9,590	8,170	16,200	11,900	8,750	23,600	36,700	24,800	138	5,970	2,730
5	1,150	10,400	7,590	5,240	12,800	9,300	30,000	32,800	16,500	886	5,410	4,260
6	1,120	8,660	7,250	8,630	11,700	10,400	34,400	22,500	15,800	138	6,240	688
7	4,140	6,940	3,090	9,070	10,900	11,300	37,600	25,400	14,700	3,830	4,920	138
8	3,850	8,400	2,790	9,420	8,520	11,800	38,400	26,700	6,420	4,300	6,880	2,640
9	2,900	9,500	9,680	10,200	7,710	8,520	36,700	35,500	8,000	7,120	5,650	2,410
10	3,270	1,660	13,800	9,870	7,840	9,620	30,800	36,800	9,900	5,640	2,860	3,000
11	2,670	5,890	24,800	9,540	9,290	10,300	29,800	30,400	9,160	6,760	6,470	3,200
12	138	7,440	27,500	8,960	8,210	9,910	29,600	27,800	7,860	6,310	4,900	3,690
13	138	8,070	19,300	8,840	7,670	11,200	27,100	33,100	8,170	6,120	5,240	138
14	3,480	6,900	16,100	9,100	9,290	10,800	30,000	32,600	7,060	7,760	4,890	138
15	3,110	8,760	14,900	7,800	7,420	11,400	35,000	27,700	2,090	9,880	6,570	3,240
16	2,540	11,500	13,700	8,380	5,560	8,390	40,800	21,200	5,640	7,610	2,650	2,970
17	3,610	10,400	10,800	9,720	7,360	9,440	65,800	21,500	6,350	7,400	542	3,720
18	2,820	7,810	13,300	9,590	7,590	9,900	76,600	21,000	6,900	8,280	5,380	5,560
19	1,510	12,000	12,900	6,280	7,630	8,600	86,400	18,900	6,390	5,140	5,220	7,030
20	2,160	11,300	13,800	7,770	7,700	9,260	82,600	14,700	7,190	985	5,170	6,790
21	4,790	12,600	45,200	8,780	7,500	10,000	77,300	17,200	2,230	7,440	5,110	3,330
22	5,210	12,700	66,300	10,700	8,040	9,520	80,000	16,400	138	8,070	6,770	6,590
23	5,320	12,500	48,600	12,600	6,380	5,950	90,500	15,200	4,300	8,020	615	6,250
24	5,930	6,060	41,400	13,300	7,970	8,840	87,300	15,100	4,620	8,440	312	5,960
25	6,170	9,000	37,500	13,500	8,040	9,140	82,700	12,700	4,300	6,480	6,440	6,230
26	3,040	9,680	28,600	15,400	8,050	11,100	74,600	8,940	4,540	4,380	4,930	6,960
27	337	9,450	37,500	15,600	8,380	12,300	57,600	12,500	5,360	2,940	5,050	5,200
28	6,860	3,400	38,500	16,200	9,800	14,300	49,500	12,900	2,570	8,270	1,980	508
29	5,520	8,630	30,900	15,900	-	16,300	46,300	9,490	780	9,540	3,560	5,580
30	7,280	7,130	24,200	15,400	--------	16,700	51,400	10,200	3,730	9,280	410	5,680
31	5,500	--------	21,300	15,300	--------	17,600	--------	9,150	--------	11,600	60	--------
Total	105,453	249,370	668,010	365,290	247,740	323,110	‡1,494.6	742,380	240,698	185,127	144,289	110,590
Mean	3,402	8,312	21,550	11,780	8,848	10,420	49,820	23,950	8,023	5,972	4,654	3,686
(†)	-685	+221	+913	-1,564	-1,784	-776	+3,991	+252	+156	+401	-470	-387
Adjusted for change in reservoir contents												
Mean	2,717	8,533	22,460	10,220	7,064	9,646	53,810	24,200	8,179	6,372	4,184	3,299
Cfsm	0.379	1.19	3.14	1.43	0.986	1.35	7.51	3.38	1.14	0.890	0.584	0.461
In.	0.44	1.33	3.62	1.64	1.03	1.55	8.38	3.90	1.27	1.03	0.67	0.51

	Observed			Adjusted			
Calendar year 1957:	Max 66,300	Min 138	Mean 9,169	Mean 9,225	Cfsm 1.29	In. 17.48	
Water year 1957-58:	Max 90,500	Min 60	Mean 13,360	Mean 13,390	Cfsm 1.87	In. 25.37	

† Change in contents, equivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir, Comerford Station Pond, Union Village Reservoir, 4 reservoirs in Mascoma River basin, Sunapee Lake, and Surry Mountain, 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 1958.

Gage.--Water-stage recorder. Datum of gage is 517.36 ft above mean sea level, datum of 1929.

Average discharge.--45 years, 898 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 7,820 cfs Dec. 21 (gage height, 7.31 ft); minimum daily, 42 cfs Sept. 1.
1913-58: 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. 238), and by several powerplants above station.

Revisions (water years).--WSP 781: 1915(M). WSP 1301: 1918(M).

Rating table, water year 1957-58, 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	6.5	6,140

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	270	650	798	709	1,140	1,060	947	2,680	151	217	306	42
2	236	306	782	1,060	1,110	1,050	1,000	2,610	508	114	84	158
3	440	457	1,050	1,010	1,100	1,040	960	2,060	774	158	59	219
4	390	374	*1,040	892	1,080	1,060	727	2,830	390	86	509	*387
5	180	682	1,020	750	1,090	1,080	1,150	1,920	215	113	650	571
6	125	795	1,010	989	1,080	1,080	1,800	1,780	216	75	480	203
7	592	748	668	1,100	1,080	1,080	2,510	2,070	125	124	636	210
8	532	720	202	1,100	1,080	1,070	1,910	2,100	108	96	594	508
9	477	726	609	*1,090	1,000	1,070	1,660	1,930	342	130	107	438
10	456	218	1,280	1,050	1,060	1,090	1,630	1,320	*368	75	57	479
11	412	368	1,290	990	*1,050	1,110	1,780	932	396	68	484	382
12	180	580	972	316	980	1,130	1,530	850	407	549	634	254
13	44	706	850	600	1,040	1,140	1,420	620	278	205	655	68
14	349	718	444	950	1,000	1,170	2,150	728	187	394	667	52
15	266	610	334	1,040	1,050	1,150	3,140	802	105	428	625	290
16	250	787	839	1,050	1,000	1,130	3,650	1,160	246	402	151	606
17	246	316	998	1,040	1,000	1,120	4,290	478	387	230	52	508
18	506	530	1,050	1,040	1,000	*1,110	5,180	256	526	*70	436	334
19	268	1,030	1,060	960	1,000	1,110	4,540	604	530	75	544	192
20	92	1,120	1,910	1,000	1,040	1,110	4,110	614	859	70	536	102
21	348	1,040	4,980	1,060	1,030	344	*5,200	610	346	96	529	207
22	*384	1,060	1,640	1,080	1,040	180	5,280	709	89	164	608	699
23	372	1,040	902	958	1,040	169	5,600	842	418	882	526	501
24	536	1,010	576	1,130	1,030	390	3,760	199	642	662	96	610
25	451	910	496	1,130	1,040	528	2,860	203	582	778	500	648
26	226	1,000	1,410	1,230	1,030	791	2,190	634	615	194	464	715
27	141	991	2,170	1,320	1,040	874	1,210	670	672	172	447	617
28	552	973	1,480	1,240	1,080	582	2,230	596	380	556	468	297
29	582	1,040	644	1,200	-	330	2,900	530	78	*692	612	586
30	656	1,090	1,000	1,180	--------	367	4,620	273	59	470	80	636
31	652	--------	1,200	1,150	--------	830	--------	340	--------	304	50	--------
Total	11,211	22,595	34,704	31,614	29,310	27,345	81,914	33,950	10,999	8,649	12,646	11,519
Mean	362	753	1,119	1,020	1,047	882	2,730	1,095	367	279	408	384
(†)	-235	-88.5	+630	-496	-739	-459	+1,803	+281	-100	-1.79	-270	-114
Adjusted for change in reservoir contents												
Mean	126	665	1,749	523	308	424	4,534	1,376	266	277	138	270
Cfsm	0.348	1.84	4.83	1.44	0.851	1.17	12.5	3.80	0.735	0.765	0.381	0.746
In.	0.40	2.05	5.57	1.67	0.89	1.35	13.97	4.38	0.82	0.88	0.44	0.83

	Observed			Adjusted			
Calendar year 1957:	Max 4,980	Min 29	Mean 636	Mean 657	Cfsm 1.81	In. 24.64	
Water year 1957-58:	Max 5,600	Min 42	Mean 867	Mean 887	Cfsm 2.45	In. 33.25	

* 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 Jan. 5, 10, 13-15, 19, 20, Feb. 9-21.

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 1958. October, November 1939 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 458.36 ft above mean sea level, datum of 1929.

Average discharge.--19 years, 179 cfs.

Extremes.--Maximum discharge during year, 3,400 cfs Dec. 21 (gage height, 6.68 ft); minimum, 7.8 cfs Aug. 24; minimum daily, 8.6 cfs Sept. 5, 6.
1939-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 18				Apr. 19 to Sept. 30			
1.5	8.0	3.0	207	1.48	8.6	3.0	211
1.7	18	3.5	360	1.5	9.5	3.5	360
1.9	32	4.0	580	1.7	20	4.0	580
2.1	51	5.0	1,250	1.9	36	5.0	1,250
2.5	103	6.0	2,380	2.2	68	6.0	2,380
				2.5	109		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	17	191	278	170	110	294	503	69	24	34	11
2	11	49	97	230	160	103	322	380	126	23	26	14
3	11	180	69	155	150	98	353	388	136	22	23	11
4	10	78	*59	110	135	134	484	424	86	27	19	*9.0
5	9.8	47	38	105	130	134	584	322	72	32	17	8.6
6	10	38	37	115	120	129	767	274	67	35	16	8.6
7	11	32	63	120	115	131	1,040	419	58	30	15	9.5
8	12	28	104	120	110	122	646	540	54	40	18	47
9	16	101	107	*120	105	110	485	408	90	68	24	22
10	18	64	257	115	110	124	485	298	*91	37	18	28
11	16	43	498	110	105	161	540	259	106	26	16	32
12	14	35	205	105	*105	177	467	243	94	85	15	20
13	12	32	120	100	100	166	532	204	68	57	14	17
14	12	30	115	95	95	170	846	185	59	38	17	15
15	12	158	110	97	90	175	1,240	169	50	35	16	13
16	12	103	100	98	88	148	1,460	207	44	38	15	13
17	11	62	97	96	88	136	1,640	192	41	29	14	14
18	11	49	77	90	87	*125	1,710	159	40	25	15	78
19	30	190	80	84	85	124	1,560	155	38	*29	13	72
20	38	220	484	81	82	127	1,420	149	36	31	11	41
21	24	105	1,670	82	80	125	*1,340	143	37	25	11	32
22	*20	72	553	160	78	124	1,210	119	38	21	18	128
23	17	59	322	330	78	122	1,360	106	34	98	20	60
24	17	52	250	240	77	122	756	94	31	58	14	35
25	43	47	197	180	81	146	550	119	29	36	18	26
26	34	41	618	252	90	157	400	137	28	28	29	21
27	25	28	856	462	87	194	316	101	63	43	21	36
28	20	40	384	346	118	220	969	88	43	37	18	76
29	18	59	300	256	-	250	939	104	32	*40	14	44
30	17	99	237	215	-------	276	980	90	28	36	13	31
31	17	-------	202	192	-------	308	-------	75	-------	33	12	-------
Total	538.8	2,158	8,497	5,139	2,919	4,748	25,595	7,054	1,788	1,188	544	972.7
Mean	17.4	71.9	274	166	104	153	853	228	59.6	38.3	17.5	32.4
Cfsm	0.197	0.813	3.10	1.88	1.18	1.73	9.65	2.58	0.674	0.433	0.198	0.367
In.	0.23	0.91	3.57	2.16	1.23	2.00	10.77	2.97	0.75	0.50	0.23	0.41

Calendar year 1957: Max 1,670 Min 8.9 Mean 115 Cfsm 1.30 In. 17.60
Water year 1957-58: Max 1,710 Min 8.6 Mean 168 Cfsm 1.90 In. 25.73

Peak discharge (base, 1,880 cfs).--Dec. 21 (6:30 a.m.) 3,400 cfs (6.68 ft); Dec. 26 (10 p.m.) 2,010 cfs (5.73 ft); Apr. 18 (7 p.m.) 2,520 cfs (6.10 ft); Apr. 29 (10:30 p.m.) 1,920 cfs (5.66 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 3-6, 12-16, 18, Jan. 2-14, 19-24, Feb. 1-26, Mar. 9, 14, 15.

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 1958. 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.--18 years (1940-58), 1,297 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 13,800 cfs Dec. 21 (gage height, 7.90 ft); minimum daily, 59 cfs Sept. 1.
1940-58: 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. 238), and by several powerplants above station.

Rating table, water year 1957-58, 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	6.5	8,900
2.5	605		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	378	638	1,310	1,450	1,550	1,450	1,790	3,770	374	171	*458	59
2	306	636	830	1,500	1,490	1,360	1,880	3,450	660	184	114	222
3	420	1,040	1,320	1,490	1,340	1,390	1,850	2,960	1,160	196	80	298
4	399	467	1,100	1,070	1,280	1,540	1,970	3,750	578	135	511	356
5	248	468	*1,230	993	1,470	1,570	2,380	2,800	394	222	682	*521
6	161	886	1,100	1,250	1,460	1,450	3,680	2,450	352	144	580	442
7	494	884	784	1,540	1,440	1,520	5,230	2,940	307	145	610	163
8	587	764	474	1,440	1,390	1,390	3,490	3,370	264	193	632	523
9	584	1,090	774	1,380	1,170	1,390	2,870	2,900	458	316	380	502
10	480	430	1,690	1,350	1,340	1,490	2,780	2,230	531	166	62	552
11	537	322	2,370	1,350	1,230	1,640	3,050	1,540	*566	228	241	328
12	304	623	1,310	500	1,280	1,640	2,870	1,480	606	471	813	329
13	61	706	1,080	1,000	1,330	1,590	2,600	902	564	441	672	144
14	430	806	942	1,300	1,230	1,740	3,670	1,080	338	434	729	65
15	290	948	564	1,350	1,310	1,700	5,270	1,190	192	524	626	330
16	390	886	875	1,400	1,290	1,530	6,120	1,630	295	358	378	559
17	192	552	1,230	1,300	1,230	1,460	6,730	1,150	364	*332	62	613
18	372	484	1,300	1,300	1,250	1,460	7,750	738	592	245	300	582
19	524	1,610	1,220	1,250	1,270	*1,460	7,280	852	618	73	533	341
20	169	1,340	2,480	1,250	1,400	1,480	6,200	1,000	1,090	163	652	223
21	345	1,320	7,980	1,300	1,350	786	6,960	1,010	512	221	554	176
22	326	1,190	2,920	1,700	1,330	553	7,280	956	142	232	615	814
23	*480	1,300	1,540	1,500	1,400	481	*7,700	1,240	433	767	542	656
24	526	1,060	1,000	1,400	1,550	558	5,240	523	672	872	184	620
25	644	1,040	871	1,550	1,500	1,010	3,980	395	746	864	615	766
26	263	1,140	2,240	1,900	1,400	1,220	3,120	795	531	481	467	718
27	256	1,110	4,270	2,300	1,360	1,480	2,080	920	650	192	496	870
28	492	992	2,360	2,000	1,630	1,300	3,770	887	719	463	520	508
29	516	1,040	1,530	1,700	-	1,090	4,310	652	171	803	687	535
30	818	1,440	1,190	1,600	---------	1,030	6,620	656	137	731	87	807
31	751	--------	1,600	1,500	--------	1,660	--------	476	--------	402	62	--------
Total	12,743	27,212	51,484	43,913	38,270	41,418	130,520	50,692	15,016	11,195	13,944	13,622
Mean	411	907	1,661	1,417	1,367	1,336	4,351	1,635	501	361	450	454
	-235	-88.5	+630	-496	-739	-459	+1,803	+281	-100	-1.73	-270	-114

Adjusted for change in reservoir contents

Mean	176	819	2,291	920	628	878	6,154	1,916	400	359	180	340
Cfsm	0.315	1.47	4.11	1.65	1.13	1.57	11.0	3.43	0.717	0.643	0.323	0.609
In.	0.36	1.64	4.73	1.90	1.17	1.81	12.30	3.96	0.80	0.74	0.37	0.68

	Observed			Adjusted			
Calendar year 1957:	Max 7,980	Min 50	Mean 892	Mean 912	Cfsm 1.63	In. 22.18	
Water year 1957-58:	Max 7,980	Min 59	Mean 1,233	Mean 1,253	Cfsm 2.25	In. 30.46	

* 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 Jan. 1, 2, Jan. 10 to Feb. 1, Feb. 14, 17, 18, 20, 21, 23-26.

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 1958. 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.--54 years, 13,760 cfs (adjusted for storage since October 1933).
Extremes.--Maximum discharge during year, 101,000 cfs Apr. 23 (gage height, 32.11 ft); minimum daily, 215 cfs Aug. 31, Sept. 1.
1904-58: Maximum discharge, 236,000 cfs Mar. 19, 1936 (gage height, 49.2 ft, from floodmarks); minimum daily, that of 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. 238), and other reservoirs (combined usable capacity, about 33½ billion cubic feet).
Revisions (water years).--WSP 471: 1904-13 calendar years, 1914-17. 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 23				Apr. 24 to Sept. 30			
4.0	405	5.0	1,170	3.8	180	8.0	5,250
4.2	525	6.0	2,260	4.0	275	10.0	9,260
4.5	735	8.0	5,250	4.5	565	16.0	28,000
				5.0	1,000	32.0	100,000
				6.0	2,170		

Note.--Same as following table above 8.0 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,270	6,940	12,400	20,000	17,000	11,500	24,900	57,300	8,460	4,190	*13,200	215
2	3,230	4,120	10,500	23,300	12,000	6,800	26,200	49,500	10,400	4,120	11,300	3,080
3	2,730	4,400	9,770	21,800	11,500	9,700	26,600	44,200	27,900	4,950	1,730	2,910
4	2,800	9,590	9,740	18,700	13,500	10,500	28,800	41,300	27,400	273	6,140	2,830
5	1,430	11,200	*8,720	6,500	15,000	11,500	34,700	37,000	18,500	963	6,150	*4,180
6	1,400	9,440	8,010	9,800	13,500	12,500	39,300	27,200	16,800	449	6,930	1,460
7	4,250	7,730	4,280	11,000	12,500	13,500	47,000	29,000	15,900	4,160	5,750	250
8	4,260	9,170	3,300	11,500	10,500	14,000	45,800	33,100	7,410	4,540	7,820	2,760
9	3,380	11,000	10,400	12,000	9,200	10,300	43,300	40,000	8,220	7,400	6,330	2,740
10	3,560	2,870	15,600	11,500	9,500	11,300	36,900	41,500	10,400	6,040	2,870	3,370
11	3,000	5,760	27,200	11,000	11,000	12,500	34,700	35,700	*9,600	6,900	6,610	3,530
12	710	7,610	31,000	9,800	10,000	12,000	34,500	31,000	8,340	6,800	5,720	3,850
13	429	8,540	23,100	10,000	9,200	13,000	31,200	35,800	8,690	6,910	6,130	411
14	3,380	8,110	19,000	11,000	11,000	13,000	33,900	36,100	7,280	8,300	5,730	220
15	3,290	9,680	17,000	9,400	9,000	14,000	41,200	31,400	2,330	10,600	7,220	3,080
16	2,680	12,700	15,300	10,000	7,200	10,500	48,500	24,800	5,900	8,340	3,430	3,310
17	3,600	11,600	12,600	11,500	9,000	11,000	66,300	23,300	6,790	7,920	557	4,240
18	2,930	8,260	15,200	11,000	9,200	12,000	80,300	22,800	7,370	8,860	5,420	6,300
19	2,160	13,400	14,600	7,800	9,200	*10,400	90,200	20,000	7,150	5,630	5,900	7,490
20	2,240	13,300	16,400	9,200	9,400	11,300	90,400	16,700	8,460	1,020	6,120	6,720
21	4,840	14,500	47,000	10,500	9,200	11,500	86,000	18,900	3,190	7,880	5,850	3,490
22	5,430	14,500	68,700	13,000	9,700	10,700	89,100	18,900	490	8,380	7,330	7,160
23	5,320	14,700	56,000	15,000	8,100	6,550	98,500	17,600	4,520	9,120	1,440	6,900
24	6,390	7,430	44,900	15,000	10,000	9,580	97,700	16,700	5,270	9,860	596	6,830
25	*6,530	10,100	39,400	15,500	10,000	10,700	*91,100	13,900	5,250	7,400	6,690	7,210
26	3,690	10,900	30,600	18,000	9,800	12,800	83,600	10,400	5,530	5,100	5,680	7,710
27	512	11,000	42,300	18,500	10,000	14,500	66,000	13,900	5,870	3,050	5,420	6,070
28	7,290	4,860	43,600	19,000	12,000	16,300	53,600	14,100	3,390	8,920	2,250	1,280
29	5,660	9,480	35,100	18,000	-	18,800	52,000	10,600	1,110	10,800	4,200	5,900
30	7,810	8,820	26,700	17,500	--------	19,500	59,600	10,500	4,070	10,400	*780	6,520
31	6,040	--------	23,100	17,500	--------	20,700	--------	9,490	--------	12,700	215	--------
Total	114,241	281,710	741,520	424,300	297,200	382,930	‡1,681.9	632,690	261,990	201,975	161,518	122,016
Mean	3,685	9,390	23,920	13,690	10,610	12,350	56,060	26,860	8,733	6,515	5,210	4,067
(†)	-921	+133	+1,543	-2,060	-2,523	-1,235	+5,794	+533	+55.6	+399	-740	-501
Adjusted for change in reservoir contents												
Mean	2,765	9,523	25,460	11,630	8,091	11,120	61,860	27,390	8,789	6,914	4,470	3,566
Cfsm	0.352	1.21	3.24	1.48	1.03	1.41	7.87	3.48	1.12	0.879	0.568	0.453
In.	0.41	1.35	3.73	1.70	1.07	1.63	8.77	4.02	1.25	1.01	0.66	0.51

	Observed				Adjusted			
Calendar year 1957:	Max 68,700	Min 357	Mean 10,290		Mean 10,370	Cfsm 1.32	In. 17.89	
Water year 1957-58:	Max 98,500	Min 215	Mean 15,080		Mean 15,130	Cfsm 1.92	In. 26.11	

Peak discharge (base, 61,000 cfs).--Dec. 22 (6 to 7 a.m.) 71,100 cfs (26.17 ft); Apr. 23 (7 to 11 p.m.) 101,000 cfs (32.11 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 p. 239.
‡ Expressed in thousands.
Note.--Stage-discharge relation affected by ice Jan. 1, 5, Jan. 7 to Mar. 8, Mar. 12-18.

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 1958. 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.--20 years, 96.9 cfs.

Extremes.--Maximum discharge during year, 2,340 cfs Apr. 6 (gage height, 6.15 ft); minimum, 4.2 cfs Oct. 6; minimum daily, 4.4 cfs Oct. 4, 5.
1938-58: 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 periods of ice effect, which are fair. Flow regulated by mill above station.

Revisions (water years).--WSP 921: 1940. WSP 1231: 1940-42(M), 1944-45(M), 1948(M), 1949.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 26				Dec. 27 to Sept. 30			
1.37	4.4	2.1	63	1.5	8.8	3.0	277
1.4	5.0	2.5	138	1.7	18	3.5	500
1.5	7.8	3.0	290	2.0	43	4.0	765
1.6	12	3.5	500	2.3	86	4.5	1,080
1.8	26	4.0	765	2.6	151		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.5	8.6	103	187	120	160	266	224	51	13	22	11
2	4.6	19	50	151	110	110	259	184	79	14	20	11
3	*4.6	73	37	100	95	105	255	210	99	12	16	10
4	4.4	44	32	70	82	170	289	244	61	12	15	9.5
5	4.4	25	25	65	88	150	309	178	51	18	14	9.2
6	4.6	18	21	78	82	140	650	159	53	19	13	8.8
7	6.2	14	23	82	74	140	988	241	45	19	12	9.2
8	7.1	*13	26	80	70	115	418	317	42	30	13	10
9	7.4	60	36	75	64	100	301	234	56	74	14	10
10	7.1	40	98	70	73	110	277	173	61	32	13	12
11	6.2	24	170	65	71	135	351	156	68	25	12	13
12	5.2	18	86	61	67	135	351	159	68	73	11	11
13	5.0	16	57	58	65	120	321	139	*49	37	16	10
14	5.2	14	52	56	63	130	364	*127	42	27	13	9.2
15	5.5	53	48	60	61	135	392	129	36	24	26	*9.2
16	5.2	48	44	62	58	120	369	141	32	30	27	8.8
17	5.5	31	44	60	58	110	334	139	28	76	19	23
18	5.5	22	41	57	58	98	301	118	27	34	15	107
19	36	77	42	54	56	100	263	103	27	27	13	66
20	24	88	158	51	54	105	224	103	26	28	11	36
21	14	48	631	54	52	97	218	90	27	22	12	27
22	12	35	216	90	54	100	196	81	32	19	35	87
23	12	29	140	180	56	105	278	78	27	37	27	48
24	13	24	118	130	53	105	215	68	23	48	17	28
25	12	22	102	105	59	130	167	112	21	29	24	23
26	12	20	532	190	64	170	146	137	20	23	36	19
27	11	18	568	334	58	200	132	84	19	34	26	24
28	9.0	16	211	255	160	*215	480	68	17	36	19	61
29	8.2	23	190	178	-	218	352	72	16	32	16	38
30	7.8	44	146	149	--------	228	416	65	16	26	13	26
31	7.4	--------	125	137	--------	252	--------	56	--------	*23	12	--------
Total	276.6	984.6	4,172	3,344	2,025	4,308	9,882	4,389	1,219	953	552	774.9
Mean	8.92	32.8	135	108	72.3	139	329	142	40.6	30.7	17.8	25.8
Cfsm	0.169	0.621	2.56	2.05	1.37	2.63	6.23	2.69	0.769	0.581	0.337	0.489
In.	0.19	0.69	2.94	2.36	1.43	3.03	6.96	3.09	0.86	0.67	0.39	0.55

Calendar year 1957: Max 631 Min 4.2 Mean 55.1 Cfsm 1.04 In. 14.16
Water year 1957-58: Max 988 Min 4.4 Mean 90.1 Cfsm 1.71 In. 23.16

Peak discharge (base, 1,250 cfs).--Dec. 26 (9:30 p.m.) 1,830 cfs (5.51 ft); Apr. 6 (11 p.m.) 2,340 cfs (6.15 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 6, Jan. 3-26, Feb. 1 to Mar. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 745 ft (from topographic map).

Average discharge.--12 years, 95.6 cfs.

Extremes.--Maximum discharge during year, 964 cfs Apr. 8 (gage height, 5.32 ft); maximum gage height not determined, occurred in February during period of ice effect and no gage-height record; minimum discharge, 0.8 cfs July 1; minimum daily, 3.7 cfs Oct. 1. 1946-58: Maximum discharge, 1,890 cfs Oct. 16, 1955 (gage height, 6.31 ft), from rating curve extended above 960 cfs by logarithmic plotting; minimum, that of 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. Beginning with April, occasional regulation by Barre Falls Reservoir (flood-control reservoir under construction by Corps of Engineers).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 7				Apr. 8 to Sept. 30			
1.9	3.5	3.5	145	2.2	7.2	3.6	168
2.1	7.0	4.0	286	2.4	13	4.0	286
2.4	16	4.5	485	2.7	29	4.5	485
2.7	34	5.0	755	3.0	51	5.0	755
3.0	64			3.3	97	5.5	1,100

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.7	11	80	150	195	88	251	381	63	15	36	14
2	4.0	19	69	166	176	105	260	283	61	14	30	12
3	3.8	46	52	130	145	107	267	239	60	14	25	10
4	9.2	64	41	75	125	107	289	245	58	14	22	9.0
5	10	44	39	75	105	111	331	236	50	16	18	8.2
6	5.7	31	31	75	95	118	410	210	37	18	15	7.7
7	4.9	25	31	77	85	131	555	254	40	18	14	7.7
8	6.0	21	34	69	80	135	767	320	75	23	20	9.0
9	6.6	36	46	72	75	125	585	320	45	43	23	8.7
10	*6.4	34	99	80	70	135	520	270	*56	*36	22	11
11	6.2	27	185	75	67	150	495	224	57	40	20	14
12	5.5	22	185	71	65	171	467	195	58	108	*17	11
13	5.5	20	140	70	61	176	436	*176	43	131	15	10
14	5.5	18	115	69	57	157	436	155	41	106	15	9.2
15	5.3	31	85	65	54	152	454	140	34	75	14	*8.4
16	5.1	36	74	70	52	195	480	125	29	63	16	8.2
17	6.0	31	*67	72	51	168	505	125	25	64	16	24
18	7.2	26	57	70	50	145	500	110	23	51	14	62
19	16	42	56	70	49	133	467	95	27	47	12	76
20	21	78	88	67	48	129	431	110	28	48	12	63
21	18	69	196	65	47	121	389	95	28	42	11	49
22	15	50	289	95	46	129	338	80	29	36	16	51
23	13	40	236	125	46	139	342	80	27	38	16	46
24	11	34	171	140	45	135	342	70	24	38	14	38
25	23	31	135	135	46	137	293	100	21	32	20	33
26	21	28	132	180	49	150	239	145	20	28	30	28
27	17	24	236	286	48	168	201	110	31	30	33	43
28	15	24	251	327	60	179	224	90	27	30	28	97
29	13	31	210	313	-	192	335	80	22	43	24	97
30	11	44	179	270	-------	210	414	70	19	46	20	74
31	11	-------	150	236	-------	236	-------	65	-------	41	16	-------
Total	311.6	1,037	3,759	3,840	2,092	4,534	12,023	5,198	1 118	1,348	604	939.1
Mean	10.1	34.6	121	124	74.7	146	401	168	37.3	43.5	19.5	31.3
Cfsm	0.184	0.629	2.20	2.25	1.36	2.65	7.29	3.05	0.678	0.791	0.355	0.569
In.	0.21	0.70	2.54	2.60	1.41	3.07	8.13	3.51	0.76	0.91	0.41	0.64

Calendar year 1957: Max 345 Min 2.2 Mean 60.9 Cfsm 1.11 In. 15.04
Water year 1957-58: Max 767 Min 3.7 Mean 101 Cfsm 1.84 In. 24.89

* Discharge measurement made on this day.

Note.--No gage-height record Feb. 12-22, May 14 to June 9; discharge estimated on basis of weather records and records for Ware River at Coldbrook and Priest Brook near Winchendon. Stage-discharge relation affected by ice Nov. 27, Dec. 5, 6, 10-15, 18, Jan. 3-26, Feb. 1, 3-26, 28, Mar. 1, 9.

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 1958.

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.--30 years, 168 cfs.

Extremes.--Maximum daily discharge during year, 1,380 cfs Apr. 8; minimum daily, 8.0 cfs Oct. 1.
1928-58: 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.

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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.0	18	134	308	353	320	539	655	136	39	65	32
2	8.8	26	96	290	319	270	555	494	133	37	54	28
3	8.8	67	54	234	272	240	565	438	135	37	45	25
4	8.8	95	30	137	231	206	606	459	128	37	41	23
5	14	69	53	137	216	209	688	396	107	40	37	22
6	13	58	43	138	202	221	899	420	79	41	32	20
7	11	48	50	141	183	233	1,290	549	87	41	35	22
8	11	40	53	136	181	230	1,380	631	81	54	40	25
9	12	46	88	139	145	221	1,040	569	102	88	46	25
10	13	50	221	155	134	245	897	517	132	66	41	34
11	13	45	395	141	136	298	886	412	136	95	39	32
12	13	38	407	137	138	333	837	369	129	258	35	30
13	12	33	215	136	136	311	781	339	111	246	32	27
14	11	30	248	133	135	252	805	310	77	154	31	26
15	11	36	134	125	132	368	817	286	76	124	32	24
16	11	45	126	130	126	326	848	261	65	114	34	23
17	11	45	113	137	125	304	853	259	51	105	32	44
18	14	43	100	134	124	234	805	204	52	80	34	144
19	28	61	103	135	123	226	736	190	64	77	34	139
20	39	138	176	129	119	197	643	265	64	77	29	106
21	33	104	624	122	118	301	612	224	66	67	31	87
22	26	75	574	210	113	270	549	173	65	58	42	97
23	20	60	449	297	112	272	598	168	60	79	41	82
24	18	52	315	291	107	267	564	138	53	79	35	66
25	25	47	207	293	118	273	462	266	48	64	46	54
26	28	44	392	436	125	311	370	345	49	58	58	108
27	28	38	552	605	127	354	317	257	63	57	60	109
28	15	38	464	631	142	374	305	207	56	63	52	148
29	10	43	445	576	-	402	656	165	48	89	48	154
30	10	97	371	499	-------	447	810	141	43	82	41	147
31	15	-------	273	420	-------	492	-------	137	-------	73	36	-------
Total	499.4	1,629	7,505	7,532	4,492	9,007	21,913	10,244	2,496	2,579	1,258	1,903
Mean	16.1	54.3	242	243	160	291	730	330	83.2	83.2	40.6	63.4
Cfsm	0.166	0.561	2.50	2.51	1.65	3.01	7.54	3.41	0.860	0.860	0.419	0.655
In.	0.19	0.63	2.88	2.89	1.73	3.46	8.42	3.94	0.96	0.99	0.48	0.73

Calendar year 1957: Max 631 Min 7.0 Mean 118 Cfsm 1.22 In. 16.48
Water year 1957-58: Max 1,380 Min 8.0 Mean 195 Cfsm 2.01 In. 27.30

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 1958.
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.--46 years, 324 cfs (adjusted for diversion).
Extremes.--Maximum discharge during year, 1,720 cfs Apr. 7 (gage height, 4.60 ft); minimum, 12 cfs Sept. 15, 16; minimum daily, 24 cfs Oct. 6.
1912-58: 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, no gage-height record, or backwater from aquatic vegetation, 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.
Revisions (water years).--WSP 661: Drainage area. WSP 1031: 1944. WSP 1301: 1914(M).

Rating tables, water year 1957-58, except periods of ice effect and backwater from aquatic vegetation (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 21				Dec. 22 to Sept. 30			
1.7	24	2.7	300	1.8	34	3.0	420
1.8	34	3.0	460	2.0	62	3.5	760
2.1	87	3.5	780	2.2	105	4.0	1,180
2.4	175			2.6	235	4.5	1,630

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	42	208	325	370	400	*680	652	252	88	*162	76
2	27	53	235	384	350	340	680	516	266	84	153	56
3	27	85	185	270	310	320	645	432	286	80	93	60
4	*27	121	132	200	270	300	638	540	252	76	119	49
5	26	147	112	220	260	300	645	522	238	70	78	60
6	24	115	74	190	260	310	752	450	193	74	87	48
7	31	151	110	200	250	320	1,560	621	172	84	76	48
8	35	80	107	190	245	310	*1,230	680	165	110	97	83
9	34	108	141	200	210	300	960	*673	168	180	74	49
10	33	97	269	210	230	320	666	540	190	135	81	86
11	43	115	598	220	220	370	652	468	221	180	104	43
12	28	*79	431	220	220	400	673	438	263	450	75	67
13	34	78	290	220	*220	390	645	408	210	520	84	58
14	31	80	250	220	215	350	596	372	182	320	109	41
15	31	85	209	223	215	450	568	340	147	260	93	40
16	32	62	247	220	155	410	528	355	141	230	68	77
17	33	79	213	221	220	380	504	378	98	210	79	127
18	34	111	186	225	215	320	480	340	83	180	103	313
19	50	93	158	210	210	310	444	298	126	150	71	332
20	72	153	243	200	205	290	408	390	114	150	*62	204
21	74	216	739	180	200	370	378	345	*114	160	64	172
22	79	162	746	210	195	340	382	298	141	130	92	222
23	37	107	425	380	175	340	438	306	112	150	71	210
24	72	112	324	400	180	340	492	302	130	160	48	131
25	84	130	252	364	200	340	414	335	93	140	98	128
26	53	91	361	492	210	380	296	568	93	110	99	73
27	64	86	673	752	220	410	315	444	152	110	114	192
28	78	60	480	736	260	430	524	340	123	120	104	492
29	63	117	396	575	-	460	704	310	108	150	88	413
30	58	118	324	486	---------	500	856	290	98	180	63	297
31	41	--------	331	432	---------	550	--------	274	--------	170	76	--------
Total	1,381	3,133	9,449	9,575	6,490	11,350	18,753	13,225	4,931	5,211	2,785	4,247
Mean	44.5	104	305	309	232	366	625	427	164	168	89.8	142
(†)	0	0	116	105	32.7	155	573	194	0	0	0	0
Adjusted for diversion												
Mean	44.5	104	420	414	264	521	1,198	620	164	168	89.8	142
Cfsm	0.224	0.523	2.11	2.08	1.33	2.62	6.02	3.12	0.824	0.844	0.451	0.714
In.	0.26	0.59	2.44	2.40	1.38	3.02	6.72	3.59	0.92	0.97	0.52	0.79

	Observed			Adjusted			
Calendar year 1957:	Max 1,450	Min 19	Mean 200	Mean 224	Cfsm 1.13	In. 15.29	
Water year 1957-58:	Max 1,560	Min 24	Mean 248	Mean 346	Cfsm 1.74	In. 23.60	

Peak discharge (base, 1,300 cfs).--Apr. 7 (10 a.m.) 1,720 cfs (4.60 ft).

* Discharge measurement made on this day.
† Diversion, equivalent in cubic feet per second, from 97 sq mi in Ware River basin for supply of Boston metropolitan district; furnished by Metropolitan District Commission.
Note.--No gage-height record Feb. 19 to Apr. 1, July 1-31; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for station at Coldbrook. Stage-discharge relation affected by ice Jan. 3-14, 19-24, Feb. 1-18, and at times during period of no gage-height record in winter. Backwater from aquatic vegetation Oct. 1 to Nov. 6, July 1 to Sept. 30.

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 1958. 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.--11 years, 6.31 cfs.

Extremes.--Maximum disxharge during year, 155 cfs Dec. 21 (gage height, 2.72 ft), from rating curve extended above 78 cfs by logarithmic plotting; minimum, 0.05 cfs Oct. 1. 1947-58: 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 table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.4	0.04	1.2	4.6
.5	.15	1.4	9.0
.6	.37	1.6	17.1
.7	.71	1.8	29
.8	1.20	2.0	45
1.0	2.6	2.2	65

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.05	0.62	5.5	17.0	9.0	5.5	18.2	16.2	3.4	0.43	1.8	0.32
2	.09	4.2	2.5	11.1	8.0	5.4	18.2	13.4	*6.4	.34	.99	.22
3	.07	3.1	*2.0	7.0	7.0	5.5	19.4	15.8	5.1	.61	.71	.18
4	.06	1.3	1.7	4.5	6.3	7.8	23	15.6	3.5	.63	.59	.18
5	.06	.84	1.3	4.6	6.0	7.2	23	12.2	3.0	.84	.46	.18
6	.06	.67	1.25	4.6	5.6	7.2	47	11.4	2.9	.89	.37	.18
7	.80	.55	1.5	4.7	5.2	7.2	52	18.0	2.5	.89	.34	.24
8	.43	.57	1.85	4.1	4.9	6.5	30	25	2.4	4.3	1.07	.46
9	.29	3.0	4.8	4.3	4.7	6.3	23	16.2	10.3	2.8	1.45	.29
10	.20	.99	22	4.7	4.4	7.8	22	12.5	5.4	.99	.59	1.6
11	.15	.67	20	4.4	4.2	10.3	22	11.1	5.0	*13.0	.46	.73
12	.14	.59	7.8	4.2	4.0	10.4	21	10.8	4.0	7.0	.29	.40
13	.14	.55	5.6	4.1	*3.9	10.8	19.3	9.4	2.8	3.6	1.4	.29
14	.14	.55	4.8	4.0	3.6	11.0	18.8	8.5	2.5	2.4	1.5	.24
15	.14	3.9	4.4	3.8	3.5	11.0	17.1	8.0	2.05	3.0	.94	.20
16	.14	1.5	4.1	4.1	3.3	7.8	15.7	10.2	1.85	2.2	.59	.30
17	.14	.99	3.9	4.2	3.2	7.2	14.3	8.5	1.7	1.35	.49	5.8
18	.15	.84	3.5	4.0	3.1	7.0	13.0	7.5	1.55	.89	.86	9.0
19	2.0	7.7	4.8	3.8	3.1	7.2	11.4	7.8	1.55	2.7	.40	3.3
20	.87	7.6	23	3.7	3.0	*8.0	10.4	8.0	1.7	1.5	.24	2.0
21	.43	2.35	58	3.5	2.9	7.0	9.7	6.5	1.85	.84	.51	1.9
22	.37	1.65	17.8	11.0	3.0	7.2	*9.4	5.6	1.8	.75	4.5	3.7
23	.34	1.4	13.0	15.0	2.8	7.0	18.4	6.9	1.25	5.2	.98	1.65
24	*.61	1.25	11.1	9.0	2.9	7.5	12.8	5.2	1.05	2.35	.61	1.15
25	1.9	1.10	9.0	8.2	4.0	8.8	9.7	13.3	.89	1.20	5.9	.94
26	.63	.94	34	14.2	3.6	11.4	8.2	9.5	1.05	1.24	2.6	.79
27	.49	.71	30	26	3.3	13.0	7.8	6.3	1.10	4.1	1.5	4.9
28	.43	.94	15.7	15.9	5.6	13.4	28	5.6	.67	2.2	.89	4.4
29	.40	3.2	15.3	11.8	-	15.0	24	5.6	.49	4.4	.71	2.0
30	.37	7.1	11.8	10.4	-------	17.6	*30	4.5	.52	*1.95	.49	1.45
31	.37	-------	10.4	9.7	-------	18.2	-------	3.9	-------	2.2	.43	---------
Total	12.46	61.37	352.40	241.6	124.1	283.2	596.8	319.0	80.27	76.79	34.66	48.99
Mean	0.402	2.05	11.4	7.79	4.43	9.14	19.9	10.3	2.68	2.48	1.12	1.63
Cfsm	0.119	0.605	3.36	2.30	1.31	2.70	5.87	3.04	0.791	0.732	0.330	0.481
In.	0.14	0.67	3.87	2.65	1.36	3.11	6.55	3.50	0.88	0.84	0.38	0.54

Calendar year 1957: Max 58 Min 0.01 Mean 4.18 Cfsm 1.23 In. 16.72
Water year 1957-58: Max 58 Min 0.05 Mean 6.11 Cfsm 1.80 In. 24.49

Peak discharge (base, 72 cfs).--Dec. 10 (9 p.m.) 87 cfs (2.36 ft); Dec. 21 (5 a.m.) 155 cfs (2.72 ft); Dec. 26 (7 to 8 p.m.) 93 cfs (2.40 ft); Apr. 6 (9:30 p.m.) 140 cfs (2.65 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 12-14, Jan. 3-24, Feb. 3 to Mar. 3, Mar. 14, 15.

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 1958. 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.--21 years, 70.7 cfs.

Extremes.--Maximum discharge during year, 645 cfs Apr. 7 (gage height, 20.65 ft); minimum, 0.2 cfs Oct. 6.
1937-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

19.1	0	19.4	18
19.15	.4	19.5	36
19.2	1.6	19.6	67
19.25	3.8	20.0	239
19.3	7.2	20.6	610
19.35	12		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	5.7	42	94	105	62	210	293	45	9.8	21	9.3
2	.4	8.7	40	111	96	62	210	200	46	8.8	17	7.2
3	.3	15	32	90	82	61	200	150	54	9.3	14	5.3
4	.3	15	28	59	67	65	210	166	48	8.8	12	4.4
5	.3	14	19	50	57	67	239	159	38	9.8	9.3	4.7
6	.3	12	16	45	54	67	291	138	34	10	7.2	3.8
7	1.0	9.3	15	42	b52	75	603	153	30	9.3	8.0	4.4
8	1.7	8.0	19	39	b52	73	491	188	25	16	8.8	6.0
9	1.9	12	23	37	b49	69	339	214	29	36	9.8	5.3
10	1.7	11	50	36	45	67	271	175	45	31	9.3	7.9
11	1.6	10	134	35	39	76	271	138	53	42	8.0	8.4
12	1.4	9.3	134	35	36	99	261	123	51	210	6.4	7.6
13	1.6	8.4	82	35	35	119	239	107	44	161	7.6	6.4
14	1.6	7.6	56	34	35	132	239	92	36	103	8.8	6.0
15	1.6	12	45	34	34	134	239	80	29	67	9.8	5.0
16	1.6	14	35	35	b33	115	234	78	23	53	9.3	5.7
17	2.3	13	31	36	b32	96	224	80	21	40	8.0	12
18	3.6	13	26	34	b32	82	200	76	19	27	8.4	36
19	10	19	25	32	b32	80	172	80	22	26	8.4	56
20	11	36	46	30	b31	80	142	107	21	25	7.2	45
21	9.3	36	206	28	31	84	119	99	20	22	7.0	34
22	8.4	30	271	53	31	86	111	76	23	19	19	33
23	8.8	24	170	103	30	82	132	75	21	26	35	30
24	9.3	19	107	123	30	78	164	67	19	33	20	24
25	11	16	80	117	32	78	138	74	16	31	23	19
26	9.3	14	80	132	36	88	105	136	16	24	27	18
27	8.0	12	200	200	36	109	84	128	16	25	25	26
28	6.8	10	183	234	53	132	115	96	15	24	22	56
29	5.3	15	142	195	-	142	229	75	13	26	17	56
30	4.7	23	115	150	-------	157	350	59	11	24	13	39
31	4.7	-------	94	126	-------	186	--------	53	--------	23	11	--------
Total	130.1	452.0	2,546	2,404	1,277	2,903	6,832	3,735	883	1,179.8	407.3	581.4
Mean	4.20	15.1	82.1	77.5	45.6	93.6	228	120	29.4	38.1	13.1	19.4
Cfsm	0.096	0.346	1.88	1.77	1.04	2.14	5.22	2.75	0.673	0.872	0.300	0.444
In.	0.11	0.38	2.17	2.05	1.09	2.47	5.81	3.18	0.75	1.00	0.35	0.49

Calendar year 1957: Max 410 Min 0 Mean 44.9 Cfsm 1.03 In. 13.93
Water year 1957-58: Max 603 Min 0.3 Mean 63.9 Cfsm 1.46 In. 19.85

Peak discharge (base, 350 cfs).--Apr. 7 (12 m. to 2 p.m.) 645 cfs (20.65 ft); Apr. 30 (4 to 6 p.m.) 392 cfs (20.27 ft).

b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 4-21; discharge estimated on basis of weather records, recorded range in stage, and records for Millers River near Winchendon and Ware River near Barre.

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 1958.

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.--46 years (1912-58), 307 cfs (adjusted for storage and diversions).

Extremes.--Maximum discharge during year, 178 cfs Sept. 16 (gage height, 2.97 ft); maximum gage height, 3.10 ft Feb. 18 (affected by ice); minimum daily discharge, 30 cfs Feb. 16, 22, Apr. 19.
1910-58: 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. 238). Diversion from Ware River to Quabbin Reservoir since 1940, from Quabbin Reservoir to Wachusett Reservoir since 1941, and 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 1957-58, 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	121	124	47	36	47	48	48	48	41	98	97	122
2	123	101	109	110	35	32	47	47	103	95	54	131
3	122	126	98	95	78	57	46	48	83	98	41	98
4	*122	131	97	54	b60	49	47	34	78	87	106	99
5	101	98	97	41	74	47	48	58	78	119	99	112
6	126	99	97	102	76	48	36	91	78	117	97	*102
7	148	97	55	95	76	48	61	100	48	121	98	124
8	125	*99	46	97	45	46	49	101	41	93	100	144
9	123	91	109	94	b33	33	48	*100	84	99	93	123
10	125	121	102	102	84	56	47	56	76	111	122	121
11	125	119	100	54	b50	47	47	44	78	110	130	116
12	96	133	99	43	b44	47	49	108	96	103	98	117
13	122	98	*96	104	b44	46	32	98	95	124	103	98
14	148	98	54	95	b44	55	60	99	*53	124	100	121
15	122	98	43	97	b45	50	48	97	42	99	99	138
16	124	68	104	96	b30	34	47	100	103	101	55	120
17	123	82	80	96	b54	56	47	56	94	99	45	127
18	122	120	78	54	b48	47	46	43	97	99	107	126
19	101	100	79	42	b46	47	30	104	98	53	100	121
20	126	100	79	100	b45	47	42	98	98	42	99	100
21	146	98	55	*95	45	45	55	98	92	103	100	121
22	124	98	44	100	30	47	46	99	117	100	100	143
23	125	55	88	99	41	33	47	98	124	98	94	124
24	125	44	97	97	55	58	47	56	96	99	122	121
25	124	106	34	55	47	49	47	45	97	*93	132	122
26	100	98	109	46	46	49	45	106	97	55	100	121
27	126	99	100	111	46	48	32	98	97	44	100	109
28	149	34	56	99	49	*49	60	96	92	107	101	124
29	124	110	44	99	-	47	49	96	117	99	65	128
30	123	57	105	76	---------	32	50	33	124	97	87	98
31	124	--------	97	76	--------	59	--------	61	--------	99	122	--------
Total	3,835	2,902	2,498	2,560	1,417	1,456	1,401	2,414	2,617	2,994	2,966	3,571
Mean	124	96.7	80.6	82.6	50.6	47.0	46.7	77.9	87.2	96.6	95.7	119
(†)	-139	+98.6	+401	+360	+235	+457	+768	+402	-2.4	+196	-50.9	-19.0
Adjusted for diversion and change in reservoir contents ‡												
Mean	-15.6	195	482	443	286	504	814	480	84.8	293	44.8	100
Cfsm	-0.083	1.04	2.56	2.36	1.52	2.68	4.33	2.55	0.451	1.56	0.238	0.532
In.	-0.10	1.16	2.95	2.72	1.58	3.09	4.83	2.94	0.50	1.80	0.27	0.59

	Observed			Adjusted		
Calendar year 1957:	Max 151	Min 33	Mean 97.5	Mean 195	Cfsm 1.04	In. 14.05
Water year 1957-58:	Max 149	Min 30	Mean 83.9	Mean 309	Cfsm 1.64	In. 22.33

* 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 1958.

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.--46 years (1912-58), 244 cfs.

Extremes.--Maximum discharge during year, 1,240 cfs Apr. 8 (gage height, 6.19 ft); minimum daily, 7.1 cfs Oct. 1, 5.
1909-58: 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 or no gage-height record, 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.0	6.6	3.5	214
2.1	9.6	4.0	339
2.2	14	5.0	690
2.5	36	6.0	1,150
2.8	75	6.5	1,430
3.1	129		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.1	17	100	475	658	294	*710	610	221	96	110	74
2	8.0	26	130	454	598	323	714	578	203	87	101	69
3	7.4	55	105	430	490	361	730	558	190	82	94	68
4	7.4	57	90	380	450	403	748	566	177	80	89	63
5	7.1	47	75	340	410	416	748	534	164	78	82	62
6	8.0	42	55	270	380	425	829	509	153	80	78	60
7	12	39	42	240	350	435	1,150	646	141	77	75	59
8	12	40	58	210	320	441	*1,220	690	133	80	87	60
9	11	60	70	260	220	448	1,220	*694	129	116	85	*57
10	10	47	150	270	280	464	1,190	650	125	101	80	66
11	9.2	40	260	240	260	492	1,160	626	121	97	78	63
12	8.6	*44	260	220	240	516	1,120	586	121	129	75	57
13	8.0	42	250	210	225	542	1,060	*526	114	133	89	55
14	*8.3	42	230	200	210	602	1,000	492	101	131	97	52
15	8.3	54	220	210	200	622	960	461	90	121	116	51
16	8.3	56	200	214	195	618	906	441	84	116	101	52
17	8.3	52	*170	216	190	602	852	419	75	120	92	166
18	8.9	44	181	210	200	574	802	388	75	118	84	216
19	19	66	157	200	200	554	748	370	84	116	77	194
20	18	85	183	*175	200	542	702	361	85	106	70	170
21	13	75	356	200	200	526	654	323	84	99	72	160
22	12	70	370	250	190	509	606	294	94	94	94	166
23	12	68	359	300	200	498	602	289	*90	137	78	157
24	13	66	350	330	200	506	570	271	85	131	69	147
25	26	50	323	330	190	520	520	304	78	116	82	139
26	19	55	386	440	205	542	478	353	83	110	94	133
27	18	51	506	580	203	570	458	323	160	125	96	175
28	18	54	498	678	*255	578	520	302	125	*118	92	221
29	15	52	506	698	-	590	566	274	112	125	87	196
30	14	82	492	702	------	606	618	251	103	118	82	185
31	15	------	464	690	------	654	------	239	------	112	78	------
Total	369.9	1,578	7,596	10,622	7,919	15,773	24,161	13,928	3,600	3,349	2,684	3,393
Mean	11.9	52.6	245	343	283	509	805	449	120	108	86.6	113
Cfsm	0.079	0.348	1.62	2.27	1.87	3.37	5.33	2.97	0.795	0.715	0.574	0.748
In.	0.09	0.39	1.87	2.62	1.95	3.88	5.95	3.43	0.89	0.82	0.66	0.84

Calendar year 1957: Max 622 Min 6.6 Mean 151 Cfsm 1.00 In. 13.62
Water year 1957-58: Max 1,220 Min 7.1 Mean 260 Cfsm 1.72 In. 23.39

Peak discharge (base, 840 cfs).--Apr. 8 (9:30 to 11:30 a.m.) 1,240 cfs (6.19 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Dec. 1-17; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for Quinebaug River at Westville and Ware River at Coldbrook. Stage-discharge relation affected by ice Jan. 3-15, 18-27, Feb. 3-26, 28.

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 1958. 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 1½ miles downstream at different datum.
Average discharge.--30 years, 1,108 cfs (adjusted to present drainage area and for storage and diversions).
Extremes.--Maximum discharge during year, 4,380 cfs Apr. 8 (gage height, 8.74 ft); minimum daily, 81 cfs Nov. 28.
1928-58: 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 and, since 1950, for city of Chicopee. 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. 238), and by smaller reservoirs.
Revisions (water years).--WSP 711: Drainage area. WSP 1231: 1934.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.5	81	6.0	1,340
3.9	160	8.0	3,450
4.4	325	8.5	4,070
5.0	640		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	143	248	342	1,110	1,500	1,200	2,070	2,140	809	*412	560	450
2	208	129	601	1,220	1,270	1,140	1,980	1,660	878	373	470	320
3	190	140	551	1,050	1,160	1,210	*1,910	1,450	839	366	410	340
4	208	586	452	814	984	1,250	1,870	1,560	872	356	300	250
5	102	439	282	578	1,060	1,320	1,880	1,580	672	283	380	300
6	108	348	248	793	1,020	1,300	1,930	1,460	563	380	400	210
7	262	268	143	834	956	1,360	3,700	1,940	510	481	460	160
8	236	322	132	654	939	1,310	3,800	2,230	494	382	430	390
9	246	94	624	741	b600	1,160	3,190	2,270	604	731	250	430
10	211	261	544	674	b700	1,280	2,630	1,810	680	594	170	390
11	220	291	913	563	855	1,370	2,460	1,570	504	548	350	350
12	102	610	1,080	610	780	1,560	2,600	1,540	684	610	420	460
13	104	277	798	672	656	1,570	2,390	*1,430	600	962	450	280
14	237	*254	610	707	b680	1,680	2,330	1,370	369	1,070	300	*120
15	250	300	458	708	b470	1,810	2,110	1,220	460	822	620	330
16	221	126	720	699	b600	1,680	1,970	1,230	408	635	460	360
17	198	209	604	694	b520	1,600	1,790	1,090	465	840	310	464
18	236	441	576	499	b550	1,460	1,690	1,110	402	862	360	923
19	97	430	*535	b560	b580	1,390	1,530	1,120	408	616	460	1,100
20	134	423	554	b600	b560	1,400	1,420	1,190	470	542	440	836
21	513	405	1,100	*728	*620	1,340	1,390	1,180	430	435	320	550
22	230	517	1,640	779	548	1,350	1,360	982	436	416	370	620
23	258	125	1,280	1,100	474	1,320	1,460	895	500	561	290	709
24	232	242	946	1,140	596	1,350	1,490	792	424	606	280	542
25	*406	401	666	1,140	806	1,400	1,380	897	485	508	600	532
26	102	390	1,020	1,280	656	1,510	1,170	1,510	404	432	480	432
27	94	344	1,660	1,970	741	1,610	933	1,390	787	866	400	461
28	387	81	1,430	2,230	904	1,610	1,440	1,230	594	764	430	1,040
29	293	394	1,220	2,000	-	1,630	2,110	926	337	656	450	1,090
30	220	112	1,160	1,730	---------	1,580	2,330	996	500	626	260	906
31	247	--------	1,000	1,590	--------	1,770	--------	558	--------	*520	280	--------
Total	6,695	9,207	23,889	30,467	21,785	44,520	60,313	42,326	16,588	18,255	12,160	15,345
Mean	216	307	771	983	778	1,436	2,010	1,365	553	589	392	512
(†)	-146	+104	+542	+470	+268	+617	+1,345	+594	-1.52	+193	-45.0	-14.3

Adjusted for diversion and change in reservoir contents

Mean	70.0	411	1,313	1,453	1,046	2,053	3,355	1,959	551	782	347	497
Cfsm	0.102	0.597	1.91	2.11	1.52	2.98	4.88	2.85	0.801	1.14	0.504	0.722
In.	0.12	0.67	2.20	2.43	1.58	3.44	5.44	3.28	0.89	1.3	0.58	0.81

	Observed			Adjusted		
Calendar year 1957:	Max 3,260	Min 52	Mean 592	Mean 717	Cfsm 1.04	In. 14.14
Water year 1957-58:	Max 3,800	Min 81	Mean 826	Mean 1,153	Cfsm 1.68	In. 22.75

* 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 city of Chicopee, change in contents in Ludlow Reservoir, and diversion from Ludlow Reservoir, equivalent in cubic feet per second.
b Stage-discharge relation affected by ice.
Note.--No gage-height record July 31 to Sept. 15; discharge estimated on basis of 2 discharge measurements, 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 1958.
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.--49 years, 325 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 3,900 cfs Apr. 20 (gage height, 6.31 ft); minimum, 4.5 cfs Dec. 5; minimum daily, 14 cfs Oct. 3-5.
1909-58: 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. 238).
Revisions (water years).--WSP 415: 1909-12. WSP 1001: 1941-43. WSP 1231: 1910, 1912, 1913(M) (calendar years), 1914-15, 1916-19(M), 1921-23(M), 1925-27(M), 1929-33(M), 1935(M).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.8	11	4.0	765
2.0	26	4.5	1,220
2.3	59	5.0	1,810
2.6	114	6.0	3,310
3.0	225	6.5	4,300
3.5	440		

Discharge, in cubic feet per second, water year October 1956 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	30	336	473	366	320	607	1,620	138	35	70	26
2	15	51	203	607	304	318	*627	1,320	142	37	61	22
3	14	190	151	342	277	229	607	1,000	284	33	49	21
4	14	150	126	209	b235	300	803	1,050	232	35	43	20
5	14	88	62	143	247	304	1,080	930	146	46	37	19
6	15	65	42	146	229	309	291	705	146	46	34	18
7	18	54	43	156	215	300	1,140	728	133	46	31	19
8	26	47	97	164	215	292	2,520	896	114	88	42	20
9	28	132	202	164	b195	243	2,440	870	120	152	64	25
10	32	121	233	167	b180	225	2,110	683	172	90	52	*33
11	26	75	600	167	b180	309	1,380	501	210	78	40	42
12	22	56	445	170	b175	357	1,110	507	262	225	34	37
13	19	*54	203	164	b165	343	1,030	456	*181	136	35	30
14	18	49	164	164	b165	330	1,540	*381	148	86	62	26
15	*18	166	170	164	b165	313	1,810	343	116	70	102	22
16	19	157	164	164	b165	343	1,370	339	95	123	77	22
17	18	71	161	164	b160	300	1,440	420	84	277	55	62
18	19	46	*107	164	b160	222	2,480	371	75	122	43	348
19	49	15	149	164	b160	296	2,850	313	75	89	35	252
20	73	304	453	161	b155	239	3,290	296	70	244	30	142
21	49	195	1,010	156	b155	229	3,580	292	72	80	27	99
22	37	148	212	161	154	232	3,260	284	77	62	54	265
23	31	119	589	432	151	232	2,880	243	75	116	61	174
24	30	97	930	574	148	222	2,360	209	64	188	43	101
25	51	80	975	332	146	273	1,220	209	59	106	54	73
26	59	58	922	401	151	304	913	304	54	75	108	59
27	44	31	1,000	562	154	405	690	261	52	133	75	86
28	36	38	1,230	805	167	482	907	203	47	142	52	377
29	33	115	1,370	773	-	490	1,520	193	43	*110	43	178
30	31	96	1,010	484	--------	537	1,820	181	39	93	37	112
31	30	--------	518	381	--------	627	--------	156	--------	73	34	--------
Total	903	2,898	13,877	9,278	5,339	9,925	49,675	16,264	3,525	3,236	1,584	2,730
Mean	29.1	96.6	448	299	191	320	1,656	525	118	104	51.1	91.0
(†)	0	+3.86	+4.22	-2.99	+1.07	-5.15	+45.1	-43.8	-0.35	-0.04	-0.26	+0.15
Adjusted for change in contents in Knightville Reservoir												
Mean	29.1	100	452	296	192	315	1,701	481	117	104	50.8	91.2
Cfsm	0.180	0.617	2.79	1.83	1.19	1.94	10.5	2.97	0.722	0.642	0.314	0.563
In.	0.21	0.69	3.22	2.11	1.23	2.24	11.71	3.42	0.81	0.74	0.36	0.63

	Observed			Adjusted			
Calendar year 1957:	Max 1,440	Min 10	Mean 200	Mean 200	Cfsm 1.23	In. 16.78
Water year 1957-58:	Max 3,580	Min 14	Mean 327	Mean 327	Cfsm 2.02	In. 27.37

* 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 1958.

Gage.--Water-stage recorder and concrete control. Datum of gage is 641.40 ft above mean sea level, datum of 1929.

Average discharge.--13 years, 2.76 cfs.

Extremes.--Maximum discharge during year, 74 cfs Apr. 6 (gage height, 2.515 ft); minimum, 0.05 cfs Oct. 1.
1945-58: 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, 1933.

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

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 10				Dec. 11 to Sept. 30					
1.1	0.06	1.5	1.14	1.1	0.04	1.5	0.93	1.9	10.0
1.2	.16	1.6	2.1	1.2	.12	1.6	1.95	2.0	15.0
1.3	.31	1.7	3.8	1.3	.25	1.7	3.8	2.2	31
1.4	.59			1.4	.48	1.8	6.4		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.06	0.16	1.63	4.7	3.6	5.1	9.8	7.8	1.10	0.20	0.50	0.10
2	.07	.53	.96	3.4	3.3	3.7	*9.0	6.2	1.51	.18	.30	.08
3	.06	.78	.72	2.5	2.8	3.4	9.5	7.6	1.44	.17	.26	.08
4	.06	.40	.55	1.65	2.7	4.4	12.7	7.8	1.10	.21	.26	.07
5	.06	.26	.41	1.44	2.2	4.0	14.9	6.1	.96	.78	.22	.07
6	.07	.20	.38	1.38	1.88	4.0	30	5.2	1.02	.65	.20	.08
7	.16	.17	.42	1.44	1.67	3.7	31	7.7	.84	.52	.20	.10
8	.20	.23	.57	1.44	1.6	3.3	19.4	7.6	.78	2.1	.26	.10
9	.12	1.03	1.06	1.33	1.61	3.0	13.9	6.0	.96	3.2	.20	.08
10	.09	.42	2.7	1.23	1.50	3.6	13.6	4.7	.99	1.55	.17	*.20
11	.08	.26	3.3	1.23	1.23	4.1	14.7	4.1	1.29	1.56	.17	.12
12	.08	.20	1.55	1.14	1.25	4.0	12.9	4.4	1.74	1.61	.16	.09
13	.07	*.18	1.20	1.06	1.2	4.2	14.8	3.7	*1.18	1.23	.46	.08
14	.07	.19	.93	1.06	1.2	4.1	18.0	*3.2	.90	.96	.51	.08
15	.07	1.26	.84	1.28	1.15	4.0	18.5	2.9	.74	.90	.73	.07
16	.07	.71	.78	1.18	1.1	3.5	17.3	3.6	.63	1.09	.36	.09
17	.07	.39	.74	1.14	1.1	3.2	15.0	3.2	.57	1.47	.28	.63
18	.08	.31	*.69	1.06	1.1	3.0	13.2	2.7	.53	.90	.23	2.4
19	.41	1.57	.88	1.02	1.1	2.8	11.5	2.5	.52	.87	.18	1.16
20	.13	1.33	4.3	.99	1.05	2.8	9.0	2.2	.52	.63	.16	.58
21	.10	.78	15.8	.96	1.0	2.7	7.7	2.1	.54	.52	.30	.72
22	.10	.53	5.7	5.0	1.0	2.7	6.8	1.80	.80	.49	.97	1.63
23	.09	.39	3.8	3.5	1.0	2.8	11.2	1.74	.59	1.15	.39	.84
24	.12	.34	3.2	2.6	1.05	3.2	8.3	1.55	.45	.85	.25	.63
25	.23	.31	2.5	2.5	1.1	3.6	6.2	3.7	.36	.63	1.08	.43
26	.14	.27	10.4	6.7	1.1	4.9	5.1	3.6	.36	.51	.65	.32
27	.12	.25	10.0	7.7	1.1	5.6	4.4	2.3	.36	.72	.40	.82
28	.12	.26	5.5	6.2	5.5	6.3	14.3	1.88	.28	.63	.25	.99
29	.11	.58	5.0	5.0	-	6.9	12.0	1.88	.25	*.56	.18	.63
30	.11	1.61	3.9	4.6	-------	8.0	12.3	1.55	.22	.36	.15	.48
31	.11	-------	3.2	4.2	-------	9.0	-------	1.28	-------	.48	.12	-------
Total	3.43	15.90	93.61	80.63	47.19	129.6	397.0	122.58	23.53	27.68	10.55	13.75
Mean	0.111	0.530	3.02	2.60	1.69	4.18	13.2	3.95	0.784	0.893	0.340	0.458
Cfsm	0.068	0.323	1.84	1.59	1.03	2.55	8.05	2.41	0.478	0.545	0.207	0.279
In.	0.08	0.36	2.12	1.83	1.07	2.94	9.00	2.78	0.53	0.63	0.24	0.31

Calendar year 1957: Max 15.8 Min 0.04 Mean 1.30 Cfsm 0.793 In. 10.77
Water year 1957-58: Max 31 Min 0.06 Mean 2.65 Cfsm 1.62 In. 21.89

Peak discharge (base, 35 cfs).--Apr. 6 (7 p.m.) 74 cfs (2.515 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 2-4, 22-25, Feb. 1, 3-5, 8, 12-28, Mar. 9, 14.

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 1958.

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.--48 years, 105 cfs.

Extremes.--Maximum discharge during year, 2,320 cfs Dec. 21 (gage height, 4.45 ft); minimum, 2.0 cfs Oct. 19.
1910-58: 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 or backwater from leaves, which are fair. Some diurnal fluctuation at low flow prior to 1952 caused by mill above station.

Revisions (water years).--WSP 415: 1910-12 (calendar years). WSP 781: 1933(M), drainage area.

Rating table, water year 1957-58, except periods of ice effect of backwater from leaves (gage height, in feet, and discharge, in cubic feet per second)

0.1	4.4	1.5	185
.2	7.4	2.0	357
.4	17	2.5	575
.7	39	3.0	860
1.0	77	3.5	1,260

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	6.1	141	155	105	130	226	284	35	7.7	20	6.7
2	3.0	10	64	130	95	90	*235	210	39	7.4	16	5.8
3	2.8	39	41	85	78	85	235	247	56	7.0	13	5.2
4	2.6	30	34	50	82	120	333	317	38	7.0	10	4.9
5	2.2	21	24	54	80	100	419	219	33	14	8.9	4.9
6	2.2	14	25	62	68	92	871	178	34	15	7.7	4.6
7	4.2	11	32	60	60	90	992	245	32	12	7.4	4.9
8	7.3	10	33	58	55	76	542	270	31	81	10	5.5
9	8.9	37	41	56	55	74	398	207	33	80	20	5.2
10	7.0	31	113	50	57	79	398	160	40	27	14	*7.5
11	5.5	20	258	46	53	103	444	137	*47	31	9.7	10
12	4.4	16	110	42	52	113	353	137	70	85	7.7	7.4
13	3.4	*12	66	41	50	105	393	115	38	38	9.2	6.1
14	3.2	10	62	41	49	117	606	*99	31	24	30	5.2
15	*2.6	62	50	42	48	117	797	90	26	21	46	4.6
16	2.4	53	45	*42	45	95	828	105	20	42	25	4.6
17	2.2	34	42	41	45	84	819	107	19	101	18	27
18	2.2	27	*37	40	45	77	779	86	18	38	14	135
19	10	88	37	39	45	77	702	77	17	32	10	82
20	14	98	329	38	43	77	605	70	16	38	8.5	44
21	10	52	1,060	39	42	77	552	74	17	25	8.1	33
22	7.3	36	317	75	41	77	483	64	23	20	24	115
23	5.5	29	168	150	40	74	588	59	18	45	18	60
24	5.0	25	126	100	40	74	353	49	15	50	12	35
25	12	22	97	85	45	97	242	71	13	30	20	26
26	16	18	423	220	43	119	185	86	12	24	33	21
27	10	12	514	300	45	146	151	59	12	27	24	43
28	7.9	17	213	220	150	151	518	49	9.3	30	16	148
29	6.4	25	165	160	-	172	472	49	9.3	*27	12	65
30	6.1	54	128	130	-------	202	564	45	8.5	25	9.7	39
31	5.5	-------	105	110	-------	235	-------	39	-------	20	8.1	-------
Total	184.4	919.1	4,900	2,761	1,656	3,325	15,083	4,004	810.1	1,031.1	450.0	966.1
Mean	5.95	30.6	158	89.1	59.1	107	503	129	27.0	33.3	15.8	32.2
Cfsm	0.113	0.582	3.00	1.69	1.12	2.03	9.56	2.45	0.513	0.633	0.300	0.612
In.	0.13	0.65	3.46	1.95	1.17	2.35	10.66	2.83	0.57	0.73	0.35	0.68

Calendar year 1957: Max 1,100 Min 1.8 Mean 63.4 Cfsm 1.21 In. 16.35
Water year 1957-58: Max 1,060 Min 2.2 Mean 99.0 Cfsm 1.88 In. 25.53

Peak discharge (base, 1,650 cfs).--Dec. 21 (4:30 a.m.) 2,320 cfs (4.45 ft); Apr. 6 (9 p.m.) 2,300 cfs (4.44 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27, Dec. 3, 5, 6, 13-16, 18, Jan. 2 to Mar. 9. Backwater from leaves Oct. 1 to Nov. 15. Discharge for periods Oct. 1 to Nov. 2, Nov. 5-8, 11-14, 24-29, June 11-16, computed from once-daily chain-gage readings.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 388.60 ft above mean sea level, datum of 1929.

Average discharge.--23 years, 190 cfs.

Extremes.--Maximum discharge during year, 3,770 cfs Apr. 6 (gage height, 5.76 ft); minimum, 3.3 cfs Nov. 27, result of freezeup.
1935-58: 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. Some diurnal fluctuation at low flow caused by mill above station.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 21				Dec. 22 to Sept. 30			
0.4	4.9	2.0	270	0.6	11	2.0	245
.6	12	2.5	560	.8	21	2.5	550
.8	22	3.0	950	1.1	44	3.0	950
1.1	47	4.0	1,780	1.4	78	4.0	1,780
1.4	85	4.5	2,280	1.7	140	4.5	2,280
1.7	155						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.7	13	217	275	188	217	380	508	71	18	39	18
2	7.0	21	100	245	170	143	*374	386	72	16	31	16
3	6.7	54	70	155	140	140	386	456	95	15	24	14
4	6.4	*47	58	105	145	191	538	598	71	15	20	13
5	6.4	30	35	100	145	164	691	404	60	26	18	13
6	6.4	24	32	115	120	152	1,430	334	63	35	15	13
7	7.3	20	48	111	105	149	1,860	445	58	30	15	13
8	15	21	53	109	100	132	982	487	48	145	19	14
9	21	68	75	101	100	120	710	386	52	188	25	14
10	15	56	196	92	105	138	694	300	65	67	20	*18
11	11	35	390	90	95	167	774	255	*83	81	16	26
12	9.4	27	194	80	92	184	574	260	175	203	14	19
13	9.0	25	120	79	89	170	654	221	86	83	18	16
14	8.4	22	111	78	87	175	1,050	*194	67	54	109	14
15	7.6	85	98	81	86	188	1,430	170	54	45	122	13
16	7.6	79	84	*86	79	155	1,450	198	44	43	64	14
17	7.6	50	80	83	80	138	1,410	194	39	76	45	68
18	8.0	39	*69	77	81	128	1,310	158	37	49	34	289
19	22	116	70	73	80	125	1,170	143	35	40	26	187
20	30	141	522	70	76	125	974	128	34	55	21	97
21	19	80	1,800	72	74	125	822	132	34	39	20	83
22	14	58	572	130	74	122	686	118	45	30	64	208
23	12	46	322	250	71	118	894	120	39	70	49	120
24	12	40	241	185	72	120	598	105	32	82	30	77
25	33	36	188	152	80	155	424	148	29	50	53	62
26	30	32	679	357	78	188	328	198	26	44	85	45
27	20	22	894	522	*80	233	280	125	26	45	53	78
28	16	29	398	424	246	245	798	103	23	53	38	263
29	14	39	322	295	-	300	737	105	20	*54	31	118
30	13	76	255	237	-------	339	974	95	19	39	26	78
31	13	-------	209	205	-------	398	-------	81	-------	33	22	-------
Total	414.5	1,431	8,502	5,034	2,938	5,444	25,382	7,555	1,602	1,821	1,166	2,021
Mean	13.4	47.7	274	162	105	176	846	244	53.4	58.7	37.6	67.4
Cfsm	0.143	0.509	2.92	1.73	1.12	1.88	9.03	2.60	0.570	0.626	0.401	0.719
In.	0.16	0.57	3.37	2.00	1.17	2.16	10.07	3.00	0.64	0.72	0.46	0.80

Calendar year 1957: Max 1,900 Min 4.6 Mean 113 Cfsm 1.21 In. 16.37
Water year 1957-58: Max 1,860 Min 6.4 Mean 173 Cfsm 1.85 In. 25.12

Peak discharge (base, 2,700 cfs).--Dec. 21 (6 to 7 a.m.) 3,360 cfs (5.44 ft); Apr. 6 (9 p.m.) 3,770 cfs (5.76 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27, Dec. 5, 6, Jan. 3-6, 10-13, 19-24, Feb. 3-20, Mar. 9, 14.

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 1958. 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 2¾ miles downstream.

Average discharge.--48 years (1910-58), 91.2 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 238); 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 1957 to September 1958

Month	Mean	Per square mile	Runoff in inches
October	2.37	0.052	0.06
November	31.9	.697	.78
December	174	3.80	4.37
Calendar year 1957	52.0	1.14	15.42
January	110	2.40	2.76
February	57.2	1.25	1.30
March	119	2.60	2.99
April	520	11.4	12.68
May	106	2.31	2.66
June	18.2	.397	.44
July	4.88	.107	.12
August	5.84	.128	.15
September	32.5	.710	.79
Water year 1957-58	98.2	2.14	29.10

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 1958.

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.--44 years, 954 cfs (adjusted for diversion and, since October 1931, for storage).

Extremes.--Maximum discharge during year, 8,740 cfs Apr. 7 (gage height, 11.48 ft); minimum, 72 cfs Oct. 14; minimum daily, 77 cfs Oct. 6, 14.
1914-58: 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. 238).

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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.7	73	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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	115	672	1,150	990	1,420	1,990	3,900	458	155	215	151
2	95	143	624	1,360	919	1,120	1,910	3,250	505	*139	218	131
3	*88	242	360	952	814	945	*1,820	2,340	582	182	169	109
4	81	416	348	630	694	1,270	2,170	2,740	572	151	155	107
5	79	246	282	492	678	1,230	2,830	2,710	449	151	151	107
6	77	169	160	518	689	1,140	3,330	2,380	408	190	139	133
7	81	158	176	528	605	1,090	6,350	2,620	387	190	135	109
8	106	147	206	b520	b560	971	5,330	*2,910	340	240	137	105
9	124	206	436	501	b520	862	4,510	2,310	371	650	141	133
10	113	306	566	479	b560	900	4,080	1,740	420	383	158	131
11	110	256	1,440	488	b520	1,040	3,710	1,410	484	327	151	132
12	93	192	1,110	b430	b500	1,210	3,150	1,360	832	572	135	140
13	91	*139	577	471	b480	1,130	2,920	1,250	582	449	201	129
14	77	149	488	449	b470	1,220	4,050	1,080	437	321	285	122
15	102	255	408	484	b470	1,190	5,050	978	352	415	469	*120
16	92	505	462	492	b400	1,130	4,720	1,020	381	341	345	114
17	93	281	395	*471	b480	1,040	4,640	1,070	246	497	226	271
18	101	206	*360	458	b460	906	5,590	984	263	376	195	816
19	152	319	313	404	b450	862	5,740	919	*266	263	167	874
20	169	684	1,090	b440	b440	945	5,410	844	250	272	143	505
21	160	532	4,990	420	*b440	856	5,960	760	233	302	137	340
22	149	313	1,910	626	b430	850	5,580	790	246	184	209	622
23	117	317	1,310	1,070	b400	826	5,660	662	298	259	250	633
24	96	244	1,510	1,190	479	912	4,660	610	233	444	179	400
25	133	222	1,500	1,020	475	964	2,980	679	206	367	246	284
26	160	203	2,280	1,360	496	1,140	2,110	1,020	350	257	329	236
27	148	179	3,690	2,210	484	1,350	1,630	808	308	222	317	295
28	126	141	2,260	2,230	1,180	1,430	3,010	635	206	367	246	855
29	109	198	2,230	1,910	-	1,510	4,160	610	179	313	192	668
30	119	298	1,920	1,410	---------	1,600	5,210	522	162	350	158	404
31	112	--------	1,230	1,120	--------	1,920	--------	501	--------	246	141	--------
Total	3,446	7,781	35,303	26,283	16,083	34,979	120,260	45,412	11,006	9,575	6,339	9,176
Mean	111	259	1,139	848	574	1,128	4,009	1,465	367	309	204	306
(†)	+1.64	+37.3	+185	+116	+61.7	+124	+444	-43.4	+8.53	-18.4	-1.90	+33.0
Adjusted for diversion and change in reservoir contents												
Mean	113	297	1,324	963	636	1,253	4,453	1,422	375	290	203	339
Cfsm	0.227	0.598	2.66	1.94	1.28	2.52	8.96	2.86	0.755	0.584	0.408	0.682
In.	0.26	0.67	3.07	2.23	1.33	2.91	10.00	3.30	0.84	0.67	0.47	0.76

	Observed			Adjusted			
Calendar year 1957:	Max 4,990	Min 70	Mean 549	Mean 584	Cfsm 1.18	In. 15.95	
Water year 1957-58:	Max 6,350	Min 77	Mean 892	Mean 971	Cfsm 1.95	In. 26.51	

* 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.
b Stage-discharge relation affected by ice.

1840. Connecticut River at Thompsonville, Conn.

Location.--Lat 41°59'14", long 72°36'21", on right bank just upstream from Enfield Dam, 1 mile downstream from Thompsonville, Hartford County.

Drainage area.--9,661 sq mi.

Records available.--July 1928 to September 1958.

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.--30 years, 16,530 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 109,000 cfs Apr. 24 (gage height, 7.36 ft); minimum daily, 1,300 cfs Sept. 14.
1928-58: 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. 238), and other reservoirs (combined usable capacity, about 96 billion cubic feet).

Revisions (water years).--WSP 741: 1932. WSP 891: Drainage area.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,650	7,550	12,900	27,200	22,700	16,200	29,000	68,300	10,900	*5,350	13,400	1,590
2	3,710	7,250	14,300	28,000	20,900	14,900	31,900	60,300	11,900	4,840	13,200	2,970
3	4,340	6,230	11,000	27,100	14,900	11,600	32,100	53,000	17,300	4,440	8,920	3,700
4	3,510	8,160	12,200	24,300	14,300	14,500	33,400	49,100	32,400	3,340	4,770	3,400
5	2,700	13,000	11,000	16,100	17,000	15,800	37,600	46,800	25,500	1,680	7,320	3,440
6	1,860	11,400	9,770	b9,730	17,100	16,400	44,700	40,400	19,900	1,860	*7,080	4,000
7	3,810	10,100	7,580	b11,100	15,900	18,300	57,100	33,900	18,200	3,120	7,160	1,910
8	4,930	8,970	5,730	b12,700	b13,900	19,200	59,300	38,900	15,200	5,010	7,500	2,500
9	5,190	11,100	7,680	b13,100	b12,600	17,600	55,300	43,300	8,590	6,540	7,590	3,620
10	4,530	11,000	15,000	13,400	b12,900	14,900	49,600	47,400	10,500	7,900	6,200	4,330
11	4,230	5,450	24,500	13,500	11,900	15,900	44,700	44,400	11,700	6,800	5,600	4,310
12	2,700	7,470	35,400	b12,600	12,100	16,400	44,200	38,800	11,600	9,390	7,080	4,320
13	a1,340	9,060	31,300	11,500	11,100	16,800	42,100	36,700	10,000	9,290	7,330	3,040
14	2,640	10,100	23,800	12,100	b12,800	18,400	40,700	40,500	9,770	9,410	6,850	*1,300
15	4,350	9,370	20,900	12,100	b11,800	19,000	45,900	38,600	7,370	10,800	7,570	2,330
16	*4,340	13,700	18,300	11,500	b8,800	19,900	52,000	32,400	4,770	10,900	7,240	4,360
17	4,370	14,600	16,400	12,300	b8,900	16,400	63,000	28,400	6,900	8,790	3,720	5,440
18	3,720	11,600	15,600	12,600	9,600	16,300	79,900	27,300	7,720	9,770	4,130	7,070
19	3,910	12,100	*16,800	b12,200	a10,900	15,800	92,900	26,200	8,360	8,470	5,930	9,940
20	3,840	16,500	18,000	b12,900	11,000	15,300	99,700	22,300	8,710	5,280	6,560	10,100
21	4,400	16,100	35,800	11,300	10,600	15,200	97,300	20,900	7,340	4,530	6,760	7,430
22	6,180	16,400	68,200	13,300	11,000	15,100	94,600	22,500	3,900	8,780	7,160	6,500
23	6,420	16,200	68,700	17,400	10,700	14,300	101,000	21,100	3,840	9,870	6,540	9,080
24	6,420	14,900	55,000	19,900	9,480	11,200	108,000	19,700	5,480	11,400	2,250	8,830
25	8,500	8,810	47,700	20,100	11,200	13,900	101,000	19,300	5,810	9,370	4,430	8,340
26	6,230	12,100	41,600	22,000	11,400	15,700	93,000	15,800	6,530	7,370	7,640	8,610
27	4,040	12,500	44,000	26,800	11,700	17,700	80,900	15,100	6,780	6,450	7,560	8,340
28	3,940	9,490	50,900	28,800	13,700	18,900	64,800	17,100	5,870	7,530	5,520	8,750
29	7,710	7,670	46,700	27,400	-	22,700	62,400	16,100	4,010	10,900	3,720	6,380
30	7,230	11,300	37,900	25,200	-------	24,200	64,100	13,200	3,870	12,100	3,370	8,250
31	7,970	-------	29,600	22,900	-------	26,000	-------	12,600	-------	11,800	1,760	-------
Total	142,710	330,180	855,260	541,130	360,880	524,500	1,902,200	1,010,400	310,720	233,080	201,860	164,380
Mean	4,604	11,010	27,590	17,460	12,890	16,920	63,410	32,590	10,360	7,519	6,512	5,479
(†)	-1,130	+218	+2,213	-1,529	-2,249	-557	+7,528	+1,031	-4.01	+504	-868	-548

Adjusted for change in reservoir contents and diversion

Mean	3,473	11,220	29,800	15,930	10,640	16,360	70,930	33,620	10,350	8,022	5,644	4,931
Cfsm	0.359	1.16	3.08	1.65	1.10	1.69	7.34	3.48	1.07	0.830	0.584	0.510
In.	0.41	1.30	3.56	1.90	1.15	1.95	8.19	4.01	1.20	0.96	0.67	0.57

	Observed						Adjusted					
Calendar year 1957:	Max	68,700	Min	1,220	Mean	12,590	Mean	12,750	Cfsm	1.32	In.	17.92
Water year 1957-58:	Max	108,000	Min	1,300	Mean	18,020	Mean	18,410	Cfsm	1.91	In.	25.87

* 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 p. , and diversion from Chicopee River basin, equivalent in cubic feet per second.
a No gage-height record: discharge estimated on basis of weather records and weekly regulation pattern.
b Stage-discharge relation affected by ice.

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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 1958.

Gage.--Water-stage recorder. Datum of gage is 26.23 ft above mean sea level, datum of 1929.

Average discharge.--30 years, 142 cfs.

Extremes.--Maximum discharge during year, 613 cfs Jan. 28 (gage height, 5.39 ft): minimum, 18 cfs Oct. 6 (gage height, 0.48 ft); minimum daily, 18 cfs Oct. 6.
1928-58: 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 at gage height 19.9 ft; minimum, 10 cfs Aug. 13, 14, 1944; minimum daily, 16 cfs Aug. 13, 1944.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are good. Flow regulated by mills and small reservoirs upstream. Records of chemical analyses, water temperatures, and suspended sediment loads for the water year 1958 are given in WSP 1571.

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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 2		Nov. 3 to Sept. 30			
0.4	12	0.5	24	2.0	181
.6	28	.9	62	4.0	440
.8	47	1.5	127	5.2	586

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	27	73	129	258	476	264	440	117	*89	82	44
2	21	35	69	*150	219	388	278	349	114	79	79	41
3	20	55	51	132	187	316	258	264	122	72	70	40
4	20	59	44	90	146	342	226	284	119	65	*62	39
5	19	47	39	74	131	362	200	297	105	67	54	68
6	18	39	36	73	129	330	235	278	95	84	55	40
7	22	35	36	73	124	310	440	401	94	92	51	40
8	26	35	38	81	125	297	*524	476	88	87	47	32
9	23	51	53	78	108	258	476	476	*89	70	44	30
10	21	52	109	80	97	233	336	401	94	102	43	30
11	19	45	220	76	87	226	349	304	95	88	44	36
12	20	37	189	72	82	235	440	264	115	84	42	45
13	20	35	136	70	78	238	440	226	132	98	46	39
14	19	34	84	72	76	271	375	206	120	97	53	36
15	19	51	72	100	76	414	316	187	97	84	76	36
16	19	54	68	132	70	427	271	*181	87	76	80	36
17	19	50	64	129	67	356	238	187	78	70	69	132
18	20	43	*60	117	66	284	219	175	74	66	60	232
19	40	49	60	98	67	245	200	167	80	62	51	212
20	28	62	79	89	70	238	181	164	85	59	*46	162
21	23	60	236	89	75	258	171	157	85	56	43	111
22	28	48	233	204	80	284	164	142	95	53	46	96
23	27	41	206	316	85	297	187	136	109	70	49	87
24	30	38	134	290	*92	271	206	133	92	85	46	74
25	33	37	97	264	105	258	200	158	78	75	59	66
26	26	36	108	500	136	264	169	278	80	70	81	60
27	30	35	215	573	146	271	149	278	206	100	86	99
28	29	32	226	586	382	264	236	219	252	130	*68	177
29	29	36	193	476	-	241	330	164	193	100	56	163
30	26	48	146	*362	-------	223	452	139	122	85	50	132
31	26	-------	122	304	-------	223	-------	128	-------	75	46	-------
Total	741	1,306	3,496	5,879	3,364	9,100	8,530	7,659	3,312	2,491	1,784	2,435
Mean	23.9	43.5	113	190	120	294	284	247	110	80.4	57.5	81.2
Cfsm	0.243	0.442	1.15	1.93	1.22	2.99	2.89	2.51	1.12	0.817	0.584	0.825
In.	0.28	0.49	1.33	2.22	1.27	3.45	3.22	2.89	1.25	0.94	0.67	0.92

Calendar year 1957: Max 613 Min 18 Mean 86.2 Cfsm 0.876 In. 11.91
Water year 1957-58: Max 586 Min 18 Mean 137 Cfsm 1.39 In. 18.93

Peak discharge (base, 550 cfs).--Jan. 28 (2 to 5 a.m.) 613 cfs (5.39 ft); Feb. 28 (6 p.m.) 573 cfs (5.06 ft); Apr. 8 (10 a.m.) 573 cfs (5.06 ft).

* Discharge measurement made on this day.
Note.--No gage-height record July 17-31; discharge estimated on basis of recorded range in stage, weather records, and records for nearby streams. Stage-discharge relation affected by ice Jan. 8, 19, 20, Feb. 10-23.

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 1958. Prior to October 1948, published as Farmington River near New Boston.

Gage.--Water-stage recorder. Datum of gage is 758.21 ft above mean sea level, datum of 1929.

Average discharge.--45 years, 184 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 2,360 cfs Dec. 21 (gage height, 6.76 ft); minimum daily, 5.4 cfs Oct. 5.
1913-58: 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, which are fair. Flow regulated by Otis Reservoir (see p. 238).

Revisions (water years).--WSP 641: 1924(M). WSP 756: Drainage area. WSP 781: 1928(M). WSP 1231: 1914.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.0	4.5	3.5	203
2.1	8.3	4.0	360
2.3	19	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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	19	236	259	165	200	278	665	101	17	46	16
2	86	29	171	222	150	140	278	520	101	14	35	16
3	*78	118	142	140	120	130	278	511	110	14	30	13
4	9.3	107	127	100	125	142	353	555	107	13	25	12
5	5.4	101	98	85	115	125	459	423	96	14	21	*11
6	94	96	48	97	100	116	832	364	122	18	18	10
7	98	*86	55	95	90	116	1,400	447	105	20	16	11
8	103	24	118	90	85	107	1,010	*443	89	49	15	16
9	101	80	148	85	85	105	798	381	83	96	16	14
10	90	118	235	80	90	107	744	318	86	84	15	21
11	11	105	353	75	82	125	768	281	89	64	16	24
12	21	98	*239	70	78	135	635	284	196	89	13	17
13	96	94	155	66	75	131	675	256	125	67	12	14
14	96	85	105	64	74	148	906	230	96	44	27	12
15	94	78	89	*66	71	164	1,200	214	80	38	93	11
16	94	72	78	72	67	133	1,320	214	65	35	101	10
17	86	122	71	68	67	116	1,350	178	54	43	81	166
18	11	118	64	64	68	108	1,350	153	*41	30	60	436
19	73	173	69	62	67	107	1,280	135	39	28	26	362
20	116	200	402	58	63	107	1,090	131	38	28	19	171
21	94	146	1,480	60	62	107	967	144	38	28	16	107
22	94	65	694	130	62	108	906	127	55	24	79	232
23	92	52	395	230	60	103	1,110	137	43	43	41	110
24	74	110	278	175	60	132	846	120	32	53	27	75
25	39	105	211	140	64	196	630	207	30	*41	85	63
26	31	101	632	330	62	208	459	253	28	52	118	50
27	99	94	862	500	*62	*230	360	180	29	67	72	123
28	96	80	475	400	230	242	678	148	26	53	38	271
29	94	53	356	280		242	842	144	23	45	28	180
30	94	119	274	220	-------	227	1,040	131	18	35	23	146
31	79	-------	219	180	-------	268	-------	110	-------	32	19	-------
Total	2,334.7	2,848	8,879	4,563	2,499	4,625	24,842	8,404	2,145	1,278	1,231	2,720
Mean	75.3	94.9	286	147	89.2	149	828	271	71.5	41.2	39.7	90.7
(†)	-62.2	-37.8	+42.7	-37.8	+25.8	+29.6	+57.3	+8.6	+1.5	0	0	-5.9

Adjusted for change in contents in Otis Reservoir

Mean	13.1	57.1	329	185	115	178	885	280	73.0	41.2	39.7	84.8
Cfsm	0.142	0.621	3.58	2.01	1.25	1.93	9.62	3.04	0.793	0.448	0.432	0.922
In.	0.16	0.69	4.12	2.32	1.30	2.23	10.74	3.51	0.89	0.52	0.50	1.03

	Observed			Adjusted		
Calendar year 1957:	Max 1,480	Min 2.4	Mean 105	Mean 110	Cfsm 1.20	In. 16.28
Water year 1957-58:	Max 1,480	Min 5.4	Mean 182	Mean 190	Cfsm 2.07	In. 28.01

Peak discharge (base, 1,400 cfs).--Dec. 21 (5 a.m.) 2,360 cfs (6.76 ft); Dec. 26 (7 to 8 p.m.) 1,630 cfs (6.03 ft); Apr. 6 (10 p.m.) 1,890 cfs (6.32 ft); Apr. 17 (8 to 9 p.m.) 1,570 cfs (5.97 ft); Apr. 23 (8:30 to 9 a.m.) 1,400 cfs (5.78 ft); Apr. 29 (10:30 to 11:30 p.m.) 1,570 cfs (5.97 ft).

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Otis Reservoir.
Note.--Stage-discharge relation affected by ice Nov. 27, Dec. 5, 6, 13, 14, 18, Jan. 3 to Mar. 3, Mar. 9.

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, 0.7 mile upstream from former gage site, and at mile 52.0.
Drainage area.--130 sq mi.
Records available.--August 1955 to September 1958.
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, 3,570 cfs Dec. 21 (gage height, 8.55 ft); minimum, 12 cfs Oct. 5, 6 (gage height, 2.66 ft).
1955-58: Maximum discharge observed, 10,600 cfs Oct. 16, 1955 (gage height, 12.47 ft); minimum, 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, from computation of peak flow at slope-area reach 1.5 mile upstream).
Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by Otis Reservoir (see p. 238).
Revisions (water years).--WSP 1501: 1956. Revised figures of discharge, in cubic feet per second, for the water year 1957, superseding those published in WSP 1501, are given herewith:

1957		1957	
Sept.22	48	Sept.26	94
23	96	27	42
24	45	29	56
25	70	30	88

Month	Observed			Adjusted		
	Maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches
September 1957	96	6.5	26.0	2.30	0.018	0.02
Water year 1956-57	1,400	6.5	122	135	1.04	14.20

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	50	282	358	270	360	478	880	120	32	*54	21
2	82	31	196	324	250	265	466	670	116	29	48	18
3	81	101	159	227	180	230	442	670	126	28	40	21
4	43	124	140	155	170	*280	566	770	120	28	37	18
5	13	109	120	143	180	230	745	566	105	28	32	16
6	55	105	60	161	160	210	1,380	478	126	31	26	16
7	96	101	66	155	140	190	2,160	645	118	34	25	16
8	113	*50	118	150	150	180	1,460	620	100	52	25	17
9	105	74	165	140	130	177	1,090	522	91	101	24	*20
10	105	126	279	130	140	*179	1,000	422	91	98	24	20
11	48	114	*482	120	130	204	1,090	368	96	73	25	29
12	17	105	294	110	120	227	880	358	218	109	25	25
13	70	101	211	100	130	218	940	321	139	87	23	20
14	94	97	149	100	120	242	1,250	288	105	65	24	17
15	94	120	143	110	120	242	1,570	266	84	*54	86	16
16	96	96	114	130	120	211	1,730	276	67	46	124	15
17	97	128	97	110	120	187	1,730	237	56	48	92	117
18	50	126	84	100	130	173	1,690	202	54	45	67	502
19	49	171	90	90	125	167	1,610	179	60	37	48	436
20	128	227	611	95	120	169	1,390	179	59	39	*29	214
21	105	175	*2,120	92	110	167	1,220	179	57	37	25	124
22	103	85	910	200	105	171	1,120	163	72	34	73	272
23	92	65	530	320	95	167	1,460	167	68	39	62	151
24	96	99	375	260	95	183	1,120	153	54	50	38	101
25	57	114	285	240	110	263	798	245	48	50	64	80
26	42	107	902	450	105	302	588	350	51	60	141	68
27	80	99	1,290	600	100	337	454	227	54	82	85	121
28	97	103	670	760	310	350	992	183	45	70	50	361
29	96	61	490	550	-	378	1,090	173	42	62	37	211
30	94	98	378	400	--------	372	1,510	159	35	50	31	169
31	94	--------	299	350	--------	*442	--------	134	--------	42	25	--------
Total	2,478	3,162	12,109	7,230	4,035	7,473	34,019	11,050	2,577	1,640	1,509	3,232
Mean	79.9	105	391	233	144	241	1,134	356	85.9	52.9	48.7	108
(†)	-62.2	-37.8	+42.7	+37.8	+25.8	+28.6	+57.3	+8.6	+1.5	0	0	-5.9

Adjusted for change in contents in Otis Reservoir

Mean	17.7	67.2	434	271	170	270	1,191	365	87.4	52.9	48.7	102
Cfsm	0.136	0.517	3.34	2.08	1.31	2.08	9.16	2.81	0.672	0.407	0.375	0.785
In.	0.16	0.58	3.85	2.40	1.36	2.40	10.22	3.24	0.75	0.47	0.43	0.88

	Observed			Adjusted		
Calendar year 1957:	Max 2,120	Min 6.5	Mean 138	Mean 144	Cfsm 1.11	In. 15.01
Water year 1957-58:	Max 2,160	Min 13	Mean 248	Mean 256	Cfsm 1.97	In. 26.74

Peak discharge (base, 1,800 cfs).--Dec. 21 (6 a.m.) 3,570 cfs (8.55 ft); Dec. 26 (8 p.m.) 2,780 cfs (7.90 ft); Apr. 6 (10 p.m.) 3,330 cfs (8.40 ft); Apr. 15 (8:30 p.m.) 2,110 cfs (7.22 ft); Apr. 23 (10:30 a.m.) 1,850 cfs (6.92 ft); Apr. 30 (1 a.m.) 2,200 cfs (7.31 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. 4-6, Jan. 7 to Mar. 8.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 764.18 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during year, 680 cfs Dec. 21 (gage height, 4.67 ft); minimum, 0.3 cfs Oct. 6 (gage height, 0.46 ft).
1956-58: Maximum discharge, that of Dec. 21, 1957; 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 21

0.46	0.3	1.5	23
.5	.5	1.9	49
.6	1.35	2.5	115
.8	4.1	3.0	200
1.0	7.8	3.5	310
1.2	13	4.2	515

Dec. 22 to Sept. 30

0.69	1.5
.8	2.9
1.0	6.7
1.2	12
1.4	19

Note.--Same as preceding table above 1.4 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	1.15	16	55	b42	b112	96	112	17	2.5	6.5	2.0
2	.5	2.2	6.2	49	b38	97	94	81	17	2.4	4.4	1.7
3	.5	3.2	b4.4	b22	b34	91	88	79	16	2.2	3.6	1.6
4	.45	2.5	3.8	b13	b36	94	116	101	14	2.1	3.1	1.5
5	.4	1.8	b2.9	b9	b31	80	149	78	13	2.5	2.6	1.5
6	.35	1.7	b3.0	b9.5	b26	71	251	68	14	3.6	2.4	1.5
7	.5	1.5	3.5	b10	b25	63	360	118	15	3.6	3.1	1.9
8	1.35	*1.8	5.3	b15	26	52	224	115	14	8.1	7.4	2.8
9	1.6	6.6	18	b19	b22	35	148	87	14	10	6.9	2.8
10	1.05	4.0	*35	b18	b19	35	*141	64	14	4.4	6.5	3.9
11	.7	2.5	57	b17	b18	43	148	54	16	3.9	6.1	4.6
12	.5	2.0	33	b16	b16	49	109	53	26	10	5.4	3.6
13	.4	1.8	b22	b15	b18	47	128	44	20	6.1	5.6	2.9
14	.4	1.8	b17	b15	b17	47	176	40	17	5.2	5.0	2.5
15	.4	12	b15	a25	b17	47	200	38	15	*5.2	16	2.4
16	.4	6.8	14	a22	b17	40	222	44	30	3.9	12	2.5
17	.4	4.0	13	a20	b20	35	200	42	38	2.5	6.3	38
18	.6	3.2	b11	a18	b18	33	177	35	34	2.1	4.3	89
19	5.5	7.3	14	a15	b18	32	151	33	38	2.1	3.8	49
20	3.2	9.8	143	a14	b17	32	120	33	12	2.1	*3.4	26
21	1.7	5.1	**497	a14	16	32	99	31	4.1	2.1	3.6	21
22	1.25	3.8	270	70	15	33	85	28	4.4	2.0	9.7	41
23	.95	3.2	187	115	15	32	138	28	3.8	3.8	5.6	25
24	1.35	2.8	66	79	16	33	112	24	3.1	3.8	3.9	15
25	3.6	2.5	52	62	b20	43	77	43	2.8	2.8	12	11
26	2.4	2.4	161	72	*19	53	60	59	5.4	50	11	9.4
27	1.5	b1.7	231	86	b19	56	52	36	7.8	58	6.1	33
28	1.25	2.1	102	84	b43	59	115	28	3.9	22	4.1	55
29	1.05	3.0	81	63	-	71	156	25	3.1	11	2.9	30
30	.95	8.0	49	54	--------	78	216	22	2.6	6.7	2.5	20
31	.95	--------	24	47	--------	90	--------	19	--------	*5.2	2.1	--------
Total	36.65	112.25	2,157.1	1,142.5	638	1,715	4,448	1,662	435.0	251.9	177.9	502.1
Mean	1.18	3.74	69.6	36.9	22.8	55.3	148	53.6	14.5	8.13	5.74	16.7
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 497 Min 0.3 Mean 18.1 Cfsm - In. -
Water year 1957-58: Max 497 Min 0.35 Mean 36.4 Cfsm - In. -

Peak discharge (base, 300 cfs).--Dec. 21 (7 a.m.) 680 cfs (4.67 ft); Dec. 26 (8 p.m.) 375 cfs (3.75 ft); Apr. 6 (10 p.m.) 532 cfs (4.25 ft).

* Discharge measurement made on this day.
** Field estimate 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 1958.

Gage.--Water-stage recorder. Datum of gage is 510.24 ft above mean sea level, datum of 1929.

Average discharge.--10 years, 189 cfs.

Extremes.--Maximum discharge during year, 2,640 cfs Apr. 7 (gage height, 6.50 ft); minimum, 9.0 cfs Oct. 14, 15, 17, 18 (gage height, 1.43 ft); minimum daily, 9.0 cfs Oct. 14, 15.
1948-58: 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 tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 6

1.4	7.7	3.0	252
1.6	17	4.0	620
1.8	31	5.0	1,200
2.1	64	5.7	1,780
2.5	132		

Apr. 7 to Sept. 30

1.4	11	2.1	66
1.6	22	2.5	132
1.8	36		

Note.--Same as preceding table above 2.5 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	13	126	312	198	400	464	568	74	22	78	21
2	22	17	79	268	208	282	448	420	86	20	80	35
3	16	30	55	185	179	279	416	399	85	18	73	33
4	16	37	46	148	138	*322	492	452	76	17	66	32
5	16	23	33	110	148	282	608	374	72	18	64	31
6	17	16	32	115	138	270	1,120	326	74	28	60	23
7	17	26	35	115	119	246	1,780	504	55	28	37	14
8	20	24	43	120	119	198	1,060	528	51	53	21	34
9	11	43	91	110	111	170	720	452	68	55	21	33
10	11	38	172	100	100	196	645	308	71	40	19	35
11	10	41	267	90	90	230	670	232	79	36	25	39
12	9.8	*29	167	80	85	249	588	241	125	47	22	36
13	9.4	19	131	110	95	249	620	211	100	44	20	24
14	9.0	22	106	100	90	249	745	181	66	38	18	17
15	9.0	90	84	140	85	241	*850	172	55	*38	54	31
16	9.8	68	67	120	80	230	880	191	73	32	58	36
17	11	49	68	105	100	208	795	186	83	26	40	173
18	9.4	45	51	90	110	175	720	146	61	21	31	364
19	28	60	77	75	95	165	612	156	71	21	24	246
20	29	94	498	85	a90	165	496	156	61	17	*20	136
21	26	73	1,700	80	a85	166	432	145	38	16	18	103
22	14	38	778	350	a80	170	371	132	54	16	47	190
23	23	31	480	500	a80	179	579	125	46	34	35	130
24	13	33	330	350	a80	194	492	96	41	29	26	94
25	26	56	214	300	90	216	371	163	30	34	54	77
26	36	23	657	350	100	257	308	269	42	112	62	62
27	15	16	978	450	100	295	261	182	49	291	44	145
28	16	17	528	402	400	305	624	145	34	152	34	216
29	27	43	406	324	-	332	670	130	28	107	41	149
30	13	57	315	268	--------	350	970	99	24	91	35	120
31	11	--------	232	234	--------	424	--------	85	--------	*81	23	--------
Total	519.4	1,171	8,846	6,186	3,393	7,694	19,807	7,774	1,872	1,582	1,250	2,679
Mean	16.8	39.0	285	200	121	248	660	251	62.4	51.0	40.3	89.3
Cfsm	0.199	0.462	3.38	2.37	1.43	2.94	7.82	2.97	0.739	0.604	0.477	1.06
In.	0.23	0.52	3.90	2.73	1.49	3.39	8.72	3.42	0.82	0.70	0.55	1.18

Calendar year 1957: Max 1,700 Min 0.3 Mean 97.6 Cfsm 1.16 In. 15.69
Water year 1957-58: Max 1,780 Min 9.0 Mean 172 Cfsm 2.04 In. 27.65

Peak discharge (base, 800 cfs).--Dec. 21 (6:30 a.m.) 2,580 cfs (6.46 ft); Dec. 26 (9 p.m.) 1,640 cfs (5.57 ft); Apr. 7 (10 p.m.) 2,640 cfs (6.50 ft); Apr. 28 (2 to 3 p.m.) 1,030 cfs (4.75 ft); Apr. 30 (2 to 4 a.m.) 1,200 cfs (5.00 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. 5, 6, Jan. 4-27, Feb. 4, 10-19, 25-28, Mar. 1, 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 1958.

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.--27 years, 8.20 cfs.

Extremes.--Maximum discharge during year, 209 cfs Apr. 6 (gage height, 3.91 ft); minimum, 0.53 cfs June 13 (gage height, 0.30 ft); minimum daily, 0.67 cfs Oct. 3, 4, 5.
1931-58: 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 debris, which are good. Infrequent low-water regulation.

Revisions (water years).--WSP 1171: Drainage area. WSP 1301: 1933-45(M).

Rating table, water year 1957-58, except periods of ice effect or backwater from debris (gage height, in feet, and discharge, in cubic feet per second)

0.3	0.53	1.3	10.3
.4	.81	1.7	29.0
.7	1.85	2.1	53
1.0	3.11	2.4	74
1.1	4.55		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.69	1.16	6.57	11.9	8.95	31.6	34.5	18.2	4.55	2.46	6.03	1.62
2	.69	2.37	3.07	8.95	8.32	15.6	28.6	13.8	4.55	2.17	3.56	1.40
3	.67	4.33	2.33	6.30	7.13	15.6	27.4	15.1	4.78	2.05	2.89	1.33
4	.67	2.22	2.21	b4.3	7.71	23.7	31.8	19.7	4.13	2.05	2.46	1.29
5	.67	1.47	1.93	b3.9	6.57	16.4	33.4	16.0	3.74	9.34	2.09	1.29
6	.69	1.26	1.74	b4.1	5.52	15.6	63	16.0	3.74	28.2	1.93	1.37
7	1.23	1.19	2.44	4.13	5.26	15.1	71	26.9	3.29	8.95	1.77	1.62
8	2.49	1.13	3.73	b4.3	b5.5	12.6	34.5	24.2	3.29	6.85	1.81	2.05
9	1.85	2.98	8.60	4.33	b4.6	11.5	c23.7	16.4	3.42	*6.85	1.47	1.47
10	1.23	1.77	11.9	4.13	b4.3	13.4	c19.7	13.0	3.42	3.93	1.70	1.89
11	.99	1.72	17.4	3.93	b4.1	18.7	c20.7	11.9	4.55	6.07	1.85	1.62
12	.90	1.26	7.71	3.74	b3.7	20.7	c21.7	11.1	5.02	19.9	1.58	1.47
13	.87	*1.19	b4.8	3.57	4.13	19.2	c34.3	9.93	2.61	9.60	3.12	1.29
14	.84	1.19	4.33	3.74	3.93	23.7	36.5	9.27	3.17	5.77	*2.29	1.23
15	.84	4.92	4.13	5.52	3.93	17.4	*24.2	8.95	3.02	5.26	2.52	*1.19
16	.87	c2.3	3.93	5.02	3.93	12.2	18.7	10.7	3.01	4.13	3.00	1.36
17	.87	c1.7	3.74	4.55	4.55	10.3	16.4	9.93	2.70	3.04	3.58	30.2
18	.90	c1.35	3.29	4.13	3.93	9.60	14.2	8.95	3.93	2.80	3.34	25.8
19	c10.5	c3.68	3.82	3.74	3.93	9.60	13.0	8.32	4.13	2.58	2.33	10.7
20	c1.65	c4.79	20.2	3.42	3.74	10.3	12.2	8.32	3.57	2.42	1.85	6.03
21	1.19	2.89	51	3.29	3.57	9.93	11.5	7.41	3.42	2.50	1.70	5.77
22	1.09	2.25	14.2	20.3	3.74	9.27	11.1	6.85	3.93	2.21	2.46	13.8
23	1.06	1.97	8.63	25.3	3.74	9.60	22.6	6.85	3.15	2.58	1.81	5.77
24	1.17	1.81	7.13	12.2	4.13	12.2	16.9	6.57	2.62	2.37	1.77	3.57
25	3.38	1.74	5.77	9.27	5.77	15.6	12.6	16.7	2.37	2.17	4.45	3.15
26	1.66	1.58	26.0	29.6	*6.30	23.7	11.1	17.4	5.74	2.09	4.13	2.97
27	1.33	1.44	33.6	32.3	5.77	22.2	10.3	8.95	16.8	30.3	3.88	30.8
28	1.29	c1.45	11.9	25.3	40.7	21.7	34.8	7.41	5.26	8.95	2.54	26.8
29	1.19	c2.15	11.1	15.6	-	24.8	26.4	6.57	3.29	6.57	2.17	9.27
30	1.13	4.70	8.63	11.9	-------	26.9	35.6	5.77	2.80	4.55	1.93	6.85
31	1.09	-------	7.13	10.3	-------	31.2	-------	5.02	-------	21.4	1.85	-------
Total	45.69	65.96	302.96	293.06	177.45	529.90	773.4	372.17	124.00	220.11	79.86	204.97
Mean	1.47	2.20	9.77	9.45	6.34	17.1	25.8	12.0	4.13	7.10	2.58	6.83
Cfsm	0.357	0.534	2.37	2.29	1.54	4.15	6.26	2.91	1.00	1.72	0.626	1.66
In.	0.41	0.60	2.73	2.64	1.60	4.78	6.98	3.36	1.12	1.98	0.72	1.85

Calendar year 1957: Max 59 Min 0.46 Mean 4.58 Cfsm 1.11 In. 15.08
Water year 1957-58: Max 71 Min 0.67 Mean 8.74 Cfsm 2.12 In. 28.77

Peak discharge (base, 140 cfs).--Apr. 6 (9:30 p.m.) 209 cfs (3.91 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
c Backwater from debris on control.

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 1958.
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.--17 years, 87.3 cfs (adjusted for storage and diversion).
Extremes.--Maximum discharge during year, 1,380 cfs July 11 (gage height, 4.11 ft); minimum, 15 cfs Oct. 6 (gage height, 0.83 ft).
1941-58: 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. Flow regulated by Whigville Reservoir (see p. 238) 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.8	14	1.5	101
1.0	23	2.0	262
1.1	30	3.0	770
1.3	60		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	23	30	94	118	254	266	164	64	29	*62	22
2	18	27	24	71	104	170	200	134	76	28	42	23
3	18	22	22	55	94	173	170	137	70	26	36	23
4	18	21	22	40	77	254	157	160	60	25	36	23
5	17	20	22	39	*70	200	154	151	58	274	33	23
6	20	20	22	40	68	186	366	160	57	240	31	22
7	21	20	24	43	66	173	*545	222	52	101	31	45
8	37	33	22	46	70	154	254	215	52	81	35	33
9	20	34	66	40	55	134	193	164	53	*79	29	25
10	19	21	89	39	52	146	164	126	53	53	27	36
11	18	20	84	39	48	164	204	114	56	238	27	31
12	18	20	48	35	48	170	234	108	57	294	26	27
13	17	*20	34	36	48	160	271	101	48	118	122	24
14	18	20	30	42	48	176	258	90	43	86	42	22
15	18	49	28	118	43	190	197	86	38	77	43	24
16	18	23	29	81	42	157	167	101	39	66	35	25
17	18	20	29	64	57	143	146	90	36	58	29	108
18	19	21	28	52	57	132	132	79	38	48	29	118
19	53	36	28	43	53	132	121	94	48	45	26	64
20	19	35	57	45	52	143	114	101	42	40	26	42
21	19	24	327	43	46	134	111	79	39	40	26	45
22	19	22	97	270	48	140	106	70	43	42	28	70
23	20	20	66	235	45	146	204	71	38	46	26	43
24	32	20	55	116	55	160	151	60	34	43	28	36
25	24	20	45	134	95	176	118	219	33	39	73	33
26	20	20	288	345	*79	254	99	170	76	35	43	29
27	19	20	*222	294	77	222	88	116	68	83	34	195
28	20	18	101	242	597	193	278	97	42	50	29	140
29	20	21	94	186	-	186	230	88	33	50	27	75
30	20	44	75	157	--------	180	258	75	30	42	24	52
31	20	--------	64	140	--------	222	--------	70	--------	67	22	--------
Total	656	734	2,172	3,224	2,312	5,424	5,956	3,712	1,476	2,543	1,127	1,478
Mean	21.2	24.5	70.1	104	82.6	175	199	120	49.2	82.0	36.4	49.3
(†)	+4.8	+6.2	+9.4	+7.8	+7.2	+8.0	+7.6	+7.4	+4.6	+6.9	+6.0	+6.2
Adjusted for change in reservoir contents												
Mean	26.0	30.7	79.5	112	89.8	183	207	127	53.8	88.9	42.4	55.5
Cfsm	0.575	0.679	1.76	2.48	1.99	4.05	4.58	2.81	1.19	1.97	0.938	1.23
In.	0.66	0.76	2.03	2.86	2.07	4.67	5.11	3.24	1.33	2.27	1.08	1.37

	Observed			Adjusted		
Calendar year 1957	Max 460	Min 16	Mean 43.2	Mean 49.7	Cfsm 1.10	In. 14.96
Water year 1957-58	Max 597	Min 17	Mean 84.4	Mean 91.2	Cfsm 2.02	In. 27.45

Peak discharge (base, 660 cfs).--Dec. 21 (2 a.m.) 738 cfs (2.93 ft); Dec. 26 (4 p.m.) 730 cfs (2.91 ft); Feb. 28 (7:30 a.m.) 958 cfs (3.45 ft); Apr. 6 (7:30 p.m.) 835 cfs (3.16 ft); May 19 (4 p.m.) 756 cfs (2.97 ft); May 25 (1 p.m.) 895 cfs (3.24 ft); July 5 (6 a.m.) 730 cfs (2.83 ft); July 11 (7 p.m.) 1,380 cfs (4.11 ft).

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Whigville Reservoir, diversion for municipal supply of city of New Britain from Whigville Reservoir and at Whites Bridge pumping plant.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 147.54 ft above mean sea level, datum of 1929.

Average discharge.--12 years, 132 cfs.

Extremes.--Maximum discharge during year, 2,070 cfs Apr. 7 (gage height, 7.85 ft); minimum, 14 cfs Oct. 1-6; minimum gage height, 1.93 ft Oct. 5, 6.
1946-58: 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, 1955 (prior to destruction of railroad bridge); minimum, about 5 cfs Aug. 18, 1957; minimum gage height, 1.42 ft Aug. 26, 1949.

Remarks.--Records good. Infrequent regulation at low flow.

Revisions.--WSP 1431: Drainage area.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Dec. 10, Feb. 24-28, July 1 to Sept. 30)

1.7	13	4.0	305
2.0	24	5.0	580
2.5	57	6.3	1,100
3.0	107		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	17	56	148	177	418	368	330	71	41	*34	20
2	14	21	43	141	148	290	330	258	69	41	30	19
3	14	36	36	107	121	249	302	239	69	41	28	19
4	14	34	34	b99	b105	380	305	288	64	42	29	19
5	14	*27	32	b90	96	342	330	249	61	46	28	19
6	14	24	30	b80	88	318	556	231	63	59	24	20
7	16	24	31	77	83	292	1,080	290	58	51	21	22
8	20	22	31	b70	83	255	*580	342	56	68	22	28
9	20	28	38	b70	b79	217	405	280	55	59	23	22
10	18	30	80	b69	b74	217	342	223	55	49	24	23
11	16	26	169	b68	*b70	258	368	191	57	42	31	22
12	16	23	103	b67	b66	280	405	185	82	38	30	20
13	15	23	*b78	b65	b66	258	445	155	70	33	39	19
14	15	24	70	b64	b65	251	460	137	61	29	43	17
15	15	41	63	70	b63	272	405	129	55	35	48	16
16	15	38	60	68	a60	278	365	137	51	34	49	16
17	15	31	58	67	a70	239	295	134	49	30	44	99
18	15	28	55	65	a66	213	258	121	48	26	42	146
19	27	38	54	b64	a64	191	229	113	51	26	38	97
20	23	56	118	b63	a62	195	205	110	51	28	36	70
21	20	43	473	59	a60	181	183	100	51	26	31	60
22	*19	34	247	132	a60	185	167	91	52	26	29	82
23	18	33	155	231	a65	201	279	84	49	47	24	63
24	18	32	115	165	85	209	253	80	48	*45	23	54
25	21	28	95	139	*100	237	199	138	46	38	*41	49
26	20	28	290	384	108	280	167	189	48	35	49	44
27	19	26	491	520	105	302	144	127	67	39	39	a80
28	18	27	239	445	460	288	400	103	51	40	33	118
29	18	31	187	318	-	290	416	92	46	36	28	72
30	18	34	151	251	-------	285	518	85	43	33	24	59
31	17	-------	124	211	-------	318	-------	77	-------	31	22	-------
Total	536	907	3,806	4,467	2,749	8,189	10,759	5,308	1,697	1,214	1,006	1,414
Mean	17.3	30.2	123	144	98.2	264	359	171	56.6	39.2	32.5	47.1
Cfsm	0.259	0.452	1.84	2.16	1.47	3.95	5.37	2.56	0.847	0.587	0.487	0.705
In.	0.30	0.50	2.12	2.49	1.53	4.55	5.99	2.95	0.94	0.68	0.56	0.79

Calendar year 1957: Max 565 Min 8 Mean 61.8 Cfsm 0.925 In. 12.56
Water year 1957-58: Max 1,080 Min 14 Mean 115 Cfsm 1.72 In. 23.40

Peak discharge (base, 1,000 cfs).--Apr. 7 (1 a.m.) 2,070 cfs (7.85 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, existing record, and records for nearby streams.
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 1958. 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.--30 years, 1,085 cfs (adjusted to present site; adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 6,410 cfs Apr. 8 (gage height, 6.44 ft); minimum daily, 36 cfs Nov. 3.

1928-58: 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, and 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 6,450,000,000 cu ft (see p. 238), and by diversions for domestic water supply from Barkhamsted, Nepaug, and Whigville Reservoirs, and Whites Bridge pumping plant. Records of chemical analyses and water temperatures for the water year 1958 are given in WSP 1571.

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 1957-58, 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			
1.0	30	1.0	50	2.5	1,000
1.2	80	1.3	155	3.0	1,480
1.5	190	1.6	310	5.0	4,030
2.1	530	2.0	590	6.4	6,410

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	147	150	258	1,120	1,470	2,500	2,140	4,340	629	265	538	254
2	260	486	904	1,320	1,170	2,420	2,400	3,110	594	368	372	316
3	319	36	594	1,240	966	1,960	2,160	2,500	728	442	227	305
4	270	224	508	728	b999	1,750	1,980	2,690	656	356	571	262
5	240	364	440	498	916	2,090	2,120	2,670	689	409	361	338
6	104	*358	367	583	828	2,040	2,700	2,380	548	562	275	521
7	190	364	386	616	961	1,940	5,470	2,320	462	757	222	260
8	288	270	290	563	1,020	1,420	6,410	2,860	460	598	160	344
9	437	226	334	551	394	1,380	5,000	2,700	508	525	170	284
10	390	362	890	662	639	1,040	3,500	2,440	553	450	120	216
11	266	243	1,410	484	*822	*1,590	3,560	1,960	552	476	170	218
12	247	392	1,250	374	650	1,550	3,110	1,740	787	507	180	400
13	235	362	810	388	718	1,550	3,540	1,330	837	754	700	310
14	164	286	652	609	b709	1,740	3,510	1,400	670	799	70	268
15	150	360	353	956	529	1,690	3,730	1,130	784	512	309	222
16	234	550	525	1,030	576	1,960	3,900	1,300	352	270	307	226
17	296	368	641	908	b581	1,630	3,930	1,340	761	255	247	320
18	338	287	564	710	508	1,300	3,800	1,240	444	505	671	1,390
19	294	662	530	b562	650	1,190	3,310	1,090	484	378	560	1,340
20	287	549	604	b374	722	1,330	3,180	1,040	483	236	340	1,080
21	218	532	2,730	b708	688	1,230	2,890	970	346	274	*224	724
22	268	762	4,100	b888	482	1,560	2,700	984	336	299	291	486
23	396	574	2,730	b1,360	508	1,040	3,100	907	392	242	282	650
24	336	203	1,660	b1,580	452	1,290	3,620	772	501	206	274	951
25	285	334	1,170	1,660	978	1,600	2,840	1,020	477	248	404	492
26	322	222	1,380	1,560	827	1,820	2,450	1,450	419	220	566	570
27	243	230	3,020	2,500	1,060	1,760	2,020	1,690	780	672	608	990
28	240	300	3,090	2,760	1,610	2,060	2,120	1,130	738	856	572	542
29	216	413	2,220	2,500	-	1,176	3,730	1,120	342	430	508	1,240
30	340	348	1,550	2,160	---------	2,020	4,430	660	258	392	262	785
31	266	--------	1,330	1,960	--------	1,940	--------	706	--------	381	312	--------
Total	8,286	10,817	37,290	33,912	22,233	52,150	99,350	52,989	16,600	13,644	10,873	16,304
Mean	267	361	1,203	1,094	794	1,682	3,312	1,709	553	440	351	543
(†)	-100	-36	+255	+232	+105	+325	+552	+70	+13	+32	-18	+28

Adjusted for diversion and change in reservoir contents

Mean	167	325	1,458	1,326	899	2,007	3,864	1,779	566	472	333	571
Cfsm	0.283	0.550	2.47	2.24	1.52	3.40	6.54	3.01	0.958	0.799	0.563	0.966
In.	0.33	0.61	2.85	2.58	1.58	3.92	7.30	3.47	1.07	0.92	0.65	1.08

	Observed			Adjusted		
Calendar year 1957:	Max 4,100	Min 24	Mean 549	Mean 626	Cfsm 1.06	In. 14.40
Water year 1957-58:	Max 6,410	Min 36	Mean 1,026	Mean 1,148	Cfsm 1.94	In. 26.36

* 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 Collins Co., Water Bureau of Hartford Metropolitan District Commission and Board of Water Commissioners of New Britain.

Note.--No gage-height record Aug. 8-10, 13, 14; discharge computed on basis of records furnished by Farmington River Power Co.

b Stage-discharge relation affected by ice.

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 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 58.00 ft above mean sea level, datum of 1929.

Extremes.--1958: Maximum discharge during period May to September, 360 cfs July 11 (gage height, 5.54 ft); minimum, 1.0 cfs Sept. 14, 15 (gage height, 1.17 ft).

Remarks.--Records good. Occasional low-flow regulation.

Rating table, May 1 to Sept. 30 1958 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 6, 7, 30, 31, June 1)

1.17	1.0	1.6	27
1.2	2.6	2.0	53
1.3	8.4	2.9	120
1.4	14		

Discharge, in cubic feet per second, May to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								50	10	7.9	21	3.2
2								40	22	8.4	10	7.3
3								45	13	7.9	7.9	14
4								50	11	6.1	9.0	7.3
5								45	10	107	8.4	6.1
6								60	14	118	9.6	3.2
7								99	9.6	20	9.6	23
8								64	9.0	29	9.6	13
9								47	*15	26	6.1	6.7
10								35	14	14	9.0	*13
11								32	21	70	10	13
12								34	29	101	9.0	5.5
13								32	16	20	46	2.6
14								31	13	16	14	1.5
15								*30	12	20	17	3.2
16								36	11	25	14	6.1
17								28	11	21	8.4	*60
18								28	12	18	9.6	67
19								36	18	8.4	*9.0	17
20								20	12	7.3	10	8.4
21								12	11	7.9	8.4	7.9
22								9.6	14	9.6	9.6	21
23								11	12	11	4.4	12
24								6.7	12	8.4	4.4	29
25								100	12	9.0	56	11
26								32	41	7.3	19	14
27								13	18	50	12	70
28								12	9.0	11	10	31
29								10	6.7	*12	16	16
30					-------			6.1	7.9	9.6	6.1	20
31		-------			-------		-------	6.1	-------	37	3.8	-------
Total								1,060.5	426.2	823.8	396.9	513.0
Mean								34.2	14.2	26.6	12.8	17.1
Cfsm								2.38	0.986	1.85	0.889	1.19
In.								2.74	1.10	2.13	1.02	1.33

Calendar year	: Max	Min	Mean	Cfsm	In.
Water year	: Max	Min	Mean	Cfsm	In.

Peak discharge (base, 330 cfs).--July 11 (11 p.m.) 360 cfs (5.54 ft).

* Discharge measurement made on this day.

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 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 47.58 ft above mean sea level, datum of 1929.

Extremes.--1958: Maximum discharge during period April to September, 62 cfs July 11 (gage height, 2.89 ft); minimum, 1.1 cfs Sept. 4, 5 (gage height, 91 ft).

Remarks.--Records good.

Rating tables, Apr. 14 to Sept. 30, 1958 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Aug. 19-21)

Apr. 14 to May 25		May 26 to Sept. 30			
0.9	2.0	0.8	0.4	1.6	10
1.4	11	1.1	2.8	1.9	18
1.6	15	1.3	5.2	2.1	24
1.8	21				

Discharge, in cubic feet per second, April to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	4.8	1.6	1.7	5.2	1.3
2							-	3.7	2.2	1.7	3.0	1.2
3							-	4.6	2.2	1.6	2.6	1.2
4							-	6.0	1.7	1.7	2.6	1.1
5							-	5.1	1.6	10	2.5	1.1
6							-	7.8	1.5	16	2.4	1.3
7							-	20	1.5	3.1	2.3	2.0
8							-	8.6	1.5	2.8	2.2	2.0
9							-	6.2	*1.6	3.8	2.2	*1.6
10							-	4.6	1.5	2.3	2.1	1.6
11							-	4.1	2.0	13	2.1	1.5
12							-	4.2	2.6	23	2.0	1.4
13							-	4.1	1.8	3.5	4.6	1.4
14							*5.7	3.9	1.8	2.6	a2.5	1.4
15							4.6	3.9	1.6	2.6	a3.0	1.4
16							4.1	4.6	1.5	2.4	a2.5	2.0
17							3.7	4.6	1.4	2.2	a1.9	*6.3
18							3.5	4.2	1.5	2.2	a1.6	13
19							3.4	5.0	1.7	2.2	*1.5	4.2
20							3.2	5.3	1.7	2.2	1.5	2.4
21							3.4	3.9	1.7	2.1	1.4	2.2
22							3.7	3.4	1.9	2.2	1.7	3.0
23							7.7	3.4	1.8	2.3	1.4	2.2
24							4.8	3.2	1.7	2.2	1.4	1.8
25							3.4	16	1.6	2.2	5.8	1.6
26							2.8	5.3	1.9	2.3	4.9	1.6
27							2.7	2.1	2.2	9.6	2.8	14
28							21	1.9	1.9	3.3	1.9	13
29							8.8	1.8	1.8	*2.9	1.6	2.9
30							10	1.7	1.7	2.8	1.4	2.2
31								1.6		4.1	1.4	
Total							-	159.6	52.7	136.6	76.0	93.9
Mean							-	5.15	1.76	4.41	2.45	3.13
Cfsm							-	1.14	0.390	0.978	0.543	0.694
In.							-	1.31	0.44	1.13	0.63	0.77

Calendar year	: Max	Min	Mean	Cfsm	In.
Water year	: Max	Min	Mean	Cfsm	In.

Peak discharge (base, 60 cfs).--July 11 (11 p.m.) 62 cfs (2.89 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 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 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 78.39 ft above mean sea level, datum of 1929.

Extremes.--1958: Maximum discharge during period May to September, 510 cfs July 11 (gage height, 5.50 ft); minimum, 5.4 cfs Sept. 7 (gage height, 2.54 ft).

Remarks.--Records good. Some regulation caused by dams upstream and by storage and diversion at Hartford water-supply reservoirs on headwater streams.

Rating tables, May 1 to Sept. 30, 1958 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 2 to July 11)

May 2 to Sept. 23				Sept. 23-30	
2.5	4.5	3.0	28	1.3	8.5
2.6	7.2	3.4	78	1.5	18
2.7	11	3.8	118	1.8	36
2.8	15			2.1	60

Discharge, in cubic feet per second, May to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								50	10	17	23	6.6
2								38	11	16	11	6.6
3								41	11	15	10	6.3
4								58	*9.6	6.0	8.8	6.3
5								58	11	16	8.5	6.6
6								49	11	55	8.2	6.0
7								66	9.6	35	7.8	11
8								60	9.6	16	7.8	7.8
9								47	22	15	7.5	6.3
10								38	20	18	7.8	8.5
11								34	23	98	7.5	*14
12								33	17	76	7.2	19
13								30	8.2	40	46	6.9
14								29	7.5	26	15	6.6
15								*28	6.9	20	13	6.0
16								23	6.6	17	12	39
17								15	8.7	14	9.6	*97
18								15	17	10	8.8	81
19								34	17	9.6	*8.2	45
20								27	7.5	14	7.8	34
21								19	6.6	24	8.5	33
22								18	8.2	10	10	39
23								14	6.3	17	7.2	26
24								13	5.7	15	8.5	13
25								115	5.4	10	27	10
26								70	9.3	8.5	14	9
27								32	10	36	12	57
28								27	17	18	16	41
29								22	16	20	29	17
30					--------			12	17	*22	7.2	13
31		--------			--------		--------	11	--------	27	6.9	--------
Total								1,126	345.7	750.1	381.8	678.5
Mean								36.3	11.5	24.2	12.3	22.6
Cfsm								2.47	0.782	1.65	0.837	1.54
In.								2.85	0.87	1.90	0.96	1.72

Calendar year	: Max	Min	Mean	Cfsm	In.
Water year	: Max	Min	Mean	Cfsm	In.

Peak discharge (base, 400 cfs).--July 11 (6:30 p.m.) 510 cfs (5.50 ft).

* Discharge measurement made on this day.

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 1958.

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.--22 years, 72.5 cfs.

Extremes.--Maximum discharge during year, 840 cfs Apr. 6; maximum gage height, 8.23 ft Apr. 7; minimum discharge, 13 cfs Sept. 7, 14, 15 (gage height, 1.60 ft).
1936-58: 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 daily discharge, 7 cfs Sept. 2, 1957.
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.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	31	a75	110	133	210	142	127	30	34	76	15
2	19	74	a35	71	115	137	100	103	51	35	33	16
3	18	72	a25	b49	100	121	91	109	42	36	26	26
4	18	29	a20	b38	88	228	*68	133	*32	20	24	18
5	17	24	a17	b29	73	170	60	130	33	170	24	*17
6	23	20	a17	b28	70	136	318	130	36	294	23	15
7	50	*21	a25	b32	78	*121	485	253	32	91	22	41
8	58	30	a32	b45	85	118	195	170	28	72	22	40
9	27	96	114	b39	66	109	121	130	50	83	19	22
10	*21	44	254	b30	76	103	103	97	47	47	18	29
11	20	39	263	b29	54	100	171	85	52	172	24	32
12	19	35	84	b26	46	97	350	85	66	398	20	33
13	16	20	55	b26	44	91	218	80	34	88	138	17
14	16	18	68	b28	46	115	164	76	33	52	56	13
15	25	129	71	145	32	231	130	74	24	49	42	15
16	25	48	69	117	32	198	112	77	23	46	40	27
17	23	39	58	82	41	142	106	60	24	45	27	324
18	24	36	53	58	32	121	100	56	36	40	*25	213
19	59	72	54	46	36	112	75	90	51	29	23	91
20	27	64	64	*42	36	121	65	73	29	28	22	54
21	46	31	390	49	34	136	60	50	25	40	22	47
22	42	22	110	486	34	149	54	47	34	36	30	75
23	54	18	75	358	33	127	124	42	26	40	20	48
24	66	16	68	146	37	109	85	36	25	34	18	46
25	90	16	46	170	90	100	62	216	23	29	108	34
26	60	17	294	502	105	136	52	206	38	24	54	30
27	56	16	304	420	99	124	48	71	54	106	36	151
28	56	15	95	320	496	103	273	56	35	43	30	140
29	43	a26	86	236	--	97	206	51	32	*42	51	51
30	26	a80	71	188	-------	94	238	33	32	40	21	47
31	24	-------	62	166	-------	115	-------	30	-------	73	17	-------
Total	1,086	1,198	3,054	4,111	2,220	4,071	4,376	2,976	1,077	2,336	1,111	1,727
Mean	35.0	39.9	98.5	133	79.3	131	146	96.0	35.9	75.4	35.8	57.6
Cfsm	0.862	0.984	2.43	3.28	1.95	3.23	3.60	2.36	0.884	1.86	0.882	1.42
In.	0.99	1.10	2.80	3.78	2.03	3.72	4.02	2.72	0.99	2.14	1.02	1.58

Calendar year 1957: Max 502 Min 7 Mean 46.9 Cfsm 1.16 In. 15.71
Water year 1957-58: Max 502 Min 13 Mean 80.4 Cfsm 1.98 In. 26.89

Peak discharge (base, 550 cfs).--Dec. 10 (7 p.m.) 665 cfs (7.45 ft at 11 to 12 p.m.); Dec. 21 (4:30 a.m.) 715 cfs (7.50 ft at 9 to 11 a.m.); Dec. 26 (6 to 7 p.m.) 702 cfs (7.78 ft at 11 to 12 p.m.); Jan. 22 (9 a.m.) 790 cfs (7.73 ft at 12 m. to 1 p.m.); Feb. 28 (12 m.) 740 cfs (7.90 ft at 3 to 5 p.m.); Apr. 6 (6 p.m.) 840 cfs (8.23 ft at 1 a.m. Apr. 7); May 25 (4 p.m.) 715 cfs (6.95 ft at 6 p.m.); July 11 (9 p.m.) 790 cfs (7.64 ft at 5 to 6 a.m. July 12); Sept. 17 (1 a.m.) 665 cfs (7.15 ft at 3 a.m.).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for nearby stations.
b Stage-discharge relation affected by ice.

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 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 103.66 ft above mean sea level, datum of 1929.

Extremes.--1958: Maximum discharge during period April to September, 94 cfs Apr. 28, Sept. 27; maximum gage height, 2.53 ft Sept. 27; minimum discharge, 0.18 cfs Sept. 16; minimum gage height, 0.35 ft Sept. 5-7.

Remarks.--Records good. Infrequent regulation at low flow.

Rating tables, Apr. 14 to Sept. 30, 1958 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Sept. 12-16)

Apr. 14 to Sept. 12				Sept. 12-30			
0.3	0.10	0.8	5.0	0.4	0.15	0.8	3.6
.4	.34	1.0	11	.5	.5	1.0	8.5
.5	.86	1.4	28	.6	1.1	1.3	18
.6	1.7	1.9	58	.7	2.0	1.7	36
.7	3.0						

Discharge, in cubic feet per second, April to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	14	2.6	1.4	1.4	0.39
2							-	9.0	2.9	1.1	.81	.32
3							-	a10	2.7	1.0	.65	.24
4							-	a14	*2.2	1.3	.60	.24
5							-	a12	2.1	1.8	.39	.22
6							-	a12	2.1	8.0	.32	.22
7							-	a25	1.7	3.6	.32	.38
8							-	22	1.7	2.6	.29	.55
9							-	16	2.1	2.4	.27	.55
10							-	a10	2.1	1.6	.27	.32
11							-	a8	2.6	2.2	.24	.34
12							-	8.0	2.7	3.6	.24	.27
13							-	a6.5	2.0	2.9	.66	.26
14							*14	a6.0	2.1	1.8	1.2	.22
15							11	a5.5	1.6	2.0	1.3	.22
16							8.7	a6.0	1.4	1.5	1.8	.45
17							7.7	6.6	1.3	1.4	1.0	*19
18							6.9	5.8	1.4	1.1	.86	26
19							6.4	5.8	2.5	1.2	*.55	11
20							5.8	6.4	2.2	1.0	.29	4.7
21							5.5	5.0	2.1	.76	.29	3.1
22							5.5	4.2	2.7	.86	.34	6.1
23							29	4.2	1.8	1.5	.29	3.8
24							22	3.4	1.4	1.5	.34	2.3
25							9.7	12	1.4	1.0	2.5	2.3
26							6.6	17	2.5	.86	2.1	2.2
27							5.5	6.6	20	2.7	1.4	36
28							52	4.8	3.6	1.7	.81	34
29							33	4.2	2.0	2.1	.60	6.6
30					--------		34	3.4	1.5	*1.4	.55	3.8
31		--------			--------		--------	2.9	--------	1.3	.39	--------
Total							-	276.3	81.0	59.38	23.07	166.09
Mean							-	8.91	2.70	1.92	0.744	5.54
Cfsm							-	1.57	0.477	0.339	0.131	0.979
In.							-	1.81	0.53	0.39	0.15	1.09

Calendar year	: Max	Min	Mean	Cfsm	In.
Water year	: Max	Min	Mean	Cfsm	In.

Peak discharge (base, 90 cfs).--Apr. 28 (2:30 p.m.) 94 cfs (2.38 ft); Sept. 27 (3:30 p.m.) 94 cfs (2.53 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, and records for nearby streams.

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 1958.

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.--22 years, 38.2 cfs.

Extremes.--Maximum discharge during year, 815 cfs Apr. 6; maximum gage height, 5.85 ft Apr. 7; minimum discharge, 0.9 cfs Oct. 1 (gage height, 1.08 ft).
1936-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used June 27 to July 2)

Oct. 1 to Apr. 6				Apr. 7 to Sept. 30			
1.1	1.0	1.9	24	1.15	1.5	1.9	28
1.2	1.7	2.2	51	1.2	2.0	2.2	59
1.4	5.2	2.6	119	1.4	6.0	2.6	127
1.6	10	3.6	360	1.6	11	3.8	400

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	2.5	26	72	51	b200	76	66	9.7	7.7	9.7	3.9
2	2.5	11	10	46	b41	123	43	47	9.4	8.4	7.7	3.9
3	4.1	21	6.7	b19	b31	99	36	47	11	6.5	a6.7	4.3
4	3.7	7.1	5.8	b11	b24	205	*30	84	*9.7	6.2	6.0	3.9
5	4.4	4.1	b4.4	9.5	18	153	24	67	9.4	9.2	6.5	*4.5
6	4.5	*3.5	b4.7	8.6	18	*109	210	66	8.9	56	6.0	4.7
7	6.8	*2.5	5.0	9.2	17	90	383	170	8.2	16	6.0	5.1
8	8.6	3.5	6.0	b8.6	18	62	133	121	7.2	13	5.8	7.4
9	6.7	15	40	12	17	44	66	81	7.4	13	a5	6.0
10	*4.9	6.2	135	10	15	43	45	47	8.7	10	a4.5	6.0
11	4.4	3.5	160	11	12	46	86	37	9.7	42	a5	5.6
12	3.7	2.7	46	10	11	43	316	33	15	58	a4	3.9
13	4.1	2.7	23	9.2	11	33	162	27	10	21	a32	3.1
14	3.0	3.9	16	10	b10	46	73	24	9.7	12	a11	2.0
15	2.3	39	15	42	b9	200	53	22	7.4	12	*12	1.5
16	2.8	14	16	52	b8	157	43	28	6.2	10	13	11
17	3.9	7.6	16	43	b8.5	94	37	29	6.2	8.9	7.4	158
18	6.7	5.6	14	36	b9	76	33	23	7.2	7.2	5.8	148
19	9.5	13	13	25	b8.5	71	29	26	9.2	7.4	5.6	53
20	5.6	22	30	*18	b8	73	25	32	9.2	7.4	4.5	20
21	2.7	11	355	16	b8	85	24	24	9.2	6.2	4.3	12
22	1.7	7.6	70	b165	b8	109	24	18	13	6.0	6.7	30
23	1.9	7.1	31	b240	b8	81	98	17	9.2	7.7	5.0	15
24	3.5	5.4	22	105	b9	49	100	15	7.7	8.4	2.9	10
25	6.0	4.9	16	78	b18	41	47	90	7.2	7.7	21	8.4
26	3.9	4.6	179	b280	b36	64	31	78	9.3	7.2	15	8.4
27	2.0	4.1	214	b280	b36	55	24	32	38	26	8.9	156
28	1.6	3.5	51	b250	b250	38	215	22	15	*10	7.0	161
29	1.6	5.8	42	143	-	33	142	18	7.9	11	6.5	37
30	1.5	21	32	109	--------	30	176	14	6.5	10	5.4	18
31	1.8	--------	24	88	--------	37	--------	11	--------	9.2	4.3	--------
Total	121.4	265.4	1,628.6	2,216.1	718.0	2,589	2,784	1,416	302.4	441.3	251.2	911.6
Mean	3.92	8.85	52.5	71.5	25.6	83.5	92.8	45.7	10.1	14.2	8.10	30.4
Cfsm	0.155	0.350	2.08	2.83	1.01	3.30	3.67	1.81	0.399	0.561	0.320	1.20
In.	0.18	0.39	2.40	3.26	1.05	3.80	4.10	2.09	0.45	0.65	0.37	1.34

Calendar year 1957: Max 461 Min 0.95 Mean 21.3 Cfsm 0.842 In. 11.42
Water year 1957-58: Max 383 Min 1.0 Mean 37.4 Cfsm 1.48 In. 20.08

Peak discharge (base, 500 cfs).--Dec. 21 (8 a.m.) 600 cfs (4.78 ft at 9 a.m.); Dec. 26 (9:30 p.m.) 540 cfs (4.45 ft at 10:30 p.m.); Apr. 6 (11 p.m.) 815 cfs (5.85 ft at 12:30 a.m. Apr. 7).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby stations.
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 1958.

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.--22 years, 121 cfs.

Extremes.--Maximum discharge during year, 1,460 cfs Apr. 7 (gage height, 5.39 ft); minimum, 16 cfs Sept. 15 (gage height, 2.34 ft).
1936-58: 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.

Remarks.--Records good. Some regulation by dams above station and by storage and diversion at Hartford water-supply reservoirs on small headwater streams.

Revisions (water years).--WSP 1431: 1955.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	31	110	197	205	559	241	219	41	46	105	22
2	22	96	46	135	166	263	198	162	65	46	46	23
3	24	122	35	75	135	258	152	162	65	43	34	33
4	25	44	31	55	120	432	*116	232	*48	32	32	26
5	24	33	25	44	101	383	98	219	48	180	34	*25
6	30	*27	25	42	98	262	337	216	52	395	32	25
7	75	29	37	46	104	*237	1,000	470	46	138	31	56
8	71	40	48	58	113	213	413	318	39	94	31	59
9	40	136	188	60	92	176	211	240	60	128	27	32
10	*29	55	*379	46	90	169	162	162	62	75	25	39
11	27	46	495	46	72	162	254	134	67	205	32	43
12	25	44	169	42	62	162	635	128	92	500	27	43
13	21	25	95	40	62	152	492	122	52	128	190	23
14	22	25	92	44	58	155	274	112	50	73	75	18
15	29	189	98	218	50	390	200	106	36	70	60	18
16	33	70	101	210	44	457	170	115	34	65	60	59
17	29	48	90	142	b46	281	155	98	32	60	40	525
18	33	46	78	101	b50	221	144	89	48	50	*34	395
19	88	92	75	70	b52	198	115	128	65	36	32	169
20	31	95	104	*65	b52	194	103	122	46	34	30	89
21	52	48	741	70	b50	233	98	83	39	46	30	70
22	55	33	263	692	b48	258	89	75	50	50	40	118
23	72	29	123	749	b46	268	236	67	41	52	27	78
24	79	25	104	293	b48	187	212	60	39	47	23	65
25	109	24	72	258	123	162	122	276	36	40	140	57
26	72	25	372	810	183	187	95	368	51	35	75	48
27	65	24	676	785	176	225	80	118	89	150	50	242
28	62	22	173	650	693	176	412	86	57	*52	40	377
29	48	35	142	450	-	149	441	75	46	57	65	106
30	31	134	116	325	-------	138	467	52	43	*57	30	78
31	27	-------	92	281	-------	142	-------	46	-------	89	24	-------
Total	1,372	1,692	5,195	7,099	3,139	7,449	7,722	4,860	1,539	3,073	1,521	2,961
Mean	44.3	56.4	168	229	112	240	257	157	51.3	99.1	49.1	98.7
Cfsm	0.599	0.762	2.27	3.09	1.51	3.24	3.47	2.12	0.693	1.34	0.664	1.33
In.	0.69	0.85	2.62	3.56	1.57	3.74	3.87	2.44	0.77	1.54	0.77	1.48

Calendar year 1957: Max 980 Min 11 Mean 76.9 Cfsm 1.04 In. 14.10
Water year 1957-58: Max 1,000 Min 18 Mean 130 Cfsm 1.76 In. 23.90

Peak discharge (base, 1,000 cfs).--Dec. 21 (1 to 2:30 p.m.) 1,060 cfs (4.75 ft); Dec. 27 (1 to 2 a.m.) 1,060 cfs (4.77 ft); Jan. 22 (7 to 9 p.m.) 1,000 cfs (4.64 ft); Mar. 28 (8 to 9 p.m.) 1,080 cfs (4.82 ft); Apr. 7 (3 a.m.) 1,460 cfs (5.39 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record July 24-28, Aug. 5-17, Aug. 22 to Sept. 4; discharge estimated on basis of recorded range in stage, weather records, and records for North and South Branches.

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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 1958.
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.--32 years, 117 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 562 cfs Feb. 28 (gage height, 4.73 ft); minimum, 28 cfs Oct. 18; minimum gage height, 1.13 ft Oct. 1; minimum daily discharge, 23 cfs Oct. 18.
1919-21, 1928-58: 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. 239), other small reservoirs and industrial plants upstream.
Revisions (water years).--WSP 781: Drainage area. WSP 851: 1934(M), 1936(M). WSP 1051: 1920-21 and 1928-45 (monthly and yearly discharge and runoff). WSP 1201: 1920(M), 1929(M), 1931, 1932-34(m), 1944.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to May 6				May 7 to Sept. 30	
1.1	19	3.0	225	1.4	44
1.2	25	4.0	395	2.0	104
1.5	48	5.0	625	3.0	225
2.0	97			5.0	650

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	28	94	154	240	348	240	240	104	63	112	53
2	24	68	52	138	225	211	190	211	110	61	72	53
3	26	102	42	102	211	190	176	204	120	63	62	53
4	26	51	38	83	190	204	164	232	110	61	58	49
5	26	38	37	76	170	190	142	225	96	77	57	48
6	27	*32	34	73	144	183	189	225	90	176	54	50
7	31	32	38	82	122	176	435	490	82	94	53	60
8	47	33	38	98	174	164	386	460	78	83	52	69
9	30	83	90	84	132	149	312	410	84	109	51	58
10	25	51	128	79	108	145	263	351	87	76	50	60
11	24	38	204	79	97	148	321	305	87	100	52	60
12	24	32	117	74	95	150	415	261	104	200	51	45
13	25	32	67	71	97	145	376	228	87	96	144	48
14	24	32	45	76	a90	204	321	202	80	76	90	48
15	24	76	52	188	a85	304	263	168	70	73	72	48
16	24	59	66	204	a85	263	218	171	68	68	86	51
17	25	43	65	150	a100	232	*211	164	68	63	68	*244
18	23	38	*52	120	a95	204	197	154	72	59	60	230
19	74	59	62	100	a90	197	183	172	80	58	57	167
20	53	79	68	92	a85	197	150	178	76	56	*54	112
21	31	60	244	92	a80	211	149	161	76	*52	52	121
22	40	48	170	248	a85	218	147	134	88	57	54	93
23	48	46	121	366	a90	225	190	142	77	*66	52	85
24	34	44	72	225	*98	211	183	132	70	63	49	79
25	48	38	72	248	128	204	164	191	66	60	117	83
26	33	38	154	512	138	225	137	261	80	57	120	63
27	35	38	287	465	124	211	126	190	92	100	90	111
28	30	42	144	*386	361	197	230	176	71	70	70	155
29	27	42	124	321	-	190	279	151	64	90	67	154
30	25	67	107	279	---------	183	312	128	65	94	61	134
31	27	--------	97	263	--------	183	--------	111	--------	98	57	--------
Total	984	1,469	2,981	5,528	3,739	6,262	7,069	6,828	2,502	2,519	2,144	2,684
Mean	31.7	49.0	96.2	178	134	202	236	220	83.4	81.3	69.2	89.5
(†)	-1.3	+2.7	+24.4	+20.8	-4.6	+18.1	+7.9	-2.9	-8.2	-13.0	-12.2	-1.5
Adjusted for change in contents in Shenipsit Lake												
Mean	30.4	51.7	121	199	129	220	244	217	75.2	68.3	57.0	88.0
Cfsm	0.408	0.694	1.62	2.67	1.73	2.95	3.28	2.91	1.01	0.917	0.765	1.18
In.	0.47	0.77	1.87	3.08	1.80	3.40	3.66	3.36	1.13	1.06	0.88	1.32

	Observed			Adjusted			
Calendar year 1957:	Max 425	Min 21	Mean 77.9	Mean 78.0	Cfsm 1.05	In. 14.22	
Water year 1957-58:	Max 512	Min 23	Mean 122	Mean 125	Cfsm 1.68	In. 22.80	

Peak discharge (base, 900 cfs).--No peak above base.

* 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 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 1958.

Gage.--Water-stage recorder. Datum of gage is 69.50 ft above mean sea level, datum of 1929.

Average discharge.--30 years (1928-58), 181 cfs.

Extremes.--Maximum discharge during year, 1,810 cfs Jan. 22 (gage height, 3.82 ft); minimum, 4.8 cfs Oct. 5, 6 (gage height, 0.43 ft).
1928-58: 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, which are good, and those for periods of no gage-height record, which are fair. Slight regulation at low flow by mills upstream.

Revisions (water years).--WSP 1021: 1929.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 28				Apr. 29 to Sept. 30	
0.4	3.3	1.5	180	0.7	27
.5	8.3	2.0	360	1.0	68
.7	21	3.0	1,020	1.5	195
1.0	60	4.0	2,040	2.0	380
				3.0	1,020

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.3	14	186	494	395	745	415	510	140	38	380	48
2	6.3	28	117	478	344	478	352	398	130	35	215	41
3	5.8	85	75	300	292	440	312	356	140	32	122	36
4	5.3	62	60	207	245	466	280	460	120	32	85	34
5	5.3	38	52	176	*238	490	252	425	105	151	65	31
6	5.8	*28	52	b165	217	460	415	455	95	368	52	30
7	8.3	23	55	b170	210	435	1,020	892	85	260	46	44
8	12	22	73	b150	300	385	675	766	80	161	41	117
9	14	96	129	b180	245	320	440	580	85	221	37	78
10	12	66	344	b200	210	*312	348	425	90	144	32	70
11	9.4	41	553	b230	165	320	400	372	110	*98	31	78
12	8.9	29	300	b200	150	320	640	340	150	173	*30	57
13	8.3	26	200	b180	b150	292	703	308	120	161	56	45
14	8.3	25	160	b170	150	348	661	282	120	109	65	38
15	8.3	108	130	b550	b140	490	*478	250	100	98	*49	*36
16	7.8	96	110	745	b125	445	375	270	80	83	91	32
17	7.8	60	110	520	b150	385	332	240	70	65	87	48
18	8.3	44	100	375	b150	352	300	210	65	52	65	105
19	18	68	85	280	b140	352	273	210	90	52	46	130
20	23	134	150	259	b130	405	252	240	120	46	38	98
21	18	92	800	248	b120	410	238	210	100	38	34	76
22	14	62	600	1,120	b115	375	278	180	100	36	31	94
23	12	49	350	1,360	b110	385	435	190	80	44	30	85
24	13	43	250	696	b120	375	380	170	63	44	29	63
25	60	39	200	751	b150	395	300	220	55	40	110	52
26	35	35	350	1,540	b195	484	252	400	55	35	246	46
27	23	31	1,400	1,100	210	502	231	370	85	120	225	118
28	19	31	700	852	522	390	558	250	68	100	132	402
29	17	50	450	682	-	324	731	210	52	170	94	246
30	15	99	*308	542	--------	296	724	180	45	*125	70	147
31	14	--------	259	460	--------	320	--------	160	--------	155	57	--------
Total	429.2	1,624	8,708	15,380	5,688	12,496	13,048	10,529	2,798	3,286	2,691	2,523
Mean	13.8	54.1	281	496	203	403	435	340	93.3	106	86.8	84.1
Cfsm	0.131	0.515	2.68	4.72	1.93	3.84	4.14	3.24	0.889	1.01	0.827	0.801
In.	0.15	0.57	3.09	5.44	2.01	4.43	4.62	3.74	0.99	1.16	0.95	0.89

Calendar year 1957: Max 1,400 Min 2.9 Mean 117 Cfsm 1.11 In. 15.09
Water year 1957-58: Max 1,540 Min 5.3 Mean 217 Cfsm 2.07 In. 28.04

Peak discharge (base, 1,300 cfs).--Dec. 27 (time unknown) 1,700 cfs (3.68 ft); Jan. 22 (11 p.m.) 1,810 cfs (3.82 ft); Jan. 26 (7 to 9 a.m.) 1,640 cfs (3.67 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Dec. 13-29, May 15 to June 24, July 25-29; discharge estimated on basis of recorded range in stage, weather records, engineers' notes, and records for nearby streams.

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 of Eightmile River.

Drainage area.--18.6 sq mi.

Records available.--September 1937 to September 1958. 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.--21 years, 40.3 cfs (adjusted to present site).

Extremes.--Maximum discharge during year, 520 cfs Jan. 22 (gage height, 5.30 ft); minimum observed, 1.2 cfs Oct. 3 (gage height, 1.83 ft).
1937-58: 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 1957-58, 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	
1.8	0.8	3.5	86	2.0	4.2
1.9	2.0	4.0	154	2.2	10
2.1	6.2	4.5	265	2.5	22
2.5	19	5.0	415	3.0	46
3.0	45			3.5	86

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

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	3.3	41	120	86	128	86	107	30	6.1	50	12
2	1.3	8.4	26	107	77	96	72	86	27	5.3	27	9.4
3	1.2	15	18	82	68	102	64	86	28	5.0	21	7.8
4	1.3	7.9	17	72	b56	102	60	91	22	4.7	16	7.8
5	1.4	5.0	16	60	48	102	52	82	21	37	12	6.9
6	1.4	*4.3	14	45	*48	*96	135	96	20	82	9.7	6.9
7	2.6	3.8	24	45	48	96	252	184	18	43	8.1	12
8	4.5	3.4	28	35	77	91	145	128	16	22	6.9	27
9	4.5	32	52	b40	60	72	96	102	17	26	6.6	18
10	3.6	14	114	b50	45	72	86	86	18	19	5.6	24
11	3.1	9.6	184	56	40	68	96	72	26	*16	*5.0	15
12	2.4	7.6	96	50	32	64	136	68	27	18	4.7	12
13	2.2	6.8	b60	42	b30	60	128	60	21	19	5.0	9.7
14	2.2	6.2	b48	42	29	77	107	56	25	14	5.6	7.5
15	2.2	42	45	252	b28	96	*96	50	18	16	5.6	6.6
16	2.2	23	45	b228	26	86	82	56	17	14	15	*6.1
17	2.4	14	41	120	32	82	77	50	14	10	12	16
18	2.2	11	33	91	b31	72	68	45	12	8.4	12	*22
19	9.6	23	34	77	b30	77	64	44	23	7.8	7.8	20
20	6.8	17	38	b68	29	86	56	50	20	8.4	6.4	22
21	4.5	14	195	60	28	91	52	44	18	6.9	6.4	15
22	3.4	13	102	350	b27	86	64	37	18	5.6	16	32
23	3.1	12	72	292	b26	91	96	40	16	7.5	8.4	22
24	3.6	11	60	145	b25	86	77	35	13	7.5	6.1	16
25	10	10	48	200	32	91	64	46	12	6.6	19	14
26	5.7	9.9	68	382	35	107	56	102	10	6.9	50	12
27	4.5	8.4	*184	252	38	107	50	64	10	18	35	16
28	3.8	8.2	107	184	184	91	73	50	8.4	18	26	66
29	3.4	14	91	145	-	72	154	45	7.5	28	24	40
30	3.1	22	77	120	-------	64	173	38	6.9	26	19	30
31	2.9	-------	64	102	-------	60	-------	33	-------	*23	14	-------
Total	106.5	379.8	2,042	3,914	1,315	2,671	2,817	2,133	539.8	535.7	465.9	531.7
Mean	3.44	12.7	65.9	126	47.0	86.2	93.9	68.8	18.0	17.3	15.0	17.7
Cfsm	0.185	0.683	3.54	6.77	2.53	4.63	5.05	3.70	0.968	0.930	0.806	0.952
In.	0.21	0.76	4.08	7.80	2.64	5.34	5.63	4.27	1.08	1.07	0.93	1.06

Calendar year 1957: Max 335 Min 0.5 Mean 26.7 Cfsm 1.44 In. 19.44
Water year 1957-58: Max 382 Min 1.2 Mean 47.8 Cfsm 2.57 In. 34.87

Peak discharge (base, 350 cfs).--Jan. 22 (about 2 p.m.) 520 cfs (5.30 ft); Jan. 26 (about 3 a.m.) 415 cfs (5.03 ft); Apr. 6 (about 10 p.m.) 382 cfs (4.41 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

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 1958.

Gage.--Water-stage recorder. Datum of gage is 55.21 ft above mean sea level, datum of 1929.

Average discharge.--21 years, 46.6 cfs.

Extremes.--Maximum discharge during year, 510 cfs Jan. 23 (gage height, 3.59 ft); minimum, 2.2 cfs Oct. 5 (gage height, 0.14 ft).
1937-58: 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 good. Occasional regulation at low flow.

Rating tables, water year 1957-58, 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	
0.1	1.9	1.5	116	0.3	4.7
.3	3.4	2.0	182	.4	6.7
.5	7.0	3.0	345	.6	19
.8	32	3.3	415	1.0	51
1.0	51				

Note.--Same as preceding table above 1.0 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.7	3.9	44	126	114	248	119	159	34	6.7	51	13
2	2.6	5.2	33	166	97	153	106	122	31	6.3	46	11
3	2.5	15	21	104	80	138	86	108	30	5.9	25	8.4
4	2.5	10	18	66	66	136	74	130	27	5.7	18	6.7
5	2.3	6.5	15	51	60	152	66	117	25	13	13	6.3
6	2.4	5.4	13	46	*b55	*143	88	116	23	40	11	6.1
7	2.8	4.9	23	48	b52	127	270	188	22	56	8.4	6.7
8	3.8	4.7	32	36	b78	108	199	173	20	31	6.7	26
9	4.0	28	41	44	b64	90	136	150	20	25	6.3	22
10	3.7	29	98	b52	b51	82	106	116	20	18	5.9	17
11	3.5	14	189	58	b41	77	127	94	31	*14	*5.5	18
12	3.4	8.6	136	b53	b36	73	192	84	40	12	5.3	14
13	3.4	6.7	77	b49	b36	66	185	75	32	14	5.7	11
14	3.4	6.2	55	46	b36	79	170	66	32	13	5.9	8.4
15	3.3	33	50	150	b34	134	*138	60	26	12	5.7	6.7
16	3.2	40	46	278	b32	129	112	59	21	12	8.4	*6.5
17	3.3	23	45	199	b40	108	94	60	18	9.6	19	11
18	3.2	15	40	152	b39	94	84	55	16	7.3	17	*21
19	4.1	21	39	b113	b37	86	75	51	24	6.5	12	25
20	5.7	36	40	b87	b35	101	68	55	28	6.3	8.4	19
21	4.3	28	130	78	b34	136	62	56	24	5.9	6.5	16
22	3.9	19	162	269	b32	117	72	46	23	5.7	5.9	26
23	3.7	15	91	401	b33	120	116	45	20	5.7	5.7	28
24	3.8	12	67	210	b34	116	119	42	17	5.7	5.5	19
25	5.7	9.4	56	196	b39	114	84	46	14	5.7	17	14
26	5.7	7.8	69	415	46	123	68	102	12	5.5	52	12
27	4.4	6.7	*210	278	49	147	58	87	12	6.3	54	14
28	4.2	6.5	143	218	207	119	118	58	11	18	35	44
29	4.0	12	106	186	-	97	237	51	9.6	50	26	52
30	3.9	21	95	156	-------	84	207	44	7.3	62	22	32
31	*3.8	-------	74	135	-------	84	-------	38	-------	*32	17	---------
Total	113.2	453.5	2,258	4,466	1,557	3,581	3,636	2,651	669.9	516.8	530.8	520.8
Mean	3.65	15.1	72.8	144	55.6	116	121	85.5	22.3	16.7	17.1	17.4
Cfsm	0.166	0.686	3.31	6.55	2.53	5.27	5.50	3.89	1.01	0.759	0.777	0.791
In.	0.19	0.77	3.82	7.55	2.64	6.08	6.14	4.48	1.13	0.88	0.90	0.88

Calendar year 1957: Max 325 Min 0.25 Mean 31.6 Cfsm 1.44 In. 19.47
Water year 1957-58: Max 415 Min 2.3 Mean 57.4 Cfsm 2.61 In. 35.46

Peak discharge (base, 300 cfs).--Jan. 16 (6 a.m.) 305 cfs (2.79 ft); Jan. 23 (1 to 2 a.m.) 510 cfs (3.59 ft); Jan. 26 (11:30 a.m.) 455 cfs (3.43 ft); Feb. 28 (10 to 11 p.m.) 335 cfs (2.93 ft); Apr. 7 (1 p.m.) 305 cfs (2.81 ft).

* Discharge measurement made on this day.
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., 508,000,000 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, 5¼ miles northeast of Mascoma, N. H., 503,000,000 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, 537,000,000 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 662,000,000 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 952,000,000 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.

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.

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 1958. Records furnished by The Collins Co., Collinsville, Conn.

Reservoirs in Connecticut River basin--Continued

1875. Barkhamsted, East Branch and Nepaug Reservoirs in Farmington River basin are operated as a unit for municipal water supply and compensation for water diverted from river. The downstream order and capacity are as follows: Barkhamsted Reservoir on East Branch Farmington River, 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 1958. East Branch Reservoir on East Branch Farmington River, lat 41°52'49", long 72°57'30", 1 mile east of New Hartford, Litchfield County, Conn. Drainage area, 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 1958. Nepaug Reservoir on Nepaug River, 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 1958. All three reservoirs are equipped with water-stage recorders. 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 1958. 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 1958. Stage records furnished by Rockville Water & Aqueduct Co.

Month-end usable contents, in millions of cubic feet, water year October 1957 to September 1958

Date	First and Second Connecticut Lakes	Lake Francis	Moore Reservoir and Comerford Station Pond	Union Village Reservoir	Lakes and ponds in Mascoma River basin
Sept.30, 1957	2,653.5	3,167.5	5,439.8	1.5	730.9
Oct. 31	1,960.2	2,550.7	5,071.4	1.3	577.5
Nov. 30	1,993.9	2,624.6	5,185.8	10.4	837.6
Dec. 31	2,420.6	3,111.6	5,887.7	39.6	1,132.7
Jan. 31, 1958	1,196.3	2,072.8	4,279.8	16.1	1,053.6
Feb. 28	237.1	1,189.1	2,348.5	12.4	659.9
Mar. 31	117.4	539.3	1,439.0	10.8	310.6
Apr. 30	1,868.0	2,534.4	5,569.9	9.3	1,155.9
May 31	2,760.7	3,220.4	6,000.7	3.2	1,205.0
June 30	3,065.2	3,466.8	6,090.6	1.7	1,045.6
July 31	3,515.1	4,196.6	6,167.4	1.8	898.7
Aug. 31	3,252.3	3,772.6	5,870.0	1.5	747.1
Sept.30	2,879.3	3,381.0	5,853.5	1.5	602.7

	Sunapee Lake	Surry Mountain Reservoir	Otter Brook Reservoir	Birch Hill Reservoir	Tully Reservoir
Sept.30, 1957	265	0.1	-	1.3	0
Oct. 31	262	.1	-	1.3	0
Nov. 30	320	16.4	-	2.3	6.7
Dec. 31	666	157.0	-	9.5	19.5
Jan. 31, 1958	534	35.9	-	27.8	40.0
Feb. 28	428	37.5	-	5.1	22.0
Mar. 31	416	8.5	2.0	14.2	3.0
Apr. 30	939	624.4	374.0	114.4	15.3
May 31	634	51.0	1.3	3.9	.2
June 30	559	53.2	.4	1.8	0
July 31	517	56.3	1.3	2.8	.2
Aug. 31	398	54.2	.5	1.5	0
Sept.30	303	57.4	10.6	4.2	.1

	Somerset and Harriman Reservoirs	Quabbin Reservoir†	Ludlow Reservoir	Watershops Pond	Knightville Reservoir
Sept.30, 1957	4,577.8	44,459	142.9	39.6	0.1
Oct. 31	3,947.4	43,011	116.2	37.9	.1
Nov. 30	3,717.9	42,253	121.0	52.4	10.1
Dec. 31	5,405.0	43,328	181.1	52.7	21.4
Jan. 31, 1958	4,075.5	44,546	186.6	53.9	13.4
Feb. 28	2,288.4	45,168	181.9	52.4	16.0
Mar. 31	1,060.3	46,778	188.5	29.6	2.2
Apr. 30	5,734.5	50,218	194.0	31.9	119.2
May 31	6,487.2	51,781	183.3	51.6	1.8
June 30	6,227.4	51,740	179.4	52.4	.9
July 31	6,222.6	50,999	165.1	52.4	.8
Aug. 31	5,498.8	49,970	174.1	29.6	.1
Sept.30	5,203.9	49,296	179.4	30.4	.5

	Borden Brook and Cobble Mountain Reservoirs	Otis Reservoir	Barkhamsted, East Branch and Nepaug Reservoirs	Whigville Reservoir	Shenipsit Lake
Sept.30, 1957	1,690.1	438	3,829	4.9	558.1
Oct. 31	1,562.7	271	3,526	5.6	554.6
Nov. 30	1,528.9	173	3,344	4.8	561.6
Dec. 31	1,897.6	288	3,724	8.6	627.2
Jan. 31, 1958	2,101.7	389	4,080	8.7	683.0
Feb. 28	2,145.8	451	4,125	7.9	671.8
Mar. 31	2,380.4	528	4,765	8.8	720.4
Apr. 30	3,305.6	676	5,914	8.8	740.8
May 31	3,183.6	700	5,914	8.4	732.9
June 30	3,074.1	703	5,755	4.6	711.6
July 31	2,882.4	703	5,635	5.8	676.9
Aug. 31	2,731.1	703	5,389	5.9	644.3
Sept.30	2,688.7	688	5,281	7.1	640.4

† Affected by diversion from Ware River and 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 1958.
Gage.--Water-stage recorder. Datum of gage is 23.64 ft above mean sea level, datum of 1929.
Average discharge.--17 years, 22.4 cfs (adjusted).
Extremes (unadjusted for storage or diversion).--Maximum discharge during year, 355 cfs Jan. 22 (gage height, 4.38 ft); minimum, 0.02 cfs Oct. 6 (gage height, 0.67 ft).
1941-58: 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; minimum gage height, 0.48 ft Sept. 9-12, 1944.
Remarks.--Records excellent except those for periods of ice effect or backwater from leaves, rocks, 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 Oct. 1 to Nov. 10, July 16 to Sept. 18 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 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.9	1.9	29	61	46	166	53	82	16	3.6	19	3.5
2	.8	2.8	20	71	40	86	*43	60	16	3 2	13	2.8
3	.8	2.9	14	46	36	75	35	50	15	2.8	8.5	2.4
4	.7	2.8	12	34	30	83	32	61	12	2.5	5.3	2.1
5	.7	2.5	9.5	25	27	86	28	53	11	3.5	4.1	1.9
6	.6	2.2	8.5	23	24	*74	48	58	10	5 5	3.4	1.9
7	.6	2.0	18	24	*24	66	195	110	8.7	4.9	2.9	2.1
8	2.1	2.0	29	25	42	56	101	93	8.0	4.9	2.6	7.0
9	1.8	4.4	34	25	33	45	61	74	7.6	6.1	2.3	4.5
10	1.5	5.9	63	24	24	40	45	55	8.0	5 8	2.1	3.5
11	1.4	5.9	82	23	18	38	58	45	32	*4.1	*1.9	4.2
12	1.2	4.9	51	22	16	35	94	42	27	4.1	1.8	4.0
13	1.1	4.3	32	21	14	31	96	36	18	4.6	1.9	3.4
14	1.1	3.6	24	21	13	39	96	31	20	3 7	2.0	2.9
15	1.1	9.7	22	214	12	58	64	28	17	4.0	*2.0	2.2
16	1.0	18	20	208	12	55	48	27	12	3.5	7.0	*2.0
17	1.0	11	20	97	15	48	41	27	10	2.5	5.0	3.5
18	1.0	8.9	18	66	15	41	37	25	9.2	2.1	3.5	9.7
19	1.9	11	17	48	14	40	33	24	12	1.9	3.0	6.9
20	1.5	17	17	39	13	51	30	32	14	2.0	2.5	6.0
21	1.3	15	98	35	12	65	28	32	14	1.7	2.2	5.5
22	1.2	11	65	206	11	50	28	25	12	1.6	2.0	12
23	1.0	8.7	33	219	11	53	54	24	10	1.6	1.9	13
24	1.3	7.5	30	100	10	53	49	23	8.8	1.6	1.8	8.4
25	2.3	6.1	24	102	19	58	36	23	7.7	1.5	4.4	6.2
26	3.4	6.0	40	244	24	62	29	74	8.2	1.5	15	4.8
27	2.7	4.7	*125	138	24	71	26	46	7.6	2.0	12	5.4
28	2.4	4.7	63	102	184	51	114	33	6.0	*4.0	8.6	27
29	2.2	6.4	48	81	-	41	165	29	4.8	10	7.5	20
30	2.1	10	39	64	-------	35	127	24	4.2	7.5	5.4	13
31	*2.0	-------	34	53	-------	35	-------	19	-------	6.6	4.2	-------
Total	44.7	203.8	1,139.0	2,461	763	1,787	1,894	1,365	366.8	114.9	158.8	191.8
Mean	1.44	6.79	36.7	79.4	27.2	57.6	63.1	44.0	12.2	3.71	5.12	6.39
Cfsm	0.124	0.585	3.16	6.84	2.34	4.97	5.44	3.79	1.05	0.320	0.441	0.551
In.	0.14	0.65	3.64	7.89	2.44	5.73	6.07	4.37	1.17	0.37	0.51	0.61

Calendar year 1957: Max 222 Min 0.3 Mean 15.8 Cfsm 1.36 In. 18.47
Water year 1957-58: Max 244 Min 0.6 Mean 28.7 Cfsm 2.47 In. 33.59

Peak discharge (base, 200 cfs, unadjusted for storage or diversion).--Jan. 15 (8 p.m.) 345 cfs (4.33 ft); Jan. 22 (6 p.m.) 355 cfs (4.38 ft); Jan. 26 (8 a.m.) 280 cfs (3.98 ft); Feb. 28 (7 p.m.) 335 cfs (4.29 ft); Apr. 7 (6 a.m.) 250 cfs (3.80 ft); Apr. 28 (10:30 p.m.) 280 cfs (4.00 ft).

* Discharge measurement made on this day.
Note.--Backwater from leaves, rocks or aquatic vegetation Oct. 7-31; June 7 to July 11, Aug. 2 to Sept. 30. Stage-discharge relation affected by ice Dec. 5, 6, Jan. 11, 12, 19, Feb. 9-17, 19.

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 1958.

Gage.--Water-stage recorder and timber control. Datum of gage is 20.24 ft above mean sea level, datum of 1929.

Average discharge.--28 years, 208 cfs.

Extremes.--Maximum discharge during year, 1,150 cfs Jan. 26 (gage height, 5.40 ft); minimum, 37 cfs Oct. 7 (gage height, -0.04 ft).
1930-58: 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; mirimum observed gage height, -0.16 ft Aug. 10, 21, 1957.

Remarks.--Records good except those for periods of doubtful or 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 tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Aug. 25				Aug. 26 to Sept. 30	
0.0	40	3.0	530	0.2	61
.4	68	4.0	765	.8	115
1.0	117	5.2	1,090	1.5	201
2.0	286				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	d50	182	354	442	1,000	455	518	152	88	191	d74
2	48	d63	134	320	380	605	430	392	150	90	129	d71
3	46	82	105	*250	331	505	355	343	156	88	98	d69
4	46	74	98	194	286	542	331	355	146	84	86	d67
5	45	d64	89	164	254	592	320	355	134	100	78	d67
6	43	d58	92	159	236	518	410	405	129	212	74	d66
7	43	d57	100	160	232	468	938	680	133	202	d67	d88
8	60	d55	98	168	273	430	860	605	116	153	d64	142
9	63	134	140	168	246	392	568	518	116	160	d64	101
10	58	94	308	158	208	355	418	405	121	125	d54	96
11	53	71	442	158	187	320	455	331	153	120	d57	89
12	50	d62	297	139	170	297	655	308	153	182	*d54	d78
13	48	*d56	194	a138	168	219	680	282	135	168	105	d72
14	46	d56	159	a137	156	275	555	254	135	142	98	d67
15	44	90	149	489	156	492	480	246	117	125	90	d65
16	44	173	137	542	142	555	405	252	110	112	104	*d63
17	42	111	137	405	173	480	355	254	106	100	82	89
18	43	85	127	308	168	405	320	238	101	90	74	142
19	114	122	126	236	162	368	308	228	112	89	d67	139
20	76	139	139	210	a157	392	297	250	112	82	d64	107
21	64	104	561	208	a153	442	286	244	110	78	d62	94
22	*d62	87	570	809	a150	442	212	214	115	80	d61	123
23	d53	81	320	946	a147	492	364	200	108	90	d60	112
24	d69	76	240	631	a145	480	*418	182	105	86	d53	90
25	150	d72	198	625	a200	*442	331	246	101	82	156	82
26	86	d68	366	1,090	a300	492	267	405	102	76	188	80
27	68	d62	765	1,060	a300	530	242	320	143	94	142	132
28	d62	d62	527	890	a700	455	512	236	119	111	108	194
29	d56	90	355	745	-	380	705	200	100	110	92	151
30	d52	143	297	605	--------	355	655	178	92	96	d81	113
31	d48	--------	244	518	--------	368	--------	164	--------	133	d76	--------
Total	1,831	2,541	7,696	12,978	6,622	14,088	13,587	9,808	3,682	3,548	2,779	2,923
Mean	59.1	84.7	248	419	236	454	453	316	123	114	89.6	97.4
Cfsm	0.542	0.777	2.28	3.84	2.17	4.17	4.16	2.90	1.13	1.05	0.822	0.894
In.	0.62	0.87	2.63	4.43	2.26	4.81	4.64	3.34	1.26	1.21	0.95	1.00

Calendar year 1957: Max 815 Min 30 Mean 127 Cfsm 1.17 In. 15.81
Water year 1957-58: Max 1,090 Min 42 Mean 225 Cfsm 2.06 In. 28.02

Peak discharge (base, 900 cfs).--Jan. 22 (12:30 p.m.) 1,090 cfs (5.20 ft); Jan. 26 (9:30 p.m.) 1,150 cfs (5.40 ft); Mar. 1 (1 a.m.) 1,120 cfs (5.26 ft); Apr. 7 (8 p.m.) 1,120 cfs (5.26 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 nearby streams.
d Doubtful gage-height record; discharge estimated on basis of recorder graph, weather records, records for nearby streams, and supplemental staff-gage readings taken twice daily.

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 1958. 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.--22 years, 116 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 1,090 cfs Dec. 21 (gage height, 5.64 ft); minimum daily, 9.1 cfs Aug. 6.

1936-58: 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. Flow regulated by powerplants above station. 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-15		Oct. 16 to Apr. 23			Apr. 24 to Sept. 30			
2.1	23	2.0	19	3.5	267	1.8	7.5	2.5	62
2.3	41	2.3	43	4.0	412	2.0	17	3.0	152
		2.7	98	5.0	800	2.2	30	3.5	267
		3.1	175	5.5	1,020				

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

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	32	92	95	66	50	161	338	38	22	26	26
2	*33	36	55	98	59	45	155	220	54	22	22	28
3	33	46	41	67	57	48	151	229	66	23	37	29
4	32	42	38	48	51	58	198	345	51	20	32	29
5	32	*38	31	37	51	57	272	260	42	20	15	*31
6	29	37	30	40	52	58	419	197	38	23	9.1	29
7	31	34	34	45	50	57	702	*230	38	26	10	29
8	37	34	38	47	50	52	541	272	34	34	19	34
9	39	47	48	45	47	48	369	220	55	36	29	34
10	35	38	84	42	52	54	325	142	56	46	22	41
11	35	33	*137	44	44	60	366	117	84	65	22	39
12	30	29	78	36	43	66	275	156	90	72	22	34
13	25	27	51	41	44	64	262	133	57	42	29	33
14	30	28	48	40	43	70	425	119	49	34	43	28
15	29	58	42	*43	40	73	662	111	38	35	47	30
16	35	55	43	45	41	58	827	137	34	92	41	34
17	35	37	43	46	52	57	850	144	33	125	25	63
18	29	37	38	44	50	53	827	107	33	57	29	115
19	38	74	40	35	44	52	854	98	33	63	29	100
20	34	79	241	44	41	53	755	97	32	68	32	61
21	33	49	770	40	41	55	714	135	30	46	32	47
22	32	41	299	62	39	58	674	90	29	36	47	78
23	32	36	131	80	36	53	832	61	29	*84	40	65
24	34	30	82	78	39	60	542	58	*29	61	32	47
25	41	32	64	74	42	70	334	59	32	42	57	41
26	38	30	110	88	41	80	230	83	27	34	60	39
27	29	28	305	111	*42	*96	169	65	26	34	43	69
28	32	25	173	114	47	107	303	55	25	30	38	142
29	33	36	102	98	-	124	496	56	24	27	34	85
30	32	52	84	85	--------	137	742	50	18	26	32	52
31	33	--------	68	74	--------	163	--------	43	--------	25	29	--------
Total	1,024	1,200	3,440	1,886	1,304	2,136	14,432	4,427	1,224	1,350	984.1	1,512
Mean	33.0	40.0	111	60.8	46.6	68.9	481	143	40.8	43.5	31.7	50.4
(†)	9.28	4.33	5.64	6.59	8.07	8.09	10.1	8.88	8.77	8.04	7.84	7.53

Adjusted for diversion

Mean	42.3	44.3	117	67.4	54.6	77.0	491	152	49.6	51.6	39.6	57.9
Cfsm	0.741	0.776	2.05	1.18	0.956	1.35	8.60	2.66	0.869	0.904	0.694	1.01
In.	0.85	0.87	2.35	1.36	1.00	1.55	9.60	3.06	0.97	1.04	0.80	1.13

	Observed			Adjusted		
Calendar year 1957:	Max 770	Min 13	Mean 64.7	Mean 75.6	Cfsm 1.32	In. 17.96
Water year 1957-58:	Max 854	Min 9.1	Mean 95.7	Mean 103	Cfsm 1.80	In. 24.58

Peak discharge (base, 1,150 cfs).--No peak above base.

* 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.

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 1958.

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.--45 years, 528 cfs.

Extremes.--Maximum discharge during year, 2,810 cfs Apr. 8 (gage height, 6.93 ft); minimum daily, 35 cfs Sept. 14.
1913-58: 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, which are fair. Flow regulated by powerplants above station.

Revisions (water years).--WSP 415: 1931 calendar year. WSP 781: 1928(M). WSP 1051: 1928, 1933. WSP 1301: 1914-15(M), 1917-27(M), 1929-31(M).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used July 24)

1.9	32	4.0	735
2.1	48	5.0	1,500
2.5	97	6.0	2,200
3.0	209	7.0	2,870
3.5	407		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	120	131	282	630	428	346	1,060	2,040	241	125	209	94
2	*168	148	324	682	346	296	1,020	1,560	304	148	209	65
3	162	76	238	539	374	337	938	1,270	365	142	104	86
4	129	216	208	b385	338	402	962	1,430	301	65	165	125
5	162	144	158	b310	334	393	1,090	1,430	260	137	170	*127
6	94	170	160	343	334	379	1,400	1,220	254	137	158	133
7	164	*168	158	347	313	388	2,610	1,160	282	131	112	99
8	109	124	116	343	309	365	*2,760	*1,260	170	118	144	180
9	128	160	232	321	b215	282	2,370	1,260	269	278	172	137
10	124	140	253	301	b320	367	1,840	1,110	321	226	106	116
11	135	184	457	b290	298	392	1,620	858	365	209	200	212
12	133	170	*472	b265	264	439	1,570	858	381	455	135	174
13	81	148	334	b360	282	434	1,400	842	393	347	122	149
14	132	119	220	294	b255	466	1,400	667	313	290	398	35
15	115	206	249	*298	249	449	1,610	638	232	260	338	129
16	97	189	296	301	b210	345	2,040	652	216	194	338	123
17	118	175	239	301	b295	393	2,350	668	224	365	170	210
18	93	209	264	286	b260	365	2,440	557	183	455	226	382
19	168	226	203	b185	b290	356	2,420	570	202	313	165	532
20	77	298	631	b300	b235	356	2,210	513	207	249	160	412
21	174	289	2,340	268	b265	360	2,070	545	208	347	194	283
22	117	252	2,560	334	264	360	1,850	552	162	278	229	375
23	114	133	1,840	484	194	294	1,900	495	197	298	253	379
24	129	159	1,140	459	295	372	2,060	418	170	*369	120	330
25	144	204	842	378	274	434	1,790	344	161	338	249	290
26	136	122	728	444	298	519	1,360	502	158	271	379	264
27	105	168	1,300	648	298	*660	994	455	*160	178	274	246
28	148	88	1,330	720	309	735	1,060	389	172	290	194	545
29	124	137	1,060	608	-	834	1,400	348	115	219	175	539
30	135	184	826	526	-------	842	2,030	334	172	189	235	369
31	128	-------	630	472	-------	1,020	-------	338	-------	186	222	---------
Total	3,963	5,137	20,090	12,402	8,146	13,980	51,624	25,281	7,158	7,607	6,325	7,140
Mean	128	171	648	400	291	451	1,721	816	239	245	204	238
Cfsm	0.457	0.611	2.31	1.43	1.04	1.61	6.15	2.91	0.854	0.875	0.729	0.850
In.	0.53	0.68	2.67	1.65	1.08	1.86	6.86	3.36	0.95	1.01	0.84	0.95

Calendar year 1957: Max 2,560 Min 26 Mean 339 Cfsm 1.21 In. 16.45
Water year 1957-58: Max 2,760 Min 35 Mean 463 Cfsm 1.65 In. 22.44

Peak discharge (base, 2,400 cfs).--Dec. 21 (7 a.m.) 2,710 cfs (6.78 ft); Apr. 8 (6 to 9 a.m.) 2,810 cfs (6.93 ft); Apr. 18 (5 to 9 a.m.) 2,460 cfs (6.42 ft).

* Discharge measurement made on this day.
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 1958.

Gage.--Water-stage recorder. Altitude of gage is 690 ft (from topographic map).

Average discharge.--7 years, 89.6 cfs.

Extremes.--Maximum discharge during year, 1,520 cfs Dec. 21 (gage height, 6.97 ft), from rating curve extended above 880 cfs by logarithmic plotting; minimum, 3.7 cfs Oct. 15-18.
1951-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 20				Dec. 21 to Sept. 30			
2.1	3.4	3.2	180	2.3	7.8	3.5	203
2.2	10	3.5	255	2.4	15	4.0	339
2.6	56	4.0	390	2.7	47	5.0	700
2.9	108			3.0	99	6.0	1,100

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	4.6	51	188	101	62	294	266	43	14	24	11
2	4.6	4.6	40	158	99	53	285	222	47	11	21	10
3	*4.1	5.8	33	123	91	54	268	245	50	11	18	9.7
4	4.1	5.2	29	95	82	90	314	268	41	11	17	9.7
5	4.1	5.2	25	84	78	80	358	220	37	11	14	*9.7
6	4.1	5.2	21	82	75	84	607	196	46	13	14	8.4
7	4.1	*4.6	18	80	71	90	*988	222	39	13	13	9.0
8	4.1	5.2	19	80	69	82	624	*237	32	24	16	9.7
9	4.1	5.8	23	71	69	73	442	205	45	31	20	9.0
10	4.1	5.8	38	62	67	75	370	181	48	21	16	10
11	4.1	5.2	68	64	62	84	370	166	46	25	15	9.7
12	4.1	5.2	*53	59	62	95	339	177	50	54	15	9.7
13	4.1	4.6	44	53	58	95	299	152	41	32	14	9.0
14	4.1	4.6	42	50	56	109	302	137	37	24	14	8.4
15	3.7	7.2	41	*52	54	103	317	129	33	21	16	7.8
16	3.7	5.2	39	50	52	93	308	131	30	20	15	7.8
17	3.7	5.2	38	47	54	88	274	121	28	26	14	16
18	3.7	5.2	34	46	51	84	237	107	27	22	13	43
19	6.5	10	33	41	48	80	203	99	26	21	11	62
20	4.6	19	356	41	45	86	175	90	25	23	11	43
21	4.6	24	954	43	44	82	158	109	24	19	11	36
22	4.6	20	376	80	42	78	145	88	24	18	16	78
23	4.6	18	247	103	41	78	238	80	22	33	15	56
24	4.6	16	199	78	40	90	199	71	20	*34	14	41
25	4.6	12	160	76	41	117	164	76	19	27	25	35
26	4.6	11	258	109	41	147	143	80	18	24	27	32
27	4.6	8.0	446	158	*40	*173	129	67	*16	31	20	71
28	4.6	8.0	271	154	52	190	203	58	15	29	17	144
29	4.6	8.9	225	129	-	215	224	54	14	25	15	86
30	4.6	21	188	119	-------	242	396	53	14	23	14	87
31	4.6	-------	166	109	-------	291	-------	47	-------	23	12	-------
Total	136.1	270.3	4,535	2,684	1,685	3,363	9,373	4,354	957	714	497	958.6
Mean	4.39	9.01	146	86.6	60.2	108	312	140	31.9	23.0	16.0	32.0
Cfsm	0.084	0.172	2.78	1.65	1.15	2.06	5.94	2.67	0.608	0.438	0.305	0.610
In.	0.10	0.19	3.21	1.90	1.19	2.38	6.64	3.08	0.68	0.51	0.35	0.68

Calendar year 1957: Max 954 Min 3.7 Mean 56.1 Cfsm 1.07 In. 14.52
Water year 1957-58: Max 988 Min 3.7 Mean 80.9 Cfsm 1.54 In. 20.91

Peak discharge (base, 750 cfs).--Dec. 21 (8:30 to 9 a.m.) 1,520 cfs (6.97 ft); Apr. 7 (12:30 a.m.) 1,500 cfs (6.93 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 4, 10, 12, 13, 18-20, Feb. 4, 5, 8-23,

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 1958.

Gage.--Water-stage recorder. Datum of gage is 645.72 ft above mean sea level, datum of 1929.

Average discharge.--9 years, 86.4 cfs.

Extremes.--Maximum discharge during year, 1,520 cfs Apr. 6 (gage height, 7.58 ft); minimum, 4.1 cfs Oct. 3, 4 (gage height, 1.33 ft).

1949-58: 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. Infrequent regulation at low flow.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 21, Apr. 30 to Sept. 30				Dec. 22 to Apr. 29			
1.3	3.2	4.0	305	2.0	23	5.0	505
1.5	9.7	5.0	505	2.4	61	6.0	770
1.7	19	6.0	770	3.0	134	7.0	1,190
2.0	41.	7.0	1,190	4.0	280		
3.0	142						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.4	7.5	80	110	83	128	205	255	64	10	30	11
2	4.6	13	45	b106	71	93	187	184	63	9.3	18	11
3	4.6	14	28	69	61	91	175	196	64	8.6	14	10
4	4.4	12	24	48	58	113	237	226	57	8.6	12	9.7
5	4.4	10	16	38	56	90	284	176	52	9.3	11	9.0
6	4.4	9.0	15	38	47	87	574	154	57	14	11	8.6
7	4.4	7.9	18	40	46	87	885	245	51	14	11	11
8	7.5	8.2	27	41	b44	75	556	249	49	51	*13	16
9	8.7	38	42	40	b43	b66	335	185	51	47	11	11
10	6.8	22	77	b40	b41	74	288	145	53	19	9.7	18
11	5.5	14	*128	39	b38	90	335	129	55	24	9.0	14
12	5.2	11	b71	b34	*b36	96	288	128	84	35	8.6	11
13	5.5	9.7	b51	32	35	*89	272	118	61	46	8.3	10
14	5.5	9.3	b45	31	33	93	*345	110	51	20	10	9.3
15	5.5	35	41	34	29	90	442	107	41	18	73	9.7
16	5.2	26	35	37	b27	78	468	110	35	14	57	9.7
17	5.2	16	33	37	b32	71	405	110	30	11	30	74
18	5.5	14	27	36	b33	65	345	101	30	9.3	15	218
19	25	*27	32	b30	b31	65	288	98	38	9.7	12	134
20	15	53	240	b27	b29	67	235	96	35	9.0	11	86
21	10	32	897	b25	b28	67	188	99	35	8.3	11	73
22	7.9	20	312	91	b26	68	160	90	55	8.3	61	101
23	7.2	16	154	154	b25	66	283	89	47	17	35	76
24	7.9	15	101	b109	b28	69	220	82	35	16	18	64
25	22	14	75	89	35	87	151	122	27	11	54	56
26	13	13	317	137	36	114	124	137	25	12	61	51
27	10	9.0	510	190	36	128	109	101	33	120	32	86
28	9.0	11	220	171	104	131	271	88	20	65	*25	127
29	8.3	20	157	125	-	150	360	92	14	44	16	88
30	7.2	44	124	107	-------	160	572	82	*11	30	13	70
31	7.2	-------	97	90	-------	193	-------	72	-------	*22	11	-------
Total	247.0	550.6	4,039	2,195	1,191	2,941	9,587	4,176	1,323	738.4	711.6	1,483.0
Mean	7.97	18.4	130	70.8	42.5	94.9	320	135	44.1	23.8	23.0	49.4
Cfsm	0.165	0.382	2.70	1.47	0.882	1.97	6.64	2.80	0.915	0.494	0.477	1.02
In.	0.19	0.43	3.11	1.70	0.92	2.27	7.41	3.23	1.02	0.57	0.55	1.14

Calendar year 1957: Max 610 Min 2.4 Mean 43.3 Cfsm 0.898 In. 12.21
Water year 1957-58: Max 897 Min 4.4 Mean 80.0 Cfsm 1.66 In. 22.54

Peak discharge (base, 800 cfs).--Dec. 31 (6 a.m.) 1,400 cfs (7.40 ft); Dec. 26 (8 p.m.) 960 cfs (6.50 ft); Apr. 6 (10 p.m.) 1,520 cfs (7.58 ft); Apr. 30 (12:30 a.m.) 1,000 cfs (6.58 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 1958.

Gage.--Water-stage recorder. Datum of gage is 552.34 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--46 years, 1,076 cfs.

Extremes.--Maximum discharge during year, 6,290 cfs Apr. 8 (gage height, 10.56 ft); minimum, 67 cfs Sept. 16; minimum daily, 119 cfs Oct. 13.
1912-58: 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 excellent except those for periods of ice effect or no gage-height record, which are good. Low flow completely regulated by powerplant of Connecticut Power Co. Records of water temperatures for the water year 1958 are given in WSP 1571.

Revisions.--WSP 781: Drainage area.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	101
1.5	252
3.0	955
6.0	2,650
10.5	6,200

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	280	183	448	1,570	1,290	1,100	2,470	3,940	700	269	328	343
2	176	184	630	1,580	1,130	1,050	2,470	3,560	700	250	429	340
3	183	210	510	1,360	994	1,020	2,350	2,860	650	246	302	190
4	196	144	390	1,000	950	1,190	2,350	2,860	700	242	257	182
5	166	298	240	800	890	1,300	2,590	2,790	650	160	286	222
6	194	164	274	870	886	1,260	3,040	2,590	600	284	252	222
7	134	186	319	882	770	1,240	5,480	2,530	550	272	254	225
8	200	220	291	830	800	1,130	6,200	2,850	600	336	*231	228
9	192	232	303	600	700	988	5,750	2,850	500	445	324	280
10	158	266	638	700	600	934	4,820	2,410	650	512	233	265
11	153	206	*798	750	750	1,050	4,180	2,110	700	359	218	187
12	176	251	914	600	700	1,200	3,860	1,880	900	604	288	310
13	119	233	723	550	600	*1,190	3,490	1,820	900	768	224	348
14	153	180	618	550	650	1,290	*3,280	1,660	900	439	238	195
15	144	256	438	650	600	1,260	3,350	1,500	700	406	729	182
16	144	459	471	700	550	1,160	3,700	1,470	450	336	640	175
17	134	222	508	800	450	990	3,940	1,410	500	318	484	399
18	151	294	394	700	550	995	4,100	1,460	450	508	288	1,010
19	180	*311	498	550	600	951	4,100	1,270	350	578	412	1,280
20	201	442	617	500	600	958	3,780	1,200	400	422	245	1,160
21	128	534	3,900	450	550	952	3,490	1,250	500	352	272	877
22	192	398	4,820	850	650	937	3,140	1,280	450	434	463	870
23	146	368	4,260	1,200	600	920	3,140	1,130	400	424	440	966
24	178	204	3,210	1,300	550	922	3,490	1,050	450	541	432	793
25	180	251	2,110	1,250	650	1,200	3,210	1,000	300	503	361	656
26	206	290	1,820	1,200	700	1,350	2,790	1,250	350	500	628	510
27	184	246	3,140	1,760	650	1,700	2,230	1,250	400	1,050	767	566
28	168	204	3,000	1,990	800	1,760	2,050	1,050	350	582	488	998
29	178	232	2,590	1,930	-	1,820	2,790	1,000	200	542	366	1,270
30	166	372	2,110	1,610	-------	1,990	3,940	950	250	350	292	996
31	164	-------	1,820	1,410	-------	2,170	-------	900	-------	434	385	-------
Total	5,324	8,040	43,002	31,692	20,210	37,977	105,570	56,750	16,200	13,446	11,556	16,245
Mean	172	268	1,387	1,022	722	1,225	3,519	1,831	540	434	373	542
Cfsm	0.272	0.424	2.19	1.62	1.14	1.94	5.57	2.90	0.854	0.687	0.547	0.858
In.	0.31	0.47	2.52	1.87	1.19	2.24	6.21	3.34	0.95	0.79	0.63	0.96

Calendar year 1957: Max 4,820 Min 93 Mean 682 Cfsm 1.05 In. 14.17
Water year 1957-58: Max 6,200 Min 119 Mean 1,003 Cfsm 1.59 In. 21.48

Peak discharge (base, 3,600 cfs).--Dec. 21 (5 p.m.) 5,140 cfs (9.33 ft); Apr. 8 (1 p.m.) 6,290 cfs (10.56 ft); Apr. 30 (8 to 9 p.m.) 4,180 cfs (8.08 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 4-6, 8-26, 30, Feb. 4, 5, Feb. 8 to Mar. 2. No gage-height record May 24 to June 30; discharge estimated on basis of powerplant data.

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 1958. Monthly discharge only for period 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.--29 years, 298 cfs.

Extremes.--Maximum discharge during year, 2,550 cfs Apr. 7 (gage height, 6.25 ft); minimum, 7 cfs Oct. 7 (gage height, 0.67 ft); minimum daily, 7 cfs Oct. 7.
1929-58: 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, that of Oct. 7, 1957.

Remarks.--Records excellent except those for periods of ice effect and backwater from aquatic growth, which are good. Infrequent regulation at low flow.

Revisions (water years).--WSP 1201: 1939.

Rating table, water year 1957-58, except periods of ice effect and backwater from aquatic growth (gage height, in feet, and discharge, in cubic feet per second)

0.5	7	2.0	255
.6	13	3.0	600
.8	30	4.0	1,070
1.0	52	6.0	2,390
1.5	135		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	20	86	492	548	1,100	1,100	920	222	74	65	36
2	8	21	*84	453	492	752	1,100	752	219	66	59	33
3	8	25	69	b345	431	708	995	662	212	62	55	31
4	8	26	60	b260	362	895	970	730	187	60	52	29
5	8	26	51	b230	343	820	970	685	173	95	47	28
6	8	25	b48	b230	319	752	1,250	662	162	164	44	27
7	7	24	46	245	304	775	2,390	752	144	127	38	28
8	14	23	58	234	288	685	2,010	820	137	*146	36	33
9	15	27	69	216	250	596	1,440	708	144	192	35	35
10	15	37	106	b200	b230	584	1,140	620	157	135	35	36
11	15	33	162	b190	b220	576	1,100	560	164	111	34	35
12	13	29	153	170	b200	*600	1,290	540	252	125	32	*34
13	12	27	b120	170	b200	592	1,140	492	192	102	*33	33
14	12	26	b110	b170	b180	640	1,040	442	166	91	32	32
15	12	38	102	b250	b160	620	895	488	146	84	31	30
16	15	53	94	288	b140	620	775	520	127	80	38	29
17	15	51	92	255	b180	588	775	480	115	74	40	71
18	15	45	84	237	b210	552	662	435	106	68	36	175
19	18	44	83	b180	b200	532	600	408	115	62	33	222
20	18	50	280	b170	b170	544	552	386	113	58	31	153
21	20	55	1,570	b160	b150	516	508	366	110	55	29	119
22	20	47	1,120	b500	b150	496	469	337	111	51	81	142
23	19	41	730	1,170	b160	504	556	316	106	53	72	135
24	20	37	560	752	b150	544	620	296	97	68	47	108
25	23	36	431	620	b160	620	*492	340	91	63	56	89
26	26	34	561	920	b180	752	428	472	86	53	87	78
27	26	32	1,170	1,200	b170	870	389	369	111	52	68	100
28	25	31	820	1,100	b800	845	575	319	106	97	*55	199
29	23	28	708	*870	-	870	752	296	91	86	47	150
30	21	42	588	730	-------	895	1,120	266	81	75	41	121
31	19	-------	496	620	-------	995	-------	242	-------	66	38	-------
Total	487	1,033	10,711	13,627	7,347	21,438	28,103	15,679	4,243	2,695	1,407	2,371
Mean	15.7	34.4	346	440	262	692	937	506	141	86.9	45.4	79.0
Cfsm	0.077	0.169	1.70	2.16	1.28	3.39	4.59	2.48	0.691	0.426	0.223	0.387
In.	0.09	0.19	1.96	2.49	1.33	3.91	5.12	2.86	0.77	0.49	0.26	0.43

Calendar year 1957: Max 1,570 Min 7 Mean 173 Cfsm 0.848 In. 11.48
Water year 1957-58: Max 2,390 Min 7 Mean 299 Cfsm 1.47 In. 19.90

Peak discharge (base, 1,400 cfs).--Dec. 21 (4 to 5 p.m.) 1,760 cfs (5.15 ft); Apr. 7 (5 to 6 p.m.) 2,550 cfs (6.25 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from aquatic growth Oct. 1 to Dec. 19, July 15 to Sept. 17.

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 1958.

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.--18 years (1940-58), 1,668 cfs.

Extremes.--Maximum discharge during year, 10,300 cfs Apr. 7 (gage height, 8.80 ft); minimum daily, 152 cfs Oct. 18.

1900-1914, 1940-58: 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 above station.

Revisions (water years).--WSP 1301: 1949.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.1	85	2.5	680
1.2	165	3.0	1,000
1.3	198	4.0	1,920
1.5	260	6.0	4,600
2.0	450	8.5	9,580

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	205	253	621	2,550	2,160	2,480	4,280	5,630	1,150	438	584	400
2	326	266	*672	2,430	1,960	2,110	4,440	4,930	1,050	386	492	432
3	256	249	748	2,030	1,710	2,010	4,120	4,280	1,020	314	525	416
4	274	328	624	1,560	1,500	2,340	4,120	4,280	1,010	370	427	238
5	246	264	499	1,250	1,420	2,390	4,440	4,120	948	582	381	253
6	218	330	311	1,310	1,420	2,380	5,680	3,970	901	468	392	298
7	282	211	480	1,260	1,400	2,330	9,580	4,120	826	524	356	297
8	261	296	479	b1,240	1,260	2,160	9,580	4,280	748	644	338	372
9	284	330	476	b1,160	1,270	1,900	8,450	3,970	801	736	312	305
10	278	382	641	b1,050	b1,060	1,800	7,170	3,600	824	784	349	354
11	258	358	952	b1,080	b920	1,980	6,380	3,180	938	726	345	395
12	197	316	1,160	b1,050	b1,130	2,150	6,190	2,860	1,210	701	272	292
13	254	342	1,020	b980	b1,070	2,200	5,630	2,730	1,210	844	334	325
14	224	335	861	869	b930	2,290	5,270	2,490	1,040	656	362	412
15	236	316	790	1,120	b970	2,280	5,100	2,340	937	688	440	322
16	206	442	666	1,080	834	2,160	*5,270	2,320	847	597	728	251
17	242	572	678	1,080	788	1,930	5,450	2,210	578	508	678	421
18	152	350	670	1,080	b920	*1,870	5,450	2,190	729	488	548	872
19	284	431	556	b800	b950	1,790	5,270	1,960	662	657	381	1,540
20	294	456	1,330	b840	b990	1,880	5,100	1,890	542	612	428	1,380
21	274	620	6,920	792	b930	1,770	4,600	1,810	596	536	266	1,130
22	215	549	6,770	b1,560	940	1,760	4,280	1,740	682	494	496	1,080
23	218	521	5,630	2,920	b890	1,770	4,280	1,690	622	578	532	1,140
24	194	446	4,600	2,370	852	1,780	4,760	1,590	578	578	541	1,050
25	350	287	3,180	2,200	b995	2,080	4,280	1,550	560	642	542	851
26	306	294	3,140	2,670	1,160	2,530	3,820	2,020	429	644	*565	768
27	303	421	5,100	3,390	1,020	3,120	3,120	1,820	547	618	702	726
28	246	322	4,760	3,600	2,050	3,120	3,250	1,540	512	1,140	770	1,040
29	250	326	3,970	3,250	-	3,250	4,280	1,540	388	756	662	1,400
30	246	338	3,320	2,800	--------	3,390	6,000	1,390	368	695	443	1,310
31	238	--------	2,800	2,400	--------	3,820	--------	1,290	--------	521	326	--------
Total	7,817	10,951	64,424	53,771	33,499	70,820	159,640	85,330	23,253	19,325	14,417	20,070
Mean	252	365	2,078	1,735	1,196	2,285	5,321	2,753	775	623	465	669
Cfsm	0.254	0.367	2.09	1.75	1.20	2.30	5.35	2.77	0.780	0.627	0.468	0.673
In.	0.29	0.41	2.41	2.02	1.25	2.65	5.97	3.19	0.87	0.72	0.54	0.75

Calendar year 1957: Max 6,920 Min 114 Mean 1,010 Cfsm 1.02 In. 13.80
Water year 1957-58: Max 9,580 Min 152 Mean 1,543 Cfsm 1.55 In. 21.07

Peak discharge (base, 4,500 cfs).--Dec. 21 (9 p.m.) 8,010 cfs (7.83 ft); Dec. 27 (5 p.m.) 5,450 cfs (6.48 ft); Apr. 7 (6 p.m.) 10,300 cfs (8.80 ft); Apr. 30 (4 to 5 p.m.) 6,190 cfs (6.93 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 1958.

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.--27 years, 123 cfs.

Extremes.--Maximum discharge during year, 1,590 cfs Feb. 28 (gage height, 8.71 ft); minimum, 14 cfs Oct. 6; minimum daily, 15 cfs Oct. 5, 6; minimum gage height, 1.84 ft Sept. 16.
1931-58: 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.

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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	23	106	248	248	*975	326	344	62	38	44	23
2	17	32	*88	258	218	510	318	243	60	36	40	22
3	16	43	60	196	186	393	258	209	80	34	35	24
4	16	41	52	160	161	422	228	238	64	33	31	24
5	15	35	49	130	149	430	200	258	54	34	31	24
6	15	31	46	120	138	326	220	279	53	53	31	27
7	17	27	63	110	130	268	475	356	48	*62	30	29
8	53	26	102	120	141	238	550	408	42	59	29	72
9	114	47	102	110	128	200	422	306	42	60	28	44
10	59	60	182	100	110	178	323	279	46	49	25	38
11	35	39	200	95	100	173	295	178	73	44	23	41
12	27	32	164	90	90	*165	400	200	80	94	24	*33
13	23	29	111	85	85	157	465	178	58	110	*41	30
14	20	28	90	100	78	161	422	153	62	76	42	27
15	21	58	84	277	74	209	351	173	51	65	33	25
16	21	105	82	439	63	214	290	204	42	66	32	26
17	20	62	82	304	83	196	253	191	38	58	30	47
18	20	43	77	191	104	191	228	153	36	49	25	89
19	31	44	74	161	97	191	204	141	43	46	25	86
20	37	82	124	153	95	200	186	130	46	45	24	55
21	28	75	482	145	92	200	173	124	47	37	23	46
22	25	53	685	350	95	191	165	107	52	37	25	61
23	23	43	450	775	93	204	204	98	49	46	25	57
24	24	37	305	555	91	214	263	89	42	46	22	44
25	45	34	225	311	125	248	*204	104	39	43	32	39
26	46	37	250	535	214	291	161	254	44	41	58	38
27	32	35	742	675	157	380	141	173	78	37	38	78
28	26	33	615	535	803	354	215	107	61	36	32	186
29	25	36	430	*447	-	312	393	92	46	42	30	80
30	24	50	334	360	-------	296	393	78	39	45	28	56
31	22	-------	258	296	-------	279	-------	69	-------	43	25	-------
Total	913	1,320	6,714	8,431	4,148	8,766	8,726	5,916	1,577	1,564	961	1,471
Mean	29.5	44.0	217	272	148	283	291	191	52.6	50.5	31.0	49.0
Cfsm	0.431	0.642	3.17	3.97	2.16	4.13	4.25	2.79	0.786	0.737	0.453	0.715
In.	0.50	0.72	3.66	4.58	2.25	4.76	4.74	3.22	0.86	0.85	0.52	0.80

Calendar year 1957: Max 742 Min 15 Mean 86.8 Cfsm 1.27 In. 17.20
Water year 1957-58: Max 975 Min 15 Mean 138 Cfsm 2.01 In. 27.46

Peak discharge (base, 600 cfs).--Dec. 22 (2 to 3 a.m.) 805 cfs (7.47 ft); Dec. 27 (3 p.m.) 940 cfs (7.71 ft); Jan. 23 (10 a.m.) 885 cfs (7.59 ft); Jan. 26 (11 to 12 p.m.) 802 cfs (7.43 ft); Feb. 28 (10 to 11 p.m.) 1,590 cfs (8.71 ft); Apr. 7 (8 to 10 p.m.) 675 cfs (7.18 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 4-14, Feb. 10-25. Backwater from aquatic vegetation Oct. 1 to Dec. 21, May 11 to Sept. 30.

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2025. Shepaug River at Woodville, Conn.

Location.--Lat 41°43'24", long 73°17'37", at 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 1958.

Gage.--Nonrecording gage at dam or at auxiliary artificial control below dam; read usually once daily.

Average discharge.--23 years, 86.4 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 1,810 cfs Dec. 21; no flow at times (result of regulation).
1935-58: 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 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. 239).

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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	1.2	0	158	125	148	315	279	37	2.4	2.4	2.4
2	2.4	0	0	180	107	125	302	206	31	2.4	2.4	2.4
3	2.4	0	0	113	87	122	268	162	24	2.4	2.4	2.4
4	2.4	0	0	71	71	180	302	218	8.8	2.4	2.4	2.4
5	2.4	0	0	53	67	155	385	187	4.6	2.4	2.4	2.4
6	2.4	0	0	53	64	138	550	173	2.9	160	2.4	2.4
7	2.4	0	0	53	64	128	983	250	2.4	84	2.4	2.4
8	2.4	0	0	59	62	125	625	250	2.4	90	2.4	2.4
9	2.4	0	0	53	55	113	370	250	2.4	110	2.4	2.4
10	2.4	0	0	b50	49	104	315	169	2.4	49	2.4	2.4
11	2.4	0	0	b45	42	122	328	145	2.4	29	2.4	2.4
12	2.4	0	0	b40	40	151	284	128	17	51	2.4	2.4
13	2.4	0	0	b40	38	169	302	95	11	55	2.4	2.4
14	2.4	0	0	b40	37	180	385	90	2.4	46	2.4	2.4
15	2.4	0	0	55	37	135	341	84	2.4	29	2.4	2.4
16	2.4	0	0	59	37	125	315	98	2.4	23	10	2.4
17	2.4	0	0	49	37	113	284	101	2.4	16	2.4	2.4
18	2.4	0	0	46	37	98	246	90	2.4	13	2.4	2.4
19	2.0	0	0	44	35	87	210	74	2.4	2.4	2.4	2.4
20	2.4	0	0	40	35	82	180	69	2.4	2.4	2.4	2.4
21	2.4	0	1,200	37	35	76	148	64	2.4	2.4	2.4	2.4
22	2.4	0	560	110	35	76	131	59	2.4	2.4	2.4	2.4
23	2.4	0	263	230	33	76	214	53	2.4	2.4	2.4	2.4
24	2.4	0	162	173	33	82	214	46	2.4	2.4	2.4	2.4
25	2.4	0	98	141	44	107	155	80	6.9	2.4	2.4	2.4
26	2.4	0	260	226	40	131	125	162	3.4	2.4	2.4	2.4
27	2.4	0	753	321	38	162	104	92	2.4	2.4	2.4	2.4
28	2.4	0	348	335	84	145	180	67	2.4	2.4	2.4	2.4
29	2.4	0	242	250	-	187	310	55	2.4	2.4	2.4	40
30	2.4	0	180	187	--------	218	492	49	2.4	2.4	2.4	38
31	2.4	--------	122	145	--------	268	--------	42	-------	2.4	2.4	--------
Total	74.4	1.2	4,188	3,458	1,468	4,128	9,363	3,887	194.6	798.2	82.0	145.2
Mean	2.40	0.04	135	112	52.4	133	312	125	6.49	25.7	2.65	4.84
(†)	+4.3	+19.5	+68.0	0	-0.1	+0.7	+0.2	-1.2	+14.5	+10.6	+5.8	+24.2

Adjusted for diversion and change in contents in Shepaug Reservoir

Mean	6.70	19.5	203	112	52.3	134	312	124	21.0	36.3	8.45	29.0
Cfsm	0.176	0.513	5.34	2.95	1.38	3.53	8.21	3.26	0.553	0.955	0.222	0.763
In.	0.20	0.57	6.16	3.40	1.44	4.07	9.16	3.76	0.62	1.10	0.26	0.85

	Observed			Adjusted			
Calendar year 1957:	Max 1,200	Min 0	Mean 38.0	Mean 53.3	Cfsm 1.40	In. 19.02
Water year 1957-58:	Max 1,200	Min 0	Mean 76.1	Mean 88.4	Cfsm 2.33	In. 31.59

† Net diversion and change in contents, equivalent in cubic feet per second, in Shepaug Reservoir; furnished by city of Waterbury.
b Stage-discharge relation affected by ice.

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 1958.

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.--28 years, 249 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 2,840 cfs Dec. 21 (gage height, 6.35 ft); minimum, 8.5 cfs Oct. 5, 6 (gage height, 1.07 ft).

1930-58: 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 no gage-height record, which are fair. Water diverted from Shepaug Reservoir for municipal supply of city of Waterbury. Flow regulated by Shepaug Reservoir (see p. 239). Diurnal fluctuations from an unknown cause during low flow.

Revisions (water years).--WSP 801: 1931-36. WSP 971: 1936, 1939-40, 1942. WSP 1301: 1936(M), 1947(M).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 6				Apr. 7 to Sept. 30			
1.0	5	2.0	162	1.0	8	2.0	190
1.1	10	2.5	320	1.1	15	2.5	350
1.2	17	3.0	505	1.2	24	3.0	550
1.4	38	4.0	1,000	1.4	51	4.0	1,040
1.7	90	5.5	2,060	1.7	111	5.6	2,140

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.0	19	90	585	453	480	750	705	163	44	77	16
2	9.0	23	58	545	400	425	*725	590	160	44	62	15
3	9.0	25	52	433	350	411	660	546	155	40	55	14
4	9.0	24	b48	366	270	605	675	610	118	39	51	15
5	8.5	22	b42	300	280	505	750	570	107	125	*46	13
6	8.5	20	b41	250	250	469	1,200	550	98	352	38	12
7	9.5	21	58	270	240	465	2,120	705	87	*259	24	22
8	17	21	67	270	260	425	1,470	730	71	238	22	38
9	19	34	92	250	230	383	1,130	655	53	277	20	23
10	14	32	129	220	210	397	930	538	56	196	20	39
11	14	26	170	b205	190	425	930	486	61	186	19	39
12	12	23	b119	b180	180	461	930	446	75	392	18	35
13	11	22	b112	b175	180	441	955	406	79	274	24	31
14	11	22	112	b180	170	481	980	366	69	208	24	29
15	11	55	105	310	160	437	855	358	55	187	22	28
16	11	46	108	272	130	418	780	382	46	196	22	29
17	12	36	105	226	160	400	730	354	40	145	25	56
18	13	32	112	202	170	*376	630	322	40	123	20	113
19	29	38	86	b150	160	369	590	326	64	104	19	102
20	26	70	272	b155	150	376	530	312	58	89	15	73
21	18	52	2,050	b160	140	344	486	284	55	81	15	75
22	17	*44	1,090	530	140	338	450	284	60	64	28	138
23	15	41	700	725	130	346	570	241	51	56	25	93
24	16	38	545	497	140	369	590	217	44	53	20	81
25	28	38	445	433	200	414	486	317	39	46	26	77
26	32	34	786	800	250	545	426	418	64	45	36	64
27	24	30	1,640	800	220	565	382	308	130	48	26	270
28	22	32	970	*800	750	545	695	256	65	60	22	228
29	20	38	800	650	-	565	730	223	51	73	20	160
30	19	52	675	565	--------	585	980	199	45	65	20	155
31	18	--------	545	505	--------	675	--------	178	--------	71	18	--------
Total	491.5	1,010	12,224	12,009	6,563	14,042	24,115	12,854	2,259	4,180	879	2,083
Mean	15.9	33.7	394	387	234	453	804	415	75.3	135	28.4	69.4
(†)	+4.3	+19.5	+68.0	0	-0.1	+0.7	+0.2	-1.2	+14.5	+10.6	+5.8	+24.2

Adjusted for diversion and change in contents in Shepaug Reservoir

Mean	20.2	53.2	462	387	234	454	804	414	89.8	146	34.2	93.6
Cfsm	0.152	0.400	3.47	2.90	1.76	3.41	6.05	3.11	0.675	1.10	0.257	0.704
In.	0.18	0.45	4.00	3.34	1.83	3.93	6.75	3.58	0.75	1.27	0.30	0.79

	Observed			Adjusted		
Calendar year 1957:	Max 2,050	Min 5.5	Mean 131	Mean 146	Cfsm 1.10	In. 14.90
Water year 1957-58:	Max 2,120	Min 8.5	Mean 254	Mean 266	Cfsm 2.00	In. 27.17

Peak discharge (base, 1,500 cfs).--Dec. 21 (11 a.m.) 2,840 cfs (6.35 ft); Dec. 27 (5 a.m.) 1,980 cfs (5.41 ft); Apr. 7 (3 a.m.) 2,660 cfs (6.25 ft).

* Discharge measurement made on this day.

† Diversion and change in contents, equivalent in cubic feet per second, in Shepaug Reservoir; furnished by city of Waterbury.

b Stage-discharge relation affected by ice.

Note.--No gage height record Jan. 5-10, Feb. 2 to Mar. 1; discharge estimated on basis of recorded range in stage, weather records, engineers' notes, and records for nearby streams.

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 1958.

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.--26 years, 130 cfs.

Extremes.--Maximum discharge during year, 1,840 cfs Feb. 28 (gage height, 7.70 ft); minimum, 7.1 cfs Oct. 15, 16 (gage height, 2.38 ft).
1932-58: 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. Infrequent regulation at low flow by mill upstream.

Revisions (water years).--WSP 781: Drainage area. WSP 851: 1934(M). 1933(M). WSP 1201: 1933-34, 1935(M), 1937(M).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 6				Apr. 7 to Sept. 30	
2.3	4.5	3.5	111	2.6	9
2.4	7.7	4.0	206	2.8	20
2.6	16.5	4.5	337	3.0	40
2.8	28	5.0	515	3.5	111
3.0	44	6.3	1,120	Note.--Same as preceding table above 3.5 ft.	

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.7	13	79	240	247	442	380	278	84	27	77	15
2	9.7	15	43	196	217	312	286	228	84	23	38	14
3	9.3	19	34	144	189	331	247	228	86	20	28	12
4	8.9	18	32	b101	157	515	224	270	72	19	24	12
5	8.9	16	28	b95	148	363	206	250	65	25	*19	12
6	9.7	16	26	b103	139	300	413	278	58	120	18	12
7	11	14	28	103	135	284	928	370	52	67	16	29
8	19	14	49	b103	144	247	416	354	48	*63	16	62
9	20	28	86	b98	127	213	298	265	53	72	14	29
10	15	24	132	b92	109	210	252	219	57	48	14	24
11	13	19	188	b88	98	213	318	200	80	37	13	24
12	8.1	18	111	b83	b92	213	416	185	66	154	12	19
13	7.7	16	77	b80	b86	191	447	161	54	88	40	17
14	7.4	16	69	b82	b82	224	360	148	62	58	68	16
15	7.4	54	62	301	b80	255	281	159	45	57	40	15
16	7.4	35	59	224	b60	233	*245	179	38	46	39	14
17	8.1	26	56	159	b85	221	224	161	32	46	29	18
18	10	23	52	130	b90	210	206	142	29	36	24	58
19	15	29	52	b98	b90	*206	187	181	43	31	20	57
20	19	62	192	b105	82	224	173	204	40	26	17	39
21	15	38	849	96	74	208	161	156	38	24	16	39
22	14	*29	306	670	74	210	156	128	49	24	16	95
23	13	26	204	648	77	235	298	120	38	28	16	54
24	14	25	*169	295	75	268	265	106	30	26	14	38
25	24	23	144	363	124	295	196	284	26	24	36	31
26	21	21	574	870	161	447	165	249	53	25	49	27
27	16	19	634	635	139	380	148	165	140	22	29	172
28	16	19	306	*535	1,110	322	427	137	61	24	23	196
29	15	22	270	405	-	306	316	120	40	25	19	100
30	14	36	217	337	--------	281	339	106	31	24	17	70
31	13	--------	189	286	--------	331	--------	109	--------	31	16	--------
Total	399.3	733	5,317	7,767	4,291	8,690	8,978	6,140	1,654	1,340	817	1,320
Mean	12.9	24.4	172	251	153	280	299	198	55.1	43.2	26.4	44.0
Cfsm	0.171	0.324	2.28	3.33	2.03	3.72	3.97	2.63	0.732	0.574	0.351	0.584
In.	0.20	0.36	2.63	3.84	2.11	4.29	4.43	3.03	0.82	0.66	0.40	0.65

Calendar year 1957: Max 910 Min 4.5 Mean 72.7 Cfsm 0.965 In. 13.12
Water year 1957-58: Max 1,110 Min 7.4 Mean 130 Cfsm 1.73 In. 23.42

Peak discharge (base, 1,400 cfs).--Dec. 26 (10 p.m.) 1,570 cfs (7.20 ft); Feb. 28 (1 p.m.) 1,840 cfs (7.70 ft); Apr. 6 (12 p.m.) 1,570 cfs (7.21 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 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 331.05 ft above mean sea level.

Extremes.--1958: Maximum discharge during period June to September, about 41 cfs June 11 (gage height, about 2.1 ft); minimum, 0.16 cfs Aug. 7, 8, 11, 12, Sept. 3, 4 (gage height, 0.40 ft).

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

Rating table, June 1 to Sept. 30, 1958 (gage height, in feet, and discharge, in cubic feet per second)

0.4	0.16	0.9	5.0
.5	.53	1.2	11
.6	1.2	1.6	21
.7	2.1		

Discharge, in cubic feet per second, June to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									a2.4	0.53	0.73	0.27
2									a2.4	.48	.53	.21
3									a2.7	.48	.39	.18
4									a2.0	.48	.31	.18
5									a1.7	.53	*.27	.21
6									a1.5	5.6	.24	.24
7									a1.3	1.9	.21	2.5
8									a1.1	1.6	.18	2.5
9									a1.0	2.2	.24	1.4
10									a1.1	1.1	.18	1.5
11									19	.79	.16	1.2
12									4.5	1.2	.16	.73
13									2.4	.92	.31	.63
14									a2.6	.79	.27	.58
15									a2.0	.92	.31	.63
16									1.6	.92	.79	.58
17									1.2	.53	.63	3.7
18									a1.1	.43	.58	5.4
19									a1.8	.39	.35	2.4
20									2.1	.31	.27	1.6
21									a2.1	.31	.24	3.1
22									a1.8	*.35	.24	5.0
23									1.6	.53	.21	2.1
24									a1.4	.53	.21	1.4
25									a1.2	.50	4.3	1.1
26									1.3	.31	1.9	1.2
27									1.4	.53	.92	7.6
28									.79	.63	.58	5.0
29									.73	1.1	.48	2.1
30									.58	.63	.35	1.6
31										.63	.31	
Total									68.40	28.15	16.85	56.84
Mean									2.28	0.908	C.544	1.89
Cfsm									0.912	0.363	C.218	0.756
In.									1.02	0.42	0.25	0.84

Calendar year	: Max	Min	Mean	Cfsm	In.
Water year	: Max	Min	Mean	Cfsm	In.

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Saugatuck River at Westport and Menunketesuck River near Clinton.

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 1958.

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.--30 years, 2,615 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 16,900 cfs Apr. 7 (gage height, 12.08 ft); minimum, 54 cfs Oct. 21 (gage height, 0.62 ft); minimum daily, 61 cfs Oct. 20.
1928-58: 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 good. 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. 239) 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.7	61	4.0	1,250
1.0	94	5.0	2,130
1.5	170	7.0	4,860
2.0	285	9.0	8,700
3.0	660	11.6	15,400

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	286	529	235	3,130	4,040	7,400	6,800	8,040	1,010	208	1,530	130
2	134	258	849	4,360	2,140	4,530	7,820	7,820	4,160	308	567	300
3	231	80	*574	4,590	4,150	3,630	5,850	7,400	793	551	168	255
4	897	902	1,220	2,360	3,070	4,740	5,720	6,620	2,270	190	1,340	290
5	97	768	499	913	2,850	5,970	5,280	7,000	1,730	176	310	490
6	82	555	983	2,710	2,790	5,320	7,340	6,600	430	464	266	240
7	123	648	456	2,340	3,610	4,400	15,400	7,820	1,010	925	242	135
8	738	524	113	2,570	2,370	4,350	15,400	7,820	435	1,480	1,030	727
9	388	346	2,900	1,840	100	2,440	13,400	6,420	1,120	1,260	332	460
10	607	90	1,280	2,330	3,720	3,100	8,480	5,770	2,740	1,270	143	794
11	596	634	1,070	1,090	2,760	2,950	10,700	2,750	2,240	1,670	447	1,020
12	82	516	1,000	101	1,550	3,600	10,800	4,150	2,000	967	215	940
13	82	516	1,420	1,850	2,690	4,380	7,820	3,980	1,180	1,140	451	105
14	441	404	806	3,310	1,700	4,570	7,400	3,740	307	2,530	1,000	130
15	103	182	464	3,890	1,010	3,740	7,600	4,020	146	1,510	1,100	386
16	282	694	1,070	4,030	198	5,580	7,820	3,900	2,100	213	220	1,460
17	300	99	800	3,300	2,220	3,800	7,820	4,340	1,600	530	575	1,500
18	263	1,190	1,030	1,790	2,020	4,260	7,820	2,180	1,670	900	803	1,250
19	92	782	978	220	2,470	*3,320	7,600	3,000	1,910	160	435	1,820
20	61	948	2,080	1,660	2,080	3,310	6,600	3,350	1,720	160	352	1,710
21	464	922	11,300	2,470	1,180	3,600	6,420	3,770	174	95	1,040	93
22	244	652	9,900	7,500	142	2,790	5,960	3,660	230	80	1,360	1,730
23	265	962	7,600	8,260	110	3,720	5,470	3,440	2,020	1,030	112	1,160
24	482	82	7,130	*5,400	1,540	4,560	7,000	1,820	1,470	1,100	594	1,630
25	229	648	4,350	3,380	1,510	4,780	7,200	617	766	1,150	1,920	1,560
26	102	334	5,760	6,020	1,750	5,200	5,860	5,110	1,300	130	*876	1,480
27	99	112	10,500	6,600	3,710	5,200	3,620	3,990	520	1,470	*596	2,870
28	390	80	8,040	7,200	7,480	5,340	*4,820	3,710	200	1,910	984	3,830
29	422	252	6,400	6,420	-	4,850	6,600	3,920	220	1,180	1,030	630
30	330	463	4,250	5,970	--------	5,330	8,040	612	188	918	103	336
31	427	--------	5,700	5,060	--------	5,830	--------	1,560	--------	418	120	--------
Total	9,339	15,172	100,757	112,664	64,960	136,590	234,460	138,929	37,659	27,681	20,261	29,461
Mean	301	506	3,250	3,634	2,320	4,406	7,815	4,482	1,255	893	654	982
(†)	+18	+82	+433	+18	+3	-34	+117	-81	-33	+103	-68	-50

Adjusted for diversion and change in reservoir contents

Mean	319	588	3,683	3,652	2,323	4,372	7,932	4,401	1,222	993	586	932
Cfsm	0.206	0.381	2.38	2.36	1.50	2.83	5.13	2.85	0.791	0.645	0.379	0.603
In.	0.24	0.43	2.74	2.72	1.56	3.26	5.72	3.29	0.88	0.74	0.44	0.67

	Observed			Adjusted		
Calendar year 1957:	Max 11,300	Min 61	Mean 1,562	Mean 1,578	Cfsm 1.02	In. 13.86
Water year 1957-58:	Max 15,400	Min 61	Mean 2,542	Mean 2,585	Cfsm 1.67	In. 22.69

* 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 1958.
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, about 1,500 cfs Apr. 6 (gage height, about 7.85 ft, from graph based on gage readings); minimum observed, 4.5 cfs Oct. 5 (gage height, 3.93 ft).
1956-58: Maximum discharge, that of Apr. 6, 1958; minimum observed, 4.4 cfs July 14, 20, 21, Aug. 3, 11, 1957; minimum gage height observed, 3.61 ft Aug. 19, 1956.
Revisions.--The maximum discharge for the water year 1957 has been revised to 800 cfs Jan. 23, 1957, and maximum gage height of 7.54 ft is probably the result of an ice jam.
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.--Revised figures of discharge, in cubic feet per second, for high-water period in the water year 1957, superseding those published in WSP 1501, are given herewith:

Jan. 23, 1957..... 550

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in inches
January 1957.....	1,573	550	19	50.7	1.75
Water year 1956-57.....	-	550	4.4	32.4	13.17

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 22 to Feb. 27; ice effect Dec. 10, 13)

Oct. 1 to Dec. 20				Dec. 21 to Sept. 30			
3.9	4.1	4.7	34	4.3	4.8	5.5	130
4.1	6.8	5.0	66	4.6	10	6.0	305
4.3	11	5.5	160	4.8	22	6.5	570
4.5	20	6.0	325	5.0	42	7.1	940

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.1	15	52	115	70	65	218	160	24	8.2	21	6.2
2	6.8	12	29	95	62	57	194	108	27	8.2	12	6.5
3	7.1	8.1	21	68	57	80	175	108	22	8.2	9.6	5.4
4	5.8	8.9	30	50	49	160	241	154	21	8.2	*9.6	5.6
5	4.8	7.7	33	46	49	105	305	110	19	10	8.2	5.8
6	5.8	7.1	37	42	46	101	610	99	23	36	7.3	5.6
7	6.9	7.5	36	40	44	118	762	204	16	40	9.1	5.9
8	6.6	8.5	39	40	46	79	355	194	16	47	8.2	7.0
9	6.9	9.5	54	43	44	38	237	125	18	22	7.6	5.4
10	6.5	8.5	64	42	42	*70	194	91	21	12	7.8	8.2
11	6.5	8.7	73	43	40	101	245	78	24	20	8.7	6.5
12	4.6	8.3	62	42	39	108	197	76	31	25	8.9	5.8
13	4.8	7.7	43	42	39	105	249	65	21	13	12	5.6
14	7.4	8.1	45	43	40	120	265	55	16	14	9.6	5.4
15	6.8	18	42	49	43	89	297	61	16	12	8.7	6.5
16	6.6	9.7	44	44	40	71	249	62	17	9.8	8.7	6.2
17	6.6	8.9	42	44	42	65	197	62	10	*11	8.9	75
18	6.1	9.5	39	*43	46	60	175	54	15	9.3	12	101
19	8.1	13	*39	40	44	58	142	49	18	7.5	7.8	65
20	6.5	*15	230	42	*41	62	120	52	18	8.7	7.5	26
21	6.5	20	900	41	39	61	103	49	18	8.7	10	35
22	6.3	16	194	93	38	61	82	42	24	8.2	8.7	76
23	5.7	11	105	85	40	60	136	40	14	8.7	8.2	40
24	9.5	10	85	67	42	134	154	33	8.2	9.1	9.6	25
25	9.3	10	65	64	52	197	101	86	8.2	10	16	12
26	8.1	8.9	450	211	49	154	78	89	29	8.7	19	9.6
27	8.7	13	405	218	52	130	65	54	21	125	14	74
28	8.7	11	154	181	130	104	300	42	9.8	40	8.7	76
29	7.9	15	120	115	-	57	270	40	10	29	6.5	33
30	8.5	28	93	89	--------	71	400	34	10	18	5.6	19
31	7.9	--------	78	75	--------	*194	--------	26	--------	18	6.4	--------
Total	215.2	342.6	3,703	2,252	1,365	2,935	7,116	2,502	545.2	613.5	305.9	764.2
Mean	6.94	11.4	119	72.6	48.8	94.7	237	80.7	17.6	19.8	9.87	25.5
Cfsm	0.208	0.341	3.56	2.17	1.46	2.84	7.10	2.42	0.527	0.593	0.296	0.763
In.	0.24	0.38	4.10	2.50	1.52	3.27	7.92	2.79	0.59	0.68	0.34	0.85

Calendar year 1957: Max 900 Min 4.4 Mean 36.5 Cfsm 1.09 In. 14.80
Water year 1957-58: Max 900 Min 4.6 Mean 62.1 Cfsm 1.86 In. 25.18

Peak discharge (base, 800 cfs).--Dec. 21 (about 5 a.m.) 1,370 cfs (7.73 ft); Dec. 26 (about 7 p.m.) about 1,200 cfs (about 7.45 ft); Apr. 6 (about 7 p.m.) about 1,500 cfs (about 7.85 ft).

* Discharge measurement made on this day.

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 1958.

Gage.--Wire-weight gage read twice daily. Crest-stage indicator since Dec. 18, 1956. Datum of gage is 539.26 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during year, 574 cfs Apr. 6 (gage height, 3.58 ft); minimum daily, 0.8 cfs Oct. 5.

1956-58: Maximum discharge that of Apr. 6, 1958; minimum observed, 0.5 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.

Remarks.--Records good except those for periods of ice effect, which are fair, and those for period when flow was diverted around gage, which are poor. Some regulation at low flow.

Rating table, water year 1957-58, except periods of ice effect or diversion (gage height, in feet, and discharge, in cubic feet per second)

0.9	0.6	1.4	16
1.0	1.4	1.6	37
1.1	2.9	1.8	70
1.2	5.3	2.0	115
1.3	9.5	2.6	280

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	3.0	13	49	30	68	74	48	15	3.8	7.4	3.4
2	1.1	6.0	7.6	27	30	43	64	35	16	3.8	4.8	3.4
3	1.0	10	5.4	21	26	44	56	38	15	2.8	3.9	3.4
4	.9	7.0	5.6	16	28	72	87	49	15	2.2	*4.3	4.6
5	.8	5.0	6.3	13	23	50	98	36	14	4.8	3.9	4.8
6	1.3	4.0	6.2	14	22	50	220	35	13	9.5	3.4	4.1
7	3.2	3.7	6.9	14	20	44	199	70	11	5.7	3.6	6.1
8	7.0	3.5	8.3	15	21	38	110	66	11	18	3.4	7.0
9	5.0	12	29	15	18	44	74	43	12	9.5	2.4	5.1
10	3.0	8.0	62	15	17	*52	60	31	11	5.3	2.4	7.8
11	1.8	5.5	33	14	15	59	74	25	15	12	2.9	5.1
12	1.5	4.5	17	13	14	48	72	27	18	36	2.3	4.8
13	1.3	4.0	10	12	15	48	101	21	12	11	4.6	4.3
14	1.2	4.3	11	13	14	48	80	21	10	6.6	5.3	4.3
15	1.1	22	9.3	20	14	46	70	21	8.7	*6.1	4.6	4.8
16	1.1	6.6	9.3	18	14	37	59	26	8.2	5.1	5.3	5.3
17	1.0	4.9	8.8	15	17	33	49	21	7.0	4.3	3.9	110
18	1.4	4.7	7.4	13	15	30	43	19	7.4	3.9	4.3	66
19	12	*8.3	*9.7	12	14	30	35	19	9.5	3.4	4.1	30
20	7.0	11	144	11	*13	32	30	20	7.4	2.9	3.4	17
21	4.5	6.2	254	11	13	30	27	20	7.0	3.1	3.1	16
22	3.5	5.2	47	150	13	29	25	16	7.8	3.4	8.7	37
23	3.0	4.7	31	120	13	21	70	16	7.0	4.1	3.9	14
24	3.0	4.6	24	90	13	33	35	15	5.3	4.8	3.4	12
25	12	4.9	19	80	22	37	25	43	5.3	3.6	12	11
26	7.0	4.6	140	115	31	59	20	35	25	3.6	8.2	10
27	4.0	4.9	72	101	20	49	17	21	10	58	5.3	65
28	3.5	4.6	43	70	158	52	130	20	5.3	15	4.8	35
29	3.1	7.1	42	50	-	56	80	18	4.3	11	4.6	19
30	2.9	13	30	40	-------	56	103	17	4.3	7.8	3.9	12
31	2.7	-------	25	35	-------	*74	-------	16	-------	7.8	3.4	-------
Total	103.1	197.8	1,136.8	1,202	663	1,412	2,187	908	317.5	279.2	141.5	532.3
Mean	3.33	6.59	36.7	38.8	23.7	45.5	72.9	29.3	10.6	9.01	4.56	17.7
Cfsm	0.241	0.478	2.66	2.81	1.72	3.30	5.28	2.12	0.768	0.653	0.330	1.28
In.	0.28	0.53	3.07	3.24	1.79	3.80	5.89	2.44	0.86	0.75	0.38	1.43

Calendar year 1957: Max 254 Min 0.8 Mean 14.6 Cfsm 1.06 In. 14.32
Water year 1957-58: Max 254 Min 0.8 Mean 24.9 Cfsm 1.80 In. 24.46

Peak discharge (base, 300 cfs).--Dec. 21 (about 2 a.m.) about 550 cfs (about 3.5 ft); Dec. 26 (about 5 p.m.) about 450 cfs (about 3.15 ft); Apr. 6 (about 7 p.m.) 574 cfs (3.58 ft).

* Discharge measurement made on this day.

Note.--Flow diverted around gage Oct. 1 to Nov. 13 and partial diversion of flow around gage Nov. 14 to Dec. 25; discharge estimated on basis of records for nearby streams. Stage-discharge relation affected by ice Dec. 13, 14, Jan. 3-24, Feb. 3-6, 9-25.

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 1958.

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.--28 years, 144 cfs.

Extremes.--Maximum discharge during year, 2,910 cfs Apr. 6 (gage height, 6.03 ft); minimum, 8.0 cfs Oct. 6 (gage height, 0.25 ft); minimum daily, 10 cfs Oct. 6, 13.
1930-58: 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 good. Diurnal fluctuation at low flow. Records of chemical analyses and water temperatures for the water year 1958 are given in WSP 1571.

Revisions (water years).--WSP 741: 1931-32. WSP 781: Drainage area. WSP 821: 1936(M). WSP 1111: 1939(M).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to June 9				June 9 to Sept. 30			
0.2	5.5	1.5	180	0.6	15	1.4	160
.4	18	2.0	325	.8	33	1.9	320
.7	46	3.0	780	1.0	60		
1.0	85	4.2	1,490				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	24	103	260	188	294	490	353	75	28	51	21
2	14	32	67	212	170	208	422	254	79	26	39	21
3	14	35	51	145	145	249	368	254	78	24	32	21
4	14	28	54	98	126	432	436	342	67	23	30	21
5	12	24	52	90	128	297	505	269	62	150	28	21
6	10	21	58	90	117	275	1,130	254	66	222	24	21
7	17	21	66	95	115	287	*1,400	440	54	82	25	21
8	30	21	75	95	117	248	730	422	52	147	25	31
9	22	52	136	100	108	178	486	297	56	*110	21	25
10	17	29	177	100	105	222	400	222	56	60	21	31
11	15	24	228	100	98	*294	490	192	68	105	21	25
12	13	23	126	95	95	308	458	180	82	166	22	21
13	10	22	85	90	*95	278	590	155	60	133	48	21
14	14	23	88	95	95	297	566	135	56	70	*32	20
15	14	87	85	150	95	254	494	135	41	64	28	21
16	14	39	85	120	95	210	454	153	41	55	31	23
17	14	29	81	100	95	188	368	141	37	45	25	267
18	15	25	75	90	105	175	318	126	41	*38	40	299
19	48	58	*81	80	100	175	269	121	57	35	25	184
20	22	*74	302	90	95	185	230	117	47	31	22	92
21	17	47	1,490	85	90	175	205	112	45	30	26	80
22	17	43	393	460	85	175	182	97	49	31	49	214
23	17	32	225	390	90	180	368	94	43	33	25	95
24	28	30	180	290	95	268	311	85	31	34	22	57
25	50	29	145	280	130	350	212	195	29	31	53	44
26	25	26	693	560	155	380	168	218	68	30	48	39
27	20	27	772	562	126	342	145	135	85	240	37	232
28	22	27	314	445	551	318	548	112	45	100	30	266
29	21	40	260	300	-	278	534	100	35	*68	26	118
30	20	86	210	245	-------	284	737	90	*31	53	23	72
31	20	-------	178	215	-------	458	-------	82	-------	48	20	-------
Total	600	1,078	6,935	6,127	3,609	8,262	14,014	5,882	1,636	2,312	949	2,424
Mean	19.4	35.9	224	198	129	267	467	190	54.5	74.6	30.6	80.8
Cfsm	0.270	0.499	3.12	2.75	1.79	3.71	6.50	2.64	0.758	1.04	0.426	1.12
In.	0.31	0.56	3.60	3.17	1.86	4.28	7.25	3.04	0.85	1.20	0.49	1.25

Calendar year 1957: Max 1,490 Min 9.5 Mean 86.5 Cfsm 1.20 In. 16.35
Water year 1957-58: Max 1,490 Min 10 Mean 147 Cfsm 2.04 In. 27.86

Peak discharge (base, 1,500 cfs).--Dec. 21 (5 a.m.) 2,550 cfs (5.65 ft); Dec. 26 (7 p.m.) 1,910 cfs (4.78 ft); Apr. 6 (9 p.m.) 2,910 cfs (6.03 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 13, Jan. 4-26, Feb. 3-5, 11-25.

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 1958.

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.--28 years, 48.3 cfs.

Extremes.--Maximum discharge during year, 990 cfs Apr. 6 (gage height, 7.00 ft); minimum, 0.25 cfs Oct. 3-6; minimum gage height, 2.05 ft Oct. 6.
1930-58: 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 July 30, Aug. 12, 1933.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are good, and those below 5 cfs, which are fair. Occasional regulation at low flow.

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(P), 1943-44(M), 1945, 1947(M), 1949, 1951(P), 1953(P).

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	5.4	37	92	71	224	214	121	a25	8.7	a25	2.6
2	.3	11	22	65	55	151	171	93	a25	6.7	a20	2.0
3	.25	17	17	43	53	134	144	95	a25	5.8	a14	1.5
4	.25	13	16	30	50	206	141	124	a21	5.6	*11	1.3
5	.25	9.6	12	26	43	150	141	99	a19	68	a7.5	1.1
6	.3	8.1	12	27	38	144	320	99	a17	146	a5.5	1.1
7	.8	7.2	16	28	35	139	*412	154	a16	58	4.7	2.3
8	7.0	6.8	24	30	35	114	209	154	a16	49	4.4	5.2
9	10	20	50	29	30	96	140	105	a17	*47	3.3	3.1
10	5.2	13	78	27	27	*121	114	81	a17	26	2.7	4.1
11	4.7	10	106	26	25	158	135	72	22	55	2.5	4.9
12	3.6	8.3	48	25	24	162	157	67	22	97	1.9	2.9
13	2.8	7.4	31	24	*a27	141	235	59	17	80	12	2.0
14	2.4	7.2	29	25	a26	133	205	54	16	39	9.8	1.5
15	2.2	30	26	40	a25	116	140	53	13	35	9.8	1.2
16	2.0	20	26	35	a25	94	110	61	11	27	13	2.0
17	1.6	15	25	30	a30	80	94	58	9.8	*20	9.2	85
18	1.6	12	22	25	a27	73	83	51	9.5	15	9.5	128
19	10	19	24	23	a26	75	74	50	15	13	6.7	62
20	8.8	*36	121	22	a25	82	68	49	15	11	3.8	37
21	6.1	22	348	22	a23	69	64	44	14	8.8	2.7	29
22	4.9	17	119	185	a25	70	62	39	18	9.0	7.6	65
23	4.6	14	69	199	a25	79	134	38	14	11	6.9	34
24	5.7	13	54	106	a27	100	102	34	10	9.5	4.1	23
25	18	11	43	110	35	121	75	102	8.5	7.3	*18	19
26	9.9	10	220	300	37	188	62	90	15	6.5	23	16
27	7.2	8.8	197	272	32	171	56	58	74	95	14	148
28	6.5	9.1	97	206	330	167	219	47	25	42	9.0	120
29	5.9	14	84	138	-	175	177	a38	16	30	7.1	55
30	5.4	26	63	103	-------	173	228	a33	11	20	4.9	37
31	5.1	-------	52	85	-------	204	-------	a28	-------	18	3.4	-------
Total	143.65	420.9	2,088	2,398	1,231	4,090	4,486	2,250	553.8	1,069.9	277.0	896.8
Mean	4.63	14.0	67.4	77.4	44.0	132	150	72.6	18.5	34.5	8.94	29.9
Cfsm	0.193	0.583	2.81	3.22	1.83	5.50	6.25	3.02	0.771	1.44	0.372	1.25
In.	0.22	0.65	3.24	3.71	1.91	6.34	6.97	3.48	0.86	1.66	0.43	1.40

Calendar year 1957: Max 388 Min 0.07 Mean 27.1 Cfsm 1.13 In. 15.30
Water year 1957-58: Max 412 Min 0.25 Mean 54.5 Cfsm 2.27 In. 30.87

Peak discharge (base, 650 cfs).--Dec. 21 (6 a.m.) 660 cfs (6.24 ft); Apr. 6 (9 p.m.) 990 cfs (7.00 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 Burlington Brook near Burlington.
Note.--Stage-discharge relation affected by ice Nov. 27, Dec. 5, 18, Jan. 4-22, Feb. 6-12, 25-28, Mar. 9.

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 1958.

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.--36 years (1918-24, 1928-58), 476 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 6,790 cfs Apr. 6 (gage height, 9.25 ft); minimum, 37 cfs Oct. 6 (gage height, 1.43 ft); minimum daily, 49 cfs Oct. 6.
1918-24, 1928-58: 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), that of 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 good except those for periods of no gage-height record, which are fair. 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. 239). 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	75	115	394	900	960	1,860	1,690	1,190	282	136	332	71
2	75	124	264	810	840	1,190	*1,330	960	289	129	228	84
3	75	132	208	564	728	1,190	1,120	870	303	122	168	96
4	76	132	193	420	625	1,780	1,050	1,120	251	102	162	96
5	61	122	177	330	596	*1,370	1,120	1,020	231	300	138	101
6	49	95	166	340	546	1,220	2,060	1,050	231	782	117	86
7	88	85	218	350	524	1,190	4,000	1,410	202	430	115	193
8	179	80	242	360	564	1,080	2,000	1,410	181	363	110	198
9	129	210	415	360	462	870	1,370	1,120	193	422	90	130
10	107	150	675	350	430	900	1,120	870	212	254	85	141
11	93	120	930	330	402	1,050	1,330	755	279	231	85	129
12	74	90	550	310	378	1,080	1,490	728	264	918	*85	109
13	60	85	366	300	398	960	1,730	650	231	532	200	90
14	70	90	343	340	366	1,120	1,570	586	228	335	150	77
15	83	350	317	990	366	1,080	1,330	582	186	289	140	90
16	81	200	306	782	339	930	1,160	625	168	273	160	102
17	84	150	306	600	414	840	1,020	586	157	242	130	324
18	84	110	*273	514	410	782	930	524	151	210	170	650
19	220	200	273	414	390	782	840	572	193	179	115	474
20	115	320	692	438	350	900	755	625	188	164	105	270
21	99	220	3,650	430	339	840	700	514	174	162	102	218
22	96	*179	1,450	1,770	343	840	650	434	193	142	130	426
23	93	140	870	1,910	317	840	1,080	414	179	138	99	306
24	132	130	675	*1,050	343	960	1,050	370	164	*132	73	226
25	178	120	555	1,280	478	1,220	782	752	147	145	233	195
26	125	110	2,200	2,710	542	1,610	650	1,020	212	112	220	179
27	94	100	2,980	2,380	528	1,530	582	650	378	265	170	470
28	107	100	1,190	2,040	3,330	1,300	1,520	514	195	293	142	900
29	105	150	990	1,570	-	1,260	1,650	442	162	220	132	550
30	104	300	810	1,260	--------	1,190	1,440	346	147	172	96	350
31	101	--------	700	1,080	--------	1,330	--------	299	--------	266	78	--------
Total	3,112	4,509	23,378	27,282	16,308	35,094	39,119	23,008	6,371	8,460	4,360	7,331
Mean	100	150	754	880	582	1,132	1,304	742	212	273	141	244
(†)	-17.1	-9.4	+9.7	+13.3	-4.5	+4.0	+0.5	-3.6	-15.0	-10.8	-20.0	-6.0

Adjusted for diversion and change in reservoir contents

Mean	82.9	141	764	893	578	1,136	1,304	738	197	262	121	238
Cfsm	0.318	0.540	2.93	3.42	2.21	4.35	5.00	2.83	0.755	1.00	0.464	0.912
In.	0.37	0.60	3.38	3.94	2.30	5.02	5.58	3.26	0.84	1.15	0.53	1.02

	Observed			Adjusted		
Calendar year 1957:	Max 3,650	Min 49	Mean 323	Mean 307	Cfsm 1.18	In. 15.95
Water year 1957-58:	Max 4,000	Min 49	Mean 543	Mean 538	Cfsm 2.06	In. 27.99

Peak discharge (base, 4,000 cfs).--Dec. 21 (8:30 a.m.) 5,810 cfs (8.60 ft); Dec. 26 (11 p.m.) 6,130 cfs (8.82 ft); Feb. 28 (12 m.) 5,210 cfs (8.20 ft); Apr. 6 (12 p.m.) 6,790 cfs (9.25 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.

Note.--No gage-height record Oct. 1-3, Nov. 6-21, 23-30, Jan. 4-14, June 29, 30, July 23, Aug. 8-18, Sept. 27-30; discharge estimated on basis of recorded range in stage, weather records, and daily sum of records for Leadmine Brook and Naugatuck River near Thomaston.

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 1958. 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 1958. 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 1958. 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 1958. Records furnished by The Connecticut Light & Power Co.

2075. Pitch, Morris, and Wigwam Reservoirs on Branch Brook, are operated as a unit with Shepaug Reservoir for storage of water for municipal supply. The downstream order and capacity of each is as follows: Pitch Reservoir, 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. Total capacity, 190,000,000 cu ft. Records available November 1943 to September 1958. Morris Reservoir, 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. Total capacity, 265,000,000 cu ft. Records available, May 1918 to September 1924, September 1928 to September 1958. Wigwam Reservoir, 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. Total capacity, 97,000,000 cu ft. Records available, May 1918 to September 1924, September 1928 to September 1958. Records furnished by Bureau of Engineering, city of Waterbury, Conn.

Month-end contents, water year October 1957 to September 1958

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	4,761	-	26.1	-	3,018	-
Oct. 31	4,692	-25.8	22.1	-1.5	3,088	+26.1
Nov. 30	4,934	+93.4	29.7	+2.9	3,011	-29.7
Dec. 31	6,028	+408.5	98.9	+25.8	2,877	-50.0
Calendar year 1957	-	+.4	-	0	-	-1.8
Jan. 31	6,076	+17.9	98.9	0	2,928	+19.0
Feb. 28	5,915	-66.6	98.6	-.1	3,003	+31.0
Mar. 31	6,052	+51.2	100.6	+.7	2,881	-44.4
Apr. 30	6,088	+13.9	101.1	+.2	3,049	+63.7
May 31	6,040	-17.9	97.8	-1.2	2,958	-34.0
June 30	5,883	-60.6	91.5	-2.4	3,011	+20.4
July 31	6,064	+67.6	91.6	0	3,093	+31.7
Aug. 31	5,967	-36.2	68.6	-8.6	2,958	-51.5
Sept.30	5,858	-42.1	98.0	+11.3	2,855	-39.7
Water year 1957-58	-	+34.8	-	+2.3	-	-5.2

	Lake Zoar		Pitch, Morris, and Wigwam Reservoirs			
Sept.30	285.1	-	391.6	-		
Oct. 31	321.6	+13.6	380.8	-11.4		
Nov. 30	326.2	+1.8	379.4	+7.2		
Dec. 31	344.7	+6.9	518.1	+51.8		
Calendar year 1957	-	+1.9	-	-.9		
Jan. 31	294.1	-18.9	553.7	+13.3		
Feb. 28	386.6	+38.2	542.8	-4.5		
Mar. 31	276.1	-41.3	553.6	+4.0		
Apr. 30	377.3	+39.0	554.8	+.5		
May 31	303.3	-27.6	545.1	-3.6		
June 30	285.1	-7.0	550.1	+1.9		
July 31	267.0	-6.8	549.6	-.2		
Aug. 31	303.3	+13.6	534.5	-5.6		
Sept.30	321.6	+7.1	552.3	+6.9		
Water year 1957-58	-	+1.2	-	+5.1		

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 1958.
Gage.--Water-stage recorder. Datum of gage is 18.16 ft above mean sea level, datum of 1929.
Average discharge.--26 years, 144 cfs (adjusted for storage in and diversion from Saugatuck Reservoir since October 1941).
Extremes.--Maximum discharge during year, 2,000 cfs Feb. 28 (gage height, 7.32 ft); minimum, 1.2 cfs Sept. 4 (gage height, 2.00 ft); minimum daily, 6.0 cfs Sept. 4.
1932-58: 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, 1.0 cfs Aug. 11, 1939.
Remarks.--Records good. 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 interminable amount of water for domestic supply from about 17 sq mi of Saugatuck River basin through Hemlocks Reservoir in Mill River basin. Infrequent regulation at dam of Dorr Co.
Revisions (water years).--WSP 781: Drainage area. WSP 1301: 1936.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Feb. 28

2.1	4.0	3.0	88
2.2	7.5	3.5	195
2.3	12	4.0	335
2.5	25	5.0	700
2.7	45	6.5	1,480

Mar. 1 to Sept. 30

2.1	3.0	2.3	10.5
2.2	6.2	2.5	25

Note.--Same as preceding table above 2.5 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.0	8.0	71	203	338	875	476	405	75	21	18	12
2	7.0	9.3	45	180	299	560	401	320	83	19	15	10
3	7.0	12	34	114	262	483	335	293	91	18	14	17
4	7.0	13	32	80	208	520	308	398	68	18	13	6.0
5	7.0	11	30	69	182	479	282	421	57	18	13	6.8
6	8.4	9.8	25	65	168	405	544	441	54	37	12	8.8
7	14	8.8	51	62	163	363	1,100	540	38	*30	11	10
8	29	9.3	69	69	234	326	720	497	30	30	10	13
9	19	18	91	b58	b180	288	520	414	30	28	10	11
10	13	16	122	b54	b139	268	434	347	34	23	10	*10
11	11	13	135	52	b111	248	540	308	330	20	*10	10
12	10	11	100	48	b95	234	640	295	195	23	9.6	10
13	10	10	71	46	85	216	600	259	116	30	9.6	9.6
14	10	11	59	53	b75	299	487	211	118	23	9.6	9.6
15	10	66	55	256	68	357	418	234	85	23	9.6	9.6
16	10	38	53	231	b72	320	363	262	55	21	10	9.6
17	10	25	52	148	b91	296	302	229	42	18	14	14
18	11	20	46	107	b90	276	265	216	33	17	23	29
19	18	30	48	b80	83	270	240	203	43	16	14	21
20	16	34	72	77	78	323	216	190	46	16	11	16
21	12	26	303	111	72	329	198	170	49	14	10	20
22	12	22	175	906	69	296	175	131	62	14	9.6	46
23	12	19	114	868	69	314	237	122	50	14	9.6	25
24	17	18	93	520	68	*326	*221	103	37	14	9.2	18
25	30	17	78	625	85	366	168	170	30	14	37	16
26	18	16	176	1,080	100	465	126	293	28	14	46	14
27	12	14	366	*785	148	520	105	195	41	14	22	22
28	10	14	237	640	1,450	448	364	144	31	14	16	40
29	9.8	*24	221	520	-	428	520	120	27	30	14	27
30	8.4	46	185	445	--------	405	540	93	23	20	12	21
31	8.0	--------	144	382	--------	414	--------	85	--------	17	11	--------
Total	383.6	589.2	3,353	8,934	5,082	11,717	11,845	8,107	1,999	628	442.8	491.8
Mean	12.4	19.6	108	288	182	378	395	262	66.6	20.3	14.3	16.4
(†)	+5.0	+25.9	+158.9	+65.5	+4.8	-3.0	+7.0	-3.1	+10.8	+3.4	-0.2	+7.0

Adjusted for diversion and change in reservoir contents

Mean	17.4	45.4	267	354	187	375	402	259	77.4	23.7	14.1	23.4
Cfsm	0.225	0.587	3.45	4.57	2.41	4.84	5.19	3.34	0.999	0.306	0.182	0.302
In.	0.26	0.65	3.99	5.27	2.51	5.58	5.79	3.85	1.11	0.35	0.21	0.34

	Observed			Adjusted			
Calendar year 1957:	Max 995	Min 1.8	Mean 66.3	Mean 88.4	Cfsm 1.14	In. 15.48	
Water year 1957-58:	Max 1,450	Min 6.0	Mean 147	Mean 171	Cfsm 2.21	In. 29.91	

Peak discharge (base, 900 cfs).--Jan. 22 (6 p.m.) 1,180 cfs (6.02 ft); Jan. 26 (5 a.m.) 1,210 cfs (6.03 ft); Feb. 28 (2 p.m.) 2,000 cfs (7.32 ft); Apr. 7 (2 a.m.) 1,330 cfs (6.26 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. No adjustments made for Aspetuck Reservoir.
b Stage-discharge relation affected by ice.

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 1958 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 1958

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°46'48", long 73°33'12", at bridge on Pump House Road, 200 ft above confluence with Wassaic Creek and 1.6 miles southwest of South Amenia.	81.0	1956-58	8- 7-58 9-26-58	16.8 31.2
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	1956-58	8- 7-58 9-26-58	4.79 11.7
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	1956-58	7-30-58 9-26-58	46.8 44.7
		Rippowam River basin				
2098	Mill River at Scott Corners, N. Y.	Lat 41°10'42", long 73°33'14", at bridge on Trinity Pass Road, 1.0 mile south of Scott Corners.	13.2	1956-58	11-12-57 6-13-58 8-22-58	2.44 26.8 1.10
		Mianus River basin				
2100	Mianus River at Bedford, N. Y.	Lat 41°12'06", long 75°38'00", at bridge on Middle Patent Road, 0.6 mile east of Bedford.	10.7	1903, 1956-58	11-12-57 2-25-58 6-13-58 8-22-58	2.81 18.8 19.9 3.89
		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	1956-58	11-12-57 2-25-58 6-13-58 8-22-58	0.83 5.39 7.05 .88

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 1958

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Connecticut River basin						
Broad Brook..	Manhan River.	Lat 42°11'36", long 72°40'31", at Rock Valley St., at Rock Valley, 2¼ miles west of Holyoke, Mass.	1.44	1957	7- 2-58	*0.311
Harris Brook.	Higher Brook.	Lat 42°11'24", long 72°28'44", at Church and Rood Sts., 1 mile west of Ludlow Center, Mass.	2.77	1957	7- 1-58	1.54
North Branch Mill.	Connecticut River.	Lat 42°07'02", long 72°28'18", at Wilbraham Rd., 2.1 miles west of Wilbraham, Mass.	7.61	1957	7- 1-58	4.50
Arm Brook....	Powdermill Brook.	Lat 42°08'38", long 72°44'22", at Lockhouse Rd., 0.25 mile above mouth and 1½ miles north of Westfield, Mass.	4.33	1957	7- 2-58	*1.95
Still Brook..	Muddy Brook..	Lat 42°02'31", long 72°41'00", at Pine St., 3 miles southwest of West Agawam, Mass.	5.33	1957	7- 1-58	*2.65
Mill Brook...	Piper Brook..	Lat 41°42'48", long 72°43'30", at Hartford Avenue Bridge in Newington, Conn.	5.5		10-24-57	1.18
Naugatuck River.	Housatonic River.	Lat 41°40'25", long 73°04'13", at U. S. highway bridge on Route 6, at Thomaston, Conn.	107	1957	11-20-57 12-19-57	109 94.2

* Base flow.

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