Surface Water Supply of the United States 1956

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 1431

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, C. G. Paulsen, chief, succeeded by L. B. Leopold, under the general direction of J. V. B. Wells, chief, Surface Water Branch, and B. J. Peterson, chief, Basic Records Section, succeeded by F. J. Flynn.

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

B. L. Bigwood----------Hartford, Conn.
H. B. Kinnison (succeeded by C. E. Knox)----------Boston, Mass.
M. R. Stackpole (succeeded by G. S. Hayes)----------Augusta, Maine

CALENDAR FOR WATER YEAR 1956

OCTOBER 1955

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 1955

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 1955

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 1956

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 1956

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			

MARCH 1956

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 1956

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 1956

S	M	T	W	T	F	S
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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 1956

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 1956

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 1956

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 1956

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, 1956

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, 1956. 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 13,500 gaging stations in the 48 States and at many others in the Territories of Alaska and Hawaii. On September 30, 1956, the Geological Survey and cooperating organizations were maintaining 6,910 gaging stations, including those in Alaska and Hawaii. Discharge measurements only were made at many other points in the 1956 water year. The name of each stream measured at points other than gaging stations is not listed in the index of this report. Only the major river basins in which measurements were made are listed under the item "Discharge measurements" in the index.

COOPERATION

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

Connecticut: State Water Commission, H. P. Koppleman, chairman, and W. S. Wise, director; city of Hartford, Department of Public Works, C. W. Cooke, director, succeeded by L. C. Lovell; city of New Britain, Board of Water Commissioners, Franklin Atwater, chairman, succeeded by J. C. Wilks, and G. W. Wood, chief engineer; city of Torrington, W. T. Carroll, mayor, and W. F. Neirintz, city engineer.

Maine: Maine Public Utilities Commission, S. T. Pike, chairman, succeeded by T. E. Delehanty.

Massachusetts: State Department of Public Health, S. B. Kirkwood, commissioner, and C. I. Sterling, Jr., chief sanitary engineer; State Department of Public Works, J. A. Volpe, 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 38 gaging stations, of which 1 was in Connecticut, 11 were 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 Unior 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. Provisional records of discharge prior to publication, and other unpublished data concerning the gaging-station records may usually 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:

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 is the depth to which an area would be covered if all the water draining from it in a given period were uniformly distributed on its surface. The term is used for comparing runoff with rainfall, which is also usually expressed in inches.

Acre-foot is the quantity of water required to cover an acre to the depth of 1 foot and is equivalent to 43,560 cubic feet. The term is commonly used in relation to storage for irrigation.

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 OF LISTING GAGING STATIONS

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.

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. Typical structures in use at gaging stations are shown in figure 1.

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

A, OTTER BROOK NEAR KEENE, N. H.

B, PEQUABUCK RIVER AT FORESTVILLE, CONN.

C, MILL RIVER AT NORTHAMPTON, MASS.

FIGURE 1.—GAGING-STATION STRUCTURES.

necessary to define the extremes of discharge, they are made on the basis of indirect determinations of peak discharge (such as slope-area or contracted-opening determinations, 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 and runoff 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 1956 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 per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

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

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

discharge corresponding to once-daily readings of the gage, or to the mean of twice-daily readings, or to the mean gage height determined from gage-height graphs based on gage readings. For periods of rapidly changing stage, the daily mean discharge is determined from gage-height graphs based on gage readings, the frequency of which is stated in the station description.

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

In the monthly summary below the daily table, the line headed "Total" gives the sum of the daily figures; it is the total cfs-days for the month. The line headed "Mean" gives the average flow in cubic feet per second during the month. Runoff 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.

Discharge measurements and determinations of peak flows made at sites other than gaging stations are listed at the end of each report.

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.

Runoff 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 runoff in inches are not published unless storage or diversion records are included to indicate the extent of the regulation or diversion, or unless satisfactory adjustments can be made 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 2.

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.

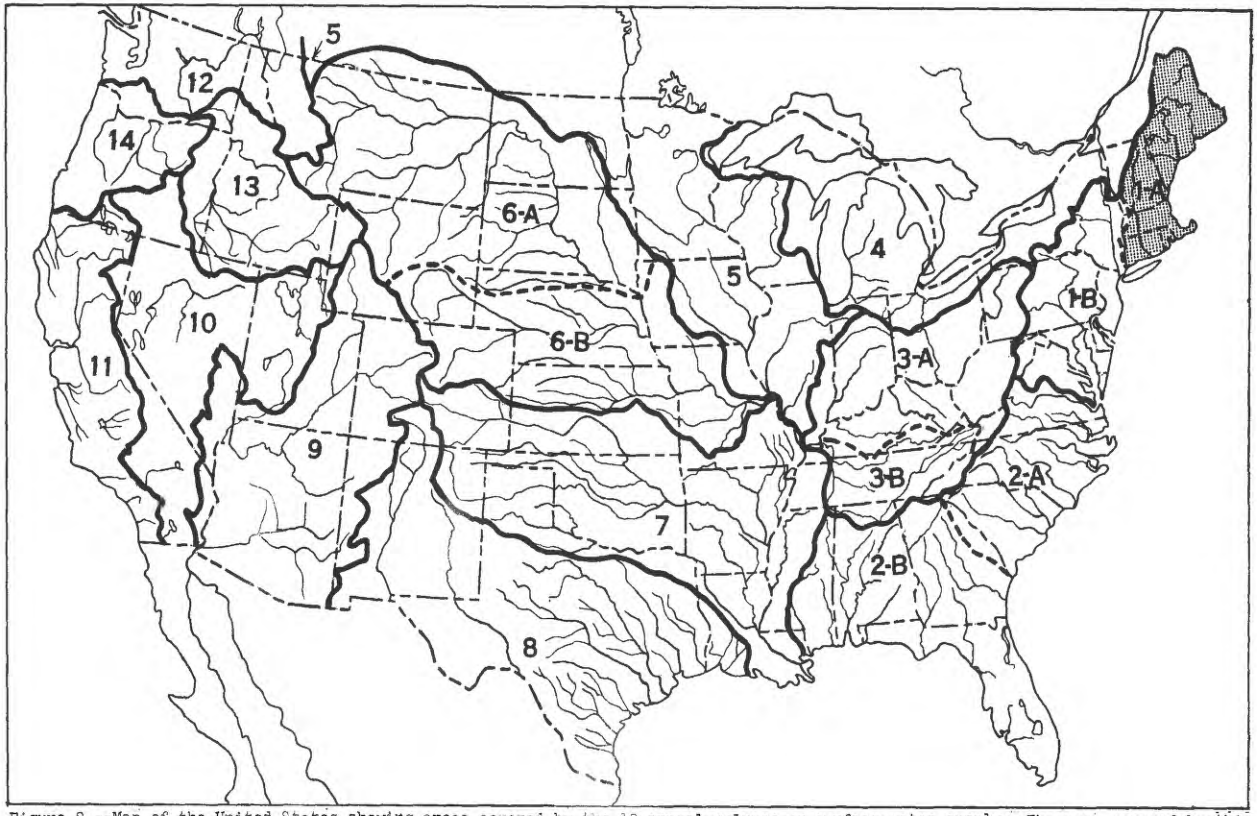

Figure 2.--Map of the United States showing areas covered by the 18 annual volumes on surface-water supply. The area covered by this report is shaded.

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.
WSP 16.....	Descriptions, measurements, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries above Kansas River.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge.	1897.
WSP 27.....	Measurements, ratings, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries.	1898.
WSP 28.....	Measurements, ratings, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries.	1898.
20th A, pt. 4	Monthly discharge.....	1898.
WSP 35 to 39.	Descriptions, measurements, gage heights, and ratings.....	1899.
21st A, pt. 4	Monthly discharge.....	1899.
WSP 47 to 52.	Descriptions, measurements, gage heights, and ratings.....	1900.
22d A, pt. 4.	Monthly discharge.....	1900.
WSP 65, 66...	Descriptions, measurements, gage heights, and ratings.....	1901.
WSP 75.....	Monthly discharge.....	1901.

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

Numbers of water-supply papers containing results of stream measurements in North Atlantic slope basins, Maine to Connecticut, 1899-1956

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		
1909	261	1922	541	1934	756	1946	1051		
1910	281	1923	561	1935	781	1947	1081		
1911	301	1924	581	1936	801	1948	1111		

The records at most of the stations discussed in these reports extend over many years. Discharge measurements at many points other than regular gaging stations have been made each year and are published at the end of each report. The streams and points of measurement are listed in the same order as the streams and gaging stations in the body of the report. An index of the records obtained before 1904 has been published in Water-Supply Paper 119.

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.

Records of discharge have been published also in State reports. Most of these records are also compiled in Water-Supply Paper 1301; however, some of them are not contained in publications of the Geological Survey. The following table contains a list of these reports for the area covered by this report.

State reports containing compilations of records of discharge

State	Period	Report	Issued by
Connecticut...	1900-1927	Bull. 44, Water resources of Connecticut.....	State Geological and Natural History Survey.
Do.....	1912-33	5th biennial report.....	State Water Commission.
Maine.....	1887-1920	1st annual report.....	Maine Water Power Commission.
New Hampshire.	1889-1922	Annual and statistical report, vol. 12.....	Public Service Commission.
Rhode Island..	1929-41	7th annual report.....	Department of Public Works.
Do.....	1929-50	Geological Bull. 6, Ground-water resources of Rhode Island.	Rhode Island Development Council.

Note.--In addition to the records contained in the reports listed above, the following States have issued annual or biennial reports in which are contained records of discharge: Connecticut, Maine, and Rhode Island.

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.

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 1955 to September 1956 by agencies other than the Geological Survey. The records of these stations are not contained in publications of the Geological Survey, nor have they been published elsewhere.

Records of discharge collected by agencies other than the Geological Survey

Stream	Location	Period	Collected by
Androscoggin River.....	Lewiston, Maine.....	1929-56	Central Maine Power Co.
Kennebec River.....	Bingham, Maine.....	1931-56	Do.
Penobscot River.....	Old Town, Maine.....	1915-56	Bangor Hydro-Electric Co.
Race Brook.....	Orange, Conn.....	1911-56	New Haven Water Co.
Saco River.....	Hiram, Maine.....	1930-56	Central Maine Power Co.
Do.....	West Buxton, Maine.....	1940-56	Do.
Stillwater Branch Penobscot River.	Stillwater, Maine.....	1915-56	Bangor Hydro-Electric Co.
Wepawaug River.....	Orange, Conn.....	1911-56	New Haven Water Co.
West River.....	Guilford, Conn.....	1930-56	Do.

HYDROLOGIC CONDITIONS

A major flood occurred October 15-16 in Connecticut and Massachusetts. Peak discharges at several gaging stations were the highest in 25 years of record. A detailed report of this flood will be published in Water-Supply Paper 1420. Monthly mean discharge was record-high for the month at representative long-term stations in Connecticut and Massachusetts during October and November. During the first half of water year 1956 streamflow was deficient in parts of Maine, New Hampshire, and Vermont. Mean discharge was record-low for October at one key gaging station in Maine; at another station in Maine it was record-low for December and for the water year. For two key gaging stations in the area covered by this report, a comparison of the mean discharge with the median for the 25-year period 1921-45 is shown in figure 3 below.

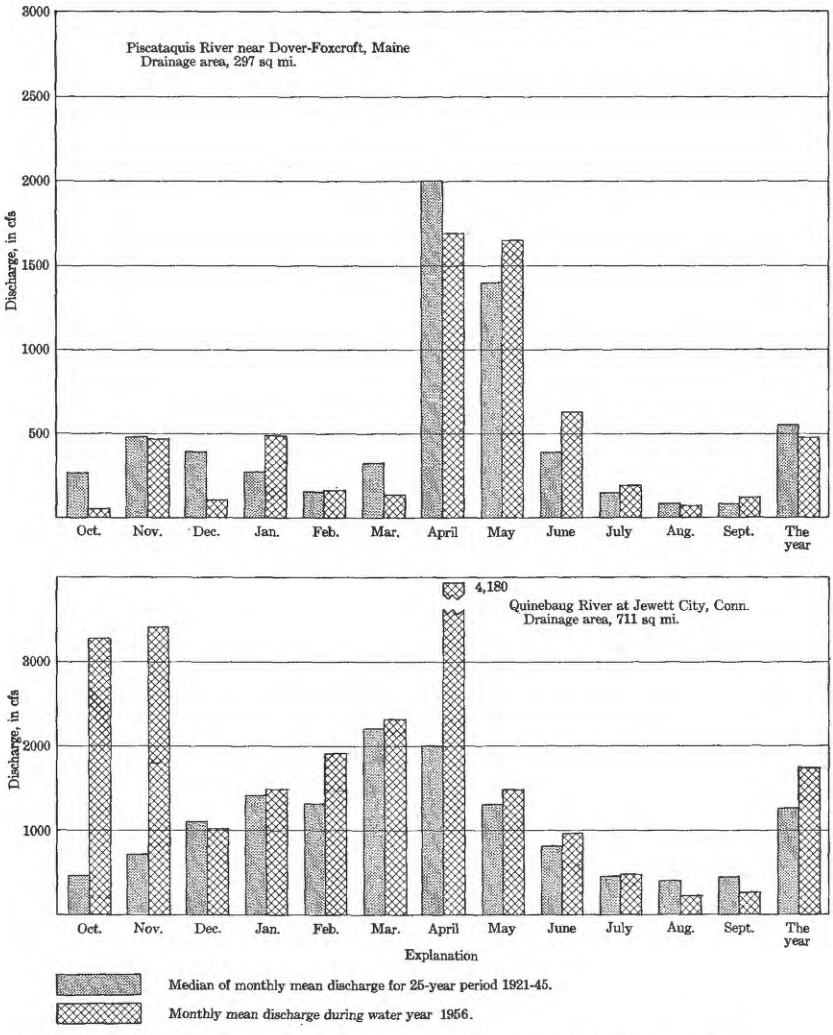

Figure 3. Comparison of discharge at two key gaging stations during 1956 water year with median discharge for 25-year period.

ST. JOHN RIVER BASIN

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 1956.

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

Average discharge.--5 years (1951-56), 2,286 cfs.

Extremes.--Maximum discharge during year, 14,600 cfs May 15 (gage height, 6.99 ft); minimum daily, 158 cfs Mar. 29.
1950-56: Maximum discharge, 27,800 cfs Apr. 23, 1954 (gage height, 8.81 ft); minimum, 59 cfs Sept. 5, 1953 (gage height, 0.25 ft).

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

Rating table, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.7	149	3.0	2,180
1.0	240	4.0	4,230
1.3	368	5.0	7,050
1.6	551	6.0	10,700
2.0	882	6.9	14,200
2.5	1,430		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	544	790	505	235	350	220	162	12,400	4,930	1,230	1,100	263
2	538	3,860	480	225	330	215	162	12,300	5,120	1,500	900	244
3	511	3,710	465	215	315	215	160	12,000	4,590	3,850	766	255
4	466	2,800	455	210	310	210	160	11,200	4,410	3,270	657	345
5	435	2,550	420	205	300	210	170	10,200	5,200	2,260	551	566
6	406	3,100	390	200	290	205	180	11,000	5,060	1,630	466	538
7	*379	3,000	370	200	280	200	198	11,800	4,130	1,280	398	518
8	379	2,730	355	210	275	194	220	10,500	3,350	1,530	363	820
9	412	2,420	350	220	270	190	250	8,450	*5,540	1,840	330	633
10	401	2,120	340	220	265	190	300	7,350	7,990	1,980	415	511
11	354	1,840	335	220	260	186	350	8,030	7,790	2,080	1,090	423
12	316	1,620	330	225	255	186	455	8,380	6,390	1,740	2,230	368
13	282	1,560	320	250	250	180	700	9,700	5,120	1,340	2,080	401
14	263	1,540	315	280	245	176	1,100	12,400	4,720	1,060	1,570	454
15	244	1,410	305	380	240	170	1,600	14,100	3,850	1,060	1,530	504
16	226	1,150	295	560	235	170	2,200	14,000	3,140	1,120	1,500	666
17	216	1,050	280	560	230	170	2,600	12,200	2,510	946	1,100	603
18	220	910	265	545	230	170	3,000	9,650	1,930	740	828	573
19	233	820	255	540	225	170	3,810	7,340	1,530	603	674	920
20	267	760	250	560	220	166	4,590	6,510	1,230	504	633	783
21	255	605	240	550	*215	166	5,800	5,950	1,050	429	801	1,010
22	244	525	240	530	215	*160	5,610	5,120	1,370	374	740	1,580
23	286	575	235	520	220	160	5,010	6,770	2,860	339	595	1,470
24	295	605	230	*495	220	166	4,590	9,950	2,800	465	491	1,230
25	312	580	230	470	225	166	4,520	7,980	2,250	1,280	429	1,410
26	354	575	230	445	225	166	4,410	5,880	2,260	1,920	412	1,960
27	412	560	225	425	220	166	5,310	4,460	1,990	1,820	412	1,750
28	423	550	230	400	220	162	7,350	4,410	1,750	1,630	418	1,390
29	396	540	235	380	220	158	10,400	5,010	1,810	1,980	396	1,100
30	358	520	240	365	-------	166	11,700	4,440	1,540	1,820	339	910
31	330	---	240	350	-------	166	-------	4,010	-------	1,440	295	---
Total	10,757	45,375	9,655	11,190	7,355	5,595	87,067	273,490	108,210	45,060	24,507	24,198
Mean	347	1,512	311	361	254	180	2,902	8,822	3,607	1,454	791	807
Cfsm	0.269	1.17	0.241	0.280	0.197	0.140	2.25	6.84	2.80	1.13	0.613	0.626
In.	0.31	1.30	0.28	0.32	0.21	0.16	2.51	7.89	3.12	1.30	0.71	0.70

Calendar year 1955: Max 20,700 Min 92 Mean 2,119 Cfsm 1.64 In. 22.28
Water year 1955-56: Max 14,100 Min 158 Mean 1,783 Cfsm 1.38 In. 18.81

Peak discharge (base, 10,000 cfs).--May 1 (8 to 11 p.m.) 12,700 cfs (6.49 ft); May 15 (11 to 12 p.m.) 14,600 cfs (6.99 ft); May 24 (2 to 4 a.m.) 10,500 cfs (5.96 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 16 to Apr. 26.

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 1956.

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.--10 years (1946-56), 4,626 cfs.

Extremes.--Maximum discharge during year, 27,400 cfs May 16 (gage height, 10.54 ft); maximum gage height, 10.83 ft Apr. 18 (backwater from ice); minimum daily discharge, 345 cfs Mar. 30.

1910-11, 1946-56: Maximum discharge, 68,700 cfs May 9, 1947 (gage height, 16.30 ft); maximum gage height, 19.88 ft Mar. 29, 1953 (backwater from ice); minimum discharge, 129 cfs Sept. 17, 1948.

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

Revisions.--WSP 1141: Drainage area.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	270	4.0	3,600
1.7	350	5.0	5,810
2.0	630	6.0	8,500
2.5	1,190	8.0	15,200
3.0	1,860	10.0	24,500

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,090	777	905	425	560	435	350	19,300	8,350	2,730	2,140	550
2	1,080	1,700	895	410	540	435	350	19,600	9,880	2,680	1,760	511
3	1,030	5,350	895	390	530	425	350	19,300	9,490	3,100	1,490	560
4	998	4,610	885	385	520	420	365	*18,700	8,590	5,080	1,290	651
5	950	3,660	860	365	500	420	390	17,700	9,130	4,120	1,150	620
6	895	3,780	830	375	490	410	445	18,300	9,430	3,100	1,020	766
7	840	4,500	800	385	480	410	560	20,600	8,060	2,490	895	1,020
8	830	4,410	735	410	475	400	695	19,000	6,810	2,140	798	1,190
9	808	3,970	715	400	475	400	895	15,700	6,580	2,360	766	1,310
10	788	3,560	695	425	475	390	1,260	13,600	10,000	2,820	974	1,200
11	819	3,120	680	*425	475	390	1,590	13,900	11,200	3,190	1,110	998
12	777	2,730	670	445	465	385	1,850	15,300	10,800	3,230	1,690	873
13	714	2,510	660	475	465	375	2,750	18,600	9,880	2,760	2,870	840
14	640	2,370	650	530	455	365	3,100	24,800	8,680	2,370	2,700	851
15	600	2,320	640	660	455	365	3,600	26,800	8,110	2,600	*2,240	986
16	540	2,030	610	930	445	360	4,010	26,800	7,910	2,580	2,120	1,090
17	530	1,920	600	930	435	360	4,690	23,100	6,880	2,420	2,120	1,150
18	530	1,680	570	950	435	360	5,710	18,200	5,260	1,950	1,690	1,170
19	530	1,540	540	975	425	360	6,990	14,200	4,180	1,610	1,400	1,200
20	530	1,410	520	950	425	360	12,800	12,100	*3,380	1,370	1,190	1,520
21	530	1,220	480	915	435	360	13,000	11,300	3,030	1,140	1,060	2,170
22	580	975	465	885	*445	350	12,300	10,000	3,120	1,010	1,140	2,940
23	550	735	465	840	445	350	10,700	10,900	3,840	950	1,180	2,600
24	530	788	455	790	445	*350	9,640	16,000	5,260	917	1,050	2,360
25	610	1,230	445	735	445	350	8,680	14,300	4,720	1,140	939	2,300
26	630	1,070	435	725	445	360	8,170	11,100	4,220	1,940	862	2,850
27	693	950	435	680	435	360	8,230	8,800	4,070	2,870	766	3,100
28	746	950	445	650	435	360	10,400	8,380	3,540	2,850	746	2,500
29	808	940	455	620	435	350	14,700	10,500	3,100	2,660	714	2,100
30	808	915	455	600	-------	345	17,900	9,910	3,010	2,800	682	1,700
31	746	-------	445	580	-------	350	-------	8,440	-------	2,540	630	-----
Total	22,750	67,720	19,335	19,260	13,490	11,710	166,470	495,230	200,490	75,497	41,182	43,476
Mean	734	2,257	624	621	465	378	5,549	15,980	6,683	2,435	1,328	1,449
Cfsm	0.272	0.836	0.231	0.230	0.172	0.140	2.06	5.92	2.48	0.902	0.492	0.537
In.	0.31	0.93	0.27	0.27	0.19	0.16	2.30	6.82	2.77	1.04	0.57	0.60

Calendar year 1955: Max 42,300 Min 350 Mean 4,433 Cfsm 1.64 In. 22.31
Water year 1955-56: Max 28,800 Min 345 Mean 3,215 Cfsm 1.19 In. 16.23

Peak discharge (base, 27,000 cfs).--May 16 (1 to 4 a.m.) 27,400 cfs (10.54 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Sept. 25-30; discharge estimated on basis of records for nearby stations. Stage-discharge relation affected by ice Nov. 19-22, Nov. 28 to Apr. 19.

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, Arcostook 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 1956.

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.--25 years, (1931-56), 1,916 cfs.

Extremes.--Maximum discharge during year, 9,370 cfs May 16 (gage height, 7.30 ft); minimum daily, 154 cfs Mar. 8-10, 29.
1910-11, 1931-56: 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 period of ice effect, which are fair.

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

Rating table, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	137	4.0	2,300
2.0	250	5.0	4,000
2.4	480	6.0	6,090
3.0	990	7.0	8,540
3.5	1,590	7.3	9,370

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	509	284	375	170	265	200	210	3,320	5,000	1,560	466	353
2	480	310	355	164	260	186	250	3,650	5,320	1,590	516	359
3	439	337	350	160	255	198	300	4,020	5,130	1,510	495	388
4	412	348	350	164	250	198	380	*4,250	4,940	1,420	480	377
5	406	359	360	170	250	192	480	4,410	4,790	1,330	473	365
6	382	400	395	192	245	192	590	5,320	4,450	1,250	466	359
7	359	426	400	200	240	170	715	5,690	4,080	1,190	446	419
8	365	466	405	205	225	154	845	5,520	3,900	1,120	426	487
9	359	480	400	210	225	154	970	5,170	3,810	1,020	406	446
10	353	480	400	210	210	154	1,080	5,130	3,720	990	432	406
11	348	480	390	*240	192	168	1,200	5,430	3,670	930	538	388
12	315	473	375	270	182	170	1,310	5,690	3,610	836	546	388
13	299	460	365	365	190	176	1,400	6,820	3,920	748	487	394
14	289	439	340	425	210	178	1,500	8,380	3,610	748	495	406
15	284	419	335	430	225	178	1,580	9,090	3,430	800	*531	412
16	265	400	300	420	215	182	1,710	9,230	3,680	766	524	388
17	255	412	290	420	210	182	1,860	8,680	3,430	689	473	371
18	274	400	285	410	210	182	1,960	7,810	2,880	631	439	377
19	299	420	280	410	210	186	2,110	7,260	2,580	584	426	394
20	304	406	260	400	215	200	2,060	7,040	*2,380	531	426	412
21	299	390	235	390	220	200	2,030	6,540	2,300	487	412	516
22	294	375	220	375	*220	200	2,020	6,000	2,530	480	406	623
23	284	400	205	355	215	200	1,970	7,320	2,790	480	388	531
24	270	380	190	340	210	*200	1,990	8,180	2,380	480	388	480
25	289	365	182	335	205	200	1,960	6,910	2,320	480	419	453
26	299	365	170	320	205	186	2,080	6,220	2,380	531	453	460
27	299	395	178	310	205	170	2,040	5,740	2,060	509	412	446
28	294	400	186	310	205	168	2,200	5,740	1,870	480	394	419
29	279	410	186	290	205	154	2,580	5,760	1,730	480	388	412
30	265	400	182	275	------	158	3,000	5,210	1,630	480	359	400
31	270	------	170	270	------	178	------	4,940	------	473	353	------
Total	10,138	12,079	9,112	9,205	6,374	5,614	44,380	190,470	100,320	25,603	13,863	12,629
Mean	327	403	294	297	220	181	1,479	6,144	3,344	826	447	421
Cfsm	0.262	0.322	0.235	0.238	0.176	0.145	1.18	4.92	2.68	0.661	0.358	0.337
In.	0.30	0.36	0.27	0.27	0.19	0.17	1.32	5.67	2.99	0.76	0.41	0.38

Calendar year 1955: Max 15,700 Min 170 Mean 1,858 Cfsm 1.49 In. 20.17
Water year 1955-56: Max 9,230 Min 154 Mean 1,202 Cfsm 0.962 In. 13.09

Peak discharge (base, 5,700 cfs).--May 16 (1 to 6 a.m.) 9,370 cfs (7.30 ft); May 23 (11:30 p.m.) 8,940 cfs (7.15 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 21 to Apr. 20 (no gage-height record Dec. 20 to Jan. 11); discharge estimated on basis of 1 discharge measurement and records of nearby station.

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 1956.

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

Average discharge.--5 years, 915 cfs.

Extremes.--Maximum discharge during year, 4,110 cfs May 17 (gage height, 7.66 ft); minimum, 99 cfs Mar. 30 (gage height, 2.205 ft).
1951-56: Maximum discharge, 8,770 cfs May 6, 1955 (gage height, 11.53 ft); minimum, that of Mar. 30, 1956.

Remarks.--Records excellent. Lake area above station has not yet 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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

2.2	98	4.0	827
2.3	119	5.0	1,530
2.5	170	7.0	3,400
3.0	334	7.7	4,150
3.5	551		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	453	142	156	111	176	119	113	2,780	1,690	480	418	142
2	406	145	148	111	170	119	113	2,950	1,770	480	401	140
3	372	153	148	106	170	119	109	2,980	1,880	457	372	142
4	345	164	142	106	170	119	115	2,980	1,940	436	345	142
5	327	182	145	104	167	119	119	2,980	1,900	410	323	140
6	304	190	142	102	162	119	121	3,000	1,800	385	301	135
7	283	196	142	100	158	117	131	3,060	1,680	372	280	142
8	273	214	140	119	164	119	148	3,070	1,550	361	262	142
9	255	226	137	119	156	124	190	2,960	1,450	342	249	142
10	242	242	135	*121	156	121	229	2,780	1,360	342	242	142
11	232	255	130	128	148	119	279	2,640	1,300	334	239	148
12	223	266	128	135	148	119	312	2,600	1,250	334	229	156
13	208	269	124	156	156	119	338	2,790	1,210	319	220	164
14	202	269	124	173	145	119	372	3,220	1,160	315	217	170
15	196	273	124	193	145	117	418	3,820	1,130	334	*214	176
16	190	259	126	199	142	117	502	4,050	1,110	323	211	176
17	184	262	124	205	142	115	627	4,040	1,120	315	208	179
18	184	252	121	211	142	115	833	3,760	1,100	304	205	193
19	176	239	119	214	142	113	1,140	3,420	1,050	297	202	190
20	173	226	119	214	140	108	1,430	3,080	*957	280	199	193
21	167	220	119	214	140	106	1,640	2,730	889	262	193	211
22	164	211	119	214	137	104	1,750	2,490	858	251	187	223
23	162	193	117	214	135	102	1,760	2,330	815	246	173	255
24	156	190	115	217	133	*102	1,710	2,240	759	242	167	290
25	162	187	119	217	131	102	1,690	2,200	714	262	170	312
26	150	184	117	214	133	102	1,680	2,080	681	266	167	323
27	148	176	117	202	131	102	1,700	1,920	622	273	162	315
28	145	167	115	199	128	102	1,860	1,790	586	361	164	301
29	140	170	113	199	121	100	2,130	1,700	546	414	150	293
30	137	167	115	193	-------	100	2,560	1,890	507	436	145	273
31	137	-------	111	184	-------	111	-------	1,890	-------	431	142	----- -
Total	6,896	6,289	3,951	5,194	4,288	3,489	26,119	85,820	35,384	10,664	7,157	5,950
Mean	222	210	127	168	148	113	871	2,768	1,179	344	231	198
Cfsm	0.448	0.423	0.256	0.339	0.298	0.228	1.76	5.58	2.38	0.694	0.466	0.399
In.	0.52	0.47	0.30	0.39	0.32	0.26	1.96	6.43	2.65	0.80	0.54	0.45

Calendar year 1955: Max 8,730 Min 102 Mean 941 Cfsm 1.90 In. 25.76
Water year 1955-56: Max 4,050 Min 100 Mean 550 Cfsm 1.11 In. 15.09

* Discharge measurement made this day.

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 1956. 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.--32 years (1903-8, 1929-56), 1,354 cfs.

Extremes.--Maximum discharge during year, 4,890 cfs May 15 (gage heignt, 6.92 ft); minimum daily, 84 cfs Jan. 3.
1903-8, 1911, 1929-56: Maximum discharge, 11,000 cfs Apr. 26, 1934, May 8, 1947; maximum gage height, 10.50 ft Apr. 26, 1934; minimum discharge, 46 cfs Oct. 9, 10, 1950.

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

Revisions.--WSP 1001: Drainage area.

Rating table, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.2	73	3.5	604
2.3	94	4.0	980
2.5	145	5.0	2,000
2.7	209	6.0	3,420
3.0	332	7.4	5,660

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	217	132	94	90	176	130	245	3,760	3,310	1,130	434	232
2	202	132	94	88	176	126	245	3,880	3,290	1,190	414	228
3	199	134	94	84	172	122	245	4,030	3,210	1,110	384	224
4	199	134	106	88	172	120	265	4,140	3,150	1,020	374	220
5	192	137	132	94	170	118	280	*4,200	3,070	972	365	213
6	185	157	134	108	158	118	295	4,350	2,900	913	346	209
7	192	166	130	112	158	118	325	4,430	2,790	896	332	220
8	189	166	130	118	146	118	340	4,400	2,730	888	328	213
9	172	166	122	118	146	118	370	4,350	2,630	880	323	209
10	166	163	112	*122	146	118	400	4,280	2,490	849	337	202
11	163	160	110	122	142	120	425	4,270	2,420	817	346	199
12	163	160	110	122	142	122	470	4,240	2,210	757	332	199
13	160	157	112	162	140	126	524	4,510	2,230	735	319	199
14	160	151	110	230	134	130	547	4,750	2,160	742	346	199
15	151	145	104	255	132	138	604	4,840	2,170	810	389	185
16	145	140	99	265	132	140	750	4,780	2,090	735	*360	175
17	142	122	96	255	132	146	1,190	4,650	2,010	678	332	172
18	154	116	90	240	130	150	1,460	4,520	1,890	658	328	175
19	157	110	92	240	126	162	1,630	4,360	*1,810	611	319	172
20	151	112	94	215	126	170	1,820	4,160	1,730	598	301	182
21	145	122	94	210	126	176	2,030	4,000	1,660	560	288	220
22	140	120	94	210	*122	190	2,250	3,790	1,640	541	276	209
23	137	118	94	210	122	*200	2,390	3,820	1,570	541	272	195
24	140	110	94	210	122	210	2,480	3,820	1,500	572	280	189
25	142	116	88	200	122	210	2,620	3,680	1,450	685	297	185
26	137	120	86	200	122	215	2,690	3,560	1,380	617	288	185
27	137	120	94	200	120	215	2,830	3,420	1,330	554	280	178
28	129	118	99	192	120	220	3,080	3,520	1,260	541	259	178
29	126	112	100	190	118	230	3,240	3,550	1,190	506	247	175
30	129	99	99	186	-------	240	3,560	3,470	1,140	478	239	175
31	129	-------	92	182	-------	245	-------	3,390	-------	440	232	-------
Total	4,950	4,015	3,199	5,318	4,050	4,961	39,600	126,920	64,410	23,024	9,967	5,916
Mean	160	134	103	172	140	160	1,320	4,094	2,147	743	322	197
Cfsm	0.184	0.154	0.118	0.197	0.161	0.184	1.52	4.70	2.46	0.853	0.370	0.226
In.	0.21	0.17	0.14	0.23	0.17	0.21	1.70	5.42	2.74	0.98	0.43	0.25

Calendar year 1955: Max 10,900 Min 86 Mean 1,375 Cfsm 1.58 In. 21.44
Water year 1955-56: Max 4,840 Min 84 Mean 810 Cfsm 0.930 In. 12.65

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 17 to Apr. 12 (no gage-height record Jan. 3-10).

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 1956.

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.--30 years, 9,556 cfs.

Extremes.--Maximum discharge during year, 48,300 cfs May 16 (gage height, 15.22 ft); minimum daily, 790 cfs Apr. 2, 3 (during ice effect period); minimum gage height, 1.54 ft Oct. 24, 25.

1926-56: 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, which are fair.

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

Rating tables, water year 1955-56, 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			
0.8	755	4.0	4,300	5.0	6,200	12.0	32,000
1.0	895	5.0	6,200	6.5	10,100	14.0	42,000
1.2	1,040	6.5	9,640	8.0	14,900	15.3	48,800
1.5	1,270	8.0	14,200	10.0	22,900		
2.0	1,710	9.5	19,700				
3.0	2,800						

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

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,410	1,510	1,340	900	1,250	930	795	31,800	20,200	6,560	3,920	1,540
2	2,500	1,580	1,420	855	1,200	930	790	33,200	21,800	6,600	3,480	1,490
3	2,360	3,730	1,500	810	1,160	930	790	33,600	22,300	6,400	3,120	1,520
4	2,230	5,860	1,560	805	1,120	930	890	33,400	21,200	7,380	2,840	1,540
5	2,180	5,070	1,500	840	1,120	925	1,000	*32,600	20,800	7,790	2,600	1,600
6	2,060	4,530	1,480	890	1,120	915	1,200	33,400	20,900	6,660	2,420	1,500
7	1,990	5,140	1,510	950	1,100	910	1,500	36,400	19,500	5,780	2,250	1,790
8	1,910	5,600	1,380	960	1,060	900	1,900	35,900	17,500	5,180	2,100	2,010
9	1,850	5,370	1,260	950	1,040	880	2,900	32,400	16,200	4,880	1,980	2,160
10	1,800	4,950	1,280	*970	1,020	875	3,050	29,200	17,700	5,200	2,050	2,250
11	1,790	4,520	1,340	1,030	1,020	875	3,240	28,600	20,500	5,450	2,310	2,030
12	1,730	4,130	1,330	1,100	1,020	880	3,600	30,400	20,400	5,720	2,510	1,860
13	1,660	3,810	1,320	1,260	1,010	875	4,200	34,600	19,500	5,280	3,520	1,800
14	1,580	3,540	1,300	1,500	1,000	865	4,990	42,700	17,700	4,770	4,110	1,820
15	1,490	3,480	1,460	1,840	990	865	5,900	46,800	16,800	4,880	3,910	1,890
16	1,410	3,260	1,340	1,800	980	865	7,010	47,800	16,500	4,900	*3,470	1,960
17	1,370	3,070	1,240	1,920	970	865	7,920	44,400	15,700	4,620	3,460	1,990
18	1,370	2,400	1,220	1,980	980	875	9,300	39,000	13,200	4,130	3,160	2,100
19	1,370	2,000	1,170	1,870	990	875	14,800	33,500	*11,400	3,620	2,780	2,030
20	1,380	2,080	1,100	1,920	980	880	17,100	29,600	9,980	3,170	2,440	2,180
21	1,380	2,000	1,020	1,900	*970	880	16,700	27,400	8,960	2,840	2,220	2,750
22	1,370	1,750	1,030	1,840	980	880	19,300	25,200	8,720	2,610	2,090	3,600
23	1,360	1,580	1,050	1,780	980	*880	18,900	25,400	9,470	2,510	2,130	4,220
24	1,330	1,580	1,050	1,720	980	880	18,000	31,800	10,400	2,500	2,100	4,080
25	1,350	1,500	1,000	1,620	970	890	17,000	31,000	10,500	2,810	2,080	3,640
26	1,370	1,500	960	1,550	970	880	16,400	26,100	9,800	2,970	1,990	3,320
27	1,440	1,510	1,040	1,500	960	875	16,600	23,000	9,050	4,070	1,960	3,680
28	1,450	1,490	1,080	1,420	960	880	18,900	21,800	8,300	4,620	1,830	3,760
29	1,520	1,440	1,000	1,370	945	860	23,500	22,900	7,300	4,460	1,740	3,350
30	1,530	1,380	935	1,320	-------	855	29,000	22,900	6,900	4,520	1,660	2,970
31	1,510	-------	970	1,280	-------	830	-------	21,100	-------	4,270	1,630	-------
Total	52,050	91,360	38,185	42,450	29,845	27,415	287,175	987,900	449,180	147,150	79,860	72,430
Mean	1,679	3,045	1,232	1,369	1,029	884	9,572	31,870	14,970	4,747	2,576	2,414
Cfsm	0.295	0.535	0.217	0.241	0.181	0.155	1.68	5.60	2.63	0.834	0.453	0.424
In.	0.34	0.60	0.25	0.28	0.20	0.18	1.87	6.46	2.93	0.93	0.52	0.47

Calendar year 1955: Max 83,900 Min 935 Mean 9,152 Cfsm 1.61 In. 21.83
Water year 1955-56: Max 47,800 Min 790 Mean 6,298 Cfsm 1.11 In. 15.06

Peak discharge (base, 45,000 cfs).--May 16 (8 to 9 a.m.) 48,300 cfs (15.22 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 18-27, Nov. 30 to Apr. 22 (no gage-height record Dec. 25 to Jan. 10, Jan 29 to Feb. 3; discharge computed on basis of 1 discharge measurement, weather records, and records of flow at Grand Falls power station).

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.--328 sq mi.

Records available.--June 1951 to September 1956.

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

Average discharge.--5 years, 598 cfs.

Extremes.--Maximum discharge during year, 3,570 cfs May 15 (gage height, 4.67 ft); maximum gage height, 5.22 ft Apr. 19 (backwater from ice); minimum daily discharge, 18 cfs Jan. 5. 1951-56: Maximum discharge, 16,600 cfs June 29, 1954 (gage height, 11.94 ft), from rating curve extended above 6,100 cfs by logarithmic plotting; minimum, 5.4 cfs Sept. 17, 1952 (gage height, 0.64 ft); minimum gage height, 0.38 ft Sept. 18, 19, 1955.

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

Rating tables, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 20				Apr. 21 to Sept. 30			
0.3	11	1.3	280	0.5	29	2.0	685
.4	21	1.6	436	.7	62	2.5	1,070
.5	34	2.0	685	1.0	144	3.0	1,540
.7	71	2.4	985	1.3	268	4.0	2,670
1.0	157			1.6	430	4.6	3,470

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	50	67	21	225	52	58	1,830	1,230	305	103	64
2	34	50	65	20	215	50	71	1,940	1,020	200	82	71
3	34	50	58	20	205	50	83	2,050	1,080	380	92	98
4	34	50	56	19	205	50	95	*2,060	1,360	530	82	95
5	34	56	56	18	196	50	120	2,010	830	455	80	44
6	34	65	58	19	196	48	150	2,180	1,010	305	82	43
7	34	83	63	20	190	48	176	2,350	775	375	77	124
8	34	85	67	21	180	48	215	2,360	835	290	69	100
9	34	85	69	26	166	48	290	2,110	765	400	66	84
10	34	83	71	34	158	48	435	1,820	565	355	75	75
11	36	81	71	42	150	48	500	1,500	855	335	84	71
12	36	81	71	*60	130	48	555	1,690	590	285	84	69
13	37	78	71	78	118	48	620	2,120	940	87	75	66
14	39	76	71	120	110	48	670	2,560	750	495	*75	66
15	39	76	71	176	95	48	685	3,370	730	134	77	64
16	39	71	71	235	93	48	755	3,230	650	335	*73	62
17	39	67	71	255	90	48	850	2,620	349	390	64	64
18	92	56	71	280	83	48	970	1,890	545	360	60	69
19	372	58	71	290	73	48	985	1,520	*495	415	7[illegible]	69
20	280	67	69	295	71	48	850	808	646	585	73	80
21	195	108	69	300	67	47	734	1,120	445	495	71	137
22	118	140	65	290	60	*44	706	929	410	49	64	162
23	78	158	56	280	60	44	692	1,270	581	505	64	158
24	49	150	50	275	*58	44	672	1,940	595	345	73	155
25	73	128	48	270	58	44	699	1,900	275	250	100	148
26	63	104	42	260	56	42	1,080	1,430	350	200	10[illegible]	144
27	39	93	36	250	54	42	1,220	1,220	350	178	93	137
28	85	81	34	235	52	42	1,340	1,180	162	164	87	128
29	56	71	33	235	52	47	1,480	1,410	320	100	77	114
30	50	67	25	235	-------	50	1,660	1,290	450	106	73	103
31	50	-------	22	235	-------	52	-------	1,110	-------	108	69	-------
Total	2,205	2,468	1,818	4,914	3,486	1,470	19,418	56,817	19,958	9,514	2,420	2,864
Mean	71.1	82.3	58.6	159	120	47.4	647	1,833	665	307	78.1	95.5
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 5,370 Min 20 Mean 478 Cfsm 1.46 In. 19.78
Water year 1955-56: Max 3,370 Min 18 Mean 348 Cfsm 1.06 In. 14.43

Peak discharge (base, 3,200 cfs).--May 15 (5 p.m.) 3,570 cfs (4.67 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 16 to Apr. 20.

Aroostook River at Washburn, Maine

Location.--Lat 46°46'35", long 66°09'30", on right bank just upstream from Bangor and Aroostook Railroad bridge, 0.1 mile downstream from Salmon Brook and 1 mile south of railroad station at Washburn, Aroostook County.
Drainage area.--1,620 sq mi, approximately.
Records available.--August 1930 to September 1956.
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.--26 years, 2,567 cfs (unadjusted).
Extremes.--Maximum discharge during year, 12,500 cfs May 16 (gage height, 7.44 ft); maximum gage height, 8.03 ft Apr. 18 (backwater from ice); minimum daily discharge, 110 cfs Dec. 6-8, 11, 12.
1930-56: Maximum discharge, 37,800 cfs Mar. 22, 1936 (gage height, 11.80 ft); maximum gage height, 15.78 ft Apr. 6, 1951 (backwater from ice); minimum daily discharge, 75 cfs Feb. 13-15, 1948.
Remarks.--Records excellent except those for period of ice effect, which are fair. Flow partly regulated by Squapan Lake (capacity, 2,554,000,000 cu ft) and by Millinocket Lake (capacity, 1,007,000,000 cu ft) used for power, and Machias and Rowe Lakes (combined capacity, about 280,000,000 cu ft, corrected) used for log driving.
Revisions (water years).--WSP 951: 1935. WSP 1301: 1933-50 (adjusted monthly runoff).

Rating tables, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 21

1.4	82	2.5	820
1.6	160	3.0	1,440
1.8	260	4.0	3,130
2.0	390	5.0	5,300

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

Apr. 22 to Sept. 30

1.7	250	5.0	5,300
2.0	455	6.0	7,990
2.5	930	7.0	11,000
3.0	1,560	7.4	12,400
4.0	3,160		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	320	185	132	120	890	445	260	10,100	4,810	1,060	506	317
2	330	180	124	124	880	445	260	10,000	4,390	974	448	310
3	327	175	116	132	880	440	265	*10,000	4,060	1,460	395	380
4	314	180	112	128	870	430	280	9,700	4,230	1,830	380	480
5	302	190	112	120	860	440	320	9,100	3,710	1,450	345	493
6	278	230	110	136	860	475	390	9,400	3,320	1,280	317	425
7	266	260	110	132	850	485	485	10,100	3,070	1,150	324	425
8	260	302	110	160	850	490	585	9,850	2,790	996	324	472
9	250	314	112	*370	850	490	720	8,880	2,810	1,010	317	432
10	235	302	112	500	850	490	870	8,020	2,710	1,110	331	440
11	210	327	110	720	850	490	1,040	7,560	3,300	1,280	388	388
12	205	286	110	980	840	490	1,260	7,420	3,050	1,250	440	373
13	200	272	128	1,230	820	485	1,520	8,430	3,500	1,140	448	440
14	185	266	128	1,480	800	475	1,820	9,850	3,480	919	*402	432
15	220	245	186	1,620	780	445	2,320	11,700	2,960	1,090	380	352
16	230	215	225	1,740	730	425	2,940	12,400	2,830	820	373	338
17	205	205	270	1,800	700	410	4,120	11,200	2,380	908	331	324
18	185	196	310	1,770	675	390	5,560	9,460	2,100	820	310	331
19	272	205	320	1,700	640	370	7,180	8,070	2,000	730	331	324
20	453	225	310	1,640	605	350	9,110	6,910	1,530	810	331	373
21	369	240	295	1,520	565	320	9,940	5,960	*1,530	820	310	558
22	296	225	270	1,430	530	295	9,460	5,200	1,170	702	304	919
23	230	200	250	1,340	*515	*285	8,910	5,480	1,560	464	286	919
24	195	205	230	1,260	500	280	8,400	6,940	1,630	702	286	842
25	235	166	210	1,170	485	270	7,860	6,800	1,420	720	380	*750
26	250	156	190	1,100	475	270	7,480	5,800	1,340	720	455	648
27	369	152	176	1,030	470	270	7,370	4,910	1,290	648	455	630
28	369	148	160	980	460	265	7,500	5,200	1,060	576	448	612
29	245	140	148	930	455	265	7,940	6,070	1,030	549	418	666
30	240	136	136	920	--------	265	8,790	5,880	1,090	532	366	684
31	195	--------	124	900	--------	260	--------	5,030	--------	549	317	--------
Total	8,230	6,538	5,436	29,182	20,535	12,005	124,955	251,420	76,150	29,069	11,446	15,082
Mean	265	218	175	941	708	387	4,165	8,110	2,538	938	369	503
(†)	-4	-41	-136	-19	-290	-78	+389	+485	+116	+2	-9	+4

Adjusted for change in contents in Millinocket and Squapan Lakes

Mean	261	177	39	922	418	309	4,554	8,595	2,654	940	360	507
Cfsm	0.161	0.109	0.024	0.569	0.258	0.191	2.81	5.31	1.64	0.580	0.222	0.313
In.	0.19	0.12	0.03	0.66	0.28	0.22	3.14	6.12	1.83	0.67	0.26	0.35

		Observed					Adjusted					
Calendar year 1955:	Max	19,900	Min	110	Mean	2,201	Mean	2,141	Cfsm	1.32	In.	18.01
Water year 1955-56:	Max	12,400	Min	110	Mean	1,612	Mean	1,648	Cfsm	1.02	In.	13.87

Peak discharge (base, 13,000 cfs).--No peak above base.
* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Millinocket and Squapan Lakes.
Note.--Stage-discharge relation affected by ice Nov. 16 to Apr. 21.

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 1956. October 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.--16 years, 280 cfs.

Extremes.--Maximum discharge during year, 2,780 cfs Apr. 18 (gage height, 6.44 ft); minimum daily, 6.9 cfs Dec. 28 to Jan. 2.
1940-56: Maximum discharge, 6,590 cfs Sept. 12, 1954 (gage height, 9.28 ft); maximum gage height, 10.83 ft Mar. 27, 1953 (backwater from ice); minimum discharge, 3.6 cfs Sept. 19, 1946 (gage height, 2.09 ft).

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

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

Rating tables, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 17				Apr. 18 to Sept. 30			
2.2	6.2	3.0	160	2.4	23	4.0	650
2.3	13	3.5	360	2.5	37	5.0	1,360
2.4	23	4.0	620	2.7	77	6.0	2,320
2.5	37	5.0	1,300	3.0	180	7.0	3,400
2.7	75	5.3	1,540	3.5	400		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	18	15	6.9	98	116	56	2,050	370	66	66	33
2	20	18	15	6.9	95	112	56	1,680	410	475	89	31
3	18	18	14	7.6	92	110	58	*1,400	365	510	83	37
4	18	18	13	7.6	90	106	64	1,210	314	328	66	53
5	18	18	13	7.6	85	102	75	1,170	282	220	57	50
6	16	20	13	8.2	85	100	100	1,140	248	164	50	42
7	16	27	13	12	82	100	168	1,040	216	133	44	41
8	17	31	14	14	80	100	290	875	188	137	41	36
9	19	34	15	*23	80	102	400	746	180	137	37	33
10	20	34	16	51	78	118	525	645	188	176	52	33
11	20	31	17	124	75	120	610	615	260	180	164	30
12	19	31	17	210	71	124	550	570	292	152	123	29
13	18	30	15	250	71	118	520	590	314	116	*92	31
14	18	30	14	325	71	112	550	605	282	120	77	41
15	17	31	12	400	69	100	630	662	232	228	73	42
16	16	30	12	330	*69	90	800	630	224	212	62	44
17	16	30	12	270	62	88	1,540	560	184	156	51	44
18	16	30	12	230	62	80	2,630	485	148	120	46	55
19	16	27	11	210	60	78	2,440	435	130	100	53	64
20	17	26	11	180	60	71	2,060	375	113	83	80	62
21	17	24	11	168	58	*69	1,760	332	*92	70	77	100
22	17	23	9.6	160	56	62	1,630	296	92	66	64	116
23	18	23	8.9	148	54	62	1,340	278	97	70	53	97
24	18	21	8.9	140	58	62	1,190	296	89	70	48	*80
25	18	20	8.2	132	60	60	1,120	269	113	66	48	77
26	20	19	8.2	124	78	60	1,090	236	144	73	39	80
27	20	18	7.6	116	90	60	1,120	228	109	70	44	77
28	20	16	6.9	110	110	62	1,290	355	92	75	42	68
29	20	16	6.9	106	112	62	1,390	420	80	94	41	59
30	20	15	6.9	102	-------	60	1,830	380	75	92	37	51
31	19	---	6.9	100	-------	58	-------	336	---	73	34	-----
Total	560	727	364.0	4,079.8	2,211	2,724	27,882	20,909	5,923	4,632	1,933	1,636
Mean	18.1	24.2	11.7	132	76.2	87.9	929	674	197	149	62.4	54.5
Cfsm	0.103	0.138	0.067	0.754	0.435	0.502	5.31	3.85	1.13	0.851	0.357	0.311
In.	0.12	0.15	0.08	0.87	0.47	0.58	5.92	4.44	1.26	0.98	0.41	0.35

Calendar year 1955: Max 3,300 Min 6.9 Mean 223 Cfsm 1.27 In. 17.32
Water year 1955-56: Max 2,630 Min 6.9 Mean 201 Cfsm 1.15 In. 15.63

Peak discharge (base, 2,100 cfs).--Apr. 18 (8 p.m.) 2,780 cfs (6.44 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 19 to Apr. 17.

St. Croix River at Vanceboro, Maine

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 (revised).

Records available.--October 1928 to September 1956.

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

Average discharge.--28 years, 691 cfs.

Extremes.--Maximum discharge during year, 1,800 cfs Aug. 6 (gage height, 6.95 ft); minimum, 28 cfs Jan. 10 (gage height, 2.48 ft).
1929-56: 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 below 150 cfs, which are good. Flow regulated by Chiputneticook Lakes (combined usable capacity, about 13,200,000,000 cu ft).

Rating table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

3.1	84	5.0	544
3.5	145	5.5	780
4.0	247	6.0	1,090
4.5	377	7.0	1,850

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	604	188	245	104	291	750	540	247	650	565	1,140	900
2	595	190	259	106	480	735	532	254	436	565	1,130	900
3	590	190	257	106	306	730	521	257	505	557	1,510	894
4	582	190	257	104	306	715	517	261	1,000	557	1,680	620
5	*582	190	257	104	309	705	340	266	795	557	1,640	462
6	569	190	257	104	309	810	194	*266	825	785	670	462
7	565	192	254	104	317	858	202	269	795	1,300	284	466
8	565	192	*254	108	319	852	211	271	740	1,290	495	462
9	565	192	490	480	319	852	220	274	406	1,260	1,210	459
10	557	194	755	575	319	828	231	276	515	750	1,180	456
11	557	192	730	305	319	804	238	278	990	569	1,050	452
12	548	194	705	152	322	798	247	281	984	805	876	452
13	540	196	680	167	322	775	257	281	984	1,240	960	449
14	524	194	655	210	322	760	266	281	*984	1,230	1,150	449
15	524	196	415	156	*322	755	276	281	725	760	1,140	456
16	517	196	220	159	319	740	291	450	436	498	1,120	449
17	513	196	385	161	319	735	280	1,270	436	494	1,100	449
18	517	198	350	161	319	720	182	815	570	494	1,090	456
19	509	196	255	163	319	705	190	281	1,090	491	1,080	449
20	509	194	211	335	319	690	198	320	1,450	491	1,070	443
21	501	198	170	290	319	675	200	449	1,450	491	1,040	446
22	335	194	106	247	317	660	206	600	1,440	491	1,030	443
23	192	190	106	370	485	645	209	735	730	487	1,010	439
24	190	192	106	425	586	626	213	535	1,020	487	996	436
25	194	192	106	281	578	612	217	575	1,420	491	996	433
26	192	192	106	284	578	599	222	515	1,420	491	978	433
27	192	420	106	284	569	586	222	406	1,370	491	966	430
28	194	385	104	286	705	573	231	660	1,380	905	954	427
29	192	224	104	315	765	561	236	600	1,030	1,200	942	424
30	192	224	104	405	-------	552	242	705	569	1,170	930	421
31	190	-------	104	291	-------	552	-------	730	-------	1,160	918	-------
Total	13,596	6,271	9,093	7,342	11,379	21,958	8,131	13,689	27,145	23,122	32,335	14,917
Mean	439	209	293	237	392	708	271	442	905	746	1,043	497
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 2,110 Min 104 Mean 930 Cfsm - In. -
Water year 1955-56: Max 1,680 Min 104 Mean 516 Cfsm - In. -

* Discharge measurement made on this day.

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, 0.8 mile downstream from outlet dam of Grand Lake.

Drainage area.--224 sq mi.

Records available.--October 1928 to September 1956.

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

Average discharge.--28 years, 352 cfs.

Extremes.--Maximum discharge during year, 1,780 cfs July 24 (gage height, 5.02 ft); minimum, 53 cfs Aug. 18 (gage height, 1.35 ft).
1928-56: Maximum discharge, 2,840 cfs June 12, 1952 (gage height, 6.35 ft); minimum mum daily, 5 cfs Dec. 3-6, 11, 1945.

Remarks.--Records excellent except those for period of no gage-height record, which are fair. 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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 16, 17)

1.4	58	2.5	326
1.5	70	3.0	541
1.6	83	3.5	790
1.7	99	4.0	1,080
1.9	141	5.0	1,760
2.2	225		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	585	369	160	150	144	541	377	136	167	285	790	255
2	580	373	198	148	146	531	369	136	167	381	818	255
3	750	369	265	148	146	522	358	136	167	381	965	255
4	735	361	261	148	144	512	361	132	167	381	1,010	295
5	*556	361	261	148	146	512	265	136	173	377	1,010	470
6	546	365	265	148	144	498	103	*141	178	373	954	465
7	527	192	250	146	146	488	101	136	175	373	954	460
8	522	275	175	146	146	496	101	136	175	369	*770	455
9	517	361	162	146	149	517	101	132	178	361	319	451
10	517	354	175	144	149	507	101	132	178	1,010	316	442
11	507	347	162	138	149	488	101	132	490	1,340	316	437
12	498	347	157	142	149	479	101	132	105	1,030	316	428
13	484	344	157	146	149	465	101	139	97	340	312	424
14	474	336	154	144	149	465	101	151	94	344	308	419
15	470	340	154	144	149	460	101	149	93	350	308	395
16	460	330	154	144	146	446	110	151	94	1,040	302	265
17	455	330	152	142	150	460	130	*154	89	1,310	330	414
18	451	333	152	142	162	451	130	154	71	995	285	414
19	446	322	152	140	192	451	127	154	300	365	291	393
20	442	322	152	144	195	446	127	154	275	490	271	385
21	432	312	152	144	195	437	127	154	65	561	258	385
22	395	312	150	144	195	428	130	157	66	556	258	377
23	419	298	150	144	195	414	130	162	66	950	261	373
24	410	298	150	144	195	410	130	164	66	850	258	361
25	410	182	150	144	235	406	132	162	68	540	258	361
26	397	225	150	144	326	397	132	162	68	425	255	358
27	401	284	150	144	322	393	132	162	68	605	255	415
28	393	278	150	144	415	389	130	167	69	635	258	510
29	381	281	150	144	551	377	130	170	68	71	255	424
30	373	274	150	144	-------	377	134	167	68	70	255	414
31	361	----	150	144	-------	381	-------	167	--------	485	255	----
Total	14,894	9,475	5,370	4,482	5,679	14,146	4,673	4,617	4,105	17,643	13,771	11,755
Mean	480	316	173	145	196	456	156	149	137	569	444	392
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 1,470 Min 83 Mean 546 Cfsm - In. -
Water year 1955-56: Max 1,340 Min 65 Mean 302 Cfsm - In. -

* Discharge measurement made on this day.
Note.--No gage-height record Dec. 18 to Jan. 18; discharge estimated from records of gate openings at storage dam three-quarters of a mile upstream.

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, approximately.

Records available.--November 1919 to September 1956.

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

Average discharge.--37 years, 2,206 cfs.

Extremes.--Maximum discharge during year, 8,570 cfs Apr. 18 (gage height, 6.36 ft); minimum daily, 355 cfs Dec. 25.
1919-56: Maximum discharge, about 23,300 cfs May 1, 1923 (gage height, 13.90 ft); minimum daily, 100 cfs (estimated) July 20, 1924, when plant was closed down.

Remarks.--Records excellent except those below 600 cfs and those for periods of shifting control, 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.

Rating table, water year 1955-56, except periods of shifting control (gage height, in feet, and discharge, in cubic feet per second)

0.5	350	2.0	1,570
.7	470	3.0	2,850
.9	590	4.0	4,340
1.2	800	6.0	7,850
1.5	1,040		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,180	758	872	525	1,610	1,930	1,270	7,270	3,020	970	1,910	1,640
2	805	848	865	620	1,630	2,140	1,870	7,190	2,630	1,630	2,020	750
3	1,120	765	680	630	1,470	2,280	2,060	6,210	1,030	2,500	1,960	560
4	1,180	758	675	710	1,640	1,150	1,960	5,400	2,160	960	2,190	1,350
5	1,180	758	660	630	895	2,150	2,160	*5,260	2,370	2,310	1,470	1,190
6	*1,210	855	610	565	1,360	2,190	2,140	4,890	2,620	2,550	1,680	1,260
7	1,220	646	710	610	1,640	2,090	2,180	4,680	2,750	2,350	1,630	1,310
8	1,190	758	*680	405	1,670	2,090	2,320	3,870	2,700	1,320	1,610	1,210
9	1,230	960	645	640	1,710	2,180	2,290	3,000	2,590	2,110	*1,820	1,230
10	1,160	1,170	680	625	1,650	2,220	2,380	2,790	1,200	2,350	1,460	1,300
11	1,200	730	565	665	1,690	1,890	2,420	2,670	2,420	2,280	1,700	1,230
12	1,200	723	640	1,060	1,730	2,090	2,450	2,580	2,610	2,310	1,040	1,150
13	968	723	510	735	1,690	2,190	2,380	2,390	2,640	2,290	1,880	1,200
14	1,050	1,260	525	2,220	1,700	2,140	2,030	2,600	2,610	2,270	2,000	985
15	1,000	1,610	530	2,550	*1,730	2,160	1,220	4,370	2,050	1,380	2,070	1,200
16	965	1,210	675	2,180	1,730	2,150	2,890	3,180	2,630	2,100	1,940	825
17	850	765	660	2,420	1,740	2,240	4,530	2,810	1,610	2,320	2,100	1,380
18	1,040	702	620	*2,290	1,730	1,520	7,110	2,770	2,450	2,200	1,850	1,220
19	1,170	758	620	2,280	1,020	2,180	7,470	2,790	2,700	2,020	960	1,180
20	955	751	640	2,360	1,640	*2,150	6,460	2,660	2,460	1,980	1,670	1,170
21	653	765	640	2,240	1,700	2,150	5,870	2,480	2,570	1,880	1,710	1,190
22	960	709	620	1,090	1,710	2,220	5,810	2,110	2,480	1,690	1,610	1,190
23	1,170	674	610	1,960	1,730	2,160	5,760	2,370	2,640	1,960	1,570	1,190
24	965	674	585	2,230	1,730	2,190	5,650	2,610	1,570	2,070	1,590	1,180
25	709	674	355	1,800	1,730	2,120	5,360	2,670	2,330	2,120	1,580	1,270
26	716	611	400	1,490	1,750	2,220	5,310	2,710	2,660	2,030	945	1,210
27	702	618	510	1,610	1,710	1,970	4,260	1,980	2,520	2,090	1,520	1,190
28	785	695	660	1,640	1,940	1,920	4,000	2,070	2,400	2,140	1,710	1,130
29	1,020	618	735	1,630	2,160	1,960	4,120	3,080	2,490	1,180	1,630	1,220
30	690	751	715	1,610	------	1,940	5,590	3,590	2,460	2,020	1,710	780
31	723	------	645	1,450	------	1,930	------	3,170	------	2,230	1,690	------
Total	30,966	24,297	19,537	43,470	47,835	63,910	111,680	108,220	71,370	61,610	52,225	34,890
Mean	999	810	630	1,402	1,649	2,062	3,723	3,491	2,379	1,987	1,685	1,163
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 7,270 Min 355 Mean 2,631 Cfsm - In. -
Water year 1955-56: Max 7,470 Min 355 Mean 1,831 Cfsm - In. -

* Discharge measurement made on this day.
Note.--Shifting-control method used Dec. 2 to Apr. 17, May 21 to Sept. 30.

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 1956.

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

Extremes.--Maximum discharge during year, 1,460 cfs Apr. 16 (gage height, 5.45 ft); minimum discharge observed, 9.4 cfs Aug. 18 (gage height, 0.34 ft).

Remarks.--Records excellent except those for periods of ice effect, no gage-height record or twice-daily staff-gage readings, which are fair. Flow partly regulated by power development at Meddybemps Lake.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.3	7.6	2.5	343
.4	12	3.0	482
.7	32	4.0	819
1.0	62	5.0	1,240
1.5	132	5.2	1,330
2.0	227		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	a130	100	31	182	175	151	580	262	100	27	14
2	36	108	53	30	169	200	153	462	245	122	20	20
3	33	88	52	27	180	247	182	416	234	92	16	30
4	28	68	45	22	182	245	299	407	276	55	14	22
5	36	59	45	27	162	240	438	*497	294	59	24	17
6	26	127	77	27	163	225	524	462	278	45	23	16
7	26	208	68	20	135	208	503	364	256	33	30	20
8	90	149	52	27	162	160	450	333	236	36	*23	22
9	60	108	70	58	200	158	438	294	247	37	19	22
10	38	119	44	214	194	196	427	346	247	46	16	20
11	27	97	37	320	186	196	430	369	282	45	16	17
12	26	180	64	343	169	242	396	326	294	34	15	15
13	35	135	63	473	162	238	407	320	*253	33	14	14
14	26	98	49	698	*200	234	421	433	231	55	13	14
15	21	162	45	740	200	219	497	396	223	127	11	29
16	19	140	40	574	194	200	1,320	*313	249	87	12	82
17	20	171	42	456	171	163	1,330	306	219	63	11	104
18	22	236	39	*356	182	219	1,020	267	212	47	9.4	124
19	26	196	33	287	165	206	744	249	190	34	12	110
20	27	139	37	253	126	*180	574	221	173	25	15	68
21	27	86	54	234	140	184	473	190	76	22	15	37
22	27	100	49	204	156	169	447	200	42	21	13	26
23	28	100	41	165	149	160	473	184	40	21	11	22
24	29	101	41	182	151	167	534	247	36	20	15	22
25	30	83	43	184	180	163	485	240	41	19	14	38
26	30	97	42	175	202	169	438	234	71	16	13	45
27	30	77	40	165	200	158	456	240	163	15	13	38
28	30	94	39	178	178	156	488	575	81	19	13	27
29	29	118	35	127	188	156	537	495	100	33	13	24
30	27	91	33	110	-------	156	694	359	162	35	13	45
31	26	-------	32	122	-------	151	-------	282	-------	30	13	------
Total	961	3,665	1,504	6,829	5,028	5,940	15,729	10,607	5,713	1,426	486.4	1,104
Mean	31.0	122	48.5	220	173	192	524	342	190	46.0	15.7	36.8
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max - Min - Mean - Cfsm - In. -
Water year 1955-56: Max 1,330 Min 9.4 Mean 161 Cfsm - In. -

Peak discharge (base, 600 cfs).--Jan. 15 (time unknown) about 785 cfs; Apr. 16 (11:30 p.m.) 1,460 cfs (5.45 ft); Apr. 30 (2:30 p.m.) 719 cfs (3.73 ft); May 28 (9 to 10 a.m.) 609 cfs (3.41 ft).

* Discharge measurement made on this day.

a No gage-height record Nov. 1; discharge estimated on basis of weather records.

Note.--Discharge computed from twice-daily staff-gage readings Nov. 2-22; from once-daily staff-gage readings July 19 to Aug. 23. Stage-discharge relation affected by ice Nov. 22, Dec. 20 to Jan. 2.

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 1956. 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.--43 years (1905-21, 1929-56), 945 cfs.

Extremes.--Maximum discharge during year, 5,060 cfs Apr. 18 (gage height, 9.15 ft); minimum, 17 cfs Dec. 14, 15 (gage height, 2.32 ft), but may have been lower Dec. 30 during period of ice effect.

1905-21, 1929-56: 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 cofferdams 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 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.3	16	4.0	520
2.4	23	4.5	890
2.6	39	5.0	1,330
2.8	63	6.0	2,220
3.0	97	7.0	3,120
3.3	175	8.0	4,010
3.6	295	9.1	5,010

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	178	277	390	63	250	330	305	3,380	2,260	483	192	99
2	175	446	275	104	240	305	330	3,220	1,230	464	200	111
3	169	483	295	104	190	285	350	2,900	440	470	200	196
4	148	406	240	102	196	430	400	2,620	290	470	325	175
5	142	246	220	104	250	470	550	*2,420	874	345	220	140
6	128	367	205	110	250	415	1,330	2,380	802	330	30	196
7	130	685	190	116	295	390	2,440	2,160	685	417	*43	192
8	415	627	175	120	295	360	2,570	1,900	613	417	196	210
9	175	495	172	140	295	330	2,210	1,730	566	412	210	178
10	175	406	166	240	295	320	1,850	1,690	526	452	163	100
11	132	372	160	690	295	330	1,800	1,830	546	514	151	51
12	435	458	154	1,240	300	410	1,750	1,560	*620	495	148	53
13	97	508	145	1,510	305	535	1,700	1,460	692	452	148	55
14	115	458	75	2,850	*460	585	1,720	2,030	730	452	148	63
15	120	435	22	3,290	370	535	1,640	2,290	722	700	108	128
16	120	406	48	2,940	295	510	1,780	2,230	730	945	102	157
17	115	606	76	*2,260	305	460	3,670	2,180	810	470	59	169
18	115	700	102	1,330	295	435	4,940	2,130	802	406	50	200
19	120	613	360	890	290	435	4,310	2,080	692	441	97	238
20	*125	520	210	730	275	*435	3,530	1,950	634	400	108	226
21	125	417	70	655	265	410	2,930	1,660	585	330	111	206
22	138	412	30	550	260	395	2,470	1,840	552	310	104	189
23	142	372	34	460	255	380	2,140	1,800	514	295	99	178
24	163	350	44	490	250	370	2,140	1,870	520	295	99	175
25	163	345	53	550	250	360	2,400	1,910	520	295	125	182
26	145	315	68	430	265	350	2,270	1,860	526	300	122	210
27	148	300	128	445	330	335	2,230	2,120	526	300	108	214
28	142	250	150	485	400	315	2,220	3,450	514	300	106	196
29	140	295	120	295	370	305	2,480	3,490	514	226	115	175
30	135	345	41	176	-------	305	3,030	2,820	508	132	93	157
31	128	-------	37	230	-------	305	-------	2,290	-------	157	95	-------
Total	4,898	12,915	4,455	23,699	8,391	12,135	63,485	69,250	20,543	12,475	4,075	4,819
Mean	158	430	144	764	289	391	2,116	2,234	685	402	131	161
Cfsm	0.346	0.941	0.315	1.67	0.632	0.856	4.63	4.89	1.50	0.880	0.287	0.352
In.	0.40	1.05	0.36	1.92	0.68	0.99	5.17	5.64	1.67	1.01	0.33	0.39

Calendar year 1955: Max 3,520 Min 22 Mean 825 Cfsm 1.81 In. 24.51
Water year 1955-56: Max 4,940 Min 22 Mean 659 Cfsm 1.44 In. 19.61

Peak discharge (base, 3,200 cfs).--Jan. 15 (time unknown) about 3,300 cfs; Apr. 18 (6 to 8 a.m.) 5,060 cfs (9.15 ft); May 1 (12 to 2 p.m.) 3,410 cfs (7.33 ft); May 28 (8 to 10 p.m.) 3,700 cfs (7.66 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Nov. 30 to Dec. 7; discharge estimated on basis of recorded range in stage and weather records. Stage-discharge relation affected by ice Dec. 20 to Apr. 6.

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 1956.

Gage.--Staff gage and crest-stage indicator; 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.--29 years (1927-56), 512 cfs.

Extremes.--Maximum discharge during year, 2,170 cfs Apr. 21 (gage height, 7.10 ft); minimum, 38 cfs Sept. 1 (gage height, 1.34 ft).
1926-56: 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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

1.2	34	3.0	310
1.3	41	4.0	595
1.4	49	5.0	1,010
1.7	81	6.0	1,500
2.0	124	7.1	2,170
2.5	208		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	59	188	57	450	278	301	1,900	857	259	128	38
2	56	73	180	57	436	285	298	1,880	831	253	120	40
3	57	88	171	53	423	292	292	1,870	823	245	118	43
4	58	96	166	49	407	315	319	1,850	810	239	112	47
5	*58	106	159	47	400	328	352	*1,810	781	232	104	52
6	57	118	154	46	387	340	436	1,360	737	226	98	55
7	58	134	150	49	382	347	570	1,460	693	217	*94	60
8	60	146	*142	64	372	350	659	1,620	659	208	90	67
9	61	156	134	94	367	355	769	1,490	625	208	89	69
10	62	171	127	146	360	357	874	1,420	588	206	84	73
11	65	190	122	190	350	362	940	1,360	570	201	81	70
12	61	204	118	305	345	372	996	1,320	548	197	79	68
13	61	215	112	444	338	384	1,040	1,290	*528	194	76	64
14	60	226	108	610	*333	392	1,090	1,280	508	190	75	60
15	57	226	102	765	328	404	1,130	1,250	494	198	74	56
16	56	230	97	918	322	412	1,180	1,230	476	205	73	58
17	57	241	94	*1,090	315	407	1,440	1,200	461	215	71	60
18	56	255	91	1,070	310	404	1,740	1,170	441	225	69	65
19	55	265	88	1,060	303	407	1,930	1,110	423	220	67	66
20	55	265	82	1,040	292	*407	2,050	1,040	407	210	65	68
21	53	261	80	1,020	285	397	2,170	972	387	200	62	71
22	51	257	77	1,000	274	382	2,140	900	370	196	60	73
23	51	253	74	927	269	372	2,160	831	350	190	57	76
24	52	247	70	857	267	357	2,170	773	333	186	55	80
25	53	241	69	765	265	350	2,140	725	322	176	53	82
26	53	230	69	686	261	340	2,110	741	310	168	51	79
27	51	219	67	647	265	333	2,080	773	296	160	48	76
28	51	212	65	581	267	326	2,000	823	285	150	47	73
29	50	204	64	548	274	315	1,910	852	276	146	44	71
30	54	197	60	504	-------	310	1,900	874	265	140	43	69
31	55	-------	58	467	-------	305	-------	883	-------	136	40	-------
Total	1,741	5,785	3,338	16,156	9,647	10,985	39,186	38,057	15,454	6,196	2,327	1,929
Mean	56.2	193	108	521	333	354	1,306	1,228	515	200	75.1	64.3
Cfsm	0.224	0.769	0.430	2.08	1.33	1.41	5.20	4.89	2.05	0.797	0.299	0.256
In.	0.26	0.86	0.50	2.40	1.43	1.63	5.80	5.64	2.29	0.92	0.34	0.29

Calendar year 1955: Max 1,520 Min 50 Mean 444 Cfsm 1.77 In. 24.02
Water year 1955-56: Max 2,170 Min 38 Mean 412 Cfsm 1.64 In. 22.36

* Discharge measurement made on this day.

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 1956.

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.--8 years, 501 cfs.

Extremes.--Maximum discharge during year, 3,200 cfs Apr. 18 (gage height, 12.91 ft); minimum, 45 cfs Aug. 29 (gage height, 7.29 ft).
1948-56: Maximum discharge, 7,250 cfs Nov. 28, 1950 (gage height, 15.81 ft); minimum, 31 cfs Sept. 10, 1955 (gage height, 7.12 ft).

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

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

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

7.2	37	9.0	425
7.4	57	9.5	620
7.6	82	10.0	850
7.8	111	11.0	1,460
8.0	149	12.0	2,250
8.5	270	13.0	3,300

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	215	150	61	240	188	225	1,530	616	137	68	68
2	69	495	132	58	215	192	240	1,380	526	137	85	106
3	64	392	128	58	215	215	270	1,140	472	143	78	115
4	58	302	120	69	220	295	330	*988	476	129	73	102
5	56	253	118	76	194	285	425	994	511	115	70	86
6	50	355	116	96	194	265	850	951	457	110	68	76
7	53	480	110	106	198	240	1,330	871	402	118	*65	76
8	77	386	106	128	210	235	1,320	782	360	129	65	86
9	82	329	98	240	215	230	1,240	681	329	135	62	74
10	82	276	95	955	210	225	1,230	686	329	164	62	67
11	76	270	90	1,210	198	235	1,240	736	335	147	68	59
12	69	382	83	1,170	198	270	1,250	690	*335	127	62	54
13	64	360	82	1,380	*240	390	1,240	690	314	110	58	54
14	56	308	81	1,760	240	360	1,280	881	282	160	57	52
15	53	351	81	1,860	225	330	1,180	860	253	311	57	72
16	50	329	81	1,700	215	310	1,390	740	245	308	57	86
17	49	382	81	1,360	205	295	2,780	681	234	267	55	85
18	56	484	78	1,020	198	275	3,090	595	214	216	53	113
19	67	399	69	800	192	*255	2,700	522	192	179	52	131
20	68	341	69	640	188	240	2,180	476	177	147	55	113
21	68	296	68	520	180	235	1,770	425	170	124	53	106
22	79	273	67	425	178	235	1,490	386	170	110	52	98
23	83	267	67	360	174	235	1,340	363	164	111	48	85
24	82	219	67	350	168	235	1,330	402	155	110	48	83
25	82	211	69	330	166	220	1,440	392	168	106	52	113
26	82	185	69	305	200	215	1,260	360	172	99	52	118
27	82	170	72	285	215	205	1,120	495	166	92	48	105
28	81	172	72	270	194	205	1,050	1,690	170	82	47	92
29	74	174	70	250	190	210	1,140	1,310	170	78	45	82
30	70	178	68	240	------	220	1,420	972	153	72	48	74
31	69	------	64	235	------	225	------	745	------	68	52	----
Total	2,120	9,234	2,719	18,317	5,875	7,770	39,150	24,414	8,717	4,341	1,815	2,631
Mean	68.4	308	87.7	591	203	251	1,305	788	291	140	58.5	87.7
Cfsm	0.295	1.33	0.378	2.55	0.875	1.08	5.62	3.40	1.25	0.603	0.252	0.378
In.	0.34	1.48	0.44	2.94	0.94	1.24	6.27	3.92	1.40	0.70	0.29	0.42

Calendar year 1955: Max 2,120 Min 31 Mean 368 Cfsm 1.59 In. 21.55
Water year 1955-56: Max 3,090 Min 45 Mean 347 Cfsm 1.50 In. 20.38

Peak discharge (base, 1,500 cfs).--Jan. 14 (11:30 p.m.) 1,930 cfs (11.63 ft); Apr. 18 (1 a.m.) 3,200 cfs (12.91 ft); May 1 (8 to 11 a.m.) 1,540 cfs (11.12 ft); May 28 (10 to 11 a.m.) 1,790 cfs (11.45 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 27, Nov. 30 to Jan. 10, Jan. 20 to Apr. 12.

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, 0.7 mile northwest of Amherst, Hancock County.

Drainage area.--148 sq mi.

Records available.--July 1909 to September 1919, July 1929 to September 1956. 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.--37 years, 261 cfs.

Extremes.--Maximum discharge during year, 1,490 cfs Apr. 17 (gage height, 6.60 ft); minimum daily, 11 cfs Jan. 7.
1909-19, 1929-56: Maximum discharge, 4,140 cfs Apr. 13, 1940 (gage height, 9.58 ft); maximum gage height, 10.41 ft Mar. 9, 1942 (ice jam); minimum discharge, 3.6 cfs Sept. 29, 1941; minimum gage height, 2.82 ft Sept. 14, 1949.

Remarks.--Records excellent except those for period of ice effect, 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 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.0	8.5	4.0	155
3.1	12	4.5	305
3.2	18	5.0	515
3.3	26	5.5	780
3.4	37	6.0	1,100
3.6	66	6.6	1,490

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	90	47	15	80	94	104	1,150	334	82	44	23
2	*16	90	45	14	79	106	106	1,110	305	80	44	27
3	*15	80	41	13	77	134	118	1,090	288	77	40	24
4	15	84	37	12	73	160	139	*1,020	285	70	37	22
5	14	84	36	12	71	156	235	991	282	66	35	20
6	13	103	35	12	68	150	334	926	305	60	34	19
7	15	110	34	11	70	138	462	857	269	58	*33	24
8	17	110	33	18	71	130	544	786	241	56	30	23
9	17	107	33	37	70	150	544	701	232	53	29	20
10	16	101	32	84	68	146	559	663	235	53	29	19
11	15	103	32	156	70	142	579	615	253	52	33	19
12	15	112	30	210	80	210	579	559	*260	52	30	18
13	14	110	29	290	*92	205	594	530	247	52	30	17
14	13	105	28	380	80	182	642	564	226	117	27	18
15	13	110	28	465	77	166	647	559	205	185	27	28
16	12	105	28	*385	75	156	786	520	194	202	26	24
17	13	134	27	320	71	150	1,350	481	168	214	24	26
18	15	137	27	275	70	138	1,440	426	150	205	24	34
19	15	122	27	230	66	130	1,420	380	132	171	24	30
20	14	117	26	190	66	124	1,370	341	115	142	25	28
21	16	110	26	160	64	120	1,320	298	105	117	22	35
22	20	112	25	148	63	110	1,260	269	101	101	21	34
23	18	138	24	130	63	108	1,190	256	94	88	19	32
24	18	84	22	116	61	106	1,140	244	88	82	19	37
25	18	82	20	108	60	100	1,060	235	90	77	18	41
26	19	71	18	100	100	100	972	220	94	75	18	38
27	20	66	17	99	97	100	907	244	88	68	17	38
28	20	63	17	90	94	100	926	401	90	64	16	38
29	20	56	16	88	92	*100	972	414	90	60	17	36
30	20	50	16	86	-------	100	1,130	414	86	50	16	34
31	21	-------	15	82	------	100	-------	376	-------	47	17	----- --
Total	503	2,946	871	4,336	2,168	4,111	23,429	17,640	5,652	2,876	825	826
Mean	16.2	98.2	28.1	140	74.8	133	781	569	188	92.8	26.6	27.5
Cfsm	0.109	0.664	0.190	0.946	0.505	0.899	5.28	3.84	1.27	0.627	0.180	0.186
In.	0.13	0.74	0.22	1.09	0.54	1.04	5.89	4.43	1.42	0.72	0.21	0.21

Calendar year 1955: Max 1,320 Min 12 Mean 225 Cfsm 1.52 In. 20.63
Water year 1955-56: Max 1,440 Min 11 Mean 181 Cfsm 1.22 In. 16.64

Peak discharge (base, 1,000 cfs).--Apr. 17 (8 to 12 p.m.) 1,490 cfs (6.60 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26 to Apr. 3.

East Branch Penobscot River at Grindstone, Maine

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

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

Records available.--October 1902 to September 1956. Monthly discharge only for some periods, published in WSP 1301.

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

Average discharge.--54 years, 1,877 cfs (unadjusted).

Extremes.--Maximum discharge during year, 7,860 cfs May 1 (gage height, 8.73 ft); minimum daily, 154 cfs Dec. 2.
1902-56: Maximum discharge, 37,000 cfs Apr. 30, 1923 (gage height, 16.9 ft, site then in use, present datum); minimum daily (1914-56), 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. 41).

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

Rating table, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.9	136	6.0	1,970
4.0	165	7.0	3,800
4.4	325	8.0	6,020
4.9	650	9.0	8,600
5.5	1,260		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*365	290	156	515	820	1,460	460	7,570	3,480	731	668	316
2	335	800	154	515	820	1,320	455	6,550	3,740	722	650	302
3	325	468	184	515	830	1,140	450	6,360	3,640	1,490	578	330
4	320	365	210	520	830	1,030	475	6,160	4,010	1,760	514	556
5	316	365	235	515	840	950	570	6,330	3,780	1,790	448	695
6	306	542	265	505	850	880	810	*6,750	3,090	1,190	320	494
7	302	626	295	535	860	810	1,260	6,680	2,880	950	311	340
8	320	542	315	570	870	775	1,600	5,790	2,750	900	292	405
9	25	461	325	670	880	720	1,590	5,190	3,200	1,030	*278	381
10	16	417	350	830	880	670	1,530	4,090	3,200	1,320	330	375
11	292	393	375	1,140	890	635	1,460	3,660	2,600	1,260	830	370
12	278	375	405	1,670	890	610	1,430	3,540	2,690	1,070	880	360
13	278	360	435	1,990	900	585	1,470	4,550	2,510	1,000	731	316
14	274	355	470	1,600	930	570	1,590	4,990	2,000	900	642	360
15	261	355	495	1,270	1,140	555	1,790	4,880	2,160	1,000	650	535
16	261	316	500	1,140	*1,130	540	2,050	4,660	1,700	1,100	556	740
17	244	285	500	970	1,120	535	2,460	4,220	1,790	1,020	387	731
18	265	270	530	860	1,110	515	3,010	4,050	*1,760	900	345	785
19	287	250	535	760	1,100	500	4,010	4,050	1,660	830	365	776
20	261	235	540	670	1,080	500	5,010	3,840	1,260	594	468	776
21	256	210	540	595	1,070	495	4,900	3,460	1,060	507	417	1,060
22	269	198	540	555	1,070	485	4,680	3,440	930	411	454	1,080
23	265	188	550	520	1,080	485	4,550	3,240	990	429	429	960
24	248	178	555	500	1,390	495	4,260	3,140	980	423	423	870
25	252	170	550	475	1,660	*495	4,120	2,800	1,050	393	474	840
26	265	168	540	470	1,670	485	4,010	2,770	1,150	435	387	860
27	256	166	535	505	1,640	485	4,260	2,070	1,020	429	355	850
28	235	162	520	650	1,590	480	5,240	3,440	910	468	365	830
29	227	158	520	810	1,530	475	6,040	3,820	910	668	494	821
30	227	156	520	810	-------	470	7,230	2,900	950	602	494	821
31	227	-------	520	810	-------	470	-------	2,900	-------	731	423	-------
Total	8,658	9,824	13,164	24,460	31,470	20,620	82,770	137,890	63,850	27,233	14,958	18,935
Mean	279	327	425	789	1,085	665	2,759	4,448	2,128	878	483	631
(†)	-169	-44	-321	+204	-669	-240	+619	+1,679	+47	0	-16	-165

Adjusted for change in reservoir contents

Mean	110	283	104	993	416	425	3,378	6,127	2,175	878	467	466
Cfsm	0.103	0.264	0.097	0.928	0.389	0.397	3.16	5.73	2.03	0.821	0.436	0.436
In.	0.12	0.29	0.11	1.07	0.42	0.46	3.53	6.61	2.26	0.95	0.50	0.49

	Observed			Adjusted			
Calendar year 1955:	Max 10,400	Min 154	Mean 1,828	Mean 1,715	Cfsm 1.60	In. 21.76	
Water year 1955-56:	Max 7,570	Min 154	Mean 1,240	Mean 1,321	Cfsm 1.23	In. 16.81	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, of Chamberlain, Telos, Second and Grand Lakes, and Round Pond.
Note.--Stage-discharge relation affected by ice Nov. 17 to Apr. 22.

Penobscot River near Mattawamkeag, Maine

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

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

Records available.--June 1940 to September 1956.

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

Average discharge.--16 years, 5,547 cfs (unadjusted).

Extremes.--Maximum discharge during year, 12,800 cfs May 1 (gage height, 7.00 ft); minimum daily, 1,810 cfs Nov. 30.
1940-56: Maximum discharge, 40,200 cfs May 21, 1945 (gage height, 11.09 ft), from rating curve extended above 17,000 cfs; minimum daily, 1,430 cfs Aug. 17, 1941.

Remarks.--Records good. Flow regulated by several reservoirs above station (see p. 41).

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,600	3,800	2,590	2,680	3,360	3,900	2,760	12,000	6,630	3,750	3,800	3,510
2	4,000	3,750	2,260	2,990	3,510	3,850	2,590	10,000	7,000	4,000	3,900	2,640
3	3,130	4,250	2,380	3,170	3,310	3,650	2,940	9,790	6,420	3,410	3,460	2,510
4	3,310	2,590	2,420	2,900	3,800	4,050	3,080	9,450	6,900	3,410	3,410	3,310
5	3,460	4,100	2,590	2,850	3,510	3,410	3,700	9,270	7,000	4,250	3,220	3,700
6	3,170	3,220	2,720	2,550	3,600	3,650	4,200	10,400	5,990	4,450	3,650	3,950
7	3,310	4,350	2,420	2,510	3,600	3,310	4,400	9,890	5,720	4,050	3,600	3,560
8	3,700	3,410	2,590	3,220	3,460	3,600	4,700	8,940	4,960	4,150	3,080	3,650
9	3,510	3,950	2,720	3,310	3,600	3,460	5,020	7,820	5,400	3,800	3,260	3,310
10	3,510	2,810	2,510	4,200	3,510	3,310	4,400	7,350	5,990	4,400	3,260	3,260
11	3,510	4,750	2,510	6,100	3,410	3,750	4,700	6,100	5,460	3,750	3,700	3,080
12	2,850	2,940	2,340	5,510	3,510	3,510	4,750	5,880	5,240	3,750	4,100	3,080
13	3,080	3,130	2,510	4,800	4,200	3,560	4,650	6,950	4,910	3,800	3,950	3,030
14	3,260	3,170	2,340	4,960	4,000	3,460	4,450	8,310	4,800	4,650	3,130	3,410
15	3,080	3,080	2,590	4,400	3,460	3,510	4,650	8,400	4,910	4,200	3,650	3,170
16	3,170	2,940	2,510	4,300	3,170	3,560	5,460	8,070	4,800	3,800	3,560	3,650
17	3,030	3,600	2,640	3,800	3,310	3,080	6,680	7,000	4,450	4,250	3,310	3,650
18	3,410	3,080	2,810	3,510	3,410	3,600	8,400	6,470	4,600	3,900	3,460	4,150
19	3,510	3,260	2,810	3,170	3,410	3,850	9,740	6,680	4,300	3,560	3,310	3,510
20	3,130	2,380	2,990	3,220	3,560	3,600	9,180	5,880	4,550	3,170	3,600	3,950
21	3,460	3,130	2,510	2,990	3,800	3,700	8,840	5,990	4,050	3,030	3,700	3,950
22	2,420	2,850	2,720	3,170	3,600	3,800	8,220	5,770	*4,200	3,510	3,360	3,900
23	3,410	2,990	2,680	3,030	3,600	3,650	8,170	5,830	3,750	3,130	3,650	4,050
24	3,360	3,080	2,900	2,990	3,800	4,050	7,100	5,770	4,000	3,310	3,360	3,460
25	2,940	3,260	2,590	3,260	4,100	*3,700	7,050	5,400	4,150	3,080	3,700	3,950
26	3,750	3,360	2,760	3,170	4,050	3,650	6,370	5,560	3,950	3,130	3,410	3,950
27	3,030	2,060	1,920	2,990	4,100	3,650	6,950	5,460	4,000	3,460	3,220	3,650
28	2,550	3,220	2,760	3,700	4,150	3,310	8,070	5,560	3,750	3,310	3,410	3,750
29	3,080	2,720	2,680	3,600	3,750	3,170	9,500	7,300	3,950	3,510	3,510	3,950
30	3,360	1,810	2,680	3,410	-------	3,460	11,800	6,420	3,700	3,650	3,750	3,560
31	3,560	-------	2,590	3,850	-------	2,720	-------	5,670	-------	3,600	3,310	-------
Total	101,650	97,040	80,040	110,310	105,650	110,530	182,520	229,380	149,530	115,220	108,790	106,250
Mean	3,279	3,235	2,582	3,558	3,643	3,565	6,084	7,399	4,984	3,717	3,509	3,542
(†)	-3,007	-2,055	-2,378	-246	-2,593	-2,229	+3,373	+12,260	+1,610	-1,484	-1,831	-1,499

Adjusted for change in reservoir contents

Mean	272	1,180	204	3,312	1,050	1,336	9,457	19,660	6,594	2,233	1,678	2,043
Cfsm	0.082	0.356	0.062	1.00	0.317	0.404	2.86	5.94	1.99	0.675	0.507	0.617
In.	0.09	0.40	0.07	1.15	0.34	0.47	3.19	6.85	2.22	0.78	0.58	0.69

	Observed				Adjusted			
Calendar year 1955:	Max 27,300	Min 1,700	Mean 6,295		Mean 5,004	Cfsm 1.51	In. 20.53	
Water year 1955-56:	Max 12,000	Min 1,810	Mean 4,090		Mean 4,093	Cfsm 1.24	In. 16.83	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, of reservoirs in East and West Branches of Penobscot River.

Note.--Stage-discharge relation affected by ice, aquatic vegetation or high stages of Mattawamkeag River all of year. No gage-height record Feb. 16-29; discharge estimated on basis of power-station records.

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.--1,400 sq mi, approximately.

Records available.--October 1934 to September 1956.

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

Average discharge.--22 years, 2,372 cfs.

Extremes.--Maximum discharge during year, 13,600 cfs May 2 (gage height, 9.30 ft); minimum, 50 cfs Jan. 3, 4 (gage height, 0.20 ft).
1934-56: 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.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.2	50	2.3	1,270
.3	80	3.0	1,820
.4	113	4.0	2,860
.5	150	6.0	6,080
.7	235	8.0	10,500
1.0	375	9.3	13,600
1.6	755		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	191	154	170	62	980	630	700	13,400	3,350	741	699	289
2	191	154	168	53	925	635	700	13,500	3,480	741	608	280
3	191	158	166	50	865	630	705	13,200	3,340	734	520	316
4	*179	175	150	50	820	620	825	12,700	3,080	902	442	340
5	179	183	146	56	770	630	1,270	12,300	2,850	980	402	360
6	162	213	146	59	725	620	1,780	11,800	2,640	853	386	340
7	154	270	140	59	685	620	2,290	*11,100	2,380	734	375	330
8	154	320	132	74	655	620	2,860	11,300	2,180	643	355	316
9	175	310	128	110	620	615	3,450	9,330	2,140	589	335	294
10	170	300	124	245	580	615	4,130	8,330	2,180	563	330	271
11	166	275	120	480	550	635	4,590	7,290	2,420	596	340	248
12	162	265	118	*790	530	655	4,700	6,520	2,660	615	392	231
13	154	260	112	1,160	510	690	5,060	6,020	2,640	615	*502	222
14	150	255	112	1,530	490	685	5,290	6,020	2,460	636	532	222
15	143	255	110	1,980	470	680	5,890	6,060	2,210	811	496	262
16	132	250	106	2,510	465	670	7,100	5,980	2,010	980	466	298
17	120	245	106	2,550	*460	665	9,860	5,700	1,820	1,000	430	320
18	124	235	102	2,510	455	655	12,300	5,310	1,620	881	397	335
19	124	225	93	2,360	440	655	13,200	4,770	1,400	769	375	345
20	120	215	87	2,190	435	655	13,200	4,270	1,230	657	370	360
21	139	210	80	1,980	435	655	13,100	3,810	1,100	556	397	386
22	150	205	74	1,820	430	665	12,600	3,380	*995	502	430	460
23	154	196	68	1,740	430	670	12,000	2,910	958	472	408	563
24	154	190	65	1,630	430	680	11,200	2,870	916	436	375	576
25	158	186	59	1,520	435	685	10,500	2,880	874	419	340	550
26	158	180	59	1,420	460	755	9,770	2,720	825	419	320	538
27	162	180	56	1,340	525	*750	9,360	2,530	846	502	316	532
28	166	176	59	1,270	595	735	9,720	2,850	881	582	302	502
29	166	174	59	1,190	600	725	10,600	3,370	825	657	307	472
30	158	170	62	1,120	-------	720	12,200	3,510	783	692	302	436
31	154	-------	65	1,040	-------	705	-------	3,340	-------	727	294	-------
Total	4,860	6,584	3,242	34,948	16,770	20,625	210,950	209,070	57,093	21,004	12,543	10,994
Mean	157	219	105	1,127	578	665	7,032	6,744	1,903	678	405	366
Cfsm	0.112	0.156	0.075	0.805	0.413	0.475	5.02	4.82	1.36	0.484	0.289	0.261
In.	0.13	0.17	0.09	0.93	0.45	0.55	5.60	5.56	1.52	0.56	0.33	0.29

Calendar year 1955: Max 18,800 Min 56 Mean 2,321 Cfsm 1.66 In. 22.48
Water year 1955-56: Max 13,500 Min 50 Mean 1,663 Cfsm 1.19 In. 16.18

* Discharge measurement made on this day.
Note.--No gage-height record Nov. 7 to Dec. 2; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations. Stage-discharge relation affected by ice Dec. 3-24, Jan. 9-15, Jan. 21 to Apr. 15.

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 1956.

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.--54 years, 585 cfs.

Extremes.--Maximum discharge during year, 5,150 cfs Apr. 30 (gage height, 7.68 ft); minimum, 23 cfs Oct. 2, 3 (gage height, 1.62 ft).
1902-56: 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 powerplant above station.

Revisions (water years).--WSP 279: 1908. WSP 1171: Drainage area. WSP 1201: 1903-17, 1918-30(M), 1934-35. WSP 1301: 1909(M).

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	21	3.5	700
1.8	40	4.0	1,060
2.0	72	5.0	1,990
2.2	119	7.0	4,320
2.5	209	7.4	4,800
3.0	415		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*24	1,830	140	*74	188	152	130	4,010	1,200	119	96	109
2	23	1,710	116	72	180	150	136	*3,020	1,970	116	92	124
3	23	765	112	70	178	146	156	2,880	1,440	122	79	177
4	37	526	106	67	174	140	168	2,690	1,530	109	70	216
5	99	548	106	65	170	138	330	2,820	1,380	92	61	168
6	96	765	106	63	168	136	795	2,620	1,230	87	59	138
7	94	772	106	70	168	136	1,220	2,310	942	94	56	119
8	94	593	106	99	166	132	1,330	1,890	732	119	56	99
9	99	487	*106	170	166	132	1,220	1,610	877	162	54	87
10	92	406	106	370	166	136	1,120	1,530	972	455	*54	74
11	41	366	106	905	166	140	1,070	1,500	928	330	83	68
12	32	366	106	1,890	166	142	1,080	1,420	821	227	104	67
13	31	370	106	2,320	162	140	1,210	1,970	668	174	83	61
14	30	352	106	1,590	158	138	1,370	2,680	548	196	74	59
15	29	366	104	1,230	158	138	1,350	2,090	460	406	74	58
16	29	334	104	905	156	136	1,590	1,730	379	289	65	59
17	29	370	102	715	152	132	3,190	1,540	370	209	56	65
18	30	392	102	565	150	128	3,760	1,310	281	168	56	90
19	29	309	99	*465	152	124	2,910	1,100	216	143	56	92
20	29	275	96	435	150	122	2,400	972	199	119	59	90
21	29	215	96	395	150	120	2,230	849	193	102	65	152
22	27	255	96	365	146	120	1,930	765	190	94	56	174
23	28	210	94	335	146	120	1,750	700	177	99	56	141
24	30	238	94	325	146	120	1,500	732	165	127	53	130
25	41	230	94	310	150	120	1,430	629	174	269	67	177
26	40	200	94	285	156	122	1,480	536	171	397	81	193
27	38	178	92	255	166	122	1,680	635	143	285	72	171
28	37	162	90	245	162	*124	3,660	1,770	141	190	68	146
29	33	166	83	215	*156	124	3,810	1,230	*141	155	68	130
30	*31	168	79	*200	------	128	4,790	912	127	132	79	116
31	39	-------	76	196	-------	128	-------	800	-------	106	87	----
Total	1,363	13,924	3,129	15,266	4,672	4,086	50,815	51,250	18,765	5,692	2,139	3,550
Mean	44.0	464	101	492	161	132	1,694	1,653	626	184	69.0	118
Cfsm	0.148	1.56	0.340	1.66	0.542	0.444	5.70	5.57	2.11	0.620	0.232	0.397
In.	0.17	1.74	0.39	1.91	0.58	0.51	6.36	6.42	2.35	0.71	0.27	0.44

Calendar year 1955: Max 8,660 Min 14 Mean 512 Cfsm 1.72 In. 23.41
Water year 1955-56: Max 4,790 Min 23 Mean 477 Cfsm 1.61 In. 21.85

Peak discharge (base, 4,000 cfs).--Apr. 18 (1 a.m.) 4,120 cfs (6.83 ft); Apr. 30 (11 a.m.) 5,150 cfs (7.68 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 20-23, 25-27, Nov. 29 to Apr. 6.

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 1956.

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.--32 years, 611 cfs (unadjusted).

Extremes.--Maximum discharge during year, 2,920 cfs May 1 (gage height, 6.55 ft); minimum, 82 cfs Oct. 31 (gage height, 1.99 ft).
1924-56: Maximum discharge, 11,400 cfs Mar. 20, 1936 (gage height, 14.46 ft), from rating curve extended above 6,000 cfs on basis of velocity-area studies; minimum, about 2 cfs Oct. 14-17, 1930 (gage height, 0.87 ft), when gates in dam were closed.

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

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

Rating table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

2.0	84	4.0	1,140
2.2	139	5.0	1,790
2.5	251	6.0	2,500
3.0	495	6.5	2,880
3.5	810		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	361	170	296	153	420	314	264	2,880	1,050	550	173	159
2	347	264	282	146	410	305	260	*2,820	1,160	539	170	159
3	342	274	278	142	415	305	256	2,650	1,220	500	173	156
4	319	278	269	146	410	305	264	2,400	1,390	446	166	159
5	301	282	269	142	405	301	310	2,300	1,650	440	170	159
6	287	292	269	139	405	296	324	2,130	1,580	270	173	163
7	282	310	264	136	410	296	352	1,980	1,470	130	173	166
8	282	310	264	166	405	305	376	1,840	1,330	130	177	166
9	274	319	260	173	400	305	395	1,670	1,290	133	177	166
10	264	319	256	243	390	298	405	1,350	1,260	133	*180	170
11	256	324	247	292	380	292	420	690	1,240	136	184	170
12	235	333	243	314	380	292	425	445	1,190	136	184	170
13	218	333	239	333	380	296	380	604	765	136	184	170
14	192	328	230	385	376	296	410	656	512	142	184	173
15	177	333	226	415	366	305	468	771	522	139	184	173
16	163	328	226	435	366	301	724	838	528	139	184	173
17	156	337	222	440	356	305	1,020	919	522	142	184	173
18	159	333	214	456	352	301	1,390	912	539	142	184	173
19	153	333	203	446	352	292	1,670	912	517	146	184	170
20	153	328	195	440	342	287	1,810	932	490	146	188	170
21	136	333	195	435	333	282	1,850	852	473	149	280	170
22	136	337	170	430	333	282	1,840	838	462	153	478	170
23	124	328	166	435	328	282	1,790	831	446	156	270	170
24	118	333	163	440	328	278	1,730	824	435	159	159	166
25	136	319	170	446	328	274	1,660	771	400	166	159	360
26	109	305	180	440	333	269	1,580	731	385	166	159	468
27	112	305	159	435	319	264	1,550	724	465	170	159	468
28	109	292	156	430	*319	269	1,730	873	574	173	159	462
29	102	292	153	430	314	274	2,030	958	*562	173	156	456
30	*96	296	156	425	-------	264	2,500	952	556	173	156	446
31	92	-------	153	425	-------	264	-------	971	-------	173	156	-------
Total	6,191	9,268	6,773	10,313	10,655	8,997	30,183	39,024	24,983	6,486	5,867	6,674
Mean	200	309	218	333	367	290	1,006	1,259	833	209	189	222
(†)	-142	+136	-164	+313	-118	-135	+252	+454	-84	-106	+33	+13
Adjusted for change in reservoir contents												
Mean	58	445	54	646	249	155	1,258	1,713	749	103	222	235
Cfsm	0.177	1.36	0.165	1.98	0.761	0.474	3.85	5.24	2.29	0.315	0.679	0.719
In.	0.20	1.52	0.19	2.28	0.82	0.55	4.30	6.04	2.56	0.36	0.78	0.80

	Observed			Adjusted		
Calendar year 1955:	Max 4,140	Min 89	Mean 577	Mean 547	Cfsm 1.67	In. 22.69
Water year 1955-56:	Max 2,880	Min 92	Mean 452	Mean 490	Cfsm 1.50	In. 20 40

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

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 8½ miles upstream from mouth.

Drainage area.--322 sq mi.

Records available.--June 1920 to September 1956.

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.--36 years, 692 cfs.

Extremes.--Maximum discharge during year, 5,030 cfs Apr. 30 (gage height, 5.86 ft); maximum gage height, 8.79 ft Jan. 13 (ice jam); minimum daily discharge, 90 cfs Jan. 6.
1920-56: 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 tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 12				Jan. 13 to Sept. 30			
1.6	71	3.0	825	1.7	98	3.5	1,370
1.8	128	3.5	1,340	1.8	128	4.0	1,990
2.0	198	3.8	1,700	2.0	202	5.0	3,520
2.5	460			2.5	480	5.7	4,740
				3.0	875		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	187	860	230	95	315	230	265	4,330	1,380	236	165	240
2	206	1,650	220	93	310	225	245	3,210	2,170	245	165	250
3	202	1,130	205	93	310	225	240	*2,760	1,920	255	154	293
4	187	834	200	93	305	225	260	2,600	1,800	240	138	359
5	172	737	198	93	305	230	330	2,580	1,670	207	128	299
6	165	761	194	90	300	230	415	2,440	1,420	194	125	245
7	172	825	190	104	300	235	520	2,330	1,150	194	119	221
8	236	777	188	*128	295	240	685	2,060	974	198	116	194
9	309	699	*180	160	290	240	655	1,730	1,210	236	107	169
10	324	617	176	198	290	240	615	1,610	1,280	455	110	161
11	227	560	168	315	280	240	590	1,600	1,180	417	245	151
12	194	540	166	670	270	240	585	1,570	994	348	282	141
13	165	526	160	2,150	265	235	660	2,120	866	277	218	141
14	161	480	160	1,800	260	235	770	3,490	726	348	202	161
15	158	473	158	1,490	255	225	930	3,040	653	726	202	161
16	158	460	154	1,140	250	225	1,290	2,340	599	606	194	165
17	161	445	148	920	245	220	2,520	2,080	528	436	161	169
18	165	430	140	785	245	215	3,100	1,780	467	337	148	198
19	187	405	138	685	245	215	2,620	1,480	405	277	144	207
20	191	397	136	615	240	215	2,130	1,300	376	231	194	207
21	187	370	128	550	240	220	1,960	1,180	342	202	202	342
22	198	350	126	485	235	215	1,800	1,070	342	186	177	365
23	215	340	120	450	235	210	1,660	1,130	326	202	158	315
24	215	320	116	415	230	205	1,450	1,350	304	226	144	288
25	202	305	110	400	225	205	1,320	1,150	299	315	186	299
26	202	290	108	375	230	200	1,290	974	304	394	216	304
27	202	285	100	360	230	*200	1,410	947	288	320	194	272
28	198	270	98	350	*230	200	2,680	2,120	*282	266	177	240
29	194	260	98	335	230	198	3,250	1,940	255	240	169	212
30	183	250	98	330	------	198	4,670	1,470	250	216	173	202
31	180	------	95	320	------	200	------	1,260	------	*190	202	------
Total	6,103	16,646	4,706	16,087	7,660	6,836	40,895	61,021	24,760	9,220	5,313	6,971
Mean	197	555	152	519	264	221	1,363	1,968	825	297	171	233
Cfsm	0.612	1.72	0.472	1.61	0.820	0.686	4.23	6.11	2.56	0.922	0.531	0.724
In.	0.71	1.92	0.57	1.86	0.88	0.80	4.72	7.04	2.86	1.06	0.61	0.81

Calendar year 1955: Max 7,200 Min 76 Mean 671 Cfsm 2.08 In. 28.33
Water year 1955-56: Max 4,670 Min 90 Mean 563 Cfsm 1.75 In. 23.84

Peak discharge (base, 3,700 cfs).--Apr. 30 (3 p.m.) 5,030 cfs (5.86 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 17-19, Nov. 21 to Apr. 15.

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 1934 to September 1956.

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.--32 years, 2,280 cfs.

Extremes.--Maximum discharge during year, 13,500 cfs Apr. 30 (gage height, 7.81 ft); minimum, 319 cfs Oct. 17 (gage height, 1.79 ft).
1934-56: 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, 1933, 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.8	324	4.0	2,750
2.0	440	5.0	4,780
2.5	840	6.0	7,240
3.0	1,340	8.0	14,300
3.5	1,980		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	678	1,830	660	435	1,050	920	775	12,900	3,740	1,030	596	573
2	555	4,980	650	440	1,030	910	820	10,200	5,060	1,030	573	580
3	460	3,090	645	440	1,020	910	875	*8,960	5,030	1,040	559	620
4	510	2,260	630	440	1,000	895	970	8,450	4,760	1,020	475	786
5	612	1,750	620	440	980	885	1,080	8,390	4,990	960	410	795
6	489	2,210	605	435	970	875	1,980	7,990	4,690	870	410	705
7	580	2,380	580	435	950	865	2,550	7,320	4,100	566	398	669
8	795	2,160	580	*440	940	865	2,750	6,580	3,480	545	392	596
9	788	1,980	575	495	930	860	2,730	5,740	3,520	604	392	538
10	714	1,670	575	680	930	860	2,650	5,220	3,990	970	*404	503
11	660	1,640	565	1,840	920	850	2,560	4,450	3,850	1,250	524	524
12	580	1,590	560	3,500	895	840	2,550	3,850	3,540	1,050	644	461
13	524	1,320	550	4,870	885	840	2,680	4,460	2,830	867	604	428
14	538	1,420	545	5,410	875	830	3,300	6,750	2,210	876	552	434
15	510	1,520	545	4,740	865	820	3,860	6,240	1,950	1,460	538	468
16	330	1,480	540	3,830	850	820	4,960	5,150	1,830	1,470	545	489
17	422	1,450	530	2,930	850	820	7,990	4,960	1,560	1,100	531	503
18	383	1,480	525	2,450	860	820	10,700	4,450	1,470	894	454	580
19	352	1,500	515	2,120	860	830	9,490	3,930	1,330	788	428	596
20	352	1,220	510	1,910	850	840	8,260	3,580	1,240	669	461	580
21	352	1,090	510	1,780	840	840	7,520	3,260	1,180	604	489	732
22	374	950	505	1,660	840	830	6,870	2,980	1,160	559	596	831
23	398	875	495	1,580	830	820	6,440	2,970	1,140	545	628	644
24	398	820	490	1,480	830	820	5,860	4,490	1,110	580	503	660
25	392	785	480	1,420	840	830	5,550	3,070	1,080	732	489	795
26	386	750	475	1,340	830	830	5,460	2,680	1,100	1,090	538	876
27	398	725	470	1,270	885	805	5,380	2,640	1,060	1,110	538	894
28	386	705	455	1,220	*940	*795	7,660	5,230	1,060	912	517	921
29	380	685	445	1,170	930	770	10,500	5,120	*1,050	786	489	1,010
30	363	680	440	1,110	-------	750	12,500	4,100	1,060	705	503	930
31	383	-------	435	1,070	-------	750	-------	*3,560	-----	636	503	-----
Total	14,982	46,995	16,705	53,160	26,275	25,995	147,070	189,670	76,170	27,298	15,683	19,721
Mean	483	1,566	539	1,715	908	839	4,902	5,473	2,539	881	506	657
Cfsm	0.416	1.35	0.464	1.48	0.780	0.723	4.22	4.71	2.19	0.759	0.436	0.566
In.	0.48	1.51	0.53	1.71	0.84	0.83	4.71	5.43	2.44	0.88	0.50	0.63

Calendar year 1955: Max 22,200 Min 236 Mean 2,123 Cfsm 1.83 In. 24.81
Water year 1955-56: Max 12,900 Min 330 Mean 1,748 Cfsm 1.51 In. 20.49

Peak discharge (base, 13,000 cfs).--Apr. 30 (11 p.m.) 13,500 cfs (7.81 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 21 to Jan. 12, Jan. 17 to Apr. 15.

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 1956. 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.--54 years (1902-56), 11,550 cfs (unadjusted).

Extremes.--Maximum discharge during year, 47,000 cfs May 1 (gage height, 12.21 ft); minimum daily, 3,340 cfs Dec. 25; minimum gage height, 1.99 ft Oct. 29.
1901-56: 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 period of ice effect, which are good. Flow regulated by several reservoirs above station (see p. 41).

Cooperation.--Water-stage-recorder graph furnished by T. W. Clark, hydraulic engineer, of Old Town until Aug. 31; thereafter, by Bangor Hydro-Electric Co.

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

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,220	5,050	3,790	3,440	6,280	5,570	5,180	46,200	13,700	6,050	5,310	4,780
2	4,980	9,780	3,750	3,460	6,360	5,520	5,160	42,100	15,800	6,150	5,570	4,960
3	4,960	5,470	3,710	3,500	6,380	5,500	5,250	38,200	16,500	6,200	5,450	4,520
4	4,520	7,790	3,670	3,550	6,360	5,470	5,940	36,300	15,300	6,170	5,140	4,270
5	4,650	5,850	3,630	3,590	6,430	5,450	7,110	35,500	15,800	6,050	4,940	5,050
6	4,700	6,780	3,630	3,710	6,480	5,430	9,980	35,300	14,700	6,760	4,720	5,340
7	4,700	7,210	3,610	3,870	6,480	5,450	14,300	*33,200	13,500	6,440	4,850	5,430
8	4,850	7,460	3,590	4,000	6,490	5,430	17,800	30,200	12,500	6,030	4,810	5,110
9	5,090	6,960	3,590	4,420	6,450	5,450	18,000	26,800	11,500	6,000	*4,520	5,050
10	4,960	6,430	3,570	5,070	6,300	5,500	17,800	23,900	13,000	5,960	4,570	4,760
11	4,870	6,400	3,550	9,380	6,180	5,470	17,600	21,200	13,400	6,710	4,670	4,670
12	4,830	6,780	3,510	13,100	5,990	5,450	17,600	18,900	15,200	6,270	5,160	4,500
13	4,570	5,870	3,480	15,500	5,820	5,430	17,600	18,000	12,300	6,080	5,380	4,020
14	4,420	5,750	3,440	16,800	5,750	5,430	18,000	21,600	11,000	6,290	5,430	4,360
15	4,740	5,940	3,440	17,500	5,640	5,450	19,100	23,200	*10,500	7,570	4,890	4,570
16	4,320	5,990	3,420	14,300	5,520	5,430	19,100	21,800	10,100	7,520	5 110	4,460
17	4,250	5,770	3,420	12,500	5,380	5,400	24,900	20,200	8,950	6,860	5.090	4,830
18	4,550	6,150	3,400	11,000	5,200	5,520	34,400	18,400	8,190	6,780	4,830	4,980
19	4,650	6,160	3,380	*9,340	5,140	5,700	38,700	17,200	8,440	6,270	4,810	5,290
20	4,570	5,700	3,360	8,870	*5,110	5,850	37,600	*15,700	8,110	5,730	4,760	5,050
21	4,500	5,050	3,360	8,140	5,140	5,940	35,700	14,100	7,520	5,310	4,960	5,400
22	4,570	5,140	*3,360	7,730	5,180	5,970	34,300	13,400	7,440	5,030	4,940	5,610
23	4,060	5,200	3,380	7,290	5,220	5,990	32,600	12,700	7,160	4,890	5.000	5,660
24	4,780	5,250	3,380	6,980	5,270	6,010	30,100	13,200	6,810	4,890	5,200	*5,750
25	4,700	4,980	3,340	6,730	5,310	6,040	28,300	13,000	6,560	5,110	4,760	5,540
26	4,550	4,630	3,360	6,560	5,400	*6,060	27,000	11,900	6,660	5,200	5,030	5,770
27	4,920	4,320	3,400	6,430	5,470	6,090	25,900	11,500	6,440	5,470	4,830	5,800
28	4,500	4,080	3,380	6,330	5,520	5,940	28,000	13,500	6,510	5,450	4,610	5,680
29	4,020	4,000	3,380	6,230	5,540	5,640	34,900	17,200	6,440	5,160	4,700	5,840
30	4,460	3,850	3,400	6,210	-------	5,360	39,700	16,300	6,360	5,220	4,830	5,860
31	4,630	-------	3,440	6,230	-------	5,220	-------	14,400	-------	5,380	5,110	-------
Total	144,070	178,790	108,120	240,760	167,680	174,140	667,620	695,100	314,390	184,980	153,960	152,910
Mean	4,647	5,960	3,488	7,766	5,782	5,617	22,250	22,420	10,480	5,967	4,966	5,097
(†)	-3,149	-1,919	-2,542	+67	-2,711	-2,364	+3,625	+12,714	+1,525	-1,590	-1,798	-1,486

Adjusted for change in reservoir contents

Mean	1,498	4,041	946	7,833	3,071	3,253	25,880	35,130	12,000	4,377	3,168	3,611
Cfsm	0.227	0.612	0.143	1.19	0.465	0.493	3.92	5.32	1.82	0.663	0.480	0.547
In.	0.26	0.68	0.16	1.37	0.50	0.57	4.37	6.13	2.03	0.76	0.55	0.61

	Observed			Adjusted		
Calendar year 1955:	Max 69,200	Min 3,340	Mean 12,270	Mean 10,950	Cfsm 1.66	In. 22.50
Water year 1955-56:	Max 46,200	Min 3,340	Mean 8,695	Mean 8,736	Cfsm 1.32	In. 17.99

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, of reservoirs in West and East Branches of Penobscot River, also Sebec Lake and Wilson Pond in Piscataquis River basin.
Note.--Stage-discharge relation affected by ice Nov. 26 to Apr. 15.

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 1956.

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 gage and staff gage 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.--41 years, 491 cfs.

Extremes.--Maximum discharge during year, 1,690 cfs Apr. 21 (gage height, 4.56 ft); maximum gage height, 4.92 ft Mar. 17 (backwater from ice); minimum daily discharge, 54 cfs Jan. 7.

1915-56: 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.7	48	2.0	365
.8	62	2.5	560
.9	78	3.0	780
1.1	114	4.0	1,340
1.5	205	4.6	1,720

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	99	108	97	59	160	166	172	1,620	954	544	255	149
2	101	122	95	59	156	160	172	1,640	910	524	258	147
3	99	134	92	58	156	150	177	1,630	815	496	255	142
4	*97	142	88	56	152	140	245	1,600	708	430	252	136
5	95	144	81	55	150	150	384	1,580	672	358	246	130
6	92	155	78	55	150	156	464	*1,520	698	350	244	124
7	90	174	78	54	150	138	572	1,470	676	361	238	124
8	92	192	78	65	150	136	640	1,390	662	376	232	122
9	97	195	76	83	150	152	680	1,320	690	380	*226	120
10	101	187	76	102	150	180	721	1,230	721	388	229	114
11	101	182	75	150	150	188	770	1,140	775	384	235	112
12	99	179	75	210	150	196	815	1,080	780	373	232	110
13	93	177	75	*280	148	188	845	1,030	780	358	226	112
14	88	177	75	405	148	184	900	1,010	*740	399	218	114
15	85	172	73	520	148	184	915	990	698	512	210	128
16	81	167	73	540	148	188	1,000	996	662	572	202	132
17	78	169	73	512	144	190	1,290	990	616	548	197	140
18	76	172	72	468	142	188	1,520	966	536	460	189	147
19	76	174	72	415	140	184	1,630	920	524	380	189	153
20	75	172	70	369	138	180	1,680	865	540	314	182	157
21	80	162	68	324	138	180	1,680	810	528	267	174	160
22	85	150	67	290	138	174	1,630	745	556	235	169	157
23	86	140	65	264	136	178	1,580	703	576	216	165	153
24	90	134	65	240	136	184	1,510	712	576	232	157	153
25	92	130	62	225	136	200	1,430	721	588	267	153	153
26	92	122	62	210	134	*196	1,360	708	596	293	149	151
27	93	114	62	192	132	189	1,300	730	592	304	147	147
28	92	110	62	184	150	182	1,330	855	592	307	144	140
29	93	104	61	180	*158	179	1,380	915	584	304	151	134
30	92	102	59	172	-------	169	1,550	948	568	293	172	128
31	90	----	58	166	-------	172	-------	960	-------	267	153	----
Total	2,800	4,562	2,263	6,962	4,238	5,401	30,342	33,794	19,913	11,492	6,249	4,089
Mean	90.3	152	73.0	225	146	174	1,010	1,090	664	371	202	136
Cfsm	0.302	0.508	0.244	0.753	0.488	0.582	3.38	3.65	2.22	1.24	0.676	0.455
In.	0.35	0.57	0.28	0.84	0.53	0.67	3.77	4.21	2.48	1.43	0.78	0.51

Calendar year 1955: Max 2,460 Min 58 Mean 521 Cfsm 1.74 In. 23.69
Water year 1955-56: Max 1,680 Min 54 Mean 361 Cfsm 1.21 In. 16.42

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 21-23, Nov. 25 to Jan. 14, Jan. 19, Jan. 24 to Mar. 25 (no gage-height record Feb. 20-29; discharge estimated on basis of recorded range in stage, 1 discharge measurement, and records for nearby stations).

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 1956. 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.--18 years, 12,240 cfs (unadjusted).

Extremes.--Maximum discharge during year, 48,900 cfs May 1 (gage height, 8.87 ft); minimum daily, 3,410 cfs Dec. 25.
1938-56: 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, which are good. Flow regulated by several reservoirs above station (see p. 41).

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

Rating tables, water year 1955-56, 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	
2.7	3,370	6.0	19,700
3.0	4,060	7.0	28,200
4.0	7,500	8.0	38,500
5.0	12,800	8.9	49,300
5.8	18,400		

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

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,290	5,220	3,920	3,520	6,480	5,790	5,400	48,300	15,300	6,630	5,970	5,080
2	5,080	10,000	3,870	3,550	6,560	5,730	5,400	44,300	17,600	6,820	6,300	5,220
3	5,080	8,450	3,840	3,570	6,590	5,700	5,470	40,200	17,900	6,820	6,120	4,780
4	4,650	7,870	3,800	3,610	6,560	5,660	5,830	38,300	16,600	6,780	5,790	4,500
5	4,780	6,050	3,730	3,660	6,630	5,650	7,820	37,500	16,900	6,520	5,580	5,430
6	4,780	6,970	3,730	3,770	6,670	5,640	10,600	37,300	15,900	7,270	5,220	5,540
7	4,750	7,200	3,700	3,940	6,670	5,610	15,000	*35,400	14,600	6,930	5,400	5,690
8	4,940	7,540	3,700	4,110	6,590	5,610	17,300	32,600	13,700	6,520	5,330	5,330
9	5,260	7,040	3,700	4,590	6,630	5,650	17,900	28,800	12,700	6,480	*4,980	5,260
10	5.040	6,630	3,680	6,560	6,480	5,740	18,100	26,000	14,400	6,590	4,980	4,980
11	5,040	6,480	3,640	8,590	6,740	5,720	17,900	23,400	14,600	7,270	5,180	4,840
12	4,940	7,010	3,610	13,400	6,190	5,710	17,800	21,000	14,500	6,890	5,760	4,680
13	4,680	6,050	3,590	16,900	6,080	5,680	18,100	20,300	13,500	6,630	5,900	4,300
14	4,560	5,940	3,550	18,400	5,830	5,680	19,300	24,500	12,300	6,850	5,940	4,650
15	4,780	6,150	3,550	17,900	5,720	5,690	19,600	25,200	*11,600	8,310	5,330	4,910
16	4,450	6,150	3,520	15,000	5,610	5,680	21,600	23,700	11,200	8,400	5,540	4,810
17	4,360	6,010	3,520	13,200	5,470	5,650	28,600	22,300	9,840	7,660	5,430	5,120
18	4,650	6,520	3,500	11,600	5,400	5,770	37,700	20,300	8,880	7,420	5,150	5,400
19	4,780	6,410	3,480	9,900	5,330	5,940	40,900	18,800	8,990	6,930	5,120	5,690
20	4,680	6,010	3,460	9,350	5,290	6,090	39,200	*17,300	8,540	6,260	5,120	5,360
21	4,590	5,180	3,460	8,590	5,320	6,180	37,500	15,500	8,040	5,790	5,180	5,760
22	4,720	5,430	3,440	8,130	5,360	6,200	36,000	14,600	7,830	5,430	5,220	6,050
23	4,170	5,430	3,500	7,660	5,400	6,230	34,600	14,000	7,660	5,330	5,220	5,970
24	4,750	5,400	3,460	7,310	5,450	6,250	32,300	14,800	7,230	5,290	5,430	6,120
25	4,750	5,180	3,410	7,040	5,490	6,310	30,700	14,400	7,040	5,540	5,080	5,900
26	4,530	4,780	3,440	6,850	5,580	6,320	28,900	13,200	7,270	5,790	5,290	6,150
27	4,980	4,480	3,480	6,700	5,650	6,330	27,800	12,900	7,010	6,050	5,010	6,150
28	4,530	4,220	3,460	6,590	5,720	6,190	31,100	15,800	7,080	6,050	4,880	6,050
29	4,140	4,140	3,460	6,480	5,750	5,870	37,600	19,100	7,010	5,790	4,940	6,230
30	4,500	3,990	3,480	6,440	--------	5,580	43,400	17,800	6,890	5,830	5,080	6,230
31	4,680	--------	3,520	6,440	--------	5,430	--------	15,800	--------	6,010	5,400	--------
Total	146,910	183,930	111,200	253,350	173,240	181,280	709,220	753,400	342,610	202,880	166,870	162,180
Mean	4,739	6,131	3,587	8,173	5,974	5,848	23,640	24,300	11,420	6,545	5,383	5,406
(†)	-3,149	-1,919	-2,542	+67	-2,711	-2,364	+3,625	+12,714	+1,525	-1,590	-1,798	-1,486

Adjusted for change in reservoir contents

Mean	1,590	4,212	1,045	8,240	3,263	3,484	27,260	37,010	12,940	4,955	3,585	3,920
Cfsm	0.227	0.602	0.149	1.18	0.466	0.498	3.89	5.29	1.85	0.708	0.512	0.560
In.	0.26	0.67	0.17	1.36	0.50	0.57	4.34	6.10	2.06	0.82	0.59	0.62

	Observed			Adjusted		
Calendar year 1955:	Max 70,400	Min 3,410	Mean 12,890	Mean 11,570	Cfsm 1.65	In. 22.43
Water year 1955-56:	Max 48,300	Min 3,410	Mean 9,254	Mean 9,295	Cfsm 1.33	In. 18.06

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, of reservoirs in West and East Branches of Penobscot River, also Sebec Lake and Wilson Pond in Piscataquis River basin.
Note.--Stage-discharge relation affected by ice Nov. 26 to Jan. 12, Jan. 16 to Apr. 7 (no gage-height record Feb. 20 to Mar. 26; discharge computed on basis of records at Penobscot River at West Enfield and Passadumkeag River at Lowell).

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 1956.

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

Average discharge.--15 years, 310 cfs.

Extremes.--Maximum discharge during year, 3,490 cfs Apr. 18 (gage height, 9.97 ft); minimum, 2.6 cfs Oct. 5.
1941-56: 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, 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 table, water year 1955-56, except periods of i e effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-28, July 24 to Sept. 5)

1.1	2.8	3.0	263
1.3	11	4.0	560
1.5	25	5.0	955
1.7	42	6.0	1,380
2.0	76	8.0	2,380
2.5	153	10.0	3,510

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.1	290	46	27	68	90	152	1,580	416	48	29	15
2	4.4	746	42	26	67	83	168	1,160	341	44	24	17
3	*4.1	495	40	26	66	89	178	*907	273	54	22	18
4	3.4	347	38	26	66	102	194	*790	239	46	19	18
5	3.1	266	36	26	66	120	235	1,000	251	40	15	17
6	3.4	317	35	25	66	118	340	947	216	33	*14	14
7	4.1	425	34	25	66	110	670	718	184	31	13	17
8	5.4	386	33	29	66	104	1,340	570	159	34	13	17
9	7.0	311	33	52	66	102	2,050	453	149	40	14	16
10	8.5	234	32	152	66	110	2,020	381	232	66	17	14
11	8.5	203	32	710	71	132	1,980	333	*296	77	19	14
12	7.5	256	32	1,120	76	150	1,960	298	246	59	18	13
13	6.0	234	31	1,570	77	148	1,960	314	188	48	16	14
14	5.7	198	31	1,780	76	142	1,950	425	140	67	12	15
15	5.0	196	31	1,860	76	136	1,990	398	118	430	11	21
16	5.4	186	31	1,620	76	130	2,280	333	112	320	10	28
17	5.4	201	31	1,230	75	128	2,970	314	96	196	9.0	27
18	6.0	244	30	955	72	126	3,400	278	73	126	8.5	31
19	6.5	207	30	535	70	124	2,790	234	62	86	8.5	34
20	7.0	190	30	*400	67	124	2,100	203	55	59	9.5	32
21	9.5	165	31	320	66	126	1,710	179	50	47	8.5	31
22	12	136	31	275	64	130	1,440	155	50	40	8.0	32
23	12	120	31	240	63	130	1,290	159	49	30	7.5	32
24	14	104	31	194	63	130	1,180	369	48	40	7.5	31
25	13	106	31	160	64	130	1,130	338	58	72	8.0	31
26	12	91	31	136	68	128	1,000	253	68	112	8.0	36
27	13	76	30	112	*83	124	911	255	61	122	8.5	37
28	12	63	29	97	97	118	1,060	915	59	91	8.5	33
29	12	56	28	84	94	*112	1,340	758	59	59	9.5	28
30	12	52	27	76	-------	120	1,700	529	54	43	10	26
31	14	-------	27	70	-------	136	-------	410	-------	33	10	-------
Total	246.0	6,901	1,005	13,958	2,061	3,752	43,488	15,956	4,402	2,603	394.5	709
Mean	7.94	230	32.4	450	71.1	121	1,450	515	147	84.0	12.7	23.6
Cfsm	0.045	1.29	0.182	2.53	0.399	0.680	8.15	2.89	0.826	0.472	0.071	0.133
In.	0.05	1.44	0.21	2.92	0.43	0.78	9.09	3.33	0.92	0.54	0.08	0.15

Calendar year 1955: Max 2,400 Min 2.3 Mean 285 Cfsm 1.60 In. 21.73
Water year 1955-56: Max 3,400 Min 3.1 Mean 261 Cfsm 1.47 In. 19.94

Peak discharge (base 1,600 cfs).--Jan. 15 (3 to 5 a.m.) 1,910 cfs (7.10 ft); Apr. 18 (7 a.m.) 3,490 cfs (9.97 ft); Apr. 30 (7 p.m.) 1,840 cfs (6.95 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 22, 23, Nov. 25 to Jan. 14, Jan. 19 to Apr. 15.

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 at 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 gage heights 648.0 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 gage heights 91 and 100 ft. Gage-height records furnished by Bangor Hydro-Electric Co.

Wilson Pond on Wilson Stream, $2\frac{3}{4}$ 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 1955 to September 1956

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, 1955	31,929	3,199	1,289
Oct. 31	24,328	2,746	910
Nov. 30	19,115	2,632	1,262
Dec. 31	13,607	1,773	822
Jan. 31, 1956	12,402	2,519	1,660
Feb. 29	7,580	642	1,365
Mar. 31	2,252	0	1,003
Apr. 30	9,391	1,604	1,656
May 31	37,728	6,100	2,872
June 30	41,779	6,222	2,653
July 31	37,804	6,222	2,369
Aug. 31	32,944	6,179	2,457
Sept.30	29,487	5,751	2,491

† 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.

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 and half a mile downstream from Pleasant Pond Brook.

Drainage area.--148 sq mi.

Records available.--October 1938 to September 1956.

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

Average discharge.--18 years, 234 cfs.

Extremes.--Maximum discharge during year, 1,930 cfs Apr. 17 (gage height, 6.54 ft); minimum, 13 cfs Oct. 6 (gage height, 1.89 ft).
1938-56: 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.

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

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 9				Jan. 10 to Sept. 30			
1.8	8.0	2.6	87	1.9	14	3.5	325
2.0	20	3.0	166	2.0	20	4.0	520
2.2	37	3.5	311	2.2	38	5.0	970
2.4	59	4.0	491	2.4	62	6.0	1,550
				2.6	93	6.8	2,110
				3.0	180		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	380	78	47	148	106	133	960	313	38	38	158
2	16	270	72	46	138	104	140	*835	286	52	36	97
3	16	135	69	46	135	112	156	790	268	49	33	83
4	14	117	69	45	130	130	182	750	271	45	32	56
5	14	196	68	45	127	144	360	700	259	42	29	46
6	13	288	67	*45	122	142	592	644	226	49	*28	42
7	19	235	66	48	120	140	730	584	*190	65	29	102
8	22	191	63	62	120	140	755	496	173	66	28	72
9	22	171	60	230	118	138	708	432	158	68	26	57
10	17	152	60	616	116	138	795	384	149	80	33	49
11	16	178	60	700	114	138	995	353	140	71	39	45
12	15	218	58	815	114	156	1,100	322	129	72	33	41
13	20	184	58	1,100	112	160	1,250	322	122	118	27	39
14	16	168	57	1,100	112	162	1,210	360	120	194	26	40
15	15	159	52	1,040	110	168	1,170	307	114	175	24	126
16	14	152	57	985	108	*168	1,350	280	108	138	23	80
17	15	186	57	885	106	166	1,880	277	93	125	22	82
18	16	174	55	750	102	162	1,850	253	85	108	21	166
19	16	159	54	620	102	160	1,750	229	77	95	20	104
20	15	148	54	544	*101	158	1,590	217	72	99	19	85
21	15	133	53	468	99	*158	1,410	192	68	87	19	104
22	15	125	53	392	97	154	1,240	180	61	79	21	95
23	14	115	52	336	95	149	1,130	188	54	72	22	88
24	14	115	52	292	93	150	1,060	253	53	66	19	164
25	14	112	52	262	91	148	985	200	54	66	18	195
26	14	102	51	235	106	144	820	180	56	61	18	142
27	15	94	51	211	112	142	755	280	49	61	17	116
28	15	89	49	186	112	135	775	516	48	56	16	108
29	14	92	49	162	108	133	885	368	45	49	16	102
30	14	84	48	156	-------	133	1,090	325	40	45	16	97
31	61	-------	47	150	-------	133	-------	322	-------	41	37	-------
Total	532	4,922	1,791	12,619	3,268	4,471	28,846	12,499	3,881	2,432	785	2,781
Mean	17.2	164	57.8	407	113	144	962	403	129	78.5	25.3	92.7
Cfsm	0.116	1.11	0.391	2.75	0.764	0.973	6.50	2.72	0.872	0.530	0.171	0.626
In.	0.13	1.24	0.45	3.17	0.82	1.12	7.25	3.14	0.97	0.61	0.20	0.70

Calendar year 1955: Max 1,410 Min 13 Mean 181 Cfsm 1.22 In. 16.63
Water year 1955-56: Max 1,880 Min 13 Mean 215 Cfsm 1.45 In. 19.80

Peak discharge (base, 1,100 cfs).--Jan. 13 (12 m.) 1,160 cfs (5.37 ft); Apr. 17 (7 to 9 p.m.) 1,930 cfs (6.54 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 5 to Jan. 9, Jan. 28 to Feb. 2, Feb. 4, 7-17, 19, 22-27, 29, Mar. 1, 3-14, 17-22, 24-26.

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 1956.

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, 17.46 ft June 16-18; minimum observed, 10.65 ft Apr. 4.
1895-56: Maximum gage height, 18.0 ft May 30, 1902; minimum, 10.0 ft or lower, present datum, Mar. 20-29, 1911.

Remarks.--Lake is controlled by dams at East and West Outlets originally built prior to 1840. East Outlet dam partly rebuilt of concrete in 1947-48 with gate sills at gage height 7.0 ft. Remaining wooden section rebuilt of concrete in 1955-56. Lake outlet dredged in 1948 to permit drawing level down to gage height 10.0 ft at a faster rate than formerly. Capacity, 23,735,000,000 cu ft between gage heights 10.0 and 17.5 ft. Water is used primarily for power, although some logs are driven each year. During October, June, July, August, and 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 (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 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.95	13.65	14.30	13.28	13.75	12.62	10.85	12.31	17.00	17.20	16.85	15.75
2	13.92	13.75	14.28	13.23	13.73	12.57	10.75	12.38	17.09	17.25	16.80	15.68
3	13.91	13.80	14.27	13.17	13.74	12.51	10.72	12.55	17.13	17.24	16.74	15.69
4	13.86	13.90	14.28	13.13	13.76	12.43	10.65	12.68	17.19	17.20	16.67	15.68
5	13.87	14.00	14.31	13.05	13.76	12.35	10.71	12.79	17.25	17.18	16.60	15.66
6	13.80	14.05	14.30	13.01	13.75	12.29	10.70	12.92	17.32	17.11	16.56	15.64
7	13.75	14.11	14.31	12.97	13.76	12.23	10.73	13.00	17.30	17.11	16.54	15.63
8	13.75	14.19	14.28	12.97	13.73	12.23	10.75	13.05	17.32	17.08	16.53	15.56
9	13.73	14.25	14.26	12.99	13.68	12.32	10.76	13.20	17.38	17.06	16.48	15.49
10	13.71	14.26	14.23	13.05	13.67	12.20	10.78	13.34	17.39	17.04	16.46	15.45
11	13.69	14.30	14.20	13.15	13.64	12.16	10.80	13.46	17.40	17.03	16.47	15.39
12	13.65	14.35	14.19	13.23	13.64	12.08	10.86	13.57	17.40	17.03	16.44	15.35
13	13.62	14.38	14.19	13.28	13.62	11.99	10.92	13.75	17.40	17.03	16.40	15.34
14	13.55	14.40	14.15	13.35	13.58	11.92	10.95	14.05	17.43	17.02	16.37	15.29
15	13.50	14.45	14.10	13.45	13.57	11.87	10.97	14.30	17.45	17.02	16.32	15.26
16	13.46	14.49	14.08	13.48	13.46	11.81	11.03	14.55	17.46	17.03	16.29	15.18
17	13.41	14.55	14.02	13.50	13.42	11.75	11.15	14.82	17.46	17.01	16.20	15.12
18	13.35	14.55	13.99	13.55	13.39	11.71	11.25	15.04	17.46	17.01	16.18	15.08
19	13.30	14.55	13.92	13.58	13.33	11.67	11.36	15.28	17.43	17.00	16.23	15.01
20	13.27	14.55	13.85	13.59	13.26	11.59	11.43	15.45	17.40	16.98	16.17	14.96
21	13.26	14.50	13.84	13.65	13.21	11.52	11.48	15.69	17.35	16.96	16.11	14.92
22	13.26	14.45	13.79	13.65	13.13	11.46	11.55	15.86	17.35	16.95	16.08	14.89
23	13.25	14.40	13.71	13.72	13.06	11.41	11.58	16.06	17.33	16.96	16.03	14.86
24	13.20	14.40	13.65	13.69	12.98	11.35	11.61	16.27	17.29	16.93	15.95	14.86
25	13.17	14.37	13.61	13.67	12.95	11.30	11.66	16.38	17.33	16.95	15.95	14.86
26	13.20	14.36	13.60	13.67	12.90	11.17	11.71	16.46	17.33	16.94	15.90	14.82
27	13.24	14.35	13.56	13.69	12.85	11.07	11.75	16.52	17.27	16.95	15.90	14.73
28	13.26	14.33	13.50	13.71	12.76	11.03	11.88	16.65	17.23	16.95	15.86	14.70
29	13.28	14.32	13.45	13.71	12.71	10.97	11.96	16.76	17.23	16.94	15.85	14.65
30	13.35	14.30	13.38	13.75	-------	10.90	12.22	16.84	17.24	16.93	15.80	14.60
31	13.40	-------	13.34	13.75	-------	10.85	-------	16.93	-------	16.91	15.78	-------
(†)	10,641	13,488	10,451	11,747	8,466	2,642	6,928	21,896	22,895	21,831	18,204	14,441
(‡)	-1,738	+2,847	-3,037	+1,296	-3,281	-5,824	+4,286	+14,968	+999	-1,064	-3,627	-3,763

Calendar year 1955..... ‡ -12,573
Water year 1955-56..... ‡ +2,062

† Contents, in millions of cubic feet, at end of month.
‡ Change in contents, in millions of cubic feet.
Note.--Diversion through West Outlet: October, 300 cfs; June, 150 cfs; July, 175 cfs; August, 600 cfs; September, 640 cfs.

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 1956.

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.--37 years, 1,855 cfs (unadjusted).

Extremes.--Maximum discharge during year, 3,780 cfs July 2 (gage height, 5.49 ft); minimum, 192 cfs Apr. 6 (gage height, 2.37 ft).
1919-56: 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. 43) and by Brassua Lake and Second and First Roach Ponds (see p. 54).

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

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Sept. 9				Sept. 10-30	
2.3	164	3.4	845	3.3	910
2.4	204	3.8	1,240	3.5	1,110
2.6	300	4.5	2,080	4.0	1,750
2.8	414	5.0	2,870	4.5	2,540
3.0	542	5.2	3,220		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,590	565	935	2,370	1,130	2,850	2,190	260	384	2,230	2,390	1,450
2	1,590	316	926	2,310	1,130	2,920	2,140	265	765	1,930	2,370	1,440
3	1,690	316	926	2,280	1,130	2,840	2,040	265	600	2,310	2,030	1,450
4	2,040	322	926	2,250	1,130	2,780	2,040	270	855	813	1,700	1,880
5	2,190	328	944	2,210	1,130	2,840	1,940	270	1,460	2,330	1,680	1,700
6	2,160	316	944	2,160	1,580	2,890	615	270	2,700	1,830	1,680	1,430
7	1,970	316	944	2,140	1,920	2,850	196	270	2,560	2,070	1,580	1,430
8	1,630	322	935	2,140	1,900	2,920	196	275	2,220	1,940	1,400	1,420
9	1,950	435	926	1,640	1,870	2,920	196	275	2,780	2,110	1,400	1,790
10	2,120	643	926	675	1,860	2,890	204	280	3,110	1,510	1,420	1,730
11	1,820	643	935	306	1,850	2,890	200	280	3,110	872	1,420	1,650
12	1,760	650	1,250	311	1,990	2,920	204	285	2,790	895	1,390	2,460
13	2,290	657	1,690	316	2,300	2,920	204	311	2,600	1,000	1,390	*2,380
14	2,400	850	1,990	322	2,250	2,840	204	322	2,620	970	*1,390	*1,960
15	2,390	725	2,000	322	2,440	2,770	204	328	2,600	420	1,390	2,150
16	2,370	1,730	1,990	322	2,650	2,700	213	338	2,280	420	1,370	1,940
17	2,360	1,710	1,960	328	2,620	2,670	218	350	1,990	955	1,360	2,270
18	2,320	1,310	1,950	333	2,580	2,580	222	355	1,690	740	1,350	2,460
19	1,700	1,310	2,150	890	2,550	2,650	227	355	1,690	433	1,350	2,130
20	1,360	1,280	2,240	1,420	2,730	2,680	227	390	2,370	1,730	1,350	1,990
21	1,360	1,250	2,160	1,090	2,900	2,600	227	495	2,530	675	1,350	1,320
22	1,330	1,100	2,140	344	2,890	2,840	227	439	2,480	445	1,340	990
23	1,120	1,670	2,120	1,170	2,840	2,990	227	439	2,530	1,480	1,320	1,270
24	1,390	1,880	1,560	1,600	2,920	2,900	227	433	2,550	1,720	1,320	1,940
25	1,320	1,860	1,130	1,110	2,920	2,770	232	439	2,580	905	1,310	1,940
26	1,370	1,580	1,570	1,110	2,840	2,650	236	845	2,560	1,350	1,310	1,920
27	1,170	1,580	2,300	1,110	2,840	2,560	241	735	2,500	1,460	1,420	1,900
28	1,060	1,330	2,530	780	2,840	2,470	245	435	2,230	1,460	1,500	1,870
29	1,050	926	2,500	570	2,780	2,400	245	810	2,110	1,450	1,480	1,860
30	1,080	926	2,450	920	------	2,320	260	895	2,110	1,440	1,470	2,110
31	1,080	------	2,420	1,130	------	2,260	------	665	------	2,080	1,470	------
Total	53,030	28,846	50,367	35,979	64,510	85,080	16,247	12,644	65,354	41,993	46,700	54,230
Mean	1,711	962	1,625	1,161	2,224	2,745	542	408	2,178	1,355	1,506	1,808
(†)	-1,816	+115	-1,192	+562	-1,339	-2,192	+2,839	+7,715	+628	-233	-804	-674
Adjusted for diversion and change in reservoir contents												
Mean	-105	1,077	433	1,723	885	553	3,381	8,123	2,808	1,122	702	1,134
Cfsm	-0.085	0.869	0.349	1.39	0.714	0.446	2.73	6.55	2.26	0.905	0.566	0.915
In.	-0.10	0.97	0.40	1.60	0.77	0.51	3.05	7.55	2.52	1.04	0.65	1.02

	Observed			Adjusted			
Calendar year 1955:	Max 7,550	Min 300	Mean 2,285	Mean 1,764	Cfsm 1.42	In. 19.31	
Water year 1955-56:	Max 3,110	Min 196	Mean 1,516	Mean 1,820	Cfsm 1.47	In. 19.98	

* 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.
Note.--Negative figures of adjusted discharge and runoff indicate that evaporation and seepage exceeded inflow.

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 1956.

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.--55 years, 2,542 cfs (unadjusted).

Extremes.--Maximum discharge during year, 7,920 cfs Apr. 30 (gage height, 5.99 ft); minimum daily, 415 cfs July 22.
1901-56: Maximum discharge, about 23,700 cfs June 18, 1917 (gage height, 10.1 ft, site then in use); minimum, 85 cfs Sept. 3, 1953 (gage height, 1.02 ft).

Remarks.--Records excellent except those below 500 cfs and those for periods of ice effect or no gage-height record, which are fair. Flow regulated by Moosehead Lake (see p. 43), Brassua Lake, and Moxie, Indian, Second and First Roach Ponds (see p. 54).

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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	381	3.5	2,270
2.0	571	4.0	3,170
2.5	985	4.8	4,870
3.0	1,550		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,010	1,650	1,310	2,490	1,380	3,020	1,550	3,600	1,360	2,560	2,760	2,900
2	2,350	920	1,220	2,700	1,420	3,320	2,840	3,050	1,610	2,900	2,760	1,910
3	2,430	1,230	785	2,600	1,380	2,670	2,060	2,870	1,870	2,770	2,700	2,260
4	2,670	1,380	1,000	2,490	1,010	2,960	2,400	3,120	1,740	835	2,070	3,350
5	3,100	630	1,290	2,300	1,360	3,130	2,240	3,910	2,140	2,58[illegible]	2,150	2,730
6	2,750	650	1,110	2,310	2,040	3,070	1,070	2,180	4,130	2,73[illegible]	2,520	2,440
7	3,060	920	1,080	2,250	2,170	3,470	670	2,820	2,920	1,77[illegible]	2,400	1,920
8	2,760	970	900	2,290	2,440	3,670	805	2,510	3,080	2,12[illegible]	2,020	2,140
9	1,690	960	1,100	2,100	2,230	3,230	755	2,110	3,420	2,39[illegible]	2,040	2,240
10	3,070	990	1,300	1,280	2,230	2,950	750	*2,410	3,290	2,25[illegible]	2,400	2,930
11	2,280	1,240	800	900	2,050	1,860	780	2,260	4,410	1,27[illegible]	2,180	2,940
12	2,550	940	1,500	1,100	1,450	3,520	860	2,060	3,230	1,09[illegible]	2,200	3,820
13	2,840	1,100	2,000	1,250	2,770	3,060	1,020	2,230	3,060	1,38[illegible]	2,280	3,480
14	3,170	1,410	2,350	1,670	2,620	3,050	1,100	4,710	2,590	1,45[illegible]	2,170	3,310
15	2,960	1,180	2,250	900	3,040	2,880	940	2,700	2,820	86[illegible]	2,220	2,940
16	3,000	2,070	2,150	1,110	3,420	3,210	1,930	2,410	2,560	61[illegible]	2,030	2,410
17	2,810	2,050	2,200	1,130	2,830	2,100	1,980	1,720	2,080	90[illegible]	2,070	3,140
18	2,920	1,500	2,100	860	3,100	2,640	2,230	1,660	2,550	1,22[illegible]	2,230	3,730
19	2,270	1,800	2,400	1,490	1,150	3,500	1,520	2,080	1,240	82[illegible]	2,330	2,780
20	1,740	1,470	2,700	2,080	3,010	2,680	1,770	900	2,630	94[illegible]	2,330	3,000
21	1,830	1,370	2,300	1,510	3,230	2,640	1,630	980	2,610	42[illegible]	2,240	2,220
22	1,610	1,360	2,600	590	3,370	2,680	1,830	1,270	2,600	41[illegible]	1,990	1,730
23	980	1,620	2,400	2,050	3,450	3,390	2,430	1,590	2,800	1,52[illegible]	1,860	2,310
24	1,730	2,080	1,570	2,200	3,530	2,920	1,740	1,280	2,440	2,480	2,340	3,240
25	1,490	2,240	1,050	1,160	2,550	2,370	1,300	1,440	3,020	1,440	2,160	2,850
26	1,480	1,800	1,730	1,320	2,030	3,070	1,890	830	3,040	1,290	2,190	2,740
27	1,220	1,540	3,020	1,400	3,230	3,000	1,090	1,290	2,740	1,900	2,230	2,820
28	1,140	1,560	2,800	1,130	3,070	2,740	1,640	1,700	2,180	1,76[illegible]	2,160	2,810
29	1,280	1,100	2,600	950	2,950	2,660	2,690	1,600	2,280	1,75[illegible]	2,540	2,230
30	610	1,040	2,450	1,070	------	2,750	4,520	1,860	2,170	1,82[illegible]	2,470	2,120
31	1,810	------	2,580	1,450	------	2,720	------	1,830	------	2,07[illegible]	2,150	------
Total	67,610	40,770	56,645	50,110	70,510	90,930	50,030	66,980	78,610	50,32[illegible]	70,190	81,440
Mean	2,181	1,359	1,827	1,616	2,431	2,933	1,668	2,161	2,620	1,62[illegible]	2,264	2,715
(†)	-2,183	+115	-1,192	+562	-1,350	-2,209	+2,927	+7,896	+490	-365	-1,421	-1,507

Adjusted for change in reservoir contents

Mean	-2	1,474	635	2,178	1,081	724	4,595	10,060	3,110	1,258	843	1,208
Cfsm	-0.001	0.939	0.404	1.39	0.689	0.461	2.93	6.41	1.98	0.801	0.537	0.769
In.	0.00	1.05	0.47	1.60	0.74	0.53	3.27	7.39	2.21	0.92	0.62	0.86

	Observed			Adjusted		
Calendar year 1955:	Max 9,940	Min 560	Mean 2,952	Mean 2,319	Cfsm 1.48	In. 20.08
Water year 1955-56:	Max 4,710	Min 415	Mean 2,115	Mean 2,266	Cfsm 1.44	In. 19.66

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Moosehead and Brassua Lakes, Second and First Roach, Indian and Moxie Ponds.
Note.--No gage-height record Dec. 6-21; discharge estimated on basis of records at Harris Power Station. Stage-discharge relation affected by ice Dec. 22, 23, Dec. 27 to Jan. 9. Negative figures of adjusted discharge and runoff indicate that evaporation and seepage exceeded inflow.

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 1956. 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.--17 years, 804 cfs (unadjusted).

Extremes.--Maximum discharge during year, 6,020 cfs July 24 (gage height, 8.82 ft); minimum daily, 0.8 cfs Mar. 2-11.

1939-56: 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 below 50 cfs, which are fair. Flow regulated by Flagstaff Lake (see p. 54).

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 19		Dec. 20 to Sept. 30			
3.6	2.1	3.37	0.8	4.5	101
3.7	6.2	3.4	1.2	5.0	240
3.8	12	3.5	3.1	5.5	475
4.0	28	3.6	5.8	6.0	835
Note.--Same as following table above 4.0 ft.		3.7	9.4	7.0	1,960
		3.8	14	8.1	4,030
		4.0	28		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,060	23	1,510	1.2	1,500	1.5	1,020	4.7	2,640	315	531	119
2	1,970	3.0	980	1.2	1,480	.8	1,340	4.4	2,030	880	531	130
3	990	3.0	737	1.2	1,460	.8	480	4.4	1,650	540	531	148
4	975	3.0	1,210	1.2	1,430	.8	325	5.2	1,720	166	265	128
5	975	3.4	1,440	1.2	1,390	.8	3.9	6.1	2,750	86	245	126
6	1,340	3.4	1,400	1.2	1,150	.8	3.9	6.4	2,180	90	1,090	121
7	1,190	3.4	1,390	1.2	691	.8	3.4	6.4	1,510	170	2,160	119
8	1,270	3.4	1,380	1.2	683	.8	2.9	9.8	585	95	895	119
9	956	3.0	1,360	530	675	.8	2.7	9.8	1,550	590	2,450	123
10	947	2.7	1,330	894	675	.8	2.5	11	1,770	1,220	2,220	435
11	325	530	1,300	280	668	.8	2.5	*100	1,490	1,070	1,280	563
12	88	886	1,250	1.9	668	.9	2.5	8.6	1,520	1,010	1,480	557
13	132	1,380	840	1.9	661	.9	2.7	164	785	1,530	2,220	557
14	210	1,730	605	1.9	653	.9	2.9	1,700	530	225	1,470	557
15	230	1,700	585	1.7	646	.9	2.7	3,870	535	97	1,070	557
16	230	595	575	1.9	639	.9	2.9	3,070	970	1,870	420	557
17	230	560	555	1.9	520	.9	5.8	820	86	1,860	108	250
18	230	1,250	545	1.9	1.2	.9	3.9	845	84	1,780	670	123
19	925	725	250	1.9	1.1	1.1	3.4	1,800	86	1,740	1,000	123
20	1,630	590	1.2	162	1.1	1.1	3.4	1,790	330	2,240	974	126
21	1,810	690	1.2	880	.9	1.1	3.4	1,850	1,190	2,380	947	128
22	1,780	835	1.2	880	.9	1.1	3.1	1,620	84	2,070	912	123
23	1,760	827	1.2	880	.9	1.1	3.1	2,300	82	1,960	886	121
24	1,730	819	1.2	1,250	.9	1.1	3.1	2,490	98	2,580	869	119
25	915	810	1.2	1,680	1.2	1.1	3.1	2,030	425	2,220	852	119
26	920	810	1.2	1,650	.9	1,120	2.9	740	505	2,250	827	121
27	1,400	810	1.2	1,640	.9	*1,330	3.1	1,420	240	1,030	810	119
28	1,530	1,090	1.2	1,610	.9	480	6.4	2,400	230	1,520	786	119
29	1,620	1,560	1.2	1,590	.9	3.1	6.4	2,610	205	1,510	769	119
30	1,600	1,550	1.2	1,550	------	245	6.7	2,310	235	860	761	116
31	1,130	------	1.2	1,520	------	417	------	1,820	------	531	390	------
Total	33,099	19,798.3	19,266.4	17,020.6	15,600.8	3,618.6	3,258.3	35,825.8	28,093	36,435	30,419	6,742
Mean	1,068	600	621	549	538	117	109	1,156	936	1,175	981	225
(†)	-911	-146	-428	+476	-301	+121	+1,675	+2,193	+15	-941	-820	+23
Adjusted for storage in Flagstaff Lake												
Mean	157	514	193	1,025	237	238	1,784	3,349	951	274	161	248
Cfsm	0.302	0.988	0.371	1.97	0.456	0.458	3.43	6.44	1.83	0.450	0.310	0.477
In.	0.35	1.10	0.43	2.27	0.49	0.53	3.83	7.42	2.04	0.52	0.36	0.53

	Observed			Adjusted				
Calendar year 1955:	Max 7,930	Min 1.2	Mean 1,034	Mean 762	Cfsm 1.47	In. 19.87		
Water year 1955-56:	Max 3,870	Min 0.8	Mean 681	Mean 759	Cfsm 1.46	In. 19.87		

* Discharge measurement made on this day.

† Change in contents, equivalent in cubic feet per second, in Flagstaff Lake.

Note.--No gage-height record Dec. 9-19, Jan. 21-24; discharge estimated from daily gage readings and record of gate openings at storage dam upstream. Stage-discharge relation affected by ice Dec. 20-25, 28, 29, Jan. 3-6, 12, 13.

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 1956. 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 September 29, 1923, staff gage at site 100 ft downstream at same datum.

Average discharge.--51 years (1902-7, 1910-56), 1,417 cfs (unadjusted).

Extremes.--Maximum discharge during year, 8,640 cfs May 16 (gage height, 5.98 ft); maximum gage height, 7.71 ft Mar. 27 (ice jam); minimum daily discharge, 66 cfs Dec. 31, Jan. 2-8.

1901-7, 1910-56: 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 period of ice effect, which are fair. Flow partly regulated by Flagstaff and Spencer Lakes (see p. 54).

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

Rating tables, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 27				Mar. 28 to Sept. 30			
1.6	66	3.0	1,380	1.8	190	4.0	3,440
1.8	153	3.5	2,200	2.0	326	5.0	5,810
2.0	270	4.0	3,200	2.4	713	5.7	7,790
2.4	610			3.0	1,550		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,170	783	1,590	70	1,630	142	1,060	4,160	3,780	513	659	564
2	2,060	807	1,370	66	1,560	124	1,910	3,210	3,720	980	648	523
3	1,200	666	856	66	1,530	110	1,360	2,990	3,130	1,390	637	691
4	1,120	510	1,050	66	1,500	106	409	2,950	2,710	762	523	762
5	1,150	520	1,480	66	1,440	97	475	2,830	3,740	401	216	595
6	1,410	590	1,530	66	1,410	93	392	2,730	4,070	319	680	494
7	1,360	570	1,530	66	1,060	86	534	2,550	3,030	378	3,000	437
8	1,490	510	1,520	66	995	97	670	2,270	2,200	447	645	392
9	*1,060	447	1,520	130	980	116	670	1,940	2,580	890	2,360	343
10	1,050	396	1,500	510	970	196	637	*1,860	3,540	1,980	3,050	409
11	685	510	1,500	995	970	255	585	2,090	2,440	1,830	1,570	786
12	180	1,140	1,500	1,500	970	220	564	2,200	2,270	1,620	1,490	798
13	213	1,420	845	1,380	945	196	605	3,980	1,910	1,980	*2,500	811
14	238	1,980	725	1,200	*945	170	616	7,130	1,090	625	1,990	798
15	305	1,940	710	970	895	152	762	7,640	*798	523	1,240	737
16	305	1,360	710	745	855	152	798	7,320	1,720	2,070	905	713
17	305	515	700	570	845	158	1,180	4,330	605	2,210	770	637
18	305	1,480	680	485	205	215	1,820	2,860	409	2,140	960	359
19	680	1,130	152	420	200	265	1,720	3,210	376	2,110	1,690	384
20	1,760	881	82	430	196	285	1,530	3,500	343	2,570	1,600	376
21	2,030	771	*74	970	180	275	1,380	3,500	1,530	2,480	1,520	564
22	1,980	1,030	74	1,100	180	270	1,200	3,010	650	2,400	1,440	585
23	1,960	1,030	74	995	180	290	1,070	3,400	343	2,320	1,380	465
24	1,910	1,010	74	1,240	176	285	939	4,340	312	2,690	1,360	418
25	1,380	982	70	1,940	205	270	887	3,850	401	2,570	1,380	484
26	965	1,020	70	1,890	200	1,100	900	2,300	1,110	2,580	1,280	574
27	1,330	956	70	1,860	164	3,200	1,030	2,170	798	730	1,230	534
28	1,670	1,030	70	1,830	152	1,620	2,340	4,180	475	1,720	1,180	437
29	1,780	1,670	70	1,760	164	298	3,400	4,230	595	1,700	*1,200	384
30	1,720	1,740	70	1,690	------	190	4,600	3,980	376	1,300	1,210	343
31	1,610	------	66	1,660	------	691	------	3,380	------	670	1,050	------
Total	37,381	29,374	22,332	26,802	21,702	11,724	36,043	110,090	51,051	46,896	41,363	16,397
Mean	1,206	979	720	865	748	378	1,201	3,551	1,702	1,513	1,334	547
(†)	-1,052	-146	-428	+476	-301	+121	+1,771	+2,338	+50	-906	-1,086	+20
Adjusted for change in reservoir contents												
Mean	154	833	292	1,341	447	499	2,972	5,889	1,752	607	248	567
Cfsm	0.177	0.955	0.335	1.54	0.513	0.572	3.41	6.75	2.01	0.696	0.284	0.650
In.	0.20	1.07	0.39	1.78	0.55	0.66	3.80	7.78	2.24	0.80	0.33	0.73

	Observed						Adjusted					
Calendar year 1955:	Max	12,200	Min	66	Mean	1,500	Mean	1,228	Cfsm	1.41	In.	19.13
Water year 1955-56:	Max	7,640	Min	68	Mean	1,233	Mean	1,303	Cfsm	1.49	In.	20.33

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

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 1956.

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

Average discharge.--25 years, 172 cfs.

Extremes.--Maximum discharge during year, 1,770 cfs Apr. 30 (gage height, 8.50 ft); maximum gage height, 8.57 ft Jan. 11 (backwater from ice); minimum discharge, 7.7 cfs Oct. 6, 7 (gage height, 5.32 ft).
1931-56: Maximum discharge, 5,820 cfs Sept. 17, 1932, and Nov. 27, 1950; maximum gage height, 17.63 ft Mar. 13, 1936 (backwater from ice jam); minimum discharge, 1.6 cfs Sept. 30, Oct. 1, 1948.

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

Revisions.--WSP 1171: Drainage area.

Rating tables, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 11				Jan. 12 to Sept. 30			
5.3	7.1	6.4	126	5.2	7.8	6.4	204
5.4	10	6.7	220	5.3	12	6.7	324
5.6	19	7.0	355	5.4	18	7.0	480
5.8	34	7.4	635	5.6	34	7.5	850
6.0	54	7.9	1,100	5.8	59	8.0	1,280
6.2	84			6.0	94	8.5	1,770
				6.2	142		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.6	1,050	25	16	56	48	32	1,450	396	36	14	30
2	8.3	550	22	16	56	48	36	1,130	802	44	13	31
3	8.6	340	22	16	55	46	40	1,090	601	41	12	62
4	8.3	250	21	16	53	46	45	1,050	566	33	11	55
5	8.0	280	20	16	49	44	116	1,010	457	30	11	38
6	*7.7	310	25	16	49	43	233	1,000	370	28	*11	30
7	7.7	270	26	15	49	42	306	890	289	37	12	26
8	9.7	180	25	19	52	41	306	690	233	43	12	24
9	15	120	24	116	52	41	293	*573	268	72	11	19
10	14	88	24	305	49	42	276	573	284	204	12	17
11	12	78	23	815	48	41	268	552	284	159	14	14
12	12	81	23	690	46	41	272	552	240	*101	13	14
13	12	76	23	615	49	40	298	882	194	67	*12	14
14	12	71	22	493	*46	38	311	1,150	*165	116	12	13
15	10	74	22	380	44	38	306	874	139	191	13	13
16	10	68	22	306	43	38	375	645	119	126	12	13
17	10	66	22	244	43	38	810	552	98	83	11	16
18	10	96	22	184	43	38	906	451	81	59	11	29
19	11	84	22	134	42	38	858	365	69	43	11	28
20	10	70	22	102	42	40	762	320	61	34	11	33
21	11	61	*22	88	42	40	645	272	58	31	10	75
22	13	57	22	75	42	38	532	236	58	30	10	65
23	15	52	21	69	41	37	463	233	53	30	10	49
24	13	54	22	62	41	42	386	244	49	30	13	46
25	14	50	22	*59	41	44	356	215	52	31	19	61
26	13	45	22	56	44	*43	356	181	48	31	18	59
27	15	40	21	56	46	44	406	252	44	29	16	45
28	14	35	18	58	48	43	1,060	545	45	24	14	36
29	13	29	18	58	49	40	1,280	422	42	22	*17	33
30	12	26	17	56	-------	34	1,730	306	40	20	18	28
31	37	-------	17	56	-------	34	-------	280	-------	16	21	------
Total	374.9	4,651	679	5,207	1,360	1,270	14,063	18,985	6,203	1,841	405	1,016
Mean	12.1	155	21.9	168	46.9	41.0	469	612	207	59.4	13.1	33.9
Cfsm	0.133	1.70	0.240	1.84	0.515	0.450	5.15	6.72	2.27	0.652	0.144	0.372
In.	0.15	1.90	0.28	2.12	0.56	0.52	5.75	7.75	2.53	0.75	0.17	0.42

Calendar year 1955: Max 1,720 Min 6.3 Mean 160 Cfsm 1.76 In. 23.85
Water year 1955-56: Max 1,730 Min 7.7 Mean 153 Cfsm 1.68 In. 22.90

Peak discharge (base 1,200 cfs).--Apr. 30 (5:30 p.m.) 1,770 cfs (8.50 ft); May 14 (5 a.m.) 1,210 cfs (7.92 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 1-6, Oct. 23 to Nov. 29; discharge estimated on basis of recorded range in stage, weather records, and records of nearby stations. Stage-discharge relation affected by ice Nov. 30 to Jan. 12, Jan. 20 to Feb. 11, Feb. 16 to Mar. 3, Mar. 5, 6, 8-29, Apr. 1-5.

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 1¼ miles downstream from Wyman Dam.

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

Records available.--June 1907 to June 1910, October 1930 to September 1956.

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.--28 years (1907-9, 1930-56), 4,274 cfs (unadjusted).

Extremes.--Maximum discharge during year, 17,300 cfs May 14 (gage height, 9.95 ft); minimum daily, 1,160 cfs Dec. 25.
1907-10, 1930-56: Maximum discharge, 58,800 cfs Mar. 20, 1936 (gage height, 14.44 ft), from rating curve extended above 27,000 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. 43); Brassua, Flagstaff, and Spencer Lakes, Second Roach, First Roach, Indian, Moxie and Wyman Ponds (see p. 54). Considerable diurnal fluctuation caused by powerplant above station.

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

Rating table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

5.5	1,050	8.0	7,790
6.0	1,910	8.5	10,000
6.5	2,980	9.0	12,200
7.0	4,310	9.5	14,900
7.5	5,930		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,750	4,580	2,690	2,350	3,250	3,350	3,160	11,300	6,710	3,240	3,360	3,710
2	3,420	3,300	2,840	2,270	3,100	3,390	3,590	8,940	6,790	3,560	3,540	2,150
3	3,950	2,200	2,860	2,280	3,360	3,350	3,190	8,590	4,620	2,930	3,480	2,360
4	3,580	2,160	2,480	2,300	3,390	3,320	3,200	7,650	5,140	2,590	3,220	3,620
5	3,720	1,610	2,680	2,100	3,140	3,350	3,010	7,790	6,680	3,420	3,380	3,490
6	3,640	2,460	2,800	2,350	3,660	3,380	2,930	7,250	7,880	3,580	3,680	3,570
7	3,750	2,100	2,900	2,230	3,380	3,260	2,640	7,830	8,490	3,180	3,420	3,320
8	3,870	1,970	2,910	2,180	3,330	3,250	2,390	6,630	6,380	3,280	3,450	3,620
9	2,900	2,430	2,770	1,970	3,310	3,410	3,320	6,200	6,440	3,130	3,340	3,090
10	3,610	2,510	3,410	2,630	3,430	3,320	1,960	6,090	5,320	3,000	3,420	3,960
11	3,450	2,440	2,520	4,140	3,220	3,400	1,850	5,000	7,050	2,780	3,440	3,530
12	3,530	2,480	2,820	4,350	3,150	3,510	1,320	5,080	7,320	3,050	3,360	3,440
13	3,140	2,600	2,600	3,860	3,130	3,160	2,420	5,730	5,850	3,080	3,500	3,500
14	3,340	2,540	2,660	4,060	3,220	3,150	3,120	13,900	4,200	3,110	3,480	3,500
15	3,650	2,710	2,800	2,370	3,150	3,180	3,550	11,600	3,980	2,640	3,520	3,440
16	3,050	2,800	2,200	2,240	3,390	3,380	4,970	11,600	3,520	2,600	3,510	3,420
17	3,340	2,910	2,740	2,160	3,420	3,420	5,840	8,600	3,260	3,140	3,480	3,320
18	3,400	2,760	2,180	2,470	3,280	3,310	5,930	5,170	3,360	3,320	3,140	3,400
19	3,120	3,060	2,940	2,900	3,180	3,320	5,930	5,920	3,220	3,040	3,780	3,350
20	3,380	2,760	2,880	3,200	3,200	3,290	5,180	4,500	3,540	3,420	3,630	3,260
21	3,140	2,910	2,860	2,960	3,280	3,290	4,720	5,480	3,380	3,280	3,530	3,490
22	3,360	2,940	2,790	2,960	3,270	3,350	4,380	4,610	3,340	3,180	3,580	3,190
23	2,530	2,950	2,820	2,910	3,160	3,290	4,950	5,190	3,180	3,300	3,540	3,130
24	2,830	2,580	1,700	3,140	3,420	3,150	4,690	6,260	3,200	3,470	3,500	3,460
25	3,050	2,780	1,160	3,030	3,030	3,520	4,480	6,360	3,240	3,200	3,490	3,150
26	2,780	2,730	2,230	3,140	3,060	3,380	4,170	4,520	3,220	3,220	3,580	3,340
27	2,760	2,750	2,450	3,000	3,090	3,390	2,630	3,360	3,200	3,420	3,530	3,240
28	2,900	2,730	2,570	3,100	3,270	3,410	2,730	6,260	3,220	3,300	3,560	3,330
29	2,900	2,980	2,440	3,100	3,390	3,460	4,080	6,940	3,260	3,340	3,550	3,330
30	2,580	2,880	2,140	3,190	-------	3,250	7,900	4,460	3,240	3,570	3,470	3,220
31	2,960	-------	2,530	3,120	-------	3,230	-------	7,820	-------	3,140	3,430	-------
Total	101,380	80,610	80,370	88,080	94,660	103,220	114,230	216,630	142,230	98,510	107,890	99,930
Mean	3,270	2,687	2,593	2,841	3,264	3,330	3,808	6,988	4,741	3,178	3,480	3,331
(†)	-3,074	-73	-1,690	+1,094	-1,683	-2,051	+4,760	+10,182	+486	-1,291	-2,470	-1,525

Adjusted for change in reservoir contents

Mean	196	2,614	903	3,935	1,581	1,279	8,568	17,170	5,227	1,887	1,010	1,806
Cfsm	0.072	0.965	0.333	1.45	0.583	0.472	3.16	6.34	1.93	0.696	0.373	0.666
In.	0.08	1.08	0.38	1.67	0.63	0.54	3.53	7.31	2.15	0.80	0.43	0.74

	Observed			Adjusted			
Calendar year 1955:	Max 17,800	Min 1,160	Mean 4,761	Mean 3,859	Cfsm 1.42	In. 19.34
Water year 1955-56:	Max 13,900	Min 1,160	Mean 3,628	Mean 3,853	Cfsm 1.42	In. 19.34

† 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.

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 1901 to May 1907, August 1925 to September 1956.

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.--35 years (1902-6, 1925-56), 693 cfs.

Extremes.--Maximum discharge during year, 6,310 cfs Apr. 30 (gage height, 9.15 ft); maximum gage height, 11.40 ft Jan. 10 (ice jam); minimum discharge, 56 cfs Oct. 6 (gage height, 2.55 ft).
1925-56: Maximum discharge, 30,800 cfs Mar. 19, 1936 (gage height, 21.17 ft); minimum, 18 cfs Oct. 29, 1929 (gage height, 2.02 ft).

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

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

Rating table, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.5	50	5.0	1,070
2.8	90	6.0	2,020
3.1	150	8.0	4,530
3.5	265	8.8	5,750
4.0	480		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65	3,500	132	73	172	126	142	4,370	1,280	201	116	135
2	61	2,370	126	77	172	120	156	2,980	1,740	262	106	130
3	62	1,230	126	80	172	116	174	2,850	1,220	287	103	190
4	62	841	124	79	172	114	215	2,710	1,890	201	84	219
5	61	1,230	130	77	172	112	420	2,980	1,690	169	77	152
6	57	1,310	132	76	172	112	1,910	2,720	1,410	160	90	124
7	73	1,030	148	76	172	112	2,410	2,400	1,020	193	95	118
8	88	805	150	80	170	112	2,240	1,890	769	301	95	104
9	90	667	138	280	170	112	1,910	1,460	793	525	97	87
10	88	557	118	1,500	170	112	1,700	1,540	923	1,250	97	90
11	77	500	114	3,810	168	112	1,590	1,430	847	745	104	87
12	69	500	110	3,300	168	110	1,570	1,330	745	515	106	88
13	68	460	108	3,400	168	110	1,580	2,840	619	397	*94	88
14	62	428	104	3,000	168	108	1,600	2,980	*510	520	88	92
15	61	452	100	2,200	*168	106	1,670	2,570	447	775	85	77
16	61	418	104	1,800	160	102	2,050	2,120	390	515	80	74
17	71	464	102	1,200	158	100	4,020	1,770	339	390	80	90
18	94	538	94	1,000	156	100	3,800	1,330	301	324	69	148
19	132	418	94	800	152	100	2,790	972	265	283	65	148
20	103	360	*87	620	148	102	2,320	874	248	233	79	148
21	92	300	85	500	138	110	2,130	811	228	207	82	590
22	90	250	82	400	136	120	1,790	751	231	193	79	309
23	92	230	80	340	136	130	1,530	1,000	216	193	77	213
24	88	235	80	290	130	140	1,180	1,050	282	225	79	204
25	90	220	77	260	130	148	1,160	751	339	294	106	290
26	101	200	74	230	130	148	1,210	619	301	219	108	290
27	103	180	73	210	130	*146	1,350	840	238	174	94	231
28	90	172	71	200	128	146	3,610	2,240	294	143	94	193
29	82	158	70	186	128	146	3,920	1,400	269	130	97	162
30	74	150	70	180	-------	142	*5,740	1,120	231	130	116	146
31	136	-------	70	174	-------	142	-------	1,140	-------	118	128	-------
Total	2,543	20,169	3,173	28,498	4,514	3,716	57,887	55,818	20,255	10,283	2,870	5,017
Mean	82.0	672	102	855	156	120	1,930	1,801	675	332	92.6	167
Cfsm	0.232	1.90	0.288	2.42	0.441	0.339	5.45	5.09	1.91	0.933	0.262	0.472
In.	0.27	2.12	0.33	2.79	0.48	0.39	6.08	5.87	2.13	1.08	0.30	0.53

Calendar year 1955: Max 7,960 Min 53 Mean 604 Cfsm 1.71 In. 23.14
Water year 1955-56: Max 5,740 Min 57 Mean 581 Cfsm 1.64 In. 22.37

Peak discharge (base, 6,000 cfs).--Apr. 30 (11 a.m.) 6,310 cfs (9.15 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 21 to Apr. 14.

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 1956.

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

Average discharge.--28 years, 928 cfs.

Extremes.--Maximum discharge during year, 7,840 cfs Apr. 18 (gage height, 8.22 ft); maximum gage height, 8.92 ft Jan. 10 (backwater from ice); minimum discharge, 44 cfs Oct. 6 (gage height, 2.34 ft).
1928-56: 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.3	40	4.5	1,040
2.5	61	5.0	1,540
2.8	111	6.0	2,960
3.0	160	7.0	4,920
3.5	352	7.8	6,770
4.0	650		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	1,760	188	112	300	265	225	*5,130	1,510	291	160	223
2	48	3,680	188	112	305	260	235	3,500	2,030	286	152	230
3	49	1,520	184	110	305	260	265	3,310	1,550	502	142	223
4	46	947	184	110	315	255	350	3,200	2,490	400	132	304
5	45	1,030	180	110	340	255	520	3,710	2,550	286	127	282
6	44	1,740	180	110	340	255	1,320	3,290	1,920	249	120	213
7	50	1,300	178	110	345	255	2,490	2,830	1,360	278	125	227
8	59	989	176	110	345	255	2,060	2,270	1,090	427	127	200
9	67	851	186	350	345	255	1,790	1,860	989	730	122	166
10	78	728	186	3,690	340	255	1,920	1,720	1,180	2,180	132	142
11	81	637	172	5,750	340	255	2,370	1,910	1,150	1,310	144	137
12	76	650	170	4,220	340	255	2,690	1,690	998	811	137	139
13	68	637	178	4,340	*350	255	3,310	2,020	843	610	122	175
14	61	583	184	4,200	345	250	3,840	2,940	720	740	105	190
15	55	583	184	2,770	340	240	3,540	2,490	603	1,440	98	160
16	51	570	176	2,160	330	235	3,730	2,000	502	972	94	147
17	54	564	170	1,780	330	225	6,580	1,800	427	685	92	147
18	68	728	164	1,440	325	225	6,480	1,520	357	558	*92	210
19	89	671	160	1,070	320	220	4,600	1,220	347	479	90	264
20	137	539	*148	915	310	220	3,840	1,100	328	400	76	264
21	118	415	148	805	305	225	3,460	1,030	304	347	74	713
22	103	385	134	715	300	225	2,930	923	300	304	87	623
23	94	345	138	550	290	230	2,780	931	278	300	90	400
24	90	315	144	480	275	240	2,440	1,180	264	333	92	363
25	94	295	142	415	270	250	2,240	980	357	502	98	473
26	87	275	132	390	275	*225	2,170	780	439	400	120	508
27	94	255	120	350	280	220	2,160	980	368	286	129	394
28	111	235	120	340	285	235	3,900	3,460	357	234	105	318
29	103	220	118	325	275	230	5,340	2,090	433	197	98	269
30	96	190	116	310	-------	225	6,390	1,450	338	178	107	230
31	111	-------	116	305	-------	240	-------	1,280	-------	163	166	----
Total	2,375	23,637	4,964	38,554	9,165	7,495	85,965	64,594	26,382	16,878	3,555	8,334
Mean	76.6	788	160	1,244	316	242	2,866	2,084	879	544	115	278
Cfsm	0.149	1.53	0.311	2.42	0.615	0.471	5.58	4.05	1.71	1.06	0.224	0.541
In.	0.17	1.71	0.36	2.79	0.66	0.54	6.23	4.67	1.91	1.22	0.26	0.60

Calendar year 1955: Max 10,200 Min 39 Mean 786 Cfsm 1.53 In. 20.75
Water year 1955-56: Max 6,580 Min 44 Mean 798 Cfsm 1.55 In. 21.12

Peak discharge (base, 6,000 cfs).--Jan. 10 (3 p.m.) 6,550 cfs (7.71 ft); Apr. 18 (1 a.m.) 7,840 cfs (8.22 ft); Apr. 30 (1:30 p.m.) 7,100 cfs (7.93 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 21 to Jan. 10, Jan. 21 to Apr. 11.

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 1956.

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

Average discharge.--27 years (1929-56), 936 cfs.

Extremes.--Maximum discharge during year, 6,310 cfs Apr. 19 (gage height, 8.28 ft); minimum daily, 4.8 cfs Sept. 29, 30.
1928-56: 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, 4.8 cfs Dec. 13, 1941, Sept. 29, 30, 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 table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.0	3.0	3.0	500
1.2	10	3.5	850
1.4	21	4.0	1,300
1.6	35	5.0	2,250
1.8	60	6.0	3,400
2.0	100	7.0	4,600
2.2	155	8.0	5,900
2.4	225	8.3	6,320
2.6	305		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	415	245	20	265	215	64	3,890	1,120	8.8	265	184
2	19	440	290	142	215	475	575	*3,990	1,030	400	265	8.0
3	*325	445	355	240	480	215	470	3,900	965	395	235	8.8
4	146	455	12	150	525	63	465	3,710	1,050	200	184	220
5	122	490	200	84	20	560	805	3,620	1,010	176	12	81
6	114	630	310	245	515	330	1,380	3,410	994	375	*270	82
7	210	755	240	102	470	310	1,840	3,260	931	360	285	265
8	12	785	162	32	138	365	2,200	2,960	904	8.0	142	6.0
9	12	785	377	380	450	500	2,420	2,690	832	420	184	6.8
10	89	755	180	385	415	470	2,640	2,270	805	395	172	215
11	89	755	14	845	335	260	3,230	1,920	*787	320	124	182
12	86	735	205	1,460	25	455	3,760	1,650	725	400	13	192
13	162	715	205	1,780	485	305	4,080	1,430	787	440	178	192
14	192	675	190	2,270	395	375	4,480	1,290	760	425	180	88
15	10	655	192	2,720	360	380	4,590	1,230	752	565	176	6.0
16	10	625	405	2,910	295	455	4,770	1,140	723	770	180	6.8
17	97	635	19	2,850	445	525	5,220	1,100	680	769	290	410
18	91	665	76	2,560	240	240	5,840	1,030	641	696	174	106
19	87	645	515	2,210	28	460	6,190	940	545	680	12	188
20	92	595	150	1,890	515	415	6,190	880	182	667	210	198
21	112	530	112	1,680	240	310	5,870	835	405	485	205	335
22	10	505	108	1,410	*350	320	5,440	425	400	17	178	6.0
23	10	465	320	1,170	275	465	4,990	460	400	600	124	6.4
24	122	450	28	990	380	410	4,580	655	8.4	375	200	260
25	124	450	27	860	25	24	4,240	680	415	405	180	136
26	96	425	130	755	355	500	3,940	620	270	420	9.6	154
27	83	166	250	655	375	305	3,600	580	285	420	235	150
28	148	435	220	560	235	400	3,420	995	365	415	99	265
29	12	305	112	500	345	435	3,450	1,120	410	12	154	4.8
30	12	445	200	435	------	405	3,630	1,140	400	455	200	4.8
31	180	------	12	420	------	300	------	1,130	------	285	415	----
Total	2,891	16,831	5,861	32,710	9,196	11,247	104,369	54,750	19,586.4	12,358.8	5,550.6	3,967.4
Mean	93.3	561	189	1,055	317	363	3,479	1,766	653	399	179	132
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 5,640 Min 10 Mean 779 Cfsm 1.35 In. 18.29
Water year 1955-56: Max 6,190 Min 4.8 Mean 763 Cfsm 1.32 In. 17.94

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 10-14, Dec. 26 to Jan. 11.

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 1956.

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

Average discharge.--66 years, 329 cfs.

Extremes.--Maximum daily discharge during year, 305 cfs, several days in March and April; minimum daily, 10 cfs, several days in December, July, and September.
1890-1956: 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 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	180	185	215	95	300	300	290	290	255	200	245	230
2	180	205	215	100	290	300	300	275	255	10	240	225
3	180	205	205	190	300	305	300	280	255	10	240	10
4	180	200	205	185	230	305	295	290	270	10	245	10
5	180	210	200	185	220	305	305	290	275	10	240	230
6	180	215	200	180	225	295	305	285	280	10	240	235
7	180	215	195	180	225	295	305	290	275	10	245	240
8	180	220	200	175	240	295	300	295	285	10	240	235
9	180	235	200	180	235	280	305	290	275	235	245	235
10	180	235	200	195	240	300	305	295	280	245	245	230
11	180	235	200	200	235	295	305	285	270	245	245	230
12	180	235	195	210	230	295	305	290	255	245	240	235
13	180	235	200	225	230	290	295	280	280	240	240	230
14	180	235	225	275	235	300	295	275	275	245	245	230
15	180	235	235	290	235	290	300	280	280	240	240	235
16	180	235	230	300	235	300	300	280	295	240	240	230
17	180	240	245	300	230	300	290	295	290	240	245	230
18	180	250	230	300	230	275	305	275	280	245	240	235
19	180	260	210	300	235	285	295	260	275	245	245	240
20	180	240	215	290	240	285	290	270	275	245	240	240
21	180	245	205	285	250	280	295	265	265	245	245	245
22	180	230	205	295	250	290	300	230	265	240	240	240
23	190	225	215	290	250	280	285	225	255	235	240	235
24	190	225	210	290	265	290	275	235	255	245	235	240
25	200	220	100	290	280	295	290	235	255	245	235	245
26	200	215	10	285	300	290	300	240	250	245	235	240
27	195	220	110	285	275	290	300	240	255	245	235	255
28	205	215	200	290	295	290	300	240	250	245	235	250
29	195	215	190	300	295	285	290	250	250	245	235	250
30	195	210	185	295	------	290	295	255	240	240	240	250
31	200	------	190	300	------	285	------	260	------	240	225	------
Total	5,730	6,745	6,040	7,560	7,300	9,060	8,920	8,345	8,020	5,850	7,445	6,665
Mean	185	225	195	244	252	292	297	269	267	189	240	222
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 895 Min 10 Mean 305 Cfsm - In. -
Water year 1955-56: Max 305 Min 10 Mean 240 Cfsm - In. -

Smaller reservoirs in Kennebec River basin, Maine

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.

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.

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.

Moosehead Lake on Kennebec River (see p. 43).

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.

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.

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.

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.

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 1955 to September 1956

Date	Brassua Lake	Second Roach Pond	First Roach Pond	Indian Pond	Moxie Pond	Flagstaff Lake	Spencer Lake	Wyman Pond
Sept.30, 1955	5,805	107	801	3,150	178	4,954	378	8,620
Oct. 31	2,113	87	584	3,150	0	2,515	0	9,050
Nov. 30	76	94	66	3,150	0	2,136	0	8,940
Dec. 31	0	82	0	3,150	0	980	0	8,750
Jan. 31, 1956	130	160	0	3,150	0	2,266	0	8,900
Feb. 29	38	177	0	3,123	0	1,512	0	8,820
Mar. 31	8	160	0	3,078	0	1,836	0	8,920
Apr. 30	2,520	177	543	3,168	138	6,178	249	9,080
May 31	7,770	169	994	3,150	640	12,050	639	8,940
June 30	8,197	160	815	3,168	654	12,080	729	8,800
July 31	8,278	134	732	3,294	640	9,570	823	8,750
Aug. 31	8,157	11	842	3,294	595	7,375	110	8,850
Sept.30	8,560	6.7	801	3,258	130	7,434	103	8,750

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

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 1956.

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

Average discharge.--15 years, 348 cfs.

Extremes.--Maximum discharge during year, 4,680 cfs May 13 (gage height, 8.38 ft); minimum, 22 cfs Aug. 18 (gage height, 1.32 ft).
1941-56: 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 tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 5				Apr. 6 to Sept. 30					
1.3	33	2.5	190	1.3	21	2.5	185	6.0	2,010
1.4	40	3.0	320	1.5	35	3.0	320	7.0	3,000
1.7	67	4.0	705	1.7	53	4.0	705	7.9	4,050
2.0	105			2.0	89	5.0	1,270		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	705	138	48	126	59	51	1,840	1,070	133	36	146
2	41	487	132	46	118	57	51	1,500	746	148	36	104
3	40	283	126	46	108	60	55	1,790	644	195	35	247
4	39	218	128	44	110	65	61	1,830	674	117	29	146
5	39	465	128	46	106	63	120	1,480	551	82	29	82
6	39	487	126	44	100	61	550	1,800	551	72	27	62
7	54	368	126	40	98	58	525	1,740	413	90	26	56
8	71	323	126	41	97	57	455	1,410	333	120	25	49
9	68	289	122	52	91	57	350	1,110	556	152	32	42
10	60	234	122	122	89	56	285	1,820	499	495	36	36
11	49	209	122	545	84	55	235	1,860	435	244	79	35
12	45	200	120	472	79	64	235	2,040	*339	141	68	35
13	41	227	118	495	74	65	290	3,640	266	106	46	35
14	39	218	118	396	68	62	340	4,020	219	143	38	35
15	39	314	116	295	69	59	290	2,840	185	286	33	34
16	39	244	112	250	*77	57	275	2,120	178	183	29	33
17	49	311	108	220	75	56	455	1,750	148	118	*24	43
18	84	298	102	205	71	55	555	1,110	118	100	22	82
19	72	220	97	194	67	54	455	895	104	79	70	102
20	65	182	89	186	66	54	385	906	94	66	89	164
21	79	166	79	180	64	55	355	750	94	58	53	317
22	128	152	71	176	61	*57	378	760	133	54	38	159
23	92	130	65	170	58	56	323	1,300	101	54	32	104
24	77	170	63	164	56	56	277	895	120	55	28	130
25	160	168	66	158	55	55	*244	564	154	55	35	382
26	150	152	65	150	62	55	269	453	168	53	36	255
27	104	144	63	148	65	54	359	885	109	44	51	157
28	89	138	60	144	62	54	1,310	1,540	115	41	46	114
29	81	140	52	136	61	53	2,070	880	107	38	98	95
30	80	142	50	132	-------	52	2,500	683	152	39	104	81
31	435	---	49	134	-------	52	-------	1,050	---	36	156	---
Total	2,493	7,784	3,059	5,479	2,317	1,773	14,103	47,261	9,376	3,597	1,486	3,362
Mean	80.4	259	98.7	177	79.9	57.2	470	1,525	313	116	47.9	112
Cfsm	0.525	1.69	0.645	1.16	0.522	0.374	3.07	9.97	2.05	0.758	0.313	0.732
In.	0.61	1.89	0.74	1.34	0.56	0.43	3.42	11.49	2.29	0.87	0.36	0.82

Calendar year 1955: Max 4,000 Min 28 Mean 326 Cfsm 2.13 In. 28.90
Water year 1955-56: Max 4,020 Min 22 Mean 279 Cfsm 1.82 In. 24.82

Peak discharge (base, 3,600 cfs).--May 13 (11 p.m.) 4,680 cfs (8.38 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 19 to Jan. 11, Jan. 16 to Apr. 19.

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 1956. 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.--51 years, 1,881 cfs (adjusted).

Extremes.--Maximum discharge during year, 5,460 cfs May'14 (gage height, 5.04 ft); minimum daily, 410 cfs Jan. 11.
1905-56: Maximum daily discharge, 15,700 cfs June 18, 1943; minimum daily, leakage only at various times when gates in dam were closed.
Instantaneous maximum not available prior to Dec. 9, 1943.

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

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

Revisions.--WSP 1001: Drainage area.

Rating table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

0.8	389	3.0	2,420
1.4	716	4.0	3,860
2.0	1,200	5.1	5,560
2.5	1,760		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,140	685	1,420	1,420	1,500	1,640	1,560	3,260	2,460	1,970	1,700	1,440
2	2,050	830	1,400	1,390	1,570	1,660	1,550	3,340	2,560	1,940	1,710	1,530
3	1,930	1,170	1,390	1,390	1,580	1,620	1,500	3,690	2,360	2,080	1,730	1,420
4	1,900	1,210	1,380	1,390	1,580	1,610	1,320	3,760	2,520	2,190	1,770	1,460
5	1,900	900	1,380	1,390	1,580	1,580	1,070	3,790	3,160	2,170	1,770	1,680
6	1,880	895	1,430	1,380	1,580	1,610	745	3,500	3,090	2,250	1,760	1,720
7	1,840	1,180	1,470	1,380	1,550	1,620	645	3,150	2,980	2,080	1,760	1,680
8	1,800	1,190	1,420	1,380	1,520	1,630	680	1,970	2,760	1,730	1,760	1,680
9	1,810	1,140	1,410	1,200	1,560	1,620	915	1,410	2,760	1,600	*1,750	1,730
10	1,810	1,150	1,420	710	1,580	1,620	1,140	1,300	2,770	1,570	1,750	1,790
11	1,800	1,190	1,430	410	1,560	1,620	1,250	1,340	2,760	1,820	1,720	1,810
12	1,790	1,160	1,390	460	1,550	1,610	1,030	1,820	2,760	1,670	1,720	1,820
13	1,810	1,190	1,360	425	1,550	1,620	850	3,200	2,740	1,700	1,760	1,820
14	1,810	1,220	1,360	785	1,530	1,620	948	5,410	2,310	1,360	1,800	1,820
15	1,710	1,210	1,360	980	1,550	1,620	1,040	5,200	1,860	1,240	1,810	1,770
16	1,630	1,540	1,350	710	1,590	1,660	1,030	4,530	1,770	1,510	1,860	1,760
17	1,610	1,040	1,370	1,060	1,830	1,640	956	3,050	1,790	1,570	1,940	1,730
18	1,520	1,170	1,370	1,260	1,620	1,630	988	2,480	1,860	1,630	1,940	1,680
19	1,570	1,150	1,380	1,320	1,610	1,630	1,180	1,750	1,960	1,700	1,800	1,760
20	1,590	1,140	1,420	1,380	1,590	1,610	1,280	1,340	1,980	1,770	1,840	1,680
21	1,580	1,250	1,500	1,390	1,580	1,610	1,030	1,390	1,990	1,770	1,890	1,580
22	1,560	1,280	1,500	1,380	1,590	1,590	1,040	1,390	1,990	1,770	1,930	1,680
23	1,570	1,310	1,490	1,370	1,590	1,560	1,430	1,390	1,990	1,850	1,940	1,720
24	1,520	1,290	1,460	1,390	1,620	1,580	1,360	1,410	1,880	1,850	1,900	1,610
25	1,380	1,260	1,460	1,420	1,640	1,590	1,450	1,560	1,810	1,650	1,900	1,490
26	1,410	1,320	1,440	1,420	1,580	1,620	1,400	1,590	1,930	1,600	1,890	1,430
27	1,350	1,350	1,440	1,400	1,590	1,630	1,280	1,670	1,940	1,630	1,880	1,520
28	1,390	1,390	1,440	1,370	1,580	1,580	760	2,200	1,890	1,630	1,860	1,610
29	1,410	1,440	1,440	1,370	1,560	1,560	575	2,270	1,960	1,620	1,820	1,640
30	1,410	1,470	1,430	1,360	--------	1,570	2,700	1,980	1,970	1,630	1,800	1,660
31	1,110	--------	1,430	1,420	--------	1,580	--------	1,930	--------	1,630	1,520	--------
Total	51,590	35,720	43,940	37,110	45,710	49,940	34,702	78,070	68,560	54,180	55,980	49,720
Mean	1,664	1,191	1,417	1,197	1,576	1,611	1,157	2,518	2,285	1,748	1,806	1,657
(†)	-1,505	+144	-1,167	+594	-1,070	-1,088	+2,048	+6,324	+17	-851	-1,605	-942

Adjusted for change in reservoir contents

Mean	159	1,335	250	1,791	506	523	3,205	8,842	2,302	897	201	715
Cfsm	0.152	1.28	0.239	1.71	0.484	0.500	3.07	8.46	2.20	0.858	0.192	0.684
In.	0.18	1.43	0.28	1.97	0.52	0.58	3.42	9.75	2.46	0.99	0.22	0.76

	Observed			Adjusted				
Calendar year 1955:	Max 9,580	Min 685	Mean 2,234	Mean 1,776	Cfsm 1.70	In. 23.07
Water year 1955-56:	Max 5,410	Min 410	Mean 1,654	Mean 1,733	Cfsm 1.66	In. 22.56

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

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 1956. 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.--43 years, 2,443 cfs (adjusted).

Extremes.--Maximum discharge during year, 8,250 cfs May 15 (gage height, 6.93 ft); minimum daily, 1,510 cfs Dec. 20.
1913-56: 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 backwater from manufacturing waste, which are good. Flow regulated by powerplants above station and by Kennebago, Rangeley, Mooselookmeguntic, Richardson, Umbagog and Aziscohos Lakes (see p. 64).

Revisions.--WSP 1001: Drainage area.

Rating table, water year 1955-56, except period of backwater from manufacturing waste (gage height, in feet, and discharge, in cubic feet per second)

3.2	1,500	5.0	4,050
3.5	1,820	6.0	6,000
4.0	2,460	6.8	7,920
4.5	3,230		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,100	2,230	1,700	1,550	1,730	1,810	1,800	7,280	3,370	1,950	1,750	2,360
2	2,100	1,780	1,610	1,530	1,810	1,870	1,810	6,110	3,500	2,110	1,830	2,040
3	1,980	1,600	1,630	1,540	1,860	1,860	1,840	6,500	3,260	2,290	1,820	2,360
4	1,900	1,720	1,610	1,630	1,840	1,860	2,000	6,830	3,310	2,000	1,870	2,090
5	1,890	2,140	1,630	1,610	1,830	1,830	2,190	6,830	3,650	2,180	1,820	1,940
6	1,890	2,060	1,620	1,560	1,840	1,810	2,540	6,640	3,880	2,180	1,840	1,980
7	1,930	1,780	1,660	1,540	1,840	1,830	2,290	6,310	3,690	2,240	1,820	2,020
8	1,890	1,880	1,630	1,520	1,790	1,830	2,160	4,940	3,440	1,980	*1,830	1,940
9	1,880	1,720	1,600	1,890	1,790	1,810	2,000	3,520	3,330	2,000	1,860	1,900
10	1,870	1,630	1,580	2,790	1,820	1,810	2,020	3,230	3,370	2,240	1,860	1,930
11	1,860	1,590	1,590	2,780	1,820	1,860	2,100	3,440	3,310	2,220	1,870	1,950
12	1,830	1,580	1,620	2,240	1,820	1,840	2,220	3,410	*3,210	1,900	1,830	1,980
13	1,820	1,570	*1,580	2,390	1,820	1,810	2,180	4,780	3,130	1,750	1,820	1,990
14	1,860	1,620	1,560	1,990	1,810	1,810	2,320	7,160	3,020	2,090	1,830	1,960
15	1,840	1,660	1,560	2,000	1,810	1,810	2,190	7,800	2,290	2,060	1,840	1,990
16	1,730	1,590	1,540	1,830	*1,790	1,810	2,290	6,960	2,090	1,940	1,840	1,960
17	1,730	2,070	1,520	1,590	1,860	1,830	2,900	5,600	1,960	1,810	1,840	2,010
18	1,760	1,710	1,590	1,720	1,840	1,820	3,120	4,120	1,930	1,750	1,980	2,070
19	1,680	1,680	1,560	1,790	1,840	1,810	2,940	3,390	1,930	1,740	2,020	2,000
20	1,710	1,540	1,510	1,800	1,830	1,840	2,820	2,660	1,990	1,730	1,890	2,090
21	1,730	1,520	1,530	1,780	1,820	1,810	2,720	2,240	2,000	1,750	1,920	2,240
22	1,710	1,590	1,590	1,770	1,810	1,830	2,500	2,190	2,050	1,740	1,980	2,070
23	1,710	1,550	1,620	1,760	1,810	1,820	2,500	2,270	2,040	1,760	1,980	2,040
24	1,700	1,670	1,640	1,740	1,790	1,800	2,420	2,280	2,060	1,820	1,990	2,120
25	1,630	1,610	1,630	1,760	1,870	1,790	*2,290	2,090	1,980	1,810	1,980	2,230
26	1,620	1,530	1,600	1,780	1,870	1,810	2,400	2,190	1,890	1,750	1,960	2,050
27	1,590	1,580	1,560	1,750	1,830	1,820	2,600	2,760	1,960	1,730	1,980	1,840
28	*1,530	1,600	1,530	1,710	1,860	1,820	3,710	4,500	1,980	1,760	1,950	1,860
29	1,570	1,630	1,570	1,680	1,810	1,780	4,980	3,910	1,950	1,740	1,930	1,900
30	1,570	1,690	1,620	1,700	--------	1,780	6,400	3,420	1,960	1,740	2,020	1,890
31	2,000	--------	1,570	1,690	--------	1,790	--------	2,990	--------	1,750	2,400	--------
Total	55,610	51,120	49,360	56,410	52,860	56,410	78,250	138,350	79,530	59,510	59,300	60,820
Mean	1,794	1,704	1,592	1,820	1,823	1,820	2,608	4,463	2,651	1,920	1,913	2,027
(†)	-1,505	+144	-1,167	+594	-1,070	-1,088	+2,048	+6,324	+17	-851	-1,605	-942
Adjusted for change in reservoir contents												
Mean	289	1,848	425	2,414	753	732	4,656	10,790	2,668	1,069	308	1,085
Cfsm	0.212	1.36	0.312	1.77	0.552	0.537	3.42	7.91	1.96	0.784	0.226	0.796
In.	0.24	1.52	0.36	2.04	0.60	0.62	3.82	9.12	2.19	0.90	0.26	0.89

	Observed			Adjusted		
Calendar year 1955:	Max 10,700	Min 1,510	Mean 2,723	Mean 2,265	Cfsm 1.66	In. 22.56
Water year 1955-56:	Max 7,800	Min 1,510	Mean 2,179	Mean 2,258	Cfsm 1.66	In. 22.56

* 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.--Backwater from manufacturing waste Oct. 7 to Jan. 9.

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 1956 (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.--64 years, 3,673 cfs (adjusted).

Extremes.--Maximum daily discharge during year, 15,400 cfs Apr. 30; minimum daily, 1,450 cfs Dec. 21.
1892-1956: Maximum discharge, 74,000 cfs Mar. 20, 1936; minimum daily, 625 cfs Mar. 27, 1911.

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

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

Revisions.--WSP 1001: Drainage area.

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,140	8,690	1,900	1,600	2,050	2,110	2,000	14,400	4,800	2,260	1,870	4,060
2	2,210	5,660	1,790	1,490	2,050	1,990	2,120	11,400	4,680	2,340	1,920	3,190
3	2,070	3,350	1,800	1,560	2,150	2,030	2,250	11,900	6,030	2,430	1,940	3,450
4	1,940	3,150	1,800	1,650	2,120	2,080	2,950	12,600	7,190	2,250	1,870	3,160
5	1,980	6,700	1,720	1,750	2,180	2,110	5,370	12,700	6,180	2,730	1,960	2,350
6	1,870	5,280	1,720	1,680	2,240	1,990	7,020	12,200	5,510	2,370	1,900	2,220
7	2,330	3,580	1,620	1,630	2,170	2,040	6,940	11,200	5,030	2,700	1,920	2,480
8	2,360	3,230	1,630	1,800	2,170	2,030	5,800	9,250	4,470	2,670	1,880	2,380
9	2,110	3,020	1,850	6,120	2,110	1,940	4,370	6,780	4,240	3,720	1,910	2,210
10	2,080	2,670	1,720	11,100	2,100	1,820	3,810	6,870	4,340	5,420	1,970	2,010
11	2,000	2,600	1,790	9,800	2,120	1,920	3,790	7,090	4,200	3,550	1,960	2,040
12	1,880	2,500	1,890	7,260	2,180	2,060	4,280	7,140	3,970	2,940	2,070	2,120
13	1,930	2,490	1,810	9,420	2,150	2,120	4,650	10,900	3,700	2,510	1,770	2,060
14	1,880	2,430	1,890	5,950	2,120	2,080	4,860	11,700	3,500	3,630	2,010	2,140
15	2,000	2,470	1,870	3,700	2,150	2,020	4,560	12,000	3,110	3,900	1,860	2,140
16	2,180	2,380	1,840	3,040	2,080	2,000	4,960	10,600	2,850	3,040	1,870	2,090
17	2,460	3,070	1,670	3,330	2,000	1,900	8,540	9,230	2,470	2,670	1,900	2,240
18	3,120	2,940	1,760	2,780	2,140	1,800	7,890	6,630	2,310	2,410	2,070	2,590
19	2,310	2,550	1,820	2,710	2,070	2,000	6,400	5,350	2,310	2,180	2,070	2,400
20	2,120	2,310	1,610	2,280	2,180	2,060	5,700	4,680	2,290	2,150	2,130	2,880
21	2,020	2,110	1,450	2,320	2,060	2,050	5,590	3,830	2,320	2,100	1,920	3,980
22	2,260	2,070	1,480	2,520	2,010	2,120	5,370	3,380	2,390	1,990	1,960	3,070
23	2,030	1,870	1,580	2,230	1,890	2,090	4,770	3,800	2,270	2,410	2,130	2,480
24	1,920	2,150	1,550	2,230	2,000	2,130	4,270	3,960	2,490	2,030	2,120	3,080
25	2,070	2,310	1,920	2,210	2,030	2,020	3,820	3,320	2,560	2,040	2,020	3,530
26	2,020	1,830	1,960	2,180	2,140	2,030	3,960	3,020	2,370	2,080	2,040	3,110
27	1,970	1,620	1,660	2,290	2,160	2,050	4,480	6,830	2,250	2,000	2,030	2,590
28	1,880	1,740	1,590	2,000	2,190	2,020	8,930	11,200	2,510	1,790	2,070	2,330
29	1,790	1,920	1,710	2,150	2,150	2,050	13,200	7,270	2,320	1,920	1,980	2,370
30	1,780	1,690	1,510	2,080	---	1,970	15,400	5,560	2,340	1,820	2,110	2,180
31	6,430	---	1,650	1,990	---	2,040	---	5,030	---	1,880	3,280	---
Total	69,140	90,380	53,560	104,850	61,160	62,670	168,050	251,820	107,000	79,930	62,510	78,930
Mean	2,230	3,013	1,728	3,382	2,109	2,022	5,602	8,123	3,567	2,578	2,016	2,631
(†)	-1,505	+144	-1,167	+594	-1,070	-1,088	+2,048	+6,324	+17	-851	-1,605	-942

Adjusted for change in reservoir contents

Mean	725	3,157	561	3,976	1,039	934	7,650	14,450	3,584	1,727	411	1,689
Cfsm	0.351	1.53	0.271	1.92	0.503	0.452	3.70	6.99	1.73	0.836	0.199	0.817
In.	0.40	1.71	0.31	2.21	0.54	0.52	4.13	8.06	1.93	0.96	0.23	0.91

	Observed			Adjusted			
Calendar year 1955:	Max 21,400	Min 1,450	Mean 3,867	Mean 3,409	Cfsm 1.65	In. 22.38
Water year 1955-56:	Max 15,400	Min 1,450	Mean 3,251	Mean 3,330	Cfsm 1.61	In. 21.91

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

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 1956.

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

Average discharge.--27 years, 196 cfs.

Extremes.--Maximum discharge during year, 3,000 cfs Jan. 10 (gage height, 6.09 ft); maximum gage height, 6.86 ft Jan. 10 (backwater from ice); minimum discharge, 10 cfs Oct. 4, 5, 6 (gage height, 1.01 ft).
1929-56: 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 1955-56, 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	5.2	2,010
2.5	255		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	885	48	28	55	50	44	989	480	51	23	118
2	12	390	43	27	55	47	49	802	398	215	23	80
3	11	176	42	27	55	48	62	989	490	137	20	250
4	10	137	41	27	54	48	100	905	703	74	19	92
5	10	670	40	27	54	45	210	940	531	53	19	70
6	10	330	40	27	54	44	370	975	364	50	23	60
7	21	214	39	26	53	44	300	829	258	108	18	160
8	35	168	39	43	58	44	240	600	202	99	17	90
9	34	141	38	1,180	54	44	215	517	226	230	17	60
10	24	116	38	1,930	53	44	183	757	226	338	16	47
11	18	108	38	1,160	53	44	176	669	208	154	25	41
12	16	108	37	738	53	47	223	825	168	100	21	38
13	14	120	36	1,020	53	43	316	1,470	137	79	18	58
14	14	112	*35	550	53	42	375	1,070	114	240	15	54
15	14	120	34	345	*53	42	298	802	95	252	14	88
16	14	100	33	180	53	41	323	642	79	134	13	80
17	39	220	32	124	51	41	843	570	68	91	12	100
18	99	186	31	93	51	41	*658	390	59	78	11	240
19	47	118	32	*71	51	41	458	342	55	61	12	150
20	31	93	31	68	51	41	398	338	50	50	13	120
21	27	88	31	66	50	41	383	285	51	44	12	600
22	40	86	31	65	49	*45	353	288	56	44	12	300
23	32	84	30	63	48	54	302	414	47	50	11	150
24	26	83	30	62	43	53	242	312	62	53	12	190
25	56	76	29	61	44	50	226	208	84	42	19	300
26	55	69	30	59	49	50	268	176	61	37	18	210
27	39	66	30	58	58	44	385	850	61	33	25	100
28	32	61	29	58	48	43	1,200	745	116	31	23	72
29	29	56	29	56	49	43	1,240	410	69	27	32	60
30	27	53	28	56	-------	44	1,640	345	61	24	40	48
31	300	----	28	55	-------	44	-------	515	-------	24	36	----
Total	1,150	5,234	1,072	8,350	1,505	1,392	12,080	19,969	5,579	3,003	589	4,026
Mean	37.1	174	34.6	269	51.9	44.9	403	644	186	96.9	19.0	134
Cfsm	0.387	1.82	0.361	2.81	0.542	0.469	4.21	6.72	1.94	1.01	0.198	1.40
In.	0.45	2.03	0.42	3.24	0.58	0.54	4.70	7.75	2.16	1.16	0.23	1.56

Calendar year 1955: Max 2,280 Min 9.4 Mean 160 Cfsm 1.67 In. 22.72
Water year 1955-56: Max 1,930 Min 10 Mean 175 Cfsm 1.83 In. 24.82

Peak discharge (base, 2,400 cfs).--Jan. 10 (7 a.m.) 3,000 cfs (6.09 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 19 to Jan. 10, Jan. 16 to Apr. 9. No gage-height record Aug. 9 to Sept. 30; discharge estimated on basis of recorded range in stage, weather records, and records of nearby streams.

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 1956.

Gage.--Water-stage recorder. Altitude of gage is 270 ft (from topographic map).

Average discharge.--15 years, 303 cfs.

Extremes.--Maximum discharge during year, 2,550 cfs Apr. 18 (gage height, 5.12 ft); minimum, 5.6 cfs Aug. 29 (gage height, 0.72 ft).
1941-56: Maximum discharge, 13,900 cfs Mar. 27, 1953 (gage height, 11.18 ft); minimum, that of Aug. 29, 1956.

Remarks.--Records excellent except those below 50 cfs, which are good, and those for periods of ice effect, which are fair.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.73	5.8	2.0	195
.8	8.2	2.5	375
.9	13	3.0	620
1.1	26	3.5	950
1.3	47	4.0	1,350
1.6	98	5.0	2,390

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	640	66	42	122	110	120	1,440	434	93	66	196
2	24	796	65	42	118	108	126	1,010	582	87	65	228
3	24	535	63	41	114	112	140	887	620	80	60	204
4	23	367	61	41	110	118	166	859	859	75	58	192
5	23	500	60	42	102	122	225	845	782	70	55	136
6	23	576	58	43	104	118	465	768	650	75	53	104
7	29	470	57	43	106	118	810	650	515	120	52	122
8	31	363	55	47	106	120	1,020	550	420	148	50	136
9	33	292	53	196	110	122	901	475	363	222	49	108
10	34	239	57	1,310	106	126	859	434	347	490	*47	87
11	34	219	55	1,750	106	136	936	398	335	470	47	73
12	34	239	53	1,660	110	138	1,080	351	295	351	49	66
13	33	222	52	2,050	112	140	1,320	335	232	331	46	60
14	32	198	*50	1,980	104	138	1,470	323	189	398	45	61
15	32	183	57	1,380	102	136	1,390	307	162	429	71	94
16	31	174	55	964	100	140	1,450	288	142	311	108	100
17	35	198	52	734	98	140	2,080	284	125	232	66	160
18	40	225	49	515	100	138	2,390	242	112	177	66	311
19	41	201	47	*415	106	136	1,810	242	102	150	52	256
20	43	162	47	345	108	132	1,400	225	94	129	52	225
21	46	136	47	295	104	128	1,180	207	91	116	47	347
22	58	122	46	265	98	128	1,040	195	93	116	27	288
23	60	114	45	240	96	126	971	201	89	120	9.3	210
24	60	106	45	210	94	122	908	246	89	122	7.8	278
25	63	98	43	196	98	120	852	225	114	120	7.5	388
26	63	93	42	174	106	118	768	195	129	106	6.8	327
27	63	87	42	158	120	118	*716	390	118	94	6.1	256
28	63	80	41	148	118	*118	866	1,050	118	87	5.8	207
29	61	77	41	140	114	118	1,210	820	112	77	5.8	174
30	60	71	41	130	------	118	1,640	555	102	70	6.1	150
31	174	------	41	130	------	118	------	456	------	68	14	------
Total	1,394	7,783	1,586	15,726	3,092	3,880	30,309	15,478	8,415	5,534	1,300.2	5,544
Mean	45.0	259	51.2	507	107	125	1,010	499	280	179	41.9	185
Cfsm	0.263	1.51	0.299	2.96	0.626	0.731	5.91	2.92	1.64	1.05	0.245	1.08
In.	0.30	1.68	0.34	3.41	0.68	0.84	6.59	3.37	1.83	1.21	0.28	1.20

Calendar year 1955: Max 1,660 Min 18 Mean 234 Cfsm 1.37 In. 18.54
Water year 1955-56: Max 2,390 Min 5.8 Mean 273 Cfsm 1.60 In. 21.73

Peak discharge (base, 1,700 cfs).--Jan. 13 (10 p.m.) 2,250 cfs (4.88 ft); Apr. 18 (5 a.m.) 2,550 cfs (5.12 ft); Apr. 30 (5 p.m.) 1,710 cfs (4.39 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 20 to Jan. 9, Jan. 18 to Apr. 7.

Little Androscoggin River near South Paris, Maine

Location.--Lat 44°17'05", long 70°32'10", on right bank just upstream from B'scoe 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 1956.

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.--35 years (1913-23, 1931-56), 138 cfs.

Extremes.--Maximum discharge during year, 1,220 cfs Apr. 17 (gage height, 6.30 ft); minimum, 4.2 cfs Oct. 6 (gage height, 1.52 ft).
1913-24, 1931-56: 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. 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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Jan. 18, 19)

1.5	3.8	3.0	98
1.6	5.8	3.5	180
1.8	11	4.0	285
2.0	18	5.0	585
2.5	49	6.2	1,150

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.0	390	31	11	40	39	43	620	178	29	17	165
2	7.1	325	28	11	40	40	43	442	186	28	16	92
3	5.8	186	29	10	42	41	64	464	241	28	14	350
4	5.4	130	29	11	39	43	76	435	362	24	13	158
5	4.4	330	33	11	42	43	194	467	283	21	12	85
6	4.2	272	33	11	41	42	340	376	210	26	10	63
7	15	184	29	11	44	42	448	307	159	73	10	205
8	28	132	29	18	48	42	426	252	120	66	11	135
9	24	104	28	365	47	47	332	212	114	240	*10	82
10	17	82	28	840	46	47	297	208	118	490	10	60
11	14	78	26	820	43	43	335	192	109	270	16	51
12	11	90	25	588	46	45	417	176	92	159	14	45
13	10	78	26	880	48	43	500	184	76	138	12	40
14	8.8	70	22	700	47	43	540	184	66	330	10	47
15	8.6	69	24	405	47	43	513	174	56	278	9.7	118
16	9.1	74	27	287	46	40	582	156	48	172	9.1	80
17	17	100	22	226	42	40	1,100	156	43	115	8.3	142
18	40	106	23	174	44	45	920	135	36	85	8.0	272
19	28	82	22	142	44	41	660	122	32	64	8.0	167
20	19	69	18	105	43	41	533	111	29	54	8.3	180
21	17	60	16	94	42	41	486	98	28	45	8.0	265
22	17	58	14	86	40	44	448	89	32	42	8.0	169
23	15	48	11	76	40	50	405	98	28	48	7.8	118
24	14	51	13	66	38	50	365	124	39	50	8.0	240
25	16	52	14	61	39	47	327	98	69	44	8.3	265
26	15	44	14	56	48	46	*319	84	57	40	8.6	180
27	16	40	14	53	47	43	322	310	44	32	8.0	138
28	17	38	13	45	45	42	526	660	51	28	7.8	111
29	16	36	11	40	41	41	750	359	41	24	7.3	101
30	15	33	12	41	-------	42	866	245	33	20	7.1	92
31	188	-------	11	42	-------	43	-------	196	-------	18	52	-------
Total	628.4	3,411	675	6,286	1,259	1,339	13,177	7,734	2,980	3,081	357.3	4,216
Mean	20.3	114	21.8	203	43.4	43.2	439	249	99.3	99.4	11.5	141
Cfsm	0.266	1.50	0.286	2.66	0.570	0.567	5.76	3.27	1.30	1.30	0.151	1.85
In.	0.31	1.67	0.33	3.07	0.61	0.65	6.43	3.77	1.45	1.50	0.17	2.06

Calendar year 1955: Max 930 Min 1.8 Mean 108 Cfsm 1.42 In. 19.19
Water year 1955-56: Max 1,100 Min 4.2 Mean 123 Cfsm 1.61 In. 22.02

Peak discharge (base, 1,000 cfs).--Jan. 13 (8 p.m.) 1,020 cfs (5.98 ft); Apr. 17 (8 p.m.) 1,220 cfs (6.30 ft).
* Discharge measurement made on this day.

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 1956.

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

Average discharge.--16 years, 561 cfs (adjusted).

Extremes.--Maximum discharge during year, 3,510 cfs Apr. 18 (gage height, 6.83 ft); minimum, 48 cfs Oct. 30 (gage height, 1.36 ft).
1940-56: 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 Pennesseewassee and Thompson Lakes (see p. 64) and several powerplants above station.

Rating table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

1.3	39	4.0	1,120
1.5	71	5.0	1,830
2.0	190	6.0	2,670
2.5	356	6.9	3,590
3.0	565		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	184	575	288	79	316	345	502	2,290	792	254	229	216
2	170	832	274	61	308	349	494	2,000	832	241	232	308
3	157	787	274	66	308	345	520	1,690	910	194	216	334
4	131	670	274	59	308	356	655	1,570	1,100	86	204	430
5	126	826	271	61	294	352	862	1,510	1,170	64	199	367
6	126	862	268	61	284	345	1,130	1,430	1,080	73	193	330
7	162	809	248	62	298	356	1,610	1,280	934	101	202	383
8	146	700	264	64	338	330	1,820	1,090	792	103	216	367
9	139	596	251	556	352	345	1,770	940	660	205	219	352
10	136	547	251	1,570	349	379	1,730	832	552	430	222	334
11	*129	498	241	2,110	326	367	1,810	748	534	675	219	308
12	122	434	232	2,400	312	383	1,960	685	542	630	213	284
13	119	406	229	2,670	302	383	2,180	650	480	606	176	264
14	117	379	219	2,650	323	383	2,340	650	463	743	84	248
15	117	371	219	2,320	323	383	2,310	660	494	850	62	245
16	112	364	216	1,770	323	371	2,480	640	430	836	59	261
17	124	406	199	1,400	298	338	3,010	610	379	894	56	288
18	136	394	204	1,120	323	394	3,410	606	330	820	56	349
19	134	383	193	856	294	390	3,310	583	308	534	58	398
20	139	341	173	*765	291	434	2,770	529	294	476	52	434
21	136	302	179	670	302	489	2,370	468	284	442	56	472
22	136	288	187	560	284	524	2,090	480	274	418	68	538
23	129	277	190	511	288	556	1,930	502	264	333	66	529
24	126	241	176	520	*274	556	1,810	480	264	334	68	596
25	126	235	77	476	294	520	1,640	480	277	349	69	640
26	124	288	77	434	352	511	1,450	485	291	330	71	630
27	80	261	162	410	345	511	*1,290	640	294	305	86	596
28	57	264	190	371	345	502	1,340	1,090	294	277	99	507
29	51	305	204	330	341	494	1,650	1,270	284	251	103	438
30	50	530	202	308	--------	511	2,200	1,100	268	235	112	367
31	180	--------	179	316	--------	520	--------	904	--------	222	154	--------
Total	3,921	14,171	6,611	25,606	9,095	13,022	54,443	28,892	15,870	12,141	4,117	11,813
Mean	126	472	213	826	314	420	1,815	932	529	392	113	394
(†)	-57	+68	-31	+131	-12	-109	+137	+65	-6	-44	-76	-38
Adjusted for change in reservoir contents												
Mean	69	540	182	957	302	311	1,952	997	523	348	57	356
Cfsm	0.210	1.65	0.555	2.92	0.921	0.948	5.95	3.04	1.59	1.06	0.174	1.09
In.	0.24	1.84	0.64	3.37	0.99	1.09	6.64	3.50	1.77	1.22	0.20	1.22

	Observed			Adjusted		
Calendar year 1955:	Max 2,310	Min 45	Mean 480	Mean 464	Cfsm 1.41	In. 19.22
Water year 1955-56:	Max 3,410	Min 50	Mean 546	Mean 548	Cfsm 1.67	In. 22.72

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

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 1956. 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.--28 years, 5,997 cfs (adjusted).

Extremes.--Maximum discharge during year, 26,200 cfs May 1 (gage height, 9.51 ft); minimum daily, 525 cfs Dec. 25, Aug. 19.
1928-56: 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 determination of peak flow and computation of flow over dam; minimum, 309 cfs Sept. 28, 1941 (gage height, 0.34 ft); minimum daily, 340 cfs Sept. 28, 1941.

Remarks.--Records excellent. Considerable fluctuation caused by powerplants above station. Flow regulated by powerplants above station and by Kennebago, Rangeley, Mooselookmeguntic, Richardson, Umbagog, Aziscohos, Auburn, Pennesseewassee and Thompson Lakes, and Gulf Island Pond (see p. 64).

Revisions (water years).--WSP 781: 1930, 1933-34. WSP 1301: 1932-36.

Rating table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

0.7	500	4.0	5,350
1.0	695	6.0	11,100
1.5	1,100	8.0	18,900
2.0	1,650	9.4	25,600
3.0	3,240		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,220	9,920	3,220	550	4,210	3,630	1,010	25,600	9,020	1,740	3,450	4,320
2	600	14,300	3,090	1,750	4,170	3,600	3,970	21,800	9,750	3,820	3,240	4,610
3	3,380	9,020	1,450	3,180	3,610	1,980	4,410	18,500	9,400	3,640	2,970	1,760
4	2,930	6,680	810	2,700	1,680	835	4,690	19,300	12,900	2,690	1,360	4,690
5	2,900	6,510	4,040	2,650	1,230	3,870	6,220	19,700	12,500	3,650	600	4,840
6	2,930	11,200	3,460	2,590	4,440	4,100	7,840	19,400	11,100	4,200	3,050	4,660
7	3,370	8,980	3,270	1,200	4,130	4,080	10,600	18,400	9,540	3,820	3,150	4,690
8	1,770	6,910	3,100	590	4,110	4,090	13,600	16,800	8,440	2,770	3,120	3,120
9	1,480	5,600	2,910	5,240	4,140	4,010	11,300	14,100	7,780	4,890	3,120	1,010
10	3,430	5,450	1,430	15,300	4,160	1,510	9,540	12,200	7,430	7,180	*3,390	3,760
11	2,910	5,080	680	23,200	2,080	870	10,300	11,600	7,750	8,500	1,250	3,870
12	2,980	4,190	3,160	22,400	935	3,900	10,900	11,900	7,220	6,470	705	3,510
13	2,900	4,200	2,880	21,000	4,280	4,140	12,800	11,600	6,720	5,840	3,570	3,350
14	3,180	4,790	2,860	21,400	4,150	4,180	14,000	16,000	6,240	5,690	3,040	3,260
15	1,530	4,850	2,900	16,600	4,100	4,170	13,900	15,800	6,310	5,960	2,970	1,890
16	580	4,660	2,930	11,800	4,120	4,[illegible]0	14,100	15,900	5,590	7,060	2,960	795
17	3,260	4,890	1,390	9,540	4,100	2,020	18,100	14,500	4,240	5,750	3,010	3,520
18	3,600	4,820	645	7,780	1,640	910	22,200	13,100	4,080	4,860	1,140	3,890
19	3,440	3,370	3,230	7,480	890	3,710	19,000	10,400	4,460	4,780	525	3,620
20	3,840	3,060	2,970	5,980	4,090	4,150	16,200	9,220	4,260	4,810	3,110	4,910
21	3,680	4,400	2,820	3,750	4,080	4,190	14,700	8,180	4,100	2,870	3,100	5,190
22	1,350	4,760	2,360	4,720	4,130	4,300	13,600	7,080	4,060	1,260	3,100	5,500
23	595	4,740	2,270	5,290	4,080	3,800	13,100	6,820	1,980	4,340	3,130	3,130
24	3,470	1,090	1,040	5,200	3,540	2,370	12,000	5,920	1,450	3,950	2,980	4,870
25	2,900	4,400	525	4,930	1,540	1,150	11,200	7,220	4,330	3,430	1,560	4,660
26	2,960	2,690	625	4,920	815	4,130	10,000	6,720	4,340	3,920	665	5,750
27	3,230	760	2,760	4,560	3,750	4,410	*9,610	5,640	4,480	3,820	2,690	5,180
28	3,360	3,820	2,560	2,200	4,120	4,360	11,500	13,600	4,500	1,810	3,100	4,830
29	1,080	3,280	2,550	1,630	4,140	4,400	18,600	16,700	4,260	665	3,130	3,530
30	590	3,230	2,970	4,450	--------	3,500	24,300	12,200	2,200	3,570	3,240	3,020
31	3,750	--------	1,150	4,160	--------	2,400	--------	10,100	--------	3,430	3,760	--------
Total	79,195	161,650	72,055	228,740	96,460	103,035	363,290	416,000	190,430	131,185	80,185	115,735
Mean	2,555	5,388	2,324	7,379	3,326	3,324	12,110	13,420	6,348	4,232	2,587	3,858
(†)	-1,481	+175	-1,180	+764	-1,132	-1,230	+2,412	+6,364	-71	-930	-1,770	-848
Adjusted for change in reservoir contents												
Mean	1,074	5,563	1,144	8,143	2,194	2,094	14,520	19,780	6,277	3,302	817	3,010
Cfsm	0.330	1.71	0.351	2.50	0.674	0.643	4.46	6.07	1.93	1.01	0.251	0.924
In.	0.38	1.91	0.40	2.88	0.73	0.74	4.98	7.00	2.15	1.16	0.29	1.03

	Observed			Adjusted		
Calendar year 1955:	Max 30,700	Min 505	Mean 5,935	Mean 5,448	Cfsm 1.67	In. 22.70
Water year 1955-56:	Max 25,600	Min 525	Mean 5,568	Mean 5,661	Cfsm 1.74	In. 23.65

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

Reservoirs in Androscoggin River Basin, Maine

Kennebago Lake on Kennebago River, at Kennebago, 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.

Rangeley Lake on Rangeley Stream, at Oquossoc, 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.

Mooselookmeguntic Lake at Upper Dam, in Richardson Township, 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.

Upper and Lower Richardson Lakes on Rapid River, at Middle Dam, 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.

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.

Aziscohos Lake on Magalloway River, in Lincoln Township, 3 miles east of village of Wilsons Mills, 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.

Gulf Island Pond on Androscoggin River, 3 miles upstream from Lewiston, 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.

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

Pennesseewassee Lake on short outlet stream to Little Androscoggin River, at Norway, 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.

Thompson Lake on short outlet stream to Little Androscoggin River, at Oxford, 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 1955 to September 1956

Date	Kennebago Lake	Rangeley Lake	Mooselookmeguntic Lake	Upper and Lower Richardson Lakes	Umbagog Lake
Sept.30, 1955	376	837	2,230	3,436	1,740
Oct. 31	632	224	2,498	746	1,398
Nov. 30	566	224	310	2,485	1,977
Dec. 31	448	40	0	1,536	1,758
Jan. 31, 1956	859	361	372	1,898	2,053
Feb. 29	756	141	186	980	1,284
Mar. 31	767	84	31	512	820
Apr. 30	871	710	1,898	1,126	1,722
May 31	836	1,158	7,581	5,237	3,060
June 30	676	1,299	7,867	5,500	2,186
July 31	599	1,282	7,009	4,881	1,958
Aug. 31	427	1,145	6,190	3,677	1,884
Sept.30	480	991	4,402	3,806	1,958

Date	Aziscohos Lake	Gulf Island Pond	Lake Auburn	Pennesseewassee Lake	Thompson Lake
Sept.30, 1955	7,122	2,187	285	107	1,571
Oct. 31	6,212	2,409	280	98	1,428
Nov. 30	6,520	2,285	310	102	1,600
Dec. 31	5,176	2,342	300	40	1,580
Jan. 31, 1956	5,007	2,304	441	104	1,866
Feb. 29	4,522	2,178	441	55	1,884
Mar. 31	2,742	2,076	452	30	1,618
Apr. 30	3,938	2,478	640	98	1,904
May 31	9,330	2,482	568	121	2,056
June 30	9,717	2,365	474	116	2,046
July 31	9,237	2,327	419	111	1,932
Aug. 31	7,346	2,144	364	116	1,723
Sept.30	6,590	2,487	364	93	1,647

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 1956.

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

Average discharge.--7 years, 311 cfs.

Extremes.--Maximum discharge during year, 2,790 cfs Apr. 17 (gage height, 4.37 ft); maximum gage height, 4.47 ft Jan. 11 (ice jam); minimum discharge, 30 cfs Aug. 18 (gage height, 1.05 ft).
1949-56: 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 backwater from debris, which are fair. Some diurnal fluctuation at low flow caused by mill above station.

Rating table, water year 1955-56, except periods of ice or backwater from debris (gage height, in feet, and discharge, in cubic feet per second)

1.0	31	2.5	705
1.1	47	3.0	1,140
1.3	92	4.0	2,290
1.6	196	4.3	2,690
2.0	385		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	1,170	103	47	98	92	144	860	205	64	41	82
2	45	1,230	87	45	95	92	180	576	227	62	41	73
3	42	555	85	45	92	95	227	432	262	60	41	78
4	37	330	90	45	92	112	285	486	461	55	41	64
5	36	1,110	95	45	92	118	590	467	402	53	37	51
6	36	1,220	103	47	92	118	1,140	408	295	62	37	44
7	78	710	92	49	95	118	1,540	343	218	98	*36	42
8	110	408	90	58	95	118	1,560	295	176	98	36	44
9	78	304	87	650	95	118	1,170	254	148	98	36	42
10	58	240	82	1,810	95	118	1,160	254	144	117	36	39
11	37	249	78	2,460	95	120	1,430	258	*138	85	39	37
12	*36	343	73	2,290	95	130	1,660	227	130	70	39	36
13	55	299	70	2,550	95	144	1,850	209	117	64	37	36
14	42	249	68	2,290	95	144	1,860	200	109	85	36	41
15	47	227	68	1,440	*95	140	1,690	192	100	114	34	62
16	53	200	75	977	95	130	1,940	184	92	92	31	62
17	64	343	75	705	95	124	2,650	184	92	128	31	66
18	128	354	73	492	95	120	2,300	171	78	110	31	114
19	95	258	70	385	95	*118	1,540	159	66	80	33	82
20	68	205	73	310	95	120	1,120	155	73	66	33	64
21	41	171	73	255	95	120	923	144	70	58	31	95
22	49	148	73	220	95	120	812	138	75	58	36	82
23	53	130	70	196	90	120	772	138	73	62	42	64
24	53	152	70	184	92	128	*780	144	70	64	41	114
25	53	155	70	156	110	128	804	134	73	60	39	196
26	53	141	68	144	114	124	642	124	80	55	39	124
27	55	114	66	128	114	120	557	325	73	49	34	90
28	55	124	62	118	98	120	596	905	70	45	34	73
29	53	117	55	106	95	124	742	531	70	42	33	62
30	53	95	49	106	-------	128	977	323	66	42	33	53
31	355	-------	47	102	-------	138	-------	244	-------	42	45	-------
Total	2,063	11,351	2,340	18,455	2,794	3,759	33,641	9,524	4,253	2,238	1,133	2,112
Mean	66.5	378	75.5	595	96.3	121	1,121	307	142	72.2	36.5	70.4
Cfsm	0.468	2.66	0.532	4.19	0.678	0.852	7.89	2.16	1.00	0.508	0.257	0.496
In.	0.54	2.97	0.61	4.83	0.73	0.98	8.80	2.49	1.12	0.59	0.30	0.55

Calendar year 1955: Max 1,230 Min 31 Mean 225 Cfsm 1.58 In. 21.51
Water year 1955-56: Max 2,650 Min 31 Mean 256 Cfsm 1.80 In. 24.51

Peak discharge (base 1,500 cfs).--Jan. 13 (12 p.m.) 2,660 cfs (4.28 ft); Apr. 8 (2 a.m.) 1,680 cfs (3.48 ft); Apr. 17 (8 p.m.) 2,790 cfs (4.37 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 7, Dec. 21 to Jan. 13, Jan. 19 to Mar. 31. Backwater from debris on control Oct. 1-31, July 15 to Sept. 30.

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 1956.

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

Average discharge.--69 years, 665 cfs (unadjusted).

Remarks.--Discharge computed from Allen meter records for each of three pairs of water wheels and from records of openings of two regulating gates at Eel Weir hydroelectric plant. Water wasted at rare intervals through gates in dam on outlet of Sebago Lake; flow computed from records of gate openings. Water diverted by Portland Water District and leakage through dam, totaling about 35 cfs, not included in figures of daily discharge. Flow completely regulated by 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 in inches).

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	657	522	597	529	500	649	626	516	668	118	760	774
2	662	497	536	528	477	610	643	500	654	0	763	0
3	656	536	602	529	530	643	656	536	629	113	761	195
4	653	538	573	412	506	642	568	595	736	232	764	783
5	657	489	562	338	497	642	527	523	786	764	761	781
6	650	503	538	338	552	652	297	588	806	753	762	781
7	651	763	554	336	658	663	283	869	820	756	763	782
8	651	546	532	336	657	648	293	930	773	789	773	780
9	647	593	534	248	674	652	485	923	726	730	782	780
10	649	544	534	100	664	647	439	825	634	808	782	780
11	651	606	565	106	675	640	344	704	637	779	782	779
12	650	586	534	137	648	641	382	673	653	659	782	778
13	649	542	534	180	673	641	348	634	647	673	782	778
14	646	558	534	143	673	647	368	666	616	647	783	777
15	649	568	535	169	675	645	362	664	646	640	779	777
16	643	534	533	198	674	638	313	664	631	635	780	771
17	619	536	534	256	660	640	394	666	651	685	781	776
18	554	538	536	294	674	652	361	651	636	828	788	781
19	573	586	534	427	651	650	366	670	642	829	785	770
20	638	539	528	385	659	653	389	673	630	771	784	776
21	641	661	519	407	653	657	422	665	648	723	783	774
22	641	672	519	389	649	645	344	667	678	728	784	778
23	642	673	519	378	657	651	350	666	661	728	783	776
24	641	672	378	452	655	650	379	681	634	731	783	777
25	640	568	0	481	653	650	407	662	629	698	779	776
26	644	674	379	528	650	653	460	664	631	752	781	777
27	639	756	531	522	658	656	466	590	637	786	780	775
28	642	794	526	503	655	650	461	526	617	778	760	773
29	639	799	533	504	655	637	413	666	649	742	775	826
30	668	726	535	503	-------	631	434	668	632	756	776	771
31	534	-------	534	503	-------	652	-------	685	-------	784	782	-------
Total	19,776	18,119	15,900	11,159	18,262	20,027	12,538	20,588	20,037	20,395	24,063	22,002
Mean	638	604	513	360	630	646	418	664	668	658	776	733
(†)	-418	+82	-480	+1,142	-25	-13	+1,891	+662	-149	-419	-248	-998

Adjusted for change in reservoir contents and diversion

Mean	222	686	33	1,502	605	633	2,309	1,326	519	239	528	-265
Cfsm	0.509	1.57	0.076	3.44	1.39	1.45	5.30	3.04	1.19	0.548	1.21	-0.608
In.	0.59	1.75	0.09	3.97	1.50	1.67	5.91	3.50	1.33	0.63	1.40	-0.68

	Observed						Adjusted					
Calendar year 1955:	Max	1,570	Min	0	Mean	798	Mean	549	Cfsm	1.26	In.	17.08
Water year 1955-56:	Max	930	Min	0	Mean	609	Mean	694	Cfsm	1.59	In.	21.66

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

Note.--Negative figures of adjusted discharge and runoff indicate that evaporation and seepage from reservoirs exceeded inflow.

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 1956.

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.--33 years (1903-9, 1929-56), 933 cfs.

Extremes.--Maximum discharge during year, 10,100 cfs Jan. 10 (gage height, 8.57 ft); minimum daily, 95 cfs Jan. 1-4.
1903-9, 1929-56: Maximum discharge, 43,900 cfs Mar. 27, 1953 (gage height, 17.20 ft), from rating curve extended above 11,000 cfs on basis of slope-area determination 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.0	93	3.5	685
2.1	115	4.0	1,050
2.3	165	5.0	2,200
2.5	228	6.0	3,840
3.0	420	7.7	7,690

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	212	3,590	285	95	430	245	255	5,120	1,720	352	323	1,160
2	218	2,170	270	95	415	240	260	3,620	1,440	328	309	650
3	186	1,360	250	95	400	235	270	3,970	3,350	309	302	870
4	168	1,090	230	95	390	240	290	3,900	4,380	291	280	521
5	160	2,770	220	97	380	250	335	3,840	2,660	269	291	389
6	155	2,420	210	97	370	235	440	3,440	1,900	325	284	340
7	526	1,620	200	102	360	220	600	3,270	1,520	553	269	1,110
8	637	1,280	190	110	355	205	780	2,750	1,250	553	262	649
9	407	1,100	178	1,050	350	190	860	2,230	1,130	1,880	266	466
10	317	954	170	7,170	340	190	880	2,690	1,090	2,950	265	380
11	269	862	160	5,670	335	196	900	2,880	1,100	1,160	356	336
12	235	834	152	4,200	330	205	960	2,830	938	785	309	321
13	225	792	148	6,120	320	220	1,040	4,900	813	698	262	302
14	205	744	142	3,700	310	220	1,300	4,370	730	4,190	245	280
15	285	730	138	2,460	305	220	1,510	3,160	661	2,490	228	344
16	496	685	130	1,860	300	200	1,650	2,740	597	1,570	212	328
17	710	744	126	1,500	290	180	1,980	2,370	548	1,170	*212	660
18	1,250	883	122	*1,220	290	174	2,000	1,810	491	930	221	1,330
19	698	692	120	1,030	280	215	2,000	1,520	438	750	221	718
20	558	625	116	920	280	270	1,940	1,440	420	643	228	865
21	501	569	112	820	270	*310	1,880	1,300	411	580	218	1,320
22	438	530	110	765	265	300	1,780	1,240	420	586	221	799
23	411	480	110	700	260	310	1,640	1,690	380	597	215	649
24	376	460	108	660	255	300	1,530	1,690	420	631	215	1,700
25	394	420	106	620	250	285	*1,450	1,120	537	542	252	1,560
26	402	395	104	580	250	275	1,370	970	466	481	225	1,030
27	368	370	102	540	250	270	1,270	1,960	402	434	198	820
28	356	345	102	510	250	260	2,190	4,560	466	402	195	724
29	352	325	100	480	250	260	5,080	2,310	416	368	186	637
30	352	305	99	460	-------	255	7,620	1,800	376	348	192	575
31	2,000	-------	97	440	-------	255	-------	1,860	-------	340	345	-------
Total	13,866	30,144	4,707	44,261	9,130	7,430	46,060	83,350	31,470	27,505	7,816	21,833
Mean	447	1,005	152	1,428	315	240	1,535	2,689	1,049	887	252	728
Cfsm	1.16	2.60	0.394	3.70	0.816	0.622	3.98	6.97	2.72	2.30	0.653	1.89
In.	1.34	2.90	0.45	4.27	0.88	0.72	4.44	8.04	3.04	2.65	0.75	2.11

Calendar year 1955: Max 6,880 Min 97 Mean 794 Cfsm 2.06 In. 27.90
Water year 1955-56: Max 7,620 Min 95 Mean 895 Cfsm 2.32 In. 31.59

Peak discharge (base, 8,700 cfs).--Jan. 10 (4 p.m.) 10,100 cfs (8.57 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 22 to Jan. 10, Jan. 20 to Mar. 24 (no gage-height record Feb. 17 to Mar. 21; discharge computed on basis of recorded range in stage, weather records, and comparison with records at nearby stations). No gage-height record Mar. 25 to Apr. 27; discharge estimated on basis of weather records and records at nearby stations.

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 1956

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

Average discharge.--14 years, 744 cfs.

Extremes.--Maximum discharge during year, about 3,550 cfs May 2; minimum, 12 cfs Oct. 3; minimum daily, 180 cfs Oct. 2.
1942-56: 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 periods 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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

2.0	160	5.0	1,380
2.5	266	6.0	2,070
3.0	420	7.0	2,950
4.0	840	8.0	4,130

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	259	920	483	330	759	410	343	3,430	1,360	333	289	242
2	180	1,120	483	309	750	402	336	a3,520	1,270	333	287	242
3	191	1,120	487	292	746	*406	*346	3,420	1,150	330	287	244
4	292	1,120	483	276	736	420	378	3,260	1,290	330	287	244
5	289	1,150	483	261	728	424	444	3,130	1,450	330	287	242
6	287	1,230	479	249	718	416	555	2,940	1,460	330	284	242
7	287	1,270	475	242	714	424	682	2,720	*1,430	330	284	242
8	292	1,260	475	252	764	438	786	2,410	1,340	330	282	242
9	295	1,220	471	315	950	441	895	2,010	1,240	333	279	242
10	298	1,180	467	454	915	413	950	1,900	1,120	355	279	242
11	298	1,060	467	1,460	880	410	985	*1,800	945	613	276	242
12	298	831	459	2,580	850	410	1,040	1,360	563	808	274	240
13	298	965	455	3,070	818	399	1,140	1,300	563	826	274	240
14	295	920	452	3,390	782	402	1,270	1,310	563	855	271	238
15	295	808	448	3,340	750	406	1,420	1,310	563	1,010	269	238
16	295	804	444	3,070	714	392	1,590	1,250	563	1,280	266	235
17	301	808	441	2,750	669	396	1,880	1,000	413	1,250	266	235
18	309	804	438	2,440	638	388	2,340	870	336	1,170	264	238
19	318	795	430	a1,900	607	378	2,830	961	336	*1,010	261	242
20	324	786	427	a1,400	579	375	2,650	1,280	336	960	259	244
21	327	786	424	a1,200	547	368	2,600	1,240	333	736	256	247
22	327	*777	416	a880	511	362	2,540	985	333	454	*254	254
23	321	624	413	a840	475	362	2,490	840	333	308	254	254
24	315	491	406	a820	444	362	2,420	836	333	309	252	261
25	315	491	402	804	444	362	2,280	745	336	312	249	269
26	315	495	396	795	459	355	2,130	523	336	393	249	274
27	315	495	385	786	434	352	1,990	531	336	559	247	276
28	318	495	378	786	430	343	1,870	957	333	591	244	337
29	318	491	368	777	427	336	2,170	1,450	333	587	242	511
30	321	487	359	772	-------	343	2,860	1,460	333	495	242	511
31	549	-------	346	768	-------	349	-------	1,430	-------	289	242	-------
Total	9,442	25,803	13,540	37,608	19,238	12,044	46,010	52,178	21,630	18,147	8,256	8,010
Mean	305	860	437	1,213	663	389	1,534	1,683	721	585	266	267
Cfsm	-	-	-	-	-	-	--	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 2,670 Min 117 Mean 670 Cfsm 2.03 In. 27.56
Water year 1955-56: Max 3,520 Min 180 Mean 743 Cfsm 2.25 In. 30.64

* 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.

Ossipee River at Cornish, Maine

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

Drainage area.--453 sq mi.

Records available.--July 1916 to September 1956.

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 than present datum.

Average discharge.--40 years, 882 cfs.

Extremes.--Maximum discharge during year, 4,620 cfs Jan. 14 (gage height, 7.35 ft); maximum gage height, 7.85 ft Jan. 13 (backwater from ice); minimum discharge, 51 cfs Oct. 4 (gage height, 0.79 ft); minimum daily discharge, 194 cfs Oct. 3.
1916-56: 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, 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 table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	182	5.0	2,190
2.0	338	6.0	3,100
3.0	810	7.2	4,440
4.0	1,430		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	280	1,100	520	400	865	525	450	3,860	1,520	436	342	311
2	273	1,330	520	385	855	515	460	3,950	1,440	427	342	300
3	194	1,260	515	375	850	505	482	3,800	1,320	419	323	382
4	260	1,220	510	360	840	510	527	3,620	1,370	411	327	366
5	304	1,370	505	350	830	530	690	3,470	1,550	411	323	311
6	300	1,440	505	340	820	550	882	3,280	1,570	440	338	300
7	390	1,420	505	335	825	515	1,110	3,020	1,540	461	327	304
8	378	1,370	505	390	865	510	1,250	2,760	1,450	495	315	293
9	354	1,340	500	575	940	515	1,250	2,340	1,350	545	319	293
10	354	1,280	500	1,430	1,000	540	1,280	2,100	1,240	555	315	300
11	338	1,240	500	2,280	980	525	1,360	1,970	1,180	550	319	283
12	346	1,100	495	3,250	970	500	1,460	1,660	755	854	293	276
13	338	909	495	3,980	930	495	1,630	1,460	695	860	319	286
14	338	1,100	490	4,420	905	510	1,800	1,440	695	986	308	276
15	346	944	490	4,000	875	530	1,960	1,480	653	1,000	297	276
16	354	887	485	3,570	840	520	2,270	1,430	653	1,210	300	269
17	403	920	485	*3,140	810	485	2,830	1,340	628	1,320	297	311
18	478	920	480	2,760	775	485	3,210	1,100	487	1,240	283	342
19	419	870	480	2,250	745	490	3,410	1,040	448	1,100	283	300
20	403	865	475	1,490	670	*515	3,270	1,170	444	998	308	304
21	403	860	470	1,360	660	525	3,200	1,350	436	887	297	342
22	382	843	465	1,050	650	525	3,140	1,300	457	695	300	319
23	382	821	460	1,020	630	485	3,030	1,030	432	504	297	290
24	382	628	455	1,000	620	470	*2,860	980	432	550	290	423
25	378	590	455	980	600	460	2,690	962	482	491	280	432
26	403	555	450	960	620	455	2,560	821	470	427	260	358
27	403	540	440	940	600	455	2,440	711	444	527	297	350
28	382	530	430	920	550	450	2,350	1,220	478	593	276	354
29	378	520	425	900	530	435	2,800	1,560	457	618	269	461
30	382	520	415	885	------	445	3,480	1,630	453	588	276	541
31	570	------	405	870	------	450	------	1,580	------	465	300	------
Total	11,295	29,292	14,830	46,965	22,650	15,425	60,131	59,434	25,529	21,063	9,420	9,953
Mean	364	976	478	1,515	781	498	2,004	1,917	851	679	304	332
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 2,950 Min 136 Mean 807 Cfsm - In. -
Water year 1955-56: Max 4,420 Min 194 Mean 891 Cfsm - In. -

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 25 to Jan. 13, Jan. 22 to Apr. 2.

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 1956.

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.--40 years, 2,715 cfs.

Extremes.--Maximum discharge during year, 11,600 cfs Jan. 16 (gage height, 8.94 ft); maximum gage height, 14.17 ft Jan. 13 (ice jam); minimum discharge, 310 cfs Oct. 4 (gage height, 1.72 ft).
1916-56: 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 13				Jan. 14 to Sept. 30			
2.2	440	5.0	3,230	2.1	455	5.0	3,240
2.5	578	7.0	7,000	2.5	656	7.0	7,000
3.0	860	8.4	10,300	3.0	973	8.9	11,500
4.0	1,800			4.0	1,930		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	528	2,700	1,340	860	2,290	1,490	1,450	8,980	4,870	1,250	1,160	690
2	496	3,690	1,350	850	2,220	1,450	1,440	9,670	4,720	1,240	1,110	725
3	488	3,680	1,320	835	2,190	1,430	1,470	10,500	4,500	1,160	1,030	1,150
4	444	3,680	1,290	815	2,170	1,440	1,580	10,700	4,500	1,080	981	1,250
5	538	4,060	1,270	790	2,160	1,500	2,050	10,700	4,820	1,050	898	1,200
6	533	4,320	1,240	775	2,180	1,570	2,550	10,300	5,040	1,070	936	1,120
7	662	4,410	1,210	765	2,340	1,500	3,210	9,840	5,100	1,130	913	1,110
8	786	4,500	1,200	860	2,360	1,420	3,530	9,280	5,030	1,210	*898	1,170
9	835	4,440	1,170	1,700	2,420	1,370	3,630	8,470	4,760	1,440	794	1,300
10	873	4,280	1,150	3,870	2,520	1,360	3,730	7,780	4,390	1,890	819	1,310
11	823	4,120	1,140	4,950	2,500	1,370	3,890	7,150	4,090	2,510	741	1,220
12	810	3,810	1,130	6,900	2,420	1,500	4,180	6,480	3,470	2,840	718	1,130
13	792	3,500	1,120	10,300	2,360	1,540	4,550	6,100	3,210	2,820	747	1,070
14	786	3,520	1,110	10,900	2,270	1,580	5,100	5,890	3,020	3,050	764	981
15	679	3,180	1,120	11,000	2,230	1,590	5,340	5,910	2,650	3,300	718	910
16	630	3,040	1,100	11,500	2,170	1,430	6,010	6,030	2,540	3,900	701	913
17	829	2,840	1,080	*11,100	2,110	1,310	7,110	6,010	2,330	4,210	690	943
18	1,170	2,800	1,060	10,100	2,050	1,220	7,760	5,620	1,980	4,160	684	1,070
19	1,430	2,760	1,060	8,610	1,980	1,230	8,180	5,400	1,830	3,810	613	1,350
20	1,430	2,680	1,050	6,810	1,930	1,270	8,300	5,320	1,740	3,470	690	1,490
21	1,350	2,540	1,040	5,890	1,840	1,370	8,370	5,010	1,510	3,060	613	1,570
22	1,310	2,460	1,040	4,970	1,760	1,490	8,350	4,570	1,490	2,650	613	1,750
23	1,230	2,330	1,030	4,410	1,710	1,620	8,200	4,020	1,380	2,340	602	1,790
24	1,170	2,040	1,020	3,820	1,690	1,610	*7,950	3,810	1,270	2,180	613	2,000
25	1,110	1,840	985	3,450	1,700	1,600	7,620	3,690	1,450	2,060	491	2,090
26	1,090	1,810	970	3,240	1,710	1,580	7,200	3,090	1,380	1,900	515	2,270
27	1,090	1,680	955	3,090	1,620	1,560	6,830	3,440	1,260	1,910	678	2,370
28	1,080	1,580	950	2,940	1,550	1,540	6,600	4,180	1,370	1,820	656	2,290
29	1,020	1,450	930	2,710	1,520	1,500	7,130	4,660	1,330	1,730	651	2,290
30	978	1,350	910	2,520	------	1,480	8,200	4,860	1,310	1,600	576	2,250
31	1,310	------	890	2,380	------	1,460	------	4,930	------	1,270	592	------
Total	28,280	91,090	34,230	143,710	59,970	45,380	161,510	202,370	88,340	69,110	23,205	42,772
Mean	912	3,036	1,104	4,636	2,068	1,464	5,384	6,528	2,945	2,229	749	1,426
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 10,900 Min 310 Mean 2,427 Cfsm - In. -
Water year 1955-56: Max 11,500 Min 444 Mean 2,712 Cfsm - In. -

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Jan. 14, Jan. 25 to Apr. 4.

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 1956.

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

Average discharge.--16 years, 299 cfs.

Extremes.--Maximum discharge during year, 2,400 cfs Jan. 11 (gage height, 5.00 ft); minimum, 25 cfs May 24 (gage height, 1.56 ft).
1940-56: Maximum discharge, 5,300 cfs May 10, 1954; 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 good 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	20	3.0	509
1.6	29	3.5	835
1.8	58	4.0	1,260
2.0	104	4.5	1,770
2.5	269	5.0	2,400

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	141	210	231	b156	b245	b265	202	1,240	455	141	64	50
2	141	225	227	b152	b245	258	202	1,070	419	138	62	50
3	141	235	224	147	b245	250	216	910	403	135	62	55
4	141	350	224	138	b245	250	235	842	434	132	62	116
5	141	520	224	129	246	b250	269	806	408	82	60	195
6	141	580	224	150	242	b250	302	741	360	77	60	195
7	144	590	224	162	239	246	419	654	324	77	*60	202
8	147	600	220	175	239	242	748	628	289	82	58	199
9	147	580	220	220	239	b245	762	485	231	132	58	195
10	147	300	220	405	277	b240	714	294	227	153	58	195
11	147	230	216	1,970	365	b230	721	294	*224	138	58	195
12	147	240	216	2,220	365	227	784	294	182	129	58	195
13	147	250	216	1,960	365	227	926	294	141	124	58	195
14	121	260	213	1,880	b380	224	1,090	294	147	132	58	199
15	104	370	213	1,660	350	235	1,230	294	172	162	56	195
16	144	490	209	1,380	b335	b220	1,390	294	195	169	58	195
17	135	490	209	*1,110	b330	206	1,820	290	216	169	53	199
18	138	500	206	888	b330	b225	2,240	240	192	162	52	199
19	132	490	206	b655	b330	b215	2,110	141	169	153	52	195
20	144	480	b200	505	b325	b215	1,780	141	150	141	52	195
21	144	350	b200	224	b310	b215	1,590	138	153	138	52	195
22	146	270	b200	b225	b300	216	1,470	94	156	132	52	195
23	146	270	b200	231	b300	220	1,400	28	159	132	52	195
24	148	270	195	b235	b295	b225	*1,270	32	162	135	52	206
25	148	180	192	b240	298	b225	1,150	142	169	135	52	206
26	150	150	b182	242	b290	b220	1,040	195	172	132	50	202
27	150	144	b178	242	b285	b215	942	260	165	126	50	202
28	150	200	b176	b240	281	b215	934	700	159	124	50	202
29	152	230	b170	b245	b275	206	1,060	780	147	121	50	202
30	154	230	162	246	-------	202	1,220	616	144	118	50	202
31	178	-------	b160	246	-------	202	-------	544	-------	86	50	-------
Total	4,456	10,284	6,357	18,678	8,551	7,081	30,236	13,775	6,904	4,007	1,719	5,421
Mean	144	343	205	603	295	228	1,008	444	230	129	55.5	181
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 872 Min 22 Mean 286 Cfsm - In. -
Water year 1955-56: Max 2,240 Min 28 Mean 321 Cfsm - In. -

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 22 to Nov. 30; discharge estimated on basis of recorded range in stage, records at dam upstream and precipitation records.

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 1956.

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

Average discharge.--17 years, 183 cfs (unadjusted).

Extremes.--Maximum discharge during year, 1,440 cfs Jan. 10 (gage height, 3.91 ft); minimum, 4.9 cfs Oct. 15 (gage height, 0.38 ft).
1939-56: 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 by powerplants above station.

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 10				Jan. 11 to Sept. 30			
0.4	5.4	1.5	182	0.6	18	2.0	412
.5	10	2.0	356	.7	28	2.5	642
.6	16	2.5	590	.8	40	3.0	902
.7	24	3.0	874	1.0	73	3.6	1,250
.8	34	3.7	1,300	1.5	216		
1.0	62						

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	370	108	16	178	142	128	697	275	22	200	40
2	13	375	130	26	178	142	248	592	270	38	160	24
3	9.5	295	72	84	174	72	220	549	270	24	67	40
4	9.5	245	90	85	116	166	240	516	404	24	52	27
5	9.5	270	166	87	168	252	315	441	358	32	32	37
6	99	320	176	90	210	205	412	454	294	32	196	66
7	142	335	136	18	210	196	476	454	260	26	198	81
8	19	275	116	20	176	198	535	391	227	26	98	48
9	24	245	108	315	170	196	516	370	164	102	25	31
10	9.1	225	58	1,300	170	63	467	366	168	158	26	61
11	9.1	210	59	1,120	122	76	*485	345	*245	142	28	71
12	9.1	196	138	891	178	216	530	252	205	136	40	80
13	9.1	200	106	905	215	162	607	271	186	139	25	66
14	9.1	240	93	817	174	192	662	313	190	116	25	46
15	17	205	92	713	160	98	760	286	184	70	38	40
16	20	240	93	647	158	188	939	260	47	172	50	38
17	15	230	34	535	152	72	1,170	245	50	200	126	75
18	13	210	41	458	102	124	1,210	212	205	186	60	46
19	46	182	106	383	148	*216	1,020	151	190	188	50	61
20	96	200	93	329	*192	188	897	202	178	196	122	80
21	108	325	86	252	160	186	801	230	192	60	190	76
22	50	275	84	263	144	168	786	202	176	28	154	42
23	54	250	79	279	146	186	796	184	55	190	23	34
24	96	182	17	220	138	66	687	184	32	170	23	69
25	92	186	16	210	85	79	652	152	180	162	42	64
26	85	150	27	200	131	227	607	65	166	184	43	56
27	83	154	91	198	194	198	568	198	139	184	23	56
28	81	170	87	150	166	198	535	490	136	68	58	56
29	39	138	83	164	142	198	657	415	131	52	87	42
30	40	130	84	225	-------	198	780	294	48	190	62	39
31	240	-------	28	196	-------	65	-------	340	-------	200	84	-------
Total	1,564.0	7,028	2,697	11,196	4,659	4,973	18,706	10,121	5,625	3,507	2,407	1,592
Mean	50.5	234	87.0	361	161	160	624	326	188	113	77.6	53.1
(†)	+8.3	+11.7	-6.9	+65.6	-16.8	-17.5	+71.4	-2.5	-37.1	-47.5	-21.0	-22.8

Adjusted for change in reservoir contents

Mean	58.8	246	80.1	427	144	142	695	324	151	65.5	56.6	30.3
Cfsm	0.560	2.34	0.763	4.07	1.37	1.35	6.62	3.09	1.44	0.624	0.539	0.289
In.	0.65	2.61	0.88	4.69	1.48	1.56	7.39	3.56	1.61	0.72	0.62	0.32

	Observed			Adjusted			
Calendar year 1955:	Max 490	Min 9.1	Mean 147	Mean 143	Cfsm 1.36	In. 18.40	
Water year 1955-56:	Max 1,300	Min 9.1	Mean 202	Mean 201	Cfsm 1.91	In. 26.09	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Square Pond and Mousam and Estes Lakes.
Note.--No gage-height record Oct. 21 to Dec. 12; discharge estimated on basis of recorded range in stage, weather records, and records of flow of nearby streams.

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 1956.

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

Average discharge.--27 years (1929-56), 241 cfs (unadjusted).

Extremes.--Maximum discharge during year, 2,270 cfs Jan. 10 (gage height, 7.00 ft); minimum, 20 cfs Oct. 2, 3 (gage height, 1.29 ft).
1928-56: Maximum discharge, 5,490 cfs Mar. 19, 1936 (gage height, 12.31 ft); minimum, 4.7 cfs Aug. 28, 1950.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow partly regulated by powerplants above station and by Great East and Lovell Lakes and Horn, Wilsons 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 table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 1 to Jan. 9)

1.2	16	3.0	655
1.4	37	3.5	935
1.6	70	4.0	1,230
1.8	119	5.0	1,490
2.0	187	6.0	1,860
2.5	400	6.5	2,070

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61	285	188	38	301	271	251	1,350	260	56	35	70
2	20	190	172	65	271	259	234	1,220	240	26	97	38
3	77	156	114	205	238	172	255	935	205	25	97	32
4	83	156	52	220	203	119	284	694	340	23	63	138
5	88	240	240	188	169	319	396	655	280	23	22	110
6	79	120	335	158	255	301	490	542	245	30	61	92
7	130	116	180	97	267	297	568	475	220	31	*126	88
8	77	200	240	68	259	284	563	427	190	26	100	56
9	24	170	215	680	251	306	485	418	176	116	100	23
10	72	182	188	2,050	246	259	500	440	148	199	88	68
11	88	182	88	1,810	206	293	*575	427	205	138	88	85
12	90	172	*255	1,700	129	259	655	345	176	138	74	82
13	85	130	260	1,550	259	255	726	218	*165	122	81	85
14	83	205	260	1,420	238	259	776	259	169	108	97	90
15	66	205	250	1,330	306	259	748	305	162	83	66	50
16	26	146	172	*1,010	288	259	1,160	205	145	120	116	38
17	110	220	88	782	328	246	1,620	234	106	122	97	106
18	166	240	88	600	276	263	1,760	238	148	102	79	97
19	102	114	250	505	301	*255	1,720	215	138	95	31	85
20	*100	88	350	455	263	242	1,550	160	135	122	65	85
21	102	130	475	365	*259	230	1,330	324	138	81	108	92
22	79	156	440	295	284	242	1,350	225	135	77	102	68
23	25	106	360	380	276	234	1,340	200	88	106	88	26
24	81	95	220	370	246	234	1,280	215	54	108	92	182
25	108	65	63	400	182	319	1,110	192	145	108	61	188
26	100	74	65	325	125	251	831	150	141	102	26	106
27	108	79	270	250	235	255	732	122	134	106	100	110
28	108	118	182	170	267	251	760	345	132	65	92	120
29	68	136	132	160	276	251	970	300	129	42	92	70
30	22	140	172	276	-------	246	1,320	270	49	110	90	27
31	235	-------	100	251	-------	238	-------	295	-------	97	97	-------
Total	2,663	4,614	6,464	18,173	7,204	7,928	26,339	12,260	4,998	2,707	2,591	2,508
Mean	85.9	154	209	586	248	256	878	395	167	87.3	83.6	83.6
(†)	+15.3	+95.3	-136.3	+60.8	-102.4	-90.1	+309.3	+67.7	-27.0	-26.2	-78.5	-2.3
Adjusted for change in reservoir contents												
Mean	101	249	72.7	647	146	166	1,187	463	140	61.1	5.1	81.3
Cfsm	0.687	1.69	0.495	4.40	0.993	1.13	8.07	3.15	0.952	0.416	0.035	0.553
In.	0.79	1.89	0.57	5.07	1.07	1.30	9.00	3.63	1.06	0.48	0.04	0.62

	Observed			Adjusted			
Calendar year 1955:	Max 755	Min 20	Mean 221	Mean 203	Cfsm 1.38	In. 18.67	
Water year 1955-56:	Max 2,050	Min 20	Mean 269	Mean 276	Cfsm 1.88	In. 25.52	

* Dischare measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Great East and Lovell Lakes, Horn, Wilson and Milton Ponds.

Note.--No gage-height record Jan. 20-24, 27, 28, May 19 to June 11; discharge estimated on basis of weather data and records of flow for nearby streams.

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 1956. 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.--22 years, 19.8 cfs.

Extremes.--Maximum discharge during year, 351 cfs Jan. 9 (gage height, 3.24 ft); minimum, 0.92 cfs Aug. 29.
1934-56: 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 or no gage-height record, which are fair.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.08	0.92	0.7	18
.1	1.1	1.0	36
.2	2.35	1.5	76
.3	4.1	2.0	141
.5	9.5	3.0	315

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	69	14	3.0	14	17	20	97	20	2.6	1.65	1.8
2	2.25	54	12	2.6	13	16	23	68	19	2.4	1.6	1.45
3	1.8	39	13	2.7	13	18	28	59	32	2.2	1.45	1.55
4	1.6	40	14	2.9	13	25	32	51	48	2.0	1.35	1.3
5	1.55	70	16	3.1	14	28	48	46	34	2.0	1.35	1.2
6	1.75	66	17	3.1	12	25	81	41	25	5.2	1.35	1.1
7	18	51	15	3.2	16	23	109	36	20	5.8	1.3	1.45
8	10	39	12	6.0	16	22	68	32	16	4.2	1.3	1.2
9	7.2	32	11	200	16	22	62	*28	15	11	1.3	1.1
10	5.0	27	10	290	17	20	72	30	14	7.6	1.25	1.1
11	3.9	36	9.0	160	17	19	91	28	*13	5.2	1.2	1.05
12	3.4	47	8.3	128	20	19	116	25	11	4.1	1.15	1.05
13	3.0	45	7.7	173	23	18	136	24	9.4	3.7	1.15	1.15
14	3.0	46	7.0	136	24	18	138	22	8.3	11	1.2	1.25
15	9.0	46	7.7	111	23	18	129	21	7.4	7.8	1.1	1.55
16	8.0	42	7.6	72	22	18	212	20	6.6	5.8	1.05	2.1
17	31	75	7.1	66	21	16	273	20	6.0	5.0	1.05	3.0
18	23	*57	6.7	53	18	17	208	18	5.2	4.3	1.0	3.2
19	15	45	6.2	41	18	15	162	17	4.8	3.7	1.0	2.05
20	12	37	5.5	36	17	15	135	16	4.4	3.2	1.0	2.5
21	10	33	a4.8	29	16	16	118	14	4.3	3.0	1.15	2.8
22	9.2	29	a4.0	24	15	18	108	14	4.3	4.0	1.55	1.9
23	8.0	25	a3.6	21	15	20	99	13	3.8	4.1	1.3	1.7
24	7.6	27	a3.4	19	14	19	99	13	3.5	5.6	*1.2	12
25	8.2	25	3.6	*18	16	18	87	12	3.5	4.0	1.15	5.7
26	7.6	21	3.8	17	20	18	76	11	3.2	3.3	1.0	3.3
27	7.1	19	3.5	17	19	17	72	36	3.3	2.7	1.0	2.5
28	6.6	19	3.3	16	19	18	69	50	4.6	2.4	1.0	2.2
29	6.0	16	3.2	13	18	18	98	56	3.4	2.05	.97	2.05
30	5.8	16	3.1	14	-------	17	144	27	2.8	1.85	*1.05	1.85
31	92	-------	3.0	14	-------	18	-------	23	-------	*1.8	1.5	-------
Total	331.15	1,193	246.1	1,694.6	499	584	3,113	948	355.8	133.60	37.67	68.15
Mean	10.7	39.8	7.94	54.7	17.2	18.8	104	30.6	11.9	4.31	1.22	2.27
Cfsm	0.884	3.29	0.656	4.52	1.42	1.55	8.60	2.53	0.983	0.356	0.101	0.188
In.	1.02	3.67	0.76	5.21	1.53	1.79	9.57	2.91	1.09	0.41	0.12	0.21

Calendar year 1955: Max 114 Min 0.83 Mean 18.4 Cfsm 1.52 In. 20.71
Water year 1955-56: Max 290 Min 0.97 Mean 25.1 Cfsm 2.07 In. 28.29

Peak discharge (base, 170 cfs).--Jan. 9 (11 to 12 p.m.) 351 cfs (3.24 ft); Apr. 17 (4 a.m.) 288 cfs (2.86 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 Lamprey River near Newmarket.

Note.--Stage-discharge relation affected by ice Dec. 19, 20, Dec. 25 to Jan. 10, Jan. 18-25, Feb. 8-24, Feb. 26 to Mar. 13, Mar. 21-27.

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 1956.

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

Average discharge.--22 years, 285 cfs.

Extremes.--Maximum discharge during year, 2,960 cfs Apr. 18 (gage height, 9.18 ft); minimum daily, 9.7 cfs Aug. 20.
1934-56: 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 18

0.8	22	3.0	382
1.0	37	5.0	960
1.5	98	7.0	1,850
2.0	176	10.0	3,390

Apr. 19 to Sept. 30

0.5	9.2	1.1	43
.7	15	1.5	92
.9	26	2.0	176

Note.--Same as preceding table above 2.0 ft.

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	664	320	95	290	210	245	1,760	256	36	19	11
2	31	670	280	88	270	220	270	1,560	242	32	18	15
3	27	578	286	86	255	225	320	1,240	292	29	16	16
4	24	486	282	88	215	260	370	1,010	380	28	15	16
5	22	667	292	105	240	300	483	858	370	25	15	14
6	24	781	305	145	235	310	718	754	344	42	15	12
7	126	790	265	140	240	300	956	670	288	55	14	12
8	143	697	276	150	260	290	860	589	234	54	14	12
9	148	549	254	745	270	275	930	*521	202	73	14	12
10	139	436	244	1,680	265	270	981	462	181	95	14	11
11	131	428	222	2,360	260	260	1,030	431	*169	72	13	11
12	122	499	213	2,740	265	255	1,130	411	151	57	13	11
13	122	535	202	*2,530	275	250	1,260	387	135	54	14	11
14	118	592	192	2,180	270	245	1,430	370	120	67	14	11
15	162	646	196	2,050	275	240	1,570	344	107	82	13	11
16	219	631	189	1,580	250	220	2,020	324	94	66	13	11
17	382	760	176	1,210	230	185	2,620	307	84	60	12	20
18	428	*769	185	940	240	230	*2,870	284	72	55	11	24
19	372	757	176	730	220	235	2,720	260	64	53	10	22
20	313	643	135	650	240	225	2,270	240	57	42	9.7	20
21	274	524	115	580	230	225	1,900	224	52	11	10	22
22	266	452	120	500	200	230	1,670	176	50	26	10	21
23	236	394	115	450	210	240	1,550	190	47	37	10	19
24	217	416	115	460	*195	240	1,520	183	43	38	*10	55
25	209	431	120	410	200	240	1,410	169	42	40	10	59
26	196	406	115	390	230	250	1,270	158	38	34	11	39
27	190	375	110	356	240	245	1,170	209	37	28	11	34
28	190	356	105	330	245	240	1,090	358	45	26	11	32
29	196	342	110	310	230	240	1,260	382	44	23	11	28
30	185	290	110	300	-------	235	1,650	358	38	21	11	24
31	490	-------	105	290	-------	240	-------	*296	-------	*20	11	------
Total	5,732	16,564	5,930	24,668	7,045	7,630	39,543	15,485	4,278	1,381	392.7	616
Mean	185	552	191	796	243	246	1,318	500	143	44.5	12.7	20.5
Cfsm	1.01	3.02	1.04	4.35	1.33	1.34	7.20	2.73	0.781	0.243	0.069	0.112
In.	1.16	3.37	1.21	5.01	1.43	1.55	8.04	3.15	0.87	0.28	0.08	0.13

Calendar year 1955: Max 892 Min 12 Mean 263 Cfsm 1.44 In. 19.49
Water year 1955-56: Max 2,870 Min 9.7 Mean 353 Cfsm 1.93 In. 26.28

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 1, 2, 7, Dec. 21 to Jan. 8, Jan. 19-26, Jan. 28 to Feb. 1, Feb. 3 to Apr. 3, Apr. 8, 9. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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 1956.

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

Average discharge.--17 years, 524 cfs.

Extremes.--Maximum discharge during year, 7,370 cfs July 14 (gage height, 8.22 ft); minimum daily, 83 cfs Oct. 6.
1939-56: Maximum discharge, 22,800 cfs Nov. 26, 1950 (gage height, 12.05 ft), from rating curve extended above 9,300 cfs by logarithmic plotting; minimum daily, 42 cfs Feb. 11, 1948.

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

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to July 14				July 15 to Sept. 30			
2.3	77	4.0	825	2.4	93	4.0	825
2.4	97	5.0	1,710	2.6	134	5.0	1,710
2.7	175	6.0	2,850	3.0	259	6.0	2,850
3.0	279	7.0	4,550	3.5	495		
3.5	515						

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	178	1,260	178	88	160	145	108	*2,260	1,320	197	152	953
2	136	901	146	86	160	145	120	1,740	1,050	188	144	478
3	108	587	178	86	170	141	145	2,180	2,550	172	132	652
4	97	610	178	88	145	141	195	2,070	2,180	158	127	343
5	89	1,410	178	94	165	136	840	1,840	*1,380	146	121	241
6	83	940	160	98	165	130	902	1,840	1,020	190	121	213
7	889	708	110	96	160	133	806	1,760	825	257	112	700
8	550	629	140	96	155	133	635	1,470	695	316	110	371
9	345	521	135	2,200	150	130	471	1,200	623	2,130	127	271
10	235	440	130	3,250	150	128	371	1,950	581	*1,910	132	227
11	185	414	125	1,860	140	123	371	1,710	599	730	255	197
12	*160	390	130	1,450	140	130	515	2,250	498	515	152	187
13	143	390	*130	1,610	140	125	629	4,000	429	504	127	169
14	133	386	120	986	140	123	617	2,980	381	4,020	110	225
15	167	429	125	740	140	123	527	2,340	340	1,720	108	525
16	207	371	125	611	135	111	745	2,130	307	1,150	102	330
17	273	624	115	*504	125	123	1,740	1,940	275	811	95	961
18	340	466	120	400	145	123	1,100	1,260	260	607	97	1,070
19	238	358	115	320	145	115	860	1,000	242	468	102	581
20	201	311	105	300	140	118	740	970	232	335	114	1,300
21	194	295	98	290	140	115	689	846	228	334	102	1,040
22	249	268	92	260	135	123	677	910	232	317	*104	633
23	204	238	86	240	130	136	593	1,580	207	343	95	495
24	188	299	97	220	125	128	510	1,120	264	425	129	*1,810
25	370	272	110	220	150	110	460	760	287	312	183	1,120
26	291	214	105	210	200	115	493	647	249	287	102	755
27	242	210	100	210	290	*111	517	3,340	214	230	99	574
28	218	221	98	180	210	111	1,280	3,270	299	210	97	473
29	235	*185	96	170	160	108	2,880	1,610	287	178	93	405
30	232	160	98	190	-------	113	4,440	1,340	232	175	96	352
31	1,480	-------	94	190	-------	113	-------	1,520	-------	157	507	-------
Total	8,660	14,507	3,817	17,343	4,510	3,859	24,976	55,833	18,286	19,602	4,147	17,651
Mean	279	484	123	559	156	124	833	1,801	610	632	134	588
Cfsm	1.45	2.51	0.637	2.90	0.808	0.642	4.32	9.33	3.16	3.27	0.694	3.05
In.	1.67	2.80	0.74	3.34	0.87	0.74	4.81	10.76	3.52	3.78	0.80	3.40

Calendar year 1955: Max 5,160 Min 64 Mean 455 Cfsm 2.36 In. 32.01
Water year 1955-56: Max 4,440 Min 83 Mean 528 Cfsm 2.74 In. 37.23

Peak discharge (base, 7,100 cfs).--July 14 (9:30 a.m.) 7,370 cfs (8.22 ft).
* Discharge measurement made on this day.
Note.--No gage-height record Dec. 29 to Jan. 8, Feb. 17 to Mar. 2, Mar. 26; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage when available, and records for Pemigewasset River at Plymouth and Baker River River near Rumney. Stage-discharge relation affected by ice Dec. 7 to Jan. 10, Jan. 19 to Feb. 16, Mar. 25, Apr. 3-5.

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 1¼ miles southwest of Rumney, Grafton County.

Drainage area.--143 sq mi.

Records available.--October 1928 to September 1956. 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.--28 years, 260 cfs.

Extremes.--Maximum discharge during year, 5,240 cfs May 27 (gage height, 7.90 ft), from rating curve extended above 2,900 cfs on basis of slope-area determinations at gage heights 13.03, 14.49, and 15.50 ft; minimum, 25 cfs Aug. 17.

1928-56: Maximum discharge, 21,400 cfs June 15, 1942 (gage height, 15.50 ft), from rating curve extended above 3,800 cfs as described above; 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 flood-marks), from rating curve extended above 3,800 cfs as described above.

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

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

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.3	20	3.5	395
2.5	46	4.0	720
2.8	113	5.0	1,620
3.1	212	7.0	3,900

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	457	85	46	94	110	80	*1,700	480	50	63	166
2	50	355	73	42	92	110	93	1,270	380	45	59	103
3	39	252	92	42	94	100	128	1,500	941	42	54	180
4	34	299	90	44	82	100	180	1,350	934	39	50	103
5	32	1,110	95	48	96	95	550	1,180	*573	38	48	76
6	33	629	78	50	94	95	900	1,030	434	60	45	67
7	238	428	64	48	98	97	934	886	334	100	42	143
8	176	370	80	47	98	95	685	741	274	83	39	105
9	125	310	76	100	100	98	480	573	240	534	38	78
10	87	256	72	800	97	97	390	790	240	573	38	65
11	69	240	72	810	95	95	426	678	240	240	42	58
12	61	248	67	780	92	103	629	685	197	175	40	54
13	*54	244	*69	1,050	92	100	755	870	162	305	39	50
14	48	224	69	553	92	97	727	783	139	2,140	34	46
15	50	*236	71	400	87	95	629	664	119	843	32	59
16	69	208	67	305	67	81	924	552	103	573	30	59
17	153	274	64	*240	76	95	1,780	580	90	*630	28	368
18	290	240	67	150	90	97	1,250	422	78	367	28	426
19	168	194	64	120	90	92	968	359	74	252	32	190
20	122	168	53	145	85	95	798	330	74	190	32	261
21	103	145	49	160	80	87	734	287	69	149	*30	283
22	97	145	46	150	72	93	734	270	67	133	33	179
23	87	120	43	140	81	100	678	320	63	128	32	139
24	80	158	46	120	85	92	552	292	61	165	33	816
25	113	149	54	115	95	87	510	232	82	142	48	*456
26	119	116	52	110	125	91	573	208	78	165	38	287
27	105	110	49	115	160	*86	564	1,970	63	128	34	216
28	103	113	47	105	140	83	1,260	2,120	63	103	32	172
29	97	97	44	90	115	83	2,670	846	61	85	29	145
30	90	87	47	100	-------	85	3,280	636	56	76	29	125
31	496	----	47	98	-------	83	-------	615	-------	67	104	----
Total	3,444	7,982	1,992	7,123	2,764	2,917	24,861	24,739	6,769	8,620	1,255	5,475
Mean	111	266	64.3	230	95.3	94.1	829	798	226	278	40.5	182
Cfsm	0.776	1.86	0.450	1.61	0.666	0.658	5.80	5.58	1.58	1.94	0.283	1.27
In.	0.90	2.08	0.52	1.85	0.72	0.76	6.47	6.43	1.76	2.24	0.33	1.42

Calendar year 1955: Max 2,910 Min 21 Mean 243 Cfsm 1.70 In. 23.03
Water year 1955-56: Max 3,280 Min 28 Mean 268 Cfsm 1.87 In. 25.48

Peak discharge (base, 3,600 cfs).--Apr. 30 (4 a.m.) 5,900 cfs (7.00 ft); May 27 (10 p.m.) 5,240 cfs (7.90 ft); July 14 (10 a.m.) 3,910 cfs (7.01 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 27 to Dec. 2, Dec. 6, 7, Dec. 15 to Jan. 13, Jan. 15 to Feb. 8, Feb. 16, 17, Feb. 22 to Mar. 4, Mar. 9, 16, 25, Apr. 4-6 (no gage-height record Dec. 21-25).

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 1956. 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.--53 years, 1,368 cfs.
Extremes.--Maximum discharge during year, 15,900 cfs May 28; maximum gage height, 11.54 ft Jan. 10 (ice jam); minimum discharge, 172 cfs Aug. 30, but may have been less during day of ice effect Dec. 23; minimum daily, 180 cfs Dec. 23.
1903-56: 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 or no gage-height record, 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 26 to Feb. 26, Feb. 29 to Apr. 4; rate of change in stage used as a factor Jan. 11, Apr. 29 to May 1, May 27, 28, June 3, 4, July 14, 15)

Oct. 1 to May 27				May 28 to Sept. 30			
0.3	175	2.0	1,650	0.2	167	2.0	1,740
.6	307	6.0	7,150	.5	330	6.0	7,150
1.0	580	10.0	14,400	1.0	700	9.0	12,400

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	307	3,000	440	240	440	450	350	8,200	2,830	411	404	1,480
2	297	2,100	380	220	400	450	360	5,390	2,280	370	384	884
3	239	1,380	422	215	380	442	460	6,080	5,010	350	350	1,090
4	226	1,270	415	230	390	450	600	5,950	6,550	311	330	742
5	213	4,330	428	250	410	435	2,200	5,350	3,860	293	311	513
6	209	2,950	390	260	410	428	3,750	4,780	2,720	361	299	426
7	1,090	1,990	320	250	420	415	3,500	4,370	2,050	543	280	1,140
8	1,220	1,670	350	240	420	410	2,790	3,790	1,680	536	262	866
9	780	1,420	350	1,800	420	440	2,050	2,990	1,480	2,730	268	589
10	540	1,180	330	11,000	410	430	1,660	3,770	1,410	4,090	280	476
11	422	1,090	320	9,750	396	430	1,710	3,940	1,400	1,730	376	411
12	364	1,090	310	5,810	402	440	2,290	3,720	1,180	1,110	350	377
13	324	1,050	320	5,410	396	440	2,840	5,910	1,020	1,250	293	357
14	302	981	300	3,230	383	428	2,790	5,770	894	8,630	257	324
15	297	1,100	320	2,190	370	420	2,420	4,640	785	5,330	230	592
16	377	970	310	1,770	350	350	3,120	3,930	692	2,910	213	521
17	495	1,410	290	1,460	330	390	6,250	3,860	a660	2,690	204	1,520
18	1,070	1,330	295	900	360	430	4,960	2,720	a600	1,750	190	2,990
19	710	970	295	700	360	420	3,790	2,160	a570	1,300	224	1,380
20	548	830	230	850	350	420	3,210	2,020	a540	1,020	240	1,670
21	471	720	200	900	347	400	2,850	1,780	a540	848	218	2,410
22	478	680	a190	800	300	410	2,840	1,690	a540	768	*218	1,380
23	450	610	a180	700	300	450	2,570	2,200	a470	742	218	1,050
24	415	730	a200	600	300	430	2,130	2,210	a520	1,170	204	3,660
25	569	720	a270	600	340	400	1,860	1,550	a630	884	327	*3,070
26	643	560	a260	550	500	400	2,030	1,320	a600	785	280	1,770
27	548	520	*a250	520	*740	*400	1,930	5,210	*a490	676	199	1,350
28	508	556	240	490	600	370	3,600	11,200	558	582	204	1,100
29	*478	*480	230	460	490	360	9,010	4,830	521	506	181	932
30	486	420	240	*480	-------	380	*13,700	3,320	469	*462	181	803
31	2,510	-------	250	490	-------	360	-------	*3,220	-------	433	412	----- --
Total	17,586	38,107	9,325	53,365	11,714	12,878	93,620	127,670	43,549	45,571	8,387	35,873
Mean	567	1,270	301	1,721	404	415	3,121	4,118	1,452	1,470	271	1,196
Cfsm	0.912	2.04	0.484	2.77	0.650	0.667	5.02	6.62	2.33	2.36	0.436	1.92
In.	1.05	2.28	0.56	3.19	0.70	0.77	5.60	7.63	2.60	2.72	0.50	2.14

Calendar year 1955: Max 12,300 Min 146 Mean 1,172 Cfsm 1.88 In. 25.57
Water year 1955-56: Max 13,700 Min 180 Mean 1,360 Cfsm 2.19 In. 29.74

Peak discharge (base, 12,600 cfs).--Jan. 10 (about 6 p.m.) about 13,400 cfs; Apr. 30 (2:30 p.m.) 14,800 cfs; May 28 (2:30 a.m.) 15,900 cfs; July 14 (3 p.m.) 13,700 cfs.
* 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, powerplant records, and records for Pemigewasset River at Woodstock, and Baker River near Rumney.
Note.--Stage-discharge relation affected by ice Nov. 21-23, 26, 27, Nov. 29 to Dec. 2, Dec. 6 to Jan. 10, Jan. 18 to Feb. 10, Feb. 16-20, Feb. 22 to Mar. 2, Mar. 4, 7-13, Mar. 15 to Apr. 7, Apr 9.

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 1956.

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

Average discharge.--17 years, 93.3 cfs.

Extremes.--Maximum discharge during year, 131 cfs Apr. 17, 18 (gage height, 10.72 ft); minimum daily, 68 cfs Dec. 29 to Jan. 8, Jan. 11, 12.
1939-56: 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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

10.3	57
10.4	73
10.6	107
10.8	149

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	79	78	68	70	87	121	*123	93	73	89	83
2	86	79	78	68	70	87	121	123	93	73	89	83
3	86	79	78	68	70	87	121	125	94	73	89	83
4	86	78	78	68	70	87	121	125	94	73	89	83
5	86	79	78	68	70	87	121	127	113	73	89	83
6	86	78	78	68	70	87	123	127	127	73	89	83
7	86	78	78	68	81	87	123	127	127	73	89	83
8	84	78	78	68	87	87	121	105	127	73	89	83
9	84	78	78	70	87	113	121	91	127	73	89	83
10	84	78	78	70	87	127	121	91	127	73	89	81
11	84	78	78	68	87	127	123	91	127	73	87	81
12	*83	78	78	68	87	125	123	91	127	73	87	81
13	81	76	*78	70	87	123	123	91	127	73	87	81
14	79	78	78	70	87	123	123	91	127	73	87	81
15	78	78	79	70	87	123	123	91	127	75	87	81
16	76	78	76	70	87	123	125	89	127	73	87	81
17	78	78	70	70	87	123	129	89	127	73	86	81
18	79	78	70	70	87	123	129	89	105	*73	86	81
19	79	78	70	70	87	123	127	89	93	73	86	81
20	78	78	70	70	87	123	103	89	81	73	86	81
21	78	76	70	70	*87	121	89	89	73	73	86	79
22	78	76	70	70	87	121	89	89	73	75	86	79
23	78	78	70	70	87	121	89	89	73	75	84	79
24	78	78	70	70	87	121	89	89	73	75	84	*81
25	76	78	70	70	87	121	89	89	73	75	84	81
26	76	78	70	70	87	121	89	89	73	83	84	79
27	75	78	70	70	87	119	89	91	73	89	84	79
28	75	78	70	70	87	119	89	93	73	89	83	79
29	75	78	68	70	87	119	91	93	73	89	83	79
30	75	78	68	70	-------	119	113	93	73	89	83	79
31	78	-------	68	70	-------	121	-------	93	-------	89	83	------
Total	2,491	2,338	2,291	2,150	2,415	3,495	3,358	3,061	3,020	2,363	2,680	2,432
Mean	80.4	77.9	73.9	69.4	83.3	113	112	98.7	101	76.2	86.5	81.1
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 159 Min 68 Mean 93.3 Cfsm - In. -
Water year 1955-56: Max 129 Min 68 Mean 87.7 Cfsm - In. -

* Discharge measurement made on this day.

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 1956.

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.--38 years, 144 cfs.

Extremes.--Maximum discharge during year, 1,670 cfs Apr. 30 (gage height, 6.41 ft); minimum daily, 10 cfs Aug. 27-30.

1918-56: 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 determination of peak flow; minimum daily, 2.7 cfs Aug. 2, 1933.

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 table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.9	8.1	3.5	207
2.0	12	4.0	380
2.2	22	5.0	860
2.5	43	6.0	1,420
3.0	96	6.5	1,720

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	456	64	25	55	62	61	*1,410	263	38	23	15
2	25	297	56	25	56	60	67	1,020	218	35	21	16
3	23	204	65	24	57	61	83	871	438	33	20	19
4	21	233	67	25	54	65	101	795	685	28	19	18
5	19	715	72	27	59	67	156	735	*515	27	18	16
6	21	675	68	29	58	64	b275	650	330	46	17	14
7	89	438	52	28	58	62	b490	533	238	59	17	18
8	106	297	57	30	60	61	b490	420	184	61	16	18
9	82	238	53	b135	62	60	376	304	154	65	16	17
10	63	191	50	b550	61	60	319	304	147	100	15	15
11	*48	184	48	b640	60	54	346	330	154	84	14	14
12	38	204	48	b720	60	60	502	283	131	63	14	14
13	34	194	*48	815	60	61	575	257	113	66	13	14
14	31	174	49	630	60	60	556	250	93	212	13	14
15	70	*164	51	b460	60	60	510	263	81	186	12	13
16	123	151	48	b320	59	56	645	235	71	110	11	17
17	161	184	48	*b220	58	54	942	221	65	110	11	35
18	311	166	46	b190	59	56	1,010	191	58	87	11	60
19	197	135	42	b175	58	59	915	174	52	66	14	49
20	133	117	32	b155	58	60	765	158	48	55	14	48
21	103	108	b28	b110	*56	57	665	144	47	44	*13	48
22	82	101	b27	88	55	60	645	131	46	41	13	41
23	71	91	27	81	54	64	625	125	42	41	12	39
24	66	93	27	72	53	64	542	125	46	*40	12	358
25	79	96	29	68	55	61	474	111	53	40	11	*274
26	88	87	30	64	65	60	488	103	53	48	11	131
27	81	74	30	64	71	60	474	393	52	48	10	84
28	73	81	28	57	74	59	685	845	49	35	10	66
29	66	73	26	52	67	58	1,280	705	48	30	10	56
30	61	62	26	56	-------	*59	1,610	456	45	26	10	47
31	323	-------	27	55	-------	60	-------	334	-------	24	13	-------
Total	2,713	6,283	1,369	5,990	1,722	1,864	16,672	12,876	4,519	1,948	434	1,588
Mean	87.5	209	44.2	193	59.4	60.1	556	415	151	62.8	14.0	52.9
Cfsm	1.02	2.44	0.515	2.25	0.692	0.700	6.48	4.84	1.76	0.732	0.163	0.617
In.	1.18	2.72	0.59	2.60	0.75	0.81	7.23	5.58	1.96	0.84	0.19	0.69

Calendar year 1955: Max 882 Min 9.6 Mean 140 Cfsm 1.63 In. 22.09
Water year 1955-56: Max 1,610 Min 10 Mean 158 Cfsm 1.84 In. 25.14

Peak discharge (base, 1,150 cfs).--Apr. 30 (3 a.m.) 1,670 cfs (6.41 ft).

* Discharge measurement made on this day.

b Stage-discharge relation affected by ice.

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 1956. September 1933 to October 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, 4.69 ft June 4; minimum daily, 1.71 ft Mar. 28, 29.
1937-56: 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. 109), 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 1955-56 (gage height, in feet, and contents, in millions of cubic feet)

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

Mean gage height, in feet, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.76	2.78	2.88	2.30	3.10	2.27	1.74	4.02	4.58	4.26	4.14	3.63
2	2.75	2.80	2.88	2.30	3.09	2.22	1.75	4.09	4.58	4.25	4.11	3.63
3	2.72	2.81	2.87	2.29	3.08	2.18	1.76	4.16	4.63	4.25	4.08	3.65
4	2.70	2.85	2.90	2.29	3.06	2.20	1.80	4.22	4.69	4.24	4.07	3.64
5	2.69	2.93	2.90	2.28	3.05	2.19	1.84	4.29	4.68	4.23	4.06	3.62
6	2.70	2.94	2.86	2.27	3.03	2.15	1.89	4.34	4.65	4.28	4.05	3.61
7	2.80	2.97	2.86	2.29	3.06	2.15	1.94	4.39	4.61	4.27	4.03	3.61
8	2.79	2.99	2.86	2.36	3.05	2.15	2.01	4.39	4.60	4.26	4.01	3.59
9	2.77	3.00	2.82	2.45	3.01	2.12	2.06	4.42	4.57	4.30	4.00	3.57
10	2.76	3.00	2.76	2.56	2.97	2.08	2.10	4.45	4.53	4.29	3.99	3.53
11	2.75	3.03	2.73	2.67	2.94	2.04	2.15	4.49	4.50	4.28	3.96	3.50
12	2.76	3.04	2.70	2.76	2.92	2.00	2.20	4.48	4.46	4.26	3.95	3.49
13	2.76	3.04	2.68	2.91	2.88	1.98	2.26	4.49	4.44	4.28	3.93	3.48
14	2.78	3.05	2.66	3.06	2.84	1.96	2.34	4.50	4.43	4.33	3.91	3.45
15	2.76	3.03	2.62	3.13	2.81	1.95	2.42	4.49	4.43	4.34	3.88	3.45
16	2.74	3.07	2.54	3.17	2.76	1.94	2.57	4.49	4.41	4.34	3.88	3.46
17	2.73	3.03	2.53	3.18	2.72	1.96	2.73	4.49	4.40	4.34	3.87	3.48
18	2.72	3.01	2.49	3.18	2.70	1.92	2.86	4.48	4.37	4.33	3.86	3.45
19	2.72	3.06	2.45	3.18	2.68	1.89	2.97	4.45	4.36	4.32	3.86	3.45
20	2.70	3.03	2.38	3.18	2.65	1.85	3.06	4.43	4.33	4.32	3.85	3.46
21	2.69	3.02	2.34	3.18	2.59	1.82	3.15	4.42	4.31	4.31	3.84	3.45
22	2.68	2.99	2.35	3.18	2.54	1.78	3.24	4.39	4.30	4.31	3.83	3.42
23	2.67	3.03	2.33	3.18	2.50	1.74	3.34	4.36	4.29	4.29	3.81	3.44
24	2.66	3.01	2.32	3.17	2.45	1.75	3.41	4.35	4.34	4.29	3.77	3.57
25	2.64	3.01	2.31	3.19	2.42	1.74	3.47	4.35	4.33	4.30	3.74	3.56
26	2.65	3.00	2.30	3.19	2.42	1.74	3.53	4.35	4.30	4.26	3.71	3.57
27	2.63	2.98	2.30	3.19	2.41	1.72	3.58	4.46	4.31	4.26	3.69	3.56
28	2.63	2.98	2.31	3.18	2.36	1.71	3.65	4.56	4.31	4.24	3.67	3.54
29	2.62	2.93	2.31	3.15	2.30	1.71	3.78	4.58	4.29	4.19	3.66	3.53
30	2.64	2.88	2.30	3.14	------	1.72	3.90	4.57	4.27	4.16	3.65	3.52
31	2.74	------	2.30	3.12	------	1.74	------	4.57	------	4.15	3.65	------
(†)	15,370	15,610	14,470	16,060	14,430	13,370	17,800	19,000	18,380	18,140	17,120	16,880
(‡)	-40	+240	-1,140	+1,590	-1,630	-1,060	+4,430	+1,200	-620	-240	-1,020	-240
(††)	-14.9	+92.6	-426	+594	-651	-396	+1,709	+448	-239	-89.6	-381	-92.6

Calendar year 1955..... ‡ -3,050 †† -96.7
Water year 1955-56..... ‡ +1,470 †† +46.5

† Contents, in millions of cubic feet, at 12 p.m. on last day of month.
‡ Change in contents, in millions of cubic feet.
†† Change in contents, equivalent in cubic feet per second.
Note.--Gage-heights for period Jan. 1-22 computed on basis of records for station at Lakeport.

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 1956.

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.--23 years, 543 cfs (adjusted for storage).

Extremes.--Maximum daily discharge during year, 1,690 cfs June 5; minimum daily, 165 cfs Apr. 7.
1933-56: Maximum daily discharge, 2,890 cfs Mar. 31, 1936; minimum daily, 20 cfs Dec. 6-19, 1941, Dec. 22, 1941, to Jan. 19, 1942.

Remarks.--Records good except those below 250 cfs, which are fair. Flow completely regulated by Winnipesaukee (see preceding page), Wentworth, Merrymeeting (see p. 109), and other lakes. Daily discharge computed from relation between discharge, stage, and deflection of vane in measuring flume.

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	510	215	505	260	980	1,490	190	270	1,100	320	375	295
2	500	225	510	260	980	1,470	220	270	1,100	350	370	250
3	565	230	445	445	970	1,420	190	270	1,090	310	355	405
4	540	225	460	515	960	1,440	180	275	1,510	300	350	480
5	330	260	525	510	950	1,470	185	240	*1,690	370	350	420
6	245	245	505	515	990	1,450	185	350	1,670	335	355	385
7	250	265	585	470	885	1,450	165	275	1,670	295	300	415
8	*460	235	685	510	1,200	1,440	215	300	1,380	345	280	*400
9	280	240	815	330	1,370	1,420	215	455	1,190	370	295	425
10	265	240	910	205	1,370	1,390	195	485	1,190	295	285	480
11	240	230	900	215	1,370	1,350	190	*665	*1,240	295	295	445
12	235	265	925	220	1,350	1,390	195	785	1,210	305	350	440
13	265	260	970	530	1,340	1,370	200	810	940	265	370	435
14	230	270	*1,140	1,100	1,340	1,370	265	835	790	270	295	425
15	235	235	1,130	1,290	1,350	1,370	205	815	565	335	290	480
16	245	240	1,030	915	1,400	1,370	235	810	350	360	305	455
17	245	240	945	250	1,380	*1,210	220	965	355	310	300	555
18	215	245	930	240	1,340	1,260	220	*1,070	390	305	255	380
19	210	225	955	245	1,320	1,310	225	1,060	385	305	285	295
20	215	260	925	250	1,400	1,280	220	1,060	370	300	340	295
21	220	270	920	*250	*1,530	1,250	250	1,090	360	285	310	285
22	220	235	710	300	*1,580	1,250	270	925	350	335	300	300
23	240	240	450	310	1,560	1,050	250	930	340	330	300	275
24	245	215	250	315	1,550	595	265	795	355	330	*300	345
25	225	275	260	260	865	605	240	445	370	*335	285	300
26	225	315	260	270	880	655	240	255	350	340	395	*300
27	215	470	265	685	1,570	625	245	510	345	435	445	300
28	215	525	230	975	1,540	675	220	1,120	335	565	400	295
29	*240	510	225	965	1,520	515	280	1,110	340	575	400	310
30	230	500	225	1,010	-------	190	295	1,080	300	430	395	280
31	230	-------	235	980	-------	210	-------	1,100	-------	380	340	-------
Total	8,785	8,405	19,825	15,595	36,840	35,340	6,670	21,425	23,630	10,680	10,270	11,150
Mean	283	280	640	503	1,270	1,140	222	691	788	345	331	372
(†)	-14.9	+92.8	-426	+594	-851	-396	+1,709	+448	-239	-89.6	-381	-92.6

Adjusted for change in reservoir contents

Mean	268	373	214	1,097	620	744	1,931	1,139	548	255	-49.5	279
Cfsm	0.738	1.03	0.590	3.02	1.71	2.05	5.32	3.14	1.51	0.702	-0.136	0.769
In.	0.85	1.15	0.68	3.48	1.84	2.36	5.94	3.62	1.69	0.81	-0.16	0.86

	Observed			Adjusted		
Calendar year 1955:	Max 1,860	Min 175	Mean 622	Mean 525	Cfsm 1.45	In. 19.65
Water year 1955-56:	Max 1,690	Min 165	Mean 570	Mean 616	Cfsm 1.70	In. 23.12

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Lake Winnipesaukee.
Note.--Negative figures of adjusted discharge and runoff indicate that evaporation and seepage from reservoir exceeded inflow.

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 1956.

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

Average discharge.--19 years, 709 cfs.

Extremes.--Maximum discharge during year, 1,940 cfs June 5, 6 (gage height, 5.93 ft); minimum daily, 250 cfs Dec. 31, Jan. 1, 2.
1937-56: Maximum discharge, 3,810 cfs Sept. 21, 1938 (gage height, 7.90 ft), from rating curve extended above 2,100 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 excellent except those for periods of ice effect, which are good. Flow regulated by powerplants and by Winnipesaukee (see p. 81), Winnisquam, Merrymeeting (see p. 109), and other lakes above station.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to May 28		May 29 to Sept. 30	
3.0	217	3.0	253
3.5	405	3.5	437
4.0	630	4.0	660
5.0	1,190	5.0	1,250
6.0	1,900	6.0	2,000

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	317	321	585	250	1,040	1,350	413	1,100	1,360	327	301	312
2	321	302	580	250	1,040	1,370	526	*980	1,120	323	298	309
3	476	295	553	260	1,040	1,370	544	932	1,190	327	298	402
4	705	317	571	*290	1,040	1,400	558	914	*1,520	383	301	445
5	740	417	580	300	1,040	1,420	585	920	1,930	410	301	528
6	462	385	576	305	1,030	1,420	665	884	1,940	410	301	537
7	357	357	571	310	1,050	1,430	745	770	1,910	449	301	383
8	345	353	605	345	1,040	1,440	735	625	1,880	441	312	309
9	329	353	725	490	1,080	1,430	675	585	1,770	390	323	375
10	314	389	735	890	1,280	1,430	665	540	1,560	330	312	519
11	302	433	932	1,230	1,300	1,420	710	401	1,360	330	309	528
12	302	369	938	1,200	1,300	1,400	770	381	1,060	327	309	528
13	298	365	926	1,230	1,290	1,400	824	401	1,030	338	305	515
14	298	365	926	1,240	1,290	1,400	852	445	1,020	437	305	334
15	298	401	938	1,380	1,290	1,400	852	504	787	498	305	294
16	287	441	956	1,320	1,290	1,390	974	620	356	481	305	342
17	302	445	956	655	1,320	1,410	1,340	735	323	481	305	457
18	302	437	956	440	1,350	1,390	1,560	944	305	477	305	323
19	302	429	962	420	1,340	1,380	1,420	1,050	298	469	316	294
20	298	417	945	481	1,310	1,380	1,300	1,110	294	465	309	298
21	295	405	930	435	1,290	1,370	1,260	1,160	294	461	305	301
22	287	413	920	421	1,310	1,370	1,240	1,040	298	461	305	294
23	287	405	620	413	1,330	1,360	1,230	1,020	305	421	305	301
24	283	397	540	410	1,340	1,290	1,160	1,000	309	319	*301	402
25	283	405	510	400	1,360	1,110	1,000	802	305	309	305	379
26	287	405	510	370	1,300	1,010	835	373	312	*309	387	349
27	287	544	600	357	*1,170	968	926	500	*316	305	437	*334
28	287	660	470	540	1,320	879	962	1,320	*338	301	445	330
29	287	590	340	890	1,340	*765	1,090	1,540	342	301	437	330
30	287	*576	270	*1,030	-------	760	1,200	1,470	334	301	437	323
31	*341	-------	250	1,040	-------	608	-------	1,440	-------	305	371	-------
Total	10,566	12,391	21,476	19,592	35,520	39,520	27,616	26,506	26,166	11,886	10,156	11,375
Mean	341	413	693	632	1,225	1,275	921	855	872	383	328	379
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 1,850 Min 250 Mean 726 Cfsm - In. -
Water year 1955-56: Max 1,940 Min 250 Mean 691 Cfsm - In. -

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 20 to Jan. 10, Jan. 18, 19, 21, 24-26, 28, Feb. 22, Mar. 25.

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 1956.

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.--51 years (1905-56), 2,805 cfs.

Extremes.--Maximum discharge during year, 16,400 cfs Apr. 30 (gage height, 13.21 ft); minimum daily, 452 cfs Aug. 18.
1903-56: 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 determination and computation of flow over dam at gage height 29.5 ft, and velocity-area study; minimum daily, 225 cfs Oct. 23, 1948.

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. Flow regulated by powerplants, by Franklin Falls Reservoir since 1942, and by Squam, Little Squam, Newfound, Winnipesaukee, Winnisquam, Wentworth, Merrymeeting, and other lakes. See pages 81 and 109 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.5	420	7.0	4,270
4.0	735	10.0	10,100
5.0	1,630	13.0	16,100

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	757	4,670	1,800	720	2,000	2,500	1,240	15,900	4,840	1,230	1,150	1,360
2	960	3,780	1,700	800	2,040	2,300	1,640	*13,200	4,650	949	1,070	1,750
3	1,100	2,600	1,250	850	2,000	1,820	1,870	10,300	5,600	1,060	920	1,570
4	1,280	2,540	1,570	910	1,700	2,350	1,680	10,100	*11,000	971	470	1,730
5	1,270	5,110	1,700	920	1,880	2,470	2,480	9,620	9,660	971	900	1,700
6	1,310	5,350	1,740	920	1,960	2,480	3,300	8,580	7,440	1,180	1,050	1,470
7	1,590	3,950	1,600	560	2,110	2,470	5,350	7,680	5,710	1,070	*928	1,470
8	1,650	3,070	1,500	920	2,200	2,360	5,500	6,580	4,880	1,250	928	1,580
9	1,780	2,710	1,640	2,500	2,280	2,350	4,370	5,260	4,410	1,680	978	1,360
10	1,620	2,540	1,190	8,200	2,450	1,800	3,820	4,950	4,060	4,770	993	1,340
11	1,090	2,480	1,780	9,700	2,090	2,260	3,820	5,820	3,580	3,400	458	1,300
12	1,040	2,230	1,700	4,410	2,190	2,390	4,500	5,060	2,850	2,300	934	1,300
13	1,000	2,060	1,700	5,370	2,290	2,450	5,500	5,960	2,860	1,840	1,270	1,310
14	1,140	2,120	1,700	6,760	2,400	2,370	5,880	7,700	2,770	4,850	896	1,110
15	580	2,180	1,750	9,000	2,380	2,470	5,520	6,880	2,430	9,000	906	615
16	891	2,190	1,700	9,020	2,370	2,370	6,200	6,010	1,630	5,320	906	1,500
17	1,500	2,380	1,600	5,540	2,330	1,720	9,300	5,770	1,430	3,690	807	1,650
18	1,810	2,510	1,650	2,940	1,700	2,200	11,100	5,270	1,390	3,190	452	3,210
19	1,660	2,170	1,650	2,230	2,320	2,400	8,940	4,350	1,430	2,550	808	2,670
20	1,720	2,000	1,600	1,940	2,480	2,380	7,660	4,110	1,250	1,950	779	2,120
21	1,150	1,590	1,500	1,650	2,290	2,360	6,900	3,900	1,120	1,700	833	2,980
22	800	1,770	1,300	1,910	2,150	2,360	6,660	3,430	1,230	1,550	937	2,480
23	1,160	1,680	1,200	1,840	2,180	2,360	6,620	3,400	642	1,600	867	1,970
24	1,240	1,470	800	1,720	2,200	1,680	5,820	4,110	1,180	1,700	*842	3,430
25	1,160	1,620	1,100	1,790	1,880	1,900	5,000	3,660	1,330	1,700	551	*5,040
26	1,310	1,550	1,050	1,770	2,160	2,030	4,790	2,430	1,480	1,550	840	3,350
27	1,300	1,610	1,250	1,470	2,190	2,000	4,790	3,620	1,390	1,500	998	2,360
28	1,160	1,780	1,150	980	*2,560	1,980	5,780	13,000	*1,490	1,000	1,080	2,220
29	903	1,880	950	1,940	2,710	*1,860	10,800	12,500	1,380	1,200	1,080	1,920
30	1,070	*1,650	700	2,000	-------	1,760	15,000	8,080	517	1,200	1,090	1,530
31	*2,180	-------	460	1,930	-------	939	-------	7,200	-------	*1,250	1,050	-------
Total	39,181	75,240	43,980	93,210	63,510	67,139	171,830	214,430	95,629	69,171	27,771	59,375
Mean	1,264	2,508	1,419	3,007	2,190	2,166	5,728	6,917	3,188	2,231	896	1,979
Cfsm	0.839	1.66	0.942	2.00	1.45	1.44	3.80	4.59	2.12	1.48	0.595	1.31
In.	0.97	1.86	1.09	2.30	1.57	1.66	4.24	5.29	2.36	1.71	0.69	1.47

Calendar year 1955: Max 14,400 Min 460 Mean 2,597 Cfsm 1.72 In. 23.40
Water year 1955-56: Max 15,900 Min 452 Mean 2,786 Cfsm 1.85 In. 25.21

* Discharge measurement made on this day.

Note.--No gage-height record Dec. 12 to Jan. 3, July 20 to Aug. 1, Aug. 3-6, 26; discharge estimated on basis of weather records, recorded range in stage when available, and records for other stations in Merrimack River basin. Stage-discharge relation affected by ice Jan. 4-10, 28, Feb. 4, 17, 22-24, Mar. 1, 9, 17-19, 25, and at times during period of no gage-height record December and January. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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 1956.

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

Average discharge.--11 years, 127 cfs.

Extremes.--Maximum discharge during year, 2,050 cfs Jan. 10 (gage height, 5.66 ft); minimum daily, 3.6 cfs Sept. 11.

1945-56: 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 or no gage-height record, which are fair. Flow regulated by mill and reservoirs above station.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.8	3.6	2.0	124
.9	6.0	2.5	257
1.0	9.2	3.0	440
1.2	20	4.0	900
1.4	36	5.0	1,540
1.7	71		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a19	347	168	43	170	100	61	996	129	57	29	5.5
2	a11	282	157	30	160	88	*102	755	82	48	28	12
3	a40	227	146	20	150	120	88	663	204	24	33	15
4	a50	336	160	29	140	115	134	614	278	18	5.9	25
5	a45	864	160	35	135	100	193	573	197	20	4.7	4.3
6	a85	568	146	45	150	100	294	507	135	38	12	16
7	a75	426	134	50	105	105	347	468	116	25	14	27
8	70	362	130	70	125	80	264	*428	106	24	14	9.5
9	56	300	126	1,200	105	95	278	334	74	40	4.5	14
10	*50	219	101	1,390	105	95	257	271	82	73	14	26
11	37	260	78	1,010	90	80	274	226	128	67	6.5	3.6
12	40	307	82	815	105	105	326	213	104	61	12	12
13	41	311	75	735	95	72	370	165	92	61	28	25
14	58	408	85	551	100	90	398	184	83	81	4.5	15
15	1,220	408	72	436	80	92	426	199	79	72	16	12
16	1,080	362	78	370	76	76	620	173	51	75	15	28
17	1,100	*491	76	274	74	90	870	170	66	41	4.5	52
18	846	398	50	244	64	80	730	165	92	*31	6.2	32
19	596	319	73	216	78	92	686	118	65	16	9.4	26
20	426	251	55	188	95	85	658	62	78	6.6	18	24
21	300	254	71	158	90	92	578	93	78	10	13	22
22	211	235	70	155	95	92	654	135	81	23	*4.5	12
23	188	228	70	160	100	91	640	115	60	35	10	18
24	205	192	66	145	94	74	547	103	69	27	17	96
25	188	231	54	160	90	90	503	107	92	5.0	5.4	102
26	180	202	48	160	120	100	507	55	86	25	7.6	*84
27	188	180	60	160	97	78	479	69	77	4.7	17	75
28	241	191	64	155	120	94	723	146	88	31	4.5	77
29	125	183	55	155	100	70	1,410	124	81	20	13	38
30	144	173	45	*165	-------	74	1,340	81	42	50	12	55
31	344	----	58	170	-------	94	-------	107	-------	33	12	----
Total	8,259	9,515	2,813	9,494	3,108	2,809	14,757	8,417	2,995	1,142.3	395.2	962.9
Mean	266	317	90.7	306	107	90.6	492	272	99.8	36.8	12.7	32.1
Cfsm	3.91	4.65	1.33	4.49	1.57	1.33	7.22	3.99	1.47	0.540	0.186	0.471
In.	4.51	5.20	1.54	5.18	1.70	1.53	8.06	4.60	1.64	0.62	0.22	0.53

Calendar year 1955: Max 1,220 Min 3.0 Mean 140 Cfsm 2.06 In. 27.96
Water year 1955-56: Max 1,410 Min 3.6 Mean 177 Cfsm 2.60 In. 35.33

Peak discharge (base, 700 cfs).--Oct. 15 (7:30 p.m.) 1,680 cfs (5.20 ft); Nov. 5 (5:30 a.m.) 1,000 cfs (4.17 ft); Jan. 10 (1:30 a.m.) 2,050 cfs (5.66 ft); Apr. 16 (12 p.m.) 960 cfs (4.10 ft); Apr. 22 (7 p.m.) 730 cfs (3.68 ft); Apr. 29 (12:30 p.m.) 1,830 cfs (5.39 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 Nubanusit Brook near Peterboro.

Note.--Stage-discharge relation affected by ice Dec. 12 to Jan. 9, Jan. 22-29, Jan. 31 to Mar. 6, Mar. 8-31.

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 1956. 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.--22 years, (1920-31, 1945-56), 85.6 cfs.

Extremes.--Maximum discharge during year, 637 cfs May 7 (gage height, 4.34 ft); minimum daily, 8.5 cfs Jan. 2.
1920-31, 1945-56: 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 good. Flow regulated by mills, Nubanusit Lake, Edward MacDowell Reservoir since March 1950 (see p. 109), and other reservoirs above station.

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

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to May 6

0.8	5.9	2.0	105
.9	9.2	2.5	182
1.0	14	3.0	281
1.2	25	4.0	535
1.5	49	5.0	860

May 7 to Sept. 30

0.9	12	1.2	26
1.0	16	1.5	49

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

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	177	73	21	67	*69	82	189	87	28	23	18
2	26	196	70	8.5	67	76	*84	505	86	28	16	20
3	24	191	68	12	67	76	97	619	109	26	18	25
4	22	193	74	14	66	84	113	616	160	24	17	22
5	21	174	80	16	66	87	149	613	154	25	17	17
6	*27	370	82	28	65	80	195	613	120	32	17	16
7	70	478	73	32	72	80	233	619	97	40	17	26
8	92	378	68	34	80	79	245	*601	80	38	17	25
9	86	233	63	73	74	78	233	482	58	40	17	20
10	69	199	58	64	70	74	235	243	44	44	17	16
11	53	144	55	41	68	69	223	182	50	38	16	14
12	43	157	53	33	69	76	221	143	46	32	19	*13
13	37	172	48	60	69	76	229	122	39	32	26	15
14	45	191	42	220	66	73	250	108	32	56	26	16
15	50	186	50	358	64	74	268	101	26	61	22	18
16	35	210	50	442	64	71	308	96	22	49	19	26
17	52	*223	50	511	65	68	292	92	19	41	17	41
18	205	262	48	517	67	70	490	86	19	35	17	40
19	458	292	46	535	69	70	538	82	16	29	17	36
20	544	273	43	559	67	72	535	82	16	26	18	31
21	538	211	44	559	58	70	529	78	16	25	19	30
22	529	121	44	556	48	70	499	72	17	28	*23	26
23	529	109	44	499	46	78	481	72	17	29	25	24
24	517	115	43	180	54	77	450	69	20	*28	22	54
25	348	122	42	110	64	75	395	64	22	28	20	72
26	131	120	42	85	92	78	279	61	22	26	18	56
27	91	98	42	73	95	76	288	74	26	24	17	41
28	69	85	41	67	87	76	295	102	40	23	15	32
29	58	76	41	64	73	79	50	96	37	21	*16	28
30	54	67	39	*65	-------	84	44	85	31	20	14	24
31	106	-------	38	67	-------	84	-------	84	-------	18	21	-------
Total	4,962	5,823	1,654	5,903.5	1,979	2,349	8,330	7,051	1,528	994	583	842
Mean	160	194	53.4	190	68.2	75.8	278	227	50.9	32.1	18.8	28.1
Cfsm	3.41	4.14	1.14	4.05	1.45	1.62	5.93	4.84	1.09	0.684	0.401	0.599
In.	3.93	4.62	1.31	4.68	1.57	1.86	6.61	5.59	1.21	0.79	0.46	0.67

Calendar year 1955: Max 544 Min 5.9 Mean 95.8 Cfsm 2.04 In. 27.71
Water year 1955-56: Max 619 Min 8.5 Mean 115 Cfsm 2.45 In. 33.30

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 12-17, 20, 21, Dec. 26 to Jan. 14, Jan. 24-26, 28, 29, Jan. 31 to Feb. 5, Feb. 8, 14, Feb. 16 to Mar. 1, Mar. 5-13, 15-29, Mar. 31 to Apr. 2. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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 1956.

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.--32 years, 101 cfs.

Extremes.--Maximum discharge during year, 1,420 cfs May 1 (gage height, 5.86 ft); minimum, 0.5 cfs Aug. 30.
1924-56: 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 determinations at gage heights 8.4 and 9.3 ft; minimum, 0.3 cfs Sept. 18, 1948, Aug. 5, 6, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, 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), 1933-56, 1938-40, 1944.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 10

0.3	4.7	1.0	32
.4	6.9	1.5	73
.6	13	2.0	129
		2.5	203

Note.--Same as following table above 2.5 ft.

Jan. 11 to Sept. 30

-0.1	0.6	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

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	284	82	19	46	*50	21	1,330	116	4.4	5.8	1.9
2	9.3	278	73	17	46	50	*21	1,010	116	4.4	5.2	2.0
3	8.2	263	71	16	47	50	31	769	184	4.3	4.4	4.9
4	7.4	276	69	17	41	55	57	654	267	4.0	3.8	2.8
5	6.7	442	72	18	47	60	95	590	265	4.0	3.4	2.0
6	9.9	503	70	19	47	58	145	521	235	7.0	2.8	2.5
7	61	470	69	19	47	56	180	456	196	8.5	2.4	10
8	102	394	a65	a25	51	54	175	*399	155	9.6	2.1	14
9	103	324	60	150	50	52	195	351	124	13	*2.0	18
10	93	263	56	500	49	54	200	313	108	15	1.9	23
11	77	233	53	740	48	52	210	282	103	18	2.2	23
12	48	224	50	721	49	54	211	243	*95	18	2.0	23
13	30	218	47	749	51	53	220	158	86	22	1.9	23
14	30	259	45	671	50	52	239	120	76	50	1.8	20
15	169	306	*44	439	50	53	253	87	64	64	1.5	15
16	439	320	42	407	50	47	311	58	53	63	1.3	14
17	868	*351	42	317	47	46	410	62	45	54	1.1	14
18	1,010	322	42	149	48	49	470	76	36	46	.9	16
19	749	286	39	124	48	49	468	82	30	37	.8	14
20	530	247	32	*110	48	50	459	84	22	28	.8	14
21	399	214	28	100	47	48	453	82	12	23	1.1	12
22	311	180	26	90	43	48	479	78	8.1	21	2.4	11
23	239	155	24	84	43	55	485	74	6.0	20	2.0	9.6
24	182	143	23	77	41	54	442	71	4.9	19	1.4	22
25	*159	132	24	75	45	52	394	68	4.7	16	1.1	31
26	151	120	26	62	50	48	371	62	4.4	15	.9	49
27	161	118	25	58	55	41	354	78	4.3	13	.7	56
28	162	103	24	54	54	37	455	116	5.2	12	*.6	41
29	138	96	22	50	a50	32	859	127	4.4	9.9	.6	31
30	122	92	22	50	-------	28	1,250	124	4.1	8.3	.6	26
31	226	-------	21	50	-------	24	-------	118	-------	6.8	1.0	-------
Total	6,610.5	7,616	1,388	5,977	1,388	1,511	9,913	8,644	2,434.1	638.2	60.5	545.7
Mean	213	254	44.8	193	47.9	48.7	330	279	81.1	20.6	1.95	18.2
Cfsm	3.89	4.64	0.818	3.52	0.874	0.889	6.02	5.09	1.48	0.376	0.036	0.332
In.	4.49	5.17	0.94	4.06	0.94	1.03	6.73	5.87	1.65	0.43	0.04	0.37

Calendar year 1955: Max 1,010 Min 0.3 Mean 115 Cfsm 2.10 In. 28.46
Water year 1955-56: Max 1,330 Min 0.6 Mean 128 Cfsm 2.34 In. 31.72

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and appearance of recorder chart on adjacent days.
Note.--Stage-discharge relation affected by ice Nov. 23, 26, 27, Nov. 29 to Dec. 2, Dec. 6, 7, Dec. 20 to Jan. 11, Jan. 20 to Mar. 29, Apr. 5-11. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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 1956. October 1945 monthly discharge only, published in WSP 1301.

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

Average discharge.--11 years, 99.1 cfs.

Extremes.--Maximum discharge during year, 1,500 cfs Apr. 30 (gage height, 5.63 ft); minimum, 2.0 cfs Aug. 29.
1945-56: 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 or no gage-height record and those below 5 cfs, which are fair.

Revisions (water years).--WSP 1231: 1948.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 9		Jan. 10 to Sept. 30			
1.3	5.4	1.08	2.0	2.0	44
1.5	11	1.1	2.3	2.3	89
1.7	19	1.2	3.7	2.6	167
		1.3	5.3	3.0	308
Note.--Same as following table above 1.7 ft.		1.4	7.2	4.0	705
		1.5	9.9	5.0	1,180
		1.7	19	6.0	1,720

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	371	68	17	44	*42	47	1,030	89	12	5.3	4.0
2	10	249	60	16	43	41	*52	648	93	11	*5.0	4.3
3	8.5	184	62	15	43	42	61	516	258	9.9	4.6	8.2
4	7.6	200	65	16	39	47	90	456	444	8.9	4.3	6.6
5	7.2	687	72	17	42	52	125	428	271	8.9	4.3	5.0
6	7.8	508	68	17	42	50	230	356	184	16	4.2	4.3
7	48	338	65	17	42	50	320	301	129	26	3.8	5.0
8	62	257	61	17	44	49	255	*253	98	22	4.0	4.5
9	42	204	57	600	45	47	255	207	79	25	*3.8	4.0
10	30	161	54	1,150	44	47	240	190	75	32	3.2	3.5
11	22	164	51	920	42	45	257	190	100	24	2.7	3.2
12	18	204	48	772	43	46	308	167	*86	22	2.8	4.3
13	16	228	47	830	44	47	364	155	68	22	2.8	14
14	19	290	*45	584	45	46	390	143	51	68	2.7	9.3
15	217	338	44	420	44	45	386	127	42	60	2.5	23
16	409	260	41	290	44	43	496	114	38	35	2.4	26
17	616	*345	39	195	43	41	656	104	40	27	2.3	31
18	588	286	38	155	42	43	669	91	32	21	2.2	35
19	*378	218	36	125	42	44	616	82	26	17	2.2	26
20	260	180	30	*94	42	45	516	79	23	14	2.4	22
21	184	150	26	85	42	44	496	70	20	13	3.1	24
22	127	130	24	75	38	45	520	66	20	13	4.2	20
23	93	115	22	68	38	47	508	64	18	13	3.8	16
24	82	110	21	65	36	48	397	66	17	14	3.3	54
25	87	110	22	60	38	50	352	60	17	12	3.0	70
26	89	105	23	57	43	49	375	52	15	9.9	2.8	42
27	79	95	22	54	47	48	345	103	14	8.6	2.5	29
28	69	86	21	49	45	47	579	232	17	7.4	*2.4	22
29	63	80	19	47	43	47	1,220	164	15	6.6	2.1	20
30	58	75	20	47	-------	46	1,380	119	13	6.0	2.3	15
31	246	-------	19	47	-------	47	-------	102	-------	5.6	3.7	-------
Total	3,953.1	6,728	1,290	6,921	1,229	1,430	12,505	6,735	2,392	590.8	100.7	555.2
Mean	128	224	41.6	223	42.4	46.1	417	217	79.7	19.1	3.25	18.5
Cfsm	2.31	4.04	0.751	4.03	0.763	0.832	7.53	3.92	1.44	0.345	0.059	0.334
In.	2.65	4.52	0.87	4.65	0.83	0.96	8.39	4.52	1.61	0.40	0.07	0.37

Calendar year 1955: Max 687 Min 1.7 Mean 100 Cfsm 1.81 In. 24.51
Water year 1955-56: Max 1,380 Min 2.1 Mean 121 Cfsm 2.18 In. 29.84

Peak discharge (base, 910 cfs).--Jan. 10 (time unknown) about 1,300 cfs; Apr. 30 (1 to 2 p.m.) 1,500 cfs (5.63 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Nov. 20 to Dec. 14, Aug. 11, 15-27; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for Warner River at Davisville and North Branch Contoocook River near Antrim. Stage-discharge relation affected by ice Dec. 15 to Jan. 11, Jan. 13, Jan. 17 to Mar. 26, Apr. 2-10, and during part of period of no gage-height record in November and December.

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 1956.

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.--17 years, 646 cfs.

Extremes.--Maximum discharge during year, 7,180 cfs May 1 (gage height, 12.05 ft); minimum daily, 42 cfs Aug. 27.
1939-56: Maximum discharge, 8,710 cfs June 26, 1944 (gage height, 13.13 ft); minimum daily, 19 cfs Oct. 29, 1940.
Maximum discharge known, 22,200 cfs Sept. 21, 1938 (gage height, 21.3 ft, from floodmarks), from rating curve extended above 7,500 cfs on basis of computations of flow over dams at gage heights 12.72 and 21.3 ft.

Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by powerplants and by Nubanusit Lake, Edward MacDowell Reservoir (see p. 109) since March 1950, Highland Lake, Jackman Reservoir, and other reservoirs above station.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 30				May 1 to Sept. 30			
5.2	170	8.0	1,350	4.2	42	7.0	700
5.5	234	9.0	2,270	4.5	67	8.0	1,320
6.0	371	10.0	3,690	5.0	129	9.0	2,270
7.0	750	12.0	7,100	5.5	220	10.0	3,690
				6.0	340	12.0	7,100

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	186	1,700	714	290	640	*590	402	6,690	638	190	88	96
2	170	1,620	700	285	650	586	*454	5,020	800	108	*88	79
3	192	1,420	674	280	610	437	520	4,030	938	92	89	77
4	255	1,380	566	280	520	444	631	3,630	1,720	87	86	67
5	192	2,660	669	285	520	578	865	3,380	1,560	78	82	75
6	221	3,280	732	290	600	578	1,270	3,090	1,210	87	72	86
7	*268	2,780	678	290	596	560	1,740	2,850	878	101	86	103
8	279	2,310	664	300	602	540	1,690	*2,600	755	93	101	94
9	234	1,980	643	900	618	480	1,530	2,350	690	99	88	84
10	241	1,530	606	3,200	614	430	1,550	2,040	562	124	77	86
11	293	1,390	442	6,000	586	400	1,680	1,630	*566	104	70	125
12	213	1,460	532	4,930	578	492	1,800	1,360	*634	89	66	132
13	276	1,550	517	4,390	602	539	2,040	1,090	427	130	59	142
14	294	1,690	524	3,460	602	490	2,210	986	343	248	55	142
15	698	2,030	*532	2,740	578	460	2,280	878	349	320	62	111
16	2,340	1,890	500	2,310	560	430	2,570	750	373	292	61	111
17	4,170	*2,040	355	1,940	540	325	3,420	665	328	282	60	190
18	4,030	2,130	335	1,590	532	425	4,010	622	205	265	60	217
19	*3,010	1,840	450	1,480	524	664	3,800	594	280	280	58	206
20	2,390	1,580	460	*1,470	551	570	3,460	546	280	270	57	200
21	2,110	1,430	450	1,330	550	465	3,280	498	268	242	51	205
22	1,830	1,300	430	1,260	560	465	3,270	509	260	218	62	132
23	1,570	1,150	380	1,220	550	500	3,560	526	244	159	63	114
24	1,460	1,080	310	1,080	490	450	3,100	520	210	193	67	227
25	1,430	1,060	290	910	375	450	2,670	484	137	191	64	318
26	1,230	1,050	305	800	360	480	2,540	454	178	184	51	256
27	955	972	310	740	578	485	2,320	512	195	152	*42	285
28	840	933	300	570	635	465	2,680	824	218	137	47	265
29	800	900	300	520	600	490	4,490	830	220	118	59	203
30	570	755	305	570	-------	460	6,560	715	214	81	65	180
31	1,010	-------	305	640	-------	393	-------	606	-------	85	80	-------
Total	33,757	48,890	14,978	46,350	16,321	15,121	72,392	51,279	15,680	5,099	2,116	4,608
Mean	1,089	1,630	483	1,495	563	488	2,413	1,654	523	164	68.3	154
Cfsm	2.96	4.43	1.31	4.06	1.53	1.33	6.56	4.49	1.42	0.446	0.186	0.418
In.	3.41	4.94	1.51	4.68	1.65	1.53	7.32	5.18	1.58	0.52	0.21	0.47

Calendar year 1955: Max 4,170 Min 60 Mean 739 Cfsm 2.01 In. 27.27
Water year 1955-56: Max 6,690 Min 42 Mean 892 Cfsm 2.42 In. 33.00

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 16 to Jan. 10, Jan. 18 to Feb. 6, Feb. 16, 17, 21-26, 29, Mar. 1, 7-11, 14-18, 20-29. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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 1956.

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.--17 years, 239 cfs.

Extremes.--Maximum discharge during year, 2,360 cfs Apr. 30 (gage height, 8.00 ft); minimum, 11 cfs Aug. 28-31.

1939-56: 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, which are good. Prior to 1948, slight diurnal fluctuation at low flow caused by mill above station.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 13				Jan. 14 to Sept. 30			
3.5	27	5.0	333	3.2	9.6	5.0	348
3.8	56	6.0	780	3.3	14	6.0	780
4.2	115	7.0	1,460	3.6	35	7.0	1,460
4.6	203			4.0	84	8.0	2,360
				4.5	190		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	581	185	49	125	123	134	2,140	380	53	*28	13
2	34	545	164	44	127	127	140	1,710	369	49	26	17
3	34	466	166	43	129	127	170	1,420	420	44	25	20
4	34	423	169	45	110	142	204	1,220	775	41	25	19
5	31	952	180	48	125	154	290	1,100	740	38	23	19
6	32	1,120	180	50	123	149	451	968	604	52	19	18
7	94	913	170	50	123	145	630	841	488	86	20	22
8	130	755	164	50	132	140	648	730	394	75	21	24
9	110	640	149	190	129	135	594	635	330	70	21	21
10	89	545	142	760	129	138	590	*568	300	81	21	19
11	75	496	128	1,140	127	129	640	532	*330	69	20	18
12	62	514	*124	1,100	129	136	755	488	310	70	18	19
13	56	509	123	1,450	132	134	913	451	267	69	18	19
14	50	491	117	1,290	129	132	988	413	227	178	16	22
15	172	522	119	1,030	129	134	994	380	190	175	16	41
16	353	*500	112	*813	130	119	1,160	352	168	136	15	44
17	415	568	106	660	120	113	1,510	330	156	113	14	53
18	487	572	106	560	123	125	1,620	306	136	101	14	74
19	440	496	101	500	125	123	1,580	287	121	78	14	64
20	*361	432	79	390	*127	129	1,430	267	105	65	16	61
21	293	386	70	340	121	123	1,320	245	94	57	17	75
22	256	345	66	300	110	123	1,300	233	91	57	17	64
23	240	303	61	260	111	140	1,320	218	82	60	17	54
24	220	293	59	230	105	136	1,190	218	78	57	16	124
25	220	293	62	230	113	132	1,040	198	72	52	15	175
26	220	269	65	185	127	*140	1,100	190	68	49	15	138
27	203	245	62	172	140	136	919	265	65	45	*13	98
28	188	231	60	155	138	129	1,080	617	69	42	11	78
29	173	215	55	140	127	129	1,710	576	62	36	11	65
30	176	205	56	140	-------	132	2,260	467	56	33	11	56
31	326	-------	54	140	-------	132	-------	424	-------	31	12	-----
Total	5,608	14,825	3,454	12,554	3,615	4,106	28,580	18,789	7,547	2,162	545	1,534
Mean	181	494	111	405	125	132	953	606	252	69.7	17.6	51.1
Cfsm	1.24	3.38	0.760	2.77	0.856	0.904	6.53	4.15	1.73	0.477	0.121	0.350
In.	1.43	3.78	0.88	3.20	0.92	1.05	7.28	4.79	1.92	0.55	0.14	0.39

Calendar year 1955: Max 1,120 Min 11 Mean 241 Cfsm 1.65 In. 22.45
Water year 1955-56: Max 2,260 Min 11 Mean 282 Cfsm 1.93 In. 26.33

Peak discharge (base, 1,200 cfs).--Nov. 6 (1 to 2 a.m.) 1,200 cfs (6.66 ft); Jan. 13 (6 to 7 p.m.) 1,560 cfs (7.12 ft); Apr. 18 (4 a.m.) 1,670 cfs (7.25 ft); Apr. 30 (2 to 5 p.m.) 2,360 cfs (8.00 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 27, Nov. 29 to Dec. 1, Dec. 6, 7, 20, Jan. 9-13, 17-25, 28, 29, 31, Feb. 1, 4, 16, 17, 22, Mar. 7-9, 16, 18, 21, 22.

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 1956. 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.--31 years (1918-20, 1927-56), 217 cfs (adjusted to present site).

Extremes.--Maximum discharge during year, 2,130 cfs May 4 (gage height, 6.89 ft); minimum, 22 cfs Aug. 18, 19; minimum daily, 22 cfs Aug. 19.
1918-20, 1927-56: 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 determinations 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. 109). Some regulation at low flow prior to 1953 by mill above station.

Revisions (water years).--WSP 696: Drainage area. WSP 821: 1936(M). WSP 851: 1936. WSP 867: 1936 (flood-report data). WSP 1231: 1919-20, 1927, 1928(M), 1929-32, 1933-34(M), 1936 (calendar year summaries).

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.0	22	4.0	381
2.2	36	4.5	550
2.5	63	5.0	790
3.0	135	6.0	1,420
3.5	241	7.0	2,230

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	394	128	47	103	121	103	80	429	72	*49	33
2	55	526	116	45	103	123	108	680	394	63	46	48
3	52	498	121	44	103	120	120	1,570	423	59	43	77
4	49	410	118	45	99	125	143	1,910	640	56	42	84
5	44	518	130	46	102	130	187	2,050	869	53	41	85
6	42	784	b120	48	104	126	288	1,940	*752	61	41	81
7	66	995	b95	48	104	123	419	1,750	512	79	41	85
8	115	757	b110	49	110	121	504	1,020	394	90	40	82
9	*143	484	116	100	109	118	522	578	325	89	38	77
10	118	381	106	59	109	120	508	*484	288	90	37	73
11	99	334	100	59	108	118	512	445	297	93	35	71
12	82	322	b93	70	108	116	562	435	291	88	39	68
13	72	334	b92	75	110	116	645	397	243	85	32	66
14	63	*328	89	b170	130	115	740	365	203	152	26	67
15	66	328	89	b600	144	115	774	340	174	214	25	63
16	118	319	85	b1,200	144	112	796	317	154	205	25	62
17	196	334	81	1,830	143	102	935	286	141	156	24	64
18	274	346	86	1,730	146	106	1,090	270	126	133	23	82
19	322	316	81	a480	144	115	1,180	251	116	114	22	90
20	275	265	64	a300	144	109	1,180	232	108	92	23	89
21	209	232	a58	a240	139	109	1,120	216	102	79	26	84
22	166	214	a55	a200	*130	109	1,040	200	99	73	30	82
23	133	192	a52	a175	130	110	965	189	93	73	*31	76
24	116	185	a50	154	121	112	935	185	89	75	30	114
25	110	185	53	139	123	109	823	178	86	72	29	211
26	115	181	54	130	126	109	740	166	85	71	27	*243
27	116	162	53	121	133	108	720	206	82	71	25	172
28	114	150	51	116	133	104	720	487	82	67	25	120
29	106	141	50	109	126	103	911	834	82	60	24	96
30	99	124	50	108	-------	*103	411	851	79	55	23	81
31	177	-------	48	106	-------	103	-------	522	-------	52	27	------
Total	3,770	10,739	2,594	8,643	3,528	3,530	19,701	19,428	7,758	2,792	989	2,726
Mean	122	358	83.7	279	122	114	657	627	259	90.1	31.9	90.9
Cfsm	0.946	2.78	0.649	2.16	0.946	0.884	5.09	4.86	2.01	0.698	0.247	0.705
In.	1.09	3.10	0.75	2.49	1.02	1.02	5.68	5.60	2.24	0.80	0.29	0.79

Calendar year 1955: Max 1,070 Min 27 Mean 212 Cfsm 1.64 In. 22.35
Water year 1955-56: Max 2,050 Min 22 Mean 236 Cfsm 1.83 In. 24.87

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage when available, and records for Warner River at Davisville and Smith River near Bristol.
b Stage-discharge relation affected by ice.

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 1956. 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.--28 years, 1,278 cfs.

Extremes.--Maximum discharge during year, 10,800 cfs May 1 (gage height, 6.37 ft); maximum gage height, 7.14 ft Jan. 11 (ice jam); minimum discharge, 89 cfs Aug. 27; minimum daily, 103 cfs Aug. 29.
1928-56: 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 by Nubanusit Lake, Edward MacDowell Reservoir since March 1950, Highland Lake, Jackman Reservoir, Blackwater Reservoir since 1941 (see p. 109), and other reservoirs above station.

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

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.4	95	3.0	1,540
1.6	159	4.0	3,400
1.8	252	5.0	5,820
2.1	450	7.0	12,700
2.5	840		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	370	2,760	1,170	470	960	950	740	9,960	1,740	428	198	148
2	318	3,080	1,160	460	1,000	950	800	*8,570	1,830	399	196	189
3	337	2,800	1,160	450	960	924	912	*7,540	2,050	293	189	212
4	337	2,540	1,130	440	900	828	1,090	6,940	*3,210	237	193	207
5	357	3,960	1,040	450	840	920	1,450	6,740	3,620	247	193	242
6	337	5,500	1,200	450	850	990	2,200	6,290	3,150	270	172	264
7	466	5,390	1,030	460	900	974	3,230	5,770	2,480	324	176	293
8	611	4,590	1,060	470	920	974	3,470	5,000	1,960	357	168	217
9	602	3,750	1,020	1,000	948	920	3,250	3,980	1,680	357	198	168
10	548	3,060	950	3,500	960	900	3,270	3,490	1,490	364	189	172
11	506	2,680	890	6,400	936	790	3,530	3,060	1,430	377	168	202
12	506	2,670	*770	6,880	912	804	3,890	2,700	1,480	344	152	237
13	421	2,780	840	6,680	960	860	4,420	2,360	1,300	311	152	270
14	450	*2,840	840	6,050	940	888	4,830	2,140	1,000	519	144	305
15	732	3,210	864	4,930	948	860	4,980	1,950	888	780	119	351
16	2,260	3,170	840	*4,640	950	770	5,420	1,800	816	*792	117	276
17	4,160	3,340	720	4,490	940	700	6,480	1,590	792	690	119	337
18	4,960	3,490	680	4,150	940	670	7,420	1,460	700	620	119	435
19	4,400	3,210	740	3,510	910	900	7,360	1,380	566	566	122	466
20	*3,490	2,780	740	2,450	*960	1,000	6,850	1,310	602	530	117	443
21	2,900	2,460	680	2,100	900	830	6,400	1,210	584	498	119	450
22	2,540	2,250	640	1,950	910	800	6,170	1,140	557	474	133	414
23	2,230	2,020	600	1,850	910	880	6,290	1,140	539	435	*133	331
24	2,000	1,860	520	1,800	900	840	6,040	1,140	498	384	133	443
25	1,930	1,830	510	1,700	800	820	5,340	1,100	458	399	137	710
26	1,810	1,760	520	1,400	700	*820	4,930	1,000	392	384	137	*792
27	1,560	1,640	520	1,150	790	850	4,610	1,160	428	364	106	650
28	1,320	1,570	500	1,000	1,000	840	4,780	2,190	443	324	111	602
29	1,210	1,480	490	920	950	*830	6,570	2,570	466	287	103	506
30	1,140	1,250	490	876	-------	852	9,050	2,520	435	264	111	428
31	1,350	---	490	960	------	780	-------	2,070	-------	212	122	--
Total	46,158	85,720	24,804	74,036	26,494	26,714	135,772	101,270	37,584	12,830	4,548	10,760
Mean	1,489	2,857	800	2,388	914	862	4,526	3,267	1,253	414	147	359
Cfsm	1.94	3.73	1.04	3.12	1.19	1.13	5.91	4.27	1.64	0.540	0.192	0.469
In.	2.24	4.16	1.20	3.59	1.29	1.30	6.59	4.92	1.82	0.62	0.22	0.52

Calendar year 1955: Max 5,500 Min 129 Mean 1,395 Cfsm 1.82 In. 24.70
Water year 1955-56: Max 9,960 Min 103 Mean 1,603 Cfsm 2.09 In. 28.47

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 30 to Dec. 2, Dec. 6-14, Dec. 16 to Jan. 11, Jan. 18, 20-29, Jan. 31 to Feb. 6, Feb. 8, 14, Feb. 16 to Mar. 2, Mar. 5, 6, 9-11, 13, 15-29, Mar. 31 to Apr. 2, Apr. 5, 8.

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 1956.

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

Average discharge.--5 years, 131 cfs.

Extremes.--Maximum discharge during year, 1,410 cfs Apr. 17 (gage height, 10.50 ft); minimum, 5.9 cfs Oct. 5, 6.
1951-56: 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-23		Oct. 24 to Apr. 17				Apr. 18 to Sept. 30	
4.1	3.8	4.2	7.7	7.0	318	4.14	6.3
4.2	6.5	4.5	21	8.0	535	4.2	8.4
4.4	14	5.0	58	9.0	825	4.5	23
4.8	36	5.5	106	10.0	1,210	5.0	58
		6.0	166	11.0	1,650		

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

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.0	104	51	13	58	56	56	653	167	24	12	9.7
2	9.4	77	44	12	58	58	64	471	175	25	11	23
3	8.3	60	48	11	58	58	80	384	245	21	10	50
4	7.2	60	52	12	56	64	100	341	443	19	9.7	23
5	5.9	201	55	12	63	68	160	347	332	18	9.7	16
6	6.2	193	55	13	63	66	280	297	*236	26	9.2	14
7	32	134	46	13	70	64	424	260	182	40	9.2	22
8	36	112	47	13	70	62	404	223	147	32	10	20
9	29	95	38	100	67	61	358	*192	135	30	12	14
10	22	81	38	430	63	60	360	193	125	39	11	12
11	17	86	33	390	58	58	409	198	131	29	9.7	10
12	14	115	31	300	59	58	515	176	109	23	8.4	10
13	13	106	29	390	60	56	622	165	93	23	7.6	9.7
14	11	100	*27	400	60	54	680	152	82	80	7.6	10
15	17	104	28	270	60	54	635	146	70	66	7.3	30
16	22	*93	29	200	60	50	868	137	62	44	7.0	27
17	23	179	29	160	56	52	1,330	133	56	37	7.6	40
18	30	157	27	*125	57	60	1,190	122	47	31	8.4	59
19	29	117	26	115	58	58	906	114	42	26	7.0	42
20	23	99	20	110	60	56	698	108	38	*23	6.6	40
21	20	88	19	100	59	56	608	98	36	21	8.8	51
22	18	80	18	92	*58	56	578	93	36	21	14	39
23	16	70	16	86	55	60	560	90	35	21	*11	32
24	*15	73	15	76	52	62	520	92	38	20	9.7	136
25	16	71	15	72	55	60	466	82	35	19	8.8	131
26	*17	63	15	68	58	62	426	75	31	18	8.0	*85
27	17	62	15	66	62	62	407	161	28	16	7.3	63
28	16	60	14	65	61	58	429	475	30	15	6.6	51
29	15	58	14	64	58	56	578	297	29	14	6.6	45
30	15	52	14	64	------	*56	780	222	26	13	6.3	42
31	64	------	13	62	------	56	------	195	------	12	7.6	----
Total	593.0	2,950	921	3,904	1,732	1,817	15,491	6,692	3,241	846	275.7	1,156.4
Mean	19.1	98.3	29.7	126	59.7	58.6	516	216	108	27.3	8.89	38.5
Cfsm	0.249	1.28	0.387	1.64	0.777	0.763	6.72	2.81	1.41	0.355	0.116	0.501
In.	0.29	1.43	0.45	1.89	0.84	0.88	7.50	3.24	1.57	0.41	0.13	0.56

Calendar year 1955: Max 520 Min 3.3 Mean 87.7 Cfsm 1.14 In. 15.51
Water year 1955-56: Max 1,330 Min 5.9 Mean 108 Cfsm 1.41 In. 19.19

Peak discharge (base, 700 cfs).--Apr. 17 (5:30 to 8:30 a.m.) 1,410 cfs (10.50 ft); Apr. 30 (3:30 to 4:30 p.m.) 867 cfs (9.12 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Dec. 24 to Jan. 8, Jan. 26 to Mar. 6; discharge estimated on basis of 1 discharge measurement, weather records, and records for Suncook River at North Chichester and Warner River at Davisville. Stage-discharge relation affected by ice Nov. 26, 27, Dec. 5-23, Jan. 9-25, Mar. 7 to Apr. 6.

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 1956.

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.--35 years (1918-20, 1921-27, 1929-56), 244 cfs.

Extremes.--Maximum discharge during year, 2,610 cfs Apr. 17 (gage height, 8.89 ft); maximum gage height, 12.98 ft Jan. 10 (ice jam); minimum discharge, 10 cfs Oct. 3; minimum daily, 11 cfs Oct. 3.
1918-56: 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 determinations 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, 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.5	8.2	4.0	310
2.6	13	4.5	540
2.8	26	5.0	700
3.1	60	7.0	1,210
3.4	114	9.0	2,020
3.7	197	10.0	2,700

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	360	115	32	130	130	140	1,740	290	57	44	25
2	12	302	112	28	130	130	150	1,290	282	53	44	35
3	11	232	110	27	135	130	170	1,040	341	54	42	93
4	22	216	116	29	120	150	220	915	651	52	36	54
5	23	508	128	31	140	160	350	868	615	50	38	35
6	23	518	130	32	140	155	550	770	500	64	43	31
7	38	400	115	32	155	150	770	672	*391	82	*40	37
8	38	298	108	36	155	145	760	587	314	69	39	27
9	43	240	99	800	150	140	692	500	262	73	37	26
10	47	204	93	1,900	140	140	685	*495	255	159	38	29
11	74	222	88	1,700	130	135	748	486	259	136	32	31
12	79	266	82	1,300	135	135	875	425	225	97	32	27
13	74	262	78	1,700	140	135	1,060	398	188	82	35	26
14	72	247	*74	1,760	135	130	1,190	355	160	131	*29	32
15	131	247	76	1,300	135	135	1,150	328	138	124	29	46
16	155	*228	72	945	135	120	1,590	278	116	93	25	54
17	152	441	68	765	125	125	2,440	286	106	84	25	80
18	191	382	68	*630	125	140	2,240	270	93	74	24	106
19	166	282	68	560	130	125	1,940	247	80	63	21	70
20	131	243	54	450	130	130	1,770	232	72	62	24	69
21	119	214	48	380	125	125	1,600	214	69	56	27	80
22	106	188	45	340	115	130	1,520	194	68	52	28	60
23	97	170	44	320	115	140	1,470	204	82	6*	*26	57
24	*99	166	42	260	*110	140	1,320	214	86	5-	25	264
25	108	166	43	240	115	135	1,150	163	70	55	24	251
26	101	150	41	190	130	140	1,070	133	63	5-	20	163
27	95	140	40	180	145	140	1,050	296	66	54	21	119
28	89	138	37	160	140	130	1,100	782	66	4-	23	97
29	82	130	36	145	130	130	1,300	660	60	4-	22	77
30	84	140	36	150	-------	135	1,840	459	55	50	22	70
31	225	---	35	145	-------	140	-------	355	-------	45	25	-----
Total	2,705	7,700	2,301	16,567	3,840	4,225	32,910	15,654	5,983	2,264	940	2,171
Mean	87.3	257	74.2	534	132	136	1,097	511	199	73.0	30.3	72.4
Cfsm	0.556	1.64	0.473	3.40	0.841	0.866	6.99	3.25	1.27	0.465	0.193	0.461
In.	0.64	1.82	0.55	3.92	0.91	1.00	7.80	3.76	1.42	0.54	0.22	0.51

Calendar year 1955: Max 1,050 Min 7.4 Mean 198 Cfsm 1.26 In. 17.13
Water year 1955-56: Max 2,440 Min 11 Mean 266 Cfsm 1.69 In. 23.09

Peak discharge (base, 1,500 cfs).--Jan. 10 (time and discharge unknown); Jan. 13 (11 to 12 p.m.) 1,940 cfs (8.85 ft); Apr. 17 (9 to 10 p.m.) 2,610 cfs (9.89 ft); Apr. 30 (6 to 7 p.m.) 2,000 cfs (8.97 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 23, 26, 27, Nov. 29 to Dec. 1, Dec. 6, 7, Dec. 11 to Jan. 13, Jan. 18 to Apr. 8.

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 1956.

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

Average discharge.--16 years, 171 cfs.

Extremes.--Maximum discharge during year, about 2,750 cfs Jan. 10; maximum gage height, 10.69 ft Jan. 9 (ice jam); minimum discharge, 7.9 cfs Aug. 29-31.
1940-56: 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 by mill above station.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.9	6.8	4.0	120
3.0	11	4.5	247
3.2	22	5.0	425
3.4	38	6.0	950
3.7	72	8.0	2,500

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	660	150	38	96	130	115	1,470	124	31	15	12
2	21	453	140	35	94	130	130	968	113	28	14	14
3	24	338	140	34	92	130	160	794	277	27	13	19
4	26	453	150	35	86	150	203	700	474	37	13	17
5	24	1,680	170	37	94	185	318	620	273	28	13	14
6	23	1,030	175	39	90	170	496	510	211	39	13	10
7	72	605	145	40	120	155	640	*441	156	60	12	12
8	79	465	135	48	165	150	501	378	*128	52	12	15
9	63	389	120	900	170	145	453	327	107	60	11	14
10	51	330	120	2,400	150	130	483	296	104	60	*10	13
11	39	366	90	1,640	140	120	510	266	116	46	10	12
12	34	449	90	1,390	150	125	590	238	100	36	10	11
13	31	450	86	1,440	160	125	700	220	82	35	11	11
14	32	594	90	980	165	120	836	200	73	69	11	12
15	704	650	*98	655	160	120	866	186	68	75	11	12
16	1,080	483	90	496	155	115	1,190	173	59	56	11	15
17	1,290	830	82	381	145	110	1,710	166	58	43	12	28
18	1,050	*660	76	320	120	115	1,470	154	60	34	12	32
19	547	478	74	275	140	115	1,310	142	50	28	11	34
20	363	393	62	240	135	120	1,120	142	45	25	9.9	23
21	273	341	53	*200	120	145	1,080	134	42	24	9.9	20
22	217	306	50	165	110	150	1,120	124	41	25	9.9	18
23	179	266	49	145	105	155	1,110	118	39	27	9.4	19
24	163	263	47	130	110	140	854	116	37	28	9.4	56
25	*161	260	49	120	125	130	758	106	37	25	9.4	73
26	154	232	51	115	160	125	794	99	34	22	9.0	47
27	140	211	49	110	150	120	734	148	34	20	8.6	34
28	124	200	47	105	145	120	1,050	260	42	19	*3.6	26
29	116	185	43	98	*135	115	1,840	189	39	17	8.2	22
30	109	165	45	105	-------	120	2,150	149	34	17	7.9	19
31	722	-------	42	100	------	*115	-------	138	-------	17	10	----
Total	7,914	14,185	2,808	12,816	3,787	4,095	25,291	9,972	3,057	1,110	333.2	664
Mean	255	473	90.6	413	131	132	843	322	102	35.8	10.8	22.1
Cfsm	2.45	4.55	0.871	3.97	1.26	1.27	8.11	3.10	0.981	0.344	0.104	0.212
In.	2.83	5.07	1.00	4.58	1.35	1.46	9.04	3.57	1.09	0.40	0.12	0.24

Calendar year 1955: Max 1,680 Min 4.3 Mean 179 Cfsm 1.72 In. 23.36
Water year 1955-56: Max 2,400 Min 7.9 Mean 235 Cfsm 2.26 In. 30.75

Peak discharge (base, 1,000 cfs).--Oct. 17 (8 to 11 p.m.) 1,420 cfs (6.71 ft); Oct. 31 (4 to 5 p.m.) 1,080 cfs (6.21 ft); Nov. 5 (9 a.m. to 12 m.) 1,850 cfs (7.26 ft); Jan. 10 (time unknown) about 2,750 cfs; Apr. 17 (6 to 9 p.m.) 1,740 cfs (7.13 ft); Apr. 30 (11 a.m. to 12 m.) 2,330 cfs (7.81 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 13, Nov. 29 to Jan. 10, Jan. 18 to Apr. 3.

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 1956.

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.--17 years, 316 cfs.

Extremes.--Maximum discharge during year, 3,800 cfs Apr. 30 (gage height, 8.75 ft); minimum daily, 6.0 cfs Oct. 9.

1939-56: Maximum discharge, 6,760 cfs June 15, 1942 (gage height, 10.79 ft), from rating curve extended above 4,400 cfs on basis of computations of flow over dam at gage heights 16.03 and 17.52 ft; minimum daily, 4.8 cfs July 26, 1955.

Maximum discharge known, 21,900 cfs Sept. 21, 1938 (gage height, 17.52 ft, from floodmarks), by computation of flow over dam. Flood of Mar. 19, 1936, reached a discharge of 19,900 cfs, by computation of flow over dam.

Remarks.--Records excellent except those below 100 cfs and those for periods of ice effect or no gage-height record, which are good. Flow regulated by powerplant above station.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.7	4.1	4.5	296
2.8	6.8	5.0	496
2.9	11	5.5	745
3.1	21	6.0	1,090
3.3	38	7.0	1,940
3.6	76	8.0	2,940
4.0	153	9.0	4,110

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	1,090	261	62	205	250	89	2,710	248	7.2	22	35
2	25	787	210	46	285	245	415	1,830	103	39	56	28
3	32	701	216	80	134	59	292	1,460	541	29	9.0	10
4	34	590	229	60	64	180	421	1,250	763	8.2	37	10
5	35	2,300	305	94	139	386	502	1,110	751	45	8.6	24
6	36	1,880	273	35	210	409	650	933	483	124	9.8	11
7	244	1,150	240	54	275	399	690	*820	328	41	32	36
8	136	831	239	90	227	375	869	718	324	27	9.8	10
9	6.0	693	203	620	333	374	857	698	49	145	15	9.4
10	31	687	163	3,000	259	*11	884	575	144	135	36	38
11	7.2	696	11	2,700	36	60	962	479	279	154	8.6	11
12	34	690	234	2,600	118	370	1,140	370	212	100	8.2	39
13	37	690	183	2,650	300	320	1,330	391	229	19	*8.6	39
14	131	1,010	203	2,000	235	285	1,540	378	202	133	40	11
15	586	1,180	179	1,250	267	140	1,600	306	122	69	9.0	9.4
16	1,400	864	250	940	180	170	2,110	359	38	108	9.0	16
17	1,590	1,270	8.6	760	260	45	3,030	284	9.0	99	10	73
18	1,480	1,090	62	620	145	10	2,620	299	126	41	35	71
19	870	799	232	510	160	370	2,350	192	99	61	9.8	66
20	851	701	210	436	340	280	1,980	127	84	61	23	66
21	*402	582	145	360	380	200	1,870	291	61	7.6	9.8	39
22	377	602	70	300	37	170	1,900	263	85	60	36	9.8
23	217	646	9.8	380	150	190	1,910	245	7.9	9.4	10	9.8
24	374	372	9.8	345	105	170	1,550	237	7.9	8.6	10	87
25	326	527	60	310	239	10	1,360	124	76	32	9.0	181
26	274	425	54	170	120	340	1,380	58	100	37	9.8	103
27	238	355	110	221	265	190	1,290	380	90	8.6	9.4	60
28	122	437	108	165	285	170	1,620	505	128	58	*33	66
29	42	275	87	15	360	160	2,810	155	90	47	11	56
30	119	253	35	264	-------	155	3,560	78	7.6	8.6	10	9.8
31	779	-------	50	197	-------	145	-------	355	-------	8.6	40	-------
Total	10,633.2	24,173	4,640.2	21,334	6,113	6,638	43,581	17,978	5,787.4	1,730.8	564.4	1,234.2
Mean	343	806	150	688	211	214	1,453	580	193	55.8	18.2	41.1
Cfsm	1.70	3.99	0.743	3.41	1.04	1.06	7.19	2.87	0.955	0.276	0.090	0.203
In.	1.96	4.45	0.85	3.93	1.13	1.22	8.02	3.31	1.07	0.32	0.10	0.23

Calendar year 1955: Max 2,300 Min 4.8 Mean 304 Cfsm 1.50 In. 20.42
Water year 1955-56: Max 3,560 Min 6.0 Mean 395 Cfsm 1.96 In. 26.59

* Discharge measurement made on this day.

Note.--No gage-height record Dec. 30 to Jan. 19, Mar. 10-31; discharge estimated on basis of 2 discharge measurements, weather records, recorded range in stage when available, powerplant records, and records for South Branch Piscataquog River near Goffstown. Stage-discharge relation affected by ice Dec. 16, 17, 20-22, 25-28, Jan. 21, 22, 24-26, 28, 29, Feb. 1, 2, 4, 6, 13, 14, 16, 17, 19-24, Feb. 26 to Mar. 3.

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 1956. October 1936 monthly discharge only, published in WSP 1301.

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

Average discharge.--20 years, 5,417 cfs.

Extremes.--Maximum discharge during year, 34,300 cfs May 1 (gage height, 11.55 ft); minimum daily, 492 cfs Aug. 19.

1936-56: 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, 154 cfs Sept. 5, 1949.

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 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 81 and 109 for description and month-end contents of many of these reservoirs.

Revisions (water years).--WSP 1231: 1937. WSP 1271: 1937(M,m).

Rating table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

2.0	454	5.0	4,780
2.5	725	6.0	8,200
3.0	1,110	9.0	22,000
3.5	1,630	12.0	36,400
4.0	2,360		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	754	6,940	2,840	900	3,600	4,130	2,240	33,500	9,710	1,020	1,550	1,600
2	782	8,960	3,510	1,250	3,800	4,200	3,480	30,700	7,780	1,870	1,520	1,470
3	1,730	7,670	3,460	1,500	3,700	3,840	3,970	24,500	8,880	1,680	*1,430	1,940
4	1,420	6,720	3,020	1,400	3,300	3,770	4,150	21,900	13,900	1,230	1,340	1,880
5	1,610	10,300	4,580	1,600	3,300	4,220	5,210	21,000	17,200	1,510	626	2,060
6	*2,050	14,800	3,570	1,550	3,500	4,420	7,500	19,400	14,400	1,610	1,440	2,030
7	2,530	13,100	3,480	1,500	3,700	4,500	11,100	*17,600	11,200	2,070	1,380	2,050
8	2,750	10,800	3,660	1,300	3,900	4,590	13,200	15,700	8,920	1,370	1,220	2,080
9	2,500	8,840	3,250	4,500	4,000	3,910	12,000	13,100	7,590	2,510	1,240	1,560
10	1,900	7,520	3,280	12,000	4,100	3,730	11,200	11,300	7,010	3,300	1,460	1,690
11	1,960	7,120	2,830	19,000	4,000	3,330	11,400	11,000	6,720	5,040	1,160	1,570
12	1,500	6,900	3,010	16,500	3,800	4,190	12,800	10,500	5,780	4,390	522	1,590
13	1,630	6,760	3,160	17,000	4,000	4,170	15,100	9,550	5,340	2,730	1,490	1,600
14	2,170	7,120	3,420	18,000	4,100	4,170	17,100	10,800	5,020	3,340	1,480	1,600
15	2,700	7,480	3,200	17,000	4,200	4,030	17,300	11,000	4,640	7,530	1,370	1,570
16	3,440	7,550	3,210	16,500	4,100	4,130	18,800	9,930	4,100	8,680	1,110	945
17	6,100	8,320	2,540	15,000	4,000	2,310	24,500	9,000	2,520	5,720	1,060	2,520
18	8,120	8,760	2,490	11,000	3,900	2,890	28,700	8,700	2,780	4,440	1,130	3,010
19	7,820	7,900	2,900	8,600	3,000	4,620	27,000	7,670	2,550	4,340	492	3,740
20	6,760	7,190	2,700	7,080	4,400	3,980	23,500	6,830	2,150	3,280	1,340	3,600
21	5,750	6,070	2,500	6,070	4,100	4,640	21,300	6,140	1,970	3,140	1,020	3,040
22	4,460	5,400	2,300	4,690	3,300	4,170	20,100	5,750	2,080	1,930	1,130	3,060
23	3,830	*5,270	2,100	5,270	3,500	4,110	20,000	5,620	2,370	2,420	1,110	2,650
24	3,790	4,620	2,200	4,660	3,400	4,110	19,100	5,750	814	2,190	1,100	3,430
25	3,800	4,690	1,200	4,420	4,300	2,630	16,800	6,070	1,960	2,250	922	4,570
26	3,650	4,150	1,800	4,170	3,200	3,810	15,400	5,530	2,190	2,280	614	5,790
27	3,250	4,290	1,900	3,890	3,820	3,750	14,700	5,110	2,240	2,040	1,410	4,650
28	3,410	4,140	1,900	3,000	4,130	3,700	14,800	11,000	2,300	2,310	1,400	3,730
29	2,760	4,290	1,700	2,700	*4,900	3,550	20,100	17,800	2,080	1,010	1,280	2,780
30	1,770	3,870	1,600	3,500	------	3,080	29,400	14,800	1,680	1,550	1,250	2,150
31	3,980	------	1,350	3,700	------	3,160	------	11,600	------	1,620	1,580	------
Total	100,676	217,540	84,660	219,250	111,050	119,840	461,950	398,850	167,874	90,400	37,178	75,955
Mean	3,248	7,251	2,731	7,073	3,829	3,866	15,400	12,870	5,596	2,916	1,199	2,532
Cfsm	1.05	2.35	0.883	2.29	1.24	1.25	4.98	4.16	1.81	0.943	0.388	0.819
In.	1.21	2.62	1.02	2.64	1.34	1.44	5.56	4.80	2.02	1.09	0.45	0.91

Calendar year 1955: Max 19,900 Min 397 Mean 5,012 Cfsm 1.62 In. 22.00
Water year 1955-56: Max 33,500 Min 492 Mean 5,697 Cfsm 1.84 In. 25.10

Peak discharge (base, 22,000 cfs).--Apr. 18 (2:30 p.m.) 29,000 cfs (10.44 ft); May 1 (1 p.m.) 34,300 cfs (11.55 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Dec. 19 to Jan. 19, Jan. 28 to Feb. 26; discharge estimated on basis of weather records, recorded range in stage, powerplant records, and records for Piscataquog River near Goffstown. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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 1956.

Gage.--Water-stage recorder and concrete control. Datum of gage is 252.60 ft above mean sea level (city of Manchester benchmark).

Average discharge.--18 years, 41.3 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 390 cfs Apr. 17, 18 (gage height, 2.18 ft); minimum, 0.3 cfs Aug. 30, 31, Sept. 9-12.
1938-56: 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. Flow regulated by Tower Hill Pond (see p. 109). Some diurnal fluctuation prior to 1951 by mill above station.

Revisions (water years).--WSP 891: 1939. WSP 921: Drainage area. WSP 1301: 1939(M).

Rating table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

0.1	0.3	0.9	40
.2	1.0	1.2	79
.3	2.4	1.5	139
.4	4.9	2.0	305
.5	8.7	2.5	570
.7	21		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	70	51	17	40	35	38	262	37	3.5	1.3	0.5
2	16	70	49	16	38	34	40	230	42	2.8	1.1	.6
3	14	80	46	16	35	34	48	160	53	2.4	1.0	.9
4	12	56	46	15	34	40	43	100	91	2.2	1.0	.8
5	11	85	46	15	33	45	82	91	93	2.0	.9	.6
6	11	108	46	15	33	46	100	96	78	2.8	.8	.4
7	16	104	44	15	38	49	139	91	61	4.3	.7	.6
8	20	93	41	18	38	48	130	84	*49	5.1	.6	.4
9	22	81	38	91	38	45	93	*70	39	11	.6	.3
10	19	73	35	285	39	42	93	67	35	15	.6	.3
11	15	78	32	265	39	40	106	66	36	14	.6	.3
12	13	86	30	226	40	40	121	61	44	11	.6	.3
13	9.2	89	27	234	41	39	139	59	43	9.2	.6	.4
14	6.9	96	25	240	41	40	165	49	41	14	.6	.4
15	19	104	25	202	41	39	177	48	34	16	.5	.6
16	39	100	*24	171	40	36	246	46	25	14	.4	.7
17	48	114	22	149	39	36	365	44	19	12	.5	1.1
18	61	118	22	*132	39	40	375	42	12	9.2	1.1	1.9
19	56	104	21	116	38	39	370	40	6.3	7.1	.9	2.8
20	42	93	19	108	35	37	328	39	4.9	5.5	.8	2.6
21	37	86	a17	102	33	36	285	36	4.6	4.3	.8	2.4
22	*32	79	a16	94	32	36	254	34	4.6	4.0	.8	2.2
23	27	*62	a15	89	31	37	237	26	4.3	3.7	.7	2.2
24	25	64	a14	84	*30	40	230	26	4.9	3.5	.6	5.3
25	24	68	a15	81	31	40	216	27	5.2	3.5	.6	7.1
26	23	64	a17	74	35	39	195	26	4.0	3.0	.5	6.7
27	22	61	a16	70	36	38	174	32	3.7	2.6	.4	5.2
28	21	52	21	64	38	37	165	49	4.0	2.2	.4	3.7
29	19	54	20	59	36	37	189	52	4.0	1.7	.4	3.2
30	19	52	19	51	-------	38	240	46	3.7	1.5	*.3	2.6
31	38	-------	19	43	-------	*37	-------	41	-------	1.4	.4	-------
Total	754.1	2,424	878	3,157	1,061	1,219	5,383	2,140	886.2	194.5	21.1	57.1
Mean	24.3	80.8	28.3	102	36.6	39.3	179	69.0	29.5	6.27	0.681	1.90
(†)	-1.90	+7.01	-8.93	+5.39	-1.44	0	+31.3	+1.65	-2.06	0	-0.35	+0.36

Adjusted for change in reservoir contents

Mean	22.4	87.8	19.4	107	35.1	39.3	211	70.7	27.5	6.27	0.326	2.27
Cfsm	0.806	3.16	0.698	3.85	1.26	1.41	7.59	2.54	0.989	0.226	0.012	0.082
In.	0.93	3.52	0.80	4.45	1.36	1.63	8.46	2.93	1.10	0.26	0.01	0.09

	Observed			Adjusted			
Calendar year 1955:	Max 121	Min 0.5	Mean 40.7	Mean 38.2	Cfsm 1.37	In. 18.63
Water year 1955-56:	Max 375	Min 0.3	Mean 49.7	Mean 52.2	Cfsm 1.88	In. 25.54

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Tower Hill Pond.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for Suncook River at North Chichester.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 160.58 ft above mean sea level, uradjusted (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.--47 years, 288 cfs.

Extremes.--Maximum discharge during year, 6,760 cfs Oct. 16 (gage height, 10.30 ft), minimum, 22 cfs Aug. 30.
1909-56: 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 for periods of ice effect or no gage-height record, 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 tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31				Nov. 1 to Sept. 30			
2.2	30	4.0	535	2.05	22	4.0	570
2.4	57	5.0	1,080	2.1	26	5.0	1,120
2.6	90	7.0	2,650	2.2	32	7.0	2,650
3.0	176	9.0	4,900	2.5	73	9.0	4,900
3.5	330	10.0	6,300	3.0	179	10.0	6,300
				3.5	350		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92	1,570	245	64	155	220	190	2,800	195	85	35	28
2	67	922	230	58	155	215	230	1,800	175	75	32	29
3	38	700	230	56	155	210	300	1,350	350	62	33	32
4	40	640	234	58	145	240	370	1,150	660	53	32	*32
5	47	2,320	280	62	150	305	673	1,050	*700	50	34	30
6	34	2,290	300	65	150	280	1,180	860	450	59	30	30
7	104	1,230	250	66	205	255	1,430	740	330	82	30	32
8	236	886	225	80	270	250	1,000	620	260	88	29	30
9	162	725	200	1,300	275	235	860	550	220	90	30	29
10	111	610	200	5,380	260	220	800	*490	180	132	29	28
11	*122	675	150	3,260	230	190	840	471	200	113	28	27
12	109	826	150	2,520	230	210	1,000	400	214	71	28	26
13	100	910	145	2,350	260	210	1,200	370	190	57	28	28
14	101	922	150	1,700	280	205	1,400	335	165	73	28	28
15	1,410	1,090	165	1,070	270	200	1,450	310	145	109	34	27
16	5,630	800	150	850	260	190	2,000	290	130	90	28	29
17	3,170	*1,120	140	700	240	180	2,500	280	120	100	27	41
18	2,990	1,030	130	540	195	195	2,600	260	110	85	26	50
19	1,500	750	125	460	200	190	2,150	250	105	65	26	55
20	942	610	105	400	220	195	1,900	240	105	48	26	42
21	702	570	88	325	210	240	1,850	230	85	48	26	38
22	562	530	84	270	185	245	1,850	210	80	54	27	36
23	441	476	80	235	170	260	1,850	200	78	57	26	35
24	409	440	78	210	170	235	1,450	200	71	56	26	85
25	405	378	80	200	190	210	1,350	180	71	*51	26	110
26	381	408	84	185	220	210	1,300	170	70	45	25	88
27	373	346	81	185	260	200	1,250	270	68	42	24	70
28	337	330	77	175	250	200	1,600	375	132	40	24	60
29	309	354	71	160	230	195	2,500	300	103	38	23	50
30	261	275	73	170	-------	215	2,900	240	96	35	23	45
31	1,060	---	---	70	165	-------	200	---	---	220	37	25	-----
Total	22,245	24,733	4,670	23,319	6,190	6,805	41,973	17,211	5,858	2,090	868	1,270
Mean	718	824	151	752	213	220	1,399	555	195	67.4	28.0	42.3
Cfsm	4.20	4.82	0.883	4.40	1.25	1.29	8.18	3.25	1.14	0.394	0.164	0.247
In.	4.84	5.38	1.02	5.07	1.35	1.48	9.13	3.74	1.27	0.45	0.19	0.28

Calendar year 1955: Max 5,630 Min 18 Mean 326 Cfsm 1.92 In. 26.07
Water year 1955-56: Max 5,630 Min 23 Mean 430 Cfsm 2.51 In. 34.20

Peak discharge (base, 2,250 cfs).--Oct. 16 (9 to 10 a.m.) 6,760 cfs (10.30 ft); Nov. 5 (9 to 10 p.m.) 3,100 cfs (7.45 ft); Jan. 10 (12 m. to 1 p.m.) 6,300 cfs (10.00 ft); Apr. 17 or 18 (time and discharge unknown); Apr. 30 (time unknown) 3,210 cfs (7.56 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Apr. 8 to May 10, May 12 to June 11, June 13-19, Sept. 18-30; discharge estimated on basis of 2 discharge measurements, weather records, recorded range in stage, and records for Jarner River at Davisville and South Branch Piscataquog River near Goffstown. Stage-discharge relation affected by ice Nov. 30 to Dec. 3, Dec. 5 to Jan. [illegible]

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 1956.

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

Average discharge.--21 years, 198 cfs.

Extremes.--Maximum discharge during year, 8,870 cfs Oct. 15 (gage height, 10.80 ft), from rating curve extended above 3,400 cfs by logarithmic plotting; minimum, 24 cfs Sept. 14; minimum daily, 42 cfs July 4.
1935-56: 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.

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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 6-8, 12, 14, 15, 18-31; backwater from debris Oct. 15-18, Sept. 27-30)

Oct. 1-31				Nov. 1 to Jan. 9				Jan. 10 to Sept. 30			
1.7	58	4.0	470	1.6	62	4.0	645	1.3	33	3.0	350
2.0	90	5.0	1,010	2.0	108	5.0	1,150	1.5	54	4.0	740
2.5	150	6.0	1,780	2.5	183	6.0	1,820	2.0	119	6.0	1,890
3.0	221	7.0	2,830	3.0	295	7.0	2,650	2.5	215	7.0	2,670
3.5	319	8.0	4,180								

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92	629	158	71	150	191	296	1,000	213	69	63	67
2	70	462	147	69	160	202	354	690	189	65	61	52
3	71	371	146	87	171	273	399	586	565	47	62	63
4	70	638	183	90	141	406	479	506	702	42	58	57
5	67	1,980	230	88	143	357	*918	455	384	61	52	58
6	133	1,030	212	85	156	302	1,080	392	262	82	50	61
7	332	681	178	84	288	615	*950	368	204	71	67	96
8	183	525	147	101	245	452	668	332	173	51	64	61
9	132	441	141	2,050	206	335	610	288	141	87	61	49
10	*117	388	128	2,620	191	299	606	290	143	80	66	51
11	96	589	124	1,720	165	282	718	268	169	66	63	52
12	94	629	122	1,190	250	344	790	210	136	60	54	52
13	75	621	141	1,020	265	302	875	218	143	63	56	56
14	127	650	116	745	222	296	950	220	154	114	77	60
15	3,780	*597	118	566	225	296	930	204	124	87	66	53
16	*4,000	497	115	483	272	255	1,340	195	97	91	63	73
17	2,370	508	102	410	235	252	1,900	183	124	73	63	81
18	1,540	413	102	338	213	255	1,480	179	116	*67	60	80
19	843	347	115	282	211	258	1,210	167	101	65	58	64
20	613	315	96	262	213	252	1,000	162	91	61	56	68
21	485	308	88	225	193	262	880	167	93	60	72	61
22	383	272	*85	206	181	280	830	152	95	72	78	55
23	326	246	89	*213	165	302	855	158	82	75	71	56
24	315	237	79	193	167	293	750	164	67	79	66	146
25	337	248	89	187	193	268	672	149	90	67	63	93
26	300	203	93	169	280	265	630	126	69	63	54	86
27	273	187	102	177	*242	252	574	156	75	62	53	78
28	228	202	85	158	228	250	546	183	91	59	*62	103
29	187	181	88	147	204	250	1,260	149	75	54	60	67
30	200	169	91	185	-------	268	*1,490	128	66	46	64	55
31	960	-------	80	187	-------	268	-------	173	-------	61	72	-----
Total	18,799	14,564	3,790	14,408	5,975	9,182	26,040	8,618	5,034	2,090	1,935	2,054
Mean	606	485	122	465	206	296	868	278	168	67.4	62.4	68.5
Cfsm	5.66	4.53	1.14	4.35	1.93	2.77	8.11	2.60	1.57	0.630	0.583	0.640
In.	6.53	5.06	1.32	5.01	2.08	3.19	9.05	3.00	1.75	0.73	0.67	0.71

Calendar year 1955: Max 4,000 Min 37 Mean 232 Cfsm 2.17 In. 29.43
Water year 1955-56: Max 4,000 Min 42 Mean 307 Cfsm 2.87 In. 39.10

Peak discharge (base, 1,000 cfs).--Oct. 15 (10 p.m.) 8,870 cfs (10.80 ft); Oct. 31 (11 a.m.) 1,240 cfs (5.15 ft); Nov. 5 (6 a.m.) 2,430 cfs (6.76 ft); Jan. 10 (4 a.m.) 3,720 cfs (8.10 ft); Apr. 5 (8:30 p.m.) 1,360 cfs (5.16 ft); Apr. 17 (4:30 to 6 a.m.) 2,130 cfs (6.34 ft); Apr. 30 (11 a.m.) 1,680 cfs (5.70 ft); June 3 (9 p.m.) 1,060 cfs (4.65 ft).
* Discharge measurement made on this day.

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 1956.

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

Average discharge.--10 years, 3.93 cfs.

Extremes.--Maximum discharge during year, 98 cfs Oct. 15 (gage height, 3.62 ft); minimum, 0.04 cfs Aug. 7-9.

1946-56: Maximum discharge, 395 cfs Sept. 11, 1954 (gage height, 4.58 ft), from rating curve extended above 56 cfs; minimum, 0.01 cfs several days in August and September 1949, Aug. 16-19, Sept. 10, Oct. 1-10, 1950.

Remarks.--Records fair. Flow regulated by reservoir since 1949.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 9, Apr. 17 to Sept. 30				Jan. 10 to Apr. 16	
1.78	0.04	2.3	2.45	2.3	4.0
1.8	.05	2.4	3.7	2.5	7.7
1.85	.11	2.6	7.4	2.8	15.9
1.9	.20	2.8	13.1	3.1	28
2.0	.48	3.0	22	3.2	36
2.1	.94	3.2	36		
2.2	1.55	3.4	60		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.6	10.9	6.6	1.10	5.3	5.6	6.6	6.8	3.6	0.30	0.16	0.06
2	9.7	9.5	5.9	.83	5.3	5.4	3.1	5.6	2.8	.24	.16	.07
3	9.2	8.4	5.7	.88	b5.3	7.5	*9.6	5.2	10.9	.22	.14	.06
4	9.0	20	6.8	.99	b5.1	11.4	11.1	*4.2	10.4	.18	.14	.06
5	8.7	28	7.9	1.22	5.1	9.8	18.1	4.4	4.0	.23	.14	.06
6	10.2	13.1	6.3	1.35	4.9	8.4	22	4.2	2.8	.74	.14	.06
7	16.3	10.3	5.2	1.45	7.7	14.3	20	4.0	2.25	.78	.06	.07
8	10.5	9.2	4.6	b2.4	7.9	11.1	14.0	3.7	1.9	.56	.04	.07
9	9.2	8.4	4.3	b38	6.8	8.8	14.0	3.4	1.8	.60	.04	.07
10	*8.7	7.9	4.0	29	6.4	7.9	14.0	3.8	1.9	.60	.06	.07
11	8.4	13.9	3.4	24	6.0	8.1	16.2	3.7	1.9	.38	.05	.06
12	7.9	12.2	3.3	23	8.1	9.4	18.4	3.4	1.65	.32	.06	.07
13	7.4	10.3	2.9	22	8.1	8.1	19.5	3.3	1.45	.27	.08	.07
14	7.2	13.5	2.7	18.0	7.3	7.7	21	3.0	1.3	.32	.08	.07
15	57	9.7	3.0	15.6	7.3	7.3	19.1	2.9	1.10	.35	.10	.07
16	33	9.2	2.9	14.0	7.7	b7.5	30	2.8	.94	.30	.08	.06
17	*32	9.5	2.45	11.6	6.8	b15.5	28	2.8	.94	.27	.08	.07
18	16.6	7.9	2.45	b10.5	6.2	7.3	20	2.6	.83	.22	.07	.08
19	13.1	10.9	2.45	b9.6	6.0	6.0	17.5	2.6	.69	.20	.07	.08
20	11.6	10.3	1.8	9.1	5.6	5.8	14.7	2.45	.60	.18	.07	.08
21	10.9	10.3	b1.15	8.4	5.4	5.8	7.9	2.25	.60	.16	.08	.08
22	10.0	*9.7	b1.0	7.3	b5.1	6.4	7.2	2.25	.69	.20	.08	.08
23	9.5	9.2	b1.05	b6.6	4.9	7.3	7.7	2.15	.60	.22	.08	.08
24	9.5	9.5	b1.15	b6.4	4.6	7.1	7.4	2.05	.48	.22	.08	.16
25	10.6	8.4	b1.8	6.0	6.2	6.6	6.6	1.9	.56	.20	.08	.24
26	9.5	8.4	1.8	5.6	b9.0	6.0	5.7	1.9	.52	.20	.08	.16
27	9.0	11.2	1.8	5.4	b6.4	5.6	5.4	2.9	.45	.18	.08	.13
28	8.4	10.0	1.55	5.1	6.2	5.6	5.8	2.8	.56	.18	.08	.18
29	8.2	8.4	1.45	4.8	b5.6	5.6	16.7	2.15	.45	.18	.07	.24
30	9.2	7.2	1.45	5.4	------	5.6	12.5	1.9	.35	.16	.06	.16
31	23	---	---	1.22	6.2	-------	5.8	-------	2.9	-------	.16	.06	-----
Total	414.1	325.4	100.07	301.82	182.3	240.3	424.8	100.50	59.01	9.34	2.65	2.87
Mean	13.4	10.8	3.23	9.74	6.29	7.75	14.2	3.24	1.97	0.301	0.035	0.096
Cfsm	5.88	4.74	1.42	4.27	2.76	3.40	6.23	1.42	0.864	0.132	0.037	0.042
In.	6.75	5.31	1.63	4.92	2.97	3.92	6.93	1.64	0.96	0.15	0.04	0.05

Calendar year 1955: Max 57 Min 0.02 Mean 4.59 Cfsm 2.01 In. 27.33
Water year 1955-56: Max 57 Min 0.04 Mean 5.91 Cfsm 2.59 In. 35.27

Peak discharge (base, 45 cfs).--Oct. 15 (6 p.m.) 98 cfs (3.62 ft); Oct. 31 (5 a.m.) 45 cfs (3.28 ft); 10 p.m. Nov. 4 to 1 a.m. Nov. 5, 51 cfs (3.33 ft); Jan. 9 (8 p.m.) 76 cfs (3.50 ft).

* 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.

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 1956.

Average discharge.--60 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 1955 to September 1956

Month	Runoff (millions of gallons)	Discharge per square mile		Runoff (inches)	Rainfall (inches)
		Millions of gallons per day	Cubic feet per second		
October	10,725.0	3.213	4.97	5.73	10.83
November	12,304.4	3.809	5.89	6.57	4.88
December	2,659.5	.797	1.23	1.42	.75
Calendar year 1955	67,220.2	1.710	2.65	35.90	53.46
January	9,208.0	2.758	4.27	4.92	6.86
February	4,801.0	1.537	2.38	2.57	5.20
March	6,834.3	2.047	3.17	3.65	6.26
April	17,257.2	5.342	8.26	9.22	5.07
May	6,510.7	1.950	3.02	3.48	2.16
June	3,394.9	1.051	1.63	1.81	2.55
July	1,631.7	.489	.756	.87	2.92
August	684.6	.205	.317	.37	2.63
September	760.5	.235	.364	.41	4.27
Water year 1955-56	76,771.8	1.948	3.01	41.02	54.38

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 1956.

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

Average discharge.--7 years, 127 cfs.

Extremes.--Maximum discharge during year, 4,010 cfs Oct. 16 (gage height, 8.04 ft), from rating curve extended above 2,200 cfs by logarithmic plotting; minimum daily, 11 cfs Aug. 27-29.
1949-56: Maximum discharge, that of Oct. 16, 1955; minimum daily, 4.3 cfs Aug. 14, 1950.

Remarks.--Records excellent except those for periods of ice effect, which are good, and those for period of no gage-height record, which are fair. Flow regulated by mill above station. Entire flow from 2.10 sq mi above outlet of Fitchburg Reservoir diverted for municipal supply of Fitchburg during most years.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31				Nov. 1 to Sept. 30			
1.9	20	4.0	362	1.6	8.4	3.2	182
2.1	32	5.0	760	1.7	12	4.0	366
2.5	68	6.0	1,440	2.0	27	5.0	760
3.0	138	7.0	2,480	2.4	61	6.0	1,440
3.5	234	8.0	3,940	2.8	112	7.0	2,480

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	622	109	28	94	b97	110	a620	93	30	*17	16
2	21	363	103	33	94	104	154	*a440	120	29	15	17
3	32	266	103	39	93	117	190	356	162	26	15	16
4	*25	254	107	40	b90	156	219	310	416	25	15	15
5	22	873	165	40	77	200	356	286	295	26	15	14
6	20	840	171	38	100	159	543	250	*182	35	15	13
7	78	449	128	36	114	200	638	243	133	40	15	17
8	116	325	114	31	147	247	418	215	109	36	15	15
9	77	275	102	858	142	188	372	192	100	36	14	15
10	78	232	100	2,410	130	150	350	186	78	36	14	13
11	39	263	74	1,240	118	131	394	178	108	32	14	12
12	41	348	92	859	124	154	456	165	90	27	13	12
13	38	353	85	740	169	150	543	149	72	26	15	13
14	36	363	*67	606	149	142	598	158	69	36	16	13
15	653	*391	58	413	138	135	624	143	59	41	15	13
16	2,770	308	b73	350	142	117	725	136	45	33	13	16
17	1,080	322	78	286	128	b92	1,180	131	40	29	13	21
18	1,070	308	53	232	115	b122	918	123	44	23	14	21
19	546	241	66	194	110	128	720	117	41	24	*14	17
20	365	206	b52	*186	122	112	602	102	40	23	13	17
21	274	204	47	169	104	b110	535	118	37	22	15	16
22	223	182	44	145	b96	115	a520	106	39	26	15	15
23	175	165	40	149	b92	126	a540	96	36	26	15	15
24	171	150	39	131	b83	126	a470	112	34	24	14	34
25	168	165	39	123	*90	b118	a410	94	34	23	13	36
26	159	147	48	112	123	*126	a390	92	33	21	13	26
27	143	126	65	114	142	112	a360	96	31	19	11	21
28	132	138	45	108	126	110	a370	159	36	18	11	*23
29	120	128	36	89	b105	110	a800	130	38	17	11	23
30	106	114	35	112	-------	115	a920	94	33	17	12	20
31	383	-------	35	106	-------	112	-------	115	-------	17	15	----
Total	9,186	9,121	2,373	10,017	3,357	4,181	15,425	5,712	2,647	843	435	535
Mean	296	304	76.5	323	116	135	514	184	88.2	27.2	14.0	17.8
Cfsm	4.71	4.84	1.22	5.14	1.85	2.15	8.18	2.93	1.40	0.433	0.223	0.283
In.	5.44	5.40	1.41	5.93	1.99	2.48	9.13	3.38	1.57	0.50	0.26	0.32

Calendar year 1955: Max 2,770 Min 5.1 Mean 128 Cfsm 2.04 In. 27.75
Water year 1955-56: Max 2,770 Min 11 Mean 174 Cfsm 2.77 In. 37.81

Peak discharge (base, 700 cfs).--Oct. 16 (4:30 a.m.) 4,010 cfs (8.04 ft); Nov. 1 (3 to 4 a.m.) 760 cfs (5.00 ft); Nov. 5 (8 to 9 p.m.) 1,250 cfs (5.76 ft); Jan. 10 (7 to 8 a.m.) 2,900 cfs (7.32 ft); Apr. 17 (12 m. to 1 p.m.) 1,300 cfs (5.82 ft).

* Discharge measurement made on this day.

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

b Stage-discharge relation affected by ice.

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 1956.

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

Average discharge.--21 years, 544 cfs (adjusted for wastage into Nashua River).

Extremes.--Maximum discharge during year, 5,880 cfs Oct. 17 (gage height, 11.02 ft); minimum daily, 7.3 cfs Sept. 30.

1935-56: Maximum discharge, 20,900 cfs Mar. 20, 1936 (gage height, 19.1 ft, from floodmarks.) from rating curve extended above 12,000 cfs on basis of velocity-area studies; minimum daily, 1.1 cfs Aug. 13, 1939.

Remarks.--Records good except those for periods of backwater from aquatic vegetation, which are fair. Extremes and daily discharge include water wasted in diverting drainage from basin of South Branch Nashua River for use of Boston metropolitan district and water diverted around station through plant of St. Regis Paper Co. Flow regulated by powerplant above station.

Revisions.--WSP 801: Drainage area.

Rating table, water year 1955-56, except periods of backwater from aqua vegetation (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-15, 23-31)

Oct. 1-31				Nov. 1 to Sept. 30			
1.2	149	5.0	1,870	0.4	7.3	2.0	292
1.5	220	8.0	3,610	.6	15	2.5	520
2.0	406	11.0	5,860	.8	27	3.0	815
3.0	845			1.0	44	5.0	1,870
				1.2	69	8.0	3,610
				1.5	129	11.0	5,860

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	450	2,090	869	8.0	919	839	617	3,260	1,000	109	264	39
2	162	2,100	803	12	880	809	*1,020	*3,010	857	267	264	54
3	215	1,720	629	552	875	*869	1,160	2,530	252	314	260	19
4	*350	1,500	653	531	845	790	1,270	2,160	1,390	7.6	67	609
5	377	2,250	755	359	737	1,300	1,600	1,920	1,620	279	8.4	465
6	419	3,310	718	279	665	1,180	2,310	1,400	*1,260	367	285	178
7	820	3,330	797	264	833	1,270	2,730	1,540	1,040	367	320	197
8	1,070	2,640	815	85	1,070	1,700	2,380	1,420	1,000	109	260	7.6
9	303	2,100	773	1,030	1,050	1,460	1,980	1,320	797	275	260	7.6
10	621	1,800	755	3,970	1,000	1,210	1,920	1,180	160	367	256	535
11	728	1,760	737	5,000	958	869	2,020	1,140	731	363	79	204
12	521	1,960	623	4,420	919	1,080	2,210	1,060	785	367	9.8	88
13	346	1,840	570	3,710	1,000	1,130	2,400	642	575	363	213	84
14	381	*2,120	*533	2,970	1,080	1,120	2,600	851	605	109	286	49
15	980	2,120	335	2,080	1,030	1,090	2,540	863	411	53	271	8.0
16	*3,090	2,110	343	1,860	1,030	1,050	2,810	875	402	428	256	8.4
17	*5,530	1,990	583	1,550	1,010	930	3,430	845	*169	375	256	226
18	5,260	1,860	230	1,460	952	623	3,970	773	112	375	94	200
19	4,210	1,680	430	1,380	845	963	3,780	974	367	367	*8.4	166
20	3,060	1,520	605	*1,290	737	897	3,350	393	371	363	193	271
21	2,130	1,400	449	1,200	815	980	2,990	852	371	109	260	150
22	1,650	1,420	301	1,050	761	958	2,540	621	*546	9.0	*260	8.0
23	961	1,360	216	930	659	985	2,650	359	479	299	271	8.0
24	1,240	898	249	946	665	1,030	2,600	647	107	371	335	261
25	1,200	1,250	9.0	946	731	665	2,500	743	223	*571	126	371
26	1,170	1,220	93	924	797	952	2,310	875	297	367	8.4	363
27	1,140	1,110	563	919	827	930	2,110	270	293	363	257	324
28	1,080	946	482	958	897	924	1,910	786	327	98	367	*142
29	1,010	1,010	411	919	902	919	2,010	1,010	359	9.8	359	7.6
30	366	1,010	393	833	-------	936	3,030	209	359	273	355	7.3
31	1,200	-------	186	919	-------	946	-------	750	-------	324	121	-------
Total	42,040	53,424	15,908.0	43,354.0	25,489	31,404	70,747	35,278	17,265	8,218.4	6,630.0	5,057.5
Mean	1,356	1,781	513	1,399	879	1,013	2,358	1,138	576	265	214	169
(†)	73.6	321	37.5	127	136	139	317	228	75.2	82.0	90.9	9.50

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

Mean	1,283	1,460	476	1,272	743	874	2,041	910	500	183	123	159
Cfsm	4.06	4.62	1.51	4.03	2.35	2.77	6.46	2.88	1.58	0.579	0.389	0.503
In.	4.68	5.15	1.74	4.64	2.54	3.19	7.21	3.32	1.77	0.67	0.45	0.56

	Observed				Adjusted			
Calendar year 1955:	Max 5,530	Min 9.0	Mean 748		Mean 642	Cfsm 2.03	In. 27.58	
Water year 1955-56:	Max 5,530	Min 7.3	Mean 969		Mean 834	Cfsm 2.64	In. 35.92	

* Discharge measurement made on this day.

† Water wasted in diverting drainage from basin of South Branch Nashua River for use of Boston metropolitan district, equivalent in cubic feet per second. Records furnished by Water Division of Metropolitan District Commission.

Note.--Backwater from aquatic vegetation Dec. 18, 19, 23-26, Dec. 31 to Jan. 2, Jan. 8, 9, May 20, 27, 28, 30, 31, June 3, 10, 11, 17, 18, 24, 25, June 27 to Sept. 30.

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 1956.

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

Average discharge.--15 years, 181 cfs.

Extremes.--Maximum discharge during year, 1,380 cfs Jan. 11 (gage height, 5.48 ft); minimum daily, 1.0 cfs Sept. 15.
1941-56: 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. Low flow regulated by mills above station; greater regulation prior to 1953.

Revisions (water years).--WSP 1231: 1945-46.

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second

Oct. 1 to Jan. 10		Jan. 11 to Sept. 30			
2.3	80	1.3	1.0	2.5	122
2.5	113	1.4	2.0	3.0	250
3.0	222	1.5	4.4	3.5	410
3.5	365	1.6	8.6	4.0	615
4.0	555	1.8	21	5.0	1,100
5.0	1,040	2.1	53	6.0	1,700
6.0	1,680				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	147	519	238	86	262	289	331	562	199	33	21	1.8
2	143	571	222	82	256	286	382	490	217	64	*20	17
3	135	499	217	83	253	316	454	422	238	39	21	1.6
4	122	463	240	83	238	434	526	389	310	5.6	3.2	13
5	115	752	311	86	244	584	664	361	334	54	23	17
6	118	1,170	344	90	229	558	*965	334	277	66	24	18
7	210	1,070	317	88	292	550	*1,140	325	196	63	26	23
8	293	805	268	93	354	692	1,060	310	154	60	26	1.4
9	320	*662	230	395	372	696	835	295	135	66	24	1.5
10	282	571	207	961	350	620	825	277	126	66	26	22
11	222	587	192	1,330	322	522	875	271	122	44	2.6	23
12	180	680	185	1,130	375	494	920	265	116	49	2.4	20
13	160	698	171	955	486	486	930	247	110	67	19	17
14	147	653	*162	870	498	470	925	241	112	66	19	17
15	268	644	160	790	450	446	910	229	94	63	19	1.0
16	726	619	164	700	426	418	960	217	98	43	18	12
17	1,210	579	147	597	403	313	1,180	202	100	52	25	24
18	1,190	519	145	510	358	334	*1,210	196	91	33	2.2	23
19	917	471	145	426	319	372	965	182	80	51	2.2	23
20	702	435	129	410	328	350	800	175	70	43	23	23
21	579	410	117	*375	304	350	*682	172	69	4.8	*22	23
22	483	386	104	340	262	347	602	165	70	6.0	19	26
23	404	362	96	319	*250	364	558	158	66	49	13	17
24	365	347	91	280	232	268	566	156	67	66	24	63
25	347	335	103	271	244	334	546	150	70	37	1.6	42
26	335	323	111	253	307	375	498	139	41	21	1.4	46
27	317	302	110	241	372	344	466	145	50	49	18	40
28	293	290	98	223	368	328	438	152	38	61	19	24
29	276	276	90	208	322	319	466	132	26	19	18	23
30	262	248	90	229	------	322	*546	143	12	23	21	9.7
31	359	------	90	262	------	319	------	154	------	46	19	----
Total	11,627	16,246	5,294	12,766	9,476	13,000	22,225	7,656	3,688	1,409.4	522.6	612.8
Mean	375	542	171	412	327	419	741	247	123	45.5	16.9	20.4
Cfsm	3.23	4.67	1.47	3.55	2.82	3.61	6.39	2.13	1.06	0.392	0.146	0.176
In.	3.73	5.21	1.70	4.09	3.04	4.17	7.13	2.45	1.18	0.45	0.17	0.20

Calendar year 1955: Max 3,650 Min 2.9 Mean 277 Cfsm 2.39 In. 32.38
Water year 1955-56: Max 1,330 Min 1.0 Mean 286 Cfsm 2.47 In. 33.52

* Discharge measurement made on this day.

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 1956.

Average discharge.--81 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 1955 to September 1956

	Runoff (millions of gallons	Discharge per square mile		Runoff (inches)	Rainfall (inches)
		Millions of gallons per day	Cubic feet per second		
October	4,915.7	2.109	3.26	3.76	7.95
November	6,513.2	2.887	4.47	4.98	4.77
December	1,654.5	.710	1.10	1.27	.96
Calendar year 1955	42,193.6	1.537	2.38	32.30	55.50
January	5,446.5	2.336	3.62	4.17	7.24
February	4,288.4	1.966	3.04	3.28	4.98
March	5,196.3	2.229	3.45	3.98	6.21
April	9,140.2	4.052	6.27	6.99	3.63
May	2,148.8	.922	1.43	1.64	1.65
June	682.7	.303	.468	.52	2.73
July	-164.9	-.071	-.109	-.13	3.52
August	-623.8	-.268	-.414	-.48	1.60
September	185.1	.082	.127	.14	4.52
Water year 1955-56	39,382.7	1.431	2.21	30.12	49.56

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

Lake Cochituate Outlet at Cochituate, Mass.

Location.--Lat 42°18'45", long 71°23'15", at outlet three-eights 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 1956.

Average discharge.--93 years, 26.2 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 1955 to September 1956

Month	Runoff (millions of gallons)	Discharge per square mile		Runoff (inches)	Rainfall (inches)
		Millions of gallons per day	Cubic feet per second		
October	1,408.9	2.612	4.04	4.55	10.27
November	1,921.3	3.681	5.70	6.35	4.68
December	668.4	1.239	1.92	2.21	1.03
Calendar year 1955	13,658.9	2.151	3.33	45.17	57.39
January	1,817.4	3.369	5.21	6.01	7.21
February	1,661.8	3.293	5.10	5.50	4.25
March	1,720.6	3.190	4.94	5.69	5.75
April	2,406.2	4.610	7.13	7.96	3.00
May	876.7	1.625	2.52	2.90	1.51
June	262.4	.503	.778	.87	1.79
July	98.8	.183	.283	.33	2.73
August	-46.0	-.085	-.132	-.15	1.79
September	184.5	.353	.547	.61	4.24
Water year 1955-56	12,981.0	2.038	3.15	42.94	48.05

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

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 1956. October, November 1936 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 67.41 ft above mean sea level, datum of 1929.

Average discharge.--20 years, 470 cfs (adjusted to net drainage area).

Extremes.--Maximum discharge during year, 2,970 cfs Apr. 18, 19 (gage height, 7.71 ft); minimum, 19 cfs Aug. 22; minimum daily, 79 cfs Aug. 18, 22.
1936-56: Maximum discharge, 4,540 cfs Aug. 23, 1955 (gage height, 8.97 ft); minimum, 7.0 cfs July 12, Dec. 10, 1949; minimum daily, 13 cfs Aug. 28, 1949.

Remarks.--Records excellent except those for periods of no gage-height record or backwater from aquatic vegetation, which are good. Daily discharge includes water wasted from 92.6 sq mi in basins of Sudbury River and Lake Cochituate. Water diverted above station for use of city of Lowell. Flow regulated by mills above station.

Rating tables, water year 1955-56, except period of backwater from aquatic vegetation (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31		Nov. 1 to Sept. 30			
5.0	430	4.0	79	6.0	1,140
6.0	1,100	4.2	120	7.0	2,170
7.0	2,040	4.5	204	8.0	3,320
8.0	3,270	5.0	430		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*557	1,300	1,210	300	1,060	1,170	1,310	1,980	575	222	*167	88
2	560	1,400	1,160	307	1,030	1,150	1,350	1,970	563	228	148	83
3	545	1,400	1,110	340	1,020	1,160	1,410	1,900	593	222	132	96
4	520	1,600	1,100	325	960	1,240	*1,500	1,800	677	201	94	140
5	490	1,900	1,130	330	970	1,350	1,660	1,670	719	222	107	*99
6	470	2,150	1,120	345	954	1,430	1,930	1,590	733	211	140	98
7	550	2,250	1,110	330	994	1,530	2,170	1,510	726	209	118	108
8	670	2,300	1,100	392	1,080	1,650	2,370	1,420	698	251	103	103
9	770	2,250	1,050	869	1,150	1,760	2,490	1,370	650	297	90	128
10	810	2,200	986	1,350	1,180	1,800	2,510	*1,310	631	259	109	152
11	840	2,150	938	1,780	1,170	1,770	2,560	1,220	612	259	107	138
12	810	2,200	906	2,260	1,230	1,730	2,600	1,160	575	236	107	112
13	780	2,300	860	2,560	1,360	1,700	2,650	1,080	545	201	138	102
14	740	2,310	815	2,640	1,460	1,660	2,680	1,040	533	189	125	102
15	1,000	2,290	755	2,620	1,500	1,620	2,680	1,000	503	239	125	89
16	1,600	2,250	684	2,580	1,490	1,560	2,760	970	468	275	120	138
17	2,000	2,210	670	2,480	1,470	1,290	2,860	938	474	250	107	186
18	2,200	2,150	657	2,270	1,400	1,450	2,950	898	515	240	79	170
19	2,300	2,030	*657	2,130	1,350	1,390	*2,960	852	497	220	88	182
20	2,300	1,920	590	2,050	1,350	1,220	2,860	800	480	190	85	188
21	2,200	1,860	560	1,880	1,310	1,330	2,720	785	452	180	97	201
22	2,100	1,780	515	1,750	1,210	1,390	2,570	726	419	220	79	192
23	2,000	*1,690	475	1,670	*1,160	1,400	2,420	691	365	250	90	211
24	1,900	1,610	419	1,470	1,090	1,380	2,310	650	360	230	93	247
25	1,800	1,550	424	1,410	1,060	1,330	2,200	612	397	230	98	*239
26	1,650	1,480	430	*1,360	1,100	1,400	2,090	581	375	210	88	243
27	1,550	1,430	452	1,260	1,130	1,380	1,990	575	360	190	83	239
28	1,450	1,390	408	1,170	1,170	1,350	1,880	593	297	170	85	247
29	1,350	1,350	375	1,110	1,180	1,320	1,910	587	251	200	87	259
30	1,250	1,280	360	1,100	-------	1,300	1,970	551	212	220	85	284
31	1,200	-------	320	1,070	-------	1,300	-------	569	-------	190	94	-------
Total	38,962	55,980	23,346	43,508	34,588	44,510	68,320	33,398	15,255	6,911	3,268	4,864
Mean	1,257	1,866	753	1,403	1,193	1,436	2,277	1,077	508	223	105	162
(†)	-307	-520	-210	-374	-358	-415	-518	-259	-114	-82.9	-31.8	-108

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

Mean	950	1,346	543	1,029	834	1,021	1,760	818	395	140	73.6	54.5
Cfsm	3.04	4.31	1.74	3.30	2.67	3.27	5.64	2.62	1.27	0.449	0.236	0.175
In.	3.51	4.81	2.01	3.80	2.88	3.77	6.29	3.02	1.41	0.52	0.27	0.19

	Observed			Adjusted				
Calendar year 1955:	Max 4,490	Min 80	Mean 957	Mean 677	Cfsm 2.17	In. 29.47		
Water year 1955-56:	Max 2,960	Min 79	Mean 1,019	Mean 745	Cfsm 2.39	In. 32.48		

* 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.
Note.--No gage-height record Oct. 2 to Nov. 13, July 17-31; discharge estimated on basis of weather records, recorded range in stage, and records for North Nashua River near Leominster and Assabet River at Maynard. Backwater from aquatic vegetation June 16 to Sept. 30.

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 1956.
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 locks and canals) was indicative of flow including that of Concord River.
Average discharge.--33 years, 7,292 cfs (adjusted for wastage into Merrimack River).
Extremes.--Maximum discharge during year, 46,900 cfs May 1 (gage height, 51.54 ft); maximum gage height, 51.73 ft Jan. 10 (backwater from ice); minimum daily, 548 cfs Aug. 12.
1923-56: 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 period of ice effect and those below 1,000 cfs, which are good. Daily discharge includes water wasted from 210 sq mi in basins of Sudbury and South Branch Nashua Rivers and Lake Cochituate. Flow regulated by powerplants, by Franklin Falls Reservoir since 1942, and by Squam, Newfound, Winnipesaukee, Winnisquam, and other lakes and reservoirs above station. See pages 81.109 for description and month-end usable contents of many of these reservoirs.

Rating table, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

41.3	475	44.0	7,820
41.5	698	46	16,400
42.0	1,520	49.0	31,900
42.5	2,740	52.0	49,800
43.0	4,270		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*2,440	12,900	6,890	1,670	6,700	7,780	6,050	46,300	13,100	1,730	*2,500	1,230
2	798	15,400	6,620	1,750	6,930	7,620	7,000	43,400	10,800	2,270	2,500	817
3	3,270	13,900	6,160	3,030	6,700	7,270	8,220	36,000	10,800	2,440	2,340	1,460
4	3,150	12,400	6,010	2,630	6,160	7,620	8,960	30,700	15,000	2,030	1,370	2,940
5	2,660	16,600	7,120	2,500	5,870	8,870	11,100	27,800	20,900	1,910	948	2,630
6	2,650	24,800	7,080	2,470	6,660	9,040	*15,700	25,900	19,000	2,230	2,550	3,070
7	3,020	24,000	6,660	1,800	6,740	9,500	20,400	23,600	15,200	2,420	2,100	3,480
8	4,100	20,300	6,370	3,830	7,540	9,920	22,700	21,200	12,500	2,370	2,060	1,620
9	4,620	18,600	6,160	b6,600	7,980	9,500	20,800	18,400	10,600	3,540	2,040	1,420
10	4,320	14,800	5,460	b23,000	7,940	8,660	19,600	16,100	9,080	3,610	2,050	2,940
11	3,920	14,200	5,360	b36,000	7,700	7,980	20,100	15,000	8,960	5,360	1,320	2,950
12	3,640	14,000	5,800	34,600	7,860	8,380	21,900	14,900	8,460	5,630	548	2,450
13	3,670	13,900	5,600	32,400	8,260	8,700	24,700	13,100	7,580	4,460	2,140	2,260
14	3,730	14,700	5,360	31,600	8,340	8,830	28,000	13,500	7,080	3,760	2,140	2,200
15	3,890	15,200	5,290	27,800	8,620	8,500	29,800	14,300	6,590	5,830	2,150	1,450
16	13,000	15,000	5,090	25,700	8,500	8,380	31,400	13,400	5,530	10,600	2,160	589
17	18,200	15,300	4,330	23,400	8,180	5,940	39,500	12,400	4,430	7,980	1,690	2,240
18	21,200	16,000	3,860	18,700	7,700	6,190	45,300	12,100	4,850	5,670	1,280	2,690
19	19,600	14,600	5,290	15,000	7,150	7,460	44,100	10,600	4,080	5,530	556	3,990
20	16,000	13,100	4,950	13,200	7,780	7,940	38,900	9,880	3,890	5,120	2,010	4,220
21	13,200	12,200	4,400	11,500	7,820	8,180	34,500	9,120	3,590	3,200	1,940	3,830
22	10,300	10,800	3,890	9,840	6,810	8,460	32,000	8,460	3,150	3,180	1,900	3,180
23	9,000	10,300	3,550	9,210	6,740	8,420	31,200	7,940	2,190	4,230	1,890	3,010
24	8,580	9,000	2,710	8,380	6,370	7,860	29,900	7,940	1,750	4,170	1,570	5,540
25	8,460	9,630	2,110	*8,460	6,370	6,700	26,500	8,380	3,230	3,170	1,270	*4,240
26	7,980	8,260	2,180	7,980	6,810	7,270	24,000	7,900	3,130	2,200	566	6,740
27	7,500	7,860	3,700	7,310	7,230	7,620	22,500	7,420	3,270	2,560	1,610	6,260
28	7,120	8,260	3,480	6,370	7,620	7,420	21,900	10,500	3,300	1,900	1,550	4,620
29	6,370	8,020	3,360	6,190	7,700	7,270	26,800	19,200	3,540	1,640	1,800	3,320
30	5,190	7,580	2,860	6,700	-------	7,040	39,700	17,800	1,870	2,730	1,790	2,540
31	7,520	-------	2,340	6,960	-------	6,440	-------	14,200	-------	2,470	1,970	-------
Total	229,098	409,610	150,040	396,580	212,780	246,760	753,230	537,440	227,450	115,960	54,308	89,926
Mean	7,390	13,650	4,840	12,790	7,337	7,960	25,110	17,340	7,582	3,741	1,752	2,998
(†)	382	842	249	503	495	555	835	488	190	166	124	118

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

Mean	7,008	12,810	4,591	12,290	6,842	7,405	24,270	16,850	7,391	3,575	1,628	2,879
Cfsm	1.58	2.89	1.04	2.78	1.55	1.67	5.48	3.81	1.67	0.808	0.368	0.651
In.	1.83	3.23	1.20	3.20	1.67	1.93	6.12	4.39	1.86	0.93	0.42	0.73

	Observed			Adjusted			
Calendar year 1955:	Max 24,800	Min 270	Mean 8,015	Mean 7,628	Cfsm 1.72	In. 23.41	
Water year 1955-56:	Max 46,300	Min 548	Mean 9,353	Mean 8,942	Cfsm 2.02	In. 27.51	

* Discharge measurement made on this day.
† Water wasted from 210 sq mi in basins of Sudbury and South Branch Nashua Rivers and Lake Cochituate, equivalent in cubic feet per second. Records furnished by Water Division of Metropolitan District Commission.
b Stage-discharge relation affected by ice.
Note.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

Reservoirs in Merrimack River basin

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.

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.

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.

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.

Lake Winnipesaukee on Winnipesaukee River (see p. 81).

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.

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.

Tower Hill Pond on Maple Falls Brook, 2¼ miles north of Auburn, N. H., completed in 1939, used for storage of water for municipal supply and for power, has usable capacity of 182,000,000 cu ft. Records furnished by Manchester Water Works.

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 1955 to September 1956

Date	Newfound Lake	Franklin Falls Reservoir	Merrymeeting Lake	Lake Wentworth	Edward MacDowell Reservoir	Blackwater Reservoir	Tower Hill Pond	Massabesic Lake
Sept.30, 1955.	969	136	149	618	16.7	0.4	93.3	535
Oct. 31.....	1,091	210	128	620	22.8	.9	89.2	501
Nov. 30.....	1,449	140	133	674	16.7	1.0	106.4	633
Dec. 31.....	1,083	135	59	612	1.6	.3	82.5	423
Jan. 31, 1956.	1,308	133	82	813	17.9	.8	96.9	719
Feb. 29.....	831	131	41	690	17.5	.7	95.3	543
Mar. 31.....	645	134	42	396	19.1	.7	93.3	440
Apr. 30.....	1,800	788	190	823	171.1	189.6	174.5	940
May 31.....	1,892	375	281	1,052	4.0	4.9	178.9	697
June 30.....	1,551	140	291	845	1.0	.5	173.5	639
July 31.....	1,480	133	254	750	.3	.3	173.5	591
Aug. 31.....	1,201	131	201	564	0	.2	172.8	498
Sept.30.....	1,146	138	196	510	.6	.6	173.5	444

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 1956.

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.--11 years, 35.6 cfs.

Extremes.--Maximum discharge during year, 247 cfs Jan. 14 (gage height, 4.00 ft); minimum daily, 0.30 cfs Sept. 6, 14, 15, 18-21.
1945-56: Maximum discharge, 352 cfs Mar. 23, 1948 (gage height, 4.81 ft); minimum daily, 0.12 cfs July 30, 1952.

Remarks.--Records excellent except those below 2.5 cfs, which are good. Diurnal fluctuation caused by mill above station. Some regulation at low flow by ponds above station.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 13		Jan. 14 to Sept. 30			
1.5	4.4	1.18	0.30	1.9	19
1.6	7.3	1.2	.41	2.2	39
1.8	15	1.3	1.17	2.5	61
2.1	32	1.4	2.4	3.0	109
2.5	61	1.5	4.1	4.0	247
3.0	107	1.7	10		
4.0	225				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.6	42	39	8.7	b43	48	55	110	31	5.4	2.4	0.36
2	6.0	43	36	8.3	42	48	61	108	29	5.1	2.4	.36
3	6.3	44	34	8.7	41	50	67	101	30	4.5	2.25	.36
4	6.3	51	37	8.7	b37	59	74	93	33	3.7	2.25	.36
5	6.3	84	42	9.0	37	67	94	84	36	*3.7	2.1	.36
6	6.9	120	48	8.7	36	74	152	74	38	3.9	2.1	.30
7	9.0	127	b47	8.3	41	78	216	71	36	4.1	2.1	.47
8	9.3	*122	44	12	44	83	206	67	33	4.1	1.95	.41
9	10	115	40	39	47	85	189	62	31	4.4	1.4	.36
10	10	106	38	121	49	87	185	59	30	4.6	1.6	.47
11	10	114	35	174	51	87	196	54	28	4.4	1.45	.82
12	9.7	118	31	199	59	87	212	53	26	4.4	1.85	.47
13	9.3	117	*29	222	67	86	216	52	23	4.4	1.6	.36
14	9.3	115	27	231	82	81	213	50	21	5.6	1.6	.36
15	12	111	27	228	93	77	207	47	19	5.4	1.35	.36
16	15	106	26	210	94	b67	212	45	18	5.4	1.25	.36
17	29	103	24	183	b88	50	231	44	16	5.6	1.17	.41
18	41	95	22	*158	75	b59	*230	41	14	5.4	1.35	.36
19	52	83	21	*146	66	62	*216	39	13	5.1	1.35	.36
20	54	77	19	130	*64	55	200	38	12	4.8	1.17	.36
21	52	74	16	113	b63	56	180	36	12	4.6	1.35	.36
22	50	67	14	100	b58	56	159	34	10	4.8	1.17	.36
23	49	60	14	87	b52	56	138	33	9.7	4.8	*1.08	.41
24	49	58	13	b75	b49	54	127	32	9.0	3.9	1.17	.67
25	49	56	12	b67	48	52	128	31	8.4	3.7	.99	.36
26	45	53	12	b61	50	52	121	28	7.7	3.5	.90	.58
27	42	50	11	57	49	52	111	31	7.4	3.3	.90	1.25
28	40	47	10	52	47	*52	101	33	6.7	3.2	.74	1.17
29	38	45	9.7	50	b45	52	102	33	6.4	2.8	.60	1.35
30	36	42	9.7	47	-------	50	109	33	5.8	2.7	.47	1.45
31	41	-------	9.3	47	-------	52	-------	32	-------	*2.7	.41	-------
Total	809.0	2,445	796.7	2,869.4	1,617	1,970	4,708	1,648	600.1	134.0	44.47	15.63
Mean	26.1	81.5	25.7	92.6	55.8	63.5	157	53.2	20.0	4.32	1.43	0.521
Cfsm	1.21	3.77	1.19	4.29	2.58	2.94	7.27	2.46	0.926	0.200	0.066	0.024
In.	1.39	4.21	1.37	4.94	2.78	3.39	8.11	2.84	1.03	0.23	0.08	0.03

Calendar year 1955: Max 127 Min 0.47 Mean 33.7 Cfsm 1.56 In. 21.16
Water year 1955-56: Max 231 Min 0.30 Mean 48.2 Cfsm 2.23 In. 30.40

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

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 1956.
Gage.--Water-stage recorder and concrete control. Altitude of gage is 45 ft (from topographic map).
Average discharge.--18 years, 69.7 cfs (adjusted for diversions).
Extremes.--Maximum discharge during year, 497 cfs Jan. 13 (gage height, 5.68 ft); minimum, 0.6 cfs Sept. 30.
1938-56: Maximum discharge, 646 cfs Mar. 21, 1948 (gage height, 5.895 ft); minimum, 0.25 cfs Sept. 19, 1953.
Remarks.--Records excellent except those for period of backwater from debris, which are good, and those for periods of ice effect or no gage-height record, which are fair. Water diverted above station for municipal supplies of Reading, Lynn, and Peabody. Regulation at low flow by mill above station.
Revisions (water years).--WSP 1301: 1942(M).

Rating tables, water year 1955-56, except periods of ice effect or backwater from debris (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 11		Nov. 12 to Sept. 30			
0.6	19	0.1	0.5	1.5	75
.7	27	.2	1.8	2.0	99
1.0	58	.3	4.2	3.0	172
1.4	90	.4	8.0	4.0	270
2.0	111	.5	13	5.0	398
3.0	174	.7	28	5.7	500
4.0	260	1.0	54		
5.0	372				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	160	88	18	b90	b105	137	*226	44	11	3.3	1.35
2	42	153	82	b16	86	101	156	212	42	9.8	*3.2	1.4
3	*34	149	73	16	86	*117	182	203	50	5.4	3.1	1.85
4	23	158	79	16	b83	146	204	190	73	4.5	2.6	1.4
5	22	286	*107	17	79	162	*267	172	63	*5.5	2.35	1.25
6	24	321	106	18	*76	161	a350	158	59	*10	2.15	*1.15
7	34	*306	98	18	88	190	a400	145	56	11	2.05	1.65
8	40	290	*98	22	105	226	a390	132	52	11	1.95	1.75
9	38	273	90	181	114	226	a360	119	48	12	1.75	1.65
10	36	258	84	370	121	228	a340	112	44	12	1.6	1.6
11	34	270	77	*440	126	224	a360	106	41	10	1.4	1.4
12	32	289	72	471	175	218	a380	95	49	8.5	1.6	1.35
13	31	259	*66	490	224	200	a380	90	46	7.5	1.75	1.25
14	36	246	62	473	232	181	a380	93	44	9.2	2.05	1.25
15	92	241	49	437	234	168	a370	88	42	10	1.85	1.4
16	168	228	49	399	224	b163	a390	84	38	10	1.6	1.65
17	282	218	48	340	b195	b145	*408	81	37	10	1.35	2.25
18	a335	200	44	282	162	135	380	77	33	8.8	2.05	2.45
19	a340	188	42	b285	143	140	343	74	26	7.3	2.05	2.35
20	a335	184	37	248	131	123	317	71	24	6.5	1.85	2.45
21	321	172	33	210	124	118	287	60	23	6.3	1.85	2.7
22	297	163	28	180	b115	119	257	48	22	8.2	2.05	2.6
23	264	151	24	158	103	126	238	*44	20	8.8	1.95	2.7
24	236	142	23	b140	94	134	234	45	18	8.8	1.95	3.4
25	211	132	23	126	90	b124	214	42	17	8.2	1.85	4.6
26	190	118	24	110	103	124	198	39	16	7.1	1.65	4.6
27	168	111	23	100	103	b124	188	39	14	5.9	1.4	4.2
28	155	106	21	92	110	b126	178	42	14	5.3	1.2	4.0
29	142	101	20	86	b110	b129	227	41	13	4.8	1.1	1.05
30	132	90	20	86	-------	130	238	40	12	4.2	1.05	.85
31	146	-------	20	*91	-------	128	-------	41	-------	3.8	1.25	-------
Total	4,278	5,963	1,710	5,936	3,726	4,741	8,751	3,009	1,080	251.4	58.90	63.55
Mean	138	199	55.2	191	128	153	292	97.1	36.0	8.11	1.90	2.12
(†)	9.97	8.15	1.67	1.52	1.53	1.60	1.66	8.52	9.62	2.30	2.49	3.15
Adjusted for diversions												
Mean	148	207	56.8	193	130	155	293	106	45.6	10.4	4.39	5.26
Cfsm	3.41	4.77	1.31	4.45	3.00	3.57	6.75	2.44	1.05	0.240	0.101	0.121
In.	3.93	5.32	1.51	5.13	3.23	4.11	7.54	2.80	1.17	0.28	0.12	0.14

	Observed						Adjusted					
Calendar year 1955:	Max	340	Min	0.7	Mean	86.1	Mean	90.9	Cfsm	2.09	In.	28.42
Water year 1955-56:	Max	490	Min	0.85	Mean	108	Mean	112	Cfsm	2.58	In.	35.28

* Discharge measurement made on this day.
† Diversions, equivalent in cubic feet per second, for municipal supplies of Reading, Lynn, and Peabody; records furnished by municipalities.
a No gage-height record; discharge estimated on basis of weather records and records for Parker River at Byfield.
b Stage-discharge relation affected by ice.
Note.--Backwater from debris Apr. 28 to May 23.

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 1956. 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.--26 years, 200 cfs (adjusted for diversions).

Extremes.--Maximum discharge during year, 1,530 cfs Jan. 13 (gage height, 6.00 ft); minimum, 5.5 cfs Aug. 19, 20.
1930-56: Maximum discharge, 2,610 cfs Mar. 15, 1936 (gage height, 7.70 ft); minimum, 1.4 cfs Aug. 9, 1934.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are good. Diversions above station for municipal supplies of Reading, Lynn, Peabody, and Danvers. No diversion during water year for Salem and Beverly.

Revisions.--WSP 781: Drainage area.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 12		Jan. 13 to Aug. 23				Aug. 23 to Sept. 30	
3.1	41	2.5	5.5	3.6	122	2.48	5.8
3.4	83	2.6	8.5	4.0	240	2.5	6.4
3.7	146	2.8	18	4.5	490	2.6	9.6
4.0	240	3.0	31	5.0	830	2.7	14
4.5	470	3.3	67	6.0	1,530	2.9	26
5.0	780						
6.0	1,460						

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	81	324	b260	b51	b265	b300	380	*746	*152	32	11	6.7
2	83	320	240	b46	252	307	424	697	146	28	10	6.7
3	83	320	233	45	248	340	454	627	152	25	9.3	7.9
4	83	334	233	47	b245	375	502	578	154	22	8.2	7.6
5	81	482	256	48	b225	414	592	544	166	*21	8.2	7.3
6	75	682	268	51	b220	442	844	514	177	26	7.8	6.8
7	85	801	b270	52	b235	478	a1,050	466	183	37	7.5	8.6
8	94	*843	268	60	272	532	a1,100	430	180	39	7.5	9.2
9	99	794	b250	169	307	b550	1,090	397	171	36	7.5	9.2
10	101	722	b235	605	320	627	a950	380	163	36	7.2	8.6
11	103	708	b220	1,150	340	627	a1,000	355	154	33	6.3	7.6
12	103	708	b200	1,440	408	599	a1,090	340	146	29	6.6	6.4
13	101	696	*b190	1,520	514	571	1,090	320	136	26	8.5	6.4
14	97	676	180	1,430	578	520	1,080	302	129	27	10	6.4
15	101	656	174	1,360	613	b505	1,060	289	122	30	9.3	6.4
16	116	620	b155	1,250	b590	b445	1,080	280	116	30	7.5	7.9
17	168	596	b150	1,040	b545	b270	1,130	268	107	29	6.6	12
18	284	554	b145	*851	b470	b350	a1,140	256	101	27	6.0	14
19	482	518	b135	b850	b420	365	a1,070	244	92	25	5.7	13
20	602	476	b115	b795	*419	340	a1,000	233	83	22	5.7	13
21	632	448	b110	b695	397	345	a900	222	72	20	6.6	14
22	614	420	b100	b615	b355	355	a800	208	64	22	7.2	14
23	584	395	90	b525	b325	370	a740	202	61	*24	*7.7	13
24	548	375	80	b485	b305	b340	a700	196	54	24	*8.6	17
25	512	356	75	b430	302	b320	a700	186	51	22	8.9	21
26	476	338	72	b380	316	350	a650	171	49	20	8.2	19
27	437	316	69	b335	320	365	592	166	45	18	7.6	17
28	400	300	64	b310	b300	*b365	538	160	39	16	6.7	18
29	365	288	60	b290	b295	b365	627	160	37	14	6.4	18
30	334	b270	57	272	-------	b335	711	154	33	13	5.8	17
31	329	-------	b56	b265	-------	355	-------	152	-------	12	5.8	-------
Total	8,253	15,336	5,010	17,462	10,401	12,822	25,084	10,243	3,335	785	235.9	339.7
Mean	266	511	162	563	359	414	836	330	111	25.3	7.61	11.3
(†)	12.6	10.6	4.20	4.00	4.05	4.09	4.20	11.0	13.0	5.60	6.32	5.93
Adjusted for diversions												
Mean	279	522	166	567	363	418	840	341	124	30.9	13.9	17.3
Cfsm	2.25	4.21	1.34	4.57	2.93	3.37	6.77	2.75	1.00	0.249	0.112	0.140
In.	2.59	4.70	1.54	5.27	3.15	3.88	7.56	3.17	1.12	0.29	0.13	0.16

	Observed			Adjusted				
Calendar year 1955:	Max 843	Min 4.0	Mean 224	Mean 237	Cfsm 1.91	In. 25.97
Water year 1955-56:	Max 1,520	Min 5.7	Mean 299	Mean 306	Cfsm 2.47	In. 33.56

* Discharge measurement made on this day.
† Diversions, equivalent in cubic feet per second, for municipal supplies of Reading, Lynn, Peabody, and Danvers; records furnished by various municipalities.
a No gage-height record; discharge estimated on basis of weather records and records for Ipswich River at South Middleton and Parker River at Byfield.
b Stage-discharge relation affected by ice.

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 1956.

Gage.--Water-stage recorder and concrete control. Datum of gage is at mean sea level, datum of 1929.

Average discharge.--17 years, 27.6 cfs.

Extremes.--Maximum discharge during year, 378 cfs Jan. 9 (gage height, 13.60 ft, backwater from construction); minimum, 0.6 cfs Sept. 3-6, 10-14; minimum daily, 0.6 cfs Sept. 4, 5, 11-13.

1939-56: 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 period of 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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from construction Oct. 15-20, Nov. 4-9, 11-14, Jan. 9-15)

Oct. 1 to Nov. 5		Nov. 6 to Sept. 30			
10.7	10	10.24	0.6	10.9	18
10.9	20	10.3	1.05	11.1	31
11.2	45	10.4	2.2	11.4	64
11.5	83	10.5	3.9	11.7	115
12.0	184	10.6	6.2	12.0	181
12.5	326	10.7	9.1	12.5	326

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a20	70	28	7.0	41	47	66	89	22	1.45	1.25	0.75
2	a17	73	30	6.2	41	50	84	73	18	2.4	2.5	1.1
3	*a15	66	32	6.2	46	65	106	*66	26	2.1	2.5	.65
4	14	101	37	7.2	37	75	123	65	36	1.35	1.05	.6
5	13	274	50	7.4	37	78	157	62	*34	2.3	1.05	.6
6	11	*280	50	7.4	33	76	202	48	27	4.2	.95	.9
7	32	199	43	7.2	106	104	202	45	21	3.0	.9	6.1
8	30	157	36	21	104	123	186	42	17	2.7	.85	.8
9	28	*129	31	241	96	113	171	38	16	4.7	.8	.65
10	25	111	27	294	75	91	157	40	15	2.7	1.45	.65
11	19	163	20	241	69	78	167	40	18	2.2	.8	.6
12	15	162	23	197	148	73	164	31	18	1.95	.8	.6
13	14	129	20	186	150	70	153	36	11	2.5	1.15	.6
14	21	127	18	157	115	71	135	34	10	5.4	1.2	1.05
15	178	117	19	137	100	72	123	29	9.1	3.5	1.25	.9
16	266	109	19	117	93	66	123	14	7.6	3.0	1.2	1.2
17	283	102	19	107	77	49	135	19	7.4	2.9	1.05	1.35
18	231	88	18	93	66	53	125	19	6.5	2.5	.9	.85
19	182	72	*17	*79	59	58	113	22	5.6	2.1	1.0	.9
20	148	72	15	65	58	48	93	31	3.1	2.4	.9	1.75
21	99	65	13	43	*52	58	82	26	3.6	2.1	1.2	1.35
22	74	60	12	44	43	61	73	23	4.7	4.4	1.0	.8
23	71	56	11	44	40	79	69	23	3.4	2.8	.8	1.05
24	70	52	8.4	41	36	88	75	24	2.3	2.4	.85	5.6
25	68	49	9.1	41	52	70	70	22	3.4	2.2	.75	1.8
26	62	46	9.5	38	77	70	63	13	4.8	2.0	.75	1.0
27	59	41	9.5	36	72	60	61	19	3.0	2.0	5.9	.85
28	57	39	*8.8	35	69	55	48	18	2.7	1.2	.65	3.5
29	51	36	7.8	32	56	*53	84	16	1.9	1.1	.65	1.2
30	49	30	7.4	44	-------	59	100	14	1.45	1.15	.95	.8
31	72	-------	7.2	46	-------	61	-------	21	-------	1.2	.8	-------
Total	2,294	3,075	655.7	2,427.6	2,048	2,174	3,510	1,062	359.55	77.90	37.85	40.55
Mean	74.0	102	21.2	78.3	70.6	70.1	117	34.3	12.0	2.51	1.22	1.35
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 612 Min 0.75 Mean 43.2 Cfsm - In. -
Water year 1955-56: Max 294 Min 0.6 Mean 48.5 Cfsm - In. -

Peak discharge (base, 170 cfs).--Oct. 17 (6:30 a.m.) 313 cfs (13.225 ft); Nov. 5-6 (12 p.m. to 3 a.m.) 326 cfs (13.295 ft); Nov. 11 (6 to 8 a.m.) 176 cfs (12.26 ft); Jan. 9 (10 p.m.) 378 cfs (13.60 ft); Apr. 6 (7 to 11 p.m.) 218 cfs (12.14 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, and records for stations on nearby streams.

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 1956.

Gage.--Water-stage recorder and concrete control. Datum of gage is 89.76 ft above mean sea level, datum of 1929.

Average discharge.--19 years, 301 cfs (adjusted for diversions).

Extremes.--Maximum discharge during year, 1,480 cfs Apr. 11 (gage height, 5.37 ft); maximum gage height, 5.61 ft Nov. 8, 9; minimum discharge, 23 cfs Aug. 25.
1937-56: 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 tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 11-13)

Oct. 1 to Jan. 13				Jan. 14 to Sept. 30			
0.9	91	3.0	648	0.5	14	1.5	282
1.0	124	4.0	924	.6	26	2.0	420
1.5	282	6.0	1,600	.7	42	3.0	720
2.0	414			.8	65	4.0	1,020
				1.0	126	5.4	1,490

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	318	602	455	124	441	606	615	627	258	85	77	49
2	303	624	431	b110	462	591	651	612	273	80	58	51
3	288	646	416	117	483	594	717	606	282	74	56	51
4	267	706	436	121	468	615	795	594	337	65	54	51
5	249	1,080	464	128	489	639	930	570	361	80	51	51
6	249	1,170	460	135	492	666	1,090	546	361	123	47	54
7	332	1,300	457	135	564	*741	1,210	513	356	136	44	100
8	361	1,420	445	b135	597	795	1,340	486	329	150	44	80
9	383	1,430	419	474	630	822	1,410	468	282	163	47	80
10	395	1,370	b385	731	669	825	1,440	447	237	157	42	80
11	395	1,340	358	983	693	831	1,470	414	210	148	40	74
12	385	1,250	b330	1,210	825	819	1,460	389	192	136	38	68
13	361	1,140	b295	1,400	876	798	1,430	361	201	120	36	65
14	329	1,090	267	1,420	942	783	1,370	343	204	129	38	71
15	476	1,050	258	1,380	996	759	1,300	320	157	150	34	68
16	654	998	b220	1,320	1,000	732	1,280	306	170	163	33	74
17	874	952	222	1,240	936	b605	1,250	303	166	170	33	74
18	960	885	219	b1,110	882	b655	*1,220	308	157	157	32	74
19	*1,070	846	213	b1,000	b850	b570	1,190	300	157	136	32	68
20	1,140	801	b195	915	762	b490	1,150	276	153	120	30	60
21	1,140	762	b175	828	723	b640	1,080	261	150	113	40	56
22	1,080	717	b165	756	b665	b675	1,000	240	137	123	40	51
23	992	677	b150	687	b615	675	942	225	126	123	38	51
24	*913	646	146	b580	b550	b635	894	225	120	126	33	68
25	840	609	156	b545	540	b595	834	231	113	123	24	65
26	*762	580	163	495	b560	633	786	222	104	113	24	68
27	692	546	*160	b420	576	612	735	222	97	104	24	65
28	*636	524	149	b400	b615	612	693	231	*94	91	32	*90
29	595	508	146	382	*b620	*612	672	237	88	82	42	126
30	562	*481	135	395	-------	618	*651	231	82	*71	*34	166
31	*602	-------	131	*b420	-------	603	-------	*231	-------	94	40	-------
Total	18,603	26,750	8,621	20,096	19,521	20,846	31,585	11,343	5,954	3,703	1,237	2,149
Mean	600	892	278	648	673	672	1,053	366	198	119	39.9	71.6
(†)	+4.84	+4.80	+5.02	+4.51	+4.28	+4.96	+4.60	+5.58	+6.20	+6.46	+5.17	-7.33
Adjusted for diversion												
Mean	605	896	283	653	677	677	1,057	371	205	126	45.1	64.3
Cfsm	3.29	4.87	1.54	3.55	3.68	3.68	5.74	2.02	1.11	0.685	0.245	0.349
In.	3.79	5.44	1.77	4.09	3.97	4.24	6.41	2.33	1.24	0.79	0.28	0.39

	Observed			Adjusted			
Calendar year 1955:	Max 3,130	Min 30	Mean 456	Mean 461	Cfsm 2.51	In. 33.98	
Water year 1955-56:	Max 1,470	Min 24	Mean 466	Mean 470	Cfsm 2.55	In. 34.74	

* Discharge measurement made on this day.
† Diversions for municipal supply of Wellesley and Needham and diversion from Sudbury River basin to Charles River, equivalent in cubic feet per second; records furnished by municipalities and Water Division of Metropolitan District Commission.
b Stage-discharge relation affected by ice.

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 1956.

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.--25 years, 86.9 cfs.

Extremes.--Maximum discharge during year, 480 cfs Nov. 11 (gage height, 90.20 ft, from graph based on gage readings); no flow Aug. 18 to Sept. 2.
1931-56: 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. Mother Brook is a diversion from Charles River to Neponset River through Dedham and Hyde Park.

Revisions (water years).--WSP 1301: 1932(M).

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from debris or shifting-control method used Jan. 27-29, Jan. 31 to Feb. 7, July 26, Aug. 18 to Sept. 13)

Oct. 1 to Mar. 11		Mar. 12 to Sept. 13				Sept. 14-30	
86.0	14	85.1	0	86.0	10	85.3	2.2
86.5	30	85.2	.2	86.2	16	85.4	4.0
87.0	59	85.3	.5	86.5	28	85.6	9.1
87.5	106	85.4	1.0	87.0	58	85.9	20
88.0	164	85.5	1.8	87.5	101		
89.0	302	85.6	2.8	88.0	157		
90.2	480	85.8	5.9	90.0	448		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	197	136	16	124	178	171	185	32	5.2	5.0	0
2	65	193	124	16	124	176	174	175	35	5.2	3.6	0
3	64	193	119	15	134	180	190	170	40	4.4	2.4	.1
4	58	208	120	16	133	185	209	*160	44	3.6	1.7	.1
5	55	316	126	16	134	184	238	155	49	3.6	1.3	*.1
6	48	390	125	17	135	189	282	150	51	8.0	.9	.1
7	61	409	121	17	156	203	320	140	50	10	.8	1.4
8	*69	*434	117	17	173	221	366	130	47	13	.7	2.4
9	77	459	110	55	180	239	403	120	44	16	.6	1.8
10	82	462	103	145	186	242	424	111	38	17	.5	1.7
11	86	467	94	232	197	245	439	104	38	17	.5	1.3
12	88	456	84	308	225	234	444	97	36	16	.3	1.0
13	87	434	74	368	249	230	442	89	35	15	.2	2.7
14	80	415	65	404	263	230	434	81	38	16	.2	5.9
15	102	392	59	420	278	227	421	72	34	17	.2	8.3
16	174	370	52	418	291	218	410	66	28	18	.1	7.5
17	248	355	46	410	291	206	404	62	25	20	.1	7.8
18	298	334	43	392	284	195	391	58	23	20	0	7.5
19	320	316	40	367	268	188	376	53	20	17	0	5.9
20	344	305	36	334	256	156	361	46	18	14	0	5.4
21	363	*285	30	303	240	153	344	38	17	11	0	4.5
22	370	270	26	275	224	170	330	35	16	12	0	3.0
23	357	250	24	239	208	182	315	32	15	11	0	2.7
24	336	236	21	207	191	190	300	28	12	11	0	4.7
25	323	219	21	186	*180	180	280	22	11	10	0	5.9
26	296	201	23	*173	178	*178	260	22	9.3	8.7	0	5.4
27	273	186	22	157	177	174	240	28	7.8	*8.2	0	5.2
28	246	172	20	140	181	169	225	30	7.0	7.6	0	8.6
29	222	160	19	122	182	166	210	30	6.7	6.1	0	14
30	198	150	*18	120	-------	170	200	31	5.7	4.7	0	20
31	196	-------	17	127	-------	170	-------	31	-------	4.1	0	-------
Total	5,654	9,234	2,035	6,032	5,842	6,028	9,603	2,551	832.5	350.4	19.1	135.0
Mean	182	308	65.6	195	201	194	320	82.3	27.8	11.3	0.616	4.50
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 960 Min 0 Mean 120 Cfsm - In. -
Water year 1955-56: Max 467 Min 0 Mean 132 Cfsm - In. -

* Discharge measurement made on this day.

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 1956.

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 from 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.--25 years (1931-56), 376 cfs (adjusted for diversions, wastage, and leakage).

Extremes.--Maximum discharge during year, 1,990 cfs Nov. 11 (gage height, 4.76 ft); minimum, 17 cfs Sept. 28; minimum daily, 26 cfs Aug. 29.
1931-56: 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. 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 Lake Cochituate. 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 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	283	710	512	128	413	622	660	752	283	91	87	36
2	272	704	496	121	430	622	682	699	272	87	85	43
3	276	704	474	125	468	628	740	660	303	83	75	43
4	280	782	490	123	435	644	806	644	386	79	67	44
5	333	1,320	506	123	446	666	926	616	356	85	64	46
6	312	1,510	484	121	457	666	1,130	594	342	113	60	52
7	316	1,440	474	123	633	752	1,290	*584	351	116	60	121
8	320	1,450	479	164	650	842	1,410	545	351	123	59	91
9	323	1,490	468	568	644	854	1,470	518	337	148	55	81
10	331	1,470	440	722	644	842	1,550	501	315	143	60	81
11	359	1,640	413	999	660	824	1,600	484	286	138	57	79
12	359	1,520	386	1,100	824	812	1,580	452	258	135	54	77
13	367	1,430	346	1,250	872	806	1,550	418	248	135	52	71
14	419	1,390	311	1,360	890	806	1,520	288	*242	143	57	75
15	651	1,270	294	1,340	1,030	818	1,500	232	225	138	48	81
16	670	1,200	272	1,320	985	770	1,500	408	216	143	44	83
17	1,030	1,130	252	1,280	957	710	1,510	391	197	146	43	81
18	1,090	1,040	238	1,180	932	670	1,450	361	179	146	42	73
19	1,080	964	*232	1,080	860	644	1,380	366	174	143	38	69
20	1,060	908	213	1,020	854	630	1,280	361	168	138	37	75
21	1,030	860	194	*878	*806	572	1,220	351	159	133	*44	67
22	*1,020	820	182	740	720	606	1,170	342	157	140	44	59
23	995	780	171	682	694	644	1,120	324	146	*135	40	57
24	974	740	157	605	644	672	1,060	303	138	128	42	81
25	934	*700	157	550	633	640	978	283	133	125	38	69
26	869	666	159	523	655	638	926	262	118	128	35	66
27	818	628	157	496	633	611	860	280	116	116	32	103
28	776	606	151	435	666	589	806	280	107	107	29	67
29	710	505	146	391	638	*611	824	269	100	96	26	85
30	666	540	143	391	-------	650	812	262	96	89	30	100
31	734	-------	135	413	-------	655	-------	276	-------	83	33	-------
Total	19,657	30,917	9,532	20,351	20,173	21,516	35,310	13,106	6,759	3,753	1,537	2,156
Mean	634	1,031	307	656	696	694	1,177	423	225	121	49.6	71.9
(†)	136	213	74.0	190	170	157	257	-61.8	28.2	23.1	11.9	1.14
Adjusted for diversions, wastage, and leakage												
Mean	771	1,244	381	847	865	851	1,434	361	253	144	61.5	73.0
Cfsm	3.40	5.48	1.68	3.73	3.81	3.75	6.32	1.59	1.11	0.634	0.271	0.322
In.	3.91	6.11	1.94	4.30	4.11	4.32	7.05	1.83	1.25	0.73	0.31	0.36

	Observed			Adjusted		
Calendar year 1955:	Max 2,330	Min 14	Mean 497	Mean 593	Cfsm 2.61	In. 35.49
Water year 1955-56:	Max 1,640	Min 26	Mean 505	Mean 604	Cfsm 2.66	In. 36.22

* Discharge measurement made on this day.
... diversions for municipal supply of Wellesley, Needham, and Dedham,

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 1956. 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.--17 years, 50.4 cfs.

Extremes.--Maximum discharge during year, 486 cfs Nov. 5 (gage height, 11.32 ft); minimum daily, 6.4 cfs July 2.
1939-56: Maximum discharge, 1,490 cfs Aug. 19, 1955 (gage height, 14.65 ft, from floodmarks); minimum daily, 2.3 cfs Oct. 23, 1949.
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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from debris Oct. 1-15, 21-31)

Oct. 1-31		Nov. 1 to Sept. 30			
7.4	42	7.0	4.5	8.0	70
8.0	105	7.1	7.6	9.0	172
9.0	188	7.4	24	11.0	432
10.0	289	7.7	43	12.0	630
11.0	432				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65	150	94	24	96	99	129	111	50	6.8	16	16
2	60	145	80	24	97	101	145	96	46	6.4	15	15
3	53	138	86	25	107	118	163	94	56	8.0	16	17
4	50	152	93	32	100	126	172	*89	77	7.2	17	18
5	45	404	109	34	100	125	216	77	71	26	14	*16
6	44	465	106	29	98	116	257	79	52	35	15	25
7	73	405	95	27	135	130	252	74	46	37	21	43
8	*92	288	85	38	150	154	257	71	44	27	20	34
9	90	254	72	209	140	160	259	68	31	30	20	29
10	79	201	77	341	125	139	263	65	34	22	20	24
11	75	190	70	348	114	125	263	60	33	*18	18	29
12	61	220	68	311	187	122	246	57	30	17	13	16
13	51	215	68	282	169	115	218	60	23	16	14	16
14	63	196	57	237	140	118	200	55	24	35	19	16
15	166	191	54	192	146	125	186	53	22	38	18	15
16	290	174	52	161	142	124	195	55	19	37	17	17
17	*350	172	45	148	128	106	221	51	22	28	18	20
18	312	158	43	145	120	107	*205	51	22	20	17	21
19	257	145	41	140	117	114	172	47	16	16	12	19
20	207	140	36	130	117	108	153	46	14	14	11	17
21	178	*137	35	115	110	102	146	46	13	16	18	16
22	121	131	32	100	100	110	129	37	17	28	16	15
23	126	130	30	92	94	117	124	41	17	32	16	16
24	134	140	28	86	90	121	121	41	11	28	20	20
25	130	132	27	82	*101	108	115	37	16	23	22	22
26	127	120	30	78	124	110	110	34	14	21	16	20
27	124	115	28	76	118	105	105	50	12	*17	17	19
28	120	110	27	73	120	106	102	49	11	15	16	35
29	118	107	26	73	108	*108	114	45	10	11	16	50
30	107	100	*26	90	------	121	117	36	10	13	15	30
31	142	----	25	*108	------	122	-------	49	----	15	17	--
Total	3,910	5,625	1,745	3,848	3,493	3,662	5,355	1,824	863	663.4	520	664
Mean	126	188	56.3	124	120	118	178	58.8	28.8	21.4	16.8	22.1
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 1,260 Min 8.3 Mean 90.9 Cfsm - In. -
Water year 1955-56: Max 465 Min 6.4 Mean 87.9 Cfsm - In. -

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 2, 9, 23, 29, 30, Nov. 11-13, 19, 20, 24, 27, 30, Dec. 3, 4, 10, 11, Dec. 17 to Jan. 5, Jan. 18-30, Feb. 4-10, 22-24, July 6-11, Sept. 3-7, 13, 15-30; discharge estimated on basis of 3 discharge measurements, recorded range in stage when available, appearance of stage graph for adjacent days, engineer's notes, and records for East Branch Neponset River at Canton and Wading River near Norton.

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 1956.

Gage.--Water-stage recorder. Altitude of gage is 85 ft (from topographic map).

Extremes.--Maximum discharge during year, 598 cfs Nov. 5 (gage height, 4.77 ft); minimum daily, 1.3 cfs Aug. 19.
1952-56: 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, that of Aug. 19, 1956.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow regulated by ponds above station.

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 4		Nov. 5 to Jan. 9		Jan. 10 to Sept. 30			
1.4	36	1.3	24	0.5	1.2	1.5	35
2.0	93	1.5	38	.6	1.9	2.0	83
3.0	226	2.0	87	.7	3.3	3.0	226
4.0	410	3.0	226	.9	8.0	4.0	410
		4.0	410	1.2	18		
		5.0	655				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*56	106	70	a24	89	81	114	94	66	13	10	1.4
2	51	100	67	a24	81	85	128	79	49	12	9.2	1.9
3	47	91	70	a25	102	106	147	73	70	5.9	8.0	1.9
4	42	114	78	a33	85	107	154	*69	88	4.7	7.5	7.5
5	40	486	95	33	82	99	191	62	70	10	7.2	8.1
6	38	360	83	30	81	89	205	64	54	27	8.5	9.6
7	90	245	74	28	128	*110	189	63	45	29	8.3	74
8	88	226	69	33	147	137	202	55	40	23	8.7	24
9	72	229	68	226	117	127	228	51	37	24	9.7	18
10	62	211	a64	301	110	107	216	54	37	23	9.2	13
11	56	239	a60	284	114	101	207	50	36	20	4.6	11
12	51	a220	a56	242	207	96	183	48	33	17	2.6	8.6
13	49	a190	a52	220	170	89	168	46	30	16	6.2	9.4
14	47	*186	a50	194	138	97	157	43	36	23	6.5	9.4
15	118	176	*51	180	131	116	150	41	29	30	6.5	8.0
16	216	160	52	170	122	103	169	39	*24	24	7.0	9.4
17	263	156	47	163	110	83	186	42	26	19	5.4	12
18	209	138	44	*162	101	99	150	40	26	17	2.2	12
19	165	127	43	151	105	93	133	38	23	15	1.3	10
20	145	123	a41	138	102	89	116	41	22	*14	4.4	9.2
21	129	118	a38	120	*95	96	116	41	26	14	5.1	9.2
22	120	111	a36	111	85	101	107	37	23	26	5.4	8.3
23	110	103	a34	103	80	106	103	35	20	27	5.9	8.3
24	104	103	a34	95	73	99	103	42	18	21	*5.4	11
25	97	94	a32	89	85	97	95	42	18	18	2.1	*12
26	95	84	a31	82	120	97	89	40	15	15	1.4	11
27	89	80	a29	78	99	*91	89	43	15	13	5.5	9.7
28	83	83	a28	74	97	91	87	49	15	12	5.3	16
29	82	87	a26	70	89	90	103	42	14	12	5.6	26
30	83	74	28	81	------	103	106	38	13	11	6.0	17
31	104	----	a25	107	------	106	--------	48	--------	11	5.1	----
Total	2,995	4,820	1,575	3,671	3,155	3,091	4,391	1,549	1,018	546.6	185.8	386.9
Mean	96.6	161	50.8	118	109	99.7	146	50.0	33.9	17.6	5.99	12.9
Cfsm	3.62	6.03	1.90	4.42	4.08	3.73	5.47	1.87	1.27	0.659	0.224	0.483
In.	4.17	6.71	2.19	5.11	4.39	4.31	6.12	2.16	1.42	0.76	0.26	0.54

Calendar year 1955: Max 1,360 Min 2.1 Mean 78.9 Cfsm 2.96 In. 40.12
Water year 1955-56: Max 486 Min 1.3 Mean 74.8 Cfsm 2.80 In. 38.14

* 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 Wading River at West Mansfield.

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 1956.

Gage.--Water-stage recorder. Concrete control since Sept. 16, 1942. Altitude of gage is 15 ft (from topographic map).

Average discharge.--16 years, 13.6 cfs.

Extremes.--Maximum discharge during year, 166 cfs Oct. 17 (gage height, 5.04 ft); minimum, 0.14 cfs Sept. 14, 15.
1940-56: Maximum discharge, 269 cfs Sept. 12, 1954 (gage height, 5.80 ft), from rating curve extended above 210 cfs; minimum, 0.03 cfs Sept. 23, 24, Oct. 3, 4, 1950.

Remarks.--Records good.

Rating tables, water year 1955-56 (gage height in feet, and discharge, in cubic feet per second)

Oct. 1-17

3.3	4.1	4.0	48
3.4	7.7	4.5	101
3.5	12	5.0	161
3.7	25		

Oct. 18 to Sept. 30

3.02	0.14	3.2	1.85
3.06	.39	3.3	4.3
3.10	.52	3.4	7.8
3.15	1.07	3.5	12

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

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	39	16	4.4	30	26	52	17	11	1.35	1.8	0.32
2	18	35	14	3.8	25	23	49	16	9.2	1.3	1.6	.32
3	15	27	13	4.2	39	30	55	18	14	1.14	1.35	.27
4	11	26	15	4.8	39	29	53	18	34	4.00	1.14	.23
5	8.7	117	20	5.7	31	25	43	17	25	1.9	.94	*.22
6	8.3	126	21	5.7	28	24	35	15	23	7.4	.88	.21
7	*14	*65	18	5.7	59	30	28	16	15	8.8	.76	.21
8	18	43	15	5.9	63	53	56	18	11	7.5	.71	.19
9	18	31	12	25	42	60	82	16	8.8	14	.66	.19
10	15	25	11	67	31	42	52	*14	7.8	20	.61	.19
11	12	31	10	63	29	30	35	12	7.0	18	.52	.19
12	*9.3	42	9.5	51	57	25	27	11	6.2	9.8	.74	.18
13	8.1	37	8.8	43	57	23	23	11	5.4	7.6	1.21	.16
14	6.9	36	8.6	36	39	28	20	10	4.9	11	.94	.16
15	12	40	11	31	29	46	20	9.5	4.2	12	.71	.17
16	58	36	12	27	24	41	31	10	3.6	*9.2	.61	.38
17	149	33	12	24	20	24	39	11	3.2	6.6	.52	.34
18	90	28	11	20	25	24	33	10	2.8	4.8	.45	.36
19	52	24	9.5	20	42	23	25	10	2.6	3.7	.39	.30
20	34	23	8.2	*18	43	20	21	9.5	2.45	3.2	.36	.42
21	25	20	6.4	16	31	20	20	8.8	*2.35	3.5	.80	.48
22	20	20	5.2	14	23	25	18	8.2	2.8	12	.76	.45
23	17	20	4.9	12	*17	31	16	7.8	2.6	13	.66	.39
24	15	23	5.4	12	15	39	15	7.4	2.6	10	.56	.39
25	14	23	6.8	10	17	40	13	6.8	2.45	7.0	.48	.32
26	13	21	6.6	9.8	20	39	14	6.4	2.35	5.1	.42	.32
27	13	18	6.1	9.5	20	37	14	11	2.05	4.0	.36	.32
28	12	17	5.1	8.8	28	39	14	21	1.95	3.4	.32	.72
29	12	16	*4.8	9.8	33	39	14	23	1.7	3.0	.29	.88
30	11	17	5.2	16	------	52	17	17	1.5	2.35	.27	.71
31	27	---	4.9	29	------	*58	------	13	------	2.05	.32	---
Total	753.3	1,061	317.0	612.1	956	1,045	934	401.4	233.40	215.79	21.94	10.05
Mean	24.3	35.4	10.2	19.7	33.0	33.7	31.1	12.9	7.78	6.96	0.708	0.335
Cfsm	2.83	4.12	1.19	2.29	3.84	3.92	3.62	1.50	0.905	0.809	0.082	0.039
In.	3.26	4.59	1.37	2.65	4.13	4.52	4.04	1.74	1.01	0.93	0.09	0.04

Calendar year 1955: Max 149 Min 0.26 Mean 16.0 Cfsm 1.86 In. 25.27
Water year 1955-56: Max 149 Min 0.16 Mean 17.9 Cfsm 2.08 In. 28.37

Peak discharge (base, 120 cfs).--Oct. 17 (8 a.m.) 166 cfs (5.04 ft); Nov. 5 (10:30 to 12 p.m.) 151 cfs (5.00 ft).

* Discharge measurement made on this day.

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 1956.

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.--27 years, 472 cfs (adjusted for diversions).

Extremes.--Maximum discharge during year, 2,860 cfs Nov. 7 (gage height, 9.97 ft); minimum, 51 cfs Sept. 13, 14; minimum daily, 51 cfs Sept. 13.
1929-56: Maximum discharge, 4,010 cfs Aug. 21, 1955 (gage height, 13.02 ft); minimum, 8 cfs Sept. 10, 1944; minimum daily, 9 cfs Sept. 9-12, 1944.

Remarks.--Records excellent. Water diverted above station from Nemasket River for municipal supply of Taunton and New Bedford; water diverted from Silver Lake by pumpage into Taunton River basin above station for municipal supply of Brockton and several towns. Flow regulated by reservoirs and small powerplants above station.

Revisions (water years).--WSP 756: Drainage area. WSP 781: 1934. WSP 1051: 1933. WSP 1201: 1931. WSP 1301: 1930(M), 1933(M), 1935(M).

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 6		Nov. 7 to Sept. 30			
4.0	238	3.1	42	4.0	265
6.0	1,160	3.4	81	6.0	1,220
10.0	2,870	3.7	148	10.0	2,870

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	406	745	650	204	845	920	1,370	775	460	197	124	70
2	424	735	675	185	810	905	1,530	755	445	126	117	70
3	392	715	680	158	985	1,040	1,730	720	505	117	110	70
4	352	730	620	193	995	1,120	1,860	695	745	*106	103	66
5	317	1,710	685	229	925	1,160	1,970	675	780	101	99	*66
6	295	2,590	760	238	920	1,110	2,060	660	705	206	106	61
7	414	*2,840	770	237	1,130	1,140	2,030	*680	595	296	101	86
8	510	2,680	675	223	1,410	1,370	1,960	675	505	256	101	103
9	491	2,330	600	758	1,420	1,490	2,110	650	432	306	101	83
10	464	1,920	555	1,520	1,300	1,420	2,110	605	391	445	99	75
11	437	1,730	495	1,930	1,200	1,260	1,910	560	364	436	101	68
12	*383	1,730	495	2,280	1,410	1,140	1,690	585	342	308	106	56
13	343	1,630	455	2,440	1,640	1,060	1,460	560	301	168	134	51
14	278	1,480	414	2,350	1,560	1,050	1,260	560	364	327	126	54
15	511	1,410	422	2,080	1,380	1,130	1,140	545	328	580	108	69
16	1,120	1,310	418	1,770	1,250	1,120	1,120	540	296	520	121	72
17	1,660	1,230	404	1,510	1,120	940	1,210	535	278	432	94	85
18	1,910	1,170	400	1,250	*1,020	895	1,220	470	260	337	83	81
19	1,810	1,060	350	1,110	965	840	1,130	404	229	274	80	70
20	1,540	970	281	*1,080	970	830	1,070	432	197	224	75	74
21	1,290	960	314	1,010	950	935	1,000	440	174	197	75	94
22	1,080	950	296	935	965	895	930	427	168	303	90	83
23	931	890	226	865	785	1,020	885	409	189	368	86	97
24	825	860	171	800	720	1,110	810	400	197	332	86	117
25	755	880	200	775	690	1,090	685	360	181	283	90	108
26	705	850	242	635	850	1,090	680	342	164	234	80	97
27	660	795	252	595	920	1,080	755	409	194	*197	76	122
28	610	770	238	605	950	1,080	815	445	220	161	74	183
29	560	805	*234	535	960	1,100	660	495	232	140	72	114
30	496	785	224	605	-------	1,180	750	470	180	137	70	145
31	560	-------	212	840	-------	*1,280	-------	465	-------	126	72	-------
Total	22,529	39,260	13,413	29,945	31,045	33,800	39,910	16,743	10,421	8,240	2,960	2,590
Mean	727	1,309	433	966	1,071	1,090	1,330	540	347	266	95.5	86.3
(†)	29.5	29.4	28.2	30.1	30.9	28.5	29.5	28.8	29.4	27.4	32.7	29.5
Adjusted for diversions												
Mean	756	1,338	461	996	1,101	1,119	1,360	569	377	293	128	116
Cfsm	2.91	5.15	1.77	3.83	4.23	4.30	5.23	2.19	1.45	1.13	0.492	0.446
In.	3.35	5.74	2.04	4.42	4.57	4.96	5.84	2.52	1.62	1.30	0.57	0.50

	Observed			Adjusted			
Calendar year 1955:	Max 3,970	Min 35	Mean 635	Mean 664	Cfsm 2.55	In. 34.63	
Water year 1955-56:	Max 2,840	Min 51	Mean 685	Mean 715	Cfsm 2.75	In. 37.43	

* Discharge measurement made on this day.
† Diversions, equivalent in cubic feet per second, from Nemasket River for municipal supply of Taunton and New Bedford, and from Silver Lake into Taunton River basin for municipal supply of Brockton and several towns. Records furnished by various municipalities.

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 1956.

Gage.--Water-stage recorder and concrete control. Datum of gage is 120.85 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge during year, 248 cfs Nov. 7 (gage height, 5.30 ft); minimum daily, 1.3 cfs Aug. 16.
1953-56: Maximum discharge, 519 cfs Aug. 20, 1955 (gage height, 6.22 ft); minimum daily, that of Aug. 16, 1956.

Remarks.--Records good. Flow regulated by Lake Mirimichi. Diversion above station for municipal supply of Attleboro.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31		Nov. 1 to Sept. 30			
3.3	27	2.4	1.1	3.5	38
3.5	38	2.5	1.9	4.0	68
4.0	73	2.6	3.0	4.5	117
4.5	118	2.7	4.5	5.0	191
5.0	191	2.8	6.7	5.5	292
		3.0	13		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*37	77	48	16	b59	66	70	58	34	7.5	6.0	2.8
2	36	75	45	16	55	61	75	56	36	6.2	5.7	3.1
3	33	72	45	16	60	63	85	55	42	5.7	4.9	3.0
4	30	74	48	19	b59	66	94	54	52	5.5	4.0	2.6
5	28	170	53	19	56	67	110	52	52	5.3	3.8	2.5
6	28	228	54	19	55	66	127	48	45	15	4.0	3.7
7	43	234	51	19	65	73	134	*47	40	18	4.2	11
8	51	217	46	18	74	86	150	45	36	18	4.3	6.4
9	52	185	43	47	74	92	163	41	31	22	5.2	3.7
10	51	156	39	110	78	81	154	39	28	21	6.4	3.0
11	48	151	36	162	78	68	146	40	27	18	4.3	3.0
12	43	150	32	169	101	70	134	40	24	15	4.0	3.0
13	40	132	30	146	113	70	125	38	22	13	4.2	3.0
14	37	*118	28	115	112	70	117	36	21	16	4.0	3.0
15	54	117	28	96	107	76	107	34	19	19	3.0	3.0
16	102	105	*29	85	100	b77	117	33	17	17	1.3	3.4
17	156	98	28	b80	85	b68	131	33	16	15	1.5	4.0
18	170	88	27	*b76	82	b77	118	31	14	13	1.8	3.8
19	164	76	26	b74	86	b74	105	30	13	12	2.3	3.2
20	137	74	26	73	79	b76	96	30	12	10	2.4	3.1
21	114	70	b24	66	*71	b78	91	29	11	11	3.0	3.2
22	95	67	22	61	63	73	83	28	11	16	4.2	3.1
23	85	64	22	b57	59	69	76	27	11	*16	4.7	3.1
24	75	62	22	b59	53	69	70	28	11	15	*4.3	4.3
25	75	62	20	b54	56	b74	64	26	11	13	4.0	*4.5
26	76	60	20	b50	64	69	60	23	9.8	11	3.5	3.8
27	67	58	19	47	66	64	57	24	8.1	10	3.2	3.5
28	63	56	18	44	71	62	55	28	8.4	9.5	3.1	5.2
29	59	56	17	42	74	60	56	28	*9.2	8.1	3.4	6.4
30	59	53	17	45	------	*65	57	27	8.7	7.3	4.0	4.9
31	72	------	17	56	------	69	------	28	------	6.7	3.0	------
Total	2,180	3,205	980	1,956	2,155	2,199	3,027	1,136	680.2	395.8	117.7	116.1
Mean	70.3	107	31.6	63.1	74.3	70.9	101	36.6	22.7	12.8	3.80	3.87
(†)	1.37	1.36	1.35	1.24	1.21	1.30	1.28	1.38	1.41	1.38	1.24	1.34
Adjusted for diversion												
Mean	71.7	108	33.0	64.3	75.5	72.2	102	38.0	24.1	14.2	5.04	5.21
Cfsm	3.73	5.62	1.72	3.35	3.93	3.76	5.31	1.98	1.26	0.740	0.262	0.271
In.	4.30	6.29	1.98	3.86	4.24	4.34	5.94	2.28	1.40	0.85	0.30	0.30

	Observed			Adjusted			
Calendar year 1955:	Max 475	Min 2.6	Mean 49.0	Mean 50.1	Cfsm 2.61	In. 35.47	
Water year 1955-56:	Max 234	Min 1.3	Mean 49.6	Mean 50.9	Cfsm 2.65	In. 36.08	

* Discharge measurement made on this day.
† Diversion, equivalent in cubic feet per second, for municipal supply of Attleboro. Records furnished by city of Attleboro.
b Stage-discharge relation affected by ice.

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 1956.

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.--31 years, 72.0 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 616 cfs Nov. 6 (gage height, 9.25 ft); minimum, 3.5 cfs July 3, 4; minimum daily, 3.7 cfs July 3, 4.
1925-56: Maximum discharge, 1,170 cfs Aug. 20, 1955 (gage height, 10.98 ft); minimum, 0.3 cfs Sept. 10, 1926.

Remarks.--Records excellent. 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 table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Mar. 19, 20)

4.6	3.0	6.0	82
4.7	4.7	7.0	197
5.0	12	8.0	344
5.2	20	9.0	554
5.5	39	10.0	830

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	138	99	28	101	126	178	104	65	20	13	4.9
2	73	153	90	28	110	124	204	103	64	13	12	4.5
3	63	137	80	19	128	129	245	101	74	3.7	11	4.5
4	67	146	86	23	111	144	248	99	126	3.7	9.6	5.1
5	58	430	108	38	116	152	264	93	103	6.5	7.9	6.7
6	58	586	111	38	115	143	282	89	99	21	9.6	6.9
7	90	455	96	31	159	162	264	91	74	27	10	18
8	108	368	91	29	184	200	274	88	68	26	10	22
9	106	309	82	133	182	206	324	83	59	48	11	13
10	98	266	77	257	170	178	309	73	52	49	11	9.9
11	92	266	67	319	165	156	270	76	52	46	11	9.9
12	83	270	70	305	237	143	244	71	57	22	13	8.3
13	70	248	64	274	262	141	220	68	41	13	13	7.9
14	69	236	58	234	214	144	197	73	28	40	13	8.6
15	112	222	60	206	196	159	178	69	37	46	10	8.3
16	268	211	56	183	182	161	185	68	31	44	9.1	8.3
17	424	200	52	173	160	124	223	59	28	41	8.1	13
18	382	170	50	147	143	137	218	65	27	34	6.7	13
19	310	162	51	146	144	145	190	49	26	29	6.7	12
20	265	152	45	150	148	145	166	50	26	27	5.1	9.1
21	218	147	44	127	138	160	153	56	26	19	5.4	6.2
22	189	141	38	115	117	158	132	53	25	19	5.1	7.1
23	167	132	33	108	111	155	125	52	23	42	5.6	6.2
24	155	124	30	98	100	152	120	51	22	38	7.1	8.1
25	142	117	30	99	103	135	115	48	14	30	8.1	12
26	128	101	30	90	121	152	110	44	8.3	27	6.5	12
27	128	103	*33	87	127	*147	105	45	15	18	6.7	12
28	104	108	33	*68	135	143	95	59	*17	9.9	6.7	*14
29	101	107	32	68	*127	144	98	58	23	12	6.2	15
30	99	*99	33	95	------	154	*102	51	22	*13	*5.4	13
31	*123	------	30	98	------	161	------	*55	------	13	5.1	------
Total	4,428	6,304	1,859	3,814	4,306	4,680	5,838	2,142	1,332.3	800.8	268.7	299.5
Mean	143	210	60.0	123	148	151	195	69.1	44.4	25.8	8.67	9.98
(†)	1.37	1.36	1.35	1.24	1.21	1.30	1.28	1.38	1.41	1.38	1.24	1.34
Adjusted for diversion												
Mean	144	211	61.3	124	150	152	196	70.5	45.8	27.2	9.91	11.3
Cfsm	3.40	4.98	1.45	2.92	3.54	3.58	4.62	1.66	1.08	0.642	0.234	0.267
In.	3.92	5.57	1.67	3.38	3.81	4.14	5.15	1.92	1.21	0.74	0.27	0.30

	Observed			Adjusted			
Calendar year 1955:	Max 1,070	Min 6.0	Mean 101	Mean 102	Cfsm 2.41	In. 32.69	
Water year 1955-56:	Max 586	Min 3.7	Mean 98.6	Mean 99.9	Cfsm 2.36	In. 32.08	

Peak discharge (base, 280 cfs).--Oct. 17 (4 to 6 p.m.) 457 cfs (8.57 ft); Nov. 6 (4:30 a.m.) 616 cfs (9.25 ft); Jan. 11 (7 p.m.) 346 cfs (8.01 ft); Feb. 13 (1 p.m.) 289 cfs (7.66 ft); Apr. 9 (7 p.m.) 357 cfs (8.07 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.

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 1956. 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.--33 years, 53.8 cfs (adjusted for diversion).
Extremes.--Maximum discharge during year, 852 cfs Oct. 16 (gage height, 5.65 ft); minimum, 3.4 cfs May 10.
1923-56: 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 tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 22-30, Nov. 3, 4, 9, 10, 13-25, Dec. 5, Jan. 9)

Oct. 1 to Jan. 9				Jan. 10 to May 9		May 10 to Sept. 30			
3.0	12	4.0	170	3.1	23	2.2	6.8	3.0	54
3.1	20	4.5	330	3.3	51	2.4	12	3.3	107
3.3	43	5.0	530	3.6	110	2.6	20	3.6	180
3.6	85	6.0	1,040	4.0	219	2.8	32	4.0	305
				4.5	415				
				5.0	660				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	251	48	18	48	61	88	132	63	12	9.2	15
2	30	194	46	16	48	*60	95	84	64	12	8.7	15
3	*26	162	44	17	58	86	*112	79	104	12	8.5	14
4	22	171	57	18	50	132	129	32	214	12	8.7	*12
5	23	441	92	24	46	129	198	40	*119	12	8.5	11
6	38	377	72	28	46	99	286	42	78	18	8.2	9.8
7	125	260	52	22	76	132	330	36	62	18	8.0	15
8	118	215	44	28	80	155	260	75	53	19	8.0	14
9	99	182	42	259	80	144	213	42	47	25	9.2	12
10	73	150	41	307	76	112	207	19	46	22	11	12
11	56	182	36	279	72	106	233	36	42	17	11	11
12	50	188	*33	226	103	103	257	48	38	15	11	12
13	44	160	31	200	95	97	272	48	34	15	11	13
14	51	148	29	160	68	90	294	44	29	18	12	13
15	302	148	29	122	74	92	310	42	25	16	11	12
16	797	*138	29	122	76	86	396	40	23	15	9.8	15
17	756	136	24	110	60	84	575	40	21	15	9.8	16
18	521	122	24	97	56	84	424	36	18	14	10	15
19	338	114	24	88	60	86	314	36	17	*14	12	13
20	257	110	24	82	72	88	233	34	17	13	12	14
21	209	102	20	76	64	88	*191	32	16	14	15	14
22	173	92	19	70	46	86	166	30	16	16	15	12
23	143	87	19	56	46	86	163	28	15	14	13	12
24	124	80	19	*50	45	92	151	28	17	14	11	19
25	110	78	22	35	45	99	134	26	24	13	10	16
26	112	72	22	39	87	124	120	26	*19	12	9.2	*14
27	124	66	22	38	95	75	117	34	16	11	8.7	12
28	110	62	20	36	88	84	106	42	15	10	9.2	19
29	99	57	19	35	70	82	139	36	14	9.8	12	20
30	92	51	19	45	------	88	157	34	13	9.5	16	16
31	228	------	19	58	------	86	------	43	------	9.2	13	------
Total	5,283	4,596	1,041	2,761	1,930	3,016	6,670	1,344	1,279	446.5	329.7	417.8
Mean	170	153	33.6	89.1	66.6	97.3	222	43.4	42.6	14.4	10.6	13.9
(†)	8.48	10.5	6.82	9.13	9.80	9.44	9.14	9.52	8.78	4.36	6.68	5.64
Adjusted for diversion												
Mean	179	164	40.4	98.2	76.4	107	231	52.9	51.4	18.8	17.3	19.6
Cfsm	5.72	5.24	1.29	3.14	2.44	3.42	7.38	1.69	1.64	0.601	0.553	0.626
In.	6.59	5.84	1.49	3.62	2.63	3.93	8.25	1.95	1.83	0.69	0.64	0.70

	Observed			Adjusted			
Calendar year 1955:	Max 2,720	Min 7.1	Mean 84.3	Mean 92.0	Cfsm 2.94	In. 39.91
Water year 1955-56:	Max 797	Min 8.0	Mean 79.5	Mean 87.7	Cfsm 2.80	In. 38.16

Peak discharge (base, 250 cfs).--Oct. 16 (6 to 8 a.m.) 852 cfs (5.65 ft); Oct. 31 (9 to 11 p.m.) 295 cfs (4.36 ft); Nov. 5 (2 to 6:30 p.m.) 508 cfs (4.95 ft); Jan. 9 (11 to 12 p.m.) 393 cfs (4.45 ft); Apr. 6 (11 a.m.) 520 cfs (4.72 ft); Apr. 17 (7:30 to 11 a.m.) 625 cfs (4.93 ft); June 4 (1:30 a.m.) 264 cfs (3.88 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.

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 1956.

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.--17 years, 42.2 cfs.

Extremes.--Maximum discharge during year, 296 cfs Nov. 5 (gage height, 3.30 ft); minimum daily, 3.0 cfs Sept. 5.
1939-56: Maximum discharge, 820 cfs Aug. 20, 1955 (gage height, 5.15 ft); minimum daily, 0.3 cfs Oct. 14-17, 1942.

Remarks.--Records excellent except those for periods of no gage-height record, which are fair. Some regulation by Lake Quinsigamond and ponds above station.

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31				Nov. 1 to Sept. 30			
1.3	20	2.0	79	0.9	3.0	2.0	78
1.5	32	2.5	150	1.0	5.4	2.5	150
1.7	48	3.0	240	1.3	18	3.0	240
				1.6	37	3.5	334

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	100	81	23	65	64	78	34	53	16	11	4.7
2	28	98	74	22	57	*60	81	*52	52	14	10	4.3
3	24	98	72	22	66	68	*96	70	65	13	9.2	4.0
4	23	175	76	22	63	78	110	73	83	14	8.4	3.8
5	22	266	81	22	63	76	128	66	83	15	9.7	3.0
6	*30	211	77	22	60	72	143	58	77	22	7.6	3.2
7	60	188	73	22	71	84	150	55	68	22	7.6	4.6
8	64	179	71	23	72	91	170	54	60	21	8.0	4.6
9	58	170	67	66	71	88	164	66	55	23	7.6	5.7
10	45	155	65	84	70	87	161	76	52	23	7.2	4.2
11	51	161	62	110	70	87	164	71	48	21	7.2	3.4
12	46	118	*59	211	78	99	168	66	43	20	8.4	4.4
13	38	51	52	226	81	107	181	65	38	18	6.6	5.4
14	38	162	47	208	78	111	184	56	37	21	6.6	5.4
15	132	236	45	188	79	111	179	52	36	24	5.7	5.7
16	240	182	40	168	83	110	197	49	33	23	5.1	10
17	230	*157	41	157	79	108	208	46	32	22	4.8	*10
18	135	130	39	143	81	104	211	44	28	20	4.6	10
19	196	186	36	112	79	101	211	43	27	17	5.4	9.2
20	186	211	31	126	77	98	195	46	24	16	5.7	10
21	217	191	33	115	74	94	179	54	23	16	7.2	11
22	181	168	31	110	65	91	157	53	23	21	6.6	9.7
23	130	150	30	100	67	90	136	51	23	19	6.0	10
24	40	138	30	*94	64	91	142	49	23	18	5.4	14
25	126	124	30	87	62	82	136	43	23	21	5.0	13
26	135	114	30	82	72	86	136	40	21	21	4.5	12
27	138	105	28	77	80	83	136	42	21	18	4.1	*11
28	114	99	26	72	74	79	128	43	20	18	3.8	15
29	31	90	25	68	72	78	128	39	18	18	3.8	16
30	45	57	25	68	------	81	81	38	16	14	4.2	16
31	92	-- --	24	71	------	79	--------	46	--------	13	4.6	---- -
Total	2,924	4,470	1,501	2,921	2,073	2,738	4,538	1,640	1,205	582	201.6	243.3
Mean	94.3	149	48.4	94.2	71.5	88.3	151	52.9	40.2	18.8	6.50	8.11
Cfsm	3.70	5.84	1.90	3.69	2.80	3.46	5.92	2.07	1.58	0.737	0.255	0.318
In.	4.26	6.52	2.19	4.26	3.02	3.99	6.62	2.39	1.76	0.85	0.29	0.35

Calendar year 1955: Max 790 Min 3.4 Mean 72.2 Cfsm 2.83 In. 38.44
Water year 1955-56: Max 266 Min 3.0 Mean 68.4 Cfsm 2.68 In. 36.50

* Discharge measurement made on this day.
Note.--No gage-height record Feb. 23 to Mar. 1, Aug. 18 to Sept. 3; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage when available, and records for Kettle Brook at Worcester. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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 1956. 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.--17 years, 240 cfs (adjusted for diversion).
Extremes.--Maximum discharge during year, 2,830 cfs Oct. 16 (gage height, 9.48 ft); minimum daily discharge, 9.0 cfs Sept. 1, 9.
1939-56: 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 determination 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.
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 periods of doubtful or 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 tables. water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-15, 18-31, Dec. 5, 6, Jan. 9-25, 30, 31, Feb. 3, 7-9, 12-14)

Oct. 1-31				Nov. 1 to Sept. 30			
3.3	148	6.0	930	2.5	9.0	3.5	250
3.5	188	8.0	1,850	2.6	22	4.0	400
4.0	300	10.0	3,250	2.9	85	6.0	1,150
5.0	573			3.2	163	8.0	2,080

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	218	930	271	130	274	346	438	645	340	78	85	9.0
2	178	740	268	130	266	*355	519	491	304	98	71	d20
3	196	582	268	135	337	474	*614	*474	480	90	73	d50
4	150	730	304	150	277	673	704	407	830	85	48	*d80
5	168	1,990	397	145	271	670	1,000	364	533	77	52	d20
6	*218	1,630	334	140	271	536	1,270	367	391	238	95	72
7	692	1,220	292	140	420	735	1,220	355	334	136	94	168
8	567	1,050	280	135	400	838	1,020	337	292	126	108	d115
9	465	914	253	1,000	370	732	886	346	250	196	d100	d9.0
10	379	810	229	1,500	343	614	926	358	238	145	119	92
11	320	1,020	223	1,200	322	572	1,040	343	250	147	d50	78
12	278	950	229	950	508	586	1,080	328	211	133	d80	89
13	274	774	*220	880	505	582	1,080	328	226	118	150	81
14	330	743	220	800	424	568	1,080	328	185	169	132	88
15	*1,170	822	208	710	400	578	1,070	295	180	128	115	79
16	*2,510	834	190	620	456	564	1,350	277	166	126	97	59
17	2,640	*758	180	550	379	550	1,800	211	152	133	88	d130
18	1,910	676	180	480	346	520	1,480	271	144	120	17	d90
19	1,340	642	185	420	343	510	1,190	247	165	*105	d45	d85
20	1,080	687	180	370	337	510	1,020	235	138	91	d100	d87
21	930	684	170	*322	340	526	*854	256	102	108	141	d90
22	804	628	165	307	301	558	762	247	139	158	108	d30
23	706	547	160	301	286	554	743	244	144	139	d80	d80
24	633	502	155	280	286	564	736	232	118	105	89	d175
25	579	*460	155	271	373	533	652	229	129	158	d17	d140
26	564	382	155	253	550	512	606	168	98	123	d30	d80
27	576	343	160	253	480	554	603	148	87	106	d90	*d75
28	552	325	165	244	460	428	568	256	100	92	78	d150
29	488	301	155	235	382	502	648	220	102	90	89	d170
30	413	298	140	289	-------	449	743	197	100	68	62	d115
31	913	-------	135	328	-------	410	-------	277	-------	110	72	-------
Total	22,241	22,972	6,626	13,668	10,707	17,103	27,702	9,481	6,928	3,796	2,575	2,606.0
Mean	717	766	214	441	369	552	923	306	231	122	83.1	86.9
(†)	9.17	0	18.9	10.9	7.76	20.7	5.53	16.8	17.1	41.4	37.7	27.5

Adjusted for diversion

Mean	708	766	195	430	361	531	918	289	214	81.0	45.4	59.3
Cfsm	5.09	5.51	1.40	3.09	2.60	3.82	6.60	2.08	1.54	0.583	0.327	0.427
In.	5.87	6.15	1.62	3.57	2.80	4.40	7.37	2.40	1.72	0.67	0.38	0.48

	Observed			Adjusted			
Calendar year 1955:	Max 8,850	Min 74	Mean 435	Mean 415	Cfsm 2.98	In. 40.52	
Water year 1955-56:	Max 2,640	Min 9.0	Mean 400	Mean 382	Cfsm 2.75	In. 37.43	

* 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.
d Doubtful gage-height record; discharge computed from reconstructed gage-height graph based on recorded graph.
Note.--No gage-height record Dec. 16 to Jan. 20, Mar. 18-20; discharge estimated on basis of weather records, recorded range in stage, and records for station at Woonsocket, R. I. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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 (revised) 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 1956. 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.--16 years, 164 cfs.

Extremes.--Maximum discharge during year, 2,550 cfs Oct. 16 (gage height, 8.33 ft); minimum daily, 7.8 cfs June 23.

1940-56: 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.

Discharge of flood in March 1936 was about 5,800 cfs, by computation of flow over dam 1 mile above station.

Remarks.--Records excellent. Flow regulated by mills and reservoirs above station.

Rating table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

1.5	4.2	3.0	198
1.6	8.3	3.5	329
1.8	21	4.0	490
2.0	39	5.0	870
2.3	75	7.0	1,800
2.6	120	9.0	3,000

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	128	690	206	29	274	228	317	311	205	37	30	31
2	174	532	203	48	248	233	401	271	85	43	39	32
3	225	443	94	172	320	*283	459	*271	199	29	38	34
4	213	451	133	168	221	302	500	268	420	35	27	32
5	166	1,370	298	99	235	391	*617	187	322	47	27	29
6	147	1,110	249	101	274	332	826	198	242	99	29	30
7	169	816	217	30	305	426	826	260	210	102	28	44
8	110	630	205	30	372	560	802	214	199	79	27	35
9	219	539	200	415	341	528	725	213	101	75	31	33
10	245	466	108	914	314	389	698	203	48	77	25	32
11	208	542	162	694	262	372	786	185	190	61	33	34
12	92	642	218	539	623	420	754	82	185	56	35	64
13	230	511	*193	504	592	372	686	123	138	52	36	147
14	211	528	155	*428	417	335	592	229	102	72	34	176
15	598	494	103	369	366	366	581	207	102	102	34	78
16	2,370	430	106	359	360	363	706	205	27	169	34	35
17	*2,000	430	92	293	323	259	1,040	200	25	135	36	35
18	1,220	372	135	248	305	296	806	200	91	87	33	38
19	886	283	204	235	243	354	650	83	99	22	33	40
20	714	320	163	224	328	291	532	26	*101	18	34	41
21	598	351	107	160	271	274	426	142	96	18	37	144
22	476	*293	104	198	245	277	430	169	29	24	36	77
23	413	272	107	251	227	305	421	88	7.8	*120	34	28
24	426	231	30	222	216	302	397	105	17	133	34	27
25	397	314	82	218	221	293	360	135	21	18	34	13
26	382	202	120	212	317	344	335	75	20	16	34	89
27	340	221	189	212	344	291	338	36	22	18	31	134
28	318	257	159	132	299	279	242	217	22	19	28	194
29	243	214	100	189	258	288	317	204	18	20	*30	89
30	285	205	104	264	------	308	388	87	20	21	30	25
31	643	--	30	308	------	267	------	172	------	21	30	-----
Total	14,846	14,159	4,576	8,265	9,119	10,328	16,958	5,366	3,363.8	1,825	1,001	1,838
Mean	479	472	148	267	314	333	565	173	112	58.9	32.3	61.3
Cfsm	5.13	5.06	1.59	2.86	3.37	3.57	6.06	1.85	1.20	0.631	0.346	0.657
In.	5.92	5.64	1.82	3.29	3.63	4.12	6.76	2.14	1.34	0.73	0.40	0.73

Calendar year 1955: Max 2,950 Min 10 Mean 243 Cfsm 2.60 In. 35.37
Water year 1955-56: Max 2,370 Min 7.8 Mean 250 Cfsm 2.68 In. 36.52

Peak discharge (base, 880 cfs).--Oct. 16 (9:30 a.m.) 2,550 cfs (8.33 ft); Nov. 5 (4 to 4:30 p.m.) 1,660 cfs (6.71 ft); Jan. 10 (7 a.m.) 1,080 cfs (5.52 ft); Apr. 9 (7 a.m.) 946 cfs (5.19 ft); Apr. 17 (10:30 a.m.) 1,180 cfs (5.74 ft).

* Discharge measurement made on this day.

Note.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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 1956.
Gage.--Water-stage recorder. Datum of gage is 107.42 ft above mean sea level, datum of 1929.
Average discharge.--27 years, 721 cfs (adjusted for diversion).
Extremes.--Maximum discharge during year, 8,710 cfs Oct. 17 (gage height, 10.12 ft); minimum daily, 111 cfs Sept. 3.
1929-56: 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 determination 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.
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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-15, 23-31)

Oct. 1-31		Nov. 1 to Sept. 30			
2.5	418	1.4	109	3.0	735
3.0	660	1.7	178	4.0	1,480
4.0	1,350	2.0	268	6.0	3,530
5.0	2,300	2.5	465	8.0	5,890
10.0	8,540				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	705	2,910	856	293	1,130	1,110	1,390	1,810	961	203	185	150
2	729	2,460	830	365	1,080	1,110	1,590	1,480	739	198	175	115
3	699	2,010	749	482	1,300	*1,270	1,970	*1,360	1,050	*189	180	111
4	681	2,020	849	536	1,060	1 540	2,270	1,250	1,800	181	168	130
5	655	5,140	1,270	448	1,040	1,910	*2,740	,120	1,620	221	132	158
6	561	5,640	1,170	413	1,020	1,680	3,660	1,110	1,200	403	139	131
7	1,220	4,120	1,030	326	1,330	1,880	3,840	1,080	894	406	172	266
8	1,370	3,340	932	316	1,650	2,500	3,590	1,010	798	411	168	270
9	1,350	2,770	815	*2,010	1,460	2,480	3,160	940	625	356	172	198
10	1,140	2,540	665	4,320	1,360	2,080	3,100	926	508	415	170	128
11	986	2,370	627	3,590	1,310	1,730	3,360	905	617	297	180	196
12	743	2.050	778	2,890	2,090	1,740	3,370	720	606	278	153	228
13	705	2,390	772	2,720	2,380	1,630	3,220	774	568	240	146	274
14	812	2.450	724	*2,470	1,990	1,640	3,060	843	445	343	214	327
15	2,000	2,270	654	2,110	1,620	1,710	2,970	950	432	426	222	256
16	*6,930	2,160	632	1,940	1,610	1,630	3,290	786	339	398	209	188
17	*8,310	2,180	551	1,720	1,500	1,410	4,600	750	295	398	211	175
18	6,530	a1,900	627	1,470	1,280	1,460	4,220	732	336	299	195	234
19	4,190	a1,600	637	1,280	1,180	1,450	3,280	610	355	225	119	202
20	3,120	a1,750	654	1.190	1,330	1,390	2,710	533	332	222	126	202
21	2,440	a1,700	491	1,010	1,180	1,440	2,300	607	325	225	198	261
22	a2,050	*a1,650	476	1,050	1,050	1 470	2,110	678	294	250	207	272
23	a1,800	1,430	486	1,070	966	1,510	1,940	564	259	*343	193	146
24	a1,650	1,430	377	1,000	861	1,480	1,970	590	229	377	175	219
25	a1,550	1,330	443	987	980	1,460	1,730	590	222	231	178	267
26	a1,500	1,190	521	889	1,560	1,490	1,570	533	251	234	122	294
27	1,540	1,190	521	868	1,610	1,410	1,560	441	250	210	122	280
28	1,400	1,030	*571	790	1,450	1,350	1,430	708	240	196	164	492
29	1,360	1,090	491	700	1,310	1,410	1,580	685	225	168	*154	416
30	1,330	890	448	987	-------	1,410	1,790	508	233	162	153	248
31	2,150	-------	349	1,340	-------	1,320	-------	579	-------	153	141	-------
Total	62,206	67,000	20,996	41,580	39,687	49,100	79,370	26,072	17,048	8,658	5,241	6,836
Mean	2,007	2,233	677	1,341	1,369	1,584	2,646	841	568	279	169	228
(†)	9.16	0	18.9	10.9	7.76	20.7	5.53	16.8	17.1	41.4	37.7	27.5
Adjusted for diversion												
Mean	1,997	2,233	658	1,330	1,361	1,563	2,640	824	551	238	131	200
Cfsm	4.80	5.37	1.58	3.20	3.27	3.76	6.35	1.98	1.32	0.572	0.315	0.481
In.	5.54	5.99	1.82	3.69	3.53	4.33	7.08	2.28	1.48	0.66	0.36	0.54

	Observed					Adjusted				
Calendar year 1955:	Max	25,900	Min	125	Mean	1,181	Mean	1,161	Cfsm	2.79	In.	37.88
Water year 1955-56:	Max	8,310	Min	111	Mean	1,158	Mean	1,140	Cfsm	2.74	In.	37.30

Peak discharge (base, 3,400 cfs).--Oct. 17 (9:30 a.m.) 8,710 cfs (10.12 ft); Nov. 5 (9 to 10 p.m.) 6,450 cfs (8.43 ft); Jan. 10 (9 a.m.) 4,550 cfs (6.89 ft); Apr. 17 (1:30 p.m.) 4,920 cfs (7.20 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.
a No gage-height record; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for station at Northbridge, Mass.

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 1956.

Gage.--Water-stage recorder. Altitude of gage is 95 ft (from topographic map).

Average discharge.--15 years, 69.8 cfs.

Extremes.--Maximum discharge during year, 959 cfs Oct. 17 (gage height, 6.59 ft); minimum daily, 20 cfs Sept. 30.
1941-56: Maximum discharge, 1,100 cfs Sept. 11, 1954 (gage height, 7.03 ft), from rating curve extended above 450 cfs; 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 periods of no gage-height record, which are fair. Flow regulated by mills and reservoirs above station. Discharge includes leakage through bypass canal.

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 20-24, 31; leakage through bypass canal included Oct. 3, 4, 7-11, Oct. 13 to Apr. 6, Apr. 15)

Oct. 1-31				Nov. 1 to Sept. 30			
2.0	52	5.0	520	1.4	18	3.0	176
2.5	99	6.0	770	1.6	28	4.0	336
3.0	159	6.5	900	2.0	57	5.0	530
4.0	321			2.5	108		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	236	100	48	84	111	158	113	57	29	30	24
2	55	222	90	45	88	112	182	107	57	30	30	21
3	73	189	73	51	109	118	218	105	82	30	30	22
4	63	198	97	52	100	127	237	101	129	28	27	26
5	54	511	117	46	105	128	272	92	107	45	23	26
6	57	452	104	49	108	126	291	93	92	40	23	26
7	90	359	100	45	149	164	285	101	78	38	27	37
8	97	290	94	47	153	200	317	88	68	37	28	32
9	91	*252	87	141	147	201	321	78	54	*42	29	24
10	*95	220	70	125	142	175	299	*70	55	38	28	25
11	80	255	74	98	140	160	282	72	58	37	26	24
12	62	252	87	118	261	147	259	60	55	36	26	23
13	73	224	77	165	250	139	239	64	51	38	24	22
14	66	238	72	15	221	149	214	73	46	42	24	21
15	223	227	76	152	194	163	200	64	44	33	24	*21
16	746	215	74	137	171	160	229	63	40	30	27	23
17	*870	205	60	132	150	151	263	61	38	33	28	22
18	589	179	64	121	147	143	242	60	40	32	26	22
19	419	158	78	105	147	149	214	48	42	34	21	23
20	320	154	75	102	140	143	185	44	39	41	22	25
21	269	148	72	*88	127	138	164	55	37	36	29	25
22	232	133	70	87	112	129	148	56	35	33	*29	24
23	205	125	68	90	*107	131	141	51	31	35	30	21
24	187	120	61	78	96	143	136	52	30	34	30	22
25	167	128	55	74	101	139	124	50	31	*32	26	21
26	153	109	60	73	135	131	119	43	31	33	22	22
27	138	111	71	81	129	124	107	45	29	34	23	23
28	128	119	*68	82	135	122	104	56	33	30	26	28
29	118	110	65	71	123	123	119	55	32	25	26	24
30	119	102	62	97	-------	*153	125	45	30	25	26	20
31	288	----	60	97	-------	154	-------	53	----	30	26	----
Total	6,195	6,239	2,381	2,836	4,071	4,451	6,194	2,118	1,551	1,060	816	719
Mean	200	208	76.8	91.5	140	144	206	68.3	51.7	34.2	26.3	24.0
Cfsm	5.22	5.43	2.01	2.39	3.66	3.76	5.38	1.78	1.35	0.893	0.687	0.627
In.	6.01	6.06	2.31	2.75	3.95	4.32	6.01	2.06	1.51	1.03	0.79	0.70

Calendar year 1955: Max 870 Min 8.9 Mean 102 Cfsm 2.66 In. 36.10
Water year 1955-56: Max 870 Min 20 Mean 106 Cfsm 2.77 In. 37.50

* Discharge measurement made on this day.

Note.--No gage-height record Dec. 21-28, June 19 to July 5, Aug. 25 to Sept. 14; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for Branch River at Forestdale and Blackstone River at Woonsocket. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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 1956.

Gage.--Water-stage recorder. Altitude of gage is 330 ft (from topographic map).

Average discharge.--16 years, 128 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 942 cfs Oct. 17 (gage height, 3.07 ft); minimum daily, 11 cfs July 2-4.
1940-56: 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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-17				Oct. 18 to Sept. 30			
1.4	20	2.1	224	1.2	6.2	1.8	96
1.5	33	2.5	515	1.3	12	2.0	175
1.7	69	3.0	890	1.4	20	2.5	540
1.9	131			1.6	49	3.0	890

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	119	442	344	17	235	269	106	249	153	13	109	18
2	34	384	336	27	244	235	247	312	54	11	98	14
3	99	303	156	197	244	37	336	309	84	11	87	16
4	114	286	120	211	35	40	352	204	291	11	17	76
5	110	554	137	130	40	224	414	32	270	18	17	86
6	99	715	200	148	247	221	333	56	225	*26	89	84
7	78	561	206	21	316	286	71	172	215	20	75	73
8	38	484	228	22	348	260	313	178	198	18	73	15
9	27	421	265	249	341	384	449	*166	63	28	68	15
10	76	*368	229	239	285	260	442	174	90	24	82	86
11	*42	376	217	352	56	244	449	174	208	20	15	74
12	22	360	256	376	84	368	449	36	202	18	15	91
13	36	360	213	*344	298	368	407	62	200	18	54	113
14	51	360	243	193	307	376	388	188	194	84	71	64
15	60	392	227	195	324	351	344	189	166	161	57	14
16	141	392	212	363	364	303	376	169	20	108	88	16
17	776	400	27	375	428	147	463	197	18	106	49	77
18	799	360	22	408	176	176	456	186	130	110	14	84
19	596	303	*126	359	149	344	400	28	133	110	14	77
20	463	193	112	280	339	352	360	39	152	100	*47	63
21	384	259	110	60	454	392	336	195	152	23	92	49
22	312	286	95	73	442	435	320	192	137	28	82	13
23	278	286	116	232	435	400	308	177	18	109	89	14
24	286	157	20	222	*294	260	294	179	16	128	48	53
25	294	*294	19	243	144	238	294	151	91	102	14	66
26	269	158	22	229	140	186	294	22	129	*111	15	53
27	235	162	132	199	242	198	294	38	148	119	96	82
28	211	303	117	24	284	*182	286	183	143	32	80	87
29	140	344	121	27	275	166	286	178	129	16	70	14
30	157	352	119	221	-------	191	286	41	17	107	59	15
31	336	-------	18	219	-------	82	-------	169	-------	109	74	-------
Total	6,682	10,618	4,746	6,285	7,590	8,075	10,127	4,627	4,004	1,897	1,835	1,582
Mean	216	354	153	203	262	260	338	149	133	61.2	59.2	52.1
(†)	+106	-19.3	-17.4	-4.85	-3.83	+14.0	+3.36	+17.1	-34.9	+18.3	-27.1	-0.19

Adjusted for diversion and change in reservoir contents

Mean	321	335	136	198	258	274	341	166	98.6	79.5	32.1	51.9
Cfsm	5.03	5.25	2.13	3.10	4.04	4.29	5.34	2.60	1.55	1.25	0.503	0.813
In.	5.81	5.85	2.45	3.58	4.36	4.96	5.96	3.01	1.72	1.44	0.58	0.91

	Observed						Adjusted					
Calendar year 1955:	Max	799	Min	18	Mean	177	Mean	175	Cfsm	2.74	In.	37.26
Water year 1955-56:	Max	799	Min	11	Mean	186	Mean	190	Cfsm	2.98	In.	40.63

* 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.

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 1956.
Gage.--Water-stage recorder. Altitude of gage is 10 ft (from topographic map).
Average discharge.--16 years (1940-56), 398 cfs (adjusted for storage and diversion).
Extremes.--Maximum discharge during year, 2,090 cfs Nov. 6 (gage height, 9.10 ft); minimum daily, 68 cfs Jan. 2, Aug. 26.
1939-56: Maximum discharge, that of Nov. 6, 1955; minimum daily, 22 cfs Sept. 4, 1944.
Remarks.--Records excellent except those for periods of backwater from aquatic vegetation, which are good, and those for period of no gage-height record, which are fair. Flow regulated by powerplants, and by Scituate, Flat River, and other reservoirs (combined usable capacity, about 5 1/3 billion cu ft). 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 1955-56, except periods of backwater from aquatic vegetation (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 15				Jan. 16 to Sept. 30			
3.5	50	5.0	615	3.5	50	4.5	430
3.7	95	6.0	1,050	3.7	95	5.0	702
4.0	193	7.0	1,410	4.0	198	6.2	1,220
4.5	384	9.7	2,070				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	298	1,160	759	98	505	749	469	660	396	101	259	98
2	179	1,070	745	69	721	760	264	622	166	82	248	78
3	253	942	634	350	877	636	1,020	720	120	98	236	70
4	330	906	498	508	496	534	983	620	550	90	136	120
5	331	1,650	638	563	168	*897	1,020	342	530	94	78	166
6	352	2,050	577	530	468	741	*998	153	489	171	112	187
7	505	1,910	606	208	1,000	886	678	439	426	125	220	173
8	272	1,460	601	88	992	1,090	833	517	417	82	210	113
9	138	1,220	606	624	909	1,030	1,150	*504	199	175	189	78
10	299	*1,060	577	868	872	832	1,100	506	116	171	213	159
11	*350	1,070	577	800	531	780	1,030	518	432	141	127	178
12	169	1,100	667	818	487	886	1,020	303	437	120	72	151
13	227	1,060	577	827	706	922	968	122	431	103	126	195
14	294	1,120	577	441	875	924	844	419	382	156	123	206
15	405	1,140	601	380	853	996	868	511	331	183	169	*150
16	1,250	1,100	582	*678	885	878	1,030	496	157	248	193	132
17	1,630	1,100	416	726	915	694	1,130	492	70	214	216	212
18	1,650	1,010	116	749	770	660	1,190	516	138	206	120	195
19	1,400	859	*268	695	697	838	1,080	266	*238	204	70	154
20	1,200	777	442	603	856	891	1,000	110	268	194	*91	a200
21	1,070	786	469	286	943	892	922	357	253	160	141	a190
22	890	800	451	150	961	963	855	496	250	146	156	a120
23	858	814	446	446	929	982	880	494	145	185	140	a90
24	902	508	376	470	845	814	789	477	72	220	138	a120
25	863	530	119	464	636	785	785	472	99	301	98	a170
26	814	676	80	476	665	817	712	262	216	257	68	a180
27	768	587	268	458	762	702	764	116	230	269	93	a170
28	717	759	456	224	790	734	749	377	250	159	166	a180
29	568	804	465	98	766	719	573	491	237	90	160	a120
30	592	791	469	374	-------	788	657	258	145	168	134	a90
31	1,100	-------	372	570	-------	675	-------	340	-------	*254	129	-------
Total	20,674	30,718	15,032	14,736	21,880	25,295	26,761	12,996	8,190	5,172	4,631	4,445
Mean	667	1,024	485	475	754	816	892	419	273	167	149	148
(+)	+451	+10.2	-144	+117	+70.6	+62.8	+227	+12.0	-5.27	+12.9	-74.1	-40.1
Adjusted for diversion and change in reservoir contents												
Mean	1,118	1,034	341	592	825	879	1,119	431	268	180	75.3	108
Cfsm	5.59	5.17	1.70	2.96	4.12	4.40	5.60	2.16	1.34	0.900	0.376	0.540
In.	6.44	5.77	1.97	3.41	4.45	5.07	6.24	2.49	1.49	1.04	0.43	0.60

	Observed				Adjusted			
Calendar year 1955:	Max 2,050	Min 64	Mean 501		Mean 550	Cfsm 2.75	In. 37.35	
Water year 1955-56:	Max 2,050	Min 68	Mean 521		Mean 579	Cfsm 2.90	In. 39.40	

* 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.
a No gage-height record; discharge estimated on basis of weather records and records for South Branch Pawtuxet River at Washington.
Note.--Backwater from aquatic vegetation Oct. 1 to Jan. 15, June 21 to Sept. 30.

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 1956.

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

Average discharge.--16 years, 42.9 cfs (unadjusted).

Extremes.--Maximum discharge during year, 347 cfs Oct. 17 (gage height, 2.345 ft); minimum, 5.2 cfs Sept. 14.
1940-56: 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 tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31, Apr. 9 to Sept. 30				Nov. 1 to Apr. 8			
1.1	3.4	1.5	70	1.2	13	1.8	152
1.2	13	1.9	190	1.3	28	2.2	298
1.3	29	2.3	333	1.5	67		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	105	62	28	63	72	126	75	39	14	11	6.6
2	38	79	60	25	63	77	129	69	38	13	10	6.6
3	32	67	62	41	119	91	152	75	51	12	9.6	6.6
4	27	71	66	54	84	91	139	75	88	11	9.0	6.1
5	21	272	90	42	72	84	129	70	72	16	9.0	5.6
6	18	262	72	36	69	81	116	66	54	42	8.5	6.1
7	48	166	65	33	143	111	108	75	43	41	8.0	6.6
8	60	122	60	32	126	159	159	70	37	31	8.5	6.6
9	46	105	56	80	97	152	176	*81	33	41	8.5	6.1
10	35	*94	54	160	86	113	143	60	34	41	8.0	6.1
11	*27	136	52	130	86	97	121	59	33	35	7.0	5.6
12	24	145	50	105	159	91	110	56	30	24	9.0	5.6
13	22	113	48	90	132	99	101	55	28	22	17	5.6
14	20	119	46	80	97	102	95	52	26	37	15	5.6
15	52	126	45	72	86	126	95	50	*22	38	11	6.1
16	205	113	44	*67	81	103	137	51	20	30	9.0	6.6
17	311	113	42	65	74	86	153	49	19	24	7.5	6.6
18	201	99	40	59	84	89	124	47	18	20	7.0	6.1
19	*132	91	*39	55	108	86	101	46	17	17	7.0	5.6
20	107	89	34	53	102	86	95	45	17	15	*6.8	6.6
21	85	84	28	51	86	86	90	43	16	19	8.0	6.1
22	75	81	28	48	72	91	88	40	18	44	7.5	6.1
23	68	77	28	46	66	99	85	38	17	39	7.5	5.6
24	62	81	30	43	*61	111	80	37	17	31	7.5	7.0
25	62	81	34	41	77	102	75	37	17	24	7.0	6.6
26	58	74	34	39	89	91	75	37	16	*20	7.0	6.1
27	55	69	30	39	77	91	75	50	15	15	6.6	5.6
28	54	72	28	38	91	*97	72	75	15	14	6.6	6.1
29	50	72	28	37	84	97	75	60	14	14	6.6	6.1
30	51	66	29	51		129	82	49	16	12	6.6	6.1
31	89		28	81		132		43		11	6.6	
Total	2,173	3,244	1,402	1,821	2,634	3,117	3,306	1,715	880	767	263.9	184.4
Mean	70.1	108	45.2	58.7	90.8	101	110	55.3	29.3	24.7	8.51	6.15
(†)	4.95	4.76	5.04	5.14	5.03	4.73	4.86	5.20	6.34	5.77	6.45	5.67

Calendar year 1955: Max 311 Min 3.8 Mean 56.4
Water year 1955-56: Max 311 Min 5.6 Mean 58.8

Peak discharge (base, 190 cfs).--Oct. 17 (2 to 5 a.m.) 347 cfs (2.345 ft); Nov. 5 (5 to 7 p.m.) 336 cfs (2.31 ft); Apr. 8 (9 to 12 p.m.) 195 cfs (1.915 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; for calendar year 1955, 5.01 cfs; for water year 1956, 5.32 cfs. Records furnished by U. S. Navy and Kent County Water Authority.

Note.--No gage-height record Dec. 5-18, Jan. 7-15; discharge estimated on basis of weather records, recorded range in stage, and records for Wood River at Hope Valley and Adamsville Brook at Adamsville.

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 1956. 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.--16 years, 185 cfs.

Extremes.--Maximum discharge during year, 779 cfs Oct. 18 (gage height, 5.48 ft); minimum, 23 cfs Sept. 14; minimum daily, 41 cfs Sept. 15.
1940-56: 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 tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 6				Nov. 7 to Sept. 30			
2.5	138	5.0	664	1.9	40	3.0	265
3.0	248	5.5	784	2.1	66	4.0	461
4.0	449			2.5	139	5.2	711

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	166	396	317	146	265	357	437	315	206	96	97	43
2	166	425	303	139	281	347	*446	308	193	101	96	55
3	171	407	298	158	347	347	475	315	200	92	92	66
4	160	390	298	176	347	347	492	313	244	85	74	69
5	148	546	315	185	355	347	493	303	257	92	90	55
6	142	655	313	180	349	349	479	293	257	161	73	54
7	173	697	305	170	389	371	465	303	239	166	80	54
8	190	*676	293	160	427	408	506	*303	213	166	79	50
9	203	605	275	190	439	456	558	293	196	180	77	53
10	203	542	260	240	425	470	560	286	186	188	76	59
11	192	530	249	330	407	458	534	275	180	180	74	52
12	173	526	239	380	437	432	499	265	178	158	72	46
13	*168	519	229	390	456	410	465	257	163	153	81	51
14	154	523	218	400	458	408	434	252	*154	168	60	48
15	183	521	221	380	437	437	417	239	141	170	77	41
16	374	513	218	350	410	442	436	236	124	168	68	62
17	673	515	210	330	380	396	456	229	128	149	61	65
18	767	490	206	310	375	402	470	223	131	133	58	59
19	*765	466	200	290	407	417	456	218	120	118	63	52
20	703	452	180	270	412	359	425	216	114	112	71	60
21	618	429	170	255	403	375	402	210	116	107	70	58
22	535	410	158	240	364	405	382	203	118	161	70	48
23	465	395	149	230	341	415	384	198	107	176	*70	53
24	421	386	149	220	319	422	351	193	114	*171	62	61
25	386	375	166	216	328	407	337	186	122	153	55	53
26	357	366	168	210	341	407	326	178	110	135	59	55
27	338	353	166	*203	*335	393	324	193	105	122	63	51
28	318	347	156	198	357	384	317	231	108	112	56	56
29	301	343	151	196	368	382	313	242	107	112	55	56
30	291	328	153	210	-------	412	317	239	94	114	52	58
31	375	-------	144	265	-------	425	-------	223	-------	101	56	----
Total	10,279	14,126	6,877	7,617	10,959	12,387	12,936	7,738	4,725	4,300	2,187	1,643
Mean	332	471	222	246	378	400	431	250	158	139	70.5	54.8
Cfsm	3.32	4.71	2.22	2.46	3.78	4.00	4.31	2.50	1.58	1.39	0.705	0.548
In.	3.82	5.25	2.56	2.83	4.08	4.61	4.81	2.88	1.76	1.60	0.81	0.61

Calendar year 1955: Max 767 Min 50 Mean 244 Cfsm 2.44 In. 33.13
Water year 1955-56: Max 767 Min 41 Mean 262 Cfsm 2.62 In. 35.62

* Discharge measurement made on this day.
Note.--No gage-height record Jan. 5-24, 26; discharge estimated on basis of weather records, recorded range in stage, and records for Wood River at Hope Valley and Pawcatuck River at Westerly.

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 1956. Records of daily mean 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.--15 years, 149 cfs.

Extremes.--Maximum discharge during year, 1,270 cfs Oct. 17 (gage height, 6.95 ft); minimum, 29 cfs Sept. 15; minimum daily, 29 cfs Sept. 15.
1941-56: 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.
Flood in March 1936 reached a discharge of 1,540 cfs, by computation of peak flow over dam a quarter of a mile upstream from station.

Remarks.--Records excellent. Some regulation at low flow by mills and ponds above station; regulation greater prior to 1948.

Revisions (water years).--WSP 1201: 1948(P). See also Records available.

Rating table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

1.8	23	3.0	260
1.9	32	4.0	488
2.2	70	5.0	698
2.5	128	7.0	1,290

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	144	513	229	101	205	234	339	257	144	63	55	32
2	151	406	216	94	216	231	*355	242	136	60	52	33
3	123	350	213	139	298	255	406	257	184	57	50	39
4	107	358	224	151	265	260	424	252	252	55	47	42
5	101	686	247	138	247	252	415	239	229	64	44	39
6	99	713	239	128	237	255	393	229	194	143	43	36
7	238	596	221	119	339	288	364	247	173	149	43	38
8	295	*488	208	114	350	387	461	239	149	110	42	38
9	244	411	197	229	310	442	513	218	136	142	41	36
10	218	368	192	409	288	387	469	221	128	170	40	34
11	192	426	181	387	288	332	442	218	128	121	39	32
12	165	454	176	343	362	302	411	211	114	94	38	32
13	*144	400	168	*312	368	285	373	205	*110	97	35	31
14	138	413	*157	282	324	300	339	194	103	168	36	30
15	363	420	157	260	290	341	324	189	97	176	38	29
16	917	402	154	244	272	339	409	186	92	123	48	31
17	1,200	417	144	237	252	302	523	178	86	99	56	35
18	*961	375	138	218	268	295	467	173	83	84	53	38
19	692	339	136	205	300	290	406	165	78	76	43	36
20	562	322	126	194	288	275	352	162	76	70	39	35
21	463	308	110	184	265	270	329	159	76	72	38	35
22	389	295	107	173	239	272	305	154	78	110	41	35
23	334	280	107	165	226	282	290	146	80	123	*43	33
24	305	285	110	154	208	302	280	141	76	99	47	33
25	298	280	116	154	231	292	268	133	75	86	47	35
26	278	268	116	146	257	280	260	123	70	76	46	35
27	260	255	112	144	239	272	255	158	69	70	42	32
28	250	252	105	138	270	278	244	221	69	66	38	34
29	244	252	101	133	265	280	250	189	69	64	36	38
30	239	237	105	162	-------	324	265	168	67	62	34	39
31	453	-------	103	229	-------	346	-------	154	-------	57	33	----
Total	10,567	11,569	4,915	6,086	7,967	9,250	10,931	6,028	3,421	3,006	1,327	1,045
Mean	341	386	159	196	275	298	364	194	114	97.0	42.8	34.8
Cfsm	4.71	5.33	2.20	2.71	3.80	4.12	5.03	2.68	1.57	1.34	0.591	0.481
In.	5.43	5.94	2.52	3.13	4.09	4.75	5.61	3.10	1.76	1.54	0.68	0.54

Calendar year 1955: Max 1,200 Min 36 Mean 198 Cfsm 2.73 In. 37.13
Water year 1955-56: Max 1,200 Min 29 Mean 208 Cfsm 2.87 In. 39.09

Peak discharge (base, 550 cfs).--Oct. 17 (5 to 6 a.m.) 1,270 cfs (6.95 ft); Nov. 1 (2 to 3 a.m.) 568 cfs (4.40 ft); Nov. 5 (10 to 11 p.m.) 790 cfs (5.36 ft).
* Discharge measurement made on this day.

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 1956.

Gage.--Water-stage recorder. Altitude of gage is at mean sea level (from topographic map).

Average discharge.--16 years, 554 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 2,800 cfs Oct. 17 (gage height, 8.11 ft); maximum gage height, 8.22 ft Oct. 17 (affected by tide); minimum daily discharge, 103 cfs Sept. 15.

1940-56: Maximum discharge, 3,510 cfs Mar. 16, 1952 (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, which occurred in November 1927, was possibly more than twice that of March 1936. Maximum stage known, 15.0 ft Sept. 21, 1938 (due to hurricane tidal wave), from information by local residents.

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 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	588	1,460	878	335	818	1,020	1,340	934	562	260	241	121
2	582	1,450	840	315	802	969	*1,360	885	510	241	236	124
3	550	1,350	810	405	1,080	976	1,450	927	562	223	232	144
4	484	1,320	818	536	1,090	990	1,500	934	772	201	181	154
5	432	1,900	885	517	1,000	990	1,490	878	825	246	197	151
6	439	2,110	899	472	997	976	1,450	832	750	459	205	140
7	788	2,090	855	405	1,200	1,050	1,360	920	672	517	169	144
8	990	*1,990	802	388	1,340	1,260	1,550	*927	609	491	173	121
9	948	1,840	758	582	1,300	1,440	1,760	870	536	543	177	124
10	832	1,670	700	997	1,220	1,430	1,740	818	504	595	189	144
11	735	1,640	679	1,150	1,170	1,360	1,640	795	504	556	151	139
12	651	1,670	616	1,180	1,320	1,280	1,520	758	478	465	154	134
13	*602	1,600	588	1,190	1,380	1,210	1,410	735	*447	453	169	131
14	562	1,560	576	1,140	1,320	1,210	1,320	721	441	569	165	128
15	771	1,600	562	1,060	1,240	1,340	1,230	686	383	630	162	103
16	1,960	1,580	569	983	1,150	1,340	1,360	658	350	576	162	106
17	2,760	1,580	536	920	1,070	1,260	1,560	644	340	465	158	128
18	2,680	1,510	524	870	1,070	1,200	1,580	616	356	400	134	134
19	*2,520	1,410	517	788	1,220	1,170	1,470	530	325	340	140	130
20	2,320	1,340	472	742	1,230	1,110	1,360	550	320	295	165	140
21	2,080	1,280	435	700	1,150	1,100	1,250	569	310	285	165	140
22	1,830	1,220	405	658	1,050	1,120	1,170	530	300	459	165	112
23	1,610	1,170	372	630	941	1,150	1,100	510	285	524	*158	118
24	1,420	1,130	372	576	878	1,200	1,040	504	290	*478	165	154
25	1,280	1,100	400	550	885	1,210	976	484	315	429	137	144
26	1,190	1,050	417	517	962	1,170	941	441	305	372	144	130
27	1,100	997	411	*504	*976	1,150	934	517	255	335	165	137
28	1,020	983	378	517	1,020	1,130	899	750	290	300	154	140
29	962	969	356	484	1,080	1,130	892	742	265	295	151	130
30	920	927	350	556	-------	1,250	927	658	232	290	151	151
31	1,170	-------	340	810	-------	1,340	-------	623	-------	275	144	-------
Total	36,776	43,496	18,120	21,477	31,959	36,531	39,579	21,946	13,093	12,567	5,259	3,996
Mean	1,186	1,450	585	693	1,102	1,178	1,319	708	436	405	170	133
(†)	2.39	2.35	2.56	2.40	2.37	2.36	2.36	2.52	3.14	3.12	3.41	2.59
Adjusted for diversion												
Mean	1,189	1,452	587	695	1,104	1,181	1,322	710	440	409	173	136
Cfsm	4.03	4.92	1.99	2.36	3.74	4.00	4.48	2.41	1.49	1.39	0.586	0.461
In.	4.65	5.49	2.29	2.72	4.04	4.61	5.00	2.78	1.66	1.60	0.68	0.51

	Observed			Adjusted			
Calendar year 1955:	Max 2,760	Min 110	Mean 751	Mean 754	Cfsm 2.56	In. 34.67	
Water year 1955-56:	Max 2,760	Min 103	Mean 778	Mean 781	Cfsm 2.65	In. 36.03	

* Discharge measurement made on this day.
† Diversion, equivalent in cubic feet per second, for municipal supply of Westerly. Records furnished by Westerly Board of Water Commissioners.

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 1956.

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.--10 years, 26.6 cfs.

Extremes.--1946-56: Maximum discharge, 464 cfs (300 mgd) 1 a.m. Sept. 12, 1954 (gage height, 5.1 ft, from floodmarks), uncorrected for storage and diversion.

Remarks.--Records adjusted for change in contents in Groton, Pohegnut and Ledyard Reservoirs and Smith Lake, and for diversion for water supply of the borough of Groton.

Cooperation.--Venturi-meter records and gage readings furnished by the borough of Groton, Department of Utilities.

Monthly discharge, water year October 1955 to September 1956

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	1,153.0	37.2	57.6	2.60	4.02	4.64
November	1,200.0	40.0	61.9	2.80	4.33	4.83
December	429.3	13.8	21.4	.965	1.49	1.72
Calendar year 1955	6,857.2	18.8	29.1	1.31	2.03	27.59
January	599.5	19.3	29.9	1.35	2.09	2.41
February	1,106.0	38.1	58.9	2.66	4.12	4.44
March	1,139.1	36.7	56.8	2.57	3.98	4.59
April	1,085.4	36.2	56.0	2.53	3.91	4.36
May	593.1	19.1	29.6	1.34	2.07	2.39
June	307.4	10.2	15.8	.713	1.10	1.23
July	356.0	11.5	17.8	.804	1.24	1.43
August	89.7	2.89	4.47	.202	.313	.36
September	115.5	3.85	5.96	.269	.416	.46
Water year 1955-56	8,174.0	22.3	34.5	1.56	2.41	32.88

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 1956.

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.--25 years, 215 cfs.

Extremes.--Maximum discharge during year, 2,990 cfs Oct. 16 (gage height, 9.29 ft); minimum, 17 cfs July 4 (gage height, 3.42 ft); minimum daily, 18 cfs July 4.
1931-56: 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 determination of peak flow; minimum, 2.0 cfs Aug. 21, 22, 1949 (gage height, 1.60 ft); minimum daily, 2.5 cfs Sept. 18, 1949.

Remarks.--Records excellent except those for periods of ice effect, which are good. 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 4				Nov. 5 to Sept. 30			
4.2	115	6.0	770	3.4	16	5.0	355
4.5	185	8.0	1,940	3.6	34	6.0	690
5.0	340	9.0	2,720	3.8	60	7.0	1,110
				4.0	95	9.0	2,630
				4.4	185		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	182	1,130	268	105	b192	228	286	550	222	63	40	29
2	172	890	250	89	190	228	315	424	265	73	35	38
3	156	535	244	93	247	271	473	424	1,030	44	38	40
4	144	78	265	109	b218	391	602	406	805	18	38	42
5	*185	2,66[illegible]	319	115	192	418	800	370	476	27	32	40
6	138	1,500	328	121	b180	364	1,040	304	346	149	33	36
7	*393	800	298	115	228	515	1,060	316	310	172	40	45
8	493	638	256	105	*274	638	860	304	235	111	36	54
9	416	568	228	198	256	550	725	283	198	119	34	36
10	316	498	210	445	235	430	*742	298	180	148	36	34
11	240	760	180	400	228	385	840	322	*205	127	33	42
12	195	760	188	334	307	409	840	301	192	74	29	32
13	172	620	170	334	343	394	840	268	165	70	35	32
14	202	725	170	304	307	376	800	253	152	133	42	38
15	1,850	708	180	250	289	382	800	244	152	168	36	42
16	*2,710	638	175	220	295	346	960	228	135	127	30	35
17	2,090	638	150	205	271	280	1,270	198	135	101	32	40
18	1,340	532	152	b190	250	b304	880	172	155	86	29	49
19	915	480	142	b178	230	310	690	175	148	74	26	44
20	705	459	b130	180	218	301	585	190	140	*70	28	*52
21	580	436	b130	b152	208	b319	498	190	131	70	45	60
22	504	418	b120	b130	180	316	448	190	125	95	46	50
23	440	394	b120	b140	175	340	442	188	117	86	46	36
24	416	403	b120	b150	168	b349	466	218	101	71	38	60
25	484	388	b130	b130	202	b319	412	192	89	63	39	71
26	468	358	b140	b130	334	319	385	165	86	59	29	71
27	408	334	129	b130	310	313	385	168	82	57	29	57
28	368	331	121	b130	307	313	352	210	91	49	31	109
29	330	*319	115	b125	262	325	439	202	91	41	29	101
30	373	289	121	150	------	325	620	168	78	42	29	70
31	1,480	---	113	b210	------	301	------	165	------	*47	28	------
Total	18,801	18,936	5,662	5,847	7,096	11,059	19,853	8,086	6,637	2,634	1,071	1,475
Mean	606	631	183	182	245	357	662	261	221	85.0	34.5	49.2
Cfsm	5.01	5.21	1.51	1.50	2.02	2.95	5.47	2.16	1.83	0.702	0.285	0.407
In.	5.78	5.81	1.74	1.73	2.18	3.40	6.10	2.49	2.04	0.81	0.33	0.45

Calendar year 1955: Max 12,100 Min 24 Mean 345 Cfsm 2.85 In. 38.66
Water year 1955-56: Max 2,710 Min 18 Mean 290 Cfsm 2.41 In. 32.86

Peak discharge (base, 1,100 cfs).--Oct. 16 (10 a.m.) 2,990 cfs (9.29 ft); Oct. 31 (1 p.m.) 1,700 cfs (7.66 ft); Nov. 5 (11 to 12 a.m.) 2,150 cfs (8.48 ft); Apr. 6 (2 a.m.) 1,160 cfs (7.11 ft); Apr. 17 (10 a.m.) 1,330 cfs (7.41 ft); June 3 (12 m.) 1,270 cfs (7.29 ft).

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

Hop River near Columbia, Conn.

Location.--Lat 41°43'39", long 72°18'10", on right bank 1,500 ft downstream from abandoned mill and 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 1956.

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.--24 years, 131 cfs.

Extremes.--Maximum discharge during year, 4,820 cfs Oct. 16 (gage height, 14.20 ft, from floodmark); minimum, about 3 cfs June 29 (gage height, 2.61 ft).
1932-56: 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, 2.4 cfs Aug. 19, 1939 (gage height, 2.55 ft); minimum daily, 2.6 cfs Aug. 28, 1949; minimum gage height, 2.49 ft Aug. 3, 1936.

Remarks.--Records excellent except those for periods of ice effect, which are good. Infrequent regulation at low water.

Revisions (water years).--WSP 781: 1933(M), drainage area. WSP 1111: 1947(M). WSP 1301: 1935-36(M).

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31				Nov. 1 to July 28				July 28 to Sept. 30	
3.4	57	7.0	780	3.0	20	5.0	286	3.2	7
3.7	88	10.0	2,010	3.4	46	7.0	800	3.5	17
4.0	126	12.0	3,190	4.0	105	10.0	2,010	3.9	51
5.0	586	13.0	3,890						

Discharge, in cubic feet per second, water year October 1955 to September 195[illegible]

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	725	141	b48	152	b129	212	310	97	[illegible]	[illegible]	[illegible]
2	101	498	135	b48	132	135	298	233	149	[illegible]	[illegible]	[illegible]
3	81	385	142	b47	231	214	485	267	698	20	11	12
4	71	491	182	45	b175	322	548	233	548	18	11	10
5	*62	1,670	233	46	150	262	698	222	335	29	10	9.4
6	92	832	193	b48	136	228	785	189	226	118	10	8.8
7	339	566	155	b47	214	427	660	202	168	83	10	26
8	268	448	140	b45	*239	510	[illegible]	178	131	56	11	a23
9	255	360	128	b110	206	472	[illegible]	152	105	58	12	a22
10	189	310	122	*b260	194	322	*546	[illegible]	95	63	11	a21
11	151	498	109	204	185	279	560	172	*118	45	9.1	a20
12	129	460	108	255	398	281	460	147	93	36	9.1	a20
13	110	360	b97	257	335	239	398	140	77	35	9.1	a19
14	126	491	b91	202	255	235	335	126	65	80	10	a19
15	2,020	498	*99	158	233	284	298	118	54	111	9.1	a19
16	*4,170	460	b91	140	233	239	460	112	48	61	7.9	a30
17	2,410	485	85	122	173	194	472	103	97	50	7.6	a37
18	1,090	360	85	118	175	202	348	101	66	39	7.5	a35
19	701	298	81	112	193	178	274	108	48	31	7.0	*35
20	522	281	b65	97	180	173	[illegible]	104	42	27	7.6	36
21	417	257	b60	90	157	161	[illegible]	95	39	28	10	34
22	363	239	b55	b85	b115	172	185	88	41	47	13	30
23	309	218	b50	b85	b112	198	185	91	38	41	12	28
24	284	233	b55	b80	b98	241	194	122	35	33	11	31
25	321	212	b65	b80	160	233	170	93	33	*28	12	30
26	279	196	b75	b75	272	194	163	82	29	24	10	19
27	254	182	b68	b75	194	191	172	106	27	21	9.4	16
28	233	175	b59	74	191	191	155	138	31	20	*8.8	43
29	221	166	b55	80	152	191	267	104	28	17	8.5	40
30	276	144	b53	88	------	204	398	88	28	15	8.5	31
31	1,170	------	b49	170	------	198	------	82	------	*14	9.1	------
Total	17,130	12,498	3,126	3,391	5,640	7,499	11,273	4,490	3,589	1,294	306.1	724.6
Mean	553	417	101	109	194	242	376	145	120	41.7	9.87	24.2
Cfsm	7.26	5.47	1.33	1.43	2.55	3.18	4.93	1.90	1.57	0.547	0.135	0.318
In.	8.37	6.10	1.53	1.65	2.75	3.67	5.50	2.19	1.75	0.63	0.16	0.35

Calendar year 1955: Max 4,170 Min 8.4 Mean 204 Cfsm 2.68 In. 36.33
Water year 1955-56: Max 4,170 Min 7.0 Mean 194 Cfsm 2.55 In. 34.65

Peak discharge (base, 900 cfs).--Oct. 16 (2 p.m.) 4,820 cfs (14.20 ft); Oct. 31 (12 m.) 1,690 cfs (9.36 ft); Nov. 5 (9 a.m.) 2,110 cfs (10.22 ft); Apr. 6 (1 a.m.) 965 cfs (7.55 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 other stations in the Shetucket River basin.

b Stage-discharge relation affected by ice.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 552.92 ft above mean sea level, datum of 1929.

Average discharge.--6 years, 9.84 cfs.

Extremes.--Maximum discharge during year, 300 cfs Nov. 5 (gage height, 4.84 ft); minimum, about 0.02 cfs Aug. 19, 20.
1950-56: Maximum discharge, 1,000 cfs Aug. 19, 1955 (gage height, 6.68 ft); minimum, 0.01 cfs Aug. 30 to Sept. 12, Sept. 18-21, 1953; minimum gage height, 1.17 ft Sept. 4-12, 1953.

Remarks.--Records good except those for periods of no gage-height record, which are poor.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 9				Jan. 9 to Sept. 30			
1.4	0.8	2.5	31	1.2	0.01	1.8	5.1
1.5	1.6	3.0	61	1.3	.14	2.0	10
1.6	2.6	3.5	103	1.4	.51	2.5	28
1.8	5.8	4.2	190	1.5	1.2	3.0	58
2.0	11			1.6	2.2	3.4	93

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.4	18	4.9	1.4	b11	b6.2	b8.9	16	8.4	0.30	a0.15	0.05
2	3.4	12	4.5	1.2	b9.2	7.1	b12	12	9.5	.19	a.13	.08
3	2.4	9.6	5.4	1.2	b20	17	26	13	53	.16	a.10	.16
4	2.0	71	b10	1.4	b10	b33	36	10	32	.14	a.08	.10
5	*1.8	135	13	1.5	b6.9	b21	86	8.4	13	.40	a.07	.06
6	9.4	30	7.7	1.6	b5.5	13	84	7.3	7.8	5.3	a.06	.06
7	35	23	6.3	1.4	b12	31	57	7.6	5.5	2.8	a.06	1.5
8	18	16	4.5	1.6	*b12	32	24	6.4	4.1	1.7	a.06	.51
9	12	13	4.2	b43	b9.5	24	21	5.3	3.5	2.6	a.06	.22
10	7.0	11	4.0	30	b7.3	b15	*29	9.7	3.5	2.3	a.06	.14
11	4.9	30	3.6	b16	b9.0	15	46	8.1	3.1	1.5	a.05	.10
12	4.0	20	3.3	b17	b32	18	47	6.0	2.7	.95	a.05	.08
13	3.4	13	3.0	b15	b22	12	42	5.5	2.2	.75	a.06	.12
14	7.4	30	2.7	9.5	b14	11	40	4.8	1.9	3.1	a.05	.10
15	176	22	2.9	7.3	13	12	38	4.6	1.5	3.8	a.04	.10
16	163	21	b2.9	6.9	b14	16	81	4.1	1.4	2.1	a.03	.69
17	90	20	2.5	6.2	b10	20	62	3.8	1.3	1.6	a.03	.88
18	38	13	2.4	6.0	7.1	12	29	3.8	1.2	1.1	a.02	*.75
19	24	a10	2.4	4.6	6.6	11	20	4.0	1.0	.75	a.02	.42
20	17	a9.3	1.9	4.1	6.2	10	15	4.0	.95	*.46	a.03	.95
21	13	*9.3	1.5	4.0	b5.5	7.8	13	3.5	.88	.69	a.14	1.1
22	10	8.5	1.2	3.8	b4.3	8.6	12	3.2	1.0	2.0	.16	.56
23	8.8	8.0	1.4	3.8	b4.3	9.5	13	3.8	.95	1.6	.10	.42
24	9.0	10	1.4	3.8	b4.0	9.2	13	4.6	.82	1.0	.10	1.8
25	15	8.2	1.8	3.8	17	b8.4	9.5	3.5	.62	.75	.14	1.4
26	10	7.2	1.9	3.8	b26	7.1	9.2	3.1	.42	.46	.10	.75
27	8.2	6.5	1.7	3.5	b14	b6.6	9.2	6.2	.51	*.56	.06	.51
28	7.0	7.5	1.5	3.4	11	b6.9	7.8	7.1	.75	.42	.05	6.0
29	6.5	b6.8	1.4	3.4	b7.3	b6.9	24	4.3	.56	a.30	.04	3.1
30	9.7	5.6	1.4	7.0	-------	7.8	30	3.5	.42	a.25	.04	1.7
31	38	---	1.5	b15	-------	b7.6	-------	4.5	-------	a.20	.04	-------
Total	758.3	604.5	108.8	232.2	330.7	422.7	944.6	191.7	164.48	40.23	2.18	24.41
Mean	24.5	20.2	3.51	7.49	11.4	13.6	31.5	6.18	5.48	1.30	0.070	0.814
Cfsm	6.00	4.95	0.860	1.84	2.79	3.33	7.72	1.51	1.34	0.319	0.017	0.200
In.	6.92	5.52	0.99	2.12	3.01	3.84	8.61	1.74	1.50	0.37	0.02	0.22

Calendar year 1955: Max 445 Min 0.4 Mean 10.6 Cfsm 2.60 In. 35.13
Water year 1955-56: Max 176 Min 0.02 Mean 10.5 Cfsm 2.57 In. 34.86

Peak discharge (base, 120 cfs).--Oct. 16 (4 to 5 p.m.) 242 cfs (4.55 ft); Nov. 5 (12:30 a.m.) 300 cfs (4.84 ft); Apr. 5 (7 p.m.) 156 cfs (3.97 ft); Apr. 6 (6:30 to 7 p.m.) 120 cfs (3.66 ft); Apr. 16 (8 to 8:30 p.m.) 135 cfs (3.80 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of weather records and records for stations on nearby streams.

b Stage-discharge relation affected by ice.

Mount Hope River near Warrenville, Conn.

Location.--Lat 41°50'37", long 72°10'10", on left bank 250 ft downstream from Knowlton Brook, 700 ft upstream from bridge on State Highway 89, 1¾ miles south of Warrenville, Windham County, and 3¼ miles southwest of Ashford.

Drainage area.--29.1 sq mi.

Records available.--July 1940 to September 1956.

Gage.--Water-stage recorder. Datum of gage is 335.57 ft above mean sea level, datum of 1929.

Average discharge.--16 years, 50.6 cfs.

Extremes.--Maximum discharge during year, 920 cfs Nov. 5 (gage height, 6.66 ft); minimum, 1.8 cfs Aug. 18, 19 (gage height, 1.30 ft).

1940-56: 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 determination of peak flow; minimum, 0.35 cfs Aug. 5, 1955; minimum gage height, 0.99 ft Aug. 26-29, 1949.

Flood in September 1938 reached a stage of about 14.5 ft, from floodmarks.

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

Revisions (water years).--WSP 1331: 1941(M), 1951-53(M).

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 4				Nov. 5 to Sept. 30			
1.8	18	4.0	298	1.3	1.8	3.0	150
2.0	32	5.0	474	1.5	6.1	3.5	225
2.5	78	6.0	690	1.7	14.5	4.0	275
3.0	143	7.0	1,090	2.0	34	5.0	430
				2.5	81	6.0	675

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	135	b45	b14	b47	b51	72	106	116	8.3	4.1	2.5
2	34	91	b41	b14	b47	b56	92	81	97	7.9	3.6	3.1
3	28	83	45	b15	b78	83	162	96	352	6.1	3.2	4.4
4	26	233	65	b18	63	142	190	79	212	5.4	3.1	3.2
5	*24	636	79	b20	56	107	296	72	117	16	2.7	2.7
6	56	270	59	b19	48	83	318	67	81	48	2.7	2.2
7	190	194	b46	b16	85	176	285	71	63	27	2.9	13
8	116	138	b44	b16	*79	184	202	60	53	16	2.7	6.8
9	91	113	b39	b103	65	147	*184	54	45	28	3.1	4.6
10	59	97	36	b142	60	b106	210	74	44	23	3.1	3.6
11	46	192	b32	b93	63	97	250	65	44	14	2.5	3.1
12	39	132	b32	b70	144	103	240	56	36	11	3.1	2.9
13	42	101	b29	b73	b110	89	218	53	32	12	4.1	3.1
14	60	201	28	60	b88	89	192	48	26	48	3.4	2.9
15	614	a160	31	53	79	98	178	45	21	42	2.9	3.4
16	*816	a130	b29	51	b79	b80	275	40	19	22	2.5	6.1
17	513	a115	27	45	b64	b70	255	40	25	18	2.2	8.6
18	273	a105	26	b41	57	b72	172	40	19	13	2.0	*8.6
19	198	a90	25	b38	b53	b73	132	41	16	9.7	2.0	5.8
20	143	a80	19	b36	b49	b68	104	42	14	*8.3	3.1	8.3
21	114	*77	18	b34	b46	b66	93	38	15	9.7	4.6	9.7
22	95	73	16	b32	b42	b69	83	34	17	22	5.8	6.8
23	83	68	b16	b30	39	b76	87	39	14	16	4.1	5.6
24	78	78	b18	b29	36	b73	85	48	13	12	a3.5	15
25	97	67	b22	b28	77	b69	70	37	12	9.7	a4.0	12
26	80	60	b22	b27	113	b65	71	33	10	7.9	a3.0	7.9
27	67	56	b18	b26	b77	b60	70	49	11	*8.6	2.5	8.6
28	60	56	b16	b25	72	b66	65	58	14	7.9	2.2	51
29	55	b52	b15	b25	b60	b65	142	42	13	6.5	2.2	28
30	80	b46	b15	b40	-------	70	177	36	9.7	5.4	2.0	14
31	256	----	b16	b68	-------	b65	-------	68	-------	4.6	2.2	-------
Total	4,478	3,929	969	1,301	1,976	2,718	4,975	1,712	1,560.7	494.0	95.1	257.5
Mean	144	131	31.3	42.0	68.1	87.7	166	55.2	52.0	15.9	3.07	8.58
Cfsm	4.95	4.50	1.08	1.44	2.34	3.01	5.70	1.90	1.79	0.546	0.105	0.295
In.	5.71	5.02	1.24	1.66	2.52	3.47	6.36	2.19	2.00	0.63	0.12	0.33

Calendar year 1955: Max 2,640 Min 0.7 Mean 69.5 Cfsm 2.39 In. 32.42
Water year 1955-56: Max 816 Min 2.0 Mean 66.8 Cfsm 2.30 In. 31.25

Peak discharge (base, 400 cfs).--Oct. 16 (5:30 p.m.) 912 cfs (6.63 ft); Nov. 5 (3 to 4 a.m.) 920 cfs (6.66 ft); Apr. 5 (8 p.m.) 460 cfs (5.16 ft); June 3 (7 a.m.) 502 cfs (5.33 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 Natchaug River at Willimantic.

b Stage-discharge relation affected by ice.

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 1956.

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 1955 to September 1956

Date	Elevation (feet)†	Contents (millions of cubic feet)	Change in contents (millions of cubic feet)
Sept.30	201.9	5.5	-
Oct. 31	207.3	50.2	+44.7
Nov. 30	200.7	1.9	-48.3
Dec. 31	199.7	.6	-1.3
Calendar year 1955	-	-	-19.2
Jan. 31	200.8	2.1	+1.5
Feb. 29	201.0	2.4	+.3
Mar. 31	201.2	3.1	+.7
Apr. 30	204.4	20.6	+17.5
May 31	204.4	20.6	0
June 30	199.5	.4	-20.2
July 31	199.4	.3	-.1
Aug. 31	199.3	.3	0
Sept.30	199.6	.5	+.2
Water year 1955-56	-	-	-5.0

† Elevation at 12 p.m.

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 1956.

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.--26 years, 306 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 3,230 cfs Oct. 19 (gage height, 8.57 ft); minimum, 6.0 cfs on several days during August (gage height, 2.05 ft); minimum daily, 6.0 cfs Aug. 5, 8, 12.

1930-56: 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 excellent. 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 cause 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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-19		Oct. 20 to Sept. 30			
2.8	145	2.05	6.0	3.0	197
3.0	212	2.1	9.0	5.0	1,070
5.0	1,130	2.2	17	7.0	2,110
7.0	2,210	2.4	45	9.0	3,590
9.0	3,590	2.6	84		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	290	1,240	302	96	290	306	430	835	390	74	7.8	32
2	320	858	278	76	259	322	524	655	430	59	36	20
3	212	632	286	91	422	402	722	583	476	64	64	38
4	184	655	342	84	374	601	902	560	1,090	63	7.8	7.2
5	161	632	470	96	322	678	1,040	506	1,420	73	6.0	38
6	184	1,950	430	103	278	552	1,370	439	835	197	61	34
7	772	2,350	325	101	398	678	1,470	444	434	242	7.8	85
8	883	1,950	*282	98	502	948	1,470	402	322	140	6.0	89
9	700	1,370	251	266	422	948	1,270	350	270	126	55	64
10	506	902	243	835	370	745	1,120	378	251	161	6.6	18
11	371	880	200	790	362	632	1,200	430	259	113	30	32
12	304	1,020	214	601	655	601	1,240	358	225	95	6.0	34
13	262	835	181	542	745	574	1,200	322	191	82	66	33
14	278	835	175	452	574	547	1,140	298	165	123	8.4	22
15	366	1,040	200	362	488	601	1,070	274	144	255	45	30
16	397	925	171	342	480	542	1,170	255	127	153	19	36
17	742	925	159	259	402	390	1,270	243	127	116	14	65
18	2,540	790	162	262	378	500	1,370	232	127	98	25	66
19	3,110	655	159	247	394	410	1,370	247	108	81	18	30
20	2,970	588	124	251	362	390	1,020	247	98	*72	23	*35
21	2,600	534	111	210	310	430	790	228	96	68	27	65
22	2,150	511	103	190	236	414	678	204	103	84	61	65
23	1,680	466	94	187	251	*452	610	211	103	113	26	37
24	1,160	480	103	175	214	484	655	518	87	94	39	66
25	794	466	113	175	290	422	574	251	91	81	23	29
26	678	418	132	170	606	422	524	208	81	72	32	53
27	565	382	120	178	488	398	534	228	78	67	30	68
28	484	366	103	165	452	390	488	358	76	66	19	127
29	439	358	91	159	342	410	606	286	90	66	31	163
30	426	306	96	197	-------	430	812	225	77	11	26	112
31	*744	-------	101	*330	-------	426	-------	218	-------	*66	19	-------
Total	27,272	25,319	6,121	8,090	11,666	16,045	28,639	10,793	8,371	3,175	845.4	1,613.2
Mean	880	844	197	261	402	518	955	348	279	102	27.3	53.8
(†)	+16.7	-18.6	-0.5	+0.6	0	+0.3	+6.8	0	-7.8	0	0	+0.1

Adjusted for change in contents in Mansfield Hollow Reservoir

Mean	897	825	196	262	402	518	962	348	271	102	27.3	53.9
Cfsm	5.31	4.88	1.16	1.55	2.38	3.07	5.69	2.06	1.60	0.604	0.162	0.319
In.	6.12	5.44	1.34	1.79	2.57	3.54	6.35	2.38	1.78	0.70	0.19	0.36

	Observed			Adjusted			
Calendar year 1955:	Max 3,110	Min 6.9	Mean 428	Mean 427	Cfsm 2.53	In. 34.35	
Water year 1955-56:	Max 3,110	Min 6.0	Mean 404	Mean 404	Cfsm 2.39	In. 32.56	

* Discharge measurement made on this day.

† Change in contents, equivalent in cubic feet per second, in Mansfield Hollow Reservoir; furnished by Corps of Engineers.

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 & Hartford Railroad bridge, 500 ft downstream from Potash Brook, 1.3 mile downstream from confluence of Willimantic and Natchaug River, and 1½ miles southeast of Williamantic County.

Drainage area.--401 sq mi.

Records available.--April 1904 to December 1905 (monthly discharge only in WSP 1301), October 1919 to September 1921 and September 1928 to September 1933 (published as "at South Windham"), October 1933 to September 1956.

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 about 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.--31 years (1904-5, 1919-21, 1928-56), 712 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 9,580 cfs Oct. 16 (gage height, 11.61 ft); minimum, 36 cfs Aug. 1, 2 (gage height, 1.45 ft); minimum daily, 57 cfs Aug. 12, 1904-5, 1919-21, 1928-56: 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 excellent except those for period of doubtful gage-height record, which are 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. 140).

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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 11				Jan. 11 to Sept. 30			
2.3	248	6.0	2,490	1.5	43	3.0	475
2.6	354	8.0	4,550	1.7	77	4.0	980
3.0	520	11.0	8,610	2.0	142	6.0	2,470
4.0	1,060			2.5	286	8.0	4,550

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	665	3,640	820	310	710	760	1,070	1,870	735	197	91	80
2	685	2,330	770	271	660	785	1,220	1,420	890	182	94	68
3	545	1,790	770	270	1,010	920	1,750	1,350	2,170	166	132	96
4	453	1,860	910	279	860	1,220	2,200	1,280	2,830	128	85	75
5	408	4,450	1,180	301	760	1,560	2,650	1,190	2,470	152	64	94
6	465	5,000	1,120	313	690	1,350	3,430	1,010	1,520	495	116	98
7	*1,650	4,190	910	306	950	1,420	3,530	1,040	980	574	84	184
8	1,800	3,330	*795	305	1,190	2,290	3,430	980	760	355	67	190
9	1,540	2,490	720	620	1,040	2,290	2,830	860	635	328	115	149
10	1,170	1,970	685	1,650	920	1,710	2,740	920	588	407	73	89
11	892	2,550	585	1,520	860	1,460	2,930	1,010	655	330	87	111
12	735	2,670	620	1,280	1,420	1,420	2,830	860	588	251	57	103
13	655	2,090	535	1,250	1,630	1,350	2,740	810	498	200	114	99
14	675	2,170	515	1,070	1,320	1,280	2,650	760	443	336	90	99
15	3,330	2,670	580	835	1,130	1,420	2,470	710	403	572	110	116
16	8,300	2,250	532	785	1,130	1,320	2,740	660	355	386	76	121
17	7,190	2,410	468	670	980	950	3,330	610	395	306	59	150
18	5,710	1,970	479	610	890	1,130	3,130	565	403	*255	75	166
19	5,080	1,650	472	592	950	1,010	2,830	583	355	221	63	*130
20	4,450	1,540	354	588	920	950	2,290	596	324	202	66	142
21	3,800	1,440	359	511	785	980	1,870	565	315	207	92	176
22	3,230	1,370	329	467	625	1,010	1,560	534	309	264	134	169
23	2,620	1,240	322	467	625	*1,100	1,380	524	295	286	107	123
24	2,070	1,270	334	429	542	1,220	1,420	710	269	241	102	168
25	1,790	1,240	377	446	660	1,100	1,320	596	251	207	90	159
26	1,640	1,150	409	424	1,250	1,100	1,190	511	233	185	86	158
27	1,420	1,060	385	434	1,160	1,040	1,190	556	220	177	78	163
28	1,270	1,030	325	406	1,040	1,040	1,100	785	241	169	67	295
29	1,170	970	303	369	860	1,040	1,350	665	255	*150	80	367
30	1,200	880	312	472	-------	1,070	1,910	542	222	85	72	250
31	3,020	-------	316	*760	-------	1,070	-------	520	-------	142	66	-------
Total	69,628	64,670	17,591	19,010	27,567	38,365	67,080	25,592	20,607	8,166	2,692	4,388
Mean	2,246	2,156	567	613	951	1,238	2,236	826	687	263	86.8	146
(†)	+16.7	-18.6	-0.5	+0.6	0	+0.3	+6.8	0	-7.8	0	0	+0.1
Adjusted for change in contents in Mansfield Hollow Reservoir												
Mean	2,263	2,137	566	614	951	1,238	2,243	826	679	263	86.8	146
Cfsm	5.64	5.33	1.41	1.53	2.37	3.09	5.59	2.06	1.69	0.656	0.216	0.364
In.	6.50	5.95	1.63	1.76	2.47	3.56	6.24	2.38	1.89	0.76	0.25	0.41

	Observed				Adjusted					
Calendar year 1955:	Max	13,000	Min	71	Mean	1,051	Mean	1,050	Cfsm	2.62	In.	35.56
Water year 1955-56:	Max	8,300	Min	57	Mean	998	Mean	998	Cfsm	2.49	In.	33.80

* Discharge measurement made on this day.

† Change in contents, equivalent in cubic feet per second, in Mansfield Hollow Reservoir; furnished by Corps of Engineers.

Note.--Doubtful gage-height record Mar. 9 to May 2; discharge computed from stage record adjusted on basis of engineers' notes.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 221.19 ft above mean sea level, datum of 1929.

Average discharge.--5 years, 69.8 cfs.

Extremes.--Maximum discharge during year, 1,220 cfs Oct. 16 (gage height, 6.04 ft), from rating curve extended as explained below; minimum, 6.4 cfs Sept. 6 (gage height, 1.13 ft).

1951-56: Maximum discharge, 1,400 cfs Aug. 19, 1955 (gage height, 6.48 ft), from rating curve extended above 820 cfs by logarithmic plotting; minimum, that of Sept. 6, 1956; minimum gage height, 1.03 ft Sept. 10, 11, 1953.

Remarks.-- Records good.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31		Nov. 1 to Sept. 30			
1.6	31	1.1	5.5	3.0	255
1.9	59	1.3	12.5	4.0	515
2.3	120	1.5	23	5.0	830
3.0	255	2.0	72	5.7	1,080
4.0	515	2.5	156		
6.0	1,200				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	138	59	b22	b63	b62	111	94	40	17	10	7.6
2	57	102	55	b21	b62	83	147	75	46	16	9.7	7.6
3	45	85	58	21	125	99	221	86	223	15	9.3	7.6
4	39	160	69	22	b82	122	229	76	258	14	8.9	7.0
5	36	668	92	23	68	106	255	79	138	23	8.5	6.7
6	52	334	75	b23	59	94	280	68	89	58	8.5	7.0
7	322	191	62	b22	122	185	225	79	66	38	8.2	23
8	206	145	56	b22	125	221	211	68	52	25	8.2	15
9	140	122	50	136	96	189	195	58	45	30	8.2	10
10	96	106	48	179	85	133	201	69	43	30	7.9	8.5
11	75	211	b44	118	98	116	229	69	45	22	7.9	7.9
12	62	179	43	111	245	115	189	59	38	19	7.6	7.6
13	54	131	b39	113	171	100	156	56	33	17	11	7.6
14	63	189	b39	86	124	107	152	51	30	36	10	7.6
15	498	183	38	72	104	138	122	49	26	38	9.3	7.9
16	1,070	169	38	69	102	116	205	46	24	26	8.5	12
17	834	173	b38	b56	78	b83	260	46	24	*21	7.9	13
18	388	129	b35	b55	82	b97	171	44	23	18	7.6	12
19	247	107	b33	*b54	94	78	134	46	21	16	7.3	*9.7
20	189	102	b31	48	89	83	111	47	21	15	7.0	10
21	152	*94	b28	b42	75	b79	99	43	20	16	8.9	13
22	129	88	b26	b43	b62	79	88	39	22	28	11	10
23	107	80	26	b43	b56	*89	83	38	20	23	8.9	8.9
24	102	94	26	b42	b48	102	86	63	19	19	8.9	10
25	124	83	29	b40	73	b91	73	48	18	*17	9.3	12
26	102	76	b29	b36	124	80	71	41	17	15	8.2	9.7
27	89	69	b28	34	83	80	75	54	17	14	7.6	8.9
28	80	69	b25	32	83	86	68	75	21	13	7.6	47
29	76	67	b23	b34	b67	89	94	54	25	12	7.6	31
30	84	59	b22	46	-------	97	116	43	19	11	7.6	18
31	174	-------	b22	b85	-------	99	-------	41	-------	10	7.6	-------
Total	5,759	4,403	1,286	1,750	2,745	3,278	4,657	1,804	1,483	672	264.7	363.8
Mean	186	147	41.5	56.5	94.7	106	155	58.5	49.4	21.7	8.54	12.1
Cfsm	6.24	4.93	1.39	1.90	3.18	3.56	5.20	1.96	1.66	0.728	0.287	0.406
In.	7.19	5.50	1.60	2.19	3.31	4.10	5.80	2.26	1.85	0.84	0.33	0.45

Calendar year 1955: Max 1,070 Min 9.8 Mean 83.6 Cfsm 2.81 In. 38.07
Water year 1955-56: Max 1,070 Min 6.7 Mean 77.8 Cfsm 2.61 In. 35.42

Peak discharge (base, 400 cfs).--Oct. 16 (9 p.m.) 1,220 cfs (6.04 ft); Nov. 5 (11 a.m.) 812 cfs (4.94 ft).

* Discharge measurement made on this day.

b Stage-discharge relation affected by ice.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 537.66 ft above mean sea level, unadjusted (levels by Corps of Engineers).

Average discharge.--17 years, 166 cfs.

Extremes.--Maximum discharge during year, 1,510 cfs Oct. 17 (gage height, 6.81 ft); minimum daily, 11 cfs Aug. 15, 16.

1939-56: 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 determination 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 determination.

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 tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31		Nov. 1 to Sept. 30			
2.7	80	1.9	8.4	3.5	220
3.1	138	2.0	12	4.0	340
3.5	211	2.2	22	5.0	640
4.0	321	2.5	51	6.0	1,060
5.0	625	3.0	123	7.0	1,620
6.0	1,060				
7.0	1,620				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	113	404	207	b56	b100	*216	203	*428	156	49	30	17
2	107	375	199	b50	117	210	214	401	170	49	30	18
3	99	312	199	52	130	249	254	381	307	47	29	19
4	90	365	220	58	b112	b325	*314	367	*384	39	25	19
5	84	884	263	60	120	345	456	381	362	44	24	17
6	107	1,040	263	61	107	314	640	389	284	128	23	15
7	203	916	235	64	136	359	750	370	220	136	24	32
8	246	734	212	59	145	404	703	345	171	108	31	38
9	246	596	191	b210	149	387	661	322	143	104	33	28
10	211	512	177	370	143	345	626	324	132	101	22	23
11	182	554	b165	364	136	319	644	319	133	82	22	20
12	157	593	*162	384	170	324	682	309	115	70	21	19
13	138	563	150	356	197	312	726	302	102	63	18	21
14	*150	542	117	314	193	296	766	282	92	73	18	21
15	*635	*524	107	284	189	279	794	265	84	83	11	19
16	1,180	503	b95	256	205	204	916	212	78	73	11	22
17	1,460	515	b100	229	193	b150	1,200	185	86	*70	27	27
18	1,310	461	110	b210	b175	b200	1,140	166	89	64	33	30
19	1,020	381	b86	b195	b180	b175	938	195	82	54	20	26
20	795	351	b53	183	170	b185	774	183	73	46	21	26
21	633	330	b93	b170	b150	b235	661	168	68	46	23	29
22	530	309	b69	b160	b120	b255	590	156	65	55	*23	28
23	466	292	b64	*b155	b125	254	557	149	59	55	22	26
24	427	289	67	b140	b115	b215	539	143	78	58	20	*36
25	424	279	74	b130	161	b245	500	136	117	77	19	50
26	395	265	b70	b130	284	b245	470	128	92	76	18	42
27	362	251	b72	b130	294	235	446	141	78	64	17	.107
28	319	244	b67	127	277	220	370	156	74	55	15	119
29	250	235	63	b115	238	214	367	150	54	44	16	74
30	207	220	63	112	-------	214	425	145	46	38	16	52
31	331	-------	b58	115	-------	207	-------	139	-------	33	16	-------
Total	12,877	13,839	4,071	5,299	4,831	8,137	18,326	7,737	3,994	2,082	678	1,020
Mean	415	461	131	171	167	262	611	250	133	67.2	21.9	34.0
Cfsm	4.42	4.91	1.40	1.82	1.78	2.79	6.51	2.67	1.42	0.716	0.233	0.362
In.	5.11	5.49	1.61	2.10	1.92	3.23	7.27	3.07	1.58	0.83	0.27	0.40

Calendar year 1955: Max 11,400 Min 26 Mean 292 Cfsm 3.11 In. 42.18
Water year 1955-56: Max 1,460 Min 11 Mean 227 Cfsm 2.42 In. 32.88

* 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.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 341.52 ft above mean sea level, datum of 1929.

Average discharge.--25 years, 282 cfs.

Extremes.--Maximum discharge during year, 2,830 cfs Oct. 17 (gage height, 6.68 ft); minimum, about 1 cfs Sept. 4; minimum daily, about 1 cfs Sept. 4.
1931-56: 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 determination of peak flow; minimum, about 1 cfs Sept. 9, 1943, July 12, 1949, Sept. 17, 18, 1950, July 9, 1951, Sept. 4, 1956; minimum daily, that of Sept. 4, 1956; minimum gage height, 1.74 ft Aug. 20, 1940.

Remarks.--Records good except those for periods of backwater from aquatic vegetation or no gage-height record, which are fair. Flow regulated by mills upstream.

Revisions (water years).--WSP 851: 1936(M). WSP 1201: 1939-43, 1947, 1949. WSP 1381: 1938(M).

Rating tables, water year 1955-56, except periods of ice effect or backwater from aquatic vegetation (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31		Nov. 1 to Sept. 30			
2.6	103	2.0	1	3.0	240
3.0	248	2.2	14	4.0	755
4.0	755	2.4	45	6.0	2,220
5.0	1,410	2.6	94		
7.0	3,120				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	181	656	294	85	b184	316	312	*656	252	54	39	34
2	160	590	272	85	200	312	*348	596	276	89	34	3
3	146	497	280	100	244	395	448	574	536	49	34	51
4	132	741	316	95	208	558	552	530	640	50	32	1
5	119	1,970	*405	90	212	558	905	530	546	78	31	11
6	172	1,730	380	90	*196	502	1,270	524	436	176	25	20
7	465	1,340	334	90	288	624	1,410	508	343	208	28	20
8	490	1,080	298	85	276	678	1,130	475	280	160	28	30
9	465	845	264	500	288	640	1,000	451	232	172	37	39
10	390	719	256	750	260	546	1,000	458	208	160	32	28
11	330	905	b228	700	256	519	1,100	448	208	*119	47	23
12	277	875	b208	600	366	530	1,160	420	180	94	22	23
13	248	785	b200	500	375	486	1,240	405	146	100	20	23
14	261	785	b153	400	356	464	1,270	385	132	110	14	25
15	1,120	755	153	360	352	*442	1,300	348	116	113	19	20
16	2,420	719	146	320	370	370	1,770	316	106	106	11	20
17	2,710	719	150	300	334	b248	2,220	272	116	100	9	32
18	*2,200	646	153	270	307	b325	1,850	272	*113	86	13	*35
19	1,580	552	150	250	298	312	1,410	256	103	67	40	32
20	1,160	514	b140	230	280	334	1,130	264	91	90	25	34
21	923	464	b130	215	252	348	935	268	80	52	39	32
22	779	*453	b145	210	b200	370	845	216	83	78	*37	32
23	673	431	b125	210	b208	380	785	220	77	88	30	33
24	618	431	110	205	b196	370	*785	212	91	60	28	45
25	640	415	100	200	266	370	690	192	172	110	27	49
26	596	385	100	b200	453	370	656	180	125	91	14	49
27	546	361	135	196	436	343	624	200	94	*78	20	75
28	485	348	130	184	420	330	548	244	94	52	18	167
29	410	338	105	164	343	316	612	232	74	54	19	89
30	376	312	105	200	------	325	713	208	57	45	20	67
31	673	------	90	216	------	302	------	220	------	39	22	------
Total	21,745	21,341	6,055	8,100	8,384	12,983	30,016	11,080	6,007	2,928	814	1,142
Mean	701	711	195	261	289	419	1,001	357	200	94.5	26.3	38.1
Cfsm	4.46	4.53	1.24	1.66	1.84	2.67	6.38	2.27	1.27	0.602	0.168	0.243
In.	5.14	5.05	1.43	1.91	1.98	3.08	7.12	2.62	1.42	0.69	0.19	0.27

Calendar year 1955: Max 26,500 Min 10 Mean 488 Cfsm 3.11 In. 42.22
Water year 1955-56: Max 2,710 Min 1 Mean 357 Cfsm 2.27 In. 30.90

Peak discharge (base, 1,000 cfs).--Oct. 17 (10 a.m.) 2,830 cfs (6.68 ft); Nov. 5 (9 a.m.) 2,090 cfs (5.83 ft); Apr. 6 (9 to 10 p.m.) 1,530 cfs (5.15 ft); Apr. 17 (2 to 4 a.m.) 2,400 cfs (6.16 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Dec. 24 to Jan. 24; discharge estimated on basis of recorded range in stage, weather records, and records for stations at Westville and Putnam. Backwater from aquatic vegetation July 14 to Sept. 30.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 457.00 ft above mean sea level, unadjusted (levels by Corps of Engineers).

Average discharge.--17 years, 48.5 cfs.

Extremes.--Maximum discharge during year, 518 cfs Apr. 17 (gage height, 5.41 ft); minimum, 3.0 cfs Sept. 2; minimum daily, 3.1 cfs Aug. 9, Sept. 2.
1939-56: 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, 0.5 cfs Nov. 28, 29, 1949, July 30, 1950, Aug. 1, 1955; minimum daily, 0.5 cfs Nov. 28, 1949.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow regulated by reservoirs and mill above station.

Revisions (water years).--WSP 1201: 1940, 1948.

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31

2.7	18	3.0	38
2.8	23	3.2	61

Note.--Same as following table above 3.2 ft.

Nov. 1 to Sept. 30

2.2	3.0	3.2	61
2.4	6.2	3.5	108
2.6	11	4.0	197
2.8	21	5.5	540
3.0	37		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	175	77	18	54	*58	57	154	67	8.6	6.5	4.9
2	44	140	80	28	49	32	72	*130	88	8.2	5.8	3.1
3	30	116	80	21	36	48	90	111	124	7.7	6.0	3.2
4	21	122	87	10	43	106	110	105	223	7.2	5.5	*3.8
5	20	320	105	11	43	123	160	100	*154	10	5.3	4.8
6	30	320	104	17	51	114	*262	87	100	33	5.2	6.4
7	82	221	*91	18	53	94	327	54	74	16	19	8.0
8	138	164	67	20	52	112	262	52	50	21	7.8	10
9	114	135	53	128	54	98	199	57	45	36	3.1	9.0
10	90	117	46	264	54	79	183	63	39	33	3.2	8.0
11	88	140	38	219	42	72	211	74	38	10	3.4	7.0
12	79	169	35	158	64	75	240	67	39	18	3.6	6.5
13	67	147	33	123	79	67	267	61	28	24	3.7	7.0
14	67	145	30	104	67	74	286	56	24	13	3.7	8.0
15	141	138	17	85	63	63	300	51	24	11	3.7	11
16	338	*140	17	72	77	58	352	51	21	25	3.4	14
17	390	137	29	66	100	56	496	44	20	8.8	3.8	19
18	300	128	27	57	94	52	387	44	18	*15	3.4	19
19	223	117	27	44	90	51	275	42	16	14	3.4	13
20	171	106	25	46	90	30	219	40	15	27	3.8	19
21	138	106	22	44	87	54	195	37	14	14	3.7	20
22	118	106	21	40	72	53	160	34	28	7.0	3.7	13
23	94	99	21	*46	67	39	156	33	13	9.8	4.3	15
24	104	99	20	31	66	62	153	32	6.8	12	4.8	20
25	105	99	21	36	71	46	138	30	7.0	23	4.8	20
26	102	96	22	36	87	57	125	28	7.4	19	4.6	*13
27	96	91	33	45	94	47	118	33	10	5.8	4.4	21
28	90	88	24	31	85	61	112	44	11	9.2	4.2	17
29	77	87	8.8	25	77	57	132	42	11	6.2	3.8	20
30	88	80	13	37	-------	69	160	39	9.7	6.6	3.7	27
31	151	---	18	43	-------	51	-------	40	-------	9.8	4.3	-------
Total	3,629	4,148	1,293.8	1,923	1,961	2,058	6,204	1,835	1,324.9	470.9	149.6	370.7
Mean	117	138	41.7	62.0	67.6	66.4	207	59.2	44.2	15.2	4.83	12.4
Cfsm	4.22	4.98	1.51	2.24	2.44	2.40	7.47	2.14	1.60	0.549	0.174	0.448
In.	4.87	5.57	1.74	2.58	2.63	2.76	8.33	2.46	1.78	0.63	0.20	0.50

Calendar year 1955: Max 5,180 Min 1.0 Mean 85.5 Cfsm 3.09 In. 41.90
Water year 1955-56: Max 496 Min 3.1 Mean 69.3 Cfsm 2.50 In. 34.05

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 17, 18, Sept. 7-26; discharge estimated on basis of 2 discharge measurements, weather records, recorded range in stage, and records for Ware River at Coldbrook and Quinebaug River at Westville.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 406.74 ft above mean sea level, datum of 1929.

Average discharge.--7 years (1949-56), 179 cfs.

Extremes.--Maximum discharge during year, about 1,300 cfs Oct. 17; minimum daily, 6.8 cfs Aug. 5, 26, Sept. 9.
1948-56: 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 except those for periods of no gage-height record, which are fair. 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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from debris Oct. 1-15; shifting-control method used Oct. 23-30, Mar. 22 to Apr. 15, Apr. 20 to May 8)

Oct. 1-31		Nov. 1 to July 30				July 31 to Sept. 30	
4.8	80	4.6	8.1	5.5	147	4.57	6.8
5.0	107	4.7	14	6.0	297	4.6	8.1
5.5	204	4.9	31	7.0	621	4.7	15
6.0	341	5.1	58	9.0	1,260	4.8	24
7.0	621					5.0	51
9.0	1,260					5.2	92

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	123	546	265	121	190	*216	256	*553	152	37	69	7.6
2	113	476	262	82	195	201	262	486	213	44	52	8.8
3	120	391	225	111	195	175	278	415	262	43	27	9.2
4	103	401	259	90	167	284	*304	384	*540	39	7.6	10
5	98	738	314	91	181	347	442	327	*528	48	6.8	74
6	90	a920	297	90	198	327	*652	304	344	82	72	74
7	166	759	*275	62	210	323	759	268	228	102	46	67
8	269	592	256	89	219	364	705	213	181	86	10	*8.1
9	263	512	237	326	213	347	601	156	155	125	13	6.8
10	209	418	198	655	207	297	580	175	150	121	14	74
11	207	449	198	683	184	271	604	181	130	100	12	70
12	197	492	233	574	259	275	657	158	123	91	16	52
13	167	469	142	446	294	265	699	144	119	79	79	52
14	*176	452	131	378	256	262	726	107	93	10	73	56
15	334	*466	141	307	228	259	756	112	80	24	49	8.6
16	a1,000	463	119	275	228	246	813	120	52	81	47	8.1
17	a1,200	456	120	265	246	219	a1,080	115	63	*83	25	72
18	a1,000	415	134	256	234	204	a1,080	111	99	*82	9.1	74
19	789	398	138	240	243	201	849	91	83	81	8.6	69
20	621	378	153	225	250	216	726	109	83	78	69	70
21	509	357	138	187	231	228	652	120	77	12	57	66
22	436	340	121	181	222	268	604	103	70	23	*37	8.6
23	391	*327	98	*198	204	300	577	101	19	92	46	8.8
24	383	300	80	190	192	278	577	102	35	84	35	*70
25	394	337	86	175	181	271	546	96	90	87	7.6	69
26	366	297	104	175	243	297	515	62	79	84	6.8	70
27	321	265	130	175	275	268	489	84	60	99	49	59
28	305	304	126	164	259	265	463	128	50	10	52	78
29	274	275	108	155	237	256	476	120	*8.1	10	30	13
30	277	253	95	187	-------	256	537	95	19	95	28	61
31	407	-------	106	190	-------	262	-------	130	-------	71	9.8	-------
Total	11,308	13,246	5,289	7,343	6,441	8,248	18,225	5,670	4,185.1	2,103	1,083.3	1,374.6
Mean	365	442	171	237	222	266	608	183	140	67.8	34.3	45.8
Cfsm	4.28	5.18	2.00	2.78	2.60	3.12	7.13	2.15	1.64	0.795	0.402	0.537
In.	4.93	5.78	2.31	3.20	2.81	3.60	7.95	2.47	1.82	0.92	0.46	0.60

Calendar year 1955: Max 6,170 Min 7.2 Mean 247 Cfsm 2.90 In. 39.39
Water year 1955-56: Max 1,200 Min 6.8 Mean 231 Cfsm 2.71 In. 36.85

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, records for Quinebaug River at Westville and Little River at Buffumville, and record for adjacent days.
Note.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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.--October 1929 to September 1956. 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.--27 years, 578 cfs.

Extremes.--Maximum discharge during year, 5,150 cfs Oct. 17 (gage height, 10.34 ft, from floodmarks); minimum, 33 cfs Aug. 14 (gage height, 1.80 ft); minimum daily, 44 cfs Sept. 5.
1929-56: Maximum discharge, 48,000 cfs Aug. 19, 1955 (gage height, 26.5 ft, from floodmarks); 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 fair. City of Putnam diverts an average of less than 1 mgd from Little River for municipal supply. Large diurnal fluctuation, particularly during low flow, caused by many dams and reservoirs above station, largest of which is Lake Chaubunagungamaug with an estimated usable capacity of 207,000,000 cu ft.

Revisions (water years).--WSP 781: Drainage area, 1934(M). WSP 1301: 1931-33(M), 1935(M).

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 9				Jan. 10 to Sept. 30			
3.0	194	7.0	2,080	1.9	42	5.0	1,120
4.0	465	9.0	3,780	2.3	95	7.0	2,570
5.0	870	11.0	5,880	3.0	244	9.0	4,340
				4.0	595		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	460	1,350	700	b195	531	*708	755	1,550	511	134	119	69
2	420	1,250	630	b195	547	640	880	1,370	531	154	116	70
3	400	1,200	650	228	*662	755	1,060	1,220	901	116	109	74
4	370	1,500	750	216	b550	1,090	1,260	1,090	1,620	125	105	69
5	350	3,600	950	203	543	1,260	1,840	1,030	1,440	146	102	44
6	400	3,500	900	b205	523	1,120	*2,720	970	1,060	258	90	58
7	900	3,000	740	b205	708	1,330	3,040	970	755	307	90	124
8	1,100	2,400	670	b195	755	1,580	2,640	855	618	272	93	102
9	1,050	1,900	*630	844	755	1,550	2,280	755	511	258	89	93
10	900	1,700	610	2,240	730	1,260	2,200	755	467	301	85	92
11	800	1,800	540	1,990	662	1,120	2,420	780	451	316	90	84
12	650	1,800	480	1,700	910	1,090	2,570	730	386	252	72	81
13	600	1,750	460	1,480	1,060	1,060	2,640	708	342	185	60	81
14	630	1,700	320	1,260	940	940	2,640	662	310	228	72	82
15	2,010	1,650	300	1,060	805	*970	2,720	640	298	231	69	89
16	4,300	1,600	*296	970	830	880	3,040	503	298	204	73	92
17	5,030	1,600	291	855	780	708	4,240	483	228	199	68	97
18	*4,280	1,500	336	780	730	755	3,940	527	234	*185	64	*107
19	3,420	1,350	325	730	685	730	3,040	428	221	169	76	102
20	2,800	1,200	311	708	685	755	2,500	435	211	167	71	112
21	2,200	1,100	300	640	640	755	2,130	499	206	165	81	123
22	1,700	1,050	345	595	563	830	1,840	396	199	182	100	116
23	1,500	1,000	293	595	b510	880	1,740	439	194	177	87	105
24	1,400	1,000	256	b575	495	880	1,740	455	194	165	87	121
25	1,400	950	234	b590	571	805	1,550	352	252	187	84	123
26	1,300	900	232	640	1,000	830	1,410	332	228	189	75	128
27	1,200	850	b285	567	1,000	805	1,330	355	201	*178	64	132
28	1,100	820	b300	543	940	780	1,220	451	196	148	65	301
29	950	800	b240	515	805	730	1,330	491	182	140	66	236
30	900	780	234	579	-------	755	1,580	400	148	128	66	180
31	1,300	-------	b205	618	-------	755	-------	400	-------	121	68	------
Total	45,820	46,600	13,813	22,716	20,915	29,106	64,295	21,031	13,393	5,987	2,556	3,287
Mean	1,478	1,553	446	733	721	939	2,143	678	446	193	82.5	110
Cfsm	4.47	4.69	1.35	2.21	2.18	2.84	6.47	2.05	1.35	0.583	0.249	0.332
In.	5.15	5.23	1.56	2.55	2.35	3.27	7.22	2.36	1.51	0.67	0.29	0.37

Calendar year 1955: Max 26,400 Min 37 Mean 928 Cfsm 2.80 In. 38.10
Water year 1955-56: Max 5,030 Min 44 Mean 791 Cfsm 2.39 In. 32.53

Peak discharge (base, 2,000 cfs).--Oct. 17 (6 a.m.) 5,150 cfs (10.34 ft); Nov. 5 (time unknown) about 3,700 cfs; Jan. 10 (12:30 a.m.) 3,480 cfs (8.13 ft, 1.63 ft higher than natural peak, 2,200 cfs at 3 a.m., owing to sharp release of water from some upstream source); Apr. 7 (6 a.m.) 3,120 cfs (7.69 ft); Apr. 17 (12:30 p.m.) 4,440 cfs (9.06 ft).

* Discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Note.--No gage-height record Oct. 1 to Nov. 29, Dec. 1, 3-6, 8, 10-14; discharge estimated on basis of floodmarks, stage observations by engineers on Oct. 18, Nov. 30, Dec. 2, 7, 9, and records for stations at Westville and Quinebaug.

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 1956. October 1937 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 222.23 ft above mean sea level, datum of 1929.

Average discharge.--19 years, 107 cfs.

Extremes.--Maximum discharge during year, 1,020 cfs Oct. 17 (gage height, 5.27 ft); minimum, 6.6 cfs July 2 (gage height, 0.75 ft); minimum daily, 16 cfs Aug. 4.
1937-56: 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, 5.6 cfs Aug. 13, 1939, Aug. 24, 1941, Nov. 24, 1939, Nov. 15, 1952.
Flood of Mar. 12, 1936, reached a discharge of 1,600 cfs, by computation of flow over dam at Danielson.

Remarks.--Records excellent. Flow regulated by dams and reservoirs upstream.

Revisions (water years).--WSP 921: 1938-40, WSP 951: 1938-41.

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-30		Nov. 1 to Sept. 30			
1.5	66	0.9	12	2.3	230
2.0	160	1.1	23	3.0	380
3.0	397	1.3	40	4.0	625
4.0	635	1.7	94	5.0	925
6.0	1,280				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	91	360	157	63	146	147	168	220	147	37	38	23
2	91	310	147	53	153	146	178	202	130	30	28	36
3	81	278	145	66	155	168	235	192	166	33	34	34
4	74	290	156	59	107	185	262	188	234	29	16	47
5	71	685	170	64	98	186	320	188	226	36	29	30
6	77	640	160	68	94	183	412	149	188	69	45	33
7	150	500	125	61	121	227	462	107	148	69	31	49
8	165	400	96	61	116	278	462	104	112	71	30	40
9	177	350	*90	217	102	290	*438	93	102	61	30	38
10	169	310	86	340	111	268	400	94	100	61	35	49
11	149	340	86	290	117	252	425	93	94	53	23	34
12	135	360	86	272	242	245	438	82	92	50	25	35
13	125	320	80	260	260	235	425	86	86	43	46	29
14	125	330	77	238	236	235	412	97	80	62	41	44
15	334	340	78	215	219	242	400	97	64	70	34	29
16	802	310	78	199	211	232	450	97	57	55	30	49
17	958	300	73	183	189	202	640	99	62	56	33	61
18	824	278	73	171	188	218	562	96	69	*57	19	46
19	670	248	74	*163	188	194	475	96	56	46	32	*29
20	533	235	66	159	176	208	400	100	49	41	48	38
21	430	220	54	152	159	196	370	99	41	38	41	36
22	360	208	50	147	141	185	330	90	49	40	40	24
23	309	198	64	146	131	186	300	92	37	50	37	34
24	275	200	63	139	123	198	290	130	44	43	33	48
25	267	195	73	136	141	198	260	113	54	35	20	40
26	246	185	71	133	185	189	238	100	41	37	33	30
27	227	178	74	134	175	180	222	107	40	36	47	31
28	211	173	66	124	177	174	202	134	42	17	30	58
29	197	168	63	124	160	170	222	120	43	29	30	59
30	192	161	66	138	------	166	235	109	24	48	37	51
31	*331	------	63	171	------	168	------	118	------	*27	31	------
Total	8,846	9,070	2,810	4,746	4,621	6,351	10,633	3,692	2,677	1,429	1,026	1,186
Mean	285	302	90.6	153	159	205	354	119	89.2	46.1	33.1	39.5
Cfsm	4.90	5.19	1.56	2.63	2.73	3.52	6.08	2.04	1.53	0.792	0.569	0.679
In.	5.65	5.79	1.80	3.03	2.94	4.06	6.78	2.35	1.71	0.91	0.66	0.76

Calendar year 1955: Max 1,150 Min 7.6 Mean 150 Cfsm 2.58 In. 34.90
Water year 1955-56: Max 958 Min 16 Mean 156 Cfsm 2.68 In. 36.44

* Discharge measurements made on this day.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 196.64 ft above mean sea level, datum of 1929.

Average discharge.--24 years, 165 cfs.

Extremes.--Maximum discharge during year, 2,930 cfs Oct. 16 (gage height, 7.00 ft); minimum, 1.8 cfs Aug. 4 (gage height, 0.51 ft); minimum daily, 5.2 cfs Sept. 2.
1932-56: 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.

Revisions (water years).--WSP 81: Drainage area. WSP 851: 1933, 1934(M), 1935-37.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 16

1.1	18	3.0	435
1.3	32	4.0	875
1.5	54	5.0	1,410
2.0	137	6.0	2,110
2.5	262	7.0	2,930

Apr. 17 to Sept. 30

0.7	4.8	1.6	56
.9	9.7	2.0	117
1.1	17	2.5	255
1.3	29	3.0	435

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

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	176	695	179	b20	200	189	388	272	130	20	36	5.9
2	170	538	172	b75	227	195	447	231	48	121	28	5.2
3	167	395	165	b100	353	268	*636	210	205	43	27	5.5
4	150	454	181	81	290	323	695	231	388	8.4	11	18
5	98	1,070	230	73	262	319	740	228	290	30	7.0	15
6	95	995	222	91	225	278	740	192	174	110	28	19
7	458	695	*191	b55	350	407	628	204	174	17	30	48
8	471	511	166	b57	384	592	646	210	160	54	23	17
9	403	407	155	406	350	569	618	180	88	75	18	5.9
10	306	346	121	672	333	435	636	195	59	144	19	23
11	225	479	125	610	329	350	695	210	153	53	6.8	29
12	184	467	154	495	592	319	641	189	58	53	8.6	19
13	163	435	116	455	592	293	538	138	77	68	44	14
14	164	471	100	388	443	310	447	194	72	27	29	40
15	998	495	130	319	353	370	388	124	86	72	34	18
16	2,420	483	112	281	316	357	565	123	52	111	23	8.1
17	2,240	467	69	242	265	278	852	146	13	63	20	36
18	1,260	388	86	198	256	271	695	124	83	*43	6.3	44
19	854	336	112	*196	296	253	487	84	49	40	5.7	45
20	623	306	b90	186	296	248	388	104	56	56	18	24
21	495	284	b70	167	259	245	342	154	54	13	18	26
22	407	268	b60	156	204	250	300	110	51	9.6	25	9.5
23	343	242	b55	167	183	271	280	104	13	92	30	9.4
24	310	235	53	b130	190	300	262	119	7.0	48	24	66
25	303	230	77	155	159	274	243	108	86	49	8.2	49
26	287	220	82	b125	287	265	225	56	46	41	6.1	39
27	271	210	b120	b110	259	262	225	120	38	39	24	23
28	250	205	b75	104	250	265	216	256	47	38	26	40
29	259	195	b65	b107	212	274	222	196	44	*13	23	12
30	245	188	b50	177	-------	336	311	78	12	31	24	13
31	605	-------	b60	237	-------	381	-------	160	-------	43	12	-------
Total	15,400	12,730	3,643	6,635	8,715	9,747	14,496	5,050	2,813.0	1,625.0	642.7	726.5
Mean	497	424	118	214	301	314	483	163	93.8	52.4	20.7	24.2
Cfsm	5.95	5.08	1.41	2.56	3.60	3.76	5.78	1.95	1.12	0.628	0.248	0.290
In.	6.86	5.67	1.63	2.95	3.88	4.34	6.45	2.25	1.25	0.72	0.29	0.32

Calendar year 1955: Max 2,420 Min 4.7 Mean 225 Cfsm 2.69 In. 36.67
Water year 1955-56: Max 2,420 Min 5.2 Mean 225 Cfsm 2.69 In. 36.61

Peak discharge (base, 800 cfs).--Oct. 16 (6 p.m.) 2,930 cfs (7.00 ft); Nov. 5 (7:30 a.m.) 875 cfs (3.98 ft); Apr. 17 (7 a.m.) 898 cfs (4.06 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

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 Fisk Mills, Inc., at mouth of Pauchaug River, 1,000 ft downstream from railroad bridge, and at mile 6.1.

Drainage area.--711 sq mi.

Records available.--July 1918 to September 1956.

Gage.--Water-stage recorder. Datum of gage is 63.07 ft above mean sea level, datum of 1929.

Average discharge.--38 years, 1,257 cfs.

Extremes.--Maximum discharge during year, 12,700 cfs Oct. 17 (gage height, 16.45 ft); minimum, 24 cfs Aug. 10 (gage height, 3.55 ft); minimum daily, 28 cfs Aug. 18.
1918-56: Maximum discharge, 40,700 cfs Aug. 20, 1955 (gage height, 29.0 ft, from floodmarks), from rating curve extended above 11,000 cfs by computation of peak flows over three nearby dams at gage heights 21.7, 22.5, 24.0 and 29.0 ft; minimum daily, 18 cfs Aug. 28, Dec. 11, 1949.

Remarks.--Records excellent except those for period of no gage-height record, which are good. Flow regulated by many ponds and reservoirs above station, the largest of which are Lake Chaubunagungamaug and Pauchaug Pond. Records of chemical analyses and water temperature for the water year 1956 are given in WSP 1450.

Revisions (water years).--WSP 781: Drainage area. WSP 1301: 1919-26(M).

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 5		Nov. 6 to Sept. 30			
5.4	540	3.6	28	6.0	790
6.0	860	3.8	52	8.0	2,130
8.0	2,200	4.2	123	10.0	4,060
12.0	6,330	4.6	220	14.0	8,900
17.0	13,600	5.0	350		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,170	3,860	1,540	448	1,370	*1,650	2,220	2,860	1,120	329	305	*31
2	1,170	3,460	1,440	472	1,370	1,540	2,490	2,580	1,090	350	331	103
3	1,160	2,970	1,370	665	1,930	1,730	*3,160	2,310	1,670	185	73	165
4	956	2,880	1,510	690	1,650	2,090	3,560	2,220	3,460	184	166	299
5	844	6,660	1,850	690	1,510	2,580	3,960	2,130	3,060	321	220	269
6	560	8,080	1,810	561	*1,510	2,400	5,270	2,010	2,310	640	380	242
7	2,020	6,570	1,650	261	1,930	2,670	5,490	2,010	1,730	690	335	250
8	2,620	5,160	a1,540	460	2,310	3,760	5,730	1,850	1,400	640	290	56
9	2,420	4,060	a1,400	1,420	2,090	3,860	5,050	1,650	1,150	665	274	214
10	2,210	3,460	a1,300	4,040	1,890	3,260	4,720	1,620	970	740	59	311
11	1,830	3,660	a1,240	4,060	1,810	2,860	5,050	1,620	1,060	690	31	253
12	1,610	4,060	a1,180	3,380	2,860	2,670	5,050	1,540	940	590	129	334
13	1,420	3,760	a1,120	3,060	3,160	2,490	4,940	1,510	790	522	365	305
14	1,360	3,760	a1,060	2,670	2,670	2,400	4,720	1,440	740	615	328	36
15	3,280	4,060	a1,000	2,310	2,310	2,580	4,610	1,340	665	690	334	100
16	8,650	3,760	a940	2,130	2,130	2,580	5,160	1,270	590	665	328	203
17	12,300	3,760	690	1,930	1,930	2,010	7,050	1,120	545	567	34	394
18	10,400	3,360	740	1,620	1,850	1,970	7,170	1,120	590	511	28	297
19	7,780	2,860	890	1,480	1,930	2,050	5,850	1,090	557	*451	34	264
20	5,840	2,670	765	1,440	1,970	1,810	4,720	1,000	513	326	265	367
21	4,610	2,580	690	1,270	1,730	1,970	4,060	1,150	494	402	250	96
22	3,730	2,310	690	1,210	1,480	1,930	3,560	1,060	399	420	252	152
23	3,230	*2,130	559	1,240	1,370	2,010	3,260	890	413	553	216	229
24	2,970	2,130	355	1,060	1,210	2,220	3,060	1,060	357	508	136	401
25	2,840	2,130	590	1,090	1,300	2,050	2,860	1,000	516	448	72	350
26	2,730	2,010	640	1,030	2,050	2,090	2,670	840	551	460	162	415
27	2,530	1,890	715	1,030	2,220	2,010	2,490	915	495	286	295	380
28	2,350	1,850	640	940	2,130	1,970	2,310	1,340	466	385	243	359
29	2,040	*1,770	615	915	1,890	2,010	2,400	1,240	428	*329	242	434
30	2,020	1,620	640	1,150	-------	2,050	2,760	1,000	392	430	243	452
31	3,000	-------	287	1,480	-------	2,220	-------	1,000	-------	376	165	-------
Total	101,650	103,290	31,456	46,182	55,560	71,490	125,400	45,785	29,461	14,968	6,585	7,761
Mean	3,280	3,443	1,015	1,490	1,916	2,306	4,180	1,477	982	483	212	259
Cfsm	4.61	4.84	1.43	2.10	2.69	3.24	5.88	2.08	1.38	0.679	0.298	0.364
In.	5.32	5.40	1.65	2.42	2.90	3.74	6.56	2.40	1.54	0.78	0.34	0.41

Calendar year 1955: Max 35,300 Min 42 Mean 1,873 Cfsm 2.63 In. 35.73
Water year 1955-56: Max 12,300 Min 28 Mean 1,748 Cfsm 2.46 In. 33.46

Peak discharge (base, 4,500 cfs).--Oct. 17 (10 a.m.) 12,700 cfs (16.45 ft); Nov. 6 (2 a.m.) 8,620 cfs (13.79 ft); Jan. 10 (3:30 p.m.) 4,940 cfs (10.81 ft); Apr. 8 (9 a.m.) 5,970 cfs (11.63 ft); Apr. 17 (11 p.m.) 7,560 cfs (13.03 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of weather records and records of tributary streams.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 94.46 ft above mean sea level, datum of 1929.

Average discharge.--26 years, 162 cfs.

Extremes.--Maximum discharge during year, 6,760 cfs Oct. 16 (gage height, 11.58 ft); minimum, 7.6 cfs Sept. 5 (gage height, 0.84 ft); minimum daily, 7.8 cfs Sept. 5.
1930-56: Maximum discharge, 13,500 cfs Sept. 21, 1938 (gage height, 14.66 ft, from floodmark), by computation of flow over 2 dams 2½ miles upstream and 3 miles downstream from station, respectively; minimum, 2.3 cfs sometime during period July 21 to Aug. 11, 1949; minimum gage height, 0.41 ft Oct. 13, 1930; minimum daily discharge, 3.3 cfs Oct. 13, 1930.

Remarks.--Records excellent except those for periods of ice effect, which are good. Low flow completely regulated by mills upstream

Revisions (water years).--WSP 781: Drainage area. WSP 1051: 1931-36. WSP 1301: 1934(M).

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-16				Oct. 17 to Sept. 30			
1.9	82	7.0	1,600	0.8	6.8	2.0	84
2.5	160	9.0	3,130	1.0	13	3.0	225
3.0	245	10.7	5,280	1.2	22	4.0	445
5.0	740			1.6	47	5.0	740

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

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	180	738	176	47	192	169	382	261	82	23	35	*8.2
2	162	458	*178	42	205	187	458	205	86	24	*68	8.2
3	127	345	190	47	335	253	*680	269	445	16	51	8.2
4	103	670	231	57	275	277	635	261	530	14	11	8.0
5	91	2,250	295	60	229	261	575	239	313	38	10	7.8
6	129	1,180	261	58	200	247	500	205	198	181	11	8.2
7	691	680	204	54	388	425	420	267	150	142	13	11
8	575	500	180	55	432	665	515	243	119	80	13	11
9	392	408	164	200	*358	590	515	198	97	97	13	11
10	274	358	158	358	297	420	485	193	98	103	13	68
11	212	575	146	*291	336	345	445	190	114	65	12	56
12	175	560	142	293	725	319	370	172	108	45	11	53
13	154	432	132	319	560	297	311	163	82	41	11	52
14	162	530	124	269	382	325	273	148	69	105	11	29
15	1,820	560	126	205	325	420	259	135	58	110	11	9.6
16	5,250	530	137	186	299	382	462	128	52	68	10	14
17	*2,840	575	131	160	245	281	605	124	55	51	10	61
18	1,410	432	114	142	295	283	420	118	48	41	10	60
19	1,000	358	105	142	370	257	321	122	39	*28	10	46
20	770	325	95	131	358	247	271	122	34	29	14	47
21	581	307	85	122	285	237	241	114	32	54	90	49
22	455	291	80	106	202	247	217	103	38	142	33	24
23	385	271	75	106	175	279	202	94	36	108	50	34
24	345	303	70	99	146	325	204	99	28	80	48	37
25	352	277	75	98	204	309	187	84	31	60	11	39
26	323	241	70	93	275	289	178	81	32	51	10	36
27	287	217	62	88	237	287	184	107	59	46	67	33
28	259	205	57	83	229	295	174	163	46	44	42	123
29	239	198	51	82	193	299	190	124	41	37	44	116
30	293	172	49	120	-------	335	277	103	34	34	57	66
31	931	---	53	215	-------	345	-------	87	-------	66	9.6	-------
Total	20,967	14,946	4,016	4,328	8,752	9,897	10,956	4,922	3,154	2,023	809.6	1,134.2
Mean	676	498	130	150	302	319	365	159	105	65.3	26.1	37.8
Cfsm	7.63	5.62	1.47	1.69	3.41	3.60	4.12	1.79	1.19	0.737	0.295	0.427
In.	8.80	6.27	1.70	1.95	3.68	4.15	4.60	2.06	1.33	0.85	0.34	0.48

Calendar year 1955: Max 5,250 Min 10 Mean 234 Cfsm 2.64 In. 35.85
Water year 1955-56: Max 5,250 Min 7.8 Mean 235 Cfsm 2.65 In. 36.21

Peak discharge (base, 1,000 cfs).--Oct. 16 (11:30 a.m.) 6,760 cfs (11.58 ft); Oct. 31 (2 p.m.) 1,050 cfs (5.82 ft); Nov. 5 (6:30 a.m.) 2,560 cfs (8.45 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 20-27, Jan. 19, 21-29.

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 1956.

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.--39 years, 195 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 563 cfs Mar. 1 (gage height, 3.13 ft); minimum daily, 8.7 cfs Apr. 6-26.

1917-56: Maximum discharge, 7,200 cfs June 16, 1943 (gage height, 6.25 ft), from rating curve extended above 1,900 cfs on basis of computation of flow over dam at gage height 6.12 ft; maximum gage height, 6.35 ft May 5, 1925 (backwater from logging operations); minimum daily discharge, 3.1 cfs Mar. 17, 18, 1929.

Remarks.--Records good except those below 20 cfs, which are fair. Flow regulated by First Connecticut and Second Connecticut Lakes (see p. 230).

Revisions (water years).--WSP 756: Drainage area. WSP 1001: 1931-39. WSP 1231: 1921-23(M), 1925-26.

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 1				Mar. 2 to Sept. 30			
1.4	8.1	2.5	221	1.4	8.1	2.2	142
1.5	15	3.0	440	1.5	15	2.5	240
1.7	38	3.5	830	1.7	38	3.0	480
2.0	87			2.0	92	3.5	830

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	148	16	404	238	398	190	47	11	16	20	264	16
2	148	16	246	238	398	547	45	11	16	20	264	16
3	148	87	246	238	398	540	45	12	16	18	230	16
4	*215	170	246	238	398	534	45	12	16	18	157	16
5	242	17	246	238	403	528	32	12	17	18	157	16
6	242	17	246	238	398	540	8.7	12	18	18	157	16
7	242	17	246	238	403	540	8.7	12	17	18	157	17
8	238	17	246	238	176	540	8.7	12	16	18	157	74
9	238	17	246	242	55	540	8.7	12	17	64	157	163
10	238	17	246	109	55	534	8.7	13	17	296	157	163
11	238	17	*246	14	55	528	8.7	13	17	151	157	163
12	242	17	246	14	55	522	8.7	14	17	98	157	163
13	242	17	242	14	55	534	8.7	14	17	53	157	*163
14	134	17	242	14	55	534	8.7	14	17	144	157	163
15	17	17	238	14	55	534	8.7	14	17	222	*157	163
16	17	17	238	103	55	534	8.7	14	17	229	157	163
17	17	17	238	246	55	510	8.7	14	17	268	157	163
18	17	140	238	246	55	462	8.7	14	17	268	157	163
19	17	382	238	246	55	405	8.7	14	17	268	157	163
20	120	377	238	246	55	338	8.7	14	17	268	157	163
21	242	403	238	246	55	302	*8.7	14	17	268	157	84
22	242	500	238	242	55	252	8.7	14	17	268	157	16
23	242	494	242	242	55	202	8.7	14	17	268	157	72
24	238	494	242	246	55	166	8.7	14	17	268	160	163
25	238	488	238	246	55	134	8.7	*14	17	268	160	163
26	238	494	238	246	55	115	8.7	15	17	268	160	163
27	238	494	238	246	55	97	9.3	15	17	268	157	163
28	235	488	238	293	55	84	11	15	*17	268	157	163
29	242	482	238	398	55	77	11	15	18	268	157	163
30	238	482	238	398	-------	55	11	15	18	268	154	160
31	93	-------	238	398	-------	47	-------	15	-------	268	87	-------
Total	5,646	6,228	7,648	6,613	4,127	11,465	439.0	418	508	5,425	5,090	3,453
Mean	182	208	247	213	142	370	14.6	13.5	16.9	175	164	115
(†)	-162	-75.9	-214	-141	-103	-354	+297	+853	+181	-60.7	-97.9	+3.43
Adjusted for change in reservoir contents												
Mean	19.9	132	33.1	72.1	39.4	15.5	312	867	198	114	66.3	119
Cfsm	0.240	1.59	0.399	0.869	0.475	0.187	3.76	10.4	2.39	1.37	0.799	1.43
In.	0.28	1.77	0.46	1.00	0.51	0.22	4.19	12.04	2.66	1.59	0.92	1.59

	Observed			Adjusted		
Calendar year 1955:	Max 722	Min 8.4	Mean 184	Mean 161	Cfsm 1.94	In. 26.39
Water year 1955-56:	Max 547	Min 8.7	Mean 156	Mean 166	Cfsm 2.00	In. 27.23

* Discharge measurement made on this day.

† Change in contents, equivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes.

Note.--Discharge for periods Dec. 28 to Jan. 8, May 15-25 computed from once-daily tape-gage readings and records of gate operation at First Connecticut Lake.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 880.17 ft above mean sea level, datum of 1929.

Average discharge.--26 years, 1,562 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 10,600 cfs May 1 (gage height, 8.99 ft); minimum daily, 159 cfs Oct. 20.
1930-56: Maximum discharge, 28,700 cfs June 16, 1943 (gage height, 14.67 ft), from rating curve extended above 15,000 cfs; maximum gage height, 16.66 ft Mar. 13, 1936 (ice jam); minimum daily discharge, 112 cfs Aug. 28, 1948.

Remarks.--Records excellent except those for period of ice effect, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes and Lake Francis (see p. 230).

Revisions (water years).--WSP 781: 1934(M). WSP 891: Drainage area.

Rating table, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.8	136	5.0	2,270
3.1	242	7.0	5,850
3.5	467	9.0	10,600
4.0	910		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	604	1,070	1,410	620	1,150	800	350	8,700	3,140	548	629	900
2	612	1,010	1,120	580	1,150	820	360	5,910	2,350	910	620	629
3	604	720	950	640	1,150	1,100	380	6,050	1,940	1,240	612	1,200
4	588	780	840	680	1,150	1,200	520	6,250	1,940	810	460	1,090
5	580	987	880	700	1,150	1,300	1,200	5,530	1,820	556	482	683
6	588	1,240	*800	720	1,150	1,250	2,500	5,470	1,730	460	489	504
7	*620	*1,530	800	720	1,150	1,200	2,900	4,940	1,340	467	427	414
8	665	1,490	800	770	1,150	1,250	3,200	3,980	1,100	511	434	341
9	656	1,280	800	1,100	920	1,300	2,620	3,230	1,230	672	460	414
10	629	998	800	2,100	880	1,000	2,020	4,090	1,200	1,860	504	540
11	629	810	800	2,700	860	900	1,630	4,630	1,130	1,090	900	525
12	629	790	800	2,600	860	960	1,880	4,230	998	780	820	533
13	620	790	790	2,300	860	920	2,430	6,590	800	638	612	*556
14	612	750	790	2,000	860	920	2,610	7,520	656	701	533	518
15	449	910	790	1,750	860	920	2,080	6,610	612	921	504	525
16	161	900	790	1,600	840	900	2,430	4,560	556	710	*474	525
17	164	900	780	1,550	800	850	3,940	3,960	482	740	460	564
18	167	954	780	1,400	800	800	4,600	2,850	454	810	460	800
19	199	1,230	770	1,250	800	760	3,670	2,290	408	750	620	840
20	159	1,360	760	1,150	800	720	2,750	2,270	371	720	580	998
21	420	1,260	720	1,100	800	720	*2,370	1,960	377	692	504	1,640
22	780	1,410	670	1,080	800	660	2,240	1,720	496	665	467	1,030
23	710	1,370	600	1,060	800	580	1,960	1,980	414	638	460	720
24	692	1,730	640	1,040	800	540	1,670	1,820	389	674	467	790
25	880	1,840	720	1,020	840	520	1,490	1,400	548	760	540	1,180
26	830	1,640	740	1,000	860	480	1,540	*1,190	770	720	525	1,080
27	780	1,530	710	980	880	440	1,920	1,830	548	674	540	900
28	750	1,450	660	940	870	390	4,680	3,580	*504	638	548	683
29	730	1,440	620	1,050	860	380	7,200	2,750	482	629	720	710
30	720	1,400	680	1,200	-------	400	9,100	1,980	540	638	860	674
31	1,040	-------	680	1,200	-------	360		2,570		638	932	-------
Total	18,267	35,569	24,490	38,600	26,850	25,340	78,240	122,440	29,325	23,260	17,643	22,506
Mean	589	1,186	790	1,245	926	817	2,608	3,950	978	750	569	750
(†)	-331	-133	-413	-277	-486	-458	+690	+1,566	+310	-48.8	-216	-29.7

Adjusted for change in reservoir contents

Mean	258	1,053	377	968	440	359	3,298	5,516	1,288	702	354	721
Cfsm	0.323	1.32	0.472	1.21	0.551	0.449	4.13	6.90	1.61	0.879	0.443	0.902
In.	0.37	1.47	0.54	1.40	0.59	0.52	4.61	7.96	1.80	1.01	0.51	1.01

	Observed						Adjusted					
Calendar year 1955:	Max	16,200	Min	114	Mean	1,417	Mean	1,365	Cfsm	1.71	In.	23.18
Water year 1955-56:	Max	9,100	Min	159	Mean	1,264	Mean	1,279	Cfsm	1.60	In.	21.79

Peak discharge (base, 10,000 cfs).--May 1 (2 a.m.) 10,600 cfs (8.99 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. 3 to Apr. 8.

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 1956.

Gage.--Water-stage recorder. Altitude of gage is 920 ft (from topographic map).

Average discharge.--16 years, 481 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 3,800 cfs Apr. 30, May 1 (gage height, 6.77 ft); maximum gage height, 7.69 ft Jan. 11 (ice jam); minimum discharge, 68 cfs Oct. 3.
1940-56: Maximum discharge, 9,950 cfs Mar. 27, 1953 (gage height, 9.44 ft), from rating curve extended above 5,800 cfs by logarithmic plotting; minimum, 32 cfs Sept. 14, 1948.
Flood in March 1936 reached a stage of about 10.6 ft, from information by local residents.

Remarks.--Records excellent except those for period of ice effect, which are fair. Some regulation by pond on Nash Stream. Small diversion above station for municipal supply of Berlin.

Rating tables, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 30				May 1 to Sept. 30			
2.7	55	4.5	950	2.7	57	5.0	1,480
3.0	132	5.0	1,400	3.0	140	6.0	2,610
3.5	325	6.0	2,580	3.5	345	7.0	4,250
4.0	600	7.0	4,250	4.0	645		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92	730	160	105	175	160	125	3,350	1,330	210	105	680
2	81	758	150	92	170	150	130	2,520	1,070	338	102	474
3	74	588	155	92	165	150	145	2,480	852	400	97	808
4	*84	474	160	98	160	145	260	2,660	948	264	91	492
5	84	800	170	98	155	145	500	2,470	757	199	86	320
6	79	852	170	98	155	145	1,000	2,410	736	174	83	242
7	97	*652	155	94	160	140	1,100	2,380	575	199	86	242
8	145	564	145	90	165	140	1,030	2,090	498	230	80	226
9	148	486	140	140	170	140	900	1,720	504	263	83	188
10	126	410	135	700	165	140	750	1,960	510	582	111	164
11	99	360	135	1,700	160	150	680	2,220	474	412	154	150
12	89	325	130	1,550	155	160	720	2,080	417	272	140	143
13	76	316	130	*1,260	155	170	820	2,820	365	226	105	134
14	74	307	130	1,030	155	160	880	3,130	325	382	88	127
15	86	340	130	840	155	*150	760	2,560	290	750	*83	*140
16	132	302	130	580	155	145	740	2,180	264	498	78	137
17	152	480	130	490	150	145	1,150	2,090	242	345	78	161
18	235	522	125	390	155	140	1,280	1,570	218	272	80	264
19	190	385	125	320	160	135	1,110	1,190	199	222	154	230
20	145	310	120	300	155	135	928	1,220	192	188	150	282
21	148	280	115	290	150	135	882	1,090	188	171	108	428
22	220	240	105	280	145	135	*905	980	196	157	91	310
23	182	220	100	265	145	145	800	1,240	185	167	80	246
24	152	300	105	245	140	150	691	1,040	188	225	88	314
25	289	290	115	230	140	140	606	852	238	268	100	510
26	289	230	120	220	160	135	646	*680	222	206	100	385
27	216	220	120	205	175	135	717	1,270	199	167	102	295
28	176	200	110	200	175	130	1,550	2,340	250	143	118	250
29	162	180	105	190	170	125	2,620	1,820	222	127	140	210
30	162	170	110	185	-------	125	3,490	1,200	*230	118	167	203
31	290	-------	110	180	-------	125	-------	1,360	-------	108	551	-------
Total	4,574	12,291	4,040	12,557	4,595	4,425	27,915	58,972	12,884	8,263	3,681	8,775
Mean	148	410	130	405	158	143	930	1,902	429	267	119	292
(†)	2.57	2.49	2.78	2.76	2.70	2.78	2.80	2.82	2.97	2.74	2.66	2.74
Adjusted for diversion												
Mean	150	412	133	408	161	146	933	1,905	432	270	121	295
Cfsm	0.647	1.78	0.573	1.76	0.694	0.629	4.02	8.21	1.86	1.16	0.522	1.27
In.	0.75	1.98	0.66	2.03	0.75	0.72	4.49	9.47	2.08	1.34	0.60	1.42

	Observed			Adjusted		
Calendar year 1955:	Max 5,440	Min 72	Mean 467	Mean 470	Cfsm 2.03	In. 27.48
Water year 1955-56:	Max 3,490	Min 74	Mean 445	Mean 448	Cfsm 1.93	In. 26.29

Peak discharge (base, 2,900 cfs).--12 p.m. Apr. 30 to 2 a.m. May 1, 3,800 cfs (6.77 ft); May 13 (10:30 to 12 p.m.) 3,270 cfs (6.47 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. 20 to Apr. 17.

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 1956. 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.--29 years, 2,902 cfs (adjusted to drainage area at present site and for storage).
Extremes.--Maximum discharge during year, 18,000 cfs May 1 (gage height, 17.11 ft); minimum daily, 508 cfs Oct. 2.
1927-56: Maximum discharge, 48,300 cfs Mar. 20, 1936 (gage height, 25.6 ft); minimum daily, 115 cfs Oct. 3, 1937.
Remarks.--Records good except those for periods of ice effect or backwater from Moore Reservoir, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis (see p. 230), 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 1955-56, except periods of ice effect or backwater from Moore Reservoir (gage height, in feet, and discharge, in cubic feet per second)

7.0	440	14.0	10,300
8.0	1,190	16.0	15,100
10.0	3,230	18.0	20,500
12.0	6,300		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	974	2,260	1,700	590	1,720	1,200	570	17,900	6,390	1,030	*930	2,750
2	508	2,630	1,730	590	1,630	1,160	720	16,700	6,160	950	890	2,500
3	635	*2,500	1,520	1,050	1,590	1,160	740	13,700	5,130	1,610	889	2,290
4	1,070	2,160	1,220	1,050	1,600	1,320	1,050	13,000	4,920	1,780	890	3,100
5	806	2,330	1,360	950	1,600	1,600	2,100	13,100	4,810	1,510	718	2,350
6	782	2,530	1,270	900	1,590	1,600	5,180	12,300	4,340	1,310	832	1,410
7	990	2,980	1,250	920	1,620	1,600	7,050	11,500	3,830	1,240	860	1,080
8	1,090	2,930	1,350	950	1,610	1,600	7,470	10,300	3,080	1,060	791	1,070
9	736	2,760	1,240	1,300	1,570	1,600	6,880	8,410	2,730	1,250	802	755
10	870	2,540	1,230	3,700	1,360	1,550	5,580	7,790	2,970	1,640	818	840
11	1,180	2,390	1,220	6,200	*1,190	1,350	4,430	9,170	2,710	2,400	884	958
12	1,030	1,930	1,170	5,860	1,320	1,360	4,550	9,190	2,330	1,940	989	690
13	846	1,280	1,170	5,410	1,280	1,260	3,930	10,200	2,050	1,890	1,150	756
14	854	1,560	1,200	*4,540	1,260	1,260	6,550	12,900	1,710	1,350	1,120	739
15	942	2,050	1,200	3,770	1,450	1,260	5,990	13,600	1,380	1,670	916	*918
16	773	1,740	1,170	3,220	1,470	1,320	5,600	12,200	1,270	2,020	797	667
17	553	1,650	1,170	2,860	1,190	1,250	8,530	10,200	788	1,950	769	945
18	640	1,920	1,170	2,580	1,170	1,100	*10,500	8,350	837	1,320	840	1,440
19	584	2,070	1,130	2,370	1,170	1,200	9,480	6,250	1,010	1,510	717	1,310
20	577	2,080	1,130	2,090	1,150	1,200	7,540	5,500	879	936	1,000	1,530
21	584	2,010	1,100	1,890	1,150	1,150	6,250	*5,090	895	938	950	2,580
22	578	1,910	840	1,880	1,150	1,050	5,680	4,520	882	938	874	2,790
23	777	2,190	860	1,800	1,150	1,000	5,250	4,370	983	899	824	1,810
24	886	2,320	660	1,790	1,150	980	4,600	4,950	954	1,230	782	1,590
25	1,400	2,610	600	1,680	1,150	970	4,010	4,340	804	1,310	806	2,070
26	1,530	2,550	520	1,630	1,050	800	3,840	3,610	1,220	1,440	652	2,280
27	1,540	2,200	860	1,580	1,070	860	3,980	4,090	1,230	1,290	902	2,090
28	1,530	2,400	1,350	1,450	1,340	740	6,280	8,960	1,120	1,190	884	1,720
29	1,350	2,190	1,300	1,430	1,320	680	12,200	8,870	1,190	834	809	1,360
30	762	1,830	820	1,450	-------	720	16,300	6,620	*1,260	937	1,110	780
31	1,170	-------	900	1,720	-------	700	-------	5,600	-------	931	2,210	-------
Total	28,847	66,480	35,410	69,200	39,070	36,600	172,830	283,280	69,862	42,513	28,405	47,168
Mean	931	2,216	1,142	2,232	1,347	1,181	5,761	9,138	2,329	1,371	916	1,572
(†)	-331	-133	-413	-277	-486	-458	+690	+1,566	+310	-48.8	-216	-29.7
Adjusted for change in reservoir contents												
Mean	599	2,083	729	1,955	862	723	6,451	10,700	2,639	1,323	701	1,543
Cfsm	0.396	1.38	0.482	1.29	0.569	0.478	4.26	7.07	1.74	0.874	0.463	1.02
In.	0.46	1.54	0.55	1.49	0.61	0.55	4.75	8.15	1.94	1.01	0.53	1.14

	Observed			Adjusted		
Calendar year 1955:	Max 25,600	Min 140	Mean 2,734	Mean 2,682	Cfsm 1.77	In. 24.04
Water year 1955-56:	Max 17,900	Min 508	Mean 2,513	Mean 2,528	Cfsm 1.67	In. 22.72

Peak discharge (base, 16,500 cfs).--May 1 (12:30 to 1:30 p.m.) 18,000 cfs (17.11 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. 15 to Jan. 11, Feb. 20 to Apr. 5. Backwater from Moore Reservoir June 11 to Aug. 30, Sept. 2-20, 22-30.

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 1956. 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.--14 years, 101 cfs.

Extremes.--Maximum discharge during year, 920 cfs Apr. 30 (gage height, 4.31 ft); minimum, 19 cfs Aug. 10.
1939-45, 1948-56: Maximum discharge, 2,180 cfs May 28, 1940 (gage height, 6.21 ft); minimum, 13 cfs Sept. 1-5, 1953.
Maximum stage known, about 12.6 ft sometime in November 1927, from information by local resident.

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

Revisions.--WSP 1141: Drainage area.

Rating table, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.8	18	2.0	163
1.1	40	3.0	415
1.5	83	4.0	780

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	106	49	29	37	31	27	466	345	70	29	96
2	30	*96	47	28	37	32	28	430	242	101	29	82
3	29	75	50	27	37	32	31	584	208	77	27	110
4	27	73	52	28	37	31	70	538	201	61	25	70
5	27	144	56	29	38	31	150	466	173	53	*24	54
6	26	159	52	29	39	31	170	475	159	59	23	44
7	*36	134	*51	27	39	30	175	427	134	70	22	44
8	48	129	50	26	38	30	161	350	122	77	21	37
9	48	106	47	40	36	30	119	315	157	98	20	37
10	37	89	45	80	*35	30	93	489	139	154	34	33
11	32	84	44	135	35	30	89	388	130	95	36	32
12	30	85	42	120	35	30	120	400	114	75	29	34
13	29	84	41	*150	35	30	159	514	102	66	25	35
14	27	83	41	100	34	*30	157	436	94	93	24	*33
15	27	88	41	85	34	29	129	352	85	90	23	36
16	28	75	41	75	33	29	210	325	77	78	22	38
17	32	94	41	67	31	28	403	305	70	64	22	59
18	36	84	40	55	35	28	285	238	64	56	22	79
19	32	71	38	51	32	27	222	220	62	48	77	59
20	31	66	36	54	31	27	171	208	60	44	45	155
21	52	62	35	60	31	27	151	175	66	42	33	119
22	61	58	33	52	30	28	*139	*161	70	40	29	87
23	44	85	31	48	30	30	123	161	61	46	26	69
24	40	81	33	46	30	29	115	141	68	64	49	98
25	84	60	35	43	32	28	114	127	77	59	52	87
26	58	56	37	42	37	28	130	120	68	45	45	68
27	52	55	35	41	35	28	166	370	64	38	57	56
28	49	53	34	39	34	27	460	422	76	37	63	49
29	48	52	32	37	32	27	533	260	*77	32	72	44
30	46	50	32	37	-------	27	729	196	87	31	60	41
31	98	-------	31	37	-------	27	-------	247	-------	30	132	----
Total	1,276	2,537	1,272	1,717	999	902	5,629	10,306	3,452	1,993	1,197	1,885
Mean	41.2	84.6	41.0	55.4	34.4	29.1	188	332	115	64.3	38.6	62.8
Cfsm	0.766	1.57	0.762	1.03	0.639	0.541	3.49	6.17	2.14	1.20	0.717	1.17
In.	0.88	1.75	0.88	1.19	0.69	0.62	3.89	7.12	2.39	1.38	0.83	1.30

Calendar year 1955: Max 1,280 Min 14 Mean 97.7 Cfsm 1.82 In. 24.65
Water year 1955-56: Max 729 Min 20 Mean 90.6 Cfsm 1.68 In. 22.92

Peak discharge (base, 800 cfs).--Apr. 30 (3:30 a.m.) 920 cfs (4.31 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 21 to Apr. 7.

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 1956.

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.--9 years, 142 cfs.

Extremes.--Maximum discharge during year, 1,710 cfs Apr. 30 (gage height, 8.94 ft); minimum, 8.1 cfs Aug. 10.
1947-56: 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.6	7.6	4.5	150
2.8	13	5.0	225
3.1	24	6.0	443
3.5	50	7.0	765
4.0	92	9.0	1,750

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	188	42	25	41	37	28	1,240	315	49	14	262
2	15	146	36	23	41	36	28	876	250	68	13	126
3	14	*98	39	23	40	35	38	904	253	73	13	186
4	13	79	40	22	40	34	70	1,080	351	43	12	110
5	12	206	42	22	38	34	235	926	335	30	*11	64
6	12	255	43	21	38	33	375	858	250	28	10	45
7	*26	184	*38	21	38	33	420	841	183	45	9.8	45
8	42	156	35	22	40	33	417	712	146	54	9.3	42
9	44	132	34	32	*39	33	339	539	169	64	8.6	34
10	32	101	33	240	38	33	246	575	160	102	9.5	29
11	23	88	33	342	37	34	190	706	154	60	14	25
12	20	87	32	277	36	34	225	608	121	40	14	28
13	17	88	32	353	36	33	310	724	97	35	11	29
14	15	90	32	306	36	*33	358	962	81	91	9.8	26
15	15	120	32	203	36	33	287	748	70	104	9.0	37
16	18	95	32	151	36	33	298	560	59	83	8.8	38
17	19	147	32	124	36	33	*611	512	49	52	8.6	83
18	22	144	31	97	36	32	744	371	41	37	11	103
19	22	102	30	80	36	32	563	281	35	28	66	74
20	20	81	30	71	35	32	388	300	33	22	54	146
21	23	68	28	71	35	32	313	230	36	20	26	324
22	53	66	26	67	34	32	281	*197	53	18	19	155
23	36	52	25	61	33	34	248	198	40	22	15	101
24	29	78	27	57	32	35	211	170	42	57	16	155
25	75	77	29	55	32	33	188	140	56	62	42	232
26	62	60	31	51	36	32	225	123	55	43	26	145
27	48	55	29	48	42	32	234	299	42	28	31	98
28	43	50	27	46	40	31	508	982	70	21	33	76
29	44	49	26	45	39	30	1,060	660	*52	18	37	64
30	48	46	27	43	-------	30	1,530	351	67	16	41	55
31	122	----	26	42	-------	30	-------	311	-------	15	235	------ --
Total	999	3,188	999	3,041	1,076	1,021	10,968	17,984	3,665	1,428	837.4	2,937
Mean	32.2	106	32.2	98.1	37.1	32.9	366	580	122	46.1	27.0	97.9
Cfsm	0.428	1.41	0.428	1.30	0.493	0.438	4.87	7.71	1.62	0.613	0.359	1.30
In.	0.49	1.58	0.49	1.50	0.53	0.50	5.42	8.89	1.81	0.71	0.41	1.45

Calendar year 1955: Max 2,120 Min 4.8 Mean 132 Cfsm 1.76 In. 23.78
Water year 1955-56: Max 1,530 Min 8.6 Mean 132 Cfsm 1.76 In. 23.78

Peak discharge (base, 1,000 cfs).--Apr. 30 (3:30 to 5:30 p.m.) 1,710 cfs (8.94 ft); May 4 (10 to 11:30 a.m.) 1,130 cfs (7.83 ft); May 14 (4:30 to 6 a.m.) 1,060 cfs (7.68 ft); May 28 (11 a.m. to 1 p.m.) 1,130 cfs (7.83 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 23, 25, 26, 29, Dec. 2, 7, 9, Dec. 16 to Jan. 10, Jan. 28, 29, Jan. 31 to Feb. 2, Feb. 4, 17, Feb. 22 to Apr. 7, Apr. 11-13.

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 1956.

Gage.--Water-state 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.--28 years, 224 cfs.

Extremes.--Maximum discharge during year, 2,780 cfs Apr. 30 (gage height, 4.09 ft), from rating curve extended above 1,600 cfs; minimum, 14 cfs Aug. 18.
1928-56: Maximum discharge, 5,800 cfs Apr. 30, 1929 (gage height, 8.3 ft, from graph based on gage readings, site and datum then in use), from rating curve extended above 3,400 cfs; minimum, 6.2 cfs Sept. 17, 18, 1948, Aug. 27, 28, 1949.

Remarks.--Records good except those for periods of ice effect, and doubtful or no gage-height record, which are fair. Slight diurnal fluctuation caused by powerplant above station.

Revisions (water years).--WSP 1231: 1929-30, 1931-34(M). WSP 1381: Drainage area.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 23-26, June 7-12, Sept. 2-4, 22, 24, 26)

1.4	.13	3.4	360
1.6	20	3.5	440
1.9	37	3.6	570
2.5	94	3.7	790
2.9	165	4.0	2,650
3.2	255		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	241	57	55	62	56	48	1,930	476	81	d25	306
2	25	*190	52	33	60	53	51	1,630	384	75	d24	180
3	23	136	56	31	58	53	60	1,570	d380	105	*d23	220
4	21	120	58	31	57	52	100	1,510	d520	76	22	152
5	20	262	60	30	56	52	400	1,630	d450	57	20	97
6	*21	348	58	29	55	52	650	1,370	342	51	19	72
7	34	255	54	29	56	51	742	1,370	241	65	17	70
8	59	211	50	31	58	50	630	1,200	193	90	17	66
9	61	188	48	50	60	51	542	886	208	95	16	58
10	52	150	47	330	*58	52	392	886	220	133	19	50
11	39	136	46	470	56	53	342	1,200	224	107	24	44
12	33	133	45	*430	55	53	440	d1,100	178	74	24	47
13	29	127	45	500	55	53	556	1,200	148	61	22	53
14	26	142	45	370	54	*53	590	1,500	125	82	19	50
15	26	168	46	280	54	53	514	1,350	110	138	20	*58
16	28	150	45	210	54	52	610	950	97	120	17	73
17	30	199	45	170	54	52	1,370	850	84	92	16	114
18	32	211	44	140	54	52	1,370	600	75	68	15	142
19	34	161	43	115	54	51	1,030	450	66	55	42	115
20	32	123	42	105	53	50	838	500	62	45	84	151
21	36	95	40	100	52	50	630	370	61	39	47	392
22	59	90	37	95	51	50	528	300	72	36	33	190
23	60	71	35	90	50	53	476	238	74	51	27	134
24	49	110	38	85	50	54	*392	220	72	87	27	174
25	71	110	41	80	50	53	324	190	81	98	39	278
26	94	83	44	76	56	50	368	*168	86	80	46	182
27	73	78	40	73	62	49	400	538	78	58	36	134
28	65	72	38	70	62	48	838	d1,700	82	44	40	110
29	60	64	36	68	60	47	1,630	d1,050	*85	d35	44	93
30	63	61	39	66	-------	46	2,530	d650	83	d30	50	82
31	92	-------	37	64	-------	46	-------	488	-------	d27	193	----
Total	1,373	4,485	1,411	4,286	1,616	1,590	19,391	29,594	5,357	2,255	1,087	3,887
Mean	44.3	150	45.5	138	55.7	51.3	646	955	179	72.7	34.4	130
Cfsm	0.346	1.17	0.355	1.08	0.435	0.401	5.05	7.46	1.40	0.568	0.269	1.02
In.	0.40	1.30	0.41	1.25	0.47	0.46	5.63	8.60	1.56	0.66	0.31	1.13

Calendar year 1955: Max 3,430 Min 8.8 Mean 205 Cfsm 1.60 In. 21.79
Water year 1955-56: Max 2,530 Min 15 Mean 209 Cfsm 1.63 In. 22.18

Peak discharge (base, 1,700 cfs).--Apr. 30 (3:30 a.m.) 2,780 cfs (4.09 ft); May 14 (about 3 p.m.) about 2,100 cfs; May 28 (about 9 p.m.) about 2,200 cfs.
* Discharge measurement made on this day.
d Doubtful gage-height record; discharge computed on basis of recorder graph, weather records, and records for station at Victory.
Note.--No gage-height record Oct. 1-6, Dec. 21 to Jan. 12, Feb. 6-10, May 14-22; discharge estimated on basis of 3 discharge measurements, weather records, and records for station at Victory.
Stage-discharge relation affected by ice Nov. 20-25, Nov. 27 to Apr. 6.

Passumpsic River at Passumpsic, Vt.

Location.--Lat 44°21'55", long 72°02'20", on right bank 0.7 mile upstream from Waterandrick Brook and 1 mile downstream from dam and village of Passumpsic, Caledonia County.

Drainage area.--436 sq mi.

Records available.--October 1928 to September 1956. October 1928 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Altitude of gage is 490 ft (from topographic map).

Average discharge.--28 years, 732 cfs.

Extremes.--Maximum discharge during year, 6,460 cfs Apr. 30 (gage height, 10.84 ft); minimum daily, 98 cfs Aug. 18.

1928-56: 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 150 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	87	5.0	1,880
2.1	160	7.0	3,330
2.5	291	11.0	6,600
3.0	535		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	148	824	290	150	290	250	240	4,510	1,600	*330	163	837
2	124	*645	280	140	290	250	250	3,350	1,380	379	154	552
3	151	480	270	130	290	260	300	3,720	1,350	454	156	824
4	132	430	250	135	280	250	500	4,120	1,570	322	*104	540
5	143	1,020	270	140	280	250	1,200	3,950	1,300	252	123	345
6	134	1,280	240	140	290	250	1,800	3,400	1,120	262	164	284
7	171	907	220	135	290	240	2,000	3,060	893	380	145	230
8	*228	772	210	130	290	240	1,800	2,520	772	460	104	230
9	270	687	200	200	280	240	1,500	2,050	907	496	116	235
10	240	546	*190	1,000	270	240	1,200	2,640	928	817	128	210
11	190	518	190	1,500	270	240	1,000	2,650	963	530	161	167
12	155	540	180	1,400	260	240	1,300	2,270	747	375	122	191
13	145	491	180	1,800	260	240	1,550	2,710	634	321	141	212
14	130	535	180	1,300	260	240	1,600	3,230	550	563	130	191
15	129	606	180	900	260	250	1,390	2,730	470	605	117	234
16	115	530	180	700	260	240	2,100	2,110	410	524	121	258
17	157	657	175	600	250	230	*4,350	2,080	350	366	122	419
18	178	657	180	530	270	230	3,280	1,590	310	304	98	491
19	168	508	175	460	260	230	2,540	1,370	290	252	204	404
20	166	445	170	420	250	230	1,940	1,450	270	217	363	664
21	189	357	160	440	250	230	1,630	1,170	300	208	198	1,090
22	282	415	155	420	250	240	1,500	*1,010	330	179	170	618
23	256	280	150	400	240	250	1,440	963	290	283	156	462
24	211	462	160	370	240	240	1,240	900	320	425	137	608
25	303	420	170	350	240	240	1,130	778	360	403	223	771
26	356	370	180	330	270	240	1,250	723	330	311	184	562
27	272	330	170	320	280	240	1,310	2,760	300	226	204	400
28	259	290	160	310	270	240	2,840	4,090	340	201	198	348
29	235	330	150	300	260	240	4,270	2,430	360	186	220	299
30	228	300	160	310	-------	240	5,900	1,570	350	162	256	272
31	536	-------	155	300	-------	240	-------	1,560	-------	168	702	-----
Total	6,401	16,632	5,980	15,760	7,750	7,480	54,330	73,464	20,094	10,961	5,584	12,948
Mean	206	554	193	508	267	241	1,811	2,370	670	354	180	432
Cfsm	0.472	1.27	0.443	1.17	0.612	0.553	4.15	5.44	1.54	0.812	0.413	0.991
In.	0.55	1.42	0.51	1.34	0.66	0.64	4.63	6.27	1.71	0.93	0.48	1.10

Calendar year 1955: Max 7,870 Min 55 Mean 682 Cfsm 1.56 In. 21.23
Water year 1955-56: Max 5,900 Min 98 Mean 649 Cfsm 1.49 In. 20.24

Peak discharge (base, 5,000 cfs).--Apr. 30 (10 a.m.) 6,460 cfs (10.84 ft); May 27 (6:30 to 7:30 p.m.) 5,450 cfs (9.65 ft).

* Discharge measurement made on this day.

Note.--No gage-height record June 14 to July 1; discharge estimated on basis of 1 discharge measurement, weather records, and records for East Branch Passumpsic River near East Haven and Moose River at St. Johnsbury. Stage-discharge relation affected by ice Nov. 23, Nov. 25 to Apr. 14.

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.--97.6 sq mi.

Records available.--August 1939 to September 1956.

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.--17 years, 213 cfs.

Extremes.--Maximum discharge during year, 3,750 cfs May 27 (gage height, 7.42 ft); minimum, 37 cfs Oct. 6.
1939-56: 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, which are fair.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.1	36	4.0	740
1.5	73	5.0	1,310
2.0	140	6.0	2,110
2.5	250	7.0	3,220
3.0	395		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	*368	69	40	63	64	54	786	527	76	66	435
2	44	285	66	39	63	62	55	636	422	74	69	188
3	41	181	74	39	63	61	72	905	796	73	62	248
4	40	163	70	40	58	60	*140	875	622	66	58	149
5	38	248	70	40	68	58	450	692	422	62	68	114
6	38	335	63	39	65	57	430	720	338	82	58	104
7	105	281	50	38	62	57	371	664	281	109	52	244
8	*104	255	54	38	63	54	284	544	242	140	50	147
9	81	204	55	460	60	54	204	460	223	365	61	115
10	64	162	58	*1,160	58	55	153	920	220	348	65	101
11	55	145	59	672	*58	56	140	670	296	158	126	90
12	50	134	*54	566	61	62	186	1,020	214	132	82	88
13	48	134	54	569	58	*60	245	2,170	175	130	66	80
14	45	126	53	310	54	56	252	1,260	154	662	*55	78
15	56	132	53	*210	54	54	202	1,000	134	493	52	132
16	71	116	52	175	49	52	433	790	121	377	49	108
17	71	211	50	145	47	56	880	720	110	232	46	*162
18	92	154	51	115	57	53	*476	455	101	175	44	195
19	74	121	49	100	55	51	356	380	96	135	51	140
20	68	106	44	92	54	*50	272	365	92	115	62	304
21	75	96	41	99	54	50	252	314	99	101	50	306
22	105	94	39	97	51	51	240	364	102	97	51	181
23	82	95	38	94	*53	54	211	639	86	99	48	145
24	75	127	42	*86	52	53	181	430	116	124	52	383
25	143	100	50	86	57	53	164	287	108	116	64	298
26	101	81	49	84	85	52	181	245	91	106	50	214
27	85	80	47	80	110	52	201	1,900	84	88	51	166
28	77	84	45	76	76	51	791	*1,450	100	77	45	142
29	78	69	44	72	66	51	1,290	623	86	73	44	126
30	81	63	45	68	-------	54	1,930	524	*85	71	57	115
31	368	-------	43	66	-------	54	-------	622	-------	67	333	-------
Total	2,501	4,750	1,631	5,795	1,774	1,707	11,096	23,430	6,543	5,033	2,087	5,298
Mean	80.7	158	52.6	187	61.2	55.1	370	756	218	162	67.3	177
Cfsm	0.921	1.80	0.600	2.13	0.699	0.629	4.22	8.63	2.49	1.85	0.768	2.02
In.	1.06	2.02	0.69	2.46	0.75	0.72	4.71	9.95	2.78	2.14	0.89	2.25

Calendar year 1955: Max 2,700 Min 33 Mean 195 Cfsm 2.23 In. 30.27
Water year 1955-56: Max 2,170 Min 38 Mean 196 Cfsm 2.24 In. 30.42

Peak discharge (base, 2,700 cfs).--May 13 (12 m.) 3,220 cfs (7.00 ft); May 27 (3 p.m.) 3,750 cfs (7.42 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Jan. 10, Jan. 14 to Feb. 22, Feb. 26 to Mar. 29, Apr. 2, 4-6 (no gage-height record Dec. 21-27).

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 1956.

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.--21 years, 682 cfs.

Extremes.--Maximum discharge during year, 9,220 cfs May 27 (gage height, 9.39 ft); minimum daily, 104 cfs Oct. 6.
1935-56: Maximum discharge, 27,900 cfs Mar. 18, 1936 (gage height, 15.40 ft), from rating curve extended above 13,000 cfs; minimum daily, 48 cfs Sept. 3, 1939.

Remarks.--Records good except those for periods of ice effect and doubtful or no gage-height record, which are fair. Diurnal fluctuation at low flow caused by small power-plants above station.

Revisions.--WSP 871: Drainage area.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 9		Jan. 10 to Sept. 30			
1.5	92	1.5	112	4.0	1,060
2.0	172	2.0	212	5.0	1,900
2.5	290	2.5	340	6.0	3,100
3.0	485	3.0	525	8.0	6,300
4.0	1,060				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	114	970	200	120	250	250	210	2,970	1,420	*228	179	1,220
2	127	1,030	200	115	240	240	210	2,110	1,140	*214	*186	658
3	116	580	180	115	240	230	260	2,370	1,770	190	173	730
4	119	485	200	120	230	220	450	2,620	1,830	175	155	548
5	108	824	200	120	260	220	2,300	2,280	1,220	171	163	370
6	104	1,030	180	115	250	220	2,700	2,040	936	208	155	323
7	256	*958	150	110	240	210	2,400	1,800	765	296	147	633
8	388	848	160	110	240	210	1,900	1,500	651	405	140	517
9	*267	702	165	150	230	210	1,330	1,190	602	912	138	380
10	211	526	170	1,700	230	210	1,000	1,700	574	1,380	149	320
11	170	472	180	1,850	*220	220	942	1,750	750	633	245	285
12	156	436	170	1,300	210	240	1,300	1,840	620	409	242	264
13	151	400	160	1,740	210	240	1,600	d3,690	481	473	199	230
14	123	380	155	*1,040	200	220	1,710	d2,900	449	1,680	161	250
15	122	380	150	740	200	215	1,390	2,440	367	1,520	141	380
16	120	368	145	560	200	205	2,620	1,850	301	1,080	136	367
17	157	498	145	520	190	220	5,800	1,970	304	700	125	525
18	172	555	150	450	210	215	3,230	1,270	269	521	113	*620
19	194	400	140	400	210	*210	2,220	1,000	254	398	126	481
20	178	332	130	360	205	205	1,640	948	240	337	119	664
21	160	297	125	380	200	205	1,410	828	259	280	145	1,020
22	210	270	120	370	190	210	1,300	800	288	272	141	584
23	227	217	115	360	200	210	*1,200	1,290	252	272	127	445
24	198	346	125	340	200	215	1,070	1,260	340	509	134	1,130
25	265	342	140	350	220	215	918	795	367	548	133	1,100
26	318	246	140	330	280	205	972	680	288	421	151	705
27	244	240	135	310	340	205	966	d3,820	262	329	151	538
28	213	235	130	300	300	200	2,360	*5,340	259	272	141	453
29	194	220	130	280	270	200	4,600	2,100	259	242	123	400
30	198	180	135	270	-------	210	5,900	1,580	233	221	*118	352
31	478	-------	125	260	-------	210	-------	1,610	-------	210	373	-------
Total	6,038	14,767	4,750	15,285	6,665	6,695	55,908	60,341	17,750	15,506	4,929	16,492
Mean	195	492	153	493	230	216	1,864	1,946	592	500	159	550
Cfsm	0.494	1.25	0.387	1.25	0.582	0.547	4.72	4.93	1.50	1.27	0.403	1.39
In.	0.57	1.39	0.45	1.44	0.63	0.63	5.26	5.68	1.67	1.46	0.46	1.55

Calendar year 1955: Max 7,500 Min 65 Mean 627 Cfsm 1.59 In. 21.53
Water year 1955-56: Max 5,900 Min 104 Mean 615 Cfsm 1.56 In. 21.19

Peak discharge (base, 6,500 cfs).--Apr. 17 (6 to 7:30 a.m.) 6,880 cfs (8.31 ft); Apr. 30 (9:30 a.m.) 6,880 cfs (8.31 ft); May 27 (10:30 p.m.) 9,220 cfs (9.39 ft).

* Discharge measurement made on this day.

d Doubtful gage-height record; discharge computed from reconstructed gage-height graph based on recorded graph, weather records, and records for nearby stations.

Note.--No gage-height record Dec. 21 to Jan. 4, Feb. 25 to Mar. 19, Mar. 29 to Apr. 7; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for station at Bethlehem Junction. Stage-discharge relation affected by ice Nov. 27 to Jan. 10, Jan. 16 to Apr. 5.

Connecticut River at Wells River, Vt.

Location.--Lat 44°09'15", long 72°02'35", on right bank 200 ft downstream from bridge on U. S. Highway 302, at Wells River, Orange County, 400 ft upstream from Wells River, and 1,200 ft downstream from Ammonoosuc River.

Drainage area.--2,644 sq mi.

Records available.--October 1949 to September 1956. 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.--7 years, 4,993 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 27,200 cfs Apr. 30 (gage height, 10.00 ft); minimum daily, 385 cfs Aug. 26.

1949-56: Maximum discharge, 54,000 cfs Mar. 27, 1953 (gage height, 15.96 ft); minimum daily, 337 cfs Aug. 7, 1955.

Remarks.--Records good except those for period of no gage-height record, which are fair. Flow regulated by powerplants, by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir (dead storage October to March, live storage thereafter) and Comerford Station Pond (see p. 230), and other reservoirs (combined usable capacity, about 1½ billion cubic feet).

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 30				May 1 to Sept. 30			
1.1	430	4.0	4,400	1.0	340	4.0	4,400
1.5	770	5.0	6,650	1.4	600	5.0	6,650
2.0	1,340	7.0	14,200	2.0	1,240	7.0	14,200
3.0	2,740	9.0	22,700	3.0	2,640	9.0	22,700

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	991	3,250	2,260	500	2,470	2,470	643	22,700	10,400	1,100	1,410	5,380
2	451	3,250	2,170	490	2,450	2,720	1,350	22,200	9,800	*1,880	*1,340	3,110
3	1,090	2,740	2,140	1,100	2,450	2,640	2,290	21,900	8,960	2,330	1,370	3,280
4	1,360	2,590	1,420	1,500	2,200	2,440	2,600	21,400	9,760	805	836	4,900
5	1,600	3,180	1,850	1,450	2,050	2,740	5,420	21,800	8,930	2,430	499	4,230
6	1,850	3,330	2,300	1,400	2,160	3,340	10,300	19,500	7,880	2,650	896	3,230
7	2,000	3,200	2,220	1,100	2,350	3,570	10,300	18,000	7,560	1,350	1,290	2,830
8	946	*2,980	2,180	520	2,940	3,490	7,950	16,200	5,880	1,560	1,250	2,460
9	670	2,950	2,120	1,300	3,020	2,470	7,420	13,800	3,280	2,750	1,410	790
10	1,460	2,710	1,960	4,150	3,220	2,350	6,500	13,900	2,540	5,550	1,320	1,400
11	1,930	2,700	1,050	5,220	2,590	1,990	6,480	15,200	5,580	5,100	680	2,160
12	1,730	2,590	*1,290	4,880	2,500	2,260	8,020	14,600	5,160	3,440	506	2,160
13	1,550	2,580	2,020	5,340	2,580	2,740	8,680	16,500	4,560	2,660	894	1,860
14	1,440	2,560	1,920	4,980	2,480	3,060	8,930	19,100	2,990	4,060	1,410	1,410
15	1,540	2,560	1,990	3,440	2,500	2,820	7,700	19,900	3,200	4,020	1,240	1,330
16	832	3,260	1,950	2,720	2,470	3,170	10,400	17,400	2,400	3,790	1,340	506
17	1,130	3,250	1,950	2,620	2,540	2,400	20,300	14,800	1,590	3,490	1,240	*1,950
18	1,510	2,800	1,310	2,590	2,460	1,670	19,300	13,000	1,890	3,280	1,180	3,670
19	1,660	2,960	1,760	2,710	2,410	2,140	17,100	10,500	1,920	2,800	438	3,250
20	1,590	2,420	2,100	2,600	2,350	2,500	14,700	5,700	1,860	2,400	934	2,750
21	1,100	2,700	2,100	2,300	2,470	2,440	10,700	7,600	1,750	2,260	1,350	4,020
22	607	3,090	2,000	2,160	2,440	2,440	8,300	7,780	2,080	1,390	1,360	2,720
23	652	2,350	1,800	2,440	2,440	2,800	*9,800	7,560	1,520	1,360	1,300	2,460
24	1,260	1,550	1,400	3,040	2,440	2,600	11,000	7,560	720	2,420	1,320	4,820
25	2,160	2,080	520	3,040	2,260	2,350	8,650	6,000	1,610	2,510	1,100	4,560
26	2,400	2,340	520	2,820	2,440	2,260	8,020	5,220	1,950	2,450	385	4,170
27	2,260	1,410	1,500	2,580	2,480	2,420	6,620	10,100	2,020	2,460	926	3,650
28	1,930	1,620	1,700	2,380	2,500	2,360	8,510	21,400	2,450	2,180	1,450	3,720
29	1,930	2,290	1,800	2,290	2,460	2,290	14,600	*15,900	2,400	1,180	2,000	2,270
30	1,130	2,220	1,600	2,300	--------	2,300	22,000	10,800	2,160	2,340	2,120	1,610
31	1,890	--------	1,200	2,520	--------	1,260	--------	9,280	--------	2,000	2,860	--------
Total	44,649	79,510	54,100	78,480	72,120	78,500	284,583	447,300	124,800	79,995	37,654	86,656
Mean	1,440	2,650	1,745	2,532	2,487	2,532	9,486	14,430	4,160	2,580	1,215	2,889
(†)	-226	+939	-394	+764	-878	-975	+2,898	+1,589	+375	-107	-219	+37.5
Adjusted for change in reservoir contents												
Mean	1,214	3,589	1,352	3,295	1,609	1,558	12,380	16,020	4,535	2,474	996	2,926
Cfsm	0.459	1.36	0.511	1.25	0.609	0.589	4.68	6.06	1.72	0.936	0.377	1.11
In.	0.53	1.51	0.59	1.44	0.66	0.68	5.23	6.98	1.91	1.08	0.43	1.23

	Observed			Adjusted			
Calendar year 1955:	Max 39,300	Min 337	Mean 4,492	Mean 4,546	Cfsm 1.72	In. 23.34	
Water year 1955-56:	Max 22,700	Min 385	Mean 4,012	Mean 4,327	Cfsm 1.64	In. 22.27	

Peak discharge (base, 23,000 cfs).--Apr. 30 (5:30 to 7 p.m.) 27,200 cfs (10.00 ft); May 28 (12:30 a.m.) 25,500 cfs (9.62 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 prior to April, dead storage in Moore Reservoir.

Note.--No gage-height record Dec. 23 to Jan. 9; discharge estimated on basis of weather records, recorded range in stage, powerplant records, and record for Ammonoosuc River near Bath, N. H. Stage-discharge relation affected by ice Dec. 20-22, Jan. 20, 21, Feb. 2-5, Mar. 10, 18, 20, 25, and at times during period of no gage-height record.

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 1956.

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.--16 years, 144 cfs.

Extremes.--Maximum discharge during year, 1,590 cfs May 27 (gage height, 5.30 ft); minimum, 14 cfs Aug. 18, 30; minimum daily, 24 cfs Jan. 2, 8.
1940-56: Maximum discharge, 3,230 cfs June 2, 1952 (gage height, 8.12 ft), from rating curve extended above 1,300 cfs on basis of computation of peak flow over dam; minimum, 5.1 cfs Oct. 6, 1948; minimum daily, 8.3 cfs Sept. 5, 1953.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Some diurnal fluctuation at low flow caused by small powerplant above station. Flow partly regulated by Groton and Ricker Ponds.

Revisions (water years).--WSP 1171: Drainage area. WSP 1201: 1942(P), 1944-45(M), 1946-47(P), 1948(M), 1950.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	24	3.0	311
1.7	39	3.5	517
1.9	59	4.0	780
2.2	102	5.0	1,400
2.6	194		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	122	54	26	52	50	55	852	275	60	40	162
2	43	86	52	24	50	56	61	655	242	*56	39	103
3	38	65	55	25	48	56	77	714	459	52	37	266
4	35	72	54	26	46	56	137	726	555	46	*35	87
5	33	219	55	27	50	54	405	738	358	44	35	58
6	31	*202	55	26	47	53	470	585	293	94	34	47
7	123	140	42	26	50	55	410	490	234	120	32	61
8	94	120	48	24	52	56	354	407	191	94	32	50
9	*65	101	42	25	50	56	269	332	173	127	30	48
10	48	82	41	80	47	53	225	399	171	126	30	43
11	38	79	41	160	46	56	230	386	197	86	37	39
12	34	90	38	210	52	58	325	332	156	70	36	43
13	34	79	*40	300	*55	55	378	346	131	65	34	37
14	30	74	40	*195	51	54	350	374	114	244	31	36
15	29	75	41	150	51	54	314	378	100	156	30	40
16	31	70	41	110	50	50	556	318	88	161	28	42
17	43	120	39	95	46	50	1,130	336	79	102	25	*69
18	60	100	38	80	51	49	816	269	70	80	25	71
19	46	84	37	76	50	*49	630	239	65	65	31	53
20	39	75	34	76	48	52	476	236	64	56	33	115
21	40	70	33	78	46	56	415	200	71	52	30	117
22	51	70	33	74	43	60	366	178	81	51	30	72
23	44	61	30	65	45	60	362	176	66	54	27	59
24	39	84	28	62	45	56	*318	173	116	97	29	147
25	53	77	29	60	50	53	284	146	110	89	33	120
26	47	61	30	58	83	56	314	135	83	79	31	82
27	45	67	32	55	60	54	314	762	74	60	30	67
28	41	58	31	52	58	53	570	1,030	85	52	27	60
29	38	56	30	50	52	53	906	*527	70	47	26	54
30	36	59	29	52	-------	54	1,070	378	64	44	28	50
31	135	---	28	52	-------	55	-------	328	-------	41	113	---
Total	1,507	2,718	1,220	2,419	1,474	1,682	12,587	13,145	4,835	2,570	1,058	2,298
Mean	48.6	90.6	39.4	78.0	50.8	54.3	420	424	161	82.9	34.1	76.6
Cfsm	0.494	0.921	0.400	0.793	0.516	0.552	4.27	4.31	1.64	0.842	0.347	0.778
In.	0.57	1.03	0.46	0.91	0.56	0.64	4.76	4.97	1.83	0.97	0.40	0.87

Calendar year 1955: Max 1,440 Min 15 Mean 133 Cfsm 1.35 In. 18.39
Water year 1955-56: Max 1,130 Min 24 Mean 130 Cfsm 1.32 In. 17.97

Peak discharge (base, 980 cfs).--Apr. 17 (6:30 to 7:30 a.m.) 1,240 cfs (4.76 ft); Apr. 30 (7:30 to 8:30 a.m.) 1,120 cfs (4.57 ft); May 27 (10 p.m.) 1,590 cfs (5.30 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26 to Mar. 30, Apr. 6, 7 (no gage-height record Dec. 17 to Jan. 10; discharge estimated on basis of weather records, recorder range in stage, and records for Dog River at Northfield Falls (Part 4) and Ayers Brook at Randolph.

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 1956.

Gage.--Water-stage recorder. Altitude of gage is 435 ft (from topographic map).

Average discharge.--16 years, 203 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 1,780 cfs Apr. 17 (gage height, 7.16 ft); minimum, 31 cfs Aug. 29, 30; minimum daily, 31 cfs Aug. 29.
1940-56: 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 determination 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 or no gage-height record, which are fair. Flow regulated by Union Village Reservoir (see p. 230) since October 1949. Some regulation by Lake Fairlee.

Rating tables, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 17				Apr. 18 to Sept. 30			
3.1	34	6.0	940	2.9	25	5.0	495
3.4	67	7.0	1,650	3.2	50	6.0	940
4.0	175	7.5	2,050	3.6	104	7.0	1,650
5.0	495			4.0	183		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	257	110	44	70	84	74	699	382	74	66	101
2	66	188	94	43	67	81	120	1,180	351	65	*66	291
3	50	162	110	42	69	77	100	1,030	984	61	57	249
4	42	155	115	45	66	82	150	730	1,360	56	54	114
5	*38	*192	120	48	68	77	528	712	672	51	51	86
6	41	443	105	52	70	73	766	581	537	112	48	84
7	180	446	85	48	*71	70	758	516	429	123	46	144
8	141	350	105	45	71	70	597	450	361	116	44	96
9	113	260	100	54	70	66	440	402	331	601	42	79
10	92	210	97	180	70	64	382	433	338	273	46	67
11	80	220	94	280	68	71	470	385	324	174	46	60
12	74	240	87	270	70	75	686	351	255	138	42	58
13	70	220	82	430	74	*72	753	327	223	208	40	56
14	66	205	78	450	73	72	668	378	195	680	38	52
15	59	200	75	320	72	72	562	365	168	395	36	86
16	52	190	72	240	71	67	1,010	344	148	327	34	75
17	109	280	65	*190	70	65	1,700	*341	132	385	33	198
18	144	220	73	150	68	70	*1,550	288	*116	244	33	206
19	110	200	66	120	80	76	976	270	107	185	34	132
20	100	190	59	105	92	76	748	261	101	155	35	186
21	93	180	53	110	70	76	690	230	98	134	35	183
22	95	170	58	105	66	75	676	215	96	140	37	134
23	88	160	56	100	64	74	663	220	88	132	34	116
24	87	180	50	98	67	74	569	212	94	127	35	345
25	103	175	51	85	70	75	523	185	107	119	38	239
26	95	150	52	81	76	75	548	174	89	138	35	183
27	90	130	51	80	85	74	540	461	81	106	34	159
28	86	140	50	77	96	74	832	481	92	94	33	142
29	84	120	49	76	84	74	1,380	1,030	83	82	31	129
30	83	100	47	74	-------	74	1,610	828	81	75	33	118
31	350	-------	46	72	-------	73	-------	453	-------	72	78	-------
Total	2,948	6,333	2,355	4,114	2,108	2,278	21,069	14,532	8,423	5,642	1,314	4,168
Mean	95.1	211	76.0	133	72.7	73.5	702	469	281	182	42.4	139
(†)	+0.75	+0.23	-0.86	+4.07	-1.00	+0.22	+9.88	-12.1	-0.81	0	+0.45	0
Adjusted for change in reservoir contents												
Mean	95.8	211	75.1	137	71.7	73.7	712	457	280	182	42.8	139
Cfsm	0.737	1.62	0.578	1.05	0.552	0.567	5.48	3.52	2.15	1.40	0.329	1.07
In.	0.85	1.81	0.67	1.21	0.59	0.65	6.11	4.05	2.40	1.61	0.38	1.19

	Observed			Adjusted			
Calendar year 1955:	Max 1,500	Min 22	Mean 199	Mean 198	Cfsm 1.52	In. 20.70	
Water year 1955-56:	Max 1,700	Min 31	Mean 206	Mean 206	Cfsm 1.58	In. 21.52	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Union Village Reservoir.
Note.--No gage-height record Oct. 3, 4, 26-31, Nov. 4, Nov. 8 to Dec. 6; discharge estimated on basis of weather records, recorded range in stage, and records for Union Village Reservoir and White River at West Hartford. Stage-discharge relation affected by ice Dec. 7 to Apr. 4 and at times during period of no gage-height record Nov. 8 to Dec. 6.

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 1956.

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.--17 years, 47.6 cfs.

Extremes.--Maximum discharge during year, 691 cfs Apr. 30 (gage height, 3.98 ft); minimum, 3.5 cfs Aug. 17, 18, 24, 29, 30.

1939-56: 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 excellent except those for period of backwater from debris, which are good, and those for periods of ice effect, which are fair.

Rating tables, water year 1955-56, except periods of ice effect and backwater from debris (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 16

0.3	3.9	1.5	61
.5	8.5	2.0	121
.9	24	2.5	207
1.2	38	3.0	330

Apr. 17 to Sept. 30

0.2	2.6	2.0	129
.3	3.9	2.5	212
.5	8.5	3.0	330
.9	24	3.5	490
1.2	45	4.0	700
1.5	73		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.5	*31	21	8	14	15	17	262	76	17	10	21
2	4.9	24	20	9	14	17	19	208	68	15	9.6	40
3	4.7	22	22	9	14	17	25	218	166	14	8.2	28
4	4.3	29	22	10	11	19	48	208	126	12	7.7	14
5	*4.5	44	24	11	14	16	145	182	95	11	7.2	11
6	*5.0	37	23	10	15	15	165	154	87	30	6.7	9.2
7	32	31	*18	10	14	17	140	132	74	29	6.4	17
8	21	29	20	10	14	16	103	114	65	21	6.9	11
9	14	27	18	10	14	13	73	101	64	53	6.2	9.9
10	11	26	18	40	14	16	79	102	66	36	5.9	8.2
11	8.5	28	18	57	14	16	120	90	64	23	5.3	7.7
12	7.7	30	17	75	14	17	178	84	52	26	4.9	7.5
13	7.2	27	17	87	14	16	160	78	45	33	4.7	6.9
14	7.2	28	17	42	14	*15	131	90	40	84	4.5	8.0
15	7.2	27	17	39	14	15	120	*81	36	41	3.9	9.9
16	7.2	27	17	33	11	10	304	74	31	31	3.8	15
17	22	58	15	*29	11	14	396	72	29	28	3.6	23
18	24	37	17	21	13	20	257	62	26	23	3.5	19
19	17	32	15	18	13	17	*206	59	*24	20	5.1	14
20	13	30	13	21	14	16	184	57	22	18	4.7	45
21	12	28	13	22	13	16	*163	51	24	16	*4.1	26
22	12	28	11	20	9.9	19	166	48	23	18	4.1	18
23	11	26	9	20	14	23	149	47	21	18	3.8	18
24	11	29	10	18	13	18	132	43	29	18	4.6	56
25	14	28	11	16	14	14	126	39	25	20	5.7	28
26	12	26	12	16	25	19	129	38	21	24	4.3	22
27	13	24	11	16	22	16	126	218	22	17	4.3	19
28	12	24	10	15	17	17	222	152	25	15	3.9	18
29	11	22	10	13	13	17	403	96	20	12	3.5	16
30	11	23	9.5	15	-------	19	496	88	18	12	6.6	16
31	47	-------	9	14	-------	17	-------	88	-------	*11	27	-------
Total	393.9	882	484.5	734	410.9	512	4,982	3,336	1,484	746	190.7	562.3
Mean	12.7	29.4	15.6	23.7	14.2	16.5	166	108	49.5	24.1	6.15	18.7
Cfsm	0.416	0.964	0.511	0.777	0.466	0.541	5.44	3.54	1.62	0.790	0.202	0.613
In.	0.48	1.08	0.59	0.89	0.50	0.62	6.07	4.07	1.81	0.91	0.23	0.69

Calendar year 1955: Max 486 Min 1.8 Mean 40.5 Cfsm 1.33 In. 18.05
Water year 1955-56: Max 496 Min 3.5 Mean 40.2 Cfsm 1.32 In. 17.94

Peak discharge (base, 350 cfs).--Apr. 17 (2:30 to 4:30 a.m.) 458 cfs (3.41 ft); Apr. 30 (2 a.m.) 691 cfs (3.98 ft); May 27 (8 p.m.) 408 cfs (3.28 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 23, 26, 27, 29, Dec. 15 to Jan. 12, Jan. 25, Feb. 3, 7, 18, 23, 26, 27, Mar. 1 to Apr. 7. Backwater from debris May 18 to June 19.

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 1956. Monthly discharge only October 1927 to September 1928, 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.--41 years, 1,203 cfs.

Extremes.--Maximum discharge during year, 16,400 cfs Apr. 30 (gage height, 12.41 ft); minimum, 142 cfs Aug. 18, 30; minimum daily, 150 cfs Aug. 30.
1915-56: 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 determination 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 tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 29				Apr. 30 to Sept. 30			
2.9	154	4.0	600	2.8	147	5.0	1,340
3.2	249	4.5	920	3.0	203	6.0	2,400
3.5	366	5.0	1,340	3.5	378	8.0	5,630
Note.--Same as following table above 5.0 ft.				4.0	620	10.0	9,600
				4.5	940	12.0	15,200

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	218	1,890	600	240	335	360	440	8,280	2,150	420	320	460
2	193	1,320	510	230	320	370	450	6,180	1,900	370	309	735
3	177	1,060	638	220	350	400	510	5,970	4,550	*339	295	948
4	160	1,160	606	235	330	460	700	5,900	4,350	306	274	525
5	*157	2,100	616	260	310	410	3,300	5,370	3,000	298	254	358
6	177	2,150	570	280	350	390	5,300	4,530	2,900	430	254	295
7	1,070	1,850	420	270	350	390	4,730	3,800	2,300	656	237	452
8	1,190	1,650	500	240	350	390	3,290	3,100	1,950	550	234	412
9	767	1,420	520	280	350	370	2,670	2,800	1,800	1,660	218	309
10	540	1,230	510	700	340	380	2,340	2,800	1,700	1,480	218	288
11	424	1,230	460	1,200	340	400	2,710	2,500	1,800	884	209	254
12	370	1,340	440	1,500	360	410	3,830	2,300	1,550	728	203	244
13	330	1,250	440	2,300	370	440	4,190	2,100	1,300	734	200	237
14	298	1,130	440	1,300	360	400	3,410	2,550	1,130	1,730	188	222
15	322	1,170	440	940	360	380	2,980	2,400	980	1,360	180	257
16	464	1,080	420	800	350	360	5,660	2,200	850	1,000	174	292
17	684	1,650	370	700	330	350	*9,470	2,100	750	1,150	166	750
18	1,540	1,480	430	620	340	370	6,440	1,800	680	805	160	890
19	976	1,200	420	560	335	390	5,100	1,600	610	638	166	560
20	728	1,090	320	540	330	390	4,070	1,500	550	550	197	783
21	606	992	260	540	325	390	3,620	1,350	650	490	183	1,120
22	709	944	290	470	320	390	3,490	*1,200	610	465	*183	692
23	606	770	280	470	310	430	3,320	*1,180	550	505	174	545
24	555	976	270	450	310	440	3,020	1,100	690	941	171	1,230
25	794	968	280	430	330	380	2,840	1,050	*600	692	180	1,070
26	760	801	300	410	420	390	3,000	950	550	746	174	760
27	685	690	290	380	580	390	2,880	3,650	590	620	171	620
28	616	754	*280	360	*500	*410	5,250	6,100	640	505	169	535
29	575	*660	270	400	400	440	11,700	3,000	510	420	155	490
30	545	550	260	380	-------	440	14,900	2,600	460	*378	150	447
31	*1,850	-------	250	*350	-------	440	-------	2,600	-------	362	*209	-------
Total	19,086	36,555	12,700	18,055	10,355	12,350	125,610	94,560	42,650	22,212	6,375	16,780
Mean	616	1,218	410	582	357	398	4,187	3,050	1,422	717	206	559
Cfsm	0.893	1.77	0.594	0.843	0.517	0.577	6.07	4.42	2.06	1.04	0.299	0.810
In.	1.03	1.97	0.68	0.97	0.56	0.67	6.77	5.10	2.30	1.20	0.34	0.90

Calendar year 1955: Max 13,400 Min 110 Mean 1,128 Cfsm 1.63 In. 22.20
Water year 1955-56: Max 14,900 Min 150 Mean 1,140 Cfsm 1.65 In. 22.49

Peak discharge (base, 11,600 cfs).--Apr. 30 (4:30 a.m.) 16,400 cfs (12.41 ft).
* Discharge measurement made on this day.
Note.--Doubtful or no gage-height record May 7 to July 2; discharge estimated on basis of 3 discharge measurements, recorder graph, weather records, and records for Ayers Brook at Randolph and Dog River at Northfield Falls. Stage-discharge relation affected by ice Nov. 23, 27, Nov. 29 to Dec. 2, Dec. 6 to Apr. 7.

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 1956.
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.--45 years, 7,230 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 40,900 cfs Apr. 30 (gage height, 17.62 ft); minimum daily, 187 cfs Aug. 19.
1911-56: 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, Comerford Station Pond and Moore Reservoir (dead storage October to March, live storage thereafter), Union Village Reservoir (see p. 230), and other reservoirs (combined usable capacity, about 17¼ billion cubic feet).
Cooperation.--Wire-weight-gage readings furnished by U. S. Weather Bureau.
Revisions (water years).--WSP 741: 1932 (adjusted monthly and yearly figures only). WSP 781: 1928(M). WSP 891: Drainage area. WSP 1301: 1922-26(M).

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.7	183	6.0	3,730
3.0	312	8.0	8,180
3.5	630	12.0	20,000
4.0	1,040	18.0	42,500
5.0	2,160		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	g530	6,180	3,320	700	3,000	3,400	g510	37,000	13,900	g422	2,200	6,420
2	g280	5,200	3,070	950	2,750	3,700	3,200	34,100	14,100	2,900	2,300	3,590
3	1,980	4,640	2,500	1,900	3,600	3,200	3,200	33,500	17,500	3,000	2,400	4,100
4	2,190	4,690	2,250	2,100	2,400	2,000	4,500	32,600	19,200	600	800	6,550
5	2,060	6,960	3,720	2,300	1,800	4,200	10,000	31,700	14,500	3,500	310	5,640
6	2,590	6,930	*3,530	2,400	3,000	4,700	g18,200	29,400	13,100	4,200	1,950	3,780
7	3,250	5,860	2,910	550	2,900	5,200	g20,500	26,100	12,100	2,800	2,100	4,500
8	2,440	6,360	2,600	350	*4,600	3,900	g16,600	23,300	11,400	610	1,600	2,370
9	*1,480	5,370	3,780	3,100	3,800	3,200	g12,600	20,300	7,100	7,200	1,800	*1,480
10	*2,930	5,940	2,050	6,000	3,700	3,600	g11,300	19,200	3,400	8,100	1,500	2,860
11	2,680	4,810	700	8,800	2,700	2,600	g11,900	20,000	8,600	8,100	850	3,070
12	1,900	5,060	2,970	8,000	2,100	4,200	g15,200	19,600	8,000	6,000	940	2,600
13	2,390	3,090	2,930	11,000	3,100	3,700	g17,300	20,000	7,200	5,000	1,900	2,830
14	4,790	4,440	2,700	8,500	3,300	3,800	g16,800	22,600	5,800	8,200	1,150	2,160
15	1,250	5,140	2,620	5,200	3,800	3,700	g15,200	24,700	5,600	6,400	2,000	1,060
16	g478	5,190	2,780	4,300	3,550	3,500	g19,400	23,000	3,100	7,400	2,050	1,240
17	1,940	5,830	1,730	3,700	3,100	3,400	33,300	20,500	2,430	5,200	2,200	4,110
18	3,040	5,920	1,090	4,100	2,350	1,900	*33,000	18,200	3,230	5,600	330	5,800
19	2,940	4,630	3,530	3,800	1,850	3,500	28,400	13,600	3,140	4,800	g187	4,310
20	2,500	3,150	2,700	3,300	3,800	2,500	23,800	11,700	3,360	3,500	2,050	4,250
21	1,910	4,560	a2,600	2,400	4,200	3,800	19,000	*9,260	3,730	2,500	2,050	5,920
22	1,360	4,500	a2,800	1,500	2,200	3,100	15,500	11,000	2,850	1,750	1,900	3,800
23	1,050	4,910	a2,050	4,500	2,900	3,500	15,000	10,500	1,850	3,500	1,700	2,870
24	2,780	1,730	a1,050	3,200	3,000	3,600	16,900	9,950	1,260	3,900	1,600	7,680
25	2,730	4,770	a520	3,700	2,700	2,900	15,000	8,950	3,320	3,500	g425	7,800
26	3,490	3,370	a470	3,700	2,300	3,200	14,000	7,740	3,260	3,800	g530	6,330
27	2,930	1,260	a2,400	3,400	3,900	3,000	12,500	11,700	3,550	4,000	1,680	5,200
28	3,490	3,300	2,880	2,600	3,900	2,800	16,200	30,200	3,690	3,600	2,490	5,000
29	3,390	3,940	2,250	2,800	3,500	3,100	31,900	25,500	4,830	1,100	2,500	3,020
30	912	3,280	1,700	3,300	-------	3,600	39,900	19,400	g536	3,900	2,430	1,100
31	5,930	-------	1,150	3,000	-------	1,650	-------	13,600	-------	*2,700	4,310	-------
Total	73,610	141,010	73,350	115,150	89,800	104,150	510,810	638,900	205,636	127,782	52,232	121,440
Mean	2,375	4,700	2,366	3,715	3,097	3,360	17,030	20,610	6,855	4,122	1,685	4,048
(†)	-226	+939	-394	+768	-879	-975	+2,908	+1,577	+374	-107	-218	+37.5

Adjusted for change in reservoir contents

Mean	2,149	5,639	1,972	4,482	2,217	2,385	19,930	22,190	7,229	4,015	1,467	4,085
Cfsm	0.525	1.38	0.482	1.10	0.542	0.583	4.87	5.42	1.77	0.981	0.359	0.998
In.	0.61	1.54	0.56	1.26	0.58	0.67	5.44	6.25	1.97	1.13	0.41	1.11

	Observed			Adjusted		
Calendar year 1955:	Max 49,400	Min 166	Mean 6,689	Mean 6,743	Cfsm 1.65	In. 22.38
Water year 1955-56:	Max 39,900	Min 187	Mean 6,158	Mean 6,474	Cfsm 1.58	In. 21.53

Peak discharge (base, 34,000 cfs).--Apr. 17 (8 to 8:30 p.m.) 35,300 cfs (16.26 ft); Apr. 30 (6:30 p.m.) 40,900 cfs (17.62 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, Comerford Station Pond, Moore Reservoir, and Union Village Reservoir and, prior to April, dead storage in Moore Reservoir.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, powerplant records, and records for White River at West Hartford.
g Computed from twice-daily wire-weight-gage readings.
Note.--Doubtful or no gage-height record Jan. 27 to Mar. 31, Apr. 2-5, 21-28, June 9-16, July 2 to Aug. 18, Aug. 20-24; discharge estimated on basis of twice-daily wire-weight-gage readings, weather records, powerplant records, and records for White River at West Hartford. Stage-discharge relation affected by ice Nov. 27, Dec. 7, 10, 11, 17, 20-27, Dec. 29 to Mar. 31.

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 1956.

Gage.--Water-stage recorder. Altitude of gage is 835 ft (from topographic map).

Average discharge.--17 years, 124 cfs.

Extremes.--Maximum discharge during year, 1,630 cfs Apr. 30 (gage height, 5.98 ft); minimum, 8.8 cfs Aug. 17-19.

1939-56: 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 determination 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 table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.6	7.7	2.5	215
.9	17	3.0	334
1.2	34	4.0	635
1.5	60	5.0	1,070
2.0	122	6.0	1,640

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	179	44	22	44	58	46	1,140	260	26	22	26
2	26	138	37	21	43	58	48	746	204	24	21	21
3	21	108	40	21	43	53	60	702	310	22	18	31
4	*18	124	41	22	38	53	85	710	387	19	17	24
5	18	474	*42	23	43	50	190	660	248	18	16	17
6	17	451	38	24	*43	50	360	588	198	41	*15	15
7	76	*258	33	24	45	52	490	499	164	65	14	23
8	70	224	40	23	45	51	407	415	135	44	14	24
9	55	184	38	70	46	52	314	339	113	59	13	18
10	40	151	37	370	46	52	253	352	112	111	12	15
11	33	145	37	420	45	50	239	350	100	61	12	14
12	28	164	34	410	43	*53	324	289	84	42	11	14
13	25	149	35	450	43	52	393	286	72	39	11	14
14	23	133	35	250	43	52	407	289	64	338	10	14
15	42	130	36	190	41	50	350	294	57	350	9.9	14
16	52	118	35	150	39	47	407	237	52	160	9.4	14
17	133	145	33	120	39	51	*762	237	48	133	8.8	38
18	224	125	35	95	43	52	738	*192	*41	98	8.8	185
19	108	100	33	85	43	51	614	171	37	73	10	72
20	80	91	27	82	41	50	475	156	34	60	11	53
21	66	86	24	81	40	49	424	140	33	51	10	64
22	59	79	22	73	40	49	421	122	33	47	12	48
23	49	74	21	65	42	52	404	114	30	47	12	39
24	47	85	23	59	44	50	344	118	36	45	11	246
25	68	84	26	56	48	48	314	99	66	43	14	242
26	64	68	25	54	62	48	352	91	57	52	13	108
27	59	63	24	57	83	48	326	498	40	44	12	76
28	57	63	23	50	74	47	541	1,210	42	36	11	60
29	53	56	22	42	65	47	1,190	518	34	30	*9.7	50
30	49	48	23	46	-------	46	1,560	342	30	26	9.4	44
31	173	-------	23	45	-------	46	-------	324	-------	24	13	-------
Total	1,863	4,297	986	3,500	1,354	1,567	12,838	12,208	3,121	2,228	391.0	1,623
Mean	60.1	143	31.8	113	46.7	50.5	428	394	104	71.9	12.6	54.1
Cfsm	0.747	1.78	0.395	1.40	0.580	0.627	5.32	4.89	1.29	0.893	0.157	0.672
In.	0.86	1.99	0.46	1.62	0.63	0.72	5.93	5.64	1.44	1.03	0.18	0.75

Calendar year 1955: Max 1,580 Min 9.3 Mean 116 Cfsm 1.44 In. 19.64
Water year 1955-56: Max 1,560 Min 8.8 Mean 126 Cfsm 1.57 In. 21.25

Peak discharge (base, 950 cfs).--Apr. 30 (1:30 to 2 p.m.) 1,630 cfs (5.98 ft); May 28 (4 a.m.) 1,540 cfs (5.84 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 23, Nov. 27 to Apr. 7.

Mascoma River at Mascoma, N. H.

Location.--Lat 43°39'00", long 72°11'05", on left bank at Mascoma, Grafton County, 250 ft downstream from railroad bridge and 1,000 ft downstream from outlet of Mascoma Lake.

Drainage area.--153 sq mi.

Records available.--August 1923 to September 1956.

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

Average discharge.--33 years, 219 cfs (adjusted for storage since October 1928).

Extremes.--Maximum discharge during year, 1,830 cfs May 1 (gage height, 4.19 ft); minimum daily, 44 cfs Sept. 1, 2, 22.
1923-56: Maximum discharge, 5,840 cfs Mar. 19, 1936 (gage height, 7.50 ft), from rating curve extended above 2,500 cfs on basis of computations of flow over dams at gage heights 6.85 and 7.50 ft; minimum daily, 2 cfs Feb. 3, 1929, Sept. 1, 1940.

Remarks.--Records excellent. Flow regulated by Mascoma and Crystal Lakes and Goose and Grafton Ponds (see p. 230).

Revisions (water years).--WSP 726: Drainage area. WSP 801: 1925(M).

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to May 1				May 2 to Sept. 30			
0.5	43	2.0	396	0.5	42	2.0	412
1.0	110	3.0	900	.7	65	3.0	900
1.5	223	4.2	1,840	1.0	114	4.1	1,750
				1.5	241		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	115	107	138	119	166	235	153	*1,800	332	80	121	44
2	115	108	138	119	174	238	150	1,700	364	114	121	44
3	115	110	138	119	171	232	150	1,480	653	114	*102	58
4	*114	115	138	124	166	229	157	1,300	571	114	53	90
5	115	101	136	132	162	244	174	826	346	114	64	90
6	115	51	*136	130	160	259	212	570	322	104	99	89
7	115	*130	134	130	*160	253	263	506	319	97	95	89
8	117	121	132	130	160	244	353	470	253	84	95	75
9	119	114	132	*132	164	235	450	562	212	108	95	51
10	119	117	130	117	162	229	543	482	204	110	97	92
11	119	119	128	110	160	220	525	412	198	112	79	90
12	119	121	126	115	160	215	512	405	198	112	58	90
13	119	124	124	115	160	*210	552	412	198	100	99	89
14	119	123	123	172	162	204	605	329	198	81	99	79
15	94	124	121	285	171	199	635	350	196	336	99	46
16	*59	134	121	338	176	196	*650	379	193	431	97	53
17	123	164	119	263	178	194	758	368	188	263	88	85
18	124	194	124	212	178	186	*949	*350	185	212	52	85
19	128	186	134	196	178	184	1,060	325	182	188	61	87
20	128	176	132	194	178	178	1,010	285	162	156	97	87
21	128	171	128	191	184	176	907	253	134	150	97	77
22	128	171	126	191	188	174	746	253	*123	185	97	44
23	126	171	124	186	186	171	580	250	72	160	95	57
24	124	169	123	184	186	169	620	221	81	136	90	95
25	123	166	123	181	184	166	570	204	132	134	75	99
26	123	157	121	178	184	164	520	166	132	132	*51	104
27	123	142	121	174	184	162	548	101	132	117	92	106
28	121	142	121	171	186	160	585	998	132	72	90	104
29	119	142	121	169	207	157	971	1,430	123	82	89	106
30	119	140	119	166	-------	155	1,610	892	72	127	87	104
31	110	-------	119	162	-------	153	-------	385	-------	125	77	------
Total	3,635	4,110	3,950	5,205	5,035	6,191	17,518	18,464	6,607	4,540	2,711	2,409
Mean	117	137	127	168	174	200	584	596	220	146	87.5	80.3
(†)	-22.8	+118	-75.3	+32.0	-100	-133	+250	+95.5	-46.2	-26.8	-84.3	+9.76

Adjusted for change in reservoir contents

Mean	94.4	255	52.1	200	73.5	67.0	834	691	174	120	3.19	90.1
Cfsm	0.617	1.67	0.341	1.31	0.480	0.438	5.45	4.52	1.14	0.784	0.021	0.589
In.	0.71	1.86	0.39	1.51	0.52	0.51	6.08	5.21	1.27	0.90	0.02	0.66

	Observed			Adjusted			
Calendar year 1955:	Max 1,550	Min 51	Mean 227	Mean 216	Cfsm 1.41	In. 19.18	
Water year 1955-56:	Max 1,800	Min 44	Mean 220	Mean 221	Cfsm 1.44	In. 19.64	

* 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.

Ottauquechee River at North Hartland, Vt.

Location.--Lat 43°36'05", long 72°21'20", on left bank 300 ft upstream from highway bridge at North Hartland, Windsor County, 1 mile upstream from mouth.

Drainage area.--221 sq mi.

Records available.--October 1930 to September 1956.

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.--26 years, 402 cfs.

Extremes.--Maximum discharge during year, 7,390 cfs Apr. 30 (gage height, 9.42 ft); maximum gage height, 10.62 ft Jan. 13 (ice jam); minimum discharge, 31 cfs Sept. 6; minimum daily, 67 cfs Aug. 29.

1930-56: Maximum discharge, 24,400 cfs Sept. 21, 1938 (gage height, 17.68 ft), from rating curve extended above 6,200 cfs on basis of computations of flow over dams at gage heights 15.58, 17.68, and 21.5 ft; minimum, 2.9 cfs July 31, 1933; mirimum 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 tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 5				Apr. 6 to Sept. 30			
2.0	58	4.0	685	2.0	58	4.0	695
2.5	130	4.5	970	2.3	95	4.5	970
3.0	262	5.0	1,360	2.6	158	5.0	1,360
3.5	447	6.0	2,420	3.0	274	7.0	3,680
				3.5	465	9.0	6,700

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	88	997	240	100	110	125	155	3,010	645	132	119	158
2	92	670	225	97	120	130	160	2,210	573	124	115	212
3	95	*545	255	94	125	140	195	2,120	1,990	94	*103	355
4	80	663	260	100	110	160	350	2,090	1,590	94	91	147
5	68	1,130	282	110	110	150	900	1,850	998	106	89	109
6	80	1,080	*259	115	135	135	1,500	1,560	886	166	84	81
7	378	946	175	110	*125	135	1,300	1,320	710	209	79	172
8	282	862	230	100	125	135	1,000	1,110	596	a175	75	121
9	*214	718	205	175	125	130	850	922	532	a200	74	108
10	151	620	200	1,050	120	135	720	1,170	550	a250	78	101
11	126	630	180	a900	120	140	900	1,100	675	a220	73	92
12	123	655	200	*a1,000	125	140	1,200	952	519	a200	70	90
13	119	620	190	1,200	130	*150	1,300	984	439	a225	69	89
14	108	605	180	700	125	140	1,070	916	378	820	76	85
15	336	590	180	400	125	135	940	770	326	392	80	78
16	610	545	160	310	125	130	1,910	695	294	279	79	117
17	797	734	150	270	120	125	*3,340	705	271	357	88	492
18	892	625	170	240	120	130	2,140	609	a240	241	68	578
19	575	535	165	220	120	135	1,600	555	a210	174	83	298
20	447	504	135	200	115	135	1,320	524	a180	156	97	330
21	353	464	115	190	110	135	1,200	*461	a190	145	90	395
22	352	443	130	180	110	135	1,170	426	*192	154	92	256
23	309	375	125	170	110	150	1,080	426	171	166	*85	251
24	292	418	120	160	110	155	904	426	198	261	80	1,760
25	423	406	125	150	120	135	874	363	206	233	82	730
26	394	348	135	145	170	140	952	344	176	444	80	483
27	348	298	130	140	210	140	930	876	152	235	84	386
28	309	330	120	130	190	150	2,090	1,420	161	188	70	333
29	282	285	115	125	150	155	4,850	817	148	156	67	294
30	269	250	110	125	-------	155	5,900	670	148	136	69	261
31	1,390	-------	105	125	-------	155	-------	710	-------	127	131	-------
Total	10,382	17,691	5,371	9,131	3,710	4,340	42,800	32,121	14,345	6,859	2,620	8,962
Mean	335	596	173	295	128	140	1,427	1,036	478	221	84.5	299
Cfsm	1.52	e.70	0.783	1.33	0.579	0.633	6.46	4.69	2.16	1.00	0.382	1.35
In.	1.79	3.01	0.90	1.54	0.62	0.73	7.20	5.41	2.41	1.15	0.44	1.51

Calendar year 1955: Max 4,000 Min 11 Mean 414 Cfsm 1.87 In. 25.46
Water year 1955-56: Max 5,900 Min 67 Mean 433 Cfsm 1.96 In. 26.67

Peak discharge (base, 5,500 cfs).--Apr. 5 (12 p.m.) 6,460 cfs (8.85 ft); Apr. 30 (2:30 a.m.) 7,390 cfs (9.42 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, and records for White River at West Hartford and Black River at North Springfield.

Note.--Stage-discharge relation affected by ice Nov. 29 to Dec. 4, Dec. 7 to Apr. 12.

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 1956. 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.--28 years, 403 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 5,150 cfs Apr. 29 (gage height, 6.27 ft); minimum daily, 61 cfs Aug. 16.
1928-56: Maximum discharge, 14,000 cfs Mar. 19, 1936 (gage height, 10.92 ft), from rating curve extended above 6,700 cfs on basis of computations of flow over dam at gage heights 10.49 and 10.92 ft; maximum gage height, 11.80 ft Mar. 12, 1936 (ice jam); minimum daily discharge, 30 cfs Sept. 26, 1948.
Remarks.--Records excellent except those for periods of ice effect and doubtful or no gage-height record, which are fair. Flow regulated by mills above station and by Sunapee Lake (see p. 230).
Revisions (water years).--WSP 711: 1930(M). WSP 756: Drainage area.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.1	45	3.0	885
1.3	86	4.0	1,750
1.6	175	5.0	3,020
2.0	325	7.0	6,540
2.5	565		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	730	280	105	180	230	240	3,480	643	128	94	70
2	91	524	260	100	180	210	260	2,600	553	128	89	77
3	97	407	280	105	190	230	300	2,340	1,100	108	86	94
4	86	520	290	105	190	270	450	2,240	1,080	110	84	102
5	81	1,990	310	105	195	260	900	2,140	770	105	76	89
6	91	1,720	290	110	195	250	1,450	1,790	625	*146	86	79
7	178	1,230	220	105	202	240	1,650	1,550	518	169	77	91
8	257	1,060	250	100	202	235	1,300	1,350	458	146	77	81
9	223	864	230	800	202	230	1,050	1,160	444	159	74	81
10	182	685	230	2,300	202	230	900	1,160	444	220	77	79
11	143	667	200	1,800	202	230	1,000	1,040	607	209	65	72
12	125	750	185	1,500	199	235	1,300	915	480	182	72	70
13	113	737	185	1,700	195	240	1,550	878	407	216	69	65
14	113	789	175	1,000	195	240	1,700	763	361	600	65	65
15	339	878	180	650	195	235	1,480	679	321	474	68	63
16	474	776	160	500	*195	225	2,800	631	269	333	61	81
17	827	822	160	400	195	210	4,200	613	249	329	65	*134
18	803	692	165	360	195	220	3,000	553	223	277	61	195
19	536	577	165	330	199	225	2,300	512	199	216	107	172
20	448	518	135	300	199	230	1,900	416	182	178	97	159
21	345	480	130	290	195	*245	1,600	365	169	146	81	172
22	277	453	135	260	185	255	1,750	337	156	143	84	127
23	238	407	130	240	180	260	1,600	337	143	156	79	131
24	231	435	130	230	180	250	1,400	373	146	146	77	464
25	*325	444	130	210	200	240	*1,260	325	159	140	72	435
26	309	399	140	205	270	230	1,400	301	143	140	70	301
27	277	369	130	200	320	230	1,280	665	143	149	74	223
28	245	373	120	195	290	225	2,350	1,540	156	128	68	172
29	220	330	115	190	250	225	4,660	1,020	153	119	65	137
30	213	300	110	185	-------	230	4,820	*802	125	113	*65	125
31	623	-------	110	185	-------	230	-------	750	-------	100	74	-------
Total	8,612	20,926	5,730	14,865	5,977	7,295	51,850	33,625	11,426	5,913	2,359	4,206
Mean	278	698	185	480	206	235	1,728	1,085	381	191	76.1	140
(†)	+24.2	-1.54	-49.3	+44.4	-24.7	-31.7	+140	+7.84	-21.2	-23.5	-50.8	-25.1

Adjusted for change in contents in Sunapee Lake

Mean	292	696	136	524	[illegible]	204	1,869	1,093	360	164	25.3	115
Cfsm	1.09	2.59	0.506	1.95	0.673	0.758	6.95	4.06	1.34	0.610	0.094	0.428
In.	1.25	2.89	0.58	2.25	0.73	0.87	[illegible]	4.68	1.49	0.70	0.11	0.48

	Observed			Adjusted		
Calendar year 1955:	Max 4,840	Min 56	Mean 427	Mean 424	Cfsm 1.58	In. 21.42
Water year 1955-56:	Max 4,820	Min 61	Mean 472	Mean 470	Cfsm 1.75	In. 23.78

Peak discharge (base, 3,000 cfs).--Apr. 17 (about 9 p.m.) about 4,500 cfs; Apr. 29 (9:30 a.m.) 5,150 cfs (6.27 ft).
* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Sunapee Lake.
Note.--Doubtful or no gage-height record Dec. 22 to Apr. 26; discharge estimated on basis of recorder graph, 4 discharge measurements, weather records, and records for Cold River at Drewsville, N. H., Black River at North Springfield, Vt., and Saxtons River at Saxtons River, Vt. Stage-discharge relation affected by ice Nov. 29 to Jan. 10, Jan. 15 to Feb. 6, Feb. 22 to Apr. 3.

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 1956. 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.--27 years, 286 cfs.

Extremes.--Maximum discharge during year, 5,500 cfs Apr. 29 (gage height, 10.51 ft); minimum not determined; minimum daily, 23 cfs Aug. 18, 29.
1929-56: 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 excellent except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by mills above station.

Revisions (water years).--WSP 756: Drainage area. WSP 781: 1931(M), 1934(M).

Rating tables, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 28		Apr. 29 to Sept. 30			
2.1	45	1.9	21	4.0	535
2.5	100	2.2	53	6.0	1,560
3.0	205	2.5	97	8.0	3,040
4.0	535	3.0	205	10.0	4,940
6.0	1,560				
8.0	3,040				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	865	140	80	83	93	112	2,360	390	57	58	60
2	58	664	135	69	92	100	127	1,660	355	54	58	81
3	51	519	150	79	92	105	150	1,620	1,450	55	55	159
4	52	738	155	74	83	115	223	1,640	1,180	42	49	74
5	51	1,410	170	78	96	105	614	1,450	700	44	33	85
6	59	1,110	150	82	92	100	950	1,280	515	*82	37	80
7	336	860	120	74	90	100	950	1,160	411	100	38	116
8	178	780	*145	70	90	100	718	975	330	71	36	90
9	141	607	135	330	90	98	539	810	278	105	38	68
10	93	515	135	1,000	90	97	519	975	309	173	31	62
11	83	527	125	750	90	100	669	965	442	110	32	56
12	73	559	125	700	95	105	910	850	316	95	26	45
13	79	523	125	800	100	105	965	835	260	154	34	51
14	72	692	120	500	97	100	875	692	229	1,070	27	47
15	852	651	125	300	95	97	855	567	207	626	30	47
16	845	527	110	240	*96	95	1,700	511	181	352	26	72
17	1,720	579	110	200	92	92	2,630	474	166	326	a28	*192
18	1,120	470	125	180	90	95	1,650	422	110	215	a23	275
19	885	411	110	165	90	100	1,300	330	81	178	a50	145
20	595	383	90	150	88	100	1,130	280	78	140	a45	211
21	450	355	80	140	86	100	1,050	256	75	122	a40	205
22	380	327	92	130	85	110	*1,030	244	71	120	a36	157
23	314	299	88	120	84	105	955	251	68	134	a33	119
24	296	341	86	115	84	100	760	253	68	122	a31	616
25	*344	314	90	110	95	100	746	219	69	101	a30	507
26	320	275	94	105	130	99	820	208	58	102	a24	308
27	311	242	90	100	150	98	838	473	63	91	a27	216
28	281	215	85	95	125	98	1,950	705	92	75	a25	178
29	260	150	80	92	105	110	3,970	531	70	65	*23	205
30	260	155	80	95	-------	110	4,210	*422	59	69	24	148
31	1,810	-------	80	90	-------	105	-------	414	-------	64	34	-------
Total	12,425	16,063	3,545	7,113	2,775	3,137	33,915	23,832	8,681	5,114	1,081	4,675
Mean	401	535	114	229	95.7	101	1,130	769	289	165	34.9	156
Cfsm	2.54	3.39	0.722	1.45	0.606	0.639	7.15	4.87	1.83	1.04	0.221	0.987
In.	2.92	3.78	0.83	1.67	0.65	0.74	7.98	5.61	2.04	1.20	0.25	1.10

Calendar year 1955: Max 2,880 Min 20 Mean 323 Cfsm 2.04 In. 27.75
Water year 1955-56: Max 4,210 Min 23 Mean 334 Cfsm 2.11 In. 28.77

Peak discharge (base, 3,600 cfs).--Apr. 29 (4 a.m.) 5,500 cfs (10.51 ft).
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Saxtons River at Saxtons River, Williams River at Brockway Mills, and Ottauquechee River near North Hartland.
Note.--Stage-discharge relation affected by ice Nov. 29 to Mar. 31.

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 1956.

Gage.--Water-stage recorder. Altitude of gage is 430 ft (from topographic map).

Average discharge.--16 years, 170 cfs.

Extremes.--Maximum discharge during year, 4,850 cfs Apr. 29 (gage height, 9.55 ft), from rating curve extended above 2,100 cfs by logarithmic plotting; minimum, 8.3 cfs Aug. 17, 18.
1940-56: 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 determination at gage height 13.31 ft; minimum not determined, occurred Dec. 11, 1941, during period of ice effect; minimum daily, 3.6 cfs Aug. 27, 1949.
Flood in September 1938 reached a stage of 22.7 ft, from floodmarks.

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

Revisions (water years).--WSP 1031: 1943-44(P). WSP 1301: 1941-42(M).

Rating tables, water year 1955-56, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 16)

Oct. 1 to Apr. 16				Apr. 17 to Sept. 30			
1.2	19	3.0	359	0.9	7.8	2.5	237
1.5	39	4.0	700	1.1	14	3.0	390
1.8	72	5.0	1,120	1.3	25	4.0	770
2.1	120	7.0	2,190	1.6	53	6.0	1,890
2.5	215			2.0	119	8.0	3,410

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	544	102	32	43	55	56	1,270	151	35	17	26
2	25	365	100	27	44	52	65	1,000	147	32	17	24
3	22	294	107	25	45	57	92	1,090	1,010	31	16	46
4	21	591	110	27	46	70	152	1,040	498	29	15	25
5	20	1,200	130	34	48	65	418	860	314	28	14	18
6	29	816	110	41	47	63	712	730	240	*62	14	16
7	206	572	80	40	46	61	676	628	196	66	13	26
8	96	490	115	36	46	58	448	498	162	39	13	23
9	69	365	110	240	47	58	314	413	140	42	12	18
10	50	306	105	600	47	59	306	544	180	73	12	16
11	43	347	100	425	46	57	454	430	279	42	10	15
12	38	387	90	470	46	58	825	403	169	33	10	15
13	34	335	75	400	47	57	639	397	138	56	10	14
14	37	598	68	200	46	56	625	326	119	270	10	16
15	797	428	65	140	47	56	620	274	97	96	9.4	26
16	718	374	62	110	47	56	1,570	251	81	57	8.9	33
17	1,660	438	59	90	46	56	2,320	229	70	64	8.6	*104
18	739	312	56	80	46	56	1,190	198	60	45	8.6	108
19	690	263	54	73	47	58	895	184	56	36	60	45
20	419	237	50	70	47	60	828	169	53	31	33	58
21	297	218	47	65	46	62	784	155	50	29	21	58
22	232	193	42	60	44	*66	851	144	53	32	18	38
23	188	176	37	55	42	65	702	149	50	38	*16	33
24	178	221	33	52	41	58	544	149	48	42	15	203
25	212	193	42	50	45	57	*562	127	45	31	15	95
26	*173	163	54	47	65	56	573	117	41	31	13	57
27	163	140	54	45	82	56	700	355	39	26	12	43
28	140	145	45	44	70	55	1,880	333	48	24	11	38
29	130	125	37	43	62	55	*2,810	204	40	21	10	34
30	150	110	37	42	-------	55	2,600	*174	37	19	11	31
31	1,510	-------	36	42	-------	56	-------	167	-------	18	16	-------
Total	9,115	10,946	2,212	3,705	1,421	1,809	25,011	13,008	4,611	1,478	469.5	1,302
Mean	294	365	71.4	120	49.0	58.4	834	420	154	47.7	15.1	43.4
Cfsm	2.85	3.54	0.693	1.17	0.476	0.567	8.10	4.08	1.50	0.463	0.147	0.421
In.	3.29	3.95	0.80	1.34	0.51	0.65	9.03	4.70	1.66	0.53	0.17	0.47

Calendar year 1955: Max 1,700 Min 5.7 Mean 190 Cfsm 1.84 In. 25.03
Water year 1955-56: Max 2,810 Min 8.6 Mean 205 Cfsm 1.99 In. 27.10

Peak discharge (base, 2,600 cfs).--Oct. 31 (7 a.m.) 2,730 cfs (7.90 ft); Apr. 17 (1 a.m.) 3,250 cfs (7.80 ft); Apr. 29 (1 a.m.) 4,850 cfs (9.55 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 29 to Apr. 3.

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 1956.

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

Average discharge.--16 years, 121 cfs.

Extremes.--Maximum discharge during year, 3,080 cfs Oct. 31 (gage height, 8.72 ft), from rating curve extended above 1,800 cfs on basis of slope-area determinations at gage heights 10.51 and 11.37 ft; minimum, 4.6 cfs Aug. 18; minimum daily, 4.8 cfs Aug. 18. 1940-56: Maximum discharge, 5,430 cfs June 1, 1952 (gage height, 11.37 ft), from rating curve extended above 1,800 cfs as described above; 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, 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 16

2.3	11	4.0	276
2.4	16	5.0	620
2.7	40	6.0	1,100
3.0	76	7.0	1,750
3.5	160		

Apr. 17 to Sept. 30

2.1	4.8
2.2	7.7
2.4	16

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

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	442	94	27	35	45	46	758	96	20	9.4	16
2	16	276	90	22	35	42	51	584	89	17	9.1	*17
3	13	216	92	21	36	48	70	620	616	16	8.4	30
4	12	503	100	26	38	58	130	596	313	16	8.4	17
5	11	1,020	110	32	40	50	360	516	198	15	8.4	12
6	20	708	*97	35	40	48	526	421	152	47	8.0	9.4
7	140	494	80	32	39	47	488	366	125	*47	7.7	10
8	77	414	95	29	38	47	307	293	104	28	7.7	12
9	59	304	90	230	39	46	216	250	90	30	6.5	9.1
10	40	250	90	500	39	45	228	319	118	40	6.2	7.7
11	32	284	80	360	39	45	344	263	184	27	5.9	7.4
12	27	307	70	400	38	44	467	258	114	20	5.9	7.7
13	25	284	65	360	39	45	477	279	89	32	8.4	7.7
14	25	643	60	156	39	46	491	228	73	133	8.4	10
15	601	418	55	116	39	46	459	189	61	57	7.1	24
16	693	350	52	85	39	45	1,260	176	52	36	5.9	28
17	1,510	407	50	75	39	44	1,510	154	46	29	5.4	51
18	552	279	48	65	38	44	816	137	40	25	4.8	53
19	547	232	45	60	38	44	604	127	36	20	43	29
20	310	211	43	59	39	48	533	118	35	17	26	43
21	214	193	40	54	39	50	502	106	33	16	15	*42
22	164	174	36	50	39	*51	548	98	34	23	14	26
23	137	156	32	46	*38	51	463	104	30	23	11	22
24	132	180	27	43	37	46	350	104	29	24	9.4	105
25	158	162	43	41	43	45	359	87	28	19	9.1	59
26	*132	141	50	39	60	44	366	82	24	16	7.7	36
27	128	127	45	37	70	43	416	170	26	14	6.8	28
28	111	128	37	36	55	43	1,150	170	31	13	6.2	24
29	103	113	29	36	50	43	*1,570	*125	25	11	5.6	21
30	131	100	29	35	-------	44	1,670	108	22	9.8	5.9	19
31	1,500	-------	29	35	-------	45	-------	104	-------	9.5	11	-------
Total	7,640	9,516	1,903	3,142	1,197	1,432	16,777	7,910	2,913	850.3	3C2.3	783.0
Mean	246	317	61.4	101	41.3	46.2	559	255	97.1	27.4	9.75	26.1
Cfsm	3.41	4.39	0.850	1.40	0.572	0.640	7.74	3.53	1.34	0.380	0.135	0.361
In.	3.94	4.90	0.98	1.62	0.62	0.74	8.64	4.07	1.50	0.44	0.16	0.40

Calendar year 1955: Max 1,510 Min 2.4 Mean 139 Cfsm 1.93 In. 26.13
Water year 1955-56: Max 1,670 Min 4.8 Mean 149 Cfsm 2.06 In. 28.01

Peak discharge (base, 1,750 cfs).--Oct. 17 (11:30 a.m.) 2,130 cfs (7.54 ft); Oct. 31 (6 a.m.) 3,080 cfs (8.72 ft); Apr. 16 (10:30 p.m.) 2,450 cfs (7.94 ft); Apr. 29 (12:30 a.m.) 2,620 cfs (8.15 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 30 to Jan. 13, Jan. 16-26, Jan. 30 to Mar. 13 Mar. 15-22, 24-29, Mar. 31 to Apr. 5.

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 1956.
Gage.--Water-stage recorder. Datum of gage is 218.63 ft above mean sea level, datum of 1929.
Average discharge.--14 years, 9,552 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 66,700 cfs Apr. 30 (gage height, 23.99 ft); minimum daily, 222 cfs Oct. 2.
1942-56: Maximum discharge, 97,000 cfs Mar. 27, 1953 (gage height, 30.37 ft); minimum daily, 115 cfs Aug. 31, 1952.
Maximum stage known, 43.8 ft Mar. 19, 1936, from floodmarks.
Remarks.--Records excellent except those for periods of ice effect or doubtful 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. 230), and other reservoirs (combined usable capacity, about 19½ billion cubic feet).

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

4.0	202	7.0	4,230
4.5	488	10.0	11,700
5.0	930	15.0	28,500
5.5	1,510	20.0	48,700
6.0	2,270	25.0	71,200

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	746	11,700	4,480	600	3,980	4,690	2,090	57,500	15,600	732	3,580	5,820
2	222	10,900	4,330	1,250	3,600	4,800	4,100	47,400	17,000	3,820	3,620	3,800
3	2,660	7,890	3,080	2,500	4,000	5,400	4,090	44,500	23,600	3,400	2,360	4,730
4	2,790	8,580	4,010	2,800	3,800	2,570	6,480	43,700	28,400	803	478	7,550
5	2,310	15,200	5,490	2,800	1,920	5,900	11,000	41,700	20,900	4,340	310	*6,340
6	2,700	15,900	*5,560	2,700	4,770	6,100	25,800	38,000	16,100	5,350	2,170	4,340
7	5,140	12,900	4,610	1,450	4,140	5,940	30,200	34,100	15,000	2,050	2,630	5,350
8	3,490	12,100	3,270	540	4,030	5,900	25,200	30,200	13,800	*1,680	2,650	2,240
9	2,370	11,400	3,780	5,000	5,200	4,130	18,300	26,200	12,500	5,900	2,810	1,670
10	4,160	8,210	2,420	10,500	4,940	4,600	16,300	24,700	5,070	9,090	2,280	4,200
11	3,650	10,900	1,770	15,500	3,620	3,570	18,900	25,300	10,100	8,800	630	3,430
12	2,400	9,320	4,470	15,000	3,700	5,000	22,900	24,700	11,100	8,760	510	3,330
13	3,480	7,810	3,890	18,500	3,920	5,600	26,500	24,300	9,810	5,920	2,580	3,310
14	5,800	7,880	4,080	14,500	4,210	5,200	24,700	25,700	9,570	8,790	1,160	1,610
15	4,680	8,820	3,910	11,500	4,450	5,000	23,800	27,900	7,400	12,900	2,310	1,630
16	5,250	10,200	4,040	8,010	4,600	5,120	29,200	27,200	6,060	8,520	2,020	1,080
17	9,300	8,640	2,000	7,490	4,930	3,900	51,700	24,800	2,960	7,630	3,070	5,920
18	7,690	10,500	1,180	5,820	3,780	1,900	49,200	21,600	3,970	6,590	658	7,070
19	6,490	9,790	4,370	5,450	1,760	5,800	42,000	17,900	4,700	7,030	476	6,520
20	6,020	5,560	3,300	5,200	4,810	3,300	34,300	13,900	3,730	5,100	2,640	5,450
21	5,200	7,190	3,430	3,760	4,870	4,400	29,700	12,100	4,240	3,670	2,480	*6,520
22	2,070	6,690	3,040	2,470	3,000	*4,300	24,500	11,600	4,450	1,780	2,320	6,250
23	2,010	7,630	2,280	5,500	4,210	4,700	23,100	11,700	2,020	3,470	2,160	2,360
24	4,260	3,590	1,300	4,790	4,260	4,500	23,200	12,200	1,500	4,290	2,300	7,850
25	4,660	6,990	488	4,350	3,600	3,300	22,000	11,600	4,170	4,890	559	12,400
26	*5,120	6,830	1,350	4,890	3,190	4,500	21,300	11,500	5,120	4,760	596	10,500
27	5,520	2,230	3,600	4,780	4,810	4,800	18,900	8,800	4,770	5,670	2,350	6,450
28	5,730	5,800	3,350	4,060	5,780	4,030	*26,100	33,200	4,840	5,200	2,920	7,060
29	4,660	5,500	3,000	2,540	5,170	4,460	52,300	*32,100	5,570	772	2,990	3,460
30	3,260	5,000	2,800	4,620	-------	4,270	63,800	25,500	1,760	4,100	2,810	637
31	11,300	-------	1,750	4,550	-------	2,820	-------	18,300	-------	3,150	5,160	-------
Total	135,138	261,650	100,428	183,420	119,050	140,500	771,660	809,900	275,810	158,957	65,587	148,877
Mean	4,359	8,722	3,240	5,917	4,105	4,532	25,720	26,130	9,194	5,128	2,116	4,963
(†)	-234	+1,056	-519	+844	-1,004	-1,139	+3,298	+1,680	+307	-160	-353	+22.1

Adjusted for change in reservoir contents

Mean	4,125	9,778	2,721	6,761	3,101	3,393	29,020	27,810	9,500	4,968	1,763	4,985
Cfsm	0.751	1.78	0.495	1.23	0.565	0.618	5.28	5.06	1.73	0.904	0.321	0.908
In.	0.87	1.99	0.57	1.42	0.61	0.71	5.89	5.84	1.93	1.04	0.37	1.01

	Observed			Adjusted				
Calendar year 1955:	Max 63,900	Min 152	Mean 9,028	Mean 9,089	Cfsm 1.65	In. 22.42
Water year 1955-56:	Max 63,800	Min 222	Mean 8,664	Mean 8,978	Cfsm 1.63	In. 22.25

Peak discharge (base, 44,000 cfs).--Apr. 17 (6:30 p.m.) 54,400 cfs (21.26 ft); Apr. 30 (3:30 to 6 p.m.) 66,700 cfs (23.99 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 (dead storage October to March, live storage thereafter), Comerford Station Pond, Union Village Reservoir, 4 reservoirs in Mascoma River basin, and Sunapee Lake.
Note.--Stage-discharge relation affected by ice Dec. 17, 24, Dec. 26 to Jan. 15 (no gage-height record Dec. 27 to Jan. 11; discharge estimated on basis of weather records, recorded range in stage, powerplant records, and records for Saxtons River at Saxtons River, Vt). Doubtful gage height record Feb. 2-4, 9, 12, 16, 25, Mar. 2, 3, 5, 6, 10, 12-15, 17, 19-27; discharge computed on basis of recorded graph, powerplant records, and records for Saxtons River at Saxtons River, Vt.

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 1956.

Gage.--Water-stage recorder. Altitude of gage is 375 ft (from topographic map).

Average discharge.--16 years, 118 cfs.

Extremes.--Maximum discharge during year, 2,290 cfs Apr. 29 (gage height, 7.21 ft); minimum, 5.7 cfs Aug. 28-30.
1940-56: 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.
Revision.--The maximum discharge for the water year 1952 has been corrected to 2,770 cfs Nov. 3, 1951 (gage height, 7.77 ft), and supplemental peak for the water year 1952 has been revised to 1,940 cfs June 1 (gage height, 7.02 ft), superseding figure published in WSP 1231.

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.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	5.4	4.0	248
1.6	11	4.5	395
2.0	23	5.0	605
2.5	48	5.5	870
3.0	91	6.0	1,220
3.5	155	7.0	2,060

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	241	64	20	35	45	48	1,010	106	17	8.2	8.2
2	19	162	59	16	35	41	56	700	114	16	9.5	20
3	17	124	74	16	38	45	74	623	412	14	9.0	17
4	15	235	76	17	38	55	131	574	329	13	8.2	17
5	15	665	77	18	39	50	334	507	210	13	8.0	20
6	17	596	*68	19	38	49	522	415	149	24	7.8	15
7	40	415	43	19	37	48	542	353	114	*33	7.8	14
8	46	321	53	19	38	47	399	293	91	25	7.8	11
9	42	238	47	280	40	46	307	244	75	22	7.8	8.6
10	31	191	51	680	39	45	293	255	86	26	7.6	7.6
11	26	214	51	515	38	45	380	238	158	21	7.6	6.8
12	23	255	45	491	40	47	495	214	100	17	7.4	8.4
13	21	253	44	533	39	49	546	202	78	20	7.4	11
14	21	437	45	301	38	50	574	179	62	81	7.4	25
15	44	374	46	218	38	50	554	158	49	46	7.2	51
16	107	295	40	162	37	46	1,150	146	41	29	7.0	33
17	374	353	40	126	37	45	1,620	140	36	28	6.8	44
18	278	250	42	88	37	45	1,100	120	32	23	6.7	51
19	200	200	39	65	*38	46	816	112	30	18	9.2	32
20	149	172	31	64	39	47	628	102	28	16	15	32
21	103	150	30	60	38	49	564	85	27	15	11	*35
22	83	132	26	53	35	54	616	77	28	17	15	25
23	78	115	24	50	34	54	569	82	26	16	12	22
24	76	138	25	46	33	*51	459	93	24	15	*9.5	89
25	99	128	29	45	35	50	423	76	22	13	8.0	63
26	88	106	30	43	54	47	459	68	20	12	7.0	38
27	77	88	30	42	65	45	450	141	20	11	6.2	28
28	*68	98	27	40	55	44	976	202	23	10	5.9	24
29	61	80	24	39	50	45	*1,720	*146	20	9.2	5.7	21
30	59	71	24	38	-------	46	1,820	120	18	8.6	5.9	18
31	319	-------	22	37	-------	47	-------	115	-------	8.4	7.2	-------
Total	2,616	7,097	1,326	4,160	1,157	1,473	18,625	7,790	2,528	637.2	256.8	795.6
Mean	84.4	237	42.8	134	39.9	47.5	621	251	84.3	20.6	8.28	26.5
Cfsm	1.02	2.87	0.518	1.62	0.482	0.574	7.51	3.04	1.02	0.249	0.100	0.320
In.	1.18	3.19	0.60	1.87	0.52	0.66	8.38	3.50	1.14	0.29	0.12	0.36

Calendar year 1955: Max 748 Min 5.7 Mean 117 Cfsm 1.41 In. 19.15
Water year 1955-56: Max 1,820 Min 5.7 Mean 132 Cfsm 1.60 In. 21.81

Peak discharge (base, 1,000 cfs).--Apr. 17 (2 a.m.) 1,890 cfs (6.83 ft), Apr. 29 (1 to 2 a.m.) 2,290 cfs (7.21 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 7, 8, 12-21, Jan. 4-10, Jan. 18 to Feb. 1, Feb. 3, 4, 16-19, Feb. 21 to Mar. 31.

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 1956.

Gage.--Water-stage recorder. Altitude of gage is 640 ft (from topographic map).

Average discharge.--10 years, 379 cfs.

Extremes.--Maximum discharge during year, 8,020 cfs Apr. 29 (gage height, 10.14 ft); minimum, 7.8 cfs Aug. 18.
1946-56: 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 determination 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 29

4.0	34	6.0	750
4.3	69	7.0	1,680
4.6	122	8.0	3,060
5.0	244	9.0	5,010
5.5	460	10.0	7,600

Apr. 30 to Sept. 30

3.6	8.4	4.5	105
3.7	12	5.0	243
3.9	24	5.5	460
4.2	52		

Note.--Same as preceding table above 5.5 ft.

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	1,230	170	47	85	115	110	2,960	435	36	28	42
2	68	687	150	42	85	105	118	2,340	365	32	26	51
3	54	515	160	38	86	120	150	2,580	1,730	28	23	156
4	46	870	200	38	91	140	237	2,760	1,110	25	21	75
5	43	1,470	240	38	97	120	690	2,440	608	25	19	44
6	90	1,270	220	41	94	115	1,430	2,130	445	74	18	36
7	1,210	964	150	46	92	110	1,480	1,880	334	*133	17	58
8	446	884	160	51	94	110	948	1,480	258	70	16	63
9	286	632	145	250	94	105	687	1,150	207	60	16	41
10	189	500	130	1,600	94	105	590	1,950	276	204	14	34
11	142	510	120	1,400	94	105	674	1,500	628	107	13	30
12	122	608	110	1,200	94	105	908	1,470	324	66	14	27
13	107	608	98	1,100	93	105	1,050	1,800	226	106	12	26
14	148	1,590	96	530	93	100	964	1,230	189	1,010	14	29
15	2,800	1,200	91	360	93	100	972	852	143	367	12	87
16	2,960	799	87	280	95	100	2,170	701	110	175	11	130
17	4,970	998	80	190	100	100	3,210	650	90	164	10	551
18	2,610	650	75	160	98	100	2,050	490	71	110	9.1	585
19	1,950	490	70	145	95	100	1,570	410	60	75	206	201
20	1,160	420	65	140	95	105	1,250	365	55	58	124	*280
21	764	374	60	130	95	105	1,170	312	51	50	60	253
22	545	334	55	120	95	110	1,200	280	51	52	*44	148
23	428	300	51	110	95	*110	972	313	52	65	37	121
24	397	420	47	105	*92	105	750	360	48	82	32	795
25	670	361	60	100	115	105	768	262	45	60	38	387
26	490	264	80	95	150	105	868	223	40	68	31	223
27	*433	230	86	90	190	100	*960	846	38	55	25	156
28	352	240	70	88	150	100	3,200	*1,010	59	45	*22	126
29	304	210	57	86	130	100	5,670	540	51	40	19	105
30	316	190	54	85	-------	100	6,270	410	39	36	18	88
31	2,640	-------	51	85	-------	105	-------	480	-------	31	23	-------
Total	26,814	19,818	3,288	8,790	2,974	3,310	43,086	36,134	8,138	3,509	972.1	4,948
Mean	865	661	106	284	103	107	1,436	1,166	271	113	31.4	165
Cfsm	4.83	3.69	0.592	1.59	0.575	0.598	8.02	6.51	1.51	0.631	0.175	0.922
In.	5.57	4.12	0.68	1.83	0.62	0.69	8.95	7.51	1.69	0.73	0.20	1.03

Calendar year 1955: Max 4,970 Min 8.4 Mean 426 Cfsm 2.38 In. 32.30
Water year 1955-56: Max 6,270 Min 9.1 Mean 442 Cfsm 2.47 In. 33.62

Peak discharge (base, 4,500 cfs).--Oct. 17 (4 p.m.) 6,220 cfs (9.50 ft); Apr. 29 (3 a.m.) 8,020 cfs (10.14 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Jan. 12, Jan. 15 to Apr. 2, Apr. 5, 6.

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 1956.

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.--32 years, 624 cfs.

Extremes.--Maximum discharge during year, 14,600 cfs Oct. 15, Apr. 29 (gage height, 11.42 ft); minimum, 23 cfs Aug. 18.

1919-23, 1928-56: 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 determination at gage height 19.3 ft and slope-area determinations 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.

Revisions (water years).--WSP 756: Drainage area. WSP 1231: 1920-21(M), 1922-23, 1929-31(M).

Rating tables, water year 1955-56, 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			
4.1	62	6.0	1,370	3.8	23	5.5	905
4.4	170	7.0	2,710	3.9	38	6.0	1,410
4.7	314	8.0	4,550	4.1	73	7.0	2,710
5.0	495	9.0	6,920	4.3	138	8.0	4,550
5.5	875	11.0	13,300	4.5	225	9.0	6,920
				5.0	505	11.0	13,300

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	2,440	300	80	140	210	195	5,320	714	69	48	50
2	112	1,400	270	73	140	200	215	4,020	590	62	45	69
3	88	1,030	304	67	145	220	260	4,210	3,060	56	43	161
4	75	1,540	348	66	155	260	410	4,660	1,960	52	40	146
5	65	3,410	412	66	165	240	1,250	4,160	1,130	50	37	79
6	75	2,740	370	72	160	225	2,300	3,410	798	84	36	58
7	1,630	2,050	*262	80	155	215	2,440	2,930	598	*212	36	54
8	776	1,770	270	90	160	210	1,680	2,380	460	134	34	89
9	495	1,330	250	370	160	205	1,180	1,850	380	104	32	66
10	331	1,020	230	2,650	160	200	1,060	2,840	392	250	31	52
11	257	1,010	210	2,290	160	200	1,280	2,390	1,030	201	29	46
12	205	1,140	195	2,190	160	200	1,680	2,170	605	123	28	43
13	179	1,200	175	1,930	160	195	1,940	2,600	416	122	29	43
14	204	3,130	150	929	160	195	1,800	1,970	330	1,230	29	43
15	8,100	2,400	160	658	160	190	1,810	1,410	270	605	29	72
16	6,710	1,590	150	500	160	190	4,320	1,160	212	301	*26	115
17	10,300	2,050	140	350	*170	190	6,630	1,070	176	225	24	403
18	4,900	1,340	130	270	160	190	3,660	824	146	184	23	876
19	3,640	1,010	120	230	160	200	2,840	698	119	130	119	321
20	2,190	850	110	220	160	205	2,240	620	104	97	210	*274
21	1,470	726	100	205	160	220	2,090	533	97	86	100	390
22	1,060	642	95	190	160	230	2,260	479	97	86	71	216
23	807	544	90	180	155	*238	1,920	472	94	94	58	167
24	702	758	80	165	150	224	1,460	575	91	127	54	847
25	1,100	695	105	155	165	215	1,380	440	86	108	50	604
26	875	530	145	150	255	210	1,650	380	81	91	50	330
27	*790	430	150	145	325	205	*1,600	912	75	89	43	225
28	650	440	120	145	280	200	5,610	*1,550	86	73	37	180
29	565	385	100	130	250	195	10,500	887	97	64	34	151
30	579	320	95	140	-------	190	11,900	658	75	58	34	127
31	5,760	-------	90	140	-------	190	-------	698	-------	52	37	-------
Total	54,806	39,920	5,726	14,926	5,050	6,457	79,540	58,276	14,369	5,219	1,496	6,297
Mean	1,768	1,331	185	481	174	208	2,651	1,880	479	168	48.3	210
Cfsm	5.74	4.32	0.601	1.56	0.565	0.675	8.61	6.10	1.56	0.545	0.157	0.682
In.	6.62	4.82	0.69	1.80	0.61	0.78	9.60	7.04	1.74	0.63	0.18	0.76

Calendar year 1955: Max 10,300 Min 17 Mean 770 Cfsm 2.50 In. 33.93
Water year 1955-56: Max 11,900 Min 23 Mean 798 Cfsm 2.59 In. 35.27

Peak discharge (base, 8,800 cfs).--Oct. 15 (6:30 p.m.) 14,600 cfs (11.42 ft); Oct. 31 (8 a.m.) 9,210 cfs (9.76 ft); Apr. 17 (1:30 a.m.) 8,800 cfs (9.63 ft); Apr. 29 (2:30 a.m.) 14,600 cfs (11.42 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 28 to Dec. 2, Dec. 8 to Jan. 10, Jan. 16 to Mar. 22, Mar. 25 to Apr. 6.

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 1956.

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.--12 years (1944-56), 11,020 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 79,600 cfs Apr. 30 (elevation, 203.14 ft); minimum daily, 270 cfs Sept. 30.
1936, 1938, 1944-56: Maximum discharge, 176,000 cfs Mar. 19, 20, 1936 (gage height, 128.8 ft, datum then in use), from rating curve extended above 69,000 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. 230), 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 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	920	16,500	5,610	1,100	4,000	6,500	2,000	71,900	16,500	751	3,610	6,830
2	285	15,100	5,240	1,400	4,800	6,200	5,240	58,200	18,500	3,720	3,430	2,980
3	3,240	12,100	3,150	3,100	4,900	5,800	5,600	52,500	25,900	3,640	2,310	3,900
4	3,200	12,200	4,730	3,000	3,300	2,500	6,880	52,500	32,500	1,120	718	7,000
5	3,140	23,200	7,000	3,200	1,400	7,270	13,400	50,000	23,600	*4,640	285	7,790
6	4,820	23,000	7,540	3,100	6,060	7,000	27,300	45,600	17,800	5,830	2,910	4,490
7	6,780	18,000	6,800	1,600	4,650	7,500	32,600	41,100	16,500	1,870	3,370	5,980
8	3,340	16,100	4,950	1,000	5,980	6,950	31,200	36,800	16,200	860	2,710	2,210
9	3,330	13,900	4,750	6,400	5,550	5,000	22,800	31,800	15,300	6,380	2,880	1,020
10	4,700	12,800	*2,270	12,000	6,240	4,130	20,300	28,800	9,770	8,760	3,090	4,300
11	3,970	12,600	958	19,000	4,380	3,700	21,300	29,200	9,030	10,400	924	4,610
12	3,160	13,900	5,260	20,000	3,540	5,750	25,900	28,400	11,200	9,060	280	4,520
13	3,750	11,900	4,520	21,000	5,020	5,730	31,300	27,800	12,100	6,320	3,010	4,120
14	7,700	11,200	4,870	*18,000	4,900	6,650	30,000	28,300	10,200	10,700	1,800	2,620
15	18,700	14,000	5,070	13,000	5,740	6,180	29,200	29,900	7,970	13,600	2,620	332
16	15,400	14,900	4,470	9,000	5,000	6,620	32,600	30,300	6,330	10,500	2,850	874
17	21,300	14,100	2,920	9,200	5,900	4,780	60,900	27,800	3,200	6,710	3,080	6,440
18	17,100	13,500	1,980	7,030	3,590	1,310	61,600	24,300	4,880	6,580	666	7,130
19	12,100	13,000	5,270	6,470	1,800	6,200	53,100	21,300	6,360	8,100	285	7,440
20	11,900	8,170	4,770	6,300	*5,900	4,200	42,600	16,900	5,810	5,680	2,850	6,240
21	9,360	8,920	3,000	4,270	6,390	5,800	37,600	13,800	3,980	3,900	2,900	6,910
22	4,500	9,450	3,200	2,860	3,100	5,000	32,900	11,500	4,430	2,390	2,690	*7,260
23	1,910	8,970	1,800	6,810	4,800	5,100	29,700	11,800	295	4,330	2,390	2,120
24	5,610	5,640	2,000	6,370	4,700	5,200	28,000	12,000	280	4,340	2,380	8,430
25	5,860	8,600	1,300	6,880	4,000	3,900	26,700	12,100	4,620	4,700	300	13,800
26	7,310	9,480	1,700	4,600	3,600	*5,540	26,100	12,200	5,530	5,490	280	12,800
27	7,100	3,690	3,800	4,900	5,400	6,260	23,300	11,600	5,610	6,170	2,470	9,040
28	*7,970	6,760	3,700	2,600	7,200	4,480	*30,500	26,500	5,420	3,050	2,600	6,830
29	6,180	7,180	3,600	2,300	6,400	5,140	60,400	34,300	7,110	544	3,120	1,300
30	4,650	6,170	3,400	5,000	-------	5,310	75,600	28,000	988	5,030	3,080	270
31	20,500	-------	1,800	4,900	-------	2,840	-------	*19,900	-------	3,600	6,050	-------
Total	229,785	365,030	121,428	216,390	138,240	164,540	926,620	927,100	307,913	168,935	71,938	159,586
Mean	7,412	12,170	3,917	6,980	4,767	5,308	30,890	29,910	10,260	5,451	2,321	5,320
(†)	-234	+1,056	-519	+844	-1,004	-1,139	+3,298	+1,680	+307	-160	-353	+22.1

Adjusted for change in reservoir contents

Mean	7,178	13,220	3,398	7,824	3,763	4,169	34,190	31,590	10,570	5,231	1,967	5,342
Cfsm	1.15	2.11	0.542	1.25	0.601	0.665	5.46	5.04	1.69	0.844	0.314	0.853
In.	1.32	2.35	0.63	1.44	0.65	0.77	6.09	5.81	1.88	0.97	0.36	0.95

	Observed						Adjusted					
Calendar year 1955:	Max	70,000	Min	275	Mean	10,650	Mean	10,690	Cfsm	1.71	In.	23.15
Water year 1955-56:	Max	75,600	Min	270	Mean	10,380	Mean	10,690	Cfsm	1.71	In.	23.22

Peak discharge (base, 50,000 cfs).--10:30 p.m. Apr. 17 to 1 a.m. Apr. 18, 64,900 cfs (199.48 ft); Apr. 30 (5 to 6 p.m.) 79,600 cfs (203.14 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 (dead storage October to March, live storage thereafter), Comerford Station Pond, Union Village Reservoir, 4 reservoirs in Mascoma River basin, and Sunapee Lake.

Note.--Stage-discharge relation affected by ice Dec. 21 to Jan. 17, Jan. 26 to Feb. 5, Feb. 22 to Mar. 3, Mar. 11, 19-24.

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 1956.

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.--34 years, 127 cfs.

Extremes.--Maximum discharge during year, 1,920 cfs Apr. 30 (gage height, 7.74 ft); minimum, 4.4 cfs Aug. 17, 28, 29.
1922-56: 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 and slope-area determination 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 table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.35	4.4	3.5	251
1.5	7.0	4.0	380
1.7	17	5.0	715
2.0	38	6.0	1,060
2.5	86	8.0	2,080
3.0	156		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	383	74	19	50	65	52	1,290	148	*14	8.1	7.4
2	14	338	71	18	48	61	59	858	226	13	8.1	9.5
3	12	269	68	16	46	62	72	656	413	12	7.7	12
4	10	274	68	17	42	69	107	575	486	10	6.7	9.0
5	10	662	73	18	45	70	214	540	369	10	6.4	7.0
6	17	648	69	18	45	65	320	470	279	15	6.0	6.4
7	43	461	70	18	45	63	410	398	200	17	5.8	6.7
8	48	360	70	18	46	63	377	344	148	15	5.6	6.2
9	46	292	*70	285	46	65	344	286	115	21	5.3	5.8
10	36	226	68	914	45	60	320	256	102	22	5.2	5.3
11	30	208	63	1,050	45	59	309	247	130	17	5.2	5.2
12	29	222	60	866	44	60	336	234	117	15	4.9	5.0
13	26	245	56	782	42	59	395	216	97	18	4.8	5.3
14	31	352	52	589	41	58	440	197	78	61	4.9	5.8
15	158	407	49	413	40	59	452	171	65	56	4.9	9.5
16	479	336	43	304	41	55	659	154	55	39	4.6	14
17	1,100	352	43	222	41	54	1,110	136	47	33	4.6	17
18	984	312	45	154	39	*62	953	118	39	28	4.8	20
19	628	247	42	134	42	60	760	107	34	25	4.9	*16
20	416	202	34	110	43	60	578	98	30	22	4.9	16
21	312	166	29	95	41	59	519	88	28	21	7.2	17
22	230	142	27	85	39	58	533	79	27	20	7.0	16
23	171	118	25	80	38	58	*512	78	26	19	5.8	16
24	145	124	23	75	36	57	419	82	24	20	5.3	40
25	163	119	25	70	45	58	360	74	22	18	5.0	43
26	154	104	26	65	76	57	372	*67	19	16	4.8	42
27	134	97	24	60	88	55	352	99	19	14	4.6	40
28	115	92	23	56	77	53	631	189	21	13	4.5	36
29	*103	85	21	54	69	52	*1,330	177	17	12	4.4	29
30	92	79	22	53	-------	51	1,720	156	15	9.5	4.6	26
31	262	-------	21	52	-------	52	-------	140	-------	9.0	*7.0	-------
Total	6,014	7,922	1,454	6,710	1,385	1,839	15,015	8,580	3,398	634.5	173.6	494.1
Mean	194	264	46.9	216	47.8	59.3	500	277	113	20.5	5.60	16.5
Cfsm	2.73	3.71	0.660	3.04	0.672	0.834	7.03	3.90	1.59	0.288	0.079	0.232
In.	3.15	4.14	0.76	3.51	0.72	0.96	7.85	4.49	1.78	0.33	0.09	0.26

Calendar year 1955: Max 1,100 Min 5.5 Mean 128 Cfsm 1.80 In. 24.44
Water year 1955-56: Max 1,720 Min 4.4 Mean 147 Cfsm 2.07 In. 28.04

Peak discharge (base, 1,000 cfs).--Oct. 17 (5:30 to 6:30 p.m.) 1,170 cfs (6.27 ft); Jan. 11 (1 a.m. to 4:30 p.m.) 1,070 cfs (6.02 ft); Apr. 17 (5 p.m.) 1,160 cfs (6.24 ft); Apr. 30 (1 p.m.) 1,920 cfs (7.74 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 22, 23, 26, 27, Nov. 29 to Dec. 3, Dec. 6 to Jan. 9, Jan. 20 to Feb. 25 (no gage-height record Dec. 22-31, Feb. 22-25; discharge estimated on basis of weather records, and records for Ashuelot River at Hinsdale, Otter Brook near Keene, Beaver Brook at Hillsboro, and South Branch Ashuelot River at Webb, near Marlboro).

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 1956.

Gage.--Water-stage recorder and concrete control. Datum of gage is 480.00 ft above mean sea level, datum of 1929 (Corps of Engineers benchmark).

Average discharge.--11 years, 177 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 994 cfs May 9 (gage height, 8.67 ft); minimum daily, 1.1 cfs Oct. 16.
1945-56: 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. 230).

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 17

3.8	0.9	4.2	5.4
3.9	1.6	4.4	9.5
4.0	2.6	4.7	20

Note.--Same as following table above 4.7 ft.

Apr. 18 to Sept. 30

4.1	4.3	6.0	154
4.2	5.9	6.5	257
4.4	10	7.0	402
4.7	20	8.0	760
5.1	43	9.0	1,110
5.5	82		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	421	90	24	56	95	71	228	184	24	14	10
2	21	431	91	24	56	105	108	739	193	*22	13	12
3	18	405	92	18	56	98	112	865	271	20	13	*20
4	16	359	108	13	56	88	154	896	472	18	12	14
5	15	235	122	13	56	90	265	921	525	19	11	12
6	20	550	121	19	56	91	412	942	437	29	10	9.8
7	66	774	68	23	57	108	489	984	387	31	9.8	9.8
8	72	792	36	23	57	100	643	984	353	26	9.6	9.6
9	69	756	*42	54	70	90	647	988	270	35	9.3	8.9
10	53	661	43	98	77	90	500	980	187	36	8.7	8.0
11	44	368	45	75	76	88	478	970	235	29	8.2	7.6
12	40	318	47	322	75	88	544	974	214	25	7.8	7.8
13	36	332	47	665	63	88	643	970	184	27	7.8	9.3
14	35	470	47	*806	61	88	661	952	127	96	8.5	9.3
15	19	624	59	795	61	87	714	907	102	83	7.6	14
16	1.1	560	64	795	62	76	385	865	85	58	7.6	20
17	1.2	525	49	795	62	67	111	812	70	49	8.5	28
18	332	472	45	774	*61	68	537	760	60	42	9.1	34
19	706	359	45	760	61	*80	567	708	53	36	9.6	*26
20	802	284	45	700	61	105	725	643	48	31	9.3	25
21	778	237	31	339	61	125	785	544	44	30	10	28
22	812	187	24	69	60	99	792	428	42	32	14	24
23	834	149	24	83	53	88	750	206	40	29	11	24
24	742	148	30	91	50	78	*781	128	37	32	9.6	66
25	604	169	34	88	50	62	854	115	36	28	8.7	64
26	302	176	34	81	63	100	876	105	33	26	7.6	58
27	182	143	34	76	72	102	882	141	31	22	7.2	55
28	159	135	34	69	105	71	619	216	37	20	6.7	49
29	*143	136	34	56	122	70	5.7	214	30	18	6.7	42
30	133	104	27	53	-------	81	5.9	207	27	16	7.4	38
31	317	-------	24	54	-------	78	-------	*199	-------	14	9.1	-------
Total	7,396.3	11,278	1,636	7,855	1,876	2,744	15,116.6	19,591	4,814	1,003	292.4	744.1
Mean	239	376	52.8	253	64.7	88.5	504	632	160	32.4	9.43	24.8
(†)	+5.68	-0.81	+6.09	+1.79	+2.04	-9.78	+270	-263	-3.12	0	0	+0.04
Adjusted for change in reservoir contents												
Mean	244	375	58.9	255	66.7	78.7	774	369	157	32.4	9.43	24.8
Cfsm	2.42	3.71	0.583	2.52	0.660	0.779	7.66	3.65	1.55	0.321	0.093	0.246
In.	2.79	4.14	0.67	2.91	0.71	0.90	8.55	4.21	1.74	0.37	0.11	0.27

	Observed			Adjusted		
Calendar year 1955:	Max 834	Min 1.0	Mean 173	Mean 173	Cfsm 1.71	In. 23.25
Water year 1955-56:	Max 988	Min 1.1	Mean 203	Mean 203	Cfsm 2.01	In. 27.37

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Surry Mountain Reservoir.

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 September 1956.

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.--33 years, 71.9 cfs.

Extremes.--Maximum discharge during year, 1,320 cfs Apr. 30 (gage height, 5.97 ft); minimum, 1.1 cfs Aug. 17.
1923-56: 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 determinations at gage heights 7.10 and 7.93 ft; minimum, 1.1 cfs Oct. 4, 5, 1953, Aug. 17, 1956.

Remarks.--Records good except those for periods of ice effect, 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 tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 29

2.4	7.4
2.6	13
2.8	22
3.0	37

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

Apr. 30 to Sept. 30

2.0	1.2	3.2	60
2.1	1.9	3.5	113
2.2	3.2	3.8	203
2.4	7.0	4.2	380
2.6	13	5.0	785
2.8	21	6.0	1,340
3.0	37		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	230	48	14	37	48	32	672	66	*9.2	4.9	3.0
2	13	169	48	13	35	43	35	460	74	8.1	4.8	7.9
3	10	131	49	11	33	43	40	400	165	7.0	2.8	22
4	9.0	196	53	12	31	56	60	355	154	6.6	2.3	8.0
5	7.9	510	56	13	33	48	112	316	113	6.6	2.0	4.4
6	9.8	365	53	13	34	42	187	270	90	12	2.0	3.4
7	40	241	47	12	35	44	226	222	74	12	1.8	4.8
8	42	193	44	12	37	43	200	189	62	12	1.5	4.2
9	40	157	*40	300	36	45	183	157	53	18	1.3	3.2
10	29	134	35	939	36	42	157	154	54	15	1.4	3.2
11	24	142	35	640	35	41	163	145	66	11	1.3	2.3
12	20	157	31	475	34	41	189	126	56	9.7	1.3	2.1
13	17	163	30	485	33	36	218	118	47	19	1.4	2.4
14	24	313	27	340	33	34	245	109	39	79	1.5	2.8
15	178	292	30	237	31	35	258	96	32	48	1.4	6.3
16	384	222	25	183	31	32	440	90	27	32	1.2	8.5
17	928	279	27	145	30	45	710	80	24	24	1.2	17
18	515	214	28	110	31	47	575	74	19	19	1.4	19
19	330	163	25	96	35	40	455	69	16	14	1.4	*9.7
20	233	139	19	87	32	44	370	66	14	13	*1.4	11
21	176	118	18	74	29	41	350	58	13	11	4.6	12
22	139	102	17	63	27	40	385	53	14	11	7.0	8.9
23	111	94	16	58	26	40	*375	52	13	9.7	3.3	9.0
24	*100	92	16	49	26	39	283	49	13	13	2.4	67
25	121	85	17	46	31	36	258	45	11	11	2.0	36
26	107	78	18	44	66	38	266	*44	9.4	8.9	1.7	24
27	100	72	17	41	60	35	262	73	11	7.5	1.5	18
28	85	68	16	40	54	33	524	102	16	7.0	1.4	14
29	77	59	15	40	50	31	1,000	85	12	5.9	1.4	12
30	74	54	15	39	-------	33	1,160	72	11	4.8	1.4	10
31	238	-------	14	38	-------	33	-------	68	-------	4.2	2.2	-------
Total	4,198.7	5,232	929	4,669	1,041	1,248	9,718	4,869	1,368.4	469.4	67.2	356.1
Mean	135	174	30.0	151	35.9	40.3	324	157	45.6	15.1	2.17	11.9
Cfsm	3.19	4.11	0.709	3.57	0.849	0.953	7.66	3.71	1.08	0.357	0.051	0.281
In.	3.69	4.60	0.82	4.10	0.92	1.10	8.54	4.28	1.20	0.41	0.06	0.31

Calendar year 1955: Max 928 Min 1.4 Mean 77.5 Cfsm 1.83 In. 24.86
Water year 1955-56: Max 1,160 Min 1.2 Mean 93.3 Cfsm 2.21 In. 30.03

Peak discharge (base, 600 cfs).--Oct. 17 (1 p.m.) 1,000 cfs (5.40 ft); Jan. 10 (3:15 a.m.) 1,020 cfs (5.43 ft); Apr. 17 (5:30 a.m.) 736 cfs (4.91 ft); Apr. 30 (6:15 a.m.) 1,320 cfs (5.97 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 27, Nov. 29 to Dec. 1, Dec. 7-11, Dec. 15 to Jan. 9, Jan. 18, Jan. 21 to Feb. 15, Feb. 22 to Mar. 18, Mar. 25, 27-29, Apr. 1-4, 10, 11 (no gage-height record Dec. 7-9, Jan. 29 to Feb. 13; discharge estimated on basis of 1 discharge measurement, weather records, and records for Ashuelot River near Gilsum, South Branch Ashuelot River at Webb, near Marlboro, and Ashuelot River at Hinsdale).

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 1956. 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.--36 years, 60.1 cfs.

Extremes.--Maximum discharge during year, about 1,700 cfs Jan. 10 (occurred during period of ice effect); maximum gage height, 6.88 ft Jan. 9 (ice jam); minimum discharge, 2.1 cfs Aug. 20; minimum daily, 2.5 cfs Aug. 20, 27.
1920-56: Maximum discharge, 5,960 cfs Sept. 21, 1938 (gage height, 7.89 ft), from rating curve extended above 3,300 cfs on basis of contracted-opening and slope-area determinations 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

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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 29

2.0	6.7	4.1	149
2.3	16	4.5	300
2.6	27	5.0	555
3.0	40	5.5	920
3.4	55	6.0	1,470
3.8	86		

Apr. 30 to Sept. 30

1.67	2.5	2.3	19
1.8	4.4	2.6	28
2.0	8.4	3.0	40

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

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	200	38	9.0	30	34	34	485	101	9.5	6.9	7.1
2	13	120	41	8.0	28	32	47	330	73	*9.0	7.1	7.3
3	14	94	36	8.5	29	35	56	278	277	7.1	6.6	12
4	9.9	146	43	10	30	38	92	247	212	6.5	6.4	10
5	8.8	544	*59	12	33	38	178	215	114	6.0	4.0	7.5
6	9.9	332	57	12	36	35	299	180	79	9.5	3.0	9.8
7	52	198	52	11	34	46	320	155	62	18	4.4	20
8	55	148	40	11	39	39	204	133	48	15	5.5	16
9	52	113	38	350	34	36	180	112	41	13	5.7	8.1
10	46	91	30	*1,000	35	35	161	101	38	13	5.5	5.3
11	28	114	29	410	33	32	180	98	55	13	5.5	5.5
12	20	139	42	296	32	40	208	89	45	16	3.6	6.0
13	17	152	37	286	31	43	251	85	38	17	3.8	12
14	16	205	33	184	30	42	296	78	34	65	6.4	14
15	153	202	34	136	*33	39	300	70	28	34	6.2	14
16	255	155	37	116	32	40	575	64	24	23	5.7	*21
17	465	231	21	86	30	33	822	58	20	21	5.3	38
18	388	178	21	70	26	38	522	52	17	18	5.1	38
19	187	113	30	62	26	*37	410	51	15	14	3.2	30
20	124	90	20	51	32	39	310	54	13	10	*2.5	29
21	76	94	18	47	27	41	*282	47	13	10	5.8	30
22	61	83	20	45	30	37	335	43	12	9.2	10	26
23	55	66	15	50	24	41	320	43	11	8.2	9.0	20
24	*56	61	16	40	29	37	243	43	11	11	6.9	63
25	68	77	16	40	28	41	223	38	10	10	5.7	54
26	62	60	14	45	40	38	239	*35	10	9.0	3.5	30
27	59	46	14	35	45	38	215	54	11	8.7	2.5	23
28	52	61	13	31	38	35	412	91	13	8.0	4.0	19
29	40	57	12	30	35	35	850	65	11	5.8	4.8	15
30	42	39	11	34	-------	32	822	59	10	4.6	5.1	9.2
31	247	-------	10	40	-------	33	-------	90	-------	6.6	6.0	-------
Total	2,746.6	4,209	897	3,565.5	929	1,159	8,386	3,543	1,446	428.7	165.7	599.8
Mean	88.6	140	28.9	115	32.0	37.4	313	114	48.2	13.8	5.35	20.0
Cfsm	2.46	3.89	0.803	3.19	0.889	1.04	8.69	3.17	1.34	0.383	0.149	0.556
In.	2.84	4.35	0.93	3.68	0.96	1.20	9.70	3.66	1.49	0.44	0.17	0.62

Calendar year 1955: Max 544 Min 2.7 Mean 64.0 Cfsm 1.78 In. 24.14
Water year 1955-56: Max 1,000 Min 2.5 Mean 79.4 Cfsm 2.21 In. 30.04

Peak discharge (base, 550 cfs).--Oct. 17 (7:30 to 8:30 p.m.) 603 cfs (5.08 ft); Nov. 5 (8 to 8:30 a.m.) 609 cfs (5.09 ft); Jan. 10 (about 3 a.m.) about 1,700 cfs; Apr. 17 (2 to 3 a.m.) 983 cfs (5.57 ft); Apr. 29 (5:30 a.m.) 1,090 cfs (5.68 ft).

* Discharge measurement made on this day.

Note.--No gage-height record June 10 to July 1, July 4-8; discharge estimated on basis of weather records, recorded range in stage, and records for Ashuelot River near Gilsum, Ashuelot River at Hinsdale, and Otter Brook near Keene. Stage-discharge relation affected by ice Nov. 27, Dec. 1, 2, Dec. 7 to Jan. 10, Jan. 18 to Feb. 17, Feb. 20 to Mar. 1, Mar. 3-5, 9, 17-22, 25-29.

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 1956.

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.--46 years, 661 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 5,900 cfs Apr. 30 (gage height, 7.96 ft); minimum, 47 cfs Aug. 26; minimum daily, 57 cfs Aug. 28.
1907-11, 1914-56: 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 (see p. 230).

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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.9	54	5.0	1,070
3.2	103	6.0	2,170
3.6	212	7.0	3,790
4.0	390	8.0	5,990

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	202	2,000	596	145	280	385	357	5,420	798	152	80	93
2	172	1,720	544	140	295	434	401	3,810	878	134	81	94
3	166	1,400	557	135	275	445	564	3,160	1,180	142	108	134
4	144	1,390	596	135	245	493	742	2,950	1,620	129	85	147
5	144	2,740	*694	130	252	544	1,170	2,760	1,500	*110	64	114
6	152	2,940	763	140	280	531	1,900	2,560	1,240	158	60	101
7	368	2,520	635	140	362	544	2,500	2,340	1,030	190	59	124
8	564	2,100	550	125	384	616	2,320	2,070	922	180	66	129
9	544	1,870	463	390	379	518	2,040	1,940	819	169	70	99
10	445	1,680	451	1,830	379	499	1,980	1,850	687	193	72	85
11	346	1,630	412	2,640	374	423	1,980	1,790	714	174	72	73
12	284	1,590	340	2,240	321	434	2,270	1,730	777	149	66	95
13	248	1,520	384	2,250	*357	481	2,640	1,620	648	160	66	252
14	230	1,590	368	2,210	357	487	2,820	1,600	550	469	64	183
15	405	2,070	370	1,890	357	475	2,950	1,570	451	570	*73	147
16	900	1,990	370	1,620	357	428	3,560	1,520	390	374	77	151
17	1,780	1,990	360	1,460	300	331	5,050	1,430	297	272	70	234
18	2,440	1,980	330	1,280	310	400	5,050	1,340	268	223	67	280
19	2,300	1,670	250	1,150	280	418	4,150	1,250	268	186	67	248
20	2,040	1,350	250	1,190	330	428	3,460	1,150	252	160	64	199
21	1,740	1,170	220	1,090	255	440	3,110	1,080	241	149	60	202
22	1,520	1,090	160	698	260	460	3,150	990	237	142	69	*199
23	1,400	968	170	450	250	499	3,320	862	230	152	93	199
24	1,350	862	150	410	250	463	3,150	654	209	147	91	337
25	1,310	798	170	380	316	369	2,820	564	172	155	75	570
26	1,180	805	175	355	384	390	2,780	531	172	142	67	396
27	900	735	170	362	469	457	2,730	512	169	117	62	288
28	763	680	170	330	475	445	2,900	756	216	117	57	241
29	*674	707	155	280	390	428	4,510	819	223	91	58	212
30	616	648	160	300	-------	440	*5,550	749	190	93	60	160
31	1,360	-------	150	305	-------	423	-------	721	-------	83	69	-------
Total	26,687	46,203	11,133	26,200	9,523	14,128	81,924	52,098	17,348	5,682	2,192	5,786
Mean	861	1,540	359	845	328	456	2,731	1,681	578	183	70.7	193
(†)	+5.68	-0.81	+6.09	+1.79	+2.04	-9.78	+270	-263	-3.12	0	0	+0.04
Adjusted for change in reservoir contents												
Mean	867	1,539	365	847	330	446	3,001	1,417	575	183	70.7	193
Cfsm	2.06	3.66	0.869	2.02	0.786	1.06	7.15	3.37	1.37	0.436	0.168	0.460
In.	2.38	4.09	1.00	2.32	0.85	1.22	7.97	3.89	1.53	0.50	0.19	0.51

	Observed						Adjusted					
Calendar year 1955:	Max	2,940	Min	59	Mean	729	Mean	729	Cfsm	1.74	In.	23.55
Water year 1955-56:	Max	5,550	Min	57	Mean	817	Mean	817	Cfsm	1.95	In.	26.45

Peak discharge (base, 3,000 cfs).--Nov. 5 (5 to 5:30 p.m.) 3,080 cfs (6.60 ft); 12 p.m. Apr. 17 to 12:30 a.m. Apr. 18, 5,350 cfs (7.72 ft); Apr. 30 (6 p.m.) 5,900 cfs (7.96 ft).

* Discharge measurement made on this day.

† Change in contents, equivalent in cubic feet per second, in Surry Mountain Reservoir.

Note.--Stage-discharge relation affected by ice Dec. 15 to Jan. 11, Jan. 23-26, Jan. 30 to Feb. 4, Feb. 6, 17, 18, 20-24, 29, Mar. 1, 18, 21, 22, 26.

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 1956. 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.--40 years, 30.3 cfs.

Extremes.--Maximum discharge during year, 472 cfs Apr. 30 (gage height, 10.07 ft); minimum 1.6 cfs Aug. 18.
1916-56: 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 10				Jan. 11 to Sept. 30			
5.2	3.5	6.5	43	5.0	1.6	7.0	68
5.4	6.6	7.0	71	5.2	4.1	8.0	144
5.6	11	8.0	157	5.5	9.6	9.0	262
6.0	23	9.0	287	6.0	24	10.1	480
				6.5	44		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	61	24	5.6	21	*21	18	362	28	5.0	4.7	2.5
2	4.6	61	22	6.2	19	20	25	222	24	9.7	3.8	2.9
3	5.9	53	18	10	18	14	24	171	48	11	3.4	2.8
4	5.7	57	23	11	12	18	25	144	54	4.9	3.2	3.6
5	*5.4	127	28	10	14	25	33	130	47	8.9	2.8	*3.6
6	9.4	154	26	11	20	22	46	118	36	8.6	2.6	4.8
7	18	116	22	8.0	19	24	62	103	32	5.8	2.6	4.7
8	13	94	21	7.6	18	25	68	84	27	4.9	3.0	3.0
9	14	75	19	45	18	24	73	68	20	9.6	2.8	2.5
10	17	65	12	230	18	19	68	67	19	8.7	2.5	5.0
11	23	66	15	318	14	23	69	64	24	10	2.5	3.2
12	19	72	20	215	16	28	76	58	18	12	2.0	3.0
13	17	74	16	170	21	24	88	56	20	10	5.2	4.4
14	19	82	16	131	19	23	102	50	19	8.3	3.6	5.2
15	62	89	15	101	18	24	119	44	16	6.8	2.9	3.4
16	113	88	16	76	19	21	162	39	9.0	11	2.5	5.1
17	148	99	13	64	19	17	256	36	6.9	13	2.5	9.2
18	199	104	12	55	12	23	266	34	10	13	2.0	10
19	178	88	13	44	16	26	*238	29	12	8.6	1.8	6.4
20	138	76	12	36	19	25	202	29	11	7.0	2.5	11
21	102	63	11	30	19	27	*173	29	13	5.3	3.8	8.1
22	83	*52	10	28	19	25	167	25	12	4.9	5.1	5.0
23	62	48	11	30	18	24	173	22	6.0	4.9	4.9	5.2
24	56	42	7.2	29	16	20	149	22	5.5	*7.2	2.9	15
25	53	42	6.8	22	13	23	126	23	10	6.7	2.5	13
26	49	36	6.3	19	17	26	122	15	11	5.2	2.2	11
27	43	32	11	20	22	24	114	16	12	5.3	4.1	*12
28	41	33	14	*13	19	23	123	35	*11	4.6	4.1	12
29	35	28	13	12	23	24	350	32	8.1	4.1	2.9	7.7
30	39	26	8.0	19	-------	27	462	29	5.8	5.8	4.8	6.4
31	52	-------	7.0	21	-------	*14	-------	32	-------	4.3	3.4	-------
Total	1,629.8	2,103	468.3	1,797.4	516	703	3,979	2,188	575.3	235.1	99.6	191.7
Mean	52.6	70.1	15.1	58.0	17.8	22.7	133	70.6	19.2	7.58	3.21	6.39
Cfsm	2.89	3.85	0.830	3.19	0.978	1.25	7.31	3.88	1.05	0.416	0.176	0.351
In.	3.33	4.30	0.96	3.67	1.05	1.44	8.13	4.47	1.18	0.48	0.20	0.39

Calendar year 1955: Max 199 Min 1.8 Mean 31.4 Cfsm 1.73 In. 23.43
Water year 1955-56: Max 462 Min 1.8 Mean 39.6 Cfsm 2.18 In. 29.60

Peak discharge (base, 150 cfs).--Oct. 18 (7:30 to 10:30 a.m.) 204 cfs (8.40 ft); Nov. 6 (4 to 6 a.m.) 162 cfs (8.05 ft); Jan. 11 (3 to 5 a.m.) 341 cfs (9.48 ft); Apr. 17 (10 to 12 p.m.) 282 cfs (9.13 ft); Apr. 30 (12 m.) 472 cfs (10.07 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 17 to Jan. 9, Jan. 18-21, 24-26, Jan. 28 to Feb. 8, Feb. 14, Feb. 16 to Mar. 2, Mar. 6-9, 15-19, 24-29, 31, Apr. 1.

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 1956. March to May 1917 monthly discharge only, published in WSP 1301.

Gage.--Water-stage recorder. Concrete control since Oct. 6, 1933. Datum of gage is 826.66 ft above mean sea level, datum of 1929. Prior to July 27, 1916, chain gage at bridge at same datum.

Average discharge.--40 years, 144 cfs.

Extremes.--Maximum discharge during year, 1,920 cfs Oct. 19 (gage height, 9.83 ft); minimum daily, 6.6 cfs Aug. 20, 26.
1916-56: 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 powerplant and by Lake Monomonac and other reservoirs.

Revisions (water years).--WSP 451: 1916. WSP 871: Drainage area. WSP 1051: 1919, 1920-21(M), 1922-24, 1928(M), 1933-34.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 27-30, Nov. 25, 26, Jan. 20-24)

3.59	6.6	4.5	139
3.6	7.0	5.0	311
3.7	12	6.0	524
3.8	19	7.0	780
4.0	39	8.0	1,120
4.2	70	10.0	2,000

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	438	170	26	150	86	136	1,320	100	23	11	7.4
2	99	426	164	24	135	84	139	1,270	90	24	9.7	9.8
3	140	380	151	28	120	84	145	1,060	160	22	9.7	12
4	129	433	167	32	62	97	180	849	190	17	8.7	13
5	*121	726	174	32	67	105	291	703	170	20	8.7	*14
6	96	751	155	30	68	97	376	588	130	21	8.2	16
7	63	658	100	26	82	172	426	528	*111	21	8.2	20
8	94	555	56	27	80	246	384	470	92	24	7.8	30
9	134	466	58	800	78	205	360	422	78	26	8.2	36
10	151	410	76	1,300	74	115	374	410	72	26	9.2	39
11	135	422	67	1,360	70	105	407	*392	78	24	11	40
12	62	511	67	1,120	72	118	446	370	70	23	10	43
13	109	496	58	900	78	108	492	355	67	21	11	49
14	120	520	53	700	74	106	548	339	78	25	11	56
15	580	513	*55	620	76	108	586	317	70	31	9.2	65
16	1,230	462	50	560	140	150	786	301	55	30	8.2	70
17	1,590	515	50	458	135	160	1,060	281	80	27	8.2	82
18	1,810	496	52	390	136	170	*1,040	260	84	24	7.8	129
19	1,880	462	49	370	140	160	972	224	65	*21	7.0	134
20	1,660	414	43	325	145	165	858	205	50	19	6.6	134
21	1,330	370	37	285	115	170	780	169	42	17	7.8	123
22	978	357	36	260	60	170	763	143	39	16	9.2	121
23	658	*262	32	240	62	170	771	78	30	16	9.2	118
24	468	202	30	230	63	175	706	72	27	16	7.8	158
25	412	231	32	220	84	170	650	74	28	16	7.4	139
26	376	231	31	215	177	165	624	60	28	15	6.6	126
27	328	220	32	*210	170	165	593	65	29	14	7.8	*116
28	319	205	38	190	*98	160	624	120	30	12	*7.9	129
29	304	177	38	185	90	160	1,000	110	30	11	7.4	108
30	301	170	31	180	-------	*155	1,280	100	27	12	8.4	95
31	412	-------	28	165	-------	151	-------	110	-------	11	8.2	-------
Total	16,134	12,479	2,180	11,508	2,901	4,452	17,797	11,765	2,200	625	267.1	2,232.2
Mean	520	416	70.3	371	100	144	593	380	73.3	20.2	8.62	74.4
Cfsm	6.27	5.01	0.847	4.47	1.20	1.73	7.14	4.58	0.883	0.243	0.104	0.896
In.	7.23	5.59	0.98	5.16	1.30	1.99	7.97	5.27	0.99	0.28	0.12	1.00

Calendar year 1955: Max 1,880 Min 9.7 Mean 178 Cfsm 2.14 In. 29.03
Water year 1955-56: Max 1,880 Min 6.6 Mean 231 Cfsm 2.78 In. 37.88

Peak discharge (base, 690 cfs).--Oct. 19 (8:30 a.m.) 1,920 cfs (9.83 ft); Nov. 6 (3 to 9 a.m.) 763 cfs (6.94 ft); Jan. 10 (7 p.m.) 1,540 cfs (9.01 ft); Apr. 17 (7 to 10 p.m.) 1,100 cfs (7.95 ft); May 1 (7 to 8 p.m.) 1,340 cfs (8.55 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Jan. 13-15, 25-27, Feb. 1-4, Mar. 18-30, May 26 to June 6; discharge estimated on basis of 2 discharge measurements, weather records, recorded range in stage when available, and records for Priest Brook near Winchendon, Tarbell Brook near Winchendon, and Ware River near Barre. Stage-discharge relation affected by ice Dec. 7-9, 21-25, Jan. 9, 18-24, 28, 29, 31, Feb. 16, 17, 19, 21-24, 28, 29, Mar. 5, 10, 11, 16, 17.

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, Worchester County.

Drainage area.--19.4 sq mi.

Records available.--May 1916 to September 1956. October 1917 to July 1918 monthly discharge only, 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.--40 years, 33.5 cfs.

Extremes.--Maximum discharge during year, 568 cfs Apr. 30 (gage height, 5.77 ft), from rating curve extended above 330 cfs on basis of contracted-opening determinations at gage heights 8.4 and 9.90 ft; minimum, 0.7 cfs Aug. 29.
1916-56: Maximum discharge, 3,000 cfs Sept. 21, 1938 (gage height, 9.90 ft), from rating curve extended above 330 cfs by method described above; minimum, 0.08 cfs several times in September 1929.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by ponds and mill above station.

Revisions (water years).--WSP 451: 1916. WSP 871: Drainage area. WSP 1051: 1919, 1922-24. WSP 1301: 1917(M), 1919-24(M), 1926-27(M), 1929(M), 1931-35(M).

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-17		Oct. 18 to Sept. 30			
2.6	11	2.17	0.8	3.0	34
2.8	22	2.2	1.1	3.5	86
3.0	36	2.3	2.4	4.0	159
3.5	86	2.4	4.4	5.0	358
4.0	159	2.5	7.0	6.0	650
4.5	250	2.7	15		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	69	28	5.1	13	25	20	353	34	6.1	2.4	1.2
2	13	70	24	4.4	13	26	21	234	28	5.9	2.0	1.7
3	11	59	23	4.6	13	25	*24	171	56	5.6	1.7	2.6
4	12	62	23	4.6	13	27	32	*124	94	4.8	1.4	2.0
5	*15	130	26	4.8	14	28	44	135	65	4.8	1.4	1.5
6	17	190	30	4.8	14	28	68	119	54	7.0	1.7	1.7
7	26	135	31	4.8	17	32	92	106	*41	7.0	2.0	5.1
8	32	90	23	5.5	19	32	78	91	32	5.9	2.0	2.9
9	32	70	20	60	18	31	82	76	25	6.4	1.8	2.0
10	28	65	19	319	18	29	94	62	22	6.4	1.8	1.5
11	23	68	18	365	17	27	102	50	22	6.4	1.7	1.4
12	18	72	17	231	17	27	105	41	20	6.1	1.4	1.4
13	15	76	16	152	17	26	120	40	18	6.4	1.3	2.3
14	14	84	16	103	17	25	140	44	20	11	1.4	3.3
15	36	90	*17	91	17	24	162	42	14	9.4	1.3	3.1
16	120	90	16	75	17	23	218	38	10	8.0	1.3	5.3
17	195	100	15	53	17	24	368	34	9.4	7.4	1.2	8.0
18	292	110	14	40	17	24	351	34	8.4	6.4	1.1	7.4
19	220	95	13	34	17	24	*285	29	7.4	*5.6	1.2	5.9
20	160	78	12	32	18	26	216	26	7.2	5.1	.9	5.6
21	115	*68	10	28	16	25	173	26	7.0	5.1	1.0	5.3
22	80	61	11	24	14	24	183	29	7.4	5.3	1.1	4.6
23	66	55	9.1	22	14	23	190	26	6.4	4.8	1.1	4.8
24	58	44	8.0	19	15	24	173	29	6.4	4.6	1.1	13
25	53	39	8.8	19	23	23	135	24	7.1	4.4	1.0	12
26	48	39	8.4	17	27	23	143	18	7.2	3.9	.9	8.8
27	45	36	7.7	16	*29	22	130	20	5.9	3.3	.9	*7.4
28	41	34	6.7	14	28	20	157	40	12	3.3	.8	28
29	39	30	6.4	13	27	20	425	40	8.8	3.1	*.8	24
30	37	30	6.1	14	-------	20	526	28	7.4	2.6	.8	12
31	58	--	5.6	14	-------	20	--------	34	--------	2.4	1.0	--------
Total	1,935	2,239	488.8	1,793.6	516	777	4,857	2,163	663.0	174.5	41.5	185.8
Mean	62.4	74.6	15.8	57.9	17.8	25.1	162	69.8	22.1	5.63	1.34	6.19
Cfsm	3.22	3.85	0.814	2.98	0.918	1.29	8.35	3.60	1.14	0.290	0.069	0.319
In.	3.71	4.29	0.94	3.44	0.99	1.49	9.31	4.15	1.27	0.33	0.08	0.36

Calendar year 1955: Max 292 Min 1.2 Mean 37.4 Cfsm 1.93 In. 26.19
Water year 1955-56: Max 526 Min 0.8 Mean 43.3 Cfsm 2.23 In. 30.36

Peak discharge (base, 150 cfs).--Oct. 18 (12:30 to 2 a.m.) 339 cfs (4.92 ft); Nov. 5 or 6 (time unknown) about 200 cfs; Jan. 10 (11 p.m.) 429 cfs (5.28 ft); Apr. 18 (12 m.) 424 cfs (5.26 ft); Apr. 30 (8 to 9 a.m.) 568 cfs (5.77 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 19 to Nov. 21; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for Millers River near Winchendon, Tarbell Brook near Winchendon, and Ware River near Barre. Stage-discharge relation affected by ice Nov. 30 to Dec. 3, Dec. 13-15, 17, 19, 20, 22, 23, Jan. 9, 17-19, Feb. 21-27, Mar. 16-21, Apr. 11-14. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

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 1956.

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.--17 years, 321 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 2,050 cfs May 4 (gage height, 7.22 ft); minimum daily, 9.3 cfs Aug. 4.
1939-56: Maximum discharge, 4,400 cfs Apr. 13, 1940 (gage height, 8.40 ft); minimum daily, that of Aug. 4, 1956.
Maximum stage known, 15.9 ft Sept. 21 or 22, 1938, from floodmarks.

Remarks.--Records excellent 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 since 1941 (see p. 230).

Rating table, water year 1955-56; except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.1	8.5	5.0	325
3.3	13	5.5	570
3.5	21	6.0	880
3.8	42	7.0	1,790
4.1	76	7.3	2,150
4.5	147		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	150	831	366	68	265	225	276	960	284	82	42	39
2	169	845	348	61	260	226	284	1,660	320	76	36	40
3	205	810	334	63	265	233	330	2,010	430	72	12	60
4	208	784	343	71	240	298	415	2,020	586	68	9.3	60
5	190	784	390	75	175	348	614	1,980	560	64	75	53
6	183	873	395	71	160	312	817	1,890	445	84	43	51
7	280	1,430	270	69	*180	390	962	1,720	338	86	35	91
8	343	1,340	210	71	195	515	1,000	1,550	264	82	34	90
9	435	1,270	190	600	196	475	925	1,360	219	84	33	80
10	405	1,190	200	910	190	405	902	1,150	199	91	34	*73
11	366	1,110	185	1,100	183	334	910	940	208	82	40	71
12	226	1,060	175	1,020	186	343	962	764	196	73	39	70
13	202	1,050	160	1,460	190	*338	1,050	679	171	73	36	78
14	252	1,030	150	1,550	186	316	1,130	620	171	110	39	79
15	189	1,030	158	1,540	190	302	1,210	576	158	125	36	91
16	90	1,010	145	1,470	248	280	1,390	540	132	107	33	107
17	397	992	150	1,350	264	250	*1,570	505	129	97	31	134
18	1,530	985	140	1,090	233	385	1,700	475	143	86	31	186
19	1,850	948	130	1,210	275	450	1,770	435	123	75	30	193
20	*1,900	888	115	935	270	365	1,790	395	109	66	29	186
21	1,890	810	100	622	255	330	1,790	366	101	62	29	183
22	1,870	727	95	880	185	345	1,800	*307	101	63	36	163
23	1,860	649	84	637	170	366	1,750	123	93	64	36	160
24	1,830	545	82	530	165	275	1,760	149	86	61	34	292
25	1,720	520	92	340	180	325	1,670	436	84	60	31	316
26	1,660	505	98	406	380	325	1,590	222	82	59	29	256
27	1,380	475	94	430	380	300	1,500	212	82	54	23	216
28	910	*450	90	350	295	280	1,430	294	111	52	23	202
29	703	420	82	325	245	284	1,510	302	107	48	29	222
30	620	390	76	307	-------	298	1,140	256	*94	44	31	171
31	715	-------	72	290	-------	280	-------	260	-------	*44	34	-------
Total	24,708	25,751	5,519	19,901	6,606	10,198	35,947	25,156	6,126	2,254	1,042.3	4,013
Mean	797	858	178	642	228	329	1,198	811	204	71.0	33.6	134
(†)	+4.89	-4.24	-1.31	+0.86	-0.12	+0.11	+98.8	-95.8	-0.77	-0.11	0	+0.56

Adjusted for change in reservoir contents

Mean	802	854	177	643	228	329	1,297	716	203	73.9	33.6	134
Cfsm	4.29	4.57	0.947	3.44	1.22	1.76	6.94	3.83	1.09	0.395	0.180	0.717
In.	4.94	5.10	1.09	3.96	1.31	2.03	7.74	4.41	1.21	0.46	0.21	0.80

	Observed			Adjusted				
Calendar year 1955:	Max 1,900	Min 23	Mean 380	Mean 380	Cfsm 2.03	In. 27.57
Water year 1955-56:	Max 2,020	Min 9.3	Mean 457	Mean 457	Cfsm 2.44	In. 33.26

* 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 Nov. 29, 30, Dec. 7-14, Dec. 16 to Jan. 10, Jan. 24 25, 27-29, Jan. 31 to Feb. 6, Feb. 8, 19-24, 26, Feb. 28 to Mar. 1, Mar. 9, 17-22, 24-27.

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 1956. 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 benchmark). Prior to Oct. 26, 1948, staff gage at site 0.2 mile upstream at datum 14.40 ft higher.
Average discharge.--41 years, 84.8 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 560 cfs May 8 (gage height, 4.74 ft); minimum, 0.04 cfs Jan. 7, 8; minimum daily, 0.06 cfs Jan. 4-6.
1915-56: 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 determination of peak flow by computation of flow over dam and contracted-opening determination; 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 fair. Flow regulated by Tully Reservoir since 1948 (see p. 230).
Revisions (water years).--WSP 451: 1916. WSP 891: Drainage area. WSP 1051: 1916(M), 1928. WSP 1301: 1917-35(M), 1937(M).

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 16				Jan. 17 to Sept. 30			
2.27	0.06	2.8	18	2.38	0.7	3.2	66
2.3	.1	3.1	52	2.4	.9	3.6	147
2.35	.4	3.4	101	2.5	2.8	4.0	259
2.4	.9	3.7	172	2.6	6.5	4.5	450
2.5	2.8	4.0	259	2.7	12	5.0	700
2.6	6.2	4.5	450	2.9	29		
2.7	11						

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	183	69	26	21	80	63	210	79	*9.2	*1.6	1.7
2	35	205	68	20	22	79	69	215	71	7.5	1.6	2.4
3	27	199	68	4.9	22	77	69	215	96	6.5	1.4	3.1
4	22	191	*68	.06	22	77	88	220	142	5.2	1.2	3.1
5	18	87	77	.06	22	76	140	220	147	4.8	1.1	2.4
6	21	129	90	.06	32	62	175	260	128	8.0	1.1	2.2
7	71	381	65	.08	39	55	202	360	99	12	1.1	7.0
8	114	432	65	.3	39	65	256	500	74	11	1.1	6.5
9	114	331	58	*66	*39	80	285	540	59	11	1.1	3.8
10	95	240	49	72	39	80	269	520	52	12	1.1	2.6
11	72	199	49	80	39	80	253	490	58	10	.9	1.9
12	56	199	46	84	39	80	262	470	51	7.5	.9	1.7
13	44	218	35	88	39	65	285	450	46	6.5	.9	*2.1
14	40	256	36	222	39	39	292	440	38	19	.9	6.5
15	18	247	35	338	39	51	306	410	32	31	.9	8.0
16	.1	247	35	389	40	66	350	350	28	20	.9	9.5
17	56	247	35	441	40	*66	373	280	25	14	.8	19
18	247	250	35	350	40	65	276	180	22	10	.8	20
19	292	247	39	121	40	65	289	92	15	7.0	.8	14
20	292	231	30	60	40	65	289	84	12	5.2	.8	12
21	*289	211	21	60	40	65	*289	79	11	4.8	.8	11
22	282	147	21	60	40	65	289	*66	12	5.2	.9	9.8
23	269	145	21	33	40	79	292	65	11	5.6	.9	9.2
24	244	152	14	44	40	86	296	63	9.8	5.6	.9	26
25	253	142	9.0	51	44	82	377	59	9.8	4.8	.9	39
26	205	105	9.0	38	55	80	490	53	8.0	4.1	.8	26
27	125	95	9.0	37	56	79	495	59	7.5	3.8	.8	18
28	97	80	9.0	37	56	77	477	84	14	3.1	.7	13
29	82	82	18	37	71	74	486	80	16	2.6	.7	11
30	79	74	26	40	-------	71	305	71	12	2.1	.7	9.2
31	133	-------	26	28	-------	66	-------	74	-------	1.9	.9	-------
Total	3,727.1	5,950	1,235.0	2,827.46	1,134	2,197	8,387	7,259	1,385.1	261.0	30.0	301.7
Mean	120	198	39.8	91.2	39.1	70.9	280	234	46.2	8.42	0.97	10.1
(†)	+1.27	+5.56	+0.19	-0.19	+2.47	-7.24	+72.2	-71.5	-0.12	-0.04	0	+0.04
Adjusted for change in reservoir contents												
Mean	121	204	40.0	91.0	41.6	63.6	352	163	46.1	8.39	0.97	10.1
Cfsm	2.40	4.05	0.794	1.81	0.825	1.26	6.98	3.23	0.915	0.166	0.019	0.200
In.	2.78	4.51	0.92	2.08	0.89	1.46	7.79	3.72	1.02	0.19	0.02	0.22

	Observed						Adjusted					
Calendar year 1955:	Max	432	Min	0.04	Mean	90.8	Mean	90.6	Cfsm	1.80	In.	24.42
Water year 1955-56:	Max	540	Min	0.06	Mean	94.8	Mean	94.8	Cfsm	1.88	In.	25.60

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Tully Reservoir.
Note.--No gage-height record May 1-22; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records of pond elevations and gate operations at Tully Reservoir.

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 1956. Published as "at Wendell" 1909-10.

Gage.--Staff gage read twice daily except once daily during some winter months. 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.--40 years (1916-56), 21.2 cfs.

Extremes.--Maximum discharge during year, 293 cfs Apr. 17 (gage height, 3.74 ft, from graph based on gage readings); minimum, 1.0 cfs Aug. 29.
1916-56: 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 determinations at gage heights 5.62 and 6.30 ft; minimum, 0.2 cfs Sept. 4, 5, 1929.

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

Revisions (water years).--WSP 821: 1936(M). WSP 891: Drainage area. WSP 1051: 1917, 1919-24, 1929(m). WSP 1231: 1917-21(M), 1922, 1923(M), 1924-26, 1927-28(M), 1929, 1930-35(M), 1939(M), 1941(M), 1944(M), 1949(M).

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.97	1.0	1.8	18
1.0	1.1	2.1	36
1.2	2.4	2.5	72
1.4	5.1	3.0	138
1.6	10	3.5	235

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	128	17	3.1	8.0	13	10	132	18	2.6	1.5	1.6
2	9.3	80	16	2.6	7.6	12	9.6	86	20	2.4	*1.4	1.6
3	7.3	44	17	2.8	8.0	14	14	74	59	2.1	1.3	3.0
4	6.0	48	*24	3.0	8.4	18	20	62	60	2.0	1.3	2.2
5	5.6	176	33	3.1	8.4	17	40	53	36	2.1	1.3	1.7
6	7.5	118	31	3.1	8.4	18	62	45	24	3.9	1.3	1.6
7	32	76	24	3.2	10	25	116	40	17	3.8	1.3	3.0
8	39	54	16	3.5	*12	22	96	36	13	3.2	1.2	2.1
9	29	44	14	50	12	21	69	31	11	3.9	1.2	1.7
10	20	40	12	110	13	20	49	30	11	3.4	1.3	1.5
11	14	44	11	70	9.8	19	52	29	13	2.8	1.4	1.4
12	10	64	11	52	11	19	64	26	11	2.4	1.3	1.4
13	9.3	63	10	44	11	19	76	24	9.0	2.4	1.3	*2.3
14	9.3	62	10	29	11	19	82	22	7.6	8.6	1.4	1.6
15	20	57	11	25	10	*18	94	20	5.8	8.0	1.3	2.0
16	41	54	10	21	9.6	17	179	19	5.1	4.5	1.2	6.5
17	81	64	9.5	22	11	17	217	18	5.3	3.4	1.3	7.2
18	119	63	9.0	22	11	17	*141	16	4.5	2.8	1.5	4.5
19	*87	63	8.5	20	11	17	112	16	3.9	2.4	1.4	3.2
20	50	52	7.5	17	11	17	88	15	3.6	2.2	1.3	3.5
21	36	35	7.0	16	10	14	80	14	3.3	2.0	1.3	3.2
22	29	31	6.5	14	9.0	14	84	13	3.4	3.2	1.4	2.6
23	24	30	5.5	12	9.0	14	94	12	3.2	2.8	1.4	2.9
24	21	28	5.0	11	10	15	91	*12	3.0	2.6	1.3	13
25	26	27	5.4	10	12	14	76	11	2.8	2.4	1.2	8.3
26	26	25	5.8	9.4	14	12	76	10	2.6	2.4	1.2	4.6
27	23	24	5.4	9.0	17	11	68	12	2.6	2.1	1.1	3.4
28	20	22	4.5	8.0	16	10	83	18	3.8	2.0	1.1	3.1
29	17	20	4.2	8.4	14	11	155	14	3.2	1.8	1.0	3.0
30	21	19	3.7	8.4	-------	11	161	12	*2.8	1.6	1.2	2.6
31	181	-------	3.4	9.0	-------	11	-------	15	-------	1.6	1.4	---
Total	1,010.3	1,635	357.9	621.6	313.2	496	2,558.6	939	368.5	93.4	40.1	100.3
Mean	32.6	54.5	11.5	20.1	10.8	16.0	85.3	30.3	12.3	3.01	1.29	3.34
Cfsm	2.65	4.43	0.935	1.63	0.878	1.30	6.93	2.46	1.00	0.245	0.105	0.272
In.	3.05	4.94	1.08	1.88	0.95	1.50	7.74	2.84	1.11	0.28	0.12	0.30

Calendar year 1955: Max 426 Min 1.1 Mean 27.6 Cfsm 2.24 In. 30.41
Water year 1955-56: Max 217 Min 1.0 Mean 23.3 Cfsm 1.89 In. 25.79

Peak discharge (base, 160 cfs).--Oct. 31 (8 p.m.) 283 cfs (3.70 ft); Nov. 5 (11 a.m.) 224 cfs (3.45 ft); Apr. 17 (1 a.m.) 293 cfs (3.74 ft); Apr. 29 (12 m.) 180 cfs (3.23 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26, 27, Dec. 7 to Jan. 11, Jan. 17 to Feb. 7, Feb. 21-24, Feb. 27 to Mar. 1, Mar. 4-8, 11, 12, 17-19, 24-26.

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 1956.

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.--42 years, 636 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 4,550 cfs Apr. 17 (gage height, 6.86 ft); minimum daily, 31 cfs Aug. 5.
1914-56: 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 determinations; practically no flow at times during 1915 and 1916 because of regulation; minimum daily, 8 cfs Sept. 6, 1926.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by powerplants, Lake Monomonac and other reservoirs, and high flow by Birch Hill and Tully Reservoirs (see p. 230).

Revisions (water years).--WSP 641: 1920(M). WSP 756: Drainage area. WSP 781: 1928(M), 1939(M). WSP 1201: 1915(M).

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	26	3.0	396
1.7	45	4.0	1,040
1.9	72	5.0	1,870
2.2	126	7.0	4,790
2.5	199		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	347	1,720	731	140	420	460	568	2,090	608	148	78	64
2	283	1,550	692	120	410	470	608	2,440	542	135	71	66
3	325	1,440	640	110	420	480	705	2,940	949	126	64	110
4	329	1,600	*672	115	340	568	828	2,880	1,130	118	33	100
5	303	2,510	835	120	300	672	1,300	2,810	1,000	122	31	86
6	341	1,810	828	115	340	620	1,790	2,620	868	133	93	82
7	646	2,180	724	115	370	861	2,110	2,590	738	150	86	150
8	770	2,380	600	120	400	970	1,970	2,450	575	146	76	135
9	848	2,140	475	1,000	360	880	1,920	2,320	474	167	70	115
10	796	1,870	425	1,500	340	835	1,820	2,070	428	182	62	115
11	705	1,830	390	1,550	330	672	1,860	1,820	450	150	45	100
12	498	1,880	380	1,500	*340	738	2,000	1,590	439	130	60	100
13	418	1,850	340	1,850	355	738	2,240	1,430	372	258	87	115
14	456	1,980	330	1,960	355	634	2,450	1,310	338	188	*74	120
15	705	1,950	350	2,100	355	588	2,590	1,290	299	186	65	110
16	718	1,840	320	2,100	400	560	3,470	1,180	279	237	67	*153
17	1,410	1,950	320	2,050	410	*480	4,430	1,080	267	106	62	202
18	2,460	1,780	305	1,700	440	580	*3,740	942	271	134	45	220
19	*2,870	1,640	290	1,620	450	620	3,500	783	243	136	60	243
20	2,880	1,500	250	1,340	520	580	3,240	672	214	122	78	243
21	2,690	1,480	220	647	430	580	3,120	666	194	102	70	232
22	2,520	1,320	210	1,200	340	620	3,110	601	183	124	64	205
23	2,370	1,170	180	970	330	640	3,120	*510	167	133	66	202
24	2,410	1,030	170	679	330	580	3,020	307	160	118	60	474
25	2,350	1,030	180	601	340	540	2,880	626	162	106	43	480
26	3,160	949	190	386	582	630	2,920	486	153	104	58	391
27	1,850	861	180	816	705	560	2,880	401	155	130	72	316
28	1,350	868	165	575	580	545	2,980	568	160	86	66	283
29	1,050	802	160	492	460	545	3,300	608	180	85	60	287
30	1,040	744	160	523	-------	582	3,500	510	*160	97	60	253
31	1,970	-------	150	490	-------	575	-------	568	-------	81	68	-------
Total	39,868	47,654	11,862	28,604	11,752	19,403	73,969	43,158	12,158	4,193	1,994	5,752
Mean	1,286	1,588	383	923	405	626	2,466	1,392	405	135	64.3	192
(†)	+6.16	+1.31	-1.12	+0.67	+2.35	-7.13	+171	-167	-0.89	-0.15	0	+0.54
Adjusted for change in reservoir contents												
Mean	1,292	1,590	382	923	408	619	2,637	1,225	404	135	64.3	192
Cfsm	3.45	4.24	1.02	2.46	1.09	1.65	7.03	3.27	1.08	0.360	0.171	0.512
In.	3.97	4.73	1.17	2.84	1.17	1.90	7.84	3.77	1.20	0.42	0.20	0.57

	Observed			Adjusted			
Calendar year 1955:	Max 2,880	Min 45	Mean 744	Mean 743	Cfsm 1.98	In. 26.89
Water year 1955-56:	Max 4,430	Min 31	Mean 821	Mean 821	Cfsm 2.19	In. 29.78

* 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 Aug. 17 to Sept. 14; 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. 8 to Jan. 13, Jan. 31 to Feb. 25, Feb. 28 to Mar. 2, Mar. 16-29.

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 1956.

Average discharge.--41 years, 11,970 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, Comerford Station Pond and Moore Reservoir (see p. 230), and other reservoirs (combined usable capacity, about 24½ 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 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,120	21,500	7,620	266	6,040	7,670	2,540	79,200	17,500	246	3,640	6,920
2	452	16,800	7,450	1,480	5,980	7,320	7,420	63,300	18,900	5,950	3,590	3,730
3	4,460	15,100	5,010	4,350	6,030	6,970	6,980	57,800	26,700	3,130	3,160	4,110
4	4,180	15,700	5,080	3,510	4,550	2,810	8,840	58,200	37,400	138	555	7,780
5	3,950	28,100	9,150	3,320	1,570	9,380	13,700	55,600	29,100	5,170	424	8,030
6	5,360	28,500	9,790	3,730	6,700	9,200	31,000	52,300	20,000	7,250	2,820	6,040
7	9,360	24,000	8,570	2,030	6,820	10,400	38,100	47,800	17,900	1,880	3,400	6,090
8	4,490	21,100	6,960	1,200	6,700	8,310	34,800	43,200	17,900	890	3,420	2,960
9	5,340	17,400	6,300	7,800	6,490	8,860	29,300	38,500	16,300	6,930	2,630	632
10	6,070	15,800	2,370	15,000	6,750	6,780	25,500	33,400	14,100	9,520	3,890	4,560
11	5,800	16,200	1,730	22,000	5,920	5,300	24,500	35,400	9,790	10,300	1,160	4,470
12	4,240	17,000	6,200	23,700	3,800	7,090	29,900	32,700	10,800	10,200	191	4,810
13	5,390	15,000	5,620	24,600	6,170	6,750	36,800	31,500	13,100	7,120	3,290	5,900
14	8,160	15,100	5,580	23,800	5,820	7,040	37,100	32,000	11,200	9,970	2,060	4,780
15	17,600	16,900	5,960	16,800	6,480	8,020	37,600	32,800	9,590	12,600	3,250	138
16	19,400	18,300	5,880	15,100	6,240	7,500	40,700	34,400	7,950	11,500	2,810	138
17	23,500	17,800	3,330	14,200	6,820	4,090	71,000	32,000	4,650	7,850	3,510	7,180
18	25,400	17,000	1,750	11,500	3,850	2,170	74,000	27,500	5,420	7,760	390	7,150
19	15,300	16,000	5,830	9,640	1,700	6,990	62,700	22,900	6,590	8,110	138	8,440
20	14,800	13,300	6,140	9,000	7,040	5,780	50,600	18,500	6,780	6,850	3,160	6,940
21	14,500	11,000	4,450	5,830	6,500	6,610	45,700	17,600	5,370	5,000	3,280	7,550
22	10,500	12,100	3,080	4,140	4,080	6,450	40,300	14,000	5,250	2,610	3,000	8,080
23	4,950	11,700	2,800	9,200	6,060	7,020	36,500	11,400	145	4,470	2,930	2,210
24	9,680	9,140	1,930	7,800	5,440	6,690	34,300	12,300	323	4,670	3,270	8,520
25	10,800	9,880	1,340	8,020	4,810	4,840	33,200	12,700	5,090	4,700	138	14,900
26	9,600	11,500	1,680	5,980	4,980	7,180	31,800	13,200	6,300	5,870	138	14,400
27	10,200	5,790	4,930	6,170	7,200	7,550	29,800	13,200	6,220	6,470	3,000	10,300
28	11,500	8,550	4,800	4,180	8,230	5,700	32,700	24,500	5,850	4,270	2,800	8,000
29	7,800	8,950	4,770	3,340	7,990	6,740	63,800	35,400	7,440	138	3,120	1,200
30	7,040	7,630	4,090	6,580	-------	5,930	78,400	31,900	2,160	5,140	3,630	305
31	25,700	-------	2,250	5,760	-------	5,680	-------	21,800	-------	4,000	6,370	-------
Total	306,642	462,840	152,440	280,026	168,760	208,820	1,089,580	‡1,037	345,818	180,702	78,564	176,263
Mean	9,892	15,430	4,917	9,033	5,750	6,736	36,320	33,450	11,530	5,829	2,534	5,875
(†)	-222	+1,056	-514	+847	-1,000	-1,156	+3,739	+1,250	+303	-160	-353	+22.7

Adjusted for change in reservoir contents

Mean	9,669	16,480	4,403	9,880	4,751	5,580	40,060	34,700	11,830	5,669	2,181	5,898
Cfsm	1.35	2.30	0.615	1.38	0.663	0.779	5.59	4.84	1.65	0.791	0.304	0.824
In.	1.56	2.57	0.71	1.59	0.72	0.90	6.24	5.59	1.84	0.91	0.35	0.92

	Observed			Adjusted			
Calendar year 1955:	Max 79,600	Min 138	Mean 12,420	Mean 12,460	Cfsm 1.74	In. 23.62	
Water year 1955-56:	Max 79,200	Min 138	Mean 12,280	Mean 12,570	Cfsm 1.75	In. 23.89	

† Change in contents, equivalent in cubic feet per second, in First Connecticut and Second Connecticut Lakes, Lake Francis, Comerford Station Pond and Moore Reservoir (dead storage October to March, live storage thereafter), Union Village Reservoir, 4 reservoirs in Mascoma River basin, Sunapee Lake, and Surry Mountain, Birch Hill, and Tully Reservoirs.

‡ Expressed in thousands.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 517.36 ft above mean sea level, datum of 1929.

Average discharge.--43 years, 905 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 18,100 cfs Oct. 15 (gage height, 11.19 ft); minimum daily, 40 cfs Aug. 5.

1913-56: 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 determinations 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. 230), and by several powerplants above station.

Revisions (water years).--WSP 781: 1915(M). WSP 1301: 1918(M).

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	30	4.0	1,980
1.6	100	6.0	5,210
2.0	235	8.0	9,380
2.5	500	10.0	14,600
3.0	910		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	232	3,960	982	820	1,050	776	164	3,660	1,500	106	468	95
2	181	2,760	973	900	1,060	1,070	438	3,100	1,160	96	390	87
3	733	1,920	319	746	928	1,000	687	3,250	2,000	114	420	126
4	854	2,760	696	901	408	330	814	2,920	2,660	90	188	283
5	858	5,300	1,230	904	170	656	1,330	3,370	2,130	112	40	506
6	1,500	3,500	1,200	904	652	1,070	1,910	3,030	1,450	142	160	734
7	2,610	2,350	1,160	*691	858	1,470	2,020	2,410	1,170	126	*474	566
8	1,440	2,200	1,140	150	808	1,320	1,880	2,200	1,050	101	508	94
9	564	1,750	1,110	1,010	874	1,180	1,160	2,430	966	138	575	45
10	1,030	1,950	1,130	1,740	*827	1,160	1,190	2,680	382	148	599	466
11	1,110	2,550	1,110	1,610	444	499	1,470	2,780	557	78	220	614
12	1,070	2,500	1,090	1,540	334	654	1,790	2,650	672	89	64	840
13	1,070	2,100	1,110	1,360	854	1,140	1,920	1,890	676	82	202	951
14	1,440	2,800	1,090	1,050	718	*1,130	1,890	2,300	751	740	74	*973
15	13,600	3,100	1,100	564	716	1,120	1,740	1,890	523	414	91	215
16	10,400	2,700	1,080	753	750	1,060	3,450	1,940	465	486	480	310
17	*12,000	3,000	1,070	1,160	704	1,070	4,320	1,620	126	470	430	733
18	7,570	2,400	1,070	1,100	638	435	2,800	1,510	526	580	117	1,040
19	4,750	1,750	1,080	1,080	438	830	2,380	680	699	530	73	794
20	3,390	1,600	1,060	1,100	645	772	*1,960	252	390	525	386	876
21	2,430	1,300	1,050	1,080	902	930	1,750	577	558	298	436	500
22	1,800	1,100	1,040	1,010	830	1,080	1,750	1,150	504	100	366	80
23	681	1,050	1,040	1,020	1,030	1,100	1,320	1,150	124	244	316	74
24	836	1,100	1,060	1,070	1,040	608	1,240	*864	132	544	322	770
25	1,400	1,100	1,100	1,090	664	275	1,160	498	552	539	68	884
26	1,270	1,000	1,080	1,080	613	575	1,230	218	438	530	43	886
27	1,240	1,050	1,040	1,060	1,020	1,080	1,310	468	410	482	200	982
28	1,190	1,050	1,040	1,060	980	1,100	3,060	710	110	90	246	982
29	1,140	980	1,050	1,060	748	678	4,680	795	*130	61	270	837
30	1,090	*1,000	1,010	1,050	-------	720	6,450	443	124	126	278	150
31	6,270	-------	1,040	1,050	-------	196	-------	972	-------	333	378	-------
Total	85,749	63,680	32,330	31,693	21,703	27,084	59,263	54,407	22,935	8,514	8,882	16,493
Mean	2,766	2,123	1,043	1,022	748	874	1,975	1,755	764	275	287	550
(†)	+613	-262	-719	-177	-401	-450	+1,302	+722	-96.5	-36.7	-233	-247

Adjusted for change in reservoir contents

Mean	3,379	1,861	324	845	347	423	3,277	2,477	668	238	53.4	303
Cfsm	9.33	5.14	0.895	2.33	0.959	1.17	9.05	6.84	1.85	0.657	0.148	0.837
In.	10.76	5.73	1.03	2.69	1.03	1.35	10.10	7.89	2.06	0.76	0.17	0.93

	Observed			Adjusted			
Calendar year 1955:	Max 13,600	Min 47	Mean 1,215	Mean 1,148	Cfsm 3.17	In. 43.04
Water year 1955-56:	Max 13,600	Min 40	Mean 1,182	Mean 1,184	Cfsm 3.27	In. 44.50

* Discharge measurement made on this day.

† Change in contents, equivalent in cubic feet per second, in Somerset and Harriman Reservoirs.

Note.--No gage-height record Oct. 15, 16, Nov. 5-29, Aug. 5, 6; discharge estimated on basis of weather records, recorded range in stage, powerplant records, and records for station near West Deerfield. Stage-discharge relation affected by ice Dec. 20-24, 26-28, Dec. 31 to Jan. 2, Jan. 8, 19, 24, Feb. 1, 5, 22-24, Mar. 18, 19, 25, 26.

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 1956. 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.--17 years, 184 cfs.

Extremes.--Maximum discharge during year, 13,200 cfs Oct. 15 (gage height, 10.37 ft), from rating curve extended above 5,700 cfs by logarithmic plotting; minimum, 9.2 cfs Aug. 26; minimum daily, 10 cfs Aug. 26, 27, 29, 30.
1939-56: Maximum discharge, that of Oct. 15, 1955; 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 15-21, 31)

Oct. 1-31				Nov. 1 to Sept. 30			
1.9	34	4.0	635	1.5	8.0	3.0	207
2.1	56	5.0	1,310	1.7	17	3.5	385
2.5	117	6.0	2,390	1.9	31	4.0	660
3.0	230	8.0	5,780	2.1	50	5.0	1,530
3.5	393	10.0	11,200	2.5	103	6.0	2,740

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	62	660	125	33	50	77	79	1,080	133	32	16	14
2	51	440	*125	28	50	73	89	813	118	31	15	44
3	44	358	133	27	47	81	120	962	953	31	15	56
4	41	1,120	196	36	45	98	177	790	397	29	14	80
5	38	2,000	234	40	50	89	503	660	237	29	14	65
6	234	972	170	42	47	76	746	540	182	57	16	60
7	689	636	129	42	57	207	674	470	151	59	16	59
8	287	534	125	40	62	177	440	385	124	41	15	57
9	189	415	120	530	61	125	312	312	106	42	14	54
10	134	344	110	700	60	100	390	358	112	39	13	52
11	106	430	100	530	58	91	554	312	153	32	12	51
12	91	475	95	582	*68	106	709	300	108	30	12	52
13	80	485	81	435	68	98	745	293	89	32	12	26
14	239	730	82	226	63	*93	772	262	74	184	13	*22
15	8,740	507	92	170	62	84	751	229	63	83	12	23
16	2,870	435	85	144	62	68	1,730	207	58	47	12	87
17	*3,400	626	80	117	57	84	1,840	184	54	38	11	94
18	*1,260	376	77	103	57	90	1,160	168	48	31	11	79
19	1,100	300	72	95	61	85	902	161	44	27	11	40
20	739	272	60	93	59	80	*738	146	39	23	11	43
21	536	246	42	81	58	75	745	133	39	25	12	50
22	409	223	40	75	61	80	1,040	124	42	42	12	33
23	337	204	40	72	61	80	775	120	40	37	13	29
24	310	243	50	66	57	76	570	*113	38	39	12	193
25	343	215	62	60	64	82	558	101	37	36	11	87
26	284	187	62	56	125	86	612	97	33	31	10	50
27	268	166	54	55	120	77	665	185	34	26	10	37
28	230	168	43	53	115	76	1,670	254	49	23	11	33
29	208	144	38	51	90	74	2,050	157	*40	21	10	29
30	403	138	40	53	-------	79	2,160	159	36	19	10	26
31	2,060	-------	38	54	-------	76	-------	166	-------	18	13	-----
Total	25,782	14,049	2,800	4,689	1,895	2,843	24,276	10,241	3,631	1,234	389	1,625
Mean	832	468	90.3	151	65.3	91.7	809	330	121	39.8	12.5	54.2
Cfsm	9.41	5.29	1.02	1.71	0.739	1.04	9.15	3.73	1.37	0.450	0.141	0.613
In.	10.85	5.91	1.18	1.97	0.80	1.20	10.21	4.31	1.53	0.52	0.16	0.68

Calendar year 1955: Max 8,740 Min 9.4 Mean 255 Cfsm 2.88 In. 39.14
Water year 1955-56: Max 8,740 Min 10 Mean 255 Cfsm 2.88 In. 39.32

Peak discharge (base, 1,880 cfs).--Oct. 15 (11:30 a.m.) 13,200 cfs (10.37 ft); Oct. 17 (1 p.m.) 5,850 cfs (7.78 ft); Oct. 31 (4:30 a.m.) 3,700 cfs (6.62 ft); Nov. 5 (3 a.m.) 2,730 cfs (5.99 ft); Apr. 16 (10:30 p.m.) 2,540 cfs (5.86 ft); Apr. 29 (1 a.m.) 3,540 cfs (6.52 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 8-14, Dec. 16 to Jan. 11, Jan. 19, Jan. 21 to Feb. 7, Feb. 16, 17, Feb. 20 to Mar. 2, Mar, 5, 9-11, 15-29.

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 1956. 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.--16 years (1940-56), 1,327 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 43,700 cfs Oct. 15 (gage height, 14.56 ft); minimum daily, 56 cfs Aug. 26.
1940-56: 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. 230), and by several powerplants above station.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	56	4.0	2,670
1.6	84	5.0	4,690
1.8	155	6.0	7,370
2.1	310	8.0	14,200
2.5	605	12.0	31,100
3.0	1,130		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	324	5,780	1,280	980	1,180	856	415	5,910	1,850	188	584	172
2	210	3,650	1,290	940	1,150	1,320	582	4,620	1,650	128	514	370
3	690	2,980	782	880	1,170	1,310	910	4,980	3,810	138	509	295
4	948	4,920	1,160	1,040	514	694	1,320	4,370	3,470	162	130	240
5	1,010	10,100	2,000	1,040	373	714	2,690	4,640	2,830	204	73	423
6	1,850	5,650	1,580	1,040	596	1,340	3,590	4,150	2,070	124	380	766
7	4,200	3,830	1,510	1,000	1,030	2,740	3,510	3,390	1,250	298	466	714
8	2,260	3,510	1,420	400	1,040	1,990	2,940	3,030	1,350	214	498	130
9	1,140	2,990	1,470	2,000	944	1,650	2,160	3,160	1,340	307	620	134
10	1,020	3,070	1,460	3,060	948	1,440	2,080	3,350	725	362	690	326
11	1,140	3,890	1,410	2,690	*721	970	2,830	3,530	818	94	144	646
12	1,410	3,730	1,240	2,680	464	770	3,350	3,330	950	84	104	870
13	1,200	3,470	1,470	2,530	1,040	1,440	3,610	2,760	859	95	232	1,100
14	1,880	4,420	1,280	1,620	730	1,430	3,590	2,850	863	1,040	*172	990
15	30,000	4,340	1,390	1,080	1,080	1,400	3,410	2,600	741	839	131	*374
16	18,000	3,790	1,180	649	909	*1,230	6,090	2,440	611	445	339	516
17	20,200	4,520	1,310	1,360	811	1,270	8,300	2,280	253	570	439	964
18	*11,300	3,510	1,390	1,310	819	850	5,220	1,970	512	546	262	1,040
19	7,340	2,700	1,270	1,380	630	858	*4,390	1,400	756	597	59	896
20	5,020	2,480	1,210	1,370	746	1,240	3,570	660	677	634	448	1,030
21	3,690	2,150	1,050	1,280	1,030	1,070	3,260	538	572	602	490	742
22	2,870	1,680	1,150	1,220	939	1,360	3,850	1,350	564	182	472	132
23	1,820	1,670	1,150	1,160	1,200	1,360	3,010	*1,460	228	235	367	154
24	1,430	1,780	1,350	1,280	1,250	960	2,600	1,350	134	560	300	1,190
25	2,310	1,440	1,350	1,310	948	535	2,400	676	500	667	131	1,070
26	1,940	1,410	1,300	1,310	1,020	624	2,570	482	*693	766	56	1,010
27	1,870	1,460	1,250	1,190	1,350	1,280	2,450	728	518	594	196	1,170
28	1,710	1,390	1,150	1,240	1,230	1,320	5,160	1,080	244	192	228	1,170
29	1,840	*1,420	1,150	1,120	966	890	8,490	1,150	149	70	265	840
30	1,960	1,340	1,250	1,240	-------	1,050	10,400	800	174	201	352	323
31	11,000	-------	1,150	1,130	-------	446	-------	1,230	-------	342	392	-------
Total	143,582	99,070	40,402	42,529	26,808	36,407	108,747	76,264	31,161	11,480	10,043	19,797
Mean	4,632	3,302	1,303	1,372	924	1,174	3,625	2,460	1,039	370	324	660
(†)	+613	-262	-719	-177	-401	-450	+1,302	+722	-96.5	-36.7	-233	-247

Adjusted for change in reservoir contents

Mean	5,245	3,040	584	1,194	523	724	4,927	3,182	942	334	90.8	413
Cfsm	9.40	5.45	1.05	2.14	0.937	1.30	8.83	5.70	1.69	0.599	0.163	0.740
In.	10.84	6.08	1.21	2.47	1.01	1.50	9.85	6.58	1.88	0.69	0.19	0.83

	Observed			Adjusted		
Calendar year 1955:	Max 30,000	Min 65	Mean 1,806	Mean 1,739	Cfsm 3.12	In. 42.31
Water year 1955-56:	Max 30,000	Min 56	Mean 1,766	Mean 1,767	Cfsm 3.17	In. 43.13

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Somerset and Harriman Reservoirs.
Note.--Stage-discharge relation affected by ice Dec. 20 to Jan. 9, Feb. 23, 24, Mar. 18.

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 1956. 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.--52 years, 13,820 cfs (adjusted for storage since October 1923).

Extremes.--Maximum discharge during year, 99,400 cfs Apr. 30 (gage height, 31.80 ft); minimum daily, 357 cfs Aug. 26.

1904-56: Maximum discharge, 236,000 cfs Mar. 19, 1936 (gage height, 49.2 ft, from floodmarks), from rating curve extended above 160,000 cfs; minimum daily, 325 cfs July 4, 1949.

Remarks.--Records good except those for periods of ice effect or no gage-height record and those below 1,500 cfs, which are fair. Flow regulated by powerplant and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir and Comerford Station Pond (see p. 230), and other reservoirs (combined usable capacity, about 32½ 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).

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,880	29,900	9,220	1,700	7,400	8,920	3,000	92,900	20,900	770	4,310	7,510
2	982	24,000	8,670	2,500	7,500	8,980	8,040	75,800	21,900	6,830	4,030	4,030
3	4,610	20,200	*6,280	5,400	7,600	8,940	7,840	67,100	31,800	3,320	3,710	4,680
4	5,050	20,600	6,090	4,700	5,300	4,500	10,500	65,400	42,500	a434	968	7,990
5	5,000	41,700	11,300	4,500	2,600	9,910	17,700	63,400	34,400	5,370	672	8,290
6	6,470	38,900	11,500	5,000	7,400	9,860	34,400	58,500	23,700	7,330	2,960	6,900
7	14,100	30,400	10,600	3,500	8,200	13,600	43,600	53,000	20,500	2,390	3,810	6,760
8	7,180	26,500	8,520	2,000	8,000	10,900	42,700	47,500	19,900	1,510	3,760	3,350
9	6,580	22,300	7,310	9,500	7,800	9,460	33,100	42,600	18,600	7,360	3,340	926
10	7,380	20,100	4,050	20,000	8,000	8,340	29,600	38,500	16,000	10,200	4,750	4,820
11	6,930	21,100	3,690	27,000	*6,000	6,630	30,200	38,600	11,100	10,700	1,490	2,540
12	5,790	22,500	7,640	30,000	4,500	8,140	35,300	37,300	12,400	10,400	a439	5,700
13	6,630	20,500	7,150	30,500	7,330	8,920	42,100	35,900	14,800	7,430	3,400	6,540
14	9,620	20,700	7,120	27,900	7,000	8,980	42,300	35,500	12,800	11,500	2,370	5,350
15	42,200	23,000	7,540	20,300	7,550	9,890	42,000	36,800	10,700	15,500	3,390	*835
16	43,700	23,400	7,280	14,600	7,510	9,950	46,700	37,500	8,320	13,300	2,890	922
17	45,200	24,600	5,200	15,700	7,860	5,720	72,700	35,300	5,280	8,530	4,190	8,120
18	42,400	21,800	3,780	13,400	5,460	3,600	79,400	30,800	5,910	8,310	858	8,690
19	26,500	20,200	7,400	11,300	3,000	8,200	*70,300	27,000	7,420	8,910	*399	9,480
20	*22,800	17,200	7,600	11,100	8,040	7,300	57,800	21,200	7,640	7,740	3,450	8,220
21	20,000	14,000	6,000	7,670	7,600	7,800	50,400	18,900	5,970	5,660	3,840	8,400
22	14,100	13,900	4,500	5,880	5,200	8,470	46,000	15,800	5,690	3,010	3,510	8,480
23	7,800	14,200	4,000	10,100	7,600	8,310	41,800	13,400	1,040	4,770	3,390	12,600
24	11,100	11,000	3,500	9,930	7,000	8,000	38,900	14,500	796	5,420	3,620	10,100
25	13,400	11,200	3,000	10,100	6,000	5,590	37,100	*14,300	5,380	5,720	555	16,800
26	12,200	13,600	2,900	7,600	6,200	7,770	36,100	14,500	7,010	6,600	a357	15,800
27	12,600	7,480	6,400	7,400	8,640	8,680	33,800	14,400	6,730	7,220	2,970	11,500
28	13,500	10,300	6,100	5,600	9,720	7,020	37,900	26,000	6,540	4,710	3,000	8,930
29	9,740	10,600	6,100	4,700	9,300	7,730	70,600	38,800	7,740	a563	3,270	2,700
30	8,260	9,430	5,500	7,600	-------	7,150	92,400	35,400	2,180	5,420	3,460	1,070
31	35,800	-------	3,500	7,200	-------	6,440	-------	25,000	-------	4,500	6,710	-------
Total	469,502	605,310	199,440	344,380	201,310	253,700	1,234,280	‡1,171.6	395,646	201,427	89,718	208,033
Mean	15,150	20,180	6,434	11,110	6,942	8,184	41,140	37,790	13,190	6,498	2,894	6,934
(†)	+390	+795	-1,233	+669	-1,401	-1,606	+5,041	+1,972	+206	-197	-596	-224

Adjusted for change in reservoir contents

Mean	15,540	20,970	5,200	11,780	5,541	6,578	46,180	39,770	13,390	6,301	2,398	6,710
Cfsm	1.98	2.67	0.661	1.50	0.705	0.836	5.87	5.06	1.70	0.801	0.293	0.853
In.	2.28	2.97	0.76	1.73	0.76	0.96	6.55	5.83	1.90	0.92	0.34	0.95

	Observed			Adjusted		
Calendar year 1955:	Max 79,200	Min 393	Mean 14,820	Mean 14,790 Cfsm 1.88	In. 25.53	
Water year 1955-56:	Max 92,900	Min 357	Mean 14,680	Mean 15,000 Cfsm 1.91	In. 25.95	

Peak discharge (base, 61,000 cfs).--Oct. 15 (9:30 p.m.) 65,100 cfs (24.84 ft); Apr. 18 (1 a.m.) 81,500 cfs (28.30 ft); Apr. 30 (9 to 11 p.m.) 99,400 cfs (31.80 ft).

* Discharge measurement made on this day.

† Change in contents, equivalent in cubic feet per second, in all reservoirs from First Connecticut and Second Connecticut Lakes to 2 reservoirs in Deerfield River basin listed on page , and, dead storage October to March, live storage thereafter in Moore Reservoir.

‡ Expressed in thousands.

a No gage-height record; discharge estimated on basis of weather records, shape of normal recession graph, and records for Connecticut River at Turners Falls and Deerfield River near West Deerfield.

Note.--Stage-discharge relation affected by ice Dec. 19 to Jan. 12, Jan. 26 to Feb. 12, Feb. 19, 21-26, Mar. 18-20.

Mill River at Northampton, Mass.

Location.--Lat 42°19'05", long 72°39'21", on right bank at Northamptor, Hampshire County, 3½ miles upstream from mouth.

Drainage area.--52.8 sq mi.

Records available.--October 1938 to September 1956, 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.--18 years, 99.8 cfs.

Extremes.--Maximum discharge during year, 5,010 cfs Oct. 15 (gage height, 9.81 ft), from rating curve extended above 3,700 cfs on basis of computation of flow over dam at gage height 11.78 ft; minimum, 5.0 cfs Aug. 4; minimum daily, 6.7 cfs Aug. 29.
1938-56: Maximum discharge, 6,300 cfs Aug. 19, 1955 (gage height, 11.78 ft), from rating curve extended above 3,700 cfs as explained above; minimum, 2.2 cfs Oct. 1, 1950; minimum daily, 5.5 cfs Sept. 27-30, 1941, Sept. 10, 1944.

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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31				Nov. 1 to Sept. 30			
1.9	34	3.5	500	1.4	5.6	2.5	138
2.2	74	4.0	765	1.5	8.0	3.0	290
2.5	136	7.0	3,020	1.6	12	3.5	500
3.0	290			1.8	26	4.0	765
				2.1	63	6.0	2,220

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	*432	100	29	45	80	98	385	154	21	11	12
2	49	301	98	28	42	89	120	301	104	20	10	23
3	43	258	104	31	43	125	153	344	707	18	8.2	46
4	38	734	204	34	37	140	198	276	244	16	6.8	22
5	34	1,770	212	36	43	120	436	241	160	22	8.3	14
6	182	544	146	37	41	91	497	218	120	60	8.6	20
7	393	372	110	*38	54	360	418	206	104	49	8.6	16
8	221	332	*104	36	56	210	254	163	89	34	8.6	11
9	146	272	98	120	56	135	228	150	78	37	*8.3	9.4
10	96	244	92	170	56	110	303	160	89	34	8.3	8.6
11	76	399	83	158	56	105	393	146	104	25	8.0	8.6
12	66	360	78	249	105	116	432	134	82	21	7.4	8.6
13	60	305	69	244	90	112	428	127	69	27	8.6	9.0
14	106	534	66	143	70	112	442	118	55	100	9.4	9.0
15	*2,930	344	78	104	*65	100	417	112	45	52	9.0	9.4
16	1,880	320	68	92	68	82	883	106	42	34	8.3	22
17	1,740	352	64	85	65	95	716	100	43	29	8.0	49
18	717	251	63	69	63	105	491	98	38	22	8.0	37
19	758	224	60	62	68	82	410	100	34	20	8.3	24
20	455	212	38	69	62	*87	352	92	33	18	7.4	20
21	328	200	35	60	49	85	*344	83	30	19	7.7	22
22	265	183	35	57	47	82	381	78	32	38	8.0	18
23	231	156	35	55	55	105	393	76	29	36	8.0	17
24	228	163	41	52	49	95	336	*75	28	26	8.0	92
25	254	150	56	47	68	87	305	68	26	30	7.4	58
26	202	138	47	43	120	85	313	64	*23	26	7.2	39
27	179	129	39	45	110	82	298	92	26	21	7.2	34
28	148	127	34	43	100	82	444	98	30	19	7.0	33
29	139	115	32	41	82	84	679	72	24	16	6.7	35
30	374	105	35	52	-------	84	*755	100	22	14	7.0	32
31	1,730	---	31	52	-------	83	-------	167	-------	12	9.7	---
Total	14,127	10,026	2,355	2,381	1,865	3,410	11,917	4,550	2,864	916	253.0	758.6
Mean	456	334	76.0	76.8	64.3	110	397	147	88.8	29.5	8.16	25.3
Cfsm	8.64	6.33	1.44	1.45	1.22	2.08	7.52	2.78	1.68	0.559	0.155	0.479
In.	9.95	7.06	1.66	1.68	1.31	2.40	8.39	3.20	1.88	0.65	0.18	0.53

Calendar year 1955: Max 3,870 Min 6.8 Mean 160 Cfsm 3.03 In. 41.21
Water year 1955-56: Max 2,930 Min 6.7 Mean 151 Cfsm 2.86 In. 38.89

Peak discharge (base, 1,250 cfs).--Oct 15 (10:30 a.m.) 5,010 cfs (9.81 ft); Oct. 17 (2 p.m.) 3,020 cfs (7.00 ft); Oct. 31 (4:30 to 5 a.m.) 3,660 cfs (7.88 ft); Nov. 5 (5 a.m.) 3,210 cfs (7.24 ft); June 3 (6:30 a.m.) 1,720 cfs (5.37 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 29 to Dec. 1, Dec. 11-14, Dec. 16 to Jan. 10, Jan. 18 to Mar. 4, Mar. 8-11, 16-30.

Ware River near Barre, Mass.

Location.--Lat 42°25'35", long 72°01'30", on left bank 1,100 ft downstream from bridge at Barre Falls, 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 1956.

Gage.--Water-stage recorder. Altitude of gage is 745 ft (from topographic map).

Average discharge.--10 years, 98.5 cfs.

Extremes.--Maximum discharge during year, 1,890 cfs Oct. 16 (gage height, 6.31 ft), from rating curve extended above 960 cfs by logarithmic plotting; minimum, 3.6 cfs Aug. 29. 1946-56: Maximum discharge, that of Oct. 16, 1955; minimum, 1.1 cfs Sept. 6, 1953.

Remarks.--Records excellent except those for periods of ice effect, which are good. Some regulation by Long Pond and other small reservoirs.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from silt July 17-19, 24-28, Sept. 8)

Oct. 9				Jan. 10 to Sept. 30			
2.5	[illegible]	4.8	485	1.93	3.8	3.5	153
2.7	40	5.0	755	2.0	4.9	4.0	301
3.1	80	5.5	1,100	2.2	9.8	4.5	490
3.5	145	6.0	1,560	2.4	19	5.0	755
4.0	286			2.7	40	5.5	1,100
				3.1	82		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	242	102	31	75	89	93	570	149	22	7.6	7.8
2	47	233	96	26	72	89	104	437	156	19	6.7	7.8
3	38	201	94	27	76	93	120	383	168	16	6.3	7.8
4	32	195	105	30	77	123	140	315	203	14	5.7	7.3
5	*28	396	129	33	75	142	212	281	186	16	5.5	6.5
6	34	525	127	35	71	127	291	258	149	29	5.3	6.4
7	96	406	104	35	81	153	342	*233	118	30	5.3	17
8	120	320	104	36	95	192	262	209	96	26	4.9	18
9	120	267	92	315	96	165	281	186	85	29	4.4	13
10	104	230	85	540	90	145	301	178	78	30	5.4	9.5
11	83	242	79	602	85	133	278	176	77	25	11	8.1
12	65	286	74	463	88	135	291	166	70	19	6.7	7.0
13	53	286	69	394	93	131	315	158	63	17	7.3	7.0
14	53	289	67	332	92	125	338	144	56	27	7.6	6.7
15	242	313	66	286	93	125	384	133	48	44	6.7	6.5
16	1,520	286	66	242	98	123	464	123	44	38	5.9	8.8
17	1,460	270	64	192	95	96	779	116	43	30	5.1	16
18	1,040	245	58	168	88	140	755	104	38	23	4.7	24
19	636	215	56	170	89	125	618	95	33	18	4.9	27
20	452	195	50	140	90	110	499	89	29	15	4.6	20
21	348	179	46	125	82	109	454	81	28	14	5.3	20
22	283	*161	40	112	76	107	429	74	28	15	8.1	16
23	245	147	35	110	78	110	421	72	28	15	7.0	14
24	210	143	36	94	80	102	391	77	25	14	6.1	30
25	198	139	43	92	80	101	346	72	37	18	5.5	37
26	190	131	48	86	110	106	328	68	37	*19	4.7	28
27	173	118	45	83	109	98	311	77	32	15	4.1	21
28	156	118	39	77	*99	96	308	96	34	13	3.8	27
29	141	105	34	75	92	95	487	86	29	11	4.0	32
30	135	105	34	75	-------	96	668	78	25	9.0	6.8	25
31	185	---	33	80	-------	*93	-------	92	---	8.4	*7.8	---
Total	8,538	6,988	2,120	5,108	2,525	3,684	11,010	5,207	2,190	638.6	183.6	482.0
Mean	275	233	68.4	165	87.1	119	367	168	73.0	20.6	6.02	16.1
Cfsm	5.00	4.24	1.24	3.00	1.58	2.16	6.67	3.05	1.33	0.375	0.109	0.293
In.	5.77	4.73	1.43	3.45	1.71	2.49	7.44	3.52	1.48	0.43	0.13	0.33

Calendar year 1955: Max 1,520 Min 3.6 Mean 116 Cfsm 2.11 In. 28.56
Water year 1955-56: Max 1,520 Min 3.8 Mean 133 Cfsm 2.42 In. 32.91

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27, Nov. 30 to Dec. 2, Dec. 7-14, Dec. 16 to Jan. 2, Jan. 7-10, 20-29, Jan. 31 to Feb. 6, Feb. 8, 14, 16, 17, 19, 21-24, 26, Feb. 28 to Mar. 1, Mar. 9, 10, 17, 18, 20-22, 24-29, Mar. 31 to Apr. 2.

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 1956.

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.--28 years, 169 cfs.

Extremes.--Maximum daily discharge during year, 2,070 cfs Oct. 17; minimum daily, 10 cfs Aug. 28.
1928-56: 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 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	107	419	186	47	105	b136	154	1,190	295	33	18	20
2	97	388	179	41	107	b135	177	926	293	43	20	23
3	80	325	185	41	109	155	215	759	373	41	19	26
4	67	503	221	45	99	224	299	626	381	37	18	26
5	59	1,050	252	50	106	244	500	549	315	41	16	22
6	84	1,040	248	51	108	217	698	496	238	62	16	22
7	248	794	176	52	136	321	766	454	187	65	16	50
8	274	599	177	61	147	353	470	403	152	59	16	47
9	261	481	150	584	150	287	614	360	138	63	15	37
10	219	406	148	1,180	143	248	589	354	130	67	18	26
11	216	500	114	1,080	138	228	556	346	125	56	27	23
12	154	557	114	854	138	240	616	322	111	46	23	19
13	113	540	116	690	145	236	718	292	96	43	21	19
14	92	577	102	573	138	219	807	247	84	78	20	18
15	694	597	108	472	144	207	900	223	73	94	19	18
16	1,900	532	107	377	148	155	1,300	208	65	88	17	24
17	2,070	499	103	269	137	158	1,720	191	64	76	15	39
18	1,650	440	100	220	137	220	1,530	175	54	60	13	49
19	1,180	384	56	220	138	203	1,250	155	50	48	13	50
20	846	342	25	194	138	193	1,040	149	50	40	13	46
21	635	311	77	176	120	183	971	137	50	39	14	44
22	502	763	67	167	127	179	918	118	50	40	17	36
23	399	255	58	151	b126	188	907	120	47	40	17	34
24	346	244	60	137	b141	171	827	130	56	39	16	63
25	348	239	71	135	b138	181	735	125	74	45	15	77
26	326	216	75	125	b194	182	690	112	56	47	13	66
27	291	206	70	120	184	159	632	144	51	41	11	52
28	265	231	59	110	185	154	684	163	69	35	10	58
29	245	197	53	102	b156	153	1,280	140	99	31	11	62
30	254	204	53	111	-------	155	1,460	130	62	26	17	51
31	384	-------	51	113	-------	150	-------	208	-------	16	19	-------
Total	14,407	17,341	3,568	8,548	3,982	6,234	24,023	9,952	3,887	1,539	513	1,149
Mean	465	445	115	276	137	201	801	321	130	49.6	16.5	38.3
Cfsm	4.80	4.60	1.19	2.85	1.42	2.08	8.27	3.32	1.34	0.512	0.170	0.396
In.	5.54	5.13	1.37	3.28	1.53	2.40	9.23	3.82	1.49	0.59	0.20	0.44

Calendar year 1955: Max 2,070 Min 9.9 Mean 211 Cfsm 2.18 In. 29.59
Water year 1955-56: Max 2,070 Min 10 Mean 249 Cfsm 2.57 In. 35.02

b Stage-discharge relation affected by ice.

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 1956.
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.--44 years, 326 cfs (adjusted for diversion).
Extremes.--Maximum discharge during year, 2,580 cfs Apr. 17 (gage height, 5.55 ft); minimum, 14 cfs Aug. 7, 8, 12, 16; minimum daily, 14 cfs Aug. 12.
1912-56: 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 determination at gage height 12.83 ft and slope-area determination 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 or no gage-height record, 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from aquatic vegetation Aug. 6 to Sept. 6)

Oct. 1 to Jan. 9				Jan. 10 to Sept. 30			
2.0	45	3.5	820	1.58	14	3.0	465
2.1	59	4.0	1,290	1.8	34	3.5	850
2.3	99	5.0	2,110	2.1	87	4.0	1,290
2.6	195	6.0	2,980	2.4	175	5.0	2,110
3.0	400			2.7	300	6.0	2,980

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	940	322	a70	261	279	296	*1,690	557	94	43	20
2	216	850	*335	a75	240	313	414	1,580	610	*101	43	32
3	308	730	242	a150	279	310	485	1,400	866	98	*33	38
4	181	784	367	a100	b170	730	694	1,210	922	94	38	84
5	155	1,890	559	72	211	746	1,340	1,050	722	100	16	48
6	192	1,930	502	96	300	558	1,810	948	558	55	15	[illegible]
7	550	1,630	b478	48	324	865	1,860	906	441	46	[illegible]	[illegible]
8	*730	1,280	379	50	344	939	1,370	810	377	104	[illegible]	18
9	739	1,030	274	b600	346	b710	1,080	722	237	156	[illegible]	51
10	622	870	225	1,510	322	543	1,190	706	235	131	34	106
11	*435	1,060	234	*1,150	228	565	1,340	706	366	133	34	66
12	414	1,260	332	1,030	293	634	1,430	626	276	107	14	58
13	*346	1,180	211	906	423	565	1,570	618	187	94	45	57
14	194	1,220	198	*984	335	514	1,640	618	201	69	41	59
15	*650	1,310	216	858	332	447	1,750	542	199	100	35	48
16	1,630	1,160	b220	786	*373	388	2,02[illegible]	507	112	247	32	29
17	2,130	1,100	141	642	335	b225	2,370	447	91	140	*39	86
18	2,050	960	149	521	194	b345	1,900	384	204	119	40	150
19	*1,510	793	b270	397	234	432	1,610	338	121	100	17	88
20	1,510	739	b125	b400	345	b390	1,350	340	112	90	54	81
21	1,290	694	132	319	b220	b380	1,510	366	111	36	42	94
22	1,050	613	72	b305	b180	*397	1,510	*286	107	59	35	66
23	890	550	133	389	b200	419	1,500	256	85	162	32	40
24	802	502	69	b280	b190	372	1,480	272	62	76	42	161
25	766	534	107	268	b240	b360	*1,330	270	177	61	38	103
26	721	448	b110	243	b600	417	1,220	162	136	69	15	100
27	667	421	b175	239	550	345	1,14[illegible]	220	103	58	43	143
28	577	442	a50	206	427	333	1,020	416	132	61	33	128
29	*470	370	a120	160	b300	328	1,510	342	*147	26	30	88
30	502	358	a100	297	-------	320	1,960	184	70	90	41	40
31	870	-------	a50	284	-------	249	-------	403	-------	50	22	-------
Total	23,263	27,648	6,897	13,415	8,796	14,418	41,809	19,327	8,524	3,008	1,073	2,221
Mean	750	922	222	433	303	465	1,394	623	284	97.0	34.6	74.0
(†)	88.8	0	0	49.7	0	0	128	3.53	0	0	0	0

Adjusted for diversion

Mean	839	922	222	482	303	465	1,522	627	284	97.0	34.6	74.0
Cfsm	4.22	4.63	1.12	2.42	1.52	2.34	7.65	3.15	1.43	0.487	0.174	0.372
In.	4.86	5.17	1.29	2.79	1.64	2.69	8.53	3.63	1.59	0.56	0.20	0.42

	Observed				Adjusted			
Calendar year 1955:	Max 8,880	Min 21	Mean 445		Mean 465	Cfsm 2.34	In. 31.70	
Water year 1955-56:	Max 2,370	Min 14	Mean 466		Mean 488	Cfsm 2.45	In. 33.37	

Peak discharge (base, 1,300 cfs).--Oct. 17 (10 to 11 p.m.) 2,410 cfs (5.37 ft); Nov. 5 (9:30 to 11 p.m.) 2,100 cfs (4.99 ft); Nov. 15 (1 to 3 a.m.) 1,360 cfs (4.08 ft); Jan. 10 (2 to 5 p.m.) 1,570 cfs (4.33 ft); Apr. 7 (2:30 to 3:30 a.m.) 2,020 cfs (4.89 ft); Apr. 17 (1:30 to 3 a.m.) 2,580 cfs (5.55 ft); Apr. 30 (7:30 a.m.) 2,090 cfs (4.97 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.
a No gage-height record; discharge estimated on basis of weather records and records for Ware River at Coldbrook and East Branch Swift River near Hardwick.
b Stage-discharge relation affected by ice.

Hop Brook near New Salem, Mass.

Location.--Lat 42°28'40", 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 1956. 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.--9 years, 6.58 cfs.

Extremes.--Maximum discharge during year, 193 cfs Oct. 31 (gage height, 2.87 ft), from rating curve extended above 78 cfs by logarithmic plotting; minimum, 0.02 cfs Aug. 28, 29.

1947-56: Maximum discharge, 275 cfs Aug. 19, 1956 (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 or no gage-height record, which are fair.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.39	0.02	1.2	4.6
.4	.02	1.4	9.0
.5	.10	1.6	17.1
.6	.24	1.8	29
.7	.54	2.0	45
.8	.99	2.3	78
1.0	2.35		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.3	23	5.6	1.7	2.4	3.6	5.2	26	12.9	0.99	0.29	0.37
2	3.0	18.2	*5.4	1.5	2.5	3.7	6.5	22	10.4	.83	*.18	5.1
3	2.35	15.7	5.7	1.5	2.5	6.1	9.2	21	45	.65	.14	2.30
4	2.15	41	10.0	1.6	2.3	7.6	16.3	17.6	15.3	.50	.12	.46
5	2.00	45	10.4	1.7	2.4	5.8	31	16.2	10.8	2.35	.10	.24
6	15.6	23	6.9	1.8	2.5	4.6	35	14.2	8.5	4.1	*.12	10.0
7	18.9	18.8	5.9	1.85	4.8	25	26	12.2	7.2	2.05	.14	6.5
8	15.4	17.1	5.2	1.75	6.0	10.1	17.0	11.1	6.1	10.7	.08	1.14
9	8.8	14.3	5.2	16.0	4.1	7.3	14.3	9.7	5.9	3.9	.07	.81
10	6.1	13.0	4.5	15.3	3.7	6.3	17.1	11.8	6.7	3.3	1.23	.40
11	5.0	26	4.4	9.0	3.5	7.4	23	9.7	6.4	1.90	.88	.32
12	4.4	22	4.1	13.6	4.4	8.5	29	8.8	4.6	1.40	.26	.63
13	4.1	17.6	3.9	10.6	4.2	7.0	31	8.0	4.0	3.2	.23	*1.35
14	5.4	28	4.0	6.1	3.7	6.8	35	7.5	3.2	7.4	.44	.61
15	15.7	17.1	4.4	5.0	4.8	*5.7	34	7.0	2.7	2.6	.14	.69
16	18.6	17.6	3.8	4.5	4.8	5.6	76	6.5	6.1	2.15	.10	4.9
17	40	19.3	3.4	4.1	3.8	7.8	59	5.9	5.3	1.95	.07	4.0
18	19.1	13.4	3.4	3.8	3.5	6.5	*43	5.9	3.0	1.22	.05	3.0
19	*17.2	12.2	2.9	3.8	3.4	5.4	36	5.7	2.45	.94	.12	1.22
20	13.4	11.4	1.10	3.7	3.2	5.2	31	5.7	2.20	.83	.08	2.15
21	11.1	10.4	5.0	3.4	3.0	5.2	29	5.0	2.30	1.45	.19	1.45
22	9.0	9.4	2.4	3.2	2.8	6.1	30	4.6	2.20	2.9	.28	.99
23	8.5	9.0	2.1	3.1	2.8	6.3	27	7.5	1.75	1.65	.14	2.15
24	11.8	9.7	2.0	2.9	3.0	5.7	26	6.4	1.70	1.10	.10	14.2
25	14.9	8.5	2.2	2.7	7.2	5.4	24	*5.0	1.60	1.30	.08	3.1
26	9.7	7.8	2.4	2.6	12.2	5.0	23	4.5	1.16	1.50	.05	1.90
27	8.5	7.2	2.3	2.5	4.6	5.0	22	7.3	3.0	.83	.04	1.50
28	7.8	7.5	2.1	2.4	4.1	5.0	27	6.1	3.8	.63	.02	1.80
29	7.2	6.1	2.0	2.3	3.8	5.0	38	4.6	1.70	.37	.02	1.50
30	24	6.1	1.9	2.5	------	4.8	49	5.8	*1.30	.34	.06	1.16
31	77	----	1.8	2.7	------	4.6	-------	14.5	--------	.32	.28	----
Total	412.00	495.4	126.40	139.20	115.8	204.1	867.6	303.9	189.26	71.35	6.10	75.74
Mean	13.3	16.5	4.08	4.49	3.99	6.58	28.9	9.80	6.31	2.30	0.197	2.52
Cfsm	3.92	4.87	1.20	1.32	1.18	1.94	8.53	2.89	1.86	0.678	0.058	0.743
In.	4.52	5.44	1.39	1.53	1.27	2.24	9.52	3.33	2.08	0.78	0.07	0.83

Calendar year 1955: Max 163 Min 0.01 Mean 7.62 Cfsm 2.25 In. 30.54
Water year 1955-56: Max 77 Min 0.02 Mean 8.22 Cfsm 2.42 In. 33.00

Peak discharge (base, 72 cfs).--Oct. 17 (12:30 a.m.) 75 cfs (2.28 ft); Oct. 31 (2:30 to 3:30 a.m.) 193 cfs (2.87 ft); Nov. 4 (8:30 to 9:30 p.m.) 86 cfs (2.35 ft); Apr. 16 (4:30 p.m.) 112 cfs (2.51 ft); Apr. 30 (3 to 4 a.m.) 82 cfs (2.33 ft); June 3 (4 a.m.) 107 cfs (2.48 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Dec. 21 to Jan. 6; discharge estimated on basis of weather records, recorded range in stage, and records for East Branch Swift River near Hardwick and Ware River near Barre. Stage-discharge relation affected by ice Jan. 25 to Feb. 8, Feb. 22-25, Mar. 10, 16, 17.

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 1956. 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.--19 years, 72.2 cfs.

Extremes.--Maximum discharge during year, 847 cfs Apr. 17 (gage height, 20.99 ft), from rating curve extended above 500 cfs on basis of computation of flow over dam at gage height 22.49 ft; minimum, 1.6 cfs Aug. 28.
1937-56: Maximum discharge, 6,780 cfs Sept. 21, 1938, average of slope-area and contracted-opening determinations; maximum gage height, 22.49 ft June 25, 1944; no flow Aug. 7, 14-21, 1939, Aug. 26-28, 1949, Aug. 31 to Sept. 6, Sept. 9-12, 1953.

Remarks.--Records good except those for periods of no gage-height record or backwater from Quabbin Reservoir, which are fair.

Rating table, water year 1955-56, except periods of backwater from Quabbin Reservoir (gage height, in feet, and discharge, in cubic feet per second)

19.2	1.6	19.5	36
19.25	3.8	19.6	67
19.3	7.2	20.0	239
19.35	12	20.5	540
19.4	18	21.0	900

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	208	78	28	44	69	75	454	120	28	7.2	6.4
2	54	159	73	25	46	67	84	295	130	24	6.8	7.4
3	50	124	73	25	46	71	97	258	160	21	5.7	--
4	38	133	88	26	42	90	130	224	190	17	5.1	9.9
5	35	521	113	26	45	103	218	201	150	19	4.4	8.4
6	47	426	113	27	46	97	339	177	120	26	5.0	11
7	130	255	94	28	62	144	416	142	90	28	5.0	36
8	170	183	82	28	56	188	339	151	66	25	4.1	31
9	172	148	74	118	54	157	252	128	58	28	3.6	22
10	128	140	68	350	53	128	217	144	52	29	5.0	15
11	99	170	64	293	54	115	242	110	50	25	6.8	11
12	78	258	62	219	57	113	287	113	45	21	6.4	9.3
13	64	225	57	195	57	113	343	100	40	20	5.7	8.4
14	65	233	53	159	54	117	372	95	35	43	8.0	8.8
15	148	261	54	130	57	107	409	92	32	64	5.3	8.4
16	316	208	53	111	64	97	565	84	29	51	4.4	13
17	452	196	50	97	59	96	802	79	27	38	3.8	17
18	461	172	50	82	69	84	600	72	25	29	3.2	23
19	292	145	48	69	64	90	480	66	23	23	3.6	19
20	215	124	44	64	57	86	390	68	22	18	3.2	23
21	165	123	36	59	53	78	320	62	21	17	3.8	21
22	135	117	34	54	46	82	298	58	21	17	4.4	19
23	112	110	32	54	48	88	310	63	20	17	3.8	19
24	101	105	31	50	46	99	290	75	25	16	3.8	42
25	120	108	33	46	57	88	299	66	32	16	3.2	54
26	119	105	35	44	84	82	245	60	25	17	2.8	42
27	109	96	34	42	97	76	225	70	30	16	2.3	30
28	96	89	33	40	96	73	240	80	45	13	1.9	29
29	88	86	31	39	80	76	574	68	48	11	2.5	28
30	86	81	30	44	-------	80	616	60	36	9.3	5.7	23
31	176	-------	29	48	-------	95	-------	90	-------	8.0	6.4	-------
Total	4,375	5,309	1,749	2,620	1,693	3,0[illegible]	10,021	3,803	1,767	734.3	140.5	605.9
Mean	141	177	56.4	84.5	58.4	97.7	334	123	58.9	23.7	4.53	20.2
Cfsm	3.23	4.05	1.29	1.93	1.34	2.24	7.64	2.81	1.35	0.542	0.104	0.462
In.	3.72	4.52	1.49	2.23	1.44	2.58	8.53	3.24	1.50	0.62	0.12	0.52

Calendar year 1955: Max 1,100 Min 0.2 Mean 90.1 Cfsm 2.06 In. 27.98
Water year 1955-56: Max 802 Min 1.9 Mean 97.9 Cfsm 2.24 In. 30.51

Peak discharge (base, 350 cfs).--11 p.m. Oct. 17 to 2 a.m. Oct. 18, 547 cfs (20.51 ft); Nov. 5 (2 to 5 p.m.) 600 cfs (20.64 ft); Jan. 10 (12 m. to 6 p.m.) 374 cfs (20.24 ft); Apr. 7 (5 a.m. to 1 p.m.) 428 cfs (20.33 ft); Apr. 17 (6 to 8 a.m.) 847 cfs (20.99 ft); Apr. 30 (1 to 3 p.m.) 654 cfs (20.79 ft).

Note.--No gage-height record Apr. 19-21, May 27 to June 19, June 21-28; discharge estimated on basis of weather records, recorded range in stage when available, and records for Ware River at Coldbrook. Backwater from Quabbin Reservoir Oct. 18 to Dec. 11, Apr. 9 to June 19.

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 1956.

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.--44 years (1912-56), 309 cfs (adjusted for storage and diversions).

Extremes.--Maximum discharge during year, 1,870 cfs Apr. 30 (gage height, 8.37 ft); minimum daily, 47 cfs Oct. 2.
1910-56: 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. 230). Diversion from Ware River to Quabbin Reservoir since 1940, from Quabbin Reservoir to Wachusett Reservoir since 1941, and from Quabbin Reservoir to Chicopee Valley aquaduct 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 tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31				Nov. 1 to Sept. 30			
2.0	36	3.0	183	2.1	43	5.0	725
2.2	56	4.0	399	2.5	98	6.0	1,040
2.5	98	5.0	670	3.0	184	7.0	1,390
				4.0	426	8.2	1,810

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61	740	503	149	226	218	122	*1,800	345	124	98	106
2	47	707	*461	147	226	222	215	1,680	314	150	117	127
3	115	692	390	239	228	165	218	1,600	503	116	130	127
4	106	803	398	233	163	138	224	1,470	653	101	106	151
5	106	1,040	500	228	137	225	240	1,280	599	159	127	130
6	110	998	485	223	225	227	245	1,160	539	134	151	124
7	109	984	464	158	239	249	198	1,180	446	104	129	108
8	62	966	443	128	233	250	238	1,080	390	124	129	60
9	48	952	432	*234	229	254	316	899	270	156	130	48
10	117	881	340	241	228	191	335	902	212	120	129	115
11	107	949	292	254	*162	163	283	857	326	123	108	118
12	89	963	382	272	142	248	280	734	249	93	128	115
13	152	929	368	283	227	205	334	695	208	106	149	117
14	109	1,110	355	226	223	179	350	743	180	95	130	105
15	67	1,200	342	196	224	185	461	677	154	124	129	60
16	54	1,210	335	283	222	190	755	641	96	139	129	50
17	158	1,120	258	284	220	135	1,130	584	108	106	129	117
18	265	1,050	234	277	166	108	1,450	542	167	117	108	118
19	401	920	316	267	138	202	1,510	426	142	116	127	116
20	426	860	306	262	224	206	1,650	409	142	106	152	105
21	428	833	294	196	223	205	*1,520	458	140	97	129	104
22	375	755	289	161	133	*201	1,420	*404	140	125	130	59
23	299	776	280	250	218	200	1,530	405	111	135	128	49
24	348	695	208	247	217	154	1,460	382	125	120	130	115
25	369	731	182	244	167	125	1,370	314	140	129	106	103
26	338	632	180	239	138	216	1,310	210	106	98	125	103
27	373	542	258	234	225	214	1,240	190	119	*86	150	104
28	375	614	258	173	231	211	1,110	329	140	95	130	106
29	*309	566	256	138	227	210	1,360	268	*130	128	131	59
30	334	521	243	232	-------	212	1,730	158	102	121	131	48
31	638	-------	179	231	-------	151	-------	299	-------	87	129	-------
Total	6,893	25,739	10,231	6,929	5,861	6,059	24,604	22,776	7,296	3,634	3,954	2,967
Mean	222	858	330	224	202	195	820	735	243	117	128	98.9
(†)	+453	-138	-185	+68.2	+109	+308	+570	-265	+92.2	-38.1	-153	+62.0

Adjusted for diversion and change in reservoir contents‡

Mean	675	720	145	292	311	503	1,390	469	335	79.1	-25.4	161
Cfsm	3.59	3.83	0.771	1.55	1.65	2.68	7.39	2.49	1.78	0.421	-0.135	0.856
In.	4.14	4.27	0.89	1.79	1.78	3.08	8.25	2.88	1.99	0.49	-0.16	0.95

	Observed			Adjusted			
Calendar year 1955:	Max 1,210	Min 34	Mean 189	Mean 411	Cfsm 2.19	In. 29.68	
Water year 1955-56:	Max 1,800	Min 47	Mean 347	Mean 419	Cfsm 2.23	In. 30.35	

* 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

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. Prior to Nov. 1, 1955, at site 0.5 mile downstream.

Drainage area.--151 sq mi.

Records available.--August 1909 to August 1912 (twice-daily gage heights and corresponding discharge). September 1912 to September 1956.

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.--44 years (1912-56), 246 cfs.

Extremes.--Maximum discharge during year, 1,510 cfs Apr. 18 (gage height, 6.63 ft); maximum gage height, 6.84 ft Jan. 10 (ice jam); minimum daily discharge, 18 cfs Aug. 29.
1909-56: Maximum discharge, 12,800 cfs Aug. 19, 1955 (gage height, 15.26 ft, from floodmarks, present site and datum), from rating curve extended above 2,700 cfs on basis of slope-area determination of peak flow; minimum daily discharge, 7.8 cfs Oct. 11, 19, 1930.

Remarks.--Records good except those for periods of ice effect and doubtful or no gage-height record, which are fair. Slight diurnal fluctuation at low flow 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 tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31		Nov. 1 to Sept. 30			
3.1	156	2.3	16	4.0	339
3.5	321	2.5	32	5.0	690
4.0	585	2.8	75	6.0	1,150
5.0	1,280	3.1	129	6.7	1,550
		3.5	214		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	219	574	335	110	230	350	309	860	320	56	40	22
2	204	534	350	105	240	340	334	820	350	58	37	22
3	188	526	342	110	220	390	388	780	450	56	*33	23
4	174	626	370	115	230	500	464	730	500	50	31	22
5	163	968	*403	120	220	570	690	700	460	52	29	22
6	206	960	382	125	220	580	906	650	420	85	29	22
7	372	973	350	130	260	620	1,020	610	370	90	30	37
8	393	932	340	115	281	660	996	580	300	85	28	31
9	388	874	326	230	268	620	932	550	250	90	25	26
10	367	811	302	450	266	570	942	540	220	80	24	23
11	341	896	286	558	259	550	991	530	210	72	23	21
12	326	892	270	618	264	540	1,030	510	190	82	22	20
13	312	856	250	646	271	520	1,070	490	170	77	22	21
14	307	856	240	614	300	490	1,100	460	150	80	24	21
15	663	838	230	598	310	460	1,140	430	135	84	20	19
16	775	820	220	566	350	430	1,260	390	125	81	20	22
17	1,020	798	210	526	320	*278	1,460	330	130	78	20	27
18	1,180	762	200	355	320	376	1,500	300	125	75	20	32
19	1,250	744	195	394	310	361	1,430	280	120	70	21	29
20	1,200	706	180	419	300	289	1,350	265	115	67	19	27
21	1,140	630	165	391	270	361	1,240	*256	105	62	23	30
22	1,060	590	150	361	220	353	1,140	242	100	62	24	30
23	959	558	140	342	240	336	1,080	230	95	62	23	28
24	868	534	150	276	250	345	1,020	214	105	62	23	35
25	808	498	160	285	280	291	955	207	115	68	21	49
26	715	475	160	280	410	331	906	201	96	66	20	58
27	665	441	150	270	440	315	856	216	76	56	19	67
28	620	425	140	260	410	312	806	230	66	53	19	65
29	580	394	135	240	370	317	810	226	*59	48	18	63
30	590	310	125	225	-------	320	880	225	53	46	19	60
31	760	-------	120	220	-------	304	-------	250	-------	42	21	-------
Total	18,813	20,801	7,376	10,054	8,329	13,079	29,005	13,302	5,980	2,095	747	974
Mean	607	693	238	324	287	422	967	429	199	67.6	24.1	32.5
Cfsm	4.02	4.59	1.58	2.15	1.90	2.79	6.40	2.84	1.32	0.448	0.160	0.215
In.	4.63	5.12	1.82	2.48	2.05	3.22	7.14	3.28	1.47	0.52	0.18	0.24

Calendar year 1955: Max 7,590 Min 32 Mean 430 Cfsm 2.85 In. 38.64
Water year 1955-56: Max 1,500 Min 18 Mean 357 Cfsm 2.36 In. 32.15

Peak discharge (base, 840 cfs).--Oct. 19 (7 a.m. to 3 p.m.) 1,260 cfs (4.97 ft); Nov. 5 (2:30 to 3 a.m.) 1,020 cfs (5.75 ft); Apr. 18 (10 a.m. to 2 p.m.) 1,510 cfs (6.63 ft).
* Discharge measurement made on this day.
Note.--No gage-height record Oct. 26-31, Sept. 9-26, 29, 30; discharge estimated on basis of staff-gage readings, weather records, and records for Quinebaug River at Westville and Ware River at Coldbrook. Doubtful or no gage-height record Feb. 12 to Mar. 16, Apr. 29 to May 20, May 30 to June 28, July 1-30; discharge estimated on basis of recorder graph, 1 discharge measurement, weather records, and records for stations mentioned above. Stage-discharge relation affected by ice Nov. 30 to Dec. 2, Dec. 7, 8, Dec. 12 to Jan. 10, Jan. 25 to Feb. 7.

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 1956. Published as "at Bircham Bend" prior to November 1938.

Gage.--Water-stage recorder. Altitude of gage is 125 ft (from topographic map). Prior to Nov. 1, 1938, at site 1¾ miles downstream at different datum.

Average discharge.--28 years, 1,119 cfs (adjusted to present drainage area and for storage and diversions).

Extremes.--Maximum discharge during year, 6,690 cfs Apr. 17 (gage height, 10.34 ft); minimum daily, 43 cfs Sept. 16.
1928-56: 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. 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. 230), and by smaller reservoirs.

Revisions (water years).--WSP 711: Drainage area. WSP 1231: 1934.

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 4		Nov. 5 to Sept. 30			
4.8	455	3.2	43	6.0	1,390
5.3	760	3.5	83	7.0	2,310
6.0	1,330	4.0	195	9.0	4,720
7.0	2,310	4.5	380	11.0	7,810
9.0	4,720	5.0	650		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	696	3,110	1,510	535	976	1,080	894	5,060	1,390	330	330	184
2	509	2,660	1,460	418	962	1,080	1,360	4,820	1,640	462	320	45
3	820	2,430	1,420	606	980	1,200	1,520	4,360	2,320	416	320	130
4	802	2,490	1,390	631	675	1,740	1,930	3,930	2,730	277	206	426
5	611	4,850	1,920	548	698	1,990	3,080	3,510	2,210	659	51	338
6	713	5,030	1,790	715	985	1,690	4,460	3,130	1,840	723	354	359
7	1,240	4,410	1,670	394	989	2,150	4,630	3,050	1,580	303	292	386
8	*1,690	3,850	*1,520	542	1,010	2,550	3,800	2,820	1,430	425	298	195
9	1,570	3,390	1,440	924	1,110	2,170	3,130	2,490	1,160	803	326	44
10	1,440	3,090	1,210	*2,650	*1,070	1,740	3,250	2,410	816	483	302	450
11	1,260	3,580	968	2,640	870	1,600	3,630	2,440	1,240	484	216	341
12	1,060	3,890	1,260	2,380	1,070	1,850	3,740	2,180	1,080	466	50	300
13	1,050	3,590	1,220	2,350	1,330	1,700	3,950	2,040	922	472	438	328
14	934	3,670	1,090	2,240	1,230	1,580	4,060	2,090	753	187	314	323
15	*1,530	3,900	1,020	1,980	1,180	1,500	4,280	1,920	780	322	312	178
16	2,990	3,730	1,050	1,930	1,310	1,410	5,040	1,760	384	656	307	43
17	4,200	3,640	860	1,740	1,170	*939	6,290	1,700	749	806	332	454
18	4,510	3,270	726	1,510	970	1,080	5,990	1,530	794	507	188	321
19	*3,950	2,900	1,020	1,200	834	1,350	5,390	1,430	804	472	53	438
20	3,630	2,710	893	1,340	1,150	1,220	5,040	1,300	578	450	*363	404
21	3,270	2,600	698	1,160	1,110	1,290	4,800	1,440	528	227	*336	411
22	2,820	2,340	702	880	611	1,320	4,660	*1,320	494	174	298	178
23	2,400	2,260	664	1,260	990	1,240	*4,580	1,130	122	537	308	138
24	2,220	2,170	563	1,140	917	1,260	4,600	1,190	334	497	340	586
25	2,310	2,170	636	914	744	1,000	4,230	1,100	715	517	161	483
26	2,110	2,000	684	956	1,630	1,380	3,930	818	*570	456	96	471
27	1,990	1,780	794	910	1,550	1,270	3,760	742	*545	435	378	323
28	1,870	1,850	746	612	1,430	1,160	3,390	1,280	519	195	281	514
29	1,670	1,760	660	602	1,160	1,160	3,940	1,170	486	105	297	197
30	1,640	1,540	638	1,040	-------	1,180	5,320	729	134	54	294	233
31	*3,040	-------	442	998	-------	1,050	-------	1,090	-------	423	328	-------
Total	60,545	90,660	32,664	37,745	30,711	44,909	118,674	65,779	29,647	13,626	8,489	9,201
Mean	1,953	3,022	1,054	1,218	1,059	1,449	3,956	2,122	988	440	274	307
(†)	+558	-135	-186	+120	+112	+313	+705	-261	+93.1	-39.9	-156	+68.9
Adjusted for diversion and change in reservoir contents												
Mean	2,511	2,887	867	1,337	1,171	1,762	4,661	1,861	1,081	402	118	376
Cfsm	3.65	4.20	1.26	1.94	1.70	2.56	6.77	2.70	1.57	0.581	0.172	0.547
In.	4.21	4.68	1.45	2.24	1.84	2.95	7.56	3.12	1.75	0.67	0.20	0.61

	Observed						Adjusted					
Calendar year 1955:	Max	30,600	Min	47	Mean	1,449	Mean	1,693	Cfsm	2.46	In.	33.41
Water year 1955-56:	Max	6,290	Min	43	Mean	1,483	Mean	1,581	Cfsm	2.30	In.	31.28

* 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.

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 1956.
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.--47 years, 328 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 4,370 cfs May 2 (gage height, 6.53 ft); minimum, 14 cfs Aug. 28; minimum daily, 14 cfs Aug. 28.
1909-56: 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 determinations 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 except those for periods of ice effect, no gage-height record, or shifting control, which are good. Flow regulated by Knightville Reservoir since 1941 (see p. 230).
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 1955-56, except periods of ice effect or shifting control (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	7.0	5,470
3.5	440		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	187	1,660	255	82	105	206	181	326	558	46	a28	36
2	148	2,230	239	80	105	184	255	2,570	357	44	a27	44
3	116	2,460	269	75	105	148	261	4,030	1,190	39	a26	377
4	101	1,290	313	72	105	233	355	3,530	1,160	35	a26	124
5	91	152	569	72	104	206	790	2,770	614	47	a26	73
6	389	1,120	467	75	106	187	1,260	1,600	440	142	a24	55
7	1,680	2,520	262	80	108	280	1,440	939	348	121	a24	52
8	922	3,210	229	80	112	624	922	750	284	86	a23	49
9	600	3,200	232	292	112	594	683	634	239	72	*22	39
10	385	2,110	229	581	112	395	648	712	239	62	21	34
11	292	870	212	676	112	339	870	676	322	50	22	31
12	243	966	170	1,110	141	277	1,030	614	243	43	22	30
13	212	1,050	*138	1,400	170	284	1,220	600	193	48	22	32
14	257	1,320	141	996	*170	269	1,190	537	167	359	25	73
15	132	1,890	187	410	164	230	1,360	473	143	208	25	56
16	161	1,050	161	326	164	175	1,090	430	126	116	22	205
17	1,160	988	133	277	161	160	1,380	395	121	88	19	381
18	*3,080	1,200	130	212	159	190	2,710	357	108	69	18	285
19	3,380	698	130	154	151	206	2,680	348	93	59	18	161
20	3,470	592	125	159	148	190	*2,440	317	86	52	18	131
21	3,490	404	91	184	131	195	1,220	280	*82	52	18	182
22	3,490	540	85	151	95	195	1,630	250	80	95	19	116
23	3,550	462	91	136	88	206	1,730	239	75	97	20	97
24	3,550	462	95	114	110	212	1,120	243	70	80	22	1,010
25	3,550	473	100	105	148	205	1,000	*209	65	142	18	434
26	3,470	425	110	105	156	199	1,100	*193	58	99	16	216
27	3,070	352	110	104	341	196	972	250	56	75	16	148
28	626	343	110	106	324	187	1,520	381	64	56	14	133
29	425	339	105	108	212	184	1,440	284	58	46	18	151
30	433	265	91	108	-------	184	561	308	47	39	21	124
31	560	-------	83	105	-------	181	-------	518	-------	a32	28	-------
Total	43,220	34,641	5,662	8,535	4,219	7,521	35,058	25,763	7,686	2,599	668	4,879
Mean	1,394	1,155	183	275	145	243	1,169	831	256	83.8	21.5	163
(†)	+126	-128	-0.34	+2.28	-0.84	-1.27	+197	-192	-1.04	0	-0.04	+0.08

Adjusted for change in reservoir contents

Mean	1,521	1,027	182	278	145	241	1,365	639	255	83.8	21.5	163
Cfsm	9.39	6.34	1.12	1.72	0.895	1.49	8.43	3.94	1.57	0.517	0.133	1.01
In.	10.82	7.07	1.30	1.98	0.96	1.72	9.40	4.55	1.76	0.60	0.15	1.12

	Observed			Adjusted		
Calendar year 1955:	Max 3,550	Min 9.4	Mean 506	Mean 506	Cfsm 3.12	In. 42.36
Water year 1955-56:	Max 4,030	Min 14	Mean 493	Mean 493	Cfsm 3.04	In. 41.43

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Knightville Reservoir.
a No gage-height record; discharge estimated on basis of weather records and records for West Branch Westfield River at Huntington.
Note.--Stage-discharge relation affected by ice Nov. 30, Dec. 1, Dec. 18 to Jan. 1, Jan. 25, 26, Jan. 31 to Feb. 4, Feb. 22-24, Mar. 15-18, 21, 22, 25. Shifting-control method used May 6 to July 2, July 5-30, Aug. 14, 15, Aug. 30 to Sept. 30.

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 1956.

Gage.--Water-stage recorder and concrete control. Datum of gage is 641.40 ft above mean sea level, datum of 1929.

Average discharge.--11 years, 2.90 cfs.

Extremes.--Maximum discharge during year, 149 cfs Oct. 15 (gage height, 2.915 ft), from rating curve extended above 80 cfs; minimum, 0.07 cfs Aug. 27, 28.
1945-56: Maximum discharge, 680 cfs Aug. 19, 1955 (gage height, 4.485 ft), from rating curve extended above 80 cfs; minimum, 0.03 cfs Aug. 31, Sept. 1, 1953.

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

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-15		Oct. 15 to Aug. 1				Aug. 1 to Sept. 30	
1.9	10.0	1.2	0.14	1.8	6.4	1.1	0.06
2.0	14.9	1.3	.29	1.9	10.0	1.2	.16
2.2	27	1.4	.52	2.0	15.0	1.3	.31
2.5	56	1.5	1.01	2.2	31	1.4	.59
2.9	114	1.6	2.1	2.5	71	1.5	1.14
Note.--Same as following table below 1.9 ft.		1.7	3.8	3.0	166	1.6	2.1

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.81	11.5	2.6	0.75	1.15	2.0	2.1	14.2	3.4	0.23	*0.12	0.16
2	1.34	8.2	2.4	.66	1.15	1.87	2.4	10.2	3.0	.22	.13	.23
3	1.05	7.0	2.8	.69	1.19	2.2	3.4	10.8	12.2	.20	.12	.18
4	.87	23	5.7	.72	1.0	3.0	5.4	8.4	5.8	.17	.11	.11
5	.90	40	5.2	.74	1.09	2.5	12.0	7.0	3.9	.67	.11	.10
6	7.7	16.4	3.8	.75	1.05	2.2	13.4	6.2	3.2	1.01	.11	.13
7	10.3	11.5	3.0	.75	1.75	7.8	11.7	5.6	2.7	.68	.11	.18
8	7.2	9.4	2.8	.80	1.51	5.0	7.4	4.8	2.1	.42	.10	.11
9	5.2	7.6	2.6	7.5	1.51	3.6	6.2	4.3	1.93	.51	*.10	.10
10	3.9	6.8	2.3	5.5	1.45	3.1	8.6	4.4	2.1	.34	.11	.09
11	3.2	9.6	2.2	5.0	1.57	2.9	11.2	3.9	2.2	.26	.10	.09
12	2.9	9.8	1.99	8.0	3.4	3.0	13.4	3.7	1.75	.22	.10	.09
13	2.5	8.6	1.87	8.4	2.6	2.8	13.6	3.4	1.39	.63	.12	.09
14	8.4	14.2	1.69	4.3	2.2	2.9	15.0	3.2	1.14	1.19	.15	.09
15	99	9.6	1.75	3.4	2.2	2.5	14.4	3.0	.93	.56	.10	.11
16	*87	9.6	1.5	3.1	2.2	2.2	31	2.9	.80	.46	.09	.62
17	*44	10.0	1.57	2.9	2.1	2.5	26	2.7	.78	.42	.09	.76
18	*21	7.2	1.51	2.2	2.1	2.5	21	2.8	.70	.29	.09	.56
19	19.2	6.4	1.34	2.1	1.93	2.0	17.1	2.9	.58	.23	.12	.27
20	12.6	5.6	1.00	2.3	1.69	2.1	*13.4	2.7	.50	.21	.10	.33
21	9.6	5.1	.90	1.9	1.4	2.0	11.9	2.2	*.48	.34	.12	.25
22	7.7	4.6	.86	1.7	1.2	2.1	12.6	2.1	*.47	.58	.15	.20
23	6.4	4.2	.85	1.6	1.15	2.2	12.2	2.1	.40	.40	.11	.31
24	6.2	4.2	1.00	1.4	1.1	2.1	11.5	*1.87	.36	.94	.10	1.29
25	6.6	3.9	1.3	1.3	2.5	2.0	9.8	1.69	.32	1.28	.09	.61
26	5.2	3.6	1.2	1.35	3.5	2.1	9.6	1.69	.29	.59	.08	.33
27	4.6	3.2	1.00	1.4	2.8	1.93	9.2	2.6	.41	.36	.07	.25
28	*4.2	3.2	.84	1.3	2.3	1.93	14.6	2.4	.39	.26	.07	.41
29	4.0	3.0	.76	1.2	2.1	1.99	28	2.1	.30	.21	.09	.46
30	12.6	2.7	.78	1.55	-------	1.93	28	2.2	.26	.17	.14	.33
31	30	-------	.77	1.4	-------	1.87	-------	2.9	-------	.15	.25	---
Total	437.27	269.7	59.88	76.66	52.89	80.82	396.1	130.95	54.78	14.20	3.45	8.85
Mean	14.1	8.99	1.93	2.47	1.82	2.61	13.2	4.22	1.83	0.458	0.111	0.295
Cfsm	8.60	5.48	1.18	1.51	1.11	1.59	8.05	2.57	1.12	0.279	0.068	0.180
In.	9.92	6.12	1.36	1.74	1.20	1.83	8.98	2.97	1.24	0.32	0.08	0.20

Calendar year 1955: Max 159 Min 0.06 Mean 4.65 Cfsm 2.84 In. 38.52
Water year 1955-56: Max 99 Min 0.07 Mean 4.33 Cfsm 2.64 In. 35.96

Peak discharge (base, 35 cfs).--Oct. 15 (11 a.m.) 149 cfs (2.915 ft); Oct. 31 (2 a.m.) 55 cfs (2.39 ft); Nov. 5 (3 a.m.) 64 cfs (2.45 ft); Apr. 16 (2:30 to 3:30 p.m.) 42 cfs (2.30 ft); Apr. 28 (11 a.m.) 45 cfs (2.325 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 30, Dec. 7, 16, Dec. 20 to Jan. 7, Jan. 9, 18, 19, Jan. 21 to Feb. 2, Feb. 4, 15-18, 21-26, Feb. 28 to Mar. 1, Mar. 9, 10, 16-19, 21-25.

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 1956.

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, 1910, at datum 1.00 ft higher.

Average discharge.--46 years, 106 cfs.

Extremes.--Maximum discharge during year, 6,460 cfs Oct. 15 (gage height, 6.91 ft); minimum, 1.9 cfs Aug. 27, 28.
1910-56: 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 determinations 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 doubtful gage-height record, which are fair. Some diurnal fluctuation at low flow prior to 1952 by mill above station.

Revisions (water years).--WSP 415: 1910-12, calendar years. WSP 781: 1933(M), drainage area.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 28

0.4	18	2.5	575
.6	31	3.0	860
.8	51	4.0	1,770
1.0	80	5.0	3,090
1.4	166	6.0	4,750
2.0	361		

Apr. 29 to Sept. 30

0.02	1.9	0.7	46
.1	4.9	1.0	86
.3	14	1.4	166
.5	27		

Note.--Same as preceding table above 1.4 ft.

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	398	d59	20	31	54	50	556	180	12	8.8	11
2	38	260	d61	18	31	52	52	412	131	11	7.5	13
3	30	208	d64	20	32	62	87	486	456	10	7.0	68
4	25	738	d125	23	28	84	127	388	241	9.7	6.2	30
5	22	1,490	146	25	37	68	346	334	149	15	5.3	17
6	291	558	100	*25	30	56	490	263	111	33	4.9	11
7	*484	369	*70	23	43	170	460	222	92	28	5.3	13
8	294	312	66	22	40	140	284	188	79	21	4.9	11
9	202	238	64	150	36	100	222	159	67	18	*4.5	7.9
10	130	196	58	330	*34	80	247	202	68	15	4.1	5.8
11	94	244	52	310	33	72	323	188	88	13	4.1	4.9
12	*80	277	49	340	75	91	380	159	68	11	4.1	4.9
13	69	294	44	380	57	82	424	154	54	13	4.1	4.9
14	254	628	46	185	46	76	440	138	44	102	5.8	5.3
15	*4,570	380	49	130	41	66	448	127	36	56	5.8	7.5
16	3,020	305	37	104	43	56	1,020	111	32	27	4.1	37
17	*1,220	384	44	89	40	64	956	106	29	24	3.3	71
18	*564	241	42	58	39	66	647	102	28	20	3.3	56
19	515	193	40	54	43	52	514	97	24	15	4.1	32
20	350	169	24	62	39	*56	*408	91	*22	12	3.7	30
21	253	148	22	52	29	54	396	82	20	13	4.9	37
22	196	d130	22	46	28	56	556	75	21	25	5.8	25
23	164	d118	22	45	30	61	478	72	18	22	4.1	19
24	156	d127	26	38	27	55	353	73	18	22	3.7	276
25	238	d112	35	36	40	52	334	*64	16	81	3.0	106
26	171	d100	31	36	130	52	342	*59	15	37	2.2	58
27	141	d88	26	38	120	49	346	77	15	23	1.9	37
28	*123	d86	22	35	80	48	884	89	18	17	1.9	35
29	114	d76	20	36	57	48	1,150	73	15	13	2.6	46
30	332	d66	21	44	-------	54	1,220	80	13	11	4.5	33
31	1,540	---	---	20	40	-------	51	-------	161	-------	10	10	-----
Total	15,728	8,933	1,507	2,814	1,339	2,127	13,984	5,388	2,168	739.7	145.5	1,113.2
Mean	507	298	48.6	90.8	46.2	68.6	466	174	72.3	23.9	4.69	37.1
Cfsm	9.64	5.67	0.924	1.73	0.878	1.30	8.86	3.31	1.37	0.454	0.089	0.705
In.	11.12	6.32	1.07	1.99	0.95	1.50	9.89	3.81	1.53	0.52	0.10	0.79

Calendar year 1955: Max 5,190 Min 1.4 Mean 164 Cfsm 3.12 In. 42.29
Water year 1955-56: Max 4,570 Min 1.9 Mean 153 Cfsm 2.91 In. 39.59

Peak discharge (base, 1,650 cfs).--Oct. 15 (6 a.m.) 6,460 cfs (6.91 ft); Oct. 31 (2 a.m.) 3,420 cfs (5.21 ft); Nov. 5 (3:30 a.m.) 2,330 cfs (4.46 ft); Apr. 29 (1:30 a.m.) 2,480 cfs (4.58 ft).

* Discharge measurement made on this day.

d Doubtful gage-height record; discharge computed on basis of recorded graph, weather records, and records for West Branch Westfield River at Huntington.

Note.--Stage-discharge relation affected by ice Dec. 6 to Jan. 13, Jan. 18 to Mar. 11, Mar. 14 to Apr. 2. Discharge for periods Dec. 6, June 20 to July 13, July 16-24, July 27 to Sept. 2, Sept. 5-15, 20, 22, 23 computed from once-daily chain-gage readings.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 388.60 ft above mean sea level, datum of 1929.

Average discharge.--21 years, 195 cfs.

Extremes.--Maximum discharge during year, 12,400 cfs Oct. 15 (gage height, 10.47 ft); minimum, 6.7 cfs Aug. 27, 28.

1935-56: 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 determination of peak flow; minimum, 3.3 cfs Aug. 9, 1955.

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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second) (Shifting-control method used Oct. 23, 24, 27-29, Nov. 20 to Dec. 13, Dec. 15, 17, Jan. 10)

Oct. 1 to Jan. 10				Jan. 11 to Sept. 30			
0.8	31	2.5	625	0.4	4.9	2.0	270
.9	40	3.0	970	.6	12	2.5	560
1.2	75	4.0	1,780	.8	22	3.0	950
1.5	132	6.0	4,100	1.1	47	4.0	1,780
1.8	226	8.0	7,340	1.4	85	5.0	2,830
2.1	375	10.0	11,400	1.7	155		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	718	120	40	61	110	106	*1,010	192	21	14	19
2	83	502	123	35	61	111	118	734	178	20	13	25
3	62	399	130	37	64	130	192	814	578	18	12	62
4	53	1,250	252	42	56	168	285	654	350	16	11	31
5	49	2,100	300	46	65	138	694	567	226	27	10	19
6	465	1,030	208	47	60	127	910	460	178	82	10	15
7	990	739	*142	*48	73	355	870	406	144	55	10	18
8	753	651	137	42	74	310	560	345	118	38	9.8	16
9	514	502	132	260	73	211	442	300	98	33	*9.0	13
10	320	411	114	550	74	165	472	406	100	28	8.7	11
11	222	477	105	511	72	152	588	360	120	22	8.7	10
12	*167	573	100	574	127	199	678	305	91	20	8.7	9.8
13	142	592	88	638	120	178	750	280	76	23	8.4	9.8
14	599	1,010	94	325	*94	162	774	252	65	179	9.8	9.8
15	9,270	704	99	230	85	144	830	244	54	93	10	11
16	*7,180	592	75	192	89	105	1,930	215	48	50	9.4	33
17	*2,330	746	88	165	84	125	1,820	211	45	41	8.4	73
18	*1,070	489	86	110	82	130	1,160	199	43	33	8.0	62
19	980	375	81	104	89	110	910	199	37	25	9.0	37
20	711	336	48	120	80	*115	*686	188	*34	21	8.7	31
21	539	300	45	98	59	115	654	158	32	23	9.4	47
22	429	261	44	89	56	110	934	144	34	44	9.8	30
23	348	235	43	87	60	125	838	141	30	40	9.8	25
24	336	257	51	73	54	115	616	144	29	30	8.7	292
25	528	226	70	70	82	105	581	*120	27	63	8.0	119
26	381	200	64	70	300	105	609	111	25	43	7.3	61
27	305	177	53	73	218	100	626	143	25	28	7.0	43
28	*261	174	45	68	160	100	1,530	165	30	22	6.7	43
29	235	153	40	64	115	100	2,390	130	27	19	7.6	60
30	698	135	42	76	-------	110	2,340	118	25	16	11	44
31	2,140	-------	41	73	------	105	-------	155	-------	14	18	----
Total	32,262	16,314	3,060	4,957	2,687	4,435	25,893	9,678	3,059	1,187	299.9	1,279.4
Mean	1,041	544	98.7	160	92.7	143	863	312	102	38.3	9.67	42.6
Cfsm	11.1	5.81	1.05	1.71	0.989	1.53	9.21	3.33	1.09	0.409	0.103	0.455
In.	12.81	6.48	1.21	1.97	1.07	1.76	10.28	3.84	1.21	0.47	0.12	0.51

Calendar year 1955: Max 10,500 Min 3.3 Mean 312 Cfsm 3.33 In. 45.18
Water year 1955-56: Max 9,270 Min 6.7 Mean 287 Cfsm 3.06 In. 41.73

Peak discharge (base, 2,700 cfs).--Oct. 15 (11:30 a.m.) 12,400 cfs (10.47 ft); Oct. 31 (1:30 a.m.) 4,280 cfs (6.13 ft); Nov. 5 (3:30 a.m.) 3,090 cfs (5.22 ft); Apr. 16 (9:30 p.m.) 3,150 cfs (5.27 ft); Apr. 29 (1 a.m.) 5,030 cfs (6.62 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 30, Dec. 1, 11-13, 16, 17, Dec. 20 to Jan. 6, Jan. 8-10, 18, 24, 25, 31, Feb. 1, 4-6, 15-18, 21-26, Feb. 28 to Mar. 1, Mar. 16-31.

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 1956. 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.--46 years (1910-56), 92.0 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. 230); 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 1955 to September 1956

Month	Mean	Per square mile	Runoff in inches
October	608	13.3	15.30
November	271	5.92	6.61
December	44.2	.965	1.11
Calendar year 1955.	184	4.02	54.64
January	101	2.21	2.54
February	64.8	1.41	1.53
March	75.3	1.64	1.90
April	414	9.04	10.09
May	143	3.12	3.60
June	42.6	.930	1.04
July	18.2	.397	.46
August	-4.09	-.089	-.10
September	4.34	.095	.11
Water year 1955-56.	149	3.25	44.19

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

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 1956.

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.--42 years, 962 cfs (adjusted for diversion and, since October 1931, for storage).

Extremes.--Maximum discharge during year, 31,100 cfs Oct. 16 (gage height, 21.79 ft), 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, 81 cfs Aug. 27; minimum daily, 87 cfs Aug. 27.
1914-56: Maximum discharge, 70,300 cfs Aug. 19, 1955 (gage height, 34.2 ft, from floodmarks), from rating curve extended above 18,000 cfs as described above; 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. 230).

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 tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31				Nov. 1 to Sept. 30			
4.0	418	8.0	3,720	2.8	81	5.0	1,000
4.5	645	10.0	6,440	3.0	115	7.0	2,660
5.0	945	15.0	15,000	3.5	254	9.0	4,990
6.0	1,890	20.0	26,500	4.0	445	11.0	7,970

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	626	*4,620	1,250	336	560	664	606	3,270	1,360	218	188	146
2	525	4,380	1,400	310	614	656	846	3,890	1,100	194	135	138
3	532	4,440	1,200	670	531	774	1,050	6,340	2,770	171	135	388
4	481	5,240	1,340	885	392	850	1,380	5,550	2,570	156	137	362
5	453	7,920	1,800	782	407	898	2,750	4,510	1,490	229	119	235
6	752	4,140	1,650	556	448	772	3,800	3,220	1,130	451	103	279
7	3,890	4,960	1,350	569	558	1,540	4,060	2,510	922	430	126	478
8	2,400	5,750	*1,210	368	560	1,790	2,820	2,160	760	326	126	193
9	1,850	5,940	1,200	b950	525	1,550	2,160	1,940	662	318	119	162
10	1,290	4,180	994	*2,210	572	1,100	2,200	2,080	591	345	108	177
11	994	2,880	802	2,130	518	1,000	2,700	1,970	786	160	111	162
12	819	2,900	886	2,600	915	982	2,950	1,480	692	185	127	137
13	810	3,230	856	3,230	940	952	3,350	1,410	556	298	102	147
14	946	4,280	894	2,260	743	916	3,280	1,310	525	624	184	151
15	19,900	4,170	949	1,290	705	862	3,560	1,200	501	634	146	141
16	24,300	3,360	840	1,220	*700	718	5,570	1,100	396	572	*172	185
17	11,100	3,180	678	1,140	606	667	5,820	1,020	348	484	163	620
18	*7,910	3,360	520	915	596	698	5,540	988	378	376	137	494
19	7,380	2,090	746	928	556	754	5,190	988	318	315	150	378
20	6,340	1,820	924	860	585	736	4,470	896	290	361	99	366
21	5,620	1,430	b1,020	684	476	*667	3,140	868	338	283	128	296
22	5,000	1,670	b1,060	562	410	744	3,630	742	334	261	132	301
23	4,740	1,510	b930	598	470	814	4,190	730	277	446	119	222
24	4,680	1,480	b730	624	422	814	*3,080	*724	243	440	171	1,240
25	5,050	1,390	456	556	580	696	2,690	672	259	412	130	976
26	4,830	1,350	568	718	945	768	2,900	612	225	376	106	532
27	4,590	1,110	669	672	994	706	2,420	612	225	290	87	388
28	2,510	1,310	665	510	1,050	672	4,250	902	*257	242	192	312
29	1,720	1,400	706	396	700	762	6,320	772	244	188	188	333
30	1,870	1,340	534	770	-------	706	6,090	580	232	168	237	304
31	8,280	-------	400	647	-------	645	-------	949	-------	185	160	-------
Total	142,188	96,830	29,127	30,946	18,078	26,873	102,812	55,995	20,779	10,138	4,337	10,243
Mean	4,587	3,228	940	998	623	867	3,427	1,806	693	327	140	341
(†)	+333	-187	-200	-57.6	+48.6	+71.9	+587	-144	+29.9	-33.0	-25.5	-11.3
Mean	4,920	3,041	739	941	672	939	4,014	1,663	723	294	114	330
Cfsm	9.90	6.12	1.49	1.89	1.35	1.89	8.08	3.35	1.45	0.592	0.229	0.664
In.	11.41	6.73	1.71	2.18	1.46	2.18	9.01	3.86	1.62	0.68	0.27	0.74

Adjusted for diversion and change in reservoir contents

	Observed			Adjusted					
Calendar year 1955:	Max 37,400	Min 79	Mean 1,628	Mean 1,659	Cfsm 3.34	In. 45.30
Water year 1955-56:	Max 24,300	Min 87	Mean 1,498	Mean 1,532	Cfsm 3.08	In. 41.95

* 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.

Connecticut River at Thompsonville, Conn.

Location.--Lat 41°59'14", long 72°36'21", on right bank just upstream from Enfield Dam and 1 mile downstream from Thompsonville, Hartford County.

Drainage area.--9,661 sq mi.

Records available.--July 1928 to September 1956.

Gage.--Water-stage recorder on river and on canal of Connecticut Light & Power Co. Datum of gage is 38.48 ft above mean sea level, datum of 1929.

Average discharge.--28 years, 16,640 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 110,000 cfs May 1 (gage height, 7.40 ft); minimum daily, 1,220 cfs Aug. 26.
1928-56: 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 excellent except those below 4,000 cfs and those for periods of ice effect or no gage-height record, which are good. 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. 230), and other reservoirs (combined usable capacity, about 93½ billion cubic feet).

Revisions (water years).--WSP 741: 1932. WSP 891: Drainage area.

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,070	50,800	13,900	5,570	9,610	11,800	7,180	108,000	28,000	2,320	5,340	7,600
2	3,410	*38,900	14,100	3,840	9,390	11,900	8,530	97,300	26,300	3,500	4,750	6,160
3	4,540	34,400	13,100	4,820	9,000	12,500	12,500	84,900	34,000	5,650	4,290	5,060
4	6,670	32,100	10,200	7,220	8,190	12,800	14,200	78,300	47,900	2,690	2,580	7,060
5	6,490	51,900	14,700	7,040	6,280	11,500	22,200	74,500	46,800	3,300	1,810	8,880
6	7,880	58,500	18,300	6,420	5,980	15,000	39,600	69,500	36,300	7,480	2,430	9,910
7	17,400	49,800	17,500	5,470	9,370	16,600	54,400	63,400	27,000	6,820	3,110	10,200
8	20,300	43,100	14,800	6,210	9,990	23,300	55,700	57,300	25,000	2,590	3,550	6,770
9	13,900	39,800	13,200	6,470	10,700	17,900	48,100	51,800	23,100	4,720	3,910	2,950
10	12,200	33,300	9,200	17,900	10,200	14,700	40,600	47,200	21,500	9,730	4,160	3,110
11	11,300	32,600	7,390	29,100	9,780	11,900	41,000	45,600	18,000	10,300	3,540	5,170
12	9,340	34,200	9,100	33,100	10,400	12,000	43,300	43,700	14,600	10,900	1,680	6,600
13	9,560	33,700	11,300	41,700	11,200	12,700	49,900	42,900	15,400	9,550	2,370	6,160
14	10,500	33,100	10,500	38,000	11,300	13,400	53,800	41,400	16,600	11,000	3,520	7,230
15	41,400	35,800	10,600	30,200	11,000	13,700	53,800	41,500	15,300	15,000	2,970	4,270
16	86,100	35,100	10,800	24,000	*11,200	b14,000	57,300	42,200	12,000	17,200	3,450	1,760
17	65,000	36,600	9,180	20,500	10,600	b9,630	74,400	41,700	8,170	14,600	3,630	4,810
18	69,300	34,400	6,980	18,800	9,200	7,890	93,900	39,100	7,750	8,370	2,810	9,750
19	51,600	30,900	7,520	15,900	5,590	b8,670	90,300	33,500	7,410	9,230	1,620	11,300
20	41,500	27,700	9,400	14,600	7,850	b10,400	78,600	29,500	8,440	9,960	2,280	10,100
21	35,700	23,400	a9,850	12,100	11,200	13,200	64,900	25,300	7,950	7,140	*3,850	10,200
22	30,800	22,000	a8,670	9,280	8,890	11,800	59,200	22,000	7,200	5,330	3,840	9,920
23	22,200	21,300	a6,780	9,990	7,340	12,500	56,200	*18,600	4,710	4,710	3,490	6,730
24	20,400	19,800	a5,290	11,800	9,410	12,000	*51,700	16,600	2,000	5,260	3,850	7,420
25	22,400	17,100	a5,720	11,800	8,800	9,400	48,200	18,100	3,390	6,930	2,820	16,500
26	23,900	17,600	a5,610	11,100	9,800	10,300	46,300	17,300	6,080	6,570	1,220	18,400
27	22,400	17,200	a6,310	9,720	12,500	11,400	44,700	16,900	7,670	7,390	2,280	16,700
28	21,500	14,100	8,460	8,900	13,200	11,100	44,400	21,600	7,680	6,630	3,060	13,000
29	18,700	15,600	8,160	6,560	13,100	9,900	65,000	36,900	7,490	3,650	3,220	6,830
30	15,300	15,900	8,150	8,450	-------	10,400	94,700	41,500	6,830	3,410	3,730	3,220
31	38,000	-------	5,910	10,000	-------	10,600	-------	35,400	-------	5,340	4,740	-------
Total	765,760	950,700	310,680	446,560	281,070	384,890	1,514,610	‡1,403.5	500,570	227,270	100,200	243,770
Mean	24,700	31,690	10,020	14,410	9,692	12,420	50,490	45,270	16,690	7,331	3,232	8,126
(†)	+1,216	+416	-1,677	+674	-1,300	-1,278	+6,273	+1,504	+252	-344	-849	-230

Adjusted for change in reservoir contents and diversion

Mean	25,920	32,110	8,345	15,080	8,393	11,140	56,760	46,780	16,940	6,987	2,383	7,896
Cfsm	2.68	3.32	0.864	1.56	0.869	1.15	5.88	4.84	1.75	0.723	0.247	0.817
In.	3.09	3.71	1.00	1.80	0.94	1.33	6.55	5.58	1.96	0.83	0.28	0.91

	Observed						Adjusted					
Calendar year 1955:	Max	127,000	Min	1,130	Mean	19,810	Mean	20,000	Cfsm	2.07	In.	28.10
Water year 1955-56:	Max	108,000	Min	1,220	Mean	19,480	Mean	19,860	Cfsm	2.06	In.	27.98

* 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. 230, dead storage prior to April, live thereafter in Moore Reservoir, and diversion from Chicopee River basin, equivalent in cubic feet per second.
‡ Expressed in thousands.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for station at Montague City, Mass.
b Stage-discharge relation affected by ice.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 26.23 ft above mean sea level, datum of 1929.

Average discharge.--28 years, 144 cfs.

Extremes.--Maximum discharge during year, 1,320 cfs Nov. 6 (gage height, 8.90 ft); minimum, 24 cfs Aug. 18 (gage height, 0.70 ft); minimum daily, 27 cfs Aug. 18.
1928-56: 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 determination at 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. Flow regulated by mills and small reservoirs upstream. Records of water temperatures and suspended sediment loads for the water year 1956 are given in WSP 1450.

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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-16		Oct. 17 to Sept. 30			
1.8	110	0.7	24	5.0	475
2.5	198	1.5	105	7.0	779
3.0	264	2.5	200	9.0	1,360
5.0	475	3.5	320		
7.0	779				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	146	759	190	117	144	145	189	380	124	70	44	38
2	138	*532	184	115	135	173	239	315	135	66	43	40
3	128	370	182	114	148	232	320	282	315	61	40	47
4	*115	398	206	111	140	315	400	264	360	72	41	46
5	110	956	264	107	126	330	649	239	288	80	40	33
6	129	1,090	252	107	123	288	1,030	212	175	95	40	34
7	*224	640	218	105	215	450	845	206	137	103	43	57
8	266	464	188	100	264	524	738	200	120	99	38	49
9	295	390	174	154	232	475	577	175	110	92	37	43
10	247	350	166	276	200	360	537	175	107	72	37	41
11	197	458	160	294	186	294	524	186	112	89	37	41
12	159	550	157	258	360	270	537	180	110	60	36	41
13	136	499	152	258	360	258	487	167	103	54	36	38
14	142	464	144	232	304	252	453	156	*97	89	36	47
15	339	464	145	194	246	246	420	147	94	97	*32	38
16	675	464	148	166	252	232	453	140	87	85	31	42
17	*817	453	138	152	218	175	499	137	115	75	29	45
18	660	410	138	140	177	184	499	134	123	81	27	49
19	540	350	138	122	159	193	400	133	102	49	28	45
20	423	320	122	126	152	176	340	132	92	54	29	48
21	358	304	121	125	144	181	304	129	88	58	35	*49
22	307	299	124	118	130	186	276	122	88	68	40	49
23	265	276	123	120	*122	206	264	118	85	69	42	46
24	248	270	122	118	119	232	288	127	79	63	41	51
25	274	258	124	113	238	192	288	125	76	58	40	58
26	280	246	127	112	390	196	258	114	70	62	35	53
27	266	*232	121	113	340	198	252	115	71	56	35	47
28	233	225	123	112	232	194	239	128	81	54	37	66
29	212	218	122	110	177	193	246	126	83	52	32	75
30	253	200	120	135	-------	194	350	117	77	47	33	60
31	511	-------	118	182	-------	187	-------	116	-------	46	38	-------
Total	9,093	12,909	4,811	4,606	6,033	7,731	12,901	5,297	3,704	2,176	1,132	1,416
Mean	293	430	155	149	208	249	430	171	123	70.2	36.5	47.2
Cfsm	2.98	4.37	1.58	1.51	2.11	2.53	4.37	1.74	1.25	0.713	0.371	0.480
In.	3.44	4.88	1.82	1.74	2.28	2.92	4.88	2.01	1.40	0.82	0.43	0.54

Calendar year 1955: Max 7,770 Min 25 Mean 238 Cfsm 2.42 In. 32.82
Water year 1955-56: Max 1,090 Min 27 Mean 196 Cfsm 1.99 In. 27.16

Peak discharge (base, 550 cfs).--Oct. 17 (2 to 3 a.m.) 879 cfs (7.44 ft); Nov. 1 (1 p.m.) 869 cfs (7.40 ft); Nov. 6 (1 to 2 a.m.) 1,320 cfs (8.90 ft); Nov. 12 (7 to 9 p.m.) 591 cfs (5.90 ft); Mar. 8 (10 to 11 p.m.) 577 cfs (5.79 ft); Apr. 6 (2 to 4 p.m.) 1,060 cfs (8.13 ft).
* Discharge measurement made on this day.

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 1956. 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.--43 years, 185 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 7,910 cfs Oct. 16 (gage height, 9.35 ft); minimum daily, 4.6 cfs Aug. 28.
1913-56: 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 determination of peak flow; minimum daily, 3.2 cfs Sept. 12, 1953.
Remarks.--Records good except those below 30 cfs and those for periods of ice effect, which are fair. Flow regulated by Otis Reservoir (see p. 230).
Revisions (water years).--WSP 641: 1924(M). WSP 756: Drainage area. WSP 781: 1928(M). WSP 1231: 1914.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31

2.7	55	5.0	690
3.0	96	6.0	1,270
3.5	192	7.0	2,240
4.0	315	8.0	3,800
4.5	467	9.0	6,660

Nov. 1 to Sept. 30

2.0	3.7	3.5	197
2.1	7.1	4.0	318
2.2	12	4.5	467
2.5	32	5.0	690
2.8	64	6.0	1,270
3.1	112	7.0	2,240

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	108	720	129	52	186	215	167	1,100	254	12	11	18
2	84	528	125	60	179	208	183	795	270	10	*9.9	26
3	73	450	129	82	181	215	234	785	456	9.0	9.4	43
4	66	1,120	212	82	181	242	296	685	348	8.5	9.0	22
5	59	1,730	249	80	176	225	490	605	288	49	9.0	13
6	215	1,100	*181	*95	174	211	576	528	254	118	8.5	13
7	420	815	142	105	181	316	605	481	230	67	8.5	42
8	*406	690	135	100	181	296	460	428	206	40	7.1	24
9	335	553	125	350	179	256	424	393	188	39	6.7	18
10	235	489	110	550	181	232	431	507	183	30	9.9	15
11	179	585	115	480	181	227	467	457	183	24	22	13
12	*143	640	101	500	204	261	515	412	135	21	11	15
13	124	590	100	480	204	237	572	390	107	29	9.4	15
14	229	782	98	353	*190	230	615	367	86	129	12	15
15	*3,280	685	89	290	192	220	665	348	70	81	9.4	16
16	5,400	635	96	256	197	*180	1,260	332	56	58	7.6	30
17	*2,440	625	116	234	186	200	1,420	313	45	44	6.7	46
18	1,390	503	103	213	188	200	1,080	316	36	33	6.0	63
19	1,240	444	92	206	183	195	*885	313	32	27	15	36
20	914	408	74	186	176	195	690	308	30	26	9.4	36
21	698	384	58	170	172	190	635	286	27	29	8.5	40
22	564	358	56	160	165	190	760	276	26	44	9.9	28
23	480	342	55	150	165	197	750	286	24	35	8.0	26
24	464	300	68	145	165	197	620	283	22	26	7.1	112
25	590	208	90	140	210	190	610	256	20	22	6.3	92
26	481	188	80	135	337	185	595	*244	18	20	5.6	59
27	*437	172	65	150	263	179	615	266	*18	18	4.9	39
28	408	172	57	181	254	170	1,230	268	20	15	4.6	40
29	387	142	52	181	230	170	2,070	242	15	14	*8.0	49
30	723	139	54	195	-------	176	2,110	227	15	12	16	65
31	1,420	-------	54	199	-------	170	-------	232	-------	11	18	-------
Total	23,992	16,497	3,210	6,560	5,681	6,575	22,030	12,729	3,662	1,100.5	294.4	1,069
Mean	774	550	104	212	196	212	734	411	122	35.5	9.50	35.6
(†)	+36.9	-8.68	+18.2	-40.0	-86.5	-62.2	+16.8	-31.3	-42.2	-2.24	+3.55	+3.20
Adjusted for change in reservoir contents												
Mean	811	541	122	172	109	150	751	379	79.9	33.3	13.0	38.8
Cfsm	8.82	5.88	1.33	1.87	1.18	1.63	8.16	4.12	0.868	0.362	0.141	0.422
In.	10.16	6.56	1.53	2.15	1.28	1.88	9.11	4.75	0.97	0.42	0.16	0.47

	Observed			Adjusted		
Calendar year 1955:	Max 16,100	Min 5.0	Mean 307	Mean 314	Cfsm 3.41	In. 46.34
Water year 1955-56:	Max 5,400	Min 4.6	Mean 283	Mean 267	Cfsm 2.90	In. 39.44

Peak discharge (base, 1,400 cfs).--Oct. 16 (7:30 a.m.) 7,910 cfs (9.35 ft); Oct. 30 (12 p.m.) 2,490 cfs (7.21 ft); Nov. 4 (9 p.m.) 2,000 cfs (6.78 ft); Apr. 16 (7 p.m.) 1,750 cfs (6.53 ft); Apr. 29 (12:30 a.m.) 3,090 cfs (7.62 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 Dec. 11, 13, Dec. 20 to Jan. 13, Jan. 21, 22, 24-27, Feb. 22-25, 29, Mar. 1, 16-22, 25, 26, 28, 29.

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 1956.

Gage.--Nonrecording gage read twice daily. Datum of gage is 485.60 ft above mean sea level, datum of 1929.

Extremes.--Maximum discharge observed during period Aug. 30, 1955, to Sept. 30, 1956, 10,600 cfs Oct. 16 (gage height, 12.47 ft); minimum observed, 31 cfs Aug. 10 (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 miles upstream).

Remarks.--Records good except those for periods of ice effect or missing or doubtful gage readings, which are fair. Flow regulated by Otis Reservoir (see p. 230).

Rating tables, Aug. 30, 1955, to Sept. 30, 1956, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Sept. 20-23, 1955)

Aug. 30 to Oct. 15, 1955				Oct. 16, 1955, to Sept. 30, 1956			
3.0	32	6.0	1,100	2.4	29	6.0	1,270
3.5	116	7.0	1,850	3.0	85	8.0	3,000
4.0	225	10.0	5,480	3.5	158	10.0	5,500
5.0	570			4.0	287	12.0	9,300
				5.0	690		

Discharge, in cubic feet per second, 1955

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1	-	205	9	-	256	17	-	62	25	-	g240
2	-	177	10	-	250	18	-	52	26	-	118
3	-	195	11	-	265	19	‡57,200	d69	27	-	d111
4	-	d268	12	-	d135	20	-	98	28	-	220
5	-	286	13	-	120	21	-	42	29	-	200
6	-	283	14	-	91	22	-	43	30	253	159
7	-	*295	15	-	84	23	-	56	31	245	
8	-	280	16	-	71	24	-	g220			
Total										498	4,951
Mean										-	165
(†)										-	-57.1
Adjusted for change in reservoir contents											
Mean										-	108
Cubic feet per second per square mile										-	0.831
Runoff in inches										-	0.93

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Otis Reservoir.
‡ Result of slope-area determination of peak flow.
d Doubtful gage-height record; discharge computed from adjusted readings.
g From graph based on gage readings.

West Branch Farmington River above Still River, at Riverton, Conn.--Continued

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	155	1,010	147	b60	b210	227	192	1,600	390	39	35	43
2	127	790	140	b60	206	233	g227	1,160	397	37	34	57
3	105	640	168	b65	b200	236	300	1,160	g805	34	34	72
4	*100	g1,750	244	b70	b195	250	*g390	980	595	35	33	49
5	87	g3,350	341	*b150	b190	256	g820	840	411	g47	32	42
6	g200	1,520	294	b140	b190	294	950	765	341	g178	32	42
7	760	1,100	b180	b135	b190	465	g1,010	690	300	d110	32	64
8	735	920	b150	b130	b185	411	765	595	265	74	32	54
9	710	740	b130	bg750	b180	307	665	550	217	97	32	49
10	g570	690	b125	g1,060	180	272	g690	690	233	70	31	41
11	124	g1,090	b120	740	178	253	765	640	253	50	45	40
12	200	890	b115	890	b200	310	840	572	*185	46	35	39
13	177	840	b110	a700	b200	268	g890	528	151	g52	35	39
14	200	g920	109	a500	b195	262	g1,000	485	127	g178	38	39
15	*g4,550	*950	116	a350	194	244	g1,070	441	110	129	34	39
16	g7,310	890	100	*287	185	b210	g2,120	425	95	90	39	40
17	g3,290	890	93	262	192	b215	2,100	404	82	78	37	70
18	g2,060	665	92	211	196	b220	1,520	411	72	64	35	86
19	1,680	595	b100	180	187	b210	1,300	404	62	50	39	62
20	1,240	528	b80	b190	170	b215	1,070	394	58	42	41	52
21	920	505	b70	b180	162	187	815	355	55	49	40	64
22	740	433	b65	b170	b170	b210	765	341	58	76	40	60
23	665	397	b65	b160	b170	b205	a950	330	52	62	40	50
24	572	334	b70	154	b165	b210	a980	348	50	52	39	g126
25	840	304	b95	166	g275	b205	865	304	49	45	37	124
26	640	256	b90	158	g485	204	890	287	43	*42	37	85
27	595	233	b80	158	348	196	865	320	43	39	36	62
28	505	227	b75	b175	275	183	g1,250	341	47	39	37	60
29	449	201	b65	b195	244	174	g2,600	294	42	36	38	63
30	g1,000	168	b65	b210	-------	206	g3,140	275	39	35	40	86
31	g2,180	-------	b62	b215	-------	199	-------	281	-------	35	42	-------
Total	33,486	23,826	3,756	8,871	6,117	7,537	31,804	17,210	5,627	2,010	1,131	1,799
Mean	1,080	794	121	286	211	243	1,060	555	188	64.8	36.5	60.0
(†)	+36.9	-8.7	+18.2	-40.0	-86.5	-62.2	+16.8	-31.3	-42.2	-2.2	+3.5	+3.2

Adjusted for change in reservoir contents

Mean	1,117	785	139	246	125	181	1,077	524	146	62.6	40.0	63.2
Cfsm	8.59	6.04	1.07	1.89	0.962	1.39	8.28	4.03	1.12	0.482	0.308	0.486
In.	9.90	6.74	1.23	2.18	1.04	1.60	9.24	4.65	1.25	0.56	0.36	0.54

	Observed			Adjusted		
	Max -	Min -	Mean -	Mean -	Cfsm -	In. -
Calendar year 1955:						
Water year 1955-56:	Max 7,310	Min 31	Mean 391	Mean 375	Cfsm 2.88	In. 39.29

Peak discharge (base, 1,800 cfs).--Oct. 16 (8:25 a.m.) 10,600 cfs (12.47 ft); Oct. 31 (3 a.m.) 3,100 cfs (8.1 ft); Nov. 5 (3 a.m.) 5,200 cfs (9.8 ft); Jan. 9 (11 p.m.) 1,800 cfs (6.7 ft); Apr. 16 (8 p.m.) 3,000 cfs (8.0 ft); Apr. 30 (5 a.m.) 4,000 cfs (8.9 ft).

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Otis Reservoir.
a No gage-height record; discharge estimated on basis of records for station at New Boston, Mass.
b Stage-discharge relation affected by ice.
d Doubtful gage-height record; discharge computed from adjusted readings.
g From graph based on gage readings.

Still River at Robertsville, Conn.

Location.--Lat 41°58'04", long 73°02'02", 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 1956.

Gage.--Water-stage recorder. Datum of gage is 510.24 ft above mean sea level, datum of 1929.

Average discharge.--8 years, 203 cfs.

Extremes.--Maximum discharge during year, 9,270 cfs Oct. 16 (gage height, 10.02 ft); minimum, 4.0 cfs Aug. 6, 8, 10; minimum daily, 4.3 cfs Aug. 5; minimum gage height, 1.27 ft Aug. 6, 8.
1948-56: Maximum discharge, 44,000 cfs Aug. 19, 1955 (gage height, 16.46 ft, from floodmark), from rating curve extended above 5,600 cfs on basis of slope-area determination of peak flow; minimum, that of Aug. 6, 8, 10, 1956; minimum daily, that of Aug. 5, 1956; 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 above station.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Aug. 8 to Sept. 30)

Oct. 1 to Nov. 4

1.9	57	5.0	1,130
2.0	67	6.0	1,960
2.5	144	7.0	3,250
3.0	246	10.0	9,220
4.0	581		

Nov. 5 to Sept. 30

1.2	2.5	3.0	252
1.4	7.7	4.0	620
1.6	17	5.0	1,200
1.8	31	6.0	2,080
2.1	64	7.0	3,270
2.5	132		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	139	798	152	54	72	98	111	885	174	10	22	15
2	99	534	193	48	61	95	154	596	196	9.0	21	16
3	85	428	186	59	65	109	214	612	442	7.7	20	27
4	*85	1,150	264	49	47	136	280	520	345	6.8	18	39
5	61	2,460	332	*46	41	148	582	436	211	57	4.3	36
6	212	1,210	258	44	59	132	725	413	154	104	19	56
7	*486	770	203	58	75	273	770	368	124	75	19	60
8	400	600	181	69	81	261	493	326	104	a45	18	55
9	333	500	154	500	*76	203	488	318	74	a50	18	19
10	229	436	144	450	82	163	*565	329	64	a45	18	29
11	175	722	136	290	74	128	620	311	108	a42	15	27
12	144	670	130	310	126	170	723	298	*95	a38	5.9	27
13	128	556	117	308	150	154	795	264	84	41	22	26
14	217	860	95	211	124	148	867	230	70	123	26	24
15	*4,180	*820	99	170	124	144	940	188	58	84	24	17
16	6,740	600	78	148	123	124	1,790	172	42	67	21	17
17	3,040	616	85	132	104	130	1,840	161	26	54	22	39
18	1,270	484	87	113	84	125	1,130	161	40	46	14	50
19	914	413	110	113	73	120	910	124	37	37	9.8	38
20	694	378	87	106	83	115	720	111	39	34	24	36
21	527	343	72	87	73	115	620	115	37	32	28	38
22	449	285	67	85	65	120	695	104	39	46	26	32
23	382	238	67	87	80	130	770	100	28	50	25	19
24	356	246	64	85	75	140	645	100	19	40	23	79
25	428	232	68	79	103	115	576	92	36	35	16	58
26	365	211	70	60	191	125	584	74	31	*31	6.5	40
27	324	191	67	63	191	125	544	72	37	32	20	47
28	264	188	64	50	167	135	760	111	39	21	20	55
29	224	170	61	44	122	136	1,430	95	33	11	25	47
30	654	150	59	88	-------	119	1,800	64	13	24	34	36
31	2,180	---	59	87	-------	108	-------	92	-------	14	28	---
Total	25,782	17,057	3,807	3,813	2,789	4,344	23,143	7,843	2,796	1,306.5	605.5	1,066
Mean	832	569	123	123	98.2	140	771	253	93.2	42.1	19.5	35.5
Cfsm	9.86	6.74	1.46	1.46	1.14	1.66	9.14	3.00	1.10	0.499	0.231	0.421
In.	11.37	7.52	1.68	1.68	1.23	1.91	10.20	3.46	1.23	0.58	0.27	0.47

Calendar year 1955: Max 24,800 Min 5.6 Mean 337 Cfsm 3.99 In. 54.16
Water year 1955-56: Max 6,740 Min 4.3 Mean 258 Cfsm 3.06 In. 41.60

Peak discharge (base, 1,300 cfs).--Oct. 16 (8 a.m.) 9,270 cfs (10.02 ft); Oct. 31 (2 to 3 a.m.) 3,420 cfs (7.11 ft); Nov. 5 (4:30 a.m.) 3,200 cfs (6.93 ft); Apr. 17 (9 to 11 p.m.) 2,460 cfs (6.33 ft); Apr. 29 (3 to 4 a.m.) 1,880 cfs (5.79 ft); Apr. 30 (4 to 5 a.m.) 2,360 cfs (6.25 ft).
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for nearby stations.
Note.--Stage-discharge relation affected by ice Dec. 17-31, Jan. 1-12, 22, 24, 25, Feb. 4, 5, 22-24, 29, Mar. 1, 17-27.

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 1956.

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.--25 years, 8.32 cfs.

Extremes.--Maximum discharge during year, 475 cfs Oct. 16 (gage height, 6.24 ft); minimum, 0.30 cfs (regulated) June 22 (gage height, 0.30 ft); minimum daily, 0.93 cfs Aug. 18-20. 1931-56: 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, 0.64 cfs Sept. 23, 24, 27-29, 1941, Aug. 27, 28, 1949; minimum gage height, 0.03 ft. Oct. 11, 13, 1943 (orifice plate removed).

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are good. Infrequent low-water regulation.

Revisions (water years).--WSP 1171: Drainage area. WSP 1301: 1933-45(M).

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater during weir repairs June 22-25)

0.2	0.30	1.3	10.3
.4	.81	1.6	23.7
.7	1.85	2.0	46.5
1.0	3.11	3.0	123
1.1	4.55	5.0	324

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.03	30.1	8.95	3.93	b5.3	b5.8	8.32	19.2	12.2	2.37	1.40	1.40
2	4.55	21.2	8.63	3.93	5.52	6.57	10.7	15.1	12.6	2.25	1.37	1.40
3	3.92	18.2	9.27	3.93	7.13	11.9	21.2	24.2	34.3	2.05	1.39	1.47
4	3.57	70	14.2	3.93	b5.8	15.1	25.3	16.0	14.2	1.93	1.16	1.09
5	3.57	200	15.6	4.13	5.26	11.9	46.2	13.4	9.60	8.61	1.26	1.02
6	12.3	38.0	11.1	4.13	*5.02	10.7	54	12.6	8.00	16.9	1.40	1.58
7	24.6	25.8	8.95	3.93	7.13	19.2	45.3	15.1	6.57	7.71	1.47	2.97
8	13.4	23.2	8.32	3.74	7.71	20.2	22.2	12.2	5.77	4.13	1.29	1.47
9	10.3	19.2	8.32	15.0	7.13	15.6	22.7	10.7	5.26	6.30	1.19	1.19
10	7.41	17.4	8.00	21.7	7.71	10.7	31.9	12.2	5.77	4.55	1.24	1.09
11	6.03	59	7.41	14.2	7.71	10.7	*39.1	10.7	7.13	3.33	1.02	1.06
12	5.52	23.7	7.13	20.2	18.7	15.6	40.9	9.93	5.02	2.58	1.16	1.06
13	5.02	18.7	6.85	17.8	13.8	10.3	40.9	9.60	4.13	3.06	1.19	1.02
14	12.8	35.2	6.57	10.3	9.60	9.60	40.3	8.95	3.42	5.77	1.33	.99
15	254	22.7	6.85	8.00	10.7	8.95	39.1	8.95	3.18	3.42	1.09	1.02
16	295	30.0	6.57	7.13	11.1	b7.5	83	*8.00	3.07	2.97	1.02	a1.3
17	84	26.9	6.03	6.85	7.71	b7.0	52	7.41	3.24	2.62	1.06	a1.7
18	41.5	17.8	5.77	6.03	7.41	b8.5	31.8	8.63	2.80	2.13	.93	a2.0
19	35.7	16.4	6.03	5.77	6.57	8.00	27.9	8.32	2.62	*1.80	.93	1.44
20	27.4	15.6	b5.5	5.52	6.30	7.71	21.2	8.63	2.58	1.93	.93	1.66
21	*21.7	14.6	b5.3	5.02	5.77	7.41	19.2	7.13	2.80	3.58	2.16	1.40
22	18.7	13.8	b5.1	4.55	5.02	8.32	17.8	6.57	1.94	5.02	1.62	1.29
23	16.4	13.0	5.02	b4.3	b4.5	9.60	21.2	8.00	1.50	3.21	1.23	1.29
24	13.4	14.6	5.02	b4.1	b3.9	9.93	20.7	7.71	2.33	2.62	1.33	3.08
25	16.9	13.0	5.26	b3.9	11.5	b8.3	15.6	6.57	2.29	2.29	1.13	1.74
26	14.2	11.5	5.26	b3.7	15.1	7.71	15.6	5.77	1.97	1.93	1.71	1.37
27	13.0	11.1	4.55	b3.6	8.63	8.00	14.8	7.13	4.87	1.94	1.23	*1.26
28	12.2	11.1	4.13	b3.4	8.00	8.63	13.4	7.71	5.77	1.70	1.13	2.59
29	12.2	9.93	b4.1	b3.4	6.57	8.63	19.7	6.30	3.11	1.58	1.09	1.77
30	49.3	*9.27	4.13	b5.6	-------	8.00	39.9	5.77	2.58	1.54	1.13	1.44
31	119	-------	3.93	b7.4	-------	7.71	-------	5.77	-------	1.44	1.33	-------
Total	1,166.63	851.00	217.85	219.12	232.30	313.77	901.72	314.25	180.62	113.35	38.92	45.16
Mean	37.6	28.4	7.03	7.07	8.01	10.1	30.1	10.1	6.02	3.66	1.26	1.51
Cfsm	9.13	6.89	1.71	1.72	1.94	2.45	7.31	2.45	1.46	0.880	0.306	0.367
In.	10.53	7.69	1.97	1.98	2.09	2.82	8.16	2.82	1.63	1.01	0.35	0.41

Calendar year 1955: Max 673 Min 0.69 Mean 14.4 Cfsm 3.50 In. 47.50
Water year 1955-56: Max 295 Min 0.93 Mean 12.6 Cfsm 3.06 In. 41.46

Peak discharge (base, 140 cfs).--Oct. 16 (7 a.m.) 475 cfs (6.24 ft); Oct. 31 (1 a.m.) 372 cfs (5.42 ft); Nov. 5 (4:30 a.m.) 199 cfs (3.81 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of weather records and records for Naugatuck River at Thomaston.

b Stage-discharge relation affected by ice.

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 1956.

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.--15 years, 89.6 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 4,170 cfs Oct. 16 (gage height, 7.67 ft, from floodmarks); minimum, 20 cfs Aug. 20, Sept. 2, 15 (gage height, 0.93 ft).

1941-56: 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 determinations 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 determination of peak flow and computation of peak flow over dam).

Remarks.--Records good except those for periods of fragmentary gage-height record, which are fair. Flow regulated by Whigville Reservoir (see p. 231) and mills above station. Diversion for municipal water supply of city of New Britain from Copper Mine Brook.

Revisions (water years).--WSP 971: 1941-42. WSP 1111: 1947.

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	404	96	42	64	61	115	173	132	29	26	22
2	49	239	89	39	113	75	150	146	129	30	25	27
3	47	207	91	43	94	94	235	215	373	29	24	24
4	45	f840	120	46	61	125	251	160	170	28	23	22
5	44	f1,510	125	49	69	100	421	134	108	142	22	22
6	90	524	100	46	*59	105	446	121	90	150	24	29
7	f193	342	85	43	168	219	400	146	75	73	25	42
8	93	291	81	40	115	224	279	121	64	50	24	24
9	77	247	79	201	98	167	247	104	58	68	25	22
10	65	*221	75	152	98	130	315	108	58	50	24	22
11	59	465	69	105	105	125	*324	97	66	39	22	22
12	55	287	69	144	224	138	287	90	58	40	22	22
13	50	228	66	112	130	112	271	86	52	40	23	22
14	f228	402	64	79	100	112	239	81	46	50	24	22
15	*f2,050	275	66	66	98	112	247	86	46	39	23	26
16	f3,050	346	64	63	100	94	504	*83	58	39	23	28
17	f1,010	320	58	61	77	96	415	77	43	36	23	29
18	568	224	56	55	89	87	262	83	43	33	22	28
19	409	200	58	53	98	83	226	81	42	*30	21	24
20	285	197	50	53	94	91	193	83	40	29	22	29
21	225	184	50	50	81	87	176	73	43	50	30	24
22	184	177	50	49	64	96	164	68	45	46	24	23
23	158	*161	50	50	56	107	190	71	39	38	23	23
24	158	144	50	49	53	117	176	71	36	34	23	36
25	154	125	53	47	178	94	151	64	39	31	22	26
26	134	115	50	46	124	94	154	57	34	29	21	25
27	117	107	47	45	83	98	148	66	64	29	22	24
28	107	107	46	43	87	105	137	70	55	27	22	45
29	103	105	46	42	66	110	204	62	39	25	22	25
30	f570	100	46	111	-------	107	289	53	33	26	22	22
31	f1,090	-------	43	83	-------	98	-------	83	-------	26	22	-------
Total	11,523	9,094	2,092	2,107	2,846	3,463	7,616	3,013	2,178	1,385	720	781
Mean	372	303	67.5	68.0	98.1	112	254	97.2	72.6	44.7	23.2	26.0
(†)	+7.5	+7.6	+6.8	+7.3	+8.6	+7.7	+7.7	+7.5	+6.7	+7.6	+6.7	+6.7
Adjusted for change in reservoir contents												
Mean	380	311	74.3	75.3	107	120	262	105	79.3	52.3	29.9	32.7
Cfsm	8.41	6.88	1.64	1.67	2.37	2.65	5.80	2.32	1.75	1.16	0.662	0.723
In.	9.70	7.68	1.89	1.92	2.56	3.06	6.47	2.68	1.95	1.34	0.76	0.81

	Observed			Adjusted		
Calendar year 1955:	Max 6,500	Min 19	Mean 149	Mean 156	Cfsm 3.45	In. 46.96
Water year 1955-56:	Max 3,050	Min 21	Mean 128	Mean 135	Cfsm 2.99	In. 40.82

Peak discharge (base, 660 cfs).--Oct. 16 (about 7 a.m.) 4,170 cfs (7.67 ft); Oct. 30 (about 12 p.m.) about 2,040 cfs (about 5.2 ft); Nov. 5 (about 2 a.m.) 2,500 cfs (5.8 ft); Apr. 5 (8 p.m.) 665 cfs (2.87 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.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

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 (revised).

Records available.--July 1946 to September 1956.

Gage.--Water-stage recorder. Datum of gage is 147.54 ft above mean sea level, datum of 1929.

Average discharge.--10 years, 141 cfs.

Extremes.--Maximum discharge during year, 10,800 cfs Oct. 16 (gage height, 12.18 ft); minimum, 22 cfs Aug. 17, 28-30 (gage height, 1.95 ft).
1946-56: 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 discharge, 10 cfs Aug. 26, 1949 (gage height, 1.42 ft).

Remarks.--Records good. Infrequent regulation at low flow.

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 13, 14, Jan. 9 to Apr. 5; backwater from debris on control Dec. 28-30)

Oct. 1-13		Oct. 13 to Apr. 5						Apr. 5 to Sept. 30			
4.3	84	2.8	49	5.0	353	9.0	3,320	1.9	20	4.0	305
5.0	162	3.0	63	6.0	660	10.0	5,000	2.0	24	5.0	580
5.5	244	3.5	107	7.0	1,190	11.0	7,300	2.5	57	6.0	960
		4.0	167	8.0	2,090			3.0	107		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	110	691	146	55	86	75	101	342	189	47	31	24
2	101	470	141	50	84	80	126	255	209	46	30	24
3	91	377	141	52	85	109	173	295	505	45	30	24
4	87	794	174	55	79	143	224	241	305	43	28	23
5	84	2,380	237	67	81	129	583	209	191	51	28	23
6	124	835	188	69	77	118	766	189	139	97	28	24
7	238	585	150	67	95	243	760	181	114	74	28	79
8	180	456	140	66	112	358	445	161	99	57	27	42
9	157	402	130	120	112	178	405	148	90	67	*25	33
10	131	342	124	220	111	144	*474	161	88	61	24	30
11	118	629	117	174	109	129	520	141	97	50	24	28
12	106	515	115	202	208	130	505	137	81	48	23	26
13	97	428	109	218	202	117	505	132	71	43	23	28
14	111	*610	105	182	163	112	490	124	*65	67	25	26
15	5,760	515	105	145	146	107	460	117	59	61	24	26
16	*7,210	500	99	128	126	97	840	114	59	49	23	30
17	4,010	500	95	119	99	94	680	108	57	48	22	33
18	1,320	402	93	109	97	98	460	114	57	42	23	36
19	918	342	92	100	92	94	392	111	59	40	23	31
20	700	319	78	*102	87	92	330	103	59	37	23	31
21	585	287	75	95	80	90	318	96	59	43	27	*31
22	506	258	75	92	65	94	295	92	61	65	28	33
23	382	234	75	92	69	105	342	91	57	55	26	32
24	337	227	75	86	67	107	330	93	55	48	25	45
25	339	211	78	85	80	95	288	85	52	43	24	46
26	291	196	78	82	129	94	268	83	50	40	23	38
27	254	*182	68	81	110	94	251	87	51	37	23	35
28	*223	176	62	79	105	96	258	95	59	36	22	40
29	207	164	60	77	81	100	368	84	52	34	22	42
30	452	153	57	89	-------	95	548	80	49	32	22	36
31	2,290	---	56	105	-------	92	-------	87	-------	32	24	-------
Total	27,519	14,180	3,338	3,263	3,037	3,609	12,505	4,356	3,138	1,538	778	999
Mean	888	473	108	105	105	116	417	141	105	49.6	25.1	33.3
Cfsm	13.3	7.08	1.62	1.57	1.57	1.74	6.24	2.11	1.57	0.743	0.376	0.499
In.	15.33	7.90	1.87	1.81	1.69	2.01	6.96	2.43	1.75	0.86	0.43	0.56

Calendar year 1955 : Max 18,400 Min 16 Mean 299 Cfsm 4.48 In. 60.65
Water year 1955-56 : Max 7,210 Min 22 Mean 214 Cfsm 3.20 In. 43.60

Peak discharge (base, 1,000 cfs).--Oct. 16 (10:30 a.m.) 10,800 cfs (12.18 ft); Oct. 31 (5 a.m.) 4,020 cfs (9.46 ft); Nov. 5 (7 a.m.) 3,540 cfs (9.15 ft); Apr. 5 (9 p.m.) 1,200 cfs (6.48 ft); Apr. 5 (9 p.m.) 1,200 cfs (6.48 ft); Apr. 16 (9:30 p.m.) 1,100 cfs (6.31 ft).
* Discharge measurement made on this day.

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 (revised); at former site at Tariffville, 578 sq mi (revised).

Records available.--August 1928 to September 1956. 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.--28 years (1928-56), 1,099 cfs (adjusted to present site; adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 34,700 cfs Oct. 16 (gage height, 16.35 ft); minimum daily, 124 cfs Sept. 16.
1928-56: 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 excellent except those for period of no gage-height record, which are 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. 230), and by diversions for domestic water supply from Barkhamsted, Nepaug, and Whigville Reservoirs and Whites Bridge pumping plant.

Revisions (water years).--WSP 851: 1936. WSP 1051: 1945(m). WSP 1171: Drainage area. WSP 1301: 1937-43 (adjusted figures of monthly and yearly discharge and runoff).

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	774	8,280	2,110	513	1,070	1,010	1,610	6,790	956	262	400	404
2	690	6,380	1,610	632	1,010	820	1,650	5,100	1,480	304	320	277
3	726	4,150	1,470	560	701	898	2,240	4,140	1,810	413	380	125
4	462	4,250	2,080	482	700	1,370	2,460	3,560	2,910	444	480	312
5	614	7,500	2,320	574	830	1,370	3,280	3,320	2,460	228	260	257
6	1,240	11,600	2,330	650	696	1,150	4,550	2,830	2,000	754	230	252
7	1,650	8,840	2,220	698	1,060	1,480	4,500	2,780	1,360	1,190	235	823
8	2,240	6,600	1,600	434	793	2,300	4,280	2,600	1,120	532	300	514
9	1,720	4,030	1,700	866	1,220	2,320	3,080	2,530	740	459	328	307
10	1,730	3,660	1,780	2,100	1,080	1,630	3,220	2,260	372	760	365	324
11	1,340	3,810	1,310	2,320	911	1,260	3,560	1,340	838	631	368	340
12	*899	4,660	1,750	2,000	1,440	1,130	3,670	1,470	*928	541	208	366
13	1,120	4,310	1,520	2,530	1,760	1,360	3,630	1,580	642	505	217	307
14	1,400	4,440	1,330	2,600	1,390	1,410	3,710	1,490	541	716	250	350
15	6,930	4,340	1,490	2,060	957	1,350	3,940	1,200	468	628	403	339
16	23,500	4,340	1,540	1,360	1,250	1,110	4,670	1,020	542	1,230	302	124
17	29,900	4,320	*1,160	1,580	1,080	1,160	6,220	1,250	691	238	374	377
18	18,800	4,050	1,280	761	895	516	6,600	1,250	398	225	382	220
19	11,300	3,110	1,370	680	706	1,490	5,180	1,040	504	532	274	584
20	7,300	3,020	1,220	*864	848	844	4,300	904	935	575	369	461
21	5,570	2,810	854	1,010	790	1,290	3,210	981	760	579	257	*384
22	4,260	2,670	854	573	*778	1,080	2,990	852	774	320	186	382
23	3,420	2,530	964	799	696	1,050	3,340	788	635	490	160	301
24	2,970	2,320	720	810	738	1,520	3,760	904	395	400	376	301
25	2,840	2,460	738	607	706	1,300	3,430	922	328	420	378	502
26	3,020	2,060	572	*664	1,500	1,370	3,360	878	430	530	142	638
27	2,560	1,800	604	696	1,550	1,350	3,410	956	574	530	259	512
28	2,350	1,940	810	612	1,130	1,580	3,070	878	607	420	334	718
29	1,850	1,900	464	824	1,010	1,660	4,570	731	559	230	196	460
30	2,140	2,210	652	746	-------	1,630	6,220	754	459	360	232	282
31	6,190	-------	406	1,130	-------	1,680	-------	724	-------	190	*436	-------
Total	151,505	*128,390	40,828	32,735	29,295	41,468	113,710	57,802	27,196	15,784	9,421	11,543
Mean	4,887	4,280	1,317	1,056	1,010	1,338	3,790	1,865	907	509	304	385
(†)	+129	-29	-303	+4	+45	+7	+423	+4	-88	-46	-101	-59

Adjusted for diversion and change in reservoir contents

Mean	5,016	4,251	1,014	1,060	1,055	1,345	4,213	1,869	819	463	203	326
Cfsm	8.49	7.19	1.72	1.79	1.79	2.28	7.13	3.16	1.39	0.738	0.343	0.552
In.	9.79	8.02	1.98	2.06	1.93	2.63	7.96	3.64	1.55	0.91	0.40	0.62

	Observed			Adjusted				
Calendar year 1955:	Max 58,700	Min 150	Mean 2,086	Mean 2,132	Cfsm 3.61	In. 48.94
Water year 1955-56:	Max 29,900	Min 124	Mean 1,802	Mean 1,799	Cfsm 3.04	In. 41.49

* 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 at Hartford Metropolitan District Commission, and Board of Water Commissioners of New Britain.

Note.--No gage-height record July 22 to Aug. 7; discharge estimated on basis of powerplant data.

South Branch Park River at Hartford, Conn.

Location.--Lat 41°44'08", 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 1956.

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.--20 years, 73.5 cfs.

Extremes.--Maximum discharge during year, 2,800 cfs Oct. 16; maximum gage height, 15.6 ft Oct. 16, from floodmark; minimum discharge, 13 cfs Aug. 20, 26, 27 (gage height, 1.50 ft).

1936-56: Maximum discharge, 5,000 cfs (revised) 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, 9.4 cfs Oct. 6, 1941.

Flood of Mar. 12, 1936, reached a stage of 12.1 ft, as determined by Hartford city engineers, from floodmarks.

Revisions.--The maximum discharge for the water year 1955 has been revised to 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, superseding figure published in WSP 1381.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Some regulation by mills and reservoirs above station.

Revisions (water years).--WSP 1301: 1939-40(P), 1941(M), 1943-44(P), 1950. Revised figures of discharge, in cubic feet per second, for the water year 1955, superseding those published in WSP 1281 are given herewith:

Aug. 19, 1955..... 3,880
Aug. 20, 1955..... 2,030

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
August 1955.....	8,735	3,880	15	282	6.95	8.01
Water year 1954-55.....	-	3,880	14	94.7	2.33	31.66

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	208	*54	32	*46	49	128	*88	106	32	18	15
2	38	*152	62	35	80	74	179	72	67	34	18	31
3	45	125	49	*46	113	79	284	123	423	*35	18	24
4	42	444	64	47	44	118	250	84	112	34	18	14
5	39	815	86	40	66	79	298	73	91	114	17	*17
6	118	375	81	36	59	91	273	65	55	150	17	22
7	203	249	69	28	270	*266	254	80	47	58	18	34
8	151	204	63	25	185	253	250	68	*44	43	21	17
9	111	173	63	153	93	174	210	60	35	91	20	21
10	79	152	52	128	81	105	200	63	52	55	18	23
11	70	325	49	81	71	95	*175	58	69	40	17	25
12	65	186	58	128	222	98	150	55	43	29	14	26
13	61	134	56	98	102	93	132	53	38	29	15	20
14	70	306	*54	63	81	98	118	54	43	74	23	18
15	704	190	54	48	79	128	123	57	45	35	23	19
16	1,820	205	52	48	77	102	228	54	45	39	22	34
17	840	184	40	48	52	81	180	52	31	37	22	25
18	373	120	38	49	65	74	123	59	30	43	37	36
19	287	108	51	46	88	65	112	54	30	31	17	29
20	*227	108	49	46	87	86	96	57	31	28	13	42
21	186	108	49	34	75	79	88	49	32	38	45	23
22	144	84	46	31	56	88	84	47	31	40	23	20
23	126	74	42	38	52	105	102	52	37	29	19	19
24	125	70	39	36	49	102	94	45	38	32	16	41
25	126	72	39	34	112	84	63	35	37	21	16	24
26	115	88	36	32	96	84	68	34	38	19	13	22
27	94	82	45	29	65	95	67	47	37	18	13	23
28	85	72	42	27	70	100	57	47	40	18	17	84
29	79	72	40	26	52	98	129	34	31	16	19	40
30	296	86	42	108	------	98	164	30	27	16	22	34
31	548	----	----	36	101	-------	98	86	-------	*17	16	----
Total	7,319	5,511	1,600	1,733	2,558	3,239	4,677	1,785	1,785	1,295	605	822
Mean	236	184	51.6	55.6	88.2	104	156	57.6	59.5	41.8	19.5	27.4
Cfsm	5.81	4.53	1.27	1.37	2.17	2.56	3.84	1.42	1.47	1.03	0.480	0.675
In.	6.70	5.05	1.46	1.58	2.34	2.95	4.28	1.64	1.64	1.19	0.55	0.75

Calendar year 1955: Max 3,880 Min 14 Mean 110 Cfsm 2.71 In. 36.91
Water year 1955-56: Max 1,820 Min 13 Mean 89.9 Cfsm 2.21 In. 30.17

Peak discharge (base, 550 cfs).--Oct. 16 (2 p.m.) 2,800 cfs (15.6 ft at 4 p.m.); Oct. 31 (2 a.m.) 878 cfs (8.49 ft, 4 to 5 a.m.); Nov. 5 (3 a.m.) 1,060 cfs (9.20 ft at 6 a.m.); June 3 (3 a.m.) 690 cfs (7.07 ft from 10 a.m. to 12 m.).

Discharge measurement made on this day.

Note.--No gage-height record Feb. 17-24, 26, 27, Apr. 9-11, Aug. 1 to Sept. 4; discharge estimated on basis of recorded range in stage, weather records, and records for Park River at Hartford.

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 1956.
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.--20 years, 39.0 cfs.
Extremes.--Maximum discharge during year, 3,680 cfs Oct. 16, from rating curve extended above 1,600 cfs as explained below; maximum gage height, 12.40 ft Oct. 16; minimum discharge, 2.6 cfs Aug. 30 (gage height, 1.23 ft).

1936-56: Maximum discharge, 10,000 cfs Aug. 19, 1955, from rating curve extended above 1,600 cfs on basis of slope-area determination of peak flow 2.6 miles upstream; maximum gage height, 18.8 ft Aug. 19, 1955, from floodmarks: 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 except those for periods of backwater from debris, which are fair. Some regulation by mills upstream and by storage and diversion at Hartford water-supply reservoirs above station.
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.

Rating tables, water year 1955-56, except periods of ice effect or backwater from debris (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31

1.6	10	4.0	440
1.7	14	6.0	830
2.0	31	8.0	1,400
2.3	64	11.0	2,750
2.8	165		

Nov. 1 to Sept. 30

1.2	2.3	2.0	32
1.3	3.4	2.3	66
1.5	6.8	2.8	165
1.7	13		

Note.--Same as preceding table above 2.8 ft.

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	160	b23	8.2	20	b23	105	52	12	5.3	3.4	6.6
2	13	*81	22	7.6	19	55	168	30	26	4.9	3.3	9.2
3	12	63	27	*8.0	46	109	240	74	198	*4.8	3.3	5.5
4	11	283	54	8.0	22	148	248	44	66	4.8	3.4	4.0
5	10	878	97	8.7	23	63	409	29	26	20	3.2	*3.4
6	64	285	53	9.0	24	53	322	23	15	66	3.1	3.4
7	170	126	b30	8.5	145	324	220	31	11	29	3.3	20
8	92	94	b21	8.0	128	255	175	24	9.0	12	4.6	6.0
9	63	70	22	b91	94	130	200	18	7.8	21	3.3	4.0
10	32	61	19	94	90	83	155	19	8.5	17	3.1	3.3
11	22	274	16	50	68	75	117	19	*21	9.2	3.0	3.1
12	18	130	16	94	323	70	95	15	11	7.5	2.7	3.0
13	18	76	15	80	122	57	81	15	8.0	7.0	2.7	3.6
14	45	225	14	39	70	53	69	14	6.6	11	3.0	3.4
15	1,160	126	16	26	65	63	65	14	6.0	14	3.2	3.2
16	2,500	325	14	b27	62	45	170	13	5.7	9.2	3.3	4.3
17	951	137	12	22	b33	24	134	12	6.0	8.7	3.1	4.3
18	273	68	13	b19	b20	42	72	13	5.3	7.5	3.2	5.1
19	180	52	12	14	27	30	54	17	4.4	5.8	3.1	4.2
20	122	53	9.6	15	30	39	42	19	4.4	6.0	2.7	6.8
21	*81	53	8.7	12	b25	40	37	14	4.8	6.8	5.1	4.9
22	61	53	7.8	11	b17	46	29	12	5.5	21	5.7	3.6
23	49	44	b8.5	11	13	63	37	12	5.3	12	4.4	3.4
24	48	44	b9.0	10	11	61	45	16	7.8	7.8	3.8	8.0
25	59	38	b10	9.6	142	b51	28	11	22	6.2	4.3	6.6
26	48	34	b9.5	8.5	143	52	29	9.2	7.8	5.5	3.1	4.8
27	41	31	b9.0	8.5	70	61	30	12	9.6	4.8	3.0	4.0
28	37	32	8.7	8.2	56	74	24	16	16	4.6	3.4	12
29	35	30	8.2	8.5	b31	76	56	11	8.2	4.4	4.6	6.6
30	227	*24	8.7	68	-------	*60	150	9.2	6.2	3.6	5.7	6.0
31	701	-------	8.7	66	-------	63	-------	9.0	----	3.6	6.8	----
Total	7,158	3,950	602.4	858.2	1,939	2,388	3,606	626.4	550.9	351.0	113.9	166.3
Mean	231	1.32	19.4	27.7	66.9	77.0	120	20.2	18.4	11.3	3.67	5.54
Cfsm	9.13	5.22	0.767	1.09	2.64	3.04	4.74	0.798	0.727	0.447	0.145	0.219
In.	10.53	5.82	0.88	1.26	2.85	3.50	5.29	0.92	0.81	0.52	0.17	0.24

Calendar year 1955: Max 6,460 Min 0.75 Mean 84.1 Cfsm 3.32 In. 45.14
Water year 1955-56: Max 2,500 Min 2.7 Mean 61.0 Cfsm 2.41 In. 32.79

Peak discharge (base, 500 cfs).--Oct. 16 (2 p.m.) 3,680 cfs (12.40 ft at 3:30 p.m.); Oct. 31 (4:30 a.m.) 996 cfs (6.67 ft at 6 a.m.); Nov. 5 (7 a.m.) 1,110 cfs (7.02 ft at 8:30 a.m.); Apr. 5 (7:30 p.m.) 700 cfs (5.24 ft at 9 p.m.).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from debris Oct. 1-4, June 19-29, July 8 to Aug. 1, Sept. 16-30.

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 1956.

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.--20 years, 123 cfs.

Extremes.--Maximum discharge during year, 6,420 cfs Oct. 16 (gage height, 10.6 ft, from floodmark in gage house); minimum, 15 cfs July 24, Aug. 1, 7; minimum gage height, 2.28 ft Aug. 7.

1936-56: Maximum discharge, 14,000 cfs (revised) 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 determination 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.

Revisions.--The maximum discharge for the water year 1955 has been revised to 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 determination of peak flow, superseding figure published in WSP 1381.

Remarks.--Records good. Some regulation by mills above station and by storage and diversion at Hartford water-supply reservoirs on small backwater streams.

Revisions.--Revised figures of discharge, in cubic feet per second, for the water year 1955, superseding those published in WSP 1381 are given herewith:

Aug. 19, 1955..... 8,790
Aug. 20, 1955..... 6,540

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
August 1955.....	20,103	8,790	18	648	8.76	10.10
Water year 1954-55	-	8,790	16	169	2.28	30.92

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	448	*89	43	80	85	244	*155	128	39	*25	25
2	61	*261	92	41	*109	120	*404	112	92	41	25	38
3	61	200	95	*50	200	180	570	215	585	*41	25	36
4	59	559	128	57	89	320	515	141	207	41	25	21
5	56	1,640	223	50	98	170	645	112	131	138	23	*27
6	173	715	144	48	103	160	685	95	80	248	23	29
7	*415	418	109	43	374	540	510	118	67	103	25	67
8	280	328	92	32	382	*550	475	103	62	65	30	30
9	211	265	92	213	223	382	455	89	50	125	27	25
10	125	223	86	265	188	215	408	89	57	80	25	29
11	104	565	73	162	148	192	323	89	*100	60	23	32
12	95	377	80	265	530	184	279	80	67	41	20	34
13	87	232	83	215	265	169	236	75	55	39	21	27
14	94	498	80	125	162	173	207	75	55	108	30	23
15	1,790	377	83	86	148	219	196	78	55	60	30	29
16	4,150	381	83	83	155	196	426	73	60	57	29	48
17	2,570	413	73	80	98	118	372	70	43	52	29	*32
18	779	232	62	73	100	138	223	75	39	52	46	50
19	536	188	65	67	128	118	180	75	36	43	23	41
20	*424	188	60	67	141	141	155	75	36	32	18	57
21	325	188	52	52	112	138	141	67	41	50	55	36
22	248	166	57	48	78	148	125	78	43	75	32	29
23	203	138	57	55	75	192	138	62	46	52	27	27
24	195	131	52	50	67	207	162	70	52	52	23	62
25	207	122	52	48	213	158	106	50	60	34	23	39
26	184	118	52	46	287	151	95	46	55	30	18	30
27	155	109	52	43	141	169	109	62	50	27	18	30
28	135	112	55	39	144	188	95	70	73	27	23	128
29	125	115	52	32	92	207	211	52	46	23	27	60
30	296	109	55	170	-------	180	332	48	32	23	32	48
31	1,300	-------	52	229	-------	180	-------	48	-------	25	27	------
Total	15,514	9,816	2,480	2,877	4,930	6,288	8,992	2,647	2,503	1,883	827	1,189
Mean	500	327	80.0	92.8	170	203	300	85.2	83.4	60.7	26.7	39.6
Cfsm	6.76	4.42	1.08	1.25	2.30	2.74	4.05	1.15	1.13	0.820	0.361	0.535
In.	7.79	4.93	1.24	1.44	2.48	3.16	4.52	1.33	1.26	0.95	0.42	0.60

Calendar year 1955: Max 8,790 Min 16 Mean 207 Cfsm 2.80 In. 38.05
Water year 1955-56: Max 4,150 Min 18 Mean 164 Cfsm 2.22 In. 30.12

Peak discharge (base, 1,000 cfs).--Oct. 16 (5 p.m.) 6,420 cfs (10.6 ft); Oct. 31 (9 a.m.) 1,840 cfs (5.64 ft); Nov. 5 (8 a.m.) 1,940 cfs (6.06 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Mar. 1-7; discharge estimated on basis of recorded range in stage, weather records, and records for North and South Branches.

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. paper mill, 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 1956.

Gage.--Water-stage recorder. Datum of gage is 54.5 ft above mean sea level, datum of 1929 (levels by Department of Engineeri ., city of Hartford).

Average discharge.--30 years, 117 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 1,520 cfs Oct. 16 (gage height, 7.96 ft); minimum, 20 cfs Aug. 4-8 (gage height, 1.11 ft).
1919-21, 1928-56: 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 fair. Flow regulated by Shenipsit Lake (see p. 231), 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 table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

1.1	19	3.0	244
1.2	26	4.0	430
1.5	54	6.0	910
2.0	104	8.0	1,540

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	480	194	45	119	125	197	256	163	63	53	33
2	61	342	185	130	140	156	258	233	85	76	79	25
3	125	314	152	110	207	106	279	238	374	72	68	25
4	100	432	194	99	90	171	325	224	290	62	24	77
5	*80	1,030	230	101	128	211	420	167	222	85	20	69
6	134	625	169	125	195	170	470	180	201	138	20	76
7	160	460	158	52	229	253	390	229	142	160	20	94
8	85	400	138	37	236	325	390	184	149	110	21	40
9	133	360	147	215	196	281	366	131	122	100	55	25
10	158	342	74	217	174	168	395	207	114	120	64	53
11	97	480	111	170	108	164	378	175	*142	100	49	67
12	94	430	167	183	270	219	339	121	107	85	39	57
13	62	360	128	179	265	190	311	141	100	75	36	66
14	111	450	117	88	194	207	278	194	94	100	66	69
15	528	430	121	123	166	231	261	137	93	150	33	33
16	1,240	420	139	160	163	217	330	132	72	130	26	32
17	863	430	63	143	158	149	356	132	131	93	27	72
18	540	351	88	119	100	190	310	152	116	86	41	84
19	428	314	148	117	154	221	277	65	90	84	58	75
20	360	323	113	*131	210	210	255	106	87	112	110	84
21	323	305	97	55	139	204	217	165	87	112	141	78
22	285	289	123	46	122	208	203	118	88	111	129	36
23	271	273	125	134	110	222	225	124	64	91	102	24
24	276	278	60	102	141	227	192	131	68	*73	58	80
25	282	261	55	99	111	233	146	143	92	*44	38	84
26	256	261	130	82	236	249	205	66	87	76	22	77
27	244	*252	110	123	220	219	*183	63	88	31	41	72
28	226	265	100	53	142	207	125	172	91	43	28	114
29	208	243	110	46	140	206	264	126	64	56	22	42
30	291	226	120	189	-------	180	320	61	63	88	23	27
31	710	-------	55	160	-------	208	-------	113	-------	67	50	-------
Total	8,801	11,426	3,901	3,653	4,863	6,327	8,665	4,686	3,684	2,793	1,563	1,790
Mean	284	381	126	118	168	204	289	151	123	90.1	50.4	59.7
(†)	+27.4	-23.6	-6.3	+1.0	+15.2	+8.5	+23.0	-5.5	-10.1	-13.7	-22.8	-16.0
Adjusted for change in contents in Shenipsit Lake												
Mean	311	357	120	119	183	212	312	146	113	76.4	27.6	43.7
Cfsm	4.17	4.79	1.61	1.60	2.46	2.85	4.18	1.96	1.52	1.03	0.370	0.587
In.	4.81	5.34	1.86	1.84	2.65	3.29	4.66	2.26	1.70	1.19	0.43	0.65

	Observed			Adjusted			
Calendar year 1955:	Max 1,760	Min 40	Mean 181	Mean 179	Cfsm 2.40	In. 32.67	
Water year 1955-56:	Max 1,240	Min 20	Mean 170	Mean 168	Cfsm 2.26	In. 30.68	

Peak discharge (base, 900 cfs).--Oct. 16 (2 to 3 p.m.) 1,520 cfs (7.96 ft); Nov. 5 (4 a.m.) 1,180 cfs (6.94 ft).

* Discharge measurement made on this day.

† Change in contents, equivalent in cubic feet per second, in Shenipsit Lake. Records furnished by Rockville Water & Aqueduct Co.

Note.--No gage-height record Dec. 21 to Jan. 3, June 4, July 7-16; discharge estimated on basis of recorded range in stage, weather records, and records for nearby streams.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 69.50 ft above mean sea level, datum of 1929.

Average discharge.--28 years, 182 cfs.

Extremes.--Maximum discharge during year, 9,130 cfs Oct. 16 (gage height, 8.21 ft); minimum, 8 cfs Aug. 20 (gage height, 0.46 ft).
1928-56: 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 good except those for periods of ice effect, which are fair. Slight regulation at low flow by mills upstream.

Revisions (water years).--WSP 1201: 1929.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-16				Oct. 17 to Sept. 6				Sept. 7-30	
1.1	74	4.0	2,040	0.4	4.1	1.5	195	0.6	16
1.5	170	5.0	3,360	.5	10.4	2.0	380	.8	34
2.0	365	7.0	6,590	.7	27	3.0	1,020	1.0	62
3.0	1,020			1.0	68	4.5	2,670	1.4	156

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	143	766	212	60	210	215	420	356	138	48	23	18
2	130	505	202	65	200	249	515	282	212	41	*23	19
3	102	416	218	70	380	324	780	416	784	38	21	22
4	87	825	274	75	308	402	710	344	530	34	19	23
5	78	2,330	324	80	263	364	752	344	332	70	18	19
6	134	1,080	270	75	252	328	703	293	249	332	18	17
7	586	675	218	65	438	566	569	368	195	198	17	39
8	445	530	195	60	460	738	654	316	164	109	18	39
9	320	460	*183	260	372	661	622	274	147	100	17	25
10	221	416	176	500	328	485	675	285	144	79	16	20
11	170	700	161	352	328	420	628	274	225	68	14	18
12	143	592	158	394	564	398	490	249	167	58	13	18
13	128	455	150	389	505	372	416	221	125	57	13	20
14	198	660	144	316	380	402	368	205	100	161	16	20
15	2,490	622	150	256	340	505	360	208	87	141	16	29
16	*6,200	606	141	232	324	430	604	205	85	85	17	48
17	2,600	640	127	189	270	324	628	192	87	72	15	50
18	1,270	475	130	*180	343	352	455	195	76	58	13	40
19	1,020	402	127	170	412	320	376	208	65	48	11	29
20	745	380	102	150	389	293	340	212	62	44	9	30
21	569	360	90	140	308	296	316	189	62	54	16	38
22	475	348	80	130	228	*317	296	167	72	114	18	32
23	416	324	75	125	218	372	285	167	63	81	21	27
24	394	340	80	120	189	455	296	202	57	*68	18	*34
25	407	320	90	115	260	394	270	173	52	55	19	39
26	364	293	90	110	340	352	263	150	45	45	18	32
27	328	270	70	110	289	340	270	195	46	38	17	28
28	296	263	60	105	282	348	249	267	62	35	16	139
29	278	252	55	110	246	348	308	195	91	31	16	106
30	490	221	60	170	-------	394	450	158	62	28	16	49
31	1,520	-------	65	250	-------	394	-------	150	-------	25	16	-------
Total	22,747	16,526	4,477	5,423	9,426	12,158	14,068	7,460	4,586	2,415	518	1,067
Mean	734	551	144	175	325	392	469	241	153	77.9	16.7	35.6
Cfsm	6.99	5.25	1.37	1.67	3.10	3.73	4.47	2.30	1.46	0.742	0.159	0.339
In.	8.06	5.86	1.58	1.92	3.34	4.30	4.99	2.65	1.63	0.86	0.18	0.38

Calendar year 1955: Max 6,200 Min 7.2 Mean 272 Cfsm 2.59 In. 35.18
Water year 1955-56: Max 6,200 Min 9 Mean 276 Cfsm 2.63 In. 35.75

Peak discharge (base, 1,300 cfs).--Oct. 16 (8 a.m.) 9,130 cfs (8.21 ft); Oct. 31 (7:30 a.m.) 1,940 cfs (3.92 ft); Nov. 5 (5 a.m.) 2,940 cfs (4.68 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 21 to Jan. 9, Jan. 19 to Feb. 3.

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 1956. 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.--19 years, 40.6 cfs (adjusted to present site).

Extremes.--Maximum discharge during year, 2,350 cfs Oct. 15 (gage height, 7.72 ft), from rating curve extended above 1,220 cfs on basis of computation of peak flow through highway bridge and over road; minimum, 2.0 cfs Aug. 20, 30, Sept. 11, 12 (gage height, 1.93 ft).
1937-56: Maximum discharge, that of Oct. 15, 1955; minimum observed, 0.05 cfs Sept. 12, 1944 (gage height, 1.60 ft).

Remarks.--Records good except those for periods of ice effect or no gage-height record, 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-15		Oct. 16 to Sept. 30			
2.4	21	1.9	2.0	4.0	154
2.7	40	2.1	6.2	4.5	265
3.0	65	2.5	19	5.0	415
3.5	120	3.0	45	6.0	860
4.0	215	3.5	86	7.0	1,610
5.0	427				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59	*145	42	b14	b34	48	77	a64	22	6.8	6.5	2.6
2	41	107	40	b14	b36	48	86	a48	25	5.5	6.2	3.3
3	31	91	45	a15	a90	64	128	60	184	4.8	5.0	5.2
4	28	239	52	a16	b60	60	107	60	107	4.0	4.3	3.1
5	25	529	48	b18	52	52	107	56	64	15	3.8	2.6
6	24	216	41	b16	48	a52	86	52	a48	68	3.8	2.6
7	216	136	38	a15	114	86	82	86	41	29	3.6	8.2
8	126	114	38	b14	82	114	114	64	39	17	3.4	4.8
9	107	*96	36	b45	72	102	102	a52	34	34	3.1	3.3
10	71	*86	34	82	68	82	102	a48	30	32	2.8	2.6
11	59	154	34	56	82	68	*102	48	29	19	2.9	2.0
12	50	107	32	72	145	a60	86	45	24	a14	2.8	2.0
13	*43	91	31	68	a107	a56	72	43	20	38	2.6	3.1
14	49	145	32	56	86	77	64	40	19	72	2.6	3.4
15	1,050	120	29	48	72	91	64	39	16	36	3.1	a5.5
16	*1,480	128	28	43	68	82	120	38	14	22	4.0	a8.7
17	608	128	b26	a36	60	a56	107	36	16	17	3.1	7.9
18	320	96	b26	*b36	a82	a64	91	35	14	13	2.6	6.2
19	384	86	25	b36	102	a60	72	34	11	11	2.2	4.5
20	221	82	b21	a35	77	a60	64	33	11	9.9	2.0	5.2
21	145	77	a19	b34	68	56	64	30	13	19	4.0	5.7
22	120	68	a17	b30	56	60	60	28	13	45	4.5	4.8
23	99	64	b16	b26	45	64	56	26	10	24	3.8	3.8
24	96	77	a17	a25	39	77	52	27	12	*19	3.1	*6.5
25	96	64	b20	b24	72	68	48	24	11	15	3.1	5.5
26	84	60	b18	a23	68	68	44	23	8.2	11	3.3	4.3
27	77	56	b16	b22	60	68	56	36	7.6	11	2.6	3.6
28	69	56	b14	a21	77	68	52	43	9.9	11	2.6	28
29	65	48	b13	b21	60	64	52	32	*10	10	*2.2	14
30	91	44	b14	b32	-------	82	77	27	a9.3	8.2	2.0	8.2
31	267	-------	a15	b42	-------	82	-------	25	-------	7.0	2.2	-------
Total	6,201	3,510	877	1,035	2,084	2,139	2,394	1,302	872.0	648.2	103.8	171.2
Mean	200	117	28.3	33.4	71.9	69.0	79.8	42.0	29.1	20.9	3.35	5.71
Cfsm	10.8	6.29	1.52	1.80	3.87	3.71	4.29	2.26	1.56	1.12	0.180	0.307
In.	12.45	7.02	1.75	2.08	4.17	4.28	4.79	2.61	1.74	1.29	0.21	0.34

Calendar year 1955: Max 1,480 Min 0.8 Mean 61.4 Cfsm 3.30 In. 44.84
Water year 1955-56: Max 1,480 Min 2.0 Mean 58.3 Cfsm 3.13 In. 42.73

Peak discharge (base, 350 cfs).--Oct. 15 (about 12 p.m.) 2,350 cfs (7.72 ft); Oct. 31 (about 6 a.m.) 350 cfs (4.80 ft); Nov. 5 (about 2 a.m.) 750 cfs (5.85 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of weather records and records for station on East Branch.

b Stage-discharge relation affected by ice.

East Branch Eightmile River near North Lyme, Conn.

Location.--Lat 41°25'40", long 72°20'05", on left bank at highway 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 1956.

Gage.--Water-stage recorder. Datum of gage is 55.21 ft above mean sea level, datum of 1929.

Average discharge.--19 years, 46.7 cfs.

Extremes.--Maximum discharge during year, 2,200 cfs Oct. 16 (gage height, 5.90 ft); minimum, 2.5 cfs Aug. 19, 20 (gage height, -0.01 ft).
1937-56: 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation indefinite Oct. 16)

Oct. 1-31				Nov. 1 to Sept. 30			
0.7	23	2.5	233	-0.1	1.6	1.0	52
.9	43	3.0	329	0.0	2.6	1.5	107
1.5	107	3.5	470	.1	4.0	2.0	165
2.0	165	4.0	690	.2	5.8	2.5	233
				.3	8.2	3.0	329
				.4	12	3.5	470
				.5	18		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	172	47	b13	b46	b56	99	66	30	7.7	7.7	3.2
2	56	121	44	b12	b44	61	108	52	31	6.5	7.5	3.7
3	46	97	46	b13	b94	73	140	68	140	5.8	6.5	5.1
4	36	135	52	b15	b82	74	128	71	145	5.3	5.8	4.7
5	29	470	63	b17	68	68	116	59	86	15	5.3	3.7
6	38	242	59	b17	63	65	98	52	58	65	5.3	3.6
7	182	161	47	b15	115	86	86	76	46	51	5.1	6.5
8	188	133	42	b14	130	135	138	79	39	28	4.7	7.5
9	126	114	38	b45	100	141	138	57	34	40	4.4	5.3
10	89	*100	37	122	83	103	124	52	32	50	4.0	4.2
11	70	148	34	82	90	83	*112	50	32	31	4.0	3.7
12	60	148	32	74	173	78	94	46	29	20	3.7	3.6
13	*54	112	29	79	143	72	79	46	26	42	3.6	3.6
14	55	140	29	66	106	86	72	42	23	60	3.4	3.6
15	409	153	31	53	90	122	69	40	20	52	3.7	4.7
16	*1,490	133	29	49	87	98	114	38	19	31	4.2	9.0
17	684	151	26	37	72	b64	157	38	19	23	3.4	10
18	310	119	26	*37	88	b78	114	36	16	18	3.0	8.0
19	254	95	25	b37	135	b69	86	37	13	14	2.6	6.5
20	204	92	b21	b35	108	69	74	36	12	12	2.5	6.5
21	156	84	b19	b30	83	67	68	34	13	40	4.0	7.7
22	132	82	b17	b28	b59	71	63	31	17	57	5.4	7.0
23	114	74	b15	b26	b55	81	58	30	16	42	4.7	5.8
24	100	76	b16	b25	b48	93	58	31	13	*27	4.5	*9.3
25	100	75	b17	b24	68	82	54	29	13	21	5.6	10
26	92	66	b18	b23	103	79	50	27	11	17	4.5	7.7
27	80	60	b16	b23	78	78	54	38	9.3	14	3.7	6.8
28	70	58	b14	b22	80	82	52	61	9.7	14	3.3	29
29	65	58	b12	b21	72	82	52	45	*11	12	*3.0	36
30	84	50	b13	b29	------	98	63	35	9.7	10	2.9	19
31	240	------	b13	b44	------	104	------	31	------	8.2	2.9	------
Total	5,671	3,717	927	1,127	2,563	2,598	2,716	1,433	972.7	839.5	134.9	245.0
Mean	183	124	29.9	36.4	88.4	83.8	90.5	46.2	32.4	27.1	4.35	8.17
Cfsm	8.32	5.64	1.36	1.65	4.02	3.81	4.11	2.10	1.47	1.23	0.198	0.371
In.	9.59	6.29	1.57	1.90	4.34	4.39	4.59	2.42	1.64	1.42	0.23	0.41

Calendar year 1955: Max 1,490 Min 0.35 Mean 62.5 Cfsm 2.84 In. 38.55
Water year 1955-56: Max 1,490 Min 2.5 Mean 62.7 Cfsm 2.85 In. 38.79

Peak discharge (base, 300 cfs).--Oct. 16 (2 p.m.) 2,200 cfs (5.90 ft); Nov. 5 (12 m.) 575 cfs (3.73 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Reservoirs in Connecticut River basin

First Connecticut and Second Connecticut Lakes on Connecticut River are operated as a unit for storage of water for power. The reservoirs in downstream order and usable capacity of each are as follows: Second Lake, 12 miles northeast of Pittsburg, N. H., 506,000,000 cu ft; First Lake, 5 2/3 miles northeast of Pittsburg, N. H., 3,330,000,000 cu ft. Records furnished by New England Power Co.

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 Hampshire Water Resources Board.

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.

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.

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., 509,000,000 cu ft; Grafton Pond, 8½ miles southeast of Mascoma, 144,000,000 cu ft; Crystal Lake, 5⅝ miles southeast of Mascoma, 75,000,000 cu ft; Mascoma Lake at Mascoma, 337,000,000 cu ft; total usable capacity of the four reservoirs, 1,060,000,000 cu ft. Records furnished by New England Power Co.

Sunapee Lake on Sugar River at Sunapee, N. H., used for recreation and storage of water for power, has usable capacity of 862,000,000 cu ft. Records collected by Geological Survey.

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.

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.

Tully Reservoir on East Branch Tully River, 3½ miles north of Athol, Mass., completed in 1948 for flood control, has usable capacity of 958,000,000 cu ft. Records furnished by Corps of Engineers.

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.

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.

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.

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.

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.

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.

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 1956. Records furnished by The Collins Co., Collinsville, Conn.

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 1956. 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.

Reservoirs in Connecticut River basin--Continued

Barkhamsted, East Branch, and Nepaug Reservoirs--Continued. Drainage area, 61.2 sq mi. Completed in 1919 for storage of water to compensate for water diverted from river. Total capacity, 400,000,000 cu ft. Records available, August 1928 to September 1956. 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 1956. All three reservoirs are equipped with water-stage recorders. Records furnished by Water Bureau, Metropolitan District Commission, Hartford, Conn.

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 1956. Records furnished by Board of Water Commissioners, New Britain, Conn.

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 1956. Stage records furnished by Rockville Water & Aqueduct Co.

Month-end usable contents, in millions of cubic feet, water year October 1955 to September 1956

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.30,1955	2,845.1	3,246.6	1,221	1.9	803.4
Oct. 31	2,410.7	2,793.7	1,298	3.9	742.2
Nov. 30	2,214.0	2,646.8	1,253	4.5	1,049.3
Dec. 31	1,641.9	2,111.6	1,216	2.2	847.5
Jan. 31, 1956	1,263.7	1,747.3	1,266	13.1	933.1
Feb. 29	1,005.8	788.4	1,212	10.6	682.2
Mar. 31	56.8	510.7	1,230	11.2	326.8
Apr. 30	827.2	1,528.4	5,977	36.8	974.5
May 31	3,112.7	3,437.7	6,038	4.5	1,230.4
June 30	3,580.9	3,773.4	6,206	2.4	1,110.7
July 31	3,418.2	3,805.4	6,051	2.4	1,039.0
Aug. 31	3,155.9	3,490.3	6,043	3.6	813.3
Sept.30	3,164.8	3,404.5	6,217	3.6	838.6

Date	Sunapee Lake	Surry Mountain Reservoir	Birch Hill Reservoir	Tully Reservoir	Somerset and Harriman Reservoirs
Sept.30, 1955	401	0.1	2.7	0.2	5,173.5
Oct. 31	439	15.3	15.8	3.6	6,815.0
Nov. 30	435	13.2	4.8	18.0	6,136.3
Dec. 31	303	29.5	1.3	18.5	4,210.1
Jan. 31, 1956	422	34.3	3.6	18.0	3,734.8
Feb. 29	360	39.4	3.3	24.2	2,730.0
Mar. 31	275	13.2	3.6	4.8	1,524.1
Apr. 30	639	713.0	259.8	192.0	4,899.0
May 31	660	8.2	3.3	.4	6,833.7
June 30	605	.1	1.3	.1	6,583.5
July 31	534	.1	1.0	0	6,485.3
Aug. 31	398	.1	1.0	0	5,860.9
Sept.30	333	.2	2.3	.1	5,221.0

Date	Quabbin Reservoir†	Ludlow Reservoir	Watershops Pond	Knightville Reservoir	Borden Brook and Cobble Mountain Reservoirs
Sept.30, 1955	54,706	148.7	0	0.4	2,909.8
Oct. 31	55,653	181.1	0	338.8	3,329.2
Nov. 30	55,255	179.4	0	6.8	3,066.2
Dec. 31	54,343	167.8	0	5.9	2,414.8
Jan. 31, 1956	54,245	164.0	0	12.0	2,139.4
Feb. 29	54,213	163.1	0	9.9	2,151.4
Mar. 31	54,706	169.5	0	6.5	2,232.1
Apr. 30	56,334	178.6	0	516.2	3,124.5
May 31	55,413	172.7	0	2.8	3,124.6
June 30	54,673	166.3	0	.1	3,052.6
July 31	53,490	152.0	0	.1	2,811.3
Aug. 31	51,730	135.8	0	0	2,573.9
Sept.30	50,618	145.3	0	.2	2,419.2

Date	Otis Reservoir	Barkhamsted, East Branch and Nepaug Reservoirs	Whigville Reservoir	Shenipsit Lake
Sept.30, 1955	521	5,826	5.1	618.8
Oct. 31	620	5,889	8.9	692.3
Nov. 30	597	5,670	8.7	651.0
Dec. 31	646	4,626	6.4	614.2
Jan. 31, 1956	539	4,569	6.4	617.0
Feb. 29	322	4,730	8.6	655.0
Mar. 31	156	4,755	8.7	677.9
Apr. 30	199	5,647	8.8	737.5
May 31	115	5,561	8.6	722.8
June 30	6	5,241	6.4	696.6
July 31	0	4,901	4.9	659.8
Aug. 31	10	4,399	3.9	598.7
Sept.30	18	4,020	3.7	557.2

* Contents beginning with Apr. 30 include storage in Moore Reservoir.

† Affected by diversion from Ware River and diversion to Wachusett Reservoir and Chicopee Valley aqueduct.

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 1956.

Gage.--Water-stage recorder. Datum of gage is 23.64 ft above mean sea level, datum of 1929.

Average discharge.--15 years, 22.3 cfs (adjusted).

Extremes (unadjusted for storage or diversion).--Maximum discharge during year, 709 cfs Oct. 16 (gage height, 5.93 ft); minimum, 0.02 cfs Sept. 12-14 (gage height, 0.78 ft). 1941-56: Maximum discharge, 1,500 cfs (corrected) 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; minimum gage height, 0.48 ft Sept. 9-12, 1944.

Remarks.--Records excellent except those below 2.0 cfs, which are fair, and those for period of no gage-height record for Kelseytown Reservoir, 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 June 25 to July 6 and Aug. 30 to Sept. 29 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. Draft on Killingworth Reservoir is determined at a staff-gage station just below spillway. Change in contents in Kelseytown Reservoir is determined at a temporary recording station at dam. 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 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	102	20	6.2	31	30	45	29	14	1.8	*3.5	1.3
2	11	61	17	5.7	32	29	43	23	31	1.7	a2.9	1.5
3	8.5	46	20	6.8	70	37	62	39	137	1.5	a2.5	2.2
4	6.7	83	23	7.8	45	37	52	34	86	1.1	a2.2	1.6
5	6.0	420	30	8.2	37	33	44	30	45	3.8	a2.0	1.2
6	9.8	137	26	8.3	35	32	36	24	31	21	a1.9	1.1
7	61	79	20	7.5	*69	42	33	53	24	17	a1.8	1.8
8	50	57	18	6.6	70	68	61	43	19	11	a1.6	1.8
9	33	*46	17	16	51	68	54	30	16	15	a1.5	1.3
10	23	41	16	40	45	46	50	29	15	28	a1.5	1.1
11	17	66	14	35	45	37	39	27	13	16	a1.4	1.1
12	14	62	14	51	95	34	33	24	13	10	a1.4	1.0
13	*12	45	13	50	67	32	28	23	11	12	a1.3	.9
14	11	59	12	37	46	35	27	21	9.4	44	a1.3	1.0
15	231	64	13	30	38	64	28	21	7.6	27	a1.3	3.0
16	573	59	13	27	36	*50	61	20	6.6	16	a1.5	3.8
17	282	81	11	25	30	40	70	18	5.6	13	a1.3	3.3
18	121	54	11	20	50	36	45	16	5.0	7.7	a1.2	2.6
19	112	43	11	19	74	33	36	16	4.4	6.4	a1.2	1.9
20	82	41	8.7	17	55	31	30	17	3.8	5.1	a1.1	2.0
21	57	36	8.1	15	42	29	28	15	4.1	7.1	a1.9	2.4
22	45	35	7.2	14	32	34	26	14	5.1	16	a2.2	1.9
23	36	32	7.9	15	26	40	24	13	5.1	*14	a1.9	1.7
24	33	35	7.8	14	22	50	22	14	4.5	10	a1.8	*3.0
25	33	31	9.3	13	37	43	21	12	3.2	7.8	a1.8	2.0
26	30	28	9.8	12	50	37	20	9.8	2.6	6.1	a1.5	1.9
27	27	25	8.6	11	37	39	22	17	2.2	7.6	a1.3	2.0
28	24	24	7.2	11	46	41	20	32	2.4	11	a1.1	3.8
29	23	23	6.5	10	40	39	21	21	2.1	7.9	a1.1	3.8
30	64	20	6.9	20	-------	50	32	16	1.9	5.7	1.1	4.4
31	237	-------	6.9	44	-------	49	-------	14	-------	4.3	1.1	-------
Total	2,287.0	1,935	413.9	603.1	1,353	1,265	1,113	714.8	530.6	356.6	51.0	62.4
Mean	73.8	64.5	13.4	19.5	46.7	40.8	37.1	23.1	17.7	11.5	1.65	2.08
Cfsm	6.36	5.56	1.16	1.68	4.03	3.52	3.20	1.99	1.53	0.991	0.142	0.179
In.	7.33	6.20	1.34	1.94	4.35	4.06	3.57	2.29	1.71	1.14	0.16	0.20

Calendar year 1955: Max 573 Min 0.15 Mean 26.5 Cfsm 2.28 In. 30.99
Water year 1955-56: Max 573 Min 0.9 Mean 29.2 Cfsm 2.52 In. 34.29

Peak discharge (base, 200 cfs, unadjusted for storage and diversion).--Oct. 16 (1 p.m.) 709 cfs (5.93 ft); Oct. 31 (8 a.m.) 288 cfs (4.05 ft); Nov. 5 (7 a.m.) 600 cfs (5.53 ft).

* Discharge measurement made on this day.

a No gage-height record for Kelseytown Reservoir, storage adjustments unknown; discharge estimated on basis of records for nearby streams.

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 1956.

Gage.--Water-stage recorder and timber control. Datum of gage is 20.24 ft above mean sea level, datum of 1929.

Average discharge.--26 years, 210 cfs.

Extremes.--Maximum discharge during year, 3,000 cfs Oct. 17 (gage height, 8.49 ft); minimum, 56 cfs Sept. 14.
1930-56: 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 (gage height, 0.38 ft).

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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 5				Nov. 6 to Sept. 30	
0.9	88	6.0	1,380	0.2	54
2.0	286	8.0	2,500	1.0	117
4.0	765	9.0	3,770	2.0	286

Note.--Same as preceding table above 2.0 ft.

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	163	1,160	257	122	226	218	405	368	202	a98	a78	a64
2	144	634	250	113	244	224	480	286	238	a97	a76	a73
3	120	492	259	124	405	271	605	418	568	a95	a74	61
4	105	829	297	126	278	308	592	380	530	a94	a72	a64
5	96	2,080	343	131	240	308	592	331	320	160	a70	a62
6	134	1,740	320	129	259	308	605	280	234	265	a69	a67
7	310	1,000	265	126	618	492	605	368	196	216	a67	128
8	320	725	236	119	568	630	705	331	175	154	*a68	78
9	265	592	226	317	405	592	642	281	156	153	a64	a64
10	216	530	218	480	331	455	592	252	152	156	a62	a60
11	185	642	208	368	308	368	505	242	153	122	a61	a59
12	149	680	200	430	442	343	455	222	147	104	a61	a50
13	117	542	193	418	442	331	405	216	137	108	a60	a60
14	157	745	189	320	343	368	368	206	126	153	a62	a67
15	823	765	189	242	297	442	355	204	*117	117	a65	82
16	2,140	745	189	216	276	430	505	202	120	104	a68	109
17	2,820	765	176	212	246	308	542	193	112	a98	a64	90
18	1,750	*630	171	191	343	320	430	193	108	a96	a70	101
19	*1,050	518	170	175	430	308	343	196	106	a94	a64	82
20	810	468	159	171	418	286	308	200	104	a94	a62	87
21	477	430	140	165	320	297	297	189	102	107	74	82
22	458	418	143	156	254	297	276	175	109	139	74	73
23	405	392	143	156	222	331	271	173	105	118	a66	a65
24	375	380	145	147	200	405	281	191	102	103	a63	80
25	365	355	149	147	263	355	259	178	a100	98	a62	78
26	341	331	153	143	320	331	252	160	a98	a94	a60	68
27	308	308	140	138	*273	*343	257	168	a98	*a95	a61	a65
28	288	297	131	134	278	355	242	180	108	88	a62	146
29	273	286	127	131	252	368	271	160	118	a86	a62	115
30	578	271	129	204	-------	380	430	145	103	a83	a62	85
31	1,430	-------	126	320	-------	380	-------	171	-------	a81	a62	---
Total	17,172	19,750	6,041	6,371	9,501	11,152	12,875	7,239	5,044	3,670	2,045	2,395
Mean	554	658	195	206	328	360	429	234	168	118	66.0	79.8
Cfsm	5.08	6.04	1.79	1.89	3.01	3.30	3.94	2.15	1.54	1.08	0.606	0.732
In.	5.86	6.74	2.06	2.18	3.25	3.80	4.40	2.48	1.72	1.24	0.70	0.82

Calendar year 1955: Max 3,160 Min 27 Mean 291 Cfsm 2.67 In. 36.22
Water year 1955-56: Max 2,820 Min 59 Mean 282 Cfsm 2.59 In. 35.25

Peak discharge (base, 900 cfs).--Oct. 17 (5 to 8 a.m.) 3,000 cfs (8.49 ft); Oct. 31 (8 to 9 p.m.) 1,580 cfs (6.49 ft); Nov. 5 (9 to 10 p.m.) 2,340 cfs (7.75 ft).
* Discharge measurement made on this day.
a Doubtful or no gage-height record; discharge estimated on basis of recorder graph, weather records, and records for stations on adjacent streams.

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 1956. 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.--20 years, 118 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 2,010 cfs Oct. 16 (gage height, 7.18 ft), from rating curve extended above 1,300 cfs on basis of computations of flow over dam at gage heights 10.38 and 10.80 ft; minimum daily, 14 cfs July 4.
1936-56: 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.

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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-15		Oct. 16 to Sept. 30			
2.2	33	1.9	12	3.5	267
2.5	67	2.1	23	4.0	412
Note.--Same as following table above 2.5 ft.		2.3	41	5.0	800
		2.5	67	6.0	1,260
		3.0	155	7.0	1,880

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	358	*99	42	35	55	74	648	230	22	21	29
2	51	214	90	41	35	56	90	432	156	28	21	92
3	49	179	95	53	36	76	112	425	335	*25	19	171
4	41	336	139	52	32	79	149	400	280	14	19	80
5	43	690	166	*53	32	68	321	369	169	28	18	41
6	128	541	131	51	38	57	420	300	126	40	19	34
7	348	432	94	47	39	215	409	260	104	32	19	33
8	232	390	85	42	38	157	208	207	89	26	15	28
9	165	302	87	134	*39	112	196	177	75	29	16	25
10	105	240	77	336	39	85	183	218	74	28	19	25
11	70	240	72	270	36	63	237	228	106	25	18	21
12	67	270	79	242	36	79	289	181	79	24	16	30
13	63	308	72	230	41	74	319	181	64	30	20	39
14	101	610	73	145	38	70	308	169	56	91	24	39
15	1,410	500	74	98	42	*64	348	135	56	67	29	29
16	1,800	345	68	92	49	53	686	131	49	44	19	88
17	1,210	384	66	84	41	49	1,070	127	46	38	28	120
18	639	275	66	68	36	47	*626	119	47	36	16	103
19	422	207	70	60	32	56	472	118	46	27	16	59
20	336	175	56	63	43	56	345	106	44	30	21	66
21	257	175	52	55	38	70	302	98	45	31	22	62
22	203	155	56	47	34	92	476	92	48	31	28	44
23	169	145	59	54	36	100	476	90	38	*26	21	45
24	167	159	56	50	37	100	319	92	39	29	22	331
25	250	157	66	49	58	87	280	76	47	63	19	202
26	209	131	64	46	116	93	308	69	36	47	15	87
27	*163	115	62	49	116	88	275	87	38	33	20	60
28	139	124	55	41	90	87	620	*111	45	29	19	56
29	129	121	54	29	70	85	917	85	31	25	*20	56
30	157	93	53	40	-------	85	1,130	129	21	25	30	47
31	652	-------	43	38	-------	82	-------	225	-------	22	30	-------
Total	9,845	8,371	2,379	2,701	1,352	2,540	11,965	6,085	2,619	1,045	639	2,142
Mean	318	279	76.7	87.1	46.6	81.9	399	196	87.3	33.7	20.6	71.4
(†)	10.6	10.3	12.7	13.8	13.1	13.2	13.2	13.4	14.0	12.0	11.7	11.7

Adjusted for diversion

Mean	328	289	89.5	101	59.8	95.1	412	210	101	45.7	32.3	83.1
Cfsm	5.74	5.06	1.57	1.77	1.05	1.67	7.22	3.68	1.77	0.800	0.566	1.46
In.	6.63	5.65	1.81	2.04	1.13	1.92	8.05	4.23	1.98	0.92	0.65	1.62

	Observed			Adjusted			
Calendar year 1955:	Max 1,800	Min 10	Mean 135	Mean 147	Cfsm 2.57	In. 34.86	
Water year 1955-56:	Max 1,800	Min 14	Mean 141	Mean 154	Cfsm 2.70	In. 36.83	

Peak discharge (base, 1,150 cfs).--Oct. 16 (7 a.m.) 2,010 cfs (7.18 ft); Apr. 16 (10:30 p.m.) 1,300 cfs (6.07 ft); Apr. 30 (2:30 p.m.) 1,220 cfs (5.93 ft).

* Discharge measurement made on this day.

† Diversion above station, equivalent in cubic feet per second, from Cleveland Brook Reservoir for municipal supply of Pittsfield. Records furnished by city of Pittsfield.

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 1956.

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.--43 years, 534 cfs.

Extremes.--Maximum discharge during year, 4,410 cfs Apr. 17 (gage height, 8.51 ft); minimum daily, 54 cfs July 5.
1913-56: 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: 1913 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.1	48	4.0	735
2.5	97	5.0	1,500
3.0	209	7.0	2,870
3.5	407	9.0	5,050

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	242	1,710	*532	b225	256	356	356	3,400	608	160	144	150
2	206	1,450	507	b220	227	330	438	2,700	668	243	116	95
3	282	1,110	460	287	234	467	510	2,240	750	137	129	244
4	235	1,160	549	282	230	652	822	1,890	1,070	126	112	384
5	170	1,960	772	*294	189	624	1,590	1,730	1,000	54	66	236
6	248	2,320	675	249	273	464	2,190	1,500	802	204	154	148
7	938	2,210	545	237	245	910	1,930	1,340	660	222	141	152
8	1,180	1,920	490	199	243	1,350	2,350	1,170	559	194	111	134
9	1,090	1,660	439	292	*248	1,010	2,970	1,030	478	176	92	121
10	875	1,420	439	830	232	742	3,010	1,000	333	142	93	138
11	600	1,350	346	1,160	236	550	2,810	1,140	436	156	95	152
12	434	1,420	439	1,050	231	700	2,600	1,030	406	158	70	99
13	369	1,370	389	1,060	316	592	2,300	882	422	151	122	91
14	365	1,740	347	826	286	557	1,920	866	400	254	114	137
15	1,040	2,240	423	521	259	516	1,860	842	334	301	135	135
16	2,880	2,190	337	502	280	*b450	2,440	780	334	320	92	146
17	4,090	2,050	347	449	260	b410	4,180	750	210	220	85	365
18	3,270	1,790	311	374	263	b400	3,920	720	301	204	93	340
19	2,440	1,540	384	334	214	484	*3,100	690	219	187	75	307
20	1,800	1,280	309	326	283	434	2,540	522	291	140	102	233
21	1,420	1,150	267	326	b230	414	2,040	515	274	144	120	236
22	1,140	1,030	256	255	b220	449	1,790	495	286	89	124	222
23	922	922	274	333	b220	475	2,010	385	278	234	94	131
24	874	874	265	269	204	532	2,000	461	178	163	91	664
25	970	882	317	285	282	407	1,770	407	225	157	101	834
26	986	802	b300	248	652	488	1,600	347	189	212	65	532
27	*874	630	b320	269	719	429	1,530	309	*176	200	67	369
28	728	682	287	242	532	404	1,660	*463	194	143	116	290
29	645	638	272	194	398	441	2,930	399	183	108	*123	280
30	638	578	256	294	------	379	3,690	360	160	176	142	215
31	1,420	----	232	264	------	378	------	476	------	143	144	----
Total	33,371	42,078	12,086	12,696	8,462	16,794	64,856	30,839	12,424	5,518	3,328	7,580
Mean	1,076	1,403	390	410	292	542	2,162	995	414	178	107	253
Cfsm	3.84	5.01	1.39	1.46	1.04	1.94	7.72	3.55	1.48	0.636	0.382	0.904
In.	4.43	5.59	1.61	1.69	1.12	2.23	8.61	4.10	1.65	0.73	0.44	1.01

Calendar year 1955: Max 4,190 Min 51 Mean 657 Cfsm 2.35 In. 31.87
Water year 1955-56: Max 4,180 Min 54 Mean 683 Cfsm 2.44 In. 33.21

Peak discharge (base, 2,400 cfs).--Oct. 17 (7 a.m.) 4,320 cfs (8.43 ft); Nov. 7 (7:30 a.m.) 2,470 cfs (6.43 ft); Apr. 9 (12 m.) 3,260 cfs (7.46 ft); Apr. 17 (8:30 a.m.) 4,410 cfs (8.51 ft); Apr. 30 (3 p.m.) 3,930 cfs (8.10 ft).

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

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 w st of Great Barrington, Berkshire County, and 3 miles upstream from mouth.

Drainage area.--52.5 sq mi.

Records available.--October 1951 to September 1956.

Gage.--Water-stage recorder. Altitude of gage is 690 ft (from topographic map).

Average discharge.--5 years, 97.5 cfs.

Extremes.--Maximum discharge during year, 1,790 cfs Apr. 17 (gage height, 7.65 ft), from rating curve extended above 680 cfs; minimum, 4.7 cfs Aug. 23-28, Sept. 9-15.
1951-56: Maximum discharge, that of Apr. 17, 1956; minimum, 3.0 cfs Sept. 2-5, 1953 (corrected).
Correction.--The date of the minimum discharge has been corrected to Sept. 2-5, 1953, superseding date published in WSP 1331 and 1381.

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

Rating tables, water year 1955-56, 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			
2.2	19	4.0	390	2.08	4.7	3.0	142
2.5	49	6.0	1,130	2.2	12	4.0	390
3.0	142			2.4	34	6.0	1,130
				2.7	82		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	333	*75	27	31	52	56	*354	54	13	8.2	5.6
2	25	268	71	26	30	54	69	298	58	12	7.6	6.0
3	23	230	71	28	28	120	119	305	105	11	7.6	6.0
4	22	320	99	27	27	172	203	260	90	10	7.0	5.6
5	22	432	101	*25	28	121	564	240	73	18	7.0	5.1
6	63	402	86	25	27	97	600	209	64	30	7.0	5.6
7	129	354	69	24	30	295	532	194	58	22	7.0	6.5
8	181	351	66	22	27	265	375	170	51	18	6.5	5.6
9	163	300	60	36	*27	200	322	155	48	16	6.0	5.1
10	119	265	56	144	27	155	375	183	51	13	7.0	4.7
11	a96	328	55	111	27	144	426	155	64	12	7.0	4.7
12	a82	308	54	115	36	165	480	140	48	11	6.5	4.7
13	a72	275	50	129	39	136	477	138	41	16	6.0	4.7
14	a74	381	47	90	37	132	441	125	40	37	6.0	4.7
15	146	325	45	75	38	*113	456	117	34	23	5.6	4.7
16	409	322	44	66	43	97	915	109	33	20	5.6	7.0
17	515	316	43	60	36	95	1,060	105	27	18	5.1	7.0
18	333	252	42	47	36	97	a800	103	31	16	5.6	7.0
19	363	223	41	45	35	84	*a450	97	25	13	6.5	6.5
20	295	203	38	43	33	82	357	92	23	12	6.0	7.0
21	242	183	37	39	29	75	300	82	23	14	5.6	7.0
22	205	172	36	37	28	73	305	75	20	17	5.6	7.0
23	181	157	35	36	32	75	312	75	14	16	5.1	7.6
24	174	146	34	36	30	78	288	73	17	13	4.7	77
25	216	132	37	34	106	77	260	64	17	12	4.7	44
26	172	119	34	34	180	68	252	58	14	*11	4.7	31
27	*150	109	33	31	103	64	240	61	*17	11	4.7	23
28	138	103	34	30	80	61	260	*66	20	10	5.1	21
29	127	95	29	29	60	61	453	58	17	8.8	*5.6	22
30	218	82	29	33	------	60	*512	56	16	8.8	5.1	20
31	575	---	29	32	------	56	------	56	------	8.2	5.1	-----
Total	5,557	7,486	1,580	1,536	1,290	3,424	12,059	4,273	1,193	473.8	186.8	373.4
Mean	179	250	51.0	49.5	44.5	110	402	138	39.8	15.3	6.03	12.4
Cfsm	3.41	4.76	0.971	0.943	0.848	2.10	7.66	2.63	0.758	0.291	0.115	0.236
In.	3.94	5.30	1.12	1.09	0.91	2.43	8.54	3.03	0.85	0.34	0.13	0.26

Calendar year 1955: Max 575 Min 4.7 Mean 101 Cfsm 1.92 In. 26.07
Water year 1955-56: Max 1,060 Min 4.7 Mean 108 Cfsm 2.06 In. 27.94

Peak discharge (base, 750 cfs).--Oct. 31 (3:30 a.m.) 810 cfs (5.20 ft); Apr. 5 (7:30 p.m.) 954 cfs (5.56 ft); Apr. 17 (12:30 a.m.) 1,790 cfs (7.65 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, and records for Green River at Williamstown.

Note.--Stage-discharge relation affected by ice Dec. 19-24, Dec. 26 to Jan. 2, Jan. 7-9, 18, 19, 21, 24-26, 31, Feb. 1, 4, 18, 21-24, 26, 29, Mar. 1, 3, 16-21, 25.

Blackberry River at Canaan, Conn.

Location.--Lat 42°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 1956.

Gage.--Water-stage recorder. Datum of gage is 645.72 ft above mean sea level, datum of 1929.

Average discharge.--7 years, 93.5 cfs.

Extremes.--Maximum discharge during year, 2,830 cfs Oct. 16 (gage height, 9.12 ft); minimum, 6.6 cfs Aug. 18 (gage height, 1.49 ft).

1949-56: 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 determination of peak flow; minimum, 2.2 cfs Aug. 28, 1949 (gage height, 1.12 ft); minimum daily, 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 determination at East Canaan, 2.5 miles upstream, adjusted for intervening drainage area).

Remarks.--Records good. Infrequent regulation at low flow.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Backwater from sand on control June 28, 29)

Oct. 1-15				Oct. 16 to Apr. 4				Apr. 5 to Sept. 30			
2.2	28	6.0	760	1.9	18	5.0	505	1.5	6.8	3.0	142
2.5	47	7.0	1,190	2.2	39	6.0	770	1.7	13	4.0	305
3.0	91	8.0	1,790	2.5	67	7.0	1,190	2.0	34		
4.0	235	9.0	2,690	3.0	130	8.0	1,790				
				4.0	305	9.0	2,690				

Note.--Same as preceding table above 4.0 ft.

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	355	71	b25	b35	b55	54	395	103	15	9.9	11
2	43	217	68	b23	36	78	69	241	110	14	9.6	15
3	35	172	74	b23	34	104	123	261	254	13	9.0	16
4	31	622	107	b25	30	129	357	202	146	12	8.8	10
5	29	820	127	b27	32	85	632	166	105	46	8.5	8.8
6	96	542	99	b27	30	76	505	145	86	93	8.2	11
7	*204	385	69	b26	35	258	495	135	74	56	8.2	38
8	209	325	64	b25	38	150	345	121	66	34	7.9	17
9	148	239	61	b50	38	b110	215	110	60	39	7.6	11
10	90	194	56	445	40	b78	292	121	61	31	7.4	9.6
11	67	458	b52	277	43	92	306	121	76	22	9.0	8.5
12	55	335	b50	345	54	124	340	110	62	18	9.0	8.5
13	48	251	b45	247	77	84	358	105	53	20	8.2	8.5
14	91	414	43	100	52	79	352	101	49	72	9.6	7.6
15	*1,830	305	46	80	78	b70	345	96	50	58	9.0	7.6
16	2,290	297	40	65	69	b55	690	92	42	32	8.2	16
17	1,170	281	*43	53	44	b70	540	88	38	27	7.4	20
18	546	194	42	38	42	b62	465	84	35	*20	7.1	30
19	572	163	40	36	45	b54	365	88	32	17	16	18
20	405	*150	b27	37	40	b56	257	90	30	15	11	18
21	273	138	b29	33	b31	b50	218	82	31	21	10	20
22	199	126	b27	33	b30	b55	263	75	32	32	11	13
23	164	115	b28	b30	*b29	*b62	325	72	29	24	9.6	12
24	162	122	b30	b29	b30	b75	226	73	31	18	9.0	82
25	215	108	b39	b27	340	b65	210	68	28	15	8.5	42
26	164	100	b34	b25	272	b56	216	63	25	15	7.9	23
27	133	91	30	b25	106	56	200	65	25	15	7.4	18
28	116	91	27	b24	83	52	290	78	22	14	6.8	23
29	107	79	25	b23	b67	52	750	73	18	12	6.8	22
30	291	72	b25	b46	------	55	847	64	17	11	*7.1	18
31	1,000	--	b25	52	------	52	------	57	------	10	9.6	---
Total	10,837	7,761	1,543	2,321	1,880	2,499	10,650	3,642	1,790	841	273.3	563.1
Mean	350	259	49.8	74.9	64.8	80.6	355	117	59.7	27.1	8.82	18.8
Cfsm	7.26	5.37	1.03	1.55	1.34	1.67	7.37	2.43	1.24	0.562	0.183	0.390
In.	8.37	5.99	1.19	1.79	1.44	1.92	8.22	2.80	1.38	0.65	0.21	0.44

Calendar year 1955: Max 6,220 Min 3.4 Mean 140 Cfsm 2.90 In. 39.50
Water year 1955-56: Max 2,290 Min 6.8 Mean 122 Cfsm 2.53 In. 34.40

Peak discharge (base, 800 cfs).--Oct. 16 (9 a.m.) 2,830 cfs (9.12 ft); Oct. 31 (3 a.m.) 1,610 cfs (7.74 ft); Nov. 4 (8 p.m.) 1,240 cfs (7.10 ft).

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

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 1956.

Gage.--Water-stage recorder. Datum of gage is 522.34 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--44 years, 1,086 cfs.

Extremes.--Maximum discharge during year, 8,940 cfs Oct. 16 (gage height, 13.2 ft, from powerplant data); minimum, 31 cfs Sept. 17; minimum daily, 130 cfs Aug. 12, 18, 28.
1912-56: 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 discharge, 24 cfs Oct. 15, 1914, Sept. 18, 1932.

Remarks.--Records excellent except those for periods of ice effect, which are good. Low flow completely regulated by powerplant of Connecticut Power Co. Records of chemical analyses and water temperatures for the water year 1956 are given in WSP 1450.

Revisions.--WSP 781: Drainage area.

Rating tables, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31				Nov. 1 to Sept. 30			
2.1	515	7.0	3,420	1.0	123	5.0	2,050
3.0	950	10.0	5,750	1.5	252	8.0	4,100
5.0	2,080			3.0	955	13.0	8,700

Note.--Same as following table above 10.0 ft.

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	659	4,180	1,280	430	500	873	854	6,650	1,000	275	188	237
2	615	3,560	1,210	400	420	838	911	5,930	1,170	252	208	228
3	590	2,930	1,170	430	610	1,020	1,290	5,060	1,500	316	197	234
4	555	3,070	1,250	530	280	1,550	1,760	4,260	1,760	246	200	336
5	551	5,300	1,540	520	600	1,600	3,350	3,560	1,590	297	180	450
6	612	5,300	1,590	500	280	1,380	4,900	3,140	1,430	493	168	328
7	1,450	5,060	1,340	450	640	1,700	5,570	2,790	1,220	580	212	310
8	1,880	4,580	1,170	300	538	2,530	5,220	2,470	1,030	396	206	285
9	2,300	4,100	1,070	530	419	2,530	4,340	2,170	936	388	186	240
10	*2,040	*3,490	992	1,380	622	1,990	3,630	2,050	836	348	147	217
11	1,670	3,630	924	1,690	392	1,700	3,700	2,170	820	298	234	206
12	1,250	3,860	813	1,350	838	1,580	4,020	2,050	828	277	130	211
13	1,030	3,490	902	1,900	786	*1,610	4,420	1,930	782	320	148	188
14	924	3,560	801	1,700	750	1,400	4,500	1,740	703	590	199	165
15	3,360	4,100	808	1,440	742	1,330	4,500	1,660	675	601	180	192
16	7,650	4,180	800	1,120	800	1,140	5,390	1,530	628	580	204	217
17	8,090	4,260	680	980	555	948	7,710	1,460	502	496	159	179
18	7,400	3,860	740	790	776	1,130	8,590	1,390	388	355	130	477
19	6,540	3,420	660	620	600	1,040	7,820	1,410	544	348	215	444
20	5,510	3,000	540	804	526	1,020	6,200	1,320	340	314	*184	463
21	4,150	2,590	390	640	564	1,050	4,980	1,180	462	294	158	355
22	3,190	2,350	500	610	431	934	4,260	1,080	446	321	325	355
23	2,490	2,170	480	550	516	1,040	4,020	984	458	293	336	305
24	2,170	2,050	540	580	440	1,070	4,020	990	433	391	188	445
25	2,280	1,930	610	530	840	1,030	3,780	960	341	289	170	1,040
26	2,280	1,820	620	520	1,640	968	3,490	864	358	286	170	1,000
27	2,090	1,700	540	506	1,630	998	3,210	794	314	318	158	770
28	1,950	1,540	530	536	1,460	953	3,210	848	338	316	130	486
29	1,690	1,460	480	320	1,040	910	4,420	935	332	208	170	427
30	1,600	1,340	500	476	------	954	6,380	762	298	210	185	479
31	3,810	------	470	790	------	875	------	813	------	270	200	------
Total	82,376	97,880	25,940	23,922	20,235	39,711	130,445	64,950	22,462	10,966	5,865	11,269
Mean	2,657	3,263	837	772	698	1,281	4,348	2,095	749	354	189	376
Cfsm	4.20	5.16	1.32	1.22	1.10	2.03	6.88	3.31	1.19	0.560	0.299	0.595
In.	4.84	5.76	1.52	1.41	1.19	2.34	7.68	3.82	1.33	0.65	0.34	0.66

Calendar year 1955: Max 17,000 Min 144 Mean 1,534 Cfsm 2.43 In. 32.93
Water year 1955-56: Max 8,590 Min 130 Mean 1,465 Cfsm 2.32 In. 31.54

Peak discharge (base, 3,600 cfs).--Oct. 16 (9 p.m.) 8,940 cfs (13.2 ft); Oct. 31 (7 p.m.) 4,620 cfs (8.61 ft); Nov. 5 (3:30 p.m.) 5,570 cfs (9.75 ft); Nov. 12 (1 a.m.) 3,940 cfs (7.84 ft); Nov. 17 (9:30 a.m.) 4,340 cfs (8.28 ft); Apr. 7 (5 and 10 p.m.) 5,750 cfs (9.96 ft); Apr. 18 (12 m.) 8,700 cfs (12.96 ft); Apr. 30 (6 p.m.) 6,740 cfs (11.13 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 17 to Jan. 19, Jan. 20-26, 31, Feb. 1-7, 24-26.

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 Connecticut-New York 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 1956. Monthly discharge only for October to December 1929, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 304.4 ft above mean sea level, datum of 1929 (levels by Connecticut Light & Power Co.).

Average discharge.--27 years, 302 cfs.

Extremes.--Maximum discharge during year, 8,960 cfs Oct. 16 (gage height, 10.95 ft); minimum, 23 cfs Aug. 19, 20, 30, 31 (gage height, 0.77 ft); minimum daily, 24 cfs Aug. 19, 20, 30.

1929-56: 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, 8 cfs Sept. 24, 26, 1939 (gage height, 0.52 ft); minimum daily, 9 cfs Sept. 23-26, 1939.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Infrequent regulation at low flow. Records of chemical analyses and water temperatures for the water year 1956 are given in WSP 1450.

Revisions (water years).--WSP 1201: 1939.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.7	21	3.0	600
.8	30	4.0	1,070
1.0	52	6.0	2,390
1.5	135	8.0	4,400
2.0	255	10.0	7,400

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	147	1,400	350	100	192	296	370	1,020	316	70	50	27
2	168	1,050	330	90	178	304	600	845	396	66	47	35
3	146	870	330	95	199	552	1,050	920	620	62	44	63
4	129	1,400	380	95	159	685	1,350	798	536	56	40	50
5	121	2,600	430	95	168	572	2,150	708	399	82	38	39
6	142	1,950	370	95	150	472	2,510	640	328	212	*37	78
7	307	1,550	310	90	209	788	1,900	662	282	212	37	137
8	325	1,300	280	70	250	1,260	1,530	584	247	157	36	153
9	350	1,150	250	105	242	1,020	1,200	516	229	187	34	102
10	277	1,000	230	460	296	730	1,260	492	232	175	31	80
11	237	1,500	220	461	362	685	1,150	453	263	135	31	60
12	222	1,500	200	435	953	798	1,050	410	229	110	30	48
13	190	1,100	190	492	845	550	950	389	204	150	29	40
14	215	1,350	180	356	*512	488	850	356	175	230	30	35
15	1,960	1,400	180	274	496	453	800	359	153	190	28	33
16	7,310	1,300	170	245	600	406	1,350	328	135	150	27	37
17	4,000	1,350	140	216	362	302	1,650	307	127	117	26	50
18	3,090	1,050	150	150	450	362	1,150	313	121	97	25	70
19	2,340	900	150	155	540	356	1,000	319	108	84	24	69
20	2,040	*800	110	160	508	331	850	296	99	75	24	60
21	1,470	750	110	130	396	316	750	271	94	84	30	60
22	1,180	700	115	120	274	313	650	255	97	101	34	53
23	1,000	650	110	110	252	331	800	242	94	94	38	48
24	890	600	120	100	212	350	750	245	92	84	33	106
25	845	560	130	110	636	296	600	224	89	75	33	*127
26	744	520	125	110	1,450	322	650	209	81	69	30	89
27	672	480	110	105	685	325	600	212	84	65	27	72
28	600	440	105	100	532	353	550	232	94	65	25	74
29	548	420	100	95	353	375	700	212	87	60	25	114
30	685	370	100	150	-------	362	1,200	190	80	56	24	81
31	1,600	--	95	288	-------	346	-------	190	-------	52	25	-------
Total	34,990	32,010	6,170	5,657	12,461	15,105	31,970	13,197	6,091	3,422	992	2,090
Mean	1,129	1,067	199	182	430	487	1,066	426	203	110	32.0	69.7
Cfsm	5.53	5.23	0.975	0.892	2.11	2.39	5.23	2.09	0.995	0.539	0.157	0.342
In.	6.38	5.84	1.12	1.03	2.28	2.76	5.84	2.41	1.11	0.62	0.18	0.38

Calendar year 1955: Max 10,700 Min 12 Mean 487 Cfsm 2.39 In. 32.43
Water year 1955-56: Max 7,310 Min 24 Mean 449 Cfsm 2.20 In. 29.95

Peak discharge (base, 1,400 cfs).--Oct. 16 (7 a.m.) 8,960 cfs (10.95 ft); Oct. 31 (about 3 p.m.) about 1,800 cfs; Nov. 5 (about 8 a.m.) about 2,700 cfs; Apr. 6 (8 a.m.) 2,970 cfs (6.72 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 31 to Dec. 19, Apr. 1-4, 11-29, July 12-16; discharge estimated on basis of existing record, recorded range in stage, weather records, and records for nearby streams. Stage-discharge relation affected by ice Dec. 20 to Jan. 10, Jan. 18-30.

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 1956.

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.--16 years (1940-56), 1,713 cfs.

Extremes.--Maximum discharge during year, 21,600 cfs Oct. 16 (gage height, 12.45 ft); minimum daily, 168 cfs Aug. 19.

1900-1914, 1940-56: 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 of 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. Ordinary flow regulated by powerplants above station.

Revisions (water years).--WSP 1301: 1949.

Rating table, water year 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	155	4.0	1,940
1.5	236	5.0	3,120
2.0	447	7.0	6,380
2.5	710	10.0	13,500
3.0	1,050	12.0	19,900

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,020	6,380	1,940	728	b1,020	1,420	1,550	8,670	1,690	469	426	310
2	964	5,270	1,890	b720	886	1,420	1,740	7,800	1,940	434	211	356
3	797	4,600	1,840	688	908	1,790	2,680	7,170	2,860	476	350	357
4	689	4,930	1,940	684	b820	2,560	3,600	6,000	2,920	352	285	377
5	754	6,670	2,320	814	714	2,620	6,380	5,100	2,500	618	298	572
6	830	8,450	2,320	b750	b870	2,320	8,890	4,600	2,220	902	287	677
7	1,760	7,590	1,970	b780	762	2,860	9,120	4,120	1,890	971	244	706
8	2,450	6,970	1,760	b740	1,070	4,280	8,010	3,670	1,650	814	301	606
9	2,810	6,000	1,670	b780	988	4,120	6,570	3,180	1,500	856	300	387
10	*2,560	5,300	1,510	b1,920	1,010	3,250	6,000	2,990	1,430	768	274	328
11	2,190	6,200	1,440	2,560	1,170	2,860	6,190	3,060	1,400	497	214	301
12	1,640	6,400	1,350	2,800	1,650	2,860	6,380	2,920	1,360	556	326	326
13	1,430	5,300	1,300	3,120	2,010	2,560	6,570	2,740	1,260	436	228	317
14	1,340	5,600	1,240	2,680	1,610	2,320	6,570	2,500	1,210	860	242	280
15	7,130	6,400	1,250	2,100	1,510	2,100	6,570	2,440	1,060	1,200	299	262
16	19,100	6,400	1,170	1,690	1,760	1,900	8,450	2,220	982	860	230	311
17	16,200	6,400	1,130	1,460	1,390	1,600	11,300	2,160	987	816	298	379
18	12,200	5,600	1,110	1,290	1,370	1,820	11,300	2,050	682	634	264	414
19	10,200	5,100	1,130	1,160	1,500	1,760	10,300	2,100	788	548	168	651
20	8,670	4,600	b960	1,050	1,370	1,610	8,230	2,000	666	488	362	628
21	6,650	4,000	b790	b1,100	1,170	1,700	6,970	1,790	702	474	288	582
22	5,200	3,600	b740	b910	b990	1,660	5,810	1,670	748	544	240	458
23	4,230	3,200	b940	908	b890	1,640	5,630	1,540	746	538	547	468
24	3,680	3,000	896	b830	*b900	1,780	5,630	1,490	743	496	394	724
25	3,670	2,900	1,000	b850	1,520	1,680	5,270	1,510	600	528	307	*945
26	3,530	2,700	b1,010	b770	3,820	1,630	4,930	1,390	520	410	226	1,190
27	3,200	2,400	b940	b790	2,680	1,630	4,600	1,270	595	449	204	1,080
28	2,940	*2,400	b870	b730	2,380	1,650	4,280	1,390	568	498	244	868
29	2,600	2,270	819	b770	1,740	*1,600	5,450	1,430	535	428	174	719
30	2,760	2,100	814	783	-------	1,600	8,450	1,280	463	336	196	580
31	6,320	-------	b810	1,140	-------	1,550	-------	1,280	-------	302	331	-------
Total	139,514	150,730	40,869	38,095	40,478	66,150	193,420	93,530	37,215	18,558	8,658	16,159
Mean	4,500	5,024	1,318	1,229	1,396	2,134	6,447	3,017	1,240	599	279	539
Cfsm	4.53	5.05	1.33	1.24	1.40	2.15	6.49	3.04	1.25	0.603	0.281	0.542
In.	5.22	5.63	1.53	1.43	1.51	2.48	7.24	3.50	1.40	0.70	0.32	0.60

Calendar year 1955: Max 38,800 Min 145 Mean 2,436 Cfsm 2.45 In. 33.26
Water year 1955-56: Max 19,100 Min 168 Mean 2,304 Cfsm 2.32 In. 31.56

Peak discharge (base, 4,500 cfs).--Oct. 16 (8 a.m.) 21,600 cfs (12.45 ft); Oct. 31 (9 p.m.) 7,230 cfs (7.43 ft); Nov. 5 (4 p.m.) 9,350 cfs (8.37 ft); Nov. 16 (12 p.m.) 6,770 cfs (7.15 ft); Mar. 8 (8 p.m.) 4,930 cfs (6.20 ft); Apr. 7 (1 p.m.) 9,350 cfs (8.37 ft); 9 p.m. Apr. 17 to 11 a.m. Apr. 18, 11,800 cfs (9.20 ft); Apr. 30 (7 p.m.) 9,120 cfs (8.31 ft).

* Discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Note.--No gage-height record Oct. 15-19, Nov. 10-28; discharge estimated from reconstructed graph based on thrice-daily gage-height readings at tailrace of Bulls Bridge powerplant immediately upstream.

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 1956.

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.--25 years, 124 cfs.

Extremes.--Maximum discharge during year, 7,980 cfs Oct. 16 (gage height, 14.11 ft, from high-water marks in well), from rating curve extended above 3,000 cfs by logarithmic plotting; minimum, 21 cfs Aug. 26, 27, Sept. 10; minimum daily, 21 cfs Aug. 27; minimum gage height, 1.50 ft June 25.
1931-56: Maximum discharge, that of Oct. 16, 1955; 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 no gage-height record, 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).

Rating table, water year 1955-56, except periods of ice effect or backwater from aquatic vegetation (gage height, in feet, and discharge, in cubic feet per second)

1.2	21	4.0	182	8.0	1,120
1.5	31	5.0	283	9.0	1,820
2.0	52	6.0	406	11.0	3,720
3.0	105	7.0	609	13.0	6,280

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	81	a885	156	50	108	118	240	329	114	31	28	33
2	74	a550	144	45	92	118	283	245	140	26	29	31
3	62	458	152	50	272	156	347	250	246	26	27	35
4	58	480	173	55	159	160	392	266	353	24	27	28
5	54	1,450	200	60	108	160	392	230	212	34	25	26
6	66	1,120	182	60	128	144	399	196	128	111	*25	27
7	176	830	148	55	233	235	379	256	102	77	29	65
8	174	627	128	55	*379	323	379	335	84	52	29	45
9	147	536	122	88	215	372	406	235	76	72	28	30
10	101	466	a115	240	152	305	435	186	70	99	28	23
11	82	a550	a110	191	144	215	420	178	80	58	29	25
12	74	a450	a105	220	220	196	353	156	70	43	27	26
13	68	a400	99	288	220	182	288	148	60	40	26	25
14	91	a500	93	196	148	178	250	136	54	50	30	25
15	746	a420	a90	125	128	235	230	152	47	51	29	74
16	6,120	a500	a92	105	136	245	283	140	44	38	29	86
17	*3,700	a600	a85	102	114	173	347	122	40	37	29	80
18	1,670	a500	a80	90	154	191	294	118	35	33	28	59
19	1,070	a420	a82	82	317	164	230	125	36	30	30	43
20	790	a380	a75	75	266	160	200	128	32	29	26	38
21	613	341	68	70	186	160	186	114	33	38	34	39
22	511	a310	60	65	132	164	168	102	47	52	41	32
23	434	a280	60	60	114	182	164	99	41	40	32	29
24	362	a260	62	56	105	215	182	111	32	36	29	35
25	346	a240	65	53	145	200	156	90	27	33	26	40
26	324	a220	70	50	311	182	148	82	30	31	23	31
27	275	a210	62	48	196	196	164	80	40	36	21	28
28	239	a200	60	46	152	215	148	87	64	42	24	49
29	218	*186	58	44	140	*205	168	80	48	31	40	68
30	277	164	56	70	-------	191	160	71	40	26	33	45
31	898	-------	54	186	-------	225	-------	67	-------	27	30	-------
Total	19,901	14,533	3,106	2,980	5,174	6,165	8,191	4,914	2,425	1,353	891	1,220
Mean	642	484	100	96.1	178	199	273	159	80.8	43.6	28.7	40.7
Cfsm	9.37	7.07	1.46	1.40	2.60	2.91	3.99	2.32	1.18	0.636	0.419	0.594
In.	10.80	7.89	1.68	1.61	2.80	3.36	4.45	2.68	1.32	0.73	0.48	0.66

Calendar year 1955: Max 6,120 Min 14 Mean 217 Cfsm 3.17 In. 42.93
Water year 1955-56: Max 6,120 Min 21 Mean 194 Cfsm 2.83 In. 38.46

Peak discharge (base, 600 cfs).--Oct. 16 (about 3 p.m.) 7,980 cfs (14.11 ft); Oct. 31 (about 8 p.m.) 1,200 cfs (8.13 ft); Nov. 5 (3 p.m.) 1,740 cfs (8.88 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 Saugatuck River near Westport.

Note.--Stage-discharge relation affected by ice Dec. 21 to Jan. 9, Jan. 19-30. Backwater from aquatic vegetation May 24 to Sept. 30.

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 1956.

Gage.--Nonrecording gage at dam or at auxiliary artificial control below dam; read usually once daily.

Average discharge.--21 years, 88.1 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 3,900 cfs Oct. 16, from graph based on gage readings; minimum observed, 2.4 cfs on many days.
1935-56: Maximum discharge observed, 13,800 cfs Aug. 19, 1955; no flow at times (result of regulation).

Remarks.--Records good. Discharge computed on basis of flow over spillway, through floodgates, and through fountain at toe of dam. Rating curves for floodgates and fountain computed by means of a temporary sharp-crested weir below dam. Rating curve for spillway computed for discharges below 18.5 cfs by means of same weir, and for discharges above 18.5 cfs by a formula selected to fit the spillway-crest sections. At times of ice effect on spillway, flow computed from gage readings at permanent artificial control below the dam, which was calibrated with the sharp-crested weir. Water diverted from Shepaug River for municipal supply of Waterbury. Flow regulated since September 1933 by Shepaug Reservoir (see p. 249).

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 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	400	57	2.4	33	44	49	355	110	2.4	2.4	2.4
2	49	273	51	2.4	31	44	51	250	176	2.4	2.4	2.4
3	40	202	55	2.4	37	49	113	296	330	2.4	2.4	2.4
4	35	470	71	2.4	28	76	160	210	250	2.4	2.4	2.4
5	31	1,070	113	2.4	24	98	355	162	151	2.4	2.4	2.4
6	55	677	87	2.4	24	90	570	141	92	2.4	2.4	2.4
7	235	483	74	2.4	28	113	684	151	71	2.4	2.4	2.4
8	198	385	59	2.4	29	138	415	125	59	2.4	2.4	2.4
9	151	284	51	2.4	29	148	315	98	51	3.5	2.4	2.4
10	113	222	46	16	29	98	295	101	51	64	2.4	2.4
11	87	520	42	128	35	107	430	95	59	24	2.4	2.4
12	71	370	38	162	59	113	415	84	46	7.9	2.4	2.4
13	57	254	38	122	79	98	475	84	24	7.0	2.4	2.4
14	141	315	38	64	59	84	429	74	8.8	37	2.4	2.4
15	2,230	302	37	44	49	71	425	69	2.9	46	2.4	2.4
16	3,180	335	35	46	64	53	980	67	2.4	20	2.4	2.4
17	1,520	302	33	42	51	51	827	59	2.4	7.9	2.4	2.4
18	758	210	31	33	55	53	500	67	2.4	4.0	2.4	2.4
19	557	173	23	26	46	55	380	57	2.4	2.4	2.4	2.4
20	385	155	4.0	23	40	55	346	46	2.4	2.4	2.4	2.4
21	273	141	2.4	21	29	53	271	35	2.4	2.4	2.4	2.4
22	218	131	2.4	b18	7.9	53	257	26	2.4	7.9	2.4	2.4
23	173	125	2.4	b16	4.6	49	296	18	2.4	6.1	2.4	2.4
24	148	119	2.4	b16	3.4	46	273	33	2.4	2.9	2.4	2.4
25	162	101	2.4	b14	21	44	230	29	2.4	2.4	2.4	2.4
26	141	90	2.4	b13	92	49	218	24	2.4	2.4	2.4	2.4
27	119	84	2.4	b12	79	55	210	23	2.4	2.4	2.4	2.4
28	107	84	2.4	b12	62	55	198	44	2.4	2.4	2.4	2.4
29	95	79	2.4	b11	44	55	309	42	2.4	2.4	2.4	2.4
30	320	64	2.4	21	-------	51	670	35	2.4	2.4	2.4	2.4
31	944	-------	2.4	35	-------	46	-------	38	-------	2.4	2.4	-------
Total	12,648	8,420	1,009.4	916.6	1,171.9	2,194	11,146	2,938	1,517.7	281.4	74.4	72.0
Mean	408	281	32.6	29.6	40.4	70.8	372	94.8	50.6	9.08	2.40	2.40
(†)	+1.6	-1.7	+6.0	+11.1	+6.0	0	+1.6	+3.0	+7.9	+15.2	+2.5	+15.9
Adjusted for diversion and change in contents in Shepaug Reservoir												
Mean	410	279	38.6	40.7	46.4	70.8	374	97.8	58.5	24.3	4.90	18.3
Cfsm	10.8	7.34	1.02	1.07	1.22	1.86	9.84	2.57	1.54	0.639	0.129	0.482
In.	12.45	8.19	1.18	1.23	1.32	2.14	10.98	2.96	1.72	0.74	0.15	0.54

	Observed			Adjusted		
Calendar year 1955:	Max 6,480	Min 2.4	Mean 143	Mean 149	Cfsm 3.92	In. 53.43
Water year 1955-56:	Max 3,180	Min 2.4	Mean 116	Mean 122	Cfsm 3.21	In. 43.60

† 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.

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 1956.

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.--26 years, 253 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 7,760 cfs Oct. 16 (gage height, 11.51 ft); minimum, 7.2 cfs Sept. 11 (gage height, 1.17 ft).

1930-56: 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 determination of peak flow; minimum, 2 cfs Oct. 6, 1951; minimum gage height, that of Sept. 11, 1956.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Water diverted from Shepaug Reservoir for municipal supply of city of Waterbury. Flow regulated by Shepaug Reservoir (see p. 249). 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 1955-56, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 9				Jan. 9 to Aug. 31				Sept. 1-30	
2.7	74	5.5	660	2.2	8.5	3.5	246	1.2	9
3.0	111	6.5	1,140	2.3	16	4.0	430	1.4	29
3.5	183	8.0	2,240	2.5	36	5.0	940	1.6	56
4.0	272	11.0	6,600	2.7	64	7.0	2,640	1.8	95
4.5	377			3.0	118				

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	146	880	290	95	110	150	294	880	318	40	36	12
2	130	760	270	90	110	170	374	710	329	37	34	15
3	116	680	270	95	165	230	528	820	660	34	24	29
4	107	1,200	320	100	115	250	645	660	497	32	21	17
5	102	2,270	350	100	120	200	1,000	565	350	75	19	14
6	132	1,320	300	95	110	210	1,160	506	290	180	21	13
7	331	1,000	260	90	130	500	1,380	528	256	112	23	78
8	282	880	240	85	150	600	1,000	458	227	90	17	30
9	249	780	220	285	160	460	910	402	201	116	18	18
10	209	700	200	402	180	350	970	386	201	139	17	15
11	183	1,010	190	366	210	330	1,030	354	207	112	18	14
12	167	880	180	390	280	360	1,060	329	182	90	33	13
13	155	740	170	382	263	290	1,130	308	150	79	17	12
14	246	905	150	315	230	270	1,060	287	122	135	19	11
15	3,400	830	150	263	224	*298	1,130	273	108	137	17	12
16	5,470	880	140	210	224	253	1,840	256	92	112	16	19
17	2,920	905	135	180	195	250	1,840	234	69	92	15	24
18	1,800	760	130	160	260	260	1,310	256	72	74	14	30
19	1,350	680	130	140	290	230	1,100	243	61	64	13	22
20	1,010	642	120	130	250	235	940	230	58	56	12	18
21	763	575	95	120	187	240	790	201	60	72	15	27
22	614	516	95	105	145	240	710	184	*55	81	23	33
23	554	*488	100	105	135	246	735	182	49	72	18	31
24	551	475	110	100	125	266	710	187	49	62	20	52
25	597	450	120	100	310	235	625	172	46	55	23	44
26	590	425	115	95	280	224	600	160	40	49	14	36
27	557	390	105	90	200	240	560	167	64	49	12	31
28	516	365	100	90	210	256	533	184	69	49	10	48
29	480	345	100	85	180	277	710	170	54	45	10	48
30	596	310	105	120	-	263	1,190	153	45	40	*11	41
31	1,310	-------	100	155	-------	256	-------	160	-------	37	12	-------
Total	25,633	23,041	5,360	5,138	5,548	8,639	27,864	10,605	4,981	2,417	572	807
Mean	827	768	173	166	191	279	929	342	166	78.0	18.5	26.9
(†)	+1.6	-1.7	+6.0	+11.1	+6.0	0	+1.6	+3.0	+7.9	+15.2	+2.5	+15.9

Adjusted for diversion and change in contents in Shepaug Reservoir

Mean	829	766	179	177	197	279	931	345	174	93.2	21.0	42.8
Cfsm	6.23	5.76	1.35	1.33	1.48	2.10	7.00	2.59	1.31	0.701	0.158	0.322
In.	7.18	6.43	1.56	1.53	1.60	2.42	7.81	2.99	1.46	0.81	0.18	0.36

	Observed			Adjusted					
Calendar year 1955:	Max 15,400	Min 7.8	Mean 424	Mean 430	Cfsm 3.23	In. 43.87
Water year 1955-56:	Max 5,470	Min 10	Mean 330	Mean 336	Cfsm 2.53	In. 34.33

Peak discharge (base, 1,500 cfs).--Oct. 16 (3:30 a.m.) 7,760 cfs (11.51 ft); Oct. 31 (6 a.m.) 1,540 cfs (7.13 ft); Nov. 5 (4 a.m.) 2,930 cfs (8.7 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.

Note.--Stage-discharge relation affected by ice Dec. 17 to Jan. 9, Feb. 22-24, Mar. 17-22, 25. No gage-height record Nov. 8, 9, Nov. 25 to Dec. 16, Jan. 16 to Feb. 12, Feb. 18-20, Feb. 26 to Mar. 14; discharge estimated on basis of weather records, engineers' notes, fragmentary record, and records for nearby streams.

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 1956.

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.--24 years, 132 cfs.

Extremes.--Maximum discharge during year, 8,860 cfs Oct. 16 (gage height, 15.75 ft, from floodmarks); minimum, 8.3 cfs Aug. 18, 27-31 (gage height, 2.55 ft).
1932-56: 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 determination of peak flow; minimum, 3.3 cfs Aug. 27, 1949 (gage height, 2.32 ft).

Remarks.--Records good except those for period of no gage-height record, which are fair. Infrequent regulation at low flow by mill upstream.

Revisions (water years).--WSP 781: Drainage area. WSP 851: 1934(M), 1936(M). WSP 1201: 1933-34, 1935(M), 1937(M).

Rating table, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

2.4	5.5	4.0	206
2.5	9.0	4.5	337
2.7	20	5.0	515
2.9	35	7.0	1,470
3.1	54	14.0	6,440
3.5	111		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	600	148	45	77	100	249	240	219	36	20	9.0
2	77	450	139	44	110	114	322	204	228	32	19	16
3	65	370	144	41	213	173	536	360	453	29	17	33
4	56	1,000	183	43	98	185	470	252	247	26	16	16
5	52	1,900	204	46	115	146	651	238	175	37	15	13
6	119	800	161	46	111	154	555	200	141	177	15	12
7	286	550	121	44	314	448	535	275	120	101	15	22
8	204	550	120	37	*223	494	440	208	101	74	14	16
9	167	450	116	299	173	360	416	177	89	106	12	13
10	121	400	111	269	183	268	535	179	90	83	12	12
11	*100	650	97	163	191	257	458	163	105	58	11	11
12	90	550	95	200	158	265	374	148	80	46	10	11
13	80	450	89	183	224	202	328	139	69	65	10	10
14	167	600	80	132	169	198	292	126	59	94	10	11
15	2,740	500	89	108	156	*204	275	125	53	74	10	13
16	6,380	550	84	98	156	175	535	118	48	53	10	20
17	2,010	450	76	94	120	163	416	109	45	48	9.5	21
18	964	380	76	75	229	165	292	121	43	40	9.0	22
19	650	340	77	73	276	142	273	121	40	39	8.6	18
20	450	320	60	76	220	146	235	130	37	33	8.6	16
21	380	290	55	65	163	137	217	105	36	46	12	16
22	320	270	52	61	111	152	196	94	*41	58	14	15
23	300	*240	53	65	100	181	210	98	39	45	12	14
24	300	247	55	56	84	224	206	108	34	36	10	33
25	370	219	60	59	291	175	177	83	33	33	9.5	24
26	310	206	62	53	255	165	183	77	30	29	9.0	17
27	270	189	56	51	152	196	185	83	37	33	8.6	15
28	240	187	52	48	156	217	163	98	83	32	8.3	21
29	220	171	48	46	116	228	269	79	53	26	8.3	24
30	600	150	46	132	------	196	450	69	43	*22	8.5	19
31	1,200	----	46	151	------	196	------	80	------	19	8.6	----
Total	19,368	14,029	2,855	2,903	4,944	6,422	10,423	4,607	2,871	1,628	360.3	503.0
Mean	625	468	92.1	93.6	170	207	347	149	95.7	52.5	11.6	16.8
Cfsm	8.30	6.22	1.22	1.24	2.26	2.75	4.61	1.98	1.27	0.697	0.154	0.223
In.	9.57	6.94	1.41	1.43	2.44	3.17	5.14	2.28	1.42	0.80	0.18	0.25

Calendar year 1955: Max 9,510 Min 12 Mean 232 Cfsm 3.08 In. 41.91
Water year 1955-56: Max 6,380 Min 8.3 Mean 194 Cfsm 2.58 In. 35.03

Peak discharge (base, 1,400 cfs).--Oct. 16 (9 a.m.) 8,860 cfs (15.75 ft); Oct. 31 (time unknown) about 1,500 cfs; Nov. 5 (time unknown) 2,980 cfs (9.7 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 16 to Nov. 23; discharge estimated on basis of high-water marks, partial recorder record, weather records, engineers' notes, and records for nearby streams.

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 Eight Mile Brook, and at mile 19.2.

Drainage area.--1,545 sq mi.

Records available.--August 1928 to September 1956.

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.--28 years, 2,650 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 75,800 cfs Oct. 16 (gage height, 24.50 ft), from rating curve extended above 35,000 cfs on basis of computation of peak flow at Stevenson and Derby dams and slope-area determinations at gage heights 21.5 and 23.5 ft; minimum, 43 cfs Oct. 30 (gage height, 0.48 ft); minimum daily, 105 cfs Apr. 1, July 21.
1928-56: Maximum discharge, that of Oct. 16, 1955, practically no flow at times, result of regulation.

Remarks.--Records excellent. Ordinary flow completely regulated by Stevenson hydroelectric plant. Flow regulated by Lake Candlewood, Lake Lillinonah, Lake Zoar, and Shepaug Reservoir, having a combined usable capacity of 6,840,000,000 cu ft, corrected (see p. 249), and by small diversion from the 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 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

1.0	94	5.0	2,130
1.5	170	7.0	4,860
2.0	285	10.0	11,200
3.0	660	14.0	23,400
4.0	1,250	23.0	67,000

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	986	*9,180	3,080	1,280	1,050	1,910	105	11,700	1,440	172	194	178
2	1,820	8,180	3,060	612	2,820	2,350	3,680	10,200	4,640	152	626	164
3	1,330	8,340	3,640	1,380	2,370	2,660	4,260	10,200	5,000	172	666	158
4	440	10,700	3,300	1,420	1,130	3,240	4,990	7,820	6,340	186	458	920
5	274	22,000	3,420	1,280	404	4,200	7,820	7,820	3,520	2,100	158	840
6	350	16,600	3,820	1,200	2,470	3,940	12,200	7,000	3,610	2,470	440	1,620
7	694	14,200	2,840	1,020	2,290	5,340	14,200	5,700	2,390	1,730	333	808
8	362	11,200	2,480	248	1,800	6,800	12,200	5,520	2,680	132	395	459
9	414	11,200	2,120	2,010	1,920	6,420	9,700	5,520	2,320	492	214	106
10	267	10,400	1,610	4,140	1,780	6,060	8,700	4,950	307	1,250	580	498
11	432	14,000	791	3,570	2,300	4,600	9,200	3,990	2,040	926	321	617
12	420	7,600	1,910	3,630	1,920	3,560	8,700	4,110	2,360	705	119	452
13	1,520	7,000	1,740	4,410	4,530	*4,530	9,450	4,190	1,800	1,790	434	1,170
14	3,830	10,500	1,730	4,460	2,190	4,790	8,700	3,960	2,090	628	740	1,830
15	18,000	10,200	2,350	1,460	2,170	4,860	9,450	3,210	1,920	1,160	974	156
16	62,400	11,100	2,180	1,500	2,510	3,440	11,700	3,870	511	1,050	352	160
17	39,500	9,950	1,970	2,370	3,260	3,920	14,200	3,350	324	925	634	950
18	26,400	8,700	1,280	1,270	3,510	1,820	14,500	3,140	1,560	1,050	224	568
19	19,100	7,600	2,410	1,550	1,500	3,770	13,700	2,620	1,340	2,040	118	664
20	15,800	7,600	2,180	1,510	2,670	5,150	8,700	1,370	1,940	453	453	1,020
21	13,500	7,200	2,120	1,560	2,790	3,550	10,700	2,910	1,390	105	638	662
22	10,800	5,700	2,450	110	1,940	2,780	7,600	1,610	1,050	174	678	245
23	9,200	5,850	419	1,520	2,290	3,470	5,700	3,830	180	1,020	520	225
24	6,790	5,390	1,490	1,520	2,750	3,140	6,060	3,140	184	961	826	390
25	5,920	4,290	704	1,170	2,880	868	7,000	2,160	858	827	156	433
26	6,680	5,220	1,120	1,760	4,690	3,240	7,400	849	753	884	166	864
27	6,900	2,920	1,660	2,680	3,300	2,230	7,400	1,510	1,440	545	596	2,930
28	4,780	4,130	1,990	821	3,430	4,070	6,720	2,340	1,300	787	664	3,260
29	332	3,540	1,250	330	3,130	3,800	5,010	1,880	1,380	118	715	197
30	3,280	3,080	827	1,700	-------	3,210	9,700	756	194	486	389	168
31	10,600	-------	468	1,640	-------	2,590	-------	1,080	-------	282	292	-------
Total	273,121	263,570	62,409	55,111	71,794	116,308	259,445	132,305	56,861	25,772	14,073	22,712
Mean	8,810	8,786	2,013	1,778	2,476	3,752	8,648	4,268	1,895	831	454	757
(†)	+726	+46	-58	+55	+50	-270	+365	-53	-5	+97	-106	-41
Adjusted for diversion and change in reservoir contents												
Mean	9,536	8,832	1,955	1,833	2,526	3,482	9,013	4,215	1,890	928	348	716
Cfsm	6.17	5.72	1.27	1.19	1.63	2.25	5.83	2.73	1.22	0.601	0.225	0.463
In.	7.11	6.38	1.46	1.37	1.76	2.59	6.50	3.15	1.36	0.69	0.26	0.52

	Observed					Adjusted					
Calendar year 1955:	Max	54,800	Min	130	Mean	4,130	Mean	4,205	Cfsm	2.72	In. 36.93
Water year 1955-56:	Max	62,400	Min	105	Mean	3,698	Mean	3,765	Cfsm	2.44	In. 33.15

* Discharge measurement made on this day.
† Change in contents in Lake Candlewood, Lake Lillinonah, Lake Zoar, and Shepaug Reservoir, and small diversion from the basin at Shepaug Reservoir, equivalent in cubic feet per second; furnished by Connecticut Light & Power Co. and city of Waterbury.

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, and 2 miles north of Thomaston, Litchfield County, and at mile 31.

Drainage area.--71.9 sq mi.

Records available.--October 1930 to September 1956.

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.--26 years, 146 cfs.

Extremes.--Maximum discharge during year, 8,100 cfs Oct. 15 (gage height, 10.30 ft); minimum, 13 cfs Sept. 15 (gage height, 0.36 ft).
1930-56: 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 determination of peak flow; minimum, about 7 cfs Mar. 12, 1940 (result of freezeup); minimum daily, 13 cfs Oct. 24, 1931; minimum gage height, that of Sept. 15, 1956.

Remarks.--Records good except those for periods of ice effect and shifting control, which are fair. Slight diurnal fluctuation.

Revisions (water years).--WSP 741: 1931-32. WSP 781: Drainage area. WSP 821: 1936(M). WSP 1111: 1939(M).

Rating tables, water year 1955-56, except periods of ice effect and shifting-control (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-31				Nov. 1 to Sept. 30			
1.4	51	3.0	540	0.4	15	2.5	535
1.6	77	4.0	1,160	.7	43	3.0	780
2.0	155	6.0	2,880	1.2	117	4.0	1,350
2.5	310	9.0	6,250	1.6	195	6.0	2,910
				2.0	320		

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	106	620	121	43	68	80	122	494	175	24	45	22
2	85	432	103	43	72	95	165	324	200	23	49	20
3	73	304	103	49	90	158	313	418	539	21	51	22
4	62	1,370	135	54	66	205	389	288	242	19	43	17
5	59	*2,310	165	51	69	155	870	226	159	81	28	17
6	204	948	137	*49	*62	117	813	198	126	133	30	106
7	566	660	128	47	102	211	885	215	103	80	32	73
8	312	558	117	40	97	255	526	179	86	51	31	26
9	250	458	115	185	89	208	392	155	75	84	30	20
10	186	334	108	375	102	159	576	161	84	78	30	19
11	156	742	107	226	100	153	675	149	97	51	32	18
12	126	558	98	292	218	195	720	131	84	39	32	17
13	*102	392	81	215	161	145	730	126	68	42	34	17
14	354	672	76	135	117	135	685	117	58	103	36	18
15	5,850	526	81	105	121	128	730	114	51	108	31	17
16	5,180	602	75	97	130	100	1,490	*102	50	66	30	28
17	1,930	538	70	95	95	100	1,080	92	45	55	30	29
18	958	368	68	78	95	110	690	114	44	42	29	32
19	843	313	72	72	97	105	595	114	43	*34	27	23
20	636	306	62	65	95	100	481	103	34	36	32	24
21	462	285	59	59	84	97	418	89	38	52	51	30
22	374	244	56	55	69	122	454	82	41	72	43	18
23	314	210	54	51	76	12[illegible]	544	92	35	59	32	17
24	303	220	59	49	72	130	427	94	33	40	32	50
25	358	*200	65	47	195	103	356	80	34	34	30	29
26	292	183	54	45	223	108	364	72	26	32	28	24
27	231	149	41	43	135	117	324	82	47	32	27	*21
28	204	155	44	41	122	*122	356	103	41	34	26	49
29	186	151	44	39	92	128	700	84	39	31	21	30
30	952	137	44	72	-------	117	1,120	75	41	32	21	24
31	2,080	-------	43	97	-------	108	-------	81	-------	30	*23	-----
Total	23,794	14,945	2,585	2,914	3,114	4,192	17,990	4,754	2,738	1,618	1,016	857
Mean	768	498	83.4	94.0	107	135	600	153	91.3	52.2	32.8	28.6
Cfsm	10.7	6.93	1.16	1.31	1.49	1.88	8.34	2.13	1.27	0.726	0.456	0.398
In.	12.34	7.73	1.34	1.51	1.61	2.17	9.30	2.46	1.42	0.84	0.53	0.44

Calendar year 1955: Max 14,700 Min 18 Mean 278 Cfsm 3.87 In. 52.42
Water year 1955-56: Max 5,850 Min 17 Mean 220 Cfsm 3.06 In. 41.69

Peak discharge (base, 1,500 cfs).--Oct. 15 (9:45 a.m.) 8,100 cfs (10.30 ft); Oct. 30 (11:30 p.m.) 4,960 cfs (7.97 ft); Nov. 5 (4 a.m.) 3,570 cfs (6.69 ft); Apr. 16 (8 p.m.) 1,770 cfs (4.60 ft); Apr. 30 (6 a.m.) 1,560 cfs (4.31 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 14, Dec. 17 to Jan. 10, Jan. 18 to Feb. 2, Feb. 4, 22-24, Mar. 16-21, 24, 25. Shifting-control method used Oct. 1-31.

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 1956.

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.--26 years, 49.0 cfs.

Extremes.--Maximum discharge during year, 3,080 cfs Oct. 16 (gage height, 9.60 ft); minimum, about 0.5 cfs Aug. 20 (gage height, 2.20 ft).
1930-56: 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 determination at peak flow; minimum, 0.08 cfs Aug. 27-29, 1941; minimum gage height, 1.60 ft at times during period Sept. 12-15, 1931, and on July 30, Aug. 12, 1933.

Remarks.--Records good except those for periods of ice effect, which are fair, and those below 2 cfs, which are poor. Occasional low-water regulation.

Revisions (water years).--WSP 781: Drainage area. WSP 1301: 1947. WSP 1331: 1931(M), 1933(M), 1934, 1935(M), 1936, 1937(M), 1938, 1939-40(P), 1942(P), 1943-44(M), 1945, 1947(M), 1949, 1951(P), 1953(P).

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	188	39	12	31	35	53	126	72	4.8	1.5	1.0
2	16	129	36	12	32	36	76	94	75	4.2	1.4	1.3
3	13	103	40	11	51	81	155	144	185	4.1	1.2	2.0
4	11	465	62	10	32	107	192	96	84	3.5	1.1	1.4
5	9.9	808	82	10	29	84	391	77	54	25	.9	1.1
6	47	288	57	*10	24	69	393	68	40	56	.9	13
7	*121	190	41	10	45	139	338	81	32	31	1.0	13
8	71	157	37	9	45	154	184	65	26	19	.9	4.6
9	53	125	35	50	40	115	158	56	23	27	.7	2.5
10	35	106	32	180	47	82	238	60	24	21	.8	1.6
11	27	272	29	102	50	77	277	54	28	13	1.2	1.5
12	23	159	27	126	160	102	277	47	21	9.9	.9	1.3
13	20	116	26	98	107	69	264	45	17	12	.9	1.2
14	111	225	24	58	69	61	242	41	14	28	1.1	1.1
15	*2,090	152	26	43	72	55	238	40	11	29	1.1	1.0
16	1,990	202	24	37	67	44	460	37	12	15	.9	2.1
17	608	172	22	32	47	55	290	34	12	12	.7	3.7
18	299	115	22	27	45	51	193	42	*9.6	8.3	.7	5.9
19	266	95	19	23	40	46	165	41	7.8	*5.9	.6	3.7
20	186	86	18	20	36	49	129	41	6.8	4.7	.5	3.0
21	138	79	17	18	30	44	110	33	7.1	9.9	1.1	3.2
22	110	74	16	16	25	49	102	29	7.8	18	1.8	2.4
23	94	68	16	15	21	58	129	32	5.9	13	1.5	2.0
24	89	72	17	14	19	63	122	33	5.0	9.3	1.1	6.6
25	94	*64	18	13	75	53	91	27	5.0	6.8	1.0	6.8
26	76	58	17	12	120	45	91	24	4.0	4.8	.8	4.3
27	67	52	15	12	70	49	84	30	15	3.8	.8	*3.2
28	59	51	14	11	57	*56	76	34	18	3.3	.7	5.5
29	56	46	15	12	39	59	118	27	9.3	2.8	.7	8.0
30	247	41	14	34	------	52	168	23	6.4	2.2	.8	6.4
31	537	----	13	56	------	45	------	30	------	1.6	.9	----
Total	7,585.9	4,758	870	1,093	1,525	2,084	5,804	1,611	837.7	408.9	30.2	114.4
Mean	245	159	28.1	35.3	52.6	67.2	193	52.0	27.9	13.2	0.974	3.81
Cfsm	10.2	6.62	1.17	1.47	2.19	2.80	8.04	2.17	1.16	0.550	0.041	0.159
In.	11.76	7.39	1.35	1.70	2.36	3.23	8.97	2.50	1.29	0.63	0.05	0.18

Calendar year 1955: Max 3,660 Min 0.7 Mean 83.0 Cfsm 3.46 In. 46.96
Water year 1955-56: Max 2,090 Min 0.5 Mean 73.0 Cfsm 3.04 In. 41.41

Peak discharge (base, 650 cfs).--Oct. 16 (6:30 a.m.) 3,080 cfs (9.60 ft); Oct. 31 (1 a.m.) 1,300 cfs (7.57 ft); Nov. 5 (4:30 a.m.) 1,360 cfs (7.64 ft); Apr. 5 (7 p.m.) 700 cfs (6.34 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 11-13, Dec. 19 to Jan. 10, Jan. 19-30, Feb. 22-25.

Naugatuck River at Beacon Falls, Conn.
(Formerly published as Naugatuck River near Naugatuck)

Location.--Lat 41°26'32", long 73°03'47", on downstream side of highway bridge over Naugatuck River at Beacon Falls, New Haven County, 0.4 mile upstream from Bronson Brook and at mile 10.1. Prior to Oct. 1, 1955, at site 2.5 miles upstream.

Drainage area.--261 sq mi. Prior to Oct. 1, 1955, 246 sq mi.

Records available.--June 1918 to September 1924, September 1928 to September 1955 (published as "near Naugatuck"), October 1955 to September 1956.

Gage.--Chain gage read twice daily. 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.

Average discharge.--34 years (1918-24, 1928-56), 479 cfs (adjusted for storage and diversion).

Extremes.--Maximum discharge during year, 30,400 cfs Oct. 16 (gage height, 13.7 ft, former site and datum, from floodmarks), from rating curve extended above 9,000 cfs as explained below; minimum observed, 73 cfs Sept. 2 (gage height, 1.68 ft); minimum daily discharge, 74 cfs Sept. 2.

1918-24, 1928-56: 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 determinations at gage heights 12.4 and 25.7 ft; minimum, 24 cfs Oct. 21, 1935; minimum daily, 40 cfs Oct. 5, 12, 1930, Sept. 7, 1936; minimum gage height, 0.14 ft July 17, 1939 (site and datum then in use).

Flood of November 1927 reached a stage of 14 ft (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. 249). Flow increased by diversion from Shepaug Reservoir into Naugatuck River basin.

Revisions (water years).--WSP 781: Drainage area. WSP 1171: 1918-24, 1928-49.

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Feb. 2				Feb. 3 to Sept. 30			
2.1	114	6.0	2,150	1.7	75	4.0	870
2.5	197	8.0	4,500	2.0	117	5.0	1,570
3.0	340	11.0	10,200	2.5	220	6.5	3,010
4.0	740	14.3	20,200	3.0	390		
5.0	1,350						

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	340	3,200	500	183	245	414	960	1,160	650	130	116	84
2	280	2,100	460	169	418	510	990	990	782	130	122	74
3	230	1,560	440	155	600	782	1,530	1,190	1,530	130	111	106
4	210	4,000	500	143	386	1,020	1,370	930	960	127	110	101
5	190	8,100	650	128	446	870	2,340	810	675	362	101	102
6	480	4,220	550	133	394	728	2,180	700	498	596	111	114
7	1,900	2,590	500	164	*870	1,190	2,300	900	378	398	105	313
8	1,200	1,720	470	169	675	1,530	1,700	728	346	205	112	119
9	*850	1,520	450	710	625	1,330	*1,530	625	282	276	111	82
10	600	1,420	420	1,280	532	870	1,820	650	270	296	110	92
11	470	2,900	400	740	650	900	2,000	582	296	188	89	95
12	380	2,100	370	900	1,160	930	1,860	524	282	174	85	99
13	330	1,500	350	765	900	810	1,820	486	240	174	87	104
14	700	2,200	320	540	700	840	1,690	462	228	218	112	101
15	14,000	1,900	320	457	650	810	1,610	446	208	228	106	127
16	20,000	2,100	350	392	650	675	3,010	410	198	162	105	127
17	7,000	1,800	320	361	524	524	2,380	390	181	146	101	119
18	3,600	1,460	300	*324	555	625	1,450	418	172	138	83	128
19	3,000	1,300	300	312	700	550	1,370	418	172	140	80	108
20	2,200	1,200	270	312	625	650	1,150	410	172	138	101	122
21	1,680	1,100	230	256	470	625	1,050	362	172	170	144	102
22	1,300	1,000	200	247	430	650	990	343	179	181	131	88
23	1,080	900	205	253	390	755	1,080	406	142	184	108	82
24	1,020	800	245	218	390	870	1,050	402	137	162	98	142
25	1,150	800	234	218	814	782	870	303	142	140	82	128
26	1,020	750	223	223	1,020	700	840	296	144	138	80	112
27	800	650	213	215	730	700	870	296	166	190	99	110
28	700	650	218	200	650	700	810	386	242	130	96	164
29	650	600	202	200	430	782	1,450	296	181	125	102	130
30	2,400	550	207	264	-------	700	2,000	286	144	*128	99	95
31	7,120	-------	187	389	-------	700	-------	317	-------	120	98	-------
Total	76,880	56,690	10,604	11,020	17,629	24,522	46,070	16,922	10,169	6,024	3,195	3,470
Mean	2,480	1,890	342	355	608	791	1,536	546	339	194	103	116
(†)	+17.7	-4.3	-11.8	-3.5	-1.0	-1.2	+2.5	-5.1	-14.8	-17.8	-23.1	-19.6

Adjusted for diversion and change in reservoir contents

Mean	2,498	1,886	330	352	607	790	1,538	541	324	176	79.9	96.4
Cfsm	9.57	7.22	1.26	1.35	2.33	3.03	5.89	2.07	1.24	0.674	0.306	0.369
In.	11.03	8.06	1.45	1.56	2.51	3.49	6.57	2.39	1.38	0.78	0.35	0.41

	Observed			Adjusted			
Calendar year 1955:	Max 56,400	Min 71	Mean 968	Mean 961	Cfsm 3.81	In. 51.77	
Water year 1955-56:	Max 20,000	Min 74	Mean 774	Mean 768	Cfsm 2.94	In. 39.98	

Peak discharge (base, 4,000 cfs).--Oct. 16 (about 3:30 a.m.) 30,400 cfs (13.7 ft); Oct. 1 (about 1 a.m.) 7,120 cfs (9.6 ft); Nov. 5 (1:30 a.m.) 6,390 cfs (9.24 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. 1-20, 22, 25-29, Nov. 11-16, 19-30, Dec. 1-22, Feb. 27, Apr. 7, 8; discharge estimated on basis of existing record, weather records, and daily sum of records for Leadmine Brook and Naugatuck River near Thomaston.

Reservoirs in Housatonic River basin

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 1956. Records furnished by The Connecticut Light & Power Co.

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 1956. Records furnished by Bureau of Engineering, city of Waterbury, Conn.

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 1956. Records furnished by The Connecticut Light & Power Co.

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 1956. Records furnished by The Connecticut Light & Power Co.

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 1956. 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 1956. 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 1956. Records furnished by Bureau of Engineering, city of Waterbury, Conn.

Month-end contents, water year October 1955 to September 1956

Date	Lake Candlewood (Rocky River Reservoir)		Shepaug Reservoir		Lake Lillinonah	
	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)
Sept.30	5,834	-	98.0	-	652	-
Oct. 31	5,834	0	102.2	+1.6	2,544	+706.4
Nov. 30	5,678	-60.2	97.8	-1.7	2,898	+136.6
Dec. 31	5,309	-137.8	93.0	-1.8	2,965	+25.0
Calendar year 1955..	-	-25.9	-	-.2	-	+94.0
Jan. 31	5,511	+75.4	97.2	+1.6	2,898	-25.0
Feb. 29	5,750	+95.4	97.5	+.1	2,791	-42.7
Mar. 31	5,642	-40.3	97.5	0	2,248	-202.7
Apr. 30	5,762	+46.3	101.7	+1.6	2,869	+239.6
May 31	5,702	-22.4	97.9	-1.4	2,877	+3.0
June 30	5,690	-4.6	84.6	-5.1	2,884	+2.7
July 31	5,702	+4.5	91.9	+2.7	3,072	+70.2
Aug. 31	5,583	-44.4	64.5	-10.2	2,891	-67.6
Sept.30	5,499	-32.4	73.2	+3.4	2,841	-19.3
Water year 1955-56..	-	-10.6	-	+.8	-	+69.2

Date	Lake Zoar		Pitch, Morris, and Wigwam Reservoirs	
Sept.30	226.9	-	497.3	-
Oct. 31	276.1	+18.4	544.7	+17.7
Nov. 30	200.5	-29.2	533.6	-4.3
Dec. 31	330.8	+48.6	522.9	-4.0
Calendar year 1955..	-	+.4	-	-.9
Jan. 31	312.5	-6.8	539.3	+6.1
Feb. 29	289.6	-9.1	551.5	+4.9
Mar. 31	218.1	-26.7	548.2	-1.2
Apr. 30	419.6	+77.7	554.6	+2.5
May 31	321.6	-36.6	552.6	-.7
June 30	294.1	-10.6	548.0	-1.8
July 31	312.5	+6.9	533.5	-5.4
Aug. 31	321.6	+3.4	505.8	-10.3
Sept.30	307.9	-5.3	486.3	-7.1
Water year 1955-56..	-	+2.6	-	0

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 1956.

Gage.--Water-stage recorder. Datum of gage is 18.16 ft above mean sea level, datum of 1929.

Average discharge.--24 years, 145 cfs (adjusted for storage in and diversion from Saugatuck Reservoir since October 1941).

Extremes.--Maximum discharge during year, 14,800 cfs Oct. 16 (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 determination of peak flow; minimum, 1.6 cfs Aug. 17 (gage height, 1.99 ft); minimum daily, 4.7 cfs Aug. 21.

1932-56: Maximum discharge, that of Oct. 16, 1955; minimum, 0.2 cfs Oct. 19, 1953 (gage height, 1.92 ft); minimum daily, 1.0 cfs Aug. 11, 1939.

Remarks.--Records good except those for period of no gage-height record, which are poor. Flow regulated by storage and diversion at Saugatuck Reservoir (total capacity, 11,900,000,000 gal) and Aspetuck Reservoir. At Aspectuck Reservoir, Bridgeport Hydraulic Co. diverts an indeterminable amount of water for domestic supply from about 17 sq mi of Saugatuck River basin through Hemlocks Reservoir in Mill River basin. Infrequent regulation at dam of Dorr Co.

Revisions (water years).--WSP 781: Drainage area. WSP 1301: 1936.

Rating tables, water year 1955-56 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 4				Nov. 5 to June 13				June 14 to Sept. 30			
2.5	26	5.0	700	2.5	25	4.0	310	2.1	4.0	2.5	25
2.7	48	7.0	1,790	2.7	42	5.0	670	2.2	7.5	2.7	45
3.0	91	9.0	3,310	3.0	80	6.0	1,160	2.3	12	2.9	72
3.5	195	12.0	6,410	3.5	180	8.0	2,500				
4.0	335	15.0	12,200								

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	720	116	51	82	141	268	364	80	5.0	12	7.5
2	57	501	110	56	98	138	289	255	105	9.8	11	7.5
3	52	423	114	56	158	147	380	334	295	11	7.7	7.5
4	36	1,140	126	50	93	195	358	280	255	9.8	6.2	7
5	28	2,190	145	46	90	192	334	250	168	22	8.4	7
6	43	1,240	128	44	94	166	307	222	118	54	12	10
7	169	800	105	43	258	185	304	510	90	32	10	25
8	148	630	93	44	200	280	468	394	73	21	9.8	15
9	131	492	88	80	143	322	412	275	63	45	9.3	10
10	96	419	85	136	143	250	422	255	56	41	6.1	8.5
11	68	510	73	126	166	218	367	230	57	24	7.5	7.5
12	53	458	73	200	260	208	313	202	48	19	8.0	7
13	46	374	66	158	235	185	270	200	44	22	11	6.5
14	107	475	61	94	170	255	250	175	34	54	6.8	6.5
15	2,720	468	62	74	156	337	262	168	*35	48	7.5	55
16	*10,600	550	62	70	149	262	433	147	20	27	7.5	60
17	2,950	*630	53	62	124	255	384	124	19	21	5.3	45
18	1,440	447	52	51	240	210	292	118	19	18	6.1	30
19	996	380	54	43	355	238	255	114	17	17	6.4	20
20	756	364	49	42	295	198	218	118	15	15	11	16
21	580	304	35	40	*225	175	202	100	17	22	4.7	20
22	465	280	27	38	163	185	188	88	28	26	9.8	15
23	395	255	27	43	136	218	188	101	19	20	*8.0	12
24	363	248	26	37	110	275	163	114	17	18	7.5	13
25	341	230	29	33	200	242	138	80	16	15	6.8	15
26	290	202	31	30	270	228	141	70	16	20	6.8	12
27	254	180	33	28	212	230	147	85	14	*18	6.1	11
28	221	178	42	32	230	228	134	96	14	21	6.8	15
29	203	152	43	49	185	228	147	70	13	16	9.8	17
30	660	126	44	97	-------	272	510	58	8.5	16	7.5	14
31	1,250	-------	44	116	-------	270	-------	62	-------	12	7.5	-------
Total	25,578	15,366	2,096	2,069	5,240	6,933	8,544	5,659	1,773.5	719.6	250.9	502.5
Mean	825	512	67.6	66.7	181	224	285	183	59.1	23.2	8.09	16.8
(†)	+43.3	-5.7	+5.2	+42.1	+49.5	+8.7	+1.7	-3.9	+5.1	+17.1	-2.40	+5.4

Adjusted for diversion and change in contents in Saugatuck Reservoir

Mean	868	506	72.8	109	230	233	287	179	64.2	40.3	5.69	22.2
Cfsm	11.20	6.53	0.939	1.41	2.97	3.01	3.70	2.31	0.828	0.520	0.073	0.286
In.	12.91	7.29	1.08	1.63	3.20	3.47	4.13	2.66	0.92	0.60	0.08	0.32

	Observed			Adjusted			
Calendar year 1955:	Max 10,600	Min 1.9	Mean 215	Mean 232	Cfsm 2.99	In. 40.71	
Water year 1955-56:	Max 10,600	Min 4.7	Mean 204	Mean 218	Cfsm 2.81	In. 38.29	

Peak discharge (base, 900 cfs).--Oct. 16 (7 a.m.) 14,800 cfs (15.93 ft); Oct. 31 (about 4 a.m.) 1,540 cfs (6.6 ft); Nov. 5 (7 a.m.) 2,500 cfs (8.00 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.

Note.--No gage-height record Sept. 3-30; discharge estimated on basis of recorded range in stage, weather records, and records for Still River near Lanesville.

Measurements of streamflow in the North Atlantic slope basins, Maine to Connecticut, made at points other than regular gaging 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. Measurements believed to have been made under base-flow conditions are identified by an asterisk (*) to the left of the discharge figure. 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, "Measured previously" shows the water years in which measurements were made at the same, or practically the same, site.

Determinations of peak flow at points other than regular gaging stations are given in a separate table below.

Discharge measurements made at points other than gaging stations in the North Atlantic slope basins, Maine to Connecticut, during the water year 1956

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Discharge (cfs)
Menunketesuck River basin, Conn.						
Killingworth Reservoir Outlet.	Menunketesuck River.	Just below Killingworth Reservoir, near Killingworth.	-	1941-55 1941-55 1941-55	July 23 Aug. 1 Sept.24	1.75 .033 .04
Menunketesuck River.	Long Island Sound.	Just above Kelseytown Reservoir.	-	1944-55	Oct. 13	8.12
Quinnipiac River basin, Conn.						
Eightmile River.	Quinnipiac River.	Lat 41°36'54", long 72°55'24", at bridge on wood's road, 1.6 miles northwest of Southington.	6.42	1954-55	Sept.11 Sept.11	5.63 5.26
Housatonic River basin, N. Y.						
Wassaic Creek.	Tenmile River.	Lat 41°47'36", long 73°33'06", at bridge 0.7 mile southeast of Wassaic and 1.0 mile above confluence with Webatuck Creek.	36.6		July 12 Aug. 30	*10.2 *2.80
Webatuck Creek.	....do.....	Lat 41°46'48", long 73°33'12", at bridge 200 ft above confluence with Wassaic Creek and 1.6 miles southwest of South Amenia.	81.0		July 12 Aug. 30	*21.8 *6.94
Tenmile River.	Housatonic River.	Lat 41°46'45", long 73°33'34", at Dutchess County highway bridge A-30, 0.2 mile below confluence of Wassaic and Webatuck Creeks and 1.6 miles south of Wassaic.	120		July 12 Aug. 30	*37.0 *7.96
Rippowam River basin, N. Y.						
Mill River...	Rippowam River.	Lat 41°10'42", long 73°33'14", at bridge on Trinity Pass Rd., 1.0 mile south of Scott Corners.	13.2		Sept.26	*1.54
Mianus River basin, N. Y.						
Mianus River.	Long Island Sound.	Lat 41°12'05", long 73°38'00", at bridge on Middle Patent Rd., 0.6 mile east of Bedford.	10.7	1903	Sept.26	*2.40
Byram River basin, N. Y.						
Byram River..	Long Island Sound.	Lat 41°07'28", long 73°42'09", at bridge on State Highways 22 and 128, 0.6 mile east of Armonk.	3.78		Sept.26	*0.64

* Base flow.

The following table contains determinations of peak discharge made at crest stage by indirect methods or by current meter or computed from rating curve at points other than regular gaging stations.

Determinations of peak discharge during water year October 1955 to September 1956

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Discharge (cfs)
Still River..	Housatonic River.	Lat 41°24'00", long 73°25'44", 500 ft upstream from U. S. Highway 6 bridge, at Danbury, Conn.	38.3		Oct. 16	5,000
Poquonock River.	Long Island Sound.	Lat 41°15'16", long 73°12'27", 0.9 mile northwest of Trumbull, Conn.	14.4		Oct. 16	4,111
Norwalk River.	....do.....	Lat 41°16'31", long 73°26'43", 0.6 mile north of Branchville, Conn.	7.54		Oct. 16	3,100
Five Mile River.	....do.....	Lat 41°07'29", long 73°28'18", at Merritt Parkway, 1.9 miles southeast of New Canaan, Conn.	5.85		Oct. 16	2,140
Mianus River.	....do.....	Lat 41°06'02", long 73°35'21", at Merritt Parkway, 4.2 miles northwest of Stamford, Conn.	26.6		Oct. 16	3,780

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