

Compilation of Records of Surface Waters of the United States, October 1950 to September 1960

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

Prepared under the direction of E. L. HENDRICKS, Chief, Surface Water Branch

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1721



UNITED STATES DEPARTMENT OF THE INTERIOR

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PREFACE

This report contains summaries of streamflow records in the North Atlantic slope basins, Maine to Connecticut. It was prepared by the United States Geological Survey in the Water Resources Division, L. B. Leopold, chief, under the general direction of E. L. Hendricks, chief, Surface Water Branch, and F. J. Flynn, chief, Reports Section.

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COMPILATION OF RECORDS OF SURFACE WATERS OF NORTH ATLANTIC SLOPE BASINS, MAINE TO CONNECTICUT, 1951-60

PURPOSE AND SCOPE

This volume is one of a series of reports presenting monthly and yearly summaries of streamflow and reservoir data collected by the Geological Survey during the period October 1, 1950, to September 30, 1960. Included with these data are some records furnished by other Federal, State, and private agencies. This series of reports is a condensation of the detailed streamflow information presented in the annual series of reports known as "Surface Water Supply of the United States" for each of the years 1951 through 1960. The area covered by this report is the North Atlantic slope basins from Maine to Connecticut.

The purpose of the present series of reports is to make available in summarized form all of the surface-water records collected October 1, 1950, to September 30, 1960, and to continue the series of reports known as Water-Supply Papers 1301-19 and 1372 which summarized all surface-water records through September 30, 1950. The present series of reports includes corrections of errors which have been found in the earlier series. Also included are some records collected prior to October 1, 1950, that were omitted from the 1950 compilation series.

The Geological Survey collected the records mainly in cooperation with State, municipal, and other Federal agencies, and published them in detail in the series of annual reports known as "Surface Water Supply of the United States." Some records furnished by other agencies have been included in the annual reports and in the present series of reports; such records are identified in the station description.

The data presented consist of records of discharge of streams and contents of reservoirs summarized on a monthly and yearly basis. Results of miscellaneous discharge measurements and, in general, stage records have been excluded. Included is a map of the area showing the location of each station (pl. 1). The reports of the present series are generally similar in the type of data they contain and in the form of presentation; moreover, they conform in style with the earlier series of compilation reports so that the entire record for any station up to September 30, 1960, is available in one or two volumes.

All records compiled for these summary reports were examined for major errors. A few revisions were made and the revised figures, noted as such, are included. Some previously unpublished information is included, as well as a few estimates of discharge that were made to fill short gaps in an otherwise complete period of record.

DESCRIPTION OF DATA

The gaging-station records are arranged in downstream order. The order used in this report is the same as that adopted for use in the annual series of reports on surface-water supply beginning with the water year 1951. 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 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.

As an added means of identification, each station was assigned a number which is shown on the index map and which is a part of the station name in the heading of the description in the text. The numbers are assigned in downstream order in each part (see explanation of "parts" under the heading "Publications," p. 4) beginning with the most upstream station. The numbers are not consecutive because gaps are left to allow for new stations that may be established.

The data presented for most of the gaging stations comprise a description of the station, a table of monthly discharge in cubic feet per second, a table of monthly runoff in inches, and a yearly summary table. The station description gives the name of the river basin, the station number and name, the location, drainage area, records available, types and datums of gages, average discharge, extremes of discharge, general remarks concerning the data, and a credit statement if records were furnished by another agency.

The location of the gaging station and the drainage area are obtained from the best available maps. When more than one site was used during water years 1951-60 and the difference in drainage areas is significant, the area for the latest site is shown first followed by the areas for other sites in chronological order. In some instances drainage-area figures have not been obtained because of the lack of suitable maps or because the boundaries cannot be defined or the effective drainage area determined.

The paragraph "Records available" lists all periods for which there are published records generally equivalent to those at the present site. If equivalent records have been published under another station name, that fact is also noted.

The gage described first is the present gage or the one used most recently. Information is then given in chronological order for all gages used earlier, giving changes in location, type of gage, or datum. The location or datum of all earlier gages is given with reference to the present or most recently used gage. The datum of the gage is the elevation of the zero of the gage above mean sea level. Where information as to datum is not available, the altitude of the gage is given.

The average discharge for a station is the average of all complete water years and is published only if there are five or more complete water years of record. The years used to determine the average are not necessarily consecutive. The average discharge is not published for some stations because of extensive changes in diversion or storage, or other water development, that have occurred upstream.

In general, the momentary maximum and minimum discharges and stages for the entire period of record are published in the "Extremes" paragraph. These are qualified if necessary according to the type of gage used and the completeness of the record. Maximum and minimum discharges at nonrecording gaging stations are qualified as "observed" unless determined from a graph drawn through actual gage heights which approximates the actual hydrograph.

Under "Remarks" information is given on factors which affect the basir runoff characteristics. These include upstream regulation, diversion, and utilization-- a history of changes in these items during the period 1951-60 is given when known.

Also, references are made to the records of storage or diversion upstream and to records concerning quality of water, if published.

When discharge records are furnished by another agency, credit is given under "Cooperation."

The streamflow data summarized in this report generally are contained in two monthly tables and one yearly table. The first monthly table is a tabulation of monthly and yearly mean discharges in cubic feet per second. These figures represent discharge passing the station; they are unadjusted for storage or diversion upstream unless otherwise specified under "Remarks" for the individual station. Each monthly figure is the mean flow for the entire month; generally no record for part of a month is tabulated. Likewise, each yearly figure is the mean flow for a full year, and no figure is shown for a partial year. Usually the months are arranged on a water-year basis. Exceptions to this rule are made in connection with seasonal records wherein the months are grouped to give a complete season for each calendar year.

The second monthly table is a tabulation of monthly and yearly runoff in inches. For streams that are subject to considerable regulation, the second table contains the adjusted runoff in inches. The table of runoff in inches is omitted if the data do not represent natural yield without gross error, whether adjusted or unadjusted.

The third table contains a yearly summary of the streamflow data. The column headed "WSP" lists the number of the water-supply paper in which the figures of daily and monthly discharge are published. If a part of the record has been revised and the revision published, then reference is made to both the original report and the one containing the revised record; if the daily discharge record for the entire year has been republished to include the revisions, then only the later report is listed. However, there is no reference in this column for revisions published for the first time in this report as the corresponding revised figures of daily discharge will be published in a water-supply paper which will contain daily records for the period 1961-65. For some stations the third table is omitted; however, the report containing records for any particular year can generally be found by referring to the table given on page 6.

In the third table the momentary maximum discharge for each water year and the date of its occurrence is given if known. For nonrecording gage records, momentary maximums were obtained from graphs drawn through the gage readings. The momentary maximum discharge, however obtained, is not qualified in any way if it is believed to be representative of the absolute maximum for the water year.

The minimum daily discharge for each water year is listed if known. Other data listed in this table are the annual mean discharge and runoff for both the water year and the calendar year. The figures listed for the water year are the same as those given in the yearly columns of the preceding tables. In addition, the annual mean discharge per square mile is listed for the water year. If figures of runoff have been adjusted for regulation or diversion in the preceding table, adjusted figures are listed in the yearly summary table. For a few stations regulation affects monthly figures seriously, but the effect on annual figures is either negligible or can be adequately adjusted for; for these stations the monthly table of runoff in inches is omitted, but the annual runoff is given.

Most canal and diversion records are given in a single table. There are some records for large canals, however, that are published in the same detail as those for streams. Records of reservoirs also are given in a single table which shows the contents at the end of each month.

Revised figures of discharge for water years 1951-60 are not so indicated if they have been published in an annual report, but are noted as "revised" if they have not been published in an annual report. Revised daily figures which have not been published in annual reports will be published in the water-supply paper containing records for water years 1961-65, except for special cases involving only a few figures which are included in this series of reports. Figures that represent corrections of typographical or computational errors whereas no figures of daily discharge have been revised or changed are indicated as "corrected" in this report, except corrected figures of runoff in inches which are not noted if the correction is due solely to a revision of drainage area. Estimates of discharge made to complete months or years for this report are noted as estimates and as "not previously published."

Revisions or corrections of records published in WSP 1301 are included in this report. However, revised figures of runoff in inches or discharge per square mile for records prior to October 1, 1950, resulting solely from a revision of drainage area, are not given.

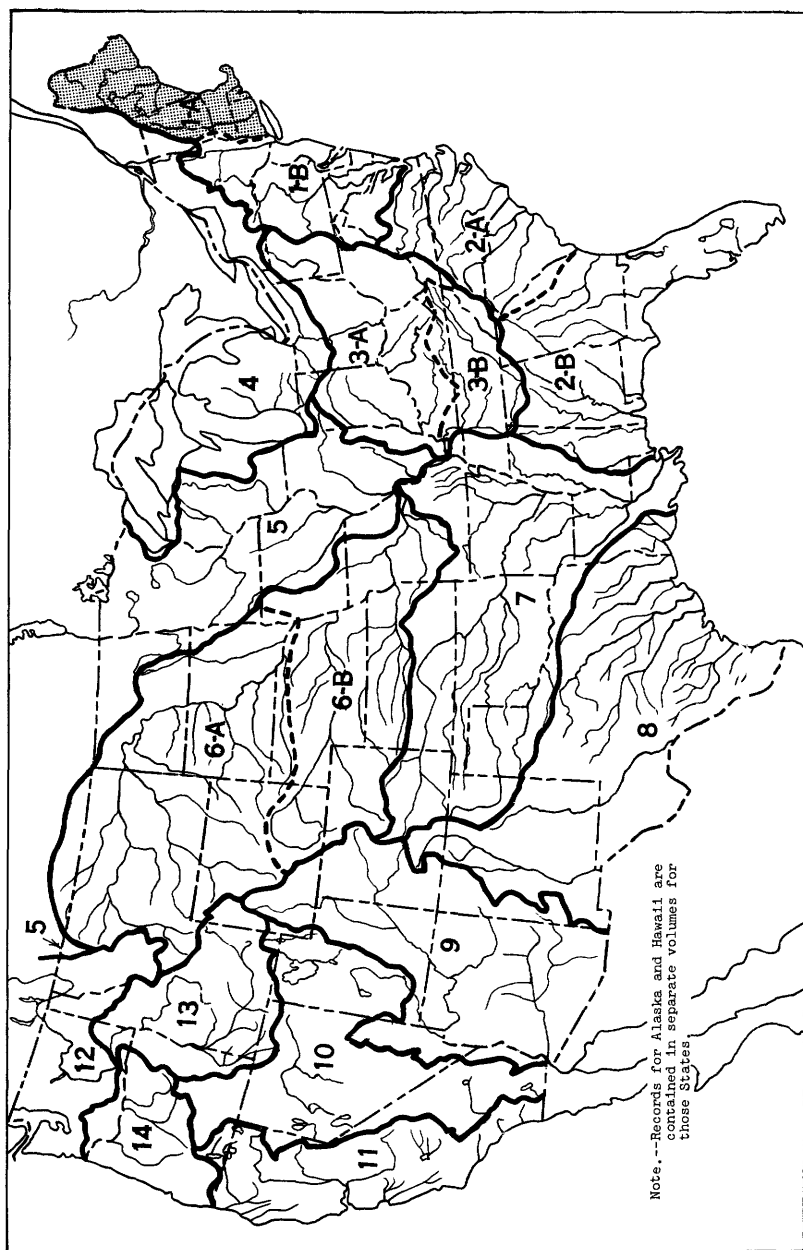
PUBLICATIONS

This series of reports comprises 20 volumes of water-supply papers (WSP) as numbered below. The "Part" numbers and the areas covered are the same as those used for the annual series of reports on surface water supply of the United States since 1951. The boundaries of the parts are indicated on figure 1.

Numbers of water-supply papers for 1960 series of compilation reports		
WSP	Part	Area
1721	1-A	North Atlantic slope basins, Maine to Connecticut.
1722	1-B	North Atlantic slope basins, New York to York River.
1723	2-A	South Atlantic slope basins, James River to Savannah River.
1724	2-B	South Atlantic slope and eastern Gulf of Mexico basins, Ogeechee River to Pearl River.
1725	3-A	Ohio River basin except Cumberland and Tennessee River basins.
1726	3-B	Cumberland and Tennessee River basins.
1727	4	St. Lawrence River basin.
1728	5	Hudson Bay and upper Mississippi River basins.
1729	6-A	Missouri River basin above Sioux City, Iowa.
1730	6-B	Missouri River basin below Sioux City, Iowa.
1731	7	Lower Mississippi River basin.
1732	8	Western Gulf of Mexico basins.
1733	9	Colorado River basin.
1734	10	The Great Basin.
1735	11	Pacific slope basins in California.
1736	12	Pacific slope basins in Washington and upper Columbia River basin.
1737	13	Snake River basin.
1738	14	Pacific slope basins in Oregon and lower Columbia River basin
1739	-	Hawaii.
1740	-	Alaska.

Records prior to September 30, 1950, were summarized in a series of water-supply papers as listed below. Each of these volumes contains a list of the annual reports from which data prior to 1951 were summarized.

Numbers of water-supply papers for 1950 series of compilation reports					
WSP	Part	WSP	Part	WSP	Part
1301	1-A	1308	5	1315-A	11-B
1302	1-B	1309	6-A	1315-B	11-A
1303	2-A	1310	6-B	1316	12
1304	2-B	1311	7	1317	13
1305	3-A	1312	8	1318	14
1306	3-B	1313	9	1319	Hawaii
1307	4	1314	10	1372	Alaska



Note.--Records for Alaska and Hawaii are contained in separate volumes for those States.

This report is summarized from the following 10 annual reports which contain records of daily discharge for each of the water years from 1951 to 1960.

<u>Annual water-supply papers, Part 1-A, 1951-60</u>			
<u>Water year</u>	<u>WSP</u>	<u>Water year</u>	<u>WSP</u>
1951	1201	1956	1431
1952	1231	1957	1501
1953	1271	1958	1551
1954	1331	1959	1621
1955	1381	1960	1701

In addition to the customary records of discharge collected during the systematic operation of gaging stations, there is much additional hydrologic information available, both published and unpublished.

A list of flood reports and other special reports is contained in the introductory pages of each of the annual reports listed above.

Records for many stations have been analyzed by an electronic computer to give: the number of days in each year that the discharge was between selected limits (duration tables); the lowest and highest mean discharges for selected numbers of consecutive days in each year; and other statistical summaries.

Data on low flow or peak flows or both are available for many sites other than gaging stations.

Specific information on unpublished data available can be obtained by writing directly to the district engineer for the State in which the site or gaging station is located.

HYDROLOGIC CONDITIONS

Streamflow, a residual of precipitation after other demands have been met, varies considerably from year to year and from place to place. Figure 2 shows yearly discharge for three gaging stations in North Atlantic slope basins, Maine to Connecticut. The pattern of yearly runoff shown by these streams is generally representative of hydrologic conditions in their parts of the report area.

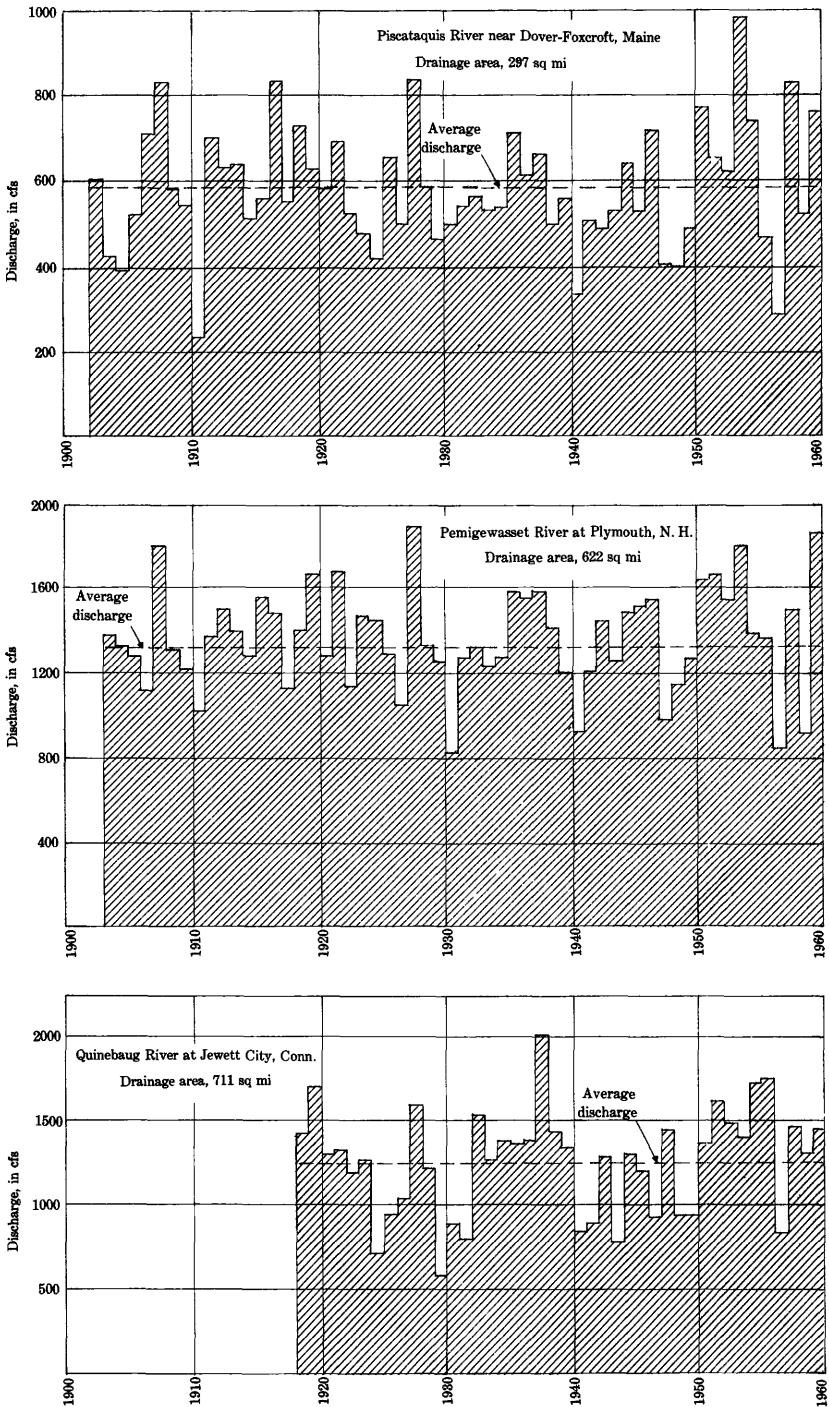


Figure 2.—Yearly discharge at three representative gaging stations

ST. JOHN RIVER BASIN

100. St. John River at Ninemile Bridge, Maine

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

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

Records available.--October 1950 to September 1960.

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

Average discharge.--10 years (1950-60), 2,285 cfs.

Extremes.--1950-60: Maximum discharge, 34,200 cfs Apr. 25, 1958 (gage height, 10.97 ft); minimum, 59 cfs Sept. 5, 1953 (gage height, 0.25 ft).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1,060	4,689	4,899	543	702	738	10,930	4,865	967	2,042	1,194	853	†2,781
1952	991	3,661	1,125	699	401	281	6,936	7,770	3,438	174	126	102	2,136
1953	1,687	1,306	912	685	899	1,377	10,460	5,819	559	469	113	190	2,037
1954	357	945	1,891	325	427	818	7,906	6,756	4,705	2,737	2,247	3,930	2,755
1955	5,281	2,595	1,378	756	558	808	9,209	8,402	1,265	615	1,231	386	2,718
1956	347	1,512	311	361	254	180	2,902	8,922	3,607	1,454	791	807	1,783
1957	1,249	540	489	207	181	443	4,413	3,173	1,979	1,359	1,141	831	1,336
1958	998	2,987	3,291	1,325	385	324	9,058	5,758	1,796	2,128	3,699	1,290	2,759
1959	1,222	1,951	772	375	291	232	6,524	4,679	3,697	1,046	2,423	1,837	2,087
1960	3,225	3,560	1,624	504	489	450	5,308	9,972	2,386	1,077	308	496	2,455

† Corrected.

* Not previously published; discharge estimated on basis of weather records and records for nearby stations.

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	†0.95	†4.05	4.38	0.49	0.57	0.66	9.37	4.35	0.84	1.82	1.07	0.74	†29.29
1952	.89	3.17	1.00	.62	.34	.25	6.00	6.94	2.98	.16	.11	.09	22.55
1953	1.51	1.13	.82	.61	.73	1.23	9.05	5.20	.48	.42	.10	.16	21.44
1954	.32	.82	1.70	.29	.34	.73	6.84	6.04	4.07	2.44	2.01	3.40	29.00
1955	4.72	2.24	1.23	.68	.45	.72	7.97	7.50	1.09	.55	1.10	.33	28.58
1956	.31	1.30	.28	.32	.21	.16	2.51	7.89	3.12	1.30	.71	.70	18.81
1957	1.12	.47	.44	.19	.15	.40	3.82	2.84	1.71	1.21	1.02	.72	14.09
1958	.89	2.59	2.93	1.19	.31	.29	7.82	5.14	1.55	1.90	3.31	1.12	29.04
1959	1.08	1.68	.69	.34	.24	.21	5.64	4.18	3.20	.94	2.17	1.58	21.96
1960	2.88	3.08	1.45	.45	.41	.40	4.59	8.91	2.06	.96	.28	.43	25.90

† Corrected.

* Not previously published; discharge estimated on basis of weather records and records for stations on nearby streams.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	2,461	25.91
1951	1201	†19,000	Apr. 11, 1951	†240	†2,781	†2.16	†29.29	2,371	24.97
1952	1231	19,200	Apr. 27, 1952	98	2,136	1.66	22.55	1,984	20.95
1953	1271	†21,000	Apr. 1, 1953	63	2,037	1.58	21.44	1,978	20.82
1954	1331	27,800	Apr. 23, 1954	122	2,755	2.14	29.00	3,265	34.35
1955	1381	25,400	Apr. 20, 1955	92	2,718	2.11	28.58	2,119	22.28
1956	1431	14,600	May 15, 1956	158	1,783	1.38	18.81	1,794	18.95
1957	1501	†16,000	Apr. 22, 1957	100	1,356	1.04	14.09	1,754	18.47
1958	1551	34,200	Apr. 25, 1958	213	2,759	2.14	29.04	2,480	26.09
1959	1621	16,300	Apr. 27, 1959	115	2,087	1.62	21.96	2,461	25.91
1960	1701	28,000	May 7, 1960	113	2,455	1.90	25.90	-	-

* Not previously published.

a About.

105. St. John River at Dickey, Maine

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

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

Records available.--July 1910 to November 1911 (published as "near Dickey"), September 1946 to September 1960.

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.--14 years (1946-60), 4,624 cfs.

Extremes.--1910-11, 1946-60: Maximum discharge, 71,200 cfs Apr. 25, 1958 (gage height, 16.58 ft); maximum gage height, 19.88 ft Mar. 29, 1953 (backwater from ice); minimum discharge, 129 cfs Sept. 17, 1948.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2,222	9,368	9,781	1,159	1,393	1,183	22,590	10,050	3,465	5,119	2,240	1,497	5,838
1952	1,880	6,749	3,114	1,440	891	729	11,700	18,170	7,491	937	703	459	4,519
1953	4,011	2,847	1,657	1,246	1,665	2,498	22,140	12,110	1,186	984	265	397	4,246
1954	690	1,728	3,327	775	783	1,798	16,370	15,470	9,540	5,936	5,517	7,655	5,807
1955	8,980	5,466	2,705	1,560	1,066	1,631	17,620	18,680	3,973	1,362	2,544	1,055	5,574
1956	734	2,257	624	621	465	378	5,549	15,980	6,683	2,435	1,328	1,449	3,215
1957	2,141	994	893	452	456	773	8,942	7,812	4,936	4,327	2,233	2,012	3,005
1958	2,147	6,393	6,841	2,518	786	828	18,800	12,240	4,856	5,351	8,718	3,774	6,119
1959	2,475	3,541	1,624	756	354	685	12,980	11,030	7,462	3,097	4,586	3,550	4,348
1960	5,427	6,935	3,681	1,065	1,023	871	10,840	23,170	3,647	1,619	567	835	4,993

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.95	3.87	4.17	0.49	0.54	0.50	9.34	4.29	1.43	2.19	0.96	0.62	29.35
1952	.80	2.79	1.53	.61	.36	.51	4.85	7.76	3.09	.40	.30	.19	22.77
1953	1.72	1.17	.71	.53	.64	1.07	9.15	5.18	.49	.42	.11	.16	21.35
1954	.30	.71	1.42	.33	.30	.77	6.76	6.61	3.94	2.54	2.35	3.17	29.20
1955	3.84	2.25	1.15	.67	.41	.70	7.29	7.98	1.64	.58	1.09	.44	28.04
1956	.31	.93	.27	.27	.19	.16	2.30	6.82	2.77	1.04	.57	.60	16.23
1957	.91	.41	.38	.19	.18	.33	3.69	3.33	2.04	1.84	.95	.83	15.08
1958	.92	2.64	2.92	1.08	.30	.35	7.76	5.22	2.00	2.27	3.72	1.56	30.74
1959	1.06	1.46	.69	.32	.14	.29	5.37	4.72	3.08	1.33	1.96	1.46	21.68
1960	2.32	2.87	1.57	.45	.41	.38	4.47	9.89	1.51	.69	.24	.37	25.15

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	4,724	23.74
1951	1201	45,100	Apr. 12, 1951	1504	5,838	2.16	29.35	5,028	25.35
1952	1231	38,200	Apr. 30, 1952	580	4,519	1.67	22.77	4,357	21.45
1953	1271	51,100	Apr. 1, 1953	200	4,246	1.57	21.35	4,034	20.18
1954	1331	58,600	Apr. 24, 1954	255	5,807	2.15	29.20	6,766	34.01
1955	1381	42,700	May 5, 1955	350	5,574	2.06	28.04	4,433	22.31
1956	1431	27,400	May 16, 1956	345	3,215	1.19	16.23	3,253	16.42
1957	1501	34,200	Apr. 23, 1957	200	3,005	1.11	15.08	3,955	19.86
1958	1551	71,200	Apr. 25, 1958	650	6,119	2.27	30.74	5,469	27.47
1959	1621	31,000	Apr. 28, 1959	295	4,348	1.61	21.68	5,053	25.43
1960	1701	49,400	May 7, 1960	244	4,993	1.85	25.15	-	-

† Corrected.

110. Allagash River near Allagash, Maine

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

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

Records available--July 1910 to November 1911, September 1931 to September 1960.

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--29 years (1931-60), 1,909 cfs.

Extremes--1910-11, 1931-60: Maximum discharge, 23,400 cfs May 5, 1933 (gage height, 11.32 ft); maximum gage height, 14.16 ft Apr. 23, 1960 (ice jam); minimum discharge, 87 cfs Sept. 11, 1960.

Remarks--Some storage in lakes above station prior to 1959.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	582	2,344	4,549	1,224	1,144	791	6,302	4,828	2,492	1,625	764	611	2,273
1952	462	1,921	1,415	648	522	424	3,352	8,205	3,580	1,186	355	247	1,863
1953	579	706	599	496	594	983	7,985	5,823	1,409	668	241	301	1,698
1954	309	729	1,741	884	502	906	5,112	6,958	4,163	4,053	3,353	3,133	2,664
1955	3,776	2,506	1,567	1,105	626	788	5,636	8,933	1,999	720	790	593	2,432
1956	327	403	294	297	220	181	1,479	6,144	3,344	826	447	421	1,202
1957	512	446	406	214	224	353	1,929	3,640	1,819	987	658	633	989
1958	478	2,231	2,931	1,865	1,014	546	5,248	8,060	1,674	2,026	4,535	1,666	2,703
1959	766	1,190	811	579	351	465	3,975	4,976	2,803	1,582	881	947	1,614
1960	1,259	2,583	2,629	483	348	332	4,144	10,780	1,824	804	270	213	2,148

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.54	2.10	4.20	1.13	0.95	0.73	5.62	4.45	2.22	1.50	0.70	0.55	24.69
1952	.43	1.72	1.30	.80	.45	.39	2.99	7.56	3.19	1.09	.33	.22	20.27
1953	.53	.63	.55	.46	.49	.91	7.13	5.37	1.26	.62	.22	.27	18.44
1954	.28	.85	1.60	.82	.42	.84	4.56	6.42	3.72	3.74	3.09	2.80	28.94
1955	3.48	2.23	1.44	1.02	.52	.73	5.03	8.24	1.78	.66	.73	.53	26.39
1956	.30	.36	.27	.27	.19	.17	1.32	5.67	2.99	.76	.41	.38	13.09
1957	.47	.40	.37	.20	.19	.33	1.72	3.36	1.63	.91	.61	.56	10.75
1958	.44	1.99	2.70	1.72	.84	.50	4.69	7.44	1.50	1.87	4.18	1.48	29.35
1959	.71	1.06	.75	.52	.29	.43	3.55	4.59	2.50	1.46	.81	.85	17.53
1960	1.16	2.31	2.42	.45	.30	.31	3.70	9.94	1.63	.74	.25	.19	23.40

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	1,905	20.70
1951	1201	10,400	Dec. 13, 1950	378	2,273	1.82	24.69	1,962	21.30
1952	1231	13,200	May 13, 1952	192	1,863	1.49	20.27	1,704	18.53
1953	1271	11,100	Apr. 4, 1953	147	1,698	1.36	18.44	1,774	19.26
1954	1331	15,500	Apr. 23, 1954	171	2,664	2.13	28.94	3,090	33.56
1955	1381	15,900	May 5, 1955	289	2,432	1.95	26.39	1,858	20.17
1956	1431	9,370	May 16, 1956	154	1,202	.962	13.09	1,230	13.40
1957	1501	7,740	Apr. 29, 1957	144	989	.791	10.75	1,347	14.64
1958	1551	19,000	Apr. 25, 1958	299	2,703	2.16	29.35	2,462	26.74
1959	1621	8,620	May 8, 1959	250	1,614	1.29	17.53	1,925	20.90
1960	1701	20,400	May 10, 1960	91	2,148	1.72	23.40	-	-

115. St. Francis River at outlet of Glazier Lake, near Connors, New Brunswick
(International gaging station)

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

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

Records available.--October 1951 to September 1960.

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

Average discharge.--9 years (1951-60), 892 cfs.

Extremes.--1951-60: Maximum discharge, 10,800 cfs Apr. 26, 1958 (gage height, 13.21 ft); minimum, 68 cfs Sept. 11, 12, 1960.

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

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

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	196	652	707	322	217	194	1,520	4,230	1,690	347	285	180	897
1953	722	669	445	306	346	490	4,187	2,620	621	426	141	105	923
1954	123	240	519	226	177	531	2,534	2,935	1,251	708	1,781	1,162	1,018
1955	1,650	1,100	743	418	251	351	2,972	4,508	1,354	345	204	296	1,187
1956	222	210	127	168	148	113	871	2,768	1,179	344	231	198	550
1957	259	175	168	117	127	118	1,219	2,145	792	1,138	396	327	585
1958	424	1,309	1,393	839	342	301	3,448	2,834	1,043	870	1,537	1,051	1,285
1959	502	543	379	252	198	153	1,827	2,949	1,010	374	497	413	761
1960	449	1,058	793	302	239	220	1,588	4,426	540	225	101	131	825

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	0.43	1.83	1.57	0.71	0.45	0.43	3.26	9.37	3.63	0.77	0.63	0.39	23.47
1953	1.60	1.44	.99	.68	.69	1.09	8.98	5.81	1.33	.94	.31	.23	24.09
1954	.27	.51	1.15	.50	.35	1.18	5.44	6.51	2.64	1.57	3.95	2.49	26.56
1955	3.66	2.36	1.65	.93	.50	.78	6.38	10.00	2.90	.77	.45	.63	31.01
1956	.49	.45	.28	.37	.31	.25	1.87	6.14	2.53	.76	.51	.43	14.39
1957	.57	.38	.37	.26	.25	.26	2.62	4.76	1.70	2.52	.88	.70	15.27
1958	.94	2.10	3.09	1.86	.68	.67	7.40	6.28	2.24	1.93	3.41	2.26	32.66
1959	1.11	1.16	.84	.56	.40	.34	3.92	6.54	2.17	.83	1.10	.88	19.85
1960	1.00	2.23	1.76	.67	.49	.49	2.98	9.81	1.16	.50	.22	.28	21.59

Yearly discharge, in cubic feet per second

Year	WSP	water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	-	-
1951	-	-	-	-	-	-	-	-	-
1952	1231	6,660	May 1, 1952	125	897	1.72	23.47	916	23.67
1953	1271	5,830	Apr. 4, 5, 1953	92	923	1.77	24.09	843	21.99
1954	1331	8,120	Apr. 25, 1954	88	1,018	1.96	26.56	1,237	32.30
1955	1381	8,770	May 6, 1955	102	1,187	2.28	31.01	941	24.56
1956	1431	4,110	May 17, 1956	100	550	1.06	14.39	553	14.49
1957	1501	5,280	May 1, 1957	100	585	1.12	15.27	796	20.79
1958	1551	10,800	Apr. 26, 1958	242	1,285	2.47	33.57	1,143	29.84
1959	1621	4,920	Apr. 29, May 9	142	761	1.46	19.85	832	21.73
1960	1701	7,170	May 12, 1960	68	825	1.59	21.59	-	-

135. Fish River near Fort Kent, Maine

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

Drainage area.--871 sq mi.

Records available.--July 1903 to December 1908, May to November 1911, September 1929 to September 1960. 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.--36 years (1903-8, 1929-60), 1,357 cfs.

Extremes.--1903-8, 1911, 1929-60: Maximum discharge, 12,000 cfs Apr. 26, 1958 (gage height, 10.81 ft); minimum, 46 cfs Oct. 9, 10, 1950.

Remarks.--Large lake area above station has not yet been developed for storage.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	90.0	938	4,688	1,172	982	730	5,958	3,261	1,498	1,971	851	601	1,899
1952	410	1,467	1,479	962	818	366	2,735	6,475	2,776	658	230	122	1,527
1953	267	463	623	425	666	838	7,495	4,897	1,145	356	160	100	1,452
1954	124	427	1,616	687	399	813	3,665	5,423	2,466	3,075	3,571	1,940	2,029
1955	2215	1,974	1,470	1,045	637	677	3,826	7,108	1,794	418	325	223	1,817
1956	160	134	103	172	140	160	1,320	4,094	2,147	743	322	197	810
1957	192	230	342	251	201	250	1,766	3,570	1,351	750	424	229	800
1958	209	1,583	2,341	1,891	747	599	4,503	5,067	1,259	1,293	2,712	1,886	1,998
1959	688	934	805	535	325	347	2,836	3,813	1,204	702	599	865	1,142
1960	825	1,905	2,325	655	598	586	2,706	7,395	1,307	396	135	91.2	1,575

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.12	1.20	6.20	1.56	1.18	0.97	7.63	4.51	1.92	2.61	1.13	0.77	29.60
1952	.54	1.87	1.96	1.27	.77	.48	3.50	8.57	3.56	.87	.30	.16	23.85
1953	.35	.59	.82	.56	.82	1.11	9.61	6.48	1.46	.47	.21	.13	22.61
1954	.16	.55	2.14	.91	.48	1.08	4.70	7.18	3.16	4.07	4.73	2.49	31.65
1955	2.93	2.53	1.95	1.38	.76	.90	4.90	9.41	2.30	.55	.43	.29	28.33
1956	.21	.17	.14	.23	.17	.21	1.70	5.42	2.74	.98	.43	.25	12.65
1957	.25	.29	.45	.33	.24	.33	2.26	4.73	1.73	.99	.56	.29	12.45
1958	.28	1.77	3.10	2.50	.89	.79	5.77	6.71	1.62	1.71	3.58	2.42	31.14
1959	.91	1.19	1.07	.71	.39	.46	3.64	5.05	1.54	.93	.79	1.13	17.81
1960	1.09	2.44	3.08	.87	.74	.78	3.47	9.79	1.67	.52	.18	.12	24.65

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	1,436	22.37
1951	1201	8,600	Apr. 16, 1951	50	1,899	2.18	29.60	1,697	26.45
1952	1231	8,530	Apr. 30, 1952	80	1,527	1.75	23.85	1,360	21.24
1953	1271	9,120	Apr. 7, 1953	77	1,452	1.67	22.61	1,521	23.70
1954	1331	9,380	Apr. 24, 1954	75	2,029	2.33	31.65	2,322	36.21
1955	1361	10,900	May 5, 1955	166	1,817	2.09	28.33	1,375	21.44
1956	1431	4,890	May 15, 1956	84	810	.930	12.65	840	13.12
1957	1501	6,120	Apr. 30, May 1	154	800	.918	12.45	1,066	16.61
1958	1551	12,000	Apr. 26, 1958	160	1,998	2.29	31.14	1,871	29.16
1959	1621	5,660	May 7, 1959	230	1,142	1.31	17.81	1,363	21.25
1960	1701	10,100	May 16, 1960	48	1,575	1.81	24.65	-	-

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

(International gaging station)

Location--Lat 47°15'25", long 68°35'35", on right bank at Fort Kent, Aroostock 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 1960; published as "at Fort Kent" prior to Oct. 1, 1931.

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--34 years (1926-60), 9,558 cfs.

Extremes--1926-60: Maximum discharge, 121,000 cfs May 5, 1933 (gage height, 25.1 ft); minimum daily, 510 cfs Mar. 13-15, 1948.

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

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	3,247	13,840	22,900	4,235	4,230	3,454	41,820	21,550	9,081	10,930	4,684	3,276	11,940
1952	3,240	11,720	7,235	3,608	2,309	2,052	20,770	58,300	16,750	3,822	2,177	1,196	9,456
1953	5,621	4,812	3,582	2,611	3,497	5,171	45,240	27,200	5,374	2,926	1,038	1,105	9,002
1954	1,408	3,356	7,536	2,630	1,971	4,345	29,920	32,550	18,020	14,770	15,520	14,700	12,260
1955	17,610	11,520	6,824	4,338	2,716	3,615	30,920	42,790	9,330	3,227	4,156	2,441	11,680
1956	1,679	3,045	1,232	1,369	1,029	884	9,572	31,870	14,970	4,747	2,576	2,414	6,298
1957	3,458	2,076	1,972	1,078	1,115	1,578	14,850	18,890	9,780	6,039	4,323	3,549	5,912
1958	5,578	12,460	15,280	7,438	3,052	2,469	34,500	30,700	9,397	10,590	19,130	9,434	13,220
1959	4,978	6,853	3,939	2,569	1,602	1,838	23,520	24,530	12,200	5,458	7,302	6,494	8,454
1960	6,576	13,540	10,140	2,695	2,441	2,335	21,970	51,530	8,245	3,558	1,302	1,554	10,700

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.66	2.71	4.64	0.86	0.77	0.70	6.20	4.37	1.78	2.21	0.95	0.64	28.49
1952	.66	2.30	1.46	.73	.44	.42	4.07	7.76	3.28	.78	.44	.23	22.57
1953	1.14	.94	.72	.53	.64	1.05	8.87	5.51	1.05	.59	.21	.22	21.47
1954	.28	.66	1.52	.57	.56	.88	5.87	6.80	3.54	3.00	3.15	2.68	29.31
1955	3.56	2.25	1.38	.68	.50	.73	6.06	6.67	1.83	.65	.84	.48	27.83
1956	.34	.60	.25	.28	.20	.18	1.87	6.46	2.93	.96	.52	.47	15.06
1957	.70	.41	.40	.22	.20	.32	2.91	3.63	1.92	1.63	.88	.70	14.12
1958	.73	2.44	3.10	1.51	.56	.50	6.76	6.23	1.84	2.14	3.87	1.85	31.53
1959	1.01	1.34	.80	.52	.29	.37	4.61	4.97	2.39	1.11	1.48	1.27	20.16
1960	1.74	2.66	2.05	.55	.46	.47	4.31	10.44	1.62	.72	.26	.30	25.58

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches		
		Discharge	Date								
1950	1271	-	-	-	-	-	-	9,469	22.57		
1951	1101	77,800	Apr. 10, 1951	1,210	11,940	2.10	28.49	10,440	24.90		
1952	1231	69,300	Apr. 30, 1952	980	9,456	1.66	22.57	6,760	20.95		
1953	1271	75,400	Apr. 1, 1953	670	9,002	1.58	21.47	8,663	21.13		
1954	1351	97,000	Apr. 24, 1954	776	12,260	2.16	29.31	14,270	34.04		
1955	1361	85,100	May 5, 1955	1,130	11,680	2.05	27.83	9,152	21.83		
1956	1431	46,300	May 16, 1956	790	6,298	1.11	15.06	6,430	15.38		
1957	1501	50,200	Apr. 24, 1957	805	5,912	1.04	14.12	7,508	16.88		
1958	1551	118,000	Apr. 26, 1958	1,590	13,220	2.32	31.53	11,510	28.41		
1959	1821	52,700	Apr. 28, 1959	1,300	8,454	1.49	20.16	9,636	23.46		
1960	1701	91,000	May 8, 1960	618	10,700	1.88	25.58	-	-		

155. Millinocket Lake in T. 7, R. 9, Maine

Location.--Lat 46°18'25", long 68°50'10", on Millinocket Stream at outlet of natural lake in T.7, R.9, Piscataquis County.

Drainage area.--74.1 sq mi.

Records available.--December 1946 to September 1960.

Gage.--Staff gage.

Remarks.--Reservoir completed in 1943 for storage of water for power. Has usable capacity of 1,007,000,000 cu ft. Records of contents not available prior to December 1946.

Cooperation.--Records furnished by Maine Public Service Co.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	212	691	1,011	972	785	350	1,029	1,046	1,009	960	996	1,007
1952	1,027	1,002	996	1,029	876	180	958	1,034	1,022	996	681	666
1953	666	722	822	876	946	1,007	1,051	1,012	1,007	887	860	835
1954	855	876	1,024	1,002	728	257	1,018	1,046	1,095	1,034	1,029	1,018
1955	1,034	1,029	1,018	914	655	185	870	996	1,007	865	855	267
1956	68	52	28	80	62	57	409	1,040	1,062	1,007	996	1,007
1957	941	584	228	85	76	113	564	1,007	985	306	161	76
1958	76	483	919	1,007	503	267	1,062	1,007	946	930	1,007	941
1959	728	865	887	770	493	161	686	1,007	1,084	833	728	554
1960	717	974	1,007	812	277	76	996	930	996	952	584	257

158. Aroostook River near Masardis, Maine

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

Drainage area.--888 sq mi.

Records available.--September 1957 to September 1960.

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

Extremes.--1957-60: Maximum discharge, 21,500 cfs Apr. 25, 1958 (gage height, 16.30 ft); maximum recorded gage height, 16.44 ft Dec. 23, 1957 (ice jam); minimum discharge, 69 cfs Sept. 16, 1957 (gage height, 2.08 ft).

Remarks.--Flow partly regulated by Millinocket Lake. Runoff adjusted for change in contents in Millinocket Lake (see p.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	224	2,082	2,823	1,163	823	699	6,583	4,665	912	876	2,191	605	1,974
1959	628	1,092	572	400	345	471	3,703	3,113	1,629	773	524	455	1,142
1960	945	2,062	2,483	628	588	448	3,911	7,181	1,097	641	373	216	1,720

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	0.29	2.81	3.87	1.58	0.72	0.79	8.66	6.03	1.12	1.13	2.88	0.73	30.59
1959	.71	1.44	.75	.46	.27	.45	4.91	4.20	2.09	.88	.63	.49	17.28
1960	1.30	2.71	3.24	.72	.46	.48	5.36	9.29	1.41	.81	.31	.11	26.20

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30										Calendar year		
		Observed					Adjusted					Observed		Adjusted
		Momentary maximum		Minimum		Mean	Mean		Per square mile	Runoff in inches		Mean	Mean	Runoff in inches
		Discharge	Date		day									
1958	1551	21,500	Apr. 25, 1958	88		1,974	2,001	2.25	30.59	1,735	1,734	26.52		
1959	1621	7,340	Apr. 27, 1959	172		1,142	1,130	1.27	17.28	1,411	1,415	21.65		
1960	1701	13,100	May 16, 1960	146		1,720	1,711	1.93	26.20	-	-	-		

160. Squapan Lake in T. 10, R. 4, Maine

Location.--Lat 46°33'25", long 68°19'30", at dam on Squapan Stream in T.10, R.4, Aroostook County, 6 miles downstream from old dam (flooded out).

Drainage area.--67.1 sq mi.

Records available.--October 1932 to September 1960.

Gage.--Staff gage. Datum of gage is 494.88 ft above mean sea level, datum of Bangor and Aroostook Railroad.

Remarks.--Reservoir completed in 1928 for storage of water for power, has usable capacity of 2,554,000,000 cu ft between gage heights 9.40 and 110.0 ft. Records of contents not available prior to September 1932.

Cooperation.--Records furnished by Maine Public Service Co.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	1,859	2,361	2,409	1,816	1,607	1,157	2,505	2,642	2,629	2,529	2,579	2,554
1952	2,554	2,592	2,481	1,921	1,420	938	2,046	2,554	2,604	2,529	2,421	2,361
1953	2,409	2,313	2,277	1,784	1,408	501	2,035	2,461	2,529	2,469	2,385	2,337
1954	2,313	2,554	2,566	2,173	1,711	1,597	2,409	2,679	2,804	2,679	2,679	2,692
1955	2,684	2,684	2,642	2,254	2,127	852	1,467	2,337	2,421	2,361	2,325	2,254
1956	2,173	2,081	1,742	1,638	928	723	1,379	2,046	2,325	2,385	2,373	2,373
1957	2,409	2,554	2,461	2,127	1,711	1,176	1,774	2,173	2,265	2,242	1,925	1,753
1958	1,507	1,806	2,385	2,529	2,361	1,881	2,457	2,804	2,592	2,666	2,716	2,529
1959	2,313	2,421	2,002	1,700	1,272	1,052	1,947	2,337	2,505	2,337	2,433	2,361
1960	2,489	2,742	2,792	2,579	2,517	1,157	2,173	2,854	2,629	2,616	2,505	2,409

165. Machias River near Ashland, Maine

Location.--Lat 46°37'40", long 68°26'05", on right bank just upstream from highway bridge, 0.8 mile upstream from mouth and $\frac{1}{2}$ miles west of Ashland, Aroostook County.

Drainage area.--330 sq mi.

Records available.--June 1951 to September 1960.

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

Average discharge.--9 years (1951-60), 579 cfs.

Extremes.--1951-60: Maximum discharge, 16,600 cfs June 29, 1954 (gage height, 11.94 ft), from rating curve extended above 7,900 cfs by logarithmic plotting; minimum, 5.4 cfs Sept. 17, 1952.

Remarks.--Flow partly regulated by Machias and Rowe Lakes (combined capacity, about 280,000,000 cu ft) used for log driving and power.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	-	-	-	-	-	-	-	-	292	621	231	175	-
1952	126	600	404	203	128	133	2,436	1,578	930	134	99.9	15.5	563
1953	81.6	82.8	184	189	247	577	3,680	1,604	203	91.7	81.0	96.8	588
1954	115	376	711	185	154	410	1,705	1,662	1,677	1,146	1,144	946	854
1955	958	764	412	223	179	269	1,869	2,216	391	152	121	68.0	639
1956	71.1	82.3	58.6	159	120	47.4	647	1,833	665	307	78.1	95.5	348
1957	140	135	126	69.1	60.5	123	1,040	1,004	363	167	178	41.5	290
1958	114	853	1,927	547	98.6	101	2,223	1,662	426	407	1,032	318	813
1959	174	431	208	116	30.3	87.0	1,600	1,213	563	223	276	215	428
1960	313	839	728	239	200	175	1,511	3,205	571	289	108	66.1	689

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	-	-
1951	1201	-	-	-	-	-	-	-	-
1952	1231	45,600	Apr. 27 or 28	6.1	563	1.71	23.23	499	20.53
1953	1271	11,800	Apr. 1, 1953	9.6	588	1.78	24.18	660	27.13
1954	1331	16,600	June 29, 1954	12	654	2.59	35.13	933	36.37
1955	1381	5,710	May 5, 1955	20	639	1.94	26.29	478	19.65
1956	1431	3,570	May 15, 1956	18	348	1.05	14.34	364	15.00
1957	1501	3,730	Apr. 24, 1957	23	290	.879	11.91	499	20.51
1958	1551	8,180	Apr. 25, 1958	30	815	2.46	35.46	658	26.25
1959	1621	3,190	Apr. 27, 1959	14	429	1.30	17.64	518	21.30
1960	1701	8,270	May 9, 1960	27	689	2.09	28.40	-	-

* Not previously published; discharge estimated on basis of weather records and records for nearby stations.

170. Aroostook River at Washburn, Maine

Location--Lat 46°46'35", long 68°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--1,652 sq mi (revised).

Records available--August 1930 to September 1960.

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--30 years (1930-60), 2,573 cfs (unadjusted).

Extremes--1930-60: Maximum discharge, 37,800 cfs Mar. 22, 1936 (gage height, 13.80 ft, present datum); maximum gage height, 15.78 ft Apr. 6, 1951 (backwater from ice); minimum daily discharge, 75 cfs Feb. 13-15, 1948.

Remarks--Flow partly regulated by Squapan and Millinocket Lakes and by Nachias and Rowe Lakes (combined capacity, about 280,000,000 cu ft). Runoff adjusted for change in contents in Squapan Lake (see p. 15), and Millinocket Lake (see p. 14).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	690	4,138	7,975	1,535	1,901	1,587	12,430	4,039	2,000	4,013	1,346	963	3,549
1952	769	3,183	2,678	1,311	1,050	1,293	9,235	9,729	5,332	544	348	144	2,962
1953	422	457	623	726	1,272	3,152	15,250	6,531	1,076	507	222	356	2,539
1954	425	2,124	3,963	1,222	1,030	1,894	9,224	7,460	5,931	5,682	5,238	5,235	4,145
1955	5,051	4,122	2,150	1,531	1,722	2,140	7,751	9,408	1,806	576	396	418	3,096
1956	265	218	175	941	708	387	4,165	8,110	2,558	938	365	503	1,612
1957	790	880	599	380	323	605	4,661	4,795	1,578	1,031	830	395	1,409
1958	511	3,556	6,505	2,535	1,378	1,479	12,150	7,468	1,644	1,505	4,448	1,220	3,719
1959	1,138	1,944	1,380	782	453	625	7,455	5,456	2,639	1,217	1,153	968	2,100
1960	1,696	3,950	4,228	1,050	960	1,030	7,991	13,070	2,348	1,125	575	575	3,207

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.34	3.05	5.66	0.91	1.09	0.88	8.93	2.86	1.34	2.77	0.96	0.65	29.44
1952	.54	2.15	1.83	.78	.52	.59	6.73	6.94	3.72	.35	.13	.08	24.56
1953	.31	.29	.45	.39	.73	1.98	10.71	4.67	.74	.31	.13	.21	20.92
1954	.30	1.51	2.81	.74	.46	1.16	6.64	5.28	4.05	4.06	3.66	3.54	34.21
1955	3.53	2.78	1.49	.94	.99	1.04	5.58	6.82	1.25	.35	.26	.11	25.14
1956	.18	.12	.03	.64	.27	.22	3.08	6.00	1.80	.66	.25	.34	13.59
1957	.54	.54	.31	.13	.09	.29	3.42	3.56	1.08	.54	.46	.20	11.16
1958	.29	2.59	4.81	1.87	.69	.85	8.57	5.23	1.09	1.07	3.14	.81	31.01
1959	.68	1.57	1.86	.44	.09	.29	5.40	3.99	1.84	.74	.80	.59	17.09
1960	1.26	2.80	2.97	.63	.47	.31	5.90	9.28	1.54	.77	.26	.14	26.35

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year			
		Observed				Adjusted			Observed	Adjusted		
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Mean	Runoff in inches
		Discharge	Date									
1950	-	-	-	-	-	-	-	18.88	2,866	2,877	23.61	-
1951	1201	23,000	Nov. 30, 1950	516	3,549	3,579	2.17	29.44	3,029	3,031	24.91	-
1952	1231	16,700	Apr. 30, 1952	85	2,962	2,945	1.78	24.56	2,535	2,523	20.89	-
1953	1271	32,600	Apr. 30, 1953	98	2,539	2,544	1.54	20.92	2,960	2,976	24.51	-
1954	1331	32,400	June 29, 1954	116	4,145	4,162	2.52	34.21	4,548	4,550	36.39	-
1955	1381	20,200	May 6, 1955	301	3,096	3,058	1.85	25.14	2,201	2,141	17.67	-
1956	1431	12,500	May 16, 1956	110	1,612	1,648	.998	13.59	1,747	1,777	14.65	-
1957	1501	13,500	Apr. 24, 1957	150	1,409	1,360	.823	11.16	2,107	2,126	17.46	-
1958	1551	35,400	Apr. 25, 1958	241	3,719	3,771	2.28	31.01	3,205	3,192	26.23	-
1959	1621	13,600	Apr. 27, 1959	340	2,100	2,082	1.26	17.09	2,554	2,583	21.21	-
1960	1701	25,000	May 16, 1960	207	3,207	3,199	1.94	26.35	-	-	-	-

180. Meduxnekeag River near Houlton, Maine

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

Drainage area.--175 sq mi.

Records available.--October 1940 to September 1960. Monthly discharge only for October 1940, published in WSP 1301.

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

Average discharge.--20 years (1940-60), 284 cfs.

Extremes.--1940-60: Maximum discharge, 6,620 cfs Apr. 23, 1958 (gage height, 9.30 ft); maximum gage height, 10.83 ft Mar. 27, 1953 (backwater from ice); minimum discharge, 3.6 cfs Sept. 19, 1946 (gage height, 2.09 ft).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	48.8	934	1,050	235	487	252	1,549	300	168	430	143	110	473
1952	107	541	409	183	164	148	1,364	461	488	33.0	8.44	6.63	324
1953	30.9	42.5	68.3	85.6	244	609	1,312	365	131	31.1	11.4	5.93	243
1954	25.3	221	565	139	96.1	363	1,481	593	488	421	502	711	467
1955	571	529	259	123	164	176	1,360	531	179	41.3	48.8	20.5	333
1956	18.1	24.2	11.7	132	76.2	87.9	929	674	197	149	62.4	54.5	201
1957	115	141	87.9	67.2	47.8	135	687	362	76.6	38.7	48.5	20.0	152
1958	27.6	432	932	330	215	304	1,676	502	109	90.5	137	64.3	401
1959	136	273	174	80.5	33.2	86.9	1,500	346	182	72.7	72.0	138	257
1960	266	751	623	251	248	136	1,394	713	159	73.1	15.4	8.64	385

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.32	5.96	6.92	1.54	2.90	1.66	9.87	1.97	1.07	2.84	0.94	0.70	36.69
1952	.70	3.45	2.70	1.21	1.01	.98	8.69	3.03	3.11	.22	.06	.01	25.20
1953	.20	.27	.45	.56	1.45	4.01	8.37	2.41	.84	.21	.07	.01	18.88
1954	.17	1.41	5.72	.92	.57	2.39	9.44	3.91	3.11	2.78	3.31	4.53	36.26
1955	3.76	3.37	1.71	.81	.98	1.16	8.67	3.49	1.14	.27	.32	.13	25.81
1956	.12	.15	.08	.87	.47	.58	5.92	4.44	1.26	.98	.41	.35	15.63
1957	.76	.90	.58	.44	.28	.88	4.38	2.39	.49	.25	.32	.13	11.80
1958	.18	2.76	6.14	2.18	1.28	2.01	10.69	3.31	.70	.60	.90	.41	31.16
1959	.90	1.74	1.15	.53	.20	.57	9.56	2.28	1.16	.48	.47	.83	19.92
1960	1.75	4.79	4.10	1.65	1.53	.90	8.89	4.69	1.01	.48	.10	.06	29.94

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	1171	-	-	-	-	-	-	359	27.88	
1951	1201	5,240	Nov. 28, 1950	20	473	2.70	36.69	311	30.34	
1952	1231	3,180	Apr. 21, 1952	4.6	324	1.85	25.20	248	19.27	
1953	1271	4,630	Mar. 31, 1953	3.7	243	1.39	18.88	300	23.26	
1954	1351	6,590	Sept. 12, 1954	3.7	467	2.67	36.26	513	39.80	
1955	1381	3,860	Apr. 16, 1955	15	353	1.90	25.81	223	17.32	
1956	1431	2,780	Apr. 16, 1956	6.9	201	1.15	15.63	225	17.52	
1957	1501	1,900	Apr. 22, 1957	6.8	152	.869	11.80	240	18.64	
1958	1551	6,620	Apr. 23, 1958	11	401	2.29	31.16	333	25.87	
1959	1621	4,200	Apr. 6 or 7, 1959	11	257	1.47	19.92	345	26.77	
1960	1701	3,580	Nov. 29, 1959	4.0	385	2.20	29.94	-	-	

185. St. Croix River at Vanceboro, Maine

(International gaging station)

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

Drainage area.--417 sq mi (revised).

Records available.--October 1928 to September 1960.

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

Average discharge.--32 years (1928-60), 700 cfs.

Extremes.--1928-60: Maximum discharge, 4,830 cfs Nov. 30, 1959 (from gage records of dam just upstream); 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.--Flow regulated by Chiputneticook Lakes (combined usable capacity, about 13,200,000,000 cu ft).

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

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	349	249	236	777	972	1,535	2,340	1,183	1,264	805	461	1,182	942
1952	731	246	344	589	1,051	1,167	724	1,085	1,746	1,111	622	578	832
1953	521	377	306	382	471	738	1,177	1,137	1,349	935	564	433	700
1954	200	224	272	1,204	943	332	1,273	1,192	1,103	1,030	1,120	871	796
1955	855	1,427	1,523	1,646	1,266	1,465	1,077	907	881	970	1,234	781	1,170
1956	439	209	293	237	392	708	271	442	905	746	1,043	497	516
1957	450	305	372	589	743	412	213	680	859	649	404	269	494
1958	219	179	208	610	853	773	941	1,407	1,343	838	543	528	702
1959	605	487	690	799	783	400	270	859	572	601	717	856	635
1960	905	1,224	2,572	1,213	1,245	1,505	1,200	1,374	1,054	1,228	508	379	1,203

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	624	-
1951	1201	3,530	Apr. 9, 1951	78	942	-	-	984	-
1952	1231	3,810	June 11, 1952	193	832	-	-	822	-
1953	1271	2,770	June 3, 1953	156	700	-	-	657	-
1954	1331	4,470	Apr. 23, 1954	87	796	-	-	1,056	-
1955	1381	2,350	Nov. 4, 1954	125	1,170	-	-	930	-
1956	1431	1,800	Aug. 6, 1956	104	516	-	-	532	-
1957	1501	1,350	May 16, 1957	120	494	-	-	450	-
1958	1551	4,350	May 6 and 7	157	702	-	-	801	-
1959	1621	2,150	May 16, 1959	159	635	-	-	881	-
1960	1701	4,830	Nov. 30, 1959	367	1,203	-	-	-	-

190. Grand Lake Stream at Grand Lake Stream, Maine

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

Drainage area.--284 sq mi.

Records available.--October 1928 to September 1960.

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

Average discharge.--32 years (1928-60), 365 cfs.

Extremes.--1928-60: Maximum discharge, 2,840 cfs June 12, 1952 (gage height, 6.35 ft); minimum daily, 5 cfs Dec. 3-6, 11, 1945.

Remarks.--Flow regulated by Grand and other lakes (combined usable capacity, about 8,250,000,000 cu ft).

ST. CROIX RIVER BASIN

19

Monthly and yearly mean discharge, in cubic feet per second, of Grand Lake Stream at
Grand Lake Stream, Maine

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	185	122	151	164	432	844	938	569	465	651	1,030	843	531
1952	458	117	280	150	179	747	218	192	588	542	1,173	598	439
1953	163	238	191	223	149	138	188	213	299	540	740	555	304
1954	312	132	147	320	276	195	717	822	463	363	497	468	393
1955	547	514	1,022	1,053	812	813	433	429	503	447	364	749	640
1956	480	316	173	145	196	456	156	149	137	569	444	392	302
1957	348	230	175	212	334	260	107	88.9	181	535	270	343	257
1958	293	133	109	145	167	181	480	619	402	510	833	681	381
1959	318	353	290	436	467	745	263	146	605	843	780	755	501
1960	525	494	1,304	830	909	1,117	465	671	565	493	669	350	701

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	252	-
1951	1201	1,890	July 25, 1951	50	531	-	-	565	-
1952	1231	2,840	June 12, 1952	37	439	-	-	416	-
1953	1271	1,920	June 26, 1953	75	304	-	-	304	-
1954	1331	2,280	May 19, 1954	108	393	-	-	519	-
1955	1381	2,030	May 19, 1955	83	640	-	-	546	-
1956	1431	1,780	July 24, 1956	65	302	-	-	284	-
1957	1501	665	July 6, 1957	78	257	-	-	258	-
1958	1551	2,250	May 9, 1958	86	381	-	-	416	-
1959	1621	1,920	June 21, 1959	108	501	-	-	616	-
1960	1701	2,320	June 14, 1960	290	701	-	-	-	-

200. St. Croix River near Baileyville, Maine

(International gaging-station)

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

Drainage area.--1,320 sq mi.

Records available.--November 1919 to September 1960.

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

Average discharge.--41 years (1919-60), 2,239 cfs.

Extremes.--1919-60: Maximum discharge, about 23,300 cfs May 1, 1923 (gage height, 13.90 ft); minimum daily, 64 cfs Oct. 13, 1957.

Remarks.--Flow regulated by Chiputneticook Lakes, Grand and other lakes (combined usable capacity, about 25,000,000,000 cu ft).

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

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	822	2,900	5,152	2,500	2,566	3,789	7,938	3,075	2,677	2,610	2,544	2,492	3,253
1952	2,153	3,023	1,958	2,843	2,963	3,396	4,765	2,443	3,927	2,043	1,783	1,432	2,720
1953	1,631	1,045	1,366	1,394	2,321	3,455	4,663	2,994	2,561	1,939	1,725	1,196	2,171
1954	1,047	1,956	3,096	2,301	2,354	2,524	7,394	3,897	2,893	2,414	2,514	3,460	2,982
1955	2,902	3,853	5,044	3,664	4,084	4,238	5,841	2,872	2,464	2,213	2,279	1,631	3,416
1956	999	810	630	1,402	1,649	2,062	3,723	3,491	2,379	1,987	1,685	1,163	1,831
1957	1,176	950	1,143	1,948	1,834	1,981	2,345	2,598	1,978	965	1,031	933	1,579
1958	545	1,321	2,691	2,830	2,527	2,219	4,972	4,207	2,208	2,362	2,096	1,755	2,476
1959	1,754	2,490	1,995	2,026	2,012	2,214	4,891	2,616	3,765	2,627	2,321	2,743	2,617
1960	3,061	5,016	7,469	2,897	3,548	3,579	6,220	4,063	2,180	2,327	1,253	878	3,542

ST. CROIX RIVER BASIN

Yearly discharge, in cubic feet per second, of St. Croix River near Baileyville, Maine									
Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	2,333	-
1951	1201	19,900	Dec. 13, 1950	385	3,253	-	-	3,105	-
1952	1231	8,650	June 13, 1952	257	2,720	-	-	2,464	-
1953	1271	16,100	Mar. 28, 1953	374	2,171	-	-	2,343	-
1954	1331	20,800	Apr. 19, 1954	779	2,982	-	-	3,460	-
1955	1381	11,000	Dec. 20, 1954	495	3,416	-	-	2,631	-
1956	1431	8,570	Apr. 18, 1956	355	1,831	-	-	1,901	-
1957	1501	5,120	May 20, 1957	395	1,579	-	-	1,688	-
1958	1551	11,000	Apr. 25, 1958	64	2,476	-	-	2,616	-
1959	1621	9,640	June 19, 1959	613	2,617	-	-	3,400	-
1960	1701	17,400	Nov. 30, 1960	498	3,542	-	-	-	-

DENNY'S RIVER BASIN

212. Dennys River at Dennysville, Maine

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

Drainage area--92.4 sq mi.

Records available--October 1955 to September 1960.

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

Average discharge--5 years (1955-60), 182 cfs.

Extremes--1955-60: Maximum discharge, 1,640 cfs Apr. 3, 1959 (gage height, 5.85 ft); minimum, 8.4 cfs Oct. 1, 1957 (gage height, 0.28 ft).

Remarks--Flow partly regulated by power development at Meddybemps Lake. Records of water temperatures for the water year 1960 are published in reports of Geological Survey.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1956	31.0	122	48.5	220	173	192	524	342	190	46.0	15.7	36.8	161
1957	70.3	95.4	164	156	79.8	207	367	96.4	56.1	28.8	28.2	11.4	113
1958	11.7	103	313	457	228	274	460	301	156	90.7	79.2	97.4	214
1959	197	242	164	158	108	180	428	172	331	185	52.4	55.5	189
1960	109	271	305	190	368	256	551	280	160	171	58.0	65.4	231

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1956	1431	1,460	Apr. 16, 1956	9.4	161	1.74	23.74	172	25.34
1957	1501	806	Apr. 7, 1957	8.6	113	1.22	16.66	122	17.88
1958	1551	1,520	Jan. 17, 1958	8.7	214	2.32	31.48	229	33.62
1959	1621	1,640	Apr. 3, 1959	30	189	2.05	27.79	196	28.80
1960	1701	1,340	Dec. 13, 1960	26	231	2.50	34.00	-	-

215. Machias River at Whitneyville, Maine

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

Drainage area.--457 sq mi.

Records available.--October 1905 to September 1921, September 1929 to September 1960. Monthly discharge only for some periods, published in WSP 1301. Records for October 1903 to September 1905, published in WSP 97, 124, 165, and 241, have been found to be unreliable and should not be used.

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.--47 years (1905-21, 1929-60), 942 cfs.

Extremes.--1905-21, 1929-60: Maximum discharge, 11,800 cfs Nov. 28, 1950 (gage height, 14.70 ft, from floodmarks), from rating curve extended above 7,000 cfs by logarithmic plotting; maximum gage height, 16.18 ft Mar. 14, 1936 (ice jam); minimum daily discharge, 3.5 cfs Oct. 12, 1939, when flow was held back by cofferdam during reconstruction of highway bridge upstream.

Remarks.--Some storage in lakes above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	118	2,077	2,972	1,412	1,291	1,337	2,625	1,735	683	681	454	406	1,331
1952	830	1,826	1,416	2,008	1,682	1,229	2,030	1,486	991	238	206	235	1,176
1953	215	401	598	758	1,339	2,070	3,208	1,034	510	308	288	363	919
1954	370	1,129	2,112	962	1,243	1,601	3,379	2,030	728	437	592	1,624	1,348
1955	1,305	1,647	2,077	1,258	1,561	1,675	2,175	1,498	473	447	204	125	1,186
1956	158	430	144	784	289	391	2,116	2,234	685	402	131	161	659
1957	371	550	625	537	306	758	1,270	1,478	390	255	171	70.9	567
1958	63.6	463	1,192	2,059	1,100	990	2,449	2,224	640	384	448	295	1,026
1959	608	826	685	506	293	660	2,663	1,028	1,507	998	301	455	875
1960	887	1,712	2,764	1,073	1,599	682	2,707	1,831	370	277	178	214	1,188

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.30	5.06	7.49	3.56	2.94	3.38	6.90	4.39	1.66	1.72	1.14	0.99	39.52
1952	2.10	4.46	3.57	5.08	3.93	3.10	4.95	3.75	2.42	.60	.52	.57	35.03
1953	.54	.98	1.51	1.91	3.05	5.22	7.83	2.61	1.25	.77	.73	.89	27.29
1954	.93	2.76	5.33	2.43	2.83	4.04	8.24	5.12	1.77	1.10	1.50	3.96	40.01
1955	3.30	4.02	5.23	3.17	3.10	4.23	5.31	3.78	1.16	1.13	.51	.31	35.25
1956	.40	1.05	.36	1.92	.68	.99	5.17	5.64	1.67	1.01	.33	.39	19.61
1957	.94	1.34	1.58	1.56	1.70	1.90	3.10	3.72	.95	.84	.45	.17	16.85
1958	.16	1.13	3.01	5.20	2.51	2.50	5.98	5.62	1.56	.97	1.13	.72	30.49
1959	1.53	2.02	1.68	1.28	.67	1.66	6.50	2.59	3.68	2.51	.78	1.11	25.99
1960	2.24	4.18	6.98	2.71	3.78	1.72	6.80	4.62	.90	.70	.45	.52	35.40

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	1,044	30.98
1951	1201	11,800	Nov. 28, 1950	59	1,331	2.91	39.52	1,239	36.80
1952	1231	5,070	Nov. 9, 1951	41	1,176	2.57	35.03	938	27.93
1953	1271	6,210	Mar. 27, 1953	36	919	2.01	27.29	1,120	33.28
1954	1331	11,800	Apr. 19, 1954	54	1,348	2.95	40.01	1,467	43.54
1955	1381	4,610	Dec. 20, 1954	26	1,186	2.60	35.25	825	24.51
1956	1431	5,080	Apr. 18, 1955	22	659	1.44	19.61	727	21.66
1957	1501	2,680	Apr. 7, 1957	41	567	1.24	16.85	582	17.27
1958	1551	4,730	Apr. 25, 1958	38	1,026	2.25	30.49	1,057	31.42
1959	1621	6,510	Apr. 4, 1959	163	875	1.91	25.99	1,150	34.16
1960	1701	6,990	Dec. 14, 1959	62	1,188	2.60	35.40	-	-

220. East Machias River near East Machias, Maine

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

Drainage area.--251 sq mi.

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

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

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

Extremes--1929-59: Maximum discharge, 3,660 cfs Dec. 15, 1950 (gage height, 9.05 ft); minimum, 8.4 cfs Nov. 8, 1947 (gage height, 0.65 ft, present datum).

Monthly and yearly mean discharge, in cubic feet per second

[illegible]

Monthly and yearly runoff, in inches

[illegible]

Yearly discharge, in cubic feet per second

[illegible]

225. Narraguagus River at Cherryfield, Maine

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

Drainage area.--232 sq mi.

Records available.--February 1948 to September 1960.

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.--12 years (1948-60), 500 cfs.

Extremes.--1948-60: Maximum discharge, 7,250 cfs Nov. 28, 1950 (gage height, 15.81 ft); minimum, 27 cfs Oct. 6, 1957 (gage height, 6.98 ft).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	61.0		1,236	767	639	709	1,307	529	344	338	249	224	615
1952	387	1,120	776	1,116	766	669	1,931	578	498	82.1	91.6	106	592
1953	71.9	162	469	567	881	1,341	1,363	583	239	115	106	204	506
1954	218	809	1,064	442	655	904	1,555	775	315	169	251	947	673
1955	612	793	934	427	756	1,012	972	422	195	71.4	88.5	45.2	526
1956	68.4	308	87.7	591	203	251	1,305	788	291	140	58.5	87.7	347
1957	245	297	441	387	238	562	713	435	135	78.0	44.0	35.1	301
1958	34.3	201	668	1,118	518	643	1,422	890	310	165	183	117	522
1959	347	624	438	447	217	502	1,493	466	660	475	130	230	502
1960	680	1,317	1,367	585	905	383	1,720	719	190	82.0	58.7	46.0	668

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.30	4.80	6.14	3.82	2.86	3.53	6.28	2.63	1.65	1.68	1.23	1.08	36.00
1952	1.92	5.39	3.65	5.54	3.56	3.32	4.47	2.87	2.40	.41	.46	.51	34.70
1953	.36	.78	2.33	2.81	3.96	6.86	6.55	2.89	1.15	.57	.53	.98	29.57
1954	1.08	3.69	5.29	2.20	2.94	4.50	7.48	3.85	1.52	.84	1.24	4.55	39.38
1955	3.04	3.82	4.65	2.12	3.40	5.03	4.68	2.10	.94	.36	.44	.22	30.80
1956	.34	1.48	.44	2.94	.94	1.24	6.27	3.92	1.40	.70	.29	.42	30.38
1957	1.22	1.43	2.19	1.92	1.07	2.79	3.42	2.16	.65	.39	.22	.17	17.63
1958	.17	.97	3.32	5.56	2.32	3.19	6.84	4.43	1.50	.82	.91	.56	30.59
1959	1.73	5.00	2.18	2.22	.97	2.49	7.18	2.32	5.17	2.36	.65	1.11	29.38
1960	3.38	6.34	6.79	2.90	4.21	1.90	8.27	3.57	.91	.41	.28	.22	39.19

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171							487	28.50
1951	1201	7,250	Nov. 28, 1950	46	615	2.65	36.00	614	35.32
1952	1231	3,440	Jan. 23, 1952	43	592	2.55	34.70	460	27.01
1953	1271	5,840	Mar. 28, 1953	46	506	2.18	29.57	622	36.36
1954	1331	6,890	Apr. 19, 1954	78	673	2.90	39.38	694	40.63
1955	1381	2,400	Dec. 19, 1954a	31	526	2.27	30.80	368	21.55
1956	1431	3,200	Apr. 18, 1956	45	347	1.50	20.38	391	22.96
1957	1501	2,030	Mar. 10, 1957	28	301	1.30	17.63	295	17.25
1958	1551	3,530	Apr. 24, 1958	26	522	2.25	30.59	564	33.04
1959	1621	6,520	Apr. 3, 1959	64	502	2.15	29.38	666	38.98
1960	1701	5,400	Nov. 26, 1959	32	668	2.88	39.19	-	-

* Not previously published; discharge estimated on basis of weather records and records for nearby stations.

a Probably.

230. West Branch Union River at Amherst, Maine

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

Drainage area--148 sq mi.

Records available--July 1909 to September 1913, July 1929 to September 1960. 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 gage at highway bridge 1 mile downstream at different datum.

Average discharge--41 years (1909-19, 1929-60), 263 cfs.

Extremes--1909-19, 1929-60: 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.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	22.3	494	979	341	376	388	1,002	338	150	213	144	99.1	378
1952	129	520	396	510	429	295	696	289	250	47.5	24.8	33.2	300
1953	27.7	45.9	117	175	364	555	951	410	114	58.4	37.1	40.9	238
1954	77.0	413	734	138	144	415	1,125	536	198	110	154	716	396
1955	375	445	581	319	457	424	908	290	116	29.6	27.7	13.6	331
1956	16.2	98.2	28.1	140	74.8	133	781	569	188	92.8	26.6	27.5	181
1957	88.0	156	225	101	61.2	265	511	324	90.7	51.7	22.4	9.47	159
1958	6.91	95.0	468	523	323	299	937	505	139	107	134	75.4	301
1959	180	319	285	179	77.2	176	988	308	428	263	77.1	169	287
1960	394	766	937	263	290	141	1,192	437	91.8	25.2	13.6	8.49	379

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.17	3.73	7.62	2.65	2.64	3.02	7.55	2.63	1.13	1.66	1.12	0.75	34.67
1952	1.01	3.92	3.09	3.98	3.13	2.28	5.24	2.25	1.89	0.37	.19	.25	27.60
1953	.22	.35	.91	1.36	2.56	4.32	7.02	3.19	.86	.46	.29	.31	21.85
1954	.80	3.11	5.72	1.07	1.01	3.23	8.48	4.17	1.50	.86	1.23	5.40	36.35
1955	2.92	3.36	4.53	2.49	3.22	3.30	6.85	2.26	.87	.73	.22	.10	30.35
1956	.13	.74	.22	1.09	.54	1.04	5.89	4.43	1.42	.72	.21	.21	16.64
1957	.69	1.17	1.75	.79	.43	2.06	3.85	2.52	.68	.40	.17	.07	14.58
1958	.05	.70	3.64	4.07	2.27	2.33	7.06	3.93	1.05	.83	1.04	.57	27.54
1959	1.41	2.41	2.22	1.40	.54	1.37	7.45	2.40	3.22	2.05	.63	1.27	26.34
1960	3.07	5.78	7.30	2.05	2.11	1.10	8.98	3.40	.69	.20	.11	.06	34.85

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	1171	-	-	-	-	-	-	285	-	26.14
1951	1201	2,090	Nov. 27, 1950	10	378	2.55	34.67	340	31.17	
1952	1231	1,420	Jan. 24, 1952	13	300	2.03	27.60	229	21.06	
1953	1271	1,990	Mar. 30, 1953	17	238	1.61	21.85	325	29.80	
1954	1331	2,560	Apr. 18, Sept. 12	24	396	2.69	36.35	411	37.73	
1955	1361	1,500	Dec. 19, 1954	12	331	2.24	30.35	225	20.63	
1956	1431	1,490	Apr. 17, 1956	11	181	1.22	16.64	208	19.16	
1957	1501	718	Apr. 7, 1957	7.7	159	1.07	14.58	168	15.36	
1958	1551	1,500	Apr. 23, 1958	5.3	301	2.03	27.54	318	29.19	
1959	1621	2,670	Apr. 3, 1959	11	287	1.94	26.34	397	36.45	
1960	1701	2,250	Nov. 29, 1959	4.3	379	2.56	34.85	-	-	

Reservoirs in West Branch Penobscot River basin

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

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

Records available.--November 1902 to September 1960.

Month-end contents, in millions of cubic feet ^{a/}

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Avg.	Sept.
1951	12,650	23,439	39,185	35,337	33,374	29,523	57,181	57,504	53,078	49,704	42,826	37,967
1952	33,135	37,705	39,031	35,588	30,605	24,757	43,144	57,205	56,213	47,000	36,600	29,266
1953	24,680	18,652	16,582	13,767	12,148	18,090	50,935	56,639	51,939	45,963	38,576	31,757
1954	28,140	30,258	38,090	34,973	31,311	29,085	52,682	57,779	58,384	57,049	53,748	52,228
1955	53,664	51,941	50,770	45,004	40,700	31,954	50,509	58,048	55,538	48,430	40,539	31,929
1956	24,328	19,115	13,607	12,402	7,580	2,252	9,391	37,728	41,779	37,804	32,944	29,487
1957	26,498	23,781	19,845	14,006	8,170	4,015	14,842	22,210	19,647	15,407	13,256	8,737
1958	4,876	10,283	24,433	26,121	22,583	17,225	43,899	57,789	54,261	51,598	50,282	43,111
1959	39,472	39,716	35,117	28,935	23,993	18,153	35,316	48,217	56,986	53,072	50,093	44,388
1960	43,591	49,708	51,021	44,637	40,543	33,637	53,592	57,191	54,668	50,449	42,983	37,564

^{a/} 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, Caucomogee, Loon, Shallow, Umbagogus, Harrington, Sourdnamunk, Rainbow, Ragged, and Millinocket Lakes, Canada Falls Reservoir, Dole and Poland Ponds.

275. West Branch Penobscot River at Millinocket, Maine

Location--Lat 45°38'50", long 68°42'15", at Millinocket mill of the Great Northern Paper Co., Millinocket, Penobscot County.

Drainage area--1,910 sq mi, approximately.

Records available--February 1901 to September 1960. Monthly discharge only for October 1937 to September 1950, published in WSP 1301.

Gage--Staff gage. Altitude of gage is 348 ft above mean sea level (from survey by Great Northern Paper Co.).

Average discharge--59 years (1901-60), 3,086 cfs (adjusted for storage).

Extremes--1901-60: Records of extremes not available.

Remarks--Daily discharge determined by computation of flow over dam and through turbines. Runoff in inches adjusted for change in contents in West Branch Penobscot storage reservoirs (see p. 25).

Cooperation--Records furnished by Great Northern Paper Co.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2,600	2,376	3,049	3,103	3,037	2,999	5,265	6,224	3,531	3,083	3,346	2,953	3,467
1952	2,911	2,850	2,804	3,174	3,313	3,459	3,524	4,841	5,114	3,311	3,206	3,036	3,458
1953	2,931	2,683	2,350	2,432	2,713	3,061	3,342	3,310	3,318	3,135	2,946	2,667	2,655
1954	2,588	2,490	2,565	2,820	2,817	2,920	3,047	8,395	5,233	3,437	5,370	7,906	4,137
1955	7,966	5,438	3,922	3,944	4,291	5,137	4,942	9,250	3,489	3,078	3,244	3,206	4,836
1956	3,004	2,755	2,097	2,175	2,422	2,713	2,102	2,285	2,581	2,743	2,892	2,843	2,551
1957	2,818	2,412	2,592	2,786	2,627	2,660	2,432	2,618	2,258	2,124	2,188	2,020	2,462
1958	2,031	2,017	2,028	2,540	2,908	3,429	3,180	6,406	3,275	2,952	3,355	3,377	3,131
1959	3,066	3,232	3,323	3,506	2,759	2,895	2,973	2,194	3,136	3,270	3,128	3,420	3,077
1960	3,277	3,347	4,726	3,711	3,738	4,137	3,222	16,679	3,653	3,121	2,785	2,432	4,165

Note--Records not previously published.

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.34	3.77	5.58	1.01	1.22	0.94	9.50	3.83	1.06	1.10	0.47	0.63	29.05
1952	.33	2.68	1.99	1.14	.75	.76	4.89	6.08	2.77	-.08	-.40	.11	21.02
1953	.73	.21	.95	.83	1.11	3.18	9.43	4.99	.88	.55	.12	.02	23.00
1954	.75	1.93	5.31	1.00	.71	1.27	7.03	6.21	3.19	1.78	2.50	4.27	33.95
1955	5.13	2.79	2.10	1.08	1.36	1.13	7.07	7.29	1.42	.26	.18	-.07	29.76
1956	.10	.44	.02	1.04	.28	.17	3.67	7.77	2.42	.76	.65	.88	18.20
1957	1.03	.80	.68	.37	.12	1.06	3.47	3.24	.74	.33	.84	.18	12.84
1958	4.22	2.57	4.42	1.91	.79	.86	7.88	7.00	1.12	1.19	1.75	.35	30.26
1959	1.03	1.94	.97	.72	.39	.43	5.61	4.23	3.80	1.09	1.21	.71	22.13
1960	1.80	3.34	5.15	.80	1.15	.94	6.38	7.86	1.56	.93	.00	.20	28.11

Note--Records not previously published. Negative figures indicate that evaporation and seepage from reservoirs exceeded inflow.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed	Adjusted	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	2,340	3,468	24.67	
1951	-	-	-	-	3,467	4,090	2.14	29.05	3,510	3,456	24.56
1952	-	-	-	-	3,458	2,948	1.54	21.02	3,406	2,519	17.91
1953	-	-	-	-	2,655	3,238	1.70	23.00	2,628	3,814	27.10
1954	-	-	-	-	4,137	4,777	2.50	33.95	4,952	5,330	37.98
1955	-	-	-	-	4,836	4,184	2.19	29.76	4,039	2,853	20.30
1956	-	-	-	-	2,551	2,554	1.34	18.20	2,550	2,827	20.15
1957	-	-	-	-	2,462	1,904	.944	12.84	2,315	2,493	17.74
1958	-	-	-	-	3,131	4,255	2.23	30.26	3,430	3,768	26.79
1959	-	-	-	-	3,077	3,116	1.63	22.13	3,223	3,727	26.48
1960	-	-	-	-	4,165	3,946	2.07	28.11	-	-	-

Note--Records not previously published.

285. Telos Lake in T.6, R.11, Maine

Location.--Lat 46°08'50", long 69°08'15", at Telos Lake Dam, in East Branch Penobscot River Basin, T.6, R.11, Piscataquis County.

Drainage area.--240 sq mi, approximately.

Records available.--August 1942 to September 1960.

Gage.--Staff gage. Altitude of gage is 927 ft (from river-profile map).

Remarks.--Chamberlain and Telos Lakes and Round Pond controlled by dams at outlets of Chamberlain and Telos Lakes, regulation at Telos Dam. Telos Dam was rebuilt during 1941 and has usable capacity of 5,040,000,000 cu ft between gage heights 2.0 and 11.0 ft.

Cooperation.--Records furnished by the Bangor Hydro-Electric Co.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	2,105	3,298	2,665	1,995	1,162	458	3,740	4,430	4,552	4,491	4,491	4,369
1952	3,770	4,248	3,474	2,895	1,723	874	1,941	4,491	4,552	4,308	3,710	2,952
1953	2,952	2,722	2,105	978	406	978	2,657	4,491	4,491	4,430	3,125	2,215
1954	2,215	2,722	3,770	2,895	1,399	718	3,125	4,491	4,615	4,491	4,552	4,491
1955	4,369	4,188	3,710	2,551	1,560	926	2,326	4,430	4,491	4,248	3,651	3,010
1956	2,665	2,551	1,668	822	201	0	1,030	4,369	4,491	4,491	4,430	4,128
1957	3,651	3,125	2,837	1,506	354	50	1,560	3,533	3,949	4,009	3,949	3,710
1958	3,533	3,830	4,248	2,780	1,506	666	2,952	4,369	4,430	4,430	3,474	1,135
1959	978	1,293	1,506	874	0	458	2,326	4,552	4,430	4,369	4,430	4,128
1960	4,308	4,430	4,009	2,326	1,083	100	2,160	4,369	4,430	3,889	2,382	2,105

290. Grand Lake in T. 6, R. 8, Maine

Location.--Lat 46°08'20", long 68°47'35", at outlet of Grand Lake, in T.6, R.8, Penobscot County.

Drainage area.--484 sq mi, approximately (including 240 sq mi drained by Chamberlain Lake through Telos Canal).

Records available.--May 1942 to September 1960.

Gage.--Staff gage. Datum of gage is at mean sea level.

Remarks.--Second and Grand Lakes controlled by dam rebuilt in 1942, usable capacity of 1,785,000,000 cu ft between elevations 643.0 and 655.0 ft.

Cooperation.--Records furnished by Bangor Hydro-Electric Co.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	834	1,479	1,153	1,767	1,204	299	1,391	1,605	1,677	1,785	1,713	1,255
1952	1,035	1,767	1,659	1,374	533	141	956	1,587	1,749	1,461	1,238	1,289
1953	804	299	925	1,102	1,003	1,605	1,085	1,715	987	1,102	1,102	376
1954	0	1,052	1,677	1,623	1,204	117	1,019	1,731	1,731	1,767	1,767	1,605
1955	1,605	1,605	1,623	1,289	-1,052	238	1,085	909	1,170	1,408	789	189
1956	81	81	105	1,497	441	0	574	1,731	1,731	1,731	1,749	1,623
1957	1,340	1,323	1,289	1,102	717	312	1,641	1,587	940	659	467	226
1958	117	1,695	1,533	1,445	1,391	81	987	1,587	1,695	1,731	1,695	1,695
1959	1,695	1,695	1,587	1,515	746	45	1,221	1,731	1,731	1,695	1,425	1,551
1960	1,767	1,641	1,515	1,102	788	165	894	1,551	1,785	1,749	864	105

PENOBSCOT RIVER BASIN

295. East Branch Penobscot River at Grindstone, Maine

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

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

Records available.--October 1902 to September 1960. 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.--58 years (1902-60), 1,897 cfs (unadjusted).

Extremes.--1902-60: Maximum discharge, 37,000 cfs Apr. 30, 1923 (gage height, 16.9 ft, site then in use, present datum); minimum daily (1914-60), 77 cfs Nov. 19, 1924.

Remarks.--Flow partly regulated by Chamberlain, Telos, Second and Grand Lakes, and Round Pond. Runoff adjusted for change in contents in Telos Lake (see p. 27), and Grand Lakes (see p. 27).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	911	3,523	6,015	1,317	2,385	1,905	7,040	2,986	1,296	1,486	593	780	2,514
1952	805	2,083	2,969	1,912	2,044	1,363	5,817	4,765	3,473	494	321	401	2,207
1953	533	659	640	989	1,489	2,786	8,520	3,182	1,243	437	561	832	1,813
1954	533	1,361	2,691	1,292	1,378	1,847	5,383	4,395	3,239	2,503	2,737	4,200	2,648
1955	3,930	3,069	2,528	1,653	1,894	2,337	6,380	5,152	1,966	357	702	532	2,542
1956	279	327	425	789	1,085	665	2,759	4,448	2,128	878	483	631	1,240
1957	1,024	1,152	820	982	978	1,125	2,732	2,517	1,007	566	585	353	1,153
1958	362	2,114	4,728	3,552	2,255	2,597	7,767	6,147	1,144	831	2,266	1,620	2,952
1959	1,124	1,685	1,098	1,119	1,081	1,018	5,095	2,745	3,510	1,241	1,701	1,060	1,826
1960	2,077	3,828	4,130	2,173	1,613	1,086	6,255	7,220	1,327	957	1,179	713	2,716

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.41	4.42	6.10	1.40	1.76	1.41	9.10	3.58	1.43	1.63	0.62	0.58	32.44
1952	.54	2.66	2.85	1.72	1.25	.99	6.93	6.41	3.72	.32	.01	.13	27.53
1953	.38	.37	.69	.68	1.18	3.47	9.43	4.35	1.00	.49	.06	.21	22.33
1954	.42	2.06	3.79	1.01	.57	1.28	6.94	5.57	3.42	2.66	2.97	4.28	34.97
1955	4.18	3.12	2.54	1.18	1.35	1.94	7.55	6.33	2.18	.38	.27	.06	31.08
1956	.12	.29	.11	1.07	.42	.46	3.53	6.61	2.26	.95	.50	.49	16.81
1957	.80	.98	.75	.45	.33	.93	3.99	3.48	.96	.52	.53	.18	13.90
1958	.27	2.96	5.20	3.20	1.67	1.94	9.38	7.44	1.26	.91	2.04	.75	37.02
1959	1.15	1.89	1.22	.92	.39	1.00	6.54	4.06	3.62	1.30	1.21	1.03	24.33
1960	2.40	3.99	4.23	1.50	1.00	.52	7.64	8.94	1.61	.80	.31	.32	33.16

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30										Calendar year		
		Observed					Adjusted					Observed	Adjusted	
		Momentary maximum		Minimum day	Mean	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Mean	Mean	Runoff in inches
		Discharge	Date											
1950	1171	-	-	-	-	-	-	-	-	-	-	-	-	-
1951	1201	19,100	Nov. 29, 1950	372	2,514	2,554	2,39	32.44	2,141	2,155	27.33			
1952	1231	11,400	Apr. 21, 1952	117	2,207	2,183	2.02	27.53	1,868	1,801	22.92			
1953	1271	18,300	Mar. 31, 1953	167	1,813	1,761	1.65	22.33	2,065	2,142	27.16			
1954	1331	17,700	Sept. 12, 1954	243	2,648	2,759	2.58	34.97	3,045	3,041	38.54			
1955	1381	11,200	Apr. 16, 1955	165	2,542	2,450	2,29	31.08	1,828	1,715	21.76			
1956	1431	7,860	May 1, 1956	154	1,240	1,321	1.23	16.81	1,404	1,478	18.82			
1957	1501	7,470	Apr. 22, 1957	269	1,153	1,095	1.02	13.90	1,508	1,580	19.80			
1958	1551	24,800	Apr. 24, 1958	212	2,952	2,917	2.73	37.02	2,673	2,588	32.85			
1959	1621	9,450	June 16, 1959	350	1,826	1,916	1.79	24.33	2,418	2,418	30.69			
1960	1701	13,800	Oct. 26, 1960	184	2,716	2,606	2.44	33.16	-	-	-			

300. Penobscot River near Mattawamkeag, Maine

Location.--Lat 45°34'00", long 68°24'10", on left bank 1,800 ft downstream from Mattaseunk Dam and powerhouse, 1 $\frac{1}{4}$ miles upstream from Mattaseunk Brook, and 4 $\frac{1}{4}$ miles upstream from Mattawamkeag, Penobscot County.

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

Records available.--June 1940 to September 1960.

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

Average discharge.--20 years (1940-60), 5,618 cfs (unadjusted).

Extremes.--1940-60: Maximum discharge, 40,200 cfs May 21, 1945 (gage height, 11.09 ft); minimum daily, 1,430 cfs Aug. 17, 1941.

Remarks.--Flow regulated by several reservoirs above station. Runoff adjusted for change in contents in reservoirs of West Branch Penobscot River above Millinocket (see p. 14), Telos (see p. 27), and Grand Lakes (see p. 27).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	3,802	7,907	11,260	5,015	6,034	5,812	14,990	10,230	5,268	5,069	4,238	3,928	6,958
1952	4,166	5,855	5,962	5,089	4,919	5,000	11,030	10,420	9,583	4,024	3,605	3,680	6,102
1953	3,694	3,480	3,118	3,650	4,722	7,469	14,830	9,028	4,662	3,548	3,558	3,381	5,421
1954	3,352	4,318	5,848	4,458	4,834	5,349	10,300	14,180	9,757	6,365	8,179	13,150	7,509
1955	12,790	9,183	7,054	5,840	6,607	7,481	13,310	15,440	5,918	3,745	4,293	3,876	7,971
1956	3,279	3,235	2,582	3,558	3,643	3,565	6,084	7,399	4,984	3,717	3,509	3,542	4,090
1957	4,029	3,924	3,712	3,851	3,550	4,195	6,071	5,287	3,231	2,797	2,884	2,422	3,831
1958	2,579	4,944	7,906	5,889	4,497	5,414	13,160	12,920	4,806	4,023	5,974	5,335	6,463
1959	4,849	5,620	4,564	4,768	4,016	4,064	10,160	6,014	8,142	5,256	4,789	4,863	5,588
1960	5,910	8,459	9,536	6,318	6,113	5,734	11,860	20,490	5,401	4,738	4,557	3,292	7,714

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.42	4.31	5.84	1.23	1.46	1.31	9.22	3.72	1.23	1.34	0.57	0.62	31.27
1952	.72	2.72	2.13	1.21	.69	.82	6.35	5.87	3.14	.13	-.20	.20	23.78
1953	.62	.30	.62	.78	1.19	3.53	9.45	4.18	.87	.47	.11	.04	22.36
1954	.65	1.93	3.27	1.03	.80	1.35	6.97	5.87	3.38	2.03	2.43	4.21	33.92
1955	4.62	2.84	2.25	1.09	1.36	1.28	7.20	6.61	1.71	.38	.31	.03	29.68
1956	.09	.40	.07	1.15	.34	.47	3.19	6.85	2.22	.78	.58	.65	16.83
1957	.92	.90	.74	.39	.16	.83	3.83	3.06	.73	.39	.69	.17	12.81
1958	.35	2.62	4.62	2.06	.78	.91	8.32	6.57	1.18	1.06	1.78	.56	30.81
1959	1.20	1.96	1.01	.77	.41	.62	6.06	4.13	5.87	1.31	1.26	.87	23.47
1960	2.01	3.65	3.42	1.10	1.26	.89	6.96	7.98	1.53	1.03	.31	.27	30.41

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year			
		Observed				Adjusted			Observed		Adjusted	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date									
1950	1171											
1951	1201	32,800	Nov. 28, 1950	2,140	6,958	7,625	2.30	31.27	5,250	6,401	26.23	
1952	1231	20,000	June 8, 1952	2,720	6,102	5,783	1.75	23.78	6,371	6,406	26.27	
1953	1271	35,500	Mar. 31, 1953	2,300	5,421	5,448	1.65	22.36	5,693	6,452	26.47	
1954	1331	34,600	Sept.13, 1954	2,580	7,509	8,269	2.50	33.92	8,812	9,210	37.78	
1955	1381	27,500	May 10, 1955	1,700	7,971	7,235	2.19	29.68	6,295	5,004	20.53	
1956	1431	12,800	May 1, 1956	1,810	4,090	4,093	1.24	16.83	4,306	4,578	18.83	
1957	1501	11,600	Apr. 22, 1957	1,800	3,831	3,115	.941	12.81	4,148	4,346	17.84	
1958	1551	36,100	Apr. 24, 1958	2,060	6,463	7,518	2.27	30.81	6,427	6,581	27.39	
1959	1621	18,600	June 19, 1959	3,360	5,588	5,719	1.73	23.47	6,333	6,914	28.38	
1960	1701	36,500	May 15, 1960	1,920	7,714	7,388	2.23	30.41	-	-	-	

305. Mattawamkeag River near Mattawamkeag, Maine

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

Drainage area.--1,418 sq mi (revised).

Records available.--October 1934 to September 1960.

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

Average discharge.--26 years (1934-60), 2,403 cfs.

Extremes.--1934-60: Maximum discharge, 29,200 cfs Mar. 23, 1936 (gage height, 15.34 ft); minimum, 38 cfs Sept. 19, 1952.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	319	4,265	9,871	2,105	2,585	2,334	11,940	3,148	1,472	2,584	929	758	3,522
1952	842	4,424	2,932	2,570	1,830	1,528	9,607	4,279	3,907	394	102	58.8	2,691
1953	207	339	564	817	2,039	3,560	11,800	3,940	1,096	309	124	95.6	2,060
1954	245	2,049	5,410	825	860	2,449	10,790	5,988	2,958	1,708	2,335	5,106	3,395
1955	4,202	4,120	3,726	1,756	2,271	2,754	10,940	5,701	2,330	731	722	310	3,293
1956	157	219	105	1,127	578	865	7,032	6,744	1,903	678	405	366	1,663
1957	772	1,656	1,473	579	414	1,345	5,097	3,424	715	409	583	236	1,394
1958	273	3,708	6,532	3,016	1,704	1,975	11,610	5,676	828	713	1,632	788	3,206
1959	1,414	2,827	1,310	828	496	842	9,467	3,889	3,679	1,633	945	2,081	2,427
1960	2,831	5,983	6,733	2,189	1,598	824	9,580	6,856	1,260	893	210	97.3	3,253

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.28	3.36	8.03	1.71	1.90	1.90	9.40	2.56	1.16	2.10	0.76	0.60	33.74
1952	.68	3.46	2.38	2.09	1.39	1.24	7.56	3.48	3.07	.52	.08	.05	25.82
1953	.17	.27	.46	.66	1.50	2.89	9.28	3.20	.86	.25	.10	.08	19.72
1954	.20	1.61	4.40	.67	.63	1.99	8.49	4.87	2.33	1.39	1.30	4.02	32.50
1955	3.42	3.24	3.03	1.43	1.67	2.24	8.61	4.64	1.83	.59	.59	.24	31.53
1956	.13	.17	.08	.92	.44	.54	5.53	5.48	1.50	.55	.33	.29	15.96
1957	.63	1.30	1.20	.47	.30	1.09	4.00	2.78	.56	.33	.47	.19	13.32
1958	.22	2.91	5.32	2.46	1.25	1.60	9.14	4.61	.65	.58	1.53	.62	30.69
1959	1.15	2.22	1.06	.67	.36	.52	7.45	3.16	2.89	1.33	.77	1.64	23.22
1960	2.31	4.71	5.48	1.78	1.22	.67	7.54	5.57	.99	.73	.17	.08	31.25

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	-	-
1951	1201	18,600	Dec. 15, 1950	176	3,522	2.48	33.74	2,963	28.38
1952	1231	15,500	Apr. 24, 1952	45	2,691	1.90	25.82	2,102	20.18
1953	1271	20,900	Apr. 3, 1953	48	2,060	1.45	19.72	2,616	25.03
1954	1331	23,500	Apr. 24, 1954	57	3,395	2.39	32.50	3,758	35.98
1955	1381	18,900	Apr. 21, 1955	191	3,293	2.32	31.53	2,321	22.22
1956	1431	13,600	May 2, 1956	50	1,663	1.17	15.96	1,949	18.71
1957	1501	10,200	Apr. 25, 1957	128	1,394	.983	13.32	1,950	18.64
1958	1551	25,400	Apr. 26, 1958	129	3,206	2.26	30.69	2,787	26.67
1959	1621	14,400	Apr. 11, 1959	195	2,427	1.71	23.22	3,268	31.29
1960	1701	17,300	Dec. 1, 1959	48	3,253	2.29	31.25	-	-

315. Piscataquis River near Dover-Foxcroft, Maine

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

Drainage area.--297 sq mi.

Records available.--August 1902 to September 1960.

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.--58 years (1902-60), 586 cfs.

Extremes.--1902-60: 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.--Low flow regulated by operation of powerplant above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	136	1,781	1,589	279	693	561	3,210	562	176	181	70.6	132	776
1952	256	1,388	855	311	306	346	2,580	1,139	639	55.9	26.6	25.7	655
1953	61.8	69.8	439	460	599	2,024	2,505	664	270	70.4	58.4	71.4	623
1954	275	1,106	1,147	173	327	608	2,697	1,580	955	600	962	1,461	990
1955	1,182	1,166	1,041	293	446	434	2,764	982	473	68.7	91.6	32.2	746
1956	44.0	464	101	492	161	132	1,694	1,653	626	184	69.0	118	477
1957	200	245	222	150	121	431	1,068	513	168	114	151	91.0	290
1958	90.9	823	1,690	751	336	369	3,357	1,781	214	248	199	119	832
1959	524	638	258	254	203	244	2,432	524	964	155	58.9	84.7	525
1960	589	1,512	887	289	495	247	2,582	1,350	492	423	160	194	765

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.53	6.69	6.17	1.06	2.43	2.18	12.06	2.18	0.66	0.70	0.27	0.50	35.45
1952	.99	5.14	3.32	1.21	1.11	1.34	9.70	4.43	2.40	.22	.10	.10	30.06
1953	.24	.26	1.71	1.79	2.10	7.65	9.40	3.36	1.01	.27	.23	.27	28.49
1954	1.07	4.15	4.45	.67	1.14	2.38	10.13	6.13	3.59	2.33	3.74	5.49	45.25
1955	4.59	4.38	4.05	1.14	1.56	1.68	10.39	3.82	1.77	.27	.36	.12	34.13
1956	.17	1.74	.39	1.91	.58	.51	6.36	6.42	2.35	.71	.27	.44	21.85
1957	.78	.92	.86	.58	.42	1.67	4.02	1.99	.63	.44	.59	.34	13.24
1958	3.35	3.09	6.56	2.92	1.18	1.43	12.61	6.92	.80	.96	.77	.46	38.04
1959	2.03	2.40	1.00	.99	.71	.95	9.14	2.03	3.63	.60	.23	.31	24.03
1960	2.28	5.68	3.45	1.12	1.60	.96	9.70	5.25	1.85	1.64	.62	.72	35.08

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	733	33.49
1951	1201	17,400	Nov. 27, 1950	42	776	2.61	35.45	639	31.51
1952	1231	9,310	Nov. 4, 1952	21	655	2.21	30.06	497	22.82
1953	1271	15,200	Mar. 28, 1953	22	623	2.10	28.49	737	35.95
1954	1331	13,200	Sept. 12, 1954	31	990	3.33	45.25	1,035	48.70
1955	1381	9,560	Apr. 16, 1955	14	746	2.51	34.13	512	23.41
1956	1431	5,150	Apr. 30, 1956	23	477	1.61	21.85	493	22.11
1957	1501	2,990	Apr. 22, 1957	40	290	.976	13.24	453	20.68
1958	1551	13,300	Apr. 23, 1958	36	832	2.80	38.04	732	33.47
1959	1621	5,250	June 19, 1959	23	525	1.77	24.03	636	30.01
1960	1701	7,190	Oct. 25, 1959	21	765	2.58	35.08	-	-

PENOBSCOT RIVER BASIN

320. Wilson Pond near Greenville, Maine

Location.--Lat 45°27'25", long 69°31'50", 3 miles east of Greenville, Piscataquis County.

Drainage area.--36 sq mi.

Records available.--January 1932 to September 1960.

Remarks.--Reservoir used for storage of water for hydro-electric power development, has usable capacity of 390,000,000 cu ft between gage heights 27.5 and 33.5 ft.

Cooperation.--Gage-height record furnished by Central Maine Power Co.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	0	316	369	251	186	76	404	390	369	390	369	390
1952	397	390	383	369	199	134	323	417	390	343	309	277
1953	283	283	363	336	349	390	425	390	356	323	290	290
1954	343	411	418	215	56	0	303	380	386	383	369	383
1955	390	356	349	199	166	12	363	390	356	349	383	277
1956	225	277	218	186	108	18	18	390	376	356	356	390
1957	390	390	283	244	121	63	270	383	376	390	316	383
1958	383	396	404	390	309	121	390	383	383	383	349	257
1959	212	251	173	115	37	0	251	383	411	363	363	316
1960	383	397	369	309	218	69	329	363	376	376	343	231

325. Sebec Lake at Sebec, Maine

Location.--Lat 45°16'10", long 69°06'45", at Sebec, Piscataquis County.

Drainage area.--327 sq mi.

Records available.--January 1924 to September 1960.

Gage.--Staff gage. Datum of gage is at mean sea level, datum of 1929.

Remarks.--Reservoir used for storage of water for power and log driving, has usable capacity of 2,511,000,000 cu ft between elevations 316.1 and 325.1 ft.

Cooperation.--Elevation record furnished by Bangor Hydro-Electric Co.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	1,365	3,080	2,086	2,365	2,042	1,984	2,335	2,365	2,130	2,174	1,866	1,556
1952	1,584	2,218	1,866	1,556	1,556	767	2,394	2,482	2,394	1,837	1,611	1,502
1953	1,338	1,175	2,160	2,277	2,306	3,095	2,511	2,189	2,306	2,130	2,160	1,866
1954	1,584	2,452	1,665	1,638	1,502	1,665	1,749	2,277	2,511	2,394	1,837	1,896
1955	1,693	1,638	1,420	1,175	1,311	849	2,130	2,482	2,072	1,954	1,954	1,012
1956	685	985	604	1,474	1,257	985	1,638	2,482	2,277	2,013	2,101	2,101
1957	1,665	1,584	1,447	957	154	1,175	2,452	2,335	2,130	2,013	1,954	1,148
1958	441	2,130	2,452	2,130	1,638	1,257	2,570	2,306	2,013	2,247	2,013	1,257
1959	1,529	2,042	1,420	1,502	577	495	2,101	1,925	2,423	1,693	1,257	1,012
1960	1,529	2,130	1,611	1,175	876	154	2,013	1,584	1,257	1,638	1,693	1,984

330. 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 1960.

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.--36 years (1924-60), 610 cfs (unadjusted).

Extremes.--1924-60: 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.--Flow partly regulated by Sebec Lake, Wilson Pond and other reservoirs above station. Runoff adjusted for change in contents in Sebec Lake (see p. 32), and Wilson Pond (see p. 32).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	115	922	2,187	372	1,091	897	2,658	732	382	307	206	320	845
1952	303	1,305	824	585	548	619	1,876	916	803	246	73.9	164	686
1953	144	133	195	524	670	1,549	2,400	951	299	149	76.2	154	602
1954	108	921	1,367	341	328	754	2,246	1,349	608	694	983	1,304	918
1955	1,255	1,212	969	660	458	689	2,058	947	703	121	179	443	806
1956	200	309	218	333	367	290	1,006	1,259	833	209	189	222	452
1957	395	360	375	379	291	264	403	529	269	191	300	415	348
1958	242	352	1,429	815	605	626	2,313	1,469	313	234	488	490	782
1959	326	428	573	330	465	284	1,733	685	738	512	263	186	542
1960	305	1,257	1,375	565	618	423	1,936	1,549	402	292	107	124	745

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.73	5.82	6.47	1.52	2.97	2.94	9.96	2.61	0.97	1.16	0.29	0.71	38.15
1952	1.11	5.28	2.43	1.64	1.58	1.06	8.79	3.47	2.59	.07	-.08	.37	28.31
1953	.30	.24	2.09	1.97	2.19	6.58	7.46	2.88	1.13	.25	.27	.14	25.48
1954	.08	4.37	3.79	.90	.66	2.60	8.17	5.58	2.39	2.28	2.71	4.54	38.25
1955	4.16	4.02	3.19	1.81	1.53	1.61	9.10	3.84	1.82	.26	.68	.13	32.15
1956	.20	1.52	.19	2.28	.82	.55	4.30	6.04	2.58	.36	.78	.80	20.40
1957	.82	1.15	1.00	.64	-.29	2.20	3.32	1.86	.64	.54	.86	.44	13.18
1958	-.08	3.45	5.48	2.43	1.18	1.46	9.97	4.82	.68	1.13	1.37	.56	32.45
1959	1.45	2.19	1.10	1.20	.16	.85	8.36	2.36	3.21	.78	.35	.26	22.27
1960	1.84	5.10	4.13	1.34	1.52	.35	9.39	4.95	.96	1.53	.41	.66	32.18

Note.--Negative figures indicate that evaporation and seepage from reservoirs exceeded in flow.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed	Adjusted	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	1171	-	-	-	-	-	-	-	779	785	32.54
1951	1201	6,210	Nov. 29, 1950	10	845	871	2.66	36.15	776	770	31.95
1952	1231	3,710	Nov. 9, 1951	69	686	681	2.08	28.31	523	532	22.12
1953	1271	6,740	Mar. 31, 1953	46	602	614	1.88	25.48	763	749	31.09
1954	1331	5,240	Apr. 24, 1954	89	918	922	2.82	38.25	1,007	997	41.38
1955	1381	4,170	Apr. 20, 1955	89	806	775	2.37	32.15	577	547	22.69
1956	1431	2,920	May 1, 1956	92	452	490	1.50	20.40	486	515	21.44
1957	1501	1,350	Apr. 26, 1957	94	348	318	.772	13.18	424	460	19.06
1958	1551	5,680	Apr. 24, 1958	118	782	781	2.39	32.45	722	682	28.34
1959	1621	3,300	Apr. 12, 1959	142	542	536	1.64	22.27	676	688	28.60
1960	1701	3,280	Nov. 30, 1959	32	745	773	2.36	32.18	-	-	-

335. Pleasant River near Milo, Maine

Location.--Lat 45°17'05", long 69°00'25", on left bank 2 miles northeast of Milo, Piscataquis County, and 8½ miles upstream from mouth.

Drainage area.--322 sq mi.

Records available.--June 1920 to September 1960.

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.--40 years (1920-60), 696 cfs.

Extremes.--1920-60: Maximum discharge, 34,400 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.--Flow partly regulated by power development at Brownville and by small storage dams above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	221	2,103	1,879	371	836	607	3,365	973	404	483	227	307	976
1952	369	1,372	1,013	522	483	375	2,368	1,470	1,000	121	55.3	78.6	766
1953	231	162	404	462	657	1,690	2,753	1,094	320	143	82.7	94.5	690
1954	261	1,512	1,285	278	369	684	2,971	1,677	826	730	859	1,439	1,059
1955	1,363	1,324	1,190	374	622	550	2,577	1,571	636	185	493	160	922
1956	197	555	152	519	264	221	1,363	1,968	825	297	171	233	563
1957	346	420	371	225	206	465	1,145	613	236	242	312	190	398
1958	233	1,303	1,762	908	372	447	3,300	2,012	391	424	579	319	1,006
1959	506	660	237	278	215	375	2,446	828	1,593	455	262	303	661
1960	907	1,743	1,161	397	488	303	2,498	1,739	722	372	179	184	889

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.79	7.29	6.73	1.33	2.71	2.18	11.67	3.48	1.40	1.73	0.81	1.06	41.18
1952	1.33	4.75	3.63	1.87	1.62	1.34	8.20	5.27	3.47	.43	.20	.27	32.36
1953	.63	.56	1.44	1.65	2.12	6.77	9.54	3.92	1.11	.51	.30	.33	29.08
1954	1.01	4.54	4.60	.99	1.20	2.44	10.30	6.01	2.67	2.62	3.08	4.99	44.65
1955	4.68	4.59	4.27	1.34	2.01	1.97	8.93	5.63	2.21	.66	1.76	.62	38.87
1956	.71	1.92	.57	1.86	.88	.80	4.72	7.04	2.86	1.06	.61	.81	23.84
1957	1.23	1.45	1.33	.81	.67	1.66	5.97	2.19	.82	.87	1.12	.66	16.78
1958	.63	4.52	6.31	3.25	1.21	1.60	11.38	7.21	1.35	1.52	2.08	1.11	42.37
1959	1.81	2.29	.85	.99	.67	1.34	8.48	2.96	4.83	1.63	.94	1.05	27.64
1960	3.25	6.04	4.16	1.42	1.64	1.08	8.66	6.23	2.50	1.34	.64	.64	37.60

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches		Mean	Runoff in inches	
		Discharge	Date								
1950	1171	-	-	-	-	-	-	-	882	37.18	
1951	1201	15,600	Nov. 27, 1950	85	976	3.03	41.18		855	36.08	
1952	1231	5,360	Nov. 4, 1951	43	766	2.58	32.58		603	25.50	
1953	1271	13,800	Mar. 28, 1953	52	690	2.14	29.08		863	36.40	
1954	1331	11,900	Nov. 26, 1953	31	1,059	3.29	44.65		1,143	48.24	
1955	1381	7,540	Apr. 16, 1955	76	922	2.66	38.87		671	28.33	
1956	1431	5,030	Apr. 30, 1956	90	563	1.75	23.84		583	24.65	
1957	1501	3,120	Apr. 22, 1957	98	398	1.24	16.78		579	24.43	
1958	1551	14,100	Apr. 23, 1958	98	1,008	3.12	42.37		847	35.66	
1959	1621	6,810	June 19, 1959	84	661	2.05	27.64		862	36.34	
1960	1701	8,180	Oct. 26, 1959	67	889	2.76	37.60		-	-	

340. Piscataquis River at Medford, Maine

Location.--Lat 45°15'40", long 68°52'05", on left bank $1\frac{1}{2}$ miles southwest of Medford, Piscataquis County, and $3\frac{1}{2}$ miles downstream from Pleasant River.

Drainage area.--1,161 sq mi.

Records available.--June 1924 to September 1960.

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 $1\frac{1}{2}$ miles downstream at different datum.

Average discharge.--36 years (1924-60), 2,282 cfs.

Extremes.--1924-60: Maximum discharge, 50,200 cfs Mar. 20, 1936 (gage height, 15.07 ft); from rating curve extended above 20,000 cfs by logarithmic plotting; minimum, 99 cfs Oct. 28, 1947 (gage height, 1.28 ft).
Maximum stage known 20.8 ft May 1, 1923, at former site $1\frac{1}{2}$ miles downstream.

Remarks.--Flow partly regulated by Sebec Lake and other small reservoirs and powerplants above station. Runoff adjusted for change in contents in Sebec Lake and since December 1931 in Wilson Pond.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	594	5,435	6,597	1,259	2,594	2,321	10,950	2,825	1,248	1,293	625	844	3,036
1952	1,083	4,839	3,249	1,566	1,545	1,606	8,453	4,353	3,131	499	181	302	2,552
1953	600	495	1,363	1,674	2,436	6,788	9,459	3,789	1,168	475	254	410	2,405
1954	1,006	3,702	4,578	922	1,246	2,433	9,516	6,089	3,400	2,567	3,686	5,422	3,715
1955	4,863	4,624	3,904	1,547	1,321	2,008	9,149	4,131	2,185	486	883	722	3,032
1956	483	1,566	559	1,715	906	839	4,902	5,473	2,539	881	506	657	1,748
1957	1,151	1,294	1,162	894	709	1,665	3,203	1,981	770	608	863	722	1,254
1958	601	2,681	5,741	2,936	1,529	1,767	11,310	6,084	1,095	1,045	1,436	1,043	3,108
1959	1,632	2,080	1,281	1,019	1,032	1,071	8,106	2,200	3,352	1,197	615	745	2,017
1960	2,096	5,064	3,997	1,540	1,793	1,118	8,769	5,217	1,743	1,237	542	586	2,601

Monthly and annual runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1924	-	-	-	-	-	-	-	-	-	0.60	0.30	0.63	-
1925	0.30	0.77	1.01	0.40	1.38	4.06	5.28	2.34	1.29	1.87	.54	.67	19.91
1926	3.45	5.69	3.53	1.23	.92	.84	3.73	7.21	2.11	.51	.46	.55	30.23
1927	1.15	1.42	1.48	.94	1.23	.94	3.96	4.15	2.15	.67	.90	.74	23.55
1928	4.58	5.06	4.15	2.04	1.25	1.13	6.66	8.20	2.64	1.30	1.14	1.23	39.41
1929	1.87	1.82	1.73	2.54	.38	1.43	8.46	7.45	1.94	.71	.45	.23	29.51
1930	.38	.66	.33	.93	.91	3.44	7.83	4.12	2.06	1.24	.58	.35	22.84
1931	.50	1.24	.77	.52	.39	1.44	6.34	2.82	4.34	1.28	.86	.83	21.36
1932	2.06	1.72	1.60	1.52	1.01	.72	9.76	2.95	.77	.34	.92	4.41	27.78
1933	1.82	4.07	1.22	.78	.61	.72	8.41	4.68	1.61	.52	.40	.44	25.28
1934	1.70	1.29	.97	.69	.68	1.23	11.14	2.99	1.80	.85	.51	.72	24.37
1935	1.02	1.72	1.65	.88	.62	.96	8.01	4.70	2.52	1.33	.37	.19	23.97
1936	.23	.88	1.34	1.67	.83	15.33	5.51	4.25	1.37	.67	.27	.37	32.72
1937	1.65	1.68	2.63	1.87	1.35	1.66	6.60	7.15	1.93	.74	.28	.18	27.72
1938	2.18	2.73	2.18	1.57	1.23	1.83	6.56	4.89	1.60	1.80	.80	1.58	28.95
1939	1.42	1.24	4.28	.94	.66	.70	4.69	6.82	1.06	.55	.34	.61	23.31
1940	.28	1.87	2.21	.45	.22	.55	8.66	7.74	1.60	.94	.51	.82	25.65
1941	.52	3.15	1.03	1.15	.93	.65	5.02	1.40	.58	.64	.57	.61	16.25
1942	.69	1.41	1.08	1.66	.66	2.57	7.22	5.07	2.51	.69	.33	.32	24.21
1943	.65	1.52	1.04	.62	.75	1.27	4.85	7.18	2.10	1.09	.82	.27	22.76
1944	3.68	5.38	1.08	.42	.39	.80	4.53	4.56	1.16	.33	.10	.66	23.09
1945	1.91	2.21	2.14	2.06	.63	3.48	8.09	6.13	1.29	1.02	.28	.69	29.95
1946	2.84	2.19	1.57	.79	.73	4.25	5.62	4.44	.87	.38	.40	.30	24.38
1947	2.52	2.24	1.53	1.26	2.58	2.38	5.82	8.04	3.35	1.46	.43	.30	31.77
1948	.02	.65	.41	.28	.22	1.03	5.89	7.31	1.14	.58	.40	.07	18.00
1949	.41	3.10	1.75	2.68	1.21	1.51	6.12	1.98	.83	.39	.17	.31	20.46
1950	.30	1.65	1.60	1.73	.82	1.74	8.14	2.76	2.19	1.15	.55	.50	23.13
1951	.68	5.98	6.20	1.31	2.19	2.24	10.78	2.81	1.10	1.30	.50	.70	35.79
1952	1.09	4.89	3.09	1.43	1.37	1.28	8.79	4.37	2.97	.27	.06	.24	29.85
1953	.94	.42	1.75	1.70	2.20	7.04	8.88	3.63	1.17	.39	.25	.29	28.26
1954	.81	3.90	4.25	.83	1.01	2.46	9.28	6.27	3.36	2.50	3.45	5.24	43.46
1955	4.76	4.41	3.79	1.40	1.76	1.76	9.39	4.24	1.93	.44	.89	.31	35.08
1956	.34	1.64	.37	2.02	.73	.70	4.95	5.89	2.35	.77	.53	.64	20.93
1957	.98	1.22	1.06	.69	.29	2.01	3.63	1.97	.66	.57	.81	.42	14.31
1958	.33	3.21	5.82	2.79	1.16	1.54	11.49	5.94	.94	1.12	1.33	.69	36.36
1959	1.71	2.19	1.01	1.02	.55	1.02	8.48	2.17	3.41	.90	.45	.61	23.52
1960	2.29	5.10	3.77	1.35	1.52	.79	9.22	5.04	1.56	1.37	.55	.63	33.19

Note.--Adjusted runoff not previously published.

Yearly discharge, in cubic feet per second, of Piscataquis River at Medford, Maine

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed	Adjusted	Runoff
		Momentary maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date	day							
1924	581	-	-	-	-	-	-	-	-	-	-
1925	601,1231	-	-	-	1,690	1,703	1.47	19.91	2,550	2,605	30.50
1926	621,1231	-	-	-	2,600	2,583	2.22	30.23	2,190	2,191	25.61
1927	641,1231	-	-	-	1,990	2,012	1.73	23.55	2,510	2,502	29.29
1928	661,1231	-	-	-	3,340	3,365	2.90	39.41	2,640	2,648	31.04
1929	681,1231	-	-	-	2,580	2,524	2.17	29.51	2,230	2,176	25.46
1930	696	-	-	-	1,950	1,958	1.69	22.84	2,000	2,050	23.98
1931	711	-	-	-	1,790	1,828	1.57	21.36	2,070	2,075	24.23
1932	726	-	-	-	2,350	2,372	2.04	27.78	2,532	2,524	29.51
1933	741	-	-	-	2,210	2,163	1.86	25.28	1,900	1,893	22.13
1934	756	-	-	-	2,067	2,083	1.79	24.37	2,134	2,121	24.80
1935	781	-	-	-	2,073	2,050	1.77	23.97	1,883	1,884	22.03
1936	801,1231	-	-	-	2,787	2,791	2.40	32.72	3,085	3,089	36.23
1937	821	-	-	-	2,366	2,370	2.04	27.72	2,454	2,467	28.85
1938	851	-	-	-	2,448	2,474	2.13	28.95	2,461	2,462	28.80
1939	871	-	-	-	1,991	1,994	1.72	23.31	1,773	1,773	20.73
1940	891	-	-	-	2,207	2,188	1.88	25.65	2,227	2,216	25.99
1941	921	-	-	-	1,450	1,388	1.20	16.25	1,329	1,261	14.73
1942	951	-	-	-	2,029	2,073	1.79	24.21	2,061	2,125	24.84
1943	971	-	-	-	1,957	1,945	1.68	22.76	2,487	2,487	29.09
1944	1001	-	-	-	1,980	1,967	1.69	23.09	1,627	1,637	19.21
1945	1031	-	-	-	2,530	2,563	2.21	29.95	2,595	2,590	30.29
1946	1051	-	-	-	2,079	2,085	1.80	24.38	2,065	2,061	24.07
1947	1081	-	-	-	2,727	2,719	2.34	31.77	2,297	2,273	26.56
1948	1111	-	-	-	1,545	1,535	1.32	18.00	1,858	1,892	22.18
1949	1141	-	-	-	1,759	1,750	1.51	20.46	1,614	1,604	18.75
1950	1171	-	-	-	1,982	1,978	1.70	23.13	2,769	2,774	32.44
1951	1201	35,500	Nov. 28, 1950	337	3,036	3,062	2.64	35.79	2,744	2,738	32.00
1952	1231	16,300	Nov. 4, 1951	130	2,552	2,547	2.19	29.65	1,995	2,004	23.49
1953	1271	41,900	Mar. 28, 1953	145	2,405	2,417	2.08	28.26	2,977	2,963	34.61
1954	1331	27,000	Apr. 19, 1954	366	3,715	3,719	3.20	43.46	4,061	4,051	47.36
1955	1381	22,300	Apr. 16, 1955	236	3,032	3,001	2.58	35.08	2,123	2,093	24.47
1956	1431	13,500	Apr. 30, 1956	330	1,748	1,786	1.54	29.03	1,835	1,864	21.84
1957	1501	6,810	Apr. 22, 1957	368	1,254	1,224	1.05	14.31	1,710	1,746	20.41
1958	1551	36,300	Apr. 24, 1958	346	3,108	3,107	2.68	36.36	2,766	2,726	31.91
1959	1621	15,000	Apr. 7, 1959	298	2,017	2,011	1.73	23.52	2,534	2,546	29.77
1960	1701	118,600	Nov. 29, 1959	219	2,801	2,829	2.44	33.19	-	-	-

a About.

Note.--Adjusted runoff not previously published. In addition to water-supply papers listed above, observed data for 1924-50 published in WSP 1301.

345. Penobscot River at West Enfield, Maine

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

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

Records available.--November 1901 to September 1960.

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.--58 years (1902-60), 11,580 cfs (unadjusted).

Extremes.--1901-60: 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.--Flow regulated by several reservoirs above station. Runoff adjusted for change in contents in West Branch of the Penobscot River reservoirs (see p. 25), Telos Lake (see p. 27), Grand Lake (see p. 27), Wilson Pond (see p. 32), and Sebec Lake (see p. 32).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	5,108	20,230	32,500	9,758	12,800	11,680	42,860	17,460	8,958	10,400	6,625	6,554	15,390
1952	6,835	17,280	15,730	10,760	10,060	9,809	32,660	20,320	19,050	5,843	4,418	4,327	12,880
1953	4,894	4,886	6,143	6,530	10,900	19,810	40,550	19,400	7,483	4,992	4,551	4,469	11,190
1954	5,193	11,600	18,380	6,940	7,440	11,550	36,050	27,810	16,370	11,760	15,840	27,130	16,340
1955	23,760	20,610	16,340	10,620	11,680	13,150	40,410	28,130	12,310	5,683	6,328	5,275	16,190
1956	4,647	5,960	3,488	7,766	5,782	5,617	22,250	22,420	10,480	5,967	4,966	5,097	8,695
1957	6,741	7,740	7,940	6,245	5,465	7,865	16,080	11,880	5,565	4,548	5,425	4,254	7,488
1958	3,994	12,160	22,540	12,680	8,523	10,770	40,240	27,930	7,268	6,845	10,950	8,425	14,380
1959	8,857	12,490	7,913	7,023	5,692	5,708	32,670	12,620	17,200	9,119	7,135	9,508	11,300
1960	12,550	21,980	23,330	10,280	9,561	8,246	33,700	33,750	8,869	7,395	5,550	4,496	14,980

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.45	4.37	6.60	1.46	1.77	1.67	9.38	3.14	1.22	1.60	0.68	0.73	33.07
1952	.83	3.34	2.40	1.58	1.18	1.20	6.96	4.69	3.16	.35	.02	.20	25.91
1953	.51	.38	1.01	.90	1.57	3.98	9.05	3.88	.92	.47	.23	.19	23.09
1954	.63	2.26	3.78	.93	.79	1.76	7.88	5.36	2.83	1.95	2.51	4.47	35.15
1955	4.22	3.36	2.73	1.36	1.49	1.59	8.29	5.56	1.91	.52	.51	.17	31.71
1956	.26	.68	.16	1.37	.50	.57	4.37	6.13	2.03	.76	.55	.61	17.99
1957	.90	1.09	1.09	.58	.32	1.12	3.70	2.69	.74	.50	.78	.35	13.86
1958	.37	2.64	4.90	2.20	.99	1.35	8.85	5.90	.99	1.04	1.74	.75	31.72
1959	1.31	2.19	1.04	.78	.40	.59	6.96	3.22	3.50	1.28	1.01	1.20	23.48
1960	2.20	4.15	4.09	1.21	1.16	.83	7.32	†6.30	1.34	1.00	.33	.35	†30.28

† Corrected.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30										
		observed					Adjusted			Calendar year		
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date									
1950	1171	-	-	-	-	-	-	-	-	-	-	-
1951	1201	94,600	Nov. 28, 1950	4,440	15,390	16,080	2.44	33.07	13,700	13,730	28.66	28.22
1952	1231	50,700	Apr. 21, 1952	3,940	12,880	12,560	1.90	25.91	11,060	10,290	21.24	21.24
1953	1271	91,600	Apr. 1, 1953	3,380	11,190	11,230	1.70	23.09	12,800	13,540	27.86	27.86
1954	1331	83,000	Apr. 24, 1954	3,960	16,340	17,100	2.59	35.15	18,490	18,880	36.79	36.79
1955	1361	70,000	Apr. 17, 1955	3,420	16,190	15,420	2.34	31.71	12,270	10,950	22.50	22.50
1956	1431	47,000	May 1, 1956	3,340	8,695	8,736	1.32	17.99	9,396	9,696	19.97	19.97
1957	1501	29,000	Apr. 23, 1957	3,400	7,488	6,742	1.02	13.86	8,858	9,092	18.69	18.69
1958	1551	104,000	Apr. 24, 1958	3,130	14,380	15,430	2.34	31.72	13,580	13,790	28.35	28.35
1959	1621	50,300	June 20, 1959	4,360	11,300	11,420	1.73	23.48	13,700	14,290	29.38	29.38
1960	1701	62,000	Nov. 30, 1959	3,400	14,980	14,680	2.22	†30.28	-	-	-	-

† Corrected.

350. Passadumkeag River at Lowell, Maine

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

Drainage area.--299 sq mi.

Records available.--October 1915 to September 1960.

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.--45 years (1915-60), 497 cfs.

Extremes.--1915-60: 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).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	89.6	596	1,707	835	925	758	1,812	837	590	572	336	194	769
1952	236	674	567	448	516	593	1,356	647	779	291	85.6	182	529
1953	119	91.7	135	221	443	634	1,577	1,077	516	183	94.9	95.5	431
1954	124	402	992	295	305	663	1,869	1,329	635	433	485	975	709
1955	851	833	750	619	791	874	1,612	921	643	253	161	110	700
1956	90.3	152	73.0	225	146	174	1,010	1,090	664	371	202	136	361
1957	177	274	313	198	145	356	725	665	413	297	144	92.3	317
1958	69.5	281	730	646	499	519	1,467	1,294	548	311	375	278	585
1959	397	477	250	260	182	235	1,535	819	999	715	349	477	558
1960	553	1,068	1,763	790	645	420	1,780	1,134	473	212	99.9	58.1	749

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.35	2.22	6.58	3.22	3.22	2.93	6.76	3.23	2.20	2.20	1.23	0.72	34.92
1952	.91	2.51	2.19	1.73	1.87	2.28	5.07	2.49	2.91	1.12	.33	.68	24.09
1953	.46	.34	.52	.85	1.54	2.44	5.88	4.15	1.93	.71	.37	.36	19.55
1954	.48	1.50	3.83	1.14	1.06	2.56	6.97	5.12	2.36	1.67	1.87	3.64	32.20
1955	3.29	3.11	2.89	2.39	2.76	3.37	6.01	3.55	2.40	.98	.62	.41	31.78
1956	.35	.57	.28	.84	.53	.67	3.77	4.21	2.48	1.43	.73	.51	16.42
1957	.68	1.02	1.21	.76	.50	1.37	2.70	2.56	1.54	1.14	.56	.34	14.38
1958	.27	1.05	2.81	2.49	1.74	2.01	5.48	4.99	2.04	1.20	1.44	1.04	26.56
1959	1.53	1.78	.96	1.00	.63	.90	5.72	3.16	3.73	2.76	1.35	1.78	25.30
1960	2.13	3.98	6.80	3.04	2.33	1.61	6.64	4.37	1.76	.82	.39	.22	34.09

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches		
		Discharge	Date								
1950	1171	-						515		23.36	
1951	1201	2,520	Dec. 1, 1950	55	769	2.57	34.92	691		31.38	
1952	1231	1,570	Apr. 12, 1952	50	529	1.77	24.09	435		19.80	
1953	1271	2,670	Mar. 31, 1953	71	431	1.44	19.55	529		24.04	
1954	1331	3,420	Apr. 24, 1954	64	709	2.37	32.20	786		35.68	
1955	1381	2,530	Apr. 19, 1955	93	700	2.34	31.78	521		23.69	
1956	1431	1,690	Apr. 21, 1956	54	361	1.21	16.42	400		18.13	
1957	1501	948	Apr. 9, 1957	76	317	1.06	14.38	344		15.60	
1958	1551	2,350	Apr. 25, 1958	52	585	1.96	26.56	588		26.70	
1959	1621	2,230	Apr. 6, 1959	110	558	1.87	25.30	748		33.94	
1960	1701	2,710	Nov. 30, 1959	34	749	2.51	34.09	-		-	

360. Penobscot River at Passadumkeag, Maine

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

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

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

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

Average discharge.--20 years (1938-58), 12,180 cfs (unadjusted).

Extremes.--1938-58: Maximum discharge, 126,000 cfs Apr. 14, 1940 (gage height, 13.62 ft); minimum, 2,600 cfs Sept. 1, 1941 (gage height, 2.44 ft).

Remarks.--Flow regulated by several reservoirs above station. Runoff adjusted for change in contents in West Branch Penobscot River basin reservoirs (see p. 25), Telos Lake (see p. 27), Grand Lake (see p. 27), Wilson Pond (see p. 32), and Sebec Lake (see p. 33).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	5,301	21,020	35,120	10,890	14,070	12,730	45,500	18,730	9,444	11,100	6,992	6,617	16,450
1952	7,159	18,140	14,460	11,380	10,780	10,640	34,620	21,630	20,310	6,188	4,513	4,518	13,650
1953	5,114	4,987	6,291	6,901	11,510	20,650	43,190	21,090	8,082	5,159	4,651	4,569	11,820
1954	5,334	12,000	19,730	7,333	7,848	12,440	38,210	29,540	17,120	12,330	16,810	28,210	17,250
1955	24,870	21,710	17,530	11,450	12,710	14,330	42,260	29,010	12,930	6,052	6,546	5,374	17,060
1956	4,739	6,131	3,587	8,173	5,974	5,848	23,640	24,300	11,420	6,545	5,383	5,406	9,254
1957	7,095	8,433	8,266	6,509	5,658	8,392	17,860	13,060	6,001	4,850	5,579	4,412	8,016
1958	4,274	12,980	23,720	13,670	8,998	11,560	43,520	30,020	8,068	7,029	11,270	8,641	15,330
1959	-	-	-	-	-	-	-	-	-	-	-	-	-
1960	-	-	-	-	-	-	-	-	-	-	-	-	-

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.46	4.25	6.64	1.57	1.86	1.75	9.26	3.16	1.23	1.83	0.70	0.73	33.24
1952	.83	3.28	2.39	1.59	1.22	1.27	6.87	4.64	3.18	.38	.04	.22	25.91
1953	.52	.37	.97	.91	1.57	3.88	8.95	3.94	.96	.47	.23	.19	22.96
1954	.62	2.20	3.78	.94	.81	1.81	7.76	5.34	2.79	1.94	2.54	4.40	34.93
1955	4.16	3.34	2.78	1.42	1.56	1.70	8.11	5.38	1.90	.55	.52	.19	31.61
1956	.26	.67	.17	1.36	.50	.57	4.34	6.10	2.06	.82	.59	.62	18.06
1957	.91	1.14	1.08	.59	.33	1.14	3.78	2.72	.77	.52	.76	.35	14.09
1958	.40	2.62	4.81	2.24	1.00	1.41	8.87	5.90	1.06	1.01	1.70	.74	31.76
1959	-	-	-	-	-	-	-	-	-	-	-	-	-
1960	-	-	-	-	-	-	-	-	-	-	-	-	-

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed		Adjusted
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	1171	-	-	-	-	-	-	-	13,510	14,670	28.45
1951	1201	-	-	-	-	-	-	-	14,620	14,650	28.39
1952	1231	97,000	Nov. 29, 1950	4,520	16,450	17,140	2.45	35.24	11,700	10,930	21.27
1953	1271	97,400	Apr. 21, 1952	4,050	13,650	13,330	1.90	25.91	13,550	14,300	27.70
1954	1331	88,200	Apr. 1, 1953	3,640	11,820	11,860	1.69	22.96	19,520	19,910	38.61
1955	1381	88,200	Apr. 24, 1954	4,090	17,250	18,010	2.57	34.93	12,890	11,570	22.43
1956	1431	171,600	Apr. 17, 1955	3,660	17,060	16,290	2.33	31.61	-	-	-
1957	1501	48,900	May 1, 1956	3,410	9,254	9,295	1.33	18.06	10,040	10,340	20.09
1958	1551	51,400	Apr. 23, 1957	3,520	8,016	7,270	1.04	14.09	9,462	9,696	18.79
1959	-	113,000	Apr. 24, 1958	3,480	15,330	16,380	2.34	31.76	-	-	-
1960	-	-	-	-	-	-	-	-	-	-	-

365. Kenduskeag Stream near Kenduskeag, Maine

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

Drainage area--178 sq mi.

Records available--October 1941 to September 1960.

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

Average discharge--19 years (1941-60), 316 cfs.

Extremes--1941-60: 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--An artificial cut has been made through a low divide between Scudabscook Stream and Black Stream which enters Kenduskeag Stream 1.8 miles above station. During high stages of Scudabscook Stream part of its flow passes through the cut into Kenduskeag Stream; at low stages of Scudabscook Stream all flow continues down its own channel.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	10.9	490	849	335	398	607	1,232	308	105	307	63.2	53.6	396
1952	71.5	589	452	352	362	401	1,155	285	239	23.9	3.92	5.27	326
1953	31.5	58.5	204	370	286	803	1,155	423	119	22.6	17.1	21.9	307
1954	100	466	699	114	196	461	1,506	806	363	205	298	1,126	511
1955	508	617	784	186	508	705	1,352	238	153	24.7	20.1	5.31	422
1956	7.94	230	32.4	450	71.1	121	1,450	515	147	84.0	12.7	23.6	261
1957	88.0	268	204	183	92.2	471	803	235	44.6	20.8	18.8	5.77	187
1958	5.87	114	837	608	284	516	1,803	616	134	48.0	56.5	48.1	406
1959	300	449	314	198	93.3	318	1,725	142	288	67.2	13.2	81.9	351
1960	280	837	734	299	308	185	1,945	390	203	54.5	20.5	16.5	437

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.07	3.07	5.50	2.17	2.33	3.93	7.72	1.99	0.66	1.98	0.41	0.34	30.17
1952	.46	3.69	2.93	2.28	2.19	2.59	7.24	1.84	1.50	.15	.02	.03	24.92
1953	.20	.24	1.97	2.40	2.26	5.20	7.24	2.74	.75	.15	.11	.14	23.40
1954	.65	2.92	4.53	.74	1.14	2.99	9.44	3.92	2.28	1.33	1.92	7.06	38.92
1955	3.29	3.87	4.95	1.20	2.97	4.56	8.48	1.54	.96	.16	.13	.03	32.14
1956	.05	1.44	.21	2.92	.43	.78	9.09	3.33	.92	.54	.08	.15	19.94
1957	.57	1.68	1.33	1.19	.54	3.06	3.78	1.52	.28	.13	.12	.04	14.24
1958	.04	.71	4.13	3.94	1.67	3.34	11.27	3.99	.84	.31	.37	.30	30.91
1959	1.95	2.81	2.03	1.28	.55	2.06	10.80	.92	1.81	.44	.09	.51	25.25
1960	1.81	5.24	4.75	1.94	1.87	1.20	12.16	2.52	1.27	.35	.13	.10	33.34

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	325	24.82
1951	1201	4,040	Apr. 4, 1951	2.6	396	2.22	30.17	375	28.61
1952	1231	2,840	Apr. 7, 1952	1.7	326	1.83	24.92	265	20.25
1953	1271	4,440	Mar. 28, 1953	3.8	307	1.72	23.40	381	29.09
1954	1331	6,440	Sept. 12, 1954	17	511	2.87	38.92	563	42.93
1955	1381	3,050	Dec. 20, 1954	2.3	422	2.37	32.14	285	21.73
1956	1431	3,490	Apr. 18, 1956	3.1	261	1.47	19.94	285	21.82
1957	1501	1,310	Nov. 23, 1956	2.4	187	1.05	14.24	204	15.54
1958	1958	3,120	Apr. 24, 1958	2.3	406	2.28	30.91	430	32.82
1959	1621	6,380	Apr. 4, 1959	8.5	331	1.86	25.25	397	32.26
1960	1701	a5,000	Apr. 6, 1960	4.7	437	2.46	33.34	-	-

a About.

380. Sheepscot River at North Whitefield, Maine

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

Drainage area.--148 sq mi.

Records available.--October 1938 to September 1960.

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

Average discharge.--22 years (1938-60), 239 cfs.

Extremes.--1938-60: 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.--Some regulation at low flow by sawmill at North Whitefield. Records of water temperatures for the water years 1958-60 are published in reports of Geological Survey.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	15.4	264	725	271	482	558	872	278	131	170	80.8	41.6	321
1952	80.2	549	497	609	442	389	826	256	155	32.1	24.5	18.6	322
1953	30.3	37.4	202	223	315	930	928	371	138	43.8	29.5	19.0	272
1954	46.4	256	600	143	321	603	767	435	184	71.5	70.9	708	549
1955	148	353	620	210	387	489	473	209	103	24.9	44.8	17.8	256
1956	17.2	164	57.8	407	113	144	962	403	129	78.5	25.3	92.7	215
1957	123	275	286	173	135	301	397	182	92.1	42.9	16.2	8.64	169
1958	10.5	60.8	321	532	276	376	912	492	93.4	131	131	86.7	285
1959	173	398	285	189	154	321	977	182	223	113	49.2	59.3	258
1960	192	558	621	279	379	192	1,150	351	162	79.8	46.2	51.1	335

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.12	1.99	5.65	2.11	3.25	4.35	6.57	2.17	0.99	1.33	0.63	0.31	29.47
1952	.62	4.14	3.87	4.74	3.22	3.03	6.23	1.99	1.17	.25	.19	.12	29.57
1953	.24	.28	1.57	1.74	2.22	7.24	7.00	2.89	1.04	.34	.23	.14	24.93
1954	.36	1.93	4.67	1.11	2.26	4.69	5.78	3.39	1.38	.56	.55	5.33	32.01
1955	1.15	2.67	4.83	1.84	2.72	3.80	3.57	1.63	.78	.19	.35	.13	23.46
1956	.13	1.24	.45	3.17	.82	1.12	7.25	3.14	.97	.61	.20	.70	19.80
1957	.96	2.08	2.22	1.35	.95	2.34	2.99	1.42	.69	.33	.13	.06	15.52
1958	.08	.46	2.50	4.14	1.94	2.93	6.87	3.83	.70	1.02	1.02	.65	26.14
1959	1.35	3.00	2.22	1.48	1.08	2.50	7.38	1.26	1.68	.88	.38	.45	23.64
1960	1.50	4.21	4.84	2.18	2.76	1.50	8.67	2.73	1.22	.62	.36	.23	30.82

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches		
		Discharge	Date								
1950	1171	-	-	-	-	-	-	-	-	239	21.88
1951	1201	1,640	Nov. 27, 1950	12	321	2.17	29.47	331	30.34		
1952	1231	1,820	Apr. 6, 1952	13	322	2.18	29.57	250	23.03		
1953	1271	3,670	Mar. 27, 1953	14	272	1.84	24.93	325	29.83		
1954	1331	4,010	Sept. 12, 1954	14	349	2.36	32.01	367	33.70		
1955	1381	2,100	Dec. 19, 1954	14	256	1.73	23.46	181	16.63		
1956	1431	1,930	Apr. 17, 1956	13	215	1.45	19.80	253	23.24		
1957	1501	1,010	Jan. 23, 1957	5.6	169	1.14	15.52	145	13.30		
1958	1551	1,460	Apr. 23, 1958	5.4	285	1.93	26.14	324	29.67		
1959	1621	3,650	Apr. 3, 1959	27	258	1.74	23.64	301	27.62		
1960	1701	2,970	Apr. 6, 1960	16	335	2.26	30.82	-	-		

385. Brassua Lake near Rockwood, Maine

Location.--Lat 45°39'40", long 69°48'50", on Moose River, 4 miles southwest of Rockwood, Somerset County.

Drainage area.--708 sq mi, approximately.

Records available.--October 1928 to September 1960.

Gage.--Staff gage. Datum of gage is at mean sea level, unadjusted.

Remarks.--Reservoir complete in 1928, for storage of water for power, has usable capacity of 8,560,000,000 cu ft between elevations 1,048.0 and 1,073.0 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	4,347	3,626	6,879	6,118	6,118	6,118	7,389	8,854	8,560	8,540	6,513	4,988
1952	4,265	5,878	5,751	5,250	4,868	1,180	6,647	8,812	8,896	8,494	4,698	4,183
1953	4,167	352	107	92	61	1,923	7,790	8,644	8,378	8,278	6,381	3,674
1954	322	678	795	61	192	883	7,290	8,581	8,602	8,439	8,358	8,338
1955	7,953	7,349	6,362	1,849	406	252	7,113	8,602	8,560	8,479	8,459	5,805
1956	2,113	76	0	130	38	8	2,520	7,770	8,197	8,278	8,157	8,560
1957	8,298	7,749	1,812	38	15	330	4,021	7,290	3,411	76	15	0
1958	15	736	2,506	3,229	2,450	114	7,250	8,540	8,499	6,345	5,823	5,842
1959	5,606	5,250	5,006	4,698	4,480	2,534	6,324	8,854	8,896	8,812	6,936	4,631
1960	4,971	5,040	6,457	4,331	3,441	1,211	7,349	8,980	9,023	8,318	6,840	5,715

Note.--Contents are at 7 a.m. on first day of following month.

395. Second Roach Pond near Kokadjo, Maine

Location.--Lat 45°40'25", long 69°19'25", at outlet dam on Roach River 6 miles east of Kokadjo, Piscataquis County.

Drainage area.--19 sq mi, approximately.

Records available.--December 1927 to September 1960.

Gage.--Staff gage. Altitude of gage is 1,265 ft (from topographic map).

Remarks.--Reservoir used for storage of water for power, has usable capacity of 216,000,000 cu ft between gage heights 0.5 and 10.0 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	0	57	94	0	0	34	188	216	194	163	126	107
1952	0	0	0	0	0	0	158	139	182	118	0	0
1953	0	0	0	0	0	82	227	120	57	0	0	0
1954	0	11	0	0	0	0	147	194	194	188	142	150
1955	166	134	0	0	0	0	69	205	177	150	134	107
1956	87	94	82	160	177	160	177	169	160	134	11	6.7
1957	11	43	45.2	45.2	33.5	0	11	0	0	0	0	22.2
1958	0	0	22.2	0	0	0	110	174	182	0	0	0
1959	0	0	0	0	0	0	33.5	11	11	0	0	0
1960	11	22	0	0	0	0	180	185	155	142	147	142

Note.--Contents are at 7 a.m. on first day of following month.

400. First Roach Pond near Kokadjo, Maine

Location.--Lat 45°40'15", long 69°26'50", on Roach River at Kokadjo, Piscataquis County.

Drainage area.--85 sq mi, approximately.

Records available.--December 1927 to September 1960.

Gage.--Staff gage. Altitude of gage is 1,220 ft (from topographic map).

Remarks.--Reservoir used for storage of water for power, has usable capacity of 938,000,000 cu ft between gage heights 1.5 and 8.0 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	732	801	664	938	911	490	938	911	938	938	883	883
1952	924	664	911	801	801	0	543	938	952	870	870	719
1953	476	450	584	712	870	938	883	835	897	952	828	760
1954	543	856	597	705	870	530	883	911	924	883	980	1,008
1955	938	787	691	705	463	705	637	1,049	1,008	856	863	801
1956	584	66	0	0	0	0	543	994	815	732	842	801
1957	664	691	664	530	302	66	463	801	732	691	760	664
1958	705	329	131	0	0	0	760	938	856	1,049	870	624
1959	196	0	0	0	0	0	503	815	952	732	664	316
1960	131	329	0	0	0	0	801	856	760	870	870	678

Note.--Contents are at 7 a.m. on first day of following month.

405. Moosehead Lake at East Outlet, Maine

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

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

Records available.--March 1895 to September 1960.

Gage.--Staff gage. Datum of gage is 1,011.48 ft above mean sea level, datum of 1929.

Extremes.--1895-1960: 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 elevation 7.0 ft. Remaining wooden section rebuilt of concrete in 1955-56. Lake outlet dredged in 1948 to permit drawing level down to elevation 10.0 ft at a faster rate than formerly. Capacity, 23,735,000,000 cu ft between gage heights 10.0 and 17.5 ft. Water is used primarily for power although some logs are driven each year. Some water diverted down West Channel by leakage and occasionally opening of gates in dam at West Outlet.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	11,747	18,908	23,638	19,999	17,404	11,873	22,349	23,897	20,994	22,218	18,108	17,788
1952	15,968	20,513	21,187	17,628	10,799	9,442	16,574	23,735	22,992	21,059	16,957	10,862
1953	5,924	8,749	11,399	11,147	9,852	11,873	22,928	23,832	21,219	20,417	15,554	12,537
1954	13,805	16,554	21,574	18,108	14,250	13,742	19,710	23,897	24,221	23,477	22,895	22,992
1955	23,089	23,347	23,024	20,224	16,160	9,978	15,300	24,059	23,541	17,148	13,678	12,379
1956	10,641	13,468	10,451	11,747	8,466	2,642	6,928	21,896	22,895	21,831	18,204	14,441
1957	11,968	11,937	13,996	9,820	4,891	5,454	9,568	13,900	17,053	18,812	16,670	12,537
1958	7,713	12,474	20,577	21,606	17,436	12,379	15,172	23,444	22,218	22,314	20,930	17,372
1959	16,670	20,994	19,871	17,308	12,253	10,989	18,620	23,735	24,189	22,314	19,775	16,830
1960	15,141	21,027	23,670	22,057	20,096	15,841	21,509	23,574	23,735	20,706	17,180	16,766

Note.--Contents are at 7 a.m. on first day of following month.

410. Kennebec River at Moosehead, Maine

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

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

Records available.--October 1919 to September 1960.

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.--41 years (1919-60), 1,870 cfs (unadjusted).

Extremes.--1919-60: Maximum discharge, 15,600 cfs May 8, 1947 (gage height, 9.94 ft); minimum, about 62 cfs Apr. 7-15, 1923.

Remarks.--Some water diverted down west channel by leakage and occasional opening of gates in dam at West Outlet. Flow regulated by reservoirs above station. Runoff adjusted for change in contents in Brassua Lake (see p. 42), Second Roach Pond (see p. 42), First Roach Pond (see p. 42), and Moosehead Lake (see p. 43), and for water diverted at west outlet of Moosehead Lake.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1,749	987	2,049	2,785	2,553	3,309	4,373	3,220	2,339	1,038	2,858	1,858	2,426
1952	1,546	999	1,790	2,741	4,031	2,509	304	1,751	3,010	1,463	2,052	2,477	2,049
1953	2,260	833	482	1,234	1,512	1,468	2,795	3,648	2,145	998	2,772	2,417	1,881
1954	1,694	1,294	1,049	2,614	2,426	1,607	1,523	4,387	4,057	1,982	2,287	4,014	2,408
1955	4,704	3,228	2,742	3,853	3,579	3,434	1,825	2,900	2,079	2,758	1,781	936	2,821
1956	1,711	962	1,625	1,161	2,224	2,745	542	408	2,178	1,355	1,506	1,808	1,516
1957	2,108	1,076	2,610	3,293	2,776	720	365	612	1,939	1,414	1,899	1,733	1,708
1958	2,020	348	296	1,868	3,121	3,965	3,264	3,873	1,740	1,869	1,736	2,028	2,178
1959	1,657	708	1,606	2,145	2,849	1,811	695	1,368	4,389	2,142	2,463	2,094	1,987
1960	1,534	783	1,325	2,633	2,523	3,123	2,067	4,698	1,823	2,102	2,085	1,085	2,154

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.47	3.24	4.65	1.12	1.24	1.02	8.33	4.04	1.00	1.45	0.67	1.03	28.21
1952	.55	2.94	1.94	1.10	1.00	.30	4.89	4.93	2.66	-.06	-.06	-.03	20.18
1953	.32	.40	1.33	1.10	.86	2.77	8.42	4.09	1.08	.76	.33	.28	21.74
1954	.78	2.01	3.01	1.01	.80	1.44	5.84	6.04	3.86	1.59	2.09	3.83	32.30
1955	4.25	2.72	2.02	1.05	1.01	1.08	5.87	6.44	1.73	.29	.63	-.06	27.03
1956	-.10	.97	.40	1.60	.77	.51	3.05	7.55	2.52	1.04	.65	1.02	19.98
1957	1.01	.79	1.07	.95	.53	.88	3.18	3.32	1.47	.80	1.02	.24	15.26
1958	.21	2.09	3.64	2.29	.90	1.12	6.84	7.45	1.17	1.09	1.01	.56	28.57
1959	1.07	1.85	1.03	1.01	.57	.57	4.78	4.07	4.24	1.30	.80	.00	21.39
1960	.94	2.84	2.52	1.15	1.21	.65	6.40	5.98	1.75	.77	.28	.45	24.94

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed			Adjusted				Observed	Adjusted	
		Momentary maximum	Date	Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge									
1950	1171	-	-	-	-	-	-	-	1,263	2,035	22.31
1951	1201	9,970	Dec. 13, 1950	280	2,426	2,577	2.08	28.21	2,388	2,309	25.26
1952	1251	5,910	June 9, 1952	270	2,049	1,940	1.48	20.18	1,985	1,531	16.82
1953	1271	9,720	Apr. 28, 1953	222	1,881	1,986	1.60	21.74	1,920	2,330	25.49
1954	1351	13,600	Sept. 14, 1954	241	2,408	2,952	2.38	32.30	2,966	3,243	35.49
1955	1381	13,200	Oct. 16, 1954	300	2,821	2,469	1.99	27.03	2,285	1,764	19.31
1956	1431	3,780	July 2, 1956	196	1,516	1,820	1.47	19.98	1,643	1,966	21.58
1957	1501	5,200	Jan. 3, 1957	70	1,708	1,393	1.12	15.26	1,445	1,675	18.33
1958	1551	6,200	June 3, 1958	100	2,178	2,592	2.09	28.57	2,288	2,421	26.48
1959	1621	14,700	June 18, 1959	100	1,987	1,955	1.58	21.39	1,959	2,160	23.64
1960	1701	9,210	May 5, 1960	130	2,154	2,272	1.83	24.94	-	-	-

415. Indian Pond near Moosehead, Maine

Location--Lat 45°27'35", long 69°51'05", on Kennebec River, 13 miles downstream from dam at east outlet of Moosehead Lake and Moosehead, Piscataquis County.

Drainage area--1,355 sq mi, approximately.

Records available--September 1953 to September 1960.

Gage--Staff gage. Datum of gage is at mean sea level, unadjusted.

Remarks--Reservoir 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).

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1953	-	-	-	-	-	-	-	-	-	-	-	0
1954	265	268	615	810	1,405	1,532	2,970	3,186	3,150	3,132	2,902	3,150
1955	2,953	3,150	3,150	3,150	3,114	3,060	3,060	3,168	3,204	3,186	3,150	3,150
1956	3,150	3,150	3,150	3,150	3,123	3,078	3,168	3,150	3,168	3,294	3,294	3,258
1957	3,168	3,168	3,150	3,168	3,186	3,186	3,168	3,222	3,222	3,240	3,150	3,258
1958	3,222	3,186	3,150	3,078	3,132	3,078	2,817	3,060	3,042	3,150	3,150	3,060
1959	3,096	3,186	3,024	3,060	3,096	2,970	3,150	3,150	3,294	3,204	3,204	3,132
1960	3,060	3,060	2,988	3,114	2,885	2,902	2,851	3,186	3,258	3,186	3,222	3,078

Note--Contents are at 7 a.m. on first day of following month.

420. Moxie Pond near The Forks, Maine

Location--Lat 45°21'00", long 69°52'30", at outlet dam on Moxie Stream, 4½ miles east of The Forks, Somerset County.

Drainage area--89 sq mi, approximately.

Records available--December 1927 to September 1960.

Gage--Staff gage. Altitude of gage is 960 ft (from topographic map).

Remarks--Reservoir used for storage of water for power, has usable capacity of 640,000,000 cu ft between gage heights 6.0 and 14.0 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	0	775	375	0	0	130	685	676	586	586	577	307
1952	417	622	532	487	460	426	640	685	685	622	417	332
1953	0	0	0	0	0	595	721	658	658	631	640	218
1954	60	478	194	60	67	95	640	712	703	730	712	730
1955	730	640	417	0	0	0	730	685	685	604	622	178
1956	0	0	0	0	0	0	138	640	654	640	585	130
1957	60	60	30	18	12	0	604	685	640	640	622	703
1958	392	595	640	210	30	60	676	640	640	730	667	658
1959	676	307	60	60	30	30	640	685	712	658	676	116
1960	332	685	359	60	60	42	290	694	721	658	613	130

Note--Contents are at 7 a.m. on first day of following month.

425. Kennebec River at The Forks, Maine

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

Drainage area--1,670 sq mi, approximately.

Records available--September 1901 to September 1960.

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--59 years (1901-60), 2,546 cfs (unadjusted).

Extremes--1901-60: 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--Flow regulated by reservoirs above station. Runoff adjusted for change in contents in Brassua Lake (see p. 42), Second Roach Pond (see p. 42), First Roach Pond (see p. 43), Moosehead Lake (see p. 43), Indian Pond (see p. 45), and Moxie Pond (see p. 45).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2,081	2,494	3,563	3,134	2,995	3,578	7,288	4,166	2,691	1,586	3,181	2,228	3,212
1952	1,757	2,156	2,370	3,042	4,191	2,636	2,014	2,866	3,859	1,713	2,283	2,720	2,623
1953	2,483	977	701	1,432	1,647	2,679	5,091	4,877	2,490	1,168	2,948	2,848	2,447
1954	2,042	2,050	1,542	2,762	2,375	1,910	3,126	5,953	5,363	2,754	3,406	5,511	3,532
1955	6,298	4,391	3,566	4,269	3,891	3,922	3,905	4,327	2,703	3,045	2,317	1,705	3,699
1956	2,181	1,359	1,827	1,616	2,431	2,933	1,668	2,161	2,620	1,623	2,264	2,715	2,115
1957	2,379	1,215	2,471	3,278	2,703	859	1,107	954	1,810	1,533	2,123	1,909	1,859
1958	2,244	1,265	1,771	2,657	3,530	4,298	6,323	6,278	2,007	2,257	2,290	2,255	3,096
1959	2,130	1,401	2,022	2,556	3,165	2,052	2,312	2,035	5,659	2,424	2,774	2,552	2,581
1960	1,894	1,878	2,245	3,093	2,981	3,382	4,352	6,445	2,329	2,456	2,296	1,703	2,925

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.49	3.78	4.52	1.04	1.27	1.04	8.71	3.88	1.01	1.34	0.63	1.00	28.71
1952	.61	3.20	1.94	1.08	.90	.32	5.13	4.77	2.57	.01	-.03	.06	20.56
1953	.31	.42	1.21	1.02	.77	3.24	8.31	4.00	.98	.60	.28	.32	21.46
1954	.90	2.24	2.76	.81	.76	1.41	6.29	5.97	3.89	1.76	2.27	4.02	33.08
1955	4.47	3.00	2.13	1.02	.99	1.20	6.32	6.16	1.76	.39	.74	-.02	28.16
1956	.00	1.05	.47	1.60	.74	.53	3.27	7.39	2.21	.92	.62	.86	19.66
1957	.92	.73	.75	.74	.37	.79	3.20	2.92	1.06	.69	.94	.25	13.34
1958	.24	2.34	3.97	2.25	.98	1.12	7.55	7.36	1.05	1.15	1.09	.54	29.61
1959	1.20	1.95	1.00	1.10	.66	.59	5.14	3.68	4.24	1.14	.81	.10	21.61
1960	1.01	3.12	2.56	1.20	1.21	.70	6.65	5.96	1.71	.77	.31	.56	25.76

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed	Adjusted	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	1171	-	-	-	-	-	-	-	1,893	2,648	22.88
1951	1201	13,100	Dec. 14, 1950	621	3,212	3,322	2.12	28.71	3,078	2,974	25.67
1952	1231	8,240	June 8, 1952	465	2,623	2,371	1.51	20.56	2,446	1,931	16.74
1953	1271	12,900	Apr. 29, 1953	315	2,447	2,482	1.58	21.46	2,569	2,940	25.42
1954	1331	17,800	Sept. 15, 1954	186	3,232	3,840	2.45	33.08	3,957	4,270	36.78
1955	1381	17,000	Oct. 15, 1954	560	3,699	3,257	2.07	28.16	2,952	2,319	20.08
1956	1431	7,920	Apr. 30, 1956	415	2,115	2,266	1.44	19.66	2,175	2,365	20.52
1957	1501	8,310	Jan. 20, 1957	325	1,858	1,541	.982	13.34	1,792	2,024	17.51
1958	1551	13,000	Apr. 25, 1958	340	3,096	3,425	2.18	29.61	3,119	3,149	27.21
1959	1621	20,200	June 19, 1959	365	2,581	2,501	1.59	21.61	2,619	2,794	24.15
1960	1701	13,300	May 15, 1960	410	2,925	2,972	1.89	25.76	-	-	-

430. Flagstaff Lake near Dead River, Maine

Location.--Lat 45°13'20", long 70°12'00", on Dead River, three-quarters of a mile upstream from Black Brook, in T.3, R.4.

Drainage area.--520 sq ml.

Records available.--October 1949 to September 1960.

Gage.--Staff gage. Datum of gage is at mean sea level (revised).

Remarks.--Reservoir completed for storage of water for power in 1950, has usable capacity of 12,050,000,000 cu ft between gage heights 1,110.0 and 1,146.0 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	4,840	8,823	10,655	7,494	6,100	5,795	10,880	11,108	10,211	7,862	8,430	7,434
1952	4,954	8,206	8,144	5,870	5,232	2,107	9,570	11,070	10,768	6,498	4,293	4,378
1953	4,682	2,150	1,596	1,319	1,008	7,494	11,414	11,649	11,453	7,200	6,580	6,204
1954	4,908	5,947	7,924	5,998	5,209	4,045	11,531	12,131	11,070	12,172	11,610	11,032
1955	12,010	11,108	9,570	7,800	5,595	3,689	11,414	12,050	10,805	10,248	9,192	4,954
1956	2,515	2,136	990	2,266	1,512	1,836	6,178	12,050	12,090	9,570	7,375	7,434
1957	7,029	3,845	3,090	3,538	3,125	632	4,420	7,554	8,302	7,615	5,998	4,005
1958	3,160	4,378	7,316	7,955	5,304	1,215	9,432	12,050	10,284	10,284	9,328	7,524
1959	8,090	8,238	5,720	4,818	4,772	1,875	9,640	12,131	12,175	9,501	8,270	6,444
1960	7,086	10,642	10,692	8,625	6,498	1,991	11,531	12,131	10,284	9,640	7,464	4,705

Note.--Contents are at 7 a.m. on first day of following month.

435. Dead River near Dead River, Maine

Location.--Lat 45°13'48", long 70°11'58" (revised), 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 1960. Monthly discharge only for October to December 1939, published in WSP 1301.

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

Average discharge.--21 years (1939-60), 829 cfs (unadjusted).

Extremes.--1939-60: 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.--Runoff adjusted for change in contents in Flagstaff Lake (see p. 47).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	903	408	637	1,499	1,200	585	2,501	1,482	605	1,410	48.0	710	1,014
1952	1,254	147	767	1,248	524	1,398	220	1,703	1,296	1,715	934	65.5	947
1953	65.2	1,177	579	491	590	539	2,219	1,891	365	1,612	318	272	843
1954	799	410	201	925	704	920	909	2,127	2,086	252	1,009	2,148	1,040
1955	1,151	1,606	1,402	1,081	1,278	1,163	589	1,915	1,280	290	804	1,680	1,185
1956	1,068	660	621	549	558	117	109	1,156	936	1,175	981	225	681
1957	457	1,567	628	411	304	1,254	352	2,375	1,136	553	729	1,008	594
1958	436	251	667	415	1,549	2,000	1,320	2,721	1,222	674	760	976	1,077
1959	668	662	1,344	739	248	1,298	49.3	271	2,334	1,433	679	875	888
1960	940	91.5	1,031	1,524	1,402	2,027	209	2,576	1,491	456	972	1,641	1,182

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.61	4.17	3.37	0.71	1.25	1.04	9.57	3.47	0.68	1.06	0.58	0.70	27.21
1952	.73	3.01	1.65	.88	.56	.51	6.85	5.02	2.53	.27	.25	.21	22.27
1953	.40	.43	.82	.86	.92	6.56	8.00	4.59	.62	.05	.19	.27	23.51
1954	.70	1.74	2.09	.46	.76	1.08	8.14	5.21	3.59	1.48	1.78	4.13	31.16
1955	3.37	2.70	1.83	.93	.73	1.00	7.65	4.77	1.72	.18	.91	.10	25.89
1956	.35	1.10	.43	2.27	.49	.53	3.83	7.42	2.04	.52	.36	.53	19.87
1957	.68	.73	.77	.66	.27	.72	3.89	2.59	.91	.66	.28	.51	12.67
1958	.27	1.47	3.91	1.45	.91	1.05	9.63	8.21	1.16	1.50	.89	.60	31.05
1959	1.95	1.54	.90	.89	.48	.48	6.54	2.66	5.04	.97	.49	.37	22.31
1960	2.62	3.30	2.16	1.22	1.14	.76	8.34	6.20	1.67	.48	.35	1.24	29.48

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed		Adjusted
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	1171	-	-	-	-	-	-	-	-	-	-
1951	1201	7,750	May 1, 1951	1.0	1,014	1,043	2.01	27.21	576	895	23.36
1952	1231	6,560	May 13, 1952	2.0	947	850	2.27	22.27	915	936	24.45
1953	1271	9,310	May 16, 1953	1.0	843	901	1.73	23.51	811	1,012	26.39
1954	1331	18,000	Sept. 12, 1954	61	1,040	1,193	2.29	31.16	1,270	1,322	34.53
1955	1381	8,270	May 6, 1955	138	1,185	992	1.91	25.89	1,034	762	19.87
1956	1431	6,020	July 24, 1956	.8	681	759	1.46	19.87	704	770	20.17
1957	1501	5,320	June 13, 1957	.8	594	485	.933	12.67	484	618	16.14
1958	1551	7,360	June 12, 1958	2.9	1,077	1,189	2.29	31.05	1,191	1,140	29.79
1959	1621	9,680	June 15, 1959	2.6	888	854	1.64	22.31	838	996	26.00
1960	1701	6,740	May 12, 1960	2.8	1,182	1,127	2.17	29.48	-	-	-

440. Dead River Pond at Dead River Dam, Maine

Location.--Lat 45°17'40", long 70°13'25", on Dead River 15 miles upstream from The Forks, Somerset County.

Drainage area.--546 sq mi, approximately.

Records available.--December 1927 to September 1953.

Gage.--Staff gage. Altitude of gage is 1,020 ft (from topographic map).

Remarks.--Reservoir completed in 1905 for log driving, has usable capacity of 225,000,000 cu ft between gage heights 3.5 and 12.0 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	0	0	0	0	0	0	95	40	0	0	0	18
1952	0	0	0	0	0	0	0	32	10	0	0	0
1953	0	0	0	0	0	95	150	120	65	75	40	0

Note.--Contents are at 7 a.m. on first day of following month.

445. Spencer Lake at Spencer Lake Outlet, Maine

Location.--Lat 45°21'55", long 70°16'30", on Little Spencer Stream, at outlet dam in T.3, R.5, Somerset County, 4 miles upstream from mouth.

Drainage area.--48 sq mi, approximately.

Records available.--December 1927 to September 1960.

Gage.--Staff gage. Altitude of gage is 1,080 ft (from topographic map).

Remarks.--Reservoir used for storage of water for power, has usable capacity of 639,000,000 cu ft between gage heights 3.5 and 12.0 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	368	391	0	0	0	70	881	639	639	495	495	503
1952	0	0	0	0	0	0	883	683	748	537	263	58
1953	0	0	0	0	0	595	833	775	795	639	639	391
1954	26	70	0	0	0	38	823	823	833	729	711	430
1955	277	205	0	0	0	0	639	570	639	613	639	378
1956	0	0	0	0	0	0	249	639	729	823	110	103
1957	38.4	70.4	51.2	51.2	44.8	38.4	360	570	503	337	285	345
1958	307	0	103	0	0	0	795	785	666	702	739	666
1959	171	38	0	0	0	0	639	570	729	639	639	604
1960	683	241	0	0	0	0	639	471	511	307	220	220

Note.--Contents are at 7 a.m. on first day of following month.

450. Dead River at The Forks, Maine

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

Drainage area.--872 sq mi.

Records available.--September 1901 to August 1907, March 1910 to September 1960. Monthly discharge only for some periods, published in WSP 1301.

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

Average discharge.--55 years (1902-7, 1910-60), 1,425 cfs (unadjusted).

Extremes.--1901-7, 1910-60: 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.--Flow partly regulated by reservoirs above station. Runoff adjusted for change in contents in Flagstaff Lake (see p. 47), Dead River Pond prior to September 1953 (see p. 49), and Spencer Lake (see p. 49).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1,071	1,615	2,035	1,803	1,500	991	5,082	2,879	933	1,846	274	1,099	1,758
1952	1,661	1,230	1,495	1,506	815	1,717	2,129	3,193	2,139	1,824	1,090	236	1,592
1953	287	1,378	1,148	1,032	901	2,057	4,767	2,869	579	1,958	430	528	1,496
1954	1,221	1,089	980	1,144	1,072	1,306	2,809	3,936	3,103	650	1,414	3,541	1,853
1955	2,434	2,571	1,807	1,512	1,423	1,336	2,589	3,598	1,643	388	958	1,890	1,843
1956	1,206	979	720	865	748	378	1,201	3,551	1,702	1,513	1,334	567	1,233
1957	786	2,034	875	262	428	1,580	1,562	818	415	819	893	1,063	963
1958	635	956	1,822	886	1,737	2,091	3,878	4,943	1,609	1,015	1,107	1,221	1,824
1959	1,428	1,412	1,881	1,004	493	1,486	1,922	1,301	3,315	1,729	822	939	1,481
1960	1,338	1,174	1,704	1,491	1,550	2,193	2,470	4,369	2,025	730	1,157	1,795	1,634

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.59	4.04	3.40	0.82	1.10	1.20	9.46	3.77	0.73	1.21	0.64	0.93	27.89
1952	0.71	3.18	1.95	0.87	0.69	0.73	6.75	4.98	2.61	0.19	0.22	0.24	23.12
1953	0.50	0.51	1.24	1.23	0.92	6.26	8.18	3.86	0.64	0.41	0.24	0.35	24.34
1954	0.79	1.93	2.24	0.56	0.89	1.18	7.68	5.50	3.38	1.42	1.58	4.11	31.26
1955	3.62	3.04	1.53	0.86	0.61	0.83	7.44	5.03	1.52	0.22	0.76	0.20	25.66
1956	0.20	1.07	0.39	1.78	0.55	0.66	3.80	7.78	2.24	0.80	0.33	0.73	20.33
1957	0.81	1.05	0.77	0.57	0.30	0.85	4.03	2.75	0.87	0.68	0.36	0.41	13.41
1958	0.40	1.67	3.31	1.44	0.77	0.75	9.40	7.82	1.13	1.36	1.00	0.64	30.29
1959	1.92	1.82	1.22	0.88	0.57	0.53	6.00	2.92	4.34	0.92	1.48	0.28	22.58
1960	2.12	3.14	2.06	0.95	0.87	0.67	8.19	5.98	1.70	0.55	0.40	0.94	27.57

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year			
		Observed				Adjusted			Observed		Adjusted	
		Momentary		Maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date									
1950	1171	-	-	-	-	-	-	-	-	1,217	1,535	25.88
1951	1201	11,200	Apr. 13, 1951	86	1,758	1,792	2.06	27.89	1,731	1,651	25.70	
1952	1231	8,860	July 18, 1952	108	1,592	1,481	1.70	23.12	1,459	1,252	19.53	
1953	1271	10,500	Apr. 1, 1953	201	1,496	1,564	1.79	24.34	1,537	1,738	27.05	
1954	1331	16,600	Sept. 12, 1954	305	1,853	2,007	2.30	31.26	2,163	2,215	34.49	
1955	1381	13,400	May 7, 1955	196	1,843	1,649	1.89	25.66	1,500	1,228	19.13	
1956	1431	8,640	May 16, 1956	66	1,233	1,303	1.49	20.33	1,297	1,365	21.30	
1957	1501	4,790	Apr. 22, 1957	124	963	862	0.99	13.41	942	1,077	16.76	
1958	1551	10,600	Apr. 25, 1958	210	1,824	1,946	2.23	30.29	1,934	1,880	29.27	
1959	1621	11,400	June 16, 1959	134	1,481	1,445	1.66	22.58	1,439	1,597	24.84	
1960	1701	9,490	May 10, 1960	176	1,834	1,767	2.03	27.57	-	-	-	

455. Wyman Pond near Bingham, Maine

Location.--Lat 45°04'15", long 69°54'20", on Kennebec River at Wyman Dam in township of Moscow, 1½ miles upstream from Bingham, Somerset County.

Drainage area.--2,610 sq mi, approximately.

Records available.--October 1931 to September 1960.

Gage.--Staff gage. Datum of gage is at mean sea level.

Remarks.--Reservoir completed in 1930 for storage of water for power. Storage 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).

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Avg.	Sept.
1951	8,830	9,050	8,930	8,620	8,680	8,640	9,060	9,080	8,620	8,870	8,920	8,920
1952	8,900	8,790	8,990	8,570	8,750	8,440	9,060	9,040	8,900	8,930	8,920	8,900
1953	8,920	8,930	8,940	8,790	8,830	9,080	9,050	8,930	8,890	9,000	8,990	8,760
1954	9,050	8,990	8,570	8,830	8,940	8,800	9,060	9,080	9,060	8,940	9,100	8,620
1955	9,080	8,830	8,660	8,590	8,990	8,890	8,940	9,080	8,890	8,860	8,710	8,620
1956	9,050	8,940	8,750	8,900	8,820	8,920	9,080	8,940	8,800	8,750	8,850	8,750
1957	8,830	8,780	8,780	8,870	8,760	8,790	8,990	8,680	8,820	8,780	8,780	8,690
1958	8,750	8,850	9,020	8,940	8,980	8,820	8,980	8,990	8,830	9,050	8,750	8,960
1959	8,920	8,790	8,900	8,920	9,020	8,930	8,780	8,830	9,050	8,960	9,000	8,980
1960	8,980	9,040	8,920	8,980	8,790	9,020	9,050	8,990	9,060	8,900	8,870	9,060

460. Austin Stream at Bingham, Maine

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

Drainage area.--91.1 sq mi.

Records available.--October 1931 to September 1960.

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

Average discharge.--29 years (1931-60), 174 cfs.

Extremes.--1931-60: Maximum discharge, 5,820 cfs Sept. 17, 1932, Nov. 27, 1950; maximum gage height, 17.63 ft Mar. 13, 1936 (backwater from ice jam); minimum discharge, 1.6 cfs Sept. 30, Oct. 1, 1948.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	60.3	575	478	61.4	165	127	896	152	39.6	69.6	19.0	66.9	225
1952	110	441	220	82.3	81.0	90.0	688	399	197	15.5	5.55	10.1	194
1953	32.2	32.1	138	122	135	621	720	260	89.0	23.4	11.0	13.0	183
1954	67.4	264	271	31.0	70.2	169	732	462	275	191	294	405	289
1955	335	284	243	84.0	142	106	707	589	203	31.2	70.0	12.3	217
1956	12.1	155	21.9	168	46.9	41.0	469	612	207	59.4	13.1	33.9	153
1957	56.5	67.9	52.0	65.5	35.3	107	322	162	61.0	55.9	33.0	18.1	86.5
1958	30.2	318	666	193	79.1	88.1	1,188	616	64.9	101	49.7	48.2	287
1959	134	170	92.8	74.1	41.8	59.0	571	160	308	53.5	21.5	40.4	143
1960	209	512	233	93.6	156	63.7	696	446	120	173	60.1	59.3	234

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.76	7.04	6.05	0.78	1.88	1.60	10.98	1.92	0.49	0.88	0.24	0.82	33.44
1952	1.40	5.40	2.78	1.04	.96	1.14	8.42	5.05	2.49	.15	.77	.12	29.02
1953	.41	.39	1.74	1.54	1.54	7.86	8.81	3.29	1.09	.30	.14	.16	27.27
1954	.85	3.24	3.42	.39	.80	2.14	8.97	5.84	3.37	2.42	3.72	4.96	40.12
1955	4.24	3.48	3.08	1.06	1.62	1.34	8.66	4.92	2.49	.39	.89	.15	32.32
1956	.15	1.90	.28	2.12	.56	.52	5.75	7.75	2.53	.75	.17	.42	22.90
1957	.71	.85	.68	.83	.40	1.35	3.94	2.05	.75	.71	.42	.22	12.87
1958	.38	3.89	8.43	2.44	.90	1.15	†14.50	7.79	.74	1.28	.63	.55	†42.68
1959	1.70	2.09	1.18	.94	.48	.75	7.00	2.03	3.77	.68	.27	.49	21.38
1960	2.64	6.27	2.95	1.19	1.84	.81	8.52	5.65	1.47	2.19	.76	.73	35.02

† Corrected.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	228	34.00
1951	1201	5,820	Nov. 27, 1950	12	225	2.47	33.44	196	29.17
1952	1231	3,050	Nov. 4, 1952	2.9	194	2.13	29.02	147	21.98
1953	1271	4,450	Mar. 27, 1953	6.2	183	2.01	27.27	216	32.24
1954	1331	3,050	Sept. 11, 1954	8.1	269	2.95	40.12	291	43.41
1955	1381	1,790	Apr. 16, 1955	6.3	217	2.38	32.32	160	23.85
1956	1431	1,770	Apr. 30, 1956	7.7	153	1.68	22.90	152	22.77
1957	1501	1,100	Apr. 22, 1957	5.0	86.5	.950	12.87	157	23.37
1958	1551	5,180	Dec. 21, 1957	7.2	287	3.15	†42.68	235	34.95
1959	1621	1,310	June 19, 1959	7.9	143	1.57	21.38	190	28.27
1960	1701	2,580	Nov. 25, 1959	12	234	2.57	35.02	-	-

† Corrected.

465. Kennebec River at Bingham, Maine

Location.--Lat 45°03'05", long 69°53'15", on right bank at Bingham, Somerset County, 200 ft downstream from highway bridge, half a mile downstream from Austin Stream, 1½ miles downstream from Wyman Dam.

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

Records available.--June 1907 to June 1910, October 1930 to September 1960.

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.--32 years (1907-9, 1930-60), 4,300 cfs (unadjusted).

Extremes.--1907-10, 1930-60: Maximum discharge, 58,800 cfs Mar. 20, 1936 (gage height, 14.44 ft), from rating curve extended above 30,000 cfs on basis of computations of flow at Wyman Dam plus inflow; minimum daily, 110 cfs Dec. 25, 1947.

Remarks.--Flow regulated by reservoirs and powerplant above station. The latter causes considerable diurnal fluctuation. Runoff adjusted for change in contents in Brassua Lake (see p. 42), Second Roach Pond (see p. 42), First Roach Pond (see p. 43), Moosehead Lake (see p. 43), Indian Pond (see p. 45), Moxie Pond (see p. 45), Flagstaff Lake (see p. 47), Dead River Pond prior to September 1953 (see p. 49), Spencer Lake (see p. 49), and Wyman Pond (see p. 51).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	3,275	5,185	6,568	5,154	4,852	4,846	14,150	7,639	3,925	3,280	3,430	3,406	5,467
1952	3,579	4,361	4,104	4,929	5,174	4,626	5,492	6,904	6,508	3,491	3,290	2,888	4,607
1953	2,835	2,399	2,247	2,713	3,040	6,158	11,810	8,507	3,186	3,211	3,457	3,437	4,419
1954	3,262	3,645	3,654	3,929	3,805	3,955	8,049	11,110	8,882	3,811	5,367	10,140	5,773
1955	9,319	7,582	6,118	5,863	5,564	5,410	8,140	8,415	4,755	3,375	3,456	3,689	5,976
1956	3,270	2,687	2,593	2,841	3,264	3,330	3,808	6,988	4,741	3,178	3,480	3,331	3,628
1957	3,296	3,328	3,444	3,426	3,228	2,546	3,229	2,305	2,396	2,509	3,083	2,962	2,977
1958	2,802	2,645	4,641	3,922	5,155	6,495	12,690	12,830	3,838	3,394	3,468	3,422	5,442
1959	3,816	3,103	3,606	3,457	3,470	3,689	5,971	3,596	9,565	4,350	3,505	3,424	4,290
1960	3,638	4,005	4,545	4,609	4,897	5,509	8,348	12,080	4,540	3,471	3,534	3,590	5,234

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.52	3.97	4.20	0.91	1.24	1.10	8.89	3.72	0.87	1.22	0.57	0.91	28.12
1952	.63	3.24	1.89	1.01	.84	.49	5.77	4.72	2.52	.06	.05	.09	21.31
1953	.37	.43	1.27	1.07	.94	4.53	8.24	3.86	.81	.53	.27	.29	22.61
1954	.82	2.12	2.73	.77	.81	1.44	7.03	5.75	3.51	1.64	2.08	4.03	32.73
1955	4.08	2.86	2.02	.98	.93	1.01	6.74	5.42	1.65	.27	.73	.07	26.76
1956	.08	1.08	.38	1.67	.63	.54	3.53	7.31	2.15	.80	.43	.74	19.34
1957	.86	.78	.71	.58	.33	.79	3.41	2.74	.98	.67	.68	.26	12.80
1958	.25	2.09	4.02	1.91	.76	.91	8.46	7.47	1.04	1.19	.94	.53	29.57
1959	1.42	1.82	.86	.88	.50	.56	5.81	3.17	4.13	1.03	.59	.12	20.89
1960	1.44	3.22	2.38	1.02	1.09	.63	7.12	5.91	1.62	.72	.34	.76	26.19

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year			
		Observed					Adjusted		observed	Adjusted		
		Momentary		maximum	Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date									
1950	1171				-	-	-	-	-	-	-	-
1951	1201	30,600	Apr. 13, 1951	1,430	5,467	5,613	2.07	28.12	3,587	4,659	23.34	23.54
1952	1231	16,600	June 8, 1952	1,340	4,607	4,242	1.57	21.31	4,226	3,519	17.62	18.19
1953	1271	28,400	Mar. 28, 1953	580	4,419	4,518	1.67	22.61	4,677	5,236	26.21	26.21
1954	1331	31,800	Sept. 15, 1954	1,480	5,773	6,531	2.41	32.73	6,820	7,188	36.02	36.02
1955	1381	27,200	Oct. 17, 1954	2,080	5,976	5,339	1.97	26.76	4,761	3,859	19.34	19.34
1956	1431	17,300	May 14, 1956	1,180	3,628	3,853	1.42	19.34	3,754	4,013	20.15	20.15
1957	1501	11,000	Apr. 22, 1957	1,330	2,977	2,555	1.44	12.80	2,981	3,357	16.81	16.81
1958	1551	34,200	Apr. 23, 1958	710	5,442	5,901	2.18	29.57	5,478	5,450	27.31	27.31
1959	1621	33,400	June 19, 1959	2,040	4,290	4,174	1.54	20.89	4,428	4,761	23.83	23.83
1960	1701	27,900	May 16, 1960	2,210	5,234	5,216	1.92	26.19	-	-	-	-

470. Carrabassett River near North Anson, Maine

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

Drainage area.--354 sq mi.

Records available.--November and December 1901, June 1902 to May 1907, August 1925 to September 1960. Monthly discharge only for some periods, published in WSP 1301.

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

Average discharge.--39 years (1902-6, 1925-60), 695 cfs.

Extremes.--1925-60: 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.--Some regulation at low flow by mills above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	235	1,463	1,493	257	608	643	3,816	920	261	257	150	255	859
1952	295	1,638	761	440	367	661	2,896	1,881	864	95.6	68.2	96.4	835
1953	192	168	569	380	558	3,650	2,803	1,302	271	160	93.0	103	857
1954	223	870	860	229	419	641	2,973	2,058	1,030	687	711	1,768	1,037
1955	1,559	1,296	1,128	493	423	428	2,744	1,398	588	119	166	67.9	868
1956	82.0	672	102	855	158	120	1,930	1,801	675	332	92.6	167	581
1957	294	277	246	186	137	498	1,169	661	243	183	99.6	63.2	339
1958	97.1	673	1,682	802	322	387	3,863	2,150	422	422	225	156	935
1959	609	633	344	262	169	232	2,629	647	1,164	229	164	234	607
1960	1,200	1,704	916	340	488	260	3,011	2,177	526	264	143	299	942

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.77	4.61	4.87	0.84	1.79	2.10	12.03	3.00	0.82	0.84	0.49	0.80	32.96
1952	.96	5.17	2.48	1.43	1.12	2.16	9.13	6.12	2.72	.31	.22	.30	32.12
1953	.62	.53	1.86	1.23	1.64	11.88	8.84	4.24	.85	.52	.30	.32	32.83
1954	.73	2.75	2.80	.75	1.23	2.09	9.37	6.70	3.25	2.24	2.32	5.57	39.80
1955	5.07	4.08	3.68	1.60	1.24	1.40	8.65	4.54	1.85	.39	.54	.21	33.25
1956	.27	2.12	.33	2.79	.48	.39	6.08	5.87	2.13	1.08	.30	.53	22.37
1957	.96	.87	.80	.61	.40	1.63	3.68	2.16	.77	.60	.32	.20	13.00
1958	.32	2.12	5.48	2.62	.95	1.28	12.16	7.00	1.33	1.37	.73	.49	33.83
1959	1.98	2.00	1.12	.85	.50	.76	8.29	2.11	3.67	.75	.53	.74	23.30
1960	3.91	5.37	2.99	1.11	1.49	.84	9.50	7.09	1.66	.86	.47	.94	36.23

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	792	30.38
1951	1201	17,400	Apr. 4, 1951	65	859	2.43	32.96	816	31.32
1952	1231	16,100	Nov. 3, 1951	40	835	2.36	32.12	690	26.52
1953	1271	30,400	Mar. 27, 1953	39	857	2.42	32.83	942	36.10
1954	1331	21,500	Sept. 12, 1954	60	1,037	2.93	39.80	1,209	46.35
1955	1381	17,100	Oct. 16, 1954	53	868	2.45	33.25	604	23.14
1956	1431	6,310	Apr. 30, 1956	57	581	1.64	22.37	579	22.28
1957	1501	5,460	Apr. 21, 1957	44	339	1.98	13.00	476	16.29
1958	1551	16,800	Dec. 21, 1957	45	935	2.64	35.83	861	33.01
1959	1621	as,000	Apr. 3, 1959	62	607	1.71	23.30	794	30.47
1960	1701	21,800	Oct. 25, 1959	50	942	2.66	36.23	-	-

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480. Sandy River near Mercer, Maine

Location.--Lat 44°42'30", long 69°56'25", on right bank 0.9 mile upstream from Pog 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 1960.

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

Average discharge.--32 years (1928-60), 935 cfs.

Extremes.--1928-60: 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).

Correction.--In WSP 1301, the momentary maximum discharge for the water year 1938 is listed in error. It should be 14,300 cfs.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	209	1,653	2,109	389	879	1,415	5,399	1,200	356	340	193	302	1,198
1952	341	2,086	935	820	635	1,032	4,843	2,218	1,136	138	84.8	73.1	1,156
1953	114	121	642	659	790	4,564	3,780	1,614	356	124	98.2	84.8	1,081
1954	139	771	1,167	316	619	1,283	4,322	2,590	1,211	694	677	2,664	1,368
1955	1,920	1,845	1,502	523	651	855	3,638	1,573	861	152	152	56.3	1,143
1956	76.6	788	160	1,244	316	242	2,866	2,084	879	544	115	278	798
1957	350	436	459	348	291	755	1,589	881	346	236	142	74.1	493
1958	97.9	602	1,685	1,202	672	765	5,247	2,485	524	456	264	176	1,200
1959	715	837	440	376	221	535	3,918	745	1,313	475	303	573	892
1960	1,572	2,436	1,380	598	745	466	4,528	3,207	789	420	174	276	1,379

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.47	3.59	4.73	0.87	1.78	3.17	11.71	2.69	0.77	0.76	0.43	0.66	31.63
1952	.76	4.53	2.10	1.40	1.34	2.32	10.08	4.98	2.47	.31	.19	.16	30.64
1953	.26	.26	1.44	1.48	1.60	10.24	8.20	3.62	.77	.28	.22	.18	28.55
1954	.31	1.67	2.62	.71	1.25	2.88	9.38	5.81	2.63	1.56	1.52	5.78	36.12
1955	4.31	4.00	3.37	1.18	1.32	1.91	7.90	3.53	1.87	.34	.34	.12	30.19
1956	.17	1.71	.56	2.79	.66	.54	6.23	4.67	1.91	1.22	.26	.60	21.12
1957	.79	.95	1.03	.78	.59	1.70	3.45	1.97	.75	.53	.32	.16	13.02
1958	.22	1.30	4.25	2.70	1.36	1.76	11.38	5.57	1.14	1.02	.59	.38	31.67
1959	1.60	1.82	.99	.84	.45	1.20	8.50	1.67	3.50	1.07	.68	1.24	23.56
1960	3.53	5.29	3.09	1.34	1.56	1.05	9.83	7.19	1.72	.94	.39	.60	36.53

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	1171	-	-	-	-	-	-	1,038	-	27.40
1951	1201	20,400	Apr. 4, 1951	62	1,198	2.33	31.63	1,146	30.23	
1952	1231	14,200	Nov. 4, 1951	57	1,156	2.25	30.64	951	25.21	
1953	1271	36,900	Mar. 28, 1953	44	1,081	2.10	28.55	1,181	31.19	
1954	1351	21,100	Sept. 12, 1954	50	1,368	2.66	36.12	1,656	43.16	
1955	1381	15,500	Oct. 17, 1954	59	1,143	2.22	30.19	736	20.75	
1956	1431	7,840	Apr. 18, 1956	44	798	1.55	21.12	817	21.65	
1957	1501	5,180	Apr. 22, 1957	57	493	.959	13.02	607	16.02	
1958	1551	16,100	Apr. 23, 1958	41	1,200	2.33	31.67	1,148	30.31	
1959	1621	10,900	Apr. 4, 1959	113	892	1.74	23.56	1,176	31.06	
1960	1701	20,100	Oct. 25, 1959	51	1,379	2.68	36.53	-	-	

485. Kennebec River at Waterville, Maine

Location.--Lat 44°33'45", long 69°37'10", at dam and mill of Hollingsworth and Whitney Co. at Winslow, Kennebec County, 2 miles upstream from Sebasticook River and 3½ miles upstream from Messalonskee Stream.

Drainage area.--4,270 sq mi, approximately.

Records available.--February 1893 to September 1955. Monthly discharge only for September 1935 to September 1955, published in WSP 1301.

Gage.--Water-stage recorder and staff gages. Datum of gage is 47.84 ft below mean sea level (levels by Corps of Engineers).

Average discharge.--62 years (1893-1955), 6,966 cfs.

Extremes.--1893-1955: Maximum discharge, 157,000 cfs Dec. 16, 1901 (gage height, 135.15 ft); minimum daily not ascertained, leakage only on several occasions.

Remarks.--Discharge computed from flow over dam and through logway and water wheels of mill. Comparison of monthly averages with similar averages of gaging stations above Waterville plus estimated flow from ungaged area indicates that figures below are small and that monthly and annual totals should be increased by approximately 400 cfs to equal flow as indicated by records from gaging stations above. Flow regulated by reservoirs and powerplants above station. Runoff adjusted for change in contents in Brassua Lake (see p. 42), Second Roach Pond (see p. 42), First Roach Pond (see p. 43), Moosehead Lake (see p. 43), Indian Pond (see p. 45), Moxie Pond (see p. 45), Flagstaff Lake (see p. 47), Dead River Pond (see p. 49), Spencer Lake (see p. 49), and Wyman Pond (see p. 51).

Cooperation.--Records furnished by Hollingsworth & Whitney Co., Winslow, Maine.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	4,117	11,030	12,520	6,009	7,934	7,785	23,980	8,842	4,445	4,067	4,235	4,527	8,266
1952	5,008	10,120	6,291	6,157	5,840	5,877	12,000	12,080	9,053	3,715	3,731	3,080	6,898
1953	3,192	2,804	4,700	4,518	4,882	18,010	21,600	15,280	4,266	3,756	3,749	3,563	7,373
1954	4,121	6,139	5,844	4,128	5,746	7,211	17,970	15,280	10,240	5,770	7,876	19,490	9,136
1955	15,220	14,530	11,690	7,724	7,063	7,016	14,080	9,710	5,453	3,309	3,683	3,796	8,610

Note.--Records since 1950 not previously published.

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.56	4.05	4.27	0.81	1.54	1.50	8.21	2.69	0.69	0.99	0.58	0.87	26.76
1952	.79	3.56	1.79	.97	.70	.65	5.36	4.39	2.26	.10	.15	.10	20.82
1953	.33	.38	1.48	1.16	1.04	6.08	7.80	3.75	.80	.49	.25	.21	23.77
1954	.75	2.00	2.34	.54	1.03	1.82	7.05	4.77	2.58	1.57	1.99	5.00	31.45
1955	4.18	3.64	2.79	1.12	.96	1.07	5.82	3.79	1.23	.15	.52	.07	25.34

Note.--Records since 1950 not previously published.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed	Adjusted	
		Momentary	Maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date	day							
1950	-	-	-	-	-	-	-	-	6,652	7,724	24.56
1951	-	75,600	Nov. 27, 1950	1,850	8,266	8,412	1.97	26.76	7,738	7,540	24.02
1952	-	45,300	Nov. 4, 1951	1,830	6,898	6,533	1.53	20.82	6,009	5,302	16.87
1953	-	102,000	Mar. 27, 1953	1,450	7,373	7,472	1.75	23.77	7,827	8,386	26.67
1954	-	73,800	Sept. 12, 1954	2,020	9,136	9,894	2.32	31.45	11,260	11,650	36.97
1955	-	50,300	Oct. 17, 1954	1,050	8,610	7,973	1.87	25.34	-	-	-

Note.--Records since 1950 not previously published.

490. Sebasticook River near Pittsfield, Maine

Location.--Lat 44°42'55", long 69°24'55", on right bank $1\frac{1}{2}$ miles upstream from Twentyfive-mile Stream and 4 miles south of Pittsfield, Somerset County.

Drainage area.--579 sq mi (revised).

Records available.--October 1928 to September 1960.

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

Average discharge.--31 years (1929-60), 935 cfs.

Extremes.--1928-60: Maximum discharge, 14,400 cfs Mar. 22, 1936 (gage height, 18.18 ft); minimum, 2.9 cfs Dec. 30, 1941 (gage height, 0.40 ft); minimum daily, 4.5 cfs Nov. 10, 1956.

Remarks.--Considerable diurnal fluctuations 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).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	113	539	2,910	852	1,411	1,914	5,024	1,847	534	368	321	273	1,339
1952	216	1,399	1,271	1,363	1,119	1,059	3,793	875	964	272	99.5	118	1,041
1953	89.5	67.1	473	776	1,171	2,585	4,186	1,518	390	214	170	185	981
1954	230	635	2,101	454	669	2,065	4,507	1,899	817	1,249	1,664	3,447	1,645
1955	1,528	1,925	2,046	758	911	1,123	3,650	1,028	638	177	170	128	1,171
1956	93.3	561	189	1,055	317	363	3,479	1,766	653	399	179	132	763
1957	176	417	487	454	392	979	1,556	661	207	147	128	110	476
1958	79.6	518	1,482	1,457	1,113	1,157	4,822	2,452	328	200	225	162	1,147
1959	459	1,239	861	516	369	713	4,250	453	577	273	147	388	849
1960	648	2,256	2,520	906	868	563	4,825	1,330	675	313	151	156	1,262

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1951	1201	7,800	Apr. 6, 1951	30	1,339	2.31	31.39	1,275	29.99
1952	1231	6,040	Apr. 9, 1952	20	1,041	1.80	24.48	854	20.07
1953	1271	10,300	Mar. 31, 1953	18	981	1.69	23.01	1,176	27.62
1954	1331	9,510	Sept. 15, 1954	22	1,645	2.84	38.57	1,857	43.51
1955	1381	5,760	Apr. 19, 1955	10	1,171	2.02	27.45	779	18.29
1956	1431	6,510	Apr. 19, 1956	4.8	763	1.32	17.94	781	18.41
1957	1501	1,990	Apr. 13, 1957	4.5	476	.822	11.13	544	12.73
1958	1551	7,290	Apr. 26, 1958	5.3	1,147	1.98	26.69	1,202	28.19
1959	1621	8,410	Apr. 7, 1959	4.6	849	1.47	19.91	1,090	25.55
1960	1701	8,450	Apr. 8, 1960	8.1	1,262	2.18	29.66	-	-

495. Cobbosseecontee Stream at Gardiner, Maine

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

Drainage area.--217 sq mi.

Records available.--June 1890 to September 1960.

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

Average discharge.--70 years (1890-1960), 335 cfs.

Extremes.--1890-1960: Maximum discharge, 5,020 cfs Mar. 21, 1936 (elevation, 137.4 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.

KENNEBEC RIVER BASIN

Yearly discharge, in cubic feet per second, of Cobbosseecontee Stream at Gardiner, Maine--Continued

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	180	168	205	246	436	1,091	1,657	403	226	209	245	269	442
1952	225	745	801	751	790	875	1,653	421	398	165	148	131	554
1953	125	99.7	63.7	147	229	1,211	1,854	446	209	201	230	224	420
1954	230	230	272	170	228	688	1,170	673	383	326	242	905	459
1955	417	529	862	452	336	685	508	308	220	188	191	174	406
1956	180	180	185	433	259	315	1,480	425	227	203	230	230	361
1957	228	210	216	263	268	246	230	230	224	179	184	179	221
1958	175	180	180	515	709	775	1,521	875	246	177	194	227	479
1959	242	234	241	253	257	270	1,066	272	225	240	240	226	313
1960	230	245	1,035	492	676	713	1,801	1,079	274	172	217	233	596

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	267	-
1951	1201	2,770	Apr. 5, 1951	110	442	-	-	528	-
1952	1231	2,470	Apr. 7-17, 1952	70	554	-	-	447	-
1953	1271	2,660	Apr. 18, 1953	10	420	-	-	457	-
1954	1351	2,540	Apr. 20, 21, 1954	10	459	-	-	550	-
1955	1381	1,850	Dec. 20, 1954	10	406	-	-	300	-
1956	1431	2,410	Apr. 17-20, 1956	95	361	-	-	370	-
1957	1501	275	Jan. 23, 1957	90	221	-	-	211	-
1958	1551	2,210	Jan. 28, 1958	110	479	-	-	494	-
1959	1621	1,790	Apr. 4-12, 1959	10	313	-	-	380	-
1960	1701	2,900	Apr. 6, 1960	10	596	-	-	-	-

ANDROSCOGGIN RIVER BASIN

500. Kennebag Lake at Kennebago, Maine

Location.--Lat 45°06'10", long 70°46'40", at dam at outlet of Kennebago Lake on Kennebago River at Kennebago, Franklin County.

Drainage area.--112 sq mi.

Records available.--September 1931 to April 1960.

Gage.--Staff gage. Datum of gage is at mean sea level.

Remarks.--Reservoir used for storage of water for power, has usable capacity of 721,000,000 cu ft between 1,773.0 and 1,780.5 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	448	545	986	733	643	676	643	871	848	756	756	599
1952	470	756	744	632	523	480	710	767	802	480	335	335
1953	355	417	577	566	621	882	940	882	825	599	365	355
1954	427	790	733	621	523	545	767	859	744	859	790	836
1955	825	779	643	599	534	480	555	813	599	459	366	376
1956	632	566	448	859	756	767	871	836	676	599	427	480
1957	-	-	-	-	-	-	-	-	-	-	-	-
1958	-	-	-	-	-	-	928	957	928	951	842	704
1959	963	917	698	588	438	172	917	974	963	756	545	335
1960	974	974	963	848	710	513	698	-	-	-	-	-

Note.--No month-end contents available for October 1957 to March 1958 and May to September 1960. Contents are at 7 a.m. on first day of following month.

505. Rangeley Lake at Oquossoc, Maine

Location.--Lat 44°59', long 70°47', at dam at outlet of Rangeley Lake on Rangeley Stream at Oquossoc, Franklin County.

Drainage area.--90 sq mi.

Records available.--September 1931 to September 1960.

Gage.--Staff gage. Datum of gage is 1,514 ft above mean sea level.

Remarks.--Reservoir used for storage of water for power and log driving. Usable capacity, 1,339,200,000 cu ft in top 4 ft of lake (top of flashboards).

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

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	529	1,282	727	194	0	194	1,339	1,339	1,246	1,313	1,282	1,145
1952	670	476	57	237	167	110	1,229	1,339	1,339	1,004	780	559
1953	141	26	181	237	194	1,450	1,256	1,229	1,269	1,229	1,088	643
1954	251	392	335	167	181	181	1,256	1,353	1,366	1,353	1,313	1,339
1955	1,339	1,339	1,339	978	559	265	978	1,299	1,339	1,145	1,229	837
1956	224	224	40	361	141	84	710	1,158	1,299	1,282	1,145	991
1957	392	167	110	97	84	57	670	1,018	1,198	1,339	1,031	559
1958	278	308	1,018	643	224	110	1,115	1,299	1,282	1,339	1,242	1,004
1959	894	643	127	87	84	40	727	920	1,359	1,229	1,172	920
1960	1,061	1,198	1,326	1,061	392	154	1,185	1,339	1,339	1,306	1,198	1,088

Note.--Contents are at 7 a.m. on first day of following month.

510. Mooselookmeguntic Lake at Upper Dam, Maine

Location.--Lat 44°53', long 70°52', at dam at outlet of Mooselookmeguntic Lake in township of Richardsontown, Oxford County.

Drainage area.--405 sq mi.

Records available.--April 1880 to September 1884, November 1884, February to July 1885, April 1886 to September 1960.

Gage.--Staff gage. Datum of gage is 1,446 ft above mean sea level.

Remarks.--Lake used for storage of water for power and log driving. Usable capacity, 8,370,000,000 cu ft between gage heights 8.3 and 20.5 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	2,634	4,130	6,367	4,334	2,600	1,499	7,223	8,046	7,295	6,830	5,091	3,178
1952	2,532	4,884	5,056	3,688	2,297	310	4,504	7,974	7,616	5,906	3,994	2,600
1953	468	0	0	62	186	2,906	8,046	8,010	7,652	6,438	5,091	3,076
1954	1,831	1,253	1,532	1,000	634	372	6,367	8,046	8,190	7,688	7,509	7,652
1955	7,438	7,867	6,438	4,574	3,144	155	6,012	8,010	8,082	6,260	4,436	2,250
1956	2,498	310	0	372	186	31	1,898	7,581	7,667	7,009	6,190	4,402
1957	3,314	2,566	1,499	186	62	0	3,110	5,302	5,906	6,580	5,373	3,110
1958	1,565	1,998	4,539	5,160	1,765	155	5,444	8,046	7,545	8,010	6,866	5,550
1959	4,436	4,953	3,178	404	124	0	4,402	7,080	8,298	7,080	5,906	4,334
1960	5,373	8,082	7,152	5,941	4,130	1,499	6,794	8,190	8,298	7,724	6,367	4,953

Note.--Contents are at 7 a.m. on first day of following month.

515. Upper and Lower Richardson Lakes at Middle Dam, Maine

Location.--Lat 44°47', long 70°55', on Rapid River at Middle Dam, Oxford County.

Drainage area.--509 sq mi.

Records available.--October 1900 to September 1960.

Gage.--Staff gage. Datum of gage is 1,428 ft above mean sea level.

Remarks.--Lakes used for storage of water for power and log driving. Usable capacity, 5,691,500,000 cu ft between gage heights 3.0 and 20.5 ft.

Month-end contents, in millions of cubic feet												
Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	2,467	3,510	4,398	3,455	3,474	2,105	5,162	5,331	4,862	4,121	3,418	3,381
1952	2,613	3,179	4,047	3,270	2,302	1,630	3,142	5,481	5,256	4,398	3,307	2,321
1953	2,941	1,966	1,111	500	430	1,598	5,461	5,462	5,350	4,862	3,696	2,594
1954	1,983	1,881	2,668	2,321	1,864	1,320	3,270	5,652	5,652	5,200	4,862	5,218
1955	5,087	5,275	5,012	4,047	3,529	2,613	3,699	5,500	5,538	4,975	4,975	3,436
1956	746	2,485	1,556	1,898	980	512	1,126	5,237	5,500	4,881	3,677	3,806
1957	3,566	2,905	2,613	1,932	882	882	1,646	3,381	2,357	1,520	2,978	3,751
1958	3,051	3,954	5,125	4,084	3,566	2,430	3,603	5,500	5,050	5,162	4,787	4,176
1959	4,676	4,676	4,047	3,973	2,686	1,682	2,905	4,658	5,595	5,181	3,954	3,252
1960	4,084	5,162	5,481	4,639	3,862	2,321	4,454	5,557	5,652	5,350	3,862	3,714

Note.--Contents are at 7 a.m. on first day of following month.

520. Azischohos Lake at Azischohos Dam, Maine

Location.--Lat 44°56'40", long 70°59'50", on Magalloway River in Lincoln Township, 3 miles east of village of Wilson's Mills, Oxford County.

Drainage area.--214 sq mi.

Records available.--April 1911 to September 1960.

Gage.--Staff gage. Datum of gage is at mean sea level.

Remarks.--Reservoir completed in 1911 for storage of water for power. Usable capacity, 9,593,000,000 cu ft between elevations 1,490.0 and 1,535.0 ft.

Month-end contents, in millions of cubic feet												
Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	5,890	7,304	8,022	6,688	5,904	4,864	9,192	9,764	8,410	8,440	7,444	6,464
1952	5,584	7,024	6,156	5,672	4,825	3,818	7,108	9,841	9,608	8,350	6,884	5,280
1953	3,794	3,482	3,578	3,386	3,186	4,460	8,530	9,686	9,516	8,080	6,744	5,752
1954	4,786	4,585	5,456	4,786	4,135	4,310	8,305	9,826	9,918	9,779	9,624	9,810
1955	9,608	9,469	7,703	5,968	4,735	4,710	8,770	9,748	9,841	8,755	8,470	7,122
1956	6,212	6,520	5,176	5,007	4,522	2,742	3,938	9,330	9,717	9,237	7,346	6,590
1957	6,240	5,974	5,793	5,361	4,938	4,135	6,912	8,860	8,980	9,516	6,842	5,456
1958	4,968	6,240	8,140	7,276	6,198	3,674	7,332	9,253	9,407	9,717	8,955	8,056
1959	7,500	7,630	6,548	5,876	4,585	2,830	6,884	9,268	9,396	9,717	8,260	6,772
1960	7,558	9,500	9,531	7,746	6,212	4,560	9,454	9,748	9,903	8,605	6,576	6,016

Note.--Contents are at 7 a.m. on first day of following month.

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

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

Drainage area--153 sq mi.

Records available--July 1941 to September 1960.

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

Average discharge--19 years (1941-60), 346 cfs.

Extremes--1941-60: Maximum discharge, 8,630 cfs June 16, 1943 (gage height, 10.66 ft), from rating curve extended above 3,900 cfs; minimum, 6.8 cfs Aug. 27, 28, 1949, Sept. 1, 1952 (gage height, 0.81 ft).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	147	619	452	125	104	135	1,556	743	143	208	92.9	84.6	367
1952	101	482	311	165	86.8	80.6	1,338	926	457	35.1	15.0	16.8	333
1953	40.9	115	163	204	228	779	1,215	601	150	67.6	52.4	51.5	305
1954	89.0	152	323	872	165	143	1,591	1,061	595	206	288	856	460
1955	616	395	264	156	112	222	1,402	806	434	63.5	231	49.0	396
1956	80.4	259	98.7	177	79.9	57.2	470	1,525	313	116	47.9	112	279
1957	154	164	137	176	124	190	825	459	172	304	75.0	63.9	237
1958	106	422	617	142	64.5	73.1	1,261	872	231	472	149	158	382
1959	347	322	119	112	89.5	108	1,185	625	596	125	109	110	320
1960	607	721	273	161	138	88.2	1,503	760	293	140	51.5	162	407

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1.11	4.52	3.40	0.94	0.71	1.02	11.35	5.60	1.04	1.57	0.70	0.62	32.58
1952	.76	3.51	2.34	1.24	.61	.81	9.76	6.98	3.34	.26	.11	.12	29.84
1953	.31	.84	1.53	1.53	1.55	5.87	8.86	4.53	1.09	.51	.39	.38	27.09
1954	.67	1.11	2.43	.66	1.12	1.08	11.60	7.99	4.34	1.56	2.17	6.09	40.82
1955	4.65	2.86	1.99	1.18	.76	1.67	10.22	6.08	3.17	.48	1.74	.36	35.18
1956	.61	1.89	.74	1.34	.56	.43	3.42	11.49	2.29	.87	.36	.82	24.82
1957	1.16	1.19	1.03	1.33	.84	1.43	6.01	3.46	1.25	2.29	.56	.47	21.02
1958	.80	3.08	4.65	1.07	.44	.55	9.19	6.57	1.68	3.55	1.12	1.15	33.85
1959	2.62	2.34	.90	.84	.61	.81	8.65	4.70	4.35	.94	.82	.80	28.38
1960	4.58	5.26	2.05	1.21	.97	.66	10.96	5.73	2.14	1.05	.59	1.18	36.18

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	374	33.18
1951	1201	4,020	Nov. 26, 1950	37	367	2.40	32.58	34C	30.16
1952	1231	4,120	June 2, 1952	7.1	333	2.18	29.64	294	25.31
1953	1271	5,880	Mar. 27, 1953	8.9	305	1.99	27.09	32E	28.92
1954	1331	7,890	Apr. 23, 1954	23	460	3.01	40.82	52C	46.13
1955	1381	4,850	Apr. 15, 1955	28	396	2.59	35.18	32E	28.90
1956	1431	4,680	May 13, 1956	22	279	1.82	24.82	281	24.96
1957	1501	4,180	Apr. 21, 1957	25	237	1.55	21.02	29E	26.17
1958	1551	4,600	Apr. 23, 1958	34	362	2.50	33.85	35E	31.18
1959	1621	3,320	June 15, 1959	26	320	2.09	28.38	38E	34.41
1960	1701	5,640	Apr. 18, 1960	13	407	2.66	36.18	-	-

ANDROSCOGGIN RIVER BASIN

530. Umbagog Lake at Errol Dam, N. H.

Location--Lat 44°47'15", long 71°07'30", on Androscoggin River at dam at outlet of Umbagog Lake at Errol Dam and three-quarters of a mile-northeast of Errol, Coos County.

Drainage area--1,045 sq mi (corrected).

Records available--December 1879 to September 1960.

Gage--Staff gage. Datum of gage is 1,230 ft above mean sea level.

Remarks--Lake used for storage of water for power and log driving. Usable capacity, 3,080,160,000 cu ft between gage heights 5.5 and 15.0 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	1,524	3,119	2,110	1,648	1,416	1,284	3,080	3,080	2,417	2,034	2,015	1,958
1952	1,722	2,091	2,148	1,648	1,398	1,045	2,904	3,100	2,748	2,053	1,958	1,686
1953	1,506	1,156	1,348	1,348	1,140	2,651	3,041	2,866	1,364	1,364	1,332	1,364
1954	1,560	1,776	2,300	1,488	1,506	910	2,262	3,060	3,100	2,748	2,091	2,651
1955	2,495	2,514	2,300	2,091	1,794	1,380	2,965	2,651	3,002	2,129	2,091	1,740
1956	1,398	1,977	1,758	2,053	1,284	820	1,722	3,060	2,186	1,958	1,864	1,958
1957	1,650	1,794	1,686	1,830	1,252	850	3,022	2,924	2,262	2,417	1,977	1,722
1958	1,542	2,417	2,982	1,684	1,722	820	1,958	2,924	1,830	2,534	2,091	1,596
1959	2,573	1,776	1,632	1,740	1,268	536	2,729	2,339	3,119	2,129	2,015	1,884
1960	3,002	3,100	2,358	1,996	1,686	1,000	2,729	3,002	2,495	1,704	1,848	1,524

Note--Contents are at 7 a.m. on first day of following month.

535. Androscoggin River at Errol, N. H.

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

Drainage area.--1,045 sq mi.

Records available.--January 1905 to September 1960. Monthly discharge only for October 1922 to November 1943, published in WSP 1301. Published as "at Errol Dam" prior to 1922.

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

Average discharge.--55 years (1905-60), 1,890 cfs (adjusted for storage).

Extremes.--1905-60: 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.--Flow regulated by reservoirs above station. Runoff adjusted for charge in contents in Kennebago Lake (see p. 58), Rangeley Lake (see p. 59), Mooselookmeguntic Lake (see p. 59), Upper and Lower Richardson Lakes (see p. 60), Azischoos Lake (see p. 60), and Umbagog Lake (see p. 62).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1,730	1,308	2,163	2,524	2,260	2,159	2,820	3,840	2,163	1,608	1,821	1,761	2,180
1952	1,581	1,147	1,776	1,966	2,117	2,119	2,347	2,174	3,516	1,812	1,774	1,690	1,999
1953	1,485	1,257	986	986	1,041	1,892	2,723	3,688	1,583	1,657	1,730	1,785	1,739
1954	1,516	1,252	1,192	1,531	1,429	1,448	3,311	4,123	3,637	2,207	1,981	4,738	2,362
1955	3,949	2,352	2,832	2,735	2,312	2,414	2,861	3,827	2,416	1,910	1,885	2,191	2,645
1956	1,664	1,191	1,417	1,197	1,576	1,611	1,157	2,518	2,285	1,748	1,806	1,657	1,654
1957	1,651	1,560	1,456	1,523	1,560	1,329	856	1,169	1,367	1,460	1,828	1,853	1,468
1958	1,710	1,104	1,783	2,309	2,863	2,768	2,964	2,906	2,094	1,533	1,990	2,119	2,174
1959	1,887	1,923	2,209	2,039	2,005	1,765	1,858	1,508	2,707	2,204	1,906	1,851	1,992
1960	1,615	1,803	2,665	2,738	2,866	2,852	2,811	4,302	1,756	1,776	1,939	1,736	2,407

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.49	4.03	3.50	0.57	0.93	0.98	9.61	4.97	0.93	1.12	0.57	0.53	28.23
1952	.44	3.21	1.88	.99	.61	.64	7.53	6.06	3.29	-.13	-.07	-.04	24.41
1953	.17	.45	.98	.80	.90	5.46	8.40	4.42	.80	.43	.16	.04	23.01
1954	.46	1.26	2.29	.60	.79	1.10	9.54	7.25	3.95	1.68	1.59	5.60	36.31
1955	4.06	2.70	1.56	.89	.66	.73	8.65	6.21	2.73	.18	1.19	-.06	29.50
1956	.18	1.43	.28	1.97	.52	.58	3.42	9.75	2.46	.99	.22	.76	22.56
1957	.76	.94	.90	.73	.61	.97	4.80	3.82	1.14	1.89	.71	.49	17.76
1958	.57	2.62	4.81	1.41	.60	.46	8.40	6.34	1.44	2.38	.99	.73	30.75
1959	2.08	1.87	.64	.85	.46	.40	7.48	4.42	4.57	.88	.58	.16	24.43
1960	3.66	4.38	2.44	1.13	.80	.29	9.29	6.08	1.82	.73	.15	.80	31.57

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed		Adjusted
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	1171	-	-	-	-	-	-	-	1,822	2,167	28.14
1951	1201	-	-	-	-	-	-	-	2,122	1,982	25.74
1952	1231	6,220	May 5-6, 1951	246	2,180	2,173	2.08	28.23	1,933	1,572	20.46
1953	1271	8,780	June 4, 1952	325	1,999	1,674	1.79	24.41	1,759	1,957	25.42
1954	1331	6,540	Mar. 21, 1953	295	1,739	1,771	1.69	23.01	2,798	3,128	40.62
1955	1381	10,900	Sept. 15, 1954	370	2,362	2,797	2.66	36.31	2,234	1,776	23.07
1956	1431	9,630	May 9, 1955	1,300	2,645	2,272	2.17	29.50	1,686	1,788	23.27
1957	1501	5,460	May 14, 1956	410	1,654	1,733	1.66	22.56	1,463	1,783	23.16
1958	1551	2,010	Aug. 20, 1957	250	1,468	1,368	1.31	17.76	2,293	2,101	27.34
1959	1621	7,520	Apr. 26, 1958	350	2,174	2,364	2.26	30.75	1,998	2,334	30.32
1960	1701	7,460	June 19, 1959	375	1,932	1,879	1.80	24.43	-	-	-
		9,230	May 14, 1960	420	2,407	2,423	2.32	31.57	-	-	-

540. Androscoggin River near Gorham, N. H.

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

Drainage area.--1,363 sq mi.

Records available.--October 1913 to September 1960. Monthly discharge only for October 1922 to February 1929, published in WSP 1301. Published as "at Berlin" prior to October 1928.

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

Average discharge.--47 years (1913-60), 2,453 cfs (adjusted for storage).

Extremes.--1913-60: 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.--Flow regulated by reservoirs and powerplants above station. Runoff adjusted for change in contents in Kennebag Lake (see p. 58), Rangeley Lake (see p. 59), Mooselookmeguntic Lake (see p. 60), Upper and Lower Richardson Lakes (see p. 60), Azischoos Lake (see p. 60), and Umbagog Lake (see p. 62).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1,915	2,368	3,022	2,686	2,610	2,668	5,774	4,721	2,266	1,840	1,935	1,891	2,809
1952	1,767	2,009	2,113	2,240	2,286	2,425	4,749	3,467	4,231	1,850	1,730	1,715	2,548
1953	1,609	1,442	1,257	1,276	1,319	3,689	4,812	4,889	1,746	1,772	1,821	1,813	2,292
1954	1,703	1,618	1,708	1,625	1,750	1,911	6,034	5,753	4,715	2,795	2,236	6,587	3,185
1955	4,894	3,120	3,274	2,966	2,643	2,812	5,072	4,683	3,109	2,005	2,159	2,168	3,246
1956	1,794	1,704	1,592	1,820	1,823	1,820	2,608	4,463	2,651	1,920	1,913	2,027	2,179
1957	1,947	1,980	1,794	1,853	1,812	1,767	1,994	2,050	1,644	1,759	1,837	1,867	1,859
1958	1,819	1,801	2,950	2,590	3,041	3,106	5,664	4,581	2,540	2,014	2,165	2,346	2,880
1959	2,485	2,383	2,451	2,311	2,157	2,037	3,895	2,154	3,204	2,367	2,079	2,031	2,456
1960	2,434	2,709	3,347	3,152	3,291	3,176	5,381	5,210	2,175	1,980	1,976	2,011	3,069

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.53	3.96	3.41	0.57	0.98	1.18	9.78	4.55	0.80	1.06	0.56	0.49	27.87
1952	.50	3.17	1.73	.99	.80	.75	7.74	5.74	3.10	-.07	-.04	-.01	24.20
1953	.23	.50	.98	.86	.90	5.70	8.16	4.40	.75	.42	.20	.05	23.15
1954	.51	1.27	2.19	.54	.84	1.23	9.54	6.94	3.92	1.94	1.49	5.64	36.05
1955	3.91	2.70	1.57	.88	.76	.90	8.44	5.49	2.67	.22	1.14	-.06	28.62
1956	.24	1.52	.36	2.04	.60	.62	3.82	9.12	2.19	.90	.26	.89	22.56
1957	.83	1.07	.98	.84	.86	1.12	4.81	3.67	1.10	1.70	.55	.39	17.52
1958	.53	2.59	4.66	1.53	.60	.64	8.65	6.27	1.47	2.24	.91	.74	30.63
1959	2.10	1.81	.69	.83	.48	.54	7.40	3.93	3.92	.81	.55	.29	23.35
1960	3.49	4.11	2.46	1.22	.95	.49	9.23	5.42	1.73	.73	.14	.84	30.81

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed		Adjusted
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	1171	-	-	-	-	-	-	-	2,388	2,733	27.21
1951	1201	9,980	Apr. 12, 1951	1,580	2,809	2,802	2.06	27.87	2,690	2,550	25.37
1952	1231	10,500	June 5, 1952	1,580	2,548	2,423	1.78	24.20	2,416	2,055	20.51
1953	1271	17,900	Mar. 27, 1953	1,020	2,292	2,324	1.71	23.15	2,352	2,550	25.41
1954	1331	15,100	Apr. 22, 1954	1,430	3,185	3,620	2.66	36.05	3,713	4,043	40.26
1955	1581	11,000	May 9, 1955	1,920	3,246	2,873	2.11	28.62	2,723	2,265	22.56
1956	1431	8,250	May 15, 1956	1,510	2,179	2,258	1.66	22.56	2,232	2,334	23.32
1957	1501	4,340	Apr. 22, 1957	1,490	1,859	1,759	1.29	17.52	1,930	2,250	22.42
1958	1551	13,800	Apr. 23, 24, 1958	1,540	2,880	3,070	2.25	30.63	2,943	2,751	27.45
1959	1621	8,900	June 19, 1959	1,700	2,456	2,343	1.72	23.35	2,555	2,891	28.81
1960	1701	11,200	May 16, 1960	1,780	3,069	3,085	2.26	30.81	-	-	-

545. Androscoggin River at Rumford, Maine

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

Drainage area.--2,067 sq mi.

Records available.--May 1892 to September 1960. Monthly discharge only for October 1903 to September 1904, published in WSP 1301.

Gages.--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.--68 years (1892-60), 3,691 cfs (adjusted for storage).

Extremes.--1892-1960: 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 reservoirs and powerplants above station. Runoff adjusted for change in contents in Kennebago Lake (see p. 58), Rangeley Lake (see p. 59), Mooselookmeguntic Lake (see p. 60), Upper and Lower Richardson Lakes (see p. 60), Aziscohos Lake (see p. 60), and Umbagog Lake (see p. 62).

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

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2,169	5,437	6,292	3,331	3,983	3,777	13,510	7,235	2,904	2,440	2,264	2,276	4,625
1952	2,362	4,757	4,022	3,044	2,970	3,212	11,490	7,480	6,747	2,103	1,927	1,843	4,316
1953	1,716	1,608	2,181	1,986	2,151	9,615	10,040	8,025	2,141	2,000	2,111	1,963	3,807
1954	1,977	2,892	3,151	2,024	2,430	3,191	12,270	10,940	6,359	3,750	3,063	9,296	5,103
1955	6,348	5,182	4,740	3,560	3,197	3,680	10,650	7,087	4,239	2,218	2,684	2,203	4,651
1956	2,230	3,013	1,728	3,382	2,109	2,022	5,602	8,123	3,567	2,578	2,016	2,631	3,251
1957	2,454	2,618	2,429	2,379	2,191	2,551	4,532	3,354	2,032	2,201	1,955	1,897	2,550
1958	1,952	3,186	6,481	3,314	3,328	3,696	12,650	9,056	3,333	2,743	2,529	2,593	4,573
1959	3,595	3,375	2,669	2,979	2,499	2,668	9,022	3,193	4,811	2,753	2,397	2,675	3,546
1960	5,582	7,168	6,097	3,864	3,939	3,607	11,640	10,660	3,160	2,526	2,245	2,967	5,286

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.49	4.26	4.08	0.74	1.33	1.40	10.63	4.40	0.87	1.03	0.54	0.55	30.32
1952	.66	3.57	2.20	1.10	.75	.93	8.75	6.03	3.40	.09	.05	.06	27.59
1953	.21	.42	1.16	.96	1.01	7.07	8.20	4.65	.71	.41	.29	.12	25.21
1954	.49	1.53	2.25	.58	.90	1.53	9.66	7.47	3.47	1.80	1.41	5.29	36.38
1955	3.39	2.69	1.86	.91	.78	1.08	8.58	4.96	2.36	.26	1.05	-.02	28.10
1956	.40	1.71	.31	2.21	.54	.52	4.13	8.06	1.93	.96	.23	.91	21.91
1957	.83	1.05	1.00	.85	.63	1.18	4.41	3.15	.93	1.37	.43	.27	16.10
1958	.42	2.46	5.05	1.28	.54	.75	9.47	6.63	1.40	1.88	.80	.62	31.30
1959	1.99	1.73	.59	.92	.49	.71	7.64	3.17	3.45	.75	.57	.54	22.54
1960	4.06	5.11	3.15	1.20	.96	.57	9.46	6.62	1.67	.79	.24	1.07	34.90

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30								Calendar year		
		Observed					Adjusted			Observed		Adjusted
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date									
1950	1171	-	-	-	-	-	-	-	3,888	4,233	27.80	
1951	1201	27,800	Nov. 27, 1950	1,610	4,625	4,618	2.23	30.32	4,393	4,253	27.92	
1952	1231	26,000	June 27, 1952	1,650	4,316	4,191	2.03	27.59	3,848	3,487	22.95	
1953	1271	52,800	Mar. 27, 1953	1,180	3,807	3,839	1.86	25.21	4,017	4,215	27.69	
1954	1331	28,900	Apr. 23, 1954	1,580	5,103	5,538	2.68	36.38	3,798	6,128	40.25	
1955	1381	21,400	Apr. 6, 1955	1,930	4,651	4,278	2.07	28.10	3,867	3,409	22.38	
1956	1431	15,400	Apr. 30, 1956	1,450	3,251	3,330	1.61	21.91	3,297	3,399	22.37	
1957	1501	13,100	Apr. 21, 1957	1,370	2,550	2,450	1.19	16.10	2,898	3,216	21.15	
1958	1551	32,500	Apr. 23, 1958	1,670	4,573	4,763	2.30	31.30	4,404	3,586	27.67	
1959	1621	15,700	June 19, 1959	1,850	3,546	3,433	1.66	22.54	4,318	4,654	30.56	
1960	1701	41,700	Oct. 25, 1959	1,800	5,286	5,302	2.57	34.90	-	-	-	

550. Swift River near Roxbury, Maine

Location--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 1960.

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

Average discharge--31 years (1929-60), 198 cfs.

Extremes--1929-60: Maximum discharge, 16,800 cfs Oct. 24, 1959 (gage height, 12.87 ft); minimum, 3.8 cfs Sept. 16, 17, 1948 (gage height, 0.93 ft).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	55.4	469	338	91.0	195	123	1,141	359	71.5	77.5	42.3	55.7	250
1952	86.7	441	160	69.3	59.9	68.2	834	523	334	18.1	25.9	19.2	219
1953	42.9	51.8	134	95.3	135	866	740	422	54.9	26.7	25.5	23.3	219
1954	57.9	206	254	57.9	102	133	894	653	296	139	139	497	285
1955	424	326	215	93.0	101	92.8	742	443	143	24.3	36.6	10.4	221
1956	37.1	174	34.6	269	51.9	44.9	403	644	186	96.9	19.0	134	175
1957	98.3	116	87.2	122	91.5	114	425	261	81.2	66.9	38.5	20.7	127
1958	52.9	207	487	110	54.0	85.8	923	669	144	170	65.7	56.8	253
1959	195	168	594	63.3	54.9	92.8	695	245	318	43.1	104	138	181
1960	489	486	214	117	128	72.5	784	697	151	73.0	28.5	104	278

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.67	5.47	4.07	1.10	2.12	1.48	13.28	4.32	0.83	0.93	0.51	0.65	35.43
1952	1.04	5.13	1.92	.83	.67	.92	9.72	6.30	3.89	.22	.31	.22	31.07
1953	.52	.60	1.61	1.15	1.47	10.42	8.61	5.08	.64	.32	.31	.27	31.00
1954	.70	2.40	3.06	.70	1.10	1.60	10.41	7.86	3.45	1.67	1.67	5.79	40.41
1955	5.11	3.79	2.58	1.12	1.09	1.12	8.65	5.33	1.66	.29	.44	.12	31.30
1956	.45	2.03	.42	3.24	.58	.54	4.70	7.75	2.16	1.16	.23	1.56	24.82
1957	1.19	1.35	1.05	1.46	.99	1.37	4.95	3.14	.95	.80	.46	.24	17.95
1958	.64	2.42	5.86	1.33	.59	1.03	10.74	8.05	1.67	2.04	.79	.66	35.82
1959	2.35	1.95	.72	.76	.60	1.12	8.09	2.95	3.70	.52	1.24	1.61	25.61
1960	5.98	5.66	2.57	1.41	1.44	.87	9.13	8.39	1.76	.88	.34	1.22	39.55

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	226	32.09
1951	1201	-	Nov. 26, 1950	15	250	2.61	35.43	235	33.31
1952	1231	8,060	June 2, 1952	6.1	219	2.29	31.07	181	25.71
1953	1271	10,200	Mar. 27, 1953	5.4	219	2.29	31.00	243	34.43
1954	1331	9,970	Sept. 11, 1954	11	285	2.97	40.41	323	45.73
1955	1381	6,250	Oct. 16, 1954	9.4	221	2.31	31.30	160	22.72
1956	1431	3,000	Jan. 10, 1956	10	175	1.83	24.82	180	25.51
1957	1501	3,030	Apr. 21, 1957	11	127	1.33	17.95	164	23.28
1958	1551	7,200	Dec. 21, 1957	13	253	2.64	35.82	225	31.92
1959	1621	2,440	June 15, 1959	12	181	1.89	25.61	245	34.70
1960	1701	16,800	Oct. 24, 1959	7.8	278	2.90	39.55	-	-

555. Nezinscot River at Turner Center, Maine

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

Drainage area.--171 sq mi.

Records available.--August 1941 to September 1960.

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

Average discharge.--19 years (1941-60), 306 cfs.

Extremes.--1941-60: Maximum discharge, 13,900 cfs Mar. 27, 1953 (gage height, 11.18 ft); minimum, 5.6 cfs Aug. 29, 1956 (gage height, 0.72 ft).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	62.8	386	626	183	406	607	1,538	296	134	319	142	130	401
1952	170	695	363	281	246	370	1,554	612	331	53.2	29.1	24.5	392
1953	27.3	45.3	255	187	342	1,747	991	464	105	60.6	62.6	30.2	361
1954	41.8	187	354	102	239	498	1,104	746	337	224	213	883	410
1955	412	609	554	216	309	335	988	266	236	49.5	50.5	26.0	336
1956	45.0	259	51.2	507	107	125	1,010	499	280	179	41.9	185	273
1957	162	218	221	212	144	403	407	229	104	77.7	48.1	21.8	188
1958	27.6	195	593	568	309	425	1,498	595	161	117	71.6	55.4	384
1959	173	222	166	125	103	424	1,088	148	294	105	43.1	68.3	246
1960	292	635	494	256	406	246	1,455	1,016	258	90.8	58.7	89.8	440

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.42	2.52	4.22	1.23	2.47	4.09	10.03	1.99	0.87	2.16	0.96	0.85	31.81
1952	1.15	4.53	2.44	1.89	1.55	2.49	10.14	4.13	2.16	.36	.20	.16	31.20
1953	.18	.30	1.72	1.26	2.08	11.78	6.47	3.12	.68	.41	.42	.20	29.82
1954	.28	1.22	2.39	1.69	1.46	3.36	7.21	5.03	2.20	1.51	1.44	5.76	32.55
1955	2.78	3.97	3.74	1.45	1.88	2.26	6.45	1.80	1.54	.33	.34	.17	26.71
1956	.30	1.68	.34	3.41	.68	.84	6.59	3.37	1.83	1.21	.28	1.20	21.73
1957	1.09	1.42	1.49	1.43	.88	2.72	2.66	1.54	.68	.52	.32	.14	14.89
1958	.19	1.27	4.00	3.83	1.88	2.87	9.77	4.01	1.05	.79	.48	.36	30.50
1959	1.16	1.45	1.12	.84	.63	2.86	7.10	1.00	1.92	.71	.29	.45	19.53
1960	1.97	4.14	3.33	1.73	2.56	1.66	9.50	6.85	1.68	.61	.40	.59	35.02

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	279	22.18
1951	1201	6,920	Apr. 4, 1951	25	401	2.35	31.81	413	32.77
1952	1231	3,560	Apr. 7, 1952	18	392	2.29	31.20	318	25.28
1953	1271	13,900	Mar. 27, 1953	24	361	2.11	28.62	392	30.31
1954	1331	6,260	Sept. 12, 1954	25	410	2.40	32.55	493	39.15
1955	1381	2,720	Dec. 19, 1954	18	336	1.96	26.71	234	18.54
1956	1431	2,550	Apr. 18, 1956	5.8	273	1.60	21.73	294	23.41
1957	1501	668	Nov. 23, 1956	16	188	1.10	14.89	206	16.35
1958	1551	3,000	Apr. 24, 1958	15	384	2.25	30.50	363	28.77
1959	1621	4,430	Apr. 4, 1959	22	246	1.44	19.53	318	25.24
1960	1701	4,090	Apr. 6, 1960	18	440	2.57	35.02	-	-

560. Gulf Island Pond near Lewiston, Maine

Location.--Lat 44°08'50", long 70°12'25", at Gulf Island Dam on Androscoggin River, 3 miles upstream from Lewiston, Androscoggin County.

Drainage area.--2,860 sq mi.

Records available.--September 1926 to September 1960.

Gage.--Staff gage. Datum of gage is at mean sea level.

Remarks.--Reservoir completed in 1926 for storage of water for hydro-electric power development. Capacity, 1,100,000,000 cu ft in top 10 ft of pond below elevation 262 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	2,358	2,434	2,432	2,417	2,409	2,486	2,485	2,490	2,331	2,400	2,373	2,492
1952	2,480	2,283	2,461	2,354	2,308	2,480	2,480	2,472	2,434	2,224	2,410	2,340
1953	2,270	2,493	2,281	2,348	2,446	2,475	2,464	2,500	2,356	2,201	2,380	2,311
1954	2,436	2,469	2,370	2,487	2,395	2,384	2,459	2,492	2,501	2,478	2,473	2,489
1955	2,492	2,495	2,478	2,478	2,451	2,304	2,484	2,469	2,448	2,489	2,211	2,187
1956	2,409	2,285	2,342	2,304	2,178	2,076	2,478	2,482	2,365	2,327	2,144	2,487
1957	2,348	2,424	2,486	2,273	2,269	2,486	2,479	2,489	2,486	2,458	2,190	2,369
1958	2,194	2,431	2,480	2,465	2,437	2,485	2,503	2,435	2,329	2,397	2,131	2,327
1959	2,486	2,449	2,302	2,327	2,223	2,128	2,482	2,017	2,492	2,112	2,461	2,215
1960	2,456	2,468	2,428	2,455	2,435	2,276	2,479	2,435	2,336	2,434	2,080	2,107

565. Lake Auburn at East Auburn, Maine

Location.--Lat 44°08'10", long 70°13'55", on outlet stream to Androscoggin River at East Auburn, Androscoggin County.

Drainage area.--17.7 sq mi.

Records available.--January 1928 to September 1960.

Gage.--Staff gage. Datum of gage is at mean sea level.

Remarks.--Lake is used for storage of water for municipal supply. Usable capacity, 580,000,000 cu ft between elevations 254.7 and 260.7 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	260	290	452	474	556	664	580	496	463	474	430	408
1952	419	496	463	463	441	452	568	532	408	320	260	230
1953	195	180	235	310	430	790	676	604	526	458	419	358
1954	342	358	430	436	514	580	586	562	520	452	408	532
1955	502	556	544	468	496	520	556	490	446	358	336	285
1956	280	310	300	441	441	452	640	568	474	419	364	364
1957	353	375	386	452	452	496	496	474	441	408	331	270
1958	230	260	397	568	532	580	640	508	463	441	386	342
1959	342	364	364	375	386	452	544	496	520	474	408	364
1960	375	508	532	520	568	544	556	592	485	419	353	331

570. Little Androscoggin River near South Paris, Maine

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

Drainage area--76.2 sq mi.

Records available--September 1913 to April 1924, October 1931 to September 1960.

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--39 years (1913-23, 1931-60), 138 cfs.

Extremes--1913-24, 1931-60: 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, Mar. 5, 1920.

Remarks--Occasional slight diurnal fluctuation at low and medium flow by sawmills and gristmills above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	25.3	265	265	88.7	173	199	723	112	37.3	69.8	51.7	66.9	170
1952	76.1	325	155	122	102	166	705	262	188	12.5	4.79	6.42	176
1953	10.3	13.6	122	91.2	137	788	429	209	42.1	31.8	40.5	13.0	161
1954	30.5	102	184	46.5	127	220	583	393	172	89.5	70.8	354	197
1955	165	253	251	86.7	116	124	502	145	139	18.0	13.8	4.45	151
1956	20.3	114	21.8	203	43.4	43.2	439	249	99.3	99.4	11.5	141	123
1957	94.5	92.7	92.3	85.5	63.4	161	211	110	40.7	38.5	18.6	6.44	84.7
1958	13.6	124	311	179	90.7	144	687	246	54.5	49.2	30.3	12.8	162
1959	67.2	86.5	54.0	59.0	36.3	102	507	69.9	149	36.8	15.6	39.9	101
1960	162	358	212	116	154	87.6	645	372	132	49.0	24.5	69.9	198

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.38	3.88	4.01	1.34	2.36	3.01	10.59	1.70	0.55	1.06	0.48	0.98	30.34
1952	1.15	4.76	2.34	1.84	1.44	2.51	10.32	3.97	2.76	.19	.07	.09	31.44
1953	.16	.20	1.84	1.38	1.87	11.92	6.28	3.16	.62	.47	.61	.19	28.70
1954	.46	1.50	2.78	.70	1.74	3.33	8.54	5.95	2.52	1.35	1.07	5.19	35.13
1955	2.50	3.70	3.79	1.31	1.58	1.88	7.35	2.19	2.03	.27	.21	.06	26.87
1956	.31	1.67	.33	3.07	.61	.65	6.43	3.77	1.45	1.50	.17	2.06	22.02
1957	1.43	1.36	1.40	1.29	.90	2.43	3.09	1.66	.60	.58	.28	.09	15.11
1958	.21	1.82	4.70	2.71	1.24	2.18	10.06	3.72	.80	.74	.46	.19	28.83
1959	1.02	1.27	.82	.89	.50	1.54	7.42	1.06	2.19	.56	.24	.58	18.09
1960	2.46	5.24	3.20	1.75	2.18	1.33	9.44	5.63	1.93	.74	.37	1.02	35.29

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches		
		Discharge	Date								
1950	1171	-	-	-	-	-	-	139	-	24.84	-
1951	1201	3,660	Apr. 3, 1951	4.6	170	2.23	30.34	170	30.32	-	-
1952	1231	2,120	June 2, 1952	2.0	176	2.31	31.44	142	25.39	-	-
1953	1271	8,000	Mar. 27, 1953	4.2	161	2.11	28.70	175	31.24	-	-
1954	1331	3,220	Sept. 12, 1954	10	197	2.59	35.13	227	40.38	-	-
1955	1381	1,950	Dec. 19, 1954	1.8	151	1.98	26.87	108	19.19	-	-
1956	1431	1,220	Apr. 17, 1956	4.2	123	1.61	22.02	134	23.90	-	-
1957	1501	436	Nov. 22, 1956	4.2	84.7	1.11	15.11	99.0	17.65	-	-
1958	1551	2,090	Dec. 21, 1957	3.6	162	2.13	28.83	141	25.21	-	-
1959	1621	2,200	Apr. 3, 1959	7.8	101	1.33	18.09	145	25.88	-	-
1960	1701	2,110	Apr. 5, 1960	4.8	198	2.60	35.29	-	-	-	-

575. Pennesseewassee Lake at Norway, Maine

Location--Lat 44°12'20", long 70°32'44", on short outlet stream to Little Androscoggin River at Norway, Oxford County.

Drainage area--21.1 sq mi.

Records available--December 1931 to September 1960.

Gage--Staff gage. Altitude of gage is 297 ft (from topographic map).

Remarks--Reservoir used for storage of water for hydroelectric power development. Usable capacity, 192,000,000 cu ft between gage heights 95.0 and 100.0 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	98	116	109	70	102	89	111	107	111	102	111	85
1952	121	111	74	76	46	33	111	118	102	102	22	89
1953	74	95	102	95	111	197	111	104	98	93	93	93
1954	84	104	98	13	66	63	116	116	118	113	113	116
1955	118	116	109	82	36	2.4	111	116	107	107	107	107
1956	98	102	40	104	55	30	98	121	116	111	116	93
1957	121	102	98	63	49	85	116	107	93	78	66	55
1958	49	116	93	107	55	93	176	111	111	111	107	93
1959	89	93	111	63	63	102	111	150	93	102	93	93
1960	144	85	63	63	98	130	107	130	116	107	102	93

Note--Contents as of last day of month determined by interpolation.

580. Thompson Lake at Oxford, Maine

Location--Lat 44°07'55", long 70°29'45", on short outlet stream to Little Androscoggin River at Oxford, Oxford County.

Drainage area--46.0 sq mi.

Records available--January 1928 to September 1960.

Gage--Staff gage. Altitude of gage is 320 ft (from topographic map).

Remarks--Reservoir used for storage of water for power and manufacturing purposes. Usable capacity, 950,000,000 cu ft between gage heights 95.0 and 100.0 ft.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	1,723	1,818	1,875	1,761	1,704	2,084	2,105	2,046	1,913	1,856	1,799	1,742
1952	1,647	1,998	2,074	1,913	1,524	1,524	1,960	2,142	1,960	1,723	1,476	1,240
1953	1,128	1,016	1,278	1,438	1,876	2,362	2,142	2,074	1,904	1,704	1,628	1,495
1954	1,428	1,428	1,571	1,552	1,723	1,790	1,960	2,161	2,094	1,913	1,723	1,913
1955	1,770	1,998	2,008	1,790	1,856	1,676	1,951	1,960	1,980	1,808	1,770	1,571
1956	1,428	1,600	1,580	1,866	1,884	1,618	1,904	2,056	2,046	1,932	1,723	1,647
1957	1,457	1,428	1,390	1,381	1,410	1,742	1,884	1,884	1,818	1,714	1,533	1,390
1958	1,296	1,287	1,666	1,913	1,647	1,714	1,998	2,094	1,998	1,904	1,742	1,618
1959	1,533	1,552	1,571	1,552	1,476	1,390	1,980	1,932	1,980	1,818	1,676	1,533
1960	1,457	1,628	1,913	1,894	1,780	1,590	2,065	2,180	2,103	1,989	1,799	1,723

Note--Contents at 8 a.m.

585. Little Androscoggin River near Auburn, Maine

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

Drainage area.--328 sq mi.

Records available.--October 1940 to September 1960.

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

Average discharge.--20 years (1940-60), 559 cfs (adjusted for storage).

Extremes.--1940-60: 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.--Flow regulated by Pennesseewassee and Thompson Lakes and several powerplants above station. Runoff adjusted for change in contents in Pennesseewassee Lake (see p. 70) and Thompson Lake (see p. 70).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	103	557	1,106	480	824	1,034	2,639	489	279	360	226	295	696
1952	325	1,217	694	605	603	817	2,709	1,156	749	191	156	156	778
1953	106	708	430	397	589	2,852	2,247	973	304	143	148	84.1	696
1954	68.1	250	570	241	420	1,112	1,856	1,594	709	433	388	1,384	752
1955	681	1,073	1,072	506	628	798	1,591	562	524	172	115	96.1	650
1956	126	472	213	826	314	420	1,815	932	529	392	133	394	546
1957	330	368	429	342	339	698	717	475	266	173	123	71.8	361
1958	62.2	319	884	924	722	821	2,289	1,050	332	186	193	97.5	655
1959	182	324	251	250	218	556	1,865	387	528	239	81.8	146	417
1960	346	906	875	501	691	583	2,491	1,622	609	251	121	235	766

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.30	2.04	3.95	1.49	2.58	4.12	9.03	1.64	0.79	1.18	0.73	0.89	28.74
1952	1.02	4.64	2.52	1.87	1.43	2.86	9.88	4.31	2.29	.36	.12	.31	31.61
1953	.21	.12	1.87	1.59	2.21	11.03	7.24	3.32	.80	.23	.42	.11	29.15
1954	.14	.88	2.18	.71	1.62	3.99	6.60	5.87	2.33	1.28	1.11	4.96	31.67
1955	2.20	3.95	3.77	1.46	2.02	2.52	5.91	1.99	1.80	.38	.36	.06	26.42
1956	.24	1.84	.64	3.37	.99	1.09	6.64	3.50	1.77	1.22	.20	1.22	22.72
1957	.95	1.19	1.45	1.15	1.09	2.94	2.67	1.66	.80	.45	.18	.04	14.57
1958	.09	1.16	3.57	3.58	1.87	3.02	8.27	3.74	1.00	.53	.46	.15	27.44
1959	†.52	†1.14	†.93	†.79	.59	†1.89	7.13	1.35	1.78	.64	.09	.31	†17.46
1960	1.19	3.22	3.42	1.74	2.17	1.84	9.06	5.88	1.95	.72	.17	.67	32.03

† Corrected.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year					
		Observed				Adjusted		Observed		Adjusted		Runoff in inches	inches
		Discharge	Maximum	Minimum	Mean	Mean	Per square mile	Mean	Mean	Mean	Mean		
		Discharge	Date	day	Mean	Mean	Per square mile	Mean	Mean	Mean	Mean		
1950	1271	-	-	-	-	-	-	-	-	500	524	21.67	
1951	1201	5,390	Apr. 3, 1951	28	696	695	2.12	28.74	734	740	30.63		
1952	1231	4,980	Apr. 8, 1952	27	778	762	2.32	31.61	643	619	25.63		
1953	1271	16,500	Mar. 28, 1953	23	696	704	2.15	29.15	720	729	30.15		
1954	1331	5,300	Apr. 19, 1954	26	752	766	2.34	31.67	914	928	38.39		
1955	1381	2,900	Dec. 20, 1954	45	650	639	1.95	26.42	480	464	19.22		
1956	1431	3,510	Apr. 18, 1956	50	548	548	1.67	22.72	574	570	23.59		
1957	1501	1,000	Mar. 24, 1957	45	361	352	1.07	14.57	375	382	15.80		
1958	1551	3,460	Apr. 24, 1958	29	655	663	2.02	27.44	612	608	†25.21		
1959	1621	4,990	Apr. 5, 1959	46	417	414	1.26	†17.16	532	541	22.40		
1960	1701	5,700	Apr. 7, 1960	48	766	772	2.35	32.03	-	-	-		

† Corrected.

590. Androscoggin River near Auburn, Maine

Location.--Lat 44°04'15", long 70°12'35", on right bank $1\frac{1}{2}$ 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 1960. Monthly discharge only for October 1928, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 109.18 ft above mean sea level, datum of 1929.

Average discharge.--32 years (1928-60), 6,034 cfs (adjusted for storage).

Extremes.--1928-60: Maximum discharge, 135,000 cfs Mar. 20, 1936 (gage height, 27.57 ft), from rating curve extended above 76,000 cfs on basis of slope-area measurement of peak flow and computation of flow over dams; minimum, 309 cfs Sept. 28, 1941 (gage height, 0.34 ft); minimum daily, 340 cfs Sept. 28, 1941.

Remarks.--Considerable diurnal fluctuation caused by powerplants and flow regulated by powerplants and reservoirs above station. Runoff adjusted for change in contents in Kennebagog Lake (see p. 58), Rangeley Lake (see p. 59), Mooselookmeguntic Lake (see p. 59), Upper and Lower Richardson Lakes (see p. 60), Azisconos Lake (see p. 60), Umbagog Lake (see p. 62), Gulf Island Pond (see p. 68), Lake Auburn (see p. 68), Pennessewassee Lake (see p. 70), and Thompson Lake (see p. 70).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2,855	7,974	10,840	5,231	7,280	7,598	23,170	10,340	4,115	3,686	3,092	3,219	7,428
1952	3,665	9,755	6,288	5,920	5,448	6,320	21,190	12,650	9,694	2,768	2,272	2,312	7,330
1953	2,123	1,904	3,902	3,520	4,771	18,380	19,940	12,100	3,415	2,618	2,620	2,348	6,479
1954	2,381	4,507	5,863	3,033	4,248	7,293	19,980	17,450	9,218	5,937	4,584	16,700	8,422
1955	10,810	10,080	8,822	5,718	5,528	6,581	17,430	10,290	6,637	2,904	3,451	2,642	7,574
1956	2,555	5,388	2,324	7,379	3,328	3,324	12,110	13,420	6,348	4,232	2,587	3,858	5,568
1957	3,740	4,077	3,979	3,845	3,471	5,266	7,661	5,790	3,131	2,960	2,676	2,777	4,075
1958	2,411	4,567	10,050	6,977	5,856	6,822	21,650	15,020	4,992	3,693	3,450	2,971	7,371
1959	4,689	5,166	3,875	4,063	3,605	4,658	16,480	5,421	6,817	4,114	2,740	3,596	5,422
1960	7,666	10,520	8,719	5,987	6,813	5,751	21,320	16,840	5,760	3,517	3,137	3,878	8,312

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.55	3.60	4.22	1.12	1.91	2.31	10.05	3.87	0.92	1.10	0.62	0.67	30.94
1952	.87	4.00	2.22	1.68	1.23	1.72	8.98	5.67	3.12	.22	.13	.17	29.99
1953	.25	.38	1.38	1.16	1.54	7.75	8.54	4.38	.83	.42	.37	.17	27.17
1954	.46	1.53	2.40	.73	1.19	2.43	8.81	7.07	3.17	1.89	1.36	5.94	36.98
1955	3.71	3.55	2.62	1.30	1.24	1.66	7.84	4.28	2.20	.38	.89	.10	29.89
1956	.38	1.91	.40	2.88	.73	.74	4.98	7.00	2.15	1.16	.29	1.03	23.65
1957	.94	1.17	1.19	1.03	.81	1.79	3.89	2.86	.95	1.11	.46	.30	16.50
1958	1.39	2.08	4.54	2.17	1.08	1.61	9.16	6.30	1.42	1.52	.77	.53	31.57
1959	1.66	1.71	.78	.96	1.14	7.54	2.73	2.94	.88	.50	.60	.22	22.08
1960	3.34	4.43	2.96	1.51	1.55	1.07	9.40	6.40	1.92	.84	.39	.98	34.79

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year			
		Observed				Adjusted			Observed		Adjusted	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date									
1950	1171											
1951	1201	52,900	Apr. 4, 1951	520	7,428	7,428	2.28	30.94	6,135	6,509	27.14	
1952	1231	37,500	June 2, 1952	480	7,330	7,179	2.20	29.89	6,374	5,962	24.91	
1953	1271	95,800	Mar. 25, 1953	440	6,479	6,522	2.00	27.17	6,831	7,091	29.55	
1954	1331	49,600	Sept. 12, 1954	485	8,422	8,882	2.73	36.98	9,847	10,200	42.47	
1955	1381	33,000	Apr. 16, 1955	505	7,574	7,172	2.20	29.89	5,935	5,448	22.70	
1956	1431	26,200	May 1, 1956	525	5,568	5,661	1.74	23.65	5,701	5,806	24.26	
1957	1501	19,400	Apr. 22, 1957	420	4,075	3,959	1.22	16.50	4,573	4,847	20.21	
1958	1551	46,700	Apr. 24, 1958	405	7,371	7,570	2.32	31.57	7,070	6,889	28.71	
1959	1621	31,000	Apr. 4, 1959	530	5,422	5,303	1.83	22.08	6,527	6,881	28.66	
1960	1701	51,500	Oct. 26, 1959	500	8,312	8,329	2.56	34.79	-	-	-	

595. Cathance River near Topsham, Maine

Location.--Lat 43°57'15", long 69°56'30", on right bank just upstream from falls, 0.9 mile upstream from highway bridge and lowest dam on the river, 1.6 miles downstream from bridge on U. S. Highway 201, and 2.3 miles northeast of Topsham, Sagadahoc County.

Drainage area.--36.4 sq mi.

Records available.--October 1952 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 25 ft (from topographic map).

Extremes.--1952-55: Maximum discharge, 2,040 cfs Sept. 12, 1954 (gage height, 7.26 ft); minimum daily, 0.02 cfs Sept. 7-29, 1955.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1953	3.98	8.34	88.3	109	131	318	243	81.3	7.46	1.46	1.90	0.570	82.6
1954	6.27	71.0	83.6	20.1	99.4	191	193	155	61.6	26.9	32.4	294	102
1955	49.8	127	159	35.3	95.8	147	128	39.4	39.3	4.17	3.83	.028	68.8

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1953	0.13	0.26	2.80	3.45	3.75	10.08	7.45	2.57	0.23	0.05	0.06	0.01	30.84
1954	.20	2.18	2.65	.64	2.84	6.05	5.91	4.91	1.89	.85	1.03	9.02	38.17
1955	1.58	3.89	5.04	1.12	2.74	4.66	3.93	1.24	1.20	.13	.12	.00	25.65

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1953	1271	1,060	Mar. 27, 1953	0.30	82.6	2.27	30.84	87.5	32.68
1954	1331	2,040	Sept. 12, 1954	.30	102	2.80	39.17	117	43.65
1955	1381	452	Dec. 20, 1954	.02	68.8	1.89	25.65	-	-

600. Royal River at Yarmouth, Maine

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

Drainage area.--142 sq mi.

Records available.--October 1949 to September 1960.

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

Average discharge.--11 years (1949-60), 288 cfs.

Extremes.--1949-60: 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.--Some diurnal fluctuation at low flow caused by mill above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	49.8	287	408	231	451	716	991	174	96.6	183	124	116	317
1952	225	806	422	587	430	581	1,095	486	311	76.0	55.7	43.5	423
1953	47.1	72.2	322	369	526	1,263	813	370	92.9	57.1	59.0	45.8	336
1954	72.9	241	327	102	393	612	590	641	303	119	111	822	360
1955	215	484	489	215	335	553	543	192	194	76.6	55.5	37.0	282
1956	66.5	378	75.5	595	96.3	121	1,121	307	142	72.2	36.5	70.4	256
1957	101	189	272	174	131	390	315	153	77.5	53.3	34.9	34.8	159
1958	47.0	156	397	690	203	538	734	329	117	99.1	62.2	64.6	287
1959	106	246	150	119	101	424	844	124	151	59.7	50.9	73.5	204
1960	164	434	386	234	291	170	1,284	805	181	69.0	60.9	74.1	345

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.40	2.25	3.31	1.88	3.31	5.81	7.79	1.42	0.76	1.49	1.01	0.91	30.34
1952	1.82	6.34	3.42	4.60	3.27	4.72	8.60	3.94	2.44	.62	.45	.34	40.56
1953	.38	.57	2.62	3.00	3.85	10.25	6.39	3.01	.75	.46	.48	.36	32.10
1954	.59	1.90	2.65	.83	2.88	4.97	4.63	5.20	2.38	.97	.90	6.46	34.38
1955	1.74	3.80	3.97	1.74	2.46	4.48	4.26	1.56	1.53	.62	.45	.29	26.90
1956	.54	2.97	.61	4.83	.73	.98	8.80	2.49	1.12	.59	.30	.55	24.51
1957	.82	1.48	2.21	1.42	.96	3.17	2.48	1.08	.61	.43	.28	.27	15.21
1958	.38	1.23	3.23	5.60	1.49	4.37	5.77	2.68	.93	.80	.50	.51	27.49
1959	.86	1.93	1.22	.97	.74	3.45	6.63	1.01	1.18	.48	.41	.58	19.46
1960	1.33	3.41	3.14	1.90	2.21	1.38	10.09	6.54	1.42	.56	.49	.58	33.05

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	233	22.27
1951	1201	4,400	Apr. 1, 1951	21	317	2.23	30.34	376	35.96
1952	1231	4,000	Apr. 6, 1952	31	423	2.98	40.56	340	32.55
1953	1271	4,650	Mar. 27, 1953	27	336	2.37	32.10	352	35.67
1954	1331	7,960	Sept. 12, 1954	31	360	2.54	34.36	405	36.73
1955	1381	2,250	Dec. 15, 1954	31	282	1.99	26.90	225	21.51
1956	1431	2,790	Apr. 17, 1956	31	256	1.80	24.51	260	24.90
1957	1501	1,120	Mar. 10, 1957	29	159	1.12	15.21	162	15.54
1958	1551	3,140	Jan. 27, 1958	34	287	2.02	27.49	279	26.66
1959	1621	4,640	Apr. 4, 1959	34	204	1.44	19.46	244	23.33
1960	1701	4,770	Apr. 6, 1960	36	345	2.43	33.05	-	-

605. Panther Pond near Raymond, Maine

Location.--Lat 43°54'20", long 70°28'00", at natural outlet of Panther Pond 0.4 mile northeast of Raymond, Cumberland County, and 2 miles upstream from mouth of Panther Run at Sebago Lake.

Drainage area.--30 sq mi.

Records available.--January 1920 to December 1958.

Gage.--Staff gage. Altitude of gage is nearly at mean sea level (from topographic map).

Remarks.--Dam controls Rattlesnake and Panther Ponds. Combined usable capacity is 405,000,000 cu ft between gage heights 277.30 and 281.51 ft. Lakes are used for storage of water for power.

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

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	192	269	337	308	317	293	308	317	346	346	346	356
1952	250	144	299	356	289	260	385	337	385	346	298	298
1953	202	192	365	250	231	481	442	356	325	298	269	240
1954	212	250	325	309	250	269	279	356	356	337	309	231
1955	319	337	309	309	279	260	279	337	309	279	300	260
1956	269	337	279	279	260	231	300	319	309	309	260	269
1957	221	250	327	300	269	289	317	337	337	327	279	260
1958	164	212	317	356	260	212	327	356	337	346	212	260
1959	260	260	260	-	-	-	-	-	-	-	-	-
1960	-	-	-	-	-	-	-	-	-	-	-	-

610. Thomas Pond near South Casco, Maine

Location.--Lat 43°54'30", long 70°30'45", at dam on short outlet of pond to Sebago Lake, half a mile southeast of South Casco, Cumberland County.

Drainage area.--5.3 sq mi, approximately.

Records available.--December 1919 to December 1958.

Gage.--Staff gage. Altitude of gage is 272 ft (from topographic map).

Remarks.--Pond used for storage of water for power, has usable capacity of 135,000,000 cu ft between gage heights 0.0 and 6.8 ft.

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

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	119	125	127	123	118	139	135	139	129	129	119	119
1952	123	127	127	119	111	111	119	131	119	115	115	109
1953	115	99	125	123	119	139	139	135	135	115	119	111
1954	115	111	119	119	131	129	139	135	131	119	119	135
1955	139	135	119	119	127	119	131	119	119	115	115	119
1956	127	127	127	135	131	127	131	139	127	123	115	115
1957	115	115	111	109	111	119	129	135	129	123	115	111
1958	103	119	127	119	111	115	129	135	131	123	115	111
1959	103	119	127	-	-	-	-	-	-	-	-	-
1960	-	-	-	-	-	-	-	-	-	-	-	-

Note.--Month-end contents estimated January 1956 to December 1959.

615. Pleasant Lake at Casco, Maine

Location.--Lat 44°00'35", long 70°31'30", on Mile Brook at Casco, Cumberland County.

Drainage area.--10.1 sq mi.

Records available.--December 1919 to December 1958.

Gage.--Staff gage. Altitude of gage is 421 ft (from topographic map).

Remarks.--Dam at outlet of Pleasant Lake controls Parker Pond and Pleasant Lake. Combined usable capacity is 288,000,000 cu ft between gage heights of 0.0 and 5.0 ft.

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

Month-end contents, in millions of cubic feet												
Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	225	257	257	268	268	268	268	246	284	284	310	198
1952	182	209	214	193	177	241	241	246	236	209	182	182
1953	161	161	241	252	257	273	288	262	241	236	182	161
1954	161	177	182	206	177	182	187	262	262	241	214	200
1955	214	214	214	187	161	182	268	268	268	225	214	206
1956	193	182	161	214	225	225	268	268	268	246	225	214
1957	193	182	161	161	161	214	268	268	241	230	214	193
1958	182	161	161	161	161	214	268	268	241	230	214	193
1959	182	161	161	-	-	-	-	-	-	-	-	-
1960	-	-	-	-	-	-	-	-	-	-	-	-

Note.--Month-end contents estimated June 1953 to December 1959.

620. Crystal Lake at Harrison, Maine

Location.--Lat 44°06'40", long 70°40'45", on short outlet stream to Long Lake at Harrison, Cumberland County.

Drainage area.--9.60 sq mi.

Records available.--December 1919 to December 1958.

Gage.--Staff gage. Altitude of gage is 290 ft (from topographic map).

Remarks.--Lake used for storage of water for power, has usable capacity of 163,000,000 cu ft between gage heights 0.00 and 8.00 ft.

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

Month-end contents, in millions of cubic feet												
Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	83	108	102	100	112	161	144	132	118	118	118	75
1952	59	122	128	121	108	122	132	130	110	75	61	49
1953	41	41	88	0	83	173	136	140	122	110	79	41
1954	49	51	92	96	110	147	151	142	117	122	112	98
1955	81	98	122	100	118	122	140	128	92	892	112	79
1956	79	100	90	102	96	94	118	142	122	114	112	81
1957	0	47	75	98	98	126	140	142	122	112	106	71
1958	71	81	81	92	81	92	142	118	118	120	108	102
1959	98	98	94	-	-	-	-	-	-	-	-	-
1960	-	-	-	-	-	-	-	-	-	-	-	-

a Estimated.

635. Sebago Lake near North Windham, Maine

Location.--Lat 43°50'45", long 70°28'05", at White's Bridge, 1.6 miles northwest of North Windham, Cumberland County.

Drainage area.--433 sq mi.

Records available.--January 1920 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is approximately at mean sea level (from topographic map).

Remarks.--Lake used for storage of water for power and municipal supply, has usable capacity of 9,700,000,000 cu ft between gage heights 262.50 and 270.13 ft.

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

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	1,780	2,606	5,085	5,149	5,721	9,534	10,170	9,852	8,517	8,200	6,801	5,212
1952	4,322	6,420	6,992	7,882	7,628	8,009	10,234	10,234	9,534	7,755	5,594	4,958
1953	2,479	1,717	2,352	3,178	4,449	10,170	10,335	10,170	8,512	6,611	4,704	3,051
1954	1,398	508	1,144	636	890	3,242	6,738	10,424	10,043	9,534	8,258	10,043
1955	9,289	8,767	8,386	5,975	5,466	5,911	7,755	7,755	6,928	4,958	3,560	1,780
1956	1,398	1,653	699	2,924	2,924	2,797	8,738	7,945	7,437	6,356	5,848	3,941
1957	3,433	2,606	2,098	1,462	953	1,398	2,098	2,161	2,161	1,526	572	0
1958	0	0	1,271	5,085	5,721	6,611	9,454	10,170	9,053	7,755	5,975	4,577
1959	3,750	2,987	2,924	1,526	953	826	4,704	4,259	4,132	3,178	1,843	890
1960	1,653	1,907	4,195	5,466	6,356	6,356	10,119	10,335	9,598	8,263	6,999	5,594

640. Presumpscot River at outlet of Sebago Lake, Maine

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

Drainage area.--436 sq mi.

Records available.--January 1887 to September 1960.

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

Average discharge.--73 years (1887-1960), 663 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, totalling about 35 cfs, not included in figures of daily discharge. Flow regulated by lakes above station. Runoff adjusted for change in contents of Long Lake (see p. 77), Sebago Lake (see p. 75), leakage through dam and water diverted for municipal use; prior to October 1959 also by change in contents in Panther Pond (see p. 75), Thomas Pond (see p. 75), Pleasant Lake (see p. 76), Crystal Lake (see p. 76), Highland Lake (see p. 77), and several other small lakes and ponds.

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

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	525	508	554	674	714	709	1,959	858	835	648	750	749	788
1952	728	796	787	841	1,094	931	2,191	1,777	1,575	695	835	829	1,087
1953	735	656	552	555	541	595	2,974	1,325	774	758	808	751	918
1954	733	597	544	545	564	456	509	925	1,046	678	822	1,085	707
1955	986	1,297	1,283	1,399	1,052	798	832	835	834	752	676	656	950
1956	638	604	513	360	630	646	418	664	668	658	776	733	609
1957	771	762	698	679	662	607	449	350	296	285	308	310	514
1958	258	280	280	319	648	672	1,076	1,094	688	588	721	779	616
1959	732	643	612	640	670	604	483	544	535	494	551	468	581
1960	421	409	427	630	628	801	1,086	1,720	919	723	789	751	776

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.40	2.71	4.23	1.57	2.50	6.49	6.24	1.79	1.05	1.28	0.63	0.15	29.04
1952	1.06	3.35	3.19	3.18	2.39	3.26	8.98	4.51	3.24	-0.07	-0.09	1.52	34.52
1953	-1.13	.49	2.63	3.19	2.77	9.60	7.35	3.25	-0.91	.08	.94	-1.14	28.12
1954	.11	.76	2.01	.81	1.57	4.22	6.00	6.57	2.23	1.19	.81	4.50	30.78
1955	1.59	3.02	3.01	.71	1.88	2.73	3.95	3.62	1.63	-1.16	.59	-3.30	22.27
1956	.59	1.75	.09	3.97	1.50	1.67	5.91	3.50	1.33	.63	1.40	-.68	21.66
1957	.86	1.10	1.58	1.27	1.16	2.66	2.87	1.34	.92	.15	-.28	.13	13.76
1958	-.47	1.81	2.25	4.76	1.64	2.66	6.97	4.05	.29	.34	-1.16	.68	24.82
1959	-.03	.89	1.75	.40	1.12	2.10	5.70	1.21	1.67	.43	.16	-.67	14.73
1960	2.03	2.44	3.10	3.01	2.51	2.21	6.58	4.85	1.72	.69	.93	.29	30.36

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year						
		Observed				Adjusted		Observed		Adjusted		Runoff in inches		
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean				
		Discharge	Date											
1950	1171			-	-	-					467	681	21.20	
1951	1201	3,160	Apr. 26, 27, 1951	0	788	932	2.14	29.04	849	941	29.30			
1952	1231	3,620	June 5, 1952	0	1,087	1,106	2.54	34.52	1,056	932	28.91			
1953	1271	3,420	Apr. 18, 22, 1953	0	918	904	2.07	28.12	912	932	29.01			
1954	1331	2,730	Sept. 23, 1954	0	707	988	2.27	30.78	849	1,141	35.52			
1955	1381	1,590	Oct. 16, 1954	0	950	716	1.64	22.27	798	549	17.08			
1956	1431	930	May 8, 1956	0	609	694	1.59	21.66	649	729	22.77			
1957	1501	806	Oct. 28, 1956	0	514	441	1.01	13.78	395	443	13.81			
1958	1551	2,490	May 5, 1958	0	616	798	1.83	24.82	714	766	23.84			
1959	1621	906	Oct. 19, 1958	0	581	476	1.09	14.73	520	636	19.69			
1960	1701	3,420	May 25, 1960	0	776	973	2.23	30.36	-	-	-			

645. Saco River near Conway, N. H.

Location.--Lat 43°59'25", long 71°05'30", on left bank at Odell Falls, 1 $\frac{1}{4}$ 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 1960. Published as "at Center Conway" prior to 1912.

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.--37 years (1903-9, 1929-60), 931 cfs.

Extremes.--1903-10, 1929-60: Maximum discharge, 43,900 cfs Mar. 27, 1953 (gage height, 17.20 ft), from rating curve extended above 13,000 cfs on basis of slope-area measurements of peak flow; minimum, 40 cfs Mar. 16, 1932 (gage height, 1.61 ft).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	289	2,058	2,063	487	687	692	4,421	1,779	618	689	558	534	1,237
1952	622	1,975	1,009	671	557	523	4,367	3,089	2,189	328	201	197	1,305
1953	177	228	1,111	710	937	3,885	3,189	2,361	430	199	293	186	1,145
1954	250	828	1,103	276	527	780	3,643	3,520	1,357	548	431	1,794	1,253
1955	1,183	1,575	1,015	440	495	550	3,008	1,452	962	284	588	179	977
1956	447	1,005	152	1,428	315	240	1,535	2,689	1,049	887	252	728	895
1957	625	596	642	509	456	640	1,440	858	374	382	158	117	567
1958	225	990	2,460	679	363	428	3,733	2,927	589	288	190	164	1,089
1959	330	438	264	368	344	322	2,987	1,112	633	232	214	568	648
1960	1,658	2,219	1,457	650	550	482	4,100	3,076	856	414	260	602	1,358

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.86	5.95	6.16	1.45	1.85	2.06	12.78	5.32	1.78	2.05	1.67	1.54	43.47
1952	1.86	5.71	3.01	2.01	1.55	1.56	12.62	9.22	6.33	.98	.60	.57	46.02
1953	.53	.66	3.32	2.12	2.53	11.60	8.22	7.06	1.24	.59	.88	.54	40.29
1954	.75	2.40	3.30	.82	1.43	2.33	10.53	10.51	3.93	1.64	1.29	5.19	44.12
1955	3.53	4.55	3.03	1.31	1.33	1.64	8.69	4.34	2.78	.85	1.75	.52	34.32
1956	1.34	2.90	.45	4.27	.88	.72	4.44	8.04	3.04	2.65	.75	2.11	31.59
1957	1.87	1.72	1.91	1.52	1.23	1.91	4.16	2.58	1.08	1.14	.47	.34	19.91
1958	.67	2.86	7.34	2.05	.98	1.28	10.79	8.74	1.71	.86	.57	.47	38.30
1959	.99	1.26	.79	1.10	.93	.96	8.64	3.32	1.83	.89	.64	1.64	22.79
1960	4.96	6.42	4.35	1.94	1.53	1.44	11.83	9.19	2.48	1.23	.78	1.74	47.89

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	1,066	37.47
1951	1201	-	-	-	-	-	-	1,169	41.08
1952	1231	30,100	Nov. 26, 1950	126	1,237	3.20	43.47	1,133	39.95
1953	1271	22,700	June 2, 1952	116	1,305	3.38	46.02	1,200	42.23
1954	1331	43,900	Mar. 27, 1953	103	1,145	2.97	40.29	1,387	48.78
1955	1351	24,900	May 9, 1954	126	1,253	3.25	44.12	794	27.90
1956	1381	14,800	Oct. 16, 1954	130	977	2.53	34.32	-	-
1957	1431	10,100	Jan. 10, 1956	95	895	2.32	31.59	918	32.40
1958	1501	6,450	Apr. 21, 1957	93	567	1.47	19.91	719	25.28
1959	1551	19,500	Dec. 21, 1957	80	1,088	2.82	38.30	865	30.47
1959	1621	5,390	Apr. 20, 1959	86	648	1.68	22.79	1,008	35.48
1960	1701	40,600	Oct. 24, or 25	107	1,358	3.52	47.89	-	-

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

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

Drainage area.--330 sq mi.

Records available.--September 1942 to September 1960.

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

Average discharge.--18 years (1942-60), 732 cfs.

Extremes.--1942-60: 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.--Flow regulated by Ossipee and Silver Lakes and Pine River Pond (combined capacity, 1,430,000,000 cu ft).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	164	719	1,240	492	869	857	3,053	836	481	529	595	506	858
1952	499	1,424	850	860	903	718	3,092	1,712	1,133	375	279	221	1,001
1953	189	184	861	695	1,050	2,900	2,713	1,551	271	156	259	205	919
1954	174	222	755	485	429	931	2,291	2,857	1,101	393	363	1,038	926
1955	721	1,036	1,079	745	514	816	1,912	710	775	246	453	231	774
1956	305	860	437	1,213	663	389	1,534	1,683	721	585	266	237	743
1957	477	453	571	583	630	754	730	479	286	291	219	198	472
1958	125	492	1,380	879	829	586	2,738	1,659	361	250	249	176	809
1959	206	387	388	208	494	447	2,188	524	364	218	187	170	478
1960	607	1,192	1,253	941	686	477	3,324	1,719	653	312	261	626	1,001

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Runoff in inches
		Discharge	Date					
1950	-	-	-	-	-	-	-	-
1951	1201	4,800	Apr. 5, 1951	160	858	2.60	662	27.22
1952	1231	4,360	Apr. 21, 22, 1952	179	1,001	3.03	911	37.49
1953	1271	11,700	Mar. 28, 1953	135	919	2.78	874	36.05
1954	1331	6,700	May 12, 1954	170	926	2.81	912	37.52
1955	1381	2,690	Apr. 17, 1955	117	774	2.35	1,067	43.89
1956	1431	3,550	May 2, 1956	180	743	2.25	670	27.56
1957	1501	1,160	Apr. 10, 1957	91	472	1.43	735	30.34
1958	1551	5,350	Apr. 24, 1958	85	809	2.45	514	21.15
1959	1621	3,460	Apr. 10, 1959	105	478	1.45	723	28.72
1960	1701	5,640	Apr. 7, 1960	166	1,001	3.03	652	26.82
							41.30	-

655. Ossipee River at Cornish, Maine

Location.--Lat 43°48'25", long 70°47'55", on left bank downstream from highway bridge in Cornish, York County, 1½ miles upstream from mouth.

Drainage area.--453 sq mi.

Records available.--July 1916 to September 1960.

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.--44 years (1916-60), 879 cfs.

Extremes.--1916-60: 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.--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).

Monthly and yearly mean discharge, in cubic feet per second, of Ossipee River at Cornish, Maine

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	200	895	1,806	680	1,122	1,280	3,756	1,090	806	856	710	600	1,094
1952	614	1,814	1,221	1,195	1,315	1,081	4,137	2,411	1,440	466	314	254	1,349
1953	231	243	1,139	847	1,179	5,884	3,355	1,888	383	185	291	228	1,155
1954	203	286	921	559	584	1,210	2,802	3,479	1,311	525	464	1,516	1,156
1955	903	1,352	1,584	905	720	1,031	2,307	899	958	294	483	321	960
1956	364	976	478	1,515	781	498	2,004	1,917	851	679	304	332	891
1957	526	518	681	755	765	927	920	579	351	335	233	240	568
1958	149	561	1,543	1,217	1,035	840	3,528	1,983	485	328	303	222	1,014
1959	264	483	258	579	621	2,693	667	495	251	193	188	594	964
1960	654	1,340	1,540	1,165	919	667	4,129	2,153	859	594	318	733	1,235

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	828	24.83
1951	1201	6,620	Apr. 3, 1951	148	1,094	2.42	32.80	1,172	35.13
1952	1231	5,270	Apr. 22, 1952	198	1,349	2.98	40.56	1,181	35.50
1953	1271	13,800	Mar. 29, 1953	146	1,155	2.55	34.62	1,138	34.10
1954	1331	7,940	May 11, 1954	172	1,156	2.55	34.64	1,345	40.22
1955	1381	3,000	Apr. 20, 1955	136	960	2.12	28.78	807	24.19
1956	1431	4,620	Jan. 14, 1956	194	891	1.97	26.76	884	26.55
1957	1501	1,370	Apr. 11, 1957	110	568	1.25	17.01	613	18.36
1958	1551	6,260	Apr. 23, 1958	91	1,014	2.24	30.37	927	27.76
1959	1621	4,250	Apr. 9, 1959	132	594	1.31	17.78	787	23.58
1960	1701	7,010	Apr. 6, 1960	178	1,235	2.73	37.11	-	-

* Not previously published.

660. Saco River at Cornish, Maine

Location.--Lat 43°48'30", long 70°46'55", on left bank just upstream from highway bridge at Cornish, York County, half a mile downstream from Ossipee River.

Drainage area.--1,298 sq mi.

Records available.--June 1916 to September 1960.

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.--44 years (1916-60), 2,715 cfs.

Extremes.--1916-60: 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.--Flow partly regulated by powerplants above station and by Ossipee, Silver, Conway, and Kezar Lakes, and Moose, Hancock, Pine River, Bickford, and Cclcord Ponds (combined capacity, 3,400,000,000 cu ft).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	785	3,087	6,759	1,911	3,128	3,288	11,570	4,514	2,009	1,827	1,708	1,600	3,506
1952	1,625	5,689	3,249	3,106	3,167	2,915	11,870	7,938	5,219	1,273	731	647	3,936
1953	610	653	3,169	2,233	3,654	10,040	11,560	5,982	1,506	591	803	566	3,445
1954	594	1,328	3,293	1,530	1,713	3,562	8,792	10,850	4,238	1,803	1,251	5,073	3,672
1955	3,036	4,458	4,166	2,340	2,128	2,680	7,418	4,013	2,744	898	1,337	611	2,984
1956	912	3,056	1,104	4,636	2,068	1,464	5,384	6,528	2,945	2,229	749	1,426	2,712
1957	1,820	1,782	2,028	1,818	1,815	2,981	3,292	2,357	1,153	973	561	446	1,753
1958	466	2,123	4,936	3,860	2,736	2,317	9,918	7,727	1,859	904	806	611	3,188
1959	837	1,515	1,300	1,043	1,457	1,845	8,056	2,705	1,700	931	554	772	1,884
1960	2,554	4,419	5,440	2,986	2,496	1,911	11,410	7,655	2,899	1,206	1,060	1,869	3,819

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	2,874	30.07
1951	1201	17,100	Apr. 6, 1951	447	3,506	2.70	36.67	3,494	36.54
1952	1231	16,900	Apr. 23, 1952	532	3,936	3.03	41.27	3,430	35.97
1953	1271	42,400	Mar. 29, 1953	340	3,445	2.65	36.01	3,509	36.70
1954	1331	22,800	May 12, 1954	435	3,672	2.83	38.41	4,211	44.04
1955	1381	10,900	Apr. 19-20, 1955	510	2,984	2.30	31.20	2,427	25.37
1956	1431	11,600	Jan. 16, 1956	444	2,712	2.09	28.35	2,757	28.89
1957	1501	4,550	Apr. 24, 1957	303	1,753	1.35	18.32	1,913	20.00
1958	1551	20,200	Apr. 25, 1958	245	3,188	2.46	33.33	2,860	29.90
1959	1621	11,700	Apr. 12, 1959	445	1,884	1.45	19.70	2,620	27.40
1960	1701	16,800	Apr. 8, 1960	525	3,819	2.94	40.03	-	-

665. Little Ossipee River near South Limington, Maine

Location.--Lat 43°41'15", long 70°40'05", on right bank just upstream from highway bridge, 2 miles southeast of South Limington, York County, and 4 miles upstream from mouth.

Drainage area.--161 sq mi.

Records available.--August 1940 to September 1960.

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

Average discharge.--20 years (1940-60), 296 cfs.

Extremes.--1940-60: Maximum discharge, 5,300 cfs May 10, 1954 (gage height, 6.78 ft); minimum, 4.7 cfs Nov. 7, 1953 (gage height, 1.23 ft).
Maximum discharge known, 8,530 cfs Mar. 19, 1936, at Ledgemere Dam 4 miles upstream.

Remarks.--Flow regulated by Little Ossipee Lake, Ledgemere and Balch Ponds (combined capacity, 581,000,000 cu ft).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	116	276	523	331	469	737	957	300	190	175	145	164	364
1952	199	602	429	507	445	498	1,425	605	368	160	94.3	70.2	449
1953	84.4	116	430	349	549	1,362	1,011	578	168	71.0	78.4	51.9	403
1954	52.4	102	354	206	320	651	656	1,245	304	247	226	910	441
1955	295	580	684	326	350	561	662	225	254	71.6	158	147	359
1956	144	343	205	603	295	228	1,008	444	230	129	55.5	181	321
1957	193	194	208	260	314	400	259	176	99.0	76.9	55.4	54.6	190
1958	65.9	114	328	528	473	417	1,241	459	174	146	137	142	350
1959	101	102	176	154	265	359	827	171	156	67.0	35.2	94.8	208
1960	147	270	432	384	483	276	1,397	654	294	125	72.8	161	389

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1171	-	-	-	-	-	-	270	-
1951	1201	2,940	Apr. 4, 1951	76	364	-	-	360	-
1952	1231	3,740	Apr. 7, 1952	60	449	-	-	359	-
1953	1271	4,820	Mar. 28, 1953	39	403	-	-	354	-
1954	1331	5,300	May 10, 1954	5.1	441	-	-	528	-
1955	1381	1,900	Nov. 4, 1954	22	359	-	-	286	-
1956	1431	2,400	Jan. 11, 1956	28	321	-	-	313	-
1957	1501	628	Mar. 1, 1957	52	190	-	-	183	-
1958	1551	2,230	Apr. 8, 1958	47	350	-	-	339	-
1959	1621	2,530	Apr. 5, 1959	5.4	208	-	-	247	-
1960	1701	3,600	Apr. 6, 1960	23	389	-	-	-	-

MOUSAM RIVER BASIN

680. Square Pond near Acton, Maine

Location.--Lat 43°33'45", long 70°52'10", near Acton, York County.

Drainage area.--5.0 sq mi, approximately.

Records available.--September 1940 to September 1960.

Gage.--Staff gage. Datum of gage is approximately 516 ft above mean sea level (from topographic map).

Remarks.--Storage capacity, 212,000,000 cu ft.

Cooperation.--Records furnished by Sanford Mills to 1957 and by Town of Sanford, Maine, since that date.

695. Mousam River near West Kennebunk, Maine

Location.--Lat 43°25'05", long 70°39'35", on right bank 100 ft upstream from highway bridge, 1½ miles downstream from Middle Branch, and 4 miles west of West Kennebunk, York County.

Drainage area.--105 sq mi.

Records available.--October 1939 to September 1960.

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

Average discharge.--31 years (1939-60), 182 cfs (unadjusted).

Extremes.--1939-60: 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.--Flow regulated by reservoirs and powerplants above station. Runoff adjusted for change in contents in Square Pond (see p. 83), Mousam Lake (see p. 84), and Estes Pond prior to October 1957 (see p. 84).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	71.5	141	247	181	387	446	577	204	128	120	108	117	226
1952	135	481	317	414	365	367	767	384	298	101	86.3	78.0	315
1953	82.3	61.5	208	245	358	779	627	358	93.2	60.1	66.7	57.4	249
1954	39.5	66.1	203	115	221	358	341	756	193	106	88.5	431	243
1955	177	319	403	218	205	304	281	140	98.8	57.0	58.4	33.4	191
1956	50.5	234	87.0	361	161	160	624	326	188	113	77.6	53.1	202
1957	83.2	107	223	183	178	284	219	113	72.3	45.9	39.2	39.1	132
1958	24.7	67.1	156	324	282	309	682	338	124	94.0	56.8	49.2	208
1959	66.9	144	134	92.4	99.1	220	464	118	106	63.7	31.3	64.3	133
1960	118	294	348	212	263	208	744	442	141	43.3	55.4	115	248

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.78	1.86	3.36	1.96	3.93	5.23	6.10	1.95	1.24	1.27	0.80	0.87	29.35
1952	1.45	5.72	3.47	4.67	3.71	4.05	8.81	3.94	2.89	.84	.73	.53	40.81
1953	.09	.55	2.96	3.38	4.12	9.21	6.43	3.42	.62	.12	.10	.28	31.28
1954	.22	1.47	2.73	1.54	2.66	4.05	3.79	8.37	1.77	.96	.81	4.80	33.17
1955	1.63	3.60	4.28	1.89	1.85	3.77	3.47	1.45	1.02	.03	.36	.42	23.77
1956	.65	2.61	.88	4.69	1.48	1.56	7.39	3.56	1.61	.72	.62	.32	26.09
1957	1.00	1.26	2.71	2.19	1.72	3.33	2.42	1.21	.49	.19	.08	.17	16.77
1958	.09	.83	2.32	4.46	2.47	3.67	7.97	3.41	1.07	.69	.35	.34	26.67
1959	.53	1.43	1.51	.92	1.01	2.80	5.62	1.09	1.04	.57	.19	.33	17.04
1960	1.43	3.15	3.80	2.33	2.90	2.31	8.59	4.55	1.33	.34	.51	.96	32.20

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed		Adjusted
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	1171	-	-	-	-	-	-	-	139	149	19.17
1951	1201	1,580	Apr. 3, 1951	9.8	226	227	2.16	29.35	265	263	33.99
1952	1231	2,350	Apr. 6, 1952	16	315	315	3.00	40.81	267	261	33.77
1953	1271	2,190	Mar. 27, 1953	7.5	249	242	2.30	31.28	246	249	32.10
1954	1331	2,830	Sept. 12, 1954	6.3	243	257	2.45	33.17	293	296	36.26
1955	1381	1,330	Dec. 15, 1954	9.1	191	184	1.75	23.77	147	143	18.40
1956	1431	1,440	Jan. 10, 1956	9.1	202	201	1.91	26.09	206	207	26.92
1957	1501	1,000	Dec. 1, 1956	9.5	132	130	1.24	16.77	118	117	15.04
1958	1551	1,480	Jan. 27, 1958	8.6	208	214	2.04	26.67	216	216	27.90
1959	1621	1,500	Apr. 3, 1959	10	133	131	1.25	17.04	168	170	21.95
1960	1701	1,930	Apr. 6, 1960	4.4	248	249	2.37	32.20	-	-	-

700. Great East Lake near Milton Mills, N. H.

Location.--Lat 43°34'10", long 70°58'25", above Milton Mills, Strafford County.

Drainage area.--12.0 sq mi.

Records available.--May 1929 to September 1960.

Gage.--Staff gage. Datum of gage is approximately 474 ft above mean sea level (from topographic map).

Remarks.--Storage capacity, 515,000,000 cu ft.

Cooperation.--Records furnished by Public Service Co. of New Hampshire.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	118.1	71.9	78.2	132.0	182.2	281.8	450.2	466.4	458.3	335.5	313.2	219.7
1952	341.0	466.4	421.8	297.4	223.6	254.5	527.1	515.0	506.9	465.4	381.4	301.4
1953	215.9	200.8	325.0	333.0	357.0	588.8	543.7	519.1	494.7	405.6	305.3	208.3
1954	149.6	142.6	200.8	239.0	329.0	474.5	539.6	523.2	535.5	502.8	397.6	519.1
1955	434.0	462.3	490.7	305.3	277.9	274.0	430.0	474.0	494.8	430.0	397.6	317.2
1956	297.4	337.0	242.8	373.2	281.8	142.6	389.4	523.2	531.4	498.8	417.8	381.4
1957	345.0	321.1	389.4	329.0	212.1	301.4	373.2	395.5	377.3	305.3	227.4	174.9
1958	139.0	153.2	254.5	401.6	333.0	285.7	545.7	531.4	511.0	506.9	385.4	293.5
1959	242.8	227.4	212.1	197.0	212.1	289.6	474.5	482.6	482.6	450.2	365.4	321.1
1960	305.3	357.0	421.8	281.8	208.3	250.6	478.5	547.8	535.5	454.2	373.2	353.0

705. Horn Pond near Milton Mills, N. H.

Location.--Lat 43°33'25", long 70°57'15", near Milton Mills, Strafford County.

Drainage area.--16.9 sq mi.

Records available.--May 1929 to September 1960.

Gage.--Staff gage. Datum of gage is approximately 454 ft above mean sea level (from topographic map).

Remarks.--Storage capacity, 48,900,000 cu ft.

Cooperation.--Records furnished by Public Service Co. of New Hampshire.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	2.8	8.0	0.0	7.3	7.3	17.5	48.9	46.2	47.1	13.5	11.9	9.5
1952	26.1	43.6	38.4	25.2	12.3	13.1	45.0	49.7	45.0	37.6	40.6	28.9
1953	3.5	7.3	33.3	44.0	40.2	47.1	50.2	48.9	48.4	35.8	21.1	12.7
1954	5.4	5.4	5.4	5.4	9.2	47.1	49.7	49.3	50.2	48.9	36.2	45.8
1955	43.2	47.6	48.4	13.5	9.2	2.1	48.1	49.3	49.3	45.8	40.6	33.3
1956	20.3	43.2	13.9	28.6	24.0	5.4	42.8	48.9	48.9	45.8	38.8	35.8
1957	32.0	38.7	38.8	25.7	3.9	31.2	47.1	48.9	48.0	38.0	26.1	13.9
1958	4.6	5.4	5.4	14.3	9.5	17.1	44.1	48.9	49.3	48.9	34.1	23.6
1959	5.8	11.9	2.8	4.3	4.3	13.5	48.9	48.9	50.6	47.1	40.2	40.2
1960	23.2	26.1	26.1	14.3	16.3	14.3	44.5	47.1	50.6	47.1	44.5	45.0

710. Wilson Lake near Milton Mills, N. H.

Location.--Lat 43°33'35", long 70°56'55", above Milton Mills, Strafford County.

Drainage area.--15.5 sq mi.

Records available.--May 1929 to September 1960.

Gage.--Staff gage. Datum of gage is approximately 474 ft above mean sea level (from topographic map).

Remarks.--Storage capacity, 23,100,000 cu ft.

Cooperation.--Records furnished by Public Service Co. of New Hampshire.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	4.6	8.0	8.0	10.3	10.3	14.9	18.4	24.2	23.1	8.0	5.7	1.1
1952	9.8	10.3	11.5	10.9	10.3	13.8	19.6	26.5	27.7	5.7	0	1.1
1953	0	5.7	26.5	14.4	13.8	34.7	24.8	23.1	23.1	6.3	4.6	3.4
1954	6.3	5.7	8.0	7.4	16.1	21.3	24.8	27.1	25.4	14.4	9.2	21.9
1955	12.0	23.6	20.7	9.9	14.9	16.1	24.2	25.4	23.6	14.4	8.0	4.0
1956	9.2	15.5	7.4	18.4	8.6	8.6	23.1	26.5	23.1	15.5	6.9	9.8
1957	7.4	10.3	12.6	12.6	11.5	13.2	13.2	21.9	23.6	6.9	2.8	2.3
1958	3.4	6.3	17.3	23.1	8.0	13.2	23.6	25.4	24.8	23.6	12.0	8.6
1959	9.2	13.8	11.5	11.5	11.5	16.1	25.4	24.2	25.4	14.9	19.6	5.7
1960	12.6	16.1	14.4	13.2	17.3	18.4	23.1	24.8	23.7	18.4	12.6	14.9

715. Lovell Lake at Sanbornville, N. H.

Location.--Lat 43°33'10", long 71°01'05", at Sanbornville, Carroll County.

Drainage area.--10.0 sq mi.

Records available.--May 1929 to September 1960.

Gage.--Staff gage. Datum of gage is approximately 470 ft above mean sea level (from topographic map).

Remarks.--Storage capacity, 113,000,000 cu ft.

Cooperation.--Records furnished by Public Service Co. of New Hampshire.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	53.2	36.3	35.2	57.8	78.5	110.7	120.2	121.4	115.4	105.0	102.6	83.1
1952	73.9	108.4	108.4	87.7	80.1	67.0	113.0	113.0	114.2	103.8	80.8	63.6
1953	44.0	40.7	82.0	96.9	103.8	123.8	116.6	113.0	109.6	79.7	65.8	59.0
1954	65.8	76.2	94.8	91.2	62.4	101.5	114.2	115.4	116.6	113.0	114.2	102.6
1955	98.0	108.4	109.6	46.3	24.2	48.6	92.3	106.1	114.2	108.4	103.8	79.6
1956	73.9	95.8	80.8	109.6	69.3	3.3	94.6	117.8	115.4	116.6	109.6	95.8
1957	80.8	93.4	114.2	86.6	28.6	56.6	85.4	94.6	96.9	79.6	68.2	67.0
1958	67.0	52.0	40.7	90.0	67.0	59.0	114.2	117.8	115.4	113.0	102.6	93.4
1959	73.9	76.2	76.2	71.6	41.8	44.0	108.4	108.4	117.8	110.7	101.5	101.5
1960	95.8	85.4	70.4	40.7	26.4	46.3	100.4	115.4	115.4	108.4	98.0	109.6

720. Three Ponds at Milton Mills, N. H.

Location.--Lat 43°25'00", long 70°59'05", at Milton Mills, Strafford County.

Drainage area.--105 sq mi.

Records available.--May 1929 to September 1960.

Gage.--Staff gage. Datum of gage is approximately 315 ft above mean sea level (from topographic map).

Remarks.--Dam at outlet of Milton Pond controls North East, Town House, and Milton Ponds. Storage capacity, 580,000,000 cu ft.

Cooperation.--Records furnished by Public Service Co. of New Hampshire.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	230.8	294.2	274.6	424.2	211.7	479.8	543.7	496.9	381.2	284.4	269.7	279.5
1952	362.8	514.2	505.5	525.9	267.2	373.2	558.7	555.7	499.8	440.7	391.8	378.6
1953	319.0	257.4	558.7	581.7	511.3	570.8	567.8	549.7	405.3	357.6	349.8	321.6
1954	347.2	438.0	494.0	301.6	427.0	505.5	558.7	552.7	558.7	495.5	477.0	491.2
1955	451.8	531.8	520.0	344.6	306.5	365.4	543.7	535.8	525.9	475.3	391.8	255.0
1956	329.2	485.5	267.2	245.2	134.6	117.0	528.8	543.7	471.4	443.4	336.8	381.2
1957	443.4	580.0	585.2	402.6	294.2	269.7	418.8	494.0	440.7	399.2	309.0	170.0
1958	104.7	259.9	549.7	505.5	250.1	342.0	531.8	549.7	484.2	451.8	336.5	314.0
1959	274.6	314.0	314.0	274.6	250.1	479.8	573.9	520.0	514.2	457.4	334.3	284.4
1960	421.5	482.6	324.1	230.8	259.9	291.8	540.7	561.7	508.4	575.5	418.8	514.2

725. Salmon Falls River near South Lebanon, Maine

Location.--Lat 43°19'40", long 70°55'40", on left bank at Stair Falls, 1½ miles south of South Lebanon, York County, and 2½ miles upstream from Little River.

Drainage area.--147 sq mi.

Records available.--November 1928 to September 1960. Published as "near Lebanon" prior to 1935.

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

Average discharge.--31 years (1929-60), 242 cfs (unadjusted).

Extremes.--1928-60: Maximum discharge, 5,490 cfs Mar. 19, 1936 (gage height, 12.31 ft); minimum, 4.7 cfs Aug. 28, 1950.

Remarks.--Flow partly regulated by powerplants and lakes and ponds above station. Runoff adjusted for change in contents in Great East Lake (see p. 86), Horn Pond (see p. 86), Wilson Lake (see p. 32), Lovell Lake (see p. 87), and Three Ponds (see p. 88).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	68.9	147	412	302	503	575	854	235	136	117	118	135	298
1952	180	561	429	499	549	423	964	437	300	64.8	76.0	70.5	377
1953	90.7	78.3	306	318	561	1,243	848	498	102	52.4	58.1	54.9	350
1954	57.2	76.8	260	191	281	452	550	984	298	177	111	527	331
1955	216	398	559	377	358	489	425	156	147	80.2	88.3	88.6	281
1956	85.9	154	209	586	248	256	878	395	167	87.3	83.6	83.6	269
1957	103	110	262	411	374	365	220	94.7	60.2	78.8	57.7	70.8	183
1958	55.6	70.6	252	464	486	427	1,012	430	137	90.3	81.9	82.7	297
1959	86.0	109	138	112	136	252	686	137	115	84.4	73.7	66.2	166
1960	100	333	502	372	328	197	1,053	573	235	71.0	71.4	89.1	326

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.46	1.85	3.77	2.11	3.73	5.13	6.64	1.78	1.05	0.85	0.46	0.52	28.37
1952	1.29	5.22	3.20	3.50	2.93	3.75	8.90	3.42	2.08	.10	.13	.17	34.69
1953	.16	.39	3.91	2.56	3.90	10.74	6.26	3.77	.27	-1.16	.05	.00	31.85
1954	.36	.87	2.43	1.04	2.57	4.44	4.57	7.67	2.31	1.04	.49	4.43	32.22
1955	1.28	3.41	4.43	1.58	2.28	4.05	4.50	1.38	1.16	.03	.51	-.07	24.54
1956	.79	1.89	.57	5.07	1.07	1.50	9.00	3.63	1.06	.48	.04	.62	25.52
1957	.82	1.25	2.34	2.39	1.75	3.22	2.44	1.07	.26	.13	-.09	-.01	15.55
1958	.12	1.00	3.12	4.13	2.36	5.49	9.26	3.42	.75	.62	-.01	.07	28.33
1959	.30	.93	1.00	.71	.85	2.93	6.35	.93	.90	.34	-.01	.13	15.36
1960	1.09	2.84	3.62	2.11	2.25	1.82	9.65	4.82	1.61	.26	.01	.94	31.02

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Observed				Adjusted		Observed		Adjusted	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	1171	-	-	-	-	-	-	193	212	19.63	
1951	1201	2,340	Apr. 4, 1951	20	298	306	2.08	28.37	343	346	32.00
1952	1231	2,440	Apr. 7, 1952	16	377	374	2.54	34.69	320	318	29.44
1953	1271	3,690	Mar. 27, 1953	13	350	345	2.35	31.85	343	336	31.05
1954	1331	4,940	May 9, 1954	18	331	349	2.37	32.22	396	408	37.68
1955	1381	1,560	Dec. 15, 1954	20	281	265	1.80	24.54	221	203	18.67
1956	1431	2,270	Jan. 10, 1956	20	269	276	1.88	25.52	271	288	26.66
1957	1501	971	Jan. 23, 1957	21	183	168	1.14	15.55	175	166	15.40
1958	1551	1,840	Apr. 7, 1958	15	297	307	2.09	28.33	293	285	26.32
1959	1621	1,790	Apr. 6, 1959	13	166	167	1.14	15.36	216	224	20.68
1960	1701	a3,000	Apr. 6, 1960	12	326	335	2.28	31.02	-	-	-

a About.

730. Oyster River near Durham, N. H.

Location.--Lat 43°08'55", long 70°58'00", on left bank 200 ft upstream from bridge on U.S. Highway 4, 2½ miles west of Durham, Strafford County, and 7 miles upstream from mouth.

Drainage area.--12.1 sq mi.

Records available.--October 1934 to September 1960. Monthly discharge only for October and November 1934, published in WSP 1301.

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

Average discharge.--26 years (1934-60), 19.6 cfs.

Extremes.--1934-60: 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.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2.82	14.7	30.5	19.5	46.3	61.0	50.2	19.0	8.27	4.39	4.24	6.12	22.1
1952	9.65	62.7	32.6	46.1	37.2	51.6	78.0	41.1	22.0	2.77	3.39	2.10	32.3
1953	2.08	4.24	29.1	37.4	48.8	105	68.4	36.9	3.79	1.25	1.43	.807	28.2
1954	2.18	9.42	24.5	10.7	27.6	41.8	37.8	97.5	13.9	5.08	5.97	52.6	27.4
1955	11.1	40.4	51.2	18.6	28.0	48.5	36.1	15.5	11.4	1.66	3.12	1.61	22.2
1956	10.7	39.8	7.94	54.7	17.2	18.8	104	30.6	11.9	4.31	1.22	2.27	25.1
1957	3.81	8.89	19.3	18.0	17.5	31.7	22.3	8.85	2.67	1.19	.680	.648	11.3
1958	1.14	5.10	25.2	58.1	25.4	54.4	66.4	27.9	8.96	4.25	2.05	2.20	23.4
1959	3.63	11.2	12.3	7.59	8.32	35.5	55.9	13.3	12.0	5.14	2.03	4.26	14.2
1960	16.2	28.1	37.2	20.7	33.7	23.8	97.2	40.8	11.6	3.04	3.54	12.0	27.2

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.27	1.35	2.90	1.86	3.98	5.81	4.63	1.81	0.76	0.42	0.40	0.56	24.75
1952	.92	5.78	3.10	4.39	3.32	4.92	7.19	3.92	2.03	.28	.32	.19	36.54
1953	.20	.39	2.77	3.56	4.20	10.03	6.31	3.51	.35	.12	.14	.07	31.65
1954	.21	.87	2.34	1.01	2.37	3.88	3.49	9.29	1.29	.48	.57	4.85	30.75
1955	1.06	3.73	4.88	1.77	2.41	4.62	3.33	1.47	1.05	.16	.30	.15	24.93
1956	1.02	3.67	.76	5.21	1.53	1.79	9.57	2.91	1.09	.41	.12	.21	28.29
1957	.36	.82	1.84	1.72	1.51	3.02	2.06	.84	.25	.11	.03	.06	12.65
1958	.11	.47	2.40	5.54	2.18	5.19	6.12	2.66	.83	.41	.20	.20	26.31
1959	.35	1.03	1.17	.72	.72	3.38	5.15	1.26	1.11	.49	.19	.39	15.96
1960	1.54	2.59	3.54	1.98	3.01	2.27	8.96	3.89	1.07	.29	.34	1.11	30.59

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	15.2	17.04
1951	1201	261	Feb. 6, 1951	0.70	22.1	1.83	24.75	26.8	30.03
1952	1231	389	Apr. 6, 1952	1.25	32.3	2.67	36.34	26.6	29.90
1953	1271	498	Mar. 16, 1953	.80	28.2	2.33	31.65	28.3	31.71
1954	1331	862	Sept. 11, 1954	.51	27.4	2.26	30.75	33.0	37.00
1955	1381	374	Dec. 15, 1954	.83	22.2	1.83	24.93	18.4	20.71
1956	1431	351	Jan. 9, 1956	.97	25.1	2.07	28.29	23.0	25.86
1957	1501	91	Feb. 27, 1957	.50	11.3	.934	12.65	11.2	12.61
1958	1551	400	Jan. 27, 1958	.58	23.4	1.93	26.31	23.1	25.88
1959	1621	260	Apr. 3, 1959	1.25	14.2	1.17	15.96	18.8	21.08
1960	1701	423	Apr. 5, 1960	1.05	27.2	2.25	30.59	-	-

735. Lamprey River near Newmarket, N. H.

Location--Lat 43°06'05", long 70°57'20", on right bank 200 ft upstream from Packers Falls, 2 miles northwest of Newmarket, Rockingham County, and 4.6 miles upstream from mouth.

Drainage area--183 sq mi.

Records available--July 1934 to September 1960.

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

Average discharge--26 years (1934-60), 282 cfs.

Extremes--1934-60: 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--Flow regulated by Pawtuckaway and Mendums Ponds (combined capacity, about 600,000,000 cu ft).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	92.3	192	417	312	673	729	772	306	140	134	108	77.2	327
1952	154	742	426	593	552	614	990	498	399	80.5	52.8	18.9	425
1953	48.5	68.3	313	438	578	1,325	1,061	507	125	33.7	21.8	10.2	377
1954	58.4	113	340	147	317	497	510	1,400	275	121	97.5	650	378
1955	215	518	710	350	366	545	506	219	156	25.5	40.3	32.0	306
1956	185	552	191	796	243	246	1,318	500	143	44.5	12.7	20.5	353
1957	35.1	85.5	233	260	244	454	332	119	42.9	14.2	8.62	3.44	152
1958	18.1	71.0	372	715	436	644	979	455	115	83.3	29.2	46.9	330
1959	94.1	143	218	137	158	468	913	193	144	63.5	18.4	35.8	216
1960	139	292	495	319	408	286	1,413	456	146	36.2	40.9	174	349

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.58	1.17	2.63	1.97	3.83	4.60	4.71	1.93	0.86	0.84	0.68	0.47	24.27
1952	.97	4.52	2.68	3.74	3.26	3.87	6.03	3.14	2.43	.51	.33	.12	31.60
1953	.31	.42	1.97	2.76	3.29	8.35	6.47	3.19	.76	.21	.14	.06	27.93
1954	.37	.69	2.14	.93	1.80	3.13	3.11	6.82	1.66	.76	.61	3.96	28.00
1955	1.35	3.16	4.47	2.21	2.08	3.43	3.09	1.38	.95	.16	.25	.20	22.73
1956	1.16	3.37	1.21	5.01	1.43	1.55	8.04	3.15	.87	.28	.08	.13	26.28
1957	.22	.52	1.47	1.64	1.39	2.86	2.02	.75	.26	.09	.05	.02	11.29
1958	.11	.43	2.34	4.50	2.48	4.06	5.97	2.87	.70	.52	.18	.29	24.45
1959	.59	.87	1.37	.86	.90	3.06	5.57	1.22	.68	.40	.12	.22	16.06
1960	.68	1.78	3.12	2.01	2.41	1.80	6.62	2.87	.90	.23	.26	1.06	25.94

Note--Monthly runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	222	16.48
1951	1201	1,700	Apr. 5, 1951	13	327	1.79	24.27	378	28.06
1952	1231	2,780	Apr. 7, 1952	6.0	425	2.32	31.60	351	26.13
1953	1271	3,120	Mar. 16, 1953	9.4	377	2.06	27.93	363	28.43
1954	1331	4,070	May 11, 1954	23	378	2.07	28.00	466	33.78
1955	1361	1,880	Dec. 16, 1954	12	306	1.67	22.73	263	19.49
1956	1431	2,960	Apr. 18, 1956	9.7	353	1.93	26.28	306	22.75
1957	1501	676	Mar. 1, 1957	2.4	152	1.83	11.29	161	11.96
1958	1551	2,790	Jan. 27, 1958	3.5	330	1.80	24.45	329	24.40
1959	1621	3,300	Apr. 5, 1959	11	216	1.18	16.06	256	19.01
1960	1701	4,470	Apr. 6, 1960	13	349	1.91	25.94	-	-

745. East Branch Pemigewasset River near Lincoln, N. H.

Location.--Lat 44°03'40", long 71°37'00", on right bank 1 1/8 miles downstream from Hancock Branch and 2 1/4 miles northeast of Lincoln, Grafton County.

Drainage area.--104 sq mi.

Records available.--October 1928 to March 1953. Monthly discharge only for October 1928, published in WSP 1301.

Gage.--Water-stage recorder. Altitude of gage is 1,020 ft (from topographic map).

Average discharge.--24 years (1928-52), 298 cfs.

Extremes.--1928-53: Maximum discharge, 17,000 cfs Mar. 19, 1936 (gage height, 9.80 ft), from rating curve extended above 3,000 cfs on basis of computation of peak flow over dam; maximum gage height, 10.51 ft Mar. 9, 1942 (ice jam); minimum daily discharge, 13 cfs Feb. 7-12, 1948.
Flood in October 1959 reached a discharge of 24,200 cfs, by computation of peak flow over dam.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	158	708	526	88.1	155	127	962	716	176	205	213	168	352
1952	196	487	285	177	132	95.3	985	928	481	88.1	66.0	69.0	332
1953	74.6	93.2	242	227	263	916	-	-	-	-	-	-	-

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1.75	7.60	5.83	0.98	1.55	1.40	10.32	7.93	1.89	2.27	2.36	2.01	45.89
1952	2.17	5.22	3.16	1.96	1.37	1.06	10.57	10.29	5.16	.98	.73	.74	43.41
1953	.83	1.00	2.68	2.52	2.64	10.15	-	-	-	-	-	-	-

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	342	44.61
1951	1201	14,700	Nov. 26, 1950	56	352	3.38	45.89	316	41.26
1952	1231	10,600	June 1, 1952	38	332	3.19	43.41	285	37.37

750. Pemigewasset River at Woodstock, N. H.

Location--Lat 43°58'35", long 71°40'50", on right bank 0.2 mile east of Woodstock, Grafton County, and 0.7 mile upstream from Eastman Brook.

Drainage area--193 sq mi.

Records available--October 1939 to September 1960.

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

Average discharge--21 years (1939-60), 519 cfs.

Extremes--1939-60: Maximum discharge, 47,000 cfs Oct. 24, 1959 (gage height, 16.13 ft), from rating curve extended above 14,000 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 42 cfs Feb. 11, 1948.

Revisions--The momentary maximum discharge for the water year 1942, published in WSP 1301, has been revised to 9,610 cfs.

Remarks--Some diurnal fluctuation caused by powerplant above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	287	1,134	829	181	304	290	1,956	1,092	264	360	363	319	614
1952	365	869	524	318	255	221	2,030	1,459	868	141	124	120	606
1953	138	175	507	378	395	1,700	1,224	1,280	159	94.8	145	84.7	528
1954	123	333	645	137	336	357	1,960	1,688	777	247	329	1,212	675
1955	469	700	441	224	255	299	1,787	1,030	515	131	282	84.3	516
1956	279	484	123	559	156	124	833	1,801	610	632	134	568	528
1957	329	382	324	359	286	367	973	531	277	380	98.6	92.6	366
1958	198	555	1,331	323	158	165	1,748	1,456	416	219	133	131	571
1959	205	282	141	287	183	185	1,404	752	484	130	98.5	149	357
1960	1,192	1,428	638	303	243	296	2,057	1,282	293	200	118	227	689

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1.71	6.56	4.95	1.08	1.64	1.73	11.33	6.52	1.53	2.15	2.17	1.85	43.20
1952	2.18	5.02	3.13	1.90	1.43	1.32	11.74	8.72	5.02	.84	.74	.65	42.73
1953	.83	1.01	3.03	2.26	2.13	10.15	7.08	7.64	.92	.57	.87	.48	36.98
1954	.74	1.92	3.85	.82	1.81	2.01	11.33	10.09	4.49	1.47	1.96	7.01	47.50
1955	2.80	4.05	2.64	1.34	1.27	1.78	10.33	6.15	2.98	.78	1.68	.48	36.29
1956	1.67	2.80	.74	3.34	.87	.74	4.81	10.76	3.52	3.78	.80	3.40	37.23
1957	1.96	2.21	1.93	2.14	1.54	2.19	5.62	3.17	1.60	2.27	.59	.54	25.76
1958	1.18	5.21	7.95	1.93	.85	.98	10.09	8.70	2.41	1.51	.80	.76	40.17
1959	1.22	1.63	.84	1.72	.99	1.10	8.12	4.49	2.80	.78	.59	.86	25.14
1960	7.12	8.26	3.81	1.61	1.36	1.77	11.89	7.66	1.70	1.19	.70	1.31	48.58

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	586	41.24
1951	1201	22,800	Nov. 26, 1950	103	614	3.18	43.20	575	40.31
1952	1231	19,400	June 1, 1952	69	606	3.14	42.73	528	37.27
1953	1271	20,800	Mar. 27, 1953	48	528	2.73	36.98	543	36.62
1954	1331	19,500	Sept. 11, 1954	60	675	3.50	47.50	718	50.48
1955	1381	6,000	Apr. 15, 1955	64	516	2.67	36.29	455	32.01
1956	1431	7,370	July 14, 1956	83	528	2.74	37.23	541	38.12
1957	1501	5,240	Apr. 21, 1957	62	366	1.90	25.76	453	32.00
1958	1551	24,800	Dec. 21, 1957	64	571	2.96	40.17	449	31.52
1959	1621	6,700	Apr. 3, 1959	66	357	1.85	25.14	573	40.64
1960	1701	47,000	Oct. 24, 1959	57	689	3.57	48.58	-	-

755. Baker River at Wentworth, N. H.

Location.--Lat 43°52'05", long 71°54'35", on left bank 50 ft downstream from highway bridge in Wentworth, Grafton County, and 0.2 mile upstream from Pond Frook.

Drainage area.--58.8 sq mi.

Records available.--October 1940 to May 1952.

Gage.--Water-stage recorder. Altitude of gage is 580 ft (from topographic map).

Average discharge.--11 years (1940-51), 106 cfs.

Extremes.--1940-52: Maximum discharge, 12,000 cfs June 14, 1942, by slope-area measurement; maximum gage height, 14.82 ft June 14, 1942; minimum discharge, 5.2 cfs Mar. 1, 1944, Sept. 15, 1948.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	37.9	150	141	50.8	81.8	123	500	154	40.7	72.9	46.9	43.6	120
1952	69.7	161	112	79.9	64.4	79.4	533	193	-	-	-	-	-

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.74	2.86	2.77	1.00	1.45	2.41	9.49	3.02	0.77	1.43	0.92	0.83	27.69
1952	1.37	3.06	2.20	1.57	1.18	1.56	10.11	3.79	-	-	-	-	-

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	164	24.11
1951	1201	4,140	Nov. 26, 1950	12	120	2.04	27.69	121	27.95
1952	1231	2,100	Nov. 3, 1951	-	-	-	-	-	-

760. Baker River near Rumney, N. H.

Location.--Lat 43°47'45", long 71°50'45", on right bank 0.3 mile upstream from Halls Brook and 1¼ miles southwest of Rumney, Grafton County.

Drainage area.--143 sq mi.

Records available.--October 1928 to September 1960. Monthly discharge only for October 1928, 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.--32 years (1928-60), 260 cfs.

Extremes.--1928-60: Maximum discharge, 21,400 cfs June 15, 1942 (gage height, 15.50 ft), from rating curve extended above 3,800 cfs on basis of slope-area measurements at gage heights 13.03, 14.49, and 15.50 ft; minimum, 6.5 cfs Dec. 4, 1947, caused by ice conditions upstream.

Maximum discharge known, 25,900 cfs Nov. 3, 1927 (gage height, 17.4 ft, from flood-marks), from rating curve extended above 3,800 cfs as described above.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	71.5	349	336	123	200	299	1,317	333	103	140	106	98.8	288
1952	173	408	280	201	164	197	1,425	441	434	42.2	25.5	32.1	317
1953	36.4	59.1	426	240	281	1,280	666	575	58.6	29.6	65.1	31.2	314
1954	53.5	125	278	72.9	133	349	1,180	743	375	110	68.9	495	336
1955	218	407	316	125	159	254	1,145	250	256	81.9	181	32.3	285
1956	111	266	64.3	230	95.3	94.1	829	798	226	278	40.5	182	268
1957	127	184	199	160	137	267	390	212	108	115	26.7	32.0	163
1958	42.7	280	713	240	146	165	1,368	526	148	70.5	43.6	36.0	315
1959	82.4	101	76.0	87.4	70.3	130	994	199	165	46.1	61.9	60.3	172
1960	588	739	418	233	204	171	1,349	455	125	75.6	43.9	98.7	374

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.58	2.72	2.71	0.99	1.45	2.41	10.27	2.68	0.80	1.13	0.86	0.77	27.37
1952	1.40	3.19	2.26	1.62	1.24	1.59	11.12	3.55	3.38	.34	.21	.25	30.15
1953	.29	.46	3.43	1.94	2.05	10.32	5.19	4.64	.46	.24	.52	.24	29.78
1954	.43	.97	2.24	.59	1.41	2.81	9.21	5.99	2.93	.89	.56	3.83	31.89
1955	1.76	3.18	2.55	1.01	1.16	2.05	8.93	2.01	2.00	.66	1.46	.25	27.02
1956	.90	2.08	.52	1.85	.72	.76	6.47	6.43	1.76	2.24	.33	1.42	25.48
1957	1.02	1.44	1.60	1.29	1.00	2.15	3.05	1.71	.84	.93	.22	.25	15.50
1958	.34	2.19	5.75	1.93	1.06	1.33	10.67	4.24	1.15	.57	.35	.23	29.86
1959	.66	.79	.61	.70	.51	1.05	7.75	1.61	1.29	.37	.50	.47	16.31
1960	4.74	5.76	3.37	1.88	1.54	1.38	10.53	3.67	.97	.61	.35	.77	35.57

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	245	23.25
1951	1201	7,960	Nov. 26, 1950	26	268	2.01	27.37	237	28.21
1952	1231	10,800	June 2, 1952	14	317	2.22	30.15	239	27.48
1953	1271	15,400	Mar. 27, 1953	16	314	2.20	29.78	308	29.24
1954	1331	9,660	Sept. 11, 1954	19	336	2.35	31.89	376	35.74
1955	1381	3,310	Apr. 15, 1955	21	285	1.99	27.02	243	23.03
1956	1431	5,240	May 27, 1956	28	268	1.87	25.48	274	28.04
1957	1501	1,820	Nov. 22, 1956	14	163	1.14	15.50	208	19.72
1958	1551	9,260	Dec. 21, 1957	19	315	2.20	29.86	249	23.64
1959	1621	3,060	Apr. 3, 1959	15	172	1.20	16.31	296	28.12
1960	1701	18,000	Oct. 24, 1959	18	374	2.62	35.57	-	-

765. Pemigewasset River at Plymouth, N. H.

Location.--Lat 43°45'35", long 71°41'10", on right bank 150 ft downstream from bridge at Plymouth, Grafton County, and a third of a mile downstream from Baker River.

Drainage area.--622 sq mi.

Records available.--October 1903 to September 1960. Records for April 1886 to September 1903, published in WSP 134, 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.--57 years (1903-60), 1,362 cfs.

Extremes.--1903-60: Maximum discharge, 65,400 cfs Mar. 19, 1936 (gage height, 29.0 ft, from floodmarks), from rating curve extended above 43,000 cfs on basis of computations of flow over dam at gage heights 23.0, 27.4, and 29.0 ft; minimum, 35 cfs Oct. 1, 3, 4, 1948; minimum daily, 45 cfs Sept. 20, 1923.

Remarks.--Some diurnal fluctuation caused by powerplants above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	500	2,296	2,170	681	1,202	1,252	6,224	2,249	683	938	780	712	1,635
1952	986	2,349	1,508	1,071	818	914	6,407	3,055	2,196	314	222	239	1,665
1953	246	365	1,863	1,185	1,400	5,555	3,528	5,219	377	191	323	167	1,541
1954	241	719	1,673	371	1,001	1,439	5,477	4,401	2,030	649	531	3,053	1,794
1955	1,266	2,004	1,425	661	743	1,074	5,110	1,854	1,259	342	726	215	1,387
1956	567	1,270	301	1,721	404	415	3,121	4,118	1,452	1,470	271	1,196	1,360
1957	765	903	903	740	564	1,096	2,037	1,210	644	796	216	188	840
1958	351	1,325	3,505	1,110	615	697	5,302	3,201	870	421	274	256	1,496
1959	435	590	400	573	407	589	4,711	1,499	906	298	248	348	913
1960	2,855	3,444	2,050	1,026	956	736	6,374	2,868	793	435	283	483	1,855

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.93	4.12	4.02	1.26	2.01	2.32	11.16	4.17	1.23	1.74	1.45	1.28	35.69
1952	1.83	4.21	2.79	1.98	1.42	1.69	11.49	5.66	3.94	.58	.41	.43	36.43
1953	.48	.65	3.49	2.18	2.34	10.30	6.33	5.97	.68	.35	.60	.30	33.63
1954	4.45	1.29	3.10	.69	1.88	2.67	9.82	8.16	3.64	1.20	.98	5.48	39.16
1955	2.35	3.59	2.64	1.22	1.24	1.99	9.17	3.44	2.26	.63	1.34	.39	30.26
1956	1.05	2.28	.56	3.19	.70	.77	5.60	7.63	2.60	2.72	.50	2.14	29.74
1957	1.42	1.62	1.67	1.37	.94	2.03	3.65	2.24	1.15	1.48	.40	.34	18.31
1958	.65	2.38	6.50	2.06	1.03	1.29	9.51	5.93	1.56	.78	.51	.46	32.66
1959	.81	1.06	.74	1.06	.68	1.09	8.45	2.78	1.63	.55	.46	.62	19.93
1960	5.29	6.18	3.80	1.90	1.66	1.36	11.43	5.35	1.42	.81	.52	.87	40.59

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches		Mean	Runoff in inches	
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	1,424	31.08	
1951	1201	28,300	Nov. 26, 1950	178	1,635	2.63	35.69	1,624	35.45		
1952	1231	27,400	June 2, 1952	125	1,665	2.68	36.43	1,472	32.20		
1953	1271	44,700	Mar. 27, 1953	123	1,541	2.48	35.63	1,562	35.87		
1954	1351	29,100	Sept. 12, 1954	127	1,794	2.68	39.16	1,966	42.90		
1955	1391	14,500	Apr. 16, 1955	146	1,397	2.23	30.26	1,172	25.57		
1956	1431	15,900	May 28, 1956	180	1,360	2.19	29.74	1,397	30.56		
1957	1501	7,450	Apr. 21, 1957	114	840	1.35	18.31	1,060	23.13		
1958	1551	33,600	Dec. 21, 1957	129	1,496	2.41	32.66	1,179	25.74		
1959	1621	*15,000	Apr. 3, 1959	132	913	1.47	19.93	1,494	32.59		
1960	1701	52,700	Oct. 25, 1959	129	1,855	2.98	40.59	-	-		

* Revised.

770. Squam River at Ashland, N. H.

Location.--Lat 43°42'15", long 71°37'50", on right bank 200 ft upstream from bridge on U.S. Highway 3 and a third of a mile north of Ashland, Grafton County.

Drainage area.--57.6 sq mi.

Records available.--August 1939 to September 1960.

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

Average discharge.--21 years (1939-60), 91.2 cfs.

Extremes.--1939-60: Maximum discharge, 498 cfs Apr. 11, 1951 (gage height, 11.93 ft); minimum daily, 14 cfs Feb. 4, 1940.

Remarks.--Flow completely regulated by Squam and Little Squam Lakes.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	61.0	67.7	72.1	73.3	75.0	99.4	285	118	98.9	85.4	99.5	111	104
1952	111	124	142	216	234	285	170	113	194	85.7	76.7	98.2	154
1953	78.5	66.0	68.3	69.9	86.0	162	264	271	104	66.5	73.0	67.3	115
1954	69.1	69.4	83.4	86.2	71.4	72.0	87.9	295	258	97.4	80.9	98.7	114
1955	118	113	125	139	125	124	103	72.6	75.0	78.5	82.8	89.2	104
1956	80.4	77.9	73.9	69.4	83.3	113	112	98.7	101	76.2	86.5	81.1	87.7
1957	74.6	69.7	70.0	70.2	77.4	74.6	67.5	62.0	57.8	59.6	59.0	60.0	66.7
1958	56.3	58.6	64.8	71.6	95.5	177	86.0	97.6	85.2	63.8	72.5	69.6	83.2
1959	68.2	66.9	67.9	72.8	73.8	74.4	74.7	65.6	59.9	61.4	60.7	60.6	67.2
1960	61.1	66.9	83.0	103	132	155	228	195	134	64.9	70.5	68.9	113

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	64.5	-
1951	1201	498	Apr. 11, 1951	45	104	-	-	118	-
1952	1231	414	June 3, 1952	70	154	-	-	140	-
1953	1271	489	May 18, 1953	18	115	-	-	116	-
1954	1331	450	May 10, 1954	63	114	-	-	126	-
1955	1381	159	Jan. 14-17, 1955	71	104	-	-	93.3	-
1956	1431	131	Apr. 17, 18, 1956	68	87.7	-	-	86.1	-
1957	1501	166	June 1, 1957	56	66.7	-	-	63.9	-
1958	1551	199	(a)	26	83.2	-	-	85.2	-
1959	1621	86	Mar. 18, 1959	45	67.2	-	-	67.9	-
1960	1701	466	Apr. 15, 1960	3.4	113	-	-	-	-

a Mar. 10-18, 20, 21, 24-30, 31, 1958.

775. Newfound Lake near Bristol, N. H.

Location.--Lat 43°37'05", long 71°44'25", on Newfound River at outlet of Newfound Lake, 1 2/3 miles north of Bristol, Grafton County.

Drainage area.--98 sq mi.

Records available.--September 1941 to September 1960.

Gage.--Staff gage. Datum of gage is 581.88 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Remarks.--Lake is used for recreation and for storage of water for power, and has usable capacity of 1,690,000,000 cu ft.

Cooperation.--Records furnished by Public Service Co. of New Hampshire.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	841.7	1,240.1	1,464.5	1,277.8	1,435.7	1,353.6	1,662.5	1,725.5	1,561.0	1,530.0	1,321.3	1,016.7
1952	1,186	1,524	1,436	1,120	854	833	1,724	1,712	1,486	1,210	943	741
1953	547	603	1,344	1,240	1,035	2,027	1,577	1,569	1,312	1,072	1,019	863
1954	800	936	1,323	1,028	951	1,293	1,647	1,741	1,582	1,443	1,248	1,528
1955	1,415	1,674	1,472	907	802	991	1,598	1,600	1,614	1,354	1,333	969
1956	1,091	1,449	1,083	1,308	831	645	1,600	1,692	1,551	1,480	1,201	1,146
1957	1,068	1,068	1,251	980	745	867	1,274	1,561	1,350	1,316	1,072	883
1958	777	1,076	1,661	1,357	871	777	1,696	1,538	1,468	1,354	1,113	940
1959	871	907	860	929	889	745	1,631	1,698	1,604	1,335	1,120	965
1960	1,476	1,655	1,331	987	802	795	1,633	1,620	1,675	1,426	1,161	1,085

780. Smith River near Bristol, N. H.

Location.--Lat 43°34'00", long 71°44'50", on right bank in Hill, Merrimack County, 1.5 miles upstream from mouth and 1 $\frac{1}{4}$ miles southwest of Bristol, Grafton County.

Drainage area.--85.8 sq mi.

Records available.--May 1918 to September 1960.

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 1 $\frac{1}{2}$ miles upstream at different datum.

Average discharge.--42 years (1918-60), 144 cfs.

Extremes.--1918-60: Maximum discharge, 8,100 cfs Mar. 19, 1936 (gage height, 16.09 ft, from floodmarks), from rating curve extended above 2,700 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 2.7 cfs Aug. 2, 1933. Maximum stage known since at least 1885, that of Mar. 19, 1936.

Remarks.--Prior to 1954, some diurnal fluctuation caused by small mill above station; greater fluctuation prior to 1941.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	17.6	136	205	98.2	190	210	814	159	69.5	68.1	66.1	84.1	175
1952	154	295	196	180	143	177	759	266	235	30.1	14.0	20.5	205
1953	17.4	41.2	231	149	218	727	406	395	41.9	18.9	41.7	13.9	192
1954	28.1	78.6	187	59.7	138	247	456	504	172	37.8	25.5	171	175
1955	69.4	212	210	66.4	89.2	195	567	131	152	23.2	102	17.6	152
1956	87.5	209	44.2	193	59.4	60.1	556	415	151	62.8	14.0	52.9	158
1957	44.3	67.2	122	111	76.1	168	183	83.2	47.2	38.9	16.3	12.4	80.9
1958	21.8	108	322	154	101	126	807	327	95.6	50.3	21.8	14.9	179
1959	35.2	66.8	56.7	66.6	55.5	112	598	113	60.9	19.9	24.3	44.5	104
1960	251	312	228	150	135	95.1	944	281	135	43.3	25.4	73.0	222

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.24	1.77	2.76	1.32	2.31	2.82	10.58	2.14	0.90	0.92	0.69	1.09	27.74
1952	2.07	3.84	2.63	2.42	1.80	2.38	9.87	3.57	3.06	.40	.19	.27	32.50
1953	.23	.54	3.11	2.00	2.64	9.77	5.28	5.31	.55	.25	.56	.18	30.42
1954	.38	1.02	2.51	.80	1.67	3.32	5.93	6.77	2.23	.51	.34	2.23	27.71
1955	.93	2.76	2.82	.89	1.08	2.62	7.37	1.76	1.97	.31	1.37	.23	24.11
1956	1.18	2.72	.59	2.60	.75	.81	7.23	5.58	1.96	.84	.19	.69	25.14
1957	.60	.87	1.84	1.49	.92	2.25	2.38	1.12	.61	.52	.22	.16	12.78
1958	.29	1.40	4.33	2.07	1.23	1.69	10.49	4.39	1.22	.68	.29	.19	28.27
1959	.47	.87	.76	.90	.67	1.51	7.78	1.52	.79	.27	.33	.58	16.45
1960	3.37	4.05	3.07	2.01	1.69	1.28	12.28	3.78	1.76	.58	.34	.95	35.16

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	126	19.98
1951	1201	2,840	Apr. 3, 1951	6.3	175	2.04	27.74	198	31.51
1952	1251	2,130	June 1, 1952	6.2	205	2.39	32.50	176	27.84
1953	1271	3,750	Mar. 27, 1953	10	192	2.24	30.42	192	30.45
1954	1331	1,750	May 11, 1954	10	175	2.04	27.71	192	30.31
1955	1381	1,020	Apr. 11, 1955	9.6	152	1.77	24.11	140	22.09
1956	1431	1,670	Apr. 30, 1956	10	158	1.84	25.14	150	23.76
1957	1501	610	Jan. 24, 1957	6.9	90.9	.943	12.78	99.3	115.69
1958	1551	1,680	Apr. 19, 1958	8.6	179	2.09	28.27	154	24.35
1959	1621	1,800	Apr. 4, 1959	6.3	104	1.21	16.45	157	24.84
1960	1701	2,630	Oct. 24, 1959	10	222	2.59	35.16	-	-

† Corrected.

785. Franklin Falls Reservoir near Franklin, N. H.

Location.--Lat 43°28'10", long 71°39'40", on Pemigewasset River, 2 miles north of Franklin, Merrimack County.

Drainage area.--1,000 sq mi.

Records available.--March 1942 to September 1960.

Gage.--Staff gage. Datum of gage is at mean sea level.

Remarks.--Reservoir completed in 1942 for flood control, has usable capacity of 6,640,000,000 cu ft.

Cooperation.--Records furnished by Corps of Engineers.

Revisions.--Revised month-end usable contents, in millions of cubic feet, for the water years 1947-50, superseding those published in WSP 1301, are given herewith:

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1947	118	129	122	148	118	155	191	212	120	118	115	109
1948	120	120	111	122	107	235	139	152	115	120	109	113
1949	115	135	795	120	113	308	142	142	109	120	131	129
1950	131	146	144	139	111	170	222	150	109	120	113	120

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	120	261	118	122	137	544	332	155	118	139	120	118
1952	139	139	148	148	126	155	301	155	131	115	124	118
1953	116	120	120	145	142	4,320	189	119	118	115	123	118
1954	112	138	123	112	153	145	250	214	141	139	238	150
1955	146	188	147	114	142	135	240	227	120	115	118	120
1956	206	124	119	115	113	117	778	225	124	115	113	122
1957	107	131	110	138	216	138	157	110	139	111	118	113
1958	107	135	162	148	122	150	521	139	115	139	113	107
1959	113	124	111	120	118	142	157	113	120	118	120	120
1960	151	387	139	105	124	386	227	139	118	167	113	118

Note.--Figures for the water years 1951-58 are revisions, superseding those previously published in WSP 1201, 1231, 1271, 1331, 1381, 1431, 1501 and 1551.

790. Merrymeeting Lake near Alton, N. H.

Location.--Lat 43°28'35", long 71°10'45", on Merrymeeting River, 2½ miles northeast of Alton, Strafford County.

Drainage area.--10 sq mi, approximately.

Records available.--September 1942 to September 1960.

Gage.--Staff gage. Datum of gage is at mean sea level.

Remarks.--Lake is used for recreation and for storage of water for power. Usable capacity is about 368,000,000 cu ft.

Cooperation.--Records furnished by Public Service Co. of New Hampshire prior to Oct. 1, 1958; since Oct. 31, 1958, by New Hampshire Fish and Game Department.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	104	138	172	152	195	315	364	364	350	350	326	291
1952	265	278	249	225	190	133	323	367	355	323	300	275
1953	238	213	268	257	271	405	361	334	304	260	234	186
1954	164	146	175	137	148	228	322	358	360	317	284	322
1955	292	284	287	210	167	196	275	298	289	239	205	149
1956	128	133	59	82	41	42	190	281	291	254	201	196
1957	178	170	196	146	102	128	163	168	152	125	84	48
1958	17	19	84	176	210	245	375	352	328	302	265	252
1959	249	244	238	253	244	249	341	352	341	325	303	287
1960	303	255	233	244	265	196	336	346	341	330	316	316

Note.--To obtain usable contents from figures of contents shown in WSP 1301, subtract 2,306 million cu ft.

MERRIMACK RIVER BASIN

795. Lake Wentworth at Wolfeboro Falls, N. H.

Location.--Lat 43°35'25", long 71°12'05", at Wolfeboro Falls, Carroll County, above Lake Winnepesaukee.

Drainage area.--23 sq mi, approximately.

Records available.--September 1942 to September 1960.

Gage.--Reference point at top of dam. Datum of gage is 534.83 ft above mean sea level, datum of 1929.

Remarks.--Lake used for recreation and for storage of water for power, has usable capacity of 854,000,000 cu ft.

Cooperation.--Records furnished by O. P. Berry Co.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	-	-	-	-	-	-	-	-	-	-	-	526
1952	483	607	661	708	553	442	905	1,034	911	777	618	457
1953	287	287	548	662	788	1,174	1,009	955	847	729	603	424
1954	344	315	355	355	467	705	1,020	1,034	961	845	771	905
1955	880	1,000	908	677	559	585	880	904	873	758	758	618
1956	620	674	612	813	690	396	923	1,052	845	750	564	510
1957	465	452	521	558	542	634	719	716	651	553	426	a200
1958	(b)	(b)	426	531	585	646	1,015	953	777	761	646	553
1959	436	416	416	436	457	568	905	840	834	758	708	628
1960	585	713	847	585	335	467	a940	928	859	724	615	672

a Estimated.

b Record not available.

Note.--Records for 1951 water year, prior to September, not available. To obtain usable contents from figures of contents shown in WSP 1301, subtract 284 million cubic feet.

800. Lake Winnepesaukee 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 1960. Prior to November 1937 month-end contents only, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 500.02 ft above mean sea level, datum of 1929. Prior to November 1937 (corrected), staff and float gage at lake outlet at Lakeport at datum 0.53 ft higher.

Remarks.--Lake used for recreation and conservation for development of water power. Total usable capacity, 18,240,000,000 cu ft. Draft limited by law to an average of 250 cfs during the 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 (see p. 100), Merrymeeting (see p. 99), 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.

Month-end contents in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	14,580	15,590	16,680	16,020	17,220	16,900	18,840	18,980	18,480	18,580	17,280	15,710
1952	15,120	17,100	17,580	16,000	14,450	14,350	18,480	18,860	18,300	17,400	16,200	15,430
1953	13,800	13,190	15,140	16,380	16,300	21,440	19,890	18,280	17,520	16,660	16,260	15,180
1954	14,700	14,540	15,210	14,740	14,700	17,040	19,310	20,790	18,580	18,100	17,480	17,880
1955	17,360	18,000	17,520	14,430	13,720	15,570	18,400	18,920	18,680	17,740	17,580	15,410
1956	15,370	15,610	14,470	16,060	14,430	13,370	17,800	19,000	18,380	18,140	17,120	16,880
1957	16,240	15,590	15,710	13,840	13,290	14,410	15,530	16,280	16,420	16,320	15,350	14,760
1958	14,350	14,660	16,640	17,480	14,880	14,540	19,330	18,780	18,200	18,120	16,600	15,830
1959	14,780	14,780	14,820	14,740	14,740	14,510	18,300	18,340	18,200	17,160	17,040	16,180
1960	16,320	17,920	17,590	16,600	15,370	13,880	19,190	18,780	18,720	18,080	17,000	17,060

805. Lake Winnepesaukee Outlet at Lakeport, N. H.

Location.--Lat 43°32'55", long 71°27'55", 100 ft upstream from highway bridge across Paus 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 1960.

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.--27 years (1933-60), 544 cfs (adjusted for storage).

Extremes.--1933-60: Maximum daily discharge, 2,890 cfs Mar. 31, 1936; minimum daily, 5 cfs several days during April, May, and June 1957.

Remarks.--Flow completely regulated by Winnepesaukee (see p. 100), Wentworth (see p. 100), Merrymeeting (see p. 99), and other lakes.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	493	258	291	718	595	1,549	1,425	589	460	403	741	868	700
1952	613	423	782	1,601	1,566	1,002	798	782	912	407	377	369	800
1953	513	284	258	353	1,160	1,025	2,329	2,009	309	241	236	238	742
1954	230	253	265	522	775	241	669	2,043	1,548	317	324	660	653
1955	473	610	1,245	1,671	1,164	425	260	334	610	451	564	819	717
1956	283	280	640	503	1,270	1,140	222	691	788	345	331	372	570
1957	425	460	645	1,368	781	262	224	75.2	148	161	185	202	412
1958	189	255	253	751	1,672	885	559	1,095	444	297	474	319	591
1959	344	272	276	287	362	740	326	354	435	434	286	251	368
1960	348	337	1,173	1,087	1,472	1,396	629	1,313	557	409	424	516	805

Monthly and yearly runoff, in inches (adjusted)^a

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.02	1.99	2.19	1.52	3.13	4.54	6.68	2.01	0.85	1.40	0.79	0.83	25.95
1952	1.25	3.65	2.81	5.45	2.79	3.09	7.35	2.94	2.14	.22	-.23	.22	29.68
1953	-.30	-.15	3.13	2.59	3.23	9.35	5.32	4.47	.05	-.25	.27	-.55	27.46
1954	-.16	.59	1.64	1.10	2.18	3.54	4.75	8.24	2.14	.44	.29	2.55	27.63
1955	.88	2.63	3.38	1.64	2.50	3.54	4.16	1.68	1.59	.32	1.60	-.03	23.86
1956	.85	1.15	.68	3.48	1.84	2.36	5.94	3.62	1.69	.81	-.16	-.83	23.12
1957	.59	.64	2.19	2.13	1.59	2.22	2.02	1.13	.62	.39	-.56	-.03	12.86
1958	.11	1.15	3.15	3.58	1.71	2.34	7.40	2.83	.66	.65	-.30	.07	23.37
1959	-.15	.84	.59	1.24	1.00	2.08	5.50	1.11	1.17	.15	.76	-.12	14.17
1960	1.27	2.93	3.09	2.53	2.92	2.67	8.23	3.68	1.64	.54	.07	1.63	31.23

^a Adjusted for change in contents in Lake Winnepesaukee.

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year			
		Observed				Adjusted ^a			Observed		Adjusted ^a	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date									
1950	-	-	-	-	-	-	-	-	368	458	37.10	
1951	1201	-	-	230	700	694	1.91	25.95	785	788	29.46	
1952	1231	-	-	130	800	792	2.18	29.68	736	665	24.95	
1953	1271	-	-	180	742	734	2.02	27.46	716	719	26.87	
1954	1331	-	-	150	653	739	2.04	27.63	786	860	32.13	
1955	1381	-	-	175	717	638	1.76	23.86	622	525	19.65	
1956	1431	-	-	165	570	616	1.70	23.12	597	636	23.86	
1957	1501	-	-	5	412	344	.948	12.88	341	371	13.87	
1958	1551	-	-	135	591	625	1.72	23.37	608	541	20.24	
1959	1621	-	-	205	368	379	1.04	14.17	449	540	20.18	
1960	1701	-	-	200	805	833	2.29	31.23	-	-	-	

^a Adjusted for change in contents in Lake Winnepesaukee.

810. Winnepesaukee 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 1960.

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

Average discharge.--23 years (1937-60), 709 cfs.

Extremes.--1937-60: 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.--Flow regulated by powerplants and by Winnepesaukee (see p. 100), Winnisquam, Wentworth (see p. 100), Merrymeeting (see p. 99), and other lakes above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	516	411	414	884	917	1,879	2,060	832	569	496	822	946	894
1952	770	774	958	1,855	1,814	1,393	1,612	991	1,067	437	415	400	1,037
1953	563	302	474	561	1,345	1,737	2,745	2,408	448	251	256	233	940
1954	269	299	450	592	971	607	957	2,605	1,754	368	342	887	859
1955	620	800	1,394	1,710	1,328	744	578	446	774	418	552	760	840
1956	341	413	693	632	1,225	1,275	921	855	872	383	328	379	691
1957	478	537	765	1,432	840	491	473	217	201	179	181	182	497
1958	219	349	615	1,020	1,889	1,194	1,149	1,593	512	368	481	308	802
1959	377	312	364	356	468	958	998	398	519	481	332	447	500
1960	504	684	1,468	1,233	1,593	1,528	1,533	1,608	744	457	435	643	1,034

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	511	-
1951	1201	3,080	Apr. 3, 4, 1951	279	894	-	-	992	-
1952	1231	2,600	Apr. 6, 1952	276	1,037	-	-	940	-
1953	1271	3,720	Mar. 27, 1953	138	940	-	-	913	-
1954	1331	3,700	May 11, 1954	227	859	-	-	989	-
1955	1391	1,930	Jan. 14, 1955	287	840	-	-	726	-
1956	1431	1,940	June 5, 6, 1956	250	691	-	-	719	-
1957	1501	1,690	Jan. 15, 1957	117	497	-	-	447	-
1958	1551	2,700	May 1, 1958	190	802	-	-	791	-
1959	1621	2,160	Apr. 4, 1959	255	500	-	-	635	-
1960	1701	3,390	Apr. 5, 1960	287	1,034	-	-	-	-

815. Merrimack River at Franklin Junction, N. H.

Location.--Lat 43°25'25", long 71°39'10", on right bank at Franklin Junction, Merrimack County, 1 mile downstream from confluence of Pemigewasset and Winnepesaukee Rivers.

Drainage area.--1,507 sq mi.

Records available.--July 1903 to January 1904, March 1904 to January 1905, March 1905 to September 1960.

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.--55 years (1905-60), 2,794 cfs.

Extremes.--1903-60: Maximum discharge, 83,000 cfs Mar. 19, 1936 (gage height, 36.4 ft. from floodmarks), from rating curve extended above 30,000 cfs on basis of slope-area measurement and computation of flow over dam at gage height 29.5 ft, and velocity-area study; minimum daily, 209 cfs Sept. 14, 1957.

Remarks.--Flow regulated by powerplants by Franklin Falls Reservoir (see p. 93), and by Squam, Little Squam, Newfound (see p. 97), Winnepesaukee, (see p. 100), Winnisquam, Wentworth (see p. 100), Merrymeeting (see p. 99), and other lakes.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1,207	3,199	3,382	2,144	3,040	4,087	11,360	3,891	1,704	1,834	2,109	2,230	3,338
1952	2,405	4,383	3,436	4,054	3,708	3,409	11,130	5,486	4,589	1,040	691	914	3,772
1953	997	806	3,076	2,349	3,724	8,189	9,953	7,640	1,236	713	946	618	3,355
1954	772	1,347	2,742	1,351	2,553	3,059	8,084	9,412	4,902	1,386	1,140	4,735	3,455
1955	2,586	3,672	3,941	3,070	2,642	2,750	7,530	2,959	2,935	1,128	1,790	1,238	3,002
1956	1,264	2,508	1,419	3,007	2,190	2,166	5,728	6,917	3,188	2,231	896	1,979	2,788
1957	1,620	1,846	2,293	2,785	1,989	2,535	3,255	1,856	1,115	1,288	576	525	1,807
1958	742	2,103	5,259	2,962	3,185	2,847	8,939	6,373	1,802	1,081	1,013	835	3,071
1959	1,061	1,225	1,022	1,142	1,102	2,084	7,724	2,268	1,688	1,052	856	1,011	1,851
1960	3,964	5,586	4,915	3,108	3,353	2,705	11,340	5,883	2,227	1,170	1,079	1,661	3,905

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.92	2.37	2.59	1.64	2.10	3.13	8.41	2.98	1.26	1.40	1.61	1.65	30.06
1952	1.84	3.25	2.63	3.10	2.65	2.61	8.24	4.20	3.40	.80	.68	.68	34.08
1953	.76	.60	2.35	1.80	2.57	6.26	7.37	5.84	.91	.55	.72	.48	30.21
1954	.59	1.00	2.10	1.03	1.76	2.34	5.98	7.20	3.63	1.06	.87	3.55	31.11
1955	1.83	2.72	3.01	2.35	1.83	2.10	5.58	2.26	2.17	.86	1.37	.96	27.04
1956	.97	1.86	1.09	2.30	1.57	1.66	4.24	5.29	2.36	1.71	.69	1.47	25.21
1957	1.24	1.37	1.75	2.13	1.37	1.94	2.41	1.42	.83	.99	.44	.39	16.28
1958	.57	1.56	4.02	2.27	2.20	2.02	6.62	4.88	1.33	.83	.77	.60	27.67
1959	.81	.91	.78	.87	.76	1.60	5.72	1.73	1.25	.80	.65	.77	16.65
1960	3.03	4.14	3.76	2.38	2.40	2.07	8.40	4.50	1.65	.89	.83	1.23	35.28

Note.--Monthly runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	2,539	22.88
1951	1201	22,400	Apr. 4, 1951	314	3,338	2.21	30.06	3,542	31.90
1952	1231	21,300	June 3, 1952	368	3,772	2.50	34.08	3,329	30.07
1953	1271	22,100	Mar. 26, 1953	284	3,355	2.23	30.21	3,352	30.19
1954	1331	20,000	May 11, 1954	258	3,455	2.29	31.11	3,885	34.98
1955	1361	15,000	Apr. 16, 1955	490	3,002	1.99	27.04	2,597	23.40
1956	1431	16,400	Apr. 30, 1956	452	2,788	1.85	25.21	2,838	25.65
1957	1501	8,120	Apr. 22, 1957	209	1,807	1.20	16.28	2,005	18.07
1958	1551	19,400	Apr. 24, 1958	262	3,071	2.04	27.67	2,666	24.02
1959	1621	15,500	Apr. 5, 1959	288	1,851	1.23	16.65	2,786	25.08
1960	1701	21,800	Apr. 5, 1960	447	3,905	2.59	35.28	-	-

820. Contoocook River at Peterboro, N. H.

Location.--Lat 42°51'45", long 71°57'35", on left bank 1,100 ft downstream from milldam, 1 mile south of Peterboro, Hillsboro County, and 1½ miles upstream from Nubanusit Brook.

Drainage area.--68.1 sq mi.

Records available.--July 1945 to September 1960.

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

Average discharge.--15 years (1945-60), 125 cfs.

Extremes.--1945-60: 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, 1953.

Flood in September 1938 reached a stage of about 15 ft, from information by local residents.

Remarks.--Flow regulated by mill and reservoirs above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.33	2.56	3.03	2.75	4.00	4.37	5.35	1.98	1.17	0.98	1.48	1.24	29.24
1952	1.59	4.33	2.85	4.21	2.96	2.74	7.23	3.02	1.84	.88	.35	.77	32.77
1953	.26	.54	1.33	2.10	3.51	7.10	6.01	4.07	.84	.31	.26	.14	26.47
1954	.44	.86	2.64	1.64	2.12	3.37	2.96	4.97	1.79	1.11	1.23	3.32	26.45
1955	1.56	3.48	3.87	1.74	1.55	2.97	4.64	1.91	1.64	.38	1.12	.76	25.62
1956	4.51	5.20	1.54	5.18	1.70	1.53	8.06	4.60	1.64	.62	.22	.53	35.33
1957	.58	.75	1.59	1.88	1.32	2.45	2.93	1.18	1.08	.50	.13	.22	14.59
1958	.20	.71	2.67	2.53	1.59	1.89	9.86	3.95	.99	.76	.41	.55	25.91
1959	.67	1.24	1.03	1.39	1.03	2.31	6.37	2.09	1.12	.44	.39	.69	18.77
1960	2.98	3.95	4.39	2.61	1.62	1.65	9.85	3.26	2.57	.88	.86	2.17	36.79

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	19.7	156	179	162	262	258	327	117	71.5	57.8	87.5	75.8	147
1952	94.0	264	168	249	187	162	442	179	112	51.9	20.7	47.0	164
1953	15.4	35.1	78.5	124	229	419	367	241	51.0	19.3	15.6	9.46	133
1954	25.8	52.7	156	96.7	139	199	180	293	109	65.6	72.5	203	133
1955	91.9	213	229	103	101	176	283	113	100	22.5	66.1	46.2	129
1956	266	317	90.7	306	107	90.6	492	272	99.8	36.8	12.7	32.1	177
1957	34.1	45.8	93.8	111	86.2	143	179	69.9	65.8	29.6	7.73	13.6	73.2
1958	12.0	43.5	158	149	104	112	590	234	60.3	45.0	23.9	33.3	130
1959	39.8	75.9	60.8	82.3	67.4	137	389	123	68.2	26.0	23.1	42.1	94.2
1960	176	241	259	154	102	97.5	601	192	157	51.7	50.8	133	184

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	107	21.24
1951	1201	2,640	Nov. 26, 1950	1.3	147	2.16	29.24	161	32.09
1952	1231	1,180	Apr. 6, 1952	3.2	164	2.41	32.77	131	26.13
1953	1271	1,540	Mar. 16, 1953	.8	133	1.95	26.47	142	28.28
1954	1331	1,780	Sept. 11, 1954	3.5	133	1.95	26.45	158	31.42
1955	1381	1,290	Nov. 3, 1954	3.0	129	1.89	25.62	140	27.96
1956	1431	2,050	Jan. 10, 1956	3.6	177	2.60	35.33	135	27.00
1957	1501	600	Jan. 24, 1957	5.0	73.2	1.07	14.59	76.5	15.25
1958	1551	1,240	Apr. 18, 1958	6.5	130	1.91	25.91	127	25.27
1959	1621	1,450	Apr. 3, 1959	9.0	94.2	1.58	18.77	136	27.15
1960	1701	2,260	Sept. 12, 1960	13	184	2.70	36.79	-	-

825. Edward MacDowell Reservoir at West Peterboro, N. H.

Location.--Lat 42°53'35", long 71°59'15", on Nubanusit Brook at West Peterboro, Hillsboro County, 2 miles northwest of Peterboro.

Drainage area.--44 sq mi, approximately.

Records available.--March 1950 to September 1960.

Gage.--Staff gage. Datum of gage is at mean sea level.

Remarks.--Reservoir completed in 1950 for flood control, has usable capacity of 558,000,000 cu ft.

Cooperation.--Records furnished by Corps of Engineers.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	12.2	128.8	20.3	21.0	22.0	98.5	21.4	18.6	7.7	13.1	13.4	14.1
1952	19.7	17.1	23.6	35.1	19.5	19.9	35.2	24.1	18.6	19.1	8.8	11.9
1953	10.5	14.4	11.8	26.1	23.4	197.5	26.2	19.7	14.5	7.6	4.6	10.8
1954	14.4	17.9	17.0	17.9	34.5	20.5	25.8	24.5	19.9	16.7	27.1	14.4
1955	20.4	30.7	23.2	14.0	16.9	17.1	27.8	17.1	9.4	13.5	16.0	16.7
1956	22.8	18.7	1.6	17.9	17.5	19.1	171.1	4.0	1.0	.3	0	.6
1957	.3	16.7	17.5	29.3	32.4	3.7	1.6	1.3	1.0	.3	.3	0
1958	2.4	17.5	61.3	61.9	17.5	25.8	73.7	18.3	15.1	15.1	10.8	13.0
1959	1.3	20.8	19.1	47.5	19.1	20.8	9.4	4.9	14.4	15.1	17.5	10.1
1960	24.9	53.7	19.9	17.5	18.3	25.8	4.9	24.9	10.8	13.7	7.3	13.7

830. Nubanusit Brook near Peterboro, N. H.

Location.--Lat 42°53'10", long 71°58'25", on left bank 1½ 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 1960. Monthly discharge only for October 1920, 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.--26 years (1920-31, 1945-60), 86.3 cfs.

Extremes.--1920-31, 1945-60: 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.--Flow regulated by mills and Nubanusit Lake, Edward MacDowell Reservoir (see p. 105), and other reservoirs above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	26.8	79.5	183	106	180	168	307	79.8	54.1	35.0	36.5	36.3	107
1952	65.3	168	107	166	127	140	291	116	106	35.9	30.8	33.4	115
1953	33.6	30.0	63.8	88.8	157	228	263	167	40.7	21.3	21.2	16.2	95.8
1954	16.6	41.7	124	52.8	98.6	143	150	241	81.3	44.6	40.6	127	86.7
1955	59.4	160	150	72.3	65.5	129	213	81.8	52.5	10.5	75.0	42.4	92.6
1956	160	194	53.4	190	68.2	75.8	278	227	50.9	32.1	18.8	28.1	115
1957	25.7	33.9	92.6	83.8	59.2	118	113	61.7	26.9	17.5	16.5	14.4	55.3
1958	30.6	46.5	131	116	100	104	388	174	42.5	47.3	35.4	18.5	103
1959	34.5	48.9	64.1	80.5	69.1	105	269	65.3	36.3	31.0	36.2	48.8	73.8
1960	124	159	188	113	91.4	85.2	417	143	78.4	37.5	34.5	80.5	129

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.66	1.89	4.49	2.60	4.00	4.13	7.31	1.96	1.29	0.86	0.90	0.86	30.95
1952	1.60	4.00	2.62	4.09	2.91	3.45	6.92	2.85	2.53	.88	.76	.79	33.40
1953	.83	.71	1.57	2.18	3.49	5.61	6.26	4.11	.97	.52	.52	.38	27.15
1954	.41	.99	3.04	1.30	2.19	3.52	3.57	5.91	1.93	1.10	1.00	3.03	27.99
1955	1.46	3.81	3.68	1.78	1.45	3.17	5.08	2.01	1.25	.26	1.84	1.01	26.80
1956	3.93	4.62	1.31	4.68	1.57	1.86	6.61	5.59	1.21	.79	.46	.67	33.50
1957	.63	.81	2.28	2.06	1.31	2.89	2.68	1.52	.64	.43	.40	.34	15.99
1958	.75	1.11	3.21	2.86	2.23	2.55	9.22	4.28	1.01	1.16	.87	.44	29.69
1959	.85	1.16	1.58	1.98	1.53	2.57	6.40	1.61	.86	.76	.89	1.16	21.35
1960	3.05	3.79	4.62	2.78	2.10	2.10	9.92	3.52	1.86	.92	.85	1.92	37.43

Note.--Monthly runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	79.7	23.06
1951	1201	556	Apr. 11, 1951	3.9	107	2.28	30.95	111	32.13
1952	1231	544	Nov. 5, 1951	4.8	115	2.45	33.40	97.5	28.29
1953	1271	562	Mar. 16, 1953	1.8	93.8	2.00	27.15	98.5	28.48
1954	1331	487	Apr. 20, 1954	5.4	96.7	2.06	27.99	112	32.50
1955	1381	452	Apr. 27, 1955	5.9	92.6	1.97	26.80	95.8	27.71
1956	1431	637	May 7, 1956	8.5	115	2.45	33.50	93.6	27.16
1957	1501	303	Jan. 28, 1957	5.2	55.3	1.18	15.99	60.0	17.34
1958	1551	661	Apr. 29, 1958	6.0	103	2.20	29.69	97.5	28.21
1959	1621	634	Apr. 8, 1959	4.2	75.8	1.57	21.35	101	29.22
1960	1701	699	Apr. 12, 1960	6.3	129	2.75	37.43	-	-

840. North Branch Contoocook River near Antrim, N. H.

Location.--Lat 43°04'55", long 71°58'40", on right bank at North Branch, 4 miles north-west of Antrim, Hillsboro County, and 6 miles upstream from mouth.

Drainage area.--54.8 sq mi.

Records available.--August 1924 to September 1960.

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.--36 years (1924-60), 102 cfs.

Extremes.--1924-60: Maximum discharge, 5,000 cfs Mar. 19, 1936 (gage height, 9.30 ft, from floodmarks), from rating curve extended above 1,600 cfs on basis of slope-area measurements at gage heights 8.4 and 9.3 ft; minimum, 0.3 cfs Sept. 18, 1948, Aug. 5, 6, 1955.

Remarks.--Flow regulated by Highland Lake and several ponds above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	18.2	195	217	99.6	147	134	484	84.5	64.2	50.7	56.9	64.3	134
1952	124	258	145	183	135	117	458	165	123	11.7	3.25	6.11	143
1953	12.1	32.4	105	116	188	417	279	198	17.9	1.95	4.85	1.28	114
1954	24.1	65.9	205	63.3	110	208	216	302	66.8	31.1	6.70	118	118
1955	43.9	198	155	71.7	69.0	140	312	77.3	68.6	10.4	111	7.17	105
1956	213	254	44.8	193	47.9	48.7	330	279	81.1	20.6	1.95	18.2	128
1957	20.6	62.9	112	118	66.9	114	160	65.2	21.4	16.4	4.42	2.27	63.5
1958	38.6	55.1	253	108	71.5	72.5	568	195	27.7	58.2	20.6	16.9	122
1959	50.2	106	85.8	77.7	57.1	108	401	73.2	39	12.9	15.8	55.3	89.8
1960	189	231	220	123	104	67.0	616	158	81.1	20.3	19.6	162	165

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.38	3.97	4.56	2.09	2.79	2.81	9.86	1.78	1.31	1.07	1.20	1.31	33.13
1952	2.60	5.26	3.06	3.84	2.66	2.46	9.33	3.46	2.50	.25	.07	.12	35.61
1953	.25	.66	2.22	2.43	3.58	8.77	5.67	4.16	.37	.04	.10	.03	28.28
1954	.51	1.34	4.31	1.35	2.09	4.37	4.41	6.36	1.36	.65	.14	2.40	29.27
1955	.92	4.04	3.26	1.51	1.31	2.95	6.35	1.63	1.40	.22	2.34	.15	26.08
1956	4.49	5.17	.94	4.06	.94	1.03	6.73	5.87	1.65	.43	.04	.37	31.72
1957	.43	1.28	2.35	2.48	1.27	2.39	3.26	1.33	.44	.35	.09	.05	15.72
1958	.81	1.12	5.44	2.27	1.36	1.52	11.55	4.09	.56	.80	.43	.34	30.29
1959	1.06	2.16	1.80	1.63	1.09	2.27	8.16	1.54	.81	.27	.33	1.13	22.25
1960	3.98	4.69	4.63	2.59	2.04	1.41	12.54	3.33	1.65	.43	.41	3.30	41.00

Note.--Monthly runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	107	26.41
1951	1201	1,510	Nov. 27, 1950	3.7	134	2.45	33.13	142	35.14
1952	1231	1,020	Apr. 7, 1952	1.4	143	2.61	35.61	112	27.82
1953	1271	1,150	Mar. 28, 1953	.6	114	2.08	28.28	126	31.31
1954	1351	576	Apr. 20, 1954	.7	118	2.15	29.27	126	31.33
1955	1381	598	Aug. 15, 1955	.3	105	1.92	26.08	115	26.46
1956	1431	1,420	May 1, 1956	.6	128	2.34	31.72	101	25.18
1957	1501	527	Jan. 24, 1957	1.4	63.5	1.16	15.72	76.8	19.03
1958	1551	1,420	Apr. 23, 1958	1.4	122	2.23	30.29	113	27.94
1959	1621	765	Apr. 6, 1959	4.2	89.8	1.64	22.25	123	30.53
1960	1701	1,790	Oct. 25, 1959	4.4	165	3.01	41.00	-	-

845. Beards Brook near Hillsboro, N. H.

Location.--Lat 43°06'50", long 71°55'35", on right bank 300 ft upstream from bridge on State Highway 9, 500 ft upstream from mouth, and 1½ miles west of Hillsboro, Hillsboro County.

Drainage area.--55.4 sq mi.

Records available.--October 1945 to September 1960. Monthly discharge only for October 1945, published in WSP 1301.

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

Average discharge.--15 years (1945-60), 98.9 cfs.

Extremes.--1945-60: Maximum discharge, 2,190 cfs Oct. 25, 1959; maximum gage height, 6.59 ft Nov. 26, 1950; minimum discharge, 1.1 cfs Oct. 3, 1948.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	13.0	141	174	76.5	145	185	449	76.1	48.9	50.3	51.1	48.4	121
1952	92.8	226	125	160	121	128	470	155	106	10.9	4.99	7.91	133
1953	3.72	14.1	79.8	99.7	171	446	254	180	15.2	4.87	10.9	3.69	107
1954	9.15	43.0	150	44.8	114	202	214	285	79.0	21.7	10.6	100	106
1955	33.6	181	151	48.2	71.5	138	337	70.2	56.5	10.4	66.4	14.3	97.8
1956	128	224	41.6	223	42.4	46.1	417	217	79.7	19.1	3.25	18.5	121
1957	12.2	27.7	77.9	90.5	58.4	125	141	56.2	25.4	12.5	4.61	4.46	53.0
1958	8.90	65.5	219	132	81.5	93.6	541	162	30.7	25.2	21.4	13.4	116
1959	32.4	68.4	64.2	55.9	47.5	96.9	379	57.0	28.6	10.1	6.30	13.8	71.3
1960	134	185	178	103	100	73.6	615	181	82.8	19.8	17.6	145	152

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.27	2.84	3.62	1.59	2.73	3.85	9.04	1.58	0.98	1.05	1.06	0.98	29.59
1952	1.93	4.55	2.60	3.34	2.36	2.68	9.46	3.23	2.14	.23	.10	.16	32.77
1953	.08	.28	1.66	2.07	3.21	9.29	5.12	3.75	.31	.10	.23	.07	26.17
1954	.19	.87	3.13	.97	2.15	4.20	4.32	5.92	1.59	.45	.22	2.01	25.98
1955	.70	3.64	3.15	1.00	1.34	2.86	6.78	1.46	1.14	.22	1.38	.29	23.96
1956	2.65	4.52	.87	4.65	.83	.96	8.39	4.52	1.61	.40	.07	.37	29.84
1957	.25	.56	1.62	1.88	1.10	2.61	2.83	1.17	.51	.26	.10	.09	12.98
1958	.19	1.32	4.56	2.74	1.53	1.95	10.90	3.38	.62	.52	.45	.27	26.43
1959	.67	1.38	1.34	1.16	.89	2.02	7.63	1.19	.58	.21	.13	.28	17.48
1960	2.79	3.73	3.70	2.14	1.95	1.53	12.38	3.76	1.67	.41	.37	2.93	37.36

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day.	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	87.8	21.52
1951	1201	2,070	Nov. 28, 1950	3.8	121	2.18	29.59	130	31.95
1952	1231	1,660	Apr. 6, 1952	2.0	133	2.40	32.77	105	25.70
1953	1271	1,650	Mar. 27, 1953	1.6	107	1.93	26.17	116	28.34
1954	1331	1,220	Apr. 18, 1954	1.6	106	1.91	25.98	120	29.28
1955	1381	894	Nov. 4, 1954	1.7	97.8	1.77	23.96	100	24.51
1956	1431	1,500	Apr. 30, 1956	2.1	121	2.18	29.84	98.6	24.23
1957	1501	600	Jan. 23, 1957	2.0	53.0	.957	12.98	67.8	16.62
1958	1551	1,180	Apr. 18, 1958	2.7	116	2.09	26.43	105	25.75
1959	1621	1,100	Apr. 3, 1959	1.6	71.3	1.29	17.48	99.2	24.31
1960	1701	2,190	Oct. 25, 1959	2.2	152	2.74	37.36	-	-

850. Contoocook River near Henniker, N. H.

Location.--Lat 43°09'10", long 71°51'25", on right bank 1.6 miles downstream from Sand Brook and 2.2 miles southwest of Henniker, Merrimack County.

Drainage area.--368 sq mi.

Records available.--October 1939 to September 1960.

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.--21 years (1939-60), 648 cfs.

Extremes.--1939-60: Maximum discharge, 9,460 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 flood marks), 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.--Flow regulated by powerplants and by Nubanusit Lake, Edward MacDowell Reservoir (see p. 105), Highland Lake, Jackman Reservoir, and other reservoirs above station.

Revisions.--The momentary maximum discharge for the water year 1944 published in WSP 1301 has been revised to 9,460 cfs.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	179	779	1,203	573	1,273	1,297	2,445	599	413	293	377	379	812
1952	503	1,458	874	1,141	914	944	2,662	1,036	783	197	113	191	897
1953	140	136	477	655	1,251	2,427	1,909	1,264	239	92.8	108	73.1	729
1954	119	328	965	407	706	1,207	1,224	1,903	560	306	283	1,002	751
1955	368	1,205	1,172	556	526	1,039	1,672	607	477	146	426	230	701
1956	1,089	1,630	483	1,495	563	488	2,413	1,654	523	164	68.3	154	892
1957	188	223	521	607	454	807	815	352	210	116	68.9	61.1	368
1958	106	352	1,073	904	628	716	3,178	1,245	304	220	151	162	752
1959	279	433	436	380	391	707	2,338	503	254	120	117	248	515
1960	846	1,190	1,354	850	662	485	3,680	1,134	655	180	185	883	1,004

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.56	2.36	3.77	1.79	3.60	4.06	7.41	1.88	1.25	0.92	1.18	1.15	29.93
1952	1.58	4.42	2.74	3.58	2.68	2.96	8.07	3.25	2.37	.62	.35	.58	33.20
1953	.44	.41	1.50	2.05	3.54	7.60	5.79	3.96	.73	.29	.34	.22	26.87
1954	.37	.99	3.02	1.27	2.00	3.78	3.71	5.96	1.70	.96	.89	3.4	27.69
1955	1.15	3.65	3.67	1.74	1.49	3.26	5.07	1.90	1.45	.46	1.34	.70	25.88
1956	3.41	4.94	1.51	4.68	1.85	1.53	7.32	5.18	1.58	.52	.21	.47	33.00
1957	.59	.67	1.63	1.90	1.28	2.55	2.47	1.10	.64	.36	.22	.19	13.58
1958	.33	1.07	3.36	2.63	1.78	2.24	9.64	3.90	.92	.69	.47	.49	27.72
1959	.87	1.31	1.37	1.19	1.11	2.22	7.09	1.58	.77	.38	.37	.75	19.01
1960	2.65	3.61	4.24	2.66	1.94	1.52	11.16	3.55	1.99	.56	.58	2.68	37.14

Note.--Monthly runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	597	22.01
1951	1201	6,740	Apr. 4, 1951	54	812	2.21	29.93	867	31.98
1952	1231	6,240	Apr. 6, 1952	60	897	2.44	33.20	724	26.81
1953	1271	6,240	Mar. 27, 1953	37	728	1.98	26.87	784	28.90
1954	1331	3,600	Apr. 19, 1954	55	751	2.04	27.69	862	31.78
1955	1381	3,090	Nov. 5, 1954	60	701	1.90	25.88	739	27.27
1956	1431	7,180	May 1, 1956	42	892	2.42	33.00	704	26.03
1957	1501	3,030	Jan. 24, 1957	37	868	1.00	15.58	419	15.45
1958	1551	5,200	Apr. 23, 24, 1958	51	752	2.04	27.72	719	26.51
1959	1621	5,750	Apr. 4, 1959	49	515	1.40	19.01	703	25.96
1960	1701	9,440	Apr. 6, 1960	66	1,004	2.73	37.14	-	-

860. Warner River at Davisville, N. H.

Location.--Lat 43°15'05", long 71°43'50", on left bank 60 ft downstream from highway bridge at Davisville, Merrimack County, 2½ miles northwest of Contoocook, and 2.4 miles upstream from mouth.

Drainage area.--146 sq mi.

Records available.--October 1939 to September 1960.

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.--21 years (1939-60), 240 cfs.

Extremes.--1939-60: Maximum discharge, 4,510 cfs Mar. 27, 1953 (gage height, 9.88 ft); minimum, 4.4 cfs Aug. 27-29, 1945.

Flood in September 1938 reached a stage of 12.8 ft, from information by local residents.

Remarks.--Prior to 1948, slight diurnal fluctuation at low flow caused by mill above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	25.0	209	437	211	386	448	1,285	247	146	109	131	110	310
1952	230	580	316	559	316	327	1,237	451	339	39.2	19.9	28.4	352
1953	18.8	56.0	278	227	438	1,214	721	485	55.5	18.3	28.9	11.7	296
1954	29.0	102	313	124	269	510	559	855	238	70.8	30.4	302	285
1955	115	422	439	150	158	376	787	236	205	36.7	142	27.2	257
1956	181	494	111	405	125	132	953	606	252	69.7	17.6	51.1	282
1957	41.4	60.3	186	191	154	333	320	130	55.0	28.0	26.7	11.5	125
1958	36.6	254	537	369	242	275	1,205	506	112	58.5	31.9	23.6	302
1959	40.1	115	144	146	139	277	1,032	164	52.7	22.6	9.69	31.0	180
1960	203	475	465	274	256	180	1,457	510	250	49.4	35.2	260	366

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.20	1.60	3.45	1.66	2.76	3.54	9.82	1.95	1.11	0.86	1.03	0.84	28.82
1952	1.82	4.43	2.49	2.83	2.34	2.58	9.46	3.56	2.59	.31	.16	.22	32.79
1953	.15	.43	2.20	1.79	3.12	9.59	5.51	3.83	.42	.14	.23	.09	27.50
1954	.23	.78	2.47	.98	2.06	4.02	4.27	6.75	1.82	.56	.24	2.31	26.49
1955	.91	3.22	3.47	1.19	1.13	2.97	6.02	1.86	1.57	.29	1.12	.21	23.96
1956	1.43	3.78	.88	3.20	.92	1.05	7.28	4.79	1.92	.55	.14	.39	26.33
1957	.33	.46	1.47	1.51	1.10	2.63	2.45	1.02	.42	.22	.21	.09	11.91
1958	.29	1.79	4.24	2.91	1.73	2.17	9.21	3.99	.85	.46	.25	.18	28.07
1959	.32	.88	1.13	1.15	.99	2.19	7.89	1.29	.40	.18	.08	.24	16.74
1960	1.61	3.63	3.67	2.17	1.89	1.42	11.13	4.03	1.91	.39	.28	1.99	34.12

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	207	19.23
1951	1201	3,760	Apr. 3, 1951	8.4	310	2.12	28.82	348	32.31
1952	1231	3,200	Apr. 6, 1952	14	352	2.41	32.79	288	26.83
1953	1271	4,510	Mar. 27, 1953	8.4	296	2.03	27.50	303	28.20
1954	1331	1,930	May 11, 1954	9.2	285	1.95	26.49	329	30.81
1955	1381	1,120	Dec. 19, 1959	11	257	1.76	23.96	241	22.45
1956	1431	2,360	Apr. 30, 1956	11	282	1.93	26.33	241	22.50
1957	1501	604	Apr. 7, 1957	8.0	128	.877	11.91	172	15.97
1958	1551	2,070	Apr. 19, 1958	8.0	302	2.07	28.07	259	24.08
1959	1621	2,460	Apr. 4, 1959	5.9	180	1.23	16.74	251	23.32
1960	1701	4,580	Apr. 5, 6, 1960	11	366	2.51	34.12	-	-

865. Blackwater Reservoir near Webster, N. H.

Location.--Lat 43°18'55", long 71°43'20", on Blackwater River at Swett's Mills, 1 mile south of Webster, Merrimack County.

Drainage area.--128 sq mi.

Records available.--December 1942, February to May 1943, September 1943 to September 1960.

Gage.--Water-stage recorder. Datum of gage is at mean sea level.

Remarks.--Reservoir completed in 1941 for flood control, has usable capacity of 2,004,000,000 cu ft.

Cooperation.--Records furnished by Corps of Engineers.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	0.3	46.2	1.3	1.7	3.5	23.2	7.6	9.9	0.6	1.0	0.5	0.5
1952	1.7	1.4	1.7	3.0	1.2	4.3	7.6	8.7	.6	.3	.2	.2
1953	.1	.4	1.0	4.7	2.4	1266.7	5.3	1.0	.3	.2	.2	.3
1954	.7	1.0	.8	1.0	4.1	3.7	9.3	5.9	1.2	.4	.9	1.0
1955	1.0	8.1	2.0	.5	1.3	1.3	20.4	1.2	.8	.2	.5	.4
1956	.9	1.0	.3	.8	.7	.7	189.6	4.9	.5	.3	.2	.6
1957	.4	.9	.7	1.1	2.8	1.6	.9	.7	.5	.1	.2	.2
1958	.3	1.2	5.9	3.9	1.0	5.1	30.3	1.1	.5	.6	.2	.3
1959	.9	2.3	.4	1.0	.6	2.4	2.8	.5	.5	.2	.2	.2
1960	2.6	23.1	1.0	.9	1.3	5.9	5.9	1.7	.8	1.3	.3	.7

870. Blackwater River near Webster, N. H.

Location.--Lat 43°17'50", long 71°41'40", on left bank 0.2 mile west of Dingit Corner, 2½ miles southeast of Webster, Merrimack County, and 6½ miles upstream from mouth.

Drainage area.--129 sq mi.

Records available.--May 1918 to September 1920, February 1927 to September 1960. 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.--35 years (1918-20, 1927-60), 216 cfs (adjusted to present site).

Extremes.--1918-20, 1927-60: Maximum discharge, 11,000 cfs Mar. 19, 1936 (gage height, 11.78 ft, from floodmarks), from rating curve extended above 6,700 cfs on basis of slope-area and critical-depth measurements of peak flow; minimum, 3 cfs Sept. 17, 1941 (gage height, 1.20 ft); minimum daily, 10 cfs Aug. 14, 1950.

Remarks.--High flow regulated by Blackwater Reservoir (see p. 111). Some regulation at low flow prior to 1953 by mill above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	32.5	184	379	171	297	288	1,249	232	132	92.0	101	119	271
1952	212	462	271	281	234	272	1,143	399	371	62.0	42.3	43.5	314
1953	29.9	44.0	292	188	297	581	1,157	493	72.3	29.5	48.4	32.0	271
1954	38.7	93.8	285	103	211	402	515	746	235	71.5	39.6	280	250
1955	130	329	325	120	126	301	726	204	284	49.7	140	44.7	231
1956	122	358	83.7	279	122	114	657	627	259	90.1	31.9	90.9	236
1957	65.1	68.3	149	140	111	285	256	106	56.6	44.2	43.0	28.5	111
1958	49.0	202	444	283	200	221	968	443	146	74.4	33.2	39.2	258
1959	52.1	100	106	101	93.0	192	845	148	67.0	38.0	23.8	42.2	150
1960	226	375	365	212	205	163	1,232	468	249	67.2	51.7	186	315

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.29	1.59	3.39	1.53	2.40	2.58	10.80	2.07	1.14	0.82	0.92	1.03	28.54
1952	1.90	4.00	2.43	2.51	1.98	2.43	9.88	3.56	3.21	.55	.38	.38	33.19
1953	.27	.38	2.61	1.88	2.40	5.19	10.01	4.41	.63	.26	.43	.28	28.55
1954	.35	.81	2.37	.92	1.70	3.59	4.46	6.67	2.04	.64	.35	2.42	26.32
1955	1.16	2.84	2.90	1.07	1.01	2.69	6.28	1.92	2.46	.44	1.25	.39	24.31
1956	1.09	3.10	.75	2.49	1.02	1.02	5.68	5.60	2.24	.80	.25	.79	24.87
1957	.56	.59	1.33	1.25	.90	2.36	2.21	.95	.49	.40	.36	.25	11.67
1958	.44	1.74	3.97	2.53	1.62	1.98	8.37	3.95	1.26	.66	.36	.34	27.16
1959	.47	.87	.95	.90	.75	1.71	7.31	1.32	.58	.34	.21	.36	15.77
1960	2.02	3.24	3.26	1.90	1.72	1.45	10.66	4.18	2.15	.60	.46	1.61	33.25

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	194	20.38
1951	1201	2,390	Apr. 16, 1951	18	271	2.10	28.54	300	31.60
1952	1231	2,390	Apr. 10, 1952	25	314	2.43	33.19	266	28.12
1953	1271	2,320	Apr. 4, 5, 1953	18	271	2.10	28.55	274	28.82
1954	1331	2,100	May 14, 1954	22	250	1.94	26.32	282	29.69
1955	1381	1,320	Aug. 16, 1955	27	231	1.79	24.31	212	22.35
1956	1431	2,130	May 4, 1956	22	236	1.83	24.87	212	22.41
1957	1501	480	Jan. 25, 1957	18	111	.860	11.67	146	15.34
1958	1551	2,150	Apr. 25, 1958	18	258	2.00	27.16	221	23.30
1959	1621	2,220	Apr. 6, 1959	18	150	1.16	15.77	209	22.00
1960	1701	2,220	Apr. 9, 1960	23	315	2.44	33.25	-	-

880. Contoocook River at Penacook, N. H.

Location.--Lat 43°17'10", long 71°36'00", on right bank at Penacook, Merrimack County, half a mile upstream from mouth.

Drainage area.--766 sq mi.

Records available.--October 1928 to September 1960. Monthly discharge only for October 1928, published in WSP 1301.

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

Average discharge.--32 years (1928-60), 1,280 cfs.

Extremes.--1928-60: 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.--Flow regulated by Nubanusit Lake, Edward MacDowell Reservoir (see p. 105), Highland Lake, Jackman and Blackwater Reservoirs (see p. 111), and other reservoirs above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	265	1,211	2,295	1,175	2,442	2,515	5,644	1,372	900	671	785	751	1,657
1952	1,163	2,964	1,762	2,076	1,836	1,929	5,660	2,288	1,718	371	238	331	1,853
1953	251	308	1,254	1,230	2,314	4,776	4,265	2,625	466	196	259	146	1,503
1954	229	620	1,785	727	1,440	2,511	2,660	4,075	1,266	570	397	1,906	1,515
1955	747	2,254	2,320	1,001	980	2,089	3,650	1,281	1,180	307	773	366	1,411
1956	1,489	2,857	800	2,388	914	862	4,826	3,267	1,253	414	147	359	1,603
1957	363	431	1,012	1,091	810	1,713	1,656	712	408	180	132	729	1,132
1958	226	952	2,355	1,875	1,362	1,556	5,788	2,620	706	451	290	276	1,535
1959	453	793	817	741	760	1,405	4,773	1,012	498	254	180	381	1,001
1960	1,351	2,227	2,581	1,561	1,358	986	6,907	2,413	1,312	372	334	1,441	1,895

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.40	1.76	3.45	1.77	3.32	3.79	8.22	2.06	1.31	1.01	1.18	1.09	29.36
1952	1.75	4.32	2.65	3.13	2.56	2.90	8.24	3.44	2.50	.56	.36	.48	32.91
1953	.38	.45	1.89	1.85	3.15	7.19	6.21	3.95	.68	.29	.39	.21	26.64
1954	.34	.90	2.69	1.09	1.96	3.78	3.87	6.13	1.84	.86	.60	2.78	26.84
1955	1.12	3.28	3.49	1.51	1.33	3.14	5.32	1.93	1.72	.46	1.16	.53	24.99
1956	2.24	4.16	1.20	3.59	1.29	1.30	6.59	4.92	1.82	.62	.22	.52	28.47
1957	.55	.63	1.52	1.64	1.10	2.58	2.41	1.07	.59	.36	.27	.19	12.91
1958	.34	1.39	3.55	2.82	1.85	2.34	8.43	3.94	1.03	.68	.44	.40	27.21
1959	.68	1.16	1.23	1.11	1.03	2.11	6.95	1.52	.73	.38	.27	.55	17.72
1960	2.05	3.24	3.68	2.35	1.91	1.48	10.06	3.53	1.91	.56	.50	2.10	33.65

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches		
		Discharge	Date								
1950	-	-	-	-	-	-	-	1,133	20.07	-	-
1951	1201	11,800	Apr. 4, 1951	149	1,657	2.16	29.36	1,833	32.47	-	-
1952	1231	10,300	Apr. 6, 1952	164	1,853	2.42	32.91	1,515	26.91	-	-
1953	1271	11,300	Mar. 28, 1953	115	1,503	1.96	26.64	1,572	27.85	-	-
1954	1331	6,880	Apr. 19, 1954	106	1,515	1.98	26.84	1,739	30.80	-	-
1955	1381	5,000	Apr. 27, 28, 1955	129	1,411	1.84	24.99	1,395	24.70	-	-
1956	1431	10,200	May 1, 1956	103	1,603	2.09	28.47	1,327	23.57	-	-
1957	1501	4,000	Jan. 25, 1957	83	729	.952	12.91	874	15.49	-	-
1958	1551	8,500	Apr. 23, 1958	87	1,535	2.00	27.21	1,411	25.00	-	-
1959	1621	10,300	Apr. 5, 1959	129	1,001	1.31	17.72	1,345	25.80	-	-
1960	1701	16,300	Apr. 6, 1960	168	1,895	2.47	33.65	-	-	-	-

890. Soucook River near Concord, N. H.

Location.--Lat 43°14'22", long 71°27'44", on left bank 500 ft upstream from U.S. Highway 4, 0.9 mile upstream from Cemetery Brook, and 4.4 miles northeast of State Capitol at Concord, Merrimack County.

Drainage area.--76.8 sq mi.

Records available.--October 1951 to September 1960.

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

Average discharge.--9 years (1951-60), 121 cfs.

Extremes.--1951-60: Maximum discharge, 2,880 cfs Apr. 6, 1960 (gage height, 13.34 ft); minimum, 3.3 cfs Sept. 22-24, 1955.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	58.9	272	154	206	161	183	534	147	118	21.4	11.8	11.6	156
1953	14.4	16.1	111	149	245	525	330	213	35.7	13.9	15.0	5.81	139
1954	13.9	45.3	141	59.1	161	232	250	521	90.4	39.7	16.6	130	142
1955	62.8	178	195	82.6	96.3	236	286	87.8	91.7	13.4	11.2	5.14	112
1956	19.1	98.3	29.7	126	59.7	58.6	516	216	108	27.3	8.89	38.5	108
1957	39.3	51.1	108	117	89.5	180	150	53.8	22.9	13.2	7.72	6.19	70.7
1958	19.3	60.3	256	196	118	180	462	169	48.9	28.6	12.3	10.5	132
1959	13.5	40.9	42.8	44.9	41.2	113	462	71.2	45.8	21.3	16.9	53.2	80.1
1960	70.7	182	196	130	132	90.8	612	168	91.7	19.9	13.1	71.9	147

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	0.88	3.94	2.31	3.09	2.25	2.75	7.76	2.20	1.72	0.32	0.18	0.17	27.57
1953	.22	.23	1.87	2.24	3.32	7.89	4.79	3.19	.52	.21	.23	.08	24.59
1954	.21	.66	2.12	.89	2.18	3.49	3.64	7.83	1.31	.60	.23	1.89	25.07
1955	.94	2.59	2.92	1.24	1.31	3.54	4.16	1.32	1.33	.20	.17	.07	19.79
1956	.29	1.43	.45	1.89	.84	.88	7.50	3.24	1.57	.41	.13	.56	19.19
1957	.59	.74	1.63	1.76	1.21	2.85	2.17	.81	.33	.20	.12	.09	12.50
1958	.29	1.16	3.87	2.95	1.80	2.71	6.72	2.54	.71	.43	.18	.15	23.33
1959	.20	.59	.84	.87	.56	1.70	6.71	1.07	.87	.32	.25	.77	14.15
1960	1.06	2.84	2.95	1.95	1.86	1.36	8.89	2.52	1.33	.30	.20	1.04	26.10

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	-	-	-
1951	1231, 1331	-	-	-	-	-	-	-	-	-
1952	-	2,380	Apr. 6, 1952	4.8	156	2.03	27.57	127	22.56	
1953	1271	1,900	Mar. 16, 1953	4.6	139	1.81	24.59	144	25.48	
1954	1331	2,330	May 10, 1954	4.4	142	1.85	25.07	161	28.53	
1955	1381	641	Dec. 19, 1954	3.3	112	1.46	19.79	87.7	15.51	
1956	1431	1,410	Apr. 17, 1956	5.9	108	1.41	19.19	113	19.98	
1957	1501	398	Mar. 16, 1957	5.8	70.7	.921	12.50	84.1	14.88	
1958	1551	1,070	Apr. 7, 1958	5.2	132	1.72	23.33	110	19.42	
1959	1621	1,900	Apr. 3, 1959	5.1	60.1	1.04	14.15	110	19.37	
1960	1701	2,880	Apr. 6, 1960	6.2	147	1.91	26.10	-	-	

895. Suncook River at North Chichester, N. H.

Location.--Lat 43°15'25", long 71°22'10", on left bank at North Chichester, Merrimack County, 3.1 miles upstream from Little Suncook River.

Drainage area.--157 sq mi.

Records available.--May 1918 to September 1920, June 1921 to November 1927, November 1928 to September 1960.

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.--39 years (1918-20, 1921-27, 1929-60), 243 cfs.

Extremes.--1918-60; Maximum discharge, 12,900 cfs Mar. 19, 1936 (gage height, 15.27 ft, from floodmarks), from rating curve extended above 4,800 cfs on basis of slope-area and contracted-opening measurements of peak flow; minimum, 0.4 cfs Sept. 4, 1926; minimum daily, 1.4 cfs Sept. 4, 1926.

Remarks.--Flow regulated by mills and reservoirs above station; regulation greater prior to 1949.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	17.1	181	365	243	584	612	800	233	148	144	91.8	85.1	289
1952	132	665	345	437	337	358	1,141	347	244	37.2	27.8	24.8	339
1953	29.0	37.5	408	387	568	1,311	804	490	65.6	30.1	20.4	14.6	346
1954	20.7	84.0	383	136	311	517	578	1,203	153	75.8	45.1	454	330
1955	189	510	571	256	213	455	592	215	144	48.5	35.7	11.1	270
1956	87.3	257	74.2	534	132	136	1,097	511	199	73.0	30.3	72.4	266
1957	106	137	275	297	248	413	306	94.5	58.6	37.7	18.1	7.08	166
1958	16.5	198	546	445	285	340	1,096	398	96.6	60.8	21.3	38.0	295
1959	41.9	71.6	103	95.0	92.2	235	902	138	99.6	62.4	20.8	61.6	159
1960	152	394	474	287	284	201	1,369	420	287	51.0	29.4	188	343

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.13	1.29	2.69	1.79	3.87	4.49	5.89	1.71	1.05	1.06	0.67	0.6C	25.03
1952	.97	4.73	2.54	3.21	2.31	2.63	8.11	2.55	1.74	.27	.20	.18	29.44
1953	.21	.27	2.98	2.84	3.77	9.62	5.71	3.60	.47	.22	.15	.1C	29.94
1954	.15	.60	2.81	1.00	2.08	3.80	4.11	8.84	1.09	.56	.33	3.22	28.57
1955	1.39	3.62	4.20	1.88	1.41	3.34	4.21	1.56	1.02	.36	.26	.08	23.33
1956	.64	1.82	.55	3.92	.91	1.00	7.80	3.76	1.42	.54	.22	.51	23.09
1957	.78	.97	2.02	2.18	1.65	3.03	2.17	.69	.42	.28	.13	.05	14.37
1958	.12	1.41	4.01	3.27	1.89	2.50	7.79	2.92	.69	.45	.16	.27	25.48
1959	.31	.51	.76	.61	1.73	6.41	1.01	.71	.46	.15	.44	.44	13.80
1960	1.12	2.80	3.48	2.11	1.95	1.47	9.73	3.08	2.04	.37	.22	1.34	29.71

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	-	-	17.01
1951	1201	2,480	Apr. 4, 1951	13	289	1.84	25.03	337	29.17	24.66
1952	1231	3,300	Apr. 6, 1952	11	399	2.16	29.44	284	24.66	30.04
1953	1271	5,760	Mar. 27, 1953	5.0	346	2.20	29.94	348	34.22	17.13
1954	1331	4,720	May 10, 1954	4.4	330	2.10	28.57	396	27.57	23.85
1955	1381	1,590	Nov. 4, 1954	7.4	270	1.72	23.33	198	17.13	23.85
1956	1431	2,610	Apr. 17, 1956	11	266	1.69	23.09	275	23.85	16.14
1957	1501	950	Jan. 24, 1957	1.9	166	1.06	14.37	187	16.14	21.52
1958	1551	1,930	Apr. 7, 1958	1.9	295	1.88	25.48	249	21.52	19.62
1959	1621	3,480	Apr. 3, 1959	9.8	159	1.01	13.80	227	19.62	-
1960	1701	5,200	Apr. 5, 1960	13	343	2.18	29.71	-	-	-

910. South Branch Piscataquog River near Goffstown, N. H.

Location.--Lat 43°00'50", long 71°38'30", on right bank 20 ft upstream from highway bridge, 1.4 miles upstream from mouth, and 2.2 miles west of Goffstown, Hillsboro County.

Drainage area.--104 sq mi.

Records available.--July 1940 to September 1960.

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

Average discharge.--20 years (1940-60), 169 cfs.

Extremes.--1940-60: 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.--Prior to 1954, some regulation at low flow by mill above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	28.5	191	286	199	463	461	481	161	114	96.1	77.7	57.3	216
1952	111	396	234	341	268	312	778	309	194	32.0	20.0	14.8	250
1953	11.2	38.7	149	207	387	726	493	272	35.5	16.0	43.4	10.3	198
1954	30.9	92.7	253	100	208	339	286	565	157	77.2	66.5	359	211
1955	125	374	404	149	169	300	404	134	97.0	19.4	48.4	15.9	186
1956	255	473	90.6	413	131	132	843	322	102	35.8	10.8	22.1	235
1957	23.4	46.8	132	195	146	247	190	88.4	38.1	15.4	6.81	4.52	94.2
1958	10.6	84.5	284	303	174	251	800	265	49.1	75.4	26.3	23.9	195
1959	49.2	112	105	134	113	282	630	107	75.2	31.6	13.9	24.8	159
1960	147	192	266	177	198	146	888	277	147	50.7	39.2	195	226

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.31	2.05	3.17	2.20	4.63	5.11	5.16	1.79	1.23	1.06	0.83	0.61	28.18
1952	1.23	4.25	2.59	3.78	2.78	3.46	8.35	3.43	2.08	.35	.22	.16	32.68
1953	.12	.42	1.65	2.29	3.87	8.05	5.28	3.02	.39	.18	.43	.11	25.86
1954	1.34	.99	2.81	1.11	2.08	3.76	3.06	6.26	1.69	.86	.74	3.85	27.55
1955	1.38	4.01	4.48	1.65	1.70	3.32	4.34	1.49	1.04	.21	.54	.17	24.33
1956	2.83	5.07	1.00	4.58	1.35	1.46	9.04	3.57	1.09	.40	.12	.24	30.75
1957	.26	.50	1.46	2.16	1.46	2.73	2.04	.98	.41	.17	.03	.05	12.30
1958	.12	.91	3.15	3.36	1.74	2.78	8.58	2.94	.53	.84	.23	.26	25.50
1959	.55	1.21	1.17	1.49	1.14	3.12	6.75	1.18	.81	.35	.15	.27	18.19
1960	1.63	2.06	2.94	1.97	2.05	1.62	9.52	3.08	1.58	.56	.42	2.09	29.52

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	-	137	17.88
1951	1201	2,450	Apr. 3, 1951	7.4	216	2.08	28.18	235	30.72	
1952	1231	3,240	Apr. 6, 1952	7.2	250	2.40	32.68	205	26.80	
1953	1271	3,110	Mar. 16, 1953	6.9	198	1.80	25.86	213	27.81	
1954	1331	3,080	Sept. 12, 1954	6.5	211	2.03	27.55	256	33.28	
1955	1381	1,800	Dec. 15, 1954	4.3	186	1.79	24.33	179	23.36	
1956	1431	2,750	Jan. 10, 1956	7.9	235	2.26	30.75	184	24.07	
1957	1501	986	Jan. 24, 1957	4.0	94.2	.906	12.30	109	14.26	
1958	1551	2,210	Apr. 7, 1958	4.0	195	1.87	25.50	186	24.25	
1959	1621	2,890	Apr. 3, 1959	8.6	139	1.34	18.19	168	21.89	
1960	1701	3,820	Apr. 5, 1960	14	226	2.17	29.52	-	-	

915. Piscataquog River near Goffstown, N. H.

Location--Lat 43°01'00", long 71°33'00", on left bank 300 ft upstream from highway bridge, 0.2 mile upstream from Harry Brook, 0.4 mile southwest of Grasmere, and 2.5 miles east of Goffstown, Hillsboro County.

Drainage area--202 sq mi.

Records available--October 1939 to September 1960.

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--21 years (1939-60), 311 cfs.

Extremes--1939-60: Maximum discharge, 6,840 cfs Apr. 5, 1960 (gage height, 10.85 ft); minimum daily, 4.6 cfs July 19, 23, 1957.

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

Remarks--Flow regulated by powerplant above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	46.4	336	562	379	823	819	959	303	232	197	169	113	408
1952	220	770	413	622	520	585	1,438	595	370	56.5	34.0	25.6	468
1953	17.1	81.7	289	366	665	1,354	977	541	72.1	30.8	76.6	18.2	373
1954	101	183	436	214	417	650	502	1,050	286	149	92.2	673	396
1955	201	645	662	221	291	571	710	257	194	26.3	73.7	19.7	322
1956	343	806	150	686	211	214	1,453	580	193	55.8	18.2	41.1	395
1957	52.9	102	228	284	221	494	324	146	56.3	25.3	15.1	11.4	163
1958	23.9	184	490	555	359	469	1,378	476	93.1	124	46.3	41.3	352
1959	89.8	232	195	208	192	445	1,146	172	124	52.4	22.7	38.7	242
1960	238	358	499	325	365	268	1,671	513	256	79.1	67.7	384	416

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.26	1.86	3.21	2.16	4.24	4.68	5.29	1.73	1.28	1.12	0.96	0.62	27.41
1952	1.25	4.25	2.36	3.55	2.78	3.34	7.94	3.40	2.04	.32	.19	.14	31.56
1953	.10	.45	1.65	2.09	3.43	7.75	5.39	3.09	.40	.18	.44	.10	25.05
1954	.58	1.01	2.49	1.22	2.15	3.71	2.77	5.99	1.58	.85	.53	3.72	26.60
1955	1.15	3.56	3.78	1.26	1.50	3.26	3.92	1.47	1.07	.15	.42	.11	21.65
1956	1.96	4.45	.85	3.93	1.13	1.22	8.02	3.31	1.07	.32	.10	.23	26.59
1957	.30	.56	1.30	1.62	1.14	2.82	1.79	.83	.31	.14	.09	.06	10.96
1958	.14	1.01	2.80	3.17	1.85	2.68	7.61	2.72	.51	.71	.26	.23	23.69
1959	.51	1.28	1.12	1.19	.99	2.54	6.33	.98	.68	.30	.13	.21	16.26
1960	1.36	1.98	2.85	1.86	1.95	1.53	9.23	2.93	1.41	.45	.39	2.12	28.06

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	260	17.49
1951	1201	4,120	Apr. 4, 1951	5.8	408	2.02	27.41	446	29.94
1952	1231	5,340	Apr. 6, 1952	10	468	2.32	31.56	364	25.90
1953	1271	5,170	Mar. 16, 1953	9.4	373	1.85	25.05	400	26.93
1954	1331	4,280	Sept. 12, 1954	7.0	396	1.96	26.60	461	31.01
1955	1381	2,350	Dec. 15, 1954	4.8	322	1.59	21.65	304	20.42
1956	1431	3,800	Apr. 30, 1956	6.0	395	1.96	26.59	319	21.49
1957	1501	1,210	Jan. 24, 1957	4.6	163	.807	10.96	190	12.75
1958	1551	3,540	Apr. 7, 1958	6.0	352	1.74	23.69	337	22.65
1959	1621	4,860	Apr. 3, 1959	7.6	242	1.20	16.26	291	19.54
1960	1701	6,840	Apr. 5, 1960	9.6	416	2.06	28.06	-	-

MERRIMACK RIVER BASIN

920. Merrimack River near Goffs Falls, below Manchester, N. H.

Location.--Lat 42°56'55", long 71°27'45", on right bank 0.8 mile downstream from Bowman Brook, 1.3 miles north of Goffs Falls, Hillsboro County, and 2.3 miles downstream from Piscataquog River.

Drainage area.--3,092 sq mi.

Records available.--October 1936 to September 1960. Monthly discharge only for October 1936, published in WSP 1301.

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

Average discharge.--24 years (1936-60), 5,374 cfs.

Extremes.--1936-60: Maximum discharge, 102,500 cfs Sept. 23, 1938 (gage height, 25.87 ft), from rating curve extended above 48,000 cfs on basis of computations of flow over dam at gage heights 25.87 and 35.19 ft; minimum daily, 147 cfs Sept. 2, 1957.
Maximum discharge known, 150,000 cfs Mar. 20, 1936 (gage height, 35.19 ft, from floodmarks), from rating curve extended above 48,000 cfs by method explained above.

Remarks.--Flow regulated by powerplants, by Franklin Falls Reservoir (see p. 99), and by Squam, Newfound (see p. 97), Winnepesaukee (see p. 100), Winnisquam, and other lakes and reservoirs above station. Records of water temperatures for the water year 1956 are published in WSP 1450.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1,592	5,033	7,433	4,473	8,231	9,115	21,080	6,415	3,516	3,213	3,436	3,320	6,369
1952	4,123	10,210	6,600	8,409	7,515	7,295	22,010	9,672	7,610	1,683	1,358	1,402	7,290
1953	1,430	1,385	5,388	4,919	8,385	18,240	18,380	12,290	2,062	1,133	1,479	907	6,324
1954	1,257	2,479	6,111	2,861	5,481	7,909	12,680	18,250	7,299	2,545	1,769	8,789	6,445
1955	3,928	7,984	8,784	5,100	4,776	7,188	13,770	5,371	4,961	1,529	2,748	1,696	5,644
1956	3,248	7,251	2,731	7,073	3,829	3,866	15,400	12,870	5,596	2,916	1,199	2,532	5,697
1957	2,635	2,679	4,196	5,005	3,748	6,365	6,317	3,059	1,697	1,596	916	745	3,213
1958	1,099	3,750	9,459	7,198	6,502	6,209	19,020	11,130	3,055	1,891	1,495	†1,283	5,972
1959	1,670	2,494	2,611	2,691	2,623	5,400	16,880	4,182	2,739	1,672	1,231	1,805	3,819
1960	6,270	9,251	10,710	5,890	5,997	4,594	25,520	10,970	4,864	1,927	1,691	4,316	7,639

† Corrected.

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.59	1.82	2.77	1.67	2.77	3.40	7.61	2.39	1.27	1.20	1.28	1.20	27.97
1952	1.54	3.68	2.46	3.14	2.62	2.72	7.94	3.61	2.75	.63	.51	.51	32.11
1953	.53	.50	2.01	1.83	2.92	6.80	6.83	4.58	.74	.42	.55	.33	27.74
1954	1.47	.89	2.28	1.07	1.85	2.95	4.57	6.81	2.63	.95	.66	3.17	28.30
1955	1.46	2.88	3.28	1.90	1.61	2.68	4.97	2.00	1.79	.57	1.02	.61	24.77
1956	1.21	2.62	1.02	2.64	1.34	1.44	5.56	4.80	2.02	1.09	.45	.91	25.10
1957	.83	.97	1.56	1.87	1.26	2.37	2.28	1.14	.61	.60	.34	.27	14.10
1958	.41	1.35	3.52	2.68	2.12	2.32	6.86	4.15	1.10	.70	.56	.45	26.22
1959	1.62	.90	.97	1.00	.86	2.01	6.09	1.56	.99	.62	.46	.65	16.75
1960	2.34	5.34	3.99	2.20	2.09	1.71	9.21	4.09	1.76	.72	.63	1.56	33.64

Note.--Monthly runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30				Calendar year			
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	4,516	19.82
1951	1201	44,600	Apr. 4, 5, 1951	262	6,369	2.06	27.97	6,939	30.47
1952	1251	45,900	Apr. 7, 1952	479	7,290	2.36	32.11	6,236	27.47
1953	1271	46,900	Mar. 28, 1953	312	6,324	2.05	27.74	6,460	28.34
1954	1331	38,600	May 11, 1954	367	6,445	2.08	28.30	7,352	32.28
1955	1381	20,200	Apr. 17, 1955	397	5,644	1.83	24.77	5,012	22.00
1956	1431	34,300	May 1, 1956	492	5,697	1.84	25.10	5,361	23.61
1957	1501	13,100	Jan. 25, 1957	147	3,213	1.04	14.10	3,650	16.02
1958	1551	30,600	Apr. 24, 1958	259	5,972	1.93	26.22	5,337	23.43
1959	1621	36,500	Apr. 5, 1959	248	3,819	1.24	16.75	5,453	23.93
1960	1701	59,000	Apr. 6, 1960	503	7,639	2.47	33.64	-	-

925. Tower Hill Pond near Auburn, N. H.

Location.--Lat 43°01'50", long 71°21'35", on Maple Falls Brook, 2 $\frac{1}{4}$ miles north of Auburn, Rockingham County.

Drainage area.--12.5 sq mi.

Records available.--October 1939 to September 1960.

Gage.--Staff gage. Datum of gage is 268.95 ft above mean sea level.

Remarks.--Reservoir completed in 1939, used for storage of water for municipal supply and for power, has usable capacity of 182,000,000 cu ft.

Cooperation.--Records furnished by Manchester Water Works.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	3.3	33.2	95.4	107.2	178.1	178.9	182.5	182.5	178.9	178.9	175.3	175.3
1952	92.5	182.5	182.5	182.5	182.5	167.4	182.5	182.5	177.1	164.7	102.1	6.0
1953	1.9	1.9	4.7	71.4	173.5	184.2	186.1	175.3	173.5	171.8	146.5	136.0
1954	73.4	45.6	76.9	71.4	138.4	179.8	182.5	182.5	182.5	176.2	173.5	178.9
1955	122.9	124.5	163.0	95.4	86.0	147.3	183.4	179.8	176.2	171.8	147.3	93.3
1956	88.2	106.4	82.5	96.9	93.3	93.3	174.5	178.9	173.5	173.5	172.6	173.5
1957	47.3	2.8	34.6	45.1	82.3	103.5	157.6	178.9	178.1	174.5	171.8	156.8
1958	96.2	67.5	91.0	147.3	144.1	172.6	190.5	181.5	173.5	173.5	173.5	173.5
1959	41.0	8.0	2.1	7.8	3.3	85.3	182.5	178.9	178.1	177.1	173.5	169.1
1960	103.5	103.5	45.6	45.1	43.8	61.8	157.6	182.5	178.1	173.5	173.5	174.5

930. Sucker 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 1960. Prior to October 1948, published as Clark Brook at Auburn.

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

Average discharge.--22 years (1938-60), 40.8 cfs (adjusted for storage).

Extremes.--1938-60: 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.--Flow regulated by Tower Hill Pond (see above). Some diurnal fluctuation prior to 1951 by mill above station.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	9.67	16.6	39.5	39.9	89.9	117	113	38.6	21.6	15.7	11.0	5.86	42.9
1952	44.3	87.8	65.4	94.5	75.6	92.4	152	73.2	55.8	4.28	35.2	41.9	66.7
1953	6.11	6.15	35.6	47.2	54.1	178	157	79.5	9.60	2.50	10.4	1.18	48.8
1954	25.3	24.7	44.3	28.6	30.9	63.3	69.3	195	33.3	9.93	7.66	120	54.5
1955	43.7	87.7	84.4	63.1	51.1	67.5	68.8	41.3	26.3	2.67	14.0	22.7	47.7
1956	24.3	80.8	28.3	102	36.6	39.3	179	69.0	29.5	6.27	.681	1.90	49.7
1957	49.1	28.7	23.7	38.1	31.3	51.3	33.8	13.1	6.05	1.04	.54	3.72	23.4
1958	25.6	16.1	38.1	69.8	52.8	82.5	132	65.3	16.2	13.7	2.84	2.25	43.0
1959	51.7	32.2	28.4	20.6	22.0	51.7	121	32.8	25.6	9.53	2.17	4.26	33.3
1960	43.8	59.5	95.2	51.0	59.8	41.2	195	44.8	20.5	2.68	5.79	34.0	54.1

MERRIMACK RIVER BASIN

Monthly and yearly runoff, in inches (adjusted) a/, of Sucker Brook at Auburn, N. H.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.36	1.13	2.60	1.84	4.47	4.86	4.61	1.60	0.81	0.65	0.40	0.24	23.57
1952	.55	4.92	2.71	3.92	2.93	3.60	6.33	3.04	1.35	-.02	.49	.19	30.01
1953	.19	.25	1.44	2.99	3.61	7.53	6.33	3.13	.36	.08	.04	-.12	25.83
1954	.08	.56	2.32	1.10	2.19	3.27	2.82	8.08	1.34	.31	.28	4.91	27.26
1955	.95	3.55	4.10	1.57	1.77	3.75	3.32	1.65	1.00	.04	.20	.08	21.98
1956	.93	3.52	.80	4.45	1.36	1.63	8.46	2.93	1.10	.26	.01	.09	25.54
1957	.08	.46	1.48	1.74	1.44	2.77	2.20	.87	.23	-.01	-.02	-.08	11.16
1958	.12	.20	1.95	3.77	1.93	3.86	5.57	2.57	.53	.57	.12	.09	21.28
1959	.09	.78	1.09	.94	.76	3.41	6.35	1.31	.93	.38	.03	.10	16.17
1960	.80	2.39	3.05	2.11	2.30	1.98	9.29	2.24	.75	.04	.24	1.38	26.57

a Adjusted for change in contents in Tower Hill Pond.

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year		
		Observed			Adjusted a/			Observed	Adjusted a/	
		Momentary	maximum	Minimum	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date	day						
1950	-	-	-	-	-	-	-	29.3	32.3	15.76
1951	1201	277	Apr. 4, 1951	2.7	42.9	48.3	1.74	23.57	53.9	56.6
1952	1231	364	Apr. 7, 1952	1.6	66.7	61.3	2.21	30.01	54.0	48.4
1953	1271	494	Mar. 16, 1953	.2	48.8	52.9	1.90	25.83	52.8	55.1
1954	1331	602	Sept. 12, 1954	.8	54.5	55.8	2.01	27.26	64.6	67.4
1955	1381	189	Dec. 19, 1954	.5	47.7	45.0	1.62	21.98	40.7	38.2
1956	1431	390	Apr. 17, 18, 1956	.3	49.7	52.2	1.88	25.54	47.1	45.6
1957	1501	102	Oct. 24, 1956	.2	23.4	22.8	.820	11.16	21.6	23.4
1958	1551	291	Apr. 8, 1958	.5	43.0	43.6	1.57	21.28	45.8	42.9
1959	1621	430	Apr. 3, 1959	.6	33.3	33.1	1.19	16.17	40.5	41.9
1960	1701	561	Apr. 6, 1960	1.2	54.1	54.3	1.95	26.57	-	-

a Adjusted for change in contents in Tower Hill Pond.

935. Massabesic Lake near Manchester, N. H.

Location.--Lat 42°57'45", long 71°23'40", on Cohas Brook, 2½ miles southeast of Manchester, Hillsboro County.

Drainage area.--43 sq mi (approximately).

Records available.--September 1941 to September 1960.

Gage.--Float gage. Datum of gage is 100.93 ft above mean sea level.

Remarks.--Lake used for storage of water for municipal supply, has usable capacity of 724,000,000 cu ft.

Cooperation.--Records furnished by Manchester Water Works.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	491	571	543	482	793	940	745	642	513	539	541	508
1952	502	748	796	910	690	561	855	767	536	436	515	565
1953	370	368	416	506	608	1,240	813	654	616	495	449	333
1954	387	463	448	402	553	727	770	817	697	575	567	513
1955	404	527	635	467	564	581	683	719	665	544	535	
1956	501	633	423	719	543	440	940	697	639	591	498	444
1957	380	408	362	335	374	588	658	683	594	501	397	332
1958	345	394	468	578	473	621	1,020	944	650	662	571	461
1959	380	327	247	318	380	594	680	827	862	577	515	457
1960	450	450	526	438	452	385	906	884	810	650	550	428

940. Souhegan River at Merrimack, N. H.

Location.--Lat 42°51'25", long 71°30'30", on left bank at head of Atherton Falls, at Merrimack, Hillsboro County, 1½ miles upstream from mouth.

Drainage area.--171 sq mi.

Records available.--July 1909 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 160.58 ft above mean sea level, unadjusted (levels by Corps of Engineers). Prior to Apr. 12, 1911, staff gage at site 300 ft downstream at datum 0.38 ft lower. Apr. 12, 1911, to Oct. 14, 1913, chain gage at present site and datum.

Average discharge.--51 years (1909-60), 287 cfs.

Extremes.--1909-60: 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.--Some diurnal fluctuation caused by mill above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	39.6	232	417	335	808	728	739	264	195	160	158	113	345
1952	208	687	394	613	464	546	1,121	513	344	77.0	85.0	61.8	424
1953	44.1	86.8	331	434	626	1,150	869	559	103	38.4	45.4	28.5	358
1954	50.1	155	407	172	307	497	428	916	229	122	121	633	336
1955	199	612	659	241	268	498	611	246	157	42.6	141	46.1	310
1956	718	824	151	752	213	220	1,399	555	195	67.4	28.0	42.3	430
1957	45.1	77.3	208	275	244	412	339	210	72.0	32.0	22.6	16.2	163
1958	22.0	106	422	546	295	473	1,303	476	93.0	72.1	40.1	40.0	324
1959	59.9	134	146	201	182	461	886	194	115	64.5	28.7	56.4	210
1960	280	367	479	309	333	241	1,420	479	287	75.5	91.6	263	385

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.27	1.51	2.81	2.26	4.91	4.91	4.82	1.78	1.28	1.08	1.07	0.74	27.44
1952	1.40	4.48	2.66	4.13	2.92	3.68	7.31	3.46	2.24	.52	.56	.40	33.76
1953	.30	.57	2.23	2.93	3.81	7.76	5.67	3.77	.67	.26	.31	.17	28.45
1954	.34	1.01	2.74	1.16	1.87	3.35	2.79	6.18	1.49	.62	.62	4.13	26.70
1955	1.34	3.99	4.44	1.62	1.63	3.36	3.99	1.66	1.03	.29	.95	.30	24.60
1956	4.84	5.38	1.02	5.07	1.35	1.48	9.13	3.74	1.27	.45	.19	.28	34.20
1957	.30	.50	1.40	1.66	1.49	2.78	2.21	1.42	.47	.22	.15	.11	12.91
1958	.15	.69	2.84	3.69	1.80	3.19	8.50	3.21	.61	.49	.27	.26	25.70
1959	.40	.68	.98	1.36	1.11	3.11	5.78	1.31	.75	.43	.19	.37	16.67
1960	1.89	2.40	3.23	2.09	2.10	1.62	9.26	3.23	1.87	.51	.62	1.84	30.66

Yearly discharge, in cubic feet per second

Water year ending Sept. 30										Calendar year	
Year	WSP	Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches		
		Discharge	Date								
1950	-	-	-	-	-	-	-	219	17.42		
1951	1201	3,200	Nov. 27, 1950	21	345	2.02	27.44	385	31.39		
1952	1231	4,300	Apr. 6, 1952	32	424	2.48	33.76	356	28.32		
1953	1271	4,650	Mar. 16, 1953	22	358	2.09	28.45	371	29.44		
1954	1331	4,410	Sept. 12, 1954	20	336	1.96	26.70	408	32.58		
1955	1381	2,710	Dec. 15, 1954	18	310	1.81	24.60	328	26.07		
1956	1431	6,760	Oct. 16, 1955	23	430	2.51	34.20	316	25.16		
1957	1501	1,830	Jan. 24, 1957	15	163	.953	12.91	181	14.39		
1958	1551	2,970	Apr. 7, 1958	14	324	1.89	25.70	306	24.28		
1959	1621	4,180	Apr. 3, 1959	23	210	1.23	16.67	276	21.93		
1960	1701	6,000	Apr. 6, 1960	30	385	2.25	30.66	-	-		

945. North Nashua River near Leominster, Mass.

Location.--Lat 42°30'06", long 71°43'23", on right bank 1 1/3 miles upstream from Wekepeke Brook, 2 1/2 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 1960.

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

Average discharge.--25 years (1935-60), 198 cfs.

Extremes.--1935-60: Maximum discharge, 16,300 cfs Mar. 18, 1936 (gage height, 20.53 ft, from floodmarks), by computation of flow over dam; minimum, 11 cfs Aug. 29, 1948; minimum daily, 22 cfs Sept. 27, 1936, Sept. 2, 1957.

Remarks.--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.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	52.1	171	203	212	516	389	381	186	145	139	110	81.4	213
1952	117	390	291	445	302	388	472	270	206	158	78.8	73.0	257
1953	58.3	96.8	188	330	426	659	597	438	106	60.0	52.3	44.7	254
1954	64.0	108	207	129	185	281	332	450	145	76.4	104	382	205
1955	144	385	427	176	211	315	314	152	129	57.2	142	74.7	210
1956	606	485	122	465	206	296	868	278	168	67.4	62.4	68.5	307
1957	61.3	88.5	166	198	167	226	247	140	72.4	45.8	43.0	58.9	124
1958	41.5	72.9	232	336	236	411	754	306	92	78.9	64.4	73.6	124
1959	88.2	105	128	195	160	326	477	135	89.3	123	89.8	87.5	167
1960	238	299	356	233	239	182	761	305	151	97.1	95.8	181	261

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.56	1.79	2.19	2.28	5.02	4.19	3.97	2.01	1.51	1.50	1.19	0.85	27.06
1952	1.26	4.06	3.14	4.77	3.04	4.18	4.92	2.91	2.15	.85	.85	.76	32.67
1953	.63	1.01	2.02	3.56	4.15	7.10	6.22	4.72	1.11	.85	.56	.47	32.20
1954	.69	1.12	2.24	1.38	1.80	3.03	3.46	4.85	1.51	.82	1.12	3.98	26.00
1955	1.55	4.01	2.61	1.89	2.05	3.39	3.27	1.64	1.35	.62	1.53	.78	26.69
1956	6.53	5.06	1.32	5.01	2.08	3.19	9.05	3.00	1.75	.73	.67	.71	39.10
1957	.66	.92	1.78	2.13	1.62	2.43	2.57	1.51	.75	.49	.46	.41	15.73
1958	.45	.76	2.39	3.64	2.30	4.42	7.86	3.30	.96	.85	.69	.77	28.39
1959	.95	1.09	1.38	2.10	1.56	3.51	4.97	1.46	.93	1.32	1.97	.91	21.15
1960	2.56	3.11	3.64	2.51	2.41	1.97	7.93	3.28	1.58	1.05	1.03	1.88	33.15

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	-	-	18.22
1951	1201	4,390	Feb. 8, 1951	31	213	1.99	27.06	144	244	30.98
1952	1231	2,140	Nov. 3, 1951	32	257	2.40	32.67	219	219	27.87
1953	1271	3,220	Mar. 16, 1953	26	164	2.37	32.20	257	257	32.59
1954	1331	5,800	Sept. 11, 1954	31	205	1.92	26.00	253	253	32.12
1955	1381	2,510	Dec. 15, 1954	37	210	1.96	26.69	232	232	29.43
1956	1431	8,870	Oct. 15, 1955	42	307	2.87	39.10	232	232	29.55
1957	1501	1,730	Jan. 23, 1957	22	124	1.16	15.73	126	126	15.97
1958	1551	2,230	Apr. 7, 1958	26	224	2.09	28.39	222	222	28.21
1959	1621	3,560	Apr. 3, 1959	36	167	1.56	21.15	215	215	27.24
1960	1701	3,260	Apr. 5, 1960	50	261	2.44	33.15	-	-	-

950. Rocky Brook near Sterling, Mass.

Location.--Lat 42°26'57", long 71°48'10". on right bank 150 ft downstream from bridge on Beaman Road, 0.7 mile upstream from mouth, and 2½ miles west of Sterling, Worcester County.

Drainage area.--2.28 sq mi.

Records available.--October 1946 to September 1960.

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

Average discharge.--14 years (1946-60), 3.78 cfs.

Extremes.--1946-60: Maximum discharge, 470 cfs July 20, 1959 (gage height, 4.74 ft), from rating curve extended above 35 cfs; minimum, 0.003 cfs Aug. 24, 27, 1957.

Remarks.--Flow regulated by reservoir from 1949 to 1955.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.182	3.45	6.91	6.36	9.28	5.83	4.56	3.00	2.22	2.09	0.973	5.22	4.14
1952	4.80	8.64	6.75	9.24	5.57	5.87	5.80	4.78	4.08	.567	1.36	2.51	4.97
1953	6.58	1.08	3.59	6.80	8.72	9.43	9.67	7.70	.984	.095	.042	1.18	4.64
1954	3.76	2.42	4.79	2.78	3.90	4.66	4.20	5.36	1.35	.390	1.06	8.94	3.63
1955	8.85	11.9	10.4	3.66	3.32	4.28	3.99	2.06	1.54	.425	3.66	4.72	4.91
1956	13.4	10.8	3.23	9.74	6.29	7.75	14.2	3.24	1.97	.301	.085	.096	5.91
1957	.419	.919	2.56	2.59	2.56	3.31	3.62	1.71	.319	.030	.011	.015	1.49
1958	1.34	.719	3.34	6.36	4.15	10.2	13.8	6.22	1.24	.871	.492	1.04	4.03
1959	2.28	3.56	1.77	3.77	2.75	8.61	8.60	1.86	1.18	4.24	1.02	1.08	3.40
1960	3.13	5.24	7.18	4.76	5.16	5.04	13.9	6.15	1.95	.565	.414	2.06	4.62

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.09	1.69	3.49	3.22	4.24	2.95	2.23	1.52	1.08	1.06	0.49	2.56	24.62
1952	2.42	4.23	3.42	4.67	2.64	2.97	2.84	2.42	2.00	.19	.69	1.23	29.72
1953	3.35	.53	1.82	3.44	3.98	4.77	4.73	3.89	.48	.05	.02	.58	27.62
1954	1.90	1.19	2.42	1.41	1.78	2.36	2.06	2.71	.68	.20	.54	4.38	21.61
1955	4.47	5.82	5.28	1.85	1.51	2.16	1.95	1.04	.76	.21	1.85	2.31	29.21
1956	6.75	5.31	1.63	4.92	2.97	3.92	6.93	1.64	.96	.15	.04	.05	35.27
1957	.21	.45	1.30	1.31	1.08	1.67	1.77	.87	.16	.02	.006	.008	8.85
1958	.07	.35	1.69	3.22	1.90	5.16	6.65	3.14	.61	.44	.25	.51	23.99
1959	1.15	1.74	.89	1.90	1.25	4.35	4.21	.94	.58	2.14	.52	.53	20.20
1960	1.58	2.56	3.63	2.41	2.44	2.55	6.82	3.11	.95	.29	.21	1.01	27.56

Note.--Monthly runoff for some periods prior to 1956 may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	2.26	13.47
1951	1201	58	Feb. 18, 1951	0.01	4.14	1.82	24.62	4.94	29.42
1952	1231	64	(a)	.05	4.97	2.18	29.72	4.24	25.33
1953	1271	68	Mar. 16, 1953	.02	4.64	2.04	27.62	4.61	27.45
1954	1331	395	Sept. 11, 1954	.04	3.63	1.59	21.61	5.32	31.67
1955	1381	89	Dec. 15, 1954	.02	4.91	2.15	29.21	4.59	27.33
1956	1431	98	Oct. 15, 1955	.04	5.91	2.59	35.27	3.94	23.54
1957	1501	34	Jan. 23, 1957	.01	1.49	.854	8.85	1.51	9.00
1958	1551	88	Apr. 6, 1958	.02	4.03	1.77	23.99	4.31	25.66
1959	1621	470	July 20, 1959	.14	3.40	1.49	20.20	4.07	24.19
1960	1701	86	Mar. 31, 1960	.05	4.62	2.03	27.56	-	-

a Nov. 3, 1951, June 1, 1952.

955. South Branch Nashua River at Clinton, Mass.

Location.--Lat 42°24'15", long 71°41'25", at Wachusett Dam, 1 mile south of Clinton, Worcester County.

Drainage area.--107.69 sq mi since July 1937.

Records available.--July 1896 to September 1960.

Average discharge.--64 years (1896-60), 190 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.

Monthly and yearly mean discharge, in cubic feet per second (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	21.3	113	169	219	496	422	409	195	128	102	55.8	46.3	196
1952	89.3	379	307	483	358	385	439	291	260	47.7	80.2	34.7	262
1953	31.0	67.2	191	342	442	691	790	469	105	31.5	35.2	18.2	267
1954	54.9	84.8	232	160	212	294	338	415	128	67.1	112	494	216
1955	183	412	618	263	218	370	340	206	138	58.0	409	111	278
1956	535	635	133	460	256	341	890	325	175	81.4	34.2	39.2	325
1957	52.8	93.9	190	201	173	158	299	137	77.8	27.3	7.89	7.81	126
1958	14.1	34.1	221	243	237	465	831	345	115	89.9	52.0	78.9	235
1959	99.9	153	173	238	174	417	514	145	95.5	223	105	82.1	202
1960	210	320	376	261	298	303	721	336	200	127	61.8	149	279

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.23	1.17	1.81	2.35	4.79	4.52	4.23	2.08	1.33	1.09	0.60	0.48	24.68
1952	.96	3.93	3.28	5.17	3.59	4.15	4.54	3.12	2.70	.51	.86	.36	33.17
1953	.33	.70	2.05	3.66	4.28	7.40	8.19	5.02	1.09	.34	.38	.19	35.63
1954	.59	.88	2.49	1.71	2.05	3.14	3.51	4.44	1.33	.72	1.20	5.12	27.18
1955	1.96	4.27	6.61	2.61	2.11	3.96	3.52	2.20	1.43	.92	4.38	1.15	35.02
1956	5.73	6.57	1.42	4.92	2.57	3.65	9.22	3.48	1.81	.87	.37	.41	41.02
1957	.56	.97	1.93	2.15	1.68	2.76	3.10	1.46	.81	.29	.09	.08	15.88
1958	.15	.35	2.36	3.67	2.29	4.95	8.61	3.70	1.20	.96	.56	.82	29.62
1959	1.07	1.58	1.86	2.55	1.69	4.47	5.32	1.55	.99	2.39	1.13	.85	25.45
1960	2.25	3.32	4.02	2.79	2.99	3.25	7.47	3.60	2.07	1.36	.66	1.54	35.32

Yearly discharge, in cubic feet per second (adjusted)

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	126	15.82
1951	1201	-	-	-	196	1.82	24.68	235	29.64
1952	1231	-	-	-	262	2.44	33.17	222	28.08
1953	1271	-	-	-	267	2.48	35.63	274	34.51
1954	1331	-	-	-	216	2.00	27.18	285	35.05
1955	1381	-	-	-	278	2.58	35.02	285	35.90
1956	1431	-	-	-	325	3.01	41.02	243	30.76
1957	1501	-	-	-	126	1.17	15.88	121	15.28
1958	1551	-	-	-	235	2.18	29.62	248	31.27
1959	1621	-	-	-	202	1.87	25.45	242	30.52
1960	1701	-	-	-	279	2.60	35.32	-	-

960. Squannacook River near West Groton, Mass.

Location.--Lat 42°38'03", long 71°39'30", on left bank 0.7 mile downstream from Trout Brook and 2.7 miles northwest of West Groton, Middlesex County.

Drainage area.--62.8 sq mi, excludes 2.10 sq mi above outlet of Fitchburg Reservoir.

Records available.--October 1949 to September 1960.

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

Average discharge.--11 years (1949-60), 118 cfs.

Extremes.--1949-60: Maximum discharge, 4,010 cfs Oct. 16, 1955 (gage height, 8.04 ft), from rating curve extended above 2,200 cfs by logarithmic plotting; minimum daily, 4.3 cfs Aug. 14, 1950.

Remarks.--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.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	12.0	57.8	117	123	289	234	234	113	84.1	84.7	52.7	37.5	119
1952	64.3	233	158	236	179	230	351	192	131	30.6	35.7	24.4	155
1953	15.9	36.9	119	169	239	404	346	224	42.6	18.4	14.8	10.4	136
1954	18.1	47.4	129	72.7	113	165	160	343	97.1	42.6	37.2	245	122
1955	80.1	221	253	103	108	191	218	97.6	50.6	16.3	57.4	21.7	118
1956	296	304	76.5	323	116	135	514	184	66.2	27.2	14.0	17.6	174
1957	19.0	40.1	82.2	103	92.7	149	141	95.5	30.6	12.9	7.94	7.94	64.8
1958	10.3	34.1	138	208	123	233	438	189	45.4	28.6	17.3	16.0	123
1959	21.6	40.0	52.7	73.1	72.4	191	306	83.7	43.1	41.4	20.9	28.9	61.1
1960	90.0	144	196	124	140	107	520	195	85.2	38.5	42.7	95.7	147

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.22	1.03	2.15	2.27	4.80	4.30	4.16	2.07	1.49	1.55	0.97	0.67	25.66
1952	1.18	4.14	2.91	4.34	3.08	4.22	6.24	3.53	2.33	.56	.65	.43	33.61
1953	.29	.65	2.19	3.10	3.96	7.41	6.15	4.12	.76	.34	.27	.18	29.43
1954	.33	.64	2.37	1.33	1.68	3.03	2.64	6.31	1.73	.78	.68	4.35	26.47
1955	1.47	3.92	4.65	1.89	1.79	3.51	3.87	1.80	.90	.30	1.05	.35	25.54
1956	5.44	5.40	1.41	5.93	1.99	2.48	9.13	3.38	1.57	.50	.26	.32	37.61
1957	.35	.71	1.51	1.89	1.54	2.73	2.51	1.72	.54	.24	.15	.14	14.03
1958	.19	.61	2.53	3.63	2.04	4.27	7.78	3.47	.81	.53	.32	.28	26.66
1959	.40	.71	.97	1.34	1.20	3.51	5.43	1.54	.77	.76	.36	.51	17.52
1960	1.65	2.56	3.59	2.27	2.41	1.97	9.23	3.57	1.51	.71	.78	1.70	31.95

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	74.3	16.06
1951	1201	1,440	Feb. 19, 1951	4.5	119	1.89	25.66	141	30.51
1952	1231	1,210	Nov. 4, 1951	11	155	2.47	33.61	132	28.51
1953	1271	1,640	Mar. 16, 1953	5.3	136	2.17	29.43	136	29.64
1954	1331	2,470	Sept. 12, 1954	6.1	122	1.94	26.47	153	32.97
1955	1381	1,160	Dec. 15, 1954	5.1	118	1.86	25.54	126	27.75
1956	1431	4,010	Oct. 16, 1955	11	174	2.77	37.61	130	26.13
1957	1501	692	Jan. 24, 1957	5.1	64.8	1.03	14.03	69.3	14.79
1958	1551	1,370	Apr. 7, 1956	6.1	123	1.96	26.66	118	25.41
1959	1621	2,000	Apr. 3, 1959	9.5	81.1	1.29	17.52	106	23.24
1960	1701	2,120	Apr. 6, 1960	6.4	147	2.34	31.95	-	-

965. Nashua River at East Pepperell, Mass.

Location.--Lat 42°40'03", long 71°34'32", on right bank 200 ft downstream from powerplant of St. Regis Paper Co. at East Pepperell, Middlesex County, and 0.8 mile upstream from Nissitissit River.

Drainage area.--Total above gage, 433 sq mi; net above gage, 316 sq mi (flow diverted from 117 sq mi for use of Boston metropolitan district and city of Worcester).

Records available.--October 1935 to September 1960.

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

Average discharge.--25 years (1935-60), 541 cfs (adjusted for wastage into Nashua River).

Extremes.--1935-60: 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.--Flow regulated by powerplant above station. Runoff adjusted for water wasted in diverting drainage from basin of South Branch Nashua River for use of Boston metropolitan district.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	109	294	542	599	1,406	1,156	1,329	559	490	408	373	288	623
1952	364	1,512	854	1,396	1,220	1,209	1,408	1,007	714	184	278	191	842
1953	210	227	482	793	1,223	1,834	2,244	1,382	367	161	183	130	766
1954	192	343	591	354	507	766	792	1,347	509	223	202	1,249	589
1955	505	1,095	1,504	691	547	987	943	591	390	205	631	335	703
1956	1,356	1,781	513	1,399	879	1,013	2,358	1,158	576	265	214	169	969
1957	183	281	490	566	479	704	687	402	182	110	93.5	89.5	355
1958	132	225	559	929	734	1,246	1,777	928	291	211	161	194	615
1959	229	297	374	445	408	992	1,240	418	273	473	215	279	470
1960	505	721	919	640	731	619	2,248	890	588	228	268	607	744

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.37	1.02	1.96	2.13	4.46	3.84	4.01	2.02	1.71	1.46	1.33	0.99	25.32
1952	1.30	4.47	2.98	3.97	3.30	4.32	4.55	3.44	2.18	.65	.59	.65	32.80
1953	.74	.77	1.75	2.87	3.83	5.75	5.66	4.32	1.17	.56	.51	.43	26.54
1954	.67	.99	2.13	1.27	1.65	2.77	2.77	4.90	1.76	.79	.71	4.28	24.69
1955	1.68	3.49	3.88	1.93	1.67	3.10	2.90	1.74	1.20	.54	2.01	.92	25.06
1956	4.68	5.15	1.74	4.64	2.54	3.19	7.21	3.32	1.77	.67	.45	.56	35.92
1957	.64	.97	1.76	2.04	1.55	2.54	2.40	1.44	.62	.37	.32	.29	14.94
1958	.45	1.77	2.01	3.36	2.40	4.52	6.25	3.32	1.01	.74	.66	.64	26.03
1959	.81	1.02	1.34	1.60	1.32	3.59	4.36	1.51	.94	1.66	.70	.96	19.81
1960	1.81	2.52	3.33	2.26	2.34	2.13	7.22	3.01	1.74	.81	.52	1.95	30.04

a Adjusted for water wasted in diverting drainage from South Branch Nashua River for use of Boston metropolitan district.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30										Calendar year			
		Observed					Adjusted a/					Observed		Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	Mean	Mean	Runoff in inches	Mean
		Discharge	Date												
1950	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1951	1201	3,410	Feb. 19, 1951	16	623	589	1.85	25.32	765	715	30.72	362	354	15.20	30.72
1952	1231	3,590	Nov. 5, 1951	13	842	761	2.41	32.80	709	633	27.29	709	633	27.29	27.29
1953	1271	4,170	Mar. 17, 1953	7.7	766	664	2.10	28.54	783	677	29.09	783	677	29.09	29.09
1954	1331	4,860	Sept. 13, 1954	6.1	589	575	1.82	24.69	755	697	29.95	755	697	29.95	29.95
1955	1381	3,270	Dec. 20, 1954	11	703	583	1.84	25.06	748	642	27.58	748	642	27.58	27.58
1956	1431	5,880	Oct. 17, 1955	7.3	989	834	2.64	35.92	745	643	27.72	745	643	27.72	27.72
1957	1501	2,080	Jan. 24, 1957	9.0	355	348	1.10	14.94	352	345	14.80	352	345	14.80	14.80
1958	1551	3,520	Apr. 8, 1958	6.4	615	606	1.92	26.03	613	605	25.97	613	605	25.97	25.97
1959	1621	4,000	Apr. 4, 1959	8.3	470	461	1.46	19.81	575	566	24.30	575	566	24.30	24.30
1960	1701	5,640	Apr. 6, 1960	10	744	697	2.21	30.04	-	-	-	-	-	-	-

a Adjusted for water wasted in diverting drainage from South Branch Nashua River for use of Boston metropolitan district.

970. Assabet River at Maynard, Mass.

Location.--Lat 42°25'55", long 71°27'01", on right bank at Maynard, Middlesex County, 150 ft upstream from bridge on State Highway 27, 1.7 miles downstream from Assabet Brook, and 7.1 miles upstream from confluence with Sudbury River.

Drainage area.--116 sq mi.

Records available.--July 1941 to September 1960.

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

Average discharge.--19 years (1941-60), 183 cfs.

Extremes.--1941-60: 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.--Low flow regulated by mills above station; greater regulation prior to 1953.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	31.6	85.0	170	205	441	363	370	185	146	75.7	66.1	45.1	180
1952	76.9	441	289	439	341	444	356	325	222	59.1	93.4	44.8	259
1953	41.9	49.2	111	275	458	531	640	378	78.6	34.1	23.0	19.6	218
1954	20.2	95.7	247	150	193	268	314	443	158	55.4	71.8	54.2	213
1955	192	331	458	274	214	399	309	153	105	51.6	561	160	268
1956	375	542	171	412	327	419	741	247	123	45.5	16.9	20.4	286
1957	42.0	63.6	124	165	178	253	298	131	50.5	25.0	10.5	5.00	112
1958	9.92	46.5	165	406	320	647	628	349	90.9	54.7	39.8	84.1	236
1959	104	134	151	170	162	464	443	162	98.6	254	58.0	104	194
1960	106	231	328	235	376	262	546	233	147	55.9	60.5	107	223

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.31	0.32	1.69	2.04	3.96	3.61	3.56	1.84	1.40	0.75	0.66	0.43	21.07
1952	.76	4.24	2.88	4.36	3.17	4.41	3.43	3.23	2.14	.39	.93	.43	30.37
1953	.42	.47	1.11	2.73	4.11	5.28	6.15	3.75	.76	.34	.23	.19	25.54
1954	.20	.92	2.46	1.49	1.74	2.67	3.02	4.41	1.52	.55	.71	5.21	24.90
1955	1.91	3.18	4.55	2.72	1.92	3.97	2.97	1.52	1.01	.51	5.58	1.54	31.38
1956	3.73	5.21	1.70	4.09	3.04	4.17	7.13	2.45	1.18	.45	.17	.20	33.52
1957	.42	.61	1.24	1.64	1.60	2.51	2.87	1.30	.49	.25	.10	.05	13.08
1958	.10	.45	1.64	4.03	2.88	6.43	6.04	3.47	.87	.54	.39	.81	27.65
1959	1.03	1.29	1.51	1.69	1.63	4.62	4.26	1.61	.95	2.52	.58	1.00	22.69
1960	1.05	2.22	3.26	2.34	3.49	2.61	5.26	2.32	1.42	.56	.60	1.03	26.16

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	111	12.95	
1951	1201	920	Feb. 19, 1951	11	180	1.55	21.07	223	26.13	
1952	1231	1,020	Nov. 9, 1951	15	259	2.23	30.37	209	24.49	
1953	1271	1,120	Mar. 17, 1953	1.1	218	1.88	25.54	232	27.12	
1954	1331	2,040	Sept. 13, 1954	.8	213	1.84	24.90	264	30.92	
1955	1391	4,250	Aug. 20, 1955	2.9	268	2.31	31.38	277	32.38	
1956	1431	1,380	Jan. 11, 1956	1.0	286	2.47	33.52	214	25.15	
1957	1501	696	Apr. 7, 1957	2.2	112	.966	13.08	111	13.00	
1958	1551	1,320	Jan. 28, 1958	2.2	236	2.03	27.65	250	29.29	
1959	1621	1,250	Apr. 4, 1959	3.7	194	1.67	22.69	217	25.39	
1960	1701	1,300	Apr. 1, 2, 1960	2.9	223	1.92	26.16	-	-	

975. Sudbury River at Framingham Center, Mass.

Location.--Lat 42°17'30", long 71°26'40", at dam of Framingham Reservoir No. 1, half a mile upstream from outlet of Farm Pond and three-quarters of a mile southwest of Framingham Center, Middlesex County.

Drainage area.--75.2 sq mi since January 1881.

Records available.--January 1875 to September 1960.

Average discharge.--85 years (1875-60), 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.

Monthly and yearly mean discharge, in cubic feet per second (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	4.95	86.9	151	173	301	234	223	115	71.2	71.8	18.3	-16.3	113
1952	24.0	283	211	276	207	303	206	160	110	-25.7	46.4	268	150
1953	10.7	24.6	52.3	170	255	373	418	183	9.06	-4.84	-23.0	-16.1	120
1954	23.5	69.2	200	114	167	183	232	303	62.6	-12.5	21.5	345	142
1955	92.4	243	329	165	182	288	154	74.3	18.6	-29.0	532	94.3	179
1956	245	336	82.6	272	229	259	471	107	35.2	-8.23	-31.1	9.55	166
1957	17.8	54.5	125	160	150	201	196	72.8	-13.5	-33.6	-31.1	-28.9	72.2
1958	-3.53	33.9	109	352	217	450	356	198	30.6	4.99	7.19	52.7	150
1959	44.6	108	128	108	126	320	292	104	46.2	146	22.3	13.7	122
1960	58.7	118	192	150	281	191	310	122	24.2	4.33	-7.14	30.3	122

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

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.08	1.29	2.32	2.65	4.16	3.58	3.30	1.77	1.06	0.11	0.28	-0.24	20.36
1952	.37	4.20	3.24	4.23	2.97	4.65	3.06	2.45	1.63	-.39	.71	.004	27.12
1953	.16	.37	.80	2.61	3.53	5.71	6.20	2.80	.13	-.07	-.35	-.24	21.65
1954	.36	1.03	3.07	1.74	2.31	2.81	3.45	4.64	.93	-.19	.33	5.12	25.60
1955	1.42	3.61	5.04	2.53	2.53	4.42	2.28	1.14	.28	-.44	8.15	1.40	32.36
1956	3.76	4.98	1.27	4.17	3.28	3.98	6.99	1.64	.52	-.13	-.49	.14	30.12
1957	.27	.81	1.92	2.45	2.08	3.09	2.91	1.12	-.20	-.52	-.49	-.43	13.02
1958	.05	.50	1.67	5.39	3.01	6.90	5.29	3.03	.45	.08	.11	.78	27.16
1959	.68	1.60	1.96	1.65	1.74	4.91	4.34	1.59	.69	2.24	.34	.20	21.94
1960	.90	1.74	2.94	2.31	4.04	2.93	4.60	1.87	.36	.07	-.11	.45	22.10

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	75.9	13.71
1951	1201	-	-	-	113	1.50	20.36	136	24.48
1952	1231	-	-	-	150	1.99	27.12	114	20.64
1953	1271	-	-	-	120	1.60	21.65	137	24.78
1954	1331	-	-	-	142	1.89	25.60	173	31.21
1955	1381	-	-	-	179	2.38	32.36	179	32.30
1956	1431	-	-	-	166	2.21	30.12	128	23.11
1957	1501	-	-	-	72.2	2.959	13.02	67.3	12.14
1958	1551	-	-	-	150	2.00	27.16	162	29.28
1959	1621	-	-	-	122	1.62	21.94	129	23.28
1960	1701	-	-	-	122	1.62	22.10	-	-

985. Lake Cochituate Outlet at Cochituate, Mass.

Location--Lat 42°18'45", long 71°23'15", at outlet three-eighths of a mile north of Cochituate railroad station, Middlesex County, and 1 $\frac{1}{4}$ miles upstream from Sudbury River.

Drainage area--17.40 sq mi since January 1937.

Records available--January 1863 to September 1958.

Remarks--Records subsequent to the 1938 water year have been found to be in error on the basis of a precipitation-runoff study of the original data and comparison with records for nearby stations. Records for the water years 1951-58 are not published herein, and all published records since 1938 should not be used.

Cooperation--Records furnished by Water Division of Metropolitan District Commission.

995. Concord River below River Meadow Brook, at Lowell, Mass.

Location.--Lat 42°38'12", long 71°18'09, on right bank 300 ft downstream from Rogers Street Bridge at Lowell, Middlesex County, 0.3 mile downstream from River Meadow Brook, and 0.8 mile upstream from mouth.

Drainage area.--Total above gage, 405 sq mi; net above gage, 312 sq mi (diversion as needed from 92.6 sq mi for use of Boston metropolitan district).

Records available.--October 1936 to September 1960. Monthly discharge only for October, November 1936, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 67.41 ft above mean sea level, datum of 1929.

Average discharge.--24 years (1936-60), 467 cfs (adjusted to net drainage area).

Extremes.--1936-60: Maximum discharge, 4,540 cfs Aug. 23, 1955 (gage height, 8.97 ft); minimum daily, 4.0 cfs Sept. 29, 1957.

Remarks.--Runoff adjusted for 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.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	118	230	662	669	1,348	1,287	1,321	618	636	324	310	185	637
1952	301	1,460	1,010	1,378	1,361	1,509	1,178	1,047	915	177	394	249	912
1953	230	283	493	770	1,385	1,561	2,303	1,366	374	164	133	104	759
1954	142	446	926	626	706	985	1,035	1,599	731	252	291	1,694	784
1955	795	1,022	1,465	1,086	765	1,237	892	642	319	223	1,403	1,027	909
1956	1,257	1,866	753	1,403	1,193	1,436	2,277	1,077	508	223	105	162	1,019
1957	266	349	543	598	724	915	1,061	476	224	85.5	45.5	25.4	439
1958	38.4	131	411	1,074	1,337	1,910	1,829	1,154	365	168	139	273	741
1959	401	503	642	520	576	1,344	1,297	623	370	693	345	332	638
1960	349	672	1,074	874	1,213	1,035	1,614	760	502	205	218	356	737

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.38	0.59	1.87	1.78	3.36	3.49	3.44	1.51	1.64	0.82	0.73	0.54	20.21
1952	.73	3.78	2.62	3.62	3.45	3.93	3.02	2.80	2.64	.50	.89	.47	26.32
1953	.46	.48	1.27	1.85	3.24	3.97	6.09	3.73	1.03	.35	.25	.19	22.91
1954	.17	.92	2.19	1.29	1.59	2.56	2.53	4.42	1.98	.55	.49	4.01	22.80
1955	2.12	2.43	3.74	2.79	1.65	3.12	2.33	1.73	.67	.51	2.76	3.58	27.43
1956	3.51	4.81	2.01	3.80	2.88	3.77	6.29	3.02	1.41	.52	.27	.19	32.48
1957	.48	.57	1.40	1.23	1.63	2.44	2.65	1.22	.60	.26	.16	.08	12.72
1958	.13	.48	1.14	2.33	3.25	5.15	4.91	3.23	1.04	.46	.43	.59	23.14
1959	1.01	1.14	1.51	1.36	1.37	3.43	3.33	1.73	.94	1.79	.95	.81	19.35
1960	.98	1.72	2.83	2.50	3.11	2.74	4.37	2.06	1.39	.58	.47	.71	23.15

a Adjusted for water wasted from 92.6 sq mi in basins of Sudbury River and Lake Cochituate and diversion for use of city of Lowell.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Observed				Adjusted a/		Observed		Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	380	292	12.68
1951	1201	2,070	Apr. 7, 1951	42	637	464	1.49	20.21	785	562	24.47
1952	1231	2,280	Nov. 11, 1951	84	912	649	2.08	28.32	766	537	23.43
1953	1271	2,860	Apr. 19, 1953	52	759	527	1.89	22.91	801	551	23.98
1954	1331	3,340	Sept. 15, 1954	73	784	524	1.68	22.80	933	639	27.81
1955	1381	4,540	Aug. 23, 1955	80	909	630	2.02	27.43	957	677	29.47
1956	1431	2,970	Apr. 18, 1956	79	1,019	745	2.39	32.48	793	564	24.60
1957	1501	1,620	Apr. 15, 1957	4.0	439	292	.936	12.72	395	276	12.02
1958	1551	3,120	Jan. 30, 1958	6.4	741	532	1.71	23.14	818	576	25.05
1959	1621	2,050	Apr. 6, 1959	116	658	445	1.43	19.35	684	485	21.12
1960	1701	2,510	Apr. 8, 1960	56	737	531	1.70	23.15	-	-	-

a Adjusted for wastage and diversion; see footnote to preceding table.

1000. Merrimack River below Concord River, at Lowell, Mass.

Location.--Lat 42°38'45", long 71°17'56", on right bank 1,100 ft downstream from Concord River, at Lowell, Middlesex County.

Drainage area.--Total above gage, 4,635 sq mi; net above gage, 4,425 sq mi (diversions as needed from 210 sq mi for use of Boston metropolitan district and city of Worcester).

Records available.--June 1923 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 5.18 ft above mean sea level, datum of 1929. Prior to Mar. 7, 1934, at Boott Mills, 1,800 ft upstream and 700 ft above mouth of Concord River, in same gage pool and at same datum; gage-height record (furnished by Proprietors of the Locks and Canals on Merrimack River) was indicative of flow including that of Concord River.

Average discharge.--37 years (1923-60), 7,271 cfs (adjusted for wastage into Merrimack River).

Extremes.--1923-60: Maximum discharge, 173,000 cfs Mar. 20, 1936 (gage height, 68.4 ft, from floodmarks); minimum daily, 199 cfs Sept. 23, 1923.

Remarks.--Runoff adjusted for wastage from 210 sq mi in basins of Sudbury and South Branch Nashua Rivers and Lake Cochituate. Flow regulated by powerplants, by Franklin Falls Reservoir (see p. 99) and by Squam, Newfound (see p. 97), Winnepesaukee (see p. 100), Winnisquam, and other lakes and reservoirs above station.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2,003	6,048	10,200	7,016	13,810	14,020	26,550	8,939	5,758	4,640	4,792	4,303	8,948
1952	5,604	15,720	10,290	13,470	12,420	12,490	27,750	13,960	10,650	2,411	2,408	2,011	10,720
1953	2,188	2,136	7,431	8,026	13,590	25,220	27,060	17,020	3,367	1,708	1,961	1,322	9,226
1954	1,789	3,784	8,985	4,694	7,824	11,490	16,430	24,770	9,577	3,641	2,746	14,470	9,175
1955	6,335	12,100	14,420	8,571	7,456	11,690	17,350	7,973	6,638	2,215	5,224	3,416	8,612
1956	7,390	13,650	4,840	12,790	7,337	7,960	25,110	17,340	7,582	3,741	1,752	2,998	9,353
1957	3,141	3,651	6,158	6,988	5,825	9,502	9,407	4,791	2,394	1,939	1,197	895	4,652
1958	1,289	4,485	11,730	11,200	10,010	12,300	26,310	15,420	4,275	2,438	2,131	1,951	8,610
1959	2,706	3,933	4,419	4,255	4,492	9,725	22,010	6,151	3,770	3,355	1,851	2,626	5,759
1960	7,283	11,250	13,660	8,792	9,954	7,504	33,310	13,830	6,787	2,499	2,527	5,841	10,230

Monthly and yearly runoff, in inches (adjusted)^{a/}

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.52	1.51	2.62	1.77	3.16	3.54	6.55	2.27	1.40	1.18	1.22	1.07	26.81
1952	1.43	3.85	2.59	3.32	2.88	3.13	6.88	3.54	2.61	.61	.59	.47	31.90
1953	.54	.50	1.90	2.02	3.09	6.38	6.52	4.29	.82	.43	.48	.32	27.29
1954	.44	.89	2.25	1.15	1.79	2.92	4.07	6.55	2.37	.92	.67	3.50	27.32
1955	1.58	2.94	3.52	2.10	1.68	2.91	4.28	2.00	1.63	.54	1.17	.84	25.19
1956	1.83	3.23	1.20	3.20	1.67	1.93	6.12	4.39	1.86	.93	.42	.73	27.51
1957	.78	.87	1.55	1.75	1.31	2.41	2.29	1.21	.59	.50	.31	.22	13.79
1958	.33	1.12	3.03	2.80	2.27	3.07	6.52	3.94	1.06	.62	.53	.46	25.75
1959	.67	.94	1.09	1.07	1.02	2.42	5.45	1.56	.92	.81	.45	.63	17.03
1960	1.87	2.78	3.48	2.22	2.34	1.87	8.25	3.53	1.66	.64	.63	1.42	30.69

^a Adjusted for water wasted from 210 sq mi in basins of Sudbury and South Branch Nashua Rivers and Lake Cochituate.

Note.--Monthly runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30										Calendar year		
		Observed					Adjusted ^{a/}					Observed		Adjusted ^{a/}
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date											
1950	-	-	-	-	-	-	-	-	-	-	-	6,127	6,030	18.52
1951	1201	53,900	Apr. 5, 1951	375	8,949	8,740	1.98	26.81	10,060	9,794	30.03	9,794	30.03	30.03
1952	1231	53,700	Apr. 7, 1952	456	10,720	10,370	2.34	31.90	9,075	8,769	26.97	8,769	26.97	26.97
1953	1271	56,000	Mar. 28, 1953	383	9,226	8,891	2.01	27.29	9,460	9,102	27.93	9,102	27.93	27.93
1954	1351	47,900	May 11, 1954	436	9,175	8,899	2.01	27.32	10,710	10,350	31.78	10,350	31.78	31.78
1955	1381	27,900	Dec. 20, 1954	270	8,612	8,211	1.86	25.19	8,015	7,628	23.41	7,628	23.41	23.41
1956	1431	46,900	May 1, 1956	548	9,353	8,942	2.02	27.51	8,283	7,952	24.45	7,952	24.45	24.45
1957	1501	17,200	Jan. 25, 1957	324	4,652	4,497	1.02	13.79	5,039	4,911	15.07	4,911	15.07	15.07
1958	1551	36,400	Apr. 25, 1958	252	8,610	8,390	1.90	25.75	8,064	7,811	23.97	7,811	23.97	23.97
1959	1621	47,400	Apr. 5, 1959	671	5,759	5,554	1.26	17.03	7,534	7,323	22.46	7,323	22.46	22.46
1960	1701	79,000	Apr. 6, 1960	859	10,230	9,972	2.25	30.69	-	-	-	-	-	-

^a Adjusted for water wasted from 210 sq mi in basins of Sudbury and South Branch Nashua Rivers and Lake Cochituate.

1010. Parker River at Byfield, Mass.

Location.--Lat 42°45'10", long 70°56'46", on left bank 1,400 ft downstream from dam, half a mile south of Byfield, Essex County, 0.7 mile upstream from Wheeler Brook, and 5½ miles southwest of Newburyport.

Drainage area.--21.6 sq mi.

Records available.--October 1945 to September 1960.

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.--15 years (1945-60), 35.5 cfs.

Extremes.--1945-60: Maximum discharge, 479 cfs Jan. 27, 1958 (gage height, 5.49 ft); minimum daily, 0.09 cfs Sept. 25-30, Oct. 3-6, 1957.

Remarks.--Diurnal fluctuation caused by mill above station. Some regulation at low flow by ponds above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	4.39	14.4	36.5	36.1	84.4	93.0	71.5	26.4	23.0	12.6	8.03	5.24	34.3
1952	13.2	76.5	53.0	74.8	76.3	106	74.2	70.6	26.0	2.69	12.7	4.57	49.1
1953	5.54	4.42	22.6	38.4	78.1	119	135	58.2	12.4	2.46	1.58	4.04	39.4
1954	1.45	18.2	47.8	26.8	42.8	57.7	61.4	149	35.6	7.32	4.21	65.8	43.1
1955	22.9	46.6	83.4	48.3	39.7	66.0	44.3	37.3	13.9	4.17	10.1	8.17	35.5
1956	26.1	81.5	25.7	92.6	55.8	63.5	157	53.2	20.0	4.32	1.43	.521	48.2
1957	5.06	15.6	38.6	42.3	41.0	53.0	52.8	23.9	6.06	1.28	.369	.124	23.3
1958	.185	10.0	22.9	116	85.4	133	104	65.1	22.7	6.74	5.83	6.32	48.0
1959	17.8	31.9	29.1	20.2	28.9	92.6	64.4	34.9	23.3	27.0	10.2	7.33	32.3
1960	13.3	24.1	48.8	35.6	91.6	62.5	96.3	40.0	18.6	4.35	3.53	10.0	37.3

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.23	0.74	1.95	1.93	4.07	4.96	3.69	1.41	1.19	0.67	0.43	0.27	21.54
1952	.70	3.95	2.83	3.99	3.81	5.65	3.83	3.77	1.34	.14	.68	.24	30.93
1953	.19	.23	1.20	2.05	3.77	6.35	6.96	3.11	.64	.13	.03	.02	24.73
1954	.08	.94	2.55	1.43	2.06	3.08	3.17	7.94	1.84	.39	.22	3.40	27.10
1955	1.22	2.41	4.45	2.58	1.91	3.52	2.29	1.99	.72	.22	.54	.42	22.27
1956	1.39	4.21	1.37	4.94	2.78	3.39	8.11	2.84	1.03	.23	.03	.03	30.40
1957	.27	.81	2.06	2.26	1.97	2.83	2.73	1.27	.31	.07	.02	.01	14.61
1958	.01	.52	1.22	6.18	4.12	7.11	5.35	3.47	1.17	.36	.31	.33	30.15
1959	.95	1.65	1.55	1.08	1.39	4.94	3.33	1.66	1.20	1.44	.55	.38	20.32
1960	.71	1.24	2.60	1.90	4.57	5.34	5.08	2.13	.96	.23	.19	.52	23.47

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	24.2	15.18
1951	1201	184	Feb. 19, 1951	0.22	34.3	1.59	21.54	41.5	26.10
1952	1231	196	Mar. 15, 1952	.12	49.1	2.27	30.93	39.8	25.07
1953	1271	260	Mar. 17, 1953	.26	39.4	1.82	24.73	42.4	26.68
1954	1331	246	May 11, 1954	.26	43.1	2.00	27.10	50.3	31.61
1955	1381	147	Dec. 20, 1954	.47	35.5	1.64	22.27	33.7	21.16
1956	1431	247	Jan. 14, 1956	.30	48.2	2.23	30.40	42.2	26.57
1957	1501	99	Jan. 25, 1957	.09	23.3	1.08	14.61	21.0	13.22
1958	1551	479	Jan. 27, 1958	.09	48.0	2.22	30.15	51.8	32.55
1959	1621	217	Mar. 7, 1959	4.0	32.3	1.50	20.32	33.0	20.72
1960	1701	196	Apr. 6, 1960	1.9	37.3	1.73	23.47	-	-

1015. Ipswich River at South Middleton, Mass.

Location--Lat 42°34'10", long 71°01'39", on right bank 700 ft downstream from Boston Street Bridge at South Middleton, Essex County, 1.3 miles downstream from Willis Brook, and 2 miles south of Middleton.

Drainage area--43.4 sq mi.

Records available--June 1938 to September 1960. Extremely low adjusted monthly figures of discharge, in cubic feet per second per square mile, and runoff in inches, previously published in water-supply papers for 1938-58, may be subject to error because of uncertainty concerning proper adjustments.

Gage--Water-stage recorder and concrete control. Altitude of gage is 45 ft (from topographic map).

Average discharge--22 years (1938-60), 69.8 cfs (adjusted for diversions).

Extremes--1938-60: Maximum discharge, 682 cfs Jan. 27, 1958 (gage height, 6.49 ft); minimum, 0.1 cfs Sept. 24, Oct. 1, 1957.

Remarks--Water diverted above station for municipal supplies of Reading, Lynn, and Peabody. Occasional regulation by mill above station.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2.67	14.0	51.7	57.3	137	160	142	56.4	62.3	21.6	11.0	6.96	59.6
1952	18.2	120	82.4	147	143	208	121	115	61.5	4.69	17.1	5.20	86.6
1953	3.85	2.78	13.2	49.3	136	182	269	134	23.5	3.61	1.89	.650	67.7
1954	1.95	24.6	101	48.5	76.2	109	128	298	72.2	13.3	14.2	164	87.5
1955	50.8	115	169	102	84.0	155	91.4	58.9	33.7	6.59	69.7	39.7	81.5
1956	138	199	55.2	191	128	153	232	97.1	36.0	8.11	1.80	2.12	108
1957	6.60	12.7	45.2	71.5	64.5	58	102	36.5	8.77	1.01	.637	.263	56.3
1958	.552	1.46	25.9	195	124	250	212	129	37.1	14.2	13.2	11.2	84.4
1959	41.1	67.2	39.7	21.8	40.8	167	128	50.9	46.7	67.2	18.5	13.6	58.6
1960	24.0	34.4	80.4	68.8	165	117	174	71.7	43.7	8.99	7.24	29.3	68.2

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted a/			Observed	Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	35.7	48.3	15.10
1951	1201	324	Feb. 19, 1951	0.75	59.6	66.4	1.53	20.77	72.2	79.5	24.87
1952	1231	392	Mar. 15, 1952	1.55	86.6	91.8	2.12	28.77	70.0	73.8	23.11
1953	1271	426	Mar. 31, 1953	.3	67.7	76.6	1.76	23.94	76.8	87.3	27.31
1954	1331	530	May 16, 17, 1954	.5	87.5	96.2	2.22	30.09	105	110	34.41
1955	1381	302	Dec. 19, 1954	.7	81.5	85.0	1.96	26.59	86.1	90.9	28.42
1956	1431	497	Jan. 13, 1956	.85	108	112	2.58	35.28	80.9	86.5	27.13
1957	1501	232	Apr. 10, 1957	.1	36.3	44.9	1.03	14.03	53.2	42.2	13.21
1958	1551	682	Jan. 27, 1958	.15	84.4	95.6	2.20	29.90	94.4	105	32.78
1959	1621	354	Mar. 7, 1959	1.0	58.6	67.4	1.55	21.07	57.9	67.6	21.14
1960	1701	334	Apr. 6, 1960	1.5	68.2	73.8	1.70	23.15	-	-	-

a Adjusted for diversion for municipal supplies of Reading, Lynn, and Peabody.

1020. Ipswich River near Ipswich, Mass.

Location--Lat 42°39'35", long 70°53'39", on left bank 200 ft downstream from Willowdale Dam, 1½ miles downstream from Howlett Brook, and 4 miles upstream from Ipswich, Essex County.

Drainage area--124 sq mi.

Records available--June 1930 to September 1960. Prior to October 1930, published as "at Willowdale." Extremely low adjusted monthly figures of discharge, in cubic feet per second per square mile, and runoff in inches, previously published in water-supply papers for 1930-58, may be subject to error because of uncertainty concerning proper adjustments.

Gage--Water-stage recorder and concrete control. Datum of gage is 20.63 ft above mean sea level, datum of 1929.

Average discharge--30 years (1930-60), 200 cfs (adjusted for diversions).

Extremes--1930-60: Maximum discharge, 2,610 cfs Mar. 15, 1936 (gage height, 7.70 ft); minimum, 1.0 cfs Oct. 5-7, 1957.

Remarks--Diversion above station for municipal supplies of Reading, Lynn, Peabody, Danvers, Salem, and Beverly. Some regulation by reservoirs.

IPSWICH RIVER BASIN

Monthly and yearly mean discharge, in cubic feet per second (observed), of Ipswich River near Ipswich, Mass.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	13.7	47.3	143	196	417	465	407	161	186	66.4	50.5	21.3	178
1952	56.7	322	257	389	440	599	357	349	202	25.0	55.9	18.2	255
1953	13.7	17.8	64.0	162	419	559	749	380	84.5	16.4	7.93	3.34	205
1954	11.1	78.9	277	160	224	327	344	833	239	48.6	45.2	390	248
1955	162	274	437	295	225	371	237	212	99.1	27.1	168	114	219
1956	266	511	162	563	359	414	836	330	111	25.3	7.61	11.3	299
1957	43.4	68.1	183	217	193	294	311	137	34.7	5.75	4.70	2.03	124
1958	5.49	23.2	92.3	566	404	725	602	371	126	41.5	33.9	32.4	251
1959	90.0	174	138	82.7	127	465	355	184	148	181	64.7	32.2	170
1960	64.7	105	239	177	488	322	523	200	124	29.4	20.0	54.0	194

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year		
		Observed				Adjusted ^{a/}		Observed		Adjusted ^{a/}
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean
		Discharge	Date							
1950		-	-	-	-	-	-	-	114	135
1951	1201	835	Feb. 21, 1951	4.0	178	190	1.53	20.80	214	225
1952	1231	1,070	Mar. 14, 1952	7.5	255	264	2.13	28.93	210	217
1953	1271	1,300	Apr. 1, 1953	2.4	205	218	1.76	23.83	227	243
1954	1331	1,410	May 11, 12, 1954	2.9	248	262	2.11	28.66	291	299
1955	1381	682	Dec. 23, 25, 1954	4.0	219	231	1.86	25.28	224	237
1956	1431	1,530	Jan. 13, 1956	5.7	299	308	2.47	33.56	245	254
1957	1501	496	(b)	1.2	124	137	1.10	15.04	110	123
1958	1551	1,970	Jan. 29, 1958	1.0	251	269	2.17	29.45	275	292
1959	1621	934	Mar. 8, 1959	18	170	184	1.48	20.19	171	186
1960	1701	953	Apr. 6, 7, 1960	5.6	194	204	1.65	22.42	-	-

a Adjusted for diversion for municipal supplies of Reading, Lynn, Peabody, Davenport, Salem, and Beverly.

b Jan. 26, 27, Apr. 9, 10, 1957.

MYSTIC RIVER BASIN

1025. Aberjona River at Winchester, Mass.

Location.--Lat 42°26'50" long 71°08'22", on left bank at Winchester, Middlesex County, 0.5 mile upstream from head of Mystic Lakes.

Drainage area.--23.3 sq mi (excludes 1.4 sq mi drained by Winchester Reservoirs).

Records available.--April 1939 to September 1960.

Gage.--Water-stage recorder and concrete control. Datum of gage is at mean sea level, datum of 1929.

Average discharge.--21 years (1939-60), 27.4 cfs.

Extremes.--1939-60: 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.--Flow affected by diversions for industrial use and for municipal supply of Woburn and Winchester, and by wastage and leakage from Winchester Reservoirs. Occasional regulation by Winchester at dam above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.505	8.61	21.4	33.9	77.6	71.2	66.0	26.0	25.7	9.88	5.37	2.98	28.7
1952	10.5	67.4	49.5	71.8	59.5	100	47.9	47.3	24.4	2.71	7.87	2.29	40.9
1953	1.06	1.02	7.29	31.8	57.3	88.9	114	58.3	6.40	1.56	1.947	703	30.6
1954	1.56	18.8	54.2	30.8	39.5	45.2	49.3	134	25.2	6.28	7.48	78.2	40.9
1955	18.9	39.1	58.9	38.4	37.4	66.8	33.3	21.9	14.4	7.04	79.4	21.4	36.5
1956	74.0	102	21.2	78.3	70.6	70.1	117	34.3	12.0	2.51	1.22	1.35	48.5
1957	2.65	7.13	17.8	34.5	33.0	38.2	44.5	15.0	3.02	1.01	.619	.493	16.4
1958	539	1.66	15.1	90.9	55.6	103	85.6	48.9	12.8	8.10	6.05	7.38	36.0
1959	18.9	21.5	21.1	23.5	32.4	63.3	42.2	15.6	26.0	40.4	12.6	7.32	27.2
1960	8.45	15.3	34.6	36.6	69.6	43.6	60.3	22.5	16.1	6.22	3.53	13.4	27.3

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	16.4	-
1951	1201	233	Feb. 19, 1951	0.25	28.7	-	-	36.6	-
1952	1231	221	Mar. 12, 1952	.75	40.9	-	-	31.1	-
1953	1271	242	Mar. 31, 1953	.55	30.6	-	-	36.1	-
1954	1331	482	Sept. 12, 1954	.55	40.9	-	-	44.4	-
1955	1381	835	Aug. 19, 1955	.75	36.5	-	-	43.2	-
1956	1431	378	Jan. 9, 1956	.6	48.5	-	-	34.4	-
1957	1501	172	Jan. 24, 1957	.35	16.4	-	-	15.3	-
1958	1551	390	Jan. 26, 1958	.35	36.0	-	-	39.9	-
1959	1621	170	Mar. 8, 1959	2.5	27.2	-	-	27.0	-
1960	1701	194	Feb. 20, 1960	1.1	27.3	-	-	-	-

1035. Charles River at Charles River Village, Mass.

Location.--Lat 42°15'23", long 71°15'42", on right bank 0.25 mile downstream from highway bridge at Charles River Village, Norfolk County, 0.8 mile downstream from Noanet Brook, and 1.3 miles northeast of Dover.

Drainage area.--184 sq mi.

Records available.--October 1937 to September 1960.

Gage.--Water-stage recorder and concrete control. Datum of gage is 89.76 ft above mean sea level, datum of 1929.

Average discharge.--23 years (1937-60), 303 cfs (adjusted for diversions).

Extremes.--1937-60: Maximum discharge, 3,220 cfs Aug. 23, 1955 (gage height, 9.24 ft); minimum, 0.5 cfs Oct. 24, 1952.

Flood in March 1956 reached a discharge of 3,170 cfs, by computation of flow over dam at site a quarter of a mile above station.

Remarks.--Diversion above station for municipal supply of Wellesley and Needham. Occasional diversion since 1951 from Sudbury River basin to Charles River.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	49.8	163	315	360	643	538	602	294	242	79.9	105	83.6	287
1952	114	569	459	575	541	774	427	434	220	52.9	64.1	38.9	355
1953	27.5	53.8	113	304	551	743	1,137	557	139	61.6	39.5	21.1	311
1954	42.4	230	519	301	372	512	488	746	241	79.8	75.4	640	353
1955	232	421	661	453	413	592	374	260	137	79.6	956	436	419
1956	600	892	278	648	673	672	1,053	366	198	119	39.9	71.6	466
1957	114	171	382	394	372	462	547	192	67.2	19.5	9.01	7.78	227
1958	13.4	60.1	173	648	569	910	870	618	160	92.3	91.0	121	359
1959	177	199	257	186	285	670	615	294	231	395	114	110	295
1960	153	254	472	420	648	491	709	343	191	108	84.0	186	337

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.34	1.01	2.00	2.28	3.66	3.39	3.67	1.87	1.50	0.53	0.62	0.44	21.31
1952	.64	3.43	2.90	3.63	3.19	4.88	2.62	2.74	1.36	.32	.41	.26	26.38
1953	.20	.35	.73	1.93	3.14	4.68	6.92	3.58	.88	.43	.28	.16	23.28
1954	.29	1.42	3.27	1.91	2.13	3.23	2.98	4.70	1.49	.54	.50	3.91	26.37
1955	1.48	2.58	4.17	2.87	2.36	3.74	2.50	1.66	.86	.53	5.99	2.67	31.21
1956	3.79	5.44	1.77	4.09	3.97	4.24	6.41	2.33	1.24	.79	.28	.39	34.74
1957	.74	1.07	2.43	2.50	2.13	2.93	3.35	1.24	.44	.15	.09	.08	17.15
1958	.11	.40	1.12	4.10	3.24	5.72	5.30	3.90	1.01	.62	.61	.77	26.90
1959	1.14	1.24	1.65	1.20	1.65	4.24	3.76	1.88	1.44	2.47	.76	.71	22.14
1960	.99	1.57	2.99	2.66	3.82	3.10	4.32	2.18	1.20	.72	.57	1.16	25.28

a Adjusted for diversion for municipal supply of Wellesley and Needham and, at times since 1951, for diversion from Sudbury River basin to Charles River.

Yearly discharge, in cubic feet per second

Year	WSF	Water year ending Sept. 30						Calendar year				
		Observed				Adjusted a/		Observed		Adjusted a/		
		Momentary		Maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date									
1950	-	-	-	-	-	-	-	-	-	203	207	15.24
1951	1201	980	Apr. 7, 1951	24	287	289	1.57	21.31	338	358	24.93	
1952	1231	1,310	Mar. 15, 1952	26	355	357	1.94	26.38	276	280	20.69	
1953	1271	1,420	Apr. 2, 1953	.9	311	316	1.72	23.28	361	366	26.98	
1954	1331	1,240	Sept. 17, 1954	16	353	357	1.94	26.37	397	401	29.62	
1955	1381	3,220	Aug. 23, 1955	30	419	423	2.30	31.21	456	461	35.98	
1956	1431	1,480	Apr. 11, 1956	24	466	470	2.55	34.74	374	378	27.98	
1957	1501	924	Apr. 11, 1957	5.2	227	232	1.26	17.15	192	197	14.54	
1958	1551	1,770	Jan. 30, 1958	3.6	359	364	1.98	26.90	392	397	29.30	
1959	1621	981	Mar. 9, 1959	48	295	300	1.63	22.14	315	321	23.66	
1960	1701	1,100	Apr. 8, 9, 1960	30	337	342	1.86	25.28	-	-	-	

a Adjusted for diversion; see footnote to preceding table.

CHARLES RIVER BASIN

1040. Mother Brook at Dedham, Mass.

Location.--Lat 42°15'18", long 71°09'53", on right bank 100 ft upstream from Washington Street Bridge at Dedham, Norfolk County, and 0.4 mile downstream from point of diversion from Charles River. Prior to June 10, 1960, at site 200 ft upstream.

Records available.--October 1931 to September 1960.

Gage.--Water-stage recorder and concrete control. Datum of gage is 0.03 ft below mean sea level, datum of 1929. Prior to Dec. 9, 1931, water-stage recorder and Dec. 9, 1931, to June 9, 1960, float gage, at site 200 ft upstream at same datum.

Average discharge.--29 years (1931-60), 83.2 cfs.

Extremes.--1931-60: Maximum discharge, 970 cfs Aug. 24, 1955 (gage height, 92.90 ft, from graph based on gage readings); no flow at times.

Remarks.--Mother Brook is a diversion from Charles River to Neponset River through Dedham and Hyde Park.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2.92	28.6	89.3	98.8	180	161	176	76.2	74.1	13.4	20.3	13.3	77.0
1952	20.5	173	135	175	176	235	135	135	71.0	8.22	9.52	.96	106
1953	.619	4.74	23.6	79.1	171	228	381	187	41.7	8.44	3.57	.257	93.4
1954	5.23	62.9	170	87.9	106	165	150	253	84.8	18.8	18.2	.79	109
1955	60.0	111	146	86.6	71.6	148	73.0	41.0	0	3.21	306	53	100
1956	182	308	65.6	195	201	194	320	82.3	27.8	11.3	.616	4.50	132
1957	19.0	33.9	107	103	108	130	167	47.4	10.9	.061	.559	.417	60.3
1958	2.96	15.5	51.0	221	215	300	299	207	57.0	9.08	3.57	.353	115
1959	.60	.61	.43	.14	.14	.54	41.3	184	223	71.2	10.7	4.5	44.9
1960	1.55	1.60	1.97	18.9	73.7	41.2	46.4	0	31.3	14.0	9.13	10.6	20.6

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	53.6	-
1951	1201	247	Apr. 8, 9, 1951	0	77.0	-	-	94.2	-
1952	1231	374	Mar. 17, 1952	.1	106	-	-	80.9	-
1953	1271	474	Apr. 20, 1953	0	93.4	-	-	111	-
1954	1331	354	Sept. 18, 1954	.1	109	-	-	116	-
1955	1381	970	Aug. 24, 1955	0	100	-	-	120	-
1956	1431	480	Nov. 11, 1955	0	132	-	-	99.2	-
1957	1501	295	Apr. 13, 1957	0	60.3	-	-	52.8	-
1958	1551	616	Jan. 30, 1958	.1	115	-	-	109	-
1959	1621	290	June 20, 1959	0	44.9	-	-	45.2	-
1960	1701	293	Feb. 16, 1960	0	20.6	-	-	-	-

1042. Charles River at Wellesley, Mass.

Location.--Lat 42°18'59", long 71°13'42", on left bank 30 ft upstream from a horseshoe-shaped dam and 50 ft upstream from bridge on State Highway 9, at east limits of Wellesley, Norfolk County.

Drainage area.--211 sq mi.

Records available.--August 1959 to September 1960.

Gage.--Water-stage recorder and concrete dam. Datum of gage is 67.92 ft above mean sea level, datum of 1929.

Extremes.--1959-60: Maximum discharge, 1,470 cfs Apr. 5, 1960 (gage height, 5.16 ft); no flow Sept. 15, Oct. 6, 1959 (caused by closing of gates at dam); minimum daily discharge, 22 cfs Sept. 10, 1960.

Remarks.--Flow affected by diversions for municipal supply of Wellesley, Needham, and Dedham, by diversion to Mother Brook, and at times by diversion from Sudbury River basin. Occasional regulation by Metropolitan District Commission at dam 0.2 mile above station.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1959	-	-	-	-	-	-	-	-	-	-	-	137	-
1960	165	285	530	455	692	512	786	356	181	116	86.3	193	361

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1959	-	-	-	-	-	-	-	-	-	-	-	0.82	-
1960	0.97	1.57	2.96	2.64	3.96	3.08	4.45	2.00	1.20	0.78	0.59	1.14	25.34

a Adjusted for diversions for municipal supply of Wellesley, Needham, and Dedham, by diversion to Mother Brook, and at times by diversion from Sudbury River basin.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted a/			Observed		Adjusted
		Momentary maximum		Minimum	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date	day							
1960	1701	1,470	Apr. 5, 1960	22	361	393	1.86	25.34	-	-	-

a Adjusted for diversions; see note to preceding table.

1045. Charles River at Waltham, Mass.

Location.--Lat 42°22'20", long 71°14'03", on right bank 800 ft downstream from Moody Street Bridge in Waltham, Middlesex County, and a third of a mile upstream from Beaver Brook.

Drainage area.--227 sq mi, excludes 23.6 sq mi drained by Stony Brook from which flow is diverted for municipal supply of Cambridge.

Records available.--October 1903 to October 1909 (figures of average weekly discharge, equivalent to records of unadjusted discharge at present site), August 1931 to September 1960.

Gage.--Water-stage recorder and concrete control. Datum of gage is 20.02 ft above mean sea level, datum of 1929. Prior to July 10, 1904, at dam 700 ft upstream and July 10, 1904, to Oct. 2, 1909, at dam 0.7 mile downstream at different datums, discharge computed from flow over dam and through wheels and gates of Boston Manufacturing Co. and Waltham Bleachery, respectively.

Average discharge.--29 years (1931-60), 377 cfs (adjusted for diversions, wastage, and leakage).

Extremes.--1931-60: 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.--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, Dedham, Brookline (through 1952), Newton (through 1954), and Waltham (through 1951), all above station. Some regulation by mills upstream. Low flow completely regulated by Boston Edison Co. powerplant above station prior to 1954.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	40.3	125	282	304	549	505	582	254	253	84.1	107	79.6	261
1952	100	554	429	565	549	723	430	405	250	57.6	68.3	41.8	347
1953	28.9	46.2	119	261	483	640	1,061	551	136	61.1	47.5	27.2	287
1954	45.6	214	495	277	310	450	448	798	273	84.2	76.0	616	340
1955	222	395	739	543	416	633	440	331	188	107	873	453	446
1956	634	1,031	307	656	696	694	1,177	423	225	121	49.6	71.9	505
1957	123	160	325	339	354	395	484	201	66.5	34.0	17.5	19.6	209
1958	37.2	71.0	176	621	580	831	834	561	156	95.4	109	150	350
1959	213	247	296	242	380	868	740	204	64.3	418	142	137	329
1960	170	302	584	498	809	597	870	440	222	135	94.4	214	409

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.32	0.85	1.99	2.14	3.43	3.34	3.29	1.71	1.66	0.58	0.64	0.46	20.41
1952	.62	3.52	2.82	3.74	3.42	4.85	2.74	2.74	1.54	.39	.47	.29	27.14
1953	.23	.32	.80	1.79	3.06	4.42	7.04	3.70	.95	.45	.35	.22	23.33
1954	.33	1.42	3.34	1.92	1.97	3.03	2.80	5.19	1.69	.58	.52	3.91	26.70
1955	1.40	1.76	3.60	3.17	2.22	3.62	2.35	1.79	.98	.62	5.85	2.93	30.29
1956	3.91	6.11	1.94	4.30	4.11	4.32	7.05	1.83	1.25	.73	.31	.36	36.22
1957	.77	.99	2.24	2.29	2.16	2.71	3.25	1.32	.45	.27	.16	.09	16.70
1958	.17	.47	1.20	4.15	3.44	4.98	4.62	2.93	1.05	.59	.61	.79	24.67
1959	1.13	1.26	1.56	1.28	1.79	4.46	3.89	2.04	1.45	2.32	.83	.76	22.77
1960	.92	1.54	3.02	2.65	4.14	3.26	4.55	2.29	1.32	.82	.58	1.16	26.25

a/ Adjusted for diversion to Mother Brook, diversions for municipal supply of Wellesley, Needham, Dedham, Brookline (through 1952), Newton (through 1954), and Waltham (through 1951), wastage from Stony Brook Reservoir, diversion from Lake Cochituate, diversion from Sudbury River basin, and wastage and leakage from Norumbega Reservoir.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted a/			Observed	Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	179	252	15.10
1951	1201	933	Apr. 7, 1951	12	261	341	1.50	20.41	314	405	24.21
1952	1231	1,250	Mar. 17, 1952	13	347	453	2.00	27.14	273	359	21.53
1953	1271	1,360	Apr. 3, 1953	4.5	287	390	1.72	23.33	334	453	27.07
1954	1331	1,550	Sept. 22, 1954	17	340	446	1.96	26.70	321	475	29.37
1955	1391	2,490	Aug. 19, 1955	14	446	506	2.23	30.29	497	593	35.49
1956	1431	1,990	Nov. 11, 1955	26	505	604	2.66	36.22	392	471	28.26
1957	1501	957	Apr. 11, 1957	1.4	209	279	1.23	16.70	182	243	14.54
1958	1551	1,940	Jan. 26, 1958	20	350	416	1.83	24.87	390	451	26.98
1959	1621	1,460	Mar. 6, 1959	20	329	381	1.68	22.77	355	406	24.50
1960	1701	1,510	Apr. 4, 1960	27	409	438	1.93	26.25	-	-	-

a/ Adjusted for diversions, wastage, and leakage; see footnote to preceding table.

1050. Neponset River at Norwood, Mass.

Location.--Lat 42°10'39", long 71°12'05", on left bank 200 ft upstream from Pleasant Street Bridge, 800 ft downstream from New York, New Haven and 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 1960. Monthly discharge only for October 1939, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 44.04 ft above mean sea level, unadjusted.

Average discharge.--21 years (1939-60), 51.8 cfs.

Extremes.--1939-60: Maximum discharge, 1,490 cfs Aug. 19, 1955 (gage height, 14.65 ft, from floodmarks); minimum daily, 1.8 cfs Sept. 1, 1957.
Flood of July 24, 1938, reached a stage of 11.05 ft, from floodmarks.

Remarks.--Flow regulated by mills and reservoirs above station. Several diversions above station for municipal and industrial use.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	10.6	39.0	45.5	61.9	106	89.9	100	55.7	35.8	12.1	16.3	13.2	48.4
1952	21.6	85.1	78.5	95.8	97.3	135	74.8	60.6	28.8	7.85	11.0	9.14	58.7
1953	9.21	11.5	15.8	54.2	93.1	134	189	91.9	25.6	15.5	9.63	12.6	54.8
1954	21.6	53.1	111	70.7	69.2	92.0	85.7	146	41.8	17.4	17.8	87.7	67.9
1955	39.1	66.6	113	74.0	80.6	112	69.6	43.7	21.8	17.6	226	74.4	78.3
1956	126	188	56.3	124	120	118	178	58.8	28.8	21.4	16.8	22.1	87.9
1957	22.7	32.4	72.4	71.5	67.4	81.0	88.0	30.5	13.9	13.1	11.4	7.94	42.6
1958	6.01	12.3	36.4	135	89.1	169	164	109	31.0	18.7	22.9	35.4	69.0
1959	38.5	47.5	48.6	39.4	52.1	134	112	54.0	60.6	79.3	24.2	22.9	59.5
1960	28.2	43.6	83.7	80.8	117	92.8	125	58.3	29.2	13.7	12.2	34.8	59.6

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	33.2	-
1951	1201	255	Apr. 3, 1951	6.8	48.4	-	-	56.0	-
1952	1231	336	Mar. 12, 1952	3.7	58.7	-	-	46.3	-
1953	1271	398	Mar. 30, 1953	3.5	54.8	-	-	67.3	-
1954	1331	430	May 9, 1954	5.0	67.9	-	-	70.6	-
1955	1381	1,490	Aug. 19, 1955	8.3	78.3	-	-	90.9	-
1956	1431	486	Nov. 5, 1955	6.4	87.9	-	-	67.8	-
1957	1501	247	Jan. 23, 1957	1.8	42.6	-	-	36.4	-
1958	1551	384	Jan. 27, 1958	2.1	69.0	-	-	75.7	-
1959	1621	321	Mar. 7, 1959	12	59.5	-	-	61.3	-
1960	1701	247	Feb. 20, 1960	6.0	59.6	-	-	-	-

1055. East Branch Neponset River at Canton, Mass.

Location.--Lat 42°09'16", long 71°08'47", on right bank 100 ft downstream from Washington Street Bridge at Canton, Norfolk County, 200 ft downstream from Forge Pond Dam, and 900 ft downstream from Massapoag Brook.

Drainage area.--26.7 sq mi.

Records available.--October 1952 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is 85 ft (from topographic map).

Average discharge.--8 years (1952-60), 58.3 cfs.

Extremes.--1952-60: Maximum discharge, 1,790 cfs Aug. 19, 1955 (gage height, 8.18 ft), from rating curve extended above 690 cfs by logarithmic plotting; minimum daily, 0.6 cfs July 7, Sept. 1, 1957.

Remarks.--Flow regulated by Forge, Bolivar, Massapoag, Reservoir, and other ponds above station. Diversions above station for municipal supply of Canton and Stoughton.

NEPONSET RIVER BASIN

Monthly and yearly mean discharge, in cubic feet per second (observed), of East Branch Neponset River at Canton, Mass.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	-	-	-	-	-	-	-	-	-	-	-	-	-
1953	10.5	12.4	24.1	70.9	100	135	190	77.6	18.5	15.4	9.99	11.5	55.9
1954	21.5	64.8	122	57.9	64.2	75.5	69.6	142	38.1	17.5	15.3	76.2	63.8
1955	35.3	55.0	86.9	61.9	78.4	90.6	61.4	43.9	19.7	6.95	203	72.6	68.1
1956	96.6	161	50.8	118	109	99.7	146	50.0	33.9	17.6	5.99	12.9	74.8
1957	24.1	44.5	80.7	74.2	65.6	67.4	89.1	22.2	9.31	4.80	3.64	4.42	40.7
1958	7.82	16.1	37.4	134	89.0	131	140	95.9	23.4	15.4	16.1	29.2	61.2
1959	36.9	47.2	48.2	38.7	49.0	112	92.6	46.0	48.5	55.4	17.7	15.5	50.6
1960	23.5	36.0	79.1	70.1	100	75.3	100	44.2	24.0	16.0	12.1	34.6	51.0

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	-	-
1951	-	-	-	-	-	-	-	-	-
1952	-	-	-	-	-	-	-	-	-
1953	1271	374	Mar. 31, 1953	3.7	55.9	-	-	69.5	-
1954	1331	398	Apr. 18, 1954	5.0	63.8	-	-	61.2	-
1955	1381	1,790	Aug. 19, 1955	2.1	68.1	-	-	78.9	-
1956	1431	598	Nov. 5, 1955	1.3	74.8	-	-	61.7	-
1957	1501	292	Jan. 23, 1957	.6	40.7	-	-	33.3	-
1958	1551	360	Jan. 26, 1958	1.7	61.2	-	-	67.1	-
1959	1621	293	Mar. 7, 1959	9.8	50.6	-	-	51.2	-
1960	1701	221	Feb. 19, 1960	7.2	51.0	-	-	-	-

NORTH RIVER BASIN

1057. Indian Head Brook near Hanson, Mass.

Location.--Lat 42°05'13", long 70°51'26", on right bank 40 ft upstream from bridge on Washington Street, 0.3 mile upstream from mouth, and 1½ miles northeast of Hanson, Plymouth County.

Drainage area.--4.39 sq mi.

Records available.--July 1958 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is 50 ft (from topographic map).

Extremes.--1958-60: Maximum discharge, 38 cfs Apr. 5, 1960 (gage height, 2.755 ft), from rating curve extended above 15 cfs; minimum, 0.30 cfs Aug. 28, 1959; minimum daily, 0.45 cfs Sept. 3, 9-11, 1960.

Remarks.--Some regulation by ponds above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	-	-	4.35	5.02	-
1959	6.56	7.66	5.40	4.26	6.78	14.0	12.2	5.87	6.53	7.56	1.70	1.37	6.65
1960	3.43	5.59	8.50	9.28	13.7	13.5	14.2	6.43	2.62	1.79	.758	3.70	6.92

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	-	-	1.14	1.28	-
1959	1.72	1.95	1.42	1.12	1.61	3.67	3.09	1.54	1.66	1.99	.45	.35	20.57
1960	.90	1.42	2.23	2.44	3.35	3.56	3.60	1.69	.67	.47	.20	.94	21.47

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1958	1621	-	-	-	-	-	-	-	-
1959	1621	24	Apr. 3, 1959	0.50	6.65	1.51	20.57	6.48	20.03
1960	1701	38	Apr. 5, 1960	.45	6.92	1.58	21.47	-	-

1058. Pudding Brook at East Pembroke, Mass.

Location--Lat 42°05'13", long 70°45'28", on left bank 300 ft upstream from Spring Street, 500 ft downstream from Randall Pond, 0.6 mile northeast of East Pembroke, Plymouth County, and 3 miles northeast of Pembroke.

Drainage area--1.38 sq mi.

Records available--July 1958 to September 1960.

Gage--Water-stage recorder. Altitude of gage is 45 ft (from topographic map).

Extremes--1958-60: Maximum discharge, 11.3 cfs Sept. 20, 1960 (gage height, 1.15 ft), from rating curve extended above 4.4 cfs; minimum daily, 0.57 cfs Aug. 9, 1958.

Remarks--Flow regulated by Randall Pond.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	-	-	1.66	2.46	-
1959	2.24	2.43	2.12	1.73	2.06	3.40	3.06	†2.46	2.74	2.30	1.79	1.76	2.34
1960	2.14	2.27	2.50	2.46	3.16	3.08	3.33	2.45	1.60	1.87	1.61	2.32	2.42

† Corrected.

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	-	-	1.55	1.59	-
1959	1.67	1.97	1.77	1.44	1.56	2.84	2.48	2.05	2.22	1.92	1.49	1.42	23.03
1960	1.79	1.84	2.09	2.07	2.48	2.57	2.69	2.05	1.46	1.56	1.35	1.88	23.85

Note--Runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1958	1621	-	-	-	-	-	-	-	-	-
1959	1621	7.3	Mar. 15, 1959	1.3	2.34	1.70	23.03	2.35	23.14	-
1960	1701	11.3	Sept. 20, 1960	1.13	2.42	1.75	23.63	-	-	-

Note--Discharge, in cubic feet per second per square mile, and runoff in inches, may not represent natural flow because of regulation.

WEST BRANCH WESTPORT RIVER BASIN

1060. Adamsville Brook at Adamsville, R. I.

Location--Lat 41°33'30", long 71°07'47", on right bank 0.2 mile upstream from milldam at Adamsville, Newport County, and 0.7 mile upstream from mouth.

Drainage area--8.6 sq mi, approximately.

Records available--October 1940 to September 1960.

Gage--Water-stage recorder. Concrete control since Sept. 16, 1942. Altitude of gage is 15 ft (from topographic map).

Average discharge--20 years (1940-60), 13.8 cfs.

Extremes--1940-60: Maximum discharge, 273 cfs Sept. 20, 1960 (gage height, 7.135 ft); minimum, 0.03 cfs Sept. 23, 24, Oct. 3, 4, 1950.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.111	3.56	10.7	18.0	26.4	21.8	22.1	11.7	4.41	0.751	0.463	0.120	9.90
1952	.445	10.4	16.8	25.4	25.1	40.0	17.9	17.6	5.36	.281	4.92	.435	13.7
1953	.308	1.19	7.52	29.2	37.7	44.9	43.2	17.2	1.90	1.68	7.24	.672	15.9
1954	5.14	28.3	31.3	18.2	19.0	19.1	19.3	31.2	4.47	.904	7.45	27.1	17.6
1955	9.31	20.4	33.5	15.8	21.8	25.4	16.1	9.39	3.24	5.51	17.3	7.65	15.5
1956	23.2	34.2	10.2	19.7	33.0	33.7	31.1	12.9	7.78	6.96	.708	.335	17.7
1957	3.13	7.65	20.0	17.3	15.3	22.3	31.0	7.20	1.04	.092	1.105	.109	10.4
1958	.121	2.33	13.5	40.2	17.5	46.7	51.6	33.9	13.0	3.94	6.95	7.46	19.8
1959	10.8	13.1	12.6	12.2	18.2	39.0	25.3	11.2	14.9	16.6	2.95	.485	14.6
1960	1.37	12.1	22.8	16.6	34.5	22.1	30.1	14.2	5.08	3.04	.581	21.8	15.2

Monthly and yearly runoff, in inches, of Adamsville Brook at Adamsville, R. I.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.01	0.46	1.43	2.41	3.19	2.93	2.87	1.57	0.57	0.10	0.06	0.02	15.62
1952	.06	1.35	2.26	3.40	3.15	5.37	2.32	2.36	.70	.04	.66	.06	21.73
1953	.04	.15	1.01	3.91	4.56	6.02	5.61	2.30	.25	.22	.97	.09	25.13
1954	.69	3.66	4.19	2.43	2.30	2.56	2.51	4.18	.58	.12	1.00	3.51	27.75
1955	1.25	2.64	4.48	2.12	2.63	3.41	2.09	1.26	.42	.74	2.33	1.02	24.39
1956	3.11	4.44	1.37	2.65	4.13	4.52	4.04	1.74	1.01	.93	.09	.04	28.07
1957	.42	.99	2.69	2.32	1.86	2.99	4.02	.96	1.14	.01	.01	.01	16.42
1958	.02	.30	1.81	5.39	2.12	6.27	6.70	4.54	1.69	.53	.93	.97	31.27
1959	1.45	1.70	1.88	1.63	2.21	5.23	3.03	1.51	1.94	2.23	.40	.06	23.07
1960	.18	1.57	3.06	2.25	4.32	2.96	3.90	1.91	.66	.41	.08	2.83	24.13

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	6.79	13.87
1951	1201	-	-	-	-	-	-	-	-
1952	1231	90	Apr. 4, 1951	0.03	9.90	1.15	15.62	11.0	17.39
1953	1271	157	Mar. 12, 1952	.08	13.7	1.59	21.75	12.2	19.26
1954	1331	239	Mar. 16, 1953	.10	15.9	1.85	25.13	20.6	32.49
1955	1381, 1701	269	Sept. 12, 1954	.24	17.6	2.05	27.75	17.5	27.56
1956	1431, 1701	87	Aug. 20, 1955	.26	15.5	1.80	24.39	15.8	24.94
1957	1501, 1701	132	Oct. 17, 1955	.16	17.7	2.06	28.07	14.7	23.25
1958	1551, 1701	182	Apr. 6, 1957	.06	10.4	1.21	16.42	9.16	14.45
1959	1621, 1701	217	Apr. 7, 1958	.07	19.8	2.30	31.27	21.5	33.97
1960	1701	119	Mar. 7, 1959	.22	14.6	1.70	23.07	14.6	23.05
		273	Sept. 20, 1960	.13	15.2	1.77	24.13	-	-

TAUNTON RIVER BASIN

1065. Matfield River at Elmwood, Mass.

Location.--Lat 42°00'55", long 70°57'42", on right bank 20 ft upstream from bridge on State Highway 18 at Elmwood, Plymouth County, 0.6 mile upstream from Sabucket River, and 1.2 miles south of East Bridgewater.

Drainage area.--40.6 sq mi.

Records available.--July 1958 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is 30 ft (from topographic map).

Extremes.--1958-60: Maximum discharge, 598 cfs Apr. 5, 1960 (gage height, 6.90 ft); minimum daily, 7.5 cfs Sept. 8, 1960.

Remarks.--Some diurnal fluctuation at low flow by powerplant above station. Slight regulation by ponds above station. Small diversions to basin for water supply of several towns supplied by Brockton.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	-	-	33.0	51.0	-
1959	61.6	90.6	63.1	58.0	104	199	137	71.8	82.0	96.4	16.3	13.9	82.7
1960	30.5	78.1	130	109	179	125	178	52.7	33.3	21.3	16.4	57.4	83.7

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	-	-	0.94	1.40	-
1959	1.75	2.49	1.79	1.65	2.68	5.66	3.76	2.04	2.25	2.74	.46	.38	27.65
1960	.87	2.15	3.70	3.09	4.77	3.55	4.89	1.50	.92	.60	.47	1.58	28.09

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1958	-	-	-	-	-	-	-	-	-
1959	1621	473	Mar. 7, 1959	8.8	82.7	2.04	27.65	84.8	28.34
1960	1701	598	Apr. 5, 1960	7.5	83.7	2.06	28.09	-	-

1069. Poor Meadow Brook at South Hanson, Mass.

Location.--Lat 42°02'32", long 70°53'56", on right bank 20 ft downstream from bridge on State Highway 27, 0.9 mile west of South Hanson, Plymouth County, and $2\frac{1}{2}$ miles south of Hanson.

Drainage area.--14.8 sq mi.

Records available.--July 1958 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is 50 ft (from topographic map).

Extremes.--1958-60: Maximum discharge, 144 cfs Apr. 6, 1960 (gage height, 5.19 ft); minimum not determined; minimum daily, 2.2 cfs Sept. 9-11, 1960.

Remarks.--Small diversion to basin for Whitman water supply.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	-	-	10.8	16.9	-
1959	30.0	35.5	27.2	21.7	36.5	71.2	42.9	19.5	29.0	30.5	6.55	5.49	29.6
1960	13.1	23.5	39.8	37.4	66.7	42.4	51.2	20.5	10.8	7.96	4.63	14.0	27.5

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	-	-	0.84	1.27	-
1959	2.34	2.67	2.12	1.69	2.57	5.54	3.23	1.52	2.18	2.37	.51	.41	27.15
1960	1.02	1.77	3.10	2.91	4.86	3.30	3.86	1.60	.62	.62	.36	1.06	25.28

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1958	1621	-	-	-	-	-	-	-	-
1959	1621	132	Mar. 7, 1959	3.5	29.6	2.00	27.15	28.3	25.91
1960	1701	144	Apr. 6, 1960	2.2	27.5	1.86	25.28	-	-

1080. Taunton River at State Farm, Mass.

Location.--Lat 41°56'05", long 70°57'18", on right bank at State Farm, Plymouth County, 1 mile upstream from Saw Mill Brook and $3\frac{1}{2}$ miles northwest of Middleboro.

Drainage area.--260 sq mi.

Records available.--October 1929 to September 1960.

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.--31 years (1929-60), 479 cfs (adjusted for diversions).

Extremes.--1929-60: 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.--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.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	76.6	337	475	641	946	719	778	421	266	82.2	82.5	67.4	404
1952	91.4	521	469	669	891	1,401	615	566	261	69.1	154	68.0	480
1953	83.3	105	230	732	945	1,182	1,597	704	148	120	126	99.4	503
1954	195	823	1,070	558	608	684	637	1,378	321	119	204	659	605
1955	263	654	994	658	747	941	652	497	175	95.9	1,049	348	590
1956	727	1,309	433	966	1,071	1,090	1,330	540	347	266	95.5	86.3	685
1957	199	288	712	651	590	887	951	264	108	36.4	42.4	32.9	377
1958	69.4	98.6	305	1,011	549	1,256	1,417	1,097	433	160	265	511	591
1959	445	543	478	366	595	1,197	1,005	501	500	527	156	101	536
1960	178	377	690	705	1,088	921	1,032	449	229	134	83.0	241	508

TAUNTON RIVER BASIN

Monthly and yearly runoff, in inches (adjusted) a/, of Taunton River at State Farm, Mass.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.46	1.56	2.22	2.94	3.88	3.29	3.44	1.98	1.25	0.47	0.49	0.41	22.39
1952	.52	2.34	2.18	3.07	3.79	6.51	2.74	2.62	1.23	.43	.81	.41	26.45
1953	.49	.56	1.13	3.36	3.88	5.37	6.96	3.24	.78	.66	.69	.56	27.68
1954	.98	3.64	4.86	2.58	2.54	3.15	2.84	6.22	1.49	.63	1.02	2.93	32.88
1955	1.28	2.91	4.52	3.03	3.10	4.29	2.91	2.32	.88	.55	4.80	1.82	32.21
1956	3.35	5.74	2.04	4.42	4.57	4.96	5.84	2.52	1.82	1.30	.57	.50	37.43
1957	1.02	1.56	3.27	2.92	2.47	3.16	4.20	1.30	.60	.29	.31	.28	21.16
1958	.43	.53	1.46	4.59	2.30	5.67	6.19	4.97	1.96	.82	1.35	1.45	31.67
1959	2.09	2.44	2.23	1.82	2.49	5.42	4.43	2.35	2.27	2.46	.83	.56	29.39
1960	.91	1.72	3.17	3.24	4.63	4.20	4.54	2.11	1.10	.71	.51	1.16	28.00

a Adjusted for diversions 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.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted a/			Observed	Adjusted a/	
		Momentary maximum		Minimum	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date	day							
1950	-	-	(b)	-	-	-	-	-	270	294	15.37
1951	1201	1,580	Mar. 13, 1952	41	404	429	1.65	22.39	420	444	23.19
1952	1231	2,460	Apr. 1, 1953	32	480	506	1.95	26.45	425	451	23.59
1953	1271	2,320	May 18, 1954	48	503	531	2.04	27.68	642	670	34.98
1954	1331	3,040	Aug. 21, 1955	56	605	630	2.42	32.88	590	615	32.11
1955	1381	4,010		35	590	617	2.37	32.21	635	664	34.63
1956	1431	2,860	Nov. 7, 1955	51	685	715	2.75	37.43	581	610	31.95
1957	1501	1,950	Apr. 7, 1957	12	377	405	1.56	21.16	316	343	17.93
1958	1551	2,020	Apr. 13, 1958	32	581	606	2.33	31.67	665	690	36.01
1959	1621	1,760	Mar. 8, 1959	59	536	563	2.17	29.39	518	545	28.43
1960	1701	2,240	Apr. 6, 7, 1960	37	508	535	2.06	28.00	-	-	-

a Adjusted for diversions; see footnote to preceding table.

b Feb. 10, Apr. 4, 1951.

1085. Wading River at West Mansfield, Mass.

Location.--Lat 42°00'00", long 71°15'38", on right bank 200 ft downstream from Balcolm Street Bridge at West Mansfield, Bristol County, 2 miles upstream from Hodges Brook, and 3 miles southwest of Mansfield.

Drainage area.--19.2 sq mi.

Records available.--October 1953 to September 1960. Adjusted monthly figures of discharge, in cubic feet per second per square mile, and runoff in inches, previously published in water-supply papers for 1953-58, may be subject to error because of regulation upstream.

Gage.--Water-stage recorder and concrete control. Datum of gage is 120.85 ft above mean sea level, datum of 1929.

Average discharge.--7 years (1953-60), 38.6 cfs (adjusted for diversion).

Extremes.--1953-60: Maximum discharge, 519 cfs Aug. 20, 1955 (gage height, 6.22 ft); no flow Oct. 22-24, 1957 (caused by temporary storage upstream).

Remarks.--Flow regulated by Lake Mirimichi. Diversion above station for municipal supply of Attleboro.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	-	-	-	-	-	-	-	-	-	-	-	-	-
1953	-	-	-	-	-	-	-	-	-	-	-	-	-
1954	4.48	23.5	75.4	37.8	43.5	60.5	62.6	98.8	22.9	8.86	8.39	44.3	40.9
1955	20.9	41.4	65.9	47.3	51.4	65.6	39.3	28.5	14.6	10.4	87.0	35.1	42.3
1956	70.3	107	31.6	63.1	74.3	70.9	101	36.6	22.7	12.8	3.80	3.87	49.6
1957	6.17	15.1	42.9	52.2	39.7	48.5	62.9	19.6	5.76	2.89	2.40	.783	24.8
1958	1.44	1.34	5.24	81.4	57.1	85.8	105	71.0	16.8	5.11	3.18	4.54	36.4
1959	12.6	17.7	22.6	16.9	28.1	79.9	62.9	31.6	27.4	27.7	5.89	3.82	28.1
1960	8.52	20.3	58.0	46.9	66.0	57.8	72.6	33.1	13.0	9.14	5.79	14.7	33.7

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Observed			Adjusted			Observed		Adjusted	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	-	-	
1951	-	-	-	-	-	-	-	-	-	-	
1952	-	-	-	-	-	-	-	-	-	-	
1953	-	-	-	-	-	-	-	-	-	-	
1954	1331	188	May 9, 10, 1954	2.3	40.9	42.1	2.19	29.73	43.0	44.1	31.20
1955	1381	519	Aug. 20, 1955	2.6	42.3	43.4	2.26	30.73	49.0	50.1	35.47
1956	1431	248	Nov. 7, 1955	1.3	49.6	50.9	2.65	36.08	37.6	38.9	27.58
1957	1501	120	Apr. 9, 1957	.2	24.8	26.5	1.38	18.74	20.1	22.3	15.73
1958	1551	180	Jan. 28, 1958	0	36.4	39.2	2.04	27.73	40.2	42.9	30.37
1959	1621	132	Mar. 7, 1959	.6	28.1	31.6	1.65	22.33	31.0	34.4	24.34
1960	1701	145	Mar. 4, 1960	.7	33.7	36.5	1.90	25.89	-	-	-

a Adjusted for diversion for municipal supply of Attleboro.

1090. Wading River near Norton, Mass.

Location.--Lat 41°56'51", long 71°10'38", on left bank 200 ft downstream from bridge on State Highway 140, 0.9 mile upstream from confluence with Rumford River, and 1½ miles southeast of Norton, Bristol County.

Drainage area.--42.4 sq mi.

Records available.--June 1925 to September 1960. Monthly figures of discharge, in cubic feet per second per square mile, and runoff in inches, previously published in water-supply papers for 1925-58, may be subject to error because of regulation upstream.

Gage.--Water-stage recorder. Datum of gage is 49.63 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1930, staff gage at same site at datum 0.62 ft higher. Oct. 1, 1930, to May 4, 1933, staff gage at present site and datum.

Average discharge.--35 years (1925-60), 72.2 cfs (adjusted for diversion).

Extremes.--1925-60: Maximum discharge, 1,170 cfs Aug. 20, 1955 (gage height, 10.98 ft); minimum, 0.3 cfs Sept. 10, 1926.

Remarks.--Flow regulated by powerplants and ponds above station. Diversion above station for municipal supply of Attleboro.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	6.70	47.4	91.3	107	155	117	137	72.3	55.4	14.1	15.5	9.22	68.4
1952	17.6	131	125	130	134	190	90.8	89.9	42.1	12.5	19.6	8.88	82.5
1953	9.32	13.6	31.6	113	171	217	276	113	20.6	10.2	7.15	4.80	81.7
1954	11.3	68.3	171	84.1	92.8	110	136	227	43.5	16.9	19.7	106	90.6
1955	45.7	89.2	149	94.1	114	147	86.4	64.6	30.0	20.5	175	67.1	90.3
1956	143	210	60.0	123	148	151	195	69.1	44.4	25.8	8.67	9.98	98.6
1957	20.5	36.9	103	104	88.9	103	142	33.7	9.79	3.57	3.71	2.88	54.2
1958	3.11	5.21	26.7	192	117	203	229	163	33.1	9.64	11.7	21.8	84.5
1959	50.5	51.8	62.8	49.5	76.9	182	141	66.2	66.4	67.1	12.1	7.17	69.4
1960	21.3	51.4	128	109	160	117	161	69.5	24.7	13.4	9.43	34.9	74.6

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed		Adjusted
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	-	-	-
1951	1201	344	Apr. 4, 1951	4.6	68.4	68.5	1.62	21.93	45.1	45.2	14.49
1952	1231	454	Mar. 12, 1952	3.5	82.5	82.7	1.95	26.56	79.1	79.1	25.32
1953	1271	486	Mar. 16, 1953	1.3	81.7	82.6	1.95	26.46	64.2	64.6	20.75
1954	1331	698	May 10, 1954	2.2	90.6	91.7	2.16	29.37	98.2	99.3	31.79
1955	1381	1,170	Aug. 20, 1955	6.0	90.3	91.4	2.16	29.25	93.3	94.5	30.23
1956	1431	616	Nov. 6, 1955	3.7	98.6	99.9	2.36	32.08	101	102	32.69
1957	1501	313	Apr. 7, 1957	.9	54.2	55.9	1.32	17.90	77.7	79.0	25.37
1958	1551	521	Jan. 26, 1958	1.0	84.5	87.3	2.06	27.96	43.6	45.8	14.67
1959	1621	390	Mar. 7, 1959	3.8	69.4	72.9	1.72	23.34	95.4	98.2	31.43
1960	1701	354	Apr. 6, 1960	3.5	74.6	77.4	1.53	25.11	72.5	76.0	24.32

a Adjusted for diversion for municipal supply of Attleboro.

1095. Kettle Brook at Worcester, Mass.

Location.--Lat 42°13'55", long 71°50'07", on right bank 75 ft downstream from Webster Street Bridge at Worcester, Worcester County, 1 mile upstream from Beaver Brook.

Drainage area.--31.3 sq mi.

Records available.--August 1923 to September 1960. Prior to October 1950, published as Blackstone River at Worcester. Adjusted monthly discharge, in cubic feet per second per square mile, and runoff in inches, published in water-supply papers for 1923-58, may be subject to error because of regulation upstream.

Gage.--Water-stage recorder. Concrete control since Oct. 28, 1937. Datum of gage is 472.86 ft above mean sea level, datum of 1929.

Average discharge.--37 years (1923-60), 54.2 cfs (adjusted for diversion).

Extremes.--1923-60: 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.--City of Worcester diverts flow for municipal use from about 7.0 sq mi of drainage area above station. Since October 1959, city diverts flow through diversion tunnel during periods of high flow; this flow included in daily discharge. Flow regulated by reservoirs above station.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	13.3	33.9	40.1	45.3	105	73.7	92.5	39.5	28.1	11.5	23.3	16.9	43.1
1952	20.2	79.5	63.3	106	75.4	107	86.4	59.2	73.4	10.8	28.3	18.2	60.5
1953	16.4	19.5	33.5	71.5	95.4	152	190	88.5	18.8	14.5	12.5	12.9	60.2
1954	16.7	29.8	60.6	29.6	40.7	67.9	72.3	97.4	23.2	13.2	22.3	156	52.4
1955	44.8	97.5	128	57.7	45.1	104	75.6	43.4	16.1	11.4	257	39.3	77.1
1956	170	153	33.6	89.1	66.6	97.3	222	43.4	42.6	14.4	10.6	13.9	79.5
1957	14.0	18.7	30.5	38.3	39.2	54.9	65.8	23.2	11.5	8.75	12.3	11.1	27.3
1958	12.1	14.2	34.8	64.6	43.6	134	189	73.9	20.3	17.1	20.1	29.2	54.4
1959	32.6	50.0	45.0	47.8	41.3	107	125	30.1	22.6	66.8	28.6	29.9	52.3
1960	41.2	70.7	86.4	66.8	86.2	70.5	169	70.7	37.1	21.5	22.5	33.5	64.4

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted a/			Observed	Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	31.7	40.3	17.47
1951	1201	596	Feb. 8, 1951	8.4	43.1	52.6	1.68	22.85	49.4	59.7	25.90
1952	1231	508	June 2, 1952	5.6	60.5	70.2	2.24	30.51	52.7	61.2	26.60
1953	1271	584	Mar. 16, 1953	7.1	60.2	67.8	2.17	29.40	63.4	71.1	30.86
1954	1331	1,530	Sept. 12, 1954	5.6	52.4	59.8	1.91	25.91	66.0	74.1	32.12
1955	1381	3,970	Aug. 19, 1955	7.1	77.1	84.8	2.71	36.79	84.3	92.0	39.91
1956	1431	852	Oct. 16, 1955	8.0	79.5	87.7	2.80	38.16	55.0	62.5	27.19
1957	1501	246	Jan. 23, 1957	4.8	27.3	34.5	1.10	15.00	27.1	34.0	14.78
1958	1551	687	Apr. 7, 1958	2.5	54.4	62.0	1.98	26.90	59.9	68.5	29.72
1959	1621	747	Apr. 3, 1959	10	52.3	61.1	1.95	26.48	58.3	67.0	29.04
1960	1701	-	-	11	64.4	72.5	2.32	31.54	-	-	-

a Adjusted for diversion for municipal supply of Worcester.

Note.--For water year 1960 only the maximum daily discharge is available.

1100. Quinsigamond River at North Grafton, Mass.

Location.--Lat 42°13'49", long 71°42'41", on right bank 800 ft downstream from dam at outlet of Flint Pond at North Grafton, Worcester County, and 0.3 mile upstream from Bummett Brook.

Drainage area.--25.5 sq mi.

Records available.--October 1939 to September 1960.

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.--21 years (1939-60), 43.0 cfs.

Extremes.--1939-60: Maximum discharge, 820 cfs Aug. 20, 1955 (gage height, 5.15 ft); minimum daily, 0.3 cfs Oct. 14-17, 1942.

Remarks.--Some regulation by Lake Quinsigamond and ponds above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	11.0	19.4	40.7	46.1	112	81.5	92.1	43.2	41.7	17.5	111.4	13.1	43.6
1952	18.3	75.8	61.8	90.0	81.2	94.4	83.2	68.3	87.9	18.8	30.1	14.2	60.2
1953	11.8	12.1	32.2	61.3	97.5	115	146	89.9	34.0	13.5	5.46	2.58	51.3
1954	5.43	22.2	59.8	37.0	42.5	61.5	67.9	92.3	37.8	17.2	24.2	130	49.7
1955	41.7	72.4	95.4	68.5	53.9	81.0	62.8	53.1	28.2	15.0	169	41.2	65.5
1956	94.3	149	48.4	94.2	71.5	88.3	151	52.9	40.2	18.8	6.50	8.11	68.4
1957	10.7	20.7	31.5	43.2	41.6	35.9	65.4	32.5	19.2	6.88	1.87	2.02	25.8
1958	4.78	12.7	47.4	66.5	86.5	121	139	77.4	29.7	26.1	19.1	28.2	54.6
1959	26.1	42.3	56.3	43.7	47.5	87.2	84.0	43.2	29.5	64.2	23.5	26.5	47.9
1960	40.6	60.5	88.6	63.6	69.6	63.8	109	72.9	39.4	24.5	25.2	24.1	56.7

† Corrected

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.50	0.85	1.84	2.08	4.57	3.69	4.03	1.95	1.82	0.79	0.51	0.58	23.21
1952	.83	3.32	2.79	4.07	3.44	4.27	3.64	3.09	3.85	.85	1.36	.62	32.13
1953	.54	.53	1.46	2.77	3.98	5.12	6.39	4.08	1.49	.61	.25	.11	27.31
1954	.25	.97	2.70	1.67	1.73	2.78	2.97	4.17	1.65	.78	1.10	5.68	26.45
1955	1.89	3.17	4.31	3.10	2.20	3.66	2.75	2.40	1.23	.68	7.65	1.60	34.84
1956	4.26	6.52	2.19	4.26	3.02	3.99	6.62	2.39	1.76	.85	.29	.35	36.50
1957	.49	.91	1.42	1.95	1.70	1.62	2.86	1.47	1.84	.31	.08	.09	13.74
1958	.22	.56	2.14	3.01	3.53	5.46	6.06	3.50	1.30	1.18	.86	1.23	29.05
1959	1.18	1.85	2.54	1.97	1.94	3.94	3.68	1.95	1.29	2.90	1.06	1.18	25.48
1960	1.84	2.65	4.00	2.87	2.94	2.89	4.77	3.30	1.73	1.11	1.14	1.06	30.30

Note.--Monthly runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	25.2	15.54
1951	1201	233	Feb. 8, 1951	4.9	43.6	1.71	23.21	50.6	26.96
1952	1231	319	June 6, 1952	6.2	60.2	2.36	32.13	51.9	27.72
1953	1271	336	Mar. 16, 1953	1.1	51.3	2.01	27.31	53.9	28.70
1954	1331	340	Sept. 12, 1954	1.4	49.7	1.95	26.45	55.9	31.90
1955	1361	820	Aug. 20, 1955	3.4	65.5	2.57	34.84	72.2	38.44
1956	1431	296	Nov. 5, 1955	3.0	68.4	2.68	36.50	49.4	26.35
1957	1501	209	Apr. 13, 1957	.5	25.8	1.01	13.74	26.0	13.84
1958	1551	245	Apr. 9, 1958	.4	54.6	2.14	29.05	59.6	31.70
1959	1621	268	July 22, 1959	13	47.9	1.88	25.48	53.4	28.40
1960	1701	258	Apr. 6, 1960	.4	56.7	2.22	30.30	-	-

1105. Blackstone River at Northbridge, Mass.

Location.--Lat 42°09'13", long 71°39'09", on left bank 800 ft downstream from Paul Whittin Co. dam at Northbridge, Worcester County, and 3 miles downstream from Quinsigamond River.

Drainage area.--139 sq mi.

Records available.--October 1939 to September 1960. Monthly discharge only for October and November 1939, published in WSP 1301.

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

Average discharge.--21 years (1939-60), 246 cfs (adjusted for diversion).

Extremes.--1939-60: Maximum discharge, 16,900 cfs Aug. 20, 1955 (gage height, 16.74 ft), from rating curve extended above 3,800 cfs on basis of computation of flow over dam at gage height 13.7 ft and slope-area measurement at gage height 16.74 ft; maximum gage height, 17.53 ft Aug. 20, 1955 (backwater from debris); minimum daily discharge, 2 cfs Aug. 29, 1941, Sept. 5, 1942, Aug. 28, 1957.
Flood of Mar. 19, 1936, reached a stage of 13.7 ft, from floodmarks (discharge, 7,510 cfs, by computation of flow over dam 800 ft above station).

Remarks.--Flow regulated by mills and reservoirs above station. Diversion from Nashua River basin to Blackstone River basin for municipal supply of Worcester.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	106	198	285	321	604	450	516	265	225	103	92.8	73.9	267
1952	126	485	390	549	421	539	456	369	397	116	200	119	347
1953	110	114	198	405	518	726	860	471	195	113	103	90.9	324
1954	115	201	401	241	293	365	418	520	227	132	174	805	325
1955	292	475	603	329	279	503	374	263	168	119	1,195	273	408
1956	717	766	214	441	369	552	923	306	231	122	83.1	86.9	400
1957	131	147	266	260	239	304	464	184	98.4	56.4	61.2	60.4	189
1958	73.2	99.0	235	437	333	770	872	392	130	139	150	214	320
1959	216	304	291	266	261	557	558	209	177	428	171	151	299
1960	256	418	525	378	488	361	778	390	265	182	161	265	371

Monthly and yearly runoff, in inches (adjusted)^{a/}

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.72	1.40	2.24	2.60	4.50	3.70	4.02	2.07	1.59	0.65	0.55	0.29	24.33
1952	.78	3.86	3.16	4.53	3.21	4.37	3.58	2.91	3.03	.75	1.45	.68	32.29
1953	.67	.73	1.55	3.26	3.88	5.93	6.90	3.89	1.43	.67	.51	.41	29.83
1954	.72	1.42	3.51	1.88	2.08	2.96	3.26	4.22	1.73	.87	1.22	6.39	30.06
1955	2.25	3.75	5.00	2.62	1.86	3.85	2.81	2.01	1.23	.73	9.80	1.97	37.88
1956	5.87	6.15	1.62	3.57	2.80	4.40	7.37	2.40	1.72	.67	.38	.48	37.43
1957	.82	.98	2.06	2.03	1.60	2.32	3.64	1.31	.56	.18	.20	.18	15.88
1958	.47	.61	1.90	3.53	2.41	6.27	7.00	3.19	.95	.90	1.04	1.50	29.77
1959	1.62	2.26	2.27	2.06	1.80	4.54	4.45	1.66	1.22	3.35	1.24	1.04	27.51
1960	1.97	3.20	4.25	3.01	3.67	2.79	6.12	3.05	1.96	1.32	1.10	1.87	34.31

^a Adjusted for diversion from Nashua River basin to Blackstone River basin for municipal supply of Worcester.

Note.--Monthly runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted ^{a/}			Observed		
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	200	181	17.74
1951	1201	2,270	Feb. 8, 1951	6.6	267	249	1.79	24.33	302	284	27.75
1952	1231	1,750	June 2, 1952	55	347	330	2.37	32.29	299	280	27.44
1953	1271	1,860	Mar. 16, 1953	63	324	305	2.19	29.83	349	331	32.33
1954	1331	4,510	Sept. 12, 1954	59	325	308	2.22	30.06	380	365	35.61
1955	1381	16,900	Aug. 20, 1955	74	408	388	2.79	37.88	435	415	40.52
1956	1431	2,830	Oct. 16, 1955	9.0	400	382	2.75	37.43	304	282	27.65
1957	1501	1,500	Apr. 6, 1957	2.0	189	163	1.17	15.88	178	154	15.00
1958	1551	2,120	Apr. 7, 1958	5.0	320	305	2.19	29.77	354	338	32.94
1959	1621	2,870	Mar. 7, 1959	61	299	282	2.03	27.51	332	315	30.78
1960	1701	2,520	Sept. 13, 1960	71	371	350	2.52	34.31	-	-	-

^a Adjusted for diversion from Nashua River basin to Blackstone River basin for municipal supply of Worcester.

1110. Mumford River at East Douglas, Mass.

Location.--Lat 42°04'24", long 71°42'58", on right bank 100 ft upstream from Manchaug Road Bridge at East Douglas, Worcester County, and 0.1 mile downstream from Southwick Brook.

Drainage area.--27.8 sq mi.

Records available.--July 1939 to September 1951.

Gage.--Water-stage recorder. Datum of gage is 367.01 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--12 years (1939-51), 44.8 cfs.

Extremes.--1939-51: Maximum discharge, 420 cfs Mar. 22, 1948 (gage height, 5.10 ft); minimum, 2.2 cfs Feb. 1, 2, Aug. 28, 1944; minimum daily, 3.0 cfs Aug. 12, 1942.

Remarks.--Flow regulated by Manchaug, Stevens, and Willis Ponds, and prior to December 1947 by mills upstream.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	26.1	37.1	46.7	80.7	137	84.9	83.8	59.3	49.3	25.1	28.4	16.4	55.7

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1.08	1.49	1.94	3.35	5.12	3.52	3.36	2.46	1.98	1.04	1.18	0.66	27.18

Note.--Monthly runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	39.0	19.05
1951	1201	382	Feb. 8, 1951	7.5	55.7	2.00	27.18	-	-

1115. Branch River at Forestdale, R. I.

Location--Lat 41°59'47", long 71°33'47", on left bank 20 ft upstream from abandoned bridge, 400 ft downstream from milldam at Forestdale, Providence County, 1 mile east of Slatersville, and 1.6 miles upstream from mouth.

Drainage area--93.3 sq mi.

Records available--September to December 1909 and January 1912 to July 1913 (gage heights only), January 1940 to September 1960. 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--20 years (1940-60), 165 cfs.

Extremes--1940-60: Maximum discharge, 4,240 cfs Aug. 19, 1955 (gage height, 10.52 ft), from rating curve extended above 2,100 cfs on basis of computation of peak flow over dam 400 ft above station; minimum daily, 5.2 cfs Oct. 7, 1948.
Maximum discharge known since at least 1886, about 5,800 cfs Mar. 19, 1936, by computation of flow over dam 1 mile above station.

Remarks--Flow regulated by mills and reservoirs above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	31.7	120	201	226	418	296	331	193	118	38.0	61.1	45.4	171
1952	62.5	387	292	332	262	374	270	213	160	23.9	44.8	41.5	205
1953	28.2	40.3	75.6	244	336	490	534	255	58.2	32.8	31.4	25.9	178
1954	38.6	109	264	153	199	272	286	316	82.4	30.7	47.9	397	182
1955	139	307	422	245	237	328	206	157	68.3	42.1	372	162	224
1956	479	472	148	267	314	333	565	173	112	58.9	32.3	61.3	250
1957	47.0	64.1	222	195	179	230	317	90.0	39.5	23.5	21.4	19.4	122
1958	15.5	42.9	121	426	225	431	502	308	65.8	45.8	46.3	70.7	135
1959	106	136	149	126	177	391	387	145	100	156	49.4	47.5	164
1960	99.0	193	364	277	402	251	363	183	74.8	61.4	47.7	95.9	200

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.39	1.44	2.48	2.79	4.67	3.66	3.96	2.39	1.41	0.47	0.75	0.54	24.95
1952	.77	4.63	3.61	4.10	3.03	4.62	3.22	2.63	1.91	.30	.55	.50	29.87
1953	.35	.48	.93	3.01	3.75	5.05	6.59	3.16	.70	.41	.39	.31	25.93
1954	.48	1.30	3.28	1.89	2.22	3.37	3.42	3.90	.99	.38	.59	4.75	26.55
1955	1.72	3.67	5.21	3.02	2.65	4.05	2.46	1.94	.82	.52	4.59	1.94	32.59
1956	5.92	5.64	1.82	3.29	3.63	4.12	6.76	2.14	1.34	.73	.47	.73	36.52
1957	.58	1.01	2.74	2.41	2.00	2.85	3.79	1.11	.47	.29	.26	.23	17.74
1958	.19	.51	1.50	5.27	2.51	5.33	6.01	3.81	1.00	.57	.57	.85	28.12
1959	1.31	1.63	1.65	1.56	1.97	4.63	1.79	1.20	1.93	.61	.57	1.57	23.68
1960	1.22	2.30	4.50	3.42	4.65	3.11	4.34	2.26	.89	.76	.59	1.15	29.19

Note--Monthly runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches		Mean	Runoff in inches
		Discharge	Date							
1950	-	-	-	-	-	-	-	-	129	16.84
1951	1201	1,370	Feb. 8, 1951	13	171	1.83	24.95	204	29.65	
1952	1231	1,310	Nov. 8, 1951	9.4	205	2.20	23.87	155	22.62	
1953	1271	*1,260	Mar. 16, 1953*	14	178	1.91	25.93	201	29.21	
1954	1331	3,080	Sept. 12, 1954	17	182	1.95	26.55	221	32.11	
1955	1381	4,240	Aug. 19, 1955	10	224	2.40	32.59	243	35.37	
1956	1431	2,550	Oct. 16, 1955	7.8	250	2.68	36.52	188	27.47	
1957	1501	1,060	Jan. 23, 1957	8.3	122	1.31	17.74	107	15.61	
1958	1551	1,590	Jan. 26, 1958	7.0	193	2.07	28.12	211	30.71	
1959	1621	1,640	Mar. 7, 1959	34	164	1.76	23.86	186	27.11	
1960	1701	1,470	Feb. 19, 1960	18	200	2.14	29.19	-	-	

* Not previously published.

1125. Blackstone River at Woonsocket, R. I.

Location.--Lat 42°00'22", long 71°30'13", on right bank at Woonsocket, Providence County, 50 ft downstream from Peters River.

Drainage area.--416 sq mi.

Records available.--February 1929 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 107.42 ft above mean sea level, datum of 1929.

Average discharge.--31 years (1929-60), 727 cfs (adjusted for diversion).

Extremes.--1929-60: Maximum discharge, 32,900 cfs Aug. 19, 1955 (gage height, 21.8 ft, from Floodmarks), from rating curve extended above 15,000 cfs on basis of slope-area measurement of peak flow, affected by failure of Horseshoe Dam on Mill River; minimum daily, 21 cfs Aug. 11, 1934, flow diverted around station in Hamlet Trench not included. Maximum stage known since at least 1845, that of Aug. 19, 1955.

Remarks.--Flow regulated by powerplants and reservoirs above station. Extremes and figures of runoff 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.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	203	527	820	979	1,763	1,301	1,410	811	599	253	321	233	761
1952	342	1,574	1,267	1,476	1,196	1,573	1,199	1,019	889	219	270	193	933
1953	185	222	413	1,026	1,473	2,035	2,387	1,206	318	196	158	133	808
1954	193	473	1,089	850	789	1,081	1,187	1,462	453	205	255	1,980	816
1955	692	1,317	1,810	1,066	924	1,435	967	666	383	213	2,704	857	1,090
1956	2,007	2,233	677	1,341	1,369	1,684	2,646	841	568	279	169	223	1,156
1957	257	352	816	814	782	982	1,330	490	213	125	121	113	531
1958	140	203	573	1,529	1,063	2,144	2,268	1,318	387	271	262	393	878
1959	508	625	749	656	754	1,615	1,685	669	462	857	310	327	768
1960	550	900	1,501	1,209	1,735	1,154	1,987	1,001	509	340	289	504	969

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.51	1.35	2.23	2.69	4.40	3.59	3.74	2.21	1.53	0.63	0.82	0.55	24.23
1952	.86	4.21	3.49	4.08	3.08	4.33	3.19	2.78	2.33	.53	.68	.42	29.98
1953	.43	1.53	1.11	2.81	3.69	5.61	6.40	3.34	.81	.45	.33	.25	25.77
1954	.46	1.20	3.01	1.76	1.94	2.92	3.15	4.02	1.18	.49	.63	5.23	26.05
1955	1.86	3.51	5.02	2.92	2.24	3.87	2.53	1.79	.99	.51	7.45	2.23	34.92
1956	5.54	5.99	1.82	3.69	3.53	4.33	7.08	2.28	1.48	.66	.36	.54	37.30
1957	.62	.88	2.21	2.21	1.89	2.65	3.54	1.29	.49	.25	.23	.20	16.46
1958	.34	.48	1.57	4.21	2.64	5.90	6.08	3.63	1.00	.66	.66	.93	28.15
1959	1.35	1.62	2.03	1.77	1.84	4.45	4.51	1.83	1.17	2.31	.80	.82	24.50
1960	1.47	2.36	4.13	3.31	4.46	3.13	5.29	2.71	1.31	.88	.72	1.23	31.03

a Adjusted for diversion from Nashua River basin for municipal supply of Worcester, Mass.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted a/			Observed		Adjusted a/
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	-	-	-
1951	1201	4,920	Feb. 8, 1951	95	761	743	1.79	24.23	578	559	18.24
1952	1231	4,090	Nov. 8, 1951	100	933	918	2.20	29.98	897	880	28.70
1953	1271	5,570	Mar. 16, 1953	50	808	790	1.90	25.77	737	718	23.49
1954	1331	9,400	Sept. 12, 1954	84	816	799	1.92	26.05	887	869	28.37
1955	1381	32,900	Aug. 19, 1955	125	1,090	1,070	2.57	34.92	989	974	31.77
1956	1431	8,710	Oct. 17, 1955	111	1,158	1,140	2.74	37.30	1,181	1,161	37.88
1957	1501	3,850	Jan. 24, 1957	71	531	505	1.21	16.46	867	846	27.66
1958	1551	4,970	Jan. 27, 1958	95	878	863	2.07	28.15	488	464	15.14
1959	1621	5,390	Apr. 3, 1959	182	768	751	1.81	24.50	959	943	30.76
1960	1701	bs, 550	Jan. 4, 1960	105	969	948	2.28	31.03	858	841	27.46

a Adjusted for diversion from Nashua River basin for municipal supply of Worcester, Mass.

b Affected by unusual regulation; momentary maximum unaffected by regulation, 4,780 cfs Apr. 1, 1960.

1145. Woonasquatucket River at Centerdale, R. I.

Location.--Lat 41°51'32", long 71°29'16", on right bank 75 ft downstream from bridge on U.S. Highway 44, at Centerdale, Providence County, and 6½ miles upstream from mouth.

Drainage area.--38.3 sq mi.

Records available.--July 1941 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is 95 ft (from topographic map).

Average discharge.--19 years (1941-60), 70.2 cfs.

Extremes.--1941-60: Maximum discharge, 1,100 cfs Sept. 11, 1954 (gage height, 7.03 ft); minimum daily, 3.4 cfs Oct. 13, 19, 1941.

Flood in March 1936 reached a discharge of 1,000 cfs, by computation of flow over dam three-quarters of a mile below station.

Remarks.--Flow regulated by mills and reservoirs above station. Discharge includes leakage through bypass canal.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	27.0	41.4	62.7	79.7	172	140	150	80.5	56.9	33.0	33.3	28.2	74.7
1952	20.9	79.4	121	127	128	172	104	100	54.4	28.6	36.5	28.2	83.3
1953	24.0	21.2	33.7	78.8	143	225	264	133	45.1	32.5	26.4	22.8	87.0
1954	22.8	42.5	78.9	70.4	86.2	117	121	166	49.9	32.3	37.0	116	76.2
1955	58.0	116	201	113	107	142	89.5	70.5	42.1	34.7	83.6	55.2	92.8
1956	200	208	76.8	91.5	140	144	206	68.3	51.7	34.2	26.3	24.0	106
1957	21.8	26.8	54.7	63.5	77.6	96.2	155	43.9	29.8	21.0	17.4	11.8	51.3
1958	10.3	9.90	29.5	146	107	189	223	151	44.0	32.8	29.9	31.6	83.6
1959	54.2	37.2	4.8	52.5	74.0	180	148	69.5	46.0	72.2	31.2	27.8	67.8
1960	36.3	58.7	156	120	174	108	142	94.8	35.7	29.3	25.7	43.4	85.0

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.81	1.21	1.89	2.40	4.67	4.23	4.37	2.42	1.66	0.99	1.00	0.82	26.47
1952	.63	2.31	3.64	3.82	3.61	5.18	3.04	3.01	1.59	.86	1.10	.82	29.61
1953	.72	.62	1.01	2.37	3.88	6.78	7.68	4.00	1.31	.98	.80	.86	30.81
1954	.69	1.24	2.38	2.12	2.35	3.51	3.52	5.00	1.45	.97	1.11	3.38	27.72
1955	1.75	3.59	6.04	3.40	2.92	4.26	2.61	2.12	1.23	1.05	2.52	1.61	32.90
1956	6.01	6.06	2.31	2.75	3.95	4.32	6.01	2.06	1.51	1.03	.79	.70	37.50
1957	.66	.78	1.65	1.91	2.11	2.89	4.51	1.32	.87	.63	.52	.34	18.19
1958	.31	.29	.89	4.39	2.92	5.70	6.50	4.58	1.28	.99	.90	.92	29.65
1959	1.03	1.08	1.26	1.58	2.01	5.41	4.30	2.09	1.34	2.17	.94	.81	24.02
1960	1.09	1.71	4.70	3.62	4.89	3.24	4.15	2.85	1.04	.88	.77	1.26	30.20

Note.--Monthly runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	47.2	16.73
1951	1201	497	Apr. 5, 1951	7.1	74.7	1.95	26.47	82.2	29.14
1952	1231	496	Mar. 11, 1952	9.5	85.3	2.17	29.61	71.4	25.38
1953	1271	728	Mar. 15, 1953	8.9	87.0	2.27	30.81	92.5	32.77
1954	1331	1,100	Sept. 11, 1954	11	78.2	2.04	27.72	97.6	34.59
1955	1381	605	Dec. 18, 1954	8.9	92.8	2.42	32.90	102	36.10
1956	1431	959	Oct. 17, 1955	20	106	2.77	37.50	73.7	26.21
1957	1501	470	Apr. 6, 1957	7.2	51.3	1.34	18.19	46.8	16.59
1958	1551	484	Jan. 27, 1958	4.4	83.6	2.18	29.65	88.9	31.53
1959	1621	580	Mar. 6, 1959	21	67.8	1.77	24.02	79.5	28.15
1960	1701	443	Feb. 19, 1960	18	85.0	2.22	30.20	-	-

1160. South Branch Pawtuxet River at Washington, R. I.

Location.--Lat 41°41'24", long 71°33'59", on right bank 150 ft downstream from highway bridge at Washington, Kent County, and 0.9 mile upstream from outlet of Tiogue Lake.

Drainage area.--63.8 sq mi.

Records available.--October 1940 to September 1960.

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

Average discharge.--20 years (1940-60), 130 cfs (adjusted for storage and diversion).

Extremes.--1940-60: 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.--Flow regulated by Flat 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.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	45.3	51.2	107	166	250	225	254	147	117	60.9	59.1	47.4	127
1952	51.7	138	212	244	246	278	161	159	96.0	64.0	70.1	59.3	148
1953	53.4	41.3	54.5	137	251	361	375	203	76.4	61.8	56.2	53.5	143
1954	54.2	71.8	250	144	160	201	228	234	92.5	49.2	68.3	240	149
1955	123	204	300	230	211	236	166	135	82.8	67.3	135	146	170
1956	216	354	153	203	262	260	338	149	133	61.2	59.2	52.1	186
1957	75.5	62.4	121	147	161	163	220	75.3	39.2	34.1	39.4	29.1	96.8
1958	29.2	30.9	102	306	218	299	349	271	117	75.7	118	93.2	167
1959	148	133	136	99.7	132	259	256	120	107	130	62.5	54.9	137
1960	59.7	89.8	223	202	223	200	210	124	69.0	68.6	53.2	72.5	133

Monthly and yearly runoff, in inches (adjusted) ^a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.58	1.74	2.65	2.97	4.12	4.15	4.37	2.67	2.07	0.66	0.67	0.54	27.19
1952	.81	3.69	3.89	4.39	4.09	5.15	2.92	2.79	1.46	.61	1.28	.56	31.64
1953	.64	.86	1.55	3.49	4.09	6.64	6.49	3.64	1.19	.77	.67	.56	30.59
1954	1.00	2.49	4.55	2.64	2.72	3.52	4.05	4.22	1.35	.93	1.59	4.16	33.22
1955	2.00	3.76	5.63	3.38	3.99	4.10	3.28	2.32	1.49	.93	2.31	1.35	34.54
1956	5.81	5.85	2.45	3.58	4.36	4.96	5.96	3.01	1.72	1.44	.58	.91	40.63
1957	1.18	1.40	2.76	2.57	2.35	3.06	4.29	1.43	.49	.28	.34	.28	20.43
1958	.45	.80	2.48	5.84	3.25	5.59	6.38	4.90	2.04	1.31	1.98	1.58	36.60
1959	2.49	2.31	2.13	2.01	2.33	5.07	4.54	2.28	1.94	2.29	.73	.54	28.66
1960	1.41	1.78	3.76	3.46	4.54	3.05	4.18	2.45	.86	1.08	.57	1.50	28.64

^a Adjusted for diversion above station from Carr Pond for municipal supply of Coventry, Warwick, and West Warwick, and change in contents in Flat River Reservoir; records furnished by Kent County Water Authority and Quidnick Reservoir Co.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year					
		Observed			Adjusted ^a /			Observed			Adjusted ^a /		
		Discharge	Maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	Mean	Runoff in inches
			Date	day									
1950	-	-	-	-	-	-	-	-	-	95.8	103	144	21.87
1951	1201	642	Apr. 4, 1951	9.6	127	128	2.01	27.19	143	144	30.61	144	30.61
1952	1231	746	Mar. 12, 1952	13	148	148	2.32	31.64	127	123	26.30	127	26.30
1953	1271	898	Mar. 17, 1953	12	143	144	2.26	30.59	162	167	35.58	162	35.58
1954	1331	1,320	Sept. 12, 1954	13	149	156	2.45	33.22	170	172	36.57	170	36.57
1955	1381	658	Dec. 19, 1954	19	170	162	2.54	34.54	177	175	37.26	177	37.26
1956	1431	942	Oct. 17, 1955	11	186	190	2.98	40.63	147	149	31.86	147	31.86
1957	1501	421	Apr. 10, 1957	5.7	96.8	96.1	1.51	20.43	88.7	88.5	18.82	88.5	18.82
1958	1551	752	Jan. 27, 1958	7.2	167	172	2.70	36.60	189	187	39.80	187	39.80
1959	1621	602	Mar. 7, 1959	9.4	137	135	2.12	28.66	133	135	28.68	133	28.68
1960	1701	382	Feb. 27, 1960	6.2	133	134	2.10	28.64	-	-	-	-	-

^a Adjusted for diversion and change in contents; see footnote to preceding table.

1165. Pawtuxet River at Cranston, R. I.

Location.--Lat 41°45'03", long 71°26'44", on left bank at Cranston, Providence County, 0.7 mile upstream from Pocasset River.

Drainage area.--200 sq mi.

Records available.--December 1939 to September 1960.

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

Average discharge.--20 years (1940-60), 404 cfs (adjusted for storage and diversion).

Extremes.--1939-60: Maximum discharge, 2,090 cfs Nov. 6, 1955 (gage height, 9.10 ft); minimum daily, 22 cfs Sept. 4, 1944.

Remarks.--Flow regulated by powerplants and by Scituate, Flat River, and other reservoirs (combined usable capacity, about 6 billion cubic feet). Diversion above station from Scituate Reservoir for municipal supply of Providence, North Providence, Cranston, Johnston, Smithfield, and Warwick.

Revisions.--The momentary maximum discharge for the water years 1940 and 1941, published in WSP 1301, have been revised to 1,960 cfs. Adjusted monthly and yearly runoff in inches and adjusted yearly discharge in cubic feet per second and runoff in cubic feet per second per square mile for water years 1946-59 have been revised on basis of adjustments for storage in five small reservoirs not previously included. The revised figures are given herewith. They supersede figures published in WSP 1301 and water-supply papers for the water years indicated.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	114	180	264	390	719	615	662	371	294	134	147	141	333
1952	143	333	621	791	757	766	434	375	248	159	185	165	414
1953	165	150	188	447	653	1,058	1,250	585	189	165	171	179	430
1954	190	291	656	393	402	456	609	688	202	139	216	698	410
1955	303	512	877	703	600	693	376	274	177	189	438	398	462
1956	667	1,024	485	475	754	816	892	419	273	167	149	148	521
1957	185	174	304	315	294	312	518	178	95.0	74.9	87.8	83.8	216
1958	70.5	110	254	633	472	770	1,076	787	261	228	330	261	439
1959	426	365	351	316	370	716	674	277	226	349	185	144	367
1960	179	227	582	657	713	596	631	288	193	156	134	244	382

Monthly and yearly runoff, in inches (adjusted) g/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1946	0.41	1.94	4.90	4.60	3.37	4.05	1.91	2.52	2.03	0.43	2.71	0.91	29.78
1947	.93	.64	1.27	2.11	1.66	4.06	3.47	3.25	1.43	.94	.61	.59	20.96
1948	.57	2.83	1.54	1.69	3.34	6.79	4.25	5.38	3.96	1.17	.61	.28	32.41
1949	.66	1.99	1.94	3.39	3.17	3.08	3.57	2.12	.47	.23	.33	.40	21.35
1950	.41	.80	1.25	1.79	2.37	3.84	3.02	2.27	1.40	.39	.50	.35	18.29
1951	.36	1.86	2.61	3.18	4.79	4.29	4.29	2.70	1.70	.46	.43	.40	27.13
1952	.63	4.05	4.62	4.71	3.90	5.37	3.06	2.69	1.28	.36	1.03	.41	32.12
1953	.49	.79	1.50	4.75	4.93	7.58	7.01	3.60	.78	.68	.61	.59	33.10
1954	1.02	2.61	5.38	2.75	2.85	3.64	4.10	4.13	.95	.59	1.51	4.96	34.49
1955	1.78	3.64	5.99	3.16	3.90	4.38	3.00	1.98	1.17	.60	3.43	1.47	34.50
1956	6.48	5.74	1.83	3.58	4.44	5.06	6.24	2.48	1.45	1.00	.23	.62	39.21
1957	.74	1.33	3.00	2.64	2.21	2.88	4.11	1.11	.24	.002	.03	.11	18.43
1958	.20	.89	2.52	8.56	3.24	6.07	6.73	4.58	1.59	1.26	1.76	1.66	36.86
1959	2.79	2.37	2.12	2.04	2.60	5.80	4.55	1.87	1.68	2.52	.60	.37	29.51
1960	1.46	2.10	4.56	3.91	5.12	3.34	4.36	2.26	.78	.83	.49	1.96	31.18

a Adjusted for diversion from Scituate Reservoir for municipal supply of Providence, North Providence, Cranston, Johnston, Smithfield, and Warwick and change in contents in Scituate and 5 smaller reservoirs in Scituate watershed and Flat River Reservoir. Records furnished by Providence Water Supply Board and Quindnick Reservoir Co.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year					
		Observed			Adjusted g/			Observed			Adjusted g/		
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	Mean	Mean
		Discharge	Date										
1945	-	-	-	-	-	-	-	-	344	413	28.05	-	-
1946	-	1,510	Feb. 7, 1946	39	363	439	2.20	29.78	336	374	25.37	-	-
1947	-	1,320	Mar. 3, 1947	40	262	309	1.54	20.96	269	340	23.06	-	-
1948	-	1,910	May 19, 1948	41	417	476	2.38	32.41	414	471	32.06	-	-
1949	-	1,170	Apr. 6, 1949	42	266	315	1.58	21.35	252	283	19.22	-	-
1950	-	1,140	Mar. 23, 1950	34	201	270	1.35	18.29	215	304	20.66	-	-
1951	1201	1,430	Apr. 3, 1951	49	333	400	2.00	27.13	378	465	31.58	-	-
1952	1231	1,600	Dec. 21, 1951	25	414	472	2.36	32.12	364	376	25.61	-	-
1953	1271	1,830	Mar. 16, 1953	60	430	487	2.44	33.10	481	580	39.33	-	-
1954	1331	2,010	Sept. 13, 1954	60	410	508	2.54	34.49	458	543	36.89	-	-
1955	1381	1,490	Aug. 19, 1955	64	462	508	2.54	34.50	501	547	37.14	-	-
1956	1431	2,090	Nov. 6, 1955	68	521	576	2.98	39.21	393	444	30.23	-	-
1957	1501	1,080	Apr. 9, 1957	48	216	272	1.36	18.43	199	247	18.77	-	-
1958	1551	1,770	Feb. 28, 1958	44	439	543	2.72	36.86	499	600	40.73	-	-
1959	1621	1,770	Mar. 6, 1959	58	367	432	2.16	29.31	354	445	30.19	-	-
1960	1701	1,520	Feb. 19, 1960	60	382	458	2.29	31.18	-	-	-	-	-

a Adjusted for diversion and change in contents; see note to preceding table.

1170. Potowomut River near East Greenwich, R. I.

Location.--Lat 41°38'28", long 71°26'45", on right bank 45 ft upstream from Old Forge Dam in North Kingstown, Washington County, 1½ miles south of village of East Greenwich, Kent County, and 2½ miles upstream from mouth.

Drainage area.--23.0 sq mi.

Records available.--August 1940 to September 1960.

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

Average discharge.--20 years (1940-60), 43.4 cfs (unadjusted).

Extremes.--1940-60: 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, Aug. 28-30, 1960 (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.--Diversion above station for supply of East Greenwich, North Kingstown, Warwick, and U.S. Naval establishments.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	5.90	23.9	39.5	61.5	98.9	81.6	90.0	59.1	37.2	14.0	9.00	6.49	43.5
1952	9.00	54.8	71.9	89.8	96.0	118	70.0	65.5	31.4	11.7	20.3	8.74	53.7
1953	6.71	8.56	15.8	72.5	106	148	156	85.6	22.2	17.7	16.3	7.83	54.9
1954	9.29	35.2	89.7	58.6	56.7	67.9	72.3	98.4	30.6	14.9	30.7	73.6	53.1
1955	33.9	63.8	99.9	70.4	87.0	94.5	67.3	46.6	27.3	12.6	29.8	21.0	54.3
1956	70.1	108	45.2	58.7	90.8	101	110	55.3	29.3	24.7	8.51	6.15	58.8
1957	10.6	20.5	47.6	46.2	47.3	58.2	91.2	33.7	10.8	5.82	4.67	2.53	31.5
1958	9.14	10.4	33.6	107	69.1	115	135	111	51.5	25.5	29.1	25.3	60.1
1959	40.6	43.5	39.5	34.8	55.6	112	84.4	42.6	35.8	29.3	12.0	9.16	44.7
1960	16.3	24.7	57.3	54.8	91.1	75.0	93.2	58.9	26.5	19.7	6.86	18.4	45.0

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	32.8	-
1951	1201	227	Apr. 3, 1951	3.5	43.5	-	-	49.1	-
1952	1231	328	Dec. 21, 1951	4.1	53.7	-	-	45.0	-
1953	1271	368	Mar. 16, 1953	4.8	54.9	-	-	63.6	-
1954	1331	450	Sept. 12, 1954	2.5	53.1	-	-	58.4	-
1955	1381	269	Feb. 12, 1955	3.8	54.3	-	-	56.4	-
1956	1431	347	Oct. 17, 1955	5.6	58.8	-	-	46.7	-
1957	1501, 1621	305	May 10, 1957	1.1	31.5	-	-	29.3	-
1958	1551, 1621	350	Feb. 28, 1958	1.5	60.1	-	-	66.0	-
1959	1621	375	Mar. 6, 1959	4.5	44.7	-	-	42.6	-
1960	1701	276	Feb. 26, 1960	0	45.0	-	-	-	-

1175. Pawcatuck River at Wood River Junction, R. I.

Location.--Lat 41°26'42", long 71°40'53", on right bank at downstream side of bridge on Alton-Carolina road, 0.8 mile northeast of Wood River Junction, 1½ miles southwest of Carolina, Washington County, and 2.9 miles upstream from Wood River.

Drainage area.--100 sq mi.

Records available.--October 1940 to September 1960. Monthly discharge only for October and November 1940, 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.--20 years (1940-60), 187 cfs.

Extremes.--1940-60: 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.--Flow regulated by powerplant and mills above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	36.8	81.1	124	203	331	297	322	206	158	76.0	53.1	44.1	160
1952	48.3	164	229	311	360	421	256	243	147	68.6	189	82.6	210
1953	63.4	58.7	102	303	425	598	607	374	137	97.2	95.1	59.4	242
1954	60.2	159	380	218	225	257	281	348	153	83.1	145	374	223
1955	176	274	390	305	314	333	233	192	122	84.5	194	133	229
1956	332	471	222	246	378	400	431	250	158	139	70.5	54.8	262
1957	71.9	91.5	172	162	183	228	345	166	82.3	38.2	38.1	32.1	134
1958	34.5	72.9	175	598	288	461	523	437	249	147	125	130	253
1959	192	131	182	169	205	418	350	208	187	170	93.0	71.8	203
1960	71.6	100	210	212	321	318	363	222	126	86.2	55.4	73.9	179

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.42	0.90	1.43	2.34	3.45	3.42	3.59	2.37	1.76	0.88	0.61	0.49	21.66
1952	.56	1.83	2.64	3.59	3.88	4.86	2.86	2.81	1.64	.79	2.18	.92	28.56
1953	.73	.66	1.18	3.50	4.42	6.90	6.77	4.31	1.53	1.32	1.10	.66	32.88
1954	.69	1.77	4.38	2.51	2.35	2.96	3.13	4.01	1.71	.96	1.67	4.18	30.32
1955	2.03	3.05	4.50	3.52	3.27	3.34	2.60	2.21	1.37	.97	2.24	1.48	31.08
1956	3.82	5.25	2.56	2.83	4.08	4.61	4.81	2.88	1.76	1.60	.81	.61	35.62
1957	.83	1.02	1.98	1.87	1.90	2.62	3.85	1.92	.92	.44	.44	.36	18.15
1958	.40	.81	2.02	4.59	3.00	5.32	5.84	5.04	2.78	1.70	1.44	1.45	34.39
1959	2.22	2.13	2.09	1.95	2.11	4.82	3.90	2.40	2.08	1.96	1.07	.80	27.53
1960	.83	1.12	2.43	2.44	3.47	3.66	4.05	2.56	1.41	.99	.64	.82	24.42

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	-	-	-
1951	1201	502	Apr. 5, 1951	27	160	1.60	21.66	176	23.94	17.62
1952	1231	686	Mar. 14, 1952	30	210	2.10	28.56	192	26.10	26.10
1953	1271	1,040	Mar. 17, 1953	35	242	2.42	32.88	274	37.15	37.15
1954	1331	862	Sept. 13, 14, 1954	36	223	2.23	30.32	243	33.06	33.06
1955	1381	580	Jan. 8, 1955	50	229	2.29	31.08	244	33.13	33.13
1956	1431	779	Oct. 18, 1955	41	262	2.62	35.62	205	27.82	27.82
1957	1501	554	Apr. 9, 1957	20	134	1.34	18.15	129	17.55	17.55
1958	1551	776	Apr. 8, 1958	19	253	2.53	34.39	277	37.60	37.60
1959	1621	586	Mar. 8, 9, 1959	44	203	2.03	27.53	188	25.47	25.47
1960	1701	607	Feb. 28, 1960	27	179	1.79	24.42	-	-	-

1180. Wood River at Hope Valley, R. I.

Location--Lat 41°29'58", long 71°42'57", on right bank 0.2 mile downstream from highway bridge at Hope Valley, Washington County, and 6.6 miles upstream from mouth.

Drainage area--72.4 sq mi.

Records available--August to December 1909 (gage heights only), March 1941 to September 1960. Records of daily discharge for August to December 1909, published in WSP 261, have been found to be unreliable and should not be used.

Gage--Water-stage recorder and concrete control. Altitude of gage is 65 ft (from topographic map). August to December 1909 staff gage at site 1,000 ft upstream at different datum.

Average discharge--19 years (1941-60), 150 cfs.

Extremes--1941-60: Maximum discharge, 1,470 cfs Sept. 12, 1954 (gage height, 7.45 ft); minimum, 4.4 cfs Oct. 18, 1941; minimum daily, 10 cfs Oct. 13, 1941.
Maximum stage known since 1711, at least 12.4 ft in February 1886.

Remarks--Some regulation at low flow by mills and ponds above station; regulation greater prior to 1948.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	39.9	95.9	134	176	287	255	311	187	127	61.6	43.0	36.0	145
1952	41.6	211	256	288	272	308	195	175	112	46.4	66.1	38.8	187
1953	36.3	41.8	90.0	230	296	463	418	234	85.3	85.8	48.0	40.3	170
1954	53.5	166	315	170	177	235	263	234	93.3	56.5	97.9	311	181
1955	141	231	333	228	266	269	164	149	97.2	55.4	151	97.3	183
1956	341	386	159	196	275	298	364	194	114	97.0	42.8	34.8	208
1957	45.7	81.6	177	148	155	193	285	109	48.3	27.7	20.5	17.4	109
1958	22.6	49.3	142	357	220	351	394	312	141	99.7	126	104	193
1959	185	150	146	129	174	327	310	154	119	145	54.2	42.9	161
1960	65.0	104	244	201	293	227	303	165	74.7	61.2	37.5	86.3	155

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.64	1.48	2.13	2.80	4.12	4.05	4.79	2.98	1.96	0.98	0.69	0.55	27.17
1952	.66	3.26	4.07	4.59	4.06	4.91	3.00	2.79	1.72	.74	1.05	.60	31.45
1953	.58	.64	1.43	3.67	4.26	7.37	6.44	3.73	1.31	1.02	.76	.62	31.83
1954	.85	2.55	5.01	2.71	2.54	3.74	4.05	3.72	1.44	.90	1.56	4.80	33.87
1955	2.24	3.56	5.30	3.63	3.83	4.28	2.84	2.37	1.50	.88	2.41	1.50	34.34
1956	5.43	5.94	2.52	3.13	4.09	4.75	5.61	3.10	1.76	1.54	.68	.54	39.09
1957	.73	1.26	2.82	2.35	2.23	3.07	4.40	1.73	.74	.44	.33	.27	20.37
1958	.56	.76	2.26	5.69	3.16	5.58	6.08	4.96	2.18	1.59	2.01	1.60	36.23
1959	2.95	2.30	2.32	2.06	2.50	5.20	4.77	2.44	1.83	2.31	.86	.66	30.20
1960	1.03	1.61	3.88	3.20	4.37	3.62	4.67	2.63	1.15	.97	.60	1.33	29.06

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	119	22.35
1951	1201	747	Apr. 4, 1951	27	145	2.00	27.17	165	30.91
1952	1231	972	Dec. 22, 1951	28	167	2.31	31.45	139	26.11
1953	1271	1,260	Mar. 16, 1953	25	170	2.35	31.83	201	37.59
1954	1331	1,470	Sept. 12, 1954	33	181	2.50	33.87	195	36.56
1955	1381	748	Dec. 19, 1954	36	183	2.53	34.34	198	37.13
1956	1431	1,270	Oct. 17, 1955	29	208	2.87	39.09	160	30.01
1957	1501	713	Apr. 6, 1957	15	109	1.51	20.37	101	18.94
1958	1551	867	Apr. 7, 1958	14	193	2.67	36.23	216	40.42
1959	1621	901	Mar. 7, 1959	28	161	2.22	30.20	156	29.15
1960	1701	693	Apr. 6, 1960	21	155	2.14	29.06	-	-

PAWCATUCK RIVER BASIN

1183. Pendleton Hill Brook near Clarks Falls, Conn.

Location--Lat 41°28'29", long 71°50'05", on left bank just upstream from twin culverts on Grindstone Hill Road, 0.1 mile west of State Highway 49 in township of North Stonington, New London County, 1.6 miles northwest of Clarks Falls, and 3.4 miles northeast of village of North Stonington.

Drainage area--4.20 sq mi.

Records available--July 1958 to September 1960.

Gage--Water-stage recorder. Datum of gage is 152.90 ft above mean sea level, datum of 1929.

Extremes--1958-60: Maximum discharge, 120 cfs Dec. 13, 1959 (gage height, 3.68 ft); minimum, 0.07 cfs Sept. 10, 11, 1960 (gage height, 0.67 ft).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	-	4.69	5.38	4.58	-
1959	12.1	8.23	8.07	7.41	9.29	20.1	16.4	6.98	6.74	10.5	2.08	.883	9.07
1960	3.42	6.34	17.0	11.5	17.2	10.5	16.6	8.50	2.39	1.99	.706	3.88	8.29

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	-	1.29	1.48	1.22	-
1959	3.32	2.19	2.21	2.03	2.30	5.52	4.35	1.91	1.78	2.88	.57	.23	29.29
1960	.94	1.68	4.67	3.16	4.41	2.88	4.41	2.33	.64	.55	.19	1.03	26.89

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean
		Discharge	Date					
1958	1551	-	-	-	-	-	-	-
1959	1621	116	Mar. 6, 1959	0.21	9.07	2.16	29.29	8.93
1960	1701	120	Dec. 13, 1959	.07	8.29	1.97	26.89	-

1185. Pawcatuck River at Westerly, R. I.

Location.--Lat 41°23'01", long 71°50'01", on left bank at Westerly, Washington County, 2.1 miles downstream from Shunock River.

Drainage area.--295 sq mi.

Records available.--November 1940 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is at mean sea level (from topographic map).

Average discharge.--20 years (1940-60), 562 cfs (adjusted for diversion).

Extremes.--1940-60: Maximum discharge, 3,510 cfs Mar. 16, 1953 (gage height, 8.83 ft); maximum gage height, 12.16 ft Aug. 31, 1954 (backwater from tide); minimum daily discharge, 25 cfs Aug. 17, 1941.

Flood in March 1936 reached a discharge of 3,150 cfs, by computation of flow over dam $1\frac{1}{2}$ miles upstream from station. Maximum discharge known since 1886 occurred in November 1927 and was possibly more than twice that of March 1936. Maximum stage known since at least 1635, 15.0 ft Sept. 21, 1938 (due to hurricane tidal wave).

Remarks.--Regulation at low flow by mills above station. Diversion above station for municipal supply of Westerly.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	104	268	381	618	992	909	1,052	619	466	192	138	116	484
1952	142	644	847	1,038	1,036	1,196	694	684	438	166	463	175	628
1953	156	153	325	916	1,175	1,766	1,672	922	329	236	221	155	666
1954	173	585	1,276	641	687	842	912	929	372	206	448	1,235	691
1955	521	857	1,258	937	967	1,050	685	525	324	208	706	403	703
1956	1,196	1,450	585	693	1,102	1,178	1,319	708	436	405	170	133	778
1957	198	323	678	550	586	744	1,076	452	223	98.5	106	82.9	425
1958	95.2	211	619	1,363	821	1,405	1,534	1,252	630	405	446	425	768
1959	701	563	621	542	651	1,293	1,080	537	496	642	247	147	627
1960	212	328	790	668	1,034	893	1,104	592	311	238	150	293	549

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.42	1.02	1.50	2.42	3.51	3.56	3.99	2.43	1.77	0.76	0.55	0.45	22.38
1952	.56	2.45	3.32	4.07	3.79	4.68	2.63	2.68	1.67	.67	1.82	.67	29.01
1953	.62	.59	1.28	3.59	4.15	6.91	6.33	3.61	1.25	.94	.88	.60	30.75
1954	.69	2.22	5.00	2.51	2.43	3.30	3.46	3.64	1.42	.82	1.76	4.67	31.92
1955	2.04	3.25	4.92	3.67	3.42	4.12	2.60	2.06	1.24	.83	2.77	1.53	32.45
1956	4.65	5.49	2.29	2.72	4.04	4.61	5.00	2.78	1.66	1.60	.68	.51	36.03
1957	.78	1.23	2.66	2.16	2.08	2.92	4.08	1.78	.86	.40	.43	.32	19.70
1958	.38	.81	2.43	5.33	2.91	5.50	5.81	4.91	2.39	1.60	1.76	1.62	35.45
1959	2.75	2.14	2.44	2.13	2.31	5.06	4.09	2.11	1.89	2.52	.98	1.57	28.99
1960	.84	1.25	3.10	2.62	3.79	3.50	4.19	2.32	1.19	.94	.60	1.12	25.46

a Adjusted for diversion for municipal supply of Westerly.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted a/			Observed		
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	413	415	19.11
1951	1201	1,930	Apr. 4, 1951	54	484	486	1.65	22.38	558	560	25.77
1952	1231	1,960	Dec. 22, 1951	74	628	629	2.13	29.01	543	545	25.17
1953	1271	3,510	Mar. 16, 1953	74	666	668	2.26	30.75	783	786	36.17
1954	1351	3,340	Sept. 12, 1954	94	691	694	2.35	31.92	742	744	34.22
1955	1381	2,060	Dec. 20, 1954	110	703	706	2.39	32.45	751	754	34.67
1956	1431	2,800	Oct. 17, 1955	103	778	781	2.65	36.03	610	613	28.27
1957	1501	1,870	Apr. 6, 7, 1957	26	425	428	1.45	19.70	402	405	18.65
1958	1551	2,420	Apr. 7, 8, 1958	34	768	770	2.61	35.45	848	851	39.16
1959	1621	2,030	Mar. 7, 1959	82	627	630	2.14	28.99	581	583	26.85
1960	1701	2,010	Apr. 6, 1960	85	549	552	1.87	25.46	-	-	-

a Adjusted for diversion for municipal supply of Westerly.

1190. Great Brook at Poquonock Bridge, Conn.

Location--Lat 41°20'57", long 72°02'17", in midchannel on upstream side of weir-gate structure, 800 ft downstream from Groton Reservoir dam, a quarter of a mile upstream from bridge on U.S. Highway 1 at head of Poquonock River, a quarter of a mile northwest of Poquonock Bridge, New London County, and 2.3 miles east of Groton.

Drainage area--14.3 sq mi.

Records available--January 1946 to September 1960.

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--14 years (1946-60), 26.8 cfs.

Extremes--1946-60: Maximum discharge, 464 cfs 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 and yearly mean discharge, in cubic feet per second (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	3.96	8.03	12.3	23.4	48.9	46.3	54.6	26.8	17.8	6.11	6.56	4.69	21.4
1952	5.65	33.4	41.9	55.4	49.8	56.6	31.4	44.6	23.4	5.97	16.7	4.61	30.8
1953	3.60	5.48	12.8	50.7	58.8	93.9	78.3	35.0	7.22	6.62	4.29	3.23	29.9
1954	6.78	20.0	50.7	24.9	31.6	42.4	44.7	40.7	9.70	5.31	15.0	62.8	29.6
1955	22.7	42.7	61.9	37.9	37.4	48.1	28.5	16.4	9.39	4.29	17.0	9.53	28.0
1956	57.6	61.9	21.4	29.9	58.9	56.8	56.0	29.6	15.8	17.8	4.47	5.96	34.5
1957	8.90	18.6	38.5	28.6	32.5	36.7	52.3	19.2	5.94	2.10	3.40	2.26	20.6
1958	4.61	11.6	35.3	71.3	36.4	62.5	70.7	45.8	18.3	13.8	20.0	19.5	34.2
1959	46.6	29.2	28.6	24.4	31.2	54.5	49.7	21.0	22.6	26.3	7.30	6.33	28.9
1960	10.8	16.9	39.3	33.7	58.3	38.4	43.9	28.6	9.76	8.45	3.67	14.6	25.4

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.32	0.63	0.99	1.89	3.56	3.74	4.26	2.16	1.38	0.49	0.53	0.37	20.32
1952	.46	2.61	3.39	4.46	3.75	4.56	2.46	3.58	1.83	.48	1.35	.36	29.29
1953	.29	.43	1.03	4.09	4.28	7.57	6.11	2.82	.56	.53	.35	.25	28.31
1954	.55	1.56	4.08	2.02	2.30	3.42	3.49	3.29	.76	.43	1.21	4.90	28.01
1955	1.83	3.34	4.99	3.06	2.72	3.87	2.23	1.53	.73	.35	1.37	.74	26.56
1956	4.64	4.83	1.72	2.41	4.44	4.59	4.36	2.39	1.23	1.43	.36	.46	32.86
1957	.72	1.45	3.10	2.31	2.36	2.96	4.07	1.54	.46	.17	.27	.18	19.59
1958	.37	.90	2.84	5.74	2.64	5.05	5.52	3.69	1.43	1.12	1.61	1.52	32.43
1959	3.75	2.28	2.31	1.96	2.27	4.39	3.87	1.70	1.76	2.12	.59	.49	27.49
1960	.87	1.32	3.17	2.72	4.40	3.10	3.42	2.31	.76	.68	.30	1.14	24.19

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches		
		Discharge	Date								
1950	-	-	-	-	-	-	-	22.6	-	21.51	-
1951	1201	-	-	-	21.4	1.50	20.32	26.1	26.1	24.84	-
1952	1231	-	-	-	30.8	2.15	29.29	25.8	24.58	32.75	-
1953	1271	-	-	-	29.9	2.09	28.31	34.5	32.75	31.98	-
1954	1331	464	Sept. 12, 1954	-	29.6	2.07	28.01	33.7	31.98	27.59	-
1955	1381	-	-	-	28.0	1.96	26.56	29.1	27.59	-	-
1956	1431	-	-	-	34.5	2.41	32.86	28.3	26.94	18.43	-
1957	1501	-	-	-	20.6	1.44	19.59	19.5	18.43	36.66	-
1958	1551	-	-	-	34.2	2.40	32.43	38.7	24.51	-	-
1959	1621	-	-	-	28.9	2.03	27.49	25.8	-	-	-
1960	1701	-	-	-	25.4	1.78	24.19	-	-	-	-

1195. Willimantic River near South Coventry, Conn.

Location.--Lat 41°45'02", long 72°15'58", on left bank 700 ft upstream from bridge on State Highway 31, 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 1960.

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.--29 years (1931-60), 215 cfs.

Extremes.--1931-60: Maximum discharge, 24,200 cfs Aug. 19, 1955 (gage height, 18.66 ft, from floodmark), from rating curve extended above 3,600 cfs on basis of computation of flow over dam at gage height 12.2 ft and contracted-opening measurement of peak flow; minimum, 2.0 cfs Aug. 21, 22, 1949 (gage height, 1.60 ft); minimum daily, 2.5 cfs Sept. 18, 1949.

Remarks.--Flow regulated by mills and reservoirs upstream. Records of chemical analyses and water temperatures for the water year 1957 are given in WSP 1520.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	56.7	159	298	311	565	425	483	224	132	74.8	94.1	49.5	237
1952	75.6	320	335	430	326	430	388	283	261	99.7	142	82.5	264
1953	57.1	81.5	191	395	415	722	766	403	92.2	56.2	37.1	20.5	269
1954	40.6	119	301	178	218	334	340	306	120	44.9	80.0	378	204
1955	133	285	412	225	229	413	333	196	108	48.9	972	175	295
1956	606	631	183	182	245	357	662	261	221	85.0	34.5	49.2	292
1957	86.8	111	231	214	214	262	369	108	41.6	22.7	16.9	14.5	139
1958	15.5	39.2	190	352	206	416	527	393	130	66.9	72.9	117	212
1959	177	235	224	186	200	443	509	183	124	161	79.8	32.5	218
1960	209	377	404	312	416	280	569	267	192	118	98.3	168	283

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.54	1.46	2.84	2.96	4.86	4.05	4.45	2.13	1.22	0.71	0.90	0.46	26.58
1952	.70	2.94	3.19	4.09	2.90	4.09	3.58	2.70	2.41	.95	1.35	.76	29.66
1953	.54	.75	1.82	3.76	3.57	6.88	7.06	3.84	.85	.53	.35	.19	30.14
1954	1.39	1.10	2.87	1.70	1.87	3.18	3.14	2.92	1.11	.43	.76	5.48	22.95
1955	1.27	2.63	3.92	2.14	1.97	3.93	3.07	1.87	1.00	.47	9.26	1.62	33.15
1956	5.78	5.81	1.74	1.73	2.18	3.40	6.10	2.49	2.04	.81	.33	.45	32.66
1957	.64	1.02	2.20	2.04	1.84	2.50	3.40	1.03	.38	.21	.16	.13	15.55
1958	.15	.36	1.81	3.36	1.77	3.97	4.86	3.75	1.19	.85	.69	1.08	23.84
1959	1.68	2.17	2.13	1.77	1.72	4.22	4.70	1.74	1.14	1.54	.76	.86	24.43
1960	1.99	3.47	3.84	2.96	3.70	2.67	5.24	2.54	1.77	1.12	.94	1.55	31.79

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	185	20.76
1951	1201	2,240	Feb. 8, 1951	5.4	237	1.96	26.58	255	28.57
1952	1231	1,800	Dec. 31, 1951	7.1	264	2.18	29.66	231	25.94
1953	1271	2,300	Mar. 16, 1953	4.5	269	2.22	30.14	280	31.39
1954	1331	3,100	Sept. 12, 1954	3.9	204	1.69	22.95	255	26.41
1955	1381	24,200	Aug. 19, 1955	24	295	2.44	33.15	345	36.66
1956	1431	2,990	Oct. 16, 1955	18	292	2.41	32.86	203	23.39
1957	1501	1,420	Jan. 23, 1957	13	139	1.15	15.55	123	14.01
1958	1551	1,450	Apr. 7, 1958	10	212	1.75	23.84	245	27.50
1959	1621	2,840	Mar. 7, Apr. 3	36	218	1.80	24.43	247	27.75
1960	1701	2,950	Apr. 1, 1960	30	283	2.34	31.79	-	-

1200. Hop River near Columbia, Conn.

Location.--Lat 41°43'39", long 72°18'10", on right bank 1,500 ft downstream from abandoned dam at village of Hop River, 2 miles north of Columbia, Tolland County, and 4.2 miles upstream from mouth.

Drainage area.--76.2 sq mi.

Records available.--September 1932 to September 1960.

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.--28 years (1932-60), 131 cfs.

Extremes.--1932-60: Maximum discharge, 6,450 cfs Sept. 21, 1938 (gage height, 16.25 ft, from floodmarks), by computation of peak flow over dam a quarter of a mile upstream; minimum, 1.4 cfs Oct. 4, 1957 (gage height, 3.00 ft); minimum daily, 2.0 cfs July 26, Aug. 13, 19, 1957; minimum gage height, 2.49 ft Aug. 3, 1936.

Remarks.--Occasional regulation at low flow.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	28.2	89.7	152	195	369	268	278	114	52.0	14.3	22.3	8.70	131
1952	28.6	213	248	269	199	285	265	175	132	31.8	61.2	25.6	161
1953	28.7	51.8	155	324	282	475	444	209	25.6	14.5	8.06	8.84	168
1954	16.6	66.8	187	93.4	133	187	208	188	41.3	15.0	30.3	210	114
1955	78.3	224	288	131	139	264	203	119	46.4	17.8	371	76.3	164
1956	553	417	101	109	194	242	376	145	120	41.7	9.87	24.2	194
1957	34.3	57.9	170	142	153	166	239	453	13.8	4.28	3.50	3.49	85.6
1958	7.81	30.4	171	300	134	297	324	254	52.1	54.3	62.5	91.1	149
1959	160	192	147	119	140	299	314	9.75	75.0	98.7	29.4	27.3	141
1960	118	246	258	196	302	163	300	107	49.4	46.5	31.4	112	160

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.40	1.32	2.29	2.95	5.04	4.08	4.07	1.73	0.76	0.22	0.34	0.13	23.31
1952	.43	3.12	3.75	4.07	2.82	4.31	3.88	2.65	1.93	.48	.93	.37	28.74
1953	.43	.76	2.34	4.90	3.85	7.18	6.50	3.16	.37	.22	.12	.13	29.96
1954	.25	.98	2.82	1.42	1.82	2.82	3.05	2.85	.60	.23	.46	3.08	20.39
1955	1.19	3.28	4.36	1.98	1.90	3.99	2.97	1.80	.68	.27	5.62	1.12	29.16
1956	8.37	6.10	1.53	1.65	2.75	3.87	5.50	2.19	1.75	.63	.16	.35	34.65
1957	.52	.85	2.57	2.14	2.09	2.51	3.50	.68	.20	.06	.05	.05	15.22
1958	.12	.45	2.58	4.54	1.83	4.50	4.74	3.84	.76	.82	.95	1.34	26.47
1959	2.43	2.81	2.22	1.79	1.91	4.52	4.59	1.48	1.10	1.49	.44	.40	25.18
1960	1.79	3.60	3.91	2.96	4.27	2.47	4.40	1.61	.72	.70	.49	1.64	28.55

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	93.0	16.55
1951	1201	1,940	Feb. 8, 1951	5.6	131	1.72	23.31	149	26.60
1952	1231	1,860	Mar. 12, 1952	6.0	161	2.11	28.74	140	24.97
1953	1271	2,180	Jan. 25, 1953	2.9	168	2.20	29.96	171	30.48
1954	1331	2,810	Sept. 11, 1954	2.9	114	1.50	20.38	141	25.16
1955	1381	5,570	Aug. 19, 1955	8.4	164	2.15	29.16	204	36.33
1956	1431	4,820	Oct. 16, 1955	7.0	194	2.55	34.65	126	22.59
1957	1501	1,270	Jan. 23, 1957	2.0	85.6	1.12	15.22	81.2	14.44
1958	1551	1,120	Jan. 23, 1958	3.9	149	1.96	26.47	173	30.78
1959	1621	2,650	Apr. 3, 1959	12	141	1.85	25.18	152	27.02
1960	1701	1,760	Jan. 3, 1960	9.6	160	2.10	28.55	-	-

1205. Safford Brook near Woodstock Valley, Conn.

Location.--Lat 41°55'35", long 72°03'37", on right bank on downstream side of town road bridge, 0.3 mile downstream from Bradford Brook, 0.3 mile upstream from mouth, 1.2 miles southeast of Woodstock Valley, Windham County, and 2 miles southwest of West Woodstock.

Drainage area.--4.08 sq mi.

Records available.--June 1950 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 552.92 ft above mean sea level, datum of 1929.

Average discharge.--10 years (1950-60), 8.97 cfs.

Extremes.--1950-60: Maximum discharge, 1,000 cfs Aug. 19, 1955 (gage height, 6.68 ft), from rating curve extended above 270 cfs on basis of contracted-opening and flow-over-road measurement of peak flow; practically no flow Aug. 17, 1957; minimum gage height, 1.17 ft Sept. 4-12, 1953.

Remarks.--Occasional regulation at extreme low flow from unknown source upstream.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.982	7.83	10.7	13.0	22.7	16.3	14.9	6.87	3.31	2.42	3.32	1.00	8.51
1952	2.14	19.2	17.8	18.9	10.0	18.9	16.0	8.30	8.95	1.52	4.34	1.16	10.6
1953	.744	3.85	11.6	21.8	19.1	30.0	25.2	12.0	1.04	.395	.164	.015	10.5
1954	2.06	9.98	18.6	8.12	10.5	14.1	15.3	12.7	1.72	.598	2.61	15.2	9.26
1955	4.19	14.5	20.1	5.92	10.9	17.4	10.2	4.45	2.38	2.01	22.7	2.43	9.78
1956	24.5	20.2	3.51	7.49	11.4	13.6	31.5	6.18	5.48	1.30	.070	.814	10.5
1957	1.60	3.49	10.2	10.4	8.70	9.35	13.8	1.80	.474	.0565	.0052	.0144	4.97
1958	.099	1.43	11.5	16.6	5.92	20.1	12.3	8.99	2.11	1.23	2.44	5.96	8.18
1959	8.95	11.1	6.85	9.70	9.03	25.5	20.2	3.99	2.93	6.08	.497	.260	8.75
1960	5.54	14.2	13.3	10.1	16.2	11.0	15.6	7.75	2.67	2.60	1.35	5.25	8.78

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.28	2.14	3.02	3.68	5.79	4.61	4.07	1.94	.90	.68	.94	.27	28.32
1952	.61	5.26	5.05	5.34	2.64	5.34	4.37	2.34	2.44	.43	1.22	.32	35.34
1953	.21	1.05	3.27	6.16	4.87	8.47	6.90	3.39	.28	.11	.05	.004	34.76
1954	.58	2.73	5.26	2.29	2.68	3.99	4.18	3.58	.47	.17	.74	4.16	†30.83
1955	1.19	3.96	5.68	1.67	2.78	4.91	2.79	1.26	.65	.57	6.41	.66	32.53
1956	6.92	5.52	.99	2.12	3.01	3.84	8.61	1.74	1.50	.37	.02	.22	34.86
1957	.45	.95	2.88	2.94	2.22	2.64	3.77	.51	.13	.02	.001	.004	16.52
1958	.03	.39	5.25	4.69	1.51	5.68	5.69	2.71	.58	.35	.69	1.63	27.20
1959	2.53	3.03	1.94	2.74	2.30	7.21	5.52	1.13	.80	1.72	.14	.07	29.13
1960	1.68	3.88	3.76	2.85	4.27	3.11	4.28	2.19	.73	.74	.38	1.43	29.30

† Corrected.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	1201	-	-	-	-	-	-	-	-
1951	1201	390	Feb. 7, 1951	0.3	8.51	2.09	28.32	10.2	33.78
1952	1231	360	Nov. 7, 1951	.1	10.6	2.60	35.34	8.69	28.97
1953	1271	340	Jan. 24, 1953	.01	10.5	2.57	34.76	†11.7	38.80
1954	1331	570	Sept. 11, 1954	.02	9.26	2.27	†30.83	9.94	33.09
1955	1381	1,000	Aug. 19, 1955	.4	9.78	2.40	32.53	10.6	35.13
1956	1431	300	Nov. 5, 1955	.02	10.5	2.57	34.86	7.72	25.71
1957	1501	235	Jan. 23, 1957	.001	4.97	1.22	16.52	4.79	15.90
1958	1551	188	Apr. 6, 1958	.02	8.18	2.00	27.20	9.32	31.03
1959	1621	402	Apr. 3, 1959	.1	8.75	2.14	29.13	9.30	30.95
1960	1701	308	Mar. 31, 1960	.1	8.78	2.15	29.30	-	-

† Corrected.

1210. Mount Hope River near Warrenville, Conn.

Location.--Lat 41°50'37", long 72°10'10", on left bank 250 ft downstream from Knowlton Brook, 700 ft upstream from bridge on State Highway 89, 1½ miles south of Warrenville, Windham County, and ¾ miles southwest of Ashford.

Drainage area.--27.8 sq mi (revised).

Records available.--July 1940 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 335.57 ft above mean sea level, datum of 1929.

Average discharge.--20 years (1940-60), 50.8 cfs.

Extremes.--Maximum discharge, 5,590 cfs Aug. 19, 1955 (gage height, 10.41 ft), from rating curve extended above 890 cfs on basis of contracted-opening measurement of peak flow; minimum, 0.15 cfs Aug. 25, 1957; minimum gage height, 0.99 ft Aug. 26-29, 1949. Flood in September 1938 reached a stage of about 14.5 ft, from floodmarks.

Remarks.--Occasional regulation from ponds upstream. Records of chemical analyses for the period October 1958 to September 1959 are given in WSP 1641.

Revisions.--The momentary maximum discharge for the water year 1941, published in WSP 1301, has been revised to 1,090 cfs.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	6.28	39.5	63.0	84.8	152	102	106	45.6	22.2	13.2	20.5	6.58	54.6
1952	14.2	95.8	102	114	73.1	104	107	72.3	81.6	19.2	58.1	15.3	69.6
1953	8.96	20.4	61.5	117	115	195	159	85.6	12.1	5.95	3.02	1.04	65.2
1954	10.7	37.9	89.8	43.3	54.8	81.6	88.6	75.2	20.2	6.96	18.4	118	53.6
1955	36.1	77.1	114	48.7	71.3	104	70.1	35.7	16.5	6.96	148	25.4	62.9
1956	144	131	31.3	42.0	89.1	87.7	166	55.2	52.0	15.9	3.07	8.56	66.8
1957	14.2	25.8	62.2	49.0	52.6	61.2	89.2	19.0	4.99	1.35	2.790	1.49	31.7
1958	3.44	11.7	66.0	123	50.9	115	132	86.9	23.0	18.3	22.4	36.1	57.6
1959	58.2	69.3	52.4	57.5	60.7	121	132	33.8	25.0	32.5	9.69	6.14	54.8
1960	39.8	83.6	94.6	70.1	117	77.6	129	67.0	21.6	21.8	9.54	29.2	63.1

† Corrected.

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.34	1.59	2.61	3.52	5.70	4.21	4.26	1.89	0.89	0.55	0.85	0.26	26.67
1952	.59	3.84	4.22	4.74	2.84	4.31	4.28	3.00	3.27	.80	1.56	.62	34.09
1953	.37	.82	2.55	4.86	4.32	6.09	6.36	3.55	.49	.25	.13	.04	31.83
1954	.44	1.52	3.72	1.80	2.05	3.39	3.55	3.12	.81	.29	.76	4.72	26.17
1955	1.50	3.10	4.73	2.02	2.67	4.30	2.81	1.48	.66	.29	6.14	1.02	30.72
1956	5.99	5.26	1.30	1.74	2.64	3.64	6.66	2.29	2.09	.66	.13	.34	32.74
1957	.59	1.04	2.58	2.03	1.98	2.54	3.58	.79	.20	.06	.03	.06	15.48
1958	.14	.47	2.74	5.11	1.90	4.78	5.29	5.60	.92	.76	.93	1.45	28.09
1959	2.41	2.78	2.17	2.39	2.27	5.01	5.32	1.40	1.00	1.35	.46	.25	26.75
1960	1.65	3.35	3.93	2.91	4.53	3.22	5.17	2.78	.87	.91	.46	1.17	30.89

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	44.6	21.79
1951	1201	1,610	Feb. 7, 1951	2.8	54.6	1.96	26.67	63.1	30.78
1952	1231	1,190	Dec. 21, 1951	2.8	69.6	2.50	34.09	59.6	29.18
1953	1271	990	Mar. 16, 1953	.45	65.2	2.34	31.83	69.2	33.82
1954	1331	3,250	Sept. 11, 1954	.7	53.6	1.93	26.17	61.0	29.87
1955	1381	5,590	Aug. 19, 1955	.7	62.9	2.26	30.72	69.5	33.94
1956	1431	920	Nov. 5, 1955	2.0	66.8	2.40	32.74	49.8	24.40
1957	1501	550	Jan. 25, 1957	.2	31.7	1.14	15.48	29.9	14.62
1958	1551	528	Apr. 6, 1958	1.5	57.6	2.07	28.09	65.8	32.10
1959	1621	1,690	Apr. 3, 1959	2.2	54.8	1.97	26.75	58.0	26.32
1960	1701	1,140	Mar. 31, 1960	2.1	63.1	2.27	30.89	-	-

1215. Mansfield Hollow Reservoir at Mansfield Hollow, Conn.

Location--Lat 41°45'22", long 72°10'57", on Natchaug River at Mansfield Hollow, Tolland County, 0.2 mile downstream from Mount Hope River and 3½ miles northeast of Willimantic, Windham County.

Drainage area--159 sq mi.

Records available--March 1952 to September 1960.

Remarks--Reservoir completed in March 1952 for flood control. Usable capacity, 2,260,000,000 cu ft.

Cooperation--Records furnished by Corps of Engineers.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1952	-	-	-	-	-	1.8	7.9	1.5	1.0	0.2	0.4	0.4
1953	0.3	0.6	*0.9	7.4	2.7	107.1	3.1	.9	.3	.3	0	0
1954	1.5	1.3	1.2	1.5	2.7	1.9	101.6	1.2	.6	.3	43.9	1.0
1955	22.9	6.4	19.8	.6	2.4	2.4	6.9	1.0	.6	.3	48.8	5.5
1956	50.2	1.9	.6	2.1	2.4	3.1	20.6	20.6	.4	.3	.3	.5
1957	.4	.7	1.5	1.9	11.5	1.6	1.0	.4	.3	.1	0	0
1958	.2	.8	2.7	56.8	22.9	12.9	32.0	1.2	.4	2.4	.5	1.8
1959	1.3	36.0	.9	1.0	1.0	10.4	4.5	.5	.5	.5	1.5	.3
1960	1.3	9.9	2.2	1.9	5.2	107.2	1.3	1.2	.4	12.9	.4	.8

* Not previously published; omitted from table in WSP 1271.

1220. Natchaug River at Willimantic, Conn.

Location--Lat 41°43'14", long 72°11'52", on right bank 200 ft downstream from New York, New Haven and Hartford Railroad bridge, 500 ft upstream from bridge on U.S. Highway 6, 1 mile northeast of Willimantic, Windham County, 1.7 miles upstream from mouth, and 4 miles downstream from Mount Hope River.

Drainage area--169 sq mi.

Records available--October 1930 to September 1960.

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--30 years (1930-60), 305 cfs (adjusted for storage).

Extremes--1930-60: 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--City of Willimantic diverts an average of about 1,000,000 gal of water a day for municipal supply from reservoir 2 miles upstream from station. Operation of water wheels at this location causes diurnal fluctuation at low flow. Since March 1952, flow regulated by Mansfield Hollow Reservoir 3 miles upstream from station. Runoff adjusted for change in contents in Mansfield Hollow Reservoir (see p. 165). Records of chemical analyses for the water year 1958 are given in WSP 1571.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	52.2	198	342	444	856	580	703	298	153	81.3	110	41.8	316
1952	83.7	554	541	632	460	632	596	422	455	107	201	90.3	397
1953	62.5	119	331	675	700	1,050	1,029	494	90.2	47.4	28.2	13.9	385
1954	58.6	218	528	236	327	529	499	531	130	53.6	84.2	571	311
1955	181	478	681	327	356	596	404	250	126	74.7	835	258	380
1956	880	844	197	261	402	518	955	348	279	102	27.3	53.8	404
1957	89.3	147	356	301	308	389	524	119	35.3	11.8	10.3	14.7	191
1958	19.7	69.4	365	604	320	636	776	524	126	92.2	119	175	319
1959	297	358	346	260	321	655	808	222	147	213	61.0	52.9	311
1960	219	472	575	448	649	334	853	388	145	131	94.1	226	376

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.36	1.30	2.33	3.03	5.16	3.95	4.94	2.03	1.01	0.55	0.75	0.28	25.39
1952	.57	3.68	3.69	4.31	2.93	4.32	3.95	2.87	3.00	.73	1.37	.60	32.00
1953	.45	.79	2.26	4.62	4.30	7.42	6.53	3.37	.59	.32	.18	.09	30.91
1954	.40	1.44	3.60	1.61	2.01	3.61	3.55	3.37	.86	.37	.55	3.66	25.03
1955	1.29	3.11	4.68	2.18	2.20	4.07	2.68	1.56	.83	.51	5.82	1.60	30.53
1956	6.12	5.44	1.34	1.79	2.57	3.54	6.35	2.38	1.78	.70	.18	.36	32.56
1957	.61	.97	2.43	2.05	1.93	2.63	3.46	.81	.23	.08	.07	.10	15.37
1958	.13	.46	2.50	4.25	1.88	4.31	5.17	3.49	.83	.63	.80	1.18	25.61
1959	2.03	2.46	2.27	1.78	1.98	4.48	5.32	1.50	.97	1.45	.42	.35	25.01
1960	1.50	3.14	3.90	3.06	4.15	2.54	5.36	2.65	.96	.93	.61	1.50	30.30

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed	Adjusted	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	247	-	19.80
1951	1201	3,090	Feb. 8, 1951	5.1	316	-	1.87	25.39	365	-	29.32
1952	1231	2,950	June 2, 1952	3.9	397	397	2.35	32.00	342	342	27.65
1953	1271	2,880	Mar. 18, 1953	5.0	385	385	2.28	30.91	409	409	32.87
1954	1331	2,150	Sept. 15, 1954	5.9	311	311	1.84	25.03	356	357	28.67
1955	1381	3,250	Aug. 27, 1955	6.9	380	380	2.25	30.53	428	427	34.35
1956	1431	3,230	Oct. 19, 1955	6.0	404	404	2.39	32.56	294	294	23.67
1957	1501	1,440	Apr. 7, 1957	4.0	191	191	1.13	15.37	180	180	14.45
1958	1551	1,990	Jan. 30, 1958	6.0	319	319	1.89	25.61	365	385	29.28
1959	1621	-	-	3.5	311	311	1.84	25.01	333	333	26.79
1960	1701	2,210	Apr. 2, 1960	4.0	376	376	2.22	30.30	-	-	-

1225. Shetucket River near Willimantic, Conn.

Location.--Lat 41°42'01", long 72°10'57", on right bank at downstream side of Bingham Bridge, 500 ft upstream from New York, New Haven and Hartford Railroad bridge, 500 ft downstream from Potash Brook, 1.3 miles downstream from confluence of Willimantic and Natchaug Rivers, 1½ miles southeast of Willimantic, Windham County, and at mile 16.5.

Drainage area.--401 sq mi. October 1919 to September 1921 and October 1928 to September 1933, 406 sq mi.

Records available.--April 1904 to December 1905, October 1919 to September 1921, September 1928 to September 1960. Published as "at South Windham" October 1919 to September 1921, September 1928 to September 1933. Monthly discharge only for some periods, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 131.40 ft above mean sea level, datum of 1929 (levels by Corps of Engineers). Apr. 4, 1904, to Dec. 31, 1905, chain gage at same site and about the same datum. October 1919 to Sept. 30, 1921, and Sept. 1, 1928, to Sept. 30, 1933, water-stage recorder at site 1½ miles downstream at different datum.

Average discharge.--35 years (1904-5, 1919-21, 1928-60), 711 cfs (adjusted for storage).

Extremes.--1904-5, 1919-21, 1928-60: 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.--Flow regulated by mills on Willimantic River, on Natchaug River by pumping for municipal supply of city of Willimantic, and, since March 1952, by Mansfield Hollow Reservoir. Runoff adjusted for change in contents in Mansfield Hollow Reservoir (see p. 165). Records of chemical analyses and water temperatures for the water year 1957 are given in WSP 1520.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	147	498	846	1,050	1,979	1,405	1,632	699	380	190	249	117	757
1952	196	1,139	1,165	1,432	1,055	1,422	1,329	950	940	268	444	223	879
1953	173	287	737	1,485	1,468	2,469	2,486	1,210	241	140	91.1	54.6	900
1954	128	452	1,104	564	737	1,122	1,159	1,094	320	140	202	1,265	689
1955	421	1,013	1,425	719	778	1,326	982	620	318	174	2,114	584	875
1956	2,246	2,156	567	613	951	1,238	2,236	826	687	263	86.8	146	998
1957	207	347	816	719	771	915	1,261	319	110	48.6	44.5	45.0	465
1958	49.4	158	815	1,357	750	1,449	1,738	1,257	349	273	305	414	744
1959	686	841	774	620	746	1,514	1,725	575	391	512	196	199	731
1960	586	1,151	1,325	1,042	1,427	835	1,836	810	401	310	248	536	871

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.42	1.38	2.43	3.02	5.14	4.04	4.54	2.01	1.06	0.55	0.72	0.33	25.64
1952	.56	3.17	3.36	4.12	2.84	4.09	3.70	2.72	2.61	.77	1.28	.62	29.84
1953	.50	.80	2.12	4.28	3.81	7.21	6.81	3.47	.67	.40	.26	.15	30.48
1954	.57	1.26	3.17	1.63	1.92	5.23	3.34	3.05	.89	.40	.63	3.47	23.54
1955	1.23	2.80	4.12	2.05	2.02	3.82	2.73	1.78	.88	.50	6.13	1.57	29.63
1956	6.50	5.95	1.63	1.76	2.47	3.56	6.24	2.38	1.89	.76	.25	.41	33.80
1957	.59	.96	2.34	2.06	2.01	2.62	3.50	.92	.31	.14	.13	.12	15.70
1958	.14	.44	2.34	3.95	1.92	4.17	4.85	3.58	.97	.79	.87	1.15	25.17
1959	1.97	2.38	2.19	1.79	1.94	4.37	4.80	1.65	1.09	1.48	.56	.55	24.77
1960	1.68	3.21	3.80	3.00	3.84	2.51	5.00	2.33	1.12	.90	.70	1.50	29.59

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30										Calendar year			
		Observed					Adjusted					Observed		Adjusted	
		Momentary		maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches		Mean	Mean	Runoff in inches	
		Discharge	Date												
1950	-	-	-	-	-	-	-	-	-	-	-	574	-	19.42	-
1951	1201	7,010	Feb. 8, 1951	51	757	-	-	-	1.89	25.64	841	-	-	28.50	-
1952	1231	6,080	Dec. 22, 1951	38	879	879	2.19	29.64	771	771	26.17	771	771	26.17	-
1953	1271	6,320	Jan. 25, Mar. 16	29	900	900	2.24	30.48	941	941	31.86	941	941	31.86	-
1954	1331	5,280	Sept. 12, 1954	27	689	689	1.72	23.34	787	788	26.69	787	788	26.69	-
1955	1381	21,300	Aug. 19, 1955	71	875	875	2.18	29.63	1,051	1,050	35.56	1,051	1,050	35.56	-
1956	1431	9,580	Oct. 16, 1955	57	998	998	2.49	33.80	698	698	23.62	698	698	23.62	-
1957	1501	4,030	Apr. 6, 1957	31	465	465	1.16	15.70	436	436	14.73	436	436	14.73	-
1958	1551	4,050	Apr. 7, 1958	29	744	744	1.86	25.17	850	850	28.79	850	850	28.79	-
1959	1621	5,490	Mar. 7, 1959	79	731	731	1.82	24.77	795	795	26.92	795	795	26.92	-
1960	1701	6,140	Apr. 1, 1960	75	871	871	2.17	29.59	-	-	-	-	-	-	-

1230. Little River near Hanover, Conn.

Location.--Lat 41°40'18", long 72°03'10", in Windham County, on left bank 800 ft upstream from bridge on town road, 0.7 mile downstream from Peck Brook, 2.3 miles northeast of Hanover, New London County, and 6.5 miles upstream from mouth.

Drainage area.--29.1 sq mi (revised).

Records available.--July 1951 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 221.19 ft above mean sea level, datum of 1929.

Average discharge.--9 years (1951-60), 64.1 cfs.

Extremes.--1951-60: Maximum discharge, 1,400 cfs Aug. 19, 1955 (gage height, 6.48 ft), from rating curve extended above 820 cfs by logarithmic plotting; minimum, 3.2 cfs Aug. 16, 1959 (gage height, 1.00 ft), caused by a minor and temporary regulation from an unknown source upstream.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	-	-	-	-	-	-	-	-	-	-	21.5	10.9	-
1952	15.6	120	104	111	88.1	122	90.7	75.3	74.8	19.0	25.0	13.7	71.5
1953	14.7	20.4	48.0	120	120	206	173	95.2	25.5	17.3	12.4	7.64	71.5
1954	13.6	41.0	89.6	48.4	62.6	91.5	109	80.5	30.5	15.8	16.9	77.6	56.2
1955	32.7	80.0	120	62.9	82.5	110	77.4	63.6	45.9	21.9	116	48.4	71.8
1956	186	147	41.5	56.5	94.7	106	155	58.5	49.4	21.7	8.54	12.1	77.8
1957	16.1	25.2	63.7	53.9	59.8	71.8	105	26.8	12.6	5.85	7.05	6.38	37.7
1958	8.35	14.8	56.6	136	59.0	127	163	105	26.9	26.4	32.7	30.4	65.6
1959	58.5	62.9	53.5	52.3	81.0	149	146	48.9	28.6	32.7	9.21	7.44	60.7
1960	40.1	75.3	113	84.7	112	69.0	112	71.1	21.8	23.2	16.5	33.8	64.7

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	-	-	-	-	-	-	-	-	-	-	0.65	0.42	-
1952	0.62	4.62	4.12	4.40	3.27	4.82	3.48	2.98	2.87	0.75	.99	.53	33.45
1953	.58	.78	1.90	4.76	4.28	8.18	6.63	3.77	.98	.69	.49	.29	33.33
1954	.54	1.57	3.51	1.92	2.24	3.63	4.18	3.19	1.17	.63	.67	2.98	26.23
1955	1.30	3.07	4.75	2.49	2.95	4.37	2.97	2.52	1.75	.87	4.60	1.86	33.50
1956	7.36	5.63	1.64	2.24	3.51	4.19	5.95	2.31	1.90	.86	.34	.46	36.89
1957	.64	.96	2.52	2.14	2.14	2.84	4.02	1.06	1.48	.23	.28	.24	17.55
1958	.33	.57	2.24	5.38	2.11	5.02	6.26	4.15	1.03	1.05	1.30	1.17	30.61
1959	2.32	2.41	2.12	2.07	2.90	5.90	5.60	1.94	1.10	1.29	.36	.29	28.30
1960	1.59	2.89	4.47	3.36	4.17	2.73	4.31	2.82	.84	.92	.65	1.30	30.05

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	-	-
1951	1231	-	-	-	-	-	-	-	-
1952	1231	865	Dec. 21, 1951	7.9	71.5	2.46	33.45	58.5	27.35
1953	1271	830	Jan. 25, 1953	6.9	71.5	2.46	33.33	78.5	35.69
1954	1331	935	Sept. 12, 1954	6.9	56.2	1.93	26.23	63.7	29.73
1955	1381	1,400	Aug. 19, 1955	9.8	71.8	2.47	33.50	83.6	39.01
1956	1431	1,220	Oct. 16, 1955	6.7	77.8	2.67	36.39	55.3	25.88
1957	1501	545	Apr. 6, 1957	4.1	37.7	1.30	17.55	35.5	16.57
1958	1551	500	Jan. 26, 1958	5.4	65.6	2.25	30.61	73.5	34.32
1959	1621	1,240	Mar. 6, 1959	5.3	60.7	2.09	28.30	65.2	30.40
1960	1701	590	Dec. 13, Jan. 3	5.9	64.2	2.21	30.05	-	-

1235. Quinebaug River at Westville, Mass.

Location.--Lat 42°04'23", long 72°04'28", on right bank 350 ft upstream from highway bridge, 0.45 mile downstream from Breakneck Brook, 0.6 mile west of Westville, Worcester County, and 1 $\frac{1}{2}$ miles west of Southbridge.

Drainage area.--93.8 sq mi.

Records available.--July 1939 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 537.66 ft above mean sea level, unadjusted (levels by Corps of Engineers).

Average discharge.--21 years (1939-60), 166 cfs (adjusted for storage).

Extremes.--1939-60: Maximum discharge, 17,500 cfs Aug. 19, 1955 (gage height, 16.11 ft, from floodmarks), from rating curve extended above 1,300 cfs on basis of slope-area measurement of peak flow; minimum daily, 2.2 cfs June 26, 1949.

Flood in September 1938 reached a discharge of 8,400 cfs, by slope-area measurement.

Remarks.--Medium and low flows regulated by mills and reservoirs above station. Flow affected by East Brimfield Reservoir, constructed by Corps of Engineers during 1959 and 1960.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	45.5	99.3	200	222	439	313	385	145	111	54.8	94.5	62.C	179
1952	71.5	283	273	355	260	318	285	217	266	60.2	85.8	78.5	212
1953	51.4	48.1	122	297	369	500	600	312	77.3	41.0	28.8	19.C	204
1954	36.6	82.4	240	141	174	268	283	270	99.6	55.0	72.2	359	173
1955	145	268	351	202	152	309	244	167	81.8	44.5	1.09	160	271
1956	415	461	131	171	167	262	611	250	133	67.2	21.9	34.C	227
1957	37.1	68.0	152	181	170	248	329	101	32.5	15.3	8.90	7.47	112
1958	10.1	33.1	205	261	170	352	500	314	80.5	63.4	51.1	59.6	175
1959	91.8	188	213	149	132	532	412	163	109	106	29.5	54.6	165
1960	140	263	324	233	272	183	497	288	125	61.0	64.3	137	210

Monthly and yearly runoff, in inches (adjusted) $\frac{a}{b}$

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.56	1.18	2.45	2.73	4.87	3.85	4.58	1.78	1.32	0.67	1.16	0.74	25.89
1952	.88	3.37	3.36	4.37	2.99	3.91	3.39	2.67	3.17	.74	1.06	.54	30.85
1953	.63	.57	1.50	3.65	4.10	6.15	7.13	3.63	.92	.50	.35	.23	29.56
1954	.45	.98	2.94	1.73	1.93	3.30	3.37	3.32	1.18	.68	.89	4.26	25.03
1955	1.79	3.19	4.31	2.48	1.69	3.79	2.91	2.05	.97	.55	13.63	1.90	39.26
1956	5.11	5.49	1.61	2.10	1.92	3.23	7.27	3.07	1.58	.83	.27	.40	32.88
1957	.46	.81	1.86	2.23	1.88	3.05	3.91	1.24	.39	.19	.11	.09	16.22
1958	.12	.39	2.52	3.21	1.89	4.33	5.94	3.86	.96	.78	.63	.71	25.34
1959	1.13	2.23	2.62	1.83	1.47	4.08	4.90	2.00	1.30	1.31	.36	.65	23.88
1960	1.72	3.13	3.98	2.86	3.13	2.25	5.92	2.80	1.48	.75	.82	1.69	30.53

$\frac{a}{b}$ Adjusted for change in contents in East Brimfield Reservoir from August 1960.

Note.--Monthly runoff may not represent natural flow because of regulation by small reservoirs.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year			
		Observed				Adjusted $\frac{a}{b}$			Observed	Adjusted $\frac{a}{b}$		
		Momentary		Maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date									
1950	-	-	-	-	-	-	-	-	-	129	-	18.72
1951	1201	1,000	Apr. 4, 1951	17	179	-	1.91	25.89	203	-	29.31	-
1952	1231	827	June 2, 3, 1952	22	212	-	2.26	30.85	179	-	25.94	-
1953	1271	1,220	Mar. 17, 1953	12	204	-	2.17	29.56	216	-	31.23	-
1954	1331	1,250	Sept. 12, 1954	9.0	173	-	1.84	25.03	207	-	29.95	-
1955	1381	17,500	Aug. 19, 1955	26	271	-	2.89	39.26	292	-	42.18	-
1956	1431	1,510	Oct. 17, 1955	11	227	-	2.42	32.88	164	-	23.80	-
1957	1501	668	Apr. 7, 1957	4.2	112	-	1.19	16.22	112	-	16.12	-
1958	1551	1,040	Apr. 7, 8, 1958	5.7	175	-	1.87	25.34	195	-	28.29	-
1959	1621	1,160	Apr. 3, 4, 1959	17	165	-	1.76	23.88	185	-	26.73	-
1960	1701	1,130	Apr. 2, 1960	27	210	213	2.24	30.43	-	-	-	-

$\frac{a}{b}$ Adjusted for change in contents in East Brimfield Reservoir from August 1960.

1240. Quinebaug River at Quinebaug, Conn.

Location.--Lat 42°01'30", long 71°57'22", on right bank at Quinebaug, Winham County, 500 ft upstream from bridge on State Highway 197, 0.25 mile downstream from Massachusetts-Connecticut State line, 7.8 miles upstream from French R'ver, and at mile 46.

Drainage area.--157 sq mi.

Records available.--September 1931 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 341.52 ft above mean sea level, datum of 1929.

Average discharge.--29 years (1931-60), 279 cfs (adjusted for storage).

Extremes.--1931-60: Maximum discharge, 49,300 cfs Aug. 19, 1955 (gage height, 18.96 ft, from floodmarks), from rating curve extended above 5,100 cfs on basis of slope-area measurement of peak flow; minimum, about 1 cfs Sept. 9, 1943, July 12, 1949, Sept. 17, 18, 1950, July 9, 1951, Sept. 4, Oct. 29, 1956; minimum daily, about 1 cfs Sept. 4, 1956; minimum gage height, 1.74 ft Aug. 20, 1940.

Remarks.--Medium and low flow regulated by mills and reservoirs upstream. Flow affected by East Brimfield Reservoir, constructed by Corps of Engineers during 1959 and 1960. Runoff adjusted for change in contents in East Brimfield Reservoir. Records of chemical analyses and water temperatures for the period October 1959 to September 1960 are given in WSP 1741.

Revisions.--The momentary maximum discharge for the water year 1938 published in WSP 1301 has been revised to 19,000 cfs.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	59.5	179	366	414	770	540	606	278	171	73.5	134	80.8	303
1952	127	528	448	588	456	559	503	354	434	89.0	131	104	359
1953	69.1	75.3	249	533	647	844	944	465	110	56.6	37.4	26.4	336
1954	52.2	183	482	253	311	473	469	456	163	75.1	116	685	309
1955	256	481	602	345	279	530	391	262	124	66.0	97.1	242	466
1956	701	711	195	261	269	419	1,001	357	200	94.5	26.3	38.1	357
1957	46.4	91.0	241	291	268	393	531	131	45.9	17.8	12.9	12.2	173
1958	16.3	60.6	333	450	260	588	799	453	97.9	72.7	71.2	99.5	275
1959	156	281	315	220	203	566	683	234	153	192	46.4	67.7	260
1960	202	430	550	357	457	294	792	343	174	88.5	90.6	196	330

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.44	1.27	2.69	3.04	5.10	3.97	4.31	2.04	1.22	0.54	0.98	0.57	26.17
1952	.93	3.75	3.29	4.32	3.13	4.10	3.57	2.59	3.08	.65	.96	.74	31.11
1953	.51	.54	1.85	3.91	4.29	6.20	6.70	3.41	.78	.42	.27	.19	29.05
1954	.36	1.29	3.54	1.86	2.06	3.47	3.34	3.34	1.16	.55	.85	4.85	26.69
1955	1.88	3.41	4.42	2.54	1.85	3.90	2.78	1.92	.88	.48	14.53	1.72	40.31
1956	5.14	5.05	1.43	1.91	1.98	3.08	7.12	2.62	1.42	.69	.19	.27	30.90
1957	.34	.65	1.78	2.13	1.78	2.88	3.77	.96	.33	.13	.08	.09	14.93
1958	.12	.43	2.44	3.31	1.73	4.32	5.68	3.33	.70	.53	.52	.71	23.82
1959	1.15	2.00	2.31	1.61	1.35	4.16	4.85	1.72	1.09	1.41	.34	.48	22.47
1960	1.48	3.05	4.03	2.61	3.13	2.16	5.62	2.51	1.23	.65	.68	1.43	28.58

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year					
		Observed			Adjusted			Observed		Adjusted			
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches		
		Discharge	Date										
1950	-	-	-	-	-	-	-	-	-	-	218	-	18.80
1951	1201	2,940	Feb. 7, 1951	9	303	-	1.93	26.17	344	-	29.74	-	29.74
1952	1231	1,990	June 2, 1952	6	359	-	2.29	31.11	300	-	26.02	-	26.02
1953	1271	2,240	Mar. 16, 1953	8	336	-	2.14	29.05	363	-	31.38	-	31.38
1954	1331	5,990	Sept. 11, 1954	4	309	-	1.97	26.69	361	-	31.19	-	31.19
1955	1381	49,300	Aug. 19, 1955	10	466	-	2.97	40.31	488	-	42.22	-	42.22
1956	1431	2,830	Oct. 17, 1955	1	357	-	2.27	30.90	254	-	22.05	-	22.05
1957	1501	1,410	Jan. 23, 1957	5	175	-	1.10	14.93	175	-	15.15	-	15.15
1958	1551	1,970	Apr. 7, 1958	4	275	-	1.75	23.82	304	-	26.29	-	26.29
1959	1621	2,940	Apr. 3, 1959	21	260	-	1.66	22.47	296	-	25.57	-	25.57
1960	1701	2,170	Mar. 31, 1960	4.6	330	333	2.12	28.58	-	-	-	-	-

1243. Hodges Village Reservoir at Hodges Village, Mass.

Location.--Lat 42°07'09", long 71°52'55", on French River at Hodges Village, Worcester County, 0.8 mile west of Oxford.

Drainage area.--31.1 sq mi.

Records available.--February to September 1960.

Gage.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

Remarks.--Reservoir completed in February 1960 for flood control, has usable capacity of 577,000,000 cu ft.

Cooperation.--Records furnished by Corps of Engineers.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1960	-	-	-	-	0.9	35.9	0.5	0.3	0.1	0.4	0.2	0.2

1244. Buffumville Reservoir at Buffumville, Mass.

Location.--Lat 42°06'57", long 71°54'29", on Little River at Buffumville, Worcester County, 2½ miles west of Oxford.

Drainage area.--26.5 sq mi.

Records available.--September 1958 to September 1960.

Gage.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

Remarks.--Reservoir completed in September 1958 for flood control, has usable capacity of 492,000,000 cu ft.

Cooperation.--Records furnished by Corps of Engineers.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1958	-	-	-	-	-	-	-	-	-	-	-	6.1
1959	5.5	11.8	4.1	4.4	4.1	67.1	68.0	59.2	61.0	61.0	62.7	56.6
1960	63.6	39.9	65.3	62.7	68.8	99.8	73.2	62.7	58.4	67.1	62.7	19.6

1245. Little River at Buffumville, Mass.

Location.--Lat 42°06'57", long 71°53'26", on left bank 0.6 mile upstream from mouth, 0.8 mile east of Buffumville, Worcester County, 1.1 miles downstream from Buffumville Reservoir, and 1.5 miles west of Oxford.

Drainage area.--27.7 sq mi.

Records available.--July 1939 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 457.00 ft above mean sea level, unadjusted (levels by Corps of Engineers).

Average discharge.--21 years (1939-60), 48.5 cfs (adjusted for storage).

Extremes.--1939-60: Maximum discharge, 8,340 cfs Aug. 19, 1955 (gage height, 15.53 ft), from rating curve extended above 1,200 cfs on basis of computation of peak flow over dam; minimum, 0.1 cfs Sept. 25, 26, 1957; minimum daily, 0.1 cfs Sept. 25, 1957.

Remarks.--Flow regulated by Buffumville Reservoir since 1958 (see p. 171). Prior to 1958, flow regulated by mill above station.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	5.96	28.6	49.5	69.7	135	92.4	107	47.2	31.9	7.05	17.6	11.6	49.7
1952	14.4	96.8	85.9	112	82.0	103	87.8	60.7	66.5	12.4	25.5	9.95	62.9
1953	16.3	28.6	36.0	79.2	119	170	174	88.3	18.5	9.49	5.60	4.51	62.1
1954	7.82	27.0	86.1	39.5	55.9	83.3	86.7	84.8	22.6	11.2	14.5	168	57.1
1955	43.4	95.2	118	59.2	50.0	101	67.7	39.7	17.6	9.05	329	49.5	82.2
1956	117	138	41.7	62.0	67.6	66.4	207	59.2	44.2	15.2	4.83	12.4	69.3
1957	19.4	13.5	28.2	41.9	42.4	85.5	83.6	19.4	14.3	6.34	2.66	49	27.9
1958	4.25	5.30	62.4	94.1	56.6	135	170	82.7	16.5	10.4	18.2	23.8	56.7
1959	43.5	40.9	49.6	44.4	40.1	86.6	129	38.1	25.8	67.3	11.6	13.6	49.2
1960	32.0	96.0	74.0	65.0	91.2	55.3	151	64.9	30.4	10.7	15.3	49.2	60.9

Monthly and yearly runoff, in inches (adjusted) ^a/_a

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.25	1.15	2.06	2.90	5.09	3.94	4.32	1.96	1.28	0.29	0.73	0.47	24.34
1952	.60	3.90	3.58	4.65	3.19	4.27	3.54	2.53	2.68	.52	1.06	.40	30.92
1953	.69	1.15	1.50	3.29	4.49	7.06	7.02	3.87	.75	.39	.25	.19	30.41
1954	.33	1.09	3.39	1.65	2.10	3.47	3.49	3.53	.91	.47	.60	6.77	28.00
1955	1.81	3.83	4.90	2.46	1.88	4.22	2.73	1.65	.71	.39	13.70	1.99	40.26
1956	4.87	5.57	1.74	2.58	2.63	2.76	8.33	2.46	1.78	.63	.20	.50	34.05
1957	.76	.54	1.17	1.74	1.60	2.73	3.37	.81	.58	.26	.11	.02	13.69
1958	.18	.21	2.60	3.92	2.13	5.62	6.86	3.44	.66	.43	.76	.96	27.77
1959	1.80	1.74	1.94	1.85	1.50	4.58	5.20	1.45	1.07	2.80	.51	.45	24.89
1960	1.44	3.50	3.47	2.67	3.65	2.78	5.66	2.54	1.16	.59	.57	1.31	29.33

^a Adjusted for change in contents in Buffumville Reservoir since October 1958.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted ^a / _a			Observed	Adjusted ^a / _a	
		Momentary maximum		Minimum	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date	day							
1950	-	-	-	-	-	-	-	-	-	-	-
1951	1201	520	Feb. 8, 1951	0.9	49.7	-	1.79	24.34	59.1	-	18.08
1952	1251	356	June 22, 1952	1.1	62.9	-	2.27	30.92	53.2	-	26.17
1953	1271	518	Mar. 16, 1953	.7	62.1	-	2.24	30.41	65.5	-	32.09
1954	1331	1,220	Sept. 12, 1954	.8	57.1	-	2.06	28.00	68.4	-	35.53
1955	1381	8,340	Aug. 19, 1955	1.0	82.2	-	2.07	40.26	85.5	-	41.90
1956	1431	518	Apr. 17, 1956	3.1	69.3	-	2.50	34.05	45.6	-	24.34
1957	1501	280	Jan. 24, 1957	.1	27.9	-	1.01	13.69	28.0	-	14.21
1958	1551	396	Apr. 7, 1958	.5	56.7	-	2.05	27.77	61.8	61.8	30.26
1959	1621	429	Apr. 7, 1959	3.8	49.2	50.8	1.83	24.89	54.9	56.8	27.82
1960	1701	382	Apr. 6, 1960	3.6	60.9	59.7	2.16	29.33	-	-	-

^a Adjusted for change in contents in Buffumville Reservoir since October 1958.

1250. French River at Webster, Mass.

Location.--Lat 42°03'03", long 71°53'08", on right bank 50 ft upstream from Pleasant Street Bridge at Webster, Worcester County, and 1.1 miles upstream from Potash Brook.

Drainage area.--85.3 sq mi.

Records available.--December 1948 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 406.74 ft above mean sea level, datum of 1929.

Average discharge.--11 years (1949-60), 173 cfs (adjusted for storage in flood-control reservoirs).

Extremes.--1948-60: 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.--Flow regulated by mills, by Lake Chaubunagungamaug (estimated usable capacity, 207,000,000 cu ft) and smaller reservoirs above station, and by Buffumville Reservoir on Little River since 1958 (see p. 171). Flow affected by Hodges Village Reservoir, constructed by Corps of Engineers during 1959 and 1960 (see p. 171).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	36.1	86.1	127	205	355	253	308	143	123	54.7	62.7	53.9	149
1952	47.9	268	257	323	289	309	267	198	218	43.6	78.0	51.3	194
1953	45.6	63.1	107	213	311	476	566	267	70.1	46.8	31.8	27.9	184
1954	35.1	87.9	227	130	170	252	264	267	88.4	52.8	71.0	455	175
1955	140	264	348	210	155	298	210	130	58.7	39.7	712	167	229
1956	365	442	171	237	222	266	608	183	140	67.8	34.3	45.8	231
1957	61.0	63.4	107	135	131	243	77.4	48.0	31.1	25.3	28.2	95.7	30.35
1958	23.8	34.0	157	258	187	587	516	255	71.5	58.0	71.2	93.2	176
1959	131	136	190	160	133	332	405	126	87.1	229	48.2	62.5	170
1960	117	246	302	*204	*273	*186	491	*206	*139	*60.7	*79.1	*139	*203

* Revised.

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.49	1.13	1.72	2.77	4.34	3.42	4.03	1.93	1.60	0.74	0.85	0.72	25.72
1952	.65	3.50	3.48	4.36	3.41	4.18	3.50	2.68	2.86	.59	1.05	.67	30.35
1953	.62	1.82	1.44	2.88	3.80	6.43	7.40	3.60	.92	.63	.43	.39	29.33
1954	.47	1.15	3.06	1.76	2.07	3.41	3.46	3.61	1.16	.71	.96	5.93	27.78
1955	1.89	3.46	4.71	2.83	1.89	4.03	2.75	1.75	.77	.54	9.62	2.19	36.43
1956	4.93	5.78	2.31	3.20	2.81	3.60	7.95	2.47	1.82	.92	.46	.60	36.85
1957	.82	.83	1.44	1.82	1.60	2.73	3.18	1.05	.63	.42	.34	.37	15.23
1958	.32	1.44	2.12	3.48	2.28	5.23	6.75	3.44	.94	.78	.96	1.22	27.96
1959	1.77	1.80	2.53	2.17	1.62	4.81	5.30	1.66	1.15	3.09	.66	.79	27.34
1960	1.62	3.10	4.20	*2.75	*3.48	*2.85	6.10	*2.73	*1.79	*.87	*1.05	*1.60	*32.14

* Revised.

a Adjusted for change in contents in Buffumville Reservoir from October 1958 and in Hodges Village Reservoir from March 1960. Figures published in WSP 1621 not adjusted for change in contents in Buffumville Reservoir.

Note.--Monthly runoff may not represent natural flow because of regulation by Lake Chaubunagungamaug and smaller reservoirs.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30									Calendar year		
		Observed					Adjusted a/				Observed		Adjusted a/
		Momentary		maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date	day									
1950	-	-	-	-	-	-	-	-	-	107	-	16.99	
1951	1201	-	942	Feb. 8, 1951	2.9	149	-	1.75	23.72	176	-	28.01	
1952	1231	-	841	June 3, 1952	4.1	184	-	2.27	30.93	164	-	26.18	
1953	1271	-	1,250	Mar. 17, 1953	4.9	184	-	2.16	29.33	196	-	31.13	
1954	1331	-	2,320	Sept. 12, 1954	4.1	175	-	2.05	27.78	208	-	33.16	
1955	1381	-	14,400	Aug. 19, 1955	7.2	229	-	2.68	36.43	247	-	39.39	
1956	1431	-	1,300	Oct. 17, 1955	6.8	231	-	2.71	36.85	169	-	26.92	
1957	1501	-	666	Jan. 24, 1957	6.6	94.7	-	1.12	15.23	94.4	-	15.02	
1958	1551	-	1,160	Apr. 8, 1958	5.2	176	-	2.06	27.96	196	-	31.20	
1959	1621	-	954	July 22, 1959	4.6	170	172	2.02	27.35	188	189	30.17	
1960	1701	-	1,020	Apr. 2, 1960	*11	*203	*201	*2.36	*32.14	-	-	-	

* Revised.

a Adjusted for change in contents; see footnote to preceding table.

1255. Quinebaug River at Putnam, Conn.

Location.--Lat 41°54'34", long 71°54'48", on right bank at Putnam, Windham County, 0.15 mile downstream from Little River, 0.3 mile upstream from New York, New Haven and Hartford Railroad bridge, 2.8 miles downstream from French River, and at mile 35.7.

Drainage area.--331 sq mi.

Records available.--December 1929 to September 1960. Monthly discharge only for October and November 1929, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 216.76 ft above mean sea level, datum of 1929. Prior to Aug. 1, 1958, at same site on left bank at same datum.

Average discharge.--31 years (1929-60), 575 cfs (adjusted for storage).

Extremes.--1929-60: Maximum discharge, 48,000 cfs Aug. 19, 1955 (gage height, 26.5 ft, from floodmarks), from rating curve extended above 2,500 cfs on basis of computation of flow over dam at gage heights 17.28 and 19.45 ft and slope-area measurement of peak flow; minimum, 8.0 cfs Aug. 9, 1953 (gage height, 1.54 ft); minimum daily, 11 cfs Oct. 5, 12, 1930.

Remarks.--City of Putnam diverts an average of less than 1,000,000 gal per day from Little River for municipal supply. Flow regulated by many mills, by Buffumville Reservoir (see p. 171), by Lake Chaubunagungamaug (estimated usable capacity, 207,000,000 cu ft), and by smaller reservoirs above station. High flow affected by East Brimfield Reservoir and Hodges Village Reservoir (see p. 171). Runoff adjusted for changes in contents of Buffumville, East Brimfield, and Hodges Village Reservoirs. Records of chemical analyses and water temperatures for the water year 1958 are given in WSP 1571.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	118	381	675	839	1,606	1,086	1,301	579	425	174	292	181	631
1952	195	1,153	1,048	1,281	974	1,204	1,021	743	863	162	295	179	758
1953	145	179	485	1,022	1,318	1,847	2,073	1,002	230	118	84.0	54.6	709
1954	104	372	980	499	657	977	1,006	930	290	156	228	1,575	646
1955	497	1,010	1,286	729	641	1,132	791	494	234	126	2,935	535	872
1956	1,478	1,553	446	733	721	939	2,143	678	446	193	82.5	110	791
1957	149	211	489	576	542	755	1,037	276	114	60.3	34.5	37.0	356
1958	43.1	102	603	1,004	617	1,352	1,721	926	233	165	178	245	599
1959	400	571	654	545	504	1,208	1,421	459	294	549	129	150	574
1960	380	818	1,105	745	1,003	642	1,640	690	374	209	213	406	682

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.41	1.28	2.35	2.92	5.05	3.78	4.38	2.02	1.43	0.61	1.02	0.61	25.86
1952	.68	3.68	3.68	4.46	3.17	4.20	3.44	2.58	2.91	.56	1.03	.60	31.17
1953	.50	.60	1.70	3.56	4.14	6.43	6.98	3.49	.78	.41	.29	.18	29.06
1954	.36	1.25	3.41	1.74	2.06	3.40	3.39	3.24	.98	.54	.79	5.31	26.47
1955	1.73	3.40	4.48	2.54	2.02	3.94	2.67	1.72	.79	.44	10.23	1.81	35.77
1956	5.15	5.23	1.56	2.55	2.35	3.27	7.22	2.36	1.51	.67	.29	.37	32.53
1957	.52	.71	1.71	2.01	1.71	2.63	3.49	.96	.37	.21	.14	.12	14.58
1958	.16	.34	2.10	3.49	1.94	4.70	5.80	3.23	.79	.57	.62	.85	24.56
1959	1.39	1.93	2.28	1.90	1.53	4.21	4.79	1.60	.99	1.91	.45	.51	23.54
1960	1.34	2.72	3.98	2.59	3.28	2.33	5.44	2.39	1.25	.74	.75	1.33	28.04

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year			
		Observed				Adjusted			Observed		Adjusted	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date									
1950	-	-	-	-	-	-	-	-	-	-	-	-
1951	1201	5,180	Feb. 8, 1951	30	631	-	1.91	25.86	733	-	18.84	-
1952	1231	4,040	Dec. 21, 1951	20	758	-	2.29	31.17	626	-	30.04	-
1953	1271	5,180	Mar. 16, 1953	12	709	-	2.14	29.06	763	-	25.75	-
1954	1331	8,990	Sept. 12, 1954	30	646	-	1.95	26.47	758	-	31.06	-
1955	1381	48,000	Aug. 19, 1955	37	872	-	2.63	35.77	928	-	38.10	-
1956	1431	5,150	Oct. 17, 1955	44	791	-	2.39	32.53	572	-	23.53	-
1957	1501	3,040	Jan. 23, 1957	31	356	-	1.08	14.58	347	-	14.23	-
1958	1581	3,940	Apr. 8, 1958	34	599	-	1.81	24.56	673	-	27.57	-
1959	1621	5,510	Apr. 3, 1959	40	574	-	1.73	23.54	631	633	25.88	-
1960	1701	3,940	Mar. 31, 1960	76	682	684	2.07	28.04	-	-	-	-

1260. Five Mile River at Killingly, Conn.

Location.--Lat 41°50'14", long 71°53'09", at upstream left abutment of New York, New Haven and Hartford Railroad bridge, 0.5 mile upstream from Whetstone Brook, 0.6 mile south of Killingly, Windham County, and 3.2 miles upstream from mouth.

Drainage area.--58.2 sq mi.

Records available.--October 1937 to September 1960. Monthly discharge only for October 1937, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 222.22 ft above mean sea level, datum of 1929.

Average discharge.--23 years (1937-60), 106 cfs.

Extremes.--1937-60: 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, 5.2 cfs Sept. 3, 1960.

Flood of Mar. 12, 1936, reached a discharge of 1,600 cfs, by computation of flow over dam at Danielson.

Remarks.--Flow regulated by dams and reservoirs upstream. Records of chemical analyses for the water year 1959 are given in WSP 1641.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	31.7	68.6	110	141	242	179	199	103	92.1	43.6	42.8	36.8	106
1952	47.1	207	190	204	193	204	174	153	151	37.7	39.3	33.0	136
1953	32.4	31.0	41.2	151	224	295	331	171	46.0	28.3	25.0	24.4	116
1954	24.1	48.5	148	94.2	105	161	194	156	53.8	34.8	39.8	241	108
1955	88.4	164	227	160	140	209	123	85.0	54.7	30.6	224	89.0	133
1956	285	302	90.6	153	159	205	354	119	89.2	46.1	33.1	39.5	156
1957	41.4	44.1	97.7	123	115	124	181	57.2	31.5	21.7	15.6	17.4	72.2
1958	16.8	19.3	61.7	226	162	249	294	189	56.7	33.4	36.8	53.0	116
1959	71.8	72.2	106	66.4	95.8	220	247	96.9	55.8	78.1	38.3	29.4	99.9
1960	64.6	99.5	198	173	202	146	244	99.4	40.7	38.7	32.1	62.1	116

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.63	1.32	2.18	2.79	4.33	3.55	3.82	2.04	1.76	0.86	0.85	0.71	24.84
1952	.93	3.97	3.76	4.05	3.58	4.05	3.34	3.03	2.89	.75	.78	.65	31.76
1953	.64	.59	.82	2.99	4.01	5.94	6.35	3.39	.98	.56	.50	.47	27.04
1954	.46	.93	2.93	1.87	1.90	3.19	3.72	3.09	1.03	.69	.79	4.62	25.24
1955	1.75	3.15	4.50	3.17	2.51	4.14	2.35	1.68	1.05	.61	4.44	1.71	31.06
1956	5.65	5.79	1.80	3.03	2.94	4.06	6.78	2.35	1.71	.91	.66	.76	36.44
1957	.82	.85	1.94	2.43	2.06	2.46	3.47	1.13	.60	.43	.31	.33	16.83
1958	.33	.37	1.21	4.47	2.90	4.93	5.63	3.75	1.13	.66	.73	1.02	27.13
1959	1.41	1.38	2.09	1.71	1.77	4.35	4.73	1.92	1.07	1.55	.76	.56	23.50
1960	1.28	1.91	3.92	3.42	3.74	2.89	4.68	1.97	.78	.77	.64	1.18	27.19

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	88.4	20.80
1951	1201	521	Apr. 4, 1951	6.3	106	1.82	24.84	126	29.37
1952	1231	512	June 2, 1952	6.3	136	2.34	31.76	107	25.15
1953	1271	592	Mar. 16, 1953	5.6	116	1.99	27.04	126	29.33
1954	1331	845	Sept. 12, 1954	7.7	108	1.86	25.24	130	30.30
1955	1381	1,190	Aug. 20, 1955	7.6	133	2.29	31.06	150	34.90
1956	1431	1,020	Oct. 17, 1955	16	156	2.68	36.44	115	26.81
1957	1501	460	Jan. 24, 1957	5.5	72.2	1.24	16.83	65.0	15.13
1958	1551	765	Jan. 27, 1958	5.5	116	1.99	27.13	129	30.09
1959	1621	795	Apr. 3, 1959	6.2	99.9	1.72	23.30	109	25.53
1960	1701	615	Apr. 1, 1960	5.2	116	1.99	27.19	-	-

1265. Moosup River at Moosup, Conn.

Location.--Lat 41°42'37", long 71°53'11", on right bank at outlet of tailrace from Majestic Metal Specialties, Inc. (formerly Aldrich Bros.) mill at Moosup, Windham County, 100 ft upstream from New York, New Haven and Hartford Railroad bridge, 0.5 mile downstream from Ekonk Brook, and 3.8 miles upstream from mouth.

Drainage area.--83.5 sq mi.

Records available.--October 1932 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 196.64 ft above mean sea level, datum of 1929.

Average discharge.--28 years (1932-60), 164 cfs.

Extremes.--1932-60: 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.--Low flow completely regulated by mills upstream. Records of chemical analyses for the water year 1958 are given in WSP 1571.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	29.5	136	192	230	406	280	340	201	121	48.5	41.7	23.4	169
1952	42.9	366	315	310	252	339	206	205	140	34.3	54.6	23.9	190
1953	25.4	39.2	107	324	344	513	474	258	64.7	38.0	21.2	12.5	184
1954	29.9	162	348	152	217	278	287	222	65.3	32.3	59.5	285	177
1955	114	276	384	200	272	309	190	195	102	46.3	241	112	203
1956	497	424	118	214	301	314	483	163	93.8	52.4	20.7	24.2	225
1957	55.3	101	215	179	154	195	325	70.4	25.5	11.8	9.36	10.9	110
1958	13.9	34.7	147	437	165	400	482	318	91.8	78.2	139	101	203
1959	194	150	150	143	214	385	356	135	90.7	146	29.9	18.4	167
1960	64.8	156	316	234	366	201	338	155	52.1	35.8	31.0	93.8	169

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.41	1.82	2.65	3.17	5.06	3.86	4.54	2.78	1.62	0.67	0.58	0.31	27.47
1952	.59	4.89	4.32	4.28	3.26	4.68	2.76	2.84	1.87	.47	.75	.32	31.03
1953	.35	.52	1.45	4.47	4.29	7.08	6.34	3.56	.86	.52	.29	.17	29.93
1954	.41	2.16	4.81	2.10	2.71	3.84	3.84	3.07	.85	.45	.62	3.80	28.86
1955	1.58	3.69	5.30	2.77	3.40	4.27	2.54	2.70	1.36	.64	3.33	1.50	32.88
1956	6.86	5.67	1.63	2.95	3.88	4.34	6.45	2.25	1.25	.72	.29	.32	36.61
1957	.49	1.35	2.94	2.47	1.92	2.70	4.34	.97	.34	.16	.13	.14	17.95
1958	.19	1.46	2.03	6.03	2.31	5.52	6.44	4.39	1.23	1.08	1.91	1.35	32.94
1959	2.68	2.00	2.07	1.98	2.67	5.31	4.76	1.86	1.21	2.01	.41	.25	27.21
1960	.89	2.09	4.36	3.23	4.72	2.78	4.52	2.14	.70	.49	.43	1.25	27.60

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	133	21.61
1951	1201	1,320	Apr. 3, 1951	6.0	169	2.02	27.47	199	32.39
1952	1251	1,350	Mar. 11, 1952	6.0	190	2.26	31.03	145	23.59
1953	1271	1,500	Mar. 16, 1953	4.8	184	2.20	29.93	215	34.96
1954	1331	1,820	Sept. 11, 1954	8.0	177	2.12	28.86	197	32.05
1955	1381	1,520	Aug. 20, 1955	4.7	203	2.43	32.88	225	36.67
1956	1431	2,930	Oct. 16, 1955	5.2	225	2.69	36.61	167	27.23
1957	1501	1,230	Apr. 6, 1957	5.7	110	1.32	17.95	97.6	15.85
1958	1551	1,260	Jan. 27, 1958	10	203	2.43	32.94	228	37.01
1959	1821	1,350	Apr. 3, 1959	6.4	167	2.00	27.21	171	27.80
1960	1701	1,040	Dec. 13, 1959	13	169	2.02	27.60	-	-

1270. Quinebaug River at Jewett City, Conn.

Location.--Lat 41°35'52", long 71°59'05", on left bank in rear of high school on Slater Avenue at Jewett City, New London County, 570 ft downstream from outlet of canal from Wedgewood Mills (formerly Fisk Mills, Inc.) at mouth of Pachaug River, 1,000 ft downstream from railroad bridge, and at mile 6.1.

Drainage area.--711 sq mi.

Records available.--July 1918 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 63.07 ft above mean sea level, datum of 1929.

Average discharge.--42 years (1918-60), 1.258 cfs (adjusted for storage).

Extremes.--1918-60: 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.--Flow regulated by Pachaug Pond, by Buffumville Reservoir (see p. 171), by Lake Chaubunagungamaug (estimated usable capacity, 207,000,000 cu ft), and by smaller reservoirs above station. High flow affected by East Brimfield Reservoir and by Hodges Village Reservoir (see p. 171). Runoff adjusted for change in contents of Buffumville, East Brimfield, and Hodges Village Reservoirs. Records of chemical analyses and water temperatures for the water year 1956 are given in WSP 1450.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	279	778	1,330	1,799	3,311	2,413	2,915	1,377	991	478	554	319	1,364
1952	389	2,478	2,351	2,675	2,182	2,663	2,032	1,714	1,654	388	586	354	1,617
1953	313	345	884	2,149	2,741	3,984	4,228	2,354	546	299	220	163	1,434
1954	229	945	2,297	1,146	1,527	2,199	2,319	1,942	627	366	485	2,805	1,404
1955	1,049	2,100	2,825	1,672	1,702	2,481	1,620	1,205	652	341	3,918	1,104	1,726
1956	3,280	3,443	1,015	1,490	1,916	2,306	4,180	1,477	982	483	212	259	1,748
1957	373	565	1,296	1,301	1,264	1,673	2,461	639	262	158	98.4	97.4	844
1958	135	271	1,183	2,611	1,483	2,952	3,661	2,510	729	538	685	746	1,460
1959	1,217	1,238	1,450	1,075	1,366	2,787	3,027	1,126	724	1,100	297	307	1,309
1960	746	1,422	2,430	1,779	2,463	1,500	3,227	1,488	659	431	450	828	1,449

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.45	1.22	2.16	2.92	4.85	3.91	4.57	2.24	1.55	0.77	0.90	0.50	26.04
1952	.63	3.89	3.78	4.34	3.31	4.32	3.19	2.78	2.60	.63	.95	.56	30.98
1953	.51	.54	1.43	3.48	4.02	6.46	6.64	3.49	.86	.49	.36	.26	28.54
1954	.37	1.48	3.72	1.86	2.24	3.56	3.64	3.15	.98	.59	.79	4.41	26.79
1955	1.71	3.29	4.58	2.71	2.49	4.02	2.54	1.95	1.02	.55	6.35	1.73	32.94
1956	5.32	5.40	1.65	2.42	2.90	3.74	6.56	2.40	1.54	.78	.34	.41	33.46
1957	.61	.89	2.10	2.11	1.85	2.71	3.86	1.04	.41	.22	.16	.15	16.11
1958	.22	.43	1.91	4.23	2.18	4.78	5.75	4.07	1.15	.87	1.11	1.17	27.87
1959	1.97	1.94	2.35	1.68	2.00	4.52	4.75	1.82	1.14	1.79	.48	.48	24.92
1960	1.21	2.22	3.95	2.88	3.74	2.47	5.02	2.41	1.03	.70	.73	1.28	27.64

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed		Adjusted
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	1,055	-	20.17
1951	1201	8,900	Apr. 4, 1951	21	1,364	-	1.92	26.04	1,598	-	30.51
1952	1231	8,080	Dec. 22, 1951	55	1,617	-	2.27	30.98	1,313	-	25.16
1953	1271	10,200	Mar. 17, 1953	30	1,494	-	2.10	28.54	1,656	-	31.63
1954	1331	12,600	Sept. 12, 1954	27	1,404	-	1.97	26.79	1,613	-	30.80
1955	1381	40,700	Aug. 20, 1955	42	1,726	-	2.43	32.94	1,873	-	35.73
1956	1431	12,700	Oct. 17, 1955	28	1,748	-	2.46	33.46	1,289	-	24.69
1957	1501	6,570	Apr. 6, 1957	57	844	-	1.19	16.11	790	-	15.07
1958	1551	7,350	Apr. 8, 1958	86	1,460	-	2.05	27.87	1,654	-	31.57
1959	1621	9,900	Apr. 3, 1959	137	1,309	-	1.84	24.92	1,367	1,369	26.04
1960	1701	7,300	Apr. 6, 1960	147	1,449	1,451	2.04	27.64	-	-	-

THAMES RIVER BASIN

1275. Yantic River at Yantic, Conn.

Location.--Lat 41°33'31", long 72°07'19", on left bank at Yantic, New London County, 700 ft downstream from stone-arch highway bridge, 1 mile downstream from Susquetonscut Brook, and 4.8 miles upstream from mouth.

Drainage area.--88.6 sq mi.

Records available.--October 1930 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 94.46 ft above mean sea level, datum of 1929.

Average discharge.--30 years (1930-60), 162 cfs.

Extremes.--1930-60: Maximum discharge, 13,500 cfs Sept. 21, 1938 (gage height, 14.66 ft, from floodmark), by computation of flow over two dams 2½ miles upstream and 3 miles downstream from station, respectively; minimum, 2.3 cfs sometime during period July 21 to Aug. 11, 1949; minimum gage height, 0.41 ft Oct. 13, 1930; minimum daily discharge, 3.3 cfs Oct. 13, 1930.

Remarks.--Low flow completely regulated by mills upstream. Records of chemical analyses for the water year 1958 are given in WSP 1571.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	21.6	89.6	154	226	460	362	403	185	78.4	25.2	20.1	22.6	169
1952	30.2	231	293	380	298	419	274	223	185.9	32.9	132	58.6	213
1953	50.6	74.9	177	430	410	690	517	239	39.9	20.2	11.3	13.0	222
1954	21.4	96.2	238	126	172	274	327	218	45.8	16.0	38.9	263	153
1955	104	267	428	175	226	324	211	122	41.8	22.5	245	132	192
1956	676	498	130	150	302	319	365	159	105	65.3	26.1	37.8	235
1957	49.3	78.1	187	165	178	188	282	64.0	32.4	7.78	5.85	5.83	103
1958	8.36	48.2	185	430	179	365	415	287	63.9	91.5	81.0	75.0	186
1959	214	190	161	149	194	404	377	112	54.2	66.9	21.0	28.9	166
1960	103	204	378	280	380	219	347	171	32.3	38.0	30.9	84.9	188

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.28	1.13	2.01	2.94	5.40	4.72	5.08	2.41	0.99	0.33	0.26	0.28	25.83
1952	.39	2.91	3.82	4.95	3.62	5.45	3.45	2.90	2.33	.43	1.72	.74	32.71
1953	.66	.94	2.31	5.59	4.82	8.98	6.52	3.11	.50	.26	.15	.16	34.00
1954	.28	1.22	3.10	1.64	2.02	3.56	4.12	2.84	.56	.21	.51	3.31	25.39
1955	1.35	3.36	5.57	2.26	2.66	4.22	2.66	1.59	.53	.29	3.19	1.66	29.36
1956	8.80	6.27	1.70	1.95	3.68	4.15	4.60	2.06	1.33	.85	.34	.48	36.21
1957	.64	.98	2.43	2.14	2.09	2.44	3.55	.83	.41	.10	.08	.07	15.76
1958	.11	.61	2.41	5.59	2.10	4.75	5.22	3.74	.80	1.19	1.05	.94	28.51
1959	2.79	2.39	2.10	1.94	2.28	5.26	4.75	1.45	.68	1.13	.27	.36	25.40
1960	1.34	2.57	4.92	3.64	4.63	2.85	4.37	2.22	.41	.49	.40	1.07	28.91

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	122	18.68
1951	1201	2,500	Apr. 3, 1951	10	189	1.91	25.83	193	29.53
1952	1231	2,830	Mar. 11, 1952	12	213	2.40	32.71	192	29.50
1953	1271	2,280	Mar. 13, 1953	7.0	222	2.51	34.00	226	34.69
1954	1331	2,920	Sept. 11, 1954	7.4	153	1.73	23.39	190	29.07
1955	1381	2,110	Dec. 18, 1954	10	192	2.17	29.36	234	35.85
1956	1431	6,760	Oct. 16, 1955	7.8	235	2.65	36.21	152	23.49
1957	1501	1,540	Jan. 23, 1957	4.3	103	1.16	15.76	96.9	14.84
1958	1551	1,660	Jan. 23, 1958	6.3	186	2.10	28.51	213	32.66
1959	1621	3,130	Mar. 6, 1959	12	166	1.87	25.40	176	26.95
1960	1701	2,250	Dec. 13, 1959	7.8	188	2.12	28.91	-	-

CONNECTICUT RIVER BASIN

1280. First Connecticut and Second Connecticut Lakes, near Pittsburg, N. H.

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 (979,000,000 cu ft prior to 1930); First Lake, 5 2/3 miles northeast of Pittsburg, N. H., 3,330,000 cu ft. Records of contents are available for First Connecticut Lake since October 1916 and for Second Connecticut Lake since October 1919. Records furnished by New England Power Co.

Month-end usable contents, in millions of cubic feet, of First Connecticut and Second Connecticut Lakes, near Pittsburg, N. H.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	2,519.5	3,041.4	2,980.1	1,968.1	1,315.2	1,325.3	3,228.5	3,516.2	2,989.5	3,416.4	3,295.5	2,668.1
1952	2,018.4	2,469.3	2,383.3	1,814.6	937.1	470.7	2,127.2	3,234.5	3,644.2	3,098.1	2,681.2	2,182.5
1953	2,161.4	2,261.7	2,118.9	1,419.4	1,030.2	1,838.8	3,328.4	3,518.2	3,389.6	3,286.0	3,090.0	2,840.8
1954	2,482.5	2,355.0	2,227.5	1,495.9	1,005.1	994.9	2,888.4	3,531.5	3,649.2	3,405.5	3,437.2	3,836.1
1955	3,602.3	3,508.9	2,369.9	1,135.3	552.2	113.4	2,066.9	3,302.3	3,612.2	3,430.3	3,402.3	2,845.1
1956	2,410.7	2,214.0	1,641.9	1,263.7	1,005.8	56.8	827.2	3,112.7	3,580.9	3,418.2	3,155.9	3,164.8
1957	2,543.6	2,146.1	1,974.0	1,211.2	480.7	80.4	1,423.6	2,178.8	2,443.7	3,052.1	2,550.0	2,653.5
1958	1,960.2	1,993.9	2,420.6	1,196.3	237.1	117.4	1,868.0	2,760.7	3,065.2	3,515.1	3,252.3	2,879.3
1959	2,671.5	1,920.2	1,043.4	630.7	317.0	130.8	1,807.3	2,866.5	3,646.3	3,425.2	3,118.0	2,894.4
1960	2,952.9	3,678.0	2,413.6	1,232.3	679.5	119.2	2,248.1	3,198.1	3,695.4	3,330.5	2,778.6	2,659.0

1285. Connecticut River at First Connecticut Lake, near Pittsburg, N. F.

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 1960.

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.--43 years (1917-60), 195 cfs (adjusted for storage).

Extremes.--1917-60: 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.--Flow regulated by First Connecticut and Second Connecticut Lakes (see p. 178).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	123	85.8	210	388	315	80.5	14.6	239	203	26.2	109	297	173
1952	275	72.6	174	253	366	195	12.1	15.0	108	196	167	170	167
1953	115	78.5	164	296	252	98.6	15.1	247	141	150	121	142	152
1954	165	147	255	327	256	85.5	60.2	276	254	165	170	300	207
1955	348	203	512	501	279	254	12.4	16.9	106	83.6	111	215	221
1956	182	208	247	213	142	370	14.6	13.5	16.9	175	164	115	156
1957	317	285	169	373	357	232	37.7	12.8	31.4	15.5	230	44.2	175
1958	359	251	212	518	431	92.9	9.67	13.3	14.3	107	241	251	207
1959	277	429	382	247	184	126	10.4	13.8	51.0	159	186	113	182
1960	228	146	608	511	295	256	12.5	16.3	18.6	187	229	105	219

Monthly and yearly runoff, in inches (adjusted) $\frac{a}{b}$

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1.20	3.86	2.60	0.14	0.56	1.17	10.07	4.82	-0.0009	2.58	0.88	0.74	28.62
1952	.44	3.31	1.96	.56	.20	.29	8.76	5.95	3.58	-1.10	.16	-3.30	24.82
1953	1.49	1.57	1.54	.48	1.15	5.57	7.93	4.42	1.23	1.54	.67	.62	28.21
1954	.72	1.32	2.88	.75	.67	1.13	10.63	7.17	4.02	1.02	2.52	5.07	37.90
1955	4.66	2.25	1.20	.56	.48	1.26	10.30	6.64	3.03	.22	1.39	-.002	31.99
1956	.28	1.77	.46	1.00	.51	.22	4.19	12.04	2.66	1.59	.92	1.59	27.23
1957	1.19	1.77	1.45	1.22	.69	1.15	7.47	4.09	1.80	3.37	.59	1.13	25.92
1958	1.39	3.55	5.16	.84	.43	.67	9.21	4.82	1.77	3.82	1.99	1.44	35.09
1959	2.76	.87	.76	1.29	.68	.78	8.84	5.69	4.73	1.07	.99	.36	29.82
1960	3.47	5.73	1.89	.97	.96	.64	11.21	5.15	2.83	.70	.32	.79	34.66

a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes.

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30										Calendar year		
		Observed					Adjusted $\frac{a}{b}$					Observed		Adjusted $\frac{a}{b}$
		Momentary maximum		Minimum		Mean	Mean		Per square mile	Runoff in inches	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date	Date	day									
1950	-	-	-	-	-	-	-	-	-	-	-	185	181	29.56
1951	1201	749	June 16, 17, 1951	12	173	175	175	2.11	28.62	182	163	26.67		
1952	1231	602	Feb. 18, 1952	10	167	151	1.82	24.82	153	145	23.71			
1953	1271	650	May 8, 1953	11	152	172	2.07	28.21	171	174	28.53			
1954	1331	980	June 7, 8, 1954	11	207	232	2.80	37.90	247	251	41.09			
1955	1381	1,000	Oct. 4, 1954	8.4	221	196	2.36	31.99	184	161	26.39			
1956	1431	563	Mar. 1, 1956	8.7	156	166	2.00	27.23	167	178	29.13			
1957	1501	547	Dec. 31, 1956	8.7	175	159	1.52	25.92	179	193	31.61			
1958	1551	782	Jan. 31, 1958	7.5	207	215	2.59	35.09	230	186	30.38			
1959	1621	1,140	June 29, 1959	8.1	182	182	2.19	29.82	174	217	35.52			
1960	1701	1,120	Nov. 28, 1959	9.9	219	211	2.54	34.66	-	-	-			

a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes.

1290. Lake Francis at Pittsburg, N. H.

Location.--Lat 45°02'45", long 71°23'00", 2,300 ft upstream from Back Lake Brook at Pittsburg, Coos County.

Drainage area.--170 sq mi.

Records available.--March 1940 to September 1960.

Gage.--Staff gage. Datum of gage is at mean sea level.

Remarks.--Completed in March 1940, used for storage of water for power, has usable capacity of 4,326,000,000 cu ft.

Cooperation.--Records furnished by New Hampshire Water Resources Board.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	3,246.6	3,802.0	3,586.1	2,800.5	2,219.3	802.7	2,893.3	4,173.1	4,039.4	4,052.3	3,894.7	3,318.4
1952	2,811.9	3,207.0	3,104.6	2,422.9	1,304.0	524.9	2,459.2	3,282.4	4,180.1	3,768.4	3,518.4	2,949.5
1953	2,789.2	2,661.3	2,654.2	2,155.3	1,761.8	1,828.1	3,151.7	4,125.4	3,966.8	3,751.7	3,492.0	2,230.7
1954	2,903.3	2,789.2	2,811.9	2,180.8	1,758.7	575.1	2,930.2	4,181.8	4,247.1	4,026.5	3,907.3	4,102.2
1955	4,108.2	4,099.6	3,050.0	1,767.1	1,124.0	515.4	2,766.6	3,415.0	4,221.0	4,136.7	3,945.6	3,246.6
1956	2,795.7	2,646.8	2,111.6	1,747.3	788.4	510.7	1,528.4	3,437.7	3,773.4	3,805.4	3,490.3	3,404.5
1957	2,912.5	2,612.0	2,515.5	1,895.1	1,310.1	749.9	2,005.9	2,615.0	2,834.7	3,409.3	3,128.0	3,167.5
1958	2,550.7	2,624.6	3,111.6	2,072.8	1,189.1	539.3	2,534.4	3,220.4	3,466.8	4,196.6	3,772.6	3,381.0
1959	3,262.4	2,628.3	1,901.9	1,504.9	729.1	570.7	2,454.1	3,059.4	4,000.8	3,975.3	3,667.0	3,471.7
1960	3,604.1	4,489.0	3,179.3	1,875.0	920.9	581.9	2,820.9	3,366.4	3,761.7	3,880.3	3,376.9	3,288.8

1292. Connecticut River below Indian Stream, near Pittsburg, N. H.

Location.--Lat 45°02'25", long 71°26'35", on right bank 1,200 ft downstream from Indian Stream and 2.5 miles west of Pittsburg, Coos County.

Drainage area.--254 sq mi.

Records available.--October 1956 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is 1,150 ft (from topographic map).

Extremes.--1956-60: Maximum discharge, 4,580 cfs Nov. 29, 1959 (gage height, 7.07 ft), from rating curve extended above 1,700 cfs by logarithmic plotting; minimum daily, 34 cfs Sept. 29, 1960.

Remarks.--Flow regulated by First Connecticut and Second Connecticut Lakes (see p. 178) and Lake Francis (see p. 180).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1957	677	650	411	813	750	686	498	249	155	233	468	189	478
1958	791	779	782	1,121	924	425	761	229	141	380	611	556	629
1959	700	986	784	537	607	285	716	310	348	354	415	255	524
1960	613	706	1,485	1,175	826	511	881	216	122	229	462	236	622

Monthly and yearly runoff, in inches (adjusted) ^{a/}

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1957	1.18	1.67	1.41	1.35	0.84	1.49	6.59	3.44	1.50	3.06	0.80	0.94	24.27
1958	1.37	3.61	5.10	1.25	.67	.63	9.69	3.71	1.55	3.73	1.93	1.15	34.39
1959	2.62	1.98	.84	1.07	.64	.71	9.18	4.23	4.45	1.19	.84	.41	28.16
1960	3.10	5.83	2.38	1.12	.95	.80	11.27	3.52	2.05	.62	.51	.69	32.64

^a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes and Lake Francis.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year				
		Observed			Adjusted ^{a/}			Observed		Adjusted ^{a/}		
		Momentary maximum		Minimum	Mean		Mean	Mean	Mean	Runoff		
		Discharge	Date	day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	Mean
1957	1501	2,580	Apr. 22, 1957	41	478	454	1.79	24.27	530	563	30.09	
1958	1551	3,310	Apr. 22, 1958	55	629	643	2.53	34.39	639	557	29.75	
1959	1621	2,450	June 15, 1959	49	524	527	2.07	28.16	553	637	34.03	
1960	1701	4,580	Nov. 29, 1959	34	622	609	2.40	32.64	-	-	-	

^a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes and Lake Francis.

1295. Connecticut River at North Stratford, N. H.

Location.--Lat 44°44'55", long 71°37'55", on left bank at North Stratford, Coos County, 400 ft downstream from Nulhegan River.

Drainage area.--799 sq mi.

Records available.--August 1930 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 880.17 ft above mean sea level, datum of 1929.

Average discharge.--30 years (1930-60), 1,563 cfs (adjusted for storage).

Extremes.--1930-60: 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, 108 cfs Sept. 29, 1960.

Remarks.--Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes (see p. 178) and Lake Francis (see p. 180).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	767	1,991	2,121	1,280	1,298	1,602	5,013	1,546	781	646	517	815	1,527
1952	855	1,470	1,274	1,239	1,378	1,015	4,999	2,079	1,746	605	477	534	1,465
1953	756	930	927	1,281	1,588	3,610	2,822	1,578	737	602	443	488	1,297
1954	668	764	1,738	930	1,196	1,573	5,256	2,748	2,550	855	1,287	3,203	1,892
1955	2,595	1,670	1,982	1,620	1,036	1,564	5,419	1,664	1,313	292	926	668	1,729
1956	589	1,186	790	1,245	926	817	2,608	3,950	978	750	569	750	1,264
1957	1,212	1,585	1,049	1,511	1,208	1,566	2,696	1,540	651	1,063	746	449	1,256
1958	1,162	1,865	2,967	1,590	1,212	825	4,793	1,765	894	1,909	1,228	1,034	1,778
1959	1,726	1,924	1,295	1,116	1,038	802	4,953	1,537	1,604	720	680	456	1,483
1960	2,032	3,119	2,651	1,680	1,312	963	5,848	1,371	863	492	575	488	1,778

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.99	3.36	2.91	0.88	1.03	1.55	9.15	3.08	0.73	1.17	0.60	0.49	25.94
1952	.61	2.51	1.74	1.11	1.78	.79	8.91	4.04	3.13	.57	.22	.26	24.49
1953	.99	1.39	1.15	1.19	1.40	5.68	5.46	2.90	.87	.70	.39	.41	22.53
1954	.59	.94	2.45	.61	1.06	1.64	9.63	4.99	3.66	.98	1.81	4.68	33.04
1955	3.73	2.28	1.68	.98	.69	1.69	9.83	3.42	2.43	.28	1.22	.26	28.49
1956	.37	1.47	.54	1.40	.59	.52	4.61	7.96	1.80	1.01	.51	1.01	21.79
1957	1.15	1.56	1.37	1.44	.87	1.74	5.16	2.96	1.17	2.17	.65	.70	20.94
1958	.97	2.66	4.77	1.08	.59	.77	8.71	3.42	1.55	3.39	1.49	1.03	30.43
1959	2.31	1.94	1.01	1.17	.77	.97	8.63	5.11	3.17	.91	.65	.41	25.25
1960	3.03	5.22	2.44	1.10	.96	.91	10.52	2.78	1.69	.58	.26	.57	30.06

a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes and Lake Francis.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted a/			Observed	Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	1,580	1,582	26.88
1951	1201	11,500	Nov. 26, 1950	242	1,527	1,527	1.91	25.94	1,419	1,385	23.54
1952	1231	11,700	Apr. 20, 1952	290	1,465	1,438	1.80	24.49	1,383	1,360	23.16
1953	1271	16,800	Mar. 27, 1953	236	1,297	1,326	1.66	22.53	1,344	1,353	22.98
1954	1331	20,400	Apr. 23, 1954	454	1,692	1,944	2.43	33.04	2,150	2,163	36.75
1955	1381	18,700	Apr. 15, 1955	114	1,729	1,677	2.10	28.49	1,417	1,365	23.18
1956	1431	10,600	May 1, 1956	159	1,264	1,279	1.60	21.79	1,355	1,378	23.49
1957	1501	9,550	Apr. 21, 1957	145	1,256	1,233	1.54	20.94	1,454	1,487	25.26
1958	1551	16,100	Apr. 23, 1958	279	1,778	1,792	2.24	30.43	1,688	1,606	27.29
1959	1621	7,680	Apr. 19, 1959	169	1,483	1,487	1.86	25.25	1,723	1,806	30.68
1960	1701	19,700	Apr. 19, 1960	108	1,778	1,764	2.21	30.06	-	-	-

a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes and Lake Francis.

1300. Upper Ammonoosuc River near Groveton, N. H.

Location.--Lat 44°37'30", long 71°28'10", on left bank 75 ft upstream from highway bridge, 0.2 mile downstream from Nash Stream, and 2½ miles northeast of Groveton, Coos County.

Drainage area.--232 sq mi.

Records available.--August 1940 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is 920 ft (from topographic map).

Average discharge.--20 years (1940-60), 481 cfs (adjusted for diversion).

Extremes.--1940-60: Maximum discharge, 9,950 cfs Mar. 27, 1953 (gage height, 9.44 ft), from rating curve extended above 5,800 cfs by logarithmic plotting; maximum gage height, 10.14 ft Mar. 31, 1960 (ice jam); minimum discharge, 32 cfs Sept. 14, 1948.
Flood in March 1936 reached a stage of about 10.6 ft, from information by local residents.

Remarks.--Some regulation by pond on Nash Stream. Small diversion above station for municipal supply of Berlin.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	165	730	662	209	288	273	2,011	807	232	269	183	157	498
1952	199	609	344	265	207	194	1,908	1,143	741	118	83.9	86.1	489
1953	99.1	150	206	195	311	1,210	1,519	922	179	124	123	91.5	428
1954	104	166	428	156	261	285	2,416	1,437	942	445	303	1,427	696
1955	701	658	389	228	226	331	1,924	990	735	140	267	104	557
1956	148	410	130	405	158	143	930	1,902	429	267	119	292	445
1957	251	350	291	310	307	348	958	725	321	395	331	110	375
1958	139	508	984	252	136	155	1,899	1,415	467	411	273	257	576
1959	514	454	185	237	201	262	1,690	647	563	174	121	121	430
1960	500	1,014	574	311	209	173	2,168	825	330	208	93.1	174	546

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.84	3.53	3.30	1.05	1.30	1.37	9.69	4.02	1.13	1.35	0.94	0.77	29.29
1952	1.00	2.94	1.72	1.33	.98	.98	9.19	5.70	3.58	.60	.43	.43	28.88
1953	.51	.74	1.04	.98	1.41	6.02	7.32	4.60	.87	.63	.65	.45	25.22
1954	.53	.81	2.14	.79	1.19	1.43	11.63	7.16	4.54	2.22	1.54	6.87	40.85
1955	3.50	3.18	1.94	1.14	1.03	1.66	9.28	4.93	3.55	.71	1.30	.51	32.71
1956	.75	1.98	.66	2.03	.75	.72	4.49	9.47	2.08	1.34	.60	1.42	26.29
1957	1.26	1.69	1.46	1.55	1.39	1.74	4.62	3.62	1.56	1.97	.66	.54	22.06
1958	1.70	2.45	4.90	1.27	.62	.79	9.15	7.04	2.26	2.05	1.38	1.25	33.86
1959	2.57	2.20	.93	1.19	.91	1.31	8.14	3.23	2.72	.88	.62	.59	25.29
1960	2.50	4.89	2.87	1.56	.98	.88	10.44	4.12	1.60	1.05	.49	.85	32.23

a Adjusted for diversion for municipal supply of Berlin. Records furnished by city of Berlin.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year			
		Observed					Adjusted a/		Observed	Adjusted a/		
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date									
1950	-	-	-	-	-	-	-	-	466	469	27.45	
1951	1201	5,460	Nov. 27, 1950	79	498	500	2.16	29.29	464	466	27.25	
1952	1231	4,910	Apr. 21, 1952	44	489	492	2.12	28.88	432	434	25.51	
1953	1271	9,950	Mar. 27, 1953	46	429	431	1.86	25.22	449	452	26.41	
1954	1331	6,890	Apr. 23, 1954	48	696	698	3.01	40.85	784	786	45.99	
1955	1381	6,240	Apr. 15, 1955	72	557	559	2.41	32.71	467	470	27.48	
1956	1431	3,800	Apr. 30, May 1	74	445	448	1.93	26.29	463	466	27.31	
1957	1501	3,070	Apr. 22, 1957	63	375	377	1.62	22.06	437	439	25.70	
1958	1551	6,540	Apr. 22, 1958	67	576	579	2.50	33.86	536	538	31.51	
1959	1621	2,560	Apr. 19, 1959	54	430	432	1.86	25.29	508	510	29.85	
1960	1701	6,400	Apr. 18, 1960	52	546	549	2.37	32.23	-	-	-	

a Adjusted for diversion for municipal supply of Berlin.

1315. Connecticut River near Dalton, N. H.

Location.--Lat 44°24'35", long 71°43'00", on left bank 250 ft upstream from highway bridge, 1,200 ft downstream from dam of Gilman Paper Co., and $1\frac{1}{4}$ miles downstream from Dalton, Coos County.

Drainage area.--1,514 sq mi.

Records available.--March 1927 to September 1960. 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 $10\frac{1}{2}$ 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.--33 years (1927-60), 2,896 cfs (adjusted to drainage area at present site and for storage).

Extremes.--1927-60: Maximum discharge, 48,300 cfs Mar. 20, 1936 (gage height, 25.6 ft); minimum daily, 115 cfs Oct. 3, 1937.

Remarks.--Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes (see p. 178), Lake Francis (see p. 180), and other reservoirs. These reservoirs have a combined usable capacity of about 8 $1\frac{1}{3}$ billion cubic feet.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1,131	3,611	3,924	1,894	2,018	2,648	10,290	3,547	1,460	1,337	975	1,157	2,825
1952	1,389	3,133	2,235	2,216	2,084	1,799	9,994	4,612	3,976	1,028	743	712	2,812
1953	1,008	1,240	1,509	2,006	2,463	7,160	6,599	4,071	1,253	953	798	773	2,487
1954	964	1,241	2,865	1,295	1,950	2,832	11,780	6,441	5,015	2,201	2,130	7,140	3,809
1955	4,343	3,427	3,046	2,315	1,625	2,884	10,840	4,214	3,481	654	1,647	974	3,286
1956	951	2,216	1,142	2,232	1,347	1,181	5,761	9,138	2,329	1,371	916	1,572	2,513
1957	1,801	2,323	1,991	2,243	1,760	2,775	5,143	3,583	1,479	2,175	1,215	775	2,275
1958	1,456	3,037	5,752	2,471	1,808	1,486	10,010	5,127	2,201	2,971	2,184	1,610	3,330
1959	2,812	2,982	1,574	1,645	1,391	1,339	9,499	3,119	3,026	1,316	1,027	863	2,541
1960	3,324	5,354	4,667	2,519	2,008	1,382	12,060	3,523	1,745	1,060	876	929	3,275

† Corrected.

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.80	2.97	2.91	0.93	1.04	1.62	8.72	3.15	0.89	1.14	0.66	0.51	25.34
1952	.73	2.55	1.65	1.33	.90	1.02	8.39	4.06	3.30	.52	.32	.28	25.05
1953	.72	.96	1.05	1.18	1.48	5.70	5.66	3.43	.84	.64	.48	.43	22.57
1954	.54	.85	2.15	.60	1.08	1.82	9.89	5.44	5.75	1.54	1.60	5.37	34.63
1955	3.30	2.50	1.70	1.05	.77	1.90	9.18	3.74	2.68	.42	1.19	.36	28.99
1956	.46	1.54	.55	1.49	.61	.55	4.75	8.15	1.94	1.01	.53	1.14	22.72
1957	1.06	1.51	1.44	1.31	.84	1.84	4.53	3.12	1.23	1.99	.70	.61	20.18
1958	.74	2.27	4.64	1.24	.58	.91	8.44	4.35	1.78	2.60	1.47	.97	29.99
1959	2.05	1.79	.74	1.02	.65	.92	8.01	2.85	2.72	.93	.61	.52	22.81
1960	2.59	4.40	2.82	1.21	1.00	.80	10.13	3.11	1.54	.74	.37	.63	29.34

a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes and Lake Francis.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year		
		Observed			Adjusted a/			Observed	Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date							
1950	-	-	-	-	-	-	-	-	-	-
1951	1201	18,400	Nov. 26, 1950	275	2,825	2,825	1.87	25.34	2,664	2,645
1952	1231	18,300	Apr. 22, 1952	322	2,812	2,784	1.84	25.05	2,563	2,540
1953	1271	34,600	Mar. 28, 1953	366	2,487	2,517	1.66	22.57	2,599	2,607
1954	1331	34,100	Apr. 24, 1954	488	3,809	3,862	2.55	34.63	4,291	4,303
1955	1361	27,100	Apr. 17, 1955	140	3,286	3,233	2.14	28.99	2,734	2,682
1956	1431	18,000	May 1, 1956	508	2,513	2,528	1.67	22.72	2,667	2,691
1957	1501	13,800	Apr. 22, 1957	154	2,275	2,251	1.49	20.18	2,623	2,656
1958	1551	28,600	Apr. 23, 1958	494	3,330	3,344	2.21	29.99	3,084	3,002
1959	1621	14,700	Apr. 7, 1959	431	2,541	2,544	1.68	22.81	3,044	3,128
1960	1701	27,400	Apr. 20, 1960	351	3,275	3,262	2.15	29.34	-	-

a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes and Lake Francis.

1325. Moore Reservoir and Comerford Station Pond

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, $4\frac{1}{2}$ miles northwest of Littleton, N. H., filled in April 1956, 4,970,000,000 cu ft; Comerford Station Pond, $4\frac{1}{2}$ miles northeast of Barnet, Vt., completed in 1930, 1,279,000,000 cu ft. Records furnished by New England Power Co.

Month-end usable contents, in millions of cubic feet, of Moore Reservoir and Comerford Station Pond

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	1,176	1,396	1,289	989	1,275	1,221	1,353	1,257	1,253	1,257	1,221	1,340
1952	1,266	1,047	1,239	1,190	1,172	730	1,018	1,180	1,275	1,172	1,180	1,321
1953	1,198	1,353	1,221	1,181	1,294	1,221	1,086	1,330	1,216	1,239	1,103	1,176
1954	1,294	1,275	1,167	1,289	1,294	1,013	993	1,284	1,317	1,289	1,181	1,137
1955	1,312	1,142	1,235	1,235	1,235	1,068	1,047	1,271	1,216	1,194	1,043	1,221
1956	1,298	1,253	1,216	1,266	1,212	1,230	5,977	6,038	6,206	6,051	6,043	6,217
1957	5,670.0	6,028.5	5,897.0	5,953.4	4,465.7	72,221.4	4,389.9	6,025.8	6,195.4	5,986.2	5,929.8	5,439.8
1958	5,071.4	5,185.8	5,887.7	4,279.8	2,348.5	1,439.0	5,569.9	5,000.7	6,090.6	6,187.4	5,870.0	5,983.5
1959	5,863.6	6,046.3	5,560.7	4,977.4	2,962.3	1,669.4	5,694.6	5,563.3	5,967.8	5,397.7	5,737.2	5,741.2
1960	6,003.5	6,197.4	5,920.0	4,146.2	5,137.4	1,507.9	5,762.2	6,020.6	5,949.5	5,852.8	5,604.3	5,578.0

† Corrected.

Note.--Comerford Station Pond only, prior to April 1956.

1330. East Branch Passumpsic River near East Haven, Vt.

Location.--Lat 44°38'02", long 71°53'53", on right bank in Burke, Caledonia County, 2.1 miles south of East Haven, Essex County.

Drainage area.--53.8 sq mi.

Records available.--July 1939 to October 1945, October 1948 to September 1960. 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.--18 years (1939-45, 1948-60), 102 cfs.

Extremes.--1939-45, 1948-60: Maximum discharge, 2,800 cfs Apr. 18, 1960 (gage height, 6.28 ft), from rating curve extended above 1,200 cfs by logarithmic plotting; minimum, 13 cfs Sept. 1-5, 1953.

Maximum stage known, about 12.6 ft sometime in November 1927, from information by local resident.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	66.8	110	141	56.8	59.5	75.3	386	159	76.9	67.7	41.2	32.7	106
1952	35.2	104	81.0	65.5	52.4	52.4	388	172	192	50.5	31.2	38.5	105
1953	63.6	66.7	83.4	70.6	73.3	244	233	147	48.9	32.0	33.5	42.3	95.0
1954	34.3	47.1	92.1	29.7	46.9	71.8	469	277	167	52.8	70.4	177	128
1955	163	121	95.1	58.4	48.4	67.7	426	166	101	31.7	60.6	29.7	116
1956	41.2	84.6	41.0	55.4	34.4	29.1	188	332	115	64.3	38.6	62.8	90.6
1957	69.6	79.3	66.2	62.4	59.9	75.3	210	153	80.3	77.9	39.2	38.3	84.3
1958	42.6	89.6	179	83.0	46.0	49.7	319	161	116	124	62.7	58.7	111
1959	104	89.5	44.2	58.5	51.5	51.9	359	138	90.8	40.6	57.3	41.5	93.6
1960	148	232	145	80.1	71.6	54.5	413	184	114	51.0	30.7	41.4	130

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1.43	2.29	3.01	1.22	1.15	1.61	8.01	3.40	1.60	1.45	0.88	0.68	26.73
1952	.75	2.16	1.74	1.40	1.05	1.12	8.04	3.68	3.98	1.08	.67	.80	26.47
1953	1.36	1.38	1.79	1.51	1.42	5.23	4.83	3.15	1.01	.69	.72	.88	23.97
1954	.73	.98	1.97	.64	.91	1.54	9.72	5.93	3.46	1.13	1.51	3.67	32.19
1955	3.49	2.50	2.04	1.25	.94	1.45	8.83	3.56	2.08	.68	1.73	.62	29.17
1956	.88	1.75	.88	1.19	.69	.62	3.89	7.12	2.39	1.38	.83	1.30	22.92
1957	1.49	1.64	1.42	1.34	1.16	1.61	4.37	3.27	1.66	1.67	.84	.79	21.26
1958	.91	1.86	3.83	1.78	.89	1.06	6.61	3.44	2.41	2.67	1.34	1.22	28.02
1959	2.23	1.86	.95	1.25	1.00	1.11	7.44	2.95	1.88	.87	1.23	.86	23.63
1960	3.17	4.82	3.10	1.72	1.43	1.17	8.57	3.94	2.37	1.09	.66	.86	32.90

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches		
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	-	109	27.40
1951	1201	1,720	Dec. 5, 1950	21	106	1.97	26.73	97.7	24.65		
1952	1231	1,790	June 1, 1952	21	105	1.95	26.47	104	26.35		
1953	1271	1,580	Mar. 27, 1953	13	95.0	1.77	23.97	91.6	23.12		
1954	1331	2,000	Apr. 23, 1954	20	128	2.38	32.19	145	36.54		
1955	1381	1,440	Apr. 15, 1955	14	116	2.16	29.17	97.7	24.65		
1956	1431	920	Apr. 30, 1956	20	90.6	1.68	22.92	94.7	23.96		
1957	1501	764	Apr. 21, 1957	21	84.3	1.57	21.26	92.4	23.31		
1958	1551	1,260	Apr. 22, 1958	24	111	2.06	28.02	105	26.46		
1959	1621	1,692	Apr. 19, 1959	20	93.6	1.74	23.63	119	29.68		
1960	1701	2,200	Apr. 18, 1960	17	130	2.42	32.90	-	-		

1345. Moose River at Victory, Vt.

Location.--Lat 44°30'40", long 71°50'15", on right bank at Victory, Essex County, 2.7 miles upstream from highway bridge.

Drainage area.--75.2 sq mi.

Records available.--January 1947 to September 1960.

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.--13 years (1947-60), 142 cfs.

Extremes.--1947-60: 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.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	76.8	169	192	45.8	75.2	107	666	186	72.5	91.4	62.2	42.1	149
1952	55.7	214	123	94.0	76.3	73.0	702	235	252	22.8	10.2	20.7	155
1953	62.3	83.7	87.9	77.4	101	468	363	243	36.2	19.7	31.5	44.0	135
1954	33.0	64.6	152	34.7	†62.4	105	806	348	202	59.6	44.4	323	185
1955	168	175	118	63.5	63.4	97.6	737	212	163	16.0	54.0	12.2	156
1956	32.2	106	32.2	98.1	37.1	32.9	366	580	122	46.1	27.0	97.9	132
1957	84.3	141	86.7	87.9	64.6	147	351	201	80.8	114	24.6	22.2	117
1958	33.2	132	306	69.4	36.8	50.2	579	229	142	127	56.3	55.0	151
1959	159	105	46.6	79.8	52.1	83.2	646	144	123	27.2	20.8	26.1	126
1960	195	376	169	88.4	82.0	52.9	770	209	97.9	32.6	16.7	33.2	176

† Corrected.

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1.18	2.51	2.95	0.70	1.04	1.65	9.91	2.87	1.08	1.41	0.96	0.63	26.89
1952	.86	3.18	1.90	1.45	1.10	1.12	10.44	3.61	3.75	.35	.16	.31	28.23
1953	.96	1.24	1.35	1.19	1.41	7.19	5.40	3.73	.54	.30	.48	.66	24.45
1954	.51	.96	2.34	.53	.87	1.61	11.99	5.35	3.00	.92	.68	4.80	33.56
1955	2.57	2.60	1.82	.97	.88	1.50	10.94	3.25	2.42	.25	.83	.18	28.21
1956	.49	1.58	.49	1.50	.53	.50	5.42	8.89	1.81	.71	.41	1.45	23.78
1957	1.29	2.09	1.33	1.35	.89	2.25	5.21	3.08	1.20	1.75	.38	.33	21.15
1958	.51	1.95	4.70	1.08	.51	.77	8.59	3.52	2.11	1.95	.86	.82	27.35
1959	2.44	1.56	.72	1.22	.72	1.27	9.58	2.20	1.82	.42	.32	.39	22.66
1960	2.98	5.58	2.60	1.36	1.18	.81	11.42	3.20	1.45	.50	.26	.49	31.83

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	-	146	26.43
1951	1201	1,560	Dec. 5, 1950	16	149	1.99	26.89	145	26.19	
1952	1231	2,390	June 2, 1952	6.0	155	2.07	28.23	147	25.84	
1953	1271	2,720	Mar. 27, 1953	5.3	135	1.80	24.45	137	24.71	
1954	1331	2,860	Apr. 23, 1954	12	185	2.47	33.56	203	36.66	
1955	1381	2,620	Apr. 15, 1955	4.8	156	2.07	28.21	132	23.78	
1956	1431	1,710	Apr. 30, 1956	8.6	132	1.76	23.78	143	25.93	
1957	1501	1,370	Apr. 22, 1957	7.4	117	1.56	21.15	131	23.60	
1958	1551	2,180	Dec. 21, 1957	11	151	2.01	27.35	136	24.91	
1959	1621	1,180	Apr. 4, 1959	6.3	126	1.68	22.66	161	29.10	
1960	1701	2,780	Nov. 29, 1959	5.5	176	2.34	31.83	-	-	

1350. Moose River at St. Johnsbury, Vt.

Location.--Lat 44°25'20", long 72°00'05", on left bank at St. Johnsbury, Caledonia County, half a mile upstream from mouth.

Drainage area.--128 sq mi (revised).

Records available.--August 1928 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is 585 ft (from topographic map). Prior to Nov. 16, 1934, chain gage at site a quarter of a mile upstream at different datum.

Average discharge.--32 years (1928-60), 222 cfs.

Extremes.--1928-60: 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.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	97.0	222	264	74.5	118	232	1,137	270	101	131	86.1	52.6	232
1952	71.5	303	163	129	112	132	1,236	344	416	38.6	16.7	32.7	248
1953	95.2	113	132	113	152	771	1,549	404	65.3	29.9	45.5	61.4	212
1954	50.0	96.1	224	49.3	107	214	1,330	599	315	89.4	62.4	453	298
1955	262	292	181	95.9	94.1	162	1,224	311	228	25.5	76.4	21.4	247
1956	44.3	150	45.5	138	55.7	51.3	646	955	179	72.7	34.4	130	209
1957	113	195	127	106	83.9	207	489	277	114	162	35.4	33.2	162
1958	46.8	177	404	106	67.4	100	987	341	199	167	80.5	71.3	229
1959	204	149	59.4	108	73.0	115	1,009	202	170	37.6	30.4	44.5	183
1960	287	608	290	141	143	94.6	1,324	331	119	49.9	26.7	47.8	287

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.87	1.93	2.38	0.67	0.96	2.09	9.91	2.43	0.88	1.18	0.78	0.46	24.54
1952	.64	2.64	1.47	1.16	.94	1.19	10.78	3.10	3.63	.35	.15	.28	26.33
1953	.86	.98	1.19	1.02	1.23	6.94	4.78	3.64	.57	.27	.41	.53	22.42
1954	.45	.84	2.02	.44	.87	1.92	11.60	5.39	2.75	.81	.56	3.95	31.60
1955	2.36	2.54	1.63	.86	.77	1.46	10.67	2.80	1.99	.23	.71	.19	26.21
1956	.40	1.30	.41	1.25	.47	.46	5.63	8.60	1.56	.66	.31	1.13	22.18
1957	1.01	1.70	1.15	.95	.68	1.86	4.26	2.49	.99	1.46	.32	.29	17.16
1958	.42	1.54	3.64	.95	.55	.90	8.61	3.07	1.74	1.51	.72	.62	24.27
1959	1.83	1.30	.53	.97	.59	1.03	8.79	8.79	1.48	.34	.27	.39	19.34
1960	2.59	5.30	2.61	1.27	1.21	.85	11.54	2.98	1.04	.45	.24	.42	30.50

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	210	22.22
1951	1201	2,130	Apr. 3, 1951	19	232	1.81	24.54	228	24.11
1952	1231	3,140	June 2, 1952	10	248	1.94	26.33	231	24.61
1953	1271	4,400	Mar. 28, 1953	7.3	212	1.66	22.42	214	22.70
1954	1331	4,140	Apr. 24, 1954	18	298	2.33	31.60	328	34.62
1955	1391	3,760	Apr. 16, 1955	8.8	247	1.93	26.21	205	21.79
1956	1431	2,780	Apr. 30, 1956	15	209	1.63	22.18	225	23.93
1957	1501	1,690	Apr. 22, 1957	12	162	1.27	17.16	178	18.90
1958	1551	3,240	Apr. 22, 1958	16	229	1.79	24.27	211	22.33
1959	1621, 1701	2,170	Apr. 4, 1959	8.7	183	1.43	19.34	247	26.18
1960	1701	3,430	Nov. 29, 1959	8.5	287	2.24	30.50	-	-

1355. Passumpsic River at Passumpsic, Vt.

Location.--Lat 44°21'55", long 72°02'20", on right bank 0.7 mile upstream from Andrick Brook and 1 mile downstream from dam and village of Passumpsic, Caledonia County.

Drainage area.--436 sq mi.

Records available.--October 1928 to September 1960. Monthly discharge only for October 1928, published in WSP 1301.

Gage.--Water-stage recorder. Altitude of gage is 490 ft (from topographic map).

Average discharge.--32 years (1928-60), 732 cfs.

Extremes.--1928-60: 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.--Flow regulated by powerplants above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	335	649	931	388	395	892	3,115	975	435	506	306	208	761
1952	252	855	631	508	448	477	3,164	1,093	1,368	248	139	177	774
1953	309	352	573	567	647	2,067	1,729	1,223	308	199	224	312	710
1954	218	333	697	236	471	893	3,345	1,864	947	346	293	1,126	895
1955	856	829	601	409	374	622	3,449	1,040	672	138	422	146	795
1956	206	554	193	508	267	241	1,811	2,370	670	354	180	432	649
1957	407	539	431	433	420	781	1,517	950	465	583	200	187	576
1958	214	544	1,263	514	322	438	2,711	1,161	788	671	331	312	773
1959	701	559	281	393	343	449	3,097	834	537	188	227	211	649
1960	1,017	1,667	1,055	563	495	397	3,342	1,091	583	265	174	232	903

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.88	1.66	2.46	1.03	0.94	2.36	7.97	2.58	1.11	1.34	0.81	0.53	23.67
1952	.67	2.14	1.67	1.34	1.11	1.26	8.10	2.89	3.50	0.66	.37	.45	24.16
1953	.82	.90	1.51	1.50	1.55	5.47	4.43	3.24	.79	.53	.59	.80	22.13
1954	.58	.85	1.84	.62	1.12	2.36	8.56	4.93	2.42	.92	.78	2.88	27.86
1955	2.26	2.12	1.59	1.08	.89	1.64	8.82	2.75	1.72	.36	1.12	.37	24.72
1956	.55	1.42	.51	1.34	.66	.64	4.63	6.27	1.71	.93	.48	1.10	20.24
1957	1.08	1.38	1.14	1.15	1.00	2.06	3.88	2.51	1.19	1.54	.53	.48	17.94
1958	.57	1.39	3.34	1.36	.77	1.16	6.94	3.07	2.02	1.77	.87	.80	24.06
1959	1.85	1.43	.74	1.04	.82	1.19	7.92	2.21	1.37	.50	.60	.54	20.21
1960	2.69	4.27	2.79	1.49	1.22	1.05	8.55	2.89	1.49	.70	.46	.59	28.19

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	695	21.56	
1951	1201	6,580	Dec. 5, 1950	112	761	1.75	23.67	743	23.15	
1952	1231	9,670	June 2, 1952	78	774	1.78	24.16	734	22.91	
1953	1271	8,610	Mar. 27, 1953	67	710	1.63	22.13	711	22.17	
1954	1331	10,900	Apr. 23, 1954	93	895	2.05	27.86	982	30.56	
1955	1381	9,140	Apr. 16, 1955	55	795	1.82	24.72	682	21.23	
1956	1431	6,460	Apr. 30, 1956	98	649	1.49	20.24	684	21.36	
1957	1501	4,460	Apr. 22, 1957	79	576	1.32	17.94	631	19.64	
1958	1551	7,290	Apr. 22, 1958	91	773	1.77	24.06	732	22.78	
1959	1621	5,700	Apr. 3, 1959	79	649	1.49	20.21	833	25.94	
1960	1701	9,080	Nov. 28, 1959	65	903	2.07	28.19	-	-	

1375. Ammonoosuc River at Bethlehem Junction, N. H.

Location--Lat 44°16'10", long 71°37'50", on left bank 0.25 mile upstream from Pierce Bridge and Bethlehem Junction, 0.8 mile upstream from unnamed tributary entering from left, 3 miles east of Bethlehem, Grafton County, and 3.4 miles downstream from Little River.

Drainage area--87.6 sq mi.

Records available--August 1939 to September 1960.

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--21 years (1939-60), 212 cfs.

Extremes--1939-60: Maximum discharge, 10,800 cfs Oct. 24, 1959 (gage height, 12.09 ft), from rating curve extended above 4,100 cfs on basis of slope-area measurement of peak flow; minimum, 16 cfs Nov. 14, 1952 (caused by anchor ice upstream).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	78.7	429	374	82.8	150	140	792	475	134	155	135	140	257
1952	128	339	213	143	94.9	89.8	771	579	420	66.1	37.0	40.4	243
1953	56.3	70.4	190	173	175	691	526	539	91.5	48.1	60.3	43.2	223
1954	58.8	134	213	63.7	153	153	830	847	344	166	206	550	293
1955	257	263	212	98.7	102	149	789	365	297	77.3	134	48.1	232
1956	80.7	158	52.6	187	61.2	55.1	370	756	218	162	67.3	177	196
1957	108	139	123	132	93.2	114	362	295	117	161	49.4	49.0	145
1958	77.7	204	475	135	77.4	66.9	849	663	196	126	73.5	59.0	251
1959	109	144	68.4	123	76.8	68.3	531	300	302	63.0	40.6	56.9	156
1960	390	524	264	134	100	118	871	583	113	59.2	40.5	95.1	274

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1.04	5.46	4.93	1.09	1.78	1.84	10.09	6.25	1.71	2.04	1.77	1.78	39.78
1952	1.68	4.32	2.81	1.88	1.17	1.18	9.81	7.62	5.35	.87	.49	.51	37.69
1953	.74	.90	2.51	2.28	2.08	9.09	6.70	7.09	1.16	.63	.79	.55	34.52
1954	.77	1.71	2.80	.84	1.81	2.01	10.57	8.52	4.38	2.19	2.71	7.01	45.32
1955	3.39	3.35	2.79	1.30	1.21	1.96	10.05	4.80	3.79	1.02	1.76	.61	36.03
1956	1.06	2.02	.69	2.46	.75	.72	4.71	9.95	2.78	2.14	.89	2.25	30.42
1957	1.42	1.77	1.62	1.74	1.11	1.50	4.61	3.88	1.49	2.12	.65	.62	22.53
1958	1.02	2.60	6.26	1.78	.92	.98	10.81	8.72	2.49	1.66	.97	.75	38.86
1959	1.43	1.83	.90	1.61	.91	.90	6.77	3.94	3.85	.83	.53	.72	24.22
1960	5.14	6.67	3.48	1.77	1.24	1.56	11.09	7.67	1.44	.78	.53	1.21	42.58

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	220	34.05
1951	1201,1701	8,690	Nov. 26, 1950	43	257	2.93	39.78	240	37.16
1952	1231	5,540	June 2, 1952	28	243	2.77	37.69	213	33.03
1953	1271,1701	9,270	Mar. 27, 1953	29	223	2.55	34.52	230	35.65
1954	1331, 1701	8,300	Sept. 11, 1954	34	293	3.34	45.32	320	49.57
1955	1381	3,210	Oct. 16, 1954	33	232	2.65	36.03	195	30.27
1956	1431	3,750	May 27, 1956	38	196	2.24	30.42	202	31.46
1957	1501	2,280	Apr. 21, 1957	26	145	1.66	22.53	178	27.60
1958	1551	6,110	Dec. 21, 1957	33	251	2.87	38.86	214	33.14
1959	1621	2,400	Apr. 3, 1959	28	156	1.78	24.22	228	35.35
1960	1701	10,800	Oct. 24, 1959	23	274	3.13	42.58	-	-

1380. Ammonoosuc River near Bath, N. H.

Location.--Lat 44°09'15", long 71°59'10", on left bank 0.4 mile downstream from Wild Ammonoosuc River and 1½ miles downstream from Bath, Grafton County.

Drainage area.--395 sq mi.

Records available.--September 1935 to September 1960.

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.--25 years (1935-60), 674 cfs.

Extremes.--1935-60: Maximum discharge, 27,900 cfs Mar. 18, 1936 (gage height, 15.40 ft), from rating curve extended above 13,000 cfs on basis of slope-area measurement at gage height 14.28 ft; minimum daily, 35 cfs Sept. 15, 1957.

Remarks.--Diurnal fluctuation at low flow caused by small powerplants above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	230	995	1,018	320	537	768	2,617	1,108	349	445	357	288	751
1952	327	972	624	446	303	492	2,810	1,355	1,275	189	105	114	748
1953	177	207	710	725	710	2,101	1,674	1,552	234	116	167	112	709
1954	173	354	615	184	560	857	2,774	1,946	1,017	512	410	1,552	910
1955	620	895	755	365	368	534	2,593	1,141	943	270	375	118	747
1956	195	492	153	493	230	216	1,664	1,946	592	500	159	550	615
1957	309	421	388	412	350	556	1,072	830	363	461	127	150	454
1958	188	581	1,556	541	285	387	2,941	1,941	715	321	183	154	818
1959	271	350	167	214	191	258	2,065	722	767	138	123	164	451
1960	1,049	1,567	893	495	392	443	2,852	1,217	346	202	122	235	815

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.67	2.81	2.97	0.93	1.42	2.24	7.39	3.23	0.99	1.30	1.04	0.81	25.80
1952	.95	2.75	1.82	1.30	.83	1.44	7.94	3.95	3.60	.55	.31	.32	25.76
1953	.52	.58	2.07	2.11	1.87	6.13	4.73	4.53	.66	.34	.49	.32	24.35
1954	.50	1.00	1.79	.54	1.48	2.50	7.84	5.68	2.87	1.50	1.20	4.38	31.28
1955	1.81	2.53	2.20	1.06	.97	1.56	7.33	3.33	2.66	.79	1.09	.33	†25.66
1956	.57	1.39	.45	1.44	.63	.63	5.26	5.68	1.67	1.46	.46	1.55	21.19
1957	.90	1.19	1.13	1.20	.92	1.62	3.03	2.42	1.02	1.35	.37	.42	15.57
1958	.55	1.64	4.54	1.58	.75	1.13	8.31	5.66	2.02	.94	.54	.44	28.10
1959	.79	.99	.49	.63	.50	.75	5.83	2.11	2.17	.40	.36	.46	15.48
1960	3.06	4.43	2.61	1.44	1.07	1.29	8.05	3.55	.98	.59	.36	.66	28.09

† Corrected.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	629	21.64
1951	1201	17,200	Nov. 28, 1950	96	751	1.90	25.80	724	24.87
1952	1231	14,200	June 2, 1952	69	748	1.89	25.76	679	23.41
1953	1271	21,900	Mar. 27, 1953	61	709	1.79	24.35	712	24.47
1954	1331	16,600	Sept. 12, 1954	83	910	2.30	31.28	1,004	34.53
1955	1381	8,600	Apr. 15, 1955	85	747	1.89	†25.66	627	21.53
1956	1431	9,220	May 27, 1956	104	615	1.56	21.19	635	22.00
1957	1501	5,810	Jan. 23, 1957	35	454	1.15	15.57	558	19.08
1958	1551	13,800	Dec. 21, 1957	74	816	2.07	28.10	686	23.64
1959	1621	9,200	Apr. 3, 1959	80	451	1.14	15.48	676	23.31
1960	1701	23,500	Oct. 25, 1959	63	815	2.06	28.09	-	-

† Corrected.

1385. Connecticut River at Wells River, Vt.

Location--Lat 44°09'15", long 72°02'35", on right bank 200 ft downstream from bridge on U.S. Highway 302, at Wells River, Orange County, 400 ft upstream from Wells River, and 1,200 ft downstream from Ammonoosuc River.

Drainage area--2,644 sq mi.

Records available--October 1949 to September 1960. Monthly discharge only for October and November 1949, published in WSP 1301.

Gage--Water-stage recorder. Datum of gage is 399.75 ft above mean sea level, datum of 1929.

Average discharge--11 years (1949-60), 4,905 cfs (adjusted for storage).

Extremes--1949-60: Maximum discharge, 54,000 cfs Mar. 27, 1953 (gage height, 15.96 ft); minimum daily, 152 cfs Aug. 28, 1960.

Remarks--Flow regulated by powerplants, by First Connecticut and Second Connecticut Lakes (see p. 178), Lake Francis (see p. 180), Moore Reservoir since April 1956 and Comerford Station Pond (see p. 183), and other reservoirs (combined usable capacity, about 14½ billion cubic feet).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1,999	5,480	6,805	3,198	3,434	5,112	17,980	6,658	2,616	2,648	1,978	1,850	4,970
1952	2,196	5,732	4,013	3,711	3,122	3,452	18,190	8,207	7,929	1,572	1,026	1,114	4,998
1953	1,707	2,017	3,351	3,665	4,295	12,620	11,580	8,177	2,182	1,390	1,433	1,359	4,485
1954	1,518	2,243	4,933	1,970	3,634	5,653	20,110	11,690	7,757	3,569	3,200	10,810	6,404
1955	6,450	6,088	5,120	3,651	2,820	4,653	18,790	7,265	5,692	1,245	2,704	1,435	5,487
1956	1,440	2,650	1,745	2,532	2,487	2,532	9,486	14,430	4,180	2,580	1,215	2,889	4,012
1957	2,922	3,535	3,413	3,449	3,416	5,670	8,175	5,410	2,518	3,443	1,568	1,350	3,741
1958	2,064	4,533	9,220	4,823	5,549	3,039	18,410	9,129	4,312	4,351	3,148	2,172	5,370
1959	4,367	4,497	2,721	3,066	3,319	2,940	14,660	4,640	4,479	2,105	1,360	1,406	4,113
1960	5,913	9,815	7,989	5,136	4,105	3,264	17,350	6,438	2,998	1,685	1,341	1,566	5,616

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.82	2.52	2.90	1.05	1.20	1.99	8.26	3.14	1.00	1.23	0.81	0.60	25.52
1952	.76	2.52	1.75	1.41	1.95	1.23	8.31	3.92	3.57	.52	.31	.35	25.80
1953	.69	.90	1.58	1.39	1.59	5.32	3.79	.86	.56	.53	.50	.50	23.14
1954	.57	.90	2.12	.66	1.28	2.23	9.17	5.45	3.31	1.48	1.36	4.62	33.15
1955	2.84	2.52	1.89	1.18	.91	1.83	8.61	3.51	2.58	.51	1.17	.41	27.96
1956	.53	1.51	.59	1.44	.66	.68	5.23	6.98	1.91	1.08	.43	1.23	22.27
1957	1.00	1.44	1.42	1.29	.89	1.94	4.24	2.85	1.17	1.66	.55	.51	18.96
1958	1.63	1.95	4.28	1.47	.78	1.08	8.21	4.31	1.92	2.10	1.21	.79	28.73
1959	1.85	1.70	.85	1.11	.80	1.02	7.09	2.60	2.24	.78	.55	.53	21.12
1960	2.65	4.44	3.02	1.55	1.26	1.01	8.72	3.09	1.40	.68	.37	.62	28.81

a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir since April 1956, and Comerford Station Pond.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted a/			Observed	Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	4,709	4,713	24.20
1951	1201	34,200	Apr. 3, 1951	680	4,970	4,971	1.88	25.52	4,770	4,734	24.31
1952	1231	37,100	June 2, 1952	344	4,998	4,970	1.86	25.60	4,596	4,572	23.54
1953	1271	54,000	Mar. 27, 1953	402	4,485	4,510	1.71	23.14	4,822	4,829	23.76
1954	1331	48,200	Apr. 24, 1954	392	6,404	6,456	2.44	33.15	7,155	7,169	36.81
1955	1381	40,500	Apr. 17, 1955	337	5,487	5,446	2.06	27.96	4,492	4,546	23.34
1956	1431	27,200	Apr. 30, 1956	385	4,012	4,327	1.64	22.27	4,351	4,566	23.50
1957	1501	19,600	Apr. 22, 1957	345	3,741	3,692	1.40	18.96	4,243	4,276	21.96
1958	1551	45,500	Apr. 24, 1958	432	5,570	5,597	2.12	28.73	5,211	5,118	26.27
1959	1621	21,500	Apr. 6, 1959	390	4,113	4,113	1.56	21.12	5,129	5,224	26.83
1960	1701	37,000	Apr. 5, 1960	152	5,616	5,598	2.12	28.81	-	-	-

a Adjusted for change in contents; see footnote to preceding table.

1390. Wells River at Wells River, Vt.

Location--Lat 44°09'05", long 72°04'00", on right bank 800 ft upstream from railroad bridge, 0.8 mile west of village of Wells River, Orange County, and 1.5 miles upstream from mouth.

Drainage area--98.4 sq mi.

Records available--August 1940 to September 1960.

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--20 years (1940-60), 141 cfs.

Extremes--1940-60: 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--Some diurnal fluctuation at low flow caused by small powerplant above station. Flow partly regulated by Groton and Ricker Ponds.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	47.5	93.4	152	79.2	129	184	700	207	82.1	80.7	63.4	40.8	154
1952	50.7	149	125	111	115	113	764	304	333	64.2	36.6	41.5	183
1953	56.7	51.9	136	134	152	467	356	323	53.9	27.0	46.7	48.5	155
1954	39.6	69.7	118	47.5	122	188	667	361	131	59.2	46.7	132	165
1955	96.2	136	125	76.8	72.3	145	690	196	106	32.5	81.5	39.9	148
1956	48.6	90.6	39.4	78.0	50.8	54.3	420	424	161	82.9	34.1	76.6	130
1957	60.6	73.3	77.0	75.0	73.7	134	212	140	80.6	62.7	24.2	28.7	86.8
1958	23.5	73.4	222	118	75.4	102	685	304	166	71.7	39.8	41.3	160
1959	81.3	78.2	54.8	93.4	66.1	86.1	565	119	64.7	28.3	25.5	31.5	107
1960	177	275	211	111	106	88.1	824	204	90.7	43.4	29.5	45.8	167

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.56	1.06	1.78	0.93	1.37	2.15	7.94	2.43	0.93	0.95	0.74	0.46	21.30
1952	.59	1.69	1.47	1.30	1.26	1.32	8.66	3.56	3.78	.75	.43	.47	25.28
1953	.66	.59	1.60	1.57	1.61	5.47	4.04	3.79	.61	.32	.55	.55	21.36
1954	.46	.79	1.38	.56	1.29	2.20	7.56	4.23	1.49	.69	.55	1.49	22.69
1955	1.13	1.54	1.47	.90	.76	1.69	7.82	2.18	1.20	.38	.95	.45	20.47
1956	.57	1.03	.46	.91	.56	.64	4.76	4.97	1.83	.97	.40	.87	17.97
1957	.71	.83	.90	.88	.78	1.57	2.40	1.64	.91	.74	.28	.33	11.97
1958	.28	.83	2.60	1.38	.80	1.19	7.76	3.56	1.88	.84	.47	.47	22.06
1959	.95	.89	.64	1.09	.70	1.01	6.40	1.40	.73	.53	.30	.36	14.80
1960	2.08	3.12	2.47	1.30	1.16	1.03	7.08	2.39	1.03	.51	.35	.52	23.04

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	128	17.71
1951	1201	1,550	Mar. 31, 1951	19	154	1.57	21.30	157	21.65
1952	1231	3,230	June 2, 1952	24	183	1.86	25.28	176	24.38
1953	1271	1,800	Mar. 25, 1953	8.3	155	1.58	21.36	153	21.14
1954	1331	1,370	Apr. 11, 1954	14	165	1.68	22.69	175	24.20
1955	1381	1,580	Apr. 15, 1955	15	148	1.50	20.47	153	18.39
1956	1431	1,590	May 27, 1956	24	130	1.32	17.97	133	18.35
1957	1501	570	Nov. 22, 1956	13	86.8	1.882	11.97	96.0	13.24
1958	1551	1,820	Apr. 22, 1958	13	160	1.63	22.06	151	20.83
1959	1621	1,050	Apr. 3, 1959	12	107	1.09	14.80	145	19.99
1960	1701	1,980	Nov. 28, 1959	16	167	1.70	23.04	-	-

1398. East Orange Branch at East Orange, Vt.

Location--Lat 44°05'35", long 72°20'10", on left bank 0.3 mile east of East Orange, Orange County, 1.6 miles upstream from mouth, and 5 miles southwest of Orange.

Drainage area--8.95 sq mi.

Records available--June 1958 to September 1960.

Gage--Water-stage recorder. Altitude of gage is 1,180 ft (from topographic map).

Extremes--1958-60: Maximum discharge, 412 cfs Oct. 24, 1959 (gage height, 4.02 ft), from rating curve extended above 70 cfs by logarithmic plotting; maximum gage height, 6.35 ft Jan. 22, 1959 (ice jam); minimum discharge, 0.5 cfs Sept. 2, 3, 4, 8, 9, 1960.

Remarks--Occasional diurnal fluctuation at low flow caused by mill upstream.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	-	6.32	2.64	3.78	-
1959	7.45	9.51	6.83	9.66	7.62	9.93	62.6	19.1	7.69	1.98	2.5	2.86	12.3
1960	19.7	31.8	25.1	11.6	10.6	10.3	70.7	25.8	10.8	5.82	2.2	4.12	18.9

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	-	0.81	0.34	0.47	-
1959	0.96	1.19	0.88	1.24	0.89	1.28	7.80	2.46	0.96	.25	.3	.36	18.60
1960	2.54	3.97	3.23	1.50	1.28	1.32	8.81	3.28	1.35	.72	.22	.51	28.80

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1958	1551	-	-	-	-	-	-	-	-
1959	1621	164	Apr. 8, 1959	0.7	12.3	1.37	18.60	16.7	25.31
1960	1701	412	Oct. 24, 1959	.8	18.9	2.11	28.80	-	-

1400. South Branch Waits River near Bradford, Vt.

Location.--Lat 44°01'05", long 72°12'30", on left bank 50 ft upstream from highway bridge, 1¼ miles upstream from mouth, and 4½ miles west of Bradford, Orange County.

Drainage area.--42.7 sq mi.

Records available.--October 1939 to March 1940 (monthly discharge only), April 1940 to September 1951.

Gage.--Water-stage recorder. Altitude of gage is 715 ft (from topographic map). Oct. 4-25, 1939, staff gage 200 ft upstream at different datum. Oct. 26 to Dec. 10, 1939, tape gage at present site and datum.

Average discharge.--12 years (1939-51), 64.8 cfs.

Extremes.--1939-51: Maximum discharge, 2,300 cfs June 3, 1947 (gage height, 4.57 ft), from rating curve extended above 310 cfs on basis of slope-area measurement of peak flow; maximum gage height, 4.86 ft Mar. 9, 1946 (ice jam); minimum discharge, 3.7 cfs Aug. 16, 1950.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	15.4	37.2	59.6	38.0	56.8	87.3	327	102	38.4	38.0	23.0	17.9	69.8

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.42	0.97	1.61	1.03	1.38	2.36	8.54	2.75	1.00	1.03	0.62	0.47	22.18

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	61.5	19.56
1951	1201	974	Mar. 31, 1951	6.3	69.8	1.63	22.18	-	-

1410. Union Village Reservoir at Union Village, Vt.

Location.--Lat 43°47'35", long 72°15'25", on Ompompanoosuc River about 900 ft upstream from Avery Brook and 0.3 mile north of Union Village, Orange County.

Drainage area.--126 sq mi.

Gage.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

Remarks.--Reservoir completed in 1949 for flood control, has usable capacity of 1,660,000,000 cu ft.

Cooperation.--Records furnished by Corps of Engineers.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	1.0	7.4	11.2	7.2	12.0	98.5	3.0	2.5	1.9	1.2	1.0	1.0
1952	1.4	8.3	13.7	13.2	8.6	3.0	3.0	2.4	1.8	1.3	1.2	1.3
1953	1.2	8.4	11.6	16.4	8.6	522.2	5.0	4.5	2.5	1.3	1.4	1.4
1954	1.8	3.6	3.1	4.5	18.6	6.6	18.6	4.2	3.5	3.3	5.9	2.4
1955	2.6	9.4	8.8	11.9	10.8	10.4	4.2	3.4	2.6	1.8	2.8	1.9
1956	3.9	4.5	2.2	13.1	10.6	11.2	36.8	4.5	2.4	2.4	3.6	3.6
1957	1.8	12.9	7.9	24.6	43.0	14.8	2.9	3.1	3.0	2.1	1.4	1.5
1958	1.3	10.4	39.6	16.1	12.4	10.8	9.3	3.2	1.7	1.8	1.5	1.5
1959	2.3	16.7	22.0	25.2	23.9	37.4	12.0	2.3	1.7	1.3	3.0	1.9
1960	21.1	120.9	12.7	13.7	9.2	58.2	9.1	7.4	5.0	7.7	1.6	2.7

1415. Ompompanoosuc River at Union Village, Vt.

Location--Lat 43°47'20", long 72°15'20", on right bank 100 ft upstream from covered bridge at Union Village, Orange County, a quarter of a mile downstream from Avery Brook, and 0.3 mile downstream from Union Village Reservoir.

Drainage area--130 sq mi.

Records available--September 1940 to September 1960.

Gage--Water-stage recorder. Altitude of gage is 435 ft (from topographic map).

Average discharge--20 years (1940-60), 202 cfs (adjusted for storage).

Extremes--1940-60: Maximum discharge, 4,800 cfs June 3, 1947 (gage height, 9.65 ft), from rating curve extended above 2,400 cfs on basis of slope-area measurement of peak flow; minimum, 1.7 cfs Oct. 14, 1949; minimum daily, 2.0 cfs Oct. 20, 1949.
Maximum stage known, about 14.5 ft in November 1927, from information by local resident.

Remarks--Flow regulated by Union Village Reservoir (see p. 193). Some regulation by Lake Fairlee.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	33.0	128	206	122	191	259	1,068	231	87.7	71.9	56.3	43.0	207
1952	67.5	247	256	220	199	202	1,047	295	393	54.3	22.5	22.1	251
1953	39.8	33.7	183	187	242	470	744	496	49.9	15.1	24.7	13.7	208
1954	20.2	45.4	140	74.3	210	349	794	558	251	82.3	55.1	201	231
1955	111	224	221	106	97.5	245	893	199	128	72.6	217	48.6	213
1956	95.1	211	76.0	133	72.7	73.5	702	469	281	182	42.4	139	206
1957	84.6	95.5	147	155	122	257	303	150	99.9	95.6	29.5	32.4	131
1958	29.4	150	395	221	134	175	1,031	431	135	55.4	48.1	32.6	235
1959	80.2	107	62.5	109	84.9	129	860	154	61.7	21.4	41.0	76.4	148
1960	289	425	404	190	195	141	1,033	329	129	62.7	40.6	64.9	276

Monthly and yearly runoff, in inches (adjusted) ^{a/}

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.29	1.12	1.84	1.07	1.54	2.58	8.84	2.05	0.75	0.64	0.50	0.37	21.59
1952	.60	2.15	2.29	1.95	1.63	1.78	8.98	2.61	3.37	.48	.20	.19	26.23
1953	.35	.51	1.64	1.68	1.91	5.67	4.68	4.40	.42	.13	.22	.12	21.73
1954	.18	.40	1.24	.66	1.73	3.05	6.86	4.90	2.16	.73	.50	1.71	24.12
1955	.98	1.95	1.96	.95	.78	2.17	7.64	1.76	1.09	.64	1.93	.41	22.26
1956	.85	1.81	.67	1.21	.59	.65	6.11	4.05	2.40	1.61	.38	1.19	21.52
1957	.74	.86	1.29	1.43	1.04	2.19	2.56	1.33	.86	.85	.26	.28	13.69
1958	.26	1.31	3.51	1.88	1.06	1.55	8.84	3.80	1.15	.49	.43	.28	24.56
1959	.71	.97	.57	.97	.68	1.19	7.29	1.34	.53	.19	.37	.65	15.46
1960	2.63	3.98	3.23	1.69	1.60	1.41	8.70	2.91	1.10	.56	.34	.73	28.88

a Adjusted for change in contents in Union Village Reservoir.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted ^{a/}			Observed	Adjusted ^{a/}	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	174	175	18.23
1951	1201	1,740	Mar. 31, 1951	12	207	207	1.59	21.59	224	224	23.38
1952	1231	2,000	Apr. 6, 1952	11	251	251	1.93	26.23	224	224	23.49
1953	1271	1,830	Mar. 31, 1953	7.8	208	208	1.60	21.73	204	203	21.25
1954	1331	1,540	Apr. 19, 1954	9.5	231	231	1.76	24.12	260	260	27.19
1955	1381	1,690	Apr. 16, 1955	22	213	213	1.64	22.26	199	198	20.70
1956	1431	1,780	Apr. 17, 1956	31	206	206	1.58	21.52	201	202	21.08
1957	1501	740	Jan. 24, 1957	16	131	131	1.01	13.69	151	152	15.88
1958	1551	1,840	Apr. 19, 1958	20	235	235	1.81	24.56	209	208	21.73
1959	1621	1,950	Apr. 5, 1959	11	148	148	1.14	15.46	221	221	23.05
1960	1701	1,940	Apr. 1, 1960	18	276	276	2.12	28.88	-	-	-

a Adjusted for change in contents in Union Village Reservoir.

1420. White River near Bethel, Vt.

Location--Lat 43°48'45", long 72°39'25", on right bank a third of a mile upstream from Locust Creek and $1\frac{1}{4}$ miles southwest of Bethel, Windsor County.

Drainage area--241 sq mi.

Records available--June 1931 to September 1955.

Gage--Water-stage recorder. Altitude of gage is 550 ft (from topographic map). Prior to Oct. 1, 1940, at datum 2.00 ft higher.

Average discharge--24 years (1931-55), 494 cfs.

Extremes--1931-55: Maximum discharge, 32,200 cfs Sept. 21, 1938 (gage height, 11.46 ft, present datum), from rating curve extended above 4,200 cfs on basis of slope-area measurement of peak flow; maximum gage height, 13.20 ft Mar. 9, 1942 (ice jam); minimum discharge, 28 cfs Aug. 3, 1933, Aug. 22, 1934.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	186	597	713	310	469	597	1,934	494	178	364	212	185	518
1952	252	661	592	524	459	378	2,097	886	823	137	62.2	74.0	576
1953	76.5	163	387	484	564	1,707	1,100	992	113	52.7	108	59.4	486
1954	75.9	157	519	207	518	678	1,968	985	552	157	153	478	535
1955	270	707	518	303	239	701	2,171	435	275	114	223	81.4	502

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.89	2.77	3.41	1.49	2.03	2.86	8.95	2.36	0.82	1.74	1.01	0.86	29.19
1952	1.20	3.06	2.83	2.50	2.05	1.81	9.71	4.24	3.81	.65	.30	.34	32.50
1953	.37	.76	1.85	2.32	2.52	8.17	5.09	4.75	.52	.25	.52	.27	27.39
1954	.36	.73	2.48	.99	2.24	3.24	9.11	4.71	2.55	.75	.75	2.21	30.10
1955	1.29	3.27	2.48	1.45	1.03	3.35	10.05	2.08	1.27	.55	1.07	.38	28.27

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	478	26.93
1951	1201	10,300	Nov. 26, 1950	65	518	2.15	29.19	513	29.21
1952	1231	15,700	June 1, 1952	48	576	2.39	32.50	503	28.39
1953	1271	17,600	Mar. 27, 1953	30	486	2.02	27.39	497	27.98
1954	1331	7,830	Apr. 11, 1954	34	535	2.22	30.10	596	33.57
1955	1381	8,440	Apr. 15, 1955	47	502	2.08	28.27	-	-

1425. Ayers Brook at Randolph, Vt.

Location.--Lat 43°56'05", long 72°39'30", on right bank 55 ft upstream from bridge on State Highway 12, just north of village limits of Randolph, Orange County, 0.4 mile upstream from Adams Brook, and 1.2 miles upstream from mouth.

Drainage area.--30.5 sq mi.

Records available.--July 1939 to September 1960.

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.--21 years (1939-60), 47.0 cfs.

Extremes.--1939-60: 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.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	11.2	33.8	67.3	31.2	49.4	63.0	239	48.3	18.2	19.3	13.0	11.2	50.1
1952	16.7	51.4	50.0	46.7	47.6	49.6	275	74.8	119	16.0	5.64	9.16	63.1
1953	8.28	9.90	35.0	42.1	57.1	166	126	116	15.4	5.82	7.36	4.47	49.5
1954	5.91	9.05	25.3	14.8	36.9	67.7	182	100	53.7	22.0	15.7	34.9	47.2
1955	30.3	55.8	54.7	30.7	22.6	60.1	234	43.4	22.4	4.98	8.70	4.52	47.5
1956	12.7	29.4	15.6	23.7	14.2	16.5	166	108	49.5	24.1	6.15	18.7	40.2
1957	19.3	21.3	38.3	35.9	30.4	51.1	61.4	38.2	23.9	26.5	7.93	5.86	30.0
1958	5.87	26.3	72.6	39.3	26.8	37.4	223	81.4	31.3	13.0	6.76	10.5	47.7
1959	21.0	24.0	18.8	31.7	29.3	39.5	216	43.1	18.4	5.94	9.49	10.5	38.7
1960	84.9	102	84.5	44.7	40.7	33.8	210	67.6	39.4	16.4	8.26	12.8	62.0

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.42	1.24	2.54	1.18	1.69	2.38	8.73	1.83	0.67	0.73	0.49	0.41	22.31
1952	.63	1.88	1.89	1.76	1.68	1.88	10.08	2.83	4.36	.60	.21	.33	28.13
1953	.31	.36	1.32	1.59	1.95	6.27	4.61	4.38	.56	.22	.28	.16	22.01
1954	.22	.33	.96	.56	1.26	2.56	6.65	3.79	1.96	.83	.60	1.28	21.00
1955	1.14	2.04	2.07	1.16	.77	2.27	8.55	1.64	.82	.19	.33	.17	21.15
1956	.48	1.08	.59	.89	.50	.62	6.07	4.07	1.81	.91	.23	.69	17.94
1957	.73	.78	1.45	1.36	1.04	1.93	2.24	1.44	.88	1.00	.30	.21	13.36
1958	.22	.96	2.74	1.49	.92	1.41	8.14	3.08	1.14	.49	.26	.38	21.23
1959	.79	.88	.71	1.20	1.00	1.49	7.88	1.63	.67	.22	.36	.38	17.21
1960	3.21	3.74	3.19	1.69	1.44	1.28	7.70	2.56	1.44	.62	.31	.47	27.65

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	-	43.7	19.47
1951	1201	696	Dec. 5, 1950	5.6	50.1	1.64	22.31	50.6	22.51	
1952	1231	3,490	June 1, 1952	3.4	63.1	2.07	28.13	57.7	25.72	
1953	1271	918	Mar. 24, 1953	1.5	49.5	1.62	22.01	48.4	21.53	
1954	1331	534	Apr. 8, 1954	2.9	47.2	1.55	21.00	55.6	24.74	
1955	1381	758	Apr. 10, 1955	1.8	47.5	1.56	21.15	40.5	18.05	
1956	1431	691	Apr. 30, 1956	3.5	40.2	1.32	17.94	42.0	18.75	
1957	1501	420	Jan. 23, 1957	3.8	30.0	.984	13.36	32.2	14.32	
1958	1551	875	Dec. 21, 1957	3.0	47.7	1.56	21.23	44.2	19.69	
1959	1621	606	Apr. 8, 1959	2.2	38.7	1.27	17.21	56.1	24.97	
1960	1701	1,330	Nov. 28, 1959	2.5	62.0	2.03	27.65	-	-	

1440. White River at West Hartford, Vt.

Location.--Lat 43°42'45", long 72°25'10", on left bank 500 ft upstream from highway bridge at West Hartford, Windsor County, and 7 miles upstream from mouth.

Drainage area.--690 sq mi.

Records available.--June 1915 to September 1960. Monthly discharge only for 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.--45 years (1915-60), 1,198 cfs.

Extremes.--1915-60: Maximum discharge, 120,000 cfs Nov. 4, 1927 (gage height, 29.3 ft, from floodmarks), from rating curve extended above 29,000 cfs on basis of slope-area measurement of peak flow; minimum observed, about 35 cfs Aug. 4, 1918; minimum daily, 64 cfs Aug. 4, 1918.

Remarks.--Some diurnal fluctuation at low flow caused by powerplant above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	310	1,059	1,651	796	1,232	1,610	5,224	1,244	455	669	448	375	1,251
1952	516	1,415	1,258	1,282	1,211	1,127	5,706	1,993	2,339	365	160	170	1,453
1953	182	288	915	1,168	1,443	4,034	3,067	2,866	358	149	210	135	1,236
1954	152	285	953	454	1,266	2,018	4,881	2,770	1,449	447	317	1,025	1,329
1955	619	1,464	1,328	759	625	1,733	5,472	1,135	641	256	518	197	1,226
1956	616	1,218	410	582	357	398	4,187	3,050	1,422	717	206	555	1,140
1957	519	632	1,107	1,027	812	1,314	1,743	951	653	698	243	193	825
1958	198	721	1,938	841	571	757	6,067	2,239	823	474	238	355	1,267
1959	708	658	387	616	590	918	5,058	1,028	469	188	195	251	917
1960	1,609	2,391	2,184	1,120	943	848	6,049	1,818	986	455	264	467	1,589

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.52	1.71	2.76	1.33	1.86	2.69	8.45	2.08	0.74	1.12	0.75	0.61	24.62
1952	.86	2.29	2.10	2.14	1.89	1.88	9.23	3.33	3.78	.61	.27	.27	28.65
1953	.30	.47	1.53	1.95	2.18	6.74	4.96	4.79	.58	.25	.35	.22	24.32
1954	.25	.46	1.59	.76	1.91	3.37	7.89	4.63	2.34	.75	.53	1.66	26.14
1955	1.03	2.37	2.22	1.27	.94	2.90	8.85	1.90	1.04	.43	.87	.33	24.14
1956	1.03	1.97	.68	.97	.56	.67	6.77	5.10	2.30	1.20	.34	.90	22.49
1957	.87	1.02	1.85	1.72	1.23	2.19	2.82	1.59	1.06	1.17	.41	.31	16.24
1958	.33	1.17	3.24	1.41	.86	1.26	9.81	3.74	1.33	.79	.40	.56	24.92
1959	1.18	1.06	.65	1.03	.89	1.53	8.18	1.72	.76	.31	.33	.41	18.05
1960	2.69	3.87	3.65	1.87	1.47	1.42	9.78	3.04	1.59	.76	.44	.76	31.34

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	1,105	21.74
1951	1201	#18,000	Nov. 26, 1950*	90	1,251	1.81	24.62	1,264	24.88
1952	1231	29,100	June 1, 1952	103	1,453	2.11	28.65	1,303	25.70
1953	1271	26,300	Mar. 27, 1953	68	1,236	1.79	24.32	1,236	24.32
1954	1331	13,300	Apr. 8, 1954	87	1,329	1.93	26.14	1,487	29.46
1955	1381	14,800	Apr. 15, 1955	110	1,226	1.78	24.14	1,178	22.20
1956	1431	16,400	Apr. 30, 1956	150	1,140	1.65	22.49	1,143	22.55
1957	1501	11,100	Jan. 23, 1957	120	825	1.20	16.24	875	17.24
1958	1551	20,100	Apr. 22, 1958	120	1,267	1.84	24.92	1,173	23.07
1959	1621	11,300	Apr. 3, 1959	85	917	1.33	18.05	1,269	25.37
1960	1701	20,200	Nov. 28, 1959	122	1,589	2.30	31.34	-	-

* Not previously published.

1445. Connecticut River at White River Junction, Vt.

Location.--Lat 43°38'50", long 72°18'45", on right bank 50 ft downstream from railroad bridge at White River Junction, Windsor County, and 500 ft downstream from White River.

Drainage area.--4,092 sq mi.

Records available.--October 1911 to September 1960.

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.--49 years (1911-60), 7,200 cfs (adjusted for storage).

Extremes.--1911-60: 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, 110 cfs Aug. 2, 1959.

Remarks.--Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes (see p. 178), Lake Francis (see p. 180), Moore Reservoir since April 1956 and Comerford Station Pond (see p. 183), Union Village Reservoir (see p. 193), and other reservoirs (combined usable capacity, about 17½ billion cubic feet).

Cooperation.--Wire-weight-gage readings furnished by U.S. Weather Bureau.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2,261	6,553	9,366	4,483	5,552	7,883	28,650	9,107	3,548	3,659	2,645	2,359	7,151
1952	3,091	8,373	6,225	6,158	5,400	5,652	28,650	11,980	12,390	2,303	1,303	1,513	7,711
1953	2,144	2,492	4,982	5,764	7,011	19,220	18,060	13,540	2,734	1,617	1,707	1,564	6,740
1954	1,729	2,701	6,454	2,540	5,644	9,242	28,600	17,810	10,680	4,559	3,831	12,900	8,864
1955	7,826	8,872	7,709	5,067	4,111	8,533	28,740	9,573	7,220	1,710	4,315	1,806	7,948
1956	2,375	4,700	2,366	3,715	3,037	3,360	17,030	20,610	6,855	4,122	1,685	4,048	6,158
1957	3,869	4,480	5,052	4,853	4,704	7,982	10,380	6,960	3,572	4,561	2,006	1,752	5,057
1958	2,483	5,938	13,210	6,684	4,755	5,019	28,090	13,560	5,742	4,723	3,464	2,730	8,032
1959	5,061	5,255	3,285	4,092	3,998	4,484	24,400	6,185	5,251	2,246	1,544	1,806	5,608
1960	8,799	14,240	12,650	7,290	6,038	4,968	30,080	10,250	4,778	2,464	1,775	2,398	8,782

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.60	1.92	2.60	1.04	1.31	2.08	8.23	2.72	0.90	1.08	0.71	0.53	23.72
1952	.74	2.35	1.75	1.60	1.21	1.41	8.22	3.59	3.52	.54	.28	.34	25.55
1953	.57	.71	1.35	1.49	1.71	5.55	5.15	3.96	.70	.42	.42	.38	22.41
1954	.43	.71	1.80	.59	1.34	2.45	8.24	5.25	2.93	1.23	1.03	3.55	29.58
1955	2.22	2.39	1.95	1.16	.92	2.28	8.28	2.92	2.08	.46	1.21	.36	26.23
1956	.61	1.54	.56	1.26	.58	.67	5.44	6.25	1.97	1.13	.41	1.11	21.53
1957	.92	1.19	1.38	1.23	.90	1.87	3.50	2.28	1.04	1.39	.43	.44	16.82
1958	.52	1.64	3.90	1.47	.81	1.24	8.49	4.03	1.63	1.48	.87	.66	26.72
1959	1.39	1.31	.71	1.01	.69	1.09	7.24	2.11	1.66	.55	1.41	.45	18.62
1960	2.53	4.08	3.25	1.61	1.33	1.14	9.10	3.07	1.39	.66	.35	.63	29.15

† Corrected.

a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir since April 1956, Comerford Station Pond, and Union Village Reservoir.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year			
		Observed				Adjusted a/			Observed		Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date									
1950	-	-	-	-	-	-	-	-	6,706	6,711	22.25	
1951	1201	41,800	Apr. 11, 1951	350	7,151	7,153	1.75	23.72	7,105	7,069	22.44	
1952	1231	56,500	June 2, 1952	155	7,711	7,684	1.88	25.55	7,044	7,021	23.34	
1953	1271	73,300	Mar. 27, 1953	115	6,740	6,765	1.65	22.41	6,847	6,853	22.72	
1954	1331	50,700	Apr. 24, 1954	247	8,864	8,916	2.18	29.58	9,996	10,010	33.20	
1955	1381	50,400	Apr. 16, 1955	166	7,948	7,907	1.93	26.23	6,689	6,743	22.38	
1956	1431	40,900	Apr. 30, 1956	187	6,158	6,474	1.58	21.53	6,494	6,709	22.31	
1957	1501	23,000	Jan. 23, 1957	154	5,057	5,009	1.22	16.82	5,752	5,786	19.19	
1958	1551	57,400	Apr. 25, 1958	219	8,032	8,059	1.97	26.72	7,351	7,258	24.07	
1959	1621	36,900	Apr. 3, 1959	110	5,608	5,608	1.37	18.62	7,460	7,555	25.07	
1960	1701	57,000	Apr. 5, 1960	143	8,782	8,764	2.14	29.15	-	-	-	

a Adjusted for change in contents; see footnote to preceding table.

1450. Mascoma River at West Canaan, N. H.

Location.--Lat 43°39'00", long 72°04'50", on right bank 45 ft downstream from Boston and Maine Railroad bridge, 0.9 mile east of West Canaan, Grafton County, 1.2 miles downstream from Indian River, and 3½ miles west of Canaan.

Drainage area.--80.5 sq mi.

Records available.--July 1939 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is 835 ft (from topographic map).

Average discharge.--21 years (1939-60), 122 cfs.

Extremes.--1939-60: Maximum discharge, 3,780 cfs Mar. 27, 1953 (gage height, 8.94 ft), from rating curve extended above 1,900 cfs on basis of slope-area measurement at gage height 9.6 ft; minimum, 3.3 cfs Aug. 3, 4, 1953.
Flood in September 1938 reached a stage of 9.6 ft, from floodmarks (discharge, 4,310 cfs, from rating curve extended above 1,900 cfs as explained above).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	17.7	126	131	60.7	108	149	654	151	61.1	62.8	60.4	63.6	156
1952	105	213	144	125	104	115	644	184	180	24.4	11.7	15.1	155
1953	16.8	24.8	145	134	152	570	317	297	23.9	8.55	21.5	11.4	144
1954	21.5	45.8	126	39.5	100	171	464	370	198	49.8	25.2	182	149
1955	62.4	169	167	60.7	57.9	156	443	124	110	36.4	156	19.7	150
1956	60.1	143	31.8	113	46.7	50.5	428	394	104	71.9	12.6	54.1	126
1957	40.2	67.5	85.6	68.4	54.9	119	155	82.5	45.7	56.7	26.5	14.8	68.2
1958	15.6	99.0	272	127	85.3	87.8	748	254	59.9	23.0	13.6	9.48	149
1959	24.5	56.6	27.7	31.6	25.5	49.5	459	95.2	67.9	23.0	27.9	33.8	73.2
1960	161	315	222	125	108	69.1	692	199	71.9	27.7	14.6	51.9	171

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.25	1.74	1.87	0.87	1.40	2.13	9.07	2.16	0.85	0.90	0.87	0.88	22.99
1952	1.50	2.96	2.06	1.79	1.39	1.65	8.93	2.64	2.49	.35	.17	.21	26.14
1953	.24	.34	2.07	1.92	1.97	8.16	4.39	4.25	.33	.12	.31	.16	24.26
1954	.31	.65	1.80	.57	1.29	2.45	6.43	5.29	2.74	.71	.36	2.53	25.13
1955	.89	2.34	2.59	.87	.75	2.24	6.14	1.78	1.52	.52	2.24	.27	21.95
1956	.86	1.99	.46	1.62	.63	.72	5.93	5.64	1.44	1.03	.18	.75	21.25
1957	.58	.94	1.23	.98	.71	1.71	2.15	1.18	.63	.81	.38	.21	11.51
1958	.22	1.37	3.89	1.82	1.10	1.26	10.36	3.64	.83	.33	.19	.13	25.14
1959	.35	.51	.40	.45	.33	.71	6.09	1.36	.94	.33	.40	.47	12.34
1960	2.30	4.37	3.19	1.79	1.45	.99	9.59	2.85	1.00	.40	.21	.72	28.86

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	106	-	18.20
1951	1201	2,370	Apr. 3, 1951	8.3	136	1.69	22.99	152	25.65	
1952	1231	1,770	June 2, 1952	6.1	155	1.93	26.14	132	22.27	
1953	1271	3,780	Mar. 27, 1953	3.4	144	1.79	24.26	144	24.37	
1954	1331	1,570	Apr. 18, 1954	5.9	149	1.85	25.13	166	27.99	
1955	1381	1,790	Aug. 14, 1955	9.3	150	1.61	21.95	116	19.64	
1956	1431	1,630	Apr. 30, 1956	8.8	126	1.57	21.25	122	20.69	
1957	1501	430	Nov. 22, 1956	5.3	68.2	.847	11.51	84.5	14.24	
1958	1551	1,830	Apr. 22, 1958	5.0	149	1.85	25.14	124	20.92	
1959	1621	1,190	Apr. 3, 1959	5.6	73.2	.909	12.34	124	20.94	
1960	1701	1,950	Nov. 28, 1959	5.0	171	2.12	28.86	-	-	

1500. Lakes and ponds in Mascoma River basin

Lakes and ponds in Mascoma River basin.--These reservoirs are operated as a unit for storage of water for power. The reservoirs and usable capacity of each are as follows: Goose Pond, 5½ miles northeast of Mascoma, N. H.; 509,000,000 cu ft; Grafton Pond, 8½ miles southeast of Mascoma, 144,000,000 cu ft; Crystal Lake, 5½ 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.

Month-end usable contents, in millions of cubic feet, of lakes and ponds in Mascoma River basin

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	529.3	909.5	953.7	956.6	937.3	825.1	1,132.4	1,212.9	1,048.2	1,070.7	1,055.7	996.2
1952	1,164.9	1,170.2	1,127.9	1,062.4	803.2	501.5	1,093.2	1,126.6	937.0	752.5	586.1	467.1
1953	331.0	270.0	705.5	839.1	827.7	1,177.6	1,209.1	1,198.4	989.5	779.2	649.7	469.5
1954	332.6	374.4	646.9	527.4	733.4	638.4	1,166.6	1,255.2	1,215.7	1,069.1	876.0	1,073.9
1955	915.7	1,256.2	1,190.7	797.1	549.7	524.6	1,164.7	1,246.1	1,253.2	1,048.3	1,113.3	803.4
1956	742.2	1,049.3	847.5	933.1	682.2	326.8	974.5	1,230.4	1,110.7	1,039.0	813.3	838.6
1957	729.0	824.7	964.4	931.9	664.5	594.6	784.6	931.9	929.3	942.5	870.4	730.9
1958	577.5	837.6	1,132.7	1,053.6	659.9	310.6	1,155.9	1,205.0	1,045.6	898.7	747.1	602.7
1959	517.1	451.0	444.5	470.5	404.1	406.1	1,068.2	1,096.8	1,096.3	947.6	921.0	809.7
1960	1,033.0	1,246.9	1,035.9	757.8	493.5	373.8	1,169.4	1,216.3	1,106.4	999.3	776.5	793.6

1505. Mascoma River at Mascoma, N. H.

Location.--Lat 43°39'00", long 72°11'05", on left bank at Mascoma, Grafton County, 250 ft downstream from railroad bridge and 1,000 ft downstream from outlet of Mascoma Lake.

Drainage area.--153 sq mi.

Records available.--August 1923 to September 1960.

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

Average discharge.--37 years (1923-60), 218 cfs (adjusted for storage since October 1928).

Extremes.--1923-60: 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.--Flow regulated by Mascoma and Crystal Lakes and Goose and Grafton Ponds (see p. 199).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	58.2	86.2	219	117	215	346	1,081	217	143	88.8	98.8	122	230
1952	131	403	299	260	237	338	963	312	368	95.4	73.2	76.0	301
1953	67.9	53.0	91.6	160	292	920	590	563	103	78.4	79.2	76.4	286
1954	72.9	70.0	131	111	110	378	657	700	383	127	102	204	254
1955	141	197	300	231	199	308	652	176	241	130	280	132	249
1956	117	137	127	168	174	200	584	596	220	146	87.5	80.3	220
1957	99.0	80.6	106	137	195	265	229	78.2	75.7	81.6	54.0	72.3	122
1958	80.0	85.7	380	256	313	300	1,020	445	163	88.9	74.9	72.4	272
1959	67.4	64.9	64.7	62.9	73.9	124	588	150	115	83.3	69.4	101	130
1960	215	494	478	291	277	172	1,041	332	152	76.8	92.1	78.2	307

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.12	1.70	1.77	0.89	1.41	2.23	8.60	1.86	0.58	0.73	0.70	0.72	21.37
1952	1.46	2.95	2.13	1.78	1.36	1.70	8.68	2.44	2.29	2.0	.08	.22	25.29
1953	.13	.21	1.92	1.58	1.96	7.92	4.39	4.21	1.6	-.001	.23	.05	22.76
1954	.16	.63	1.75	.50	1.33	2.58	6.28	5.52	2.68	.54	.23	2.04	24.24
1955	.62	2.39	2.07	.63	.66	2.25	6.56	1.55	1.78	.40	2.30	.09	21.30
1956	.71	1.86	.39	1.51	.52	.51	6.08	5.21	1.27	.90	.02	.66	19.64
1957	.44	.86	1.19	.94	.57	1.80	2.21	1.00	.54	.65	.20	.13	10.53
1958	.17	1.36	3.69	1.71	1.02	1.28	9.82	3.49	.74	.26	.14	.12	23.80
1959	.27	.29	.47	.55	.32	.94	6.15	1.21	.84	.21	.45	.42	12.12
1960	2.25	4.20	3.00	1.41	1.21	.96	9.83	2.63	.80	.28	.07	.62	27.26

a Adjusted for change in contents in Mascoma and Crystal Lakes and Goose and Grafton Ponds.

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year				
		Observed				Adjusted a/		Observed		Adjusted a/		
		Discharge	Maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
1950	-	-	-	-	-	-	-	-	189	186	16.51	
1951	1201	2,700	Apr. 4, 1951	33	230	241	1.58	21.37	269	274	24.32	
1952	1231	1,790	June 3, 1952	42	301	285	1.86	25.29	250	236	21.01	
1953	1271	4,880	Mar. 27, 1953	37	256	257	1.68	22.76	262	260	23.04	
1954	1331	2,030	Apr. 19, 1954	15	254	273	1.78	24.24	285	302	26.78	
1955	1381	1,600	Aug. 15, 1955	64	249	240	1.57	21.30	227	216	19.18	
1956	1431	1,830	May 1, 1956	44	220	221	1.44	19.64	212	215	19.17	
1957	1501	305	Apr. 3, 4, 1957	26	122	119	.778	10.53	144	150	15.26	
1958	1551	2,230	Apr. 24, 1958	28	272	268	1.75	23.80	243	221	19.61	
1959	1621	1,290	Apr. 6, 7, 1959	3	130	136	.889	12.12	213	231	20.54	
1960	1701	2,320	Apr. 6, 1960	35	307	306	2.00	27.26	-	-	-	

a Adjusted for change in contents in Mascoma and Crystal Lakes and Goose and Grafton Ponds.

1515. Ottaquechee 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 1960.

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.--30 years (1930-60), 401 cfs.

Extremes.--1930-60: Maximum discharge, 24,400 cfs Sept. 21, 1938 (gage height, 17.68 ft), from rating curve extended above 6,200 cfs on basis of computations of flow over dams at gage heights 15.58, 17.68, and 21.5 ft; minimum, 2.9 cfs July 31, 1933; minimum daily, 3.8 cfs July 3, 1933.
Maximum stage known, 21.5 ft in November 1927, from floodmarks (discharge, 30,400 cfs, by computation of peak flow over dam).

Remarks.--Flow regulated by powerplants above station. Small seasonal storage in reservoir at Plymouth. Some effect on high flow during 1960 water year by North Hartland Reservoir (flood-control reservoir under construction by Corps of Engineers).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	72.5	275	502	271	420	572	1,929	437	171	210	191	194	435
1952	288	584	473	479	437	400	1,909	682	822	136	62.3	68.2	525
1953	69.1	96.3	333	358	446	1,602	1,064	1,041	123	46.2	80.4	54.2	444
1954	56.4	98.4	307	183	444	687	1,451	993	614	162	93.8	235	442
1955	168	436	451	238	186	587	1,780	348	178	72.2	379	110	411
1956	335	596	173	295	128	140	1,427	1,036	478	221	84.5	299	433
1957	238	237	433	364	278	453	622	281	186	166	93.9	71.7	285
1958	65.5	225	613	275	187	293	2,288	783	229	86.6	59.9	70.0	430
1959	139	162	113	200	181	294	1,602	366	199	65.5	65.1	80.9	306
1960	455	791	688	377	302	257	2,328	640	359	123	69.6	157	543

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.38	1.59	2.62	1.41	1.98	2.98	9.74	2.28	0.86	1.10	0.99	0.98	26.71
1952	1.50	2.95	2.47	2.50	2.13	2.09	9.64	3.56	4.15	.71	.33	.34	32.37
1953	.36	.49	1.74	1.87	2.10	8.36	5.37	5.43	.62	.24	.42	.27	27.27
1954	.29	.50	1.60	.96	2.09	3.58	7.33	5.18	3.10	.84	.49	1.18	27.14
1955	.88	2.20	2.35	1.24	.88	3.06	8.99	1.82	.90	.38	1.98	.55	25.23
1956	1.75	3.01	.90	1.54	.62	.73	7.20	5.41	2.41	1.15	.44	1.51	26.67
1957	1.24	1.19	2.26	1.90	1.31	2.36	3.14	1.47	.94	.86	.49	.36	17.52
1958	.34	1.14	3.20	1.43	.88	1.53	11.55	4.09	1.16	.45	.31	.35	26.43
1959	.73	.82	.59	1.04	.85	1.53	9.10	2.01	1.01	.34	.34	.41	18.77
1960	2.37	4.00	3.59	1.97	1.47	1.34	11.75	3.34	1.81	.64	.36	.79	33.43

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	354	21.77
1951	1201	7,140	Mar. 31, 1951	16	435	1.97	26.71	476	29.24
1952	1231	16,300	June 1, 1952	7.0	525	2.38	32.37	455	28.04
1953	1271	11,400	Mar. 27, 1953	7.3	444	2.01	27.27	441	27.07
1954	1331	5,080	Apr. 12, 1954	5.3	442	2.00	27.14	492	30.18
1955	1381	6,800	Aug. 13, 1955	11	411	1.86	25.23	414	25.46
1956	1431	7,390	Apr. 30, 1956	67	433	1.96	26.67	417	25.70
1957	1501	*4,000	Jan. 23, 1957	17	285	1.29	17.52	285	17.51
1958	1551	8,610	Apr. 22, 1958	28	430	1.95	26.43	389	23.89
1959	1621	6,700	Apr. 3, 1959	30	306	1.38	18.77	433	26.59
1960	1701	6,720	Apr. 5, 1960	39	543	2.46	33.43	-	-

* Estimated; not previously published.

CONNECTICUT RIVER BASIN

1520. Sunapee Lake at Sunapee, N. H.

Location.--Lat 42°23'10", long 72°04'55", on Sugar River at outlet of Sunapee Lake, in Sunapee, Sullivan County.

Drainage area.--45.5 sq mi.

Gage.--Staff gage. Datum of gage is 1,079.41 ft above mean sea level.

Remarks.--Present dam built in 1928. Lake used for recreation and storage of water for power, has usable capacity of 862,000,000 cu ft.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	289	476	507	432	473	571	680	666	609	544	484	415
1952	464	439	374	350	282	282	678	704	581	452	347	248
1953	102	68	282	367	403	920	657	615	493	371	323	201
1954	163	184	323	347	439	459	671	707	629	493	403	503
1955	418	503	374	211	238	384	678	718	632	476	554	401
1956	439	435	303	422	360	275	639	660	605	534	398	333
1957	252	214	265	330	343	425	547	517	449	394	347	265
1958	262	320	666	534	428	416	939	634	559	517	398	303
1959	224	231	194	228	224	316	638	610	566	462	381	258
1960	422	517	425	374	425	425	734	698	634	551	445	493

Note.--To obtain usable contents from figures of contents shown in WSP 1301, subtract 5,214 million cubic feet.

1525. Sugar River at West Claremont, N. H.

Location.--Lat 43°23'15", long 72°21'45", on right bank 0.2 mile downstream from Redwater Brook at West Claremont, Sullivan County.

Drainage area.--269 sq mi.

Records available.--May 1928 to September 1960. 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.--32 years (1928-60), 403 cfs (adjusted for storage).

Extremes.--1928-60: Maximum discharge, 14,000 cfs Mar. 19, 1936 (gage height, 10.92 ft), from rating curve extended above 6,700 cfs on basis of computations of flow over dam at gage heights 10.49 and 10.92 ft; maximum gage height, 11.80 ft Mar. 12, 1936 (ice jam); minimum daily discharge, 21 cfs Sept. 1, 1957.

Remarks. Flow regulated by mills above station and by Sunapee Lake (see p. 202).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	77.1	477	523	310	541	655	2,138	396	196	174	208	174	486
1952	482	832	544	596	445	477	1,834	554	546	125	85.4	87.4	548
1953	80.3	106	361	390	653	1,685	1,270	1,013	134	81.4	128	65.7	497
1954	93.5	174	498	183	481	770	1,155	1,348	498	133	94.5	397	485
1955	173	591	580	228	233	600	1,408	398	434	108	474	89.5	443
1956	278	698	185	480	206	235	1,728	1,085	381	191	76.1	140	472
1957	111	166	289	323	209	425	526	261	132	80.2	64.6	59.2	221
1958	80.4	254	725	390	281	347	2,285	965	273	131	72.4	63.9	488
1959	98.5	165	134	198	140	283	1,495	269	165	88.1	71.1	85.3	285
1960	360	831	751	379	361	314	2,672	707	726	160	113	312	637

† Corrected.

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.21	2.28	2.29	1.21	2.16	2.96	9.04	1.67	0.72	0.64	0.80	0.61	24.59
1952	2.15	3.41	2.23	2.52	1.68	2.04	8.24	2.41	2.07	0.33	0.20	0.20	27.48
1953	1.11	.58	1.86	1.84	2.59	8.05	4.85	4.28	.36	1.15	.47	.08	25.02
1954	.34	.76	2.36	.82	1.99	3.35	5.13	5.83	1.94	1.35	.26	1.80	24.93
1955	.61	2.59	2.28	.72	.95	2.81	6.30	1.77	1.66	.21	2.15	.13	22.18
1956	1.25	2.89	.58	2.25	.73	.87	7.75	4.68	1.49	.70	.11	.48	23.78
1957	.34	.63	1.32	1.49	.83	1.95	2.38	1.07	.44	.26	.20	.11	11.02
1958	.34	1.14	3.66	1.46	.92	1.47	10.31	3.65	1.01	.49	.12	.11	24.68
1959	.29	.69	.52	.90	.53	1.36	6.72	1.11	.62	.21	.18	.16	13.29
1960	1.64	3.60	3.07	1.54	1.53	1.35	11.58	2.97	2.91	.55	.31	1.37	32.42

a Adjusted for change in contents in Sunapee Lake.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Observed				Adjusted a/		Observed	Adjusted a/		
		Momentary maximum		Minimum day	Mean	Mean	Per square mlie	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	355	371	18.75
1951	1201	7,530	Apr. 3, 1951	51	486	487	1.81	24.59	551	547	27.60
1952	1231	4,890	Apr. 5, 1952	53	548	543	2.02	27.48	439	436	22.04
1953	1271	8,170	Mar. 27, 1953	43	497	496	1.84	25.02	516	517	26.13
1954	1331	4,770	Apr. 18, 1954	44	485	494	1.84	24.93	533	534	26.95
1955	1381	5,890	Aug. 14, 1955	56	443	439	1.63	22.18	427	424	21.42
1956	1431	5,150	Apr. 29, 1956	61	472	470	1.75	23.78	423	422	21.35
1957	1501	4,500	Jan. 23, 1957	21	221	218	.810	11.02	262	275	15.87
1958	1551	5,100	Apr. 19, 1958	33	488	489	1.82	24.68	432	417	21.04
1959	1621	5,360	Apr. 3, 1959	38	265	263	.978	13.29	394	401	20.10
1960	1701	7,760	Apr. 5, 1960	61	637	644	2.39	32.42	-	-	-

a Adjusted for change in contents in Sunapee Lake.

1530. Black River at North Springfield, Vt.

Location.--Lat 43°20'00", long 72°30'55", on right bank at North Springfield, Windsor County, 1,300 ft upstream from Great Brook.

Drainage area.--158 sq mi.

Records available.--October 1929 to September 1960. Monthly discharge only for October 1929, 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.--31 years (1929-60), 286 cfs.

Extremes.--1929-60: 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.--Flow regulated by mills above station. Some effect on high flow during 1960 water year by North Springfield Reservoir (flood-control reservoir under construction by Corps of Engineers).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	60.7	215	365	197	294	409	1,416	245	104	124	102	100	301
1952	258	478	403	354	321	297	1,410	512	583	114	40.9	55.1	400
1953	50.7	95.9	302	278	332	1,193	723	725	75.7	29.1	54.1	36.2	325
1954	51.0	72.8	252	122	313	541	904	690	430	108	72.8	241	315
1955	118	424	359	185	168	421	1,365	212	120	39.2	266	59.7	311
1956	401	535	114	229	95.7	101	1,130	769	289	165	34.9	156	334
1957	99.7	150	283	268	186	329	466	212	97.6	95.1	45.6	33.3	189
1958	50.8	182	487	194	131	217	1,714	524	193	68.4	32.8	30.6	318
1959	82.8	116	80.2	137	131	214	1,237	221	128	76.7	39.4	59.2	209
1960	363	565	463	253	242	190	1,688	458	480	113	86.6	197	423

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.44	1.52	2.67	1.44	1.94	2.98	10.00	1.79	0.73	0.91	0.74	0.71	25.87
1952	1.88	3.38	2.94	2.58	2.19	2.16	9.96	3.73	4.12	.83	.30	.39	34.46
1953	.37	.68	2.20	2.03	2.19	8.70	5.10	5.29	.53	.21	.39	.26	27.95
1954	.37	.51	1.84	.89	2.06	3.95	6.38	5.03	3.04	.79	.53	1.70	27.09
1955	.86	3.00	2.62	1.35	1.11	3.07	9.64	1.55	.85	.29	1.94	.42	26.70
1956	2.92	3.78	.83	1.67	.65	.74	7.98	5.61	2.04	1.20	.25	1.10	28.77
1957	.73	1.06	2.06	1.95	1.23	2.40	3.29	1.55	.69	.68	.33	.24	16.21
1958	.37	1.28	3.55	1.42	.86	1.58	12.10	3.83	1.36	.50	.24	.22	27.31
1959	.60	.83	.59	1.00	.86	1.56	8.74	1.62	.90	.56	.29	.42	17.97
1960	2.65	3.99	3.38	1.84	1.65	1.39	11.92	3.35	3.39	.82	.63	1.39	36.40

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	263	22.64
1951	1201	4,860	June 31, 1951	16	301	1.91	25.87	343	29.44
1952	1231	13,000	June 1, 1952	20	400	2.53	34.46	343	29.51
1953	1271	7,690	Mar. 24, 1953	15	325	2.06	27.95	319	27.42
1954	1331	3,940	Mar. 4, 1954	23	315	1.99	27.09	359	30.85
1955	1381	5,470	Aug. 13, 1955	20	311	1.97	26.70	323	27.75
1956	1431	5,500	Apr. 29, 1956	23	334	2.11	28.77	291	25.09
1957	1501	2,300	Jan. 23, 1957	17	189	1.20	16.21	204	17.56
1958	1551	6,460	Dec. 21, 1957	13	318	2.01	27.31	281	24.13
1959	1621	4,500	Apr. 3, 1959	14	209	1.32	17.97	302	25.97
1960	1701	6,300	June 4, 1960	28	423	2.68	36.40	-	-

1535. Williams River at Brockways Mills, Vt.

Location.--Lat 43°12'30", long 72°31'05", on left bank 25 ft upstream from highway bridge at Brockways 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 1960.

Gage.--Water-stage recorder. Altitude of gage is 430 ft (from topographic map).

Average discharge.--20 years (1940-60), 169 cfs.

Extremes.--1940-60: Maximum discharge, 8,910 cfs June 1, 1952 (gage height, 13.39 ft), from rating curve extended above 3,300 cfs on basis of slope-area measurement at gage height 13.31 ft; minimum not determined, occurred Dec. 11, 1941, during period of ice effect; minimum daily, 3.6 cfs Aug. 27, 1949.

Flood in September 1938 reached a stage of 22.7 ft, from floodmarks.

Correction.--In WSP 1301, the momentary maximum discharge for the water year 1941 is listed in error. It should be 2,580 cfs.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	43.7	173	243	103	211	337	822	145	96.5	67.0	76.6	65.7	198
1952	179	353	276	244	205	213	889	352	329	53.1	18.7	25.1	260
1953	24.3	55.7	213	145	192	773	459	495	46.3	14.3	19.1	11.6	205
1954	22.7	37.9	155	74.9	226	344	417	396	173	43.1	26.9	112	168
1955	63.0	278	228	92.3	88.8	267	790	118	58.6	16.9	102	21.9	177
1956	294	365	71.4	120	49.0	58.4	834	420	154	47.7	15.1	43.4	205
1957	51.3	65.6	147	132	103	201	273	105	40.0	28.1	10.0	12.3	95.6
1958	20.0	69.8	273	140	76.0	144	953	275	66.3	34.5	15.1	16.8	173
1959	59.2	54.0	42.1	87.5	71.8	181	742	116	49.1	34.9	32.6	34.2	123
1960	237	362	313	139	129	150	1,033	241	217	49.8	35.5	139	252

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.49	1.87	2.72	1.16	2.13	3.77	8.91	1.63	1.04	0.75	0.86	0.71	26.04
1952	2.00	3.83	3.08	2.75	2.15	2.38	9.63	3.94	3.57	.59	.21	.27	34.38
1953	.27	.60	2.38	1.62	1.94	8.66	4.98	5.54	.50	.16	.21	.13	26.99
1954	.25	.41	1.73	.84	2.29	3.85	4.51	4.43	1.88	.48	.30	1.22	22.19
1955	.71	3.01	2.56	1.03	.90	2.99	8.55	1.32	.63	.19	1.14	.24	23.27
1956	3.29	3.95	.80	1.34	.51	.65	9.03	4.70	1.66	.53	.17	.47	27.10
1957	.35	.71	1.64	1.48	1.04	2.25	2.96	1.18	.43	.31	.11	.13	12.59
1958	.22	.76	3.06	1.56	.77	1.61	10.33	3.08	.72	.39	.17	.18	22.85
1959	.44	.59	.47	.98	.73	2.03	8.04	1.50	.53	.39	.36	.37	16.23
1960	2.65	3.93	3.51	1.56	1.35	1.68	11.19	2.69	2.35	.56	.40	1.50	33.37

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean
		Discharge	Date					
1950	-	-	-	-	-	-	-	165
1951	1201	4,860	Mar. 31, 1951	15	198	1.92	26.04	227
1952	1231	8,910	June 1, 1952	9.3	260	2.52	34.38	217
1953	1271	6,490	Mar. 24, 1953	6.2	205	1.99	26.99	198
1954	1331	2,150	Apr. 17, 1954	6.9	169	1.63	22.19	198
1955	1381	2,800	Aug. 13, 1955	5.7	177	1.72	23.27	190
1956	1431	4,850	Apr. 29, 1956	8.6	205	1.99	27.10	165
1957	1501	2,000	Jan. 23, 1957	6.4	95.6	.928	12.59	106
1958	1551	3,070	Dec. 21, 1957	6.6	173	1.68	22.85	154
1959	1621	3,230	Apr. 3, 1959	9.4	123	1.19	16.23	188
1960	1701	5,270	Apr. 5, 1960	14	252	2.45	33.37	-

1540. Saxtons River at Saxtons River, Vt.

Location.--Lat 43°08'15", long 72°29'15", on right bank 130 ft upstream from highway bridge, 0.8 mile east of Saxtons River, Windham County, 1.4 miles upstream from Bundy Brook, and 3.9 miles upstream from mouth.

Drainage area.--72.2 sq mi.

Records available.--June 1940 to September 1960.

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

Average discharge.--20 years (1940-60), 119 cfs.

Extremes.--1940-60: Maximum discharge, 5,610 cfs Sept. 12, 1960 (gage height, 11.57 ft), from rating curve extended above 1,800 cfs on basis of slope-area measurements at gage heights 10.51 and 11.37 ft; minimum, 1.9 cfs July 25, 1949; minimum daily, 2.4 cfs Aug. 6, 1955.

Flood in September 1938 reached a stage of 17.9 ft, from floodmarks.

Remarks.--Occasional diurnal fluctuation at low flow caused by sawmill above station; fluctuation more frequent prior to 1946.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	35.1	138	194	88.0	148	258	570	99.9	72.4	40.8	46.3	50.4	144
1952	139	314	223	193	156	171	644	232	222	38.0	14.6	20.0	196
1953	15.5	37.2	164	125	163	535	310	302	38.5	9.13	11.6	6.61	144
1954	15.8	25.9	118	54.0	161	239	259	283	97.2	30.2	17.5	91.4	116
1955	44.0	196	163	67.0	62.2	173	529	84.6	43.5	7.46	67.2	12.3	120
1956	246	317	61.4	101	41.3	46.2	559	255	97.1	27.4	9.75	26.1	149
1957	20.6	51.6	109	94.0	72.9	144	184	75.5	24.2	15.7	6.55	7.83	67.2
1958	16.5	58.9	215	122	65.3	114	643	192	38.2	20.3	10.7	12.1	125
1959	25.6	39.3	29.8	67.8	50.4	124	461	69.0	28.6	19.8	21.1	25.4	79.8
1960	173	268	216	100	102	103	671	163	94.3	32.5	33.4	163	176

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.56	2.13	3.10	1.41	2.14	4.12	8.81	1.60	1.12	0.65	0.74	0.78	27.16
1952	2.22	4.86	3.56	3.08	2.32	2.73	9.95	3.71	3.43	.61	.23	.31	37.01
1953	.25	.57	2.62	2.00	2.35	8.54	4.78	4.82	.59	.15	.15	.10	26.97
1954	.25	.40	1.88	.86	2.32	3.82	4.00	4.51	1.50	.48	.28	1.41	21.71
1955	.70	3.03	2.61	1.07	.90	2.77	8.17	1.35	.67	.12	1.07	.19	22.65
1956	3.94	4.90	.98	1.62	.62	.74	8.64	4.07	1.50	.44	.16	.40	28.01
1957	.33	.80	1.74	1.50	1.05	2.31	2.85	1.20	.37	.25	.10	.12	12.62
1958	.26	.91	3.43	1.95	.94	1.82	9.94	3.08	.59	.32	.17	.19	23.58
1959	.41	.61	.48	1.08	.73	1.99	7.12	1.10	.44	.32	.34	.39	15.01
1960	2.77	4.14	3.45	1.60	1.52	1.64	10.37	2.61	1.46	.52	.53	2.52	33.13

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	124	23.31
1951	1201	4,070	Mar. 31, 1951	14	144	1.99	27.16	170	32.01
1952	1231	5,430	Jun. 1, 1952	7.2	186	2.71	37.01	158	29.81
1953	1271	4,660	Mar. 24, 1953	3.2	144	1.99	26.97	139	26.06
1954	1331	2,290	Mar. 3, 1954	4.6	116	1.61	21.71	136	25.52
1955	1381	2,160	Aug. 13, 1955	2.4	120	1.66	22.65	139	26.13
1956	1431	3,080	Oct. 31, 1955	4.8	149	2.06	28.01	112	21.06
1957	1501	†1,200	Jan. 23, 1957	3.6	67.2	.931	12.62	76.4	14.35
1958	1551	2,560	Dec. 21, 1957	4.5	125	1.75	23.58	109	20.48
1959	1621	2,820	Apr. 3, 1959	5.0	79.8	1.11	15.01	127	23.87
1960	1701	5,610	Sept. 12, 1960	12	176	2.44	33.13	-	-

† Not previously published.

1545. Connecticut River at North Walpole, N. H.

Location.--Lat 43°07'35", long 72°26'15", on left bank at North Walpole, Cheshire County, 100 ft upstream from Saxtons River and 0.7 mile downstream from Vilas Bridge between Bellows Falls, Vt., and North Walpole, N. H. Records include flow of Saxtons River.

Drainage area.--5,493 sq mi, includes that of Saxtons River.

Records available.--March 1942 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 218.63 ft above mean sea level, datum of 1929.

Average discharge.--18 years (1942-60), 9,424 cfs (adjusted for storage).

Extremes.--1942-60: Maximum discharge, 97,000 cfs Mar. 27, 1953 (gage height, 30.37 ft); minimum daily, 115 cfs Aug. 31, 1952, Sept. 2, 1957.
Maximum stage known, 43.8 ft Mar. 19, 1936, from floodmarks.

Remarks.--Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes (see p. 178), Lake Francis (see p. 180), Moore Reservoir since April 1956 and Comerford Station Pond (see p. 183), Union Village Reservoir (see p. 193). Four reservoirs in Mascoma River basin (see p. 199), Sunapee Lake (see p. 202), and other reservoirs (combined usable capacity, about 19½ billion cubic feet).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2,511	8,247	12,420	6,287	8,566	11,960	39,830	11,620	4,788	4,665	3,775	3,357	9,800
1952	5,247	12,980	9,303	9,481	8,224	8,529	39,350	15,790	16,030	3,095	1,640	1,830	10,900
1953	2,602	2,992	7,034	7,950	10,460	27,950	24,370	19,110	3,444	1,935	2,168	1,834	9,325
1954	2,088	3,314	8,587	3,541	9,361	13,660	34,600	23,610	13,450	5,474	4,116	14,800	11,290
1955	8,669	11,540	10,560	6,524	5,162	12,360	37,230	11,630	8,768	2,160	6,198	2,271	10,250
1956	4,359	8,722	3,240	5,917	4,105	4,532	25,720	26,130	9,194	5,128	2,116	4,933	8,664
1957	4,602	5,396	6,953	6,387	6,107	10,870	14,060	8,550	4,357	5,056	2,503	2,032	6,410
1958	2,770	6,915	16,550	8,619	6,421	7,258	39,310	18,130	7,019	5,227	3,919	3,018	110,440
1959	5,473	6,138	4,038	5,414	5,107	6,472	33,030	8,188	6,134	2,820	2,008	2,402	7,236
1960	11,020	18,420	16,590	9,087	7,866	5,654	43,180	13,830	7,373	3,148	2,503	3,698	11,850

† Corrected.

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.49	1.82	2.58	1.15	1.55	2.40	8.44	2.56	0.90	1.01	0.76	0.59	24.25
1952	1.02	2.68	1.94	1.88	1.43	1.63	8.37	3.48	3.34	.54	.26	.30	26.87
1953	.50	.63	1.49	1.59	1.93	6.04	5.10	4.12	.64	.36	.40	.31	23.11
1954	.38	.66	1.82	.64	1.54	2.75	7.42	5.18	2.74	1.09	.83	3.06	28.11
1955	1.81	2.36	2.04	1.13	.86	2.51	7.96	2.62	1.86	.41	1.31	.33	25.20
1956	.87	1.59	.57	1.42	.61	.71	5.89	5.84	1.93	1.04	.37	1.01	22.25
1957	.82	1.07	1.44	1.24	.92	2.02	3.26	2.04	.93	1.13	.45	.37	15.69
1958	.44	1.45	3.65	1.53	.88	1.36	8.71	3.94	1.46	1.18	.72	.53	25.85
1959	1.11	1.15	.68	1.03	.72	1.24	7.22	1.99	1.41	.51	.39	.44	17.89
1960	2.38	3.91	3.23	1.55	1.33	1.02	9.53	3.04	1.55	.62	.40	.78	29.34

a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir since April 1956, Comerford Station Pond, Union Village Reservoir, 4 reservoirs in Mascoma River basin, and Sunapee Lake.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year			
		Observed				Adjusted a/			Observed		Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date									
1950	-	-	-	-	-	-	-	-	8,600	8,618	21.30	
1951	1201	68,600	Mar. 31, 1951	185	9,800	9,815	1.79	24.25	10,160	10,120	25.00	
1952	1231	81,700	June 2, 1952	115	10,900	10,850	1.98	26.87	9,668	9,627	23.85	
1953	1271	97,000	Mar. 27, 1953	164	9,325	9,349	1.70	23.11	9,440	9,447	23.35	
1954	1331	57,600	Apr. 18, 1954	171	11,290	11,370	2.07	28.11	12,690	12,720	31.46	
1955	1381	64,400	Apr. 16, 1955	152	10,250	10,190	1.86	25.20	9,028	9,069	22.42	
1956	1431	66,700	Apr. 30, 1956	222	8,664	8,978	1.63	22.25	8,726	8,944	22.15	
1957	1501	38,900	Jan. 23, 1957	115	6,410	6,356	1.16	15.69	7,195	7,246	17.90	
1958	1551	76,300	Apr. 23, 1958	188	110,440	10,460	1.90	25.85	9,543	9,414	23.25	
1959	1621	83,700	Apr. 4, 1959	226	7,236	7,241	1.32	17.89	9,782	9,903	24.47	
1960	1701	94,400	Apr. 5, 1960	188	11,850	11,840	2.16	29.34	-	-	-	

† Corrected.

a Adjusted for change in contents; see footnote to preceding table.

1550. Cold River at Drewsville, N. H.

Location.--Lat 43°07'55", long 72°23'25", on left bank 50 ft upstream from bridge on State Highway 101 at Drewsville, Cheshire County, 1.0 mile upstream from Great Brook, 2.7 miles east of Bellows Falls, Vt., and 3.4 miles upstream from mouth.

Drainage area.--82.7 sq mi.

Records available.--June 1940 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is 375 ft (from topographic map).

Average discharge.--20 years (1940-60), 118 cfs.

Extremes.--1940-60: Maximum discharge, 8,160 cfs Nov. 26, 1950 (gage height, 10.29 ft), from rating curve extended above 3,400 cfs by logarithmic plotting; minimum, 1.3 cfs Sept. 23, 1940.

Remarks.--Occasional diurnal fluctuation at low flow caused by sawmill above station; fluctuation more frequent prior to 1945.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	17.7	205	141	79.9	188	204	472	106	58.1	45.5	62.6	65.1	136
1952	156	320	167	210	140	171	551	126	134	18.6	15.5	16.9	168
1953	16.0	20.8	92.2	150	211	461	336	249	32.4	10.2	17.2	7.10	133
1954	15.0	43.7	179	54.6	185	224	297	513	79.2	23.6	12.1	126	129
1955	42.0	180	162	47.2	59.8	189	396	116	137	16.0	64.5	15.7	119
1956	84.4	237	42.8	134	39.9	47.5	621	251	84.3	20.6	8.28	26.5	132
1957	19.7	30.4	70.7	97.2	66.9	144	180	83.9	29.1	15.3	8.69	9.45	62.9
1958	16.9	51.6	236	115	68.1	109	731	207	37.8	15.9	14.4	11.3	134
1959	21.8	44.8	31.5	66.4	40.2	108	438	77.6	43.3	22.8	12.9	14.9	76.5
1960	132	321	208	107	112	103	792	205	141	30.5	18.7	114	189

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.25	2.77	1.96	1.11	2.37	2.85	6.37	1.48	0.78	0.63	0.87	0.88	22.32
1952	2.18	4.32	2.33	2.92	1.83	2.38	7.44	1.76	1.80	.26	.22	.23	27.67
1953	.22	.28	1.29	2.09	2.65	6.43	4.53	3.47	.44	.14	.24	.10	21.88
1954	.21	.59	2.50	.76	2.33	3.12	4.00	4.37	1.07	.33	.17	1.70	21.15
1955	.59	2.43	2.26	.66	.75	2.64	5.34	1.61	1.85	.22	.90	.21	19.46
1956	1.18	3.19	.60	1.87	.52	.66	8.38	3.50	1.14	.29	.12	.36	21.81
1957	.27	.41	.99	1.35	.84	2.01	2.43	1.17	.39	.21	.12	.13	10.32
1958	.24	.70	3.29	1.60	.86	1.52	9.86	2.89	.51	.22	.20	.15	22.04
1959	.30	.60	.44	.93	.51	1.51	5.90	1.08	.58	.32	.18	.20	12.55
1960	1.83	4.33	2.90	1.50	1.46	1.44	10.69	2.86	1.90	.43	.26	1.53	31.13

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	115	18.94
1951	1201	8,160	Nov. 26, 1950	14	136	1.64	22.32	159	26.17
1952	1231, 1431	2,770	Nov. 3, 1951	6.8	168	2.03	27.67	125	20.63
1953	1271	2,190	Mar. 24, 1953	5.7	133	1.61	21.88	142	23.39
1954	1331	2,270	Apr. 18, 1954	5.6	129	1.66	21.15	141	23.13
1955	1381	1,240	May 31, 1955	5.7	119	1.44	19.46	117	19.15
1956	1431	2,290	Apr. 29, 1956	5.7	132	1.60	21.81	112	18.51
1957	1501	1,040	Jan. 23, 1957	6.2	62.9	1.761	10.32	76.4	12.86
1958	1551	1,970	Apr. 18, 1958	5.0	134	1.62	22.04	117	19.15
1959	1621	2,200	Apr. 3, 1959	5.5	76.5	.925	12.55	124	20.27
1960	1701	3,190	Oct. 24, 1959	8.8	169	2.29	31.13	-	-

1555. West River at Jamaica, Vt.

Location.--Lat 43°06'30", long 72°46'30", on left bank a quarter of a mile upstream from highway bridge at Jamaica, Windham County, and 0.4 mile upstream from Ball Mountain Brook.

Drainage area.--179 sq mi.

Records available.--October 1946 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is 640 ft (from topographic map).

Average discharge.--14 years (1946-60), 366 cfs.

Extremes.--1946-60: Maximum discharge, 29,500 cfs Dec. 31, 1948 (gage height, 14.87 ft), from rating curve extended above 9,800 cfs by logarithmic plotting, verified by slope-area measurement of peak flow; minimum, 5.0 cfs Aug. 28, 1949.

Remarks.--Some effect on high flow during 1960 water year by Ball Mountain Reservoir (flood-control reservoir under construction by Corps of Engineers).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	82.3	458	452	237	340	443	1,559	312	190	171	175	112	376
1952	409	823	474	405	353	357	1,771	625	615	47.8	23.4	41.7	476
1953	32.0	133	360	374	431	1,486	878	945	66.6	16.2	32.7	18.3	399
1954	54.4	95.1	382	117	360	677	1,065	765	402	78.0	82.3	389	373
1955	159	771	461	163	199	545	1,796	243	137	31.6	324	48.4	405
1956	865	661	106	284	103	107	1,436	1,166	271	113	31.4	165	442
1957	98.8	256	454	345	199	366	624	285	134	134	31.2	34.3	247
1958	59.5	297	671	229	154	192	1,890	596	124	121	45.5	65.2	370
1959	132	193	125	230	195	500	1,465	243	121	47.5	39.1	41.9	261
1960	411	696	503	199	194	219	2,082	389	274	105	62.4	281	449

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.53	2.85	2.91	1.53	1.98	2.66	9.72	2.01	1.18	1.10	1.13	0.70	28.50
1952	2.63	3.88	3.05	2.61	2.12	2.30	11.04	4.02	3.84	.31	.15	.26	36.21
1953	.21	.83	2.32	2.41	2.51	9.57	5.47	6.08	.41	.10	.21	.11	30.23
1954	.35	.59	2.46	.76	2.10	4.36	6.76	4.93	2.51	.50	.53	2.43	28.28
1955	1.02	4.81	2.97	1.05	1.16	3.51	11.19	1.57	.86	.20	2.09	.30	30.73
1956	5.57	4.12	.68	1.83	.62	.89	8.95	7.51	1.69	.73	.20	1.03	33.62
1957	.64	1.60	2.93	2.22	1.16	2.36	3.89	1.83	.83	.87	.20	.21	18.74
1958	.58	1.85	4.32	1.47	.89	1.24	11.78	3.84	.77	.78	.28	.41	28.01
1959	.85	1.20	.80	1.48	1.13	1.93	9.26	1.56	.75	.31	.25	.26	19.78
1960	2.65	4.34	3.24	1.28	1.17	1.41	12.98	2.51	1.71	.68	.40	1.75	34.12

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches		
		Discharge	Date								
1950	-	-	-	-	-	-	-	339	25.70		
1951	1201	11,700	Nov. 26, 1950	22	376	2.10	28.50	419	31.77		
1952	1231	24,100	June 1, 1952	10	476	2.66	36.21	395	30.01		
1953	1271	10,100	Mar. 24, 1953	5.1	399	2.23	30.23	399	30.27		
1954	1331	4,460	Dec. 7, 1953	11	373	2.08	28.28	444	33.68		
1955	1381	9,460	Nov. 3, 1954	8.4	405	2.26	30.73	426	32.30		
1956	1431	8,020	Apr. 29, 1956	9.1	442	2.47	33.62	373	28.42		
1957	1501	6,200	Jan. 23, 1957	12	247	1.38	18.74	265	20.12		
1958	1551	7,000	Dec. 21, 1957	11	370	2.07	28.01	321	24.31		
1959	1621	4,070	Apr. 8, 1959	12	261	1.46	19.78	358	27.16		
1960	1701	6,480	Nov. 28, 1959	21	449	2.51	34.12	-	-		

1560. West River at Newfane, Vt.

Location.--Lat 42°59'45", long 72°38'20", on right bank 600 ft downstream from highway bridge and 1 mile northeast of Newfane, Windham County.

Drainage area.--308 sq mi.

Records available.--September 1919 to September 1923, October 1928 to September 1960.

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.--36 years (1919-23, 1928-60), 620 cfs.

Extremes.--1919-23, 1928-60: Maximum discharge, 52,300 cfs Sept. 21, 1933 (gage height, 22.81 ft, from floodmarks), from rating curve extended above 20,000 cfs on basis of contracted-opening measurement at gage height 19.3 ft and slope-area measurements at gage heights 19.46 and 22.81 ft; minimum, 13 cfs Sept. 17, 18, 1948, Aug. 27, 28, 1949. Flood of Nov. 3, 1927, reached a stage of 23.0 ft, from floodmarks, at chain-gage site (discharge, 45,000 cfs, from rating curve extended by logarithmic plotting and on basis of computation of flow over dam at West Dummerston).

Remarks.--Some effect on high flow during 1960 water year by Ball Mountain and Townshend Reservoirs (flood-control reservoirs under construction by Corps of Engineers). Records of water temperatures for the water years 1955-60 are published in reports of the Geological Survey.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	150	890	925	461	721	1,005	3,049	537	355	264	276	215	735
1952	772	1,212	871	742	636	632	3,105	1,150	1,110	95.9	47.9	77.8	867
1953	54.6	225	660	656	772	2,749	1,497	1,829	127	34.3	52.9	31.5	709
1954	87.2	153	665	200	695	1,245	1,717	1,350	577	132	120	650	630
1955	277	1,437	847	306	342	958	3,075	406	216	46.4	538	76.7	708
1956	1,768	1,331	185	461	174	208	2,651	1,880	479	168	48.3	210	798
1957	134	393	712	581	341	651	1,055	463	192	180	54.1	53.4	401
1958	97.7	458	1,175	388	263	356	3,611	1,015	192	182	77.0	102	658
1959	211	329	214	379	342	532	2,454	413	177	69.6	52.7	59.9	433
1960	720	1,276	959	433	456	404	3,887	771	467	132	107	595	845

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.56	3.22	3.46	1.80	2.44	3.76	11.05	2.01	1.29	0.99	1.03	0.78	32.39
1952	2.89	4.39	3.26	2.78	2.23	2.37	11.25	4.31	4.02	.36	.18	.28	38.32
1953	.20	.82	2.47	2.45	2.61	10.26	5.42	6.10	.46	.13	.20	.11	31.23
1954	.33	.56	2.49	.75	2.32	4.66	6.22	5.06	2.09	.49	.45	2.35	27.76
1955	1.04	5.20	3.17	1.15	1.16	3.59	11.14	1.52	.78	.17	2.01	.28	31.21
1956	6.62	4.82	.69	1.80	.61	.78	9.60	7.04	1.74	.63	.18	.76	35.27
1957	.50	1.42	2.66	2.18	1.15	2.44	3.82	1.73	.70	.68	.20	.19	17.67
1958	.37	1.66	4.40	1.45	.89	1.33	13.08	3.80	.69	.68	.29	.37	29.01
1959	.79	1.19	.80	1.42	1.16	1.99	8.89	1.54	.64	.26	.20	.22	19.10
1960	2.69	4.62	3.59	1.62	1.60	1.51	14.08	2.89	1.69	.49	.40	2.15	37.33

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	643	28.32
1951	1201	20,800	Nov. 26, 1950	49	735	2.39	32.39	810	35.69
1952	1231	31,000	June 1, 1952	24	867	2.81	38.32	707	31.27
1953	1271	17,900	Mar. 24, 1953	18	709	2.30	31.23	705	31.12
1954	1351	7,890	Dec. 7, 1953	25	630	2.05	27.76	767	33.79
1955	1381	16,300	Nov. 3, 1954	17	708	2.30	31.21	770	33.93
1956	1431	14,600	(a)	23	798	2.59	35.27	627	27.72
1957	1501	11,000	Jan. 23, 1957	26	401	1.30	17.67	443	19.52
1958	1551	12,600	Dec. 21, 1957	25	658	2.14	29.01	576	25.36
1959	1621	7,230	Apr. 3, 1959	21	433	1.41	19.10	618	27.22
1960	1701	13,300	Apr. 5, 1960	37	845	2.74	37.33	-	-

a Occurred Oct. 15, 1955, Apr. 29, 1956.

1565. Connecticut River at Vernon, Vt.

Location.--Lat 42°46'10", long 72°30'50", on right bank just downstream from Vernon Dam at Vernon, Windham County, and 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 1960.

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.--16 years (1944-60), 10,830 cfs (adjusted for storage).

Extremes.--1936, 1938, 1944-60: Maximum discharge, 176,000 cfs Mar. 19, 20, 1936 (gage height, 128.8 ft, datum then in use), from rating curve extended above 86,070 cfs; minimum daily, 99 cfs Oct. 8, 1944.

Remarks.--Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes (see p. 178), Lake Francis (see p. 180), Moore Reservoir since April 1956 and Comerford Station Pond (see p. 183). Union Village Reservoir (see p. 193), four reservoirs in Mascoma River basin (see p. 199), Sunapee Lake (see p. 202), and other reservoirs (combined usable capacity, about 20 billion cubic feet).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2,875	9,985	13,990	7,439	10,020	13,150	46,000	12,490	5,752	5,579	4,661	4,154	11,300
1952	6,905	15,480	10,680	11,330	9,799	9,784	45,680	17,110	17,840	3,374	2,081	2,052	12,610
1953	2,719	3,366	8,351	8,762	11,730	31,830	27,940	21,820	3,855	2,188	2,425	1,973	10,580
1954	2,395	3,870	10,100	4,297	9,814	16,210	37,860	26,570	14,140	5,825	4,559	15,610	12,570
1955	8,921	13,770	12,590	7,377	6,045	14,170	43,370	12,480	9,179	2,409	7,084	2,528	11,630
1956	7,412	12,170	3,917	6,980	4,767	5,308	30,890	29,910	10,260	5,451	2,321	5,320	10,380
1957	4,906	6,222	8,333	7,784	7,034	12,480	15,510	9,204	4,682	5,374	2,731	2,173	7,204
1958	3,008	7,669	19,100	10,060	7,489	8,632	44,320	20,660	7,235	5,609	4,272	3,253	11,770
1959	5,879	6,700	4,565	6,374	5,857	7,935	37,990	8,950	6,638	3,118	2,166	2,744	8,205
1960	12,870	20,450	18,990	11,180	9,736	7,049	50,990	15,300	8,594	3,755	2,945	5,570	13,890

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.49	1.91	2.55	1.22	1.60	2.32	8.50	2.40	0.96	1.05	0.83	0.66	24.49
1952	1.20	2.80	1.96	1.99	1.53	1.66	8.47	3.30	3.25	.53	.31	.31	27.31
1953	.46	.62	1.55	1.54	1.91	6.01	5.11	4.11	.63	.36	.39	.30	22.99
1954	.39	.68	1.87	.70	1.59	2.88	7.08	5.05	2.52	1.02	.81	2.82	27.41
1955	1.63	2.46	2.12	1.15	.90	2.53	8.07	2.45	1.70	.41	1.31	.33	25.06
1956	1.32	2.35	.63	1.44	.65	.77	6.09	5.81	1.88	.97	.36	.95	23.22
1957	.78	1.09	1.52	1.34	.96	2.07	3.11	1.91	.87	1.05	.44	.35	15.49
1958	.43	1.40	3.67	1.57	.95	1.45	8.53	3.92	1.32	1.11	.70	.51	25.56
1959	1.05	1.11	.69	1.08	.76	1.35	7.21	1.69	1.32	.50	.37	.44	17.77
1960	2.43	3.79	3.27	1.74	1.49	1.12	9.74	2.94	1.57	.65	.43	.98	30.15

a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir since April 1956, Comerford Station Pond, Union Village Reservoir, 4 reservoirs in Mascoma River basin, and Sunapee Lake.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Observed			Adjusted a/			Observed		Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	9,802	9,820	21.27
1951	1201	81,200	Mar. 31, 1951	242	11,300	11,310	1.80	24.49	11,810	11,770	25.50
1952	1251	86,600	June 2, 1952	235	12,610	12,560	2.00	27.31	11,070	11,030	23.98
1953	1271	98,800	Mar. 28, 1953	289	10,580	10,610	1.69	22.99	10,750	10,750	25.30
1954	1331	65,000	Apr. 18, 1954	332	12,570	12,650	2.02	27.41	14,130	14,160	30.68
1955	1381	70,500	Apr. 16, 1955	275	11,630	11,580	1.85	25.06	10,650	10,690	23.15
1956	1431	79,600	Apr. 30, 1956	270	10,380	10,690	1.71	23.22	10,050	10,270	22.31
1957	1501	30,000	Jan. 24, 1957	260	7,204	7,150	1.14	15.49	8,076	8,128	17.60
1958	1551	84,200	Apr. 23, 1958	321	11,770	11,790	1.88	25.56	10,700	10,570	22.91
1959	1621	80,600	Apr. 4, 1959	250	8,205	8,210	1.31	17.77	11,150	11,270	24.41
1960	1701	107,000	Apr. 5, 6, 1960	182	13,890	13,880	2.22	30.15	-	-	-

a Adjusted for change in contents; see footnote to preceding table.

1570. Ashuelot River near Gilsum, N. H.

Location.--Lat 43°02'20", long 72°16'15", on right bank 50 ft downstream from White Brook, 60 ft upstream from stone-arch bridge just off Keene-Newport road, and 0.7 mile downstream from Gilsum, Cheshire County.

Drainage area.--71.1 sq mi.

Records available.--August 1922 to September 1960.

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.--38 years (1922-60), 126 cfs.

Extremes.--1922-60: Maximum discharge, 5,220 cfs Sept. 21, 1938 (gage height, 11.24 ft in gage well), from rating curve extended above 2,000 cfs on basis of float measurements at gage heights 10.66 and 10.72 ft and slope-area measurement at gage height 11.24 ft; maximum gage height, 12.80 ft Mar. 19, 1936; minimum discharge, about 1 cfs Oct. 6, 1922, July 10, 1923, Nov. 14, 1952.

Remarks.--Flow regulated by reservoir above station. Diurnal fluctuation caused by power-plant above station prior to 1938.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	15.3	292	206	98.2	219	200	550	105	60.7	44.3	59.2	81.7	160
1952	168	290	159	218	134	144	559	158	137	16.0	14.7	24.2	168
1953	11.4	12.9	92.2	156	220	480	358	266	29.7	9.20	16.8	10.3	138
1954	14.0	52.2	231	47.9	160	225	300	334	95.8	27.9	12.8	118	135
1955	46.1	246	178	56.6	71.8	191	399	86.7	103	16.2	96.6	12.8	125
1956	194	264	46.9	216	47.8	59.3	500	277	113	20.5	5.60	16.5	147
1957	19.0	43.5	108	112	70.8	146	199	92.7	37.9	20.8	8.74	6.83	72.1
1958	9.75	70.1	267	117	56.8	79.2	673	238	35.7	19.0	16.9	8.68	133
1959	27.4	90.8	65.5	126	41.8	148	503	83.6	43.0	19.8	13.0	20.3	98.3
1960	204	300	220	117	101	76.8	791	189	99.8	23.1	15.8	171	191

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.25	4.57	3.34	1.59	3.21	3.24	8.63	1.71	0.95	0.72	0.96	1.28	30.45
1952	2.73	4.55	2.58	3.53	2.04	2.33	8.77	2.57	2.15	.26	.24	.38	32.13
1953	.19	.20	1.49	2.53	3.22	7.78	5.62	4.32	.47	.15	.27	.16	26.40
1954	.23	.82	3.74	.78	2.34	3.65	4.70	5.42	1.50	.45	.21	1.85	25.69
1955	.75	3.86	2.88	.92	1.05	3.09	6.27	1.41	1.62	.26	1.57	.20	23.88
1956	3.15	4.14	.76	3.51	.72	.96	7.85	4.49	1.78	.33	.09	.26	28.04
1957	.31	.68	1.75	1.82	1.04	2.37	3.13	1.50	.59	.34	.14	.11	13.78
1958	.16	1.10	4.34	1.89	.83	1.28	10.56	3.86	.56	.31	.27	.14	25.30
1959	.44	1.43	1.06	2.05	.61	2.40	7.90	1.56	.68	.32	.21	.32	18.78
1960	3.30	4.70	3.56	1.90	1.53	1.25	12.41	3.06	1.57	.37	.26	2.69	36.60

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches		
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	-	136	26.01
1951	1201	3,700	Nov. 26, 1950	8.8	160	2.25	30.45	168	32.15		
1952	1231	1,870	Apr. 6, 1952	9.0	168	2.36	32.13	126	24.15		
1953	1271	1,630	Mar. 27, 1953	3.6	138	1.94	26.40	153	29.31		
1954	1331	1,420	Apr. 18, 1954	6.4	135	1.90	25.69	149	28.39		
1955	1381	1,210	Nov. 4, 1954	5.5	125	1.76	23.88	128	24.44		
1956	1431	1,920	Apr. 30, 1956	4.4	147	2.07	28.04	119	22.73		
1957	1501	568	Jan. 23, 1957	4.2	72.1	1.01	13.78	87.1	16.64		
1958	1551	1,390	Apr. 19, 1958	5.5	133	1.87	25.30	119	22.63		
1959	1621	1,590	Apr. 3, 1959	7.6	98.3	1.38	18.78	144	27.41		
1960	1701	2,780	Apr. 5, 1960	9.8	191	2.69	36.60	-	-		

1575. Surry Mountain Reservoir near Keene, N. H.

Location.--Lat 42°59'50", long 72°18'40", on Ashuelot River 2.6 miles upstream from Sturtevant Brook and 4½ miles north of Keene, Cheshire County.

Drainage area.--100 sq mi.

Gage.--Water-stage recorder. Datum of gage is 485 ft above mean sea level (levels by Corps of Engineers).

Remarks.--Reservoir completed in 1942 for flood control, has usable capacity of 1,420,000,000 cu ft.

Cooperation.--Records furnished by Corps of Engineers.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	0.2	609.9	29.5	31.9	38.4	270.0	260.0	1.4	0.5	0.5	0.4	0.4
1952	6.7	31.1	40.3	118.2	33.5	4.0	203.4	1.2	39.4	39.4	37.5	.1
1953	.1	19.8	28.8	140.0	35.5	952.5	302.0	.7	.2	.1	.1	.1
1954	.3	6.1	31.9	35.1	55.3	2.8	3.3	1.6	5.5	.2	.9	.3
1955	.5	33.5	33.5	31.1	38.9	14.1	4.6	6.7	.6	.1	.2	.1
1956	15.3	13.2	29.5	34.3	39.4	13.2	713.0	8.2	.1	.1	.1	.2
1957	.1	19.8	34.3	35.1	48.9	1.4	.8	.5	.3	.2	.1	.1
1958	.1	16.4	157.0	35.9	37.5	8.5	624.4	51.0	53.2	56.3	54.2	57.4
1959	63.4	73.1	41.2	61.0	46.9	32.7	68.1	62.2	69.3	58.6	74.4	58.6
1960	209.1	270.0	64.5	62.2	68.1	121.1	318.4	82.0	59.8	24.0	19.8	146.8

1580. Ashuelot River below Surry Mountain Dam, near Keene, N. H.

Location.--Lat 42°59'45", long 72°18'40", on right bank 600 ft downstream from Surry Mountain Dam, 2½ miles upstream from Sturtevant Brook, and 4½ miles north of Keene, Cheshire County.

Drainage area.--101 sq mi.

Records available.--September 1945 to September 1960.

Gage.--Water-stage recorder and concrete control. Datum of gage is 480.00 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Average discharge.--15 years (1945-60), 177 cfs (adjusted for storage).

Extremes.--1945-60: Maximum discharge, 1,320 cfs Oct. 28, 1959 (gage height, 9.60 ft); minimum daily, 0.8 cfs Dec. 4-7, 1948.

Remarks.--Flow regulated by Surry Mountain Reservoir (see p. 213).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	22.5	140	479	149	293	223	710	234	86.9	66.3	98.4	126	218
1952	215	406	215	275	215	218	605	269	188	22.8	19.3	41.3	223
1953	17.4	13.0	111	166	333	318	720	474	745.1	13.2	23.8	12.1	186
1954	18.0	65.8	308	80.2	236	324	394	445	132	43.3	18.2	168	186
1955	61.3	297	235	80.5	86.1	272	565	117	146	21.3	111	16.9	167
1956	239	376	52.8	253	64.7	88.5	504	632	160	32.4	9.43	24.8	203
1957	27.5	55.6	145	143	86.1	225	262	125	49.6	28.0	11.6	9.63	97.5
1958	13.9	90.1	330	223	107	162	717	545	54.2	32.2	24.5	13.0	193
1959	34.5	115	104	140	73.6	186	685	119	58.6	30.2	13.5	32.1	132
1960	229	427	386	167	168	110	1,022	368	171	54.6	26.2	233	279

† Corrected.

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.26	4.15	2.99	1.71	3.05	3.53	7.80	1.56	0.96	0.76	1.12	1.39	29.28
1952	2.48	4.59	2.50	3.47	1.94	2.36	7.53	2.20	2.24	.26	.21	.30	30.08
1953	.20	.23	1.31	2.37	2.98	7.54	5.18	4.13	.50	.15	.27	.13	24.99
1954	.21	.75	3.63	.93	2.52	3.47	4.36	5.07	1.47	.47	.21	1.88	24.95
1955	.70	3.43	2.68	.91	.92	3.00	6.20	1.34	1.58	.24	1.27	.19	22.46
1956	2.79	4.14	.67	2.91	.71	.90	8.55	5.21	1.74	.37	.11	.27	27.37
1957	.31	.70	1.72	1.64	.95	2.37	2.89	1.42	.55	.32	.13	.11	13.11
1958	.16	1.06	4.37	2.02	1.11	1.75	10.54	3.78	.61	.38	.27	.16	26.19
1959	.42	1.31	1.05	1.68	.70	2.07	7.72	1.34	.68	.30	.22	.29	17.78
1960	3.26	4.97	3.52	1.88	1.82	1.48	12.14	3.19	1.79	.47	.28	3.11	37.92

a Adjusted for change in contents in Surry Mountain Reservoir.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Observed				Adjusted a/		Observed		Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	184	184	24.72
1951	1201	1,010	Dec. 13, 1950	2.6	218	218	2.16	29.28	234	234	31.45
1952	1231	840	Nov. 11, 1951	11	223	223	2.21	30.08	165	165	22.25
1953	1271	910	Apr. 2, 1953	7.6	186	186	1.84	24.99	207	207	27.84
1954	1331	820	Dec. 9, 14, 1953	2.8	186	186	1.84	24.95	202	202	27.17
1955	1381	840	Apr. 15, 1955	1.0	167	167	1.65	22.46	173	173	23.25
1956	1431	994	May 9, 1956	1.1	203	203	2.01	27.37	167	167	22.50
1957	1501	579	Jan. 28, 1957	4.8	97.5	97.5	.965	13.11	115	119	15.97
1958	1551	1,000	Apr. 17, 1958	4.5	193	195	1.93	26.19	178	174	23.36
1959	1621	1,160	Apr. 7, 1959	7.8	132	132	1.31	17.78	198	199	26.75
1960	1701	1,320	Oct. 28, 1959	2.5	279	281	2.78	37.92	-	-	-

a Adjusted for change in contents in Surry Mountain Reservoir.

1585. Otter Brook near Keene, N. H.

Location.--Lat 42°57'55", long 72°14'00", on left bank 10 ft downstream from bridge near State Highway 9, 3½ miles northeast of Keene, Cheshire County, and 3½ miles upstream from Minnewawa Brook.

Drainage area.--42.3 sq mi.

Records available.--October 1923 to May 1958.

Gage.--Water-stage recorder. Concrete control since Nov. 17, 1936. Datum of gage is 716.11 ft above mean sea level (levels by Corps of Engineers).

Average discharge.--34 years (1923-57), 71.0 cfs.

Extremes.--1923-58: Maximum discharge, 6,130 cfs Sept. 21, 1938 (gage height, 7.93 ft), from rating curve extended above 1,300 cfs on basis of surface-float measurements and slope-area and contracted-opening measurements at gage heights 7.10 and 7.93 ft; maximum gage height not determined, occurred May 1, 1958 (backwater from Otter Brook Reservoir); minimum discharge, 1.0 cfs Sept. 2, 1957.

Remarks.--Flow regulated at times by Granite Lake above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	16.3	155	133	68.9	134	139	252	56.4	30.9	29.5	35.5	47.4	90.9
1952	76.1	157	91.8	137	79.9	80.0	282	85.4	78.5	7.92	5.00	11.4	89.0
1953	14.1	7.25	33.2	66.8	123	249	192	130	15.3	3.67	7.87	1.79	70.1
1954	5.11	29.3	123	37.5	85.9	132	153	181	67.3	24.2	14.1	84.5	78.0
1955	35.6	125	112	37.2	43.3	110	210	62.1	51.6	11.2	56.9	8.51	72.0
1956	135	174	30.0	151	35.9	40.3	324	157	45.6	15.1	2.17	11.9	93.3
1957	28.2	24.2	56.5	67.7	39.5	89.8	117	50.7	18.4	6.56	2.70	7.00	42.3
1958	4.27	33.7	148	83.2	42.2	57.5	436	151	-	-	-	-	-
1959	-	-	-	-	-	-	-	-	-	-	-	-	-
1960	-	-	-	-	-	-	-	-	-	-	-	-	-

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.44	4.09	3.64	1.88	3.31	3.80	6.65	1.54	0.82	0.80	0.97	1.25	29.19
1952	2.07	4.15	2.50	3.73	2.04	2.18	6.91	2.33	2.07	.22	.14	.30	28.64
1953	.36	.19	.90	1.82	3.02	6.79	5.07	3.55	.40	.10	.21	.05	22.48
1954	.14	.77	3.35	1.02	2.11	3.61	4.03	4.94	1.78	.66	1.38	2.23	25.02
1955	.97	3.31	3.06	1.01	1.07	3.00	5.54	1.69	1.36	.31	1.55	.22	23.09
1956	3.69	4.60	.82	4.10	.92	1.10	8.54	4.28	1.20	.41	.06	.31	30.03
1957	.77	.64	1.54	1.84	.97	2.42	3.08	1.38	.49	.18	.07	.18	13.56
1958	.12	.89	4.04	2.27	1.04	1.57	11.51	4.10	-	-	-	-	-
1959	-	-	-	-	-	-	-	-	-	-	-	-	-
1960	-	-	-	-	-	-	-	-	-	-	-	-	-

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	81.1	26.03	
1951	1201	3,540	Nov. 26, 1950	6.3	90.9	2.15	29.19	92.7	29.74	
1952	1231	1,010	Apr. 6, 1952	3.6	89.0	2.10	28.64	66.5	21.39	
1953	1271	944	Mar. 16, 1953	1.3	70.1	1.66	22.48	79.8	25.27	
1954	1331	1,070	Apr. 18, 1954	1.1	78.0	1.84	25.02	87.6	28.10	
1955	1381	780	Nov. 3, 1954	1.4	72.0	1.70	23.09	77.5	24.86	
1956	1431	1,320	Apr. 30, 1956	1.2	93.3	2.21	30.03	74.2	23.87	
1957	1501	480	Jan. 23, 1957	1.1	42.3	1.00	13.56	48.8	15.66	
1958	1551	1,000	Apr. 22, 1958	-	-	-	-	-	-	
1959	-	-	-	-	-	-	-	-	-	
1960	-	-	-	-	-	-	-	-	-	

1585.5 Otter Brook Reservoir near Keene, N. H.

Location.--Lat 42°56'49", long 72°14'13", on Otter Brook, 2½ miles northeast of Keene, Cheshire County.

Drainage area.--47.2 sq mi.

Gage.--Water-stage recorder. Datum of gage is at mean sea level (level by Corps of Engineers).

Remarks.--Reservoir completed in 1958 for flood control, has usable capacity of 798,000,000 cu ft.

Cooperation.--Records furnished by Corps of Engineers.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1958	-	-	-	-	-	2.0	374.0	1.3	0.4	1.3	0.5	10.6
1959	29.9	33.7	32.6	55.5	33.4	3.3	33.7	30.2	30.9	29.0	32.6	29.0
1960	147.5	129.7	34.8	34.8	34.4	70.4	212.2	32.3	12.6	28.4	33.7	34.4

1586. Otter Brook below Otter Brook Dam, near Keene, N. H.

Location.--Lat 42°56'45", long 72°14'15", on right bank 450 ft downstream from Otter Brook Dam, 2 miles northeast of Keene, Cheshire County, and 2.4 miles upstream from Minnewawa Brook.

Drainage area.--47.2 sq mi.

Records available.--May 1958 to September 1960.

Gage.--Water-stage recorder and concrete control. Datum of gage is 658.65 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Extremes.--1958-60: Maximum discharge, 685 cfs Apr. 20, 1959 (gage height, 8.59 ft); minimum, 0.1 cfs Nov. 28, 1959; minimum daily, 0.4 cfs Oct. 25, 1959.

Remarks.--Flow regulated by Otter Brook Reservoir (see p. 216).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	23.5	24.0	11.8	7.68	-
1959	10.2	60.7	46.1	59.6	45.5	83.5	301	64.7	29.0	11.5	16.4	21.7	62.2
1960	93.7	212	187	90.5	73.3	51.2	432	180	63.4	13.9	13.6	103	126

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	0.55	0.59	0.23	0.27	-
1959	0.43	1.47	1.12	1.66	0.80	1.76	7.40	1.55	.69	.26	.43	.48	18.05
1960	3.37	4.85	3.70	2.21	1.67	1.58	11.51	2.75	1.32	.48	.39	2.45	36.27

a Adjusted for change in contents in Otter Brook Reservoir.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted a/			Observed	Adjusted a/	
		Momentary maximum		Minimum	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date	day							
1959	1621	685	Apr. 20, 1959	3.6	62.2	62.8	1.33	18.05	93.7	93.8	26.95
1960	1701	682	May 2, 1960	.4	126	126	2.67	36.27	-	-	-

a Adjusted for change in contents in Otter Brook Reservoir.

1600. South Branch Ashuelot River at Webb, near Marlboro, N. H.

Location.--Lat 42°52'20", long 72°12'55", on right bank 15 ft downstream from bridge, 800 ft southwest of Webb station on Boston & Maine Railroad, and 2½ miles south of Marlboro, Cheshire County.

Drainage area.--36.0 sq mi.

Records available.--October 1920 to September 1960. Monthly discharge only for October 1920, 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.--40 years (1920-60), 60.4 cfs.

Extremes.--1920-60: Maximum discharge, 5,960 cfs Sept. 21, 1938 (gage height, 7.89 ft), from rating curve extended above 3,300 cfs on basis of contracted-opening and slope-area measurements of peak flow; maximum gage height, 9.70 ft Mar. 12, 1936 (ice jam); practically no flow Mar. 22, 1931; minimum daily discharge, 0.4 cfs Sept. 15-17, 1926.

Remarks.--Flow regulated by powerplant and several small reservoirs above station. Records of water temperatures for the water years 1955-60 are published in reports of the Geological Survey.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	9.34	95.6	105	56.9	133	145	178	50.2	28.3	38.7	28.9	27.7	74.2
1952	60.5	137	73.5	120	76.2	94.1	206	75.4	76.6	12.1	10.7	11.4	79.2
1953	7.32	12.1	49.2	89.8	131	222	191	123	17.1	4.82	7.00	2.61	71.1
1954	7.37	28.0	90.6	27.8	72.9	99.0	112	129	37.7	15.6	19.7	73.8	59.3
1955	25.5	98.2	85.0	27.2	59.6	95.0	156	57.4	50.3	9.32	63.4	12.7	59.9
1956	88.6	140	28.9	115	32.0	37.4	313	114	48.2	13.8	5.35	20.0	79.4
1957	10.9	31.1	51.6	66.1	43.6	83.9	91.7	58.2	27.8	10.4	3.19	3.36	40.2
1958	4.57	27.7	118	106	40.5	58.2	330	98.4	16.7	26.8	10.2	13.1	70.8
1959	15.4	43.1	34.7	73.6	27.9	73.9	207	49.5	33.0	19.0	11.6	22.9	50.9
1960	133	149	108	57.5	60.0	55.9	351	81.3	34.5	18.4	15.2	46.5	92.2

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.30	2.96	3.38	1.82	3.86	4.66	5.51	1.61	0.88	1.24	0.92	0.86	28.00
1952	1.94	4.26	2.36	3.86	2.28	3.01	6.38	2.41	2.37	.39	.34	.35	29.95
1953	.23	.38	1.58	2.88	3.79	7.10	5.91	3.94	.55	.15	.22	.08	26.79
1954	.24	.87	2.90	8.89	2.11	3.17	3.49	4.14	1.17	.50	.63	2.29	22.40
1955	.82	3.04	2.72	.87	1.14	3.04	4.84	1.64	1.56	.30	2.03	.40	22.60
1956	2.84	4.35	.93	3.68	.96	1.20	9.70	3.66	1.49	.44	.17	.62	30.04
1957	.35	.97	1.65	2.12	1.26	2.69	2.84	1.86	.86	.33	.10	.10	15.13
1958	.15	.86	3.77	3.39	1.17	1.86	10.23	3.15	.52	.86	.33	.41	26.70
1959	.49	1.34	1.11	2.36	.61	2.37	6.42	1.58	1.02	.61	.37	.71	19.19
1960	4.26	4.62	3.45	1.84	1.80	1.79	10.88	2.60	1.07	.59	.49	1.44	34.83

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	59.5	22.43
1951	1201	2,010	Nov. 26, 1950	3.4	74.2	2.06	28.00	79.3	29.32
1952	1231	822	Apr. 5, 1952	2.1	79.2	2.20	29.95	62.4	23.58
1953	1271	875	Mar. 13, 1953	2.4	71.1	1.98	26.79	75.9	28.61
1954	1331	806	Apr. 18, 1954	2.4	59.3	1.65	22.40	66.2	24.97
1955	1381	511	Mar. 11, 1955	2.7	59.9	1.66	22.60	64.0	24.14
1956	1431	1,700	Jan. 10, 1956	2.5	79.4	2.21	30.04	65.8	24.89
1957	1501	475	Jan. 23, 1957	2.0	40.2	1.12	15.13	44.9	16.94
1958	1551	766	Dec. 21, 1957	1.9	70.8	1.97	26.70	65.9	24.86
1959	1621	2,070	Apr. 3, 1959	6.2	50.9	1.41	19.19	75.8	28.58
1960	1701	4,350	Oct. 24, 1959	1.4	92.2	2.56	34.83	-	-

1610. Ashuelot River at Hinsdale, N. H.

Location.--Lat 42°47'05", long 72°29'10", on left bank 40 ft upstream from highway bridge at Hinsdale, Cheshire County, a quarter of a mile downstream from dam, and 1½ miles upstream from mouth.

Drainage area.--420 sq mi.

Records available.--March 1907 to December 1911, July 1914 to September 1960.

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.--50 years (1907-11, 1914-60), 662 cfs (adjusted for storage).

Extremes.--1907-11, 1914-60: Maximum discharge, 16,600 cfs Mar. 19, 1933, by computation of peak flow over dam (previously published maximum has been revised); 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. Flow regulated by mills above station. High flow affected by Surry Mountain Reservoir (see p. 202) and by Otter Brook Reservoir since 1958 (see p. 216).

Revisions.--Revised figures of monthly discharge, in cubic feet per second, for the high-water period in the water year 1920, superseding those published in WSP 781 and 1301, are given herewith:

Month	Mean	Per square mile	Runoff in inches	Momentary maximum		Minimum day
				Discharge	Date	
March 1920.....	1,979	-	5.43	-	-	-
Calendar year 1920..	965	-	31.29	-	-	-
Water year 1919-20..	854	2.03	27.67	9,550	Mar. 29, 1920	32

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	130	813	1,284	683	1,372	1,264	2,303	716	373	378	345	420	834
1952	720	1,540	908	1,266	953	1,016	2,176	1,001	868	159	128	146	903
1953	104	104	383	649	1,296	1,896	2,106	1,586	290	115	160	72.4	726
1954	119	278	1,088	388	837	1,214	1,284	1,523	574	207	150	681	694
1955	291	1,053	996	403	426	1,164	1,823	647	663	159	556	154	694
1956	861	1,540	359	845	328	456	2,731	1,681	578	183	70.7	193	817
1957	169	277	596	618	462	984	1,003	585	251	116	60.1	58.5	428
1958	64.5	287	1,191	901	522	806	2,276	1,505	264	212	129	108	688
1959	142	403	355	535	356	811	2,289	604	260	154	121	183	516
1960	892	1,604	1,600	814	858	560	3,723	1,300	628	237	205	748	1,093

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.36	2.78	2.93	1.88	3.41	3.71	6.11	1.70	0.99	1.04	0.95	1.12	26.98
1952	1.98	4.12	2.50	3.55	2.36	2.76	5.98	2.54	2.34	.44	.35	.35	29.27
1953	.29	.30	1.06	1.89	3.11	6.14	4.93	4.04	.77	.32	.44	.19	23.48
1954	.33	.74	15.01	1.07	2.10	3.28	3.41	4.18	1.53	.56	.41	1.81	22.43
1955	.80	2.83	2.73	1.10	1.06	3.17	4.83	1.78	1.76	.44	1.53	.41	22.44
1956	2.38	4.09	1.00	2.32	.85	1.22	7.97	3.89	1.53	.50	.19	.51	26.45
1957	.46	.76	1.65	1.70	1.16	2.60	2.66	1.55	.67	.32	.16	.16	13.85
1958	.18	.73	3.41	2.35	1.30	2.18	7.06	3.16	.70	.59	.35	.29	22.30
1959	.42	1.08	.94	1.51	.84	2.18	6.15	1.65	.70	.41	.35	.47	16.70
1960	2.72	4.31	4.08	2.23	2.21	1.83	10.24	3.14	1.62	.63	.56	2.12	35.49

† Corrected.

a Adjusted for change in contents in Surry Mountain and Otter Brook Reservoirs.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted a/				Observed	Adjusted a/
		Momentary maximum		Minimum day	Mean	Per square mile		Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date			Mean	Per square mile				
1950	-	-	-	-	-	-	-	-	-	-	-
1951	1201	5,470	Nov. 27, 1950	76	834	834	1.99	26.98	662	662	21.36
1952	1231	4,350	Apr. 6, 1952	74	903	903	2.15	29.27	912	912	29.51
1953	1271	4,220	Mar. 16, 1953	29	726	726	1.73	23.48	689	689	22.32
1954	1331	3,470	Apr. 19, 1954	60	694	694	1.65	22.43	802	802	25.91
1955	1381	3,020	Apr. 27, 1955	59	694	694	1.65	22.44	765	765	24.71
1956	1431	5,900	Apr. 30, 1956	57	817	817	1.95	26.45	729	729	23.55
1957	1501	2,010	Jan. 24, 1957	25	428	428	1.02	13.85	675	675	21.85
1958	1551	3,270	Apr. 7, 1958	46	688	690	1.64	22.30	469	473	15.30
1959	1621	5,320	Apr. 3, 1959	73	516	517	1.23	16.70	635	632	20.42
1960	1701	8,800	Apr. 5, 1960	79	1,093	1,095	2.61	35.49	784	785	25.37

a Adjusted for change in contents; see footnote to preceding table.

1615. Tarbell Brook near Winchendon, Mass.

Location.--Lat 42°42'45", long 72°05'09", on left bank 0.1 mile downstream from Spud Brook, 0.3 mile downstream from Massachusetts-New Hampshire State line, and 2½ miles northwest of Winchendon, Worcester County.

Drainage area.--18.2 sq mi.

Records available.--May 1916 to September 1960. Prior to October 1950, published as Sip Pond Brook near Winchendon.

Gage.--Water-stage recorder. Datum of gage is 872.82 ft above mean sea level, datum of 1929. May 29 to June 29, 1916, staff gage; June 30 to Dec. 12, 1916, water-stage recorder; and Dec. 13, 1916, to June 26, 1917, staff gage, all at site 450 ft downstream at same datum.

Average discharge.--44 years (1916-60), 30.1 cfs.

Extremes.--1916-60: 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.--Flow regulated by Pearly and Sip Ponds, Damon Reservoirs, and small mill above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	3.85	40.3	52.0	31.0	70.4	70.4	91.2	21.7	13.3	20.4	20.2	11.2	36.3
1952	27.8	76.5	42.9	66.1	42.3	41.2	103	34.8	25.3	5.45	5.56	4.17	39.5
1953	3.41	3.81	14.9	26.4	59.5	106	88.0	54.1	10.5	5.65	3.24	.880	31.2
1954	1.66	12.0	54.2	18.3	33.4	53.3	60.7	64.4	20.2	12.0	7.61	41.9	31.6
1955	14.3	49.1	46.7	19.6	16.0	50.1	75.6	28.1	19.1	7.16	15.3	8.09	29.1
1956	52.6	70.1	15.1	58.0	17.8	22.7	133	70.6	19.2	7.58	3.21	6.39	39.6
1957	8.45	9.90	25.5	24.6	18.7	37.1	44.9	25.2	11.8	6.66	2.84	3.23	18.2
1958	3.40	5.83	38.4	37.1	26.1	29.8	134	49.7	7.45	6.32	4.82	2.93	28.8
1959	4.55	14.9	15.6	22.6	17.3	34.5	106	26.7	11.5	8.39	5.25	7.32	22.8
1960	39.3	54.6	59.9	36.8	23.9	18.2	166	42.9	33.1	11.0	11.6	36.1	44.2

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.24	2.47	3.29	1.96	4.03	4.46	5.59	1.38	0.81	1.29	1.28	0.68	27.48
1952	1.76	4.69	2.72	4.19	2.51	2.61	6.33	2.20	1.55	.35	.35	.26	29.52
1953	.22	.23	.94	1.67	3.41	6.75	5.40	3.43	.64	.36	.20	.05	23.28
1954	.11	.73	3.43	1.16	1.91	3.38	3.72	4.08	1.24	.76	.48	2.57	23.57
1955	.90	3.01	2.96	1.24	.92	3.18	4.63	1.78	1.17	.45	.97	.50	21.71
1956	3.33	4.30	.96	3.67	1.05	1.44	8.13	4.47	1.18	.48	.20	.39	29.60
1957	.54	.61	1.62	1.56	1.07	2.35	2.75	1.59	.72	.42	.18	.20	13.61
1958	.22	.36	2.43	2.35	1.43	1.89	8.25	3.15	.46	.40	.31	.18	21.49
1959	.29	.91	.99	1.43	.99	2.18	6.53	1.69	.70	.63	.33	.45	17.02
1960	2.49	3.35	3.80	2.33	1.42	1.15	10.16	2.72	2.03	.70	.74	2.22	33.11

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	29.2	21.74
1951	1201	346	Nov. 27, 1950	1.5	36.9	2.03	27.48	41.1	30.65
1952	1231	297	Apr. 6, 1952	1.9	39.5	2.17	29.52	29.1	21.74
1953	1271	412	Mar. 16, 1953	.5	31.2	1.71	23.28	35.1	26.16
1954	1331	256	Apr. 18, 1954	.7	31.6	1.74	23.57	35.1	26.17
1955	1381	173	Apr. 27, 1955	1.8	29.1	1.60	21.71	31.4	23.43
1956	1431	472	Apr. 30, 1956	1.8	39.6	2.18	29.60	31.8	23.78
1957	1501	103	Apr. 6, 1957	.9	18.2	1.00	13.61	18.6	13.85
1958	1551	213	Apr. 18, 1958	.6	28.8	1.58	21.49	27.7	20.67
1959	1621	398	Apr. 4, 1959	1.7	22.8	1.25	17.02	32.8	24.47
1960	1701	647	Apr. 5, 1960	2.8	44.2	2.43	33.11	-	-

1620. Millers River near Winchendon, Mass.

Location.--Lat 42°41'03", long 72°05'02", on right bank 10 ft downstream from Nolan Bridge, a third of a mile downstream from Tarbell Brook, and 2 miles west of Winchendon, Worcester County.

Drainage area.--83.0 sq mi.

Records available.--June 1916 to September 1960. Monthly discharge only for March to May 1917, published in WSP 1301.

Gage.--Water-stage recorder. Concrete control since Oct. 6, 1938. 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.--44 years (1916-60), 144 cfs.

Extremes.--1916-60: 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.--Flow regulated by Lake Monomonic and other reservoirs and, prior to 1957, by powerplant.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	29.1	151	222	150	355	297	370	110	77.5	110	115	67.1	170
1952	138	313	217	314	215	221	408	164	127	24.9	49.1	30.0	185
1953	52.3	39.4	113	193	301	511	568	314	65.6	20.2	10.3	7.77	182
1954	27.1	75.5	248	65.3	131	244	256	321	102	60.1	38.9	288	153
1955	78.9	249	243	97.2	106	246	296	129	69.3	20.9	86.0	70.9	141
1956	520	416	70.3	371	100	144	593	380	73.3	20.2	8.62	74.4	231
1957	55.1	45.5	105	185	99.9	182	210	126	45.7	15.5	8.60	32.5	92.6
1958	16.3	31.1	185	194	120	155	660	260	42.2	39.1	27.7	48.4	148
1959	76.0	55.7	59.0	151	71.6	188	446	119	44.6	46.9	15.1	50.3	110
1960	221	292	303	171	127	116	788	219	172	69.4	73.2	204	229

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.40	2.03	3.08	2.08	4.46	4.12	4.97	1.52	1.04	1.53	1.59	0.90	27.72
1952	1.92	4.21	3.02	4.36	2.79	3.08	5.49	2.27	1.70	.35	.68	.40	30.27
1953	.73	.53	1.57	2.68	3.78	7.10	7.64	4.36	.88	.28	.14	.10	29.79
1954	.38	.99	3.41	.91	1.65	3.38	3.44	4.47	1.38	.83	.54	3.60	24.98
1955	1.10	3.34	3.37	1.35	1.33	3.41	3.98	1.80	.93	.29	1.19	.95	23.04
1956	7.23	5.59	.98	5.16	1.30	1.99	7.97	5.27	.99	.28	.12	1.00	37.88
1957	.76	.61	1.45	2.57	1.25	2.53	2.82	1.75	.61	.21	.12	.44	15.12
1958	.23	.42	2.57	2.70	1.50	2.15	8.87	3.61	.57	.54	.39	.65	24.19
1959	1.06	.75	.82	2.10	.90	2.61	5.99	1.65	.60	.65	.21	.68	18.02
1960	3.07	3.92	4.21	2.38	1.65	1.60	10.60	3.04	2.32	.96	1.02	2.74	37.51

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	127	20.81
1951	1201	1,150	Nov. 26, 1950	10	170	2.05	27.72	192	31.36
1952	1231	1,000	Apr. 6, 1952	7.6	185	2.23	30.27	146	23.95
1953	1271	1,450	Mar. 31, 1953	5.6	182	2.19	29.79	194	31.74
1954	1331	961	Apr. 19, 1954	7.4	153	1.84	24.98	171	28.01
1955	1381	751	Aug. 19, 1955	9.7	141	1.70	23.04	178	29.03
1956	1431	1,920	Oct. 19, 1955	6.6	231	2.78	37.88	164	26.90
1957	1501	792	Jan. 23, 1957	5.9	92.6	1.12	15.12	94.9	15.52
1958	1551	988	Apr. 19, 20, 1958	5.9	148	1.78	24.19	144	23.60
1959	1621	1,340	Apr. 3, 1959	8.2	110	1.33	18.02	163	26.59
1960	1701	2,200	Apr. 5, 1960	24	229	2.76	37.51	-	-

1625. Priest Brook near Winchendon, Mass.

Location.--Lat 42°40'57", long 72°06'56", on right bank 100 ft downstream from highway bridge, 3 miles upstream from mouth, and 3½ miles west of Winchendon, Worcester County.

Drainage area.--19.4 sq mi.

Records available.--May 1916 to September 1960. Monthly discharge only for October 1917 to July 1918 (published in WSP 1301), September 1935 to September 1936.

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.--44 years (1916-60), 33.5 cfs.

Extremes.--1916-60: Maximum discharge, 3,000 cfs Sept. 21, 1938 (gage height, 9.90 ft), from rating curve extended above 620 cfs on basis of contracted-opening measurements at gage heights 8.4 and 9.90 ft; minimum, 0.08 cfs several times in September 1929.

Remarks.--Occasional diurnal fluctuation at low flow by mill above station; prior to 1953, regulation at low flow by mill and ponds.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	4.65	60.7	64.0	38.3	81.7	75.4	103	26.9	16.0	21.4	20.6	14.7	43.5
1952	31.1	87.6	49.0	79.0	43.9	50.2	111	42.8	33.8	6.30	8.20	6.85	45.6
1953	4.84	5.18	22.2	42.3	74.2	128	103	65.2	10.4	2.32	2.46	1.59	38.3
1954	3.41	13.4	58.4	18.9	39.8	58.0	66.1	72.4	21.8	10.4	6.65	47.9	34.7
1955	15.0	57.4	49.5	18.6	22.0	57.7	95.9	29.3	26.0	6.97	30.3	9.82	34.8
1956	62.4	74.6	15.8	57.9	17.8	25.1	162	69.8	22.1	5.63	1.34	6.19	43.3
1957	4.18	16.7	38.9	34.7	22.5	50.1	53.1	31.0	11.7	3.17	.477	.673	22.3
1958	1.50	9.28	57.9	47.1	29.7	38.6	150	56.3	8.42	4.04	2.61	7.70	34.4
1959	6.91	11.8	17.4	45.2	19.5	60.1	113	29.1	13.8	7.53	2.24	5.90	27.7
1960	59.4	77.2	65.2	38.6	24.4	20.8	185	47.3	29.6	8.97	10.4	27.3	49.4

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.28	3.49	3.80	2.27	4.39	4.48	5.90	1.60	0.92	1.27	1.22	0.85	30.47
1952	1.85	5.04	2.91	4.69	2.44	2.98	6.36	2.54	1.94	.37	.49	.38	32.00
1953	.29	.30	1.32	2.51	3.99	7.60	5.94	3.88	.60	.14	.15	.08	26.81
1954	.20	.77	3.47	1.12	2.14	3.44	3.80	4.30	1.26	.62	.40	2.75	24.27
1955	.89	3.30	2.94	1.11	1.18	3.43	5.52	1.74	1.50	.41	1.80	.56	24.38
1956	3.71	4.29	.94	3.44	.99	1.49	9.31	4.15	1.27	.33	.08	.36	30.36
1957	.25	.96	2.31	2.06	1.21	2.98	3.05	1.84	.67	.19	.03	.04	15.59
1958	.09	.53	3.44	2.80	1.59	2.29	8.64	3.35	.48	.24	.15	.44	24.04
1959	.41	.68	1.04	2.68	1.05	3.57	6.48	1.73	.79	.45	.13	.34	19.35
1960	3.53	4.44	3.88	2.29	1.36	1.24	10.66	2.81	1.70	.53	.62	1.57	34.83

Note.--Runoff may not represent natural flow because of regulation.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	34.5	24.19
1951	1201	605	Nov. 27, 1950	1.5	43.5	2.24	30.47	46.7	32.70
1952	1231	389	Apr. 6, 1952	1.2	45.6	2.35	32.00	34.4	24.11
1953	1271	479	Mar. 16, 1953	.1	38.3	1.97	26.81	41.9	29.34
1954	1331	325	Apr. 18, 1954	.4	34.7	1.79	24.27	38.5	26.96
1955	1381	286	Apr. 27, 1955	1.2	34.8	1.79	24.38	37.4	26.19
1956	1431	568	Apr. 30, 1956	.8	43.3	2.23	30.36	35.5	24.94
1957	1501	207	Jan. 24, 1957	.4	22.3	1.15	15.59	23.1	16.13
1958	1551	276	Apr. 7, 1958	.4	34.4	1.77	24.04	31.6	22.11
1959	1621	646	Apr. 3, 1959	.9	27.7	1.43	19.35	41.5	29.07
1960	1701	744	Apr. 6, 1960	2.6	49.4	2.55	34.63	-	-

Note.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

CONNECTICUT RIVER BASIN

1635. Birch Hill Reservoir at South Royalston, Mass.

Location.--Lat 42°37'57", long 72°07'25", on Millers River, 1,300 ft upstream from Stockwell Brook and 1 mile east of South Royalston, Worcester County.

Drainage area.--175 sq mi.

Gage.--Water-stage recorder. Datum of gage is at mean sea level.

Remarks.--Reservoir completed in 1941 for flood control, has usable capacity of 2,180,000,000 cu ft.

Cooperation.--Records furnished by Corps of Engineers.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	1.2	49.1	2.7	4.8	10.0	59.3	4.8	4.8	2.3	5.7	22	1.3
1952	4.5	4.7	7.0	67.0	3.4	14.2	19.3	5.1	2.6	1.3	1.3	1.3
1953	1.3	1.6	2.8	23.4	6.0	469.0	15.8	3.0	2.2	1.0	1.0	1.0
1954	5.6	3.3	3.3	3.0	8.0	5.4	7.5	5.7	4.8	2.0	18.2	3.0
1955	2.7	12.6	10.2	1.3	5.1	7.0	47.4	2.7	1.8	1.3	2.7	2.7
1956	15.8	4.8	1.3	3.6	3.3	3.6	259.8	3.3	1.3	1.0	1.0	2.3
1957	1.2	2.3	3.9	10.0	7.5	5.1	2.7	3.6	2.0	1.3	1.2	1.3
1958	1.3	2.3	9.5	27.8	5.1	14.2	114.4	3.9	1.8	2.8	1.5	4.2
1959	2.2	9.5	1.8	4.5	4.5	10.0	11.0	1.8	2.2	1.5	4.5	1.8
1960	8.5	117.0	3.9	3.0	3.9	57.6	11.8	6.0	2.3	7.0	2.0	6.5

1640. Millers River at South Royalston, Mass.

Location.--Lat 42°37'47", long 72°09'03", on right bank 500 ft downstream from bridge in South Royalston, Worcester County, 0.4 mile downstream from Beaver Brook, and 1.7 miles downstream from Birch Hill Dam.

Drainage area.--187 sq mi.

Records available.--July 1939 to September 1960.

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.--21 years (1939-60), 322 cfs (adjusted for storage).

Extremes.--1939-60: Maximum discharge, 4,400 cfs Apr. 13, 1940 (gage height, 8.40 ft); maximum gage height, 9.42 ft Jan. 24, 1959 (backwater from ice); minimum daily discharge, 9.3 cfs Aug. 4, 1956.

Maximum stage known, 15.9 ft Sept. 21 or 22, 1938, from floodmarks.

Remarks.--Flow regulated by Lake Monomonic and other reservoirs, by mills and powerplants prior to 1955, and at high flow by Birch Hill Reservoir (see above).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	55.2	309	492	357	771	634	818	253	186	240	223	144	370
1952	285	685	497	674	500	519	865	391	266	75.8	131	96.1	414
1953	96.3	94.6	255	414	638	773	1,240	729	182	65.7	35.3	31.4	377
1954	79.4	204	547	194	317	523	581	665	231	137	114	557	346
1955	184	561	557	250	252	524	622	313	231	81.3	308	143	336
1956	797	858	178	642	228	329	1,198	811	204	74.0	33.6	134	457
1957	115	156	306	397	251	432	468	309	113	48.7	26.4	55.6	223
1958	45.1	104	441	473	326	410	1,198	623	107	89.9	65.1	116	333
1959	163	172	195	317	167	462	911	293	133	121	45.1	105	257
1960	405	524	685	391	298	251	1,587	495	385	195	221	456	489

Monthly and yearly runoff, in inches (adjusted) \pm

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.34	1.95	2.92	2.21	4.30	4.02	4.76	1.56	1.10	1.49	1.37	0.86	26.88
1952	1.76	4.09	3.07	4.29	2.74	3.22	5.17	2.38	1.58	.46	.81	.57	30.14
1953	.59	.57	1.58	2.60	3.51	5.83	6.36	4.46	1.08	.40	.22	.19	27.39
1954	.50	1.22	3.38	1.20	1.78	3.22	3.47	4.10	1.38	.84	.74	3.29	25.12
1955	1.14	5.37	3.43	1.52	1.41	3.24	3.81	1.83	1.38	.50	1.9c	.85	24.38
1956	4.94	5.10	1.09	3.96	1.31	2.03	7.74	4.41	1.21	.46	.21	.80	33.26
1957	.71	.93	1.89	2.46	1.39	2.66	2.79	1.91	.67	.30	.16	.33	16.20
1958	.28	.62	2.73	2.96	1.76	2.55	7.38	3.59	.64	.56	.40	.70	24.17
1959	1.00	1.04	1.18	1.96	.93	2.86	5.44	1.79	.80	.74	.29	.62	18.65
1960	2.51	3.38	3.96	2.41	1.72	1.67	9.36	3.04	2.29	1.21	1.35	2.73	35.63

a Adjusted for change in contents in Birch Hill Reservoir.

Yearly discharge, in cubic feet per second, of Millers River at South Royalston, Mass.

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted a/			Observed	Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	269	269	19.51
1951	1201	1,840	Feb. 9, 1951	29	370	370	1.98	26.88	421	421	30.59
1952	1231	1,450	Apr. 6, 1952	17	414	414	2.21	30.14	329	329	23.96
1953	1271	1,790	Apr. 3, 1953	22	377	377	2.02	27.39	410	410	29.75
1954	1331	1,370	Apr. 20, 1954	31	346	346	1.85	25.12	385	385	27.96
1955	1381	1,060	Apr. 28, 29, 1955	23	336	336	1.80	24.38	380	380	27.57
1956	1431	2,050	May 4, 1956	9.3	457	457	2.44	33.26	353	353	25.66
1957	1501	1,410	Jan. 25, 1957	22	223	223	1.19	16.20	224	225	16.30
1958	1551	1,770	Apr. 11, 1958	29	333	333	1.78	24.17	327	327	23.76
1959	1621	2,140	Apr. 6, 1959	30	257	257	1.37	18.65	348	348	25.28
1960	1701	2,280	Apr. 7, 1960	81	489	490	2.62	35.63	-	-	-

a Adjusted for change in contents in Birch Hill Reservoir.

1645. Tully Reservoir near Athol, Mass.

Location.--Lat 42°38'33", long 72°13'29", on East Branch Tully River, 0.8 mile upstream from outlet of Packard Pond and 3½ miles north of Athol, Worcester County.

Drainage area.--50.4 sq mi.

Gage.--Water-stage recorder. Datum of gage is at mean sea level.

Remarks.--Reservoir completed in 1948 for flood control, has usable capacity of 958,000,000 cu ft.

Cooperation.--Records furnished by Corps of Engineers.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	0.1	70.5	20.0	19.0	30.4	27.8	0.4	0.2	0.2	0.3	0.1	0.1
1952	.4	19.0	23.6	77.0	16.4	2.1	1.6	.4	.2	0	0	.1
1953	.1	4.8	20.8	45.4	20.2	236.9	.5	.3	.1	0	0	0
1954	.2	.3	23.0	23.0	22.0	.4	.4	.3	.3	.1	.3	.2
1955	.3	22.8	23.6	17.6	24.8	23.0	27.8	.3	.1	0	.2	.2
1956	3.6	18.0	18.5	18.0	24.2	4.8	192.0	.4	.1	0	0	.1
1957	.1	21.0	21.0	26.0	26.0	8.1	.2	.3	.2	0	0	0
1958	0	6.7	19.5	40.0	22.0	3.0	15.3	.2	0	.2	0	.1
1959	.1	18.0	20.0	23.0	18.0	.4	1.2	.1	.1	0	.2	0
1960	9.9	95.2	19.0	20.0	26.0	18.0	21.5	.3	.1	.2	.1	.4

1650. East Branch Tully River near Athol, Mass.

Location.--Lat 43°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 1960. Monthly discharge only for October 1915 to May 1916, published in WSP 1301.

Gage.--Water-stage recorder and concrete control. Datum of gage is 613.71 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark). Prior to Oct. 26, 1948, staff gage at site 0.2 mile upstream at datum 14.40 ft higher.

Average discharge.--45 years (1915-60), 83.9 cfs (adjusted for storage).

Extremes.--1915-60: Maximum discharge, 5,140 cfs Sept. 21, 1938 (gage height, 8.60 ft, from floodmarks, site and datum then in use), from rating curve extended above 1,500 cfs on basis of contracted-opening measurement and computation of peak flow over dam; minimum, 0.03 cfs Jan. 4, Mar. 3, 1949, Aug. 21, 22, 1955; minimum daily, 0.04 cfs Aug. 21, 1955.

Remarks.--Flow regulated by Tully Reservoir (see p. 223).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	12.8	37.1	154	91.4	167	184	253	67.5	38.4	47.4	54.3	33.8	100
1952	87.4	197	121	162	142	131	254	102	92.1	15.5	20.9	19.5	112
1953	10.5	14.7	49.6	85.7	178	188	335	189	36.2	9.19	3.97	1.42	89.1
1954	10.2	37.7	124	48.8	99.4	149	150	169	52.7	18.4	13.0	79.1	79.2
1955	28.0	104	111	44.6	51.3	145	222	97.5	59.7	12.0	82.4	17.0	81.2
1956	120	198	39.8	91.2	39.1	70.9	280	234	46.2	8.42	.97	10.1	94.8
1957	11.3	22.9	73.4	67.2	54.9	131	126	80.8	31.5	7.94	1.03	1.34	50.9
1958	2.17	28.8	127	98.8	78.5	104	277	134	20.6	15.3	7.59	8.90	75.0
1959	17.3	28.5	39.4	65.4	46.9	112	246	78.1	30.5	16.3	5.10	13.8	58.2
1960	106	145	185	89.3	75.3	60.3	398	129	75.9	26.1	44.3	89.4	118

Monthly and yearly runoff, in inches (adjusted) ^a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.29	2.75	3.08	2.08	3.54	4.19	5.59	1.54	0.85	1.08	1.24	0.74	26.97
1952	2.00	4.52	2.81	4.15	2.53	2.88	5.62	2.32	2.04	.35	.48	.43	30.13
1953	.24	.37	1.27	2.17	3.41	6.16	5.39	3.86	.60	.21	.09	.03	24.00
1954	.23	.84	3.04	1.12	2.05	3.23	3.32	3.68	1.17	.42	.30	1.75	21.35
1955	.64	2.49	2.55	.97	1.12	3.30	4.96	2.00	1.32	.27	1.89	.38	21.69
1956	2.78	4.51	.92	2.08	.89	1.46	7.79	3.72	1.02	.19	.02	.22	25.60
1957	.26	.69	1.68	1.58	1.13	2.85	2.73	1.85	.70	.18	.02	.03	13.70
1958	.05	.65	3.01	2.44	1.49	2.21	6.24	2.94	.45	.35	.17	.20	20.20
1959	.40	.78	.92	1.52	.93	2.42	5.46	1.78	.68	.37	.12	.30	15.68
1960	2.52	3.94	3.57	2.05	1.68	1.31	8.79	2.78	1.68	.60	1.01	1.98	31.89

^a Adjusted for change in contents in Tully Reservoir.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted ^a /			Observed		Adjusted ^a /
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	82.0	82.6	22.26
1951	1201	826	Apr. 12, 1951	3.1	100	100	1.98	26.97	112	112	30.18
1952	1231	475	Apr. 7-8, 1952	.4	112	112	2.22	30.13	84.1	84.0	22.68
1953	1271	547	Apr. 8, 1953	.2	89.1	89.1	1.77	24.00	97.4	97.4	26.23
1954	1331	457	Apr. 20, 1954	.9	79.2	79.2	1.57	21.35	85.0	85.0	22.92
1955	1381	432	Apr. 29, 1955	.04	81.2	81.2	1.61	21.89	90.8	90.6	24.42
1956	1431	560	May 8, 1956	.06	94.8	94.8	1.88	25.60	74.0	74.1	20.02
1957	1501	278	Mar. 19, 1957	.1	50.9	50.9	1.01	13.70	54.9	54.9	14.78
1958	1551	472	Apr. 26, 1958	.7	75.0	75.0	1.49	20.20	69.0	69.0	18.59
1959	1621	492	Apr. 11, 1959	2.9	58.2	58.2	1.15	15.68	87.7	87.7	23.61
1960	1701	828	Apr. 21, 1960	.2	118	118	2.34	31.89	-	-	-

^a Adjusted for change in contents in Tully Reservoir.

1655. Moss Brook at Wendell Depot, Mass.

Location.--Lat 42°36'10", long 72°21'36", on left bank a quarter of a mile up stream from mouth and a quarter of a mile north of Wendell Depot, Franklin County.

Drainage area.--12.3 sq mi.

Records available.--June to October 1909, April to August 1910, June 1916 to September 1960. Published as "at Wendell" 1909-10.

Gage.--Staff gage read once or twice daily. Crest-stage gage since July 11, 1938. 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.--44 years (1916-60), 21.1 cfs.

Extremes.--1916-60: Maximum discharge, 1,540 cfs Mar. 19, 1936 (gage height, 6.30 ft, from floodmarks), from rating curve extended above 400 cfs on basis of slope-area measurements at gage heights 5.62 and 6.30 ft; minimum, 0.2 cfs Sept. 4, 5, 1929.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2.47	14.8	24.6	20.3	45.6	49.1	59.1	15.5	11.0	9.84	9.74	8.94	22.4
1952	22.1	53.7	51.1	44.8	29.2	34.0	67.5	32.3	27.6	6.06	5.71	3.35	29.7
1953	2.03	3.32	15.7	30.5	41.5	79.0	60.8	48.4	11.6	2.79	3.07	1.08	24.9
1954	5.00	9.21	32.3	12.0	24.0	32.6	36.3	37.0	11.4	2.68	2.31	12.3	18.0
1955	6.66	25.7	25.9	10.3	15.5	35.0	58.7	20.2	38.8	8.79	37.6	7.95	24.2
1956	32.6	54.5	11.5	20.1	10.8	16.0	85.3	30.3	12.3	3.01	1.29	3.34	23.3
1957	3.06	6.78	15.0	16.9	11.3	27.3	28.4	18.9	5.99	1.67	.78	.95	11.3
1958	1.14	6.01	38.2	30.0	16.8	26.4	63.2	29.9	4.97	3.20	2.19	2.74	18.7
1959	4.33	9.32	11.0	30.2	8.39	28.3	69.2	19.3	9.07	4.64	2.23	3.71	16.6
1960	30.1	40.0	33.2	24.5	25.9	19.8	107	26.2	13.9	14.1	14.7	25.6	31.1

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.23	1.35	2.30	1.90	3.86	4.60	5.36	1.45	1.00	0.92	0.91	0.81	24.69
1952	2.07	4.87	2.91	4.20	2.56	3.19	6.12	3.02	2.50	.57	.53	.30	32.94
1953	.19	.30	1.47	2.85	3.51	7.41	5.52	4.53	1.06	.26	.29	.10	27.49
1954	.47	.84	3.02	1.12	2.03	3.06	3.29	3.47	1.03	.25	.22	1.12	19.92
1955	.62	2.33	2.43	.97	1.31	3.28	5.32	1.89	3.51	.82	3.52	.72	26.72
1956	3.05	4.94	1.08	1.88	.95	1.50	7.74	2.84	1.11	.28	.12	.30	25.79
1957	.29	.61	1.40	1.58	.95	2.56	2.39	1.77	.54	.16	.07	.09	12.41
1958	.11	.54	3.58	2.81	1.42	2.47	5.73	2.80	.45	.30	.21	.25	20.67
1959	.41	.85	1.03	2.83	.71	2.65	6.28	1.81	.82	.43	.21	.34	18.37
1960	2.82	3.63	3.11	2.30	2.27	1.86	9.69	2.46	1.26	1.32	1.38	2.32	34.42

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	17.1	-	18.90
1951	1201	364	Mar. 31, 1951	0.9	22.4	1.82	24.69	27.8	30.66	
1952	1231	356	Apr. 16, 1952	1.0	29.7	2.41	32.84	22.6	24.95	
1953	1271	370	Mar. 16, 1953	.7	24.9	2.02	27.49	27.0	29.66	
1954	1331	253	Apr. 18, 1954	1.0	18.0	1.46	19.92	19.0	20.97	
1955	1381	735	June 21, 1955	1.1	24.2	1.97	26.72	27.6	30.41	
1956	1431	293	Apr. 17, 1956	1.0	23.3	1.89	25.79	17.2	19.02	
1957	1501	†180	Jan. 24, 1957	.4	11.3	.92	12.41	13.0	14.34	
1958	1551	266	Apr. 7, 1958	.6	18.7	1.52	20.67	17.0	18.73	
1959	1621	544	Apr. 3, 1959	.7	16.6	1.35	18.37	25.2	25.64	
1960	1701	573	Apr. 5, 1960	1.3	31.1	2.53	34.42	-	-	

† About; not previously published.

1665. Millers River at Erving, Mass.

Location.--Lat 42°35'51", long 72°26'19", on right bank 75 ft downstream from bridge at Farley, 0.6 mile upstream from Mormon Hollow Brook, 2.4 miles downstream from Erving, Franklin County, and 5.5 miles upstream from mouth.

Drainage area.--375 sq mi.

Records available.--August 1914 to September 1960.

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.--46 years (1914-60), 634 cfs (adjusted for storage).

Extremes.--1914-60: Maximum discharge, 29,000 cfs Sept. 22, 1938 (gage height, 13.37 ft, from floodmarks, site and datum then in use), mean of two slope-area measurements; practically no flow at times during 1915 and 1916 because of regulation; minimum daily, 8 cfs Sept. 6, 1926.

Remarks.--Flow regulated by powerplants, Lake Monomonic and other reservoirs, and high flow, by Birch Hill (see p. 222) and Tully (see p. 223) Reservoirs.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	107	603	995	752	1,487	1,335	1,778	542	397	438	409	268	753
1952	586	1,345	948	1,298	971	998	1,736	828	638	194	244	184	828
1953	155	163	472	814	1,231	1,690	2,319	1,401	419	161	94.0	72.7	745
1954	156	351	1,034	417	680	1,040	1,124	1,245	456	229	185	810	643
1955	335	979	989	449	500	1,062	1,328	649	512	196	700	272	664
1956	1,286	1,588	383	923	405	626	2,466	1,392	405	135	64.3	192	821
1957	180	255	572	640	488	908	966	627	259	112	56.0	81.6	429
1958	76.1	194	899	879	606	822	2,198	1,149	232	175	137	165	627
1959	226	283	341	594	502	947	1,763	582	242	224	88.6	170	480
1960	735	1,041	1,257	718	645	508	3,057	911	706	346	366	758	917

Monthly and yearly runoff, in inches (adjusted)^{a/}

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.33	1.93	2.95	2.31	4.15	4.16	5.19	1.67	1.18	1.35	1.25	0.80	27.27
1952	1.81	4.02	2.92	4.09	2.65	3.07	5.17	2.53	1.90	.59	.75	.55	30.05
1953	.48	.49	1.47	2.55	3.37	5.98	6.11	4.29	1.25	.49	.29	.22	26.99
1954	.48	1.04	3.20	1.28	1.89	3.17	3.35	3.83	1.36	.70	.59	2.39	23.25
1955	1.03	2.95	3.04	1.36	1.40	3.27	4.00	1.91	1.52	.82	2.15	.81	24.04
1956	3.97	4.73	1.17	2.84	1.17	1.90	7.84	3.77	1.20	.42	.20	.57	29.78
1957	.55	.78	1.76	1.98	1.35	2.77	2.86	1.93	.77	.34	.17	.24	15.50
1958	.23	.59	2.79	2.75	1.64	2.52	6.67	3.39	.69	.54	.42	.49	22.72
1959	.69	.87	1.04	1.83	.83	2.90	5.25	1.78	.72	.69	.23	.50	17.38
1960	2.28	3.32	3.65	2.21	1.86	1.61	9.05	2.77	2.10	1.07	1.12	2.26	33.30

^a Adjusted for change in contents in Birch Hill and Tully Reservoirs.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30								Calendar year		
		Observed				Adjusted ^{a/}				Observed		
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches		Mean	Mean	Runoff in inches
		Discharge	Date									
1950	-	-	-	-	-	-	-	-	-	561	562	20.34
1951	1201	4,010	Apr. 3, 1951	60	753	753	2.01	27.27	-	851	851	30.81
1952	1231	3,870	Apr. 6, 1952	65	828	828	2.21	30.05	-	854	854	23.74
1953	1271	4,110	Mar. 16, 1953	30	745	745	1.99	26.99	-	809	809	29.27
1954	1331	2,590	Apr. 16, 1954	43	643	643	1.71	23.28	-	706	707	25.68
1955	1381	3,170	Aug. 19, 1955	45	664	664	1.77	24.04	-	744	743	26.89
1956	1431	4,550	Apr. 17, 1956	31	821	821	2.19	29.78	-	634	634	23.00
1957	1501	1,990	Apr. 6, 1957	20	429	429	1.14	15.50	-	443	443	16.02
1958	1551	3,280	Apr. 7, 1958	27	627	627	1.67	22.72	-	600	600	21.71
1959	1621	4,900	Apr. 3, 1959	51	480	480	1.28	17.38	-	664	664	24.03
1960	1701	5,020	Apr. 5, 1960	100	917	917	2.45	33.30	-	-	-	-

^a Adjusted for change in contents in Birch Hill and Tully Reservoir.

1670. Connecticut River at Turners Falls, Mass.

Location.--Lat 42°36'40", long 72°33'20", at dam of Western Massachusetts Electric Co., at Turners Falls, Franklin County, 0.2 mile upstream from Falls River.

Drainage area.--7,163 sq mi.

Records available.--January 1915 to September 1960.

Average discharge.--45 years (1915-60), 11,960 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 (see p. 178), Lake Francis (see p. 180), Moore Reservoir since April 1956 and Comerford Station Pond (see p. 183), Union Village Reservoir (see p. 193), four reservoirs in Mascoma River basin (see p. 199), Sunapee Lake (see p. 202), Surry Mountain Reservoir (see p. 213), Otter Brook Reservoir since March 1958 (see p. 216), Birch Hill Reservoir (see p. 222), Tully Reservoir (see p. 223), and other reservoirs (combined usable capacity, about 25½ billion cubic feet).

Cooperation.--Records furnished by Western Massachusetts Electric Co.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	3,325	11,870	17,050	9,144	13,150	16,320	54,230	14,130	6,790	6,598	5,614	5,023	13,540
1952	8,462	19,590	12,820	14,010	12,180	12,400	52,090	19,660	20,730	4,110	2,690	2,626	15,040
1953	5,296	4,079	9,976	10,410	15,140	37,990	33,690	26,610	5,037	2,632	2,809	2,247	12,840
1954	2,750	4,563	12,460	5,198	11,560	18,730	41,550	30,350	15,100	6,636	5,106	17,420	14,250
1955	9,678	16,070	14,310	8,335	7,144	16,460	47,570	14,230	10,620	3,017	8,661	3,175	13,260
1956	9,892	15,430	4,917	9,033	5,750	6,736	36,320	33,450	11,530	5,829	2,534	5,875	12,260
1957	5,538	6,994	9,580	8,810	8,144	14,450	17,940	10,640	5,430	5,838	2,932	2,396	8,225
1958	3,402	8,312	21,550	11,780	8,848	10,420	49,820	23,950	8,023	5,972	4,654	3,686	13,360
1959	6,404	7,608	5,713	7,706	7,106	10,130	42,370	10,480	7,337	3,706	2,465	3,218	9,462
1960	14,340	23,340	22,370	12,670	11,580	8,490	61,000	17,740	9,963	4,432	3,635	7,237	16,330

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.50	2.01	2.69	1.34	1.86	2.56	8.71	2.35	1.00	1.09	0.88	0.71	25.70
1952	1.30	3.09	2.06	2.18	1.68	1.87	8.42	3.28	3.30	.58	.36	.35	28.47
1953	.50	.65	1.62	1.62	2.15	6.34	5.28	4.38	.74	.39	.41	.31	24.39
1954	.40	.70	2.02	.76	1.64	2.92	6.77	5.02	2.56	1.02	.79	2.75	27.15
1955	1.55	2.52	2.17	1.16	.95	2.58	7.72	2.42	1.71	.45	1.40	.39	25.02
1956	1.56	2.57	.71	1.59	.72	.90	6.24	5.59	1.84	.91	.35	.92	23.69
1957	.78	1.08	1.53	1.34	1.00	2.12	3.10	1.90	.68	1.00	.41	.34	15.48
1958	.44	1.33	3.62	1.64	1.03	1.55	8.38	3.90	1.27	1.03	.67	.51	25.37
1959	1.00	1.11	.79	1.13	.84	1.53	7.00	1.90	1.27	.53	.38	.46	17.94
1960	2.38	3.78	3.38	1.76	1.58	1.22	10.10	2.93	1.59	.68	.49	1.13	31.02

a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir since April 1956, Comerford Station Pond, Union Village Reservoir, 4 reservoirs in Mascoma River basin, Sunapee Lake, and Surry Mountain, Otter Brook, Birch Hill, and Tully Reservoirs.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30								Calendar year		
		Observed				Adjusted a/				Observed	Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date									
1950	-	-	-	-	-	-	-	-	11,630	11,650	22.09	
1951	1201	-	-	138	13,540	13,560	1.89	25.70	12,250	14,220	26.95	
1952	1231	-	-	60	15,040	14,990	2.09	28.47	13,090	13,050	24.79	
1953	1271	-	-	138	12,840	12,870	1.80	24.39	13,050	13,060	24.74	
1954	1331	-	-	138	14,250	14,330	2.00	27.15	15,940	15,970	30.27	
1955	1381	-	-	138	13,260	13,200	1.84	25.02	12,420	12,460	23.62	
1956	1431	-	-	138	12,260	12,570	1.75	23.69	11,590	11,610	22.45	
1957	1501	-	-	138	8,225	8,171	1.14	15.48	9,169	9,225	17.48	
1958	1551	-	-	60	13,360	13,390	1.87	25.37	12,210	12,080	22.08	
1959	1621	-	-	138	9,462	9,467	1.32	17.94	12,840	12,970	24.58	
1960	1701	-	-	138	16,330	16,320	2.28	31.02	-	-	-	

a Adjusted for change in contents; see footnote to preceding table.

1680. Somerset and Harriman Reservoirs

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. (completed early in 1913), 2,500,000,000 cu ft; Harriman Reservoir on Deerfield River at Davis Bridge, Vt. (completed in March 1924), 5,060,000,000 cu ft. Records furnished by New England Power Co.

Month-end usable contents, in millions of cubic feet, of Somerset and Harriman Reservoirs

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	6,037.4	6,452.8	6,211.1	5,874.0	5,615.9	4,816.9	6,953.3	7,176.8	7,128.5	6,950.6	6,821.7	6,046.7
1952	6,254.0	6,423.1	6,261.7	6,334.7	5,330.4	3,077.5	6,587.4	7,115.3	6,807.3	5,896.3	5,448.4	4,942.8
1953	4,128.7	4,146.2	4,286.7	4,366.5	3,874.9	6,000.2	6,791.4	6,751.0	6,310.8	5,839.4	5,214.5	5,113.6
1954	4,666.0	4,334.6	4,837.3	3,925.0	3,995.9	4,677.6	6,510.0	6,955.4	6,659.7	6,361.0	6,059.9	6,473.8
1955	6,206.3	6,590.2	6,334.5	4,440.7	3,339.7	3,210.5	6,647.0	6,746.9	6,360.7	5,885.1	5,988.6	5,173.5
1956	6,615.0	6,136.3	4,210.1	3,734.8	2,730.0	1,524.1	4,899.0	6,833.7	6,563.5	6,485.3	5,860.9	5,221.0
1957	4,406.1	4,561.0	4,752.2	4,447.6	3,368.3	2,421.7	4,465.5	6,613.9	5,896.4	6,054.2	5,237.4	4,577.8
1958	3,347.4	3,717.9	5,405.0	4,075.5	2,288.4	1,060.3	5,734.5	6,487.2	6,227.4	6,222.6	5,498.8	5,203.9
1959	5,033.9	4,828.3	3,670.6	3,761.3	2,242.1	1,565.5	5,713.0	6,013.7	6,267.5	5,720.1	5,248.8	4,849.7
1960	6,268.7	6,821.2	6,074.3	5,000.3	3,834.5	2,107.1	6,339.1	6,701.8	5,946.2	5,848.7	5,206.4	5,704.7

† Corrected.

1685. Deerfield River at Charlemont, Mass.

Location.--Lat 42°37'33", long 72°51'20", on left bank 1 mile downstream from Charlemont, Franklin County, and 2.5 miles downstream from Chickley River.

Drainage area.--362 sq mi.

Records available.--June 1913 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 517.36 ft above mean sea level, datum of 1929.

Average discharge.--47 years (1913-60), 901 cfs (adjusted for storage).

Extremes.--1913-60: Maximum discharge, 56,300 cfs Sept. 21, 1938 (gage height, 20.17 ft, from floodmarks), from rating curve extended above 31,000 cfs on basis of slope-area and contracted-opening measurements at gage heights 17.75 and 20.17 ft; minimum daily, 5 cfs June 17, 1921.

Remarks.--Flow regulated by Somerset and Harriman Reservoirs (see p. 227), and by several powerplants above station.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	461	1,204	1,479	1,064	1,316	1,797	2,467	678	598	655	439	682	1,066
1952	1,039	1,602	1,212	1,321	1,239	1,630	2,371	1,429	1,469	492	321	409	1,208
1953	372	373	985	967	1,266	3,042	1,798	2,045	392	240	311	74.0	990
1954	314	391	1,025	794	1,023	1,325	1,293	1,532	556	229	371	719	796
1955	563	1,783	1,397	1,130	1,046	1,414	2,389	539	399	265	922	547	1,032
1956	2,766	2,123	1,043	1,022	748	874	1,975	1,755	764	275	287	550	1,182
1957	506	721	950	939	1,000	1,191	698	452	214	217	342	368	630
1958	362	753	1,119	1,020	1,047	892	2,730	1,095	367	279	408	384	867
1959	460	768	849	971	1,062	1,022	1,675	577	270	355	327	277	714
1960	796	1,602	1,513	1,185	1,250	1,381	3,040	791	784	346	457	1,128	1,201

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1.01	4.80	3.83	2.99	3.48	4.77	10.20	2.43	1.79	1.88	1.25	1.18	39.61
1952	3.56	5.14	3.67	4.29	2.49	2.51	11.48	5.18	4.16	.48	.46	.66	44.11
1953	.22	1.17	3.30	3.18	3.06	12.21	6.48	6.46	.69	.20	.25	.11	37.33
1954	.47	.81	3.33	1.37	3.03	5.03	6.16	5.41	1.36	.37	.86	2.71	31.47
1955	1.54	5.94	4.16	1.35	1.70	4.35	11.45	1.84	.77	.28	3.06	.72	37.16
1956	10.76	5.73	1.03	2.69	1.03	1.35	10.10	7.89	2.06	.76	.17	.93	44.50
1957	.64	2.40	3.19	2.57	1.65	2.67	4.58	2.80	1.00	.88	.12	.35	22.85
1958	.40	2.05	5.57	1.67	.89	1.35	13.37	4.38	.82	.88	.44	.83	33.25
1959	1.26	2.09	1.33	3.20	1.25	2.45	10.09	2.20	1.13	.48	.46	.38	26.34
1960	4.22	6.21	3.33	2.50	2.34	2.35	14.40	2.95	1.52	.98	.69	4.07	46.16

a Adjusted for change in contents in Somerset and Harriman Reservoirs.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted a/			Observed		Adjusted a/
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	-	-	-
1951	1201	16,100	Nov. 26, 1950	66	1,068	2,92	39.61	940	983	36.86	42.34
1952	1231	27,000	June 1, 1952	51	1,208	1,773	44.11	1,127	1,129	36.43	37.85
1953	1271	11,300	Mar. 24, 1953	26	990	995	37.33	990	1,009	37.85	37.90
1954	1331	6,240	May 10, 1954	43	796	840	31.47	965	1,011	37.90	43.04
1955	1381	8,570	Aug. 19, 1955	47	1,032	990	37.16	1,215	1,148	43.04	33.21
1956	1431	18,100	Oct. 15, 1955	40	1,182	1,184	44.50	866	884	33.21	24.64
1957	1501	5,430	Jan. 23, 1957	29	630	609	22.85	636	657	24.64	29.91
1958	1551	7,820	Dec. 21, 1957	42	867	887	33.25	853	798	29.91	36.02
1959	1621	5,140	Jan. 22, 1959	36	714	702	26.34	684	961	36.02	-
1960	1701	12,800	Sept. 12, 1960	47	1,201	1,228	46.16	-	-	-	-

a Adjusted for change in contents in Somerset and Harriman Reservoirs.

1690. North River at Shattuckville, Mass.

Location.--Lat 42°38'18", long 72°43'32", on right bank in Shattuckville, Franklin County, 1½ miles south of Griswoldville and 1.3 miles upstream from mouth.

Drainage area.--88.4 sq mi.

Records available.--October 1939 to September 1960. Monthly discharge only for October, November 1939, published in WSP 1301.

Gage.--Water-stage recorder. Datum of gage is 458.36 ft above mean sea level, datum of 1929.

Average discharge.--21 years (1939-60), 180 cfs.

Extremes.--1939-60: Maximum discharge, 13,200 cfs Oct. 15, 1955 (gage height, 10.37 ft), from rating curve extended above 5,700 cfs by logarithmic plotting; minimum daily, 5.1 cfs Oct. 3, 1948.

Remarks.--Diurnal fluctuation at low flow caused by mill above station; prior to 1950, greater regulation by mill.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	36.3	186	279	182	266	415	606	147	124	129	80.3	88.7	211
1952	186	379	271	270	215	230	718	345	301	56.4	37.7	47.7	254
1953	26.6	69.8	225	208	244	866	467	377	47.7	21.9	17.0	9.00	215
1954	21.7	35.0	146	71.2	213	335	290	361	79.4	28.5	34.4	145	146
1955	74.9	384	294	93.8	101	285	662	144	68.9	28.2	228	49.0	201
1956	832	468	90.3	151	65.3	91.7	809	330	121	39.8	12.5	54.2	255
1957	35.3	119	167	151	144	217	246	153	51.6	23.6	13.8	14.3	111
1958	17.4	71.9	274	166	104	153	853	228	59.6	38.3	17.5	32.4	168
1959	55.9	107	83.3	136	89.2	184	665	148	49.7	35.8	28.0	17.6	133
1960	163	338	295	155	170	133	1,022	259	91.8	72.4	65.0	306	254

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.47	2.35	3.64	2.37	3.13	5.41	7.64	1.92	1.57	1.69	1.05	1.12	32.36
1952	2.42	4.79	3.53	3.52	2.62	5.00	9.06	4.51	3.80	.74	.49	.60	39.08
1953	.35	.88	2.94	2.72	2.87	11.29	5.89	4.92	.60	.29	.22	.11	33.08
1954	.28	.44	1.91	.93	2.51	4.37	3.66	4.70	1.00	.37	.45	1.83	22.45
1955	.98	4.85	3.84	1.22	1.19	3.72	8.36	1.88	.87	.37	2.97	.62	30.87
1956	10.85	5.91	1.18	1.97	.80	1.20	10.21	4.31	1.53	.52	.16	.68	39.32
1957	.46	1.50	2.18	1.97	1.69	2.82	3.10	1.99	.65	.31	.18	.18	17.03
1958	.23	.91	3.57	2.16	1.23	2.00	10.77	2.97	.75	.50	.23	.43	25.75
1959	.73	1.35	1.09	1.78	1.06	2.40	8.40	1.93	.63	.47	.37	.22	20.42
1960	2.13	4.26	3.85	2.02	2.08	1.74	12.89	3.37	1.16	.94	.85	3.86	39.15

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	161	27.81
1951	1201	6,500	Mar. 31, 1951	17	211	2.39	32.36	239	36.64
1952	1251	5,980	June 1, 1952	14	254	2.87	39.08	211	32.51
1953	1271	6,500	Mar. 24, 1953	6.0	215	2.43	33.08	205	31.54
1954	1331	3,180	Sept. 11, 1954	7.4	146	1.65	22.45	162	29.49
1955	1381	4,660	Nov. 3, 1954	9.4	201	2.27	30.87	255	39.14
1956	1431	13,200	Oct. 15, 1955	10	255	2.88	39.32	166	25.52
1957	1501	2,380	Jan. 23, 1957	8.9	111	1.26	17.03	115	17.60
1958	1551	5,400	Dec. 21, 1957	8.6	168	1.90	25.73	157	24.19
1959	1621	2,960	Apr. 3, 1959	10	133	1.50	20.42	179	27.49
1960	1701	7,750	Sept. 20, 1960	18	254	2.87	39.15	-	-

CONNECTICUT RIVER BASIN

1700. Deerfield River near West Deerfield, Mass.

Location.--Lat 42°32'09", long 72°39'14", on right bank 0.4 mile downstream from South River, $1\frac{1}{4}$ miles west of West Deerfield, Franklin County, and $2\frac{1}{2}$ miles west of Deerfield.

Drainage area.--558 sq mi.

Records available.--March to November 1904, January 1905, March to December 1905, October 1940 to September 1960. 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.--20 years (1940-60), 1,306 cfs (adjusted for storage).

Extremes.--1940-60: Maximum discharge, 48,500 cfs Dec. 31, 1948 (gage height, 15.43 ft); minimum daily, 46 cfs Aug. 3, 1947, Oct. 4, 1953.

Remarks.--Flow regulated by Somerset and Harriman Reservoirs (see p. 227) and by several powerplants above station.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	510	1,489	1,947	1,383	1,875	2,725	3,615	946	781	843	602	822	1,456
1952	1,355	2,400	1,830	1,896	1,731	2,150	3,833	2,152	2,129	655	432	518	1,752
1953	441	555	1,495	1,432	1,825	4,771	2,791	2,801	538	291	354	94.5	1,451
1954	376	477	1,321	973	1,509	2,004	1,890	2,376	756	302	445	1,082	1,124
1955	778	2,668	2,121	1,440	1,317	2,043	3,655	877	572	322	1,522	675	1,496
1956	4,632	3,302	1,303	1,372	924	1,174	3,625	2,460	1,039	370	324	660	1,766
1957	592	981	1,318	1,541	1,328	1,675	1,239	768	329	268	388	405	884
1958	411	907	1,661	1,417	1,367	1,336	4,351	1,635	501	361	450	454	1,233
1959	582	1,001	1,088	1,328	1,309	1,510	2,965	892	380	479	422	335	1,020
1960	1,203	2,496	2,186	1,587	1,724	1,774	4,937	1,326	999	503	591	1,622	1,737

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.76	3.68	3.45	2.60	3.30	5.01	8.88	2.13	1.61	1.14	1.05		35.13
1952	2.96	4.93	3.66	3.97	2.57	2.70	10.37	4.85	4.02	.65	.55	.65	41.88
1953	.28	1.12	3.20	3.02	3.02	11.50	6.19	5.76	.74	.24	.25	.11	35.43
1954	.43	.70	3.16	1.26	2.87	4.67	5.19	5.25	1.28	.39	.69	2.48	28.37
1955	1.40	5.62	4.19	1.51	1.61	4.12	9.96	1.89	.85	.30	3.22	.72	35.39
1956	10.84	6.08	1.21	2.47	1.01	1.50	9.85	6.58	1.88	.69	.19	.83	43.13
1957	.59	2.08	2.87	2.50	1.68	2.73	4.05	2.47	.88	.67	.17	.30	20.99
1958	.36	1.64	4.73	1.90	1.17	1.81	12.30	3.96	.80	.74	.37	.68	30.46
1959	1.07	1.84	1.35	2.81	1.27	2.60	9.13	2.08	.95	.57	.51	.36	24.54
1960	3.58	5.42	3.94	2.45	2.43	2.33	13.14	3.02	1.41	.96	.73	3.63	43.04

a Adjusted for change in contents in Somerset and Harriman Reservoirs.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30										Calendar year		
		Observed					Adjusted a/					Observed		Adjusted a/
		Momentary maximum		Minimum day	Mean	Mean	For square mile	Runoff in inches	Mean	Mean	Mean	Mean	Mean	Runoff in inches
		Discharge	Date											
1950	-	-	-	-	-	-	-	-	-	-	-	1,283	1,326	32.27
1951	1201	24,400	Nov. 26, 1950	50	1,456	1,444	2.59	35.13	1,593	1,594	38.79			
1952	1231	34,800	June 1, 1952	72	1,752	1,717	3.08	41.88	1,495	1,433	34.93			
1953	1271	22,200	Mar. 24, 1953	50	1,451	1,456	2.61	35.43	1,424	1,443	35.12			
1954	1331	13,400	Sept. 11, 1954	46	1,124	1,167	2.09	28.37	1,406	1,451	35.29			
1955	1381	18,600	Aug. 19, 1955	65	1,496	1,455	2.61	35.39	1,806	1,739	42.31			
1956	1431	43,700	Oct. 15, 1955	56	1,766	1,767	3.17	43.13	1,235	1,252	30.54			
1957	1501	9,570	Jan. 23, 1957	50	894	863	1.55	20.99	892	912	22.18			
1958	1551	13,800	Dec. 21, 1957	59	1,233	1,253	2.25	30.46	1,206	1,151	27.99			
1959	1621	11,100	Apr. 3, 1959	56	1,020	1,009	1.81	24.54	1,289	1,365	33.22			
1960	1701	24,700	Sept. 12, 1960	75	1,737	1,764	3.16	43.04	-	-	-			

a Adjusted for change in contents in Somerset and Harriman Reservoirs.

1705. Connecticut River near 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 1960. 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.--56 years (1904-60), 13,800 cfs (adjusted for storage since October 1929).

Extremes.--1904-60: Maximum discharge, 236,000 cfs Mar. 19, 1936 (gage height, 49.2 ft, from floodmarks); minimum daily, 215 cfs Aug. 31, Sept. 1, 1958.

Remarks.--Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes (see p. 178), Lake Francis (see p. 180), Moore Reservoir since April 1956 and Comerford Station Pond (see p. 183), Union Village Reservoir (see p. 193), four reservoirs in Mascoma River basin (see p. 199), Sunapee Lake (see p. 202), Surry Mountain Reservoir (see p. 213), Otter Brook Reservoir since March 1958 (see p. 216), Birch Hill Reservoir (see p. 222), Tully Reservoir (see p. 223), Somerset and Harriman Reservoirs (see p. 227), and other reservoirs (combined usable capacity, about 3½ billion cubic feet).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	3,841	13,070	19,460	10,870	15,710	19,120	54,910	15,320	7,701	7,586	6,295	5,877	14,920
1952	9,812	21,960	15,080	16,390	14,220	15,210	54,000	22,420	22,800	4,838	3,222	3,210	16,860
1953	3,742	4,571	11,510	11,860	17,050	41,790	36,600	29,210	5,787	3,076	3,367	2,479	14,250
1954	5,306	5,233	14,180	6,507	13,370	20,920	43,080	33,950	16,730	7,087	5,549	19,610	15,750
1955	10,840	19,720	17,390	10,280	8,952	19,890	51,790	15,780	11,560	3,395	10,940	3,854	15,350
1956	15,150	20,180	6,434	11,110	6,942	8,184	41,140	37,790	13,190	6,498	2,894	6,934	14,680
1957	6,123	8,187	11,260	10,250	9,409	16,950	20,030	11,770	5,782	6,106	3,287	2,750	29,24
1958	5,685	9,390	23,920	15,690	10,610	12,350	56,060	26,860	8,733	6,515	5,210	4,067	15,080
1959	7,052	8,897	6,785	8,918	8,411	11,550	47,140	11,830	7,909	4,279	2,954	3,611	10,740
1960	16,300	26,740	26,030	15,110	13,890	10,320	66,290	20,080	11,510	5,081	4,370	9,309	16,670

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.51	2.05	2.76	1.46	2.02	2.70	8.14	2.33	1.04	1.12	0.89	0.72	25.74
1952	1.41	3.16	2.20	2.34	1.76	2.00	8.13	3.42	3.28	.59	.39	.37	29.24
1953	.47	.66	1.70	1.70	2.19	6.45	5.27	4.34	.76	.39	.42	.31	24.66
1954	.42	.71	2.12	.83	1.74	3.02	6.48	5.13	2.36	.98	.77	2.84	27.40
1955	1.57	2.83	2.41	1.23	1.05	2.85	7.82	2.44	1.67	.44	1.61	.41	26.33
1956	2.28	.297	.76	1.73	.76	.96	6.55	5.83	1.90	.92	.34	.95	25.95
1957	.75	1.16	1.65	1.41	1.02	2.25	3.23	1.96	.87	.96	.38	.32	15.96
1958	.41	1.35	3.73	1.70	1.07	1.63	8.77	4.02	1.25	1.01	.66	.51	26.11
1959	1.00	1.18	.61	1.24	.85	1.57	7.28	1.96	1.25	.54	.39	.45	18.52
1960	2.53	3.96	3.57	1.91	1.69	1.28	10.18	3.04	1.62	.71	.52	1.35	32.36

a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir since April 1956, Comerford Station Pond, Union Village Reservoir, 4 reservoirs in Mascoma River basin, Sunapee Lake, Surry Mountain Reservoir, Otter Brook Reservoir since March 1958, Birch Hill, Tully, and Somerset and Harriman Reservoirs.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year				
		Observed				Adjusted a/			Observed	Adjusted a/			
		Momentary		maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date	day	day								
1950	-	-	-	-	-	-	-	-	-	13,000	13,070	22.55	
1951	1201	102,000	Apr. 1, 1951	688	14,920	14,920	1.90	25.74	15,340	15,760	27.19		
1952	1231	108,000	June 2, 1952	450	16,860	16,780	2.13	29.05	14,610	14,510	25.11		
1953	1271	123,000	Mar. 28, 1953	384	14,250	14,280	1.82	24.66	14,500	14,520	25.08		
1954	1331	75,600	Apr. 18, 1954	385	15,750	15,860	2.02	27.40	17,860	17,940	30.96		
1955	1381	81,400	Apr. 16, 1955	393	15,350	15,260	1.94	26.33	14,820	14,790	25.53		
1956	1431	99,400	Apr. 30, 1956	357	14,680	15,000	1.91	25.95	13,350	13,580	23.50		
1957	1501	36,000	Jan. 24, 1957	357	9,324	9,250	1.18	15.96	10,290	10,370	17.89		
1958	1551	101,000	Apr. 23, 1958	215	15,080	15,130	1.92	26.11	13,870	13,680	23.61		
1959	1621	93,500	Apr. 4, 1959	250	10,740	10,730	1.38	18.52	14,630	14,820	25.59		
1960	1701	142,000	Apr. 6, 1960	270	18,670	18,690	2.38	32.36	-	-	-	-	-

a Adjusted for change in contents; see footnote to preceding table.

CONNECTICUT RIVER BASIN

1715. Mill River at Northampton, Mass.

Location.--Lat 42°19'05", long 72°39'21", on right bank at Northampton, Hampshire County, $\frac{3}{2}$ miles upstream from mouth.

Drainage area.--52.8 sq mi.

Records available.--October 1938 to September 1960. Monthly discharge only for October 1938, published in WSP 1301.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 140 ft (from topographic map).

Average discharge.--22 years (1938-60), 97.3 cfs.

Extremes.--1938-60: Maximum discharge, 6,300 cfs Aug. 19, 1955 (gage height, 11.78 ft), from rating curve extended above 3,700 cfs on basis of computation of peak flow over dam; minimum, 2.2 cfs Oct. 1, 1950; minimum daily, 4.2 cfs Aug. 21, 23, 24, 1957.

Remarks.--Flow regulated by mill above station prior to 1956.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	14.4	48.3	103	96.2	194	271	243	77.2	50.7	46.1	29.9	33.1	99.8
1952	73.9	205	155	168	148	195	336	178	167	38.9	28.9	28.0	143
1953	19.0	45.7	126	119	177	475	296	199	43.2	17.4	13.7	9.63	128
1954	21.8	28.1	93.2	42.5	102	166	166	225	64.7	20.2	22.5	99.0	87.5
1955	41.9	175	185	69.0	57.8	179	264	96.8	32.2	17.1	254	79.9	121
1956	456	334	76.0	76.8	64.3	110	397	147	88.8	29.5	8.16	25.3	151
1957	20.7	36.2	73.2	67.2	71.1	112	123	69.5	22.8	9.13	4.96	5.48	51.3
1958	8.92	32.8	135	108	72.3	139	329	142	40.6	30.7	17.8	25.8	90.1
1959	42.5	72.0	53.6	81.2	47.9	127	288	78.3	28.3	45.9	20.7	18.6	75.2
1960	85.7	132	164	103	138	103	398	109	82.9	36.5	43.6	129	126

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.31	1.02	2.25	2.10	3.82	5.91	5.12	1.69	1.07	1.01	0.65	0.70	25.65
1952	1.61	4.27	3.39	3.68	3.02	4.26	7.11	3.88	3.53	.85	.59	.59	36.78
1953	.42	.96	2.74	2.60	3.50	10.37	6.26	4.34	.91	.38	.30	.20	32.98
1954	.48	.59	2.03	.93	2.01	3.63	3.51	4.91	1.37	.44	.49	2.09	22.48
1955	.91	3.70	4.04	1.51	1.14	3.90	5.59	2.11	.68	.37	5.55	1.69	31.19
1956	9.95	7.06	1.66	1.68	1.31	2.40	8.39	3.20	1.88	.65	.18	.53	38.89
1957	.45	.81	1.60	1.47	1.40	2.44	2.60	1.52	.48	.20	.11	.12	13.20
1958	.19	.69	2.94	2.36	1.43	3.03	6.96	3.09	.86	.67	.39	.55	23.16
1959	.93	1.52	1.17	1.77	.94	2.78	6.08	1.71	.60	1.00	.45	.39	19.32
1960	1.83	2.79	3.58	2.25	2.81	2.25	8.41	2.38	1.75	.80	.95	2.72	32.52

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	81.6	20.97
1951	1201	3,840	Mar. 31, 1951	6.2	99.8	1.89	25.65	122	31.34
1952	1231	2,850	Apr. 5, 1952	9.2	143	2.71	36.78	123	31.63
1953	1271	2,730	Mar. 13, 1953	5.8	128	2.42	32.98	124	31.96
1954	1331	2,320	Sept. 11, 1954	6.6	87.5	1.66	22.48	109	28.03
1955	1381	6,300	Aug. 19, 1955	6.8	121	2.29	31.19	160	41.21
1956	1431	5,010	Oct. 15, 1955	6.7	151	2.86	38.89	89.5	23.08
1957	1501	660	Feb. 27, 1957	4.2	51.3	.972	13.20	55.1	14.16
1958	1551	2,340	Apr. 6, 1958	4.4	90.1	1.71	23.16	89.3	22.96
1959	1621	1,930	Apr. 3, 1959	8.3	75.2	1.42	19.32	93.0	23.90
1960	1701	3,690	Sept. 12, 1960	13	126	2.39	32.52	-	-

1724. Barre Falls Reservoir near Barre, Mass.

Location.--Lat 42°25'40", long 72°01'35", on Ware River, 4 miles east of Barre, Worcester County.

Drainage area.--55.0 sq mi.

Records available.--October 1958 to September 1960.

Gage.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929 (levels by Corps of Engineers).

Remarks.--Reservoir completed in 1958 for flood control, has usable capacity of 1,050,000,000 cu ft.

Cooperation.--Records furnished by Corps of Engineers.

Month-end usable contents, in millions of cubic feet, of Barre Falls Reservoir near Barre, Mass.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1959	2.2	4.2	2.0	20.0	12.2		3.1	1.8	2.0	2.0	2.6	1.8
1960	2.6	3.4	36.5	35.6	42.5	89.3	2.2	2.4	.7	2.6	.7	2.2

1725. Ware River near Barre, Mass.

Location.--Lat 42°25'35", long 72°01'30", on left bank 700 ft downstream from Barre Falls Reservoir, 1.6 miles upstream from Burnshirt River, and 4 miles east of Barre, Worcester County.

Drainage area.--55.0 sq mi.

Records available.--July 1946 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is 745 ft (from topographic map).

Average discharge.--14 years (1946-60), 96.9 cfs (adjusted for storage).

Extremes.--1946-60: Maximum discharge, 1,890 cfs Oct. 16, 1955 (gage height, 6.31 ft), from rating curve extended above 1,100 cfs by logarithmic plotting; minimum, 0.8 cfs July 1, 1958; minimum daily, 1.2 cfs Sept. 4-6, 12, 1953.

Remarks.--Prior to August 1955, slight regulation at low flow at times by Long Pond. Flow regulated by Barre Falls Reservoir (see p. 232) since 1958.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	7.34	65.2	97.9	102	220	188	203	90.6	64.3	54.3	54.9	22.0	96.6
1952	47.8	195	158	204	142	154	208	119	83.2	17.1	33.2	28.1	116
1953	13.0	33.1	87.1	144	199	272	326	216	47.1	11.0	3.83	2.00	112
1954	13.9	67.4	170	73.6	94.8	146	174	182	65.2	29.8	26.4	205	104
1955	58.3	164	182	86.6	78.2	136	154	82.8	47.9	19.8	169	34.2	101
1956	275	233	68.4	165	87.1	119	367	169	73.0	20.6	6.02	16.1	133
1957	22.6	54.4	92.4	92.4	74.1	126	142	65.5	42.7	12.8	5.56	4.41	61.2
1958	10.1	34.6	121	124	74.7	146	401	168	37.3	43.5	19.5	31.3	101
1959	43.2	65.1	87.2	90.2	51.5	149	255	78.5	47.4	91.0	23.2	44.7	85.6
1960	103	159	173	109	112	78.0	427	136	61.9	35.5	32.2	70.6	124

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.15	1.32	2.05	2.13	4.16	3.95	4.12	1.90	1.30	1.14	1.15	0.45	23.82
1952	1.00	3.96	3.31	4.28	2.79	3.24	4.21	2.48	1.69	.56	.70	.57	28.59
1953	.27	.67	1.83	3.01	3.78	5.70	6.81	4.52	.96	.23	.08	.04	27.68
1954	.29	1.37	3.56	1.54	1.60	3.06	3.52	3.82	1.32	.63	.55	4.15	25.61
1955	1.22	3.33	3.81	1.82	1.48	2.86	3.11	1.74	.97	.41	3.55	.69	24.99
1956	5.77	4.73	1.43	3.45	1.71	2.49	7.44	3.52	1.48	.43	.13	.33	32.91
1957	.47	1.10	1.94	1.94	1.40	2.65	2.88	1.37	.87	.27	.12	.09	15.10
1958	.21	.70	2.54	2.60	1.41	3.07	8.13	3.51	.76	.91	.41	.64	24.89
1959	.90	1.34	1.81	2.03	.91	3.06	5.17	1.63	.96	1.91	.49	.90	21.11
1960	2.17	3.24	3.86	2.27	2.24	2.00	7.98	2.86	1.24	.76	.66	1.45	30.75

a Adjusted for change in contents in Barre Falls Reservoir since October 1958.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year				
		Observed			Adjusted a/			Observed		Adjusted a/		
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date									
1950	1171	-	-	-	-	-	-	-	73.9	-	-	18.22
1951	1201	480	Feb. 9, 1951	2.7	96.6	-	1.76	23.82	116	-	-	28.57
1952	1231	525	Jan. 28, 1952	5.1	116	-	2.11	28.59	93.3	-	-	23.09
1953	1271	620	Mar. 16, 1953	1.2	112	-	2.04	27.68	122	-	-	30.13
1954	1351	957	Sept. 12, 1954	1.4	104	-	1.89	25.61	117	-	-	28.75
1955	1381	1,120	Aug. 20, 1955	3.6	101	-	1.84	24.99	116	-	-	28.56
1956	1431	1,890	Oct. 16, 1955	3.8	133	-	2.42	32.91	99.0	-	-	24.49
1957	1501	365	Jan. 24, 1957	2.2	61.2	-	1.11	15.10	60.9	-	-	15.04
1958	1551	964	Apr. 8, 1958	3.7	101	-	1.84	24.89	103	103	-	24.59
1959	1621	999	Apr. 3, 1959	12	85.6	85.6	1.56	21.11	106	107	-	26.35
1960	1701	1,030	Apr. 21, 1960	2.1	124	124	2.25	30.75	-	-	-	-

a Adjusted for change in contents in Barre Falls Reservoir since October 1958.

1730. Ware River at Coldbrook, Mass.

Location.--Lat 42°23'30", long 72°03'40", on right bank above diversion dam at Ware River intake works at Coldbrook, Worcester County, 2 miles east of South Barre and 2.7 miles downstream from Burnshirt River.

Drainage area.--96.8 sq mi.

Records available.--January 1928 to September 1960.

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.--32 years (1928-60), 170 cfs.

Extremes.--1928-60: 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.--Figures of discharge include diversion as needed for Boston metropolitan district during period Oct. 15 to June 14 of each year. Flow regulated by Barre Falls Reservoir (see p. 232) since 1958.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	19.7	110	174	185	415	352	378	156	106	87.6	91.4	46.2	175
1952	82.0	342	271	351	258	264	368	205	141	35.0	60.9	49.8	204
1953	25.5	51.7	133	244	341	535	573	366	81.7	26.2	14.7	6.66	199
1954	30.8	95.2	293	125	181	282	339	321	104	51.5	57.0	329	184
1955	110	294	311	154	145	247	282	155	86.1	38.5	319	75.7	185
1956	465	445	115	276	137	201	801	321	130	49.6	16.5	38.3	249
1957	44.8	93.2	170	178	148	239	270	125	83.4	28.1	16.5	10.4	117
1958	16.1	54.3	242	243	160	291	730	330	83.2	83.2	40.6	63.4	195
1959	75.6	121	151	164	120	304	460	150	85.4	136	45.3	78.0	157
1960	182	269	298	200	185	153	796	239	119	73.0	62.9	129	225

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.24	1.26	2.07	2.20	4.46	4.19	4.56	1.86	1.22	1.04	1.09	0.53	24.52
1952	.98	3.94	3.23	4.54	2.68	3.14	4.25	2.42	1.63	.42	.73	.57	28.73
1953	.30	.60	1.58	2.91	3.67	6.37	6.61	4.36	.94	.31	.17	.08	27.90
1954	.37	1.10	3.49	1.48	1.95	3.36	3.91	3.83	1.20	.61	.68	3.79	25.77
1955	1.32	3.39	3.70	1.83	1.56	2.95	3.25	1.84	.99	.46	3.80	.87	25.96
1956	5.54	5.13	1.37	3.28	1.53	2.40	9.23	3.82	1.49	.59	.20	.44	35.02
1957	.53	1.07	2.03	2.12	1.59	2.85	3.11	1.49	.96	.54	.20	.12	16.41
1958	.19	.63	2.88	2.89	1.73	3.46	8.42	3.94	.96	.99	.48	.73	27.30
1959	.90	1.40	1.78	2.03	1.25	3.58	5.30	1.77	.99	1.62	.54	.90	22.06
1960	2.17	3.11	3.69	2.37	2.08	2.03	8.78	2.85	1.37	.88	.74	1.49	31.57

a Adjusted for change in contents in Barre Falls Reservoir since October 1958.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Observed				Adjusted a/		Observed		Adjusted a/	
		Momentary		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	maximum Date								
1950	1171	-	-	-	-	-	-	-	132	-	18.50
1951	1201	-	-	7.5	175	-	1.81	24.52	208	-	29.10
1952	1231	-	-	14	204	-	2.11	28.73	164	-	23.06
1953	1271	-	-	4.7	199	-	2.06	27.90	217	-	30.38
1954	1331	-	-	5.0	184	-	1.90	25.77	208	-	29.22
1955	1381	-	-	9.9	185	-	1.91	25.96	211	-	29.59
1956	1431	-	-	10	249	-	2.57	35.02	199	-	26.61
1957	1501	-	-	7.0	117	-	1.21	16.41	118	-	16.48
1958	1551	-	-	8.0	195	-	2.01	27.30	197	188	27.68
1959	1621	-	-	19	157	157	1.62	22.06	191	192	26.95
1960	1701	-	-	17	225	225	2.32	31.57	-	-	-

a Adjusted for change in contents in Barre Falls Reservoir since October 1958.

1735. Ware River at Gibbs Crossing, Mass.

Location.--Lat 42°14'07", long 72°16'45", on right bank half a mile upstream from Gibbs Crossing, Hampshire County, 1.8 miles upstream from Beaver Brook, and 2½ miles southwest of Ware.

Drainage area.--139 sq mi.

Records available.--August 1912 to September 1960.

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.--48 years (1912-60), 326 cfs (adjusted for diversion).

Extremes.--1912-60: Maximum discharge, 22,700 cfs Sept. 21, 1938 (gage height, 18.2 ft, from floodmarks), from rating curve extended above 4,600 cfs on basis of contracted-opening measurement at gage height 12.83 ft and slope-area measurement at gage height 18.2 ft; minimum, 5.0 cfs Oct. 26, 1914; minimum daily, 6.0 cfs Oct. 4, 1914.

Remarks.--Flow regulated by mills above station. Diversion at times from 97 sq mi in Ware River basin for supply of Boston metropolitan district. Regulation by Barre Falls Reservoir since 1958 (see p. 232).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	43.2	170	288	356	654	513	568	295	183	158	192	97.6	291
1952	184	653	505	728	467	547	676	413	291	99.5	133	105	400
1953	62.0	87.8	243	481	634	613	919	731	162	58.4	28.9	14.5	334
1954	57.0	172	505	252	344	443	447	392	210	105	98.8	525	295
1955	212	609	619	323	315	534	566	323	196	93.8	890	196	407
1956	750	922	222	433	303	465	1,394	623	284	97.0	34.6	74.0	466
1957	90.3	171	351	376	274	410	421	247	117	42.3	31.3	28.9	213
1958	44.5	104	305	309	232	366	625	427	164	168	89.8	142	248
1959	173	262	258	276	240	477	541	266	166	255	100	136	263
1960	299	433	431	332	396	332	1,318	458	269	138	141	244	397

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.25	†1.20	1.90	2.06	4.24	3.74	3.99	1.71	1.03	0.91	1.11	0.55	†22.69
1952	1.07	3.66	2.93	4.22	2.53	3.17	3.79	2.39	1.63	.58	.77	.59	27.33
1953	.56	.49	1.41	2.78	3.39	5.74	6.23	4.23	.91	.34	.17	.08	26.13
1954	.53	.96	2.93	1.46	1.80	3.06	3.65	3.36	1.18	.61	.57	3.43	23.34
1955	1.23	3.42	3.58	1.87	1.65	3.09	3.17	1.87	1.10	.54	5.99	1.10	28.61
1956	4.86	5.17	1.29	2.79	1.64	2.69	8.53	3.63	1.59	.56	.20	.42	33.37
1957	.52	.96	2.03	2.18	1.43	2.62	3.10	1.43	.66	.24	.18	.16	15.51
1958	.26	.59	2.44	2.40	1.38	3.02	6.72	3.59	.92	.97	.52	.79	23.60
1959	1.00	1.47	1.71	1.99	1.27	3.73	4.74	1.64	.93	1.48	.58	.76	21.30
1960	1.73	3.03	3.48	2.23	2.16	2.02	7.40	2.66	1.50	.80	.81	1.37	29.19

† Corrected.

a Adjusted for diversion from 97 sq mi in Ware River basin for supply of Boston metropolitan district, and change in contents in Barre Falls Reservoir since October 1958.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year					
		Observed				Adjusted a/		Observed		Adjusted a/			
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches		
		Discharge	Date										
1950	-	-	-	-	-	-	-	-	218	262	†17.69	-	-
1951	1201	1,750	Feb. 8, 1951	22	291	†333	1.67	†22.69	361	396	27.00	-	-
1952	1231	1,940	Jan. 27, 1952	29	400	400	2.01	27.33	321	321	21.93	-	-
1953	1271	2,460	Jan. 25, 1953	7.0	334	383	1.92	26.13	363	412	28.09	-	-
1954	1351	2,410	Sept. 12, 1954	18	295	342	1.72	23.34	354	401	27.35	-	-
1955	1381	12,200	Aug. 19, 1955	21	407	419	2.11	28.61	445	465	31.70	-	-
1956	1431	2,580	Apr. 17, 1956	14	466	488	2.45	33.37	359	374	25.56	-	-
1957	1501	2,200	Jan. 23, 1957	19	213	228	1.15	15.51	200	224	15.29	-	-
1958	1551	1,720	Apr. 7, 1958	24	248	346	1.74	23.60	268	359	24.49	-	-
1959	1621	2,400	Jan. 22, 1959	48	263	312	1.57	21.30	302	372	25.36	-	-
1960	1701	4,000	Mar. 31, 1960	28	397	427	2.15	29.19	-	-	-	-	-

† Corrected.

a Adjusted for diversion and change in contents; see footnote to preceding table.

1740. Hop Brook near New Salem, Mass.

Location.--Lat 42°28'42", long 72°20'05", on right bank 1.5 miles upstream from mouth and $\frac{1}{2}$ miles south of New Salem, Franklin County.

Drainage area.--3.39 sq mi.

Records available.--October 1947 to September 1960. Monthly discharge only for October 1947, published in WSP 1301.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 725 ft (from topographic map).

Average discharge.--13 years (1947-60), 6.41 cfs.

Extremes.--1947-60: Maximum discharge, 289 cfs Oct. 24, 1959 (gage height, 3.17 ft), from rating curve extended above 78 cfs by logarithmic plotting; minimum, 0.004 cfs Aug. 3, 9, 10, 1955.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.888	5.25	8.43	7.42	16.2	13.6	15.0	5.01	3.75	3.29	2.76	1.49	6.85
1952	5.15	14.7	10.4	15.0	9.21	10.6	18.3	9.07	7.48	2.64	1.98	1.69	8.83
1953	.903	1.15	4.03	9.67	14.0	22.0	20.0	13.5	3.61	.809	.311	.062	7.46
1954	1.75	2.84	10.5	5.03	7.65	9.72	11.6	11.3	3.09	.721	1.57	3.68	5.77
1955	2.91	9.29	9.00	4.09	6.11	10.6	12.8	5.88	2.32	.320	12.4	3.02	6.57
1956	13.3	16.5	4.08	4.49	3.99	6.58	28.9	9.80	6.31	2.30	.197	2.52	8.22
1957	1.56	4.21	7.57	6.82	5.39	7.13	8.51	4.65	3.05	.571	.047	.186	4.13
1958	4.02	2.05	11.4	7.79	4.43	9.14	19.9	10.3	2.68	2.48	1.12	1.63	6.11
1959	2.71	4.76	4.20	6.03	4.00	11.2	15.8	4.67	1.99	1.79	1.36	.863	4.95
1960	6.23	11.3	11.0	7.44	7.48	7.94	25.6	8.09	10.1	4.00	2.77	6.62	9.01

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.30	1.73	2.87	2.62	4.96	4.63	4.92	1.70	1.23	1.12	0.94	0.49	27.41
1952	1.75	4.83	3.56	5.11	2.93	3.60	6.01	3.08	2.46	.90	.87	.56	35.45
1953	.31	.38	1.37	3.29	4.30	7.47	6.58	4.60	1.19	.28	.11	.02	29.90
1954	.60	.93	3.57	1.71	2.35	3.31	3.81	3.83	1.02	.25	.53	1.21	23.12
1955	.99	3.06	3.06	1.39	1.88	3.62	4.21	2.00	.76	.11	4.23	.99	26.30
1956	4.52	5.44	1.39	1.53	1.27	2.24	9.52	3.33	2.08	.78	.07	.83	33.00
1957	.53	1.39	2.57	2.32	1.65	2.42	2.80	1.58	1.00	.19	.02	.06	16.53
1958	.14	.67	3.87	2.65	1.36	3.11	6.55	3.50	.88	.84	.38	.54	24.49
1959	.92	1.57	1.43	2.05	1.23	3.83	5.20	1.59	.66	.61	.46	.28	19.83
1960	2.12	3.73	3.74	2.53	2.38	2.70	8.42	2.75	3.33	1.36	.94	2.18	36.18

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	5.72	22.89
1951	1261	152	Mar. 31, 1951	0.16	6.85	2.02	27.41	8.15	32.64
1952	1231	118	Nov. 3, 1951	.23	8.83	2.60	35.45	6.82	27.38
1953	1271	146	Mar. 16, 1953	.01	7.46	2.20	29.90	8.22	32.94
1954	1331	107	Sept. 11, 1954	.02	5.77	1.70	23.12	6.27	25.13
1955	1381	275	Aug. 19, 1955	.01	6.57	1.94	26.30	7.62	30.54
1956	1431	193	Oct. 31, 1955	.02	8.22	2.42	33.00	6.51	26.14
1957	1501	135	June 26, 1957	.01	4.13	1.22	16.53	4.13	16.72
1958	1551	155	Dec. 21, 1957	.05	6.11	1.80	24.49	5.92	23.73
1959	1621	225	Apr. 2, 1959	.05	4.95	1.46	19.83	6.37	25.50
1960	1701	289	Oct. 24, 1959	.37	9.01	2.66	36.18	-	-

1745. East Branch Swift River near Hardwick, Mass.

Location.--Lat 42°23'36", long 72°14'21", on left bank 100 ft above spillway of regulating dam and 4.6 miles northwest of Hardwick, Worcester County.

Drainage area.--43.7 sq mi.

Records available.--January 1937 to September 1960. 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.--23 years (1937-60), 71.7 cfs.

Extremes.--1937-60: Maximum discharge, 6,780 cfs Sept. 21, 1938, average of slope-area and contracted-opening measurements; maximum gage height, 22.49 ft June 25, 1944; no flow at times in 1939, 1949, 1953, 1957.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	8.36	57.0	84.3	88.4	187	146	156	53.5	30.6	28.4	27.0	13.0	72.5
1952	42.8	134	123	174	101	122	153	76.7	47.6	13.0	31.2	27.2	87.0
1953	14.9	19.8	53.9	112	153	215	215	143	27.2	6.22	.803	.607	79.5
1954	15.3	49.1	129	57.9	84.9	118	150	118	35.2	14.8	13.7	83.6	72.3
1955	47.2	126	127	69.8	83.1	136	147	62.1	41.0	13.7	127	26.8	83.9
1956	141	177	56.4	84.5	58.4	97.7	354	123	58.9	23.7	4.53	20.2	97.9
1957	23.5	47.2	85.3	81.0	58.4	99.8	111	56.1	24.8	5.24	.88	.56	49.4
1958	4.20	15.1	82.1	77.5	45.6	95.6	228	120	29.4	38.1	13.1	19.4	63.9
1959	34.2	53.9	55.5	74.5	50.5	131	179	69.4	27.2	52.3	12.4	21.0	63.4
1960	71.9	139	148	105	99.5	81.3	297	85.7	64.0	34.9	31.0	67.0	102

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.22	1.46	2.22	2.33	4.45	3.84	3.99	1.41	0.78	0.75	0.71	0.33	22.49
1952	1.13	3.43	3.25	4.58	2.49	3.22	3.21	2.02	1.21	.34	.82	.69	27.09
1953	.59	.51	1.42	2.95	3.64	5.66	5.49	3.76	.69	.16	.02	.02	24.70
1954	.40	1.25	3.42	1.53	2.02	3.12	3.32	3.12	.90	.39	.36	2.13	22.46
1955	1.25	3.22	3.35	1.84	1.98	3.60	3.74	1.64	1.05	.36	3.36	.68	26.07
1956	3.72	4.52	1.49	2.23	1.44	2.58	8.53	3.24	1.50	.62	.12	.52	30.51
1957	.61	1.21	2.25	2.14	1.39	2.63	2.83	1.48	.63	.14	.02	.01	15.34
1958	.11	.38	2.17	2.05	1.09	2.47	5.81	3.18	.75	1.00	.35	.49	19.85
1959	.90	1.38	1.46	1.96	1.20	3.46	4.56	1.83	.69	1.38	.33	.54	19.69
1960	1.90	3.54	3.90	2.77	2.46	2.14	7.58	2.26	1.63	.92	.82	1.71	31.63

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	61.7	19.16
1951	1201	554	Apr. 4, 1951	2.5	72.5	1.66	22.49	85.0	26.40
1952	1231	547	Jan. 27, 1952	2.3	87.0	1.99	27.09	69.4	21.60
1953	1271	680	Jan. 25, 1953	0	79.5	1.82	24.70	88.4	27.45
1954	1331	666	Apr. 18, 1954	2	72.3	1.65	22.46	81.2	25.21
1955	1381	1,650	Aug. 19, 1955	.2	83.9	1.92	26.07	90.1	27.98
1956	1431	847	Apr. 17, 1956	1.9	97.9	2.24	30.51	79.8	24.85
1957	1501	540	Jan. 23, 1957	0	49.4	1.13	15.34	44.9	13.93
1958	1551	645	Apr. 7, 1958	.3	63.9	1.46	19.85	67.4	20.93
1959	1621	948	Apr. 3, 1959	4.7	63.4	1.45	19.69	81.4	25.29
1960	1701	1,220	Apr. 5, 1960	3.8	102	2.33	31.63	-	-

1750. Quabbin Reservoir near West Ware, Mass.

Location.--Lat 42°16'57", long 72°20'42", on Swift River, $\frac{1}{2}$ miles northwest of West Ware, Hampshire County, and $\frac{3}{4}$ miles east of Belchertown.

Drainage area.--186 sq mi.

Records available.--August 1939 to September 1960.

Gage.--Float tape. Datum of gage is 5.65 ft below mean sea level, datum of 1929.

Remarks.--Reservoir completed in August 1939 for storage of water for municipal supply, has usable capacity of 55,700,000 cu ft.

Cooperation.--Records furnished by Water Division, Metropolitan District Commission.

CONNECTICUT RIVER BASIN

Month-end usable contents, in millions of cubic feet, of Quabbin Reservoir near West Ware, Mass.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	45,773	46,377	47,216	48,076	49,734	51,481	52,084	52,418	52,645	52,834	53,067	52,779
1952	52,309	53,064	53,895	55,153	55,007	55,221	55,698	55,550	55,255	54,640	53,910	52,863
1953	51,302	50,438	50,199	51,040	51,926	55,539	55,928	55,584	54,929	53,416	52,080	50,428
1954	49,682	49,041	49,563	48,870	50,079	51,080	53,001	54,773	53,899	52,517	51,648	52,226
1955	51,936	52,423	52,990	52,916	53,149	53,888	54,795	54,717	54,332	52,684	54,773	54,706
1956	55,853	55,255	54,343	54,245	54,213	54,706	56,334	55,413	54,673	53,490	51,730	50,618
1957	49,504	48,776	48,835	49,070	49,227	49,811	51,060	50,209	49,129	47,258	45,743	44,459
1958	43,011	42,253	43,328	44,546	45,168	46,778	50,218	51,781	51,740	50,999	49,970	49,296
1959	48,504	47,561	47,747	48,344	48,531	50,288	52,758	52,184	50,879	50,778	50,558	49,257
1960	49,188	50,378	51,998	52,737	53,362	53,726	55,653	55,379	55,086	54,629	53,555	53,437

1755. Swift River at West Ware, Mass.

Location.--Lat 42°16'04", long 72°19'59", on left bank at West Ware, Hampshire County, 1.4 miles downstream from Quabbin Reservoir and 3½ miles east of Belchertown.

Drainage area.--188 sq mi, includes 1.6 sq mi drained by Beaver Brook, flow of which is diverted from Ware River basin. Prior to January 1937, 186 sq mi.

Records available.--July 1910 to September 1912 (twice-daily gage heights and corresponding discharges), October 1912 to September 1960.

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.--48 years (1912-60), 309 cfs (adjusted for storage and diversions).

Extremes.--1910-60: 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.--Flow regulated by Quabbin Reservoir (see preceding page). Diversion from Ware River to Quabbin Reservoir, from Quabbin Reservoir to Wachusett Reservoir, and from Quabbin Reservoir to Chicopee Valley aqueduct.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	78.3	79.2	76.4	80.2	79.8	81.7	453	163	98.3	77.5	81.7	75.4	118
1952	83.5	83.2	83.5	195	387	330	474	321	327	102	80.7	79.9	218
1953	82.0	78.6	83.3	76.0	84.2	97.3	1,093	775	148	83.6	82.6	85.8	231
1954	83.7	83.4	84.5	82.4	84.2	92.3	90.1	85.9	94.3	102	106	88.9	89.9
1955	92.6	82.1	90.3	86.2	86.7	94.5	89.0	88.2	87.5	108	130	92.0	94.0
1956	222	858	330	224	202	195	820	735	243	117	128	98.9	347
1957	103	110	87.4	88.1	85.8	88.4	84.4	86.8	95.7	100	112	127	97.4
1958	124	96.7	80.6	82.6	50.6	47.0	46.7	77.9	87.2	96.6	95.7	119	83.9
1959	108	81.1	77.3	85.5	84.9	89.1	84.6	85.1	86.7	100	115	118	93.1
1960	88.2	81.4	84.2	82.2	87.6	89.9	483	370	243	84.1	97.0	120	159

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.17	1.85	2.39	2.46	4.24	4.50	4.07	1.77	1.10	0.91	1.03	-0.21	24.28
1952	1.56	3.52	3.27	4.60	2.56	3.22	4.64	2.74	1.88	.65	1.18	.88	30.70
1953	-.38	1.47	1.31	3.59	3.41	6.61	6.32	4.12	1.80	-.40	-.60	-.53	24.72
1954	1.11	1.10	3.05	1.57	2.12	3.01	3.78	3.50	1.04	.30	.46	1.81	22.85
1955	.59	2.96	2.60	1.08	2.20	3.72	3.86	1.71	1.31	-.11	6.15	.46	26.53
1956	4.14	4.27	.89	1.79	1.78	3.08	8.25	2.88	1.99	.49	.16	.95	30.35
1957	.52	1.19	2.51	1.85	1.48	2.03	2.70	1.72	1.04	-.17	-.36	-.25	14.26
1958	-1.0	1.16	2.95	2.72	1.58	3.09	4.83	2.94	.50	1.80	.27	.59	22.33
1959	.65	1.47	.89	2.03	1.39	3.75	4.42	1.45	1.11	1.94	.95	-.03	20.02
1960	2.63	3.17	3.33	2.43	2.62	2.48	7.23	2.89	2.32	1.39	.65	2.25	33.39

a Adjusted for change in contents in Quabbin Reservoir (adjusted for diversion from Ware River), diversion to Wachusett Reservoir, and diversion to Chicopee Valley aqueduct.

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year		
		Observed			Adjusted a/			Observed	Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean
		Discharge	Date							
1950	-	-	-	-	-	-	-	-	73.2	285
1951	1201	726	Apr. 12, 1951	33	118	336	1.79	24.28	120	391
1952	1231	817	June 2, 1952	40	218	424	2.26	30.70	217	328
1953	1271	1,770	Apr. 17, 1953	32	231	342	1.82	24.72	232	396
1954	1351	176	Aug. 31, 1954	28	89.9	316	1.68	22.85	91.0	328
1955	1381	903	Aug. 19, 1955	34	94.0	368	1.96	26.53	187	411
1956	1431	1,870	Apr. 30, 1956	47	347	419	2.23	30.35	253	349
1957	1501	184	Sept. 16, 1957	33	97.4	197	1.05	14.26	97.5	195
1958	1551	178	Sept. 16, 1958	30	83.9	309	1.64	22.33	81.1	295
1959	1621	225	Mar. 6, 1959	32	93.1	277	1.47	20.02	92.0	362
1960	1701	845	Apr. 27, 1960	34	159	461	2.45	33.39	-	-

a Adjusted for change in contents and diversion; see footnote to preceding table.

1760. Quaboag River at West Brimfield, Mass.

Location.--Lat 42°10'56", long 72°15'51", on right bank 10 ft upstream from abandoned highway bridge at West Brimfield, Hampden County, 0.9 mile upstream from Blodgett Mill Brook, and 3½ miles northeast of Palmer.

Drainage area.--151 sq mi.

Records available.--August 1909 to August 1912 (twice-daily gage heights and corresponding discharges), September 1912 to September 1960.

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.--48 years (1912-60), 245 cfs.

Extremes.--1909-60: Maximum discharge, 12,800 cfs Aug. 19, 1955 (gage height, 15.36 ft. from floodmarks, present site and datum), from rating curve extended above 2,700 cfs on basis of slope-area measurement of peak flow; minimum daily, 6.6 cfs Sept. 28, 29, 1957.

Remarks.--Slight diurnal fluctuation at low flow caused by mill above station prior to 1956; regulation much greater prior to 1938.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	34.9	122	310	297	621	478	572	214	160	85.8	109	77.1	254
1952	112	521	411	556	454	470	481	334	306	71.3	91.5	70.3	322
1953	46.0	50.9	182	387	572	683	989	566	118	54.3	32.5	17.0	306
1954	27.4	110	362	188	234	399	460	449	152	66.5	81.3	526	254
1955	210	444	530	312	245	466	392	270	101	77.0	1440	291	400
1956	607	693	238	324	287	422	967	429	199	67.6	24.1	32.5	357
1957	57.0	89.0	204	249	255	338	402	164	57.0	25.7	12.8	12.0	155
1958	11.9	52.6	245	343	283	509	805	449	120	108	86.6	113	260
1959	155	200	270	257	213	489	572	226	119	195	99.1	96.0	241
1960	157	353	464	317	345	267	966	326	213	88.0	103	148	311

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.27	0.90	2.37	2.27	4.28	3.65	4.23	1.63	1.18	0.66	0.83	0.57	22.84
1952	.86	3.85	3.14	4.25	3.24	3.59	3.56	2.55	2.25	.54	.70	.52	29.06
1953	.35	.38	1.39	2.95	3.95	5.22	7.31	4.32	.87	.41	.25	.13	27.53
1954	.21	.81	2.76	1.43	1.61	3.04	3.40	3.43	1.12	.51	.62	3.85	22.83
1955	1.60	3.28	4.04	2.38	1.69	3.56	2.89	2.06	.75	.59	11.00	2.15	35.99
1956	4.63	5.12	1.82	2.48	2.05	3.22	7.14	3.28	1.47	.52	.18	.24	32.15
1957	.44	.66	1.56	1.90	1.76	2.58	2.97	1.25	.42	.20	.10	.09	13.93
1958	.09	.39	1.87	2.62	1.95	3.88	5.95	3.43	.89	.82	.66	.84	23.39
1959	1.18	1.48	2.06	1.97	1.47	3.73	4.23	1.73	.88	1.49	.76	.71	21.69
1960	1.20	2.61	3.54	2.42	2.47	2.04	7.13	2.49	1.58	.67	.79	1.09	28.03

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	185	16.60
1951	1201	1,180	Apr. 3, 1951	19	254	1.68	22.84	302	27.15
1952	1231	973	Jan. 28, 1952	38	322	2.13	29.06	259	23.53
1953	1271	1,450	Apr. 16, 1953	14	306	2.03	27.53	326	29.19
1954	1331	1,280	Sept. 11, 1954	12	254	1.68	22.83	311	27.97
1955	1381	12,800	Aug. 19, 1955	32	400	2.65	35.99	430	38.64
1956	1431	1,510	Apr. 18, 1956	18	357	2.36	32.15	238	23.24
1957	1501	780	Jan. 23, 1957	6.6	155	1.03	13.93	151	13.62
1958	1551	1,240	Apr. 8, 1958	7.1	260	1.72	23.39	237	25.76
1959	1621	1,080	Mar. 6, 1959	37	241	1.60	21.69	270	24.32
1960	1701	1,910	Apr. 5, 1960	36	311	2.06	28.03	-	-

1765. Ludlow Reservoir near Three Rivers, Mass.

Location.--Lat 42°12'23", long 72°24'54", in Chicopee River basin, 3 $\frac{1}{4}$ miles northwest of Three Rivers, Hampden County.

Drainage area.--21 sq mi.

Records available.--October 1950 to September 1960.

Gage.--Staff gage. Datum of gage is at mean sea level.

Remarks.--Reservoir completed in 1875 for storage of water for municipal supply, has usable capacity of 201,000,000 cu ft.

Cooperation.--Records furnished by Board of Water Commissioners, Springfield, Mass.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	119.0	158.2	165.5	179.4	181.1	177.5	172.2	177.5	178.6	171.5	174.3	129.7
1952	150.5	177.8	177.1	181.1	172.2	179.5	181.1	177.9	169.1	160.8	175.1	180.3
1953	172.2	172.4	181.1	181.1	181.1	181.1	180.9	180.3	171.2	157.3	141.3	125.7
1954	121.0	148.1	181.1	181.1	181.1	181.1	181.1	181.1	178.5	163.8	163.1	181.1
1955	181.1	181.1	181.1	179.9	181.1	181.1	181.1	169.1	180.2	174.7	170.8	148.7
1956	181.1	179.4	167.8	164.0	163.1	169.5	178.6	172.7	166.3	152.0	135.8	145.3
1957	143.2	169.4	181.1	181.1	181.1	179.9	181.1	180.7	174.2	154.4	139.6	142.9
1958	116.2	121.0	181.1	186.6	181.9	188.5	194.0	183.3	179.4	165.1	174.1	179.4
1959	183.0	192.2	179.4	181.1	181.1	190.4	188.5	185.0	183.0	181.1	183.0	175.8
1960	188.5	188.5	186.6	184.9	184.9	188.5	184.9	181.1	179.4	179.4	172.2	179.4

1770. Chicopee River at Indian Orchard, Mass.

Location.--Lat 42°09'38", long 72°30'52", on left bank 1,000 ft downstream from West Street Bridge at Indian Orchard, Hampden County, and 1.1 miles upstream from Fuller Brook.

Drainage area.--688 sq mi.

Records available.--August 1928 to September 1960. Published as "at Bircham Berd" prior to November 1938.

Gage.--Water-stage recorder. Altitude of gage is 125 ft (from topographic map). Prior to Nov. 1, 1938, at site $1\frac{1}{2}$ miles downstream at different datum.

Average discharge.--32 years (1928-1960), 1,120 cfs (adjusted to present drainage area and for storage and diversions).

Extremes.--1928-60: Maximum discharge, 45,200 cfs Sept. 21, 1938, by computation of flow over dam; minimum daily, 16 cfs several times in 1929-31.

Remarks.--Diversion from 186 sq mi in Swift River basin and at times from 97 sq mi in Ware River basin for Boston metropolitan district, for city of Chicopee, and since 1952, for South Hadley. Diversion from Ludlow Reservoir for Springfield and, prior to 1952, for Chicopee. Flow regulated by powerplants above station, by Quabbin Reservoir on Swift River (see p. 237), by Barre Falls Reservoir on Ware River since 1958 (see p. 233), and by smaller reservoirs.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	206	499	870	1,003	1,848	1,505	2,163	946	686	516	594	380	927
1952	509	1,604	1,355	1,968	1,696	1,796	2,110	1,491	1,223	411	429	376	1,241
1953	277	296	648	1,249	1,712	1,990	3,731	2,680	647	343	197	166	1,156
1954	229	473	1,230	709	958	1,285	1,385	1,321	639	434	419	1,516	881
1955	696	1,450	1,596	992	904	1,536	1,435	950	530	368	3,719	871	1,259
1956	1,953	3,022	1,054	1,218	1,059	1,449	3,956	2,122	988	440	274	307	1,483
1957	343	499	837	885	802	1,106	1,265	689	404	255	200	220	624
1958	216	307	771	993	778	1,436	2,010	1,365	553	589	392	512	826
1959	600	752	930	844	761	1,465	1,702	821	556	696	380	550	851
1960	802	1,300	1,477	1,142	1,334	994	3,423	1,502	1,005	492	511	762	1,224

Monthly and yearly runoff, in inches (adjusted)^{a/}

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.26	1.28	2.07	2.23	4.08	3.84	4.11	1.80	1.26	0.99	1.15	0.41	23.48
1952	1.16	3.45	2.99	4.23	2.75	3.35	3.93	2.58	1.97	.68	.92	.72	28.75
1953	.22	.49	1.31	2.95	3.42	5.62	6.32	4.32	1.03	.33	.02	-.03	26.00
1954	.55	.95	2.78	1.48	1.91	2.97	3.47	3.34	1.17	.63	.65	2.97	22.87
1955	1.18	3.03	3.24	1.82	1.84	3.44	3.24	1.91	1.09	.41	7.94	1.38	30.52
1956	4.21	4.68	1.45	2.24	1.84	2.95	7.56	3.12	1.75	.67	.20	.61	31.28
1957	.55	.98	1.95	1.84	1.49	2.34	2.87	1.48	.79	.21	.04	.09	14.63
1958	.12	.67	2.20	2.43	1.58	3.44	5.44	3.28	.89	1.51	.58	.81	22.75
1959	1.01	1.50	1.56	1.94	1.41	3.68	4.33	1.66	1.07	1.53	.70	.69	21.06
1960	1.92	3.01	3.53	2.53	2.68	2.23	6.75	2.69	1.87	1.06	.87	1.63	30.80

^a Adjusted for diversion from Ware River, change in contents in Quabbin Reservoir (adjusted for diversion from Ware River), diversion to Wachusett Reservoir, to South Hadley since 1952, and to Chicopee, change in contents in Barre Falls Reservoir since October 1958 and in Ludlow Reservoir, and diversion from Ludlow Reservoir.

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30								Calendar year		
		Observed				Adjusted a/				observed	Adjusted a/	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	
		Discharge	Date									
1950	-	-	-	-	-	-	-	-	671	929	18.32	
1951	1201	4,340	Apr. 4, 1951	95	927	1,190	1.73	23.48	1,083	1,392	27.47	
1952	1231	4,500	Jan. 28, 1952	46	1,241	1,452	2.11	28.75	1,056	1,170	23.15	
1953	1271	6,330	Apr. 17, 1953	37	1,156	1,316	1.92	26.00	1,216	1,433	28.26	
1954	1331	4,280	Sept. 12, 1954	46	881	1,159	1.68	22.87	1,032	1,319	26.04	
1955	1381	40,500	Aug. 19, 1955	47	1,259	1,546	2.25	30.52	1,449	1,693	33.41	
1956	1431	6,690	Apr. 17, 1956	43	1,483	1,581	2.30	31.28	1,121	1,234	24.42	
1957	1501	3,840	Jan. 24, 1957	48	624	742	1.08	14.63	592	717	14.14	
1958	1551	4,380	Apr. 8, 1958	81	826	1,153	1.68	22.75	900	1,209	23.83	
1959	1621	5,280	Mar. 7, 1959	55	831	1,067	1.55	21.06	948	1,290	25.45	
1960	1701	7,560	Mar. 31, Apr. 1, 1960	178	1,224	1,557	2.26	30.80	-	-	-	

^a Adjusted for diversion and change in contents; see Footnote to preceding table.

1775. Watershops Pond at Springfield, Mass.

Location.--Lat 42°05'50", long 72°33'50", on Mill River in Springfield, Hampden County, 1.3 miles upstream from mouth.

Drainage area.--33.9 sq mi.

Records available.--April 1939 to September 1960.

Gage.--Float gage. Datum of gage is 153.43 ft above mean sea level, datum of 1929. Prior to July 1941, water-stage recorder at same site and datum.

Remarks.--Reservoir completed in 1857 for storage of water for power, has usable capacity of 70,600,000 cu ft.

Cooperation.--Records furnished by Ordnance Department, Department of the Army.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	71.8	71.8	71.8	71.8	73.1	71.8	72.4	71.8	71.8	71.1	72.4	70.3
1952	70.3	72.4	71.8	71.8	71.1	71.8	72.4	71.1	71.1	71.1	72.4	71.1
1953	71.1	71.1	71.8	72.4	71.1	72.4	69.7	72.1	70.7	71.1	68.5	70.3
1954	71.3	68.9	71.3	71.1	71.3	70.7	72.1	73.1	70.0	69.4	0	0
1955	0	70.3	71.8	70.3	71.8	71.1	73.1	72.7	71.8	71.3	69.4	0
1956	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	49.0	51.6	45.3	45.8	46.3	45.8	43.9	47.4	41.0	39.6
1958	37.9	52.4	52.7	53.9	52.4	29.6	31.9	51.6	52.4	52.4	29.6	30.4
1959	52.2	48.4	56.3	66.3	59.9	68.9	68.2	67.6	67.6	68.9	68.9	71.8
1960	52.2	55.1	55.1	55.1	55.1	55.6	69.7	69.7	68.9	68.9	68.9	68.9

1780. Mill River at Springfield, Mass.

Location.--Lat 42°05'39, long 72°34'03", on right bank 75 ft upstream from Hancock Street Bridge at Springfield, Hampden County, 0.25 mile downstream from Watershops Pond, and 1.0 mile upstream from mouth.

Drainage area.--33.9 sq mi.

Records available.--December 1938 to September 1951.

Gage.--Water-stage recorder and concrete control. Datum of gage is 118.92 ft above mean sea level, datum of 1929.

Average discharge.--12 years (1939-51), 41.6 cfs (adjusted for storage).

Extremes.--1938-51: Maximum daily discharge, 306 cfs Apr. 1, 1940; no flow May 30, 1941.

Remarks.--Flow regulated by powerplant and by Watershops Pond (see p. 242)

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	19.4	33.9	37.8	44.2	83.8	72.4	93.7	54.3	48.3	33.8	37.8	27.2	48.6

Monthly and yearly runoff, in inches (adjusted) ^a/_a

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.70	1.11	1.29	1.50	2.59	2.44	3.09	1.84	1.59	1.14	1.30	0.87	19.46

^a Adjusted for change in contents in Watershops Pond.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted ^a / _a			Observed	Adjusted ^a / _a	
		Momentary maximum		Minimum	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date	day							
1950	-	-	-	-	-	-	-	-	37.5	39.6	-
1951	1201	-	-	-	2.4	48.6	48.6	1.43	19.46	-	-

^a Adjusted for change in contents in Watershops Pond.

1785. Westfield River at West Chesterfield, Mass.

Location.--Lat 42°23'48", long 72°52'32", on right bank 0.2 mile downstream from West Branch and 0.5 mile downstream from highway bridge at West Chesterfield, Hampshire County.

Drainage area.--111 sq mi.

Records available.--July 1946 to September 1951.

Gage.--Water-stage recorder. Altitude of gage is 770 ft (from topographic map).

Average discharge.--5 years (1946-51), 231 cfs.

Extremes.--1946-51: Maximum discharge, 16,000 cfs Dec. 31, 1948 (gage height, 11.93 ft), from rating curve extended above 6,700 cfs on basis of slope-area measurement of peak flow; minimum daily, 4.8 cfs Aug. 26, 1949.

Remarks.--Diurnal fluctuation at low flow caused by mill above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	32.8	281	305	263	380	582	684	218	143	129	89.2	67.9	263

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.34	2.83	3.17	2.73	3.57	6.04	6.87	2.27	1.44	1.34	0.93	0.68	32.21

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches		
		Discharge	Date								
1950	-	-	-	-	-	-	-	219	-	26.73	-
1951	1201	10,400	Nov. 26, 1950	12	263	2.37	32.21	-	-	-	-

1790. Knightville Reservoir at Knightville, Mass.

Location.--Lat 42°17'26", long 72°51'53", on Westfield River at Knightville, Hampshire County, 0.4 mile upstream from Sykes Brook, 2.6 miles upstream from Middle Branch, and 4 miles north of Huntington.

Drainage area.--162 sq mi.

Records available.--December 1941, March to November 1942, April 1943 to September 1960.

Gage.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929 (levels by Corps of Engineers). Prior to Oct. 19, 1942, staff gage at same site and datum.

Remarks.--Reservoir completed in 1941 for flood control, has usable capacity of 2,130,000,000 cu ft.

Cooperation.--Records furnished by Corps of Engineers.

Month-end usable contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	0.1	2.0	16.1	11.3	11.1	684.9	0.9	0.6	0.5	0.2	0.1	0.2
1952	.5	9.3	13.8	14.0	9.5	5.3	1.2	.8	.3	.1	.1	.1
1953	.1	5.9	10.8	10.8	10.5	1,355.0	2.0	.7	.4	.1	.1	.1
1954	.3	3.6	23.3	17.3	7.0	3.5	.6	.7	.3	.2	27.2	.2
1955	.5	4.5	7.4	10.8	19.2	8.1	7.4	.4	.1	0	.4	.4
1956	358.8	6.8	5.9	12.0	9.9	6.5	516.2	2.8	.1	.1	0	.2
1957	.3	7.2	14.3	10.1	29.9	1.0	.5	.3	.2	.1	.1	.1
1958	.1	10.1	21.4	13.4	16.0	2.2	119.2	1.8	.9	.8	.1	.5
1959	.5	8.9	8.5	52.9	9.1	1.0	2.7	.2	.2	.1	.2	.2
1960	3.9	60.8	11.1	9.4	10.5	136.5	1.1	1.2	.3	.6	.2	.8

1795. Westfield River at Knightville, Mass.

Location.--Lat 42°17'16", long 72°51'53", on left bank at Knightville, Hampshire County, 0.2 mile downstream from Knightville Dam, 0.2 mile upstream from Sykes Brook, 2.4 miles upstream from Middle Branch, and 3.5 miles north of Huntington.

Drainage area.--162 sq mi.

Records available.--August 1909 to September 1960.

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.--51 years (1909-60), 326 cfs (adjusted for storage).

Extremes.--1909-60: Maximum discharge, 37,900 cfs Sept. 21, 1938 (gage height, 29.58 ft, from floodmarks, site and datum then in use), from rating curve extended above 3,800 cfs on basis of slope-area measurements at gage heights 24.07 and 29.58 ft; minimum, 0.6 cfs Aug. 11, 1941; minimum daily, 4 cfs Aug. 10, 1913.

Remarks.--Flow regulated by Knightville Reservoir (see preceding page).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	41.4	336	402	344	560	581	1,150	249	166	165	114	99.1	348
1952	304	689	473	521	383	471	1,206	533	562	103	87.1	137	454
1953	59.4	169	446	408	529	987	1,391	715	113	44.3	23.7	14.8	407
1954	43.1	85.4	298	148	407	636	561	726	214	57.7	43.1	437	303
1955	182	765	584	186	204	566	1,097	271	96.4	32.7	745	124	405
1956	1394	1155	183	275	145	243	1,169	831	256	83.8	21.5	163	493
1957	116	239	322	304	252	396	457	256	89.5	34.1	17.8	21.9	208
1958	29.1	96.6	448	299	191	320	1,656	525	118	104	51.1	91.0	327
1959	168	326	193	266	198	373	1,029	231	96.6	148	66.5	51.3	261
1960	384	602	566	326	400	221	1,625	342	186	99.5	112	397	436

Monthly and yearly runoff, in inches (adjusted)^a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.29	2.32	2.90	2.44	3.60	5.92	6.10	1.77	1.14	1.18	0.81	0.68	29.15
1952	2.16	4.77	3.38	3.71	2.54	3.34	8.29	3.79	3.87	.73	.62	.94	38.14
1953	.42	1.18	3.19	2.91	3.40	10.59	5.98	5.09	.78	.31	.17	.10	34.12
1954	.31	.58	2.18	1.04	2.59	4.52	3.85	5.16	1.47	.41	.38	2.94	25.43
1955	1.29	5.28	4.16	1.33	1.34	4.00	7.55	1.91	.66	.23	5.30	.85	33.90
1956	10.82	7.07	1.30	1.98	.96	1.72	9.40	4.55	1.76	.60	.15	1.12	41.43
1957	.85	1.87	2.31	2.15	1.67	2.74	3.14	1.82	.62	.24	.13	.15	17.47
1958	.21	.69	3.22	2.11	1.23	2.24	11.71	3.42	.81	.74	.39	.63	27.37
1959	1.19	2.27	1.37	2.01	1.16	2.63	7.09	1.64	.67	1.05	.47	.35	21.90
1960	2.74	4.30	3.90	2.31	2.67	1.91	10.83	2.43	1.28	.71	.73	2.74	36.61

^a Adjusted for change in contents in Knightville Reservoir.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted ^a /			Observed	Adjusted ^a /	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	295	295	24.70
1951	1201	4,090	Apr. 7, 1951	16	348	348	2.15	29.15	405	405	33.95
1952	1231	3,330	June 8, 1952	29	454	454	2.80	38.14	386	386	32.62
1953	1271	4,340	Apr. 3, 1953	7.6	407	407	2.51	34.12	388	387	32.40
1954	1331	3,330	Apr. 20, 1954	10	303	303	1.87	25.43	395	395	33.09
1955	1381	4,680	Aug. 28, 1955	9.4	405	405	2.50	33.90	506	506	42.36
1956	1431	4,370	May 2, 1956	14	493	493	3.04	41.43	322	322	27.05
1957	1501	2,080	Jan. 24, 1957	10	208	208	1.28	17.47	200	200	16.78
1958	1551	3,900	Apr. 20, 1958	14	327	327	2.02	27.37	336	335	28.06
1959	1621	2,850	Apr. 5, 1959	22	261	261	1.61	21.90	334	334	28.01
1960	1701	3,570	Apr. 13, 1960	14	436	436	2.69	36.61	-	-	-

^a Adjusted for change in contents in Knightville Reservoir.

1800. Sykes Brook at Knightville, Mass.

Location.--Lat 42°17'27", long 72°52'15", on right bank 200 ft downstream from bridge on State Highway 112 at Knightville, Hampshire County, 0.4 mile upstream from mouth, 0.4 mile west of Knightville Dam, and 3.5 miles north of Huntington.

Drainage area.--1.64 sq mi.

Records available.--June 1945 to September 1960.

Gage.--Water-stage recorder and concrete control. Datum of gage is 641.40 ft above mean sea level, datum of 1929.

Average discharge.--15 years (1945-60), 2.76 cfs.

Extremes.--1945-60: Maximum discharge, 680 cfs Aug. 19, 1955 (gage height, 4.485 ft), from rating curve extended above 80 cfs; minimum, 0.08 cfs Aug. 31, Sept. 1, 1953.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.203	1.86	3.02	2.44	5.61	7.55	6.37	1.95	1.36	0.958	0.343	0.332	2.64
1952	1.60	4.90	3.77	4.29	3.57	5.14	9.36	4.63	4.19	.968	.375	.736	3.61
1953	.417	1.30	3.64	3.36	4.60	11.9	7.20	5.45	.775	.202	.157	.118	3.26
1954	.420	.706	2.64	1.36	3.04	4.98	4.69	5.50	1.55	.489	.496	3.19	2.42
1955	1.43	6.13	5.59	1.82	2.19	4.93	7.80	2.52	.805	.190	9.12	1.19	3.65
1956	14.1	8.99	1.93	2.47	1.82	2.61	13.2	4.22	1.83	.458	.111	.295	4.33
1957	.436	.954	2.11	1.79	1.68	3.09	3.34	1.36	.408	.129	.069	.073	1.29
1958	.111	.550	3.02	2.60	1.69	4.18	13.2	3.85	.794	.993	.340	.458	2.65
1959	1.16	2.28	1.60	2.04	1.19	3.71	7.62	1.90	.840	1.09	.320	.540	2.02
1960	2.36	4.08	4.51	3.07	3.84	2.71	12.8	3.06	1.96	.455	.758	2.51	3.49

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.14	1.26	2.12	1.71	3.56	5.31	4.33	1.37	0.93	0.67	0.24	0.23	21.87
1952	1.12	3.33	2.65	3.01	2.34	3.62	6.37	3.25	2.85	.68	.26	.50	29.98
1953	.29	.89	2.56	2.36	2.92	8.37	4.90	3.83	.53	.14	.11	.08	26.98
1954	.30	.48	1.85	.96	1.93	3.50	3.19	3.87	1.05	.34	.35	2.17	19.99
1955	1.01	4.17	3.93	1.28	1.39	3.47	5.31	1.77	.55	.13	6.41	.81	30.23
1956	9.92	6.12	1.36	1.74	1.20	1.83	8.98	2.97	1.24	.32	.08	.20	35.96
1957	.31	.65	1.49	1.26	1.07	2.18	2.27	.96	.28	.09	.05	.05	10.66
1958	.08	.36	2.12	1.83	1.07	2.94	9.00	2.78	.53	.63	.24	.31	21.89
1959	.82	1.55	1.13	1.44	.76	2.60	5.18	1.54	.57	.77	.23	.37	16.76
1960	1.66	2.77	3.17	2.16	2.53	1.91	8.70	2.15	1.33	.32	.53	1.71	28.94

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	2.15	17.79
1951	1201	67	Mar. 31, 1951	0.07	2.64	1.61	21.87	3.03	25.45
1952	1231	58	Apr. 5, 1952	.11	3.61	2.20	29.98	3.21	26.62
1953	1271	69	Mar. 26, 1953	.04	3.26	1.99	26.98	3.13	25.87
1954	1331	54	Sept. 11, 1954	.08	2.42	1.48	19.99	3.20	26.47
1955	1381	680	Aug. 19, 1955	.06	3.65	2.23	30.23	4.63	38.52
1956	1431	149	Oct. 15, 1955	.07	4.33	2.64	35.96	2.53	21.01
1957	1501	19	Jan. 23, 1957	.04	1.29	.787	10.66	1.30	10.77
1958	1551	74	Apr. 6, 1958	.06	2.65	1.62	21.89	2.73	22.83
1959	1621	55	Apr. 2, 1959	.10	2.02	1.23	16.76	2.52	20.86
1960	1701	88	Apr. 4, 1960	.15	3.49	2.13	28.94	-	-

1805. Middle Branch Westfield River at Goss Heights, Mass.

Location.--Lat 42°15'31", long 72°52'23", on right bank at upstream side of highway bridge at Goss Heights, Hampshire County, 0.35 mile upstream from mouth and 1.7 miles north of Huntington.

Drainage area.--52.6 sq mi.

Records available.--July 1910 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 400.30 ft above mean sea level, datum of 1929. Prior to Sept. 8, 1912, chain gage at same site. Prior to June 25, 1930, at datum 1.00 ft higher.

Average discharge.--50 years (1910-60), 105 cfs.

Extremes.--1910-60: Maximum discharge, 19,900 cfs Sept. 21, 1938 (gage height, 10.61 ft), from rating curve extended above 3,200 cfs on basis of mean of two contracted-opening measurements of peak flow; maximum gage height, 13.87 ft Mar. 12, 1936 (ice jam); practically no flow Sept. 3, 22, Oct. 20, 1910, July 30, 1912, Oct. 26, 27, 1914.

Remarks.--Some diurnal fluctuation at low flow prior to 1952 caused by mill above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	10.6	137	135	116	190	273	251	78.4	48.2	60.9	34.0	24.2	113
1952	93.2	233	150	192	142	178	388	176	213	32.0	21.2	44.7	154
1953	13.1	51.8	161	145	174	503	265	228	25.9	10.4	4.95	4.12	132
1954	9.95	20.8	112	49.4	133	197	180	200	56.4	12.7	13.6	139	93.3
1955	48.9	246	189	56.4	73.2	189	344	66.5	22.4	8.01	316	28.7	132
1956	507	298	48.6	90.8	46.2	68.6	466	174	72.3	23.9	4.69	37.1	153
1957	39.4	84.2	119	112	78.7	116	140	79.8	21.0	8.20	4.88	5.24	67.3
1958	5.35	30.6	158	89.1	59.1	107	503	129	27.0	33.3	15.8	32.2	99.0
1959	69.2	127	66.0	82.4	50.5	126	335	69.9	24.6	39.9	14.0	16.2	84.9
1960	132	202	174	119	129	92.2	478	110	61.1	25.2	24.9	125	139

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.23	2.90	2.96	2.55	3.76	5.98	5.32	1.72	1.02	1.33	0.75	0.51	29.03
1952	2.04	4.73	3.28	4.21	2.91	3.90	8.24	3.85	4.52	.70	.46	.95	39.79
1953	.29	1.10	3.54	3.18	3.45	11.04	5.62	4.99	.55	.23	.11	.09	34.19
1954	.22	.44	2.45	1.06	2.64	4.33	3.63	4.38	1.20	.28	.30	2.94	24.09
1955	1.07	5.21	4.14	1.24	1.45	4.15	7.29	1.46	.47	.18	6.93	.61	34.20
1956	11.12	6.32	1.07	1.99	.95	1.50	9.69	3.81	1.53	.52	.10	.79	39.59
1957	.86	1.79	2.60	2.45	1.56	2.55	2.97	1.75	.44	.18	.10	.11	17.36
1958	.13	.65	3.46	1.95	1.17	2.35	10.66	2.83	.57	.73	.35	.68	25.53
1959	1.52	2.68	1.45	1.81	1.00	2.77	7.11	1.53	.52	.87	.31	.34	21.91
1960	2.90	4.29	3.82	2.60	2.65	2.02	10.15	2.40	1.30	.55	.55	2.64	35.87

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean
		Discharge	Date					Runoff in inches
1950	-	-	-	-	-	-	-	97.3
1951	1201	8,320	Nov. 26, 1950	3.4	113	2.15	29.03	128
1952	1231	4,980	June 1, 1952	7.0	154	2.93	39.79	134
1953	1271	4,420	Dec. 11, 1952	1.3	132	2.51	34.19	125
1954	1351	3,560	Sept. 11, 1954	3.0	95.3	1.77	24.09	122
1955	1381	16,500	Aug. 19, 1955	1.4	132	2.51	34.20	164
1956	1431	6,460	Oct. 15, 1955	1.9	153	2.91	39.59	102
1957	1501	1,850	Jan. 23, 1957	1.8	67.3	1.28	17.36	63.4
1958	1551	2,320	Dec. 21, 1957	2.2	99.0	1.88	25.53	104
1959	1821	2,000	Apr. 3, 1959	4.4	84.9	1.61	21.91	106
1960	1701	4,700	Oct. 24, 1959	5.2	139	2.64	35.87	-

1810. West Branch Westfield River at Huntington, Mass.

Location.--Lat 42°14'14", long 72°53'46", on left bank at Huntington, Hampshire County, 0.4 mile downstream from Roaring Brook and 1½ miles upstream from mouth.

Drainage area.--93.7 sq mi.

Records available.--September 1935 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 388.60 ft above mean sea level, datum of 1929.

Average discharge.--25 years (1935-60), 191 cfs.

Extremes.--1935-60: Maximum discharge, 26,100 cfs Aug. 19, 1955 (gage height, 15.27 ft), from rating curve extended above 9,500 cfs on basis of slope-area measurement of peak flow; minimum, 3.3 cfs Aug. 9, 1955, Nov. 27, 1957.

Remarks.--Prior to 1950, some diurnal fluctuation at low flow caused by small mill above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	17.8	244	247	212	351	474	437	134	81.6	113	45.5	35.0	198
1952	139	356	240	346	236	309	635	295	329	75.0	37.5	72.0	255
1953	28.4	98.9	261	262	312	761	472	389	62.0	23.8	9.28	8.93	224
1954	21.3	52.8	222	99.4	230	328	341	345	112	26.7	28.8	240	170
1955	95.1	451	341	110	141	335	564	135	44.2	14.3	632	65.6	243
1956	1,041	544	98.7	160	92.7	143	963	312	102	38.3	9.67	42.6	287
1957	56.9	129	211	204	137	206	254	145	40.0	12.8	8.46	12.2	118
1958	15.4	47.7	274	162	105	176	946	244	55.4	58.7	37.6	67.4	173
1959	132	224	127	151	92.2	225	548	140	51.3	66.9	22.8	30.6	151
1960	173	347	315	220	232	177	657	204	116	50.4	52.3	179	242

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.22	2.91	3.04	2.61	3.90	5.83	5.20	1.65	0.97	1.39	0.56	0.42	28.70
1952	1.71	4.24	2.96	4.25	2.72	3.80	7.56	3.63	3.91	.90	.46	.86	37.00
1953	.35	1.18	3.21	3.22	3.47	9.36	5.62	4.79	.74	.29	.11	.11	32.45
1954	.28	.63	2.74	1.22	2.56	4.04	4.06	4.24	1.33	.33	.35	2.86	24.62
1955	1.15	5.13	4.20	1.35	1.57	4.12	6.72	1.66	.53	.18	7.77	.78	35.16
1956	12.81	6.48	1.21	1.97	1.07	1.76	10.28	3.84	1.21	.47	.12	.51	41.73
1957	.70	1.53	2.59	2.51	1.52	2.54	3.03	1.78	.48	.16	.10	.15	17.09
1958	.16	.57	3.37	2.00	1.17	2.16	10.07	3.00	.64	.72	.46	.80	25.12
1959	1.62	2.67	1.57	1.86	1.02	2.77	6.52	1.73	.61	.82	.28	.56	21.83
1960	2.13	4.13	3.88	2.71	2.67	2.18	10.20	2.52	1.38	.62	.64	2.14	35.20

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	-	173	25.01
1951	1201	10,600	Nov. 26, 1950	8.6	198	2.11	28.70	217	31.44	
1952	1231	5,420	June 1, 1952	11	255	2.72	37.00	226	32.83	
1953	1271	4,600	Dec. 11, 1952	4.3	224	2.39	32.45	216	31.34	
1954	1331	5,430	Sept. 11, 1954	5.0	170	1.81	24.62	217	31.47	
1955	1381	26,100	Aug. 19, 1955	3.3	243	2.59	35.16	312	45.18	
1956	1431	12,400	Oct. 15, 1955	6.7	287	3.06	41.73	179	26.05	
1957	1501	2,940	Jan. 23, 1957	4.6	118	1.28	17.09	113	16.37	
1958	1551	3,770	Apr. 6, 1958	6.4	173	1.85	25.12	186	26.88	
1959	1621	3,890	Apr. 2, 1959	9.4	151	1.61	21.83	180	26.11	
1960	1701	4,840	Apr. 5, 1960	11	242	2.58	35.20	-	-	

1825. Borden Brook and Cobble Mountain Reservoirs

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. (completed in 1909), 344,000,000 cu ft; Cobble Mountain Reservoir on Westfield Little River, 6½ miles west of Westfield, Mass. (completed in August 1931), 3,050,000,000 cu ft. Records furnished by Board of Water Commissioners, Springfield, Mass.

Month-end usable contents, in millions of cubic feet, of Borden Brook and Cobble Mountain Reservoirs

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	2,723.1	2,965.0	3,085.7	3,216.2	3,022.1	2,933.1	3,263.9	3,263.9	3,230.5	3,185.8	3,033.5	2,930.8
1952	2,968.4	3,206.8	3,118.0	3,113.4	2,897.5	2,744.9	3,183.2	3,336.0	3,186.5	2,807.0	2,425.5	2,266.4
1953	2,129.8	2,151.4	2,336.9	2,462.3	2,740.7	3,312.1	3,317.0	3,312.1	3,141.2	2,940.8	2,767.6	2,588.8
1954	2,466.3	2,426.2	2,559.4	2,281.5	2,316.9	2,626.7	2,890.7	3,259.1	3,164.5	3,039.2	2,884.9	3,155.1
1955	2,955.1	3,235.2	2,941.9	2,381.9	2,314.3	2,528.6	3,100.8	3,184.5	3,067.4	2,876.4	3,215.4	2,909.8
1956	3,329.2	3,066.2	2,414.8	2,139.4	2,151.4	2,232.1	3,124.5	3,124.6	3,052.6	2,811.3	2,573.9	2,419.2
1957	2,304.8	2,285.8	2,395.4	2,401.3	2,408.6	2,487.3	2,638.2	2,466.5	2,197.2	2,016.0	1,837.0	1,690.1
1958	1,562.7	1,528.9	1,897.6	2,101.7	2,145.8	2,380.4	3,305.6	3,183.6	3,074.1	2,882.4	2,731.1	2,688.7
1959	2,720.0	2,838.3	2,286.7	2,100.8	1,751.6	1,978.1	2,541.3	2,524.1	2,424.6	2,298.9	2,133.1	2,008.3
1960	2,175.0	2,513.1	2,815.2	2,830.5	2,403.4	2,125.4	3,072.0	3,139.3	3,071.0	2,996.8	2,951.4	2,863.4

1830. Westfield Little River at outlet of Cobble Mountain Reservoir, near Westfield, Mass.

Location.--Lat 42°07'34", long 72°53'37", at Cobble Mountain Dam, 7½ miles west of Westfield, Hampden County.

Drainage area.--45.8 sq mi.

Records available.--July 1905 to September 1960. 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 2½ miles downstream.

Average discharge.--50 years (1910-60), 91.4 cfs (adjusted to present drainage area).

Remarks.--Flow regulated by Borden Brook and Cobble Mountain Reservoirs (see p. 247); discharge adjusted for effect of this regulation.

Cooperation.--Records furnished by Board of Water Commissioners, Springfield.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	7.45	143	127	131	205	211	221	60.9	43.3	40.2	5.74	11.2	99.7
1952	65.0	188	145	179	115	160	329	135	149	40.5	9.85	33.9	130
1953	9.91	52.3	135	158	170	443	233	181	16.9	-139	6.20	-8.01	115
1954	12.6	29.4	115	45.6	114	167	153	180	36.0	7.57	8.93	160	85.2
1955	51.9	216	191	62.9	52.8	140	278	77.2	23.2	-229	616	22.4	144
1956	608	271	44.2	101	64.8	75.3	414	143	42.6	18.2	-4.09	4.34	149
1957	15.6	40.2	87.3	72.0	64.8	93.7	141	41.4	4.10	.629	-1.54	.653	46.5
1958	2.37	31.9	174	110	57.2	119	520	106	18.2	4.88	5.84	32.5	98.2
1959	63.4	94.2	43.2	75.0	36.8	129	256	51.0	22.8	19.4	6.19	12.5	67.3
1960	113	170	151	103	132	94.8	416	91.5	39.9	31.7	58.2	129	127

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

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.19	3.50	3.20	3.30	4.67	5.31	5.39	1.53	1.05	1.01	0.14	0.27	29.56
1952	1.64	4.57	3.65	4.50	2.70	4.02	8.02	3.84	3.64	1.02	.25	.82	38.67
1953	.25	1.27	3.40	3.98	3.87	11.16	5.67	4.06	.41	-0.03	.16	-2.20	34.03
1954	.32	.72	2.69	1.10	2.59	4.21	3.72	4.54	.88	.19	.23	3.89	25.28
1955	.80	5.32	4.82	1.58	1.20	3.52	6.77	1.94	.58	-0.1	15.51	.55	42.56
1956	15.30	6.61	1.11	2.54	1.53	1.90	10.09	3.60	1.04	.46	-1.10	.11	44.19
1957	.39	.98	2.20	1.81	1.47	2.36	3.43	1.04	1.00	.02	-0.04	.02	13.78
1958	.06	.78	4.37	2.76	1.30	2.99	12.68	2.66	.44	.12	.15	.79	29.10
1959	1.60	2.29	1.09	1.89	.84	3.24	6.25	1.28	.56	.46	.16	.31	19.97
1960	2.84	4.15	3.81	2.59	3.11	2.39	10.13	2.30	.97	.80	1.46	3.14	37.69

a Adjusted for change in contents in Borden Brook and Cobble Mountain Reservoirs.

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30										Calendar year		
		Observed					Adjusted a/					Observed		Adjusted a/
		Momentary		maximum		Minimum	Mean	Mean	Per square mile	Runoff in inches		Mean	Mean	Runoff in inches
		Discharge	Date		day									
1950	-	-	-	-	-	-	-	-	-	-	-	-	83.4	24.73
1951	1201	-	-	-	-	-	-	99.7	2.18	29.56	-	-	110	32.53
1952	1231	-	-	-	-	-	-	130	2.84	38.67	-	-	113	33.73
1953	1271	-	-	-	-	-	-	115	2.51	34.03	-	-	111	33.04
1954	1331	-	-	-	-	-	-	85.2	1.86	25.28	-	-	108	32.29
1955	1381	-	-	-	-	-	-	144	3.14	42.56	-	-	184	54.64
1956	1431	-	-	-	-	-	-	149	3.25	44.19	-	-	83.2	24.74
1957	1501	-	-	-	-	-	-	46.5	1.02	13.78	-	-	52.0	15.42
1958	1551	-	-	-	-	-	-	98.2	2.14	29.10	-	-	97.4	28.87
1959	1621	-	-	-	-	-	-	67.3	1.47	19.97	-	-	87.0	25.79
1960	1701	-	-	-	-	-	-	127	2.77	37.69	-	-	-	-

a Adjusted for change in contents in Borden Brook and Cobble Mountain Reservoirs.

1835. Westfield River near Westfield, Mass.

Location.--Lat 42°06'24", long 72°41'58", on left bank 0.7 mile downstream from Great Brook and 3 miles east of Westfield, Hampden County.

Drainage area.--497 sq mi.

Records available.--June 1914 to September 1960.

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.--46 years (1914-60), 956 cfs (adjusted for diversion and, since October 1931, for storage).

Extremes.--1914-60: Maximum discharge, 70,300 cfs Aug. 19, 1955 (gage height, 34.2 ft. from floodmarks), from rating curve extended above 18,000 cfs on basis of computations of flow over dam at gage heights 27.20, 29.40, and 34.2 ft; minimum, 9 cfs Oct. 2, 1921.

Remarks.--Flow regulated by diversion from Westfield Little River for municipal supply of Springfield and by Borden Brook and Cobble Mountain Reservoirs (see p.) and Knightville Reservoir (see p.).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	167	949	1,240	1,066	1,902	2,109	2,503	758	497	504	327	282	1,018
1952	724	1,786	1,588	1,597	1,294	1,643	3,083	1,633	1,759	476	357	416	1,342
1953	209	488	1,247	1,291	1,562	3,360	3,079	2,000	407	218	158	106	1,174
1954	166	281	893	541	1,071	1,546	1,458	1,719	610	193	172	1,097	810
1955	539	1,952	1,882	822	694	1,502	2,564	800	326	168	3,237	585	1,259
1956	4,587	3,228	940	996	623	867	3,427	1,806	695	327	140	341	1,498
1957	325	593	895	874	676	1,042	1,256	864	269	122	91.2	102	573
1958	111	259	1,159	848	574	1,128	4,009	1,465	367	309	204	306	892
1959	521	870	755	773	626	1,041	2,441	651	295	352	188	182	723
1960	838	1,391	1,429	977	1,440	884	3,797	995	604	317	377	1,098	1,172

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.35	2.43	3.08	2.67	3.89	5.49	5.41	1.86	1.19	1.24	0.72	0.64	28.97
1952	1.80	4.31	3.23	3.78	2.69	3.76	7.38	4.01	3.93	.90	.61	.90	37.30
1953	.47	1.21	3.15	3.19	3.59	9.54	5.83	4.75	.88	.45	.29	.20	33.53
1954	.40	.67	2.29	1.10	2.35	3.95	3.59	4.41	1.40	.48	.40	2.78	23.80
1955	1.17	4.72	4.21	1.52	1.49	3.75	6.35	2.02	.77	.35	7.94	1.16	35.45
1956	11.41	6.83	1.71	2.18	1.46	2.18	9.01	3.86	1.62	.68	.27	.74	41.95
1957	.77	1.43	2.28	2.14	1.53	2.56	3.01	1.51	.52	.27	.19	.22	16.43
1958	.26	.67	3.07	2.23	1.33	2.91	10.00	3.30	.84	.67	.47	.76	26.51
1959	1.34	2.16	1.37	1.78	1.06	2.71	6.08	1.63	.71	.86	.44	.44	20.58
1960	2.21	3.57	3.64	2.38	2.86	2.03	9.33	2.50	1.44	.82	.99	2.52	34.29

a Adjusted for diversion from Westfield Little River and change in contents in Knightville, Borden Brook, and Cobble Mountain Reservoirs.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year					
		Observed				Adjusted a/		Observed		Adjusted a/			
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches		
		Discharge	Date										
1950	-	-	-	-	-	-	-	-	813	882	24.10	-	-
1951	1201	18,100	Nov. 26, 1950	78	1,018	1,061	2.13	28.97	1,146	1,188	32.45	-	-
1952	1231	14,800	June 2, 1952	142	1,342	1,362	2.74	37.30	1,180	1,197	32.79	-	-
1953	1271	11,200	Mar. 15, 1953	70	1,174	1,227	2.47	33.53	1,123	1,174	32.06	-	-
1954	1331	11,900	Sept. 11, 1954	79	810	871	1.75	23.80	1,063	1,117	30.54	-	-
1955	1381	70,300	Aug. 19, 1955	79	1,259	1,298	2.61	35.45	1,628	1,659	45.30	-	-
1956	1431	31,100	Oct. 16, 1955	87	1,498	1,532	3.08	41.95	918	967	26.48	-	-
1957	1501	6,140	Jan. 23, 1957	70	573	602	1.21	16.43	549	584	15.95	-	-
1958	1551	8,740	Apr. 7, 1958	77	892	971	1.95	26.51	945	1,003	27.38	-	-
1959	1621	8,880	Apr. 3, 1959	95	723	754	1.52	20.58	850	920	25.13	-	-
1960	1701	10,500	Apr. 5, 1960	130	1,172	1,252	2.52	34.29	-	-	-	-	-

a Adjusted for diversion and change in contents; see footnote to preceding table.

CONNECTICUT RIVER BASIN

1840. Connecticut River at Thompsonville, Conn.

Location.--Lat 41°59'14", long 72°36'21", on right bank just upstream from Enfield Dam and 1 mile downstream from Thompsonville, Hartford County.

Drainage area.--9,661 sq mi.

Records available.--July 1928 to September 1960.

Gage.--Water-stage recorder on river and on canal of Connecticut Light and Power Co. Datum of gage is 38.48 ft above mean sea level, datum of 1929.

Average discharge.--32 years (1928-60), 16,630 cfs (adjusted for storage and diversion).
Extremes.--1928-60: 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.--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 (see p. 178), Lake Francis (see p. 180), Moore Reservoir since April 1956 and Comerford Station Pond (see p. 183), Union Village Reservoir (see p. 193), four reservoirs in Mascoma River basin (see p. 199), Sunapee Lake (see p. 202), Surry Mountain Reservoir (see p. 213), Otter Brook Reservoir since March 1958 (see p. 216), Birch Hill Reservoir (see p. 222), Tully Reservoir (see p. 223), Somerset and Harriman Reservoirs (see p. 227), Barre Falls Reservoir (see p. 240), Watersheds Pond (see p. 242), Knightville Reservoir (see p. 243), Borden Brook and Cobble Mountain Reservoirs (see p. 247), and other reservoirs (combined usable capacity, about 97½ billion cubic feet). Records of chemical analyses and water temperatures for the water year 1956 are published in WSP 1450.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	4,578	14,350	22,770	13,630	21,570	22,980	62,170	18,170	9,225	8,705	7,717	6,983	17,640
1952	11,900	28,420	19,840	22,480	19,530	20,760	63,760	28,760	28,050	5,981	4,549	4,266	21,430
1953	4,358	5,620	14,520	16,430	23,300	50,530	49,860	38,070	6,858	3,538	3,865	2,799	18,290
1954	3,736	6,025	17,490	8,025	15,930	25,950	47,480	39,110	18,160	7,811	6,317	23,380	18,240
1955	12,410	24,220	22,410	12,890	10,670	24,440	57,330	19,990	13,300	4,081	22,530	6,188	19,210
1956	24,700	31,690	10,020	14,410	9,692	12,420	50,490	45,270	16,690	7,331	3,232	8,126	19,480
1957	7,487	10,420	14,950	15,350	11,940	21,130	24,820	14,240	7,042	7,005	4,424	3,705	11,710
1958	4,604	11,010	27,590	17,460	12,890	16,320	63,410	32,590	10,360	7,519	6,512	5,479	18,020
1959	9,014	12,120	9,520	11,560	10,050	16,050	52,530	14,290	8,276	5,357	3,812	4,990	13,090
1960	18,690	30,170	32,230	18,700	19,100	13,320	76,050	24,280	14,040	6,351	5,971	12,140	22,490

Monthly and yearly runoff, in inches (adjusted) a/

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.49	1.86	2.69	1.56	2.35	2.76	7.50	2.25	1.05	1.05	0.90	0.70	25.14
1952	1.41	3.39	2.41	2.70	2.02	2.30	7.80	3.25	3.26	.59	.47	.43	30.33
1953	.43	.66	1.77	1.99	2.53	6.54	5.78	4.57	.73	.34	.37	.26	25.97
1954	.40	.68	2.18	.86	1.73	3.12	5.88	4.88	2.09	.87	.71	2.79	26.19
1955	1.45	2.89	2.59	1.50	1.07	2.93	7.09	2.51	1.57	.42	2.83	.58	27.23
1956	3.09	3.71	1.00	1.80	.94	1.33	6.55	5.58	1.96	.83	.28	.91	27.98
1957	.77	1.21	1.83	1.54	1.12	2.36	3.25	1.90	.85	.86	.42	.35	16.46
1958	.41	1.30	3.56	1.90	1.15	1.95	8.19	4.01	1.20	.95	.67	.57	25.87
1959	1.05	1.36	.97	1.36	.87	1.91	6.68	1.89	1.07	.58	.41	.51	18.66
1960	2.39	3.70	3.73	2.02	1.98	1.43	9.54	2.99	1.63	.74	.61	1.45	32.21

a Adjusted for change in contents in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore Reservoir since April 1956 and Comerford Station Pond, Union Village Reservoir, 4 reservoirs in Mascoma River basin, Sunapee Lake, Surry Mountain Reservoir, Otter Brook Reservoir since March 1958, Birch Hill, Tully, and Somerset and Harriman Reservoirs, Barre Falls Reservoir since October 1958, Quabbin and Ludlow Reservoirs, Watersheds Pond, Knightville and Borden Brook and Cobble Mountain Reservoirs, and for diversion from Ware River to Wachusett Reservoir and from Quabbin Reservoir to Wachusett Reservoir.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30											Calendar year		
		Observed					Adjusted a/						Observed		Adjusted a/
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	Mean	Mean	Runoff in inches	Mean
		Discharge	Date												
1950	-	-	-	-	-	-	-	-	-	-	-	15,100	15,440	21.71	-
1951	1201	106,000	Apr. 1, 1951	1,900	17,640	17,890	1.85	25.14	19,170	19,430	27.31	19,170	19,430	27.31	27.31
1952	1251	113,000	June 5, 1952	1,480	21,430	21,520	2.23	30.33	18,470	18,440	25.96	18,470	18,440	25.96	25.96
1953	1271	131,000	Mar. 28, 1953	1,060	18,290	18,480	1.91	25.97	18,530	18,760	26.37	18,530	18,760	26.37	26.37
1954	1331	83,500	Apr. 19, 1954	1,120	18,240	18,650	1.93	26.19	20,890	21,260	29.86	20,890	21,260	29.86	29.86
1955	1381	174,000	Aug. 19, 1955	1,130	19,210	19,580	2.01	27.23	19,810	20,000	28.10	19,810	20,000	28.10	28.10
1956	1431	110,000	May 1, 1956	1,220	19,480	19,860	2.06	27.98	16,700	17,030	23.99	16,700	17,030	23.99	23.99
1957	1501	47,100	Jan. 25, 1957	1,220	11,710	11,710	1.21	16.46	12,590	12,750	17.92	12,590	12,750	17.92	17.92
1958	1551	109,000	Apr. 24, 1958	1,300	18,020	18,410	1.91	25.87	16,950	17,070	23.98	16,950	17,070	23.98	23.98
1959	1621	99,700	Apr. 5, 1959	1,360	15,090	15,280	1.37	18.66	17,320	17,860	25.10	17,320	17,860	25.10	25.10
1960	1701	156,000	Apr. 6, 1960	1,180	22,490	22,850	2.37	32.21	-	-	-	-	-	-	-

a Adjusted for change in contents and diversion; see footnote to preceding table.

1845. Scantic River at Broad Brook, Conn.

Location.--Lat 41°54'42", long 72°33'48", on left bank 300 ft upstream from bridge on Connecticut Highway 140, half a mile downstream from Broad Brook, 1 mile southwest of town of Broad Brook, Hartford County, and $\frac{8}{16}$ miles upstream from mouth.

Drainage area.--98.4 sq mi.

Records available.--August 1928 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 26.23 ft above mean sea level, datum of 1929.

Average discharge.--32 years (1928-60), 145 cfs.

Extremes.--1928-60: 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 measurements of peak flow; minimum, 10 cfs Aug. 13 and 14, 1944; minimum daily, 16 cfs Aug. 13, 1944.

Remarks.--Flow regulated by mills and small reservoirs upstream. Records of suspended-sediment loads and water temperatures for the period December 1953 to September 1960 are published in reports of Geological Survey.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	49.0	110	130	182	380	276	339	150	98.1	62.8	82.7	60.7	158
1952	83.7	244	245	312	229	318	284	197	170	77.1	85.1	70.0	191
1953	59.2	67.4	124	273	274	422	540	313	95.6	67.5	45.3	36.4	193
1954	60.0	85.5	174	113	136	189	195	211	94.4	52.0	57.5	171	128
1955	88.0	192	228	157	162	293	239	154	77.9	44.5	675	163	207
1956	293	430	155	149	208	249	430	171	123	70.2	36.5	47.2	196
1957	50.8	76.4	122	130	130	164	242	85.5	43.2	24.2	21.4	20.0	92.0
1958	23.9	43.5	113	190	120	294	284	247	110	80.4	57.5	81.2	137
1959	111	161	164	182	140	286	330	125	92.3	98.5	72.5	129	158
1960	167	266	309	263	367	215	450	163	174	100	87.2	145	224

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.57	1.25	1.52	2.13	4.02	3.23	3.85	1.75	1.11	0.74	0.97	0.69	21.83
1952	.98	2.77	2.87	3.66	2.51	3.72	2.99	2.31	1.93	.90	1.00	.70	26.43
1953	.69	.76	1.45	3.19	2.90	4.95	6.12	3.67	1.08	.79	.53	.41	26.54
1954	.70	.97	2.04	1.33	1.44	2.21	2.21	2.47	1.07	.61	.67	1.94	17.66
1955	1.03	2.18	2.68	1.84	1.72	3.44	2.71	1.81	.88	.52	7.91	1.85	28.57
1956	3.44	4.88	1.82	1.74	2.28	2.92	4.88	2.01	1.40	.82	.43	.54	27.16
1957	.59	.97	1.45	1.36	1.92	2.74	1.00	.49	.28	.25	.25	.23	12.70
1958	.28	.49	1.33	2.22	1.27	3.45	3.22	2.89	1.25	.94	.67	.92	18.93
1959	1.30	1.83	1.92	2.13	1.48	3.36	3.74	1.46	1.05	1.15	.85	1.46	21.73
1960	1.96	3.02	3.62	3.08	4.03	2.52	5.10	1.91	1.98	1.18	1.02	1.64	31.06

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1950	-	-	-	-	-	-	-	121	16.72	
1951	1201	1,040	Apr. 1, 1951	34	158	1.61	21.83	182	25.11	
1952	1231	995	Mar. 12, 1952	39	191	1.94	26.43	164	22.71	
1953	1271	1,560	Jan. 25, 1953	31	193	1.96	26.54	198	27.35	
1954	1331	873	Apr. 19, 1954	31	128	1.30	17.66	192	19.84	
1955	1381	13,300	Aug. 19, 1955	25	207	2.10	28.57	238	32.82	
1956	1431	1,320	Nov. 6, 1955	27	196	1.99	27.16	144	19.91	
1957	1501	642	Apr. 7, 1957	18	92.0	.935	12.70	86.2	11.91	
1958	1551	613	Jan. 28, 1958	18	137	1.39	18.93	159	21.88	
1959	1621	1,130	Apr. 4, 1959	44	158	1.61	21.73	183	25.28	
1960	1701	1,540	Apr. 1, 1960	39	224	2.28	31.06	-	-	

1850. Otis Reservoir at Cold Spring, Mass.

Location.--Lat 42°09'35", long 73°03'35", on Fall River, three-quarters of a mile above mouth and 1 mile northeast of Cold Spring, Hamden County.

Drainage area.--17.2 sq mi.

Records available.--April 1913 to September 1960.

Gage.--Staff gage. Altitude of gage is 1,400 ft (from topographic map).

Remarks.--Reservoir completed in 1865 for storage of water for power, has usable capacity of 789,000,000 cu ft.

Cooperation.--Records furnished by Collins Co., Collinsville, Conn.

CONNECTICUT RIVER BASIN

Month-end contents, in millions of cubic feet, of Otis Reservoir at Cold Spring, Mass.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	319.0	349.0	513.6	560.3	545.8	567.7	619.5	582.3	623.2	653.5	665.0	545.8
1952	444.7	535.1	431.3	334.0	295.3	478.5	672.7	764.7	768.5	760.8	753.2	599.7
1953	379.7	247.5	189.9	163.2	385.9	734.0	722.5	699.5	707.2	714.8	653.5	520.8
1954	405.2	310.3	319.0	271.3	361.2	535.1	684.2	772.3	760.8	768.5	741.7	672.7
1955	513.6	485.5	408.5	352.0	392.2	531.5	749.3	753.2	760.8	749.3	668.8	520.8
1956	619.5	597.0	645.8	538.7	322.0	155.5	199.0	115.3	6.0	0	9.5	17.8
1957	26.2	54.8	110.3	222.5	310.3	361.2	482.0	517.2	517.2	510.0	499.5	438.0
1958	271.3	173.2	287.7	389.0	451.3	527.9	676.5	699.5	703.3	703.3	703.3	688.0
1959	567.7	506.5	398.8	328.0	398.8	506.5	653.5	691.8	699.5	699.5	695.7	668.8
1960	615.8	451.3	325.0	282.0	340.0	451.3	661.2	699.5	699.5	699.5	691.8	684.2

1855. West Branch Farmington River near New Boston, Mass.

Location.--Lat 42°04'45", long 73°04'24", on left bank 5 ft downstream from highway bridge, 0.3 mile downstream from Ciam River, and 1 mile south of New Boston, Berkshire County.

Drainage area.--92.0 sq mi.

Records available.--May 1913 to September 1960. 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.--47 years (1913-60), 184 cfs (adjusted for storage).

Extremes.--1913-60: Maximum discharge, 34,300 cfs Aug. 19, 1955 (gage height, 14.06 ft), from rating curve extended above 9,600 cfs on basis of slope-area measurement of peak flow; minimum daily, 2.4 cfs Aug. 20, 21, 1957.

Remarks.--Flow regulated by Otis Reservoir (see p. 251)

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	72.0	310	204	216	332	412	435	142	68.8	105	35.7	86.6	200
1952	189	337	305	334	232	226	504	266	278	57.2	39.1	116	240
1953	87.1	107	205	224	258	591	449	325	42.8	18.8	19.4	48.7	198
1954	67.9	108	249	117	173	254	261	239	76.4	21.5	36.2	331	161
1955	142	400	326	141	113	226	406	148	44.2	13.0	1002	135	259
1956	774	550	104	212	196	212	734	411	122	35.5	9.50	35.6	283
1957	43.9	104	170	153	110	158	227	89.3	25.7	10.1	5.6	22.8	93.1
1958	75.3	94.9	286	147	89.2	149	828	271	71.5	41.2	39.7	90.7	182
1959	201	247	168	164	71.3	173	429	113	69.3	59.5	21.2	32.4	146
1960	169	393	366	237	189	134	753	162	115	54.2	104	202	239

Monthly and yearly runoff, in inches (adjusted) ^a

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.22	3.90	3.32	2.93	3.69	5.27	5.51	1.61	1.03	1.45	0.50	0.49	29.92
1952	1.90	4.51	3.54	3.73	2.53	3.70	7.02	3.77	3.40	.68	.44	.64	35.66
1953	.11	.68	2.30	2.68	3.96	9.04	5.39	3.96	.56	.27	-.04	-.03	28.88
1954	.31	.86	3.16	1.24	2.37	4.00	3.86	3.41	.87	.51	.33	3.69	24.41
1955	1.03	4.72	3.73	1.50	1.47	3.49	5.94	1.88	.57	.11	12.18	.95	37.57
1956	10.16	6.56	1.53	2.15	1.28	1.88	9.11	4.75	.97	.42	.16	.47	39.44
1957	.59	1.40	2.39	2.44	1.65	2.21	3.32	1.28	.31	.09	.02	-.01	15.69
1958	.16	.69	4.12	2.32	1.30	2.23	10.74	3.51	.89	.52	.50	1.03	28.01
1959	1.96	2.71	1.60	1.73	1.14	2.67	5.89	1.59	.88	.73	.27	.27	21.44
1960	1.87	3.99	4.00	2.77	2.49	2.20	10.12	2.21	1.40	.62	1.31	2.41	35.39

a Adjusted for change in contents in Otis Reservoir.

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

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30										Calendar year		
		Observed					Adjusted ^a					Observed		
		Momentary		maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches		Mean	Mean	Runoff in inches
		Discharge	Date											
1950	-	-	-	-	-	-	-	-	-	-	-	167	179	26.44
1951	1201	10,100	Nov. 25,	1950	17	200	203	2.21	29.92	221	218	32.23		
1952	1231	4,060	June 1,	1952	12	240	241	2.62	35.66	204	196	29.20		
1953	1271	3,240	Mar. 24,	1953	3.2	198	196	2.13	28.88	200	204	30.12		
1954	1331	4,240	Sept. 11,	1954	9.3	161	165	1.79	24.41	197	200	29.56		
1955	1381	34,500	Aug. 19,	1955	5.0	259	255	2.77	37.57	307	314	46.34		
1956	1431	7,910	Oct. 16,	1955	4.6	283	267	2.90	39.44	190	173	25.57		
1957	1501	1,510	Jan. 23,	1957	2.4	93.1	106	1.15	15.69	105	110	16.28		
1958	1551	2,360	Dec. 21,	1957	5.4	182	190	2.07	28.01	195	198	29.31		
1959	1621	2,440	Apr. 2,	1959	6.0	146	145	1.58	21.44	172	170	25.13		
1960	1701	3,200	Apr. 5,	1960	9.8	239	239	2.60	35.39	-	-	-		

a Adjusted for change in contents in Otis Reservoir.

1859. Hogback Reservoir near Hartland, Conn.

Location.--Lat 41°59'22", long 73°01'15", on West Branch Farmington River at The Hogsback, 2.0 miles west of Hartland, Hartford County, and 2.0 miles north of Riverton.

Drainage area.--126 sq mi.

Records available.--April to September 1960.

Remarks.--Reservoir completed in 1960 for future storage of water for municipal supply. Total capacity, 6,500,000,000 gal. Presently used to compensate for water diverted by Metropolitan Water Bureau of Hartford from East Branch Farmington River.

Cooperation.--Records furnished by Water Bureau, Metropolitan District Commission, Hartford.

Month-end contents, in millions of gallons

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1960	-	-	-	-	-	0	6,500	6,500	0	0	0	4,000

1860. West Branch Farmington River above Still River, at Riverton, Conn.

Location.--Lat 41°57'46", long 73°01'05", on right bank at downstream side of bridge on State Highway 20 at Riverton, Litchfield County, 0.3 mile upstream from Still River, 2.0 miles downstream from Hogback Dam, and at mile 52.0.

Drainage area.--130 sq mi.

Records available.--August 1955 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 485.60 ft above mean sea level, datum of 1929. Prior to Mar. 29, 1957, wire-weight gage at same site and datum.

Average discharge.--5 years (1955-60), 258 cfs.

Extremes.--1955-60: Maximum discharge observed, 10,600 cfs Oct. 16, 1955 (gage height, 12.47 ft); minimum discharge, 0.9 cfs July 21, 1960; minimum gage height, 2.43 ft Sept. 16, 1957. Flood of Aug. 19, 1955, reached a stage of 21.1 ft, from floodmarks (discharge, 57,200 cfs, by slope-area measurement 1.5 miles upstream).

Remarks.--Flow regulated by Otis Reservoir and affected by Hogback Reservoir during its construction in 1959 and 1960. Runoff adjusted for change in contents in Otis Reservoir (see p. 251) and Hogback Reservoir (see above).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1955	-	-	-	-	-	-	-	-	-	-	-	165	-
1956	1,080	794	112	286	210	243	1,060	555	177	47.8	14.6	41.4	385
1957	47.4	129	219	198	148	204	323	114	35.6	15.8	12.3	26.0	122
1958	79.9	105	391	233	144	241	1,134	356	85.9	50.8	46.3	108	248
1959	244	315	216	230	103	303	600	167	114	83.1	34.7	54.6	205
1960	235	509	486	316	297	161	743	210	498	91.9	157	38.4	310

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1955	-	-	-	-	-	-	-	-	-	-	-	0.93	-
1956	9.90	6.74	1.15	2.16	1.03	1.60	9.24	4.65	1.16	0.40	0.16	.33	38.59
1957	.45	1.20	2.13	2.13	1.48	1.98	3.18	1.33	.31	.12	.07	.02	14.20
1958	.18	.58	3.85	2.40	1.36	2.40	10.22	3.24	.75	.45	.41	.83	26.70
1959	1.76	2.50	1.56	1.80	1.06	3.04	5.64	1.61	1.01	.72	.31	.33	21.39
1960	1.90	3.83	3.90	2.66	2.65	1.80	9.95	1.98	1.40	.78	1.41	2.03	34.34

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed		Adjusted
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1955	1431	-	-	-	-	-	-	-	-	-	-
1956	1501	10,600	Oct. 16, 1955	10	385	369	2.84	38.59	252	235	24.58
1957	1501,1551	2,110	Jan. 23, 1957	6.5	122	135	1.04	14.20	139	144	15.01
1958	1551,1701	3,570	Dec. 21, 1957	13	248	256	1.97	26.70	264	268	27.93
1959	1621,1701	4,200	Apr. 2, 1959	14	205	204	1.57	21.39	244	242	25.20
1960	1701	3,110	Apr. 5, 1960	3.1	310	327	2.52	34.34	-	-	-

1861. Mad River at Winsted, Conn.

Location.--Lat 41°55'51", long 73°04'56", on left bank at Winsted, Litchfield County, by U.S. Highway 44, 0.2 mile upstream from Indian Meadow Brook, 0.2 mile downstream from Winsted city line, and 1.8 miles upstream from mouth.

Drainage area.--18.4 sq mi.

Records available.--October 1956 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 764.18 ft above mean sea level, datum of 1929.

Extremes.--1956-60: Maximum discharge, 1,420 cfs Mar. 6, 1959 (gage height, 6.25 ft); maximum gage height, 4.81 ft Jan. 3, 1960 (ice jam); minimum discharge, 0.3 cfs July 24-28, Sept. 15, 16, Oct. 6, 1957 (gage height, 0.46 ft).
Flood of Aug. 19, 1955, reached a stage of 11.8 ft, from floodmarks (discharge, 10,200 cfs, by slope-area measurement 1.5 miles upstream).

Remarks.--Flow regulated by storage and diversion for municipal water supply of city of Winsted.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1957	2.29	8.95	26.2	23.6	26.1	28.7	50.3	9.45	2.53	1.09	0.879	0.930	15.0
1958	1.18	3.74	69.6	36.9	22.8	55.3	148	53.6	14.5	8.13	5.74	16.7	36.4
1959	29.6	39.0	28.0	31.5	35.2	65.2	82.9	16.8	26.6	17.7	11.6	11.9	32.9
1960	36.7	49.1	60.2	39.7	43.1	32.5	133	32.4	40.9	20.4	27.8	41.4	46.2

Yearly discharge, in cubic feet per second

Daily discharge, in cubic feet per second									
Year	WSP	Water year ending Sept. 30					Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1957	1501	335	Jan. 23, 1957	0.3	15.0	-	-	18.1	-
1958	1551	680	Dec. 21, 1957	.35	36.4	-	-	38.2	-
1959	1621	1,420	Mar. 6, 1959	2.0	32.9	-	-	37.1	-
1960	1701	760	Apr. 15, 1960	1.0	46.2	-	-	-	-

1865. Still River at Robertsville, Conn.

Location.--Lat 41°58'04", long 73°02'03", on left bank 1,500 ft downstream from Sandy Brook, 1 mile southeast of Robertsville, Litchfield County, 1 mile northwest of River-ton, and 1 mile upstream from mouth.

Drainage area.--84.4 sq mi.

Records available.--July 1948 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 510.24 ft above mean sea level, datum of 1929.

Average discharge.--12 years (1948-60), 187 cfs.

Extremes.--1948-60: Maximum discharge, 44,000 cfs Aug. 19, 1955 (gage height, 16.48 ft, from floodmark), from rating curve extended above 5,600 cfs on basis of slope-area measurement of peak flow; minimum, 0.2 cfs Sept. 14, 1957; minimum daily, 0.3 cfs Sept. 14, 1957; minimum gage height, 0.29 ft Aug. 8, 1955.

Remarks.--Ordinary flow regulated by powerplant upstream.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	33.2	227	265	265	564	381	377	127	99.4	86.0	72.5	71.6	196
1952	121	331	285	340	229	343	507	288	257	62.6	56.2	82.5	241
1953	42.0	98.4	205	310	353	699	491	336	59.9	35.1	19.5	21.8	220
1954	59.2	70.0	224	106	204	301	251	244	60.6	30.9	26.6	186	145
1955	76.2	319	315	135	145	270	402	138	47.0	18.2	1.228	111	269
1956	832	569	123	123	96.2	140	771	253	93.2	42.1	19.5	35.5	258
1957	36.5	89.4	145	118	133	168	264	78.7	31.8	12.1	9.32	17.2	91.5
1958	16.8	39.0	285	200	121	248	680	251	62.4	51.0	40.3	89.3	172
1959	151	178	128	147	113	282	366	109	106	73.5	48.3	47.1	144
1960	147	245	265	190	236	169	621	155	158	116	143	192	219

Monthly and yearly runoff, in inches, of Still River at Robertsville, Conn.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.45	3.00	3.62	3.62	4.49	5.20	4.99	1.73	1.32	1.18	0.99	0.95	31.54
1952	1.65	4.37	3.90	4.65	2.92	4.68	6.70	3.93	3.40	.86	.77	1.09	38.92
1953	.57	1.17	2.80	4.23	4.11	9.55	6.49	4.59	.79	.48	.27	.29	35.34
1954	.53	.92	3.06	1.45	2.52	4.12	3.31	3.33	.80	.42	.37	2.46	23.29
1955	1.04	4.22	4.30	1.84	1.79	3.69	5.31	1.89	.62	.25	16.72	1.47	43.14
1956	11.37	7.52	1.68	1.68	1.23	1.91	10.20	3.46	1.23	.58	.27	.47	41.60
1957	.50	1.18	1.98	1.61	1.64	2.29	3.49	1.07	.42	.16	.13	.23	14.70
1958	.23	.52	3.90	2.73	1.49	3.39	8.72	3.42	.82	.70	.55	1.18	27.65
1959	2.06	2.36	1.74	2.01	1.59	3.57	4.84	1.49	1.40	1.00	.66	.62	23.14
1960	2.01	3.24	3.62	2.59	3.02	2.31	8.21	2.12	2.09	1.58	1.95	2.53	35.27

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches		
		Discharge	Date								
1950	-	-	-	-	-	-	-	158	25.37	-	-
1951	1201	4,250	Nov. 25, 1950	11	196	2.32	31.54	214	34.39	-	-
1952	1231	3,030	June 1, 1952	15	241	2.88	38.92	208	33.54	-	-
1953	1271	2,660	Mar. 13, 1953	7.8	220	2.61	35.34	220	35.31	-	-
1954	1331	2,610	Sept. 11, 1954	6.8	145	1.72	23.29	176	28.34	-	-
1955	1381	44,000	Aug. 19, 1955	5.6	269	3.19	43.14	337	54.15	-	-
1956	1431	9,270	Oct. 18, 1955	4.3	258	3.06	41.60	153	24.69	-	-
1957	1501	1,390	Jan. 23, 1957	.3	91.5	1.08	14.70	97.6	15.69	-	-
1958	1551	2,640	Apr. 7, 1958	9.0	172	2.04	27.65	181	29.16	-	-
1959	1621	2,940	Mar. 6, 1959	7.8	144	1.71	23.14	161	25.85	-	-
1960	1701	3,410	Apr. 5, 1960	14	219	2.59	35.27	-	-	-	-

1870. West Branch Farmington River at Riverton, Conn.

Location.--Lat 41°57'13", long 73°00'51", on right bank 0.4 mile downstream from Still River, 0.6 mile south of Riverton, Litchfield County, and 8.2 miles upstream from East Branch.

Drainage area.--216 sq mi.

Records available.--September 1929 to September 1955. Prior to October 1948, published as Farmington River at Riverton.

Gage.--Water-stage recorder. Datum of gage is 472.22 ft above mean sea level, datum of 1929.

Average discharge.--26 years (1929-55), 405 cfs (adjusted for storage).

Extremes.--Maximum discharge, 101,000 cfs Aug. 19, 1955 (gage height, 20.3 ft. from flood-marks), from slope-area measurements of peak flows on West Branch Farmington River and Still River upstream from their confluence; minimum, 15 cfs Aug. 22, 30, Sept. 6, 1953 (gage height, 0.42 ft); minimum daily, 17 cfs Aug. 22, 1953.

Remarks.--Flow regulated by Otis Reservoir and, at low flow, by plants upstream. Runoff adjusted for change in contents in Otis Reservoir (see p. 251).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	116	610	584	555	797	922	984	320	203	219	126	188	465
1952	360	822	713	818	543	698	1,205	669	619	137	100	221	574
1953	141	215	461	637	721	1,499	1,126	800	123	66.7	46.6	83.4	493
1954	122	201	570	250	488	688	623	598	771	69.4	78.1	575	368
1955	254	844	762	323	298	619	1,012	357	121	46.2	2,766	316	647

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.33	3.21	3.45	3.06	3.81	4.97	5.19	1.64	1.13	1.22	0.69	0.73	29.43
1952	1.72	4.43	3.60	4.17	2.63	4.08	6.62	3.75	3.21	.71	.52	.82	36.26
1953	.35	.65	2.34	3.34	3.92	8.69	5.79	4.22	.65	.37	.13	.17	30.80
1954	.42	.65	3.06	1.25	2.53	4.02	3.51	3.37	.68	.39	.36	2.63	23.43
1955	1.04	4.31	3.91	1.61	1.52	3.58	5.66	1.91	.64	.22	14.61	1.34	40.35

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year			
		Observed			Adjusted			Observed		Adjusted	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	380	392	24.61
1951	1201	17,400	Nov. 26, 1950	50	466	469	2.17	29.43	515	512	32.19
1952	1231	7,140	June 1, 1952	35	574	575	2.66	36.26	484	476	30.03
1953	1271	7,680	Mar. 13, 1953	17	493	491	2.27	30.80	499	503	31.61
1954	1331	6,960	Sept. 11, 1954	29	368	373	1.73	23.43	449	452	28.36
1955	1381	101,000	Aug. 19, 1955	21	647	642	2.97	40.35	-	-	-

1873. Hubbard River near West Hartland, Conn.

Location.--Lat 42°02'14", long 72°56'22", on left bank at Massachusetts-Connecticut State line, 800 ft upstream from bridge on State Highway 20, 1 mile upstream from confluence with Valley Brook and 2.6 miles northeast of West Hartland, Hartford County.

Drainage area.--19.9 sq mi.

Records available.--January 1938 to September 1955, September 1956 to September 1960.

Gage.--Water-stage recorder and stepped sharp-crested rectangular weir. Datum of gage is 594.62 ft above mean sea level, datum of 1929.

Average discharge.--21 years (1938-55, 1956-60), 38.9 cfs.

Extremes.--1938-60: Maximum discharge, 10,500 cfs Aug. 19, 1955 (gage height, 16.5 ft), from rating curve extended above 300 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 0.2 cfs Sept. 10, 1953, Aug. 16 to Aug. 21, 1957.

Cooperation.--Records not previously published by Geological Survey, furnished by Water Bureau, Metropolitan District Commission, Hartford.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1938	-	-	-	45.1	35.4	45.4	45.0	28.4	49.5	53.3	25.7	103	-
1939	21.6	24.8	47.5	28.5	37.2	54.0	80.0	17.0	5.34	2.26	2.91	1.77	26.6
1940	3.64	11.9	11.5	10.4	8.13	24.2	139	57.6	28.4	10.1	2.20	3.82	25.8
1941	3.65	17.8	27.0	15.5	30.4	22.0	51.9	21.5	17.7	8.13	4.40	5.66	19.0
1942	2.68	11.6	25.5	30.4	14.3	74.8	42.1	37.8	20.2	16.3	6.71	10.1	24.5
1943	20.1	78.3	58.0	30.4	44.0	103	72.1	89.5	26.5	15.1	6.08	4.12	45.6
1944	22.4	73.4	1.59	7.13	12.3	67.0	113	24.9	18.9	5.42	2.67	16.2	31.5
1945	7.08	40.6	52.3	51.5	32.4	169	77.0	99.7	75.8	45.2	24.9	32.2	59.2
1946	20.4	37.3	45.0	57.2	27.5	109	30.2	68.9	43.2	14.3	4.71	4.37	38.7
1947	7.49	5.61	8.25	23.9	31.2	82.1	117	78.9	23.9	21.2	7.53	5.44	34.3
1948	6.82	69.7	20.9	12.8	22.9	145	61.0	53.5	84.1	11.7	3.38	1.82	41.3
1949	2.81	12.0	97.3	81.9	66.3	72.1	53.8	41.0	7.10	3.35	1.83	2.19	36.6
1950	2.76	7.81	18.8	41.2	28.5	75.9	87.6	48.5	43.7	3.75	3.94	2.23	30.2
1951	4.68	89.5	66.2	57.4	81.2	101	85.9	26.1	18.3	18.2	8.40	15.0	47.1
1952	33.2	91.3	73.7	75.5	47.9	88.1	153	66.2	59.9	6.17	4.71	14.0	59.3
1953	4.80	19.9	51.9	74.3	76.6	193	117	85.4	7.07	1.99	1.06	812	52.8
1954	6.58	12.8	49.9	19.7	50.4	64.4	60.8	62.4	11.7	5.77	8.66	70.4	35.0
1955	22.0	90.4	86.5	23.8	25.8	60.1	117	30.4	11.1	3.01	*270	*24.8	64.3
1956	-	-	-	-	-	-	-	-	-	-	-	-	-
1957	12.1	22.9	40.1	29.1	31.7	38.1	54.9	13.4	3.18	1.18	.563	.938	20.6
1958	3.31	14.3	89.9	52.1	29.6	56.5	206	52.7	8.58	3.08	4.33	14.6	42.8
1959	33.4	35.1	24.4	24.8	17.1	56.2	100	23.6	20.4	13.9	5.14	10.8	30.6
1960	51.8	71.0	63.1	45.1	57.9	39.1	161	29.8	19.0	13.5	21.3	44.0	51.1

* Estimated by Geological Survey on basis of records for stations on nearby streams.

Note.--Not previously published.

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1938	-	-	-	2.62	1.85	2.63	2.52	1.65	2.78	3.09	1.49	5.78	-
1939	1.26	1.40	2.76	1.48	1.95	3.12	4.48	.98	.30	.13	.17	.10	18.13
1940	.21	.67	.67	.60	.44	1.41	7.79	3.33	1.60	.59	.13	.21	17.65
1941	.21	1.00	1.57	.90	1.59	1.28	2.91	1.24	1.22	.47	.25	.32	12.96
1942	.16	.65	1.48	1.76	.75	4.34	2.41	2.19	1.14	.94	.39	.57	16.78
1943	1.16	4.38	3.36	1.76	2.30	5.97	4.04	5.19	1.48	.88	.35	.23	31.10
1944	1.30	4.12	.92	.41	.67	3.88	6.34	1.44	1.06	.31	.15	.91	21.51
1945	.41	2.28	3.03	2.99	1.70	9.79	4.32	5.78	4.25	2.62	1.44	1.81	40.42
1946	1.19	2.09	2.61	3.31	1.44	6.32	1.70	3.99	2.42	.83	.27	.25	26.42
1947	.43	.31	.48	1.38	1.64	4.76	6.56	4.56	1.34	1.23	.44	.30	23.43
1948	.40	3.90	1.21	.74	1.24	8.40	3.42	3.10	4.72	.68	.20	.10	28.11
1949	.16	.67	5.64	4.75	3.47	4.17	3.01	2.38	.40	.19	.11	.12	25.07
1950	.16	.44	1.09	2.39	1.49	4.39	4.91	2.81	2.46	.22	.23	.12	20.71
1951	.27	5.02	3.84	3.32	4.25	5.86	4.82	1.51	1.03	1.05	.49	.84	32.30
1952	1.92	5.12	4.27	4.37	2.60	5.11	8.58	3.84	3.36	.36	.27	.79	40.59
1953	.18	1.12	3.01	.30	4.01	11.18	6.56	4.95	.40	.12	.06	.05	35.94
1954	.38	.72	2.89	1.14	2.64	3.74	3.41	3.62	.66	.22	.60	3.95	23.87
1955	1.28	5.06	5.02	1.38	1.35	3.48	6.56	1.76	.62	.17	*15.56	*1.40	43.64
1956	-	-	-	-	-	-	-	-	-	-	-	-	-
1957	.70	1.28	2.33	1.68	1.66	2.20	3.08	.77	.18	.07	.03	.05	14.03
1958	.19	.80	3.99	3.02	1.55	3.27	11.60	3.06	.46	.18	.25	.82	29.21
1959	1.94	2.13	1.42	1.44	.89	3.25	5.61	1.37	1.15	.80	.30	.61	20.91
1960	3.00	3.98	3.66	2.62	3.14	2.26	9.03	1.73	1.07	.78	1.23	2.47	34.97

* Estimated by Geological Survey on basis of records for stations on nearby streams.

Note.--Not previously published.

Yearly discharge, in cubic feet per second, of Hubbard River near West Harland, Conn.

Year	WSP	Water year ending Sept. 30					Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean
		Discharge	Date					Runoff in inches
1938	-	a1,330	Sept. 21, 1938	-	-	-	-	43.7
1939	-	a213	Dec. 6, 1938	0.8	26.6	1.34	18.13	20.9
1940	-	a470	Apr. 9, 1940	1.0	25.8	1.30	17.65	27.6
1941	-	a174	Feb. 8, 1941	1.0	19.0	.955	12.96	18.3
1942	-	a422	Mar. 9, 1942	1.5	24.5	1.23	16.78	34.2
1943	-	a435	Nov. 25, 1942	2.0	45.6	2.29	31.10	41.8
1944	-	a745	Nov. 9, 1943	1.0	31.5	1.58	21.51	30.6
1945	-	a598	June 16, 1945	3.0	59.2	2.97	40.42	59.5
1946	-	a622	May 28, 1946	1.1	38.7	1.94	26.42	31.9
1947	-	a522	May 26, 1947	1.9	34.3	1.72	23.43	40.6
1948	-	a855	Mar. 22, 1948	.8	41.3	2.08	28.11	42.7
1949	-	a2,310	Dec. 31, 1948	.45	36.6	1.84	25.07	29.6
1950	-	a340	Mar. 29, 1950	1.0	30.2	1.52	20.71	41.1
1951	-	a1,200	Nov. 26, 1950	1.1	47.1	2.37	32.30	50.3
1952	-	a610	June 1, 1952	1.5	59.3	2.98	40.59	49.2
1953	-	a706	Mar. 13, 1953	.2	52.8	2.65	35.94	52.2
1954	-	a700	Sept. 11, 1954	.5	35.0	1.76	23.87	45.8
1955	-	b10,500	Aug. 19, 1955	.4	64.3	3.23	43.64	-
1956	-	-	-	-	-	-	-	-
1957	-	510	Jan. 23, 1957	.2	20.6	1.04	14.03	21.6
1958	-	790	Apr. 6, 1958	.5	42.8	2.15	29.21	43.5
1959	-	1,300	Apr. 2, 1959	1.9	30.6	1.54	20.91	38.2
1960	-	1,300	Sept. 12, 1960	2.2	51.1	2.57	34.97	26.06

a Maximum daily.

b Daily discharge for this day, 5,000 cfs.

Note.--Not previously published, furnished by Water Bureau, Metropolitan District Commission, Hartford.

1874. Valley Brook near West Hartland, Conn.

Location.--Lat 42°02'03", long 72°55'49", on right bank upstream from bridge on State Highway 20, a quarter of a mile south of Massachusetts-Connecticut State line, 0.3 mile upstream from confluence with Hubbard River, and 2¼ miles northeast of West Hartland, Hartford County.

Drainage area.--7.20 sq mi.

Records available.--February 1940 to September 1960.

Gage.--Water-stage recorder and stepped rectangular sharp-crested weir. Datum of gage is 554.60 ft above mean sea level, datum of 1929.

Average discharge.--20 years (1940-60), 15.1 cfs.

Extremes.--1940-60: Maximum discharge, 5,400 cfs Aug. 19, 1955 (gage height, 11.1 ft), from rating curve extended above 95 cfs on basis of computation of peak flow over sharp-crested weir; minimum daily, 0.2 cfs Sept. 9-12, 1944, Sept. 29, 30, 1948, and Sept. 3-12, 1953.

Cooperation.--Records furnished by Water Bureau, Metropolitan District Commission, Hartford.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1940	-	-	-	-	3.27	13.0	84.3	26.0	14.3	4.64	1.11	0.987	-
1941	0.877	6.16	9.84	6.75	19.5	11.5	25.4	11.7	11.6	4.00	1.59	1.89	9.12
1942	1.09	4.15	7.95	10.1	7.54	44.6	18.9	19.5	8.64	7.11	2.93	4.14	11.4
1943	6.06	23.5	25.4	11.8	15.6	38.8	26.5	13.6	14.0	4.50	1.74	1.80	18.6
1944	10.5	19.7	6.71	3.53	6.70	31.6	36.2	11.3	5.91	2.31	.619	5.22	11.7
1945	3.00	13.0	19.3	18.4	10.7	57.6	25.9	37.3	18.4	12.8	9.17	7.13	19.5
1946	5.76	11.3	18.7	20.9	9.80	36.8	13.5	22.4	16.0	4.06	1.78	1.68	13.6
1947	2.23	1.76	2.17	7.44	11.6	24.7	35.4	25.0	10.8	5.12	1.32	1.74	10.7
1948	2.21	24.4	8.66	4.77	7.58	46.0	25.4	19.2	27.0	6.08	1.32	.670	14.4
1949	1.52	2.78	31.6	39.5	20.3	25.6	22.3	15.9	3.53	.823	.542	.700	13.8
1950	1.02	1.91	5.06	11.9	10.6	28.3	31.5	16.0	13.9	1.92	1.34	.770	10.3
1951	1.38	16.5	22.2	17.5	33.5	41.0	36.2	11.3	6.57	5.04	2.23	2.37	16.2
1952	6.90	31.7	24.4	25.2	19.2	29.5	47.1	25.5	26.5	3.61	1.85	4.31	20.4
1953	1.23	7.39	23.0	27.4	33.0	67.3	46.5	28.5	4.16	1.46	.523	.337	20.0
1954	1.19	3.16	16.5	6.85	16.4	28.2	24.0	30.8	6.89	2.82	2.60	22.4	15.4
1955	7.54	25.7	29.1	10.2	9.68	21.6	38.9	13.5	3.60	.754	104	8.95	22.9
1956	99.6	52.6	9.52	13.1	10.1	13.8	76.3	22.9	8.54	4.53	.632	1.97	26.1
1957	1.82	6.37	13.3	9.58	10.0	14.5	25.6	8.05	2.07	1.11	.545	.623	7.80
1958	.842	4.73	22.5	16.0	9.79	26.0	62.6	19.9	3.47	1.01	1.23	5.25	14.4
1959	8.43	10.4	8.25	9.93	6.62	24.9	37.6	10.1	6.34	4.68	1.58	.923	10.8
1960	12.7	21.0	24.9	17.1	19.9	16.7	65.2	15.3	10.8	6.66	7.51	16.2	19.4

Note.--Not previously published.

Monthly and yearly runoff, in inches, of Valley Brook near West Hartland, Conn.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1940	-	-	-	-	0.49	2.09	13.05	4.18	2.22	0.74	0.18	0.15	-
1941	0.14	0.96	1.54	1.08	2.82	1.84	3.94	1.68	1.80	.64	.25	.29	17.18
1942	.18	.64	1.27	1.61	1.09	7.15	2.93	3.12	1.34	1.14	.47	.64	21.58
1943	.97	3.65	3.75	1.89	2.26	6.21	4.11	5.06	2.18	.72	.28	.28	31.36
1944	1.68	3.06	1.08	.57	1.00	5.06	5.61	1.81	.92	.37	.10	.81	22.07
1945	.48	2.02	3.09	2.95	1.54	9.24	4.02	5.97	2.66	2.05	1.46	1.11	36.79
1946	.92	1.75	3.00	3.36	1.42	5.90	2.10	3.58	2.48	.65	.28	.26	25.70
1947	.36	.27	.35	1.19	1.68	3.95	5.49	4.01	1.64	.82	.21	.27	20.24
1948	.35	3.78	1.36	.76	1.13	7.37	3.94	3.08	4.18	.97	.21	.10	27.25
1949	.21	.43	5.08	6.33	2.94	4.10	3.46	2.55	.55	.13	.09	.11	25.98
1950	.16	.30	.81	1.90	1.53	4.53	4.89	2.58	2.15	.31	.21	.12	19.47
1951	.22	2.56	3.56	2.80	4.85	6.57	5.61	1.81	1.02	.81	.36	.37	30.54
1952	1.11	4.92	3.91	4.04	2.68	4.73	7.31	4.08	4.11	.58	.30	.67	38.64
1953	.20	1.15	3.69	4.39	4.78	10.78	7.21	4.56	.64	.23	.08	.05	37.76
1954	.19	.49	2.64	1.10	2.37	4.52	3.73	4.95	1.07	.45	.42	3.47	25.38
1955	1.21	3.98	4.66	1.64	1.41	3.46	6.04	2.17	.56	.12	16.72	1.38	43.35
1956	15.91	8.16	1.52	2.10	1.51	2.21	11.83	3.67	1.33	.73	.10	.31	49.38
1957	.29	.99	2.13	1.53	1.45	2.33	3.97	1.29	.32	.16	.09	.10	14.67
1958	.13	.73	3.61	2.56	1.42	4.16	9.71	3.19	.54	.16	.20	.81	27.22
1959	1.35	1.62	1.33	1.59	.96	3.99	5.84	1.61	.98	.75	.25	.14	20.41
1960	2.04	3.26	3.99	2.74	2.99	2.68	10.11	2.46	1.67	1.07	1.20	2.51	36.72

Note.--Not previously published.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1940	-	-	-	-	-	-	-	-	-
1941	-	a201	Feb. 8, 1941	0.5	9.12	1.27	17.18	8.81	16.63
1942	-	a250	Mar. 9, 1942	.6	11.4	1.58	21.58	14.8	27.86
1943	-	a147	Nov. 25, 1942	.9	16.6	2.31	31.36	15.3	28.81
1944	-	a168	Nov. 9, 1943	.2	11.7	1.62	22.07	11.5	21.84
1945	-	a172	Apr. 26, 1945	1.2	19.5	2.71	36.79	19.5	36.87
1946	-	a155	May 28, 1946	.4	13.6	1.89	25.70	11.1	21.01
1947	-	a119	Apr. 6, 1947	.3	10.7	1.49	20.24	13.1	24.77
1948	-	a256	Mar. 22, 1948	.2	14.4	2.00	27.25	14.5	27.46
1949	-	a823	Dec. 31, 1948	.3	13.6	1.92	25.98	11.4	21.53
1950	-	a133	Mar. 29, 1950	.3	10.3	1.43	19.47	13.0	24.54
1951	-	a404	Mar. 31, 1951	.8	16.2	2.25	30.54	18.1	34.14
1952	-	a248	June 1, 1952	.6	20.4	2.84	38.64	17.8	33.74
1953	-	a201	Mar. 13, 1953	.2	20.0	2.78	37.76	19.1	36.04
1954	-	a224	Sept. 11, 1954	.4	13.4	1.86	25.38	16.9	31.91
1955	-	b5,400	Aug. 19, 1955	.3	22.9	3.18	43.35	31.3	59.09
1956	-	1,940	Oct. 15, 1955	.5	26.1	3.63	49.38	14.4	27.20
1957	-	122	Jan. 23, 1957	.4	7.80	1.08	14.67	8.35	15.73
1958	-	280	Apr. 6, 1958	.4	14.4	2.00	27.22	14.3	27.05
1959	-	508	Mar. 6, 1959	.5	10.8	1.50	20.41	13.5	25.40
1960	-	594	Sept. 12, 1960	.9	19.4	2.70	36.72	-	-

a Maximum daily.

b Daily discharge for this day, 2,040 cfs.

Note.--Not previously published, furnished by Water Bureau, Metropolitan District Commission, Hartford.

1875. Barkhamsted Reservoir near Barkhamsted, Conn.

Location.--Lat 41°54'38", long 72°57'15", on East Branch Farmington River, 1½ miles south of Barkhamsted, Litchfield County.

Drainage area.--53.8 sq mi.

Records available.--October 1950 to September 1960. For period August 1928 to September 1950, combined month-end contents for Barkhamsted, East Branch and Nepaug Reservoirs are given in Compilation Report for 1950, WSP 1301.

Remarks.--Barkhamsted Reservoir was completed in 1939 for storage of water for municipal supply and has a total capacity of 31,800,000,000 gal. Barkhamsted Reservoir, East Branch Reservoir (see p. 259) and Nepaug Reservoir (see p. 265) are operated as a unit for storage of water for municipal supply.

Cooperation.--Records furnished by Water Bureau, Metropolitan District Commission, Hartford.

Month-end contents, in millions of gallons

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	19,233	20,016	23,092	24,224	28,296	31,761	31,761	31,761	31,319	30,186	27,846	25,423
1952	23,407	25,714	28,802	31,739	29,413	29,392	31,761	31,761	31,023	29,860	27,636	26,496
1953	23,319	22,020	22,809	25,633	29,086	31,761	31,761	31,761	29,651	28,175	25,667	23,817
1954	18,755	16,235	17,109	16,896	18,783	21,898	24,650	27,825	26,939	25,808	23,420	25,493
1955	25,440	27,146	29,730	30,621	30,045	31,761	31,761	31,761	29,442	27,478	31,761	31,761
1956	31,761	31,450	25,176	24,833	25,493	25,808	30,694	30,731	28,287	25,955	22,746	20,617
1957	18,202	18,175	19,614	20,701	21,617	23,174	24,892	24,047	23,124	21,764	20,685	19,725
1958	18,744	17,628	19,082	20,571	21,886	24,255	31,761	31,761	30,928	30,018	29,228	28,859
1959	29,986	31,376	31,761	31,761	31,654	31,761	31,761	31,517	29,752	29,115	26,278	23,331
1960	22,840	24,326	26,664	28,084	30,570	30,366	31,761	31,761	31,524	31,672	30,105	31,958

1876. East Branch Reservoir near New Hartford, Conn.

Location.--Lat 41°52'49", long 72°57'30", on East Branch Farmington River below Barkhamsted Reservoir, 1 mile east of New Hartford, Litchfield County.

Drainage area.--61.2 sq mi.

Records available.--October 1950 to September 1960. For period August 1928 to September 1950, combined month-end contents for Barkhamsted, East Branch and Nepaug Reservoirs are given in Compilation Report for 1950, WSP 1301.

Remarks.--East Branch Reservoir was completed in 1919 for storage of water to compensate for water diverted from Farmington River basin and has a total capacity of 3,000,000,000 gal. East Branch Reservoir, Barkhamsted Reservoir (see p. 259), and Nepaug Reservoir (see p. 265) are operated as a unit for storage of water for municipal supply.

Cooperation.--Records furnished by Water Bureau, Metropolitan District Commission, Hartford.

Month-end contents, in millions of gallons

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	2,027	2,423	1,814	2,066	2,384	2,938	2,938	2,938	2,538	2,606	2,438	2,270
1952	1,784	2,548	2,441	2,789	2,938	2,938	2,938	2,938	2,546	2,554	2,632	2,427
1953	2,264	1,755	1,575	2,322	2,938	2,938	2,938	2,938	2,657	2,645	2,581	1,184
1954	2,149	1,874	1,583	1,727	1,947	2,776	2,938	2,938	2,608	2,810	2,542	2,783
1955	1,179	1,864	2,699	2,329	2,612	2,938	2,938	2,698	2,616	2,584	2,938	2,938
1956	2,746	1,676	1,319	1,568	1,641	1,512	2,169	2,083	2,030	2,060	2,073	1,745
1957	1,468	1,469	1,507	1,419	1,368	1,289	2,305	2,700	2,505	2,599	2,695	2,458
1958	1,434	1,215	1,697	1,647	1,536	2,729	2,938	2,938	2,581	2,748	2,556	2,517
1959	1,570	1,915	1,763	2,039	2,015	2,938	2,938	2,781	2,546	2,449	2,622	1,982
1960	1,666	1,899	2,335	1,686	1,613	2,727	2,938	2,934	2,938	2,522	2,865	2,740

1878. Nepaug River near Nepaug, Conn.

Location.--Lat 41°49'14", long 72°58'14", on left bank beside State Highway 4, a quarter of a mile upstream from Nepaug Reservoir, 1½ miles southeast of Nepaug, Litchfield County, and 2½ miles west of Collinsville.

Drainage area.--22.7 sq mi.

Records available.--January 1918 to September 1955, October 1957 to September 1960.

Gage.--Water-stage recorder and rectangular weir. Datum of gage is 505.54 ft above mean sea level, datum of 1929.

Average discharge.--40 years (1918-55, 1957-60), 39.6 cfs.

Extremes.--1918-55, 1957-60: Maximum daily discharge, 4,000 cfs (estimated) Aug. 19, 1955; minimum daily, 0.2 cfs Aug. 26, 27, 1935.

Cooperation.--Records furnished by Water Bureau, Metropolitan District Commission, Hartford.

Monthly and yearly mean discharge, in cubic feet per second													The year
Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1918	-	-	-	19.0	69.3	97.3	61.9	58.4	25.1	12.6	10.3	19.3	-
1919	16.0	26.1	46.1	49.4	29.5	114	85.3	89.5	20.6	14.6	11.6	25.2	44.0
1920	18.1	53.1	46.6	16.2	53.0	174	118	61.9	58.3	41.4	19.8	19.8	55.0
1921	37.1	48.3	86.1	48.9	29.1	107	86.3	45.2	17.6	27.4	9.68	7.08	46.1
1922	9.26	24.9	30.2	9.96	24.6	90.1	82.5	67.8	30.3	22.0	21.4	16.9	35.9
1923	28.5	17.6	14.4	56.5	27.4	120	110	56.3	23.8	7.11	6.17	8.61	39.8
1924	29.4	24.5	60.9	82.3	20.0	40.6	132	77.4	29.6	6.62	8.33	12.6	43.8
1925	12.4	14.8	20.9	5.67	80.2	99.4	43.3	31.3	11.3	10.0	10.6	10.4	28.9
1926	13.1	34.8	38.4	29.7	26.6	85.5	88.8	31.2	13.2	4.90	10.3	9.38	32.1
1927	23.1	59.4	29.9	43.3	43.4	92.4	44.4	58.8	24.7	32.0	56.6	24.0	44.4
1928	36.6	128	81.1	34.8	59.2	49.1	74.7	55.7	53.9	55.4	62.8	51.4	61.7
1929	15.3	12.0	15.6	31.0	45.0	99.1	113	74.7	17.1	3.90	3.67	5.56	36.2
1930	15.2	19.1	31.2	33.4	29.9	53.7	41.2	25.5	18.3	6.81	3.39	3.80	23.4
1931	2.73	15.7	9.03	8.44	13.2	73.1	68.4	65.4	61.1	9.44	5.40	2.53	27.9
1932	2.85	4.90	12.4	32.7	27.5	36.9	74.0	23.7	15.3	5.86	7.19	9.78	20.9
1933	31.4	104	32.5	32.8	41.4	86.4	112	31.4	8.43	3.03	9.01	24.5	42.9
1934	11.9	13.1	17.9	49.5	8.48	76.5	98.2	51.9	18.3	3.05	3.16	64.7	34.8
1935	40.8	53.3	44.7	58.4	32.5	85.4	52.4	22.2	21.6	5.32	1.67	5.48	35.4
1936	2.21	11.4	8.75	32.0	10.8	206	69.4	26.2	22.2	3.54	3.41	5.22	33.6
1937	15.5	9.93	57.5	81.4	61.6	48.3	66.5	51.5	50.8	29.3	22.3	23.9	43.1
1938	41.4	74.3	48.9	62.8	49.4	41.2	48.1	29.3	31.1	84.9	27.6	132	55.8
1939	28.2	36.2	84.5	42.9	65.1	88.4	108	27.1	10.6	5.18	13.5	6.16	42.8
1940	9.40	20.8	19.3	16.3	12.6	46.0	181	60.0	45.6	16.5	4.53	5.56	36.5
1941	7.61	30.6	37.5	20.6	49.1	39.7	46.7	16.6	23.9	25.3	7.22	3.48	25.5
1942	3.70	13.8	22.1	25.5	28.1	85.2	38.1	48.0	27.0	31.3	10.2	9.29	28.7
1943	19.8	64.2	66.7	40.9	53.0	107	62.6	79.7	26.7	8.80	4.10	2.90	44.7
1944	14.3	37.5	12.1	9.14	17.1	67.3	85.0	26.7	13.9	2.81	3.15	18.5	25.5
1945	10.1	40.1	55.1	52.3	37.8	133	78.0	107	65.1	50.6	41.3	19.8	57.7
1946	20.0	34.3	67.1	67.9	39.3	94.8	38.5	49.3	34.2	24.8	11.2	9.30	41.0
1947	15.7	11.5	12.4	31.4	36.8	72.3	65.2	54.1	25.0	20.4	5.85	5.95	29.7
1948	5.31	43.4	19.1	10.5	25.1	126	70.9	62.5	75.1	20.5	5.57	2.04	38.8
1949	4.87	14.4	62.0	118	69.6	68.5	53.6	71.6	11.4	3.96	3.81	3.37	40.4
1950	4.63	6.36	20.8	35.0	35.0	80.5	58.2	42.1	51.2	12.7	10.4	5.79	30.3
1951	6.66	53.0	61.1	70.8	107	101	85.1	31.6	23.9	10.2	5.46	3.28	46.2
1952	11.0	50.6	54.9	78.5	42.4	81.3	97.9	65.4	56.8	7.72	12.5	13.7	47.7
1953	4.06	26.0	49.6	75.9	74.0	171	105	61.9	8.66	4.41	1.29	1.80	46.5
1954	3.97	11.2	46.6	16.2	43.4	58.8	45.8	49.2	8.80	2.49	3.73	22.7	26.0
1955	8.84	63.4	76.4	29.6	40.2	75.1	89.0	34.7	11.6	4.12	20.4	19.7	54.9
1956	-	-	-	-	-	-	-	-	-	-	-	-	-
1957	-	-	-	-	-	-	-	-	-	-	-	-	-
1958	4.49	11.5	48.0	47.3	35.0	99.6	137	62.3	17.3	22.0	12.9	27.9	43.8
1959	47.7	49.1	36.0	29.8	25.4	71.2	84.1	26.5	21.3	12.4	7.31	3.82	34.6
1960	27.0	46.9	69.7	53.8	78.0	59.5	136	45.5	58.1	26.6	23.5	52.9	56.1

* Estimated by Geological Survey on basis of records for stations on nearby streams.

Note.--Not previously published.

Monthly and yearly runoff, in inches, of Nepaug River near Nepaug, Conn.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1918	-	-	-	0.96	3.18	4.95	3.05	2.96	1.24	0.64	0.52	0.95	-
1919	0.81	1.28	2.54	2.51	1.35	5.79	4.10	4.54	1.01	.74	.59	1.24	26.30
1920	.92	2.61	2.56	.82	1.56	8.84	5.80	3.15	2.87	2.10	1.01	.99	33.02
1921	1.88	2.38	4.37	2.48	1.33	5.43	4.24	2.29	.86	1.40	.49	.35	27.50
1922	.47	1.23	1.53	.51	1.12	4.58	4.05	3.45	1.48	1.12	1.09	.83	21.46
1923	1.45	.86	.73	2.87	1.26	6.10	5.41	2.86	1.17	.36	.31	.42	23.80
1924	1.50	1.20	3.09	4.18	.95	2.06	6.48	3.93	1.45	.34	.42	.62	26.22
1925	.63	.73	1.06	.29	3.68	5.05	2.13	1.59	.56	.51	.53	.51	17.27
1926	.67	1.71	1.95	1.51	1.22	4.35	4.36	1.58	.65	.25	.52	.41	19.18
1927	1.18	2.92	1.52	2.20	1.99	4.69	2.19	2.99	1.27	1.63	2.89	1.18	26.60
1928	1.86	6.29	4.12	1.76	2.82	2.49	3.67	2.82	2.64	2.81	3.19	2.52	36.99
1929	.78	.59	.79	1.58	2.06	5.04	5.56	3.79	.84	.20	.16	.27	21.66
1930	.77	.94	1.58	1.70	1.38	2.73	2.02	1.39	.90	.35	.17	.19	14.02
1931	.14	.77	.46	.43	.60	3.71	3.36	3.32	3.00	.48	.27	.12	16.66
1932	.14	.24	.63	1.66	1.29	1.88	3.64	1.20	.75	.30	.37	.43	12.53
1933	1.59	5.11	1.65	1.66	1.90	4.39	5.50	1.59	.41	.15	.46	1.27	25.81
1934	.60	.64	.91	2.51	.39	3.88	4.83	2.64	.90	.15	.16	3.18	20.79
1935	2.08	2.62	2.27	2.96	1.49	4.34	2.58	1.13	1.06	.27	.08	.27	21.15
1936	.11	.56	.44	1.63	.51	10.46	3.41	1.33	1.09	.18	.17	.23	20.15
1937	.79	.49	2.92	4.14	2.82	2.46	3.27	2.62	2.50	1.49	1.13	1.17	25.80
1938	2.10	3.65	2.48	3.19	2.27	2.09	2.36	1.49	1.53	4.31	1.41	6.49	33.36
1939	1.43	1.77	4.29	2.18	2.99	4.48	5.31	1.37	.52	.26	.68	.37	25.58
1940	.48	1.02	.98	.93	.60	2.34	8.89	3.04	2.24	.84	.23	.27	21.86
1941	.39	1.51	1.90	1.05	2.25	2.02	2.30	.84	1.17	1.28	.37	.17	15.25
1942	.19	1.68	1.12	1.29	1.29	4.32	1.87	2.43	1.33	1.59	.52	.46	17.09
1943	1.01	3.16	3.39	2.08	2.43	5.43	3.08	4.05	1.32	.45	.21	.14	26.75
1944	.73	1.84	.61	.46	.81	3.41	4.17	1.36	.68	.14	.16	.91	15.28
1945	.51	1.98	2.80	2.65	1.74	6.76	3.84	5.43	3.20	2.57	2.10	.97	34.55
1946	1.02	1.68	3.41	3.45	1.80	4.82	1.90	2.50	1.68	1.26	.57	.46	24.55
1947	.80	.57	.63	1.59	1.69	3.68	3.20	2.74	1.23	1.04	.30	.29	17.76
1948	.27	2.13	.97	.53	1.20	6.40	3.48	3.17	3.69	1.04	.28	.17	23.26
1949	.25	.71	3.15	6.00	3.20	3.48	2.63	3.63	.56	.20	.19	.17	24.17
1950	.24	.31	1.06	1.87	1.60	4.09	2.86	2.13	2.52	.64	.53	.28	18.13
1951	.34	2.60	3.10	3.60	4.90	5.13	4.18	1.60	1.17	.52	.28	.16	27.58
1952	.56	2.49	2.79	3.99	2.02	4.13	4.81	3.32	2.79	.39	.64	.67	28.60
1953	.21	1.28	2.52	3.85	3.40	8.68	5.17	3.15	.43	.22	.07	.04	29.02
1954	.20	.55	2.36	.82	1.99	2.99	2.25	2.50	.43	.13	.19	1.12	15.53
1955	.45	3.11	3.88	1.49	1.84	3.82	4.37	1.76	.57	.21	\$10.36	\$9.97	32.83
1956	-	-	-	-	-	-	-	-	-	-	-	-	-
1957	-	-	-	-	-	-	-	-	-	-	-	-	-
1958	.23	.57	2.43	2.40	1.60	5.06	6.74	3.16	.85	1.12	.65	1.37	26.18
1959	2.42	2.41	1.83	1.51	1.17	3.62	4.13	1.35	1.05	.63	.37	.19	20.68
1960	1.37	2.31	3.54	2.73	3.71	3.02	6.68	2.31	2.86	1.35	1.19	2.60	33.67

* Estimated by Geological Survey on basis of records for stations on nearby streams.

Note.--Not previously published.

Yearly discharge, in cubic feet per second, of Nepaug River near Nepaug, Conn.

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1918	-	-	-	-	-	-	-	38.3	22.88
1919	-	-	-	-	44.0	1.94	26.30	46.5	27.76
1920	-	-	-	-	55.0	2.42	33.02	59.6	35.76
1921	-	-	-	-	46.1	2.03	27.50	37.0	22.10
1922	-	a548	Mar. 8, 1922	6.9	35.9	1.58	21.46	35.6	21.27
1923	-	a416	Apr. 5, 1923	3.5	39.8	1.75	23.80	44.4	26.55
1924	-	a935	Apr. 7, 1924	3.8	43.8	1.93	26.22	38.2	22.65
1925	-	a546	Feb. 12, 1925	2.8	28.9	1.27	17.27	32.0	19.18
1926	-	a249	Apr. 9, 1926	2.8	32.1	1.41	19.18	34.2	20.47
1927	-	a225	May 25, 1927	6.9	44.4	1.96	26.60	55.5	33.25
1928	-	a1,120	Nov. 4, 1927	11	61.7	2.72	36.99	44.9	26.68
1929	-	a343	Apr. 17, 1929	1.6	36.2	1.59	21.66	38.1	22.79
1930	-	a197	Mar. 26, 1930	1.5	23.4	1.03	14.02	20.2	12.10
1931	-	a324	Mar. 29, 1931	1.8	27.9	1.23	16.66	27.3	16.30
1932	-	a395	Apr. 1, 1932	1.5	20.9	.921	12.53	33.2	19.87
1933	-	a499	Nov. 10, 1932	1.5	42.9	1.89	25.61	32.5	19.41
1934	-	a461	Sept. 17, 1934	.7	34.8	1.53	20.79	42.8	25.61
1935	-	a694	Jan. 10, 1935	.2	35.4	1.56	21.15	25.6	15.29
1936	-	a1,620	Mar. 12, 1936	.5	33.6	1.48	20.15	38.8	33.24
1937	-	a356	Feb. 22, 1937	3.5	43.1	1.90	25.80	49.9	29.83
1938	-	a1,640	Sept. 21, 1938	3.9	55.8	2.46	33.36	54.6	32.62
1939	-	a430	Dec. 6, 1938	3.1	42.8	1.89	25.58	34.4	20.57
1940	-	a570	Apr. 9, 1940	2.1	36.5	1.61	21.86	36.7	23.18
1941	-	a375	Feb. 8, 1941	1.5	25.5	1.12	15.25	22.5	13.44
1942	-	a356	Mar. 9, 1942	1.5	28.7	1.26	17.09	38.0	22.66
1943	-	a405	Dec. 31, 1942	1.8	44.7	1.97	26.75	37.4	22.37
1944	-	a336	Apr. 25, 1944	1.0	25.5	1.12	15.28	29.0	17.39
1945	-	a669	Apr. 26, 1945	4.3	57.7	2.54	34.55	59.1	35.37
1946	-	a319	Mar. 9, 1946	2.8	41.0	1.81	24.55	34.1	20.44
1947	-	a287	Mar. 15, 1947	2.8	29.7	1.31	17.76	32.0	19.13
1948	-	a480	Mar. 22, 1948	1.5	38.8	1.71	23.26	40.1	24.00
1949	-	a1,350	Dec. 31, 1948	1.8	40.4	1.78	24.17	36.2	21.67
1950	-	a255	Mar. 29, 1950	2.8	30.3	1.33	18.13	37.8	22.56
1951	-	a618	Mar. 31, 1951	1.5	46.2	2.04	27.58	45.9	27.38
1952	-	a473	June 2, 1952	.7	47.7	2.10	28.60	44.6	26.77
1953	-	a630	Mar. 13, 1953	.5	48.5	2.14	29.02	47.0	28.12
1954	-	a278	Apr. 18, 1954	.5	26.0	1.15	15.53	33.2	19.66
1955	-	*a4,000	Aug. 19, 1955	.7	54.9	2.42	32.83	-	-
1956	-	-	-	-	-	-	-	-	-
1957	-	-	-	-	-	-	-	-	-
1958	-	780	Apr. 7, 1958	1.8	43.8	1.93	26.18	49.5	29.61
1959	-	1,020	Mar. 6, 1959	2.1	34.6	1.52	20.68	35.5	21.24
1960	-	1,320	June 4, 1960	4.0	56.1	2.47	33.67	-	-

a Maximum daily.

* Estimated by Geological Survey on basis of records for stations on nearby streams.

Note.--Not previously published; furnished by Water Bureau, Metropolitan District Commission, Hartford.

1878.5. Clear Brook near Collinsville, Conn.

Location.--Lat 41°47'44", long 72°57'06", on right bank upstream from weir, 200 ft upstream from Nepaug Reservoir beside Clear Brook Road, $1\frac{1}{2}$ miles southwest of Collinsville, Hartford County.

Drainage area.--0.58 sq mi.

Records available.--January 1917 to September 1960.

Gage.--Water-stage recorder and rectangular weir. Datum of gage is 491.21 ft above mean sea level, datum of 1929.

Average discharge.--43 years (1917-60), 1.65 cfs.

Extremes.--1917-60: Maximum discharge, 56.5 cfs Aug. 19, 1955 (gage height, 2.41 ft), from rating curve extended above 4 cfs on basis of theoretical weir rating; minimum daily, 0.19 cfs Feb. 22, 23, 1950.

Cooperation.--Records furnished by Water Bureau, Metropolitan District Commission, Hartford.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1917	-	-	-	1.51	1.41	2.03	2.24	2.12	2.28	2.02	1.80	1.43	-
1918	1.73	1.54	1.44	1.56	1.89	2.38	2.37	2.28	1.79	1.67	1.38	1.38	1.78
1919	1.26	1.25	1.36	1.46	1.39	2.37	2.65	3.02	2.15	2.08	1.93	1.61	1.90
1920	1.87	2.06	1.44	1.18	1.58	2.86	2.89	2.87	2.99	2.20	1.55	1.62	2.09
1921	1.50	1.67	2.06	1.69	1.92	2.67	2.73	2.65	2.08	2.13	1.95	1.56	2.05
1922	1.51	1.49	1.54	1.00	1.18	1.59	1.40	1.84	1.82	1.73	1.65	1.60	1.53
1923	1.70	1.62	1.53	1.75	1.76	2.89	3.50	3.13	1.91	1.33	.944	1.04	1.92
1924	1.20	1.23	1.60	1.39	.930	1.29	2.97	2.76	2.54	1.73	1.59	1.55	1.73
1925	1.45	1.37	1.29	.545	1.58	2.65	1.51	1.50	1.55	1.16	1.03	.996	1.39
1926	.955	1.12	1.14	1.10	1.09	1.89	2.25	2.11	1.94	1.67	1.46	1.42	1.51
1927	1.68	2.26	1.82	1.69	1.74	2.38	2.59	2.49	1.40	1.82	1.75	1.63	1.96
1928	1.30	1.79	1.59	1.58	2.09	1.91	2.02	2.28	2.08	1.92	1.65	1.56	1.81
1929	1.34	1.60	1.47	1.19	1.19	1.84	2.25	2.62	1.88	1.39	1.12	1.03	1.58
1930	.889	.713	.701	.679	.564	1.02	1.22	1.21	1.27	1.24	1.03	.957	.961
1931	.854	.892	.662	.728	.569	.951	1.50	1.95	2.53	2.09	1.49	1.25	1.29
1932	1.15	1.00	.977	.971	.964	1.09	1.36	1.37	1.57	1.52	1.35	1.11	1.20
1933	1.13	2.00	1.54	1.96	2.02	2.74	3.58	2.92	2.32	1.96	1.74	1.50	2.11
1934	1.25	1.27	1.13	1.45	.896	1.85	2.94	3.14	2.92	2.25	1.99	2.31	1.95
1935	2.36	2.51	2.62	2.30	1.46	1.89	2.49	1.93	1.80	1.64	1.32	1.21	1.96
1936	1.05	1.07	.904	1.15	.905	2.71	3.00	2.73	2.59	1.76	1.47	1.23	1.72
1937	1.29	1.08	1.37	1.84	2.22	2.38	2.68	2.74	2.70	2.54	2.35	2.28	2.12
1938	2.28	2.86	2.76	2.94	2.82	2.70	2.54	2.50	2.13	2.49	2.18	2.66	2.57
1939	2.22	1.76	2.22	1.93	1.86	2.26	2.87	2.27	1.79	1.38	1.19	.956	1.89
1940	.909	.799	.773	.646	.506	.926	2.70	2.11	1.95	1.50	1.13	.935	1.24
1941	.721	.780	.580	.470	.781	.784	.960	.945	1.01	.810	.587	.520	.745
1942	.810	.892	.835	.696	.616	1.49	1.31	1.56	1.54	1.41	1.38	1.13	1.14
1943	1.18	1.29	1.41	1.35	1.47	2.25	2.38	2.72	2.48	2.08	1.62	1.31	1.80
1944	1.22	1.21	.768	.559	.543	1.03	1.46	1.24	1.18	.998	.888	1.03	1.01
1945	.858	.953	1.01	1.16	1.21	2.31	2.47	3.05	2.67	2.65	1.88	1.55	1.82
1946	1.32	1.23	1.52	1.60	1.40	2.14	2.06	2.11	2.13	1.84	1.52	1.23	1.68
1947	1.14	.986	.899	.762	.904	1.16	1.43	1.63	1.64	1.56	1.39	1.05	1.22
1948	.955	1.44	1.01	1.06	.979	1.99	2.10	2.36	2.42	1.70	1.56	1.22	1.57
1949	1.12	1.24	1.41	2.09	1.68	2.08	2.33	2.48	1.77	1.43	1.22	1.02	1.66
1950	.956	.701	.771	.709	.545	.821	1.15	1.29	1.82	1.27	1.30	1.04	1.03
1951	.893	1.14	1.17	1.38	2.35	2.71	3.15	2.37	1.93	1.45	1.22	.906	1.72
1952	.852	.931	.971	1.46	1.70	2.08	2.86	3.02	3.11	2.11	2.14	1.37	1.88
1953	.959	1.10	1.46	1.72	2.31	3.56	4.13	3.54	2.36	1.95	1.38	.970	2.12
1954	.899	.838	.881	.541	.986	1.01	1.12	1.55	1.48	1.28	1.11	1.02	1.05
1955	.742	1.23	1.41	1.34	1.39	1.57	2.03	1.89	1.53	1.17	3.69	2.45	1.70
1956	4.42	4.89	3.45	2.80	2.30	2.11	3.38	2.92	2.46	2.16	1.52	1.44	2.82
1957	1.14	1.17	1.19	.867	.788	.965	1.55	1.04	.895	.667	.606	.583	.956
1958	.603	.685	.969	.785	.946	1.34	2.66	2.47	2.12	2.24	1.25	1.33	1.45
1959	1.50	1.41	1.43	1.70	1.37	2.55	2.41	1.78	1.58	1.70	1.57	1.49	1.71
1960	1.37	1.19	1.57	1.65	1.64	1.49	2.48	2.00	2.44	1.56	.926	1.51	1.65

Note.--Not previously published.

CONNECTICUT RIVER BASIN

Monthly and yearly runoff, in inches, of Clear Brook near Collinsville, Conn.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1917	-	-	-	3.00	2.53	4.04	4.31	4.22	4.38	4.01	3.57	2.76	-
1918	3.44	2.97	2.86	3.10	3.40	4.73	4.56	4.53	3.45	3.32	2.79	2.66	41.72
1919	2.50	2.41	2.70	2.90	2.50	4.72	5.10	6.01	4.14	4.14	3.84	5.67	44.63
1920	3.71	3.96	2.86	2.34	2.93	5.68	5.56	5.71	5.76	4.37	3.03	3.11	49.07
1921	2.99	3.21	4.09	3.36	3.45	5.30	5.26	5.26	4.00	4.23	3.83	3.00	48.03
1922	3.00	2.66	3.07	1.99	2.11	3.17	2.69	3.65	3.50	3.44	3.23	3.07	35.83
1923	3.38	3.11	3.03	3.48	3.16	5.75	6.73	6.21	3.67	2.64	1.83	2.00	45.04
1924	2.38	2.57	3.17	2.77	1.73	2.56	5.72	5.48	4.88	3.44	3.15	2.87	40.62
1925	2.89	2.64	2.57	1.08	2.65	5.28	2.91	2.98	2.98	2.31	2.05	1.92	32.46
1926	1.90	2.15	2.26	2.18	1.96	3.76	4.33	4.19	3.73	3.32	2.90	2.74	35.42
1927	3.73	4.35	3.61	3.37	3.13	4.73	4.98	4.96	2.70	3.62	3.45	3.14	45.77
1928	2.58	3.45	3.16	3.15	3.68	3.80	3.89	4.53	4.01	3.81	3.23	3.01	42.55
1929	2.66	3.08	2.92	2.36	2.14	3.66	4.32	5.20	3.62	2.76	2.25	1.99	36.94
1930	1.77	1.37	1.39	1.35	1.01	2.03	2.36	2.40	2.44	2.47	2.03	1.84	22.49
1931	1.70	1.72	1.32	1.45	1.02	1.89	2.88	3.87	4.86	4.16	2.95	2.41	30.24
1932	2.29	1.92	1.84	1.95	1.79	2.17	2.62	2.71	3.05	3.03	2.64	2.14	26.21
1933	2.24	3.55	3.05	3.89	3.62	5.44	6.89	5.80	4.47	3.89	3.47	2.68	49.49
1934	2.49	2.45	2.24	2.85	1.61	3.67	5.66	6.25	5.61	4.46	3.95	4.45	45.69
1935	4.70	4.82	5.21	4.58	2.61	3.75	4.79	3.84	3.46	3.25	2.63	2.34	45.98
1936	2.09	2.06	1.80	2.28	1.68	5.38	5.77	5.43	4.99	3.50	2.92	2.39	40.29
1937	2.57	2.08	2.73	3.66	3.99	4.73	5.15	5.45	5.19	5.05	4.63	4.38	49.66
1938	4.54	5.51	5.48	5.84	5.07	5.37	4.88	4.97	4.10	4.94	4.32	5.12	60.14
1939	4.42	3.58	4.42	3.84	3.34	4.49	5.51	4.51	3.45	2.75	2.37	1.84	44.32
1940	1.81	1.54	1.54	1.28	.94	1.84	5.18	4.19	3.76	2.98	2.25	1.80	29.11
1941	1.43	1.50	1.15	.93	1.40	1.56	1.85	1.88	1.94	1.61	1.17	1.00	17.42
1942	1.61	1.72	1.66	1.38	1.11	2.96	2.51	3.10	2.96	2.80	2.74	2.18	26.73
1943	2.34	2.48	2.80	2.68	2.64	4.47	4.59	5.41	4.78	4.13	3.23	2.52	42.07
1944	2.43	2.33	1.53	1.11	1.01	2.06	2.80	2.46	2.26	1.96	1.76	1.97	23.68
1945	1.71	1.83	2.01	2.31	2.17	4.60	4.75	6.06	5.14	5.27	3.74	2.98	42.56
1946	2.63	2.36	3.03	3.19	2.52	4.25	3.96	4.20	4.10	3.65	3.02	2.36	39.27
1947	2.27	1.90	1.79	1.51	1.62	2.30	2.76	3.25	3.16	3.10	2.76	2.01	28.43
1948	1.90	2.76	2.02	2.12	1.82	3.94	4.04	4.69	4.65	3.38	3.11	2.34	36.77
1949	2.22	2.58	2.81	4.16	3.02	4.13	4.48	4.89	3.41	2.84	2.43	1.96	38.73
1950	1.90	1.35	1.53	1.41	.98	1.63	2.21	2.56	3.50	2.53	2.58	1.99	24.17
1951	1.77	2.20	2.32	2.74	4.22	5.38	6.06	4.71	3.72	2.88	2.42	1.74	40.18
1952	1.69	1.79	1.83	2.91	3.16	4.13	5.50	6.00	5.99	4.19	4.24	2.63	44.16
1953	1.91	2.12	2.90	3.41	4.14	7.07	7.95	7.03	4.54	3.87	2.75	1.87	49.56
1954	1.79	1.61	1.75	1.07	1.59	2.01	2.15	3.09	2.84	2.54	2.20	1.96	24.60
1955	1.48	2.37	2.80	2.67	2.50	3.11	3.91	3.76	2.95	2.32	7.32	4.71	39.90
1956	8.78	9.41	6.86	5.56	4.28	4.19	6.50	5.81	4.74	4.28	3.03	2.77	66.21
1957	2.26	2.26	2.36	1.72	1.42	1.92	2.99	2.07	1.72	1.33	1.20	1.12	22.37
1958	1.20	1.32	1.93	1.56	1.70	2.66	5.11	4.91	4.08	4.45	2.48	2.55	35.95
1959	2.99	2.71	2.85	3.37	2.46	5.08	4.64	3.53	3.04	3.37	3.12	2.87	40.03
1960	2.72	2.28	3.12	3.29	3.04	2.95	4.77	3.98	4.69	3.09	1.84	2.90	36.67

Note.--Not previously published.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Runoff in inches
		Discharge	Date					
1917	-	-	-	-	-	-	-	1.80
1918	-	-	-	-	1.78	3.07	41.72	1.71
1919	-	-	-	-	1.90	3.28	44.63	2.03
1920	-	-	-	-	2.09	3.60	49.07	2.08
1921	-	-	-	-	2.05	3.53	48.03	1.99
1922	-	a6.93	Mar. 7, 1922	0.88	1.53	2.64	35.83	1.56
1923	-	a6.49	Apr. 5, 1923	.79	1.92	3.31	45.04	1.86
1924	-	a15.6	Apr. 7, 1924	.68	1.73	2.98	40.62	1.74
1925	-	a5.96	Mar. 1, 1925	.45	1.39	2.40	32.46	1.31
1926	-	a3.13	Mar. 31, 1926	.79	1.51	2.60	35.42	1.74
1927	-	a4.01	May 24, 1927	.97	1.96	3.38	45.77	1.85
1928	-	a11.3	Nov. 3, 1927	.79	1.81	3.12	42.55	1.79
1929	-	a4.01	Apr. 21, 1929	.61	1.58	2.72	36.94	1.40
1930	-	a2.71	Apr. 7, 1930	.58	.961	1.66	22.49	.969
1931	-	a4.16	June 10, 1931	.45	1.29	2.22	30.24	1.35
1932	-	a2.44	Apr. 12, 1932	.68	1.20	2.07	28.21	1.33
1933	-	a6.13	Mar. 21, 1933	.68	2.11	3.64	49.49	2.03
1934	-	a7.96	June 20, 1934	*.4	1.95	3.36	45.69	2.27
1935	-	a5.12	Jan. 10, 1935	.97	1.96	3.38	45.98	1.59
1936	-	a8.92	Mar. 18, 1936	.79	1.72	2.97	40.29	1.78
1937	-	a5.79	Feb. 22, 1937	.97	2.57	3.66	49.66	2.47
1938	-	a10.3	Sept. 21, 1938	1.82	2.57	4.43	60.14	2.43
1939	-	a4.48	Dec. 6, 1938	.88	3.36	3.26	44.32	1.58
1940	-	a8.53	Apr. 8, 1940	.45	1.24	2.14	29.11	1.21
1941	-	a2.71	Feb. 7, 1941	.38	.745	1.28	17.42	.783
1942	-	a3.56	Mar. 22, 1942	.58	1.14	1.97	26.73	1.25
1943	-	a3.41	Mar. 20, May 22	*.8	1.80	3.10	42.07	1.74
1944	-	a3.41	Nov. 9, 1943	.58	1.01	1.74	25.68	.878
1945	-	a9.92	July 18, 1945	.70	1.82	3.14	42.56	1.92

* Estimated by Geological Survey.

a Maximum daily.

Note.--Not previously published, furnished by Water Bureau, Metropolitan District Commission, Hartford.

Yearly discharge, in cubic feet per second, of Clear Brook near Collinsville, Conn.--Continued

Year	WSP	Water year ending Sept. 30					Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1946	-	a7.26	July 23, 1946	†.9	1.68	2.90	39.27	1.59	37.21
1947	-	a2.99	Mar. 14, 1947	.38	1.22	2.10	28.43	1.23	29.15
1948	-	a7.19	Nov. 12, 1947	.70	1.57	2.71	36.77	1.60	37.50
1949	-	a13.3	Dec. 31, 1948	.79	1.66	2.86	38.73	1.54	36.10
1950	-	†a3.5	Aug. 20, 1950	.19	1.03	1.78	24.17	1.10	25.68
1951	-	a10.5	Mar. 31, 1951	.61	1.72	2.97	40.16	1.68	39.28
1952	-	a8.53	June 1, 1952	.53	1.88	3.24	44.16	1.95	45.68
1953	-	a6.67	Mar. 26, 1953	.79	2.12	3.66	49.56	2.04	47.78
1954	-	a3.86	Sept. 11, 1954	.25	1.05	1.81	24.60	1.11	26.10
1955	-	b56.5	Aug. 19, 1955	.38	1.70	2.93	39.90	2.49	58.30
1956	-	28.0	Oct. 18, 1955	1.27	2.82	4.86	66.21	2.05	48.04
1957	-	3.41	Apr. 6, 1957	.31	.956	1.65	22.37	.852	19.94
1958	-	8.92	June 26, 1958	.45	1.45	2.50	33.95	1.63	38.05
1959	-	35.4	Mar. 6, 1959	†.8	1.71	2.95	40.03	1.69	39.60
1960	-	17.1	June 4, 1960	†.5	1.65	2.84	38.67	-	-

* Estimated by Geological Survey.

a Maximum daily.

b Daily discharge for this day, 33.7 cfs.

Note.--Not previously published, furnished by Water Bureau, Metropolitan District Commission, Hartford.

1879. Nepaug Reservoir near Collinsville, Conn.

Location.--Lat 41°49'37", long 72°56'34", on Nepaug River 1½ miles northwest of Collinsville, Hartford County.

Drainage area.--32.0 sq mi.

Records available.--October 1950 to September 1960. For period August 1928 to September 1950 combined month-end contents for Barkhamsted, East Branch, and Nepaug Reservoirs are given in Compilation Report for 1950, WSP 1301.

Remarks.--Nepaug Reservoir was completed in 1918 for storage of water for municipal supply and has a total capacity of 9,540,000,000 gal. Nepaug Reservoir, Barkhamsted Reservoir (see p. 259) and East Branch Reservoir (see p. 259) are operated as a unit for storage of water for municipal supply.

Cooperation.--Records furnished by Water Bureau, Metropolitan District Commission, Hartford.

Month-end contents, in millions of gallons

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	8,023	8,158	8,830	8,954	9,341	9,191	9,543	9,415	9,317	8,891	8,023	7,106
1952	7,438	8,734	8,532	9,532	7,122	8,734	9,544	9,544	9,520	8,563	8,049	7,454
1953	7,514	8,420	9,356	9,544	9,544	9,544	9,544	9,544	9,544	8,883	7,738	6,963
1954	7,215	7,629	8,521	7,956	7,746	8,284	8,739	9,368	9,368	7,956	6,917	6,619
1955	6,443	7,833	9,079	8,949	8,930	9,544	9,544	9,220	9,544	8,658	9,533	8,884
1956	9,544	9,285	8,109	7,777	8,247	8,252	9,379	8,788	8,890	8,649	8,091	7,711
1957	7,294	7,161	7,544	7,609	7,592	7,995	9,373	9,544	7,978	7,371	6,957	6,462
1958	6,199	6,173	7,078	7,902	7,434	8,682	9,544	9,544	9,544	9,390	8,526	8,132
1959	8,161	8,106	8,122	8,234	7,627	9,544	9,544	9,120	9,445	9,030	7,930	7,083
1960	7,026	6,633	6,111	7,484	8,590	8,442	9,522	9,528	9,035	8,785	7,943	7,787

1880. Burlington Brook near Burlington, Conn.

Location.--Lat 41°47'10", long 72°57'55", on left bank 1½ 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 1960.

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.--29 years (1931-60), 8.26 cfs.

Extremes.--1931-60: Maximum discharge, 1,690 cfs Aug. 19, 1955 (gage height, 9.22 ft), from rating curve extended above 100 cfs on basis of one current-meter measurement and form of theoretical rating; minimum, 0.13 cfs (regulated) June 21, 1933; minimum daily, 0.46 cfs July 18, 1957.

Remarks.--Infrequent low-water regulation.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1.98	7.87	11.2	13.8	21.6	19.9	16.1	8.52	5.04	1.91	2.19	1.33	9.19
1952	2.16	11.0	13.2	16.7	9.72	17.6	20.5	13.9	12.6	2.91	7.50	4.37	11.0
1953	2.13	7.77	11.3	17.3	13.9	31.3	23.0	12.7	3.65	2.59	1.42	.917	10.7
1954	1.79	3.17	9.81	4.93	8.17	11.2	10.4	12.1	3.81	1.68	2.26	6.87	6.33
1955	3.10	13.3	14.7	6.06	7.76	13.9	17.1	7.93	3.39	1.39	36.1	5.44	10.9
1956	37.6	28.4	7.03	7.07	8.01	10.1	30.1	10.1	6.02	3.66	1.26	1.51	12.6
1957	1.55	4.58	8.19	6.31	6.27	6.93	12.9	4.81	1.44	.916	1.06	.910	4.63
1958	1.47	2.20	9.77	9.45	6.34	17.1	25.8	12.0	4.13	7.10	2.58	6.83	8.74
1959	10.6	9.99	6.50	6.05	6.17	16.4	15.7	5.04	3.37	4.40	2.37	4.32	7.58
1960	9.68	11.7	13.3	10.7	13.0	11.7	22.1	8.21	9.58	4.35	2.91	10.3	10.6

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.55	2.13	3.14	3.80	5.46	5.57	4.36	2.39	1.36	0.53	0.61	0.36	30.26
1952	.60	2.98	3.69	4.67	2.54	4.92	5.56	3.88	3.41	.81	2.10	1.18	36.54
1953	.60	2.11	3.16	4.84	3.51	8.76	6.23	3.55	.99	.73	.40	.25	35.13
1954	.50	.86	2.74	1.38	2.06	3.14	2.81	3.39	1.03	.47	.63	1.86	20.87
1955	.86	3.60	4.12	1.70	1.96	3.88	4.63	2.21	.92	.39	10.10	1.52	35.89
1956	10.53	7.69	1.97	1.98	2.09	2.82	8.16	2.82	1.63	1.01	.35	.41	41.46
1957	.43	1.18	2.29	1.76	1.58	1.94	3.49	1.37	.39	.26	.30	.25	15.24
1958	.41	.60	2.73	2.64	1.60	4.78	6.98	3.36	1.12	1.98	.72	1.85	28.77
1959	2.96	2.70	1.82	1.70	1.56	4.59	4.25	1.41	.91	1.23	.66	1.17	24.96
1960	2.71	3.17	3.72	3.00	3.41	5.27	5.98	2.29	2.60	1.22	.81	2.79	34.97

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	7.34	24.16
1951	1201	287	Mar. 31, 1951	0.93	9.19	2.23	30.26	9.62	31.71
1952	1231	191	June 1, 1952	.9	11.0	2.67	36.34	10.6	34.94
1953	1271	354	Jan. 24, 1953	.72	10.7	2.60	35.13	10.1	33.36
1954	1331	183	Sept. 11, 1954	.72	6.33	1.54	20.87	7.69	25.35
1955	1381	1,690	Aug. 19, 1955	.69	10.9	2.65	35.89	14.4	47.50
1956	1431	475	Oct. 16, 1955	.93	12.6	3.06	41.46	7.63	25.17
1957	1501	80	Jan. 23, 1957	.46	4.63	1.12	15.24	4.58	15.08
1958	1551	209	Apr. 6, 1958	.67	8.74	2.12	28.77	9.88	32.51
1959	1621	354	Mar. 6, 1959	.81	7.58	1.84	24.96	8.22	27.08
1960	1701	303	Sept. 12, 1960	1.13	10.6	2.57	34.97	-	-

1885. Whigville Reservoir at Whigville, Conn.

Location.--Lat 41°44'08", long 72°57'02", on Whigville Brook in Pequabuck River basin, at Whigville, Hartford County.

Drainage area.--3.95 sq mi.

Records available.--July 1928 to September 1960.

Remarks.--Reservoir completed in 1908 for storage of water for domestic water supply.
Total capacity, 64,750,000 gal.

Cooperation.--Records furnished by Board of Water Commissioners, New Britain.

Month-end contents, in millions of gallons

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	39.5	62.6	52.8	64.0	65.0	66.2	64.9	61.4	21.3	42.9	19.7	43.6
1952	46.6	51.9	65.0	65.1	60.6	65.0	65.2	66.5	46.1	30.5	42.5	28.7
1953	43.6	59.2	57.6	65.3	64.8	66.4	65.1	64.3	44.7	38.4	38.1	36.3
1954	47.3	48.8	55.8	59.1	50.6	64.8	64.9	62.0	34.5	44.1	38.2	30.9
1955	44.8	65.0	65.6	39.6	50.6	65.1	66.0	44.7	39.9	39.7	64.8	38.1
1956	66.6	65.0	47.6	48.0	64.2	64.9	65.9	64.0	47.6	37.0	29.2	28.0
1957	31.8	29.8	48.3	50.6	42.2	47.2	57.4	32.9	39.4	33.1	34.0	36.8
1958	41.8	35.8	64.3	65.2	58.9	66.6	65.7	63.2	34.5	43.5	43.9	53.0
1959	63.7	65.4	39.3	48.8	37.9	65.3	65.9	37.8	48.3	53.1	35.3	30.1
1960	65.1	65.2	64.9	61.6	65.2	67.8	64.9	61.6	62.2	58.0	38.7	52.8

1890. Pequabuck River at Forestville, Conn.

Location.--Lat 41°40'23", long 72°54'04", on left bank 700 ft upstream from station of New York, New Haven and Hartford Railroad at Forestville, Hartford County, a quarter of a mile downstream from Copper Mine and Brook, and 6½ miles upstream from mouth.

Drainage area.--45.2 sq mi.

Records available.--July 1941 to September 1960.

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.--19 years (1941-60), 88.4 cfs (adjusted for storage and diversion).

Extremes.--1941-59: Maximum discharge, 11,700 cfs Aug. 19, 1955 (gage height, 13.22 ft, from high-water mark in gage house), from rating curve extended above 2,100 cfs on basis of slope-area measurements at gage heights 7.3 and 13.22 ft; minimum, 6.5 cfs Sept. 21, 22, 1941 (gage height, 0.64 ft).

Flood of September 1938 reached a stage of about 7.3 ft, from floodmarks (discharge, 3,800 cfs, on basis of slope-area measurement of peak flow and computation of peak flow over dam.

Remarks.--Flow regulated by Whigville Reservoir (see p. 267) and mills above station.

Diversion for municipal water supply of city of New Britain from Copper Mine Brook. Effluent of sewage-disposal plant of city of Bristol was diverted into Quinnipiac River basin prior to Oct. 19, 1949. Runoff adjusted for change in contents in Whigville Reservoir (see p. 267), diversion for municipal water supply of city of New Britain from Copper Mine Brook, and diversion of effluent of sewage-disposal plant of city of Bristol.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	16.8	54.7	106	126	214	184	168	74.8	50.1	24.9	27.0	22.1	88.2
1952	30.0	98.5	107	153	108	177	205	128	144	42.6	62.7	44.0	108
1953	21.3	66.4	115	179	148	317	249	159	53.1	34.9	23.5	19.7	114
1954	27.5	41.2	82.5	58.4	60.9	98.2	95.8	97.5	41.9	26.9	43.0	72.7	60.5
1955	41.1	112	156	79.9	95.4	162	153	70.7	39.2	23.1	35.6	58.3	113
1956	372	303	67.5	68.0	98.1	112	254	97.2	72.6	44.7	23.2	26.0	128
1957	24.4	36.0	56.6	46.6	54.9	57.1	123	42.8	22.1	18.7	19.7	20.0	43.3
1958	21.2	24.5	70.1	104	82.6	175	199	120	49.2	62.0	36.4	49.3	84.4
1959	66.4	94.6	69.6	69.1	77.2	158	151	57.4	37.0	35.1	28.3	58.5	75.1
1960	76.0	118	143	120	155	122	199	67.6	54.0	42.9	32.2	105	104

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.63	1.57	2.93	3.47	5.13	4.90	4.34	2.10	1.36	0.71	0.79	0.73	28.66
1952	.92	2.62	2.93	4.10	2.77	4.72	5.21	3.47	3.73	1.19	1.78	1.20	34.64
1953	.75	1.83	3.14	4.77	3.57	6.29	6.35	3.72	1.47	1.06	.77	.60	36.32
1954	.84	1.20	2.31	1.19	1.57	2.73	2.57	2.68	1.19	.88	1.27	1.96	20.39
1955	1.23	2.99	4.18	2.20	2.37	4.39	3.97	1.97	1.15	.75	9.32	1.57	36.09
1956	9.70	7.68	1.89	1.92	2.56	3.06	6.47	2.68	1.95	1.34	.76	.81	40.82
1957	.78	1.05	1.65	1.38	1.42	1.64	3.26	1.26	.72	.62	.62	.59	14.99
1958	.66	.76	2.03	2.86	2.07	4.67	5.11	3.24	1.33	2.27	1.08	1.37	27.45
1959	2.55	2.62	1.90	1.92	1.94	4.23	3.90	1.70	1.14	1.12	.91	1.10	25.03
1960	2.16	3.11	3.63	3.24	3.89	3.32	5.09	2.42	1.52	1.31	1.02	2.79	33.70

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year					
		Observed			Adjusted			Observed		Adjusted			
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	Mean	Mean
		Discharge	Date										
1950	-	-	-	-	-	-	-	-	60.4	68.9	20.70	-	-
1951	1201	1,970	Feb. 7, 1951	11	88.2	95.5	2.11	28.66	93.0	100	30.00	100	30.00
1952	1231	1,170	June 1, 1952	14	108	115	2.54	34.64	105	112	33.89	112	33.89
1953	1271	2,340	Jan. 24, 1953	16	114	121	2.68	36.32	109	116	34.95	116	34.95
1954	1331	1,210	Aug. 3, 1954	16	60.5	67.9	1.50	20.39	73.7	81.3	24.44	81.3	24.44
1955	1381	11,700	Aug. 19, 1955	19	113	120	2.65	36.09	149	156	46.96	156	46.96
1956	1431	4,170	Oct. 16, 1955	21	128	135	2.99	40.82	75.7	83.0	25.03	83.0	25.03
1957	1501	614	Apr. 6, 1957	16	43.3	49.9	1.10	14.99	43.2	49.7	14.96	49.7	14.96
1958	1551	1,580	July 11, 1958	17	84.4	91.2	2.02	27.45	95.7	103	31.07	103	31.07
1959	1621	2,110	Mar. 6, 1959	21	75.1	83.3	1.84	25.03	82.4	90.1	27.06	90.1	27.06
1960	1701	2,260	Sept. 12, 1960	17	104	112	2.48	33.70	-	-	-	-	-

1895. Salmon Brook near Granby, Conn.

Location.--Lat 41°56'14", long 72°46'36", on left bank 50 ft upstream from New York, New Haven and Hartford Railroad bridge, 0.5 mile downstream from confluence of East Branch and West Branch, 1.2 miles southeast of Granby, Hartford County, and 1.9 miles upstream from mouth.

Drainage area.--66.8 sq mi (revised).

Records available.--July 1946 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 147.54 ft above mean sea level, datum of 1929.

Average discharge.--14 years (1946-60), 131 cfs.

Extremes.--1946-60: 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, about 5 cfs Aug. 18, 1957; minimum gage height, 1.42 ft Aug. 26, 1949.

Remarks.--Occasional regulation at low flow.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	26.6	79.5	146	174	319	312	291	110	67.2	43.5	42.3	33.1	136
1952	44.9	181	174	255	192	307	332	218	224	65.1	54.5	50.8	175
1953	31.7	84.0	154	216	240	496	458	231	68.5	50.2	34.5	21.4	173
1954	29.5	44.8	129	64.8	111	165	153	196	64.0	35.2	37.2	98.7	93.9
1955	48.8	154	230	114	122	242	281	124	63.4	31.0	1,003	107	212
1956	888	473	108	105	105	116	417	141	105	49.6	25.1	33.3	214
1957	32.0	56.5	86.7	88.9	86.7	104	161	61.9	30.9	14.2	11.5	13.8	62.1
1958	17.3	30.2	123	144	98.2	264	359	171	56.6	39.2	32.5	47.1	115
1959	68.5	83.4	88.5	117	89.0	249	264	86.5	71.8	50.4	50.0	20.9	102
1960	74.6	107	164	129	236	158	398	117	125	88.4	82.0	157	151

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.46	1.33	2.52	3.00	4.98	5.38	4.86	1.90	1.13	0.75	0.73	0.55	27.59
1952	.77	3.02	3.00	4.40	3.10	5.30	5.54	3.76	3.74	1.12	.94	.85	35.54
1953	.55	1.41	2.66	3.72	3.74	8.57	7.65	3.99	1.11	.87	.59	.36	35.22
1954	.51	.75	2.22	1.12	1.73	2.85	2.56	3.38	1.07	.61	.64	1.65	19.09
1955	.84	2.58	3.97	1.97	1.91	4.17	4.70	2.14	1.06	.53	17.29	1.78	42.94
1956	15.33	7.90	1.87	1.81	1.69	2.01	6.96	2.43	1.75	.86	.43	.56	43.60
1957	.55	.94	1.50	1.53	1.35	1.80	2.69	1.07	.52	.25	.20	.23	12.63
1958	.30	.50	2.12	2.49	1.53	4.55	5.99	2.95	.94	.68	.56	.79	23.40
1959	1.18	1.39	1.53	2.02	1.39	4.30	4.41	1.49	1.20	.87	.52	.35	20.65
1960	1.29	1.79	2.67	2.23	3.82	2.73	6.64	2.02	2.09	1.53	1.41	2.62	30.84

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	96.8	19.69
1951	1201	2,760	Mar. 31, 1951	18	136	2.04	27.59	148	30.07
1952	1231	2,350	June 1, 1952	19	175	2.62	35.54	164	33.37
1953	1271	2,430	Mar. 13, 1953	17	173	2.59	35.22	166	34.06
1954	1331	1,260	Sept. 11, 1954	15	35.9	1.41	19.09	113	23.00
1955	1381	40,000	Aug. 19, 1955	16	212	3.17	42.94	239	60.65
1956	1431	10,800	Oct. 16, 1955	22	214	3.20	43.60	105	21.49
1957	1501	780	Jan. 23, 1957	8	62.1	.930	12.63	61.8	12.56
1958	1551	2,070	Apr. 7, 1958	14	115	1.72	23.40	121	24.58
1959	1621	4,080	Mar. 6, 1959	14	102	1.53	20.65	110	22.30
1960	1701	3,180	Sept. 12, 1960	24	151	2.26	30.84	-	-

1900. Farmington River at Rainbow, Conn.

Location.--Lat 41°54'41", long 72°41'16", on left bank at Rainbow, Hartford County, 300 ft from Stevens Paper Mill, 0.4 mile downstream from Farmington River Power Co. dam, 1.3 miles upstream from Poquonock, 6.4 miles downstream from Salmon Brook, and 8 miles upstream from mouth.

Drainage area.--591 sq mi (revised).

Records available.--August 1928 to September 1960.

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 $5\frac{1}{2}$ miles upstream at datum 94.85 ft higher.

Average discharge.--32 years (1928-60), 1,089 cfs (adjusted to present site; adjusted for storage and diversion).

Extremes.--1928-60: 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.--Flow regulated by powerplant, by Otis, Barkhamsted, East Branch, Nepaug, and Whigville Reservoirs, by diversion for domestic water supply from Barkhamsted, Nepaug, and Whigville Reservoirs, and Whites Bridge pumping plant, and by sewage diversion from the city of Bristol. Flow affected by Hogback Reservoir, constructed by Water Bureau of Hartford Metropolitan District Commission during 1959 and 1960. Runoff adjusted for diversion and change in contents of Otis (see p. 251), Hogback (see p. 253), Barkhamsted (see p. 259), East Branch (see p. 259), Nepaug (see p. 265), and Whigville (see p. 267) Reservoirs and Whites Bridge pumping plant, and by sewage diversion from the city of Bristol through September 1930. Records of chemical analyses for the period October 1957 to September 1958 and of water temperatures October 1957 to September 1960 are published in reports of the Geological Survey.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	445	1,158	1,269	1,441	2,220	1,987	2,846	888	652	484	496	473	1,186
1952	698	1,576	1,436	2,015	1,784	2,011	2,792	1,874	1,899	511	591	610	1,479
1953	467	711	1,240	1,719	1,789	4,053	3,403	1,982	544	377	376	321	1,414
1954	475	579	1,200	598	929	1,355	1,250	1,359	503	302	387	1,042	829
1955	566	1,492	1,647	877	847	1,654	2,262	1,076	483	281	6,142	784	1,518
1956	4,887	4,280	1,517	1,056	1,010	1,338	3,790	1,865	907	509	304	385	1,802
1957	373	559	843	687	690	862	1,336	503	286	155	115	143	544
1958	267	361	1,203	1,094	794	1,682	3,212	1,709	553	440	351	543	1,026
1959	892	983	834	837	743	1,651	2,380	763	591	399	352	452	906
1960	863	1,322	1,615	1,152	1,503	888	3,340	913	1,274	514	765	941	1,251

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.46	2.35	3.01	3.11	4.49	4.40	5.57	1.82	1.28	0.94	0.78	0.60	28.81
1952	1.21	3.58	3.17	4.21	2.90	4.44	5.85	3.83	3.59	.92	1.02	.97	35.69
1953	.57	1.28	2.63	3.80	3.80	8.52	6.54	3.99	.94	.68	.47	.27	33.49
1954	.61	.94	2.63	1.21	2.02	3.31	2.91	3.16	.95	.52	.51	2.24	21.01
1955	.95	3.29	3.71	1.82	1.62	3.69	4.54	2.18	.86	.43	12.57	1.44	37.10
1956	9.79	8.02	†1.98	2.06	1.93	2.63	7.96	3.64	1.55	.91	.40	.62	41.49
1957	.59	1.19	2.01	1.66	1.49	2.03	3.12	1.14	.45	.28	.23	.21	14.40
1958	.33	.61	2.85	2.58	1.58	3.92	7.30	3.47	1.07	.92	.65	1.08	26.36
1959	1.85	2.11	1.71	1.75	1.41	3.74	4.74	1.59	1.11	.84	.48	.56	21.87
1960	1.72	2.64	3.44	2.52	3.28	2.01	7.49	1.95	1.85	1.11	1.45	2.48	51.94

† Corrected.

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed	Adjusted	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	-	-	-
1951	1201	9,900	Apr. 1, 1951	15	1,186	1,258	2.13	28.81	874	968	22.15
1952	1231	10,300	June 3, 1952	39	1,479	1,551	2.62	35.68	1,257	1,347	30.95
1953	1271	9,680	Mar. 27, 1953	72	1,414	1,459	2.47	33.49	1,400	1,444	35.19
1954	1331	5,050	Sept. 12, 1954	102	829	915	1.55	21.01	950	1,080	24.78
1955	1381	69,200	Aug. 19, 1955	150	1,518	1,616	2.73	37.10	2,086	2,132	48.94
1956	1431	34,700	Oct. 16, 1955	124	1,802	1,799	3.04	41.49	1,075	1,105	25.49
1957	1501	4,500	Apr. 7, 1957	24	544	626	1.06	14.40	549	626	14.40
1958	1551	6,410	Apr. 8, 1958	56	1,026	1,148	1.94	26.36	1,099	1,229	28.22
1959	1621	7,580	Apr. 4, 1959	77	906	951	1.61	21.87	997	1,045	24.02
1960	1701	10,700	Apr. 6, 1960	77	1,251	1,386	2.34	31.94	-	-	-

1901. Piper Brook at Newington Junction, Conn.

Location--Lat 41°42'43", long 72°44'15", on right bank just upstream from Willard Avenue Bridge at Newington Junction, 0.6 mile south of Hartford-Newington town line, 1½ miles northwest of Newington, Hartford County, 0.6 mile upstream from Mill Brook, and 1.4 miles upstream from mouth.

Drainage area--14.4 sq mi.

Records available--May 1958 to September 1960.

Gage--Water-stage recorder. Datum of gage is 58.00 ft above mean sea level, datum of 1929.

Extremes--1958-60: Maximum discharge, 935 cfs Sept. 12, 1960 (gage height, 8.40 ft); minimum, less than 0.1 cfs Oct. 5, 1960 (gage height, 1.11 ft).

Remarks--Occasional regulation at low flow from unknown source upstream.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	32.7	13.9	26.2	12.4	16.2	-
1959	40.7	39.4	12.5	18.5	26.9	45.6	41.8	11.8	12.7	11.8	11.7	11.5	23.7
1960	35.8	38.7	34.6	24.5	50.9	34.0	38.8	13.8	10.2	16.7	9.52	34.6	28.4

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	2.62	1.08	2.10	0.99	1.25	-
1959	3.26	3.06	1.00	1.48	1.95	3.66	3.24	.94	.98	.94	.94	.89	22.34
1960	2.87	3.00	2.77	1.96	3.81	2.72	3.01	1.11	.79	1.34	.76	2.68	26.82

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1958	1551,1621	-	-	-	-	-	-	-	-
1959	1621	632	Mar. 6, 1959	0.3	23.7	1.65	22.34	25.1	23.66
1960	1701	935	Sept. 12, 1960	.1	28.4	1.97	26.82	-	-

1902. Mill Brook at Newington, Conn.

Location.--Lat 41°42'16", long 72°43'34", on left bank just upstream from culvert under Dowd Street, half a mile north of Newington, Hartford County, and 1.2 miles upstream from mouth.

Drainage area.--4.51 sq mi.

Records available.--April 1958 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 47.58 ft above mean sea level, datum of 1929.

Extremes.--1958-60: Maximum discharge, 460 cfs Sept. 12, 1960 (gage height, 6.70 ft), from rating curve extended above 180 cfs by logarithmic plotting; minimum, 0.8 cfs Sept. 19 to Oct. 6, 1959; minimum gage height, 0.74 ft July 9, 1960.
Flood of Aug. 19, 1955, reached a stage of 6.5 ft, from floodmarks, reported by Greater Hartford Flood Commission (discharge, 420 cfs).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	5.15	1.76	4.41	2.45	3.13	-
1959	5.58	6.72	3.03	4.35	4.15	8.85	6.43	2.31	2.56	2.18	2.46	2.19	4.23
1960	8.22	5.79	5.37	5.55	8.60	4.56	5.23	2.56	2.09	3.28	2.17	9.29	5.20

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	1.31	0.44	1.13	0.63	0.77	-
1959	1.43	1.66	0.77	1.11	0.96	2.26	1.60	.59	.63	.56	.83	.54	12.74
1960	2.10	1.43	1.37	1.42	2.06	1.17	1.29	.65	.52	.84	.56	2.30	15.71

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1958	1551	-	-	-	-	-	-	-	-
1959	1621	220	Mar. 6, 1959	0.8	4.23	0.938	12.74	4.58	13.78
1960	1701	460	Sept. 12, 1960	.8	5.20	1.15	15.71	-	-

1903. Trout Brook at West Hartford, Conn.

Location.--Lat 41°46'13", long 72°44'15", on left bank 250 ft upstream from Fern Street Bridge, three-quarters of a mile northeast of West Hartford, Hartford County.

Drainage area.--14.7 sq mi.

Records available.--May 1958 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 78.39 ft above mean sea level, datum of 1929.

Extremes.--1958-60: Maximum discharge, 1,020 cfs Sept. 12, 1960 (gage height, 6.90 ft), from rating curve extended above 440 cfs by logarithmic plotting; minimum, 2.1 cfs May 31, 1959 (gage height, 1.08 ft); minimum daily, 3.8 cfs Sept. 25, 1959. Flood of Aug. 19, 1955, reached a stage of 12.2 ft, from floodmarks, reported by Greater Hartford Flood Commission.

Remarks.--Some regulation by dams upstream and by storage and diversion at Hartford water-supply reservoirs on headwater streams.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	36.3	11.5	24.2	12.3	22.6	-
1959	29.8	35.3	23.6	24.2	20.9	62.2	55.5	30.4	13.5	15.7	91.8	7.50	27.4
1960	26.7	31.7	49.9	43.4	66.9	34.0	64.4	19.9	24.6	18.3	14.5	45.1	36.4

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	2.85	0.87	1.90	0.98	1.72	-
1959	2.34	2.68	1.86	1.90	1.48	4.88	4.22	2.39	1.02	1.23	.72	.57	25.29
1960	2.10	2.41	3.91	3.40	4.91	2.66	4.89	1.56	1.86	1.43	1.14	3.42	33.69

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1958	1551	-	-	-	-	-	-	-	-
1959	1621	675	Mar. 6, 1959	3.8	27.4	1.86	25.29	29.0	26.83
1960	1701	1,020	Sept. 12, 1960	4.8	36.4	2.48	33.69	-	-

1905. South Branch Park River at Hartford, Conn.

Location.--Lat 41°44'02", long 72°42'51", on left bank at upstream side of bridge on Newfield Avenue in Hartford, Hartford County, 0.7 mile downstream from confluence of Trout Brook and Piper Brook and 3.3 miles upstream from confluence with North Branch.

Drainage area.--40.6 sq mi.

Records available.--October 1936 to September 1960.

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.--24 years (1936-60), 73.4 cfs.

Extremes.--1936-60: Maximum discharge, 5,000 cfs Aug. 19, 1955, from rating curve extended above 800 cfs on basis of records for North Branch Park River and Park River at Hartford; maximum gage height, 19.65 ft Aug. 19, 1955, from floodmarks; minimum daily discharge, 7 cfs Sept. 2, 1957.

Flood of Mar. 12, 1936, reached a stage of 12.1 ft, as determined by Hartford city engineers, from floodmarks.

Remarks.--Some regulation by dams upstream and by storage and diversion at Hartford water-supply reservoirs on headwater streams.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	24.3	61.4	79.0	95.7	199	149	122	49.8	36.0	22.8	28.3	29.5	73.9
1952	41.9	116	112	154	105	149	145	97.7	114	44.9	58.1	38.4	97.9
1953	21.4	57.3	84.1	180	114	263	196	110	44.4	50.0	37.1	30.8	97.3
1954	42.7	48.6	104	58.5	63.2	79.9	74.0	90.4	35.8	35.3	54.3	107	66.1
1955	51.9	97.3	134	61.5	78.8	156	105	49.3	31.9	20.2	282	64.0	94.7
1956	236	184	51.6	55.6	88.2	104	156	57.6	59.5	41.8	19.5	27.4	89.9
1957	32.5	50.4	78.6	50.6	63.8	57.6	116	29.0	25.0	19.0	17.5	13.1	45.8
1958	35.0	39.9	98.5	133	79.3	131	146	96.0	35.9	75.4	35.8	57.6	80.4
1959	98.7	102	56.1	70.0	76.1	187	132	41.6	40.4	39.1	30.3	30.5	73.7
1960	102	98.3	115	98.8	172	86.7	129	45.5	44.8	58.0	36.4	142	93.5

Monthly and yearly runoff, in inches, of South Branch Park River at Hartford, Conn.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.69	1.68	2.25	2.72	5.10	4.23	3.35	1.42	0.99	0.65	0.80	0.81	24.69
1952	1.19	3.19	3.18	4.37	2.74	4.23	3.98	2.78	3.14	1.28	1.65	1.06	32.79
1953	.61	1.57	2.39	4.54	2.93	7.47	5.39	3.12	1.22	1.42	1.05	.85	32.56
1954	1.21	1.34	2.95	1.66	1.62	2.27	2.03	2.57	.98	1.00	1.54	2.94	22.11
1955	1.48	2.68	3.80	1.74	2.02	4.43	2.89	1.40	.88	.57	8.01	1.78	31.66
1956	6.70	5.05	1.46	1.58	2.34	2.95	4.28	1.64	1.64	1.19	.55	.75	30.13
1957	.92	1.58	2.24	1.44	1.64	1.64	3.19	.82	.69	.54	.50	.36	15.36
1958	.99	1.10	2.80	3.78	2.03	3.72	4.02	2.72	.99	2.14	1.02	1.58	26.89
1959	2.80	2.60	1.59	1.98	1.95	4.74	3.63	1.18	1.11	1.11	.86	.84	24.59
1960	2.89	2.70	3.25	2.81	4.58	2.46	3.54	1.29	1.23	1.65	1.03	3.91	31.34

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	59.6	19.93
1951	1201	1,600	Mar. 31, 1951	14	73.9	1.82	24.69	62.7	27.63
1952	1231	1,380	June 1, 1952	21	97.9	2.41	32.79	89.0	29.80
1953	1271	2,290	Jan. 24, 1953	14	97.3	2.40	32.56	100	33.49
1954	1331	1,490	Sept. 11, 1954	15	66.1	1.63	22.11	73.5	24.57
1955	1381,1431	5,000	Aug. 19, 1955	14	94.7	2.33	31.66	110	36.91
1956	1431	2,800	Oct. 16, 1955	13	89.9	2.21	30.13	64.1	21.46
1957	1501	678	Apr. 6, 1957	7	45.8	1.13	15.36	46.9	15.71
1958	1551	840	Apr. 6, 1958	13	80.4	1.98	26.89	87.3	29.19
1959	1621	1,790	Mar. 6, 1959	16	73.7	1.82	24.59	78.5	26.24
1960	1701	2,720	Sept. 12, 1960	17	93.5	2.30	31.34	-	-

1906. Wash Brook at Bloomfield, Conn.

Location--Lat 41°49'31", long 72°44'23", on right bank just upstream from bridge on Gabb Road, 0.4 mile south of Bloomfield, Hartford County.

Drainage area--5.66 sq mi.

Records available--April 1958 to September 1960.

Gage--Water-stage recorder. Datum of gage is 103.66 ft above mean sea level, datum of 1929.

Extremes--1958-60: Maximum discharge, 465 cfs June 4, 1960 (gage height, 5.44 ft), from rating curve extended above 230 cfs by logarithmic plotting; minimum, 0.04 cfs Aug. 28, 1959; minimum gage height, 0.35 ft Sept. 5-7, 1958, Aug. 28, 29, 1959.
Flood of Aug. 19, 1955, reached a stage of 11.7 ft, from floodmarks, reported by Greater Hartford Flood Commission.

Remarks--Infrequent regulation at low flow.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	8.91	2.70	1.92	0.744	5.17	-
1959	6.59	8.26	5.42	11.3	6.98	18.9	15.0	3.39	2.63	2.15	1.58	.952	6.93
1960	8.85	10.1	12.6	10.4	23.4	10.4	16.9	5.11	13.7	5.28	3.29	13.6	11.0

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	1.81	0.53	0.39	0.15	1.02	-
1959	1.34	1.63	1.10	2.31	1.28	3.85	2.96	.69	.52	.44	.32	.19	16.63
1960	1.80	1.99	2.57	2.12	4.48	2.12	3.34	1.04	2.70	1.08	.67	2.68	26.59

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1958	1551,1701	-	-	-	-	-	-	-	-
1959	1621,1701	308	Mar. 6, 1959	0.05	6.93	1.22	16.63	7.88	16.92
1960	1701	465	June 4, 1960	.30	11.0	1.94	26.59	-	-

1910. North Branch Park River at Hartford, Conn.

Location.--Lat 41°47'03", long 73°42'31", on right bank 60 ft downstream from stone-arch bridge on Albany Avenue, Hartford, Hartford County, and 3 miles upstream from confluence with South Branch.

Drainage area.--25.3 sq mi.

Records available.--October 1936 to September 1960.

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.--24 years (1936-60), 38.6 cfs.

Extremes.--1936-60: Maximum discharge, 10,000 cfs Aug. 19, 1955, from rating curve extended above 1,600 cfs on basis of slope-area measurement of peak flow 2.6 miles upstream; maximum gage height, 18.8 ft Aug. 19, 1955, from 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.--Some regulation at small dams upstream and by storage and diversion at a Hartford water-supply reservoir on headwater stream.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	3.67	26.5	41.3	57.5	140	103	68.2	20.2	14.3	3.82	5.22	3.79	39.9
1952	12.4	78.0	67.0	107	46.3	104	94.5	44.8	50.3	8.53	19.5	10.0	53.5
1953	5.06	33.3	58.4	97.3	68.4	177	121	56.8	7.87	6.72	3.80	2.51	53.1
1954	8.67	15.4	48.9	18.4	39.8	50.1	44.2	49.6	8.52	3.16	7.66	40.9	27.9
1955	9.03	45.9	75.1	23.4	41.3	89.0	66.4	31.1	8.16	3.60	342	15.0	63.0
1956	231	132	19.4	27.7	66.9	77.0	120	20.2	18.4	11.3	3.49	5.97	61.0
1957	6.44	19.1	53.7	18.8	35.9	38.8	67.3	11.5	5.33	5.96	3.52	4.21	22.4
1958	3.92	8.85	52.5	71.5	25.6	83.5	92.8	45.7	10.1	14.2	8.10	30.4	37.4
1959	30.9	44.0	23.2	50.8	38.1	90.0	72.8	15.5	14.3	12.8	8.80	7.47	34.0
1960	51.3	49.3	62.0	54.0	110	41.6	83.2	16.8	54.4	25.2	14.2	72.7	52.4

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.17	1.17	1.88	2.62	5.76	4.69	3.01	0.92	0.63	0.17	0.24	0.17	21.43
1952	.56	3.44	3.06	4.86	1.97	4.74	4.17	2.04	2.22	.39	.89	.44	28.80
1953	.23	1.47	2.66	4.44	2.81	8.07	5.33	2.59	.35	.31	.17	.11	28.54
1954	.40	.68	2.22	.84	1.64	2.28	1.95	2.26	.38	.14	.35	1.81	14.95
1955	.41	2.02	3.42	1.07	1.70	4.06	2.92	1.42	.56	.16	15.56	.66	33.76
1956	10.53	5.82	.88	1.26	2.85	3.50	5.29	.92	.81	.52	.16	.26	32.80
1957	.29	.84	2.44	.86	1.48	1.76	2.97	.52	.24	.27	.16	.19	12.02
1958	.18	.39	2.40	3.26	1.05	3.80	4.10	2.09	.45	.85	.37	1.34	20.08
1959	1.41	1.94	1.06	2.32	1.57	4.10	3.21	.71	.62	.58	.40	.33	18.25
1960	2.34	2.17	2.83	2.46	4.68	1.90	3.67	.77	2.40	1.15	.65	3.21	28.23

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	26.0	13.97
1951	1201	1,750	May 31, 1951	1.3	39.9	1.58	21.43	47.1	25.27
1952	1231	1,260	Mar. 11, 1952	2.0	53.5	2.11	28.80	48.5	26.10
1953	1271	1,640	Jan. 24, 1953	1.3	53.1	2.10	28.54	51.2	27.48
1954	1331	872	Sept. 11, 1954	1.1	27.9	1.10	14.95	32.6	17.50
1955	1381	10,000	Aug. 19, 1955	.75	63.0	2.49	33.76	84.1	45.14
1956	1431, 1501	3,680	Oct. 16, 1955	2.2	61.0	2.41	32.80	35.6	19.14
1957	1501	660	Apr. 6, 1957	.95	22.4	.885	12.02	21.3	11.42
1958	1551	815	Apr. 6, 1958	1.0	37.4	1.48	20.08	40.1	21.52
1959	1621	1,320	Mar. 6, 1959	2.3	34.0	1.34	18.25	39.5	21.18
1960	1701	1,850	Sept. 12, 1960	1.0	52.4	2.07	28.23	-	-

1915. Park River at Hartford, Conn.

Location.--Lat 41°45'36", long 72°41'42", on left bank at downstream side of the 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 1960.

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.--24 years (1936-60), 123 cfs.

Extremes.--1936-60: Maximum discharge, 14,000 cfs Aug. 19, 1955 (gage height, 16.36 ft, from floodmark in gage house), from rating curve extended above 3,600 cfs on basis of slope-area measurement of peak flow; minimum, about 4 cfs Sept. 23, 1937; minimum gage height, 1.58 ft July 23, Aug. 15, 1943, result of temporary diversions upstream; minimum daily discharge, 11 cfs Oct. 6, 1941, Aug. 18, 1957.

Flood of Mar. 12, 1936, reached a stage of 9.0 ft, as determined from floodmarks by city engineers of Hartford (discharge, 5,400 cfs). A stage of 10.7 ft, from floodmarks, was caused by backwater from Connecticut River on Mar. 21, 1936.

Remarks.--Some regulation by dams upstream and by storage and diversion at Hartford water-supply reservoirs on small headwater streams.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	32.5	98.8	128	166	366	275	231	82.7	60.0	30.3	39.0	39.1	127
1952	60.1	215	192	283	162	290	280	162	179	59.5	86.5	53.5	168
1953	29.7	95.2	153	256	203	484	361	190	58.6	66.8	45.7	36.8	165
1954	80.1	73.1	175	81.5	110	146	126	153	49.1	43.5	66.5	157	103
1955	64.3	158	224	94.1	128	263	183	87.1	44.0	28.3	648	92.3	169
1956	500	327	80.0	92.8	170	203	300	85.2	83.4	60.7	26.7	39.6	164
1957	44.1	94.3	158	81.6	111	113	186	46.4	35.4	29.7	23.7	20.4	78.1
1958	44.3	56.4	168	229	112	240	257	157	51.3	99.1	49.1	98.7	130
1959	148	162	92.7	117	121	265	222	65.7	65.4	62.8	48.5	47.3	118
1960	171	171	199	163	310	137	238	73.8	103	91.7	55.6	206	159

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.51	1.50	1.99	2.58	5.16	4.29	3.48	1.29	0.90	0.47	0.61	0.59	23.37
1952	.94	3.25	2.99	4.40	2.36	4.52	4.22	2.52	2.70	.93	1.35	.81	30.99
1953	.46	1.44	2.39	4.02	2.85	7.54	5.44	2.96	.88	1.04	.71	.55	30.28
1954	.94	1.10	2.72	1.27	1.55	2.27	1.90	2.39	.74	.68	1.04	2.36	18.96
1955	1.00	2.39	3.49	1.46	1.80	4.09	2.76	1.36	.66	.41	10.10	1.40	30.92
1956	7.79	4.93	1.24	1.44	2.48	3.16	4.52	1.33	1.26	.95	.42	.60	30.12
1957	.69	1.27	2.43	1.27	1.56	1.76	2.96	.72	.53	.46	.37	.31	14.33
1958	.69	.85	2.62	3.56	1.57	3.74	3.87	2.44	.77	1.54	.77	1.46	23.90
1959	2.31	2.44	1.44	1.82	1.71	4.13	3.35	1.02	.99	.98	.76	.71	21.66
1960	2.67	2.58	3.09	2.54	4.52	2.13	3.58	1.15	1.55	1.43	.67	3.11	29.22

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	94.3	17.29
1951	1201	2,080	Mar. 31, 1951	17	127	1.72	23.37	145	26.55
1952	1231	2,160	Mar. 11, 1952	25	168	2.27	30.99	153	28.10
1953	1271	2,990	Jan. 25, 1953	19	165	2.23	30.28	168	30.75
1954	1331	1,980	Sept. 11, 1954	19	103	1.39	18.96	115	21.08
1955	1381, 1431	16,200	Aug. 19, 1955	16	169	2.28	30.92	207	38.05
1956	1431	6,420	Oct. 16, 1955	18	164	2.22	30.12	112	20.55
1957	1501	1,170	Apr. 6, 1957	11	78.1	1.06	14.33	76.9	14.10
1958	1551	1,460	Apr. 7, 1958	18	130	1.76	23.90	142	25.93
1959	1621	2,530	Mar. 6, 1959	21	118	1.59	21.66	150	23.81
1960	1701	3,630	Sept. 13, 1960	23	159	2.15	29.22	-	-

1920. Shenipsit Lake at Rockville, Conn.

Location.--Lat 41°52'06", long 72°25'59", on Hockanum River three-quarters of a mile east of Rockville, Tolland County.

Drainage area.--16.5 sq mi.

Records available.--September 1919 to September 1921, July 1928 to September 1960.

Remarks.--Dam raised to present 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.

Cooperation.--Stage records furnished by Rockville Water & Aqueduct Co. Capacities based on lake survey by Connecticut State Board of Fisheries and Game.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	547.8	572.1	618.8	668.8	710.5	754.1	730.7	723.9	685.0	633.9	633.9	586.2
1952	561.6	646.2	669.8	693.4	645.3	721.6	743.2	734.0	702.0	646.2	621.8	587.1
1953	548.8	547.8	598.7	688.1	684.7	754.1	728.4	717.1	670.8	629.2	576.5	537.6
1954	550.4	580.0	644.3	643.3	685.7	717.1	732.9	732.9	894.4	741.4	614.2	625.4
1955	600.6	655.0	670.8	639.5	655.0	732.9	742.0	717.1	676.9	624.4	678.9	618.8
1956	692.3	631.0	614.2	617.0	655.0	677.9	737.5	722.8	696.8	659.8	598.7	557.2
1957	525.0	563.4	622.6	649.2	671.8	712.7	728.4	699.8	652.0	588.0	566.8	558.1
1958	554.6	561.6	627.2	883.0	671.8	720.4	740.8	732.9	711.6	678.9	644.3	640.4
1959	643.3	682.0	649.2	655.0	688.8	731.8	723.9	711.6	707.3	682.5	646.2	625.4
1960	654.0	709.4	685.0	669.8	695.5	721.8	729.6	727.2	710.5	703.0	675.9	668.8

1925. Hockanum River near East Hartford, Conn.

Location.--Lat 41°46'59", long 72°35'16", on left bank 700 ft downstream from dam at Case Bros., Inc., papermill, $\frac{1}{2}$ miles downstream from Hop Brook, and $2\frac{1}{4}$ miles east of East Hartford, Hartford County.

Drainage area.--74.5 sq mi.

Records available.--September 1919 to September 1921, July 1928 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 54.5 ft above mean sea level, datum of 1929 (levels by Department of Engineering, city of Hartford).

Average discharge.--34 years (1919-21, 1928-60), 118 cfs (adjusted for storage).

Extremes.--1919-21, 1928-60: Maximum discharge, 5,160 cfs Sept. 21, 1933 (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.--Flow regulated by Shenipsit Lake and other small reservoirs and industrial plants upstream. Runoff adjusted for change in contents in Shenipsit Lake (see p.277).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	52.7	82.3	114	153	288	222	275	125	86.1	58.0	81.7	53.7	131
1952	68.2	131	165	206	196	219	207	166	135	71.6	101	63.3	144
1953	51.3	65.9	150	189	215	326	418	224	88.5	83.1	57.9	44.6	157
1954	43.5	56.5	118	87.5	98.6	132	148	156	78.7	56.9	78.6	161	101
1955	82.6	146	202	139	128	191	203	141	68.2	65.9	289	137	151
1956	284	381	126	118	168	204	289	151	123	90.1	50.4	59.7	170
1957	56.6	61.3	118	104	111	118	186	77.3	53.2	50.5	34.8	27.0	82.9
1958	31.7	49.0	96.2	178	134	202	236	220	83.4	81.3	69.2	89.5	122
1959	91.7	119	132	122	124	216	242	107	92.6	92.5	70.6	55.6	122
1960	86.8	134	182	167	239	157	273	117	108	84.2	74.4	122	145

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.59	1.37	2.03	2.66	4.26	3.68	3.98	1.89	1.06	0.60	1.27	0.53	23.92
1952	.91	2.46	2.70	3.33	2.57	3.84	3.22	2.52	1.84	.79	1.42	.75	26.35
1953	.57	.98	2.31	3.44	2.86	5.56	6.11	3.40	1.05	1.05	1.59	.44	28.56
1954	1.75	1.02	2.20	1.35	1.51	2.34	2.31	2.41	.96	.57	1.03	2.47	18.95
1955	1.13	2.53	3.22	1.96	1.87	3.40	3.09	2.04	1.09	.72	4.79	1.71	27.54
1956	4.81	5.34	1.86	1.84	2.65	3.29	4.66	2.26	1.70	1.19	.43	.65	30.68
1957	.69	1.14	2.17	1.76	1.68	2.06	2.88	1.03	.52	.41	.42	.35	15.11
1958	.47	.77	1.87	3.08	1.80	3.40	3.66	3.36	1.13	1.06	.83	1.32	22.80
1959	1.44	2.01	1.86	1.91	1.81	3.71	3.58	1.58	1.36	1.35	.83	.71	22.15
1960	1.54	2.32	2.68	2.49	3.60	2.58	4.13	1.80	1.53	1.26	.93	1.78	26.70

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30										Calendar year		
		Observed					Adjusted					Observed		Adjusted
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Mean	Mean	Mean	Runoff in inches
		Discharge	Date											
1950	-	-	-	-	-	-	-	-	-	-	30.0	-	-	17.07
1951	1201	1,000	Feb. 8, 1951	25	131	131	1.76	23.92	141	143	26.00	-	-	26.00
1952	1231	940	Mar. 12, 1952	25	144	144	1.93	26.35	134	132	24.14	-	-	24.14
1953	1271	1,150	Jan. 24, 1953	19	157	155	2.08	28.36	155	156	28.47	-	-	28.47
1954	1351	1,150	Sept. 11, 1954	21	101	104	1.40	18.95	119	120	21.86	-	-	21.86
1955	1361	2,740	Aug. 19, 1955	29	151	151	2.03	27.54	181	179	32.67	-	-	32.67
1956	1431	1,520	Oct. 16, 1955	20	170	168	2.26	30.68	124	124	22.67	-	-	22.67
1957	1501	455	Apr. 9, 1957	21	82.9	82.9	1.11	15.11	77.9	78.0	14.22	-	-	14.22
1958	1551	562	Feb. 28, 1958	23	122	125	1.68	22.60	136	137	25.00	-	-	25.00
1959	1621	1,270	Mar. 6, 1959	35	122	122	1.64	22.15	127	128	23.38	-	-	23.38
1960	1701	1,240	Sept. 12, 1960	37	145	146	1.96	26.70	-	-	-	-	-	-

1935. Salmon River near East Hampton, Conn.

Location.--Lat 41°33'11", long 72°26'57", on right bank at Old Comstock Bridge, a short distance downstream from New London-Middlesex County line, 0.6 mile downstream from Dickinson Creek and 3½ miles southeast of East Hampton, Middlesex County.

Drainage area.--105 sq mi.

Records available.--July 1928 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 69.50 ft above mean sea level, datum of 1929.

Average discharge.--32 years (1928-60), 182 cfs.

Extremes.--1928-60: 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.--Slight regulation at low flow by mills upstream.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	27.2	123	204	271	535	396	419	187	84.0	27.0	18.1	14.9	190
1952	37.8	246	330	397	299	454	344	243	155	44.1	121	46.5	226
1953	30.5	79.9	180	409	378	671	567	275	44.9	28.6	13.2	6.16	223
1954	24.5	83.8	260	151	182	280	349	251	53.7	26.4	59.1	332	171
1955	92.4	320	432	202	230	379	288	180	74.1	20.2	357	101	223
1956	734	551	144	175	325	392	469	241	153	77.9	16.7	35.6	276
1957	50.4	91.3	216	182	200	224	324	83.3	22.4	8.41	7.50	7.79	118
1958	13.8	54.1	281	496	203	403	435	340	93.3	106	86.8	84.1	217
1959	187	231	187	208	207	414	402	144	87.8	109	29.6	36.8	187
1960	136	264	360	321	399	262	383	160	56.8	59.4	34.6	127	212

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.80	1.30	2.24	2.97	5.31	4.35	4.45	2.05	0.89	0.30	0.20	0.16	24.52
1952	.42	2.61	3.62	4.36	3.07	4.98	3.66	2.66	1.65	.48	1.33	.49	29.33
1953	.33	.85	1.97	4.50	3.75	7.37	6.02	3.02	.48	.31	.15	.07	28.82
1954	.27	.89	2.86	1.66	1.80	3.08	3.70	2.76	.57	.29	.65	3.53	22.06
1955	1.01	3.40	4.74	2.21	2.28	4.16	3.06	1.97	.79	.22	3.92	1.07	28.83
1956	8.06	5.86	1.58	1.92	3.34	4.30	4.99	2.65	1.63	.86	.18	.38	35.75
1957	.55	.97	2.38	1.99	1.98	2.46	3.45	.91	.24	.09	.08	.08	15.18
1958	.15	.57	3.09	5.44	2.01	4.43	4.62	3.74	.99	1.16	.95	.89	28.04
1959	2.05	2.48	2.05	2.28	2.05	4.54	4.27	1.58	.93	1.20	.32	.39	24.12
1960	1.49	2.81	3.95	3.52	4.10	2.87	4.07	1.75	.60	.65	.38	1.35	27.54

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	134	17.35
1951	1201	3,080	Feb. 7, 1951	9	190	1.81	24.52	211	27.33
1952	1231	4,390	Mar. 11, 1952	12	226	2.15	29.33	199	25.83
1953	1271	2,860	Jan. 24, 1953	4.2	223	2.12	28.82	229	29.69
1954	1331	6,030	Sept. 11, 1954	5.0	171	1.63	22.06	210	27.19
1955	1381	4,870	Aug. 19, 1955	7.2	223	2.12	28.83	272	35.18
1956	1431	9,130	Oct. 16, 1955	9	276	2.63	35.75	186	24.15
1957	1501	1,540	Apr. 6, 1957	2.9	118	1.12	15.18	117	15.09
1958	1551	1,810	Jan. 22, 1958	5.3	217	2.07	28.04	238	30.79
1959	1621	3,560	Mar. 6, 1959	9	187	1.78	24.12	200	25.81
1960	1701	2,520	Jan. 3, 1960	6.4	212	2.02	27.54	-	-

1940. Eightmile River at North Plain, Conn.

Location.--Lat 41°26'30", long 72°20'00" at center of span on downstream side of bridge on State Highway 82 at North Plain, Middlesex County, 500 ft downstream from Strongs Brook, 0.8 mile upstream from confluence with East Branch, and 6 miles upstream from mouth.

Drainage area.--18.6 sq mi.

Records available.--September 1937 to September 1960. 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 gage; 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.--23 years (1937-60), 40.4 cfs (adjusted to present site).

Extremes.--1937-60: Maximum discharge, 2,350 cfs Oct. 15, 1955 (gage height, 7.72 ft), from rating curve extended above 1,200 cfs on basis of computation of peak flow through highway bridge and over road; minimum observed, 0.05 cfs Sept. 12, 1944 (gage height, 1.60 ft).

Revisions.--The momentary maximum discharges for some water years have been revised as shown in following table. They supersede figures published in water-supply papers indicated.

	WSP	Water year	Date	Discharge (cfs)
	891,1301	1940	Mar. 15, 1940	830
	921,1301	1941	Feb. 8, 1941	720
	971,1301	1943	Dec. 30, 1942	1,160
	1111,1141,1301	1948	Nov. 12, 1947	650

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	4.35	20.1	37.9	57.8	109	86.4	94.2	42.5	19.0	6.38	5.90	2.71	40.0
1952	5.07	54.0	74.8	91.3	66.2	91.5	66.8	56.1	33.6	8.62	49.0	15.3	51.0
1953	10.4	20.0	44.2	96.0	90.1	179	110	52.8	7.90	4.00	2.59	.893	51.3
1954	3.86	22.3	72.2	32.1	40.0	66.3	82.5	53.5	9.17	3.49	12.0	65.0	38.4
1955	17.6	87.2	106	47.6	62.1	86.1	57.3	27.3	13.7	4.02	62.4	29.7	50.1
1956	200	117	28.3	33.4	71.9	69.0	79.8	42.0	29.1	20.9	3.35	5.71	58.3
1957	10.3	20.3	52.0	48.8	43.6	45.4	72.9	19.5	4.19	1.39	1.60	1.67	26.7
1958	3.44	12.7	65.9	126	47.0	98.2	93.9	68.8	18.0	17.3	15.0	17.7	47.8
1959	55.2	46.5	43.5	36.0	46.7	83.1	85.1	31.9	18.9	22.1	5.19	5.00	39.9
1960	16.7	45.7	92.6	62.5	84.6	55.7	86.5	33.1	9.76	9.34	5.29	19.3	43.2

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.27	1.20	2.35	3.58	6.10	5.36	5.64	2.63	1.14	0.40	0.37	0.16	29.20
1952	.32	3.24	4.64	5.66	3.84	5.67	4.00	3.48	2.02	.53	3.03	.92	37.35
1953	.64	1.20	2.74	5.95	5.04	11.09	6.59	3.27	.47	.25	.16	.05	37.45
1954	.24	1.34	4.47	1.99	2.24	4.10	4.95	3.32	.55	.22	.74	3.89	28.05
1955	1.09	5.23	6.57	2.95	5.48	5.34	3.44	1.70	.82	.25	3.86	1.78	36.51
1956	12.45	7.02	1.75	2.08	4.17	4.28	4.79	2.61	1.74	1.29	.21	.34	42.73
1957	.64	1.22	3.23	3.02	2.44	2.81	4.37	1.21	.25	.09	.10	.10	19.48
1958	.21	.76	4.08	7.80	2.64	5.34	5.63	4.27	1.09	1.07	.93	1.06	34.87
1959	3.42	2.79	2.69	2.23	2.61	5.15	5.11	1.98	1.13	1.37	.32	1.30	29.10
1960	1.04	2.74	5.74	3.88	4.90	3.45	5.19	2.05	.59	.58	.33	1.16	31.65

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	31.9	23.23
1951	1201	650	Apr. 3, 1951	1.9	40.0	2.15	29.20	46.0	33.58
1952	1231	860	Dec. 21, 1951	1.3	51.0	2.74	37.35	46.1	33.73
1953	1271	860	Mar. 13, 1953	.15	51.3	2.76	37.45	53.3	38.92
1954	1331	1,240	Sept. 11, 1954	.35	38.4	2.06	28.05	47.9	34.89
1955	1381	805	Dec. 18, 1954	.8	50.1	2.69	36.51	61.4	44.84
1956	1431	2,350	Oct. 15, 1955	2.0	58.3	3.13	42.73	36.3	26.60
1957	1501	650	Jan. 23, 1957	.5	26.7	1.44	19.48	26.7	19.44
1958	1551	520	Jan. 22, 1958	1.2	47.8	2.57	34.87	53.1	38.72
1959	1621	980	Apr. 3, 1959	1.0	39.9	2.15	29.10	40.7	29.72
1960	1701	750	Dec. 12, 1959	1.3	43.2	2.32	31.65	-	-

1945. East Branch Eightmile River near North Lyme, Conn.

Location.--Lat 41°25'40", long 72°20'05", on left bank at bridge on State Highway 156, 0.4 mile upstream from mouth, 1.1 miles north of North Lyme, New London County, 1.2 miles south of North Plain, and 5½ miles upstream from mouth of Eightmile River.

Drainage area.--22.0 sq mi.

Records available.--September 1937 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 55.21 ft above mean sea level, datum of 1929.

Average discharge.--23 years (1937-60), 46.5 cfs.

Extremes.--1947-60: 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.--Occasional regulation at low flow.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	7.24	26.8	41.5	67.4	124	101	110	47.7	23.9	7.49	7.40	2.76	46.6
1952	7.76	72.1	90.1	108	86.8	112	70.2	64.8	38.6	11.9	45.0	14.2	59.9
1953	9.38	22.3	59.6	124	108	191	124	62.0	8.53	5.21	2.25	.850	59.6
1954	5.80	28.9	83.0	40.6	46.0	75.3	91.7	60.9	10.8	3.92	11.0	92.8	45.8
1955	25.5	85.7	117	52.8	68.8	89.5	62.7	29.3	12.7	3.69	61.1	132.3	53.4
1956	183	124	29.9	36.4	89.4	83.8	90.5	46.2	32.4	27.1	4.35	8.17	62.7
1957	13.7	27.8	64.6	53.3	55.1	57.7	88.0	25.1	4.97	1.23	1.63	2.16	32.8
1958	3.65	15.1	72.8	144	55.6	116	121	85.5	22.3	16.7	17.1	17.4	57.4
1959	66.7	53.7	45.3	39.1	54.6	101	93.5	31.2	21.9	25.3	5.01	5.26	45.2
1960	25.3	51.7	99.0	66.9	92.2	57.9	93.4	37.3	10.1	11.4	5.71	17.3	47.0

† Corrected.

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.38	1.36	2.18	3.53	5.86	5.29	5.58	2.50	1.22	0.39	0.39	0.14	28.82
1952	.41	3.66	4.75	5.66	4.26	5.87	3.56	3.29	1.95	.62	2.36	.72	37.09
1953	.49	1.13	3.12	6.50	5.11	10.01	6.29	3.25	.43	.27	.12	.04	36.76
1954	.50	1.46	4.35	2.13	2.18	3.94	4.65	3.19	.55	.21	.58	4.71	28.25
1955	1.54	4.35	6.13	2.77	3.26	4.69	3.18	1.53	.64	.19	3.20	1.64	32.92
1956	9.59	6.29	1.57	1.90	4.34	4.39	4.59	2.42	1.64	1.42	.23	.41	38.79
1957	.72	1.41	3.39	2.79	2.60	3.02	4.46	1.31	.25	.06	.09	.11	20.21
1958	.19	.77	3.82	7.55	2.64	6.08	6.14	4.48	1.13	.88	.90	.88	35.46
1959	5.49	2.72	2.38	2.05	2.58	5.29	4.74	1.64	1.11	1.33	.26	.27	27.86
1960	1.22	2.62	5.19	3.51	4.52	3.03	4.74	1.95	.51	.60	.30	.88	29.07

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	37.9	24.61
1951	1201	610	Apr. 3, 1951	1.5	46.6	2.12	28.82	54.5	33.70
1952	1251	750	Dec. 21, 1951	1.3	59.9	2.72	37.09	53.4	33.05
1953	1271	690	Mar. 14, 1953	.25	59.6	2.71	36.76	61.8	39.13
1954	1331	910	Sept. 12, 1954	.25	45.8	2.08	28.25	55.0	33.96
1955	1381	575	Dec. 19, 1954	.35	53.4	2.43	32.92	62.5	38.55
1956	1431	2,200	Oct. 16, 1955	2.5	62.7	2.85	38.79	43.4	26.86
1957	1501	470	Jan. 23, 1957	.25	32.8	1.49	20.21	31.6	19.47
1958	1551	510	Jan. 23, 1958	2.3	57.4	2.61	35.46	63.6	39.27
1959	1621	640	Apr. 3, 1959	1.6	45.2	2.05	27.86	45.9	28.30
1960	1701	600	Dec. 13, 1959	1.6	47.0	2.14	29.07	-	-

1950. Menunketesuck River near Clinton, Conn.

Location.--Lat 41°18'10", long 72°31'00", on right bank at Fairy Dell, 100 ft downstream from Cobb's Bridge, 1.7 miles north of Clinton, Middlesex County, 2.4 miles downstream from Kelseytown Reservoir, and 4.9 miles upstream from mouth.

Drainage area.--11.6 sq mi.

Records available.--June 1941 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 23.64 ft above mean sea level, datum of 1929.

Average discharge.--19 years (1941-60), 22.3 cfs (adjusted).

Extremes (unadjusted for storage or diversion).--1941-60: Maximum discharge, 1,500 cfs Sept. 11, 1954 (gage height, 8.51 ft), from rating curve extended above 270 cfs on basis of computation of peak flow over Kelseytown Dam; no flow at times during August and September 1944, July and August 1957.

Remarks.--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 is a summation of daily flow at gaging station and daily diversion from Kelseytown Reservoir, minus daily draft on Killingworth Reservoir adjusted for daily change in contents in Kelseytown Reservoir. Change in contents in Kelseytown Reservoir and draft on Killingworth Reservoir are determined from a continuous chart record of Kelseytown Reservoir water surface. No account is taken of evaporation from the reservoir surfaces. Flow at recording gage station regulated by Killingworth and Kelseytown Reservoirs and by diversion for domestic water supply from Kelseytown Reservoir.

Cooperation.--Venturi-meter records and some other data furnished by the Guilford-Chester Water Co.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	1.83	11.5	30.8	39.3	59.3	52.1	44.7	18.1	7.16	3.09	3.40	1.15	22.5
1952	2.07	35.7	42.5	50.7	35.8	50.3	35.8	36.1	17.2	2.10	1.72	9.34	27.9
1953	6.17	14.1	31.2	47.6	50.7	100	61.4	31.5	4.14	3.38	1.34	502	29.3
1954	1.20	11.4	37.5	19.5	22.3	37.4	46.5	33.2	4.92	4.00	13.1	64.7	24.6
1955	12.4	39.5	56.5	23.1	29.6	48.3	26.8	11.5	4.65	1.24	15.9	5.20	22.9
1956	73.8	64.5	13.4	19.5	46.7	40.8	37.1	23.1	17.7	11.5	1.65	2.08	29.2
1957	5.77	13.5	37.5	24.8	†27.0	28.6	43.4	15.6	3.01	.69	1.22	1.07	16.8
1958	1.44	6.79	36.7	79.4	27.2	57.6	63.1	44.0	12.2	3.71	5.12	6.39	28.7
1959	33.2	22.9	20.0	20.2	26.5	50.7	43.8	15.6	7.17	8.91	2.81	2.68	21.2
1960	6.44	25.0	45.7	28.4	48.4	27.0	46.5	14.8	5.22	5.19	4.18	9.17	22.0

† Corrected.

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.18	1.11	3.07	3.91	5.32	5.18	4.30	1.80	0.69	0.31	0.34	0.11	26.32
1952	.21	3.44	4.22	5.04	3.33	5.00	3.45	3.58	1.65	.21	1.71	.90	32.74
1953	.61	1.36	3.10	4.73	4.55	9.94	5.90	3.14	.40	.34	.13	.05	34.25
1954	.12	1.10	3.72	1.94	2.00	3.71	4.47	3.30	.47	.40	1.30	6.23	28.76
1955	1.22	3.80	5.62	2.29	2.66	4.80	2.58	1.14	.45	.12	1.58	.50	26.76
1956	7.33	6.20	1.34	1.94	4.35	4.06	3.57	2.29	1.71	1.14	.16	.20	34.29
1957	.57	1.29	3.72	2.47	2.43	2.85	4.17	1.54	.29	.07	.12	.10	19.62
1958	.14	.65	3.64	7.89	2.44	5.73	6.07	4.37	1.17	.37	.51	.61	33.59
1959	3.30	2.20	1.98	2.01	2.37	5.04	4.22	1.54	.69	.89	.28	.26	24.78
1960	.64	2.41	4.54	2.92	4.50	2.69	4.37	1.48	.50	.52	.42	.88	25.87

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	18.1	21.24
1951	1201	340	Mar. 31, 1951	0.6	22.5	1.94	26.32	25.5	29.83
1952	1231	370	(a)	.7	27.9	2.41	32.74	25.5	29.94
1953	1271	820	Mar. 13, 1953	.15	29.3	2.53	34.25	29.2	34.12
1954	1331	1,600	Sept. 11, 1954	.1	24.6	2.12	28.76	29.5	34.46
1955	1381	375	Dec. 15, 1954	.15	22.9	1.97	26.76	26.5	30.99
1956	1431	709	Oct. 16, 1955	.9	29.2	2.52	34.29	21.3	25.00
1957	1501	280	Apr. 6, 1957	.9	16.8	1.45	19.62	15.8	18.47
1958	1551	355	Jan. 22, 1958	.6	28.7	2.47	33.59	31.3	36.84
1959	1621	395	Apr. 3, 1959	.9	21.2	1.83	24.78	21.3	24.89
1960	1701	395	Dec. 13, 1959	.8	22.0	1.90	25.87	-	-

a Dec. 21, 1952, and Mar. 11, 1953.

1965. Quinnipiac River at Wallingford, Conn.

Location.--Lat 41°26'58", long 72°50'29", on right bank 0.8 mile downstream from Quinnipiac Street Bridge in Wallingford, New Haven County, and 2 miles upstream from Worton Brook.

Drainage area.--109 sq mi.

Records available.--October 1930 to September 1960.

Gage.--Water-stage recorder and timber control. Datum of gage is 20.24 ft above mean sea level, datum of 1929.

Average discharge.--30 years (1930-60), 209 cfs.

Extremes.--1930-60: Maximum discharge, 5,230 cfs Sept. 21, 1938 (gage height, 9.55 ft), by computation of flow over dam 1 mile upstream; minimum, 8 cfs Nov. 2, 1930; minimum observed gage height, -0.16 ft Aug. 10, 21, 1957.

Remarks.--Low flow regulated by mills upstream. Records of chemical analyses and water temperatures for the water year 1957 are published in reports of the Geological Survey.

Revisions.--Some periods for the water years 1936, 1938, 1940-41, 1943-44, and 1949 were revised in WSP 1381; the records published in WSP 1301 thus affected are given herewith:

Month	Mean	Per square mile	Runoff in inches	Momentary maximum	
				Discharge	Date
March 1936.....	649	-	6.86	-	-
Water year 1935-36....	195	1.79	24.36	2,680	Mar. 12, 1936
Calendar year 1936...	227	-	28.35	-	-
November 1937.....	317	-	3.25	-	-
Calendar year 1937...	256	-	31.90	-	-
January 1938.....	411	-	4.35	-	-
September	563	-	5.77	-	-
Water year 1937-38...	302	2.77	37.64	-	-
Calendar year 1938...	310	-	38.56	-	-
June 1940.....	450	-	4.61	-	-
Water year 1939-40....	239	2.19	29.77	2,270	May 31, 1940
Calendar year 1940...	238	-	29.65	-	-
February 1941.....	315	-	3.01	-	-
Water year 1940-41...	134	1.23	16.61	2,010	Feb. 8, 1941
Calendar year 1941...	121	-	15.03	-	-
December 1942.....	328	-	3.47	-	-
Calendar year 1942....	169	-	23.49	-	-
Water year 1942-43...	218	2.00	27.17	1,890	Dec. 30, 1942
September 1944.....	163	-	1.93	-	-
Water year 1943-44....	145	1.33	19.09	2,200	Sept. 15, 1944
Calendar year 1944...	171	-	21.37	-	-
December 1948.....	165	-	1.74	-	-
Calendar year 1948....	215	-	26.86	-	-
January 1949.....	551	-	5.83	-	-
Water year 1948-49....	211	1.94	26.25	2,500	Jan. 1, 1949
Calendar year 1949...	198	-	24.60	-	-

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	49.5	109	144	294	507	407	443	202	123	76.3	68.2	56.6	205
1952	81.3	313	359	477	344	517	479	361	392	130	155	112	310
1953	75.3	138	211	378	362	792	652	368	140	141	78.2	55.7	282
1954	72.5	110	251	142	171	262	240	268	111	78.3	91.6	269	172
1955	130	291	452	225	258	406	302	182	106	66.3	411	125	247
1956	554	658	195	206	328	360	429	234	168	118	66.0	79.8	282
1957	73.7	120	192	148	178	194	309	109	61.4	43.3	50.5	43.1	126
1958	59.1	84.7	248	419	236	454	453	316	123	114	89.6	97.4	225
1959	214	215	198	188	221	362	368	156	121	98.2	70.4	79.6	191
1960	211	296	323	306	450	267	397	177	118	114	83.3	240	247

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.52	1.12	1.52	3.11	4.84	4.30	4.53	2.13	1.26	0.81	0.72	0.58	25.44
1952	.86	3.20	3.79	5.05	3.41	5.46	4.90	3.82	4.02	1.37	1.64	1.15	39.67
1953	.80	1.42	2.24	4.00	3.46	8.38	6.67	3.90	1.43	1.49	.93	.57	35.19
1954	.77	1.13	2.65	1.50	1.64	2.77	2.46	2.84	1.14	.83	.97	2.76	21.46
1955	1.37	2.98	4.78	2.38	2.47	4.29	3.09	1.92	1.08	.70	4.35	1.28	30.69
1956	5.86	6.74	2.06	2.18	3.25	3.80	4.40	2.48	1.72	1.24	.70	.82	35.25
1957	.78	1.23	2.03	1.57	1.70	2.05	3.16	1.15	.63	.46	.53	.44	15.73
1958	.62	.87	2.63	4.43	2.26	4.81	4.64	3.34	1.26	1.21	.95	1.00	28.02
1959	2.26	2.20	2.10	1.98	2.11	3.83	3.77	1.65	1.24	1.04	.74	.81	23.73
1960	2.24	3.04	3.41	3.24	4.45	2.82	4.06	1.87	1.20	1.21	.88	2.46	30.88

QUINNIPIAC RIVER BASIN

Yearly discharge, in cubic feet per second, of Quinnipiac River at Wallingford, Conn.

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	143	17.80
1951	1201	1,880	Mar. 31, 1951	35	205	1.88	25.44	242	30.13
1952	1231	2,270	Mar. 12, 1952	38	310	2.84	38.67	282	35.28
1953	1271	2,100	Mar. 14, 1953	45	282	2.59	35.19	283	35.28
1954	1331	1,810	Sept. 11, 1954	41	172	1.58	21.46	209	26.04
1955	1381	3,790	Aug. 20, 1955	27	247	2.27	30.69	291	36.22
1956	1431	3,000	Oct. 17, 1955	59	282	2.59	35.25	197	24.63
1957	1501	890	Apr. 7, 1957	30	126	1.16	15.73	127	15.81
1958	1551	1,180	Jan. 26, 1958	42	225	2.06	28.02	245	30.46
1959	1621	2,070	Mar. 7, 1959	56	191	1.75	23.73	208	25.86
1960	1701	2,130	Sept. 12, 1960	48	247	2.27	30.88	-	-

HOUSATONIC RIVER BASIN

1970. East Branch Housatonic River at Coltsville, Mass.

Location.--Lat 42°28'10", long 73°11'49", on right bank at Coltsville, Berkshire County, 1½ miles upstream from Unkamet Brook and 2 miles northeast of Pittsfield.

Drainage area.--57.1 sq mi.

Records available.--March 1936 to September 1960. 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.--24 years (1936-60), 117 cfs (adjusted for diversion).

Extremes.--1936-60: Maximum discharge, 6,400 cfs Sept. 21, 1938 (gage height, 10.80 ft), from rating curve extended above 2,300 cfs on basis of computation of peak flow over dam; minimum daily, 4.4 cfs Aug. 15, 1936.
Maximum stage known since at least 1755, that of Sept. 21, 1938.

Remarks.--Flow regulated by powerplants above station and by Cleveland Brook Reservoir. Diversion above station from Cleveland Brook Reservoir for municipal supply of Pittsfield.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	43.2	127	118	109	170	222	287	84.0	54.6	89.5	53.1	50.6	117
1952	107	198	131	180	114	132	306	148	147	38.6	36.9	56.4	133
1953	32.2	47.6	97.1	120	158	383	273	214	51.7	33.0	23.9	22.4	121
1954	24.5	31.4	78.0	43.9	116	160	164	168	81.0	26.2	25.4	150	88.6
1955	76.6	225	194	80.8	87.8	157	274	78.3	44.5	28.5	143	53.7	120
1956	318	279	76.7	87.1	46.6	81.9	399	196	87.3	33.7	20.6	71.4	141
1957	58.5	82.0	93.7	110	97.5	101	108	80.2	31.9	19.9	16.6	28.7	68.8
1958	33.0	40.0	111	60.8	46.6	68.9	481	143	40.8	43.5	31.7	50.4	95.7
1959	81.8	121	65.0	113	61.8	116	274	67.1	42.7	49.8	40.6	50.8	90.2
1960	139	230	170	136	135	98.6	447	103	64.4	45.4	39.3	139	145

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year		
		Observed			Adjusted a/			Observed		
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date							
1950	-	-	-	-	-	-	-	-	96.9	103
1951	1201	3,280	Nov. 26, 1950	21	117	124	2.17	29.57	129	137
1952	1231	2,080	June 1, 1952	11	133	140	2.45	33.46	111	119
1953	1271	1,630	Mar. 24, 1953	11	121	130	2.28	30.89	118	126
1954	1331	1,870	Sept. 11, 1954	11	88.6	96.6	1.69	22.96	119	127
1955	1381	1,640	Aug. 19, 1955	10	120	131	2.29	31.13	135	147
1956	1431	2,010	Oct. 16, 1955	14	141	154	2.70	36.63	105	117
1957	1501	1,120	Jan. 23, 1957	13	68.8	81.0	1.42	19.25	64.7	75.6
1958	1551	1,090	Dec. 21, 1957	9.1	95.7	103	1.80	24.58	103	111
1959	1621	1,730	Jan. 22, 1959	22	90.2	99.7	1.75	23.69	113	123
1960	1701	1,920	Sept. 12, 1960	21	145	157	2.75	37.49	-	-

a Adjusted for diversion from Cleveland Brook Reservoir for municipal supply of Pittsfield.

1975. Housatonic River near Great Barrington, Mass.

Location.--Lat 42°13'55", long 73°21'19", on left bank at upstream side of highway bridge at Van Deusenville, 0.5 mile upstream from Williams River and 2 miles north of Great Barrington, Berkshire County.

Drainage area.--280 sq mi.

Records available.--May 1913 to September 1960.

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.--47 years (1913-60), 530 cfs.

Extremes.--1913-60: 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.--Flow regulated by powerplants above station.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	201	556	650	575	989	920	1,453	451	273	393	250	229	574
1952	459	980	707	920	653	714	1,355	730	787	224	203	255	664
1953	149	185	388	600	763	1,561	1,385	1,069	290	187	104	125	566
1954	132	176	534	290	635	843	867	869	434	159	130	549	466
1955	271	912	882	476	490	971	1,323	455	251	143	694	216	590
1956	1,076	1,403	390	410	292	542	2,162	995	414	178	107	233	683
1957	243	367	511	521	426	510	661	433	208	126	102	140	354
1958	128	171	648	400	291	451	1,721	816	259	245	204	238	463
1959	432	668	407	553	321	631	1,185	409	190	194	136	166	441
1960	442	863	914	704	748	447	2,256	610	364	237	255	648	703

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.83	2.21	2.68	2.37	3.68	3.79	5.79	1.86	1.09	1.62	1.03	0.91	27.86
1952	1.89	3.90	2.91	3.79	2.52	2.94	5.40	3.01	3.14	.92	.84	1.02	32.28
1953	.61	.74	1.60	2.47	2.84	6.43	5.52	4.40	1.16	.77	.43	.50	27.47
1954	.54	.70	2.20	1.19	2.36	3.47	3.45	3.58	1.73	.66	.54	2.19	22.61
1955	1.12	3.63	3.63	1.96	1.82	4.00	5.27	1.88	1.00	.59	2.86	.86	28.62
1956	4.43	5.59	1.61	1.69	1.12	2.23	8.61	4.10	1.65	.73	.44	1.01	33.21
1957	1.00	1.46	2.10	2.14	1.59	2.10	2.63	1.78	.83	.52	.42	.56	17.13
1958	.53	.68	2.67	1.65	1.08	1.86	6.86	3.36	.95	1.01	.84	.95	22.44
1959	1.78	2.66	1.68	2.28	1.19	2.60	4.72	1.89	.76	.80	.56	.66	21.38
1960	1.82	3.44	3.76	2.90	2.88	1.84	8.99	2.51	1.45	.98	1.05	2.58	34.20

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	473	22.94
1951	1201	4,290	Apr. 1, 1951	87	574	2.05	27.86	656	30.34
1952	1231	3,790	Apr. 6, 1952	64	664	2.37	32.28	645	26.53
1953	1271	3,970	Mar. 28, 1953	39	566	2.02	27.47	577	27.96
1954	1331	2,710	Sept. 12, 1954	41	466	1.66	22.61	568	27.55
1955	1381	6,060	Aug. 19, 1955	51	590	2.11	28.62	657	31.87
1956	1431	4,410	Apr. 17, 1956	54	683	2.44	33.21	538	26.14
1957	1501	2,240	Jan. 23, 1957	26	354	1.26	17.13	339	16.45
1958	1551	2,810	Apr. 8, 1958	35	463	1.65	22.44	509	24.68
1959	1621	3,710	Jan. 22, 1959	27	441	1.58	21.38	501	24.28
1960	1701	6,550	Apr. 6, 1960	74	703	2.51	34.20	-	-

1980. Green River near Great Barrington, Mass.

Location.--Lat 42°11'31", long 73°23'28", on left bank 250 ft downstream from Seekonk Road highway bridge, 0.2 mile downstream from Seekonk Brook, 1½ miles west of Great Barrington, Berkshire County, and 3 miles upstream from mouth.

Drainage area.--52.5 sq mi.

Records available.--October 1951 to September 1960.

Gage.--Water-stage recorder. Altitude of gage is 690 ft (from topographic map).

Average discharge.--9 years (1951-60), 91.6 cfs.

Extremes.--1951-60: Maximum discharge, 2,120 cfs Mar. 31, 1960 (gage height, 7.83 ft); minimum, 3.0 cfs Sept. 2-5, 1953.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1952	62.3	201	125	176	115	163	254	120	142	22.4	13.1	20.5	117
1953	6.72	12.1	101	131	161	289	252	184	36.3	14.3	5.20	5.87	99.8
1954	4.64	10.5	110	54.2	136	152	151	151	37.7	11.8	11.5	64.9	74.1
1955	32.8	137	163	79.2	62.1	180	197	73.9	26.6	9.18	78.0	23.9	88.7
1956	179	250	51.0	49.5	44.5	110	402	138	39.8	15.3	6.03	12.4	108
1957	19.9	64.5	108	90.6	60.1	88.6	154	71.1	28.7	8.83	6.94	4.96	58.8
1958	4.39	9.01	146	86.6	60.2	108	312	140	31.9	23.0	16.0	32.0	80.9
1959	115	168	78.0	92.5	59.5	129	208	90.1	24.6	16.2	8.67	7.75	83.1
1960	47.1	157	147	136	140	98.4	397	87.5	46.9	24.8	26.4	71.3	114

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1952	1.37	4.28	2.74	3.87	2.36	3.59	5.40	2.63	3.01	0.49	0.25	0.43	30.46
1953	.19	.26	2.22	2.88	3.19	6.35	5.36	4.04	.77	.31	.11	.12	25.80
1954	.10	.22	2.42	1.19	2.69	3.33	3.20	3.32	.80	.26	.25	1.38	19.16
1955	.72	2.91	3.58	1.74	1.23	3.95	4.18	1.62	.57	.20	1.71	.51	22.92
1956	3.94	5.30	1.12	1.09	.91	2.43	8.54	3.03	.85	.34	.13	.26	27.94
1957	.44	1.37	2.36	1.99	1.19	1.95	3.27	1.56	.61	.19	.15	.11	15.21
1958	.10	.19	3.21	1.90	1.19	2.39	6.64	3.08	.68	.51	.35	.68	20.91
1959	2.53	3.57	1.71	2.03	1.18	2.84	4.41	1.98	.52	.36	.19	.16	21.48
1960	1.03	3.34	3.23	2.99	2.88	2.16	8.44	1.92	1.00	.55	.58	1.52	29.64

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1952	1231	1,710	Apr. 6, 1952	8.0	117	2.23	30.46	95.5	24.74
1953	1271	1,630	Dec. 11, 1952	3.0	99.8	1.90	25.80	100	25.87
1954	1331	1,050	Dec. 7, 1953	3.3	74.1	1.41	19.16	91.4	23.63
1955	1381	1,060	Aug. 19, 1955	4.7	88.7	1.69	22.92	101	26.07
1956	1431, 1701	2,010	Apr. 17, 1956	4.7	108	2.06	27.94	83.9	21.77
1957	1501	683	Jan. 23, 1957	4.1	58.8	1.12	15.21	56.1	14.52
1958	1551	1,520	Dec. 21, 1957	3.7	80.9	1.54	20.91	97.6	25.22
1959	1621	1,280	Mar. 6, 1959	4.6	85.1	1.58	21.48	82.3	21.27
1960	1701	2,120	Mar. 31, 1960	5.0	114	2.17	29.64	-	-

1985. Blackberry River at Canaan, Conn.

Location.--Lat 41°01'26" (revised), long 73°20'32", on right bank downstream from bridge on U. S. Highway 44, 0.7 mile southwest of Canaan, Litchfield County, and 1 $\frac{1}{4}$ miles upstream from mouth.

Drainage area.--48.2 sq mi.

Records available.--July 1949 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 645.72 ft above mean sea level, datum of 1929.

Average discharge.--11 years (1949-60), 87.1 cfs.

Extremes.--1949-60: Maximum discharge, 14,200 cfs Aug. 19, 1955 (gage height, 13.01 ft), from rating curve extended above 2,400 cfs on basis of slope-area measurement of peak flow; minimum, 2.2 cfs Aug. 28, 1949, July 25, 26, 27, 28, 1957; minimum gage height, 1.12 ft Aug. 28, 1949; minimum daily discharge, 2.3 cfs Aug. 28, 1949.

Flood of Dec. 31, 1948, reached a stage of 12.0 ft, from floodmarks (discharge, 7,000 cfs, from slope-area measurement at East Canaan, 2.5 miles upstream, adjusted for intervening drainage area).

Remarks.--Infrequent regulation at low flow.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	12.8	115	132	120	181	165	182	56.9	37.0	52.4	37.2	53.1	94.6
1952	84.6	182	136	161	93.4	152	214	108	116	21.3	19.4	38.4	110
1953	18.8	35.2	85.5	126	134	273	211	154	31.6	13.8	6.97	11.7	91.6
1954	15.5	29.1	113	46.2	79.4	115	116	106	29.6	16.7	17.3	107	65.7
1955	34.6	186	145	51.3	80.4	126	210	70.0	27.3	8.39	400	45.2	116
1956	350	259	49.8	74.9	64.8	80.6	355	117	59.7	27.1	8.82	18.8	122
1957	16.0	52.6	87.9	71.9	52.5	62.7	108	39.9	14.0	5.51	4.85	4.41	43.2
1958	7.97	18.4	130	70.8	42.5	94.9	320	135	44.1	23.8	23.0	49.4	80.0
1959	89.4	110	53.2	69.8	56.7	141	167	49.0	36.9	35.6	14.0	21.8	70.2
1960	63.7	147	134	100	131	101	278	68.7	65.0	39.8	74.9	119	110

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.31	2.59	3.16	2.87	3.91	3.94	4.22	1.36	0.86	1.26	0.89	1.23	26.60
1952	2.03	4.22	3.25	3.85	2.09	3.63	4.95	2.58	2.69	.51	.46	.89	31.15
1953	.45	.81	2.04	3.01	2.90	6.52	4.89	3.69	.73	.33	.17	.26	25.80
1954	.37	.63	2.70	1.11	1.72	2.76	2.69	2.54	.68	.40	.41	2.48	18.49
1955	.83	4.31	3.47	1.22	1.74	3.01	4.86	1.67	.63	.20	9.57	1.05	32.56
1956	8.37	5.99	1.19	1.79	1.44	1.92	8.22	2.80	1.38	.65	.21	.44	34.40
1957	.38	1.22	2.10	1.72	1.14	1.50	2.50	.95	.32	.13	.12	.10	12.18
1958	.19	.43	3.11	1.70	.92	2.27	7.41	3.23	1.02	.57	.55	1.14	22.54
1959	2.14	2.54	1.27	1.67	1.23	3.37	3.87	1.17	.85	.82	.34	.50	19.77
1960	1.52	3.40	3.20	2.39	2.93	2.42	6.44	1.65	1.51	.95	1.79	2.76	30.96

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	70.7	19.82
1951	1201	2,550	Nov. 26, 1950	5.9	94.6	1.96	26.60	107	30.04
1952	1231	1,670	June 1, 1952	8.8	110	2.28	31.15	88.4	24.95
1953	1271	1,500	Jan. 24, 1953	4.0	91.6	1.90	25.80	93.1	26.20
1954	1331	1,910	Sept. 11, 1954	6.0	65.7	1.36	18.49	83.0	23.40
1955	1381	14,200	Aug. 19, 1955	3.4	116	2.41	32.56	140	39.50
1956	1431	2,830	Oct. 16, 1955	6.8	122	2.53	34.40	79.9	22.55
1957	1501	880	Jan. 23, 1957	2.4	43.2	.896	12.18	43.3	12.21
1958	1551	1,520	Apr. 6, 1958	4.4	80.0	1.66	22.54	87.8	24.76
1959	1621	2,800	Mar. 6, 1959	6.1	70.2	1.46	19.77	77.9	21.94
1960	1701	1,900	Sept. 12, 1960	8.8	110	2.28	30.96	-	-

1990. Housatonic River at Falls Village, Conn.

Location.--Lat 41°56'56", long 73°22'05", on left bank 0.6 mile downstream from hydro-electric 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 1960.

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.--48 years (1912-60), 1,083 cfs.

Extremes.--1912-60: Maximum discharge, 23,900 cfs Jan. 1, 1949 (gage height, 22.9 ft, from floodmarks); practically no flow at times when powerplant was shut down; minimum daily, 24 cfs Oct. 15, 1914, Sept. 18, 1932.

Remarks.--Low flow completely regulated by powerplant of Connecticut Power Co. Records of chemical analyses for the water year 1956 and of water temperatures for the water year 1960 are published in reports of the Geological Survey.

Monthly and yearly mean discharge*, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	252	1,046	1,450	1,417	2,322	1,982	3,014	928	562	841	581	564	1,237
1952	1,012	2,166	1,571	2,051	1,474	1,648	2,973	1,603	1,832	431	367	492	1,464
1953	294	382	920	1,514	1,921	3,547	3,274	2,362	607	389	164	189	1,294
1954	218	337	1,313	868	1,568	1,862	1,841	1,789	760	285	247	1,301	996
1955	555	1,921	1,932	1,058	1,067	1,397	2,571	1,084	457	242	2,509	641	1,339
1956	2,657	3,263	837	772	698	1,281	4,348	2,095	749	354	189	376	1,465
1957	391	731	1,160	1,044	843	1,039	1,510	780	352	193	166	191	699
1958	172	268	1,387	1,022	722	1,225	3,519	1,831	540	434	373	542	1,003
1959	1,011	1,511	999	1,027	906	1,511	2,377	968	457	488	268	330	986
1960	783	1,749	1,978	1,554	1,653	947	4,502	1,240	865	487	712	1,284	1,472

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.46	1.85	2.64	2.58	3.82	3.62	5.32	1.70	0.99	1.53	1.06	1.00	26.57
1952	1.84	3.83	2.87	3.75	2.51	3.01	5.24	2.93	3.24	.79	.67	.87	31.55
1953	.54	.67	1.68	2.77	3.17	6.47	5.78	4.31	1.07	.71	.30	.33	27.80
1954	.40	.59	2.40	1.22	2.25	3.40	3.25	3.26	1.34	.52	.45	2.30	21.38
1955	1.01	3.39	3.53	1.92	1.76	3.64	4.54	1.98	.82	.44	4.58	1.13	28.74
1956	4.84	5.76	1.52	1.41	1.19	2.34	7.68	3.82	1.33	.65	.34	.66	31.54
1957	.71	1.29	2.12	1.90	1.38	1.89	2.67	1.42	.62	.35	.30	.34	14.99
1958	.31	.47	2.52	1.87	1.19	2.24	6.21	3.34	.95	.79	.63	.96	21.48
1959	1.84	2.67	1.82	1.87	1.49	2.76	4.20	1.77	.81	.89	.49	.58	21.19
1960	1.43	3.09	3.61	2.84	2.83	1.73	7.94	2.26	1.53	.89	1.30	2.26	31.71

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	974	20.91
1951	1201	7,270	Apr. 4, 1951	165	1,237	1.96	26.57	1,404	30.16
1952	1231	7,170	Apr. 7, 1952	168	1,464	2.32	31.55	1,202	25.90
1953	1271	7,800	Mar. 27, 1953	131	1,294	2.05	27.80	1,317	28.30
1954	1331	5,750	Sept. 12, 1954	131	996	1.58	21.38	1,207	25.92
1955	1381	22,700	Aug. 19, 1955	144	1,339	2.12	28.74	1,534	32.93
1956	1431	8,940	Oct. 16, 1955	130	1,465	2.32	31.54	1,092	23.54
1957	1501	3,350	Jan. 24, 1957	93	699	1.11	14.99	662	14.17
1958	1551	6,290	Apr. 8, 1958	119	1,003	1.59	21.48	1,143	24.51
1959	1621	5,840	Mar. 7, 1959	116	966	1.56	21.19	1,070	22.99
1960	1701	12,400	Apr. 6, 1960	172	1,472	2.33	31.71	-	-

1994.2. Tenmile River near Wassaic, N. Y.

Location.--Lat 41°46'45", long 73°33'34", on right bank on downstream side of county highway bridge, about 1,000 ft east of State Highway 22, 0.2 mile downstream from confluence of Wassaic and Webatuck Creeks, and 1.6 miles south of Wassaic, Dutchess County.

Drainage area.--120 sq mi.

Records available.--May 1959 to October 1960 (no winter records).

Gage.--Water-stage recorder. Crest-stage gage since October 1959. Altitude of gage is 415 ft (from topographic map).

Extremes.--1959-60: Maximum discharge, 1,400 cfs Sept. 12, 1960 (gage height, 4.44 ft), from rating curve extended above 430 cfs by logarithmic plotting; minimum, 8.0 cfs Sept. 28, 29, 30, Oct. 1, 1959 (gage height, 0.44 ft).

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1959	-	-	-	-	-	-	-	-	69.4	64.6	31.3	25.7	-
1960	64.0	-	-	-	-	-	-	144	140	72.1	127	233	-

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1959	-	-	-	-	-	-	-	-	0.65	0.62	0.30	0.24	-
1960	0.62	-	-	-	-	-	-	1.39	1.30	.69	1.22	2.17	-

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1959	1702	800	July 21, 1959	-	-	-	-	-	-
1960	1702	1,400	Sept. 12, 1960	-	-	-	-	-	-

2000. Tenmile River near Gaylordsville, Conn.

Location.--Lat 41°39'32", long 73°31'44", on right bank 0.1 mile downstream from Deuel Hollow Brook, 1.2 miles upstream from New York-Connecticut State line, 1.7 miles upstream from mouth, and 2½ miles northwest of Gaylordsville, Litchfield County.

Drainage area.--204 sq mi.

Records available.--October 1929 to September 1960. 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.--31 years (1929-60), 300 cfs.

Extremes.--1929-60: Maximum discharge, 17,400 cfs Aug. 19, 1955 (gage height, 14.9 ft, from high-water mark), from rating curve extended above 9,800 cfs by logarithmic plotting; minimum, 5 cfs Sept. 8, 1957; minimum gage height, 0.52 ft Sept. 24, 26, 1939; minimum daily discharge, 7 cfs Oct. 7, 1957.

Remarks.--Infrequent regulation at low flow. Records of chemical analyses and water temperatures for the water year 1959 are given in WSP 1641.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	41.3	245	532	555	860	619	784	216	140	76.6	87.0	90.9	350
1952	150	594	547	674	435	698	1,014	534	534	130	109	119	460
1953	69.1	115	413	710	535	995	923	646	172	82.1	29.5	36.3	393
1954	44.6	90.6	443	246	413	544	437	457	133	50.2	36.1	285	264
1955	119	542	589	289	363	551	581	353	121	40.0	1,010	186	396
1956	1,222	1,067	199	182	430	487	1,099	426	203	110	32.0	69.7	459
1957	56.7	179	398	262	296	313	536	174	58.0	17.8	17.0	10.8	192
1958	15.7	34.4	346	440	252	692	964	506	141	86.9	45.4	79.0	301
1959	281	459	263	334	379	497	502	210	122	97.8	56.9	71.3	272
1960	148	355	515	465	567	323	900	278	246	140	227	353	374

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.23	1.34	3.01	3.14	4.39	3.49	4.28	1.22	0.77	0.44	0.48	0.50	23.29
1952	.85	3.25	3.09	3.80	2.30	3.94	5.54	3.02	2.92	.73	.62	.65	30.71
1953	.39	.63	2.33	4.01	2.73	5.63	5.04	3.66	.94	.46	.17	.20	26.19
1954	.25	.50	2.50	1.40	2.10	3.08	2.39	2.58	.73	.29	.20	1.56	17.57
1955	.67	2.97	3.33	1.64	1.85	3.11	3.16	1.99	.66	.23	5.71	1.02	26.36
1956	6.91	5.84	1.12	1.03	2.28	2.76	6.01	2.41	1.11	.62	.18	.38	30.65
1957	.32	.98	2.25	1.48	1.51	1.76	2.93	.98	.32	.10	.10	.06	12.79
1958	.09	.19	1.96	2.49	2.33	3.91	5.28	2.86	.77	.49	.28	.43	20.06
1959	1.59	2.51	1.48	1.89	1.94	2.81	2.74	1.19	.67	.55	.32	.59	18.08
1960	.84	1.94	2.90	2.63	3.00	1.82	4.92	1.57	1.35	.79	1.22	1.93	24.97

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	269	17.89
1951	1201	2,630	Mar. 31, 1951	27	350	1.72	23.29	389	25.80
1952	1231	3,450	Apr. 6, 1952	47	460	2.25	30.71	405	26.87
1953	1271	5,390	Jan. 25, 1953	15	363	1.93	26.19	392	26.09
1954	1331	1,900	Sept. 11, 1954	22	264	1.29	17.57	320	21.29
1955	1381,1701	17,400	Aug. 19, 1955	12	396	1.94	26.36	499	33.26
1956	1431,1701	9,620	Oct. 16, 1955	24	459	2.25	30.65	304	20.33
1957	1501,1701	1,300	Apr. 6, 1957	9	192	.941	12.79	173	11.48
1958	1551,1701	2,980	Apr. 7, 1958	7	301	1.48	20.06	352	23.40
1959	1621,1701	4,720	Jan. 22, 1959	27	272	1.33	18.08	273	18.18
1960	1701	3,510	Apr. 5, 1960	43	374	1.83	24.97	-	-

2005. Housatonic River at Gaylordsville, Conn.

Location.--Lat 41°39'11", long 73°29'25", on left bank 0.4 mile downstream from hydro-electric 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 Tennille 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 1960.

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.--20 years (1940-60), 1,682 cfs.

Extremes.--1900-14, 1940-60: Maximum discharge, 51,800 cfs Aug. 19, 1955 (gage height, 18.58 ft); minimum observed, about 30 cfs Oct. 28, 1914 (gage height, 2.18 ft, site and datum then in use); minimum daily since July 1940, about 60 cfs Aug. 31, 1944, Sept. 20, 1949.

Flood in May 1854 reached a stage of 21 ft 3 in., former site and datum; reported by observer in 1902. Flood of Sept. 22, 1938, reached a stage of 14.5 ft, from flood-marks, at present site (discharge, 37,000 cfs, by computation of peak flow over dam 2½ miles upstream adjusted for flow from intervening area).

Remarks.--Ordinary flow regulated by powerplants upstream. Records of chemical analyses and water temperatures for the water year 1958 are published in reports of the Geological Survey.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	328	1,542	2,406	2,391	3,787	3,125	4,595	1,432	880	994	700	691	1,888
1952	1,222	3,217	2,568	3,275	2,333	2,989	4,935	2,578	2,935	720	569	690	2,329
1953	427	605	1,711	2,725	2,871	5,446	5,018	3,589	943	534	222	233	2,024
1954	290	496	2,094	1,099	2,038	2,797	2,630	2,649	1,047	381	316	1,763	1,462
1955	769	2,853	2,970	1,573	1,655	3,058	3,794	1,775	732	324	4,433	994	2,081
1956	4,500	5,024	1,318	1,229	1,396	2,134	6,447	3,017	1,240	599	279	539	2,304
1957	536	1,096	1,880	1,561	1,374	1,612	2,496	1,141	505	269	230	254	1,077
1958	252	365	2,078	1,735	1,196	2,285	5,321	2,753	775	623	465	669	1,543
1959	1,467	2,239	1,496	1,614	1,548	2,446	3,407	1,435	733	705	379	489	1,491
1960	1,058	2,426	2,915	2,338	2,584	1,517	6,195	1,699	1,289	720	1,108	1,856	2,131

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.38	1.73	2.79	2.78	3.97	3.62	5.14	1.66	0.97	1.15	0.81	0.78	25.78
1952	1.42	3.62	2.97	3.79	2.53	3.47	5.53	2.99	3.29	.83	.66	.77	31.87
1953	.50	.68	1.98	3.16	3.01	6.32	5.63	4.16	1.06	.62	.26	.26	27.64
1954	.34	.66	2.43	1.28	2.14	3.24	2.96	3.07	1.17	.44	.37	1.98	19.98
1955	.89	3.20	3.45	1.82	1.73	3.55	4.26	2.06	.82	.38	5.14	1.12	28.42
1956	5.22	5.63	1.53	1.43	1.51	2.48	7.24	3.50	1.40	.70	.32	.60	31.56
1957	.62	1.23	2.18	1.81	1.44	1.87	2.80	1.33	.57	.31	.27	.29	14.72
1958	.29	.41	2.41	2.02	1.25	2.65	5.97	3.19	.87	.72	.54	.75	21.07
1959	1.70	2.51	1.72	1.87	1.62	2.84	3.82	1.66	.82	.82	.44	.53	20.35
1960	1.22	2.72	3.38	2.71	2.80	1.76	6.95	1.97	1.45	.63	1.28	2.08	29.15

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	1,490	20.35
1951	1201	11,600	Apr. 4, 1951	120	1,888	1.90	25.78	2,115	28.89
1952	1231	12,900	Apr. 6, 1952	206	2,329	2.34	31.87	1,975	27.02
1953	1271	13,800	Jan. 25, 1953	93	2,024	2.04	27.84	2,036	27.81
1954	1331	8,670	Sept. 12, 1954	80	1,462	1.47	19.98	1,771	24.19
1955	1391	51,900	Aug. 19, 1955	145	2,081	2.09	28.42	2,436	33.26
1956	1431	21,600	Oct. 16, 1955	168	2,304	2.32	31.56	1,694	23.21
1957	1501	4,930	Apr. 7, 1957	114	1,077	1.08	14.72	1,010	13.80
1958	1551	10,300	Apr. 7, 1958	152	1,543	1.55	21.07	1,750	23.89
1959	1621	9,820	Mar. 6, 1959	170	1,491	1.50	20.35	1,593	21.74
1960	1701	17,100	Apr. 5, 1960	284	2,131	2.14	29.15	-	-

HOUSATONIC RIVER BASIN

2010. Lake Candlewood (Rocky River Reservoir) near New Milford, Conn.

Location.--Lat 41°35'00", long 73°26'00", on Rocky River, a tributary of the Housatonic River, 2 miles west of New Milford, Litchfield County.

Drainage area.--40.4 sq mi.

Records available.--August 1928 to September 1960.

Remarks.--Completed in 1928 for storage of water for power. Usable capacity, 6,810,000,000 cu ft.

Cooperation.--Records furnished by the Connecticut Light & Power Co.

Month-end contents, in millions of cubic feet											
Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Sept.
1951	4,946	5,416	6,064	6,137	6,198	5,967	5,451	5,511	5,618	5,666	5,702
1952	5,721	6,089	6,169	6,057	5,883	6,161	6,205	5,962	5,815	6,084	5,731
1953	5,402	5,297	5,547	5,786	5,834	6,144	6,157	6,157	5,810	5,844	5,302
1954	4,934	5,133	5,943	6,052	6,088	6,100	6,052	6,113	5,895	5,714	5,846
1955	6,149	6,149	6,125	5,907	6,040	6,137	6,100	5,979	6,040	5,798	6,052
1956	5,834	5,678	5,309	5,511	5,750	5,642	5,762	5,702	5,690	5,702	5,583
1957	5,523	6,016	6,016	5,583	5,666	5,702	5,991	5,871	5,750	5,428	4,935
1958	4,692	4,934	6,028	6,076	5,915	6,052	6,088	6,040	5,883	6,034	5,967
1959	5,951	6,004	5,798	5,750	5,666	6,028	6,052	5,750	5,834	5,834	5,368
1960	6,028	6,088	6,016	6,088	5,955	5,762	5,955	5,955	5,919	5,931	5,654

2015. Still River near Lanesville, Conn.

Location.--Lat 41°31'12", long 73°25'07", on left bank at upstream side of highway bridge, a quarter of a mile east of U.S. Highway 7, 1.1 miles south of Lanesville, Litchfield County, 3 miles upstream from mouth, and 4 miles south of New Milford.

Drainage area.--68.5 sq mi.

Records available.--October 1931 to September 1960.

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.--29 years (1931-60), 122 cfs.

Extremes.--1931-60: Maximum discharge, 7,980 cfs Oct. 16, 1955 (gage height, 14.11 ft, from floodmarks), from rating curve extended above 3,000 cfs by logarithmic plotting; minimum, 5 cfs Oct. 20, 1946; minimum daily, 8 cfs Sept. 27, 1948; minimum gage height, 0.77 ft Aug. 10, 1939.

Revisions.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in water-supply papers indicated.

WSP	Water year	Date	Discharge (cfs)
801,851,1301	1936	Mar. 12, 1936	3,260
851,1301	1938	Sept. 22, 1938	3,590
921,1301	1941	Feb. 8, 1941	3,180

Remarks.--Some diurnal fluctuation caused by mills at Brookfield and Danbury. Records of chemical analyses and water temperatures for the water year 1959 are given in WSP 1641.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	30.8	91.0	154	216	318	228	277	101	71.7	62.5	62.0	31.2	136
1952	56.1	197	235	262	182	294	345	204	229	97.6	174	96.6	197
1953	46.0	99.7	225	287	222	432	352	167	51.7	45.8	29.7	19.0	165
1954	29.7	46.1	130	76.6	101	169	149	140	48.0	33.0	36.8	113	89.1
1955	56.1	236	226	116	143	214	193	99.8	51.0	33.2	439	74.4	157
1956	642	484	100	96.1	178	199	273	159	80.8	43.6	28.7	40.7	194
1957	35.9	121	159	100	116	111	201	87.8	46.6	38.1	28.0	24.2	88.8
1958	29.5	44.0	217	272	148	283	291	191	52.6	50.5	31.0	49.0	138
1959	107	140	104	94.1	123	182	181	79.2	71.9	55.0	40.0	38.8	101
1960	89.5	133	188	163	255	132	233	96.1	51.5	58.6	77.0	110	132

Monthly and yearly runoff, in inches, of Still River near Lanesville, Conn.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.52	1.48	2.59	3.63	4.83	3.84	4.51	1.70	1.17	1.05	1.04	0.51	26.87
1952	.94	3.21	3.92	4.40	2.98	4.95	5.62	3.44	3.73	1.48	2.93	1.57	39.07
1953	.77	1.63	3.78	4.83	3.37	7.28	5.74	2.81	.84	.82	.50	.31	32.68
1954	.50	.75	2.19	1.29	1.53	2.85	2.43	2.35	.78	.56	.62	1.84	17.69
1955	.94	3.85	3.80	1.95	2.18	3.60	3.15	1.68	.83	.56	7.39	1.22	31.15
1956	10.80	7.89	1.68	1.61	2.80	3.36	4.45	2.68	1.32	.73	.48	.66	38.46
1957	.60	1.98	2.68	1.68	1.76	1.87	3.27	1.48	.76	.64	.47	.39	17.58
1958	.50	.72	3.66	4.58	2.25	4.76	4.74	3.22	.86	.85	.52	.80	27.46
1959	1.80	2.28	1.75	1.58	1.87	3.07	2.94	1.34	1.17	.92	.67	.63	20.02
1960	1.51	2.16	3.16	2.74	4.01	2.22	3.79	1.60	.84	.99	1.29	1.80	26.12

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30					Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	90.6	17.97
1951	1201	1,080	Mar. 31, 1951	21	136	1.99	26.87	153	30.35
1952	1231	1,680	Mar. 12, 1952	20	197	2.88	39.07	187	37.18
1953	1271	1,420	Dec. 12, 1952	16	165	2.41	32.68	151	29.94
1954	1331	590	Apr. 19, 1954	16	89.1	1.30	17.69	115	22.84
1955	1391	3,920	Aug. 19, 1955	14	157	2.29	31.15	217	42.93
1956	1431	7,980	Oct. 16, 1955	21	194	2.83	38.46	118	23.35
1957	1501	627	Apr. 7, 1957	15	88.8	1.30	17.58	86.8	17.20
1958	1551	1,590	Feb. 28, 1958	15	138	2.01	27.46	143	28.41
1959	1621	1,180	Mar. 7, 1959	20	101	1.47	20.02	106	21.02
1960	1701	725	Feb. 12, 1960	24	132	1.93	26.12	-	-

2020. Shepaug Reservoir at Woodville, Conn.

Location.--Lat 41°43'24", long 73°17'37", on Shepaug River, 1 mile north of Woodville, Litchfield County.

Drainage area.--38.0 sq mi.

Records available.--February 1933 to September 1960.

Remarks.--Completed in September 1933 for storage of water for municipal supply. Usable capacity, 77,000,000 cu ft.

Cooperation.--Records furnished by Bureau of Engineering, city of Waterbury.

Month end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	40.6	99.2	98.6	97.9	99.0	103.6	97.9	97.4	94.4	76.6	63.9	39.0
1952	52.5	97.8	98.8	98.9	97.3	99.2	100.1	98.5	96.1	80.5	91.7	95.2
1953	78.2	97.2	97.2	99.8	98.2	100.7	99.5	97.3	95.0	73.2	37.7	20.5
1954	32.1	45.1	97.5	97.6	98.6	97.7	97.8	97.2	83.3	67.1	47.2	96.7
1955	97.2	99.6	99.6	96.7	98.8	98.8	100.6	97.5	94.6	67.2	97.0	98.0
1956	102.2	97.8	93.0	97.2	97.5	97.5	101.7	97.9	94.6	91.9	64.5	73.2
1957	48.3	96.1	97.8	97.6	98.5	96.7	96.7	95.9	77.4	46.7	24.4	26.1
1958	22.1	29.7	99.9	98.9	98.6	100.6	101.1	97.8	91.5	91.6	68.6	98.0
1959	98.4	99.0	96.9	97.3	97.0	98.7	98.9	93.9	96.6	96.9	77.9	51.5
1960	99.8	99.7	97.8	97.4	97.7	104.8	97.5	97.0	93.9	100.1	90.9	97.6

2025. Shepaug River at Woodville, Conn.

Location.--Lat 41°43'24", long 73°17'37", at left end of dam at outlet of Shepaug Reservoir, 1 mile north of Woodville, Litchfield County, and 3.5 miles upstream from Bantam River.

Drainage area.--38.0 sq mi.

Records available.--October 1935 to September 1960.

Gage.--Nonrecording gage at dam or at auxiliary artificial control below dam; read usually once daily.

Average discharge.--25 years (1935-60), 86.6 cfs (adjusted for storage and diversion).

Extremes.--1935-60: Maximum discharge observed, 13,800 cfs Aug. 19, 1955; no flow at times (result of regulation).

Remarks.--Discharge computed on basis of flow over spillway, through floodgates, and through fountain at toe of dam. Rating curve for floodgates and fountain computed by means of a temporary sharp-crested weir below dam. Rating curve for spillway computed for discharge 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 Reservoir for municipal supply of Waterbury. Flow regulated by Shepaug Reservoir since 1931. Runoff adjusted for diversion and change in contents in Shepaug Reservoir (see p. 293).

Cooperation.--Records furnished by Bureau of Engineering, city of Waterbury.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	2.40	84.8	140	151	226	222	198	49.5	18.9	2.40	2.40	2.40	90.6
1952	2.40	117	146	201	83.4	176	267	144	175	17.0	2.97	40.8	114
1953	3.46	24.4	124	183	139	343	254	151	6.58	2.40	2.40	2.40	103
1954	2.40	.04	94.5	36.4	104	132	98.2	93.7	4.05	2.40	2.40	44.3	51.1
1955	9.62	198	162	56.8	64.8	142	235	66.3	8.82	2.40	390	23.7	114
1956	408	281	32.6	29.6	40.4	70.8	372	94.8	50.6	9.08	2.40	2.40	116
1957	2.40	2.75	104	71.6	55.0	48.7	120	14.5	2.40	2.40	2.40	2.40	35.6
1958	2.40	.04	135	112	52.4	133	312	125	6.49	25.7	2.65	4.84	76.1
1959	100	105	48.8	55.5	92.9	142	182	47.0	19.8	17.5	8.52	2.40	68.2
1960	39.9	147	143	87.2	144	94.4	253	56.4	55.0	12.8	45.0	73.5	95.2

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.25	3.35	4.24	4.58	6.19	6.79	5.76	1.64	0.77	0.34	0.33	0.16	34.40
1952	.53	3.99	4.43	6.10	2.35	5.37	7.84	4.34	5.22	.94	.49	1.29	42.89
1953	.52	1.28	3.88	5.73	3.78	10.48	7.45	4.58	.73	.37	.10	.19	39.04
1954	.30	.71	4.22	1.35	3.04	4.65	3.67	3.70	.66	.32	.20	2.21	25.03
1955	.74	5.94	4.91	1.70	2.08	4.31	6.93	2.21	.71	.22	12.38	1.07	43.20
1956	12.45	8.19	1.18	1.23	1.32	2.14	10.98	2.96	1.72	.74	.15	.54	43.60
1957	.42	1.35	3.27	2.17	1.81	2.24	4.37	.90	.25	.13	.09	.13	17.13
1958	.20	.57	6.16	3.40	1.44	4.07	9.16	3.76	.82	1.10	.26	.85	31.59
1959	3.03	3.15	1.64	2.01	2.54	4.40	5.34	1.65	1.25	.91	.50	.36	26.78
1960	1.99	4.32	4.31	2.64	4.09	2.93	7.34	1.84	1.81	1.16	1.57	2.49	36.51

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year		
		Observed				Adjusted			Observed		Adjusted
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date								
1950	-	-	-	-	-	-	-	-	76.7	85.5	30.51
1951	1201, 1701	2,500	Mar. 31, 1951	0	90.6	96.4	2.54	34.40	93.7	99.4	35.51
1952	1251	2,400	June 1, 1952	2.4	114	120	3.16	42.89	105	111	39.62
1953	1271	1,890	Jan. 24, 1952	0	103	109	2.87	39.04	98.4	108	38.59
1954	1331	800	Aug. 17, 1954	0	51.1	70.1	1.84	25.03	73.7	88.0	31.39
1955	1381	13,800	Aug. 19, 1955	2.4	114	121	3.16	43.20	143	149	53.43
1956	1431	3,900	Oct. 16, 1955	2.4	116	122	3.21	43.60	64.8	74.9	26.82
1957	1501	709	Jan. 23, 1957	0	35.6	48.0	1.26	17.13	38.0	53.3	19.02
1958	1551	1,810	Dec. 21, 1957	0	76.1	88.4	2.33	31.59	85.7	90.9	32.48
1959	1621	1,460	Mar. 6, 1959	2.4	68.2	75.0	1.97	26.78	74.5	82.8	29.58
1960	1701	2,040	Mar. 31, 1960	2.4	95.2	102	2.68	36.51	-	-	-

2030. Shepaug River near Roxbury, Conn.

Location.--Lat 41°32'59", long 73°19'49", on right bank at downstream side of Wellers Bridge on Wellers Bridge Road, half a mile south of Roxbury Station, 1½ 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 1960.

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.--30 years (1930-60), 251 cfs (adjusted for storage and diversion).

Extremes.--1930-60: Maximum discharge, 50,300 cfs Aug. 19, 1955 (gage height, 17.2 ft, from floodmarks), from rating curve extended above 3,500 cfs on basis of computation of flow over dam at gage heights 10.77 and 12.8 ft and slope-area measurement of peak flow; minimum, 2 cfs Oct. 6, 1951; minimum gage height, 1.01 ft Aug. 14, 15, 18-21, 1957.

Remarks.--Diurnal fluctuations from an unknown cause during low flow. Water diverted from Shepaug Reservoir for municipal supply of city of Waterbury. Flow regulated by Shepaug Reservoir since 1931. Runoff adjusted for diversion from and change in contents in Shepaug Reservoir (see p. 293). Records of chemical analyses for the water year 1959 are given in WSP 1641.

Revisions.--The momentary maximum discharges for the water years 1936 and 1938, published in WSP 1301, have been revised to 8,090 and 12,100 cfs, respectively.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	23.1	241	446	444	635	569	613	193	86.0	28.2	35.4	38.8	277
1952	49.2	398	471	575	333	498	735	428	537	105	134	185	370
1953	57.0	128	381	552	473	1,053	769	417	74.2	33.0	14.9	8.49	330
1954	16.5	52.5	371	187	300	420	341	346	78.3	32.7	29.2	200	197
1955	86.5	531	512	238	274	470	654	319	81.5	30.3	1107	126	370
1956	827	768	173	166	191	279	929	342	166	78.0	18.5	26.9	330
1957	32.9	85.6	288	178	195	209	405	86.1	24.2	11.7	9.68	11.7	127
1958	15.9	33.7	394	387	234	453	754	387	75.3	135	28.4	69.4	248
1959	262	317	225	203	288	421	476	176	100	90.9	54.7	47.6	221
1960	164	396	456	316	436	244	719	203	228	73.7	156	207	298

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.25	2.28	3.86	3.85	4.97	4.95	5.12	1.72	0.80	0.32	0.38	0.35	28.85
1952	.56	3.49	4.08	4.98	2.70	4.32	6.17	3.76	4.53	1.03	1.28	1.57	38.41
1953	.61	1.24	3.33	4.84	3.70	9.13	6.45	3.62	.78	.37	.14	.10	34.31
1954	.21	.64	3.61	1.67	2.40	3.83	3.09	3.25	.81	.35	.29	1.94	22.09
1955	.88	4.48	4.44	2.05	2.23	4.07	5.49	2.82	.81	.31	9.75	1.17	38.50
1956	7.18	6.43	1.56	1.53	1.60	2.42	7.81	2.99	1.46	.81	.18	.36	34.33
1957	.38	1.08	2.54	1.54	1.61	2.03	3.64	.88	.25	.12	.09	.11	14.27
1958	.18	.45	4.00	3.34	1.83	3.93	6.33	3.34	.75	1.27	.30	.79	26.51
1959	2.27	2.68	1.99	1.86	2.26	3.68	3.99	1.59	1.03	.89	.54	.48	23.21
1960	1.65	3.32	3.94	2.74	3.54	2.14	6.00	1.80	1.96	.86	1.42	1.83	31.20

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30							Calendar year			
		Observed				Adjusted			Observed		Adjusted	
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Mean	Runoff in inches
		Discharge	Date									
1950	-	-	-	-	-	-	-	-	-	229	238	24.26
1951	1201	3,980	Mar. 31, 1951	12	277	283	2.13	28.85	229	294	300	30.59
1952	1231	3,080	June 1, 1952	14	370	376	2.83	38.41	341	347	354	35.46
1953	1271	4,530	Jan. 24, 1953	5.4	336	336	2.53	34.31	319	329	335	33.59
1954	1331	2,130	Sept. 11, 1954	6.5	197	216	1.62	22.09	255	269	274	27.43
1955	1381	50,300	Aug. 19, 1955	7.8	370	377	2.83	38.50	424	430	438	43.87
1956	1431	7,760	Oct. 16, 1955	10	330	336	2.53	34.33	216	226	231	23.16
1957	1501, 1701	1,240	Apr. 6, 1957	5.5	127	139	1.05	14.27	131	146	146	14.90
1958	1551, 1701	2,560	Dec. 21, 1957	8.5	248	260	1.95	26.51	277	282	287	28.77
1959	1621, 1701	2,920	Mar. 6, 1959	14	221	228	1.71	23.21	239	247	251	25.23
1960	1701	2,740	Apr. 5, 1960	20	298	305	2.29	31.20	-	-	-	-

2035. Lake Lillinonah near Newtown, Conn.

Location.--Lat 41°26'52", long 73°17'49", on Housatonic River in Litchfield County, 2.3 miles north of Newtown, Fairfield County.

Drainage area.--1,392 sq mi.

Records available.--February 1955 to September 1960.

Remarks.--Completed in 1955 for storage of water for power. Usable capacity, 219,000,000 cu ft.

Cooperation.--Records furnished by The Connecticut Light & Power Co.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1955	-	-	-	0	39	40	328	16	8	3	24	652
1956	2,544	2,898	2,965	2,898	2,791	2,248	2,869	2,877	2,884	3,072	2,891	2,841
1957	2,935	2,943	2,935	2,877	2,958	3,127	3,096	3,003	2,735	2,865	3,049	3,018
1958	3,068	3,011	2,877	2,928	3,003	2,864	3,049	2,958	3,011	3,096	2,958	2,855
1959	3,018	2,965	3,120	2,700	2,935	2,921	3,003	3,136	2,891	2,805	2,680	2,958
1960	3,057	3,018	2,805	3,018	2,935	2,694	2,884	3,026	2,980	3,072	2,749	2,855

2040. Pomperaug River at Southbury, Conn.

Location.--Lat 41°28'50", long 73°13'30", on right bank 200 ft upstream from highway bridge, 800 ft downstream from Bullet Hill Brook, 0.6 mile west of Southbury, New Haven County, and 5.8 miles upstream from mouth.

Drainage area.--75.3 sq mi.

Records available.--June 1932 to September 1960.

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.--28 years (1932-60), 130 cfs.

Extremes.--1932-60: Maximum discharge, 29,400 cfs Aug. 19, 1955 (gage height, 21.8 ft, from floodmarks), from rating curve extended above 1,200 cfs by computation of flow over dam at gage height 16.0 ft and by slope-area measurement of peak flow; minimum, 3.3 cfs Aug. 27, 1949; minimum gage height, 2.31 ft Aug. 10, 1957.

Remarks.--Occasional regulation at low flow by mill upstream.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	18.9	93.8	166	245	353	270	256	97.1	66.7	29.6	28.2	17.8	135
1952	33.9	208	237	295	135	271	317	201	226	79.9	148	118	190
1953	43.2	87.5	187	300	242	494	363	169	43.3	36.9	14.8	7.66	165
1954	17.4	46.8	186	97.7	145	196	180	182	52.2	26.3	34.9	125	107
1955	53.9	263	245	118	151	255	251	101	43.6	24.2	578	70.7	180
1956	625	468	92.1	93.6	170	207	347	149	95.7	52.5	11.6	16.8	194
1957	16.8	55.0	134	95.0	118	117	232	59.1	18.6	9.56	9.18	9.58	72.3
1958	12.9	24.4	172	251	153	280	299	198	55.1	43.2	26.4	44.0	130
1959	150	160	114	107	159	207	223	84.2	54.3	58.0	23.1	25.5	112
1960	95.0	188	231	185	265	154	285	117	64.2	42.6	54.4	123	150

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.29	1.40	2.54	3.75	4.88	4.14	3.79	1.49	0.99	0.45	0.43	0.27	24.42
1952	.52	3.08	3.63	4.48	2.19	4.15	4.70	3.08	3.35	1.22	2.27	1.75	34.42
1953	.66	1.29	2.86	4.59	3.54	7.56	5.38	2.58	.64	.56	.23	.11	29.80
1954	.27	.69	2.85	1.50	2.01	3.00	2.67	2.79	.77	.40	.53	1.85	19.33
1955	.83	3.89	3.75	1.81	2.09	3.91	3.72	1.54	.65	.37	8.85	1.05	32.46
1956	9.57	6.94	1.41	1.43	2.44	3.17	5.14	2.28	1.42	.80	.18	.25	35.03
1957	.25	.81	2.05	1.45	1.64	1.79	3.44	.90	.28	.15	.14	.14	13.05
1958	.20	.36	2.63	3.84	2.11	4.29	4.43	3.03	.82	.66	.40	.65	23.42
1959	1.99	2.36	1.74	1.64	2.20	3.17	3.30	1.29	.80	.89	.35	.38	20.11
1960	1.46	2.79	3.54	2.84	3.80	2.35	4.22	1.79	.95	.65	.83	1.82	27.04

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	106	19.08
1951	1201	3,160	Feb. 7, 1951	11	135	1.79	24.42	152	27.42
1952	1231	2,500	Mar. 11, 1952	9.5	190	2.52	34.42	177	32.00
1953	1271	3,400	Jan. 24, 1953	6.5	165	2.19	29.80	160	28.80
1954	1331	1,790	Sept. 11, 1954	6.8	107	1.42	19.33	133	23.99
1955	1381	29,400	Aug. 19, 1955	12	180	2.39	32.46	232	41.91
1956	1431	8,860	Oct. 16, 1955	8.3	194	2.58	35.03	112	20.23
1957	1501	1,100	Jan. 23, 1957	4.5	72.3	.960	13.05	72.7	13.12
1958	1551	1,840	Feb. 28, 1958	7.4	150	1.73	23.42	146	26.32
1959	1621	2,400	Mar. 6, 1959	9.6	112	1.49	20.11	121	21.81
1960	1701	2,010	Jan. 3, 1960	12	150	1.99	27.04	-	-

2048. Copper Mill Brook near Monroe, Conn.

Location.--Lat 41°21'46", long 73°13'08", on right bank just upstream from twin culverts on Hammertown Road, 700 ft upstream from mouth, $1\frac{1}{2}$ miles west of Connecticut Highway 111, 2.8 miles northwest of Monroe, Fairfield County, and 2.2 miles east of Bottsford.

Drainage area.--2.50 sq mi.

Records available.--June 1958 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 331.05 ft above mean sea level.

Extremes.--1958-60: Maximum discharge, 283 cfs Sept. 12, 1960 (gage height, 5.84 ft), from rating table extended above 40 cfs by logarithmic plotting; minimum, 0.12 cfs Aug. 28, 29, 1959 (gage height, 0.39 ft).

Remarks.--Infrequent regulation at low flow.

HOUSATONIC RIVER BASIN

Monthly and yearly mean discharge, in cubic feet per second, of Copper Mill Brook near Monroe, Conn.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	2.28	0.908	0.544	1.89	-
1959	5.30	5.97	4.51	4.30	5.45	10.7	9.80	3.44	2.01	1.29	1.31	.30	4.52
1960	1.78	5.17	8.42	7.43	11.2	7.46	9.03	4.00	1.54	2.14	.913	5.42	5.35

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1958	-	-	-	-	-	-	-	-	1.02	0.42	0.25	0.84	-
1959	2.44	2.67	2.08	1.98	2.27	4.93	4.37	1.59	.90	.59	.60	.13	24.55
1960	.82	2.31	3.88	3.42	4.83	3.44	4.03	1.84	.69	.99	.42	2.42	29.09

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1958	1551	-	-	-	-	-	-	-	-
1959	1621	255	Mar. 6, 1959	0.14	4.52	1.81	24.55	4.49	24.37
1960	1701	283	Sept. 12, 1960	.21	5.35	2.14	29.09	-	-

2050. Lake Zoar at Stevenson, Conn.

Location.--Lat 41°23'05", long 73°09'55", on Housatonic River at Stevensor, Fairfield County.Drainage area.--1,545 sq mi.Records available.--August 1928 to September 1960.Remarks.--Completed in 1919 for storage of water for power. Usable capacity. 331,000,000 cu ft.Cooperation.--Records furnished by The Connecticut Light & Power Co.

Month-end contents, in millions of cubic feet

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	298.7	358.6	165.9	213.6	307.9	457.7	200.5	231.3	289.6	262.5	271.6	317.0
1952	226.9	226.9	253.5	344.7	287.0	253.5	358.6	183.2	271.6	289.6	298.7	267.0
1953	289.6	312.5	271.6	276.1	178.9	405.5	187.5	276.1	267.0	280.6	269.6	231.3
1954	267.0	256.0	191.8	267.0	161.6	204.8	231.3	240.2	298.7	307.9	209.2	249.0
1955	285.1	368.0	317.0	127.9	244.6	183.2	377.3	213.6	267.0	303.3	123.7	226.9
1956	276.1	200.5	330.8	312.5	289.6	218.1	419.6	321.6	294.1	312.5	321.6	307.9
1957	285.1	317.0	285.1	235.7	307.9	271.6	303.3	307.9	303.3	321.6	303.3	285.1
1958	321.6	326.2	344.7	294.1	386.6	276.1	377.3	303.3	285.1	267.0	303.3	321.6
1959	276.1	363.3	307.9	244.6	303.3	294.1	294.1	307.9	312.5	303.3	317.0	294.1
1960	307.9	372.6	298.7	307.9	298.7	381.9	307.9	258.0	294.1	294.1	330.8	368.0

2055. Housatonic River at Stevenson, Conn.

Location.--Lat 41°23'05", long 73°10'05" (revised), on left bank in New Haven County, 0.2 mile downstream from dam of Connecticut Light & Power Co. at Stevenson, Fairfield County, 0.2 mile upstream from Eightmile Brook, and at mile 19.2

Drainage area.--1,545 sq mi.

Records available.--August 1928 to September 1960.

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.--32 years (1928-60), 2,625 cfs (adjusted for storage and diversion).

Extremes.--1928-60: Maximum discharge, 75,800 cfs Oct. 16, 1955 (gage height, 24.50 ft), from rating curve extended above 35,000 cfs on basis of computations of flow at Stevenson and Derby Dams and slope-area measurements at gage heights 21.5 and 23.5 ft; practically no flow at times, result of regulation.

Remarks.--Ordinary flow completely regulated by Stevenson hydroelectric plant. Flow regulated by Lake Candlewood, Shepaug Reservoir, Lake Lillinah, and Lake Zoar, and by small diversion from basin at Shepaug Reservoir since October 1935. Runoff adjusted for diversion and change in contents in Lake Candlewood (see p.), Shepaug Reservoir (see p.), Lake Lillinah (see p.), and Lake Zoar (see p.).

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	586	2,151	3,700	4,195	6,419	5,501	7,062	2,135	1,260	1,218	930	818	2,979
1952	1,540	4,730	4,474	5,572	3,877	5,116	7,792	4,322	4,954	1,316	1,392	1,556	3,876
1953	777	1,285	3,295	4,955	4,786	9,039	8,036	5,079	1,450	806	529	384	3,363
1954	452	674	3,062	1,604	3,120	4,383	3,972	4,010	1,436	606	478	2,422	2,178
1955	1,076	4,853	4,947	2,593	2,660	4,991	5,641	2,876	974	520	8,294	1,261	3,399
1956	8,810	8,786	2,013	1,778	2,476	3,752	8,648	4,268	1,895	831	454	757	3,698
1957	570	1,580	3,066	2,473	2,138	2,421	4,089	1,690	779	326	414	393	1,657
1958	301	3,506	3,250	3,634	2,320	4,406	7,615	4,482	1,255	893	654	982	2,542
1959	2,260	3,398	2,253	2,579	2,551	4,009	5,054	2,152	1,255	1,069	777	391	2,308
1960	1,543	3,612	4,796	3,615	4,672	2,749	8,593	2,534	1,908	1,124	1,716	2,522	3,246

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.35	1.72	2.88	3.16	4.37	3.93	5.10	1.63	0.96	0.92	0.71	0.60	26.33
1952	1.15	3.54	3.37	4.15	2.63	3.90	5.67	3.17	3.54	.96	1.13	1.00	34.21
1953	.50	.92	2.52	3.77	5.21	6.89	5.75	3.82	.96	.62	.25	.20	29.41
1954	.32	.56	2.52	1.26	2.09	3.30	2.98	3.03	1.01	.41	.37	1.87	19.62
1955	.81	3.53	3.67	1.82	1.98	3.74	4.20	1.98	.74	.53	6.23	1.06	29.99
1956	7.11	6.38	1.46	1.37	1.76	2.59	6.50	3.15	1.36	.69	.26	.52	33.15
1957	.46	1.32	2.28	1.70	1.51	1.87	3.06	1.21	.46	.22	.21	.21	14.51
1958	.24	.43	2.74	2.72	1.56	3.26	5.72	3.29	.88	.74	.44	.67	22.69
1959	1.74	2.48	1.66	1.79	1.78	3.09	3.68	1.57	.89	.78	.43	.45	20.34
1960	1.30	2.63	3.48	2.78	3.20	1.96	6.04	1.88	1.58	.84	1.29	1.83	28.61

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30										Calendar year		
		Observed					Adjusted					Observed		Adjusted
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Mean	Mean	Runoff in inches	Mean	Mean	Runoff in inches
		Discharge	Date											
1950	-	-	-	-	-	-	-	-	-	-	-	2,357	2,369	20.78
1951	1201	21,000	Apr. 3, 1951	70	2,979	2,999	1.94	26.33	3,338	3,350	29.44	-	-	-
1952	1231	22,700	Apr. 6, 1952	67	3,876	3,882	2.51	34.21	3,429	3,416	30.09	-	-	-
1953	1271	25,300	Jan. 24, 1953	84	3,563	3,547	2.17	29.41	3,266	3,286	28.87	-	-	-
1954	1331	11,000	Sept. 12, 1954	58	2,178	2,233	1.45	19.62	2,734	2,758	24.23	-	-	-
1955	1381	69,400	Aug. 19, 1955	130	3,399	3,415	2.21	29.99	4,130	4,205	36.95	-	-	-
1956	1431	75,800	Oct. 16, 1955	105	3,698	3,765	2.44	33.15	2,499	2,529	22.26	-	-	-
1957	1501	13,000	Apr. 8, 1957	86	1,657	1,651	1.07	14.51	1,562	1,578	13.86	-	-	-
1958	1551	16,900	Apr. 7, 1958	61	2,542	2,585	1.87	22.69	2,861	2,865	25.16	-	-	-
1959	1621	19,900	Mar. 6, 1959	86	2,308	2,311	1.50	20.34	2,482	2,487	21.87	-	-	-
1960	1701	30,100	Apr. 5, 1960	80	3,248	3,250	2.10	28.61	-	-	-	-	-	-

2056. West Branch Naugatuck River at Torrington, Conn.

Location.--Lat 41°48'03", long 73°07'26", on right bank at upstream side of Prospect Street Bridge in Torrington, Litchfield County, half a mile upstream from confluence with East Branch and 3 miles downstream from Stillwater Pond.

Drainage area.--33.4 sq mi.

Records available.--August 1956 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 543.54 ft above mean sea level, datum of 1929. Prior to Nov. 9, 1959, wire-weight gage (crest-stage gage since Dec. 18, 1956), on downstream side of bridge at datum 3.00 ft lower. Nov. 9, 1959, to May 23, 1960, wire-weight gage, read twice daily, and crest-stage gage at same site and datum.

Extremes.--1956-60: Maximum discharge, 3,600 cfs Sept. 12, 1960 (gage height, 7.46 ft); minimum observed, 4.4 cfs July 14, 20, 21, Aug. 3, 11, 1957; minimum gage height observed, 3.61 ft Aug. 19, 1956, site and datum then in use.

Flood of Aug. 19, 1955, reached a peak discharge of 11,900 cfs at Stillwater Pond dam 3 miles upstream, drainage area, 24.2 sq mi.

Remarks.--City of Torrington diverts an average of about 4,000,000 gal of water a day for municipal supply from North Pond and Reuben Hart and Hatchaloosie Reservoirs. Regulation at low flow by Stillwater Pond.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1956	-	-	-	-	-	-	-	-	-	-	-	10.6	-
1957	9.48	26.3	54.6	50.7	48.1	52.5	95.9	23.9	9.59	6.53	6.75	6.14	32.4
1958	6.94	11.4	119	72.6	46.8	94.7	237	80.7	17.6	13.9	9.87	25.5	62.1
1959	75.3	74.2	43.0	60.7	48.0	108	132	35.2	30.2	28.7	13.4	14.1	55.2
1960	43.3	95.0	89.5	73.5	102	68.3	187	42.8	55.9	34.5	37.3	76.8	75.1

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1956	-	-	-	-	-	-	-	-	-	-	-	0.35	-
1957	0.33	0.88	1.88	1.75	1.50	1.81	3.20	0.83	0.32	0.23	0.23	.21	13.17
1958	.24	.38	4.10	2.50	1.52	3.27	7.92	2.79	.59	.68	.34	.85	25.18
1959	2.59	2.48	1.49	2.10	1.50	3.72	4.41	1.21	1.01	.99	.46	.47	22.43
1960	1.50	3.17	3.09	2.54	3.29	2.35	6.25	1.48	1.86	1.19	1.29	2.57	30.58

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1956	1501	-	-	-	-	-	-	-	-
1957	1501, 1551	800	Jan. 23, 1957	4.4	32.4	0.970	13.17	36.5	14.80
1958	1551	1,500	Apr. 6, 1958	4.6	62.1	1.86	25.18	66.6	27.02
1959	1621	2,080	Mar. 6, 1959	9.1	55.2	1.65	22.43	58.2	23.65
1960	1701	3,600	Sept. 12, 1960	7.0	75.1	2.25	30.58	-	-

2057. East Branch Naugatuck River at Torrington, Conn.

Location--Lat 41°48'12", long 73°07'06", on upstream side of Wall Street Bridge in Torrington, Litchfield County, 0.3 mile downstream from Troy Brook and 0.6 mile upstream from confluence with West Branch.

Drainage area--13.8 sq mi.

Records available--August 1956 to September 1960.

Gage--Wire-weight gage, read twice daily, and crest-stage gage. Datum of gage is 539.26 ft above mean sea level, datum of 1929.

Extremes--1956-60: Maximum discharge, 1,130 cfs Mar. 6, 1959 (gage height, 4.33 ft); minimum observed, 0.5 cfs Oct. 20, 1956.

Flood of Aug. 19, 1955, reached a peak discharge of 6,210 cfs at a point $1\frac{1}{2}$ miles upstream, drainage area, 10.2 sq mi.

Remarks--Some regulation at low flow.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1956	-	-	-	-	-	-	-	-	-	-	-	2.54	-
1957	3.93	10.4	27.4	23.9	17.3	24.6	39.8	9.81	3.92	2.12	3.94	2.93	14.1
1958	3.33	6.59	36.7	38.8	23.7	45.5	72.9	29.3	10.6	9.01	4.56	17.7	24.9
1959	33.8	29.6	17.8	21.0	17.9	51.2	57.9	19.6	15.0	11.3	6.50	3.16	23.7
1960	15.4	37.5	43.8	33.1	45.5	34.0	73.1	19.0	33.0	16.8	21.9	40.9	34.3

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1956	-	-	-	-	-	-	-	-	-	-	-	0.21	-
1957	0.33	0.84	2.29	1.99	1.30	2.05	3.21	0.82	0.32	0.18	0.33	0.24	13.90
1958	.28	.53	3.07	3.24	1.79	3.80	5.85	2.44	.86	.75	.38	1.43	24.46
1959	2.82	2.39	1.49	1.75	1.35	4.28	4.69	1.84	1.22	.94	.54	.26	23.37
1960	1.29	3.04	3.66	2.77	3.56	2.84	5.91	1.59	2.67	1.41	1.83	3.30	33.87

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year		
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches	
		Discharge	Date							
1956	1501	-	-	-	-	-	-	-	-	-
1957	1501	305	Jan. 23, 1957	1.1	14.1	1.02	13.90	14.6	14.32	
1958	1551	740	Apr. 6, 1958	.8	24.9	1.80	24.46	27.8	27.28	
1959	1621	1,130	Mar. 6, 1959	1.5	23.7	1.72	23.37	25.0	24.66	
1960	1701	1,070	Sept. 12, 1960	2.9	34.3	2.49	33.87	-	-	

Location.--Lat 41°42'15", long 73°03'53", on right bank near downstream side of Twomile Bridge, 250 ft downstream from New York, New Haven and Hartford Railroad bridge, 0.4 mile upstream from Leadmine Brook, 2 miles north of Thomaston, Litchfield County, and at mile 31.

Records available.--October 1930 to September 1959.

Gage--Water-stage recorder. Datum of gage is 389.44 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Extremes.--1930-59: Maximum discharge, 41,600 cfs Aug. 19, 1955 (gage height, 24.0 ft, from floodmark); from rating curve extended above 6,000 cfs on basis of slope-area measurement of peak flow; minimum, about 7 cfs Mar. 12, 1940 (result of freezeup): minimum daily, 9.5 cfs Sept. 29, 1957; minimum gage height, 0.25 ft Sept. 30, Oct. 6, 1957.

Remarks.--Diurnal fluctuation at low flow. Records of chemical analyses and water temperatures for the period October 1957 to September 1958 are given in WSP 1571.

[illegible][illegible][illegible]

2064. Leadmine Brook near Harwinton, Conn.

Location.--Lat 41°43'46", long 73°03'13", on left bank just upstream from bridge on Poverty Hollow Road at Roraback Lodge, 300 ft downstream from Rock Brook, 2.8 miles upstream from mouth, and 3.0 miles south of Harwinton, Litchfield County.

Drainage area.--18.9 sq mi.

Records available.--February 1959 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 514.58 ft above mean sea level, datum of 1929.

Extremes.--1959-60: Maximum discharge, 1,520 cfs June 4, 1960 (gage height, 8.13 ft), from rating curve extended above 200 cfs by logarithmic plotting; minimum, 0.4 cfs Sept. 28, 1959; minimum gage height, 0.84 ft July 27, 1960.

Remarks.--Occasional low-water regulation.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1959	-	-	-	-	-	76.4	72.7	19.3	14.0	11.2	4.97	3.85	-
1960	27.1	49.6	61.8	50.3	68.1	55.6	98.9	31.8	45.3	15.3	12.9	53.5	47.2

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1959	-	-	-	-	-	4.88	4.30	1.18	0.83	0.68	0.30	0.23	-
1960	1.65	2.93	3.77	3.07	3.89	3.39	5.84	1.94	2.67	.93	.79	3.16	34.03

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1959	1621	-	-	-	-	-	-	-	-
1960	1701	1,520	June 4, 1960	1.5	47.2	2.50	34.03	-	-

Yearly discharge, in cubic feet per second, of Leadmine Brook near Thomaston, Conn.

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	46.5	26.31
1951	1201	1,810	Nov. 25 or 26	1.6	53.3	2.22	30.12	56.0	31.65
1952	1231	900	Aug. 16, 1952	1.5	65.9	2.75	37.38	62.9	35.68
1953	1271	2,420	Jan. 24, 1953	.9	62.7	2.61	35.43	60.0	33.92
1954	1331	720	Sept. 11, 1954	1.0	39.1	1.63	22.13	47.5	26.87
1955	1381	10,400	Aug. 19, 1955	.7	63.5	2.65	35.92	83.0	46.96
1956	1431	3,080	Oct. 16, 1955	.5	73.0	3.04	41.41	41.9	23.76
1957	1501	640	Jan. 23, 1957	.07	24.8	1.03	14.04	27.1	15.30
1958	1551	390	Apr. 6, 1958	.25	54.5	2.27	30.87	62.0	35.07
1959	1621	1,260	Mar. 6, 1959	1.1	40.3	1.68	22.80	-	-
1960	-	-	-	-	-	-	-	-	-

2069. Naugatuck River at Thomaston, Conn.

Location--Lat 41°40'25", long 73°04'12", on left bank at downstream side of bridge on U.S. Highways 6 and 202 at Thomaston, Litchfield County, 1½ miles downstream from Thomaston Reservoir, 2½ miles upstream from Branch Brook, and at mile 29.5.

Drainage area--105 sq mi.

Records available--October 1959 to September 1960.

Gage--Water-stage recorder. Datum of gage is 354.39 ft above mean sea level, datum of 1929.

Extremes--1959-60: Maximum discharge, 5,140 cfs Mar. 31, 1960 (gage height, 6.25 ft); minimum, 20 cfs Oct. 1, 1960 (gage height, 1.61 ft); minimum daily, 26 cfs Oct. 4, 1960.

Flood of Aug. 19, 1955, reached a stage of 27.0 ft, as determined from floodmarks by Corps of Engineers (discharge, 55,000 cfs at Thomaston Reservoir site 1½ miles upstream).

Remarks--Slight diurnal fluctuation at low flow. Flow affected by Thomaston Reservoir, constructed by the Corps of Engineers during 1959 and 1960.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1960	151	285	338	261	348	266	621	144	214	100	99.1	272	257

Monthly and yearly runoff, in inches

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1960	1.66	3.02	3.71	2.87	3.57	2.92	6.59	1.58	2.28	1.10	1.09	2.89	33.28

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1960	1701	5,140	Mar. 31, 1960	26	257	2.45	33.28	-	-

2070. Pitch Reservoir near Thomaston, Conn.

Location--Lat 41°41'34", long 73°09'04", on Branch Brook, a tributary of the Naugatuck River, upstream from Morris Reservoir and 4 (revised) miles northwest of Thomaston, Litchfield County.

Drainage area--5.74 sq mi.

Records available--November 1943 to September 1960.

Remarks--Completed in 1943 for storage of water for municipal supply. Total capacity, 1,414,000,000 gal.

Cooperation--Records furnished by Bureau of Engineering, city of Waterbury.

Month-end contents, in millions of gallons

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	1,412.2	1,385.9	1,374.8	1,379.1	1,407.9	1,407.2	1,380.9	1,386.3	1,412.6	1,412.9	1,408.2	1,407.5
1952	1,414.0	1,403.2	1,414.0	1,414.0	1,341.3	1,352.8	1,414.0	1,412.6	1,355.7	1,406.4	1,402.8	1,319.2
1953	1,414.7	1,396.7	1,358.2	1,412.9	1,395.6	1,415.1	1,405.7	1,391.7	1,416.6	1,413.3	1,387.5	1,327.3
1954	1,216.2	1,416.6	1,394.6	1,388.4	1,406.8	1,411.8	1,414.0	1,414.0	1,410.4	1,414.0	1,410.4	1,414.4
1955	1,421.4	1,410.4	1,399.6	1,293.0	1,406.8	1,410.4	1,406.8	1,414.0	1,410.4	1,388.8	1,289.5	1,342.0
1956	1,410.4	1,357.1	1,371.5	1,344.9	1,402.5	1,375.1	1,409.0	1,413.3	1,414.0	1,378.0	1,352.4	1,414.0
1957	1,417.0	1,417.3	1,392.8	1,301.0	1,411.8	1,417.0	1,417.0	1,415.1	1,392.4	1,403.9	1,385.9	1,217.9
1958	1,185.2	1,414.0	1,411.1	1,412.6	1,351.4	1,402.5	1,412.6	1,403.2	1,409.0	1,398.2	1,415.1	1,419.2
1959	1,344.2	1,301.4	1,351.5	1,385.8	1,320.3	1,367.2	1,363.6	1,385.6	1,378.0	1,385.8	1,416.2	1,415.5
1960	1,359.3	1,367.6	1,415.5	1,347.0	1,376.2	1,400.3	1,360.0	1,398.9	1,392.4	1,411.8	1,381.6	1,369.7

HOUSATONIC RIVER BASIN

2075. Morris Reservoir near Thomaston, Conn.

Location.--Lat 41°40'29", long 73°08'39", on Branch Brook, a tributary of the Naugatuck River, downstream from Pitch Reservoir, upstream from Wigwam Reservoir, and 3½ (revised) miles west of Thomaston, Litchfield County.

Drainage area.--13.3 sq mi.

Records available.--May 1918 to September 1924, September 1928 to September 1960.

Remarks.--Completed in 1913 for storage of water for municipal supply. Total capacity, 1,987,000,000 gal.

Cooperation.--Records furnished by Bureau of Engineering, city of Waterbury.

Month-end contents, in millions of gallons										
Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1951	1,771.7	1,992.1	1,993.6	1,994.6	1,992.1	1,994.1	1,986.5	1,989.0	1,955.6	1,865.1
1952	1,651.2	1,988.5	1,990.6	1,991.1	1,987.4	1,986.0	1,990.6	2,000.8	1,912.1	1,859.4
1953	1,907.3	1,990.1	1,972.8	1,991.6	1,985.5	1,992.6	1,989.6	1,965.0	1,956.6	1,855.7
1954	1,243.5	1,181.3	1,987.0	1,987.5	1,989.6	1,982.1	1,992.1	1,989.6	1,938.0	1,756.0
1955	1,814.8	1,992.1	1,992.1	1,962.5	1,992.1	1,997.2	1,997.2	1,987.0	1,899.6	1,728.5
1956	1,918.8	1,866.5	1,827.5	1,957.6	1,987.5	1,987.0	1,996.2	1,987.0	1,965.0	1,910.2
1957	1,629.8	1,958.6	1,984.1	1,975.2	1,993.1	1,989.6	1,989.0	1,975.2	1,735.7	1,541.3
1958	1,132.3	1,079.6	1,726.7	1,989.0	1,962.5	1,994.1	1,994.6	1,942.9	1,974.8	1,963.1
1959	1,989.6	1,994.1	1,940.0	1,981.6	1,975.2	1,989.6	1,992.1	1,969.8	1,981.1	1,958.6
1960	1,988.0	1,991.6	1,981.1	1,988.0	1,988.0	2,016.6	1,994.6	1,987.0	1,903.4	1,951.6

2080. Wigwam Reservoir near Thomaston, Conn.

Location.--Lat 41°39'50", long 73°07'41", on Branch Brook, a tributary of the Naugatuck River, downstream from Morris Reservoir, 3 miles west of Thomaston, Litchfield County.

Drainage area.--18.1 sq mi.

Records available.--May 1918 to September 1924, September 1928 to September 1960.

Remarks.--Completed in 1902 for storage of water for municipal supply. Total capacity, 729,000,000 gal.

Cooperation.--Records furnished by Bureau of Engineering, city of Waterbury.

Month-end contents, in millions of gallons										
Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1951	683.9	739.1	742.2	736.3	739.1	748.6	736.3	737.4	728.2	728.8
1952	731.2	737.4	741.2	739.8	714.2	737.7	740.5	741.9	731.2	732.9
1953	733.9	736.7	732.2	740.5	737.0	742.2	732.2	733.9	732.9	731.9
1954	610.8	622.0	736.7	736.7	740.8	739.8	740.5	739.1	725.8	664.8
1955	737.0	740.5	739.8	615.3	740.2	738.4	742.2	732.9	732.9	713.9
1956	745.8	768.5	714.2	731.9	735.6	739.8	743.3	733.6	721.4	703.0
1957	672.0	687.8	701.4	655.3	733.8	739.1	735.6	728.5	729.2	704.7
1958	581.8	544.1	737.7	740.8	747.5	744.0	743.0	731.6	731.2	730.5
1959	739.1	742.2	744.0	737.7	726.5	745.8	740.2	733.9	731.6	725.1
1960	744.0	741.9	739.4	738.8	740.5	758.0	740.5	739.1	738.0	735.3

2085. Naugatuck River at Beacon Falls, Conn.

Location (revised).--Lat 41°26'32", long 73°03'47", on left bank at downstream side of Bridge Street Highway bridge at Beacon Falls, New Haven County, 0.4 mile upstream from Bronson Brook and at mile 10.1.

Drainage area.--261 sq mi. Prior to Oct. 1, 1955, 246 sq mi.

Records available.--June 1918 to September 1924, September 1928 to September 1935 (published as "near Naugatuck"), October 1955 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 117.28 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1955, water-stage recorder at site 2.5 miles upstream at datum 37.89 ft higher. Oct. 1, 1955, to Mar. 21, 1957, wire-weight or chain gage at present site and datum.

Average discharge.--38 years (1918-24, 1928-60), 479 cfs (adjusted for storage and diversion).

Extremes.--1918-24, 1928-60: Maximum discharge, 106,000 cfs Aug. 19, 1955 (gage height, 25.7 ft, from floodmarks), from rating curve extended above 9,000 cfs on basis of slope-area measurements at gage heights 12.4 and 25.7 ft (site and datum then in use); minimum, 24 cfs Oct. 21, 1935; minimum daily, 40 cfs Oct. 2, 12, 1930, Sept. 7, 1936; minimum gage height (present site and datum), 1.43 ft Oct. 6, 1957.
Flood in November 1927 reached a stage of 14 ft, site and datum then in use (discharge, about 26,000 cfs).

Remarks.--Flow regulated by industrial plants upstream during low stages, and by Pitch, Morris, and Wigwam Reservoirs having a combined capacity of 550,000 cu ft. Flow increased by diversion from Shepaug Reservoir into Naugatuck River basin. Runoff adjusted for diversion from Shepaug Reservoir (see p. 293) and change in contents in Pitch (see p. 305), Morris (see p. 306), and Wigwam (see p. 306) Reservoirs.

Monthly and yearly mean discharge, in cubic feet per second (observed)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	121	456	712	934	1,393	1,224	1,060	406	291	144	141	114	577
1952	176	690	319	1,166	694	1,153	1,336	874	787	214	338	291	720
1953	144	383	666	1,120	963	1,887	1,384	729	209	170	122	100	656
1954	128	192	657	345	589	858	701	680	221	133	202	512	434
1955	244	970	1,050	465	587	989	945	380	180	119	2,920	262	763
1956	2,480	1,890	342	355	608	731	1,536	546	339	194	103	116	774
1957	112	241	464	380	424	509	902	264	122	85.8	99.0	92.2	307
1958	100	150	754	880	582	1,132	1,304	742	212	273	141	244	543
1959	577	598	425	398	503	881	952	360	255	217	146	144	454
1960	405	768	855	663	937	644	1,258	494	365	245	243	660	625

Monthly and yearly runoff, in inches (adjusted)

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	0.48	2.10	3.33	4.38	5.90	5.74	4.80	1.88	1.27	0.58	0.58	0.43	31.47
1952	.77	3.20	4.31	5.46	3.01	5.42	6.07	4.10	3.51	.93	1.56	1.30	39.64
1953	.58	1.70	3.09	5.25	4.07	8.85	6.27	3.40	.87	.69	.44	.33	35.54
1954	.51	.82	3.17	1.59	2.47	3.92	3.06	3.06	.98	.52	.85	2.29	23.14
1955	1.11	4.42	4.91	2.12	2.50	4.64	4.28	1.74	.72	.44	13.72	1.07	41.67
1956	11.03	8.06	1.45	1.56	2.51	3.49	6.57	2.39	1.58	.78	.35	.41	39.98
1957	.42	.93	2.12	1.65	1.70	2.13	3.73	1.09	.41	.27	.33	.29	15.07
1958	.37	.60	3.38	3.94	2.30	5.02	5.58	3.26	.84	1.15	.53	1.02	27.99
1959	2.54	2.54	1.84	1.73	1.99	3.90	4.07	1.54	1.00	.90	.55	.53	23.13
1960	1.79	3.28	3.78	2.92	3.88	2.86	5.36	2.17	1.51	1.00	1.00	2.80	32.35

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30										Calendar year		
		Observed					Adjusted			Observed		Adjusted		
		Momentary maximum		Minimum day	Mean	Mean	Per square mile	Runoff in inches	Runoff in inches	Mean	Mean	Mean	Mean	Runoff in inches
		Discharge	Date											
1950	-	-	-	-	-	-	-	-	-	-	-	453	449	24.76
1951	1201	11,300	Mar. 31, 1951	80	577	570	2.32	31.47	619	613	35.84	619	613	35.84
1952	1231	7,880	June 1, 1952	89	720	717	2.91	39.64	670	664	36.73	670	664	36.73
1953	1271	15,600	Jan. 24, 1953	73	656	644	2.62	35.54	638	629	34.67	638	629	34.67
1954	1331	5,710	Sept. 11, 1954	68	434	419	1.70	23.14	541	527	29.08	541	527	29.08
1955	1381	106,000	Aug. 19, 1955	71	763	755	3.07	41.67	968	961	51.77	968	961	51.77
1956	1431	30,400	Oct. 16, 1955	74	774	768	2.94	39.98	448	439	22.91	448	439	22.91
1957	1501	4,500	Jan. 23, 1957	55	307	290	1.11	15.07	323	307	15.95	323	307	15.95
1958	1551	6,790	Apr. 6, 1958	49	543	538	2.06	27.99	593	588	30.56	593	588	30.56
1959	1621	10,200	Mar. 6, 1959	85	454	445	1.70	23.13	490	482	25.06	490	482	25.06
1960	1701	7,870	Sept. 12, 1960	95	625	620	2.38	32.35	-	-	-	-	-	-

SAUGATUCK RIVER BASIN

2090. Saugatuck Reservoir near Lyons Plain, Conn.

Location.--Lat 41°14'54", long 73°20'59", on East Branch Saugatuck River, 2 miles north of Lyons Plain, Fairfield County.

Drainage area.--33.5 sq mi.

Records available.--January 1942 to September 1960.

Remarks.--Completed in 1942 for storage of water for municipal supply. Total capacity, 11,900,000,000 gal.

Cooperation.--Records furnished by Bridgeport Hydraulic Co.

Month-end contents, in millions of gallons

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951	10,026	10,231	11,956	11,973	11,968	12,121	11,941	11,950	11,762	11,311	10,746	10,028
1952	9,622	11,653	11,982	12,011	11,953	11,982	12,026	12,040	11,853	11,767	11,924	11,910
1953	11,068	11,165	11,953	11,982	11,938	11,982	11,996	11,924	11,513	10,864	9,954	9,049
1954	8,291	8,178	9,624	10,283	11,341	11,947	11,950	11,916	11,713	10,566	9,851	9,877
1955	9,333	11,896	12,034	11,841	11,968	11,982	12,008	11,750	11,289	10,484	11,947	11,566
1956	12,086	11,976	11,656	11,654	11,962	11,996	12,028	11,950	11,591	11,237	10,244	9,513
1957	8,879	9,882	11,350	11,953	11,982	11,950	11,965	11,918	11,031	10,049	9,064	8,021
1958	7,375	7,624	10,708	12,020	12,107	12,046	12,028	11,965	11,896	11,434	10,505	9,990
1959	10,588	11,902	11,938	11,938	11,947	11,996	11,991	11,838	11,617	11,096	10,569	9,761
1960	9,657	10,951	11,988	11,965	12,005	12,060	11,962	11,933	11,411	10,601	10,502	11,055

Monthly and yearly diversions, in cubic feet per second, from Saugatuck Reservoir

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1942	-	-	-	-	-	-	-	-	-	16.2	14.7	8.1	-
1943	10.4	0	0	0	0	0	0	0	19.5	28.3	40.2	22.5	10.2
1944	20.1	0	0	0	0	0	0	0	19.2	27.8	25.4	11.2	8.7
1945	23.0	4.1	26.4	0	4.8	4.5	3.5	1.4	9.1	11.6	24.2	16.4	10.8
1946	20.1	4.5	0	0	0	0	0	0	0	17.3	20.8	24.5	7.3
1947	16.2	19.8	13.2	9.8	15.3	10.1	0	0	3.5	16.2	21.0	24.8	12.5
1948	29.3	4.0	0	25.5	19.0	.4	4.1	3.9	4.2	16.2	22.7	33.5	13.7
1949	34.5	16.2	21.6	0	0	0	0	3.1	16.3	29.5	26.3	27.6	14.7
1950	26.3	51.9	15.5	0	0	0	0	0	.7	19.0	19.9	25.0	11.6
1951	17.3	30.1	0	0	0	0	0	0	20.4	27.8	29.1	29.2	12.9
1952	29.2	0	0	0	0	0	0	0	5.1	20.7	12.0	0	5.7
1953	39.4	16.2	1.8	0	0	0	0	0	22.2	30.3	37.0	35.8	15.3
1954	37.8	14.1	0	0	0	0	0	0	10.5	52.5	31.8	29.6	14.8
1955	37.4	2.4	0	14.6	38.7	0	0	15.0	32.8	38.4	18.6	33.1	19.1
1956	17.4	0	21.2	42.2	33.0	7.1	0	0	23.6	34.7	47.2	43.1	22.5
1957	46.5	.9	12.5	14.2	2.5	7.7	5.7	19.5	45.9	48.1	46.7	50.1	25.2
1958	37.3	13.1	5.0	0	0	0	8.0	0	14.3	26.5	46.1	33.6	15.4
1959	14.5	0	1.0	10.5	10.4	9.7	8.8	16.2	35.3	30.2	39.0	47.9	18.6
1960	42.5	20.8	0	0	0	0	0	0	34.0	38.5	28.7	16.8	15.3

2095. Saugatuck River near Westport, Conn.

Location.--Lat 41°10'15", long 73°22'00", on left bank on old Ford Road (Clinton Ave.), 400 ft downstream from West Branch, 600 ft downstream from Aspetuck River and dam of Dorr Co., 2 miles north of Westport, Fairfield County, and 5½ miles upstream from mouth.

Drainage area.--77.5 sq mi.

Records available.--September 1932 to September 1960.

Gage.--Water-stage recorder. Datum of gage is 18.16 ft above mean sea level, datum of 1929.

Average discharge.--28 years (1932-60), 132 cfs (unadjusted).

Extremes.--1932-60: Maximum discharge, 14,800 cfs Oct. 16, 1955 (gage height, 15.93 ft, from high-water marks in gage house), from rating curve extended above 2,400 cfs on basis of computation of peak flow over dam at gage height 10.28 ft and contracted-opening measurement of peak flow; minimum, 0.2 cfs Oct. 19, 1953; minimum gage height, 1.92 ft Oct. 19, 1953, and July 9, 1957; minimum daily, 1.0 cfs Aug. 11, 1939.

Remarks.--Flow regulated by storage and diversion at Saugatuck Reservoir since January 1942 and Aspetuck Reservoir. At Aspetuck Reservoir, Bridgeport Hydraulic Co. diverts an indeterminable amount of water for domestic supply from about 17 sq mi of Saugatuck River basin through Hemlocks Reservoir in Mill River basin. Occasional regulation at dam of Dorr Co.

Monthly and yearly mean discharge, in cubic feet per second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	The year
1951	14.7	48.7	110	243	358	379	334	92.6	40.1	17.8	15.4	14.4	138
1952	22.5	104	315	324	218	362	365	220	223	52.1	73.2	51.5	194
1953	20.5	35.2	193	305	222	629	416	153	21.7	20.5	11.0	10.3	170
1954	11.9	21.4	87.4	40.3	66.7	213	177	163	24.9	9.00	8.77	28.9	71.1
1955	15.5	131	287	125	160	302	223	81.3	16.4	8.02	216	36.0	134
1956	825	512	67.6	66.7	181	224	285	183	59.1	23.2	8.09	16.8	204
1957	16.8	61.1	101	59.6	126	138	259	46.9	11.7	7.25	6.94	7.24	69.5
1958	12.4	19.6	108	288	182	378	395	262	66.6	20.3	14.3	16.4	147
1959	60.5	71.2	126	86.6	120	291	246	67.9	25.3	14.5	12.4	8.12	93.9
1960	16.2	62.3	198	197	335	154	284	93.4	22.4	18.9	14.9	44.7	119

Yearly discharge, in cubic feet per second

Year	WSP	Water year ending Sept. 30						Calendar year	
		Momentary maximum		Minimum day	Mean	Per square mile	Runoff in inches	Mean	Runoff in inches
		Discharge	Date						
1950	-	-	-	-	-	-	-	66.6	-
1951	1201	3,220	Mar. 31, 1951	10	139	-	-	160	-
1952	1251	2,740	Mar. 11, 1952	12	194	-	-	178	-
1953	1271	4,710	Mar. 13, 1953	7.8	170	-	-	159	-
1954	1331	720	Mar. 20, 1954	1.4	71.1	-	-	97.3	-
1955	1381	2,530	Aug. 19, 1955	1.9	134	-	-	215	-
1956	1431	14,800	Oct. 16, 1955	4.7	204	-	-	102	-
1957	1501	1,070	Apr. 6, 1957	1.8	69.5	-	-	66.3	-
1958	1551	2,000	Feb. 28, 1958	6.0	147	-	-	157	-
1959	1621	1,600	Mar. 6, 1959	5.9	93.9	-	-	95.6	-
1960	1701	970	Feb. 19, 1960	7	119	-	-	-	-

Note.--Figures of discharge per square mile and runoff in inches for water years 1941-60, published in some water-supply papers may be in error because of diversions at Aspetuck Reservoir; those figures are not given herein.

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