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GEOLOGICAL SURVEY
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Water-Supply Paper 824

SURFACE WATER SUPPLY *of the* UNITED STATES

1937

PART 4

ST. LAWRENCE RIVER BASIN

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ILLUSTRATION

SURFACE WATER SUPPLY OF ST. LAWRENCE RIVER BASIN, 1937

SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of flow made on streams in the United States during the water year ending September 30, 1937. The work was begun in connection with special studies relating to irrigation. Measurements of stream flow have been made at about 7,200 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July 1937, 3,380 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at other points.

In the execution of the work many State and private organizations have cooperated, either by furnishing data or by assisting in collecting data. Acknowledgments for cooperation of the first kind are made in connection with the description of each station affected; cooperation of the second kind is acknowledged on page 8.

DEFINITION OF TERMS

The units in which stream-flow data are presented in this report and other terms used herein are defined as follows:

"Second-feet" is an abbreviation for "cubic feet per second." A second-foot is a rate of flow of 1 cubic foot per second, or the rate of discharge of water flowing in a channel when the cross-sectional area is 1 square foot and the average velocity is 1 foot per second.

"Second-feet per square mile" is the average number of cubic feet of water flowing per second from each square mile of area drained, on the assumption that the run-off is distributed uniformly both as regards time and area.

"Run-off in inches" is the depth to which an area would be covered if all the water flowing from it in a given period were uniformly distributed on its surface. It is used for comparing run-off with rainfall, which is usually expressed in inches.

An "acre-foot", equivalent to 43,560 cubic feet, is the quantity required to cover an acre to the depth of 1 foot. The term is commonly used in connection with storage for irrigation.

"Second-foot-day" is the volume of water represented by a flow of 1 second-foot for 24 hours.

"Stage-discharge relation" is an abbreviation for the term "relation of gage height to discharge."

"Control" is a term used to designate the natural section or reach of the channel or artificial structure below the gage which determines the stage-discharge relation at the gage.

EXPLANATION OF DATA

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either

from direct readings on a nonrecording gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods outlined in standard textbooks on the measurement of river discharge. Typical gaging stations, equipped with water-stage recorder and measuring cable and car, are shown on plate 1.

Rating tables giving the discharge for any stage are prepared from the discharge measurements. The application of the daily gage height to these rating tables gives the daily discharge from which the monthly and yearly mean discharge is computed.

The data presented for each gaging station in the area covered by this report usually comprise a description of the station, a table showing the daily discharge of the stream, and a table of monthly and yearly discharge and run-off. Skeleton rating tables are published except for those stations whose daily discharge for the greater part of the year was determined by shifting-control method or by use of slope or other special methods.

The description of the station gives the type of gage, its latitude and longitude determined from the best available maps, and information in regard to diversions that decrease the flow at the gage, artificial regulation from pondage or storage, and the accuracy of the records. Under "Average discharge" is given the average discharge for the number of years indicated. It is given only for stations for which there are 10 or more complete years of record. Information under "Extremes" gives the maximum discharge and gage height; the minimum discharge if there is little or no regulation; the minimum daily discharge if there is extensive regulation, and also the minimum discharge if useful; and the minimum gage height except when it is of no importance. Unless otherwise qualified, the maximum discharge corresponds to the crest stage obtained by use of a water-stage recorder or a nonrecording gage read at the time of the crest. Likewise the minimum represents the lowest discharge unless otherwise qualified.

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

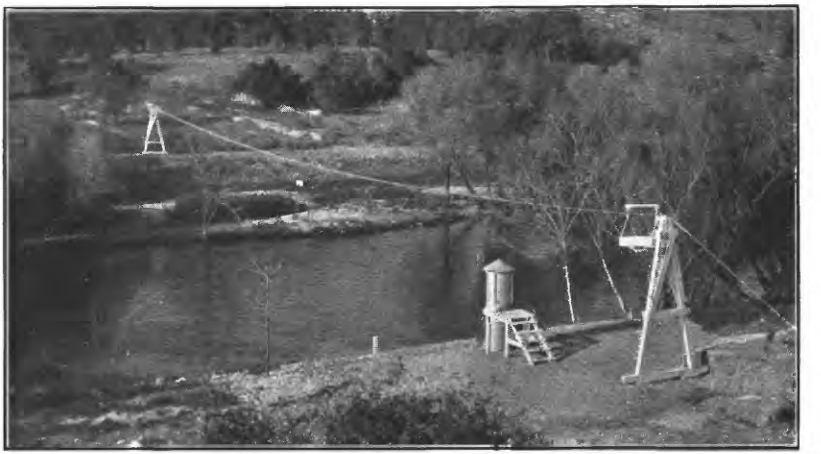
In the table of monthly discharge the column headed "Second-foot-days" gives the sum for each month of the discharge given in the table of daily discharge. The column headed "Maximum" gives the maximum daily discharge and not the discharge when the water surface was at crest height. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" is the average flow in cubic feet per second during the month.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of stream-flow data depends primarily (1) on the permanency of the stage-discharge relation and (2) on the accuracy of observation of stage, measurements of flow, and interpretation of records.

The station description gives a statement under "Remarks" in regard to the general accuracy of the records. "Excellent" indicates that, in general, the daily records are

A. ARTIFICIAL CONTROL, RECORDER HOUSE, AND MEASURING CABLE ON OLENTANGY RIVER, DELAWARE, OHIO.



B. RECORDER HOUSE AND MEASURING CABLE ON KAWEAH RIVER, THREE RIVERS, CALIF.

TYPICAL RIVER-MEASUREMENT STATIONS.

in error not more than 5 percent; "good", not more than 10 percent; "fair", not more than 15 percent; and "poor", over 15 percent.

The monthly means for any station may represent with high accuracy the quantity of water flowing past the gage, but the figures showing discharge per square mile and depth in inches may be subject to gross errors caused by the inclusion of large noncontributing districts in the measured drainage area, by lack of information concerning water diverted for irrigation or other use, or by inability to interpret to the effect of artificial regulation of the flow of the river above the station. "Second-feet per square mile" and "run-off in inches" are therefore not computed if such errors appear probable. The computations are also omitted for stations on streams draining areas in which the annual rainfall is less than 20 inches.

Many gaging stations on streams in the irrigated areas of the United States are situated above most of the diversions from those streams, and the discharge recorded does not show the water supply available for further development, as prior appropriations below the station must first be satisfied.

The table of monthly discharge gives a general idea of the flow at the station. The table of daily discharge allows more detailed studies of the variation in flow. It should be borne in mind, however, that the observations in each succeeding year may be expected to throw new light on data previously published, and that greater degrees of refinement in computations and records may be warranted with increased data and use of improved equipment.

PUBLICATIONS

The results of stream-flow measurements are now published annually in 14 parts, each part covering an area whose boundaries coincide with natural drainage features as indicated below:

Part 1. North Atlantic slope basins (St. John River to York River).
2. South Atlantic slope and eastern Gulf of Mexico basins (James River to Mississippi River).
3. Ohio River Basin.
4. St. Lawrence River Basin.
5. Hudson Bay and upper Mississippi River basins.
6. Missouri River Basin.
7. Lower Mississippi River Basin.
8. Western Gulf of Mexico basins.
9. Colorado River Basin.
10. The Great Basin.
11. Pacific slope basins in California.
12. Pacific slope basins in Washington and upper Columbia River Basin.
13. Snake River Basin.
14. Pacific slope basins in Oregon and lower Columbia River Basin.

Water-supply papers and other publications of the Geological Survey containing data in regard to the water resources of the United States may be obtained or consulted as indicated below.

1. Copies may be purchased at nominal cost from the Superintendent of Documents, Government Printing Office, Washington, D. C., who will, on application, furnish lists giving prices.

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

3. Sets are available for consultation in the local offices of the water-resources branch of the Geological Survey as follows:

Augusta, Maine, Statehouse.
Boston, Mass., 945 Post Office Building.
Hartford, Conn., 203 Federal Building.
Albany, N. Y., 526 Federal Building.
Trenton, N. J., 228 Federal Building.

Harrisburg, Pa., 490 Education Building.
Charlottesville, Va., University of Virginia.
South Charleston, W. Va., Naval Ordnance Plant.
Asheville, N. C., 220 Post Office Building.
Columbia, S. C., 119 United States Courthouse.
Atlanta, Ga., Georgia School of Technology.
Ocala, Fla., Post Office Building.
Montgomery, Ala., Post Office Building.
Chattanooga, Tenn., 442 Post Office Building.
Louisville, Ky., Federal Building.
Columbus, Ohio, Engineering Experiment Station, Ohio State University.
Indianapolis, Ind., 319 Federal Building.
Urbana, Ill., 14 Post Office Annex.
Madison, Wis., 337N State Capitol.
St. Paul, Minn., 608 New Post Office Building.
Iowa City, Iowa, 402 Hydraulic Laboratory, University of Iowa.
St. Louis, Mo., 906 Customhouse, 1114 Market Street.
Rolla, Mo., Missouri Geological Survey Building, Missouri School of Mines and Metallurgy.
Topeka, Kans., 805 Federal Building.
Fort Smith, Ark., Post Office Building.
Austin, Tex., State Highway Building.
Santa Fe, N. Mex., 3 United States Courthouse.
Tucson, Ariz., 210 Post Office Building.
Denver, Colo., 230 Customhouse.
Salt Lake City, Utah, 303 Federal Building.
Idaho Falls, Idaho, 228 Federal Building.
Boise, Idaho, 429 Federal Building.
Helena, Mont., 412 Federal Building.
Tacoma, Wash., 406 Federal Building.
Portland, Oreg., 606 Post Office Building.
San Francisco, Calif., 208 Federal Office Building.
Los Angeles, Calif., 512 Eighth and Figueroa Building.
Honolulu, Hawaii, 225 Federal Building.

A list of the Geological Survey publications may be obtained by applying to the Director, Geological Survey, Washington, D. C.

Records of flow of streams in the United States have been published in the reports tabulated as follows:

Stream-flow data in reports of the Geological Survey
(A = Annual Report; B = Bulletin; W = Water-Supply Paper)

Report	Character of data	Year
10th A, pt. 2	Descriptive information only.....	
11th A, pt. 2	Monthly discharge and descriptive information.....	1884 to Sept. 1890
12th A, pt. 2	....do.....	1884 to June 30, 1891.
13th A, pt. 3	....do.....	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871-93).....	1888 to Dec. 31, 1893.
B 131.....	Descriptions, measurements, gage heights, and ratings.	1893-94.
16th A, pt. 2	Descriptive information only.....	
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years).	1895
W 11.....	Gage heights (also gage heights for earlier years).	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).	1895-96.
W 15.....	Descriptions, measurements, and gage heiths, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas River.	1897.
W 16.....	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte Rivers, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27.....	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28.....	Measurements, ratings, and gage heights, Arkansas River and western United States.	1898.
20th A, pt. 4	Monthly discharge (also for many earlier years)....	1898.
W 35 to 39...	Descriptions, measurements, gage heights, and ratings.	1899.
21st A, pt. 4	Monthly discharge.....	1899.
W 47 to 52...	Descriptions, measurements, gage heights, and ratings.	1900.
22d A, pt. 4.	Monthly discharge.....	1900.
W 65, 66.....	Descriptions, measurements, gage heights, and ratings.	1901.
W 75.....	Monthly discharge.....	1901.

Note.- The reports which contain records after 1901 are given in the table on page 5.

Numbers of water-supply papers contsining results of stream measurements, 1899-1937

(For basins included see p. 3)

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1899 a...	35	b 35. 36	36	36	36	c 36, 37	37	37	d 37, 38	38, e 39	38, f 39	38	38	38
1900 g...	47, h 48	48	48, i 49	49	49	49, j 50	50	50	50	51	51	51	51	51
1901.....	65, 75	65, 75	65, 75	65, 75	k 65, 66, 75	66, 75	k 65, 66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902.....	82	b 82, 83	83	m 82, 83	k 83, 85	84	k 83, 84	84	85	85	85	85	85	85
1903.....	97	b 97, 98	98	97	k 98, 99, n 100	99	k 98, 99	99	100	100	100	100	100	100
1904.....	o 124, p 125, q 126	q 126, 127	128	129	k 128, 130	130, r 131	k 128, 131	132	133	133, s 134	134	135	135	135
1905.....	o 165, p 166, q 167	q 167, 168	169	170	171	172	k 169, 173	174	175, t 177	176, s 177	177	178	178	u 177, 178
1906.....	o 201, p 202, q 203	q 203, 204	205	206	207	208	k 205, 209	210	211, t 213	212, s 213	213	214	214	214
1907-8...	241	242	243	244	245	246	247	248	249	250, s 251	251	252	252	252
1909.....	261	262	263	264	265	266	267	268	269	270, s 271	271	272	272	272
1910.....	281	282	283	284	285	286	287	288	289	290	291	292	292	292
1911.....	301	302	303	304	305	306	307	308	309	310	311	312	312	312
1912.....	321	322	323	324	325	326	327	328	329	330	331	332-A	332-B	332-C
1913.....	351	352	353	354	355	356	357	358	359	360	361	362-A	362-B	362-C
1914.....	381	382	383	384	385	386	387	388	389	390	391	392	393	394
1915.....	401	402	403	404	405	406	407	408	409	410	411	412	413	414
1916.....	431	432	433	434	435	436	437	438	439	440	441	442	443	444
1917.....	451	452	453	454	455	456	457	458	459	460	461	462	463	464
1918.....	471	472	473	474	475	476	477	478	479	480	481	482	483	484
1919-20..	501	502	503	504	505	506	507	508	509	510	511	512	513	514
1921.....	521	522	523	524	525	526	527	528	529	530	531	532	533	534
1922.....	541	542	543	544	545	546	547	548	549	550	551	552	553	554
1923.....	561	562	563	564	565	566	567	568	569	570	571	572	573	574
1924.....	581	582	583	584	585	586	587	588	589	590	591	592	593	594
1925.....	601	602	603	604	605	606	607	608	609	610	611	612	613	614
1926.....	621	622	623	624	625	626	627	628	629	630	631	632	633	634
1927.....	641	642	643	644	645	646	647	648	649	650	651	652	653	654
1928.....	661	662	663	664	665	666	667	668	669	670	671	672	673	674
1929.....	681	682	683	684	685	686	687	688	689	690	691	692	693	694
1930.....	696	697	698	699	700	701	702	703	704	705	706	707	708	709
1931.....	711	712	713	714	715	716	717	718	719	720	721	722	723	724
1932.....	726	727	728	729	730	731	732	733	734	735	736	737	738	739
1933.....	741	742	743	744	745	746	747	748	749	750	751	752	753	754
1934.....	756	757	758	759	760	761	762	763	764	765	766	767	768	769
1935.....	781	782	783	784	785	786	787	788	789	790	791	792	793	794
1936.....	801	802	803	804	805	806	807	808	809	810	811	812	813	814
1937.....	821	822	823	824	825	826	827	828	829	830	831	832	833	834

a Rating tables and index to Water-Supply Papers 35-39 contained in Water-Supply Paper 39. Tables of monthly discharge for 1899 in 21st Annual Report, part 4.
b James River only.
c Gallatin River.
d Green and Gunnison Rivers and Colorado River above Gunnison River.
e Mojave River only.
f Kings and Kern Rivers and south Pacific slope basins.
g Rating tables and index to Water-Supply Papers 47-52 and data on precipitation, wells, and irrigation in California and Utah contained in Water-Supply Paper 52. Monthly discharge for 1900 in 22d Annual Report, part 4.
h Wissahickon and Schuylkill Rivers to James River.
i Scioto River.
j Loup, Platte, and Elkhorn Rivers and tributaries below Platte River.
k Tributaries of Mississippi River from east.
m Lake Ontario and tributaries to St. Lawrence River proper.
n Hudson Bay only.
o New England rivers only.
p Hudson River to Delaware River, inclusive.
q Susquehanna River to Yadkin River, inclusive.
r Platte and Kansas Rivers.
s The Great Basin in California, except Truckee and Carson River Basins.
t Below junction with Gila River.
u Rogue, Umpqua, and Siletz Rivers only.

The foregoing table gives, by years and drainage basins, the numbers of the papers on surface water supply published from 1899 to 1937. The data for any particular station will, in general, be found in the reports covering the years during which the station was maintained. For example, the data from 1910 to 1920 for any station in the area covered by part 3 are published in Water-Supply Papers 283, 303, 323, 353, 383, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

The records at most of the stations discussed in these reports extend over a series of years. Miscellaneous measurements at many points other than regular gaging stations have been made each year and are published under "Miscellaneous discharge measurements" at the end of each report in the same relative order as the regular gaging stations. An index of the records obtained prior to 1904 has been published in Water-Supply Paper 119.

From time to time reports have been published that are compilations of records for various areas, usually a single State or drainage basin. These reports contain reocrds previously published (some of which have been revised), as well as some records not contained in the annual series of water-supply papers. The following table gives the numbers and titles of these reports, arranged in alphabetical order by States and drainage basins.

Reports containing compilation of discharge by States and drainage basins

Water-Supply Paper	Year ending	State or drainage basin and title
		STATE
107	1903	Alabama, Water powers of, with an appendix on stream measurements in Mississippi.
298	1912	California, Water resources of, part 1, Stream measurements in Sacramento River Basin.
299	1912	California, Water resources of, part 2, Stream measurements in San Joaquin River Basin.
300	1912	California, Water resources of, part 3, Stream measurements in the Great Basin and Pacific coast river basins.
447	1918	California, Surface water supply of the southern Pacific slope of.
597e	1927	California, Surface water supply of Sacramento River Basin.
636d	1927	California, Surface water supply of San Joaquin River Basin.
636e	1927	California, Surface water supply of Pacific slope basins in.
637a	1927	California, Surface water supply of minor San Francisco Bay, northern Pacific, and Great basins in.
74	1900	Colorado, Water resources of.
197	1905	Georgia, Water resources of.
415	1915	Massachusetts, Surface waters of.
230	1906	Nebraska, Surface water supply of.
370	1910	Oregon, Surface water supply of.
424	1916	Vermont, Surface waters of.
492	1919	Washington, Summary of hydrometric data in.
469	1921	Wyoming, Surface waters of, and their utilization.
		DRAINAGE BASIN
395	1914	Colorado River (Colo., Utah, etc.) and its utilization, 1916.
617	1927	Colorado River, upper (Colo., Utah), and its utilization, 1929.
517	1920	Great Salt Lake Basin, Water powers of, 1924.
618	1926	Green River (Wyo., Utah) and its utilization, 1930.
198	1906	Kennebec River Basin (Maine), Water resources of, 1907.
		Milk River. (See St. Mary and Milk Rivers.)
536	1920	New-Kanawha River Basin (W. Va., Va., N. C.), Surface water supply of, 1925.
279	1909	Penobscot River Basin (Maine), Water resources of, 1912.
192	1906	Potomac River Basin (W. Va., Va., Md., etc.), 1907.
358	1913	Rio Grande Basin (N. Mex., Tex., etc.), Water resources of, 1888-1913.
491	1917	St. Mary and Milk Rivers (Mont. and Canada), Water supply of, 1920.
109	1904	Susquehanna River Basin (Pa., Md.), Hydrography of, 1905.

In addition to the records noted above, records of discharge have been published in State reports. Some of these are not contained in the publications of the Geological Survey or are revisions of records previously published in its water-supply papers. The following table contains a list of these reports.

State reports containing compilation of records of discharge

State	Year ending	Report	Issued by
Alabama....	1915	Bull. 17, Water powers of Alabama.....	Geological Survey of Alabama.
Arkansas...	1928	Stream gaging report 1.....	Arkansas Geological Survey.
Georgia....	1920	Bull. 38, Water powers of Georgia.....	Geological Survey of Georgia.
Illinois...	1937	Stream flow data of Illinois.....	Division of Waterways.
Do.....	1911	Water resources of Illinois.....	Rivers and Lakes Commission.
Indiana....	1927	Pub. 72, Surface water supply of Indiana.	Department of Conservation.
Do.....	[a]1930	Pub. 112, Surface water supply of Indiana.	Do.
Iowa.....	1932	Stream-flow records of Iowa.....	Iowa State Planning Board.
Kansas.....	[b]1919	Surface waters of Kansas.....	Kansas Water Commission.
Do.....	[c]1924	.....do.....	Do.
Do.....	[d]1928	.....do.....	Do.
Kentucky...	1920	Surface waters of Kentucky.....	Kentucky Geological Survey.
Minnesota..	1912	Water resources investigation of Minnesota.	State Drainage Commission.
Missouri...	1926	Reports of Bureau of Geology and Mines, Vol. 20, 2d series, Water Resources of Missouri.	Missouri Bureau of Geology and Mines.
Nebraska...	1914	1st hydrographic report.....	Bureau of Water Power, Irrigation and Drainage.
Do.....	[e]1928	2d hydrographic report.....	Do.
New Jersey.	1928	Bull. 33, Surface water supply of New Jersey.	Department of Conservation and Development.
Do.....	[f]1934	Special Report 5, Surface water supply of New Jersey.	State Water Policy Commission.
New Mexico.	1925	Surface water supply of New Mexico....	Office of the State Engineer.
North Carolina.	1923	Bull. 34, Discharge records of North Carolina streams.	Department of Conservation and Development.
Oregon.....	1914	Bull. 4, Water resources of the State of Oregon.	Office of the State Engineer.
Do.....	[g]1924	Bull. 7, Water resources of the State of Oregon.	Do.
Do.....	[h]1930	Bull. 8, Water resources of the State of Oregon.	Do.
Do.....	[i]1936	Bull. 9, Water resources of the State of Oregon.	Do.
Pennsylvania	1911	Report of Water Supply Commission of Pennsylvania.	Water Supply Commission of Pennsylvania.
Do.....	[j]1932	Stream-flow records of Pennsylvania..	Department of Forests and Waters.
Tennessee..	1924	Bull. 34, Water resources of Tennessee.	Department of Education.
Do.	[k]1930	Bull. 40, Surface waters of Tennessee	Do.
Utah.....	1905	5th Biennial Report, State Engineer..	Office of the State Engineer.
Virginia...	1927	Bull. 31, Water resources of Virginia	Conservation and Development Commission.
Washington.	1933	Bull. 5, Monthly and yearly summaries of hydrometric data.	Department of Conservation and Development.
Wisconsin..	1914	1st report of Railroad Commission of Wisconsin to Legislature on water powers.	Railroad Commission of Wisconsin.
Do.	[l]1923	2d report of Railroad Commission of Wisconsin to Legislature on water powers.	Do.

a Includes records for the years 1927-30.
b Includes records for the years 1895-1919.
c Includes records for the years 1919-24.
d Includes records for the years 1924-28.
e Includes records for the years 1914-28.
f Includes records for the years 1928-34.
g Includes records for the years 1914-24.
h Includes records for the years 1924-30.
i Includes records for the years 1930-36.
j Includes records for the years 1928-32.
k Includes averages weekly discharge for the years 1920-30.
l Includes records for the years 1914-23.

Note.- In addition to the records contained in the reports listed above, the following States have issued annual or biennial reports in which are contained records of discharge: California, Colorado, Idaho, Indiana, Missouri, Montana, Nebraska, New Mexico, New York (also New York City Board of Water Supply), North Dakota, Oregon, Pennsylvania, Utah, Washington, and Wyoming.

The following table contains a list of gaging stations for the area covered by this report at which records of daily discharge were collected during the water year October 1936 to September 1937, by agencies other than the Geological Survey. The records for these stations are not contained in publications of the Geological Survey.

Records of daily discharge collected by agencies other than the Geological Survey

Stream	Location	Period	Operated by	Remarks
Brule River (head of Menominee River).	Power plant near Florence, Wis.	1917-37	Wisconsin-Michigan Power Co.	Records available at Wisconsin-Michigan Power Co., Appleton, Wis.
Cayuga Lake outlet.	Lock 1 (Mud Lock), N. Y.	1926-37	State Department of Public Works, Albany, N. Y.	Unpublished.
Clyde River.....	Clyde, N. Y.....	1924-37	.....do.....	Do.
Indian River.....	Theresa, N. Y.	1934-37	Central New York Power Corporation, Syracuse, N. Y.	Do.
New York Barge Canal.	Brewerton, N. Y..	1925-37	State Department of Public Works, Albany, N. Y.	Unpublished. Diversion around Oneida River at Caughdenoy, N. Y.
Oneida River.....	Caughdenoy, N. Y..	1929-37	Oswego River Watershed Corporation, Fulton, N. Y.	Unpublished.
Ontonagon River.....	Near Rockland, Mich., sec. 29, T. 50 N., R. 39 W.	1906-21 1931-37	Copper District Power Co.	Records available at Copper District Power Co., Ontonagon, Mich.
East Branch of Oswegatchie River.	Brown Falls, N. Y.	1934-37	Central New York Power Corporation, Syracuse, N. Y.	Unpublished.
Oswego River.....	Lower Dam, Fulton, N. Y.	1928-37	Oswego River Watershed Corporation, Fulton, N. Y.	Do.
Raquette River.....	Colton, N. Y.....	1934-37	Central New York Power Corporation, Syracuse, N. Y.	Do.
West Branch of St. Regis River.	Parishville, N. Y.	1934-37	.....do.....	Do.
Salmon River.....	Bennetts Bridge, near Altmar, N. Y.	1934-37	.....do.....	Do.
Seneca River.....	Baldwinsville, N. Y.	1928-37	Oswego River Watershed Corporation, Fulton, N. Y.	Do.
Seneca River.....	Jacks Reef, near Baldwinsville, N. Y.	1933-37	State Department of Public Works, Albany, N. Y.	Do.

Note.- Unless otherwise indicated, records for stations given in the above table are available at the office of the organization by which the station was operated.

COOPERATION

The work in the several States was done under cooperative agreements as follows: In Indiana, with the Department of Public Works, V. M. Simmons, administrative officer. In Michigan, with the Michigan Stream Control Commission, M. D. Van Wagoner, chairman. In Minnesota, with the Division of Drainage and Waters, W. S. Olson, director. In New York, with the State Conservation Department, Lithgow Osborne, commissioner; State Department of Public Works, Frederick Stuart Greene, superintendent; State Water Power and Control Commission, Lithgow Osborne, chairman; Black River Regulating District, Edwin S. Cullings, chief engineer; Commission for the Improvement of Oswegatchie River, J. J. Wallace, chairman; and city of Rochester, Meloy Smith, superintendent of water works. In Vermont, with George D. Aiken, Governor. In Wisconsin, with the Public Service Commission, George P. Steinmetz, chief engineer.

Assistance in collecting records was also rendered by the following municipalities, organizations, corporations, and individuals: In Michigan, by the city of Allegan and

Michigan Gas & Electric Co. In New York, by the Corps of Engineers, U. S. Army, the Federal Emergency Administration of Public Works; Central New York Power Corp.; International Paper Co.; Cornell University; New York & Pennsylvania Co.; Associated Gas & Electric System; Rochester Gas & Electric Corp.; and Deer River Power Co. In Wisconsin, by the Wisconsin Michigan Power Co.; Wisconsin Public Service Corp.; and Corps of Engineers, U. S. Army.

Acknowledgment of records collected and furnished by individuals or corporations is made in connection with the description of each station affected.

DIVISION OF WORK

The data for the stations in the several States were collected and prepared for publication under the supervision of district engineers as follows: In Indiana and Michigan, H. E. Grosbach; in Minnesota, Chas. L. Batchelder; in New York, Arthur W. Harrington; in Vermont, H. B. Kinnison; in Wisconsin, S. B. Soule'.

ST. LAWRENCE RIVER MAIN STEM

Niagara River at Buffalo, N. Y.

Location.- Water-stage recorder at south pier of U. S. lighthouse slip, lat. 78°53'25", long. 42°52'40", at head of Niagara River at Buffalo. Elevation of reference point is 575.34 feet above mean tide level at New York.

Drainage area.- 263,452 square miles.

Records available.- January 1905 to September 1937 (prior to October 1935 monthly discharge only).

Average discharge.- 32 years, 191,000 second-feet (not including diversions from Lakes Michigan and Erie).

Extremes.- Maximum daily discharge during year, 238,000 second-feet July 26; minimum, 148,000 second-feet Jan. 6.
1905-37: Maximum monthly mean discharge, 242,000 second-feet May 1929, corresponding to gage height of 574.14 feet on Buffalo gage; minimum, 117,000 second-feet February 1936, corresponding to gage height of 569.48 feet on Buffalo gage. Gage heights are elevations above mean tide level at New York.

Remarks.- Records of daily discharge furnished by Corps of Engineers, U. S. Army. They do not include flow diverted from Lake Michigan by Chicago Sanitary Canal and from Lake Erie by Welland Canal in Ontario and Black Rock and Erie Canals at Buffalo.

Discharge, in thousands of second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	168	166	152	161	194	194	176	191	198	210	201	194
2	163	167	156	153	188	184	195	192	196	214	202	195
3	166	174	155	203	177	174	174	194	198	207	200	197
4	163	161	170	182	176	180	175	195	194	204	202	193
5	163	163	153	166	184	182	177	194	192	204	199	180
6	165	161	170	148	196	181	191	200	197	206	198	187
7	166	162	162	162	170	167	178	197	198	205	199	190
8	164	162	154	163	179	182	176	195	198	206	199	190
9	162	174	155	170	190	186	176	196	190	207	200	190
10	180	164	159	162	191	178	183	198	190	206	199	192
11	182	168	156	168	186	170	182	195	197	206	201	206
12	172	167	158	181	182	174	182	196	198	205	205	188
13	153	164	160	163	180	175	185	194	194	203	204	183
14	158	182	168	172	199	167	181	189	200	205	197	199
15	164	173	156	170	190	173	178	197	198	210	200	208
16	163	172	159	168	165	187	183	195	195	216	199	190
17	172	186	155	171	176	199	181	201	198	220	201	188
18	173	154	146	181	177	183	184	198	199	208	199	195
19	169	171	152	170	176	179	187	196	198	206	202	198
20	168	184	184	160	175	168	182	197	201	203	200	186
21	166	176	177	186	180	182	170	193	207	205	198	182
22	162	166	161	179	211	180	194	196	204	205	184	180
23	159	152	159	175	186	179	180	198	203	205	192	182
24	165	170	161	176	185	156	180	196	203	206	194	181
25	164	175	159	204	195	170	184	194	205	209	194	185
26	160	165	158	182	190	187	178	195	206	238	194	185
27	160	165	166	171	180	184	192	195	207	217	196	177
28	164	190	156	178	176	180	199	194	211	206	194	178
29	190	165	150	176	-	180	190	195	210	205	194	180
30	172	150	157	176	-	177	188	195	209	203	194	178
31	166	-	177	201	-	179	-	196	-	198	195	-

Month	Thousands of second-foot-days	Thousands of second-feet			Per square mile*	Run-off in inches
		Maximum	Minimum	Mean		
October	5,162	190	153	167	0.634	0.73
November	5,049	190	150	168	.638	.71
December	4,963	177	146	160	.607	.70
Calendar year 1936	58,950	190	100	161	.611	8.32
January	5,380	204	148	174	.660	.76
February	5,154	211	170	184	.698	.73
March	5,537	199	156	179	.679	.78
April	5,481	199	170	183	.695	.78
May	6,057	201	189	195	.740	.85
June	5,994	211	190	200	.759	.85
July	6,448	238	198	208	.790	.91
August	6,136	205	184	198	.752	.87
September	5,657	208	177	189	.717	.80
Water year 1936-37	67,018	238	146	184	.698	9.47

*Expressed in second-feet.

St. Lawrence River at Ogdensburg, N. Y.

Location.- Ogdensburg gage, lat. 75°30'15", long. 44°41'55". Oswego gage, lat. 76°31'00", long. 43°27'45". Reference point of the Ogdensburg gage is 248.09 feet above mean tide level at New York; reference point of the Oswego gage is 248.74 feet above mean tide level at New York.

Drainage area.- Above Ogdensburg gage, 301,200 square miles.

Records available.- January 1919 to September 1937 (prior to October 1935 monthly discharge only.

Average discharge.- 18 years, 218,000 second-feet (does not include diversion from Lake Michigan).

Extremes.- Maximum daily discharge during year, 245,000 second-feet July 27; minimum, 173,000 second-feet Jan. 2.

1919-37: Maximum monthly mean discharge, 289,000 second-feet June 1929, corresponding to height of 248.46 feet on Oswego gage; minimum, 166,000 second feet January 1935, corresponding to height of 242.13 feet on Ogdensburg gage. Gage heights are elevations above mean tide level at New York.

Remarks.- Records of daily discharge furnished by Corps of Engineers, U. S. Army. They do not include flow diverted from Lake Michigan by Chicago Sanitary Canal. Water diverted from Lake Erie and Niagara River by Black Rock and New York State Barge (old Erie)Canals, except that lost by seepage and evaporation, is discharged into Lake Ontario at Oswego and at several points between Niagara River and Irondequoit Bay.

Discharge, in thousands of second-feet, of water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	192	191	179	191	211	214	208	224	236	239	233	227
2	191	187	182	173	201	212	212	223	234	238	232	227
3	191	197	182	204	192	209	210	226	237	237	234	230
4	190	188	188	195	199	209	207	227	238	236	233	225
5	190	191	184	199	201	209	212	227	236	236	234	220
6	191	188	191	178	204	207	222	227	234	236	232	223
7	193	191	191	188	203	210	216	228	239	239	231	225
8	193	188	178	186	199	209	215	228	236	237	230	223
9	190	191	180	196	207	213	207	233	239	236	232	225
10	194	192	184	189	205	210	216	230	233	236	231	224
11	198	192	185	195	205	208	215	232	237	232	232	227
12	203	193	181	202	206	206	216	231	238	234	235	224
13	189	192	183	190	204	208	217	231	239	231	234	216
14	184	199	189	201	207	207	218	220	235	234	232	227
15	189	190	187	196	209	204	211	226	234	236	234	228
16	190	191	187	193	201	209	214	231	235	242	235	224
17	190	199	183	198	203	214	215	234	233	239	235	222
18	192	178	181	202	203	211	218	236	233	235	228	225
19	189	192	178	198	205	211	218	235	232	236	233	232
20	191	193	192	187	203	206	208	235	237	236	232	223
21	192	194	187	212	202	211	211	235	240	236	232	221
22	190	188	185	202	211	212	213	234	236	236	219	219
23	186	186	185	199	209	210	216	238	236	236	226	220
24	189	185	188	198	207	204	219	237	237	237	227	218
25	190	194	179	212	210	198	218	236	236	236	229	217
26	186	188	182	208	212	208	218	235	235	242	228	220
27	187	186	190	199	210	209	218	236	236	245	229	216
28	188	189	187	200	209	207	222	234	238	238	225	213
29	192	189	178	202	-	208	222	236	238	237	226	215
30	190	183	185	199	-	208	222	237	236	236	227	215
31	188	-	197	208	-	208	-	238	-	234	227	-

Month	Thousands of second-foot-days	Thousands of second-feet			Per square mile*	Run-off in inches
		Maximum	Minimum	Mean		
October	5,908	203	184	191	0.634	0.73
November	5,705	199	178	190	.631	.70
December	5,728	197	178	185	.614	.71
Calendar year 1936	70,815	227	139	193	.641	8.74
January	6,100	212	173	197	.654	.75
February	5,738	212	192	205	.681	.71
March	6,469	214	198	209	.694	.80
April	6,454	222	207	215	.714	.80
May	7,190	238	220	232	.770	.89
June	7,083	240	232	236	.784	.87
July	7,338	245	231	237	.787	.91
August	7,147	236	219	231	.767	.88
September	6,670	232	213	222	.737	.82
Water year 1936-37	77,520	245	173	212	.704	9.57

*Expressed in second-feet.

Pigeon River at International Bridge, Minn.

(International gaging station)

Location.- Wire-weight gage, lat. 48°01', long. 89°43', in sec. 20, T. 64 N., R. 6 E., fourth principal meridian on International Bridge, 9.3 miles above mouth.

Drainage area.- 590 square miles.

Records available.- April 1924 to September 1937 in reports of U. S. Geological Survey; October 1923 to September 1932 in House Document 92, 73d Congress of the United States, 1st Session; June 1921 to September 1923 in reports of Dominion Water and Power Bureau of Department of Mines and Resources, Canada.

Average discharge.- 14 years, (1923-37) 474 second-feet.

Extremes.- Maximum discharge observed during year, 5,750 second-feet Apr. 26 (gage height, 5.25 feet); minimum observed discharge, 63 second-feet several days during October and November, (gage height, 0.32 feet).
1923-36: Maximum discharge observed, 11,000 second-feet May 5, 1934 (gage height, 7.6 feet); minimum, 30 second-feet, Feb. 11 to Mar. 5 1926.

Remarks.- Records good except those for period of ice effect, Nov. 3 to Apr. 18 (computed on basis of five discharge measurements, gage heights, and weather records), which are fair, and those for Apr. 19 to June 15, which are poor. This station is one of the international gaging stations maintained by the United States under agreement with Canada.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	63	75	148	104	100	104	3,400	1,660	546	159	162
2	76	63	75	136	104	104	104	3,240	1,540	483	156	269
3	76	66	75	125	104	104	114	3,080	1,360	452	156	325
4	76	104	75	114	100	108	125	3,080	1,260	452	156	291
5	76	125	75	104	98	110	148	2,770	1,540	423	152	239
6	76	114	75	104	94	110	206	2,620	1,540	423	152	223
7	76	104	66	104	94	110	240	2,050	1,780	423	149	200
8	76	94	66	104	90	110	346	1,420	2,620	394	149	175
9	76	92	66	104	90	104	475	1,660	1,910	367	149	156
10	76	90	66	104	86	100	590	1,540	1,780	340	146	146
11	70	86	75	104	84	98	590	1,660	1,910	340	143	132
12	70	84	75	104	80	96	682	1,660	1,780	325	137	122
13	70	84	84	104	80	94	780	980	1,540	316	132	114
14	67	84	84	104	80	92	888	1,540	1,660	301	130	114
15	67	80	84	104	80	90	1,540	1,480	1,540	330	122	112
16	64	79	80	104	80	90	3,400	483	1,260	394	112	112
17	63	77	77	104	80	90	3,740	316	1,360	367	103	112
18	63	75	75	104	80	90	3,740	291	1,360	316	94	114
19	63	75	77	104	80	94	2,920	1,420	1,310	282	92	110
20	63	75	77	100	80	94	2,770	980	1,260	256	90	105
21	63	84	79	94	80	94	2,620	1,260	1,140	227	90	101
22	63	84	80	94	84	94	2,050	367	1,040	239	90	96
23	63	84	82	94	84	84	2,330	452	980	215	87	94
24	63	84	84	94	90	84	3,400	644	930	200	87	99
25	63	84	84	94	94	84	4,960	980	790	207	87	96
26	63	75	84	94	94	84	5,750	1,780	752	215	88	96
27	63	75	64	100	94	84	5,360	980	714	200	88	94
28	63	66	84	100	94	86	4,610	2,470	679	185	88	92
29	63	66	84	104	-	94	3,400	1,780	644	171	101	96
30	63	66	114	106	-	100	3,400	1,310	546	165	107	103
31	63	-	176	110	-	102	-	2,050	-	159	122	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,113	76	63	68.2	0.116	0.13
November	2,482	125	63	82.7	.140	.16
December	2,537	176	66	81.8	.139	.16
Calendar year 1936	162,841	7,390	63	445	.754	10.27
January	3,267	148	94	105	.178	.21
February	2,482	104	80	88.6	.150	.16
March	2,976	110	84	96.1	.163	.19
April	61,402	5,750	104	2,047	3.47	3.87
May	49,743	3,400	291	1,605	2.72	3.14
June	40,185	2,620	546	1,340	2.27	2.53
July	9,713	546	159	313	.531	.61
August	3,714	159	87	120	.203	.23
September	4,300	325	92	143	.242	.27
Water year 1936-37	184,916	5,750	63	507	.859	11.66

Poplar River at Lutsen, Minn.

Location.- Water-stage recorder, lat. 47°38', long. 90°42', in sec. 33, T. 60 N., R. 3 W., about 1,650 feet above mouth and about 350 feet above new concrete bridge on U. S. Highway 61 at Lutsen. Zero of gage is 697.89 feet above mean sea level. Prior to Mar. 30, 1937, chain gage at site about 150 feet downstream, on different datum.

Drainage area.- 138 square miles.

Records available.- May to November 1911 (gage heights only), August 1912 to September 1917, July 1928 to February 1929, March 1930 to September 1937.

Extremes.- Maximum discharge observed during year, 1,250 second-feet May 1 (gage height, 10.02 feet, former site and datum); minimum discharge, 9.8 second-feet Aug. 28, Sept. 28, 29 (gage height, 1.69 feet).

1912-17, 1928-37: Maximum discharge, 1,390 second-feet, Apr. 25, 1916 (gage height, 4.7 feet, former site and datum); minimum, 7 second-feet Aug. 10-13, 1936.

Remarks.- Records good for July 15 to Sept. 30 and poor for remainder of year. Discharge for periods of ice effect, Oct. 27, Nov. 4-15, 17, Nov. 20 to Dec. 16, Jan. 1-10, Jan. 18 to Mar. 27, Mar. 31 to Apr. 6, computed on basis of seven discharge measurements, gage heights, engineers' notes, weather records and records for Baptism River near Beaver Bay, Minn. Shifting-control method used Oct. 2-10, when debris was lodged on control. Discharge for Oct. 19-26, Oct. 28 to Nov. 3, for which periods observer's and engineers' readings do not agree, computed on basis of two discharge measurements. Discharge for Nov. 16, 18, 19 interpolated. Discharge for May 1, 2, when control for recording gage underwent a radical shift, computed from chain-gage readings and extension of curve based on two discharge measurements made in 1937. Chain gage read once daily Oct. 1 to Mar. 30 and May 1, 2.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	21	20	171	28	18	24	1,250	307	63	30	58
2	15	22	20	171	28	18	24	1,050	282	58	30	306
3	14	22	20	138	28	18	24	908	254	54	90	290
4	14	21	19	122	27	19	24	908	224	52	177	164
5	14	22	19	110	27	19	25	862	268	46	116	120
6	14	21	18	88	26	19	25	908	467	42	90	100
7	14	20	18	78	26	21	31	750	427	38	69	84
8	14	19	18	73	25	22	40	660	355	34	63	71
9	14	19	18	63	24	22	53	575	324	40	62	61
10	14	19	19	51	23	21	64	499	293	48	54	53
11	14	19	19	47	22	21	82	467	262	42	47	46
12	14	19	20	45	22	20	111	519	230	35	42	42
13	14	19	21	43	21	20	152	511	209	35	37	38
14	14	20	21	35	21	20	162	447	200	34	34	35
15	14	20	22	34	21	20	162	399	188	70	32	32
16	15	21	22	32	21	20	165	451	173	97	30	27
17	16	22	22	31	22	21	178	423	162	97	25	24
18	16	22	23	30	23	21	240	363	150	75	21	23
19	16	23	23	30	23	22	276	321	142	61	25	20
20	15	23	23	30	23	21	306	304	150	53	25	18
21	15	23	23	30	22	21	265	296	130	46	19	18
22	15	21	23	30	22	21	250	296	116	40	17	17
23	15	20	23	30	21	21	250	279	110	63	15	15
24	15	20	23	30	20	21	364	272	101	54	14	14
25	15	20	23	30	19	21	910	318	95	51	13	14
26	14	20	23	30	19	22	812	318	88	49	14	12
27	14	20	24	30	19	22	679	296	80	42	12	11
28	14	19	24	30	19	22	717	268	76	42	11	10
29	15	20	24	29	-	22	762	244	74	39	18	10
30	18	20	73	29	-	22	1,050	224	66	36	37	21
31	20	-	182	28	-	23	-	286	-	32	45	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	457	20	12	14.7	0.107	0.12
November	617	23	19	20.6	.149	.17
December	870	182	18	28.1	.204	.24
Calendar year 1936	28,078	790	7	76.7	.556	7.58
January	1,748	171	28	56.4	.409	.47
February	642	28	19	22.9	.166	.17
March	641	23	18	20.7	.150	.17
April	8,227	1,050	24	274	1.99	2.22
May	15,672	1,250	224	506	3.67	4.23
June	6,003	467	66	200	1.45	1.62
July	1,576	97	32	50.8	.368	.42
August	1,314	177	11	42.4	.307	.35
September	1,754	306	10	58.5	.424	.47
Water year 1936-37	39,521	1,250	10	108	.783	10.65

Baptism River near Beaver Bay, Minn.

Location.- Water-stage recorder, lat. 47°20', long. 91°12', in sec. 15, T. 56 N., R. 7 W., about 280 feet above highway bridge and 6 miles northeast of Beaver Bay. Zero of gage is 609.97 feet above mean sea level.
Drainage area.- 136 square miles.
Records available.- July 1928 to January 1929, March 1930 to September 1937.
Extremes.- Maximum discharge during year, 3,790 second-feet May 1; maximum gage height, 6.09 feet Jan. 1 (ice affected); minimum discharge, 3.9 second-feet Aug. 28 (gage height 1.77 feet).
1928-29, 1930-37: Maximum discharge, that of May 1, 1937; maximum gage height, that of Jan. 1, 1937; minimum discharge, 1.5 second-feet Aug. 13, 1934.
Remarks.- Records good except those for periods of ice effect, Oct. 22-27, Nov. 1 to Dec. 13, Dec.26 to Apr. 13 which were computed on basis of six discharge measurements, gage heights, and weather records, and are fair. Discharge for periods of missing gage-heights, Aug. 19, 21-23, Sept. 26-28, 30, computed on basis of records for Poplar River at Lutsen and Pigeon River at International Bridge.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 11		Apr. 12 to Sept. 30			
1.8	5.6	1.7	2.8	3.2	158
2.0	10	1.8	4.4	3.4	255
2.2	20	2.0	8.6	3.6	400
2.4	37	2.2	15	3.8	590
2.6	56	2.4	24	4.0	840
2.8	77	2.6	41	4.4	1,440
3.0	111	2.8	68	4.8	2,100
3.2	174	3.0	100	5.2	2,860
3.4	272				
3.6	400				

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.3	13	12	235	15	15	47	2,620	490	24	10	91
2	7.8	12	12	97	15	15	46	2,660	400	20	11	364
3	7.8	12	14	70	14	15	50	2,330	322	18	12	376
4	8.1	38	13	69	14	15	48	1,780	250	17	24	263
5	9.3	22	11	64	14	17	46	1,260	295	16	18	191
6	10	16	11	68	15	29	45	938	584	14	15	145
7	9.5	16	10	66	14	32	57	749	674	14	13	101
8	8.8	15	11	62	17	26	70	626	580	13	14	72
9	8.8	14	12	58	16	24	90	530	464	21	14	50
10	8.3	13	13	53	16	23	160	427	345	28	12	36
11	7.8	13	13	50	16	22	362	447	255	21	10	28
12	7.3	14	13	51	15	22	369	626	206	22	8.6	23
13	7.4	13	13	47	15	21	402	580	175	22	7.6	19
14	7.6	19	14	40	15	20	418	490	152	20	7.2	17
15	8.1	17	14	35	14	18	344	459	122	26	6.9	15
16	8.3	17	14	31	14	18	314	650	102	68	7.2	14
17	8.6	17	13	28	14	19	412	580	85	95	6.0	14
18	9.3	15	13	26	14	19	710	472	77	74	5.5	13
19	9.5	15	13	26	15	19	979	368	73	51	5.8	12
20	11	20	14	24	15	22	980	294	238	36	6.2	12
21	14	23	13	24	15	25	674	288	188	27	5.8	12
22	9.3	20	12	23	15	26	626	288	147	22	5.4	11
23	7.8	20	12	23	15	28	638	262	108	21	5.0	10
24	13	19	12	22	15	27	926	250	86	18	4.6	11
25	10	17	13	22	15	26	1,960	410	68	19	4.8	11
26	9.3	16	14	21	15	24	2,300	418	54	17	5.3	11
27	10	15	19	21	15	24	1,840	352	42	15	4.6	11
28	10	14	20	19	15	27	1,970	288	35	14	4.1	11
29	11	13	21	18	-	32	1,870	228	30	12	22	11
30	13	12	87	16	-	39	2,050	200	28	11	32	11
31	13	-	365	16	-	42	-	420	-	10	39	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	292.0	14	7.3	9.42	0.069	0.08
November	500	38	12	16.7	.123	.14
December	841	365	10	27.1	.199	.23
Calendar year 1936	47,697.4	2,440	2.0	130	.956	13.04
January	1,425	235	16	46.0	.338	.39
February	417	17	14	14.9	.110	.11
March	731	42	15	23.6	.174	.20
April	20,803	2,300	45	693	5.10	5.69
May	22,270	2,660	200	718	5.28	6.09
June	6,665	674	28	222	1.63	1.82
July	806	95	10	26.0	.191	.22
August	346.6	39	4.1	11.2	.082	.09
September	1,966	376	10	65.5	.482	.54
Water year 1936-37	57,062.6	2,660	4.1	156	1.15	15.60

Esquagama Lake near Biwabik, Minn.

Location.- Staff gage, lat. 47°27', long. 92°23', in sec. 4, T. 57 N., R. 16 W., on abutment of concrete dam at outlet of lake, about five miles southwest of Biwabik.

Records available.- April to September 1937.

Extremes.- Maximum stage observed during period, 8.00 feet Apr. 26-28; minimum observed, 3.20 feet June 22.

Remarks.- Stage of lake regulated by concrete dam with 20 bays each 5 feet wide, permitting a 4.5-foot control by stop logs. Zero of gage is at top of concrete sill of dam. Gage readings furnished by Minnesota Department of Conservation, Division of Drainage & Waters.

Gage height, in feet, of water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	7.75	4.56	4.64		
2							-	7.63	4.56	4.84		
3							-	7.42	4.54	4.84		
4							-	7.28	4.56	4.84		
5							-	6.86	4.56	4.82		
6							-	6.70	4.64	4.80		
7							-	6.48	4.66	4.78		
8							-	6.20	4.66	4.78		
9							3.36	5.88	4.64	4.80		
10							3.36	5.56	4.58	4.80		
11							3.48	5.28	4.56	4.78		
12							3.50	5.04	4.50	4.78		
13							3.54	4.84	4.42	4.80		
14							3.58	4.65	4.32	4.90		
15							3.62	4.50	4.20	-		4.94
16							3.68	4.40	4.08	-		
17							3.86	4.30	3.90	-		
18							4.26	4.20	3.78	-		
19							4.76	4.10	3.56	-		
20							5.10	4.00	3.44	4.82		
21							5.60	3.96	3.34	-		
22							6.47	3.88	3.20	-		
23							7.00	3.82	3.54	-		
24							7.52	3.76	3.84	-		
25							7.44	3.84	4.06	-		
26							8.00	3.86	4.28	-		
27							8.00	4.10	4.50	-		
28							8.00	4.18	4.66	-		
29							7.95	4.26	4.74	-		
30							7.85	4.28	4.80	-		
31							-	4.48	-	-		

Ammicon Lake near South Range, Wis.

Location.- Staff gage, lat. 46°29', long. 92°04', in sec. 12, T. 46 N., R. 14 W., in northwest corner of lake, 15 miles southwest of South Range.

Records available.- August 1936 to September 1937 (fragmentary).

Extremes.- Maximum water-surface elevation observed during period August 1936 to September 1937, 1,197.59 feet Apr. 26; minimum, 1,196.04 feet Aug. 24, Oct. 3, 1936.

Remarks.- Gage heights have been reduced to mean sea-level datum on basis of levels of Public Service Commission of Wisconsin.

Elevation, in feet, 1936-37

Day	1936			1937								
	Aug.	Sept.	Oct.				Apr.	May	June	July	Aug.	Sept.
1	-	-							7.18	6.66	6.58	6.54
2	-	-							7.16	6.66	-	6.60
3	-	-	6.04						7.10	6.66	-	6.66
4	-	-							7.08	6.66	6.56	6.70
5	-	6.11							7.06	6.64	-	6.84
6	-	-							7.06	6.64	-	-
7	-	6.10							7.04	6.64	6.56	-
8	-	-							7.02	6.62	6.58	6.78
9	-	-							7.02	6.62	6.62	-
10	-	6.13							7.00	6.60	-	-
11	-	-							6.98	6.62	6.56	6.82
12	-	-							6.96	-	-	6.82
13	-	6.12							6.96	-	-	-
14	-	-							6.98	6.62	6.56	-
15	-	-							6.96	-	6.56	6.80
16	-	-							6.94	-	6.56	-
17	-	-							6.92	6.62	-	-
18	-	6.15							6.92	6.62	-	6.78
19	-	-							6.90	-	-	6.76
20	-	-							6.90	6.60	-	-
21	-	-							6.88	-	6.44	6.74
22	-	6.12							6.86	6.60	6.42	-
23	-	-							6.86	-	-	6.72
24	6.04	-							6.84	6.62	-	-
25	6.06	-							6.82	6.66	6.36	6.72
26	-	6.09					7.59		6.82	6.64	-	6.70
27	-	-							6.82	-	-	-
28	-	6.08							6.80	6.62	6.36	6.72
29	6.14	-							6.68	-	6.32	-
30	-	-							6.68	6.60	-	6.72
31	6.14	-							-	6.58	6.54	-

Note.- Add 1,190 feet to obtain elevation above mean sea level.

Menominee River at Twin Falls, near Iron Mountain, Mich.

Location.- Lat. 45°52', long. 88°04', in sec. 12, T. 40 N., R. 31 W., at power plant of Wisconsin Michigan Power Co., 3 miles above mouth of Pine River and 3½ miles north of Iron Mountain.

Drainage area.- 1,790 square miles.

Records available.- January 1914 to September 1937.

Average discharge.- 23 years, 1,713 second-feet.

Extremes.- Maximum daily discharge during year, 8,530 second-feet Apr. 27; minimum, 446 second-feet Aug. 29.
1914-37: Maximum daily discharge, 16,700 second-feet Apr. 23, 24, 1916; minimum, 154 second-feet Aug. 9, 1925.

Remarks.- Records good. Discharge determined from power-house records. Flow is regulated by power plant at which station is located and also by plant on Brule River about 5 miles above station, where drainage area is 58 percent of that at station. Records of daily discharge computed by Wisconsin Michigan Power Co., on basis of load-discharge rating of hydroelectric units defined by Geological Survey.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	884	892	826	1,840	980	1,080	1,110	6,630	1,870	766	1,020	591
2	858	980	790	1,560	962	1,100	1,080	6,630	1,870	786	1,010	879
3	832	1,090	825	1,270	961	1,120	1,010	6,660	1,860	757	1,020	1,240
4	819	1,080	861	1,280	929	1,130	1,010	6,410	1,780	745	944	1,290
5	1,140	955	931	1,320	953	1,120	1,020	6,680	1,590	783	982	1,020
6	1,180	1,500	814	1,360	947	1,070	1,090	5,880	1,470	719	1,020	844
7	1,280	1,490	873	1,340	904	1,000	1,500	5,840	1,680	695	934	905
8	1,200	1,050	857	1,330	982	1,130	1,930	4,890	1,640	726	909	975
9	1,180	1,080	879	1,200	968	1,080	1,840	4,630	1,690	696	931	873
10	1,020	1,060	855	1,100	982	1,080	1,450	3,950	1,610	702	831	971
11	781	1,020	909	1,150	915	1,050	1,530	4,400	1,500	709	765	1,360
12	820	1,020	947	1,200	878	975	2,260	3,640	1,540	822	885	1,400
13	736	1,030	845	1,160	890	926	2,520	3,450	1,230	915	808	1,100
14	759	1,060	952	1,150	911	897	2,810	3,390	1,150	978	834	1,020
15	763	1,030	1,030	1,090	947	997	4,040	3,430	1,180	1,200	835	1,020
16	796	1,090	1,050	1,060	940	984	4,720	3,050	1,250	1,190	850	1,060
17	779	1,040	1,020	1,040	949	968	4,130	2,300	1,250	1,090	908	957
18	739	1,000	981	1,110	1,060	961	4,990	2,360	1,180	1,080	862	855
19	852	1,040	984	1,100	965	970	6,310	2,400	1,050	1,070	843	849
20	814	967	942	1,100	963	948	6,410	2,380	949	1,010	725	952
21	1,010	957	961	1,090	1,070	908	7,080	2,300	1,010	1,070	762	822
22	1,140	884	989	1,060	1,030	999	6,080	2,420	1,000	1,060	754	879
23	1,110	927	924	936	1,030	1,080	4,520	2,790	1,050	1,090	776	834
24	1,060	934	888	899	1,050	1,070	5,180	2,580	1,060	1,040	689	890
25	1,080	914	822	937	1,010	1,070	6,450	2,820	1,090	1,010	646	796
26	1,040	907	933	912	993	1,020	7,960	2,460	1,060	1,080	594	776
27	1,060	828	926	931	1,020	980	8,530	2,450	945	1,140	555	847
28	1,020	743	1,240	924	1,020	830	8,370	2,390	916	1,210	502	854
29	1,040	744	1,650	929	-	1,030	7,570	2,420	871	1,170	446	794
30	970	747	1,860	949	-	1,040	6,620	2,120	792	1,150	479	812
31	939	-	1,850	1,020	-	1,080	-	1,960	-	1,060	544	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	29,701	1,280	736	958	0.535	0.62
November	30,089	1,500	743	1,003	.560	.62
December	31,214	1,860	790	1,007	.563	.65
Calendar year 1936	565,479	7,770	467	1,545	.863	11.75
January	35,347	1,840	899	1,140	.637	.73
February	27,209	1,070	878	972	.543	.57
March	31,693	1,130	830	1,022	.571	.66
April	121,120	8,530	1,010	4,037	2.26	2.52
May	115,710	6,680	1,960	3,733	2.09	2.41
June	39,133	1,870	792	1,304	.728	.81
July	29,519	1,210	695	952	.532	.61
August	24,663	1,020	446	796	.445	.51
September	28,465	1,400	591	949	.530	.59
Water year 1936-37	543,863	8,530	446	1,490	.832	11.30

Menominee River below Koss, Mich.

Location.- Lat. 45°22', long. 87°39', in sec. 9, T. 34 N., R. 27 W., at power plant of Wisconsin public Service Corporation, half a mile above mouth of Little Cedar River and 4 miles below Koss.

Drainage area.- 3,790 square miles.

Records available.- July 1913 to September 1937.

Average discharge.- 24 years, 3,092 second-feet.

Extremes.- Maximum daily discharge during year, 13,800 second-feet Apr. 29; minimum, 400 second-feet July 6.
1913-37: Maximum daily discharge, 23,200 second-feet Apr. 23, 25, 1916; minimum, 162 second-feet Sept. 15, 1931.

Remarks.- Records good. Discharge determined from power-house records. Flow regulated by six dams above station, which are used for developing power. Records of daily discharge computed by Wisconsin Public Service Corporation on basis of load-discharge rating of hydroelectric units defined by Geological Survey.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,020	2,160	1,150	2,630	1,580	1,690	2,400	12,700	2,680	1,370	1,490	1,150
2	1,210	1,800	1,220	2,860	1,220	1,960	2,770	12,800	2,590	1,580	1,490	1,120
3	912	1,510	1,300	2,860	1,580	1,950	2,590	10,900	2,880	1,440	1,490	1,090
4	1,360	1,370	1,440	2,300	1,580	2,090	2,870	10,600	3,000	1,300	1,250	1,040
5	1,220	1,870	1,510	2,210	1,150	2,190	2,990	11,100	2,620	625	1,300	790
6	1,940	1,870	1,370	2,210	1,300	2,180	2,850	9,410	2,530	400	1,660	1,240
7	2,160	2,020	1,010	2,210	1,580	2,530	3,240	8,750	2,630	768	1,430	1,140
8	2,460	2,450	936	2,110	1,370	1,820	3,190	8,240	1,970	1,180	1,390	1,380
9	2,670	2,240	1,370	2,110	1,370	2,020	3,060	7,830	2,970	1,160	960	1,380
10	2,210	1,720	1,370	2,110	1,440	2,500	3,540	6,910	2,880	1,110	1,250	1,500
11	2,460	1,660	1,370	2,020	1,370	2,400	4,080	5,290	2,780	1,200	1,250	1,510
12	1,080	1,870	1,220	1,300	1,370	2,110	3,400	5,600	2,210	784	1,340	1,370
13	1,580	1,940	1,510	1,580	1,370	1,820	5,160	6,220	2,400	1,010	1,390	836
14	1,730	1,580	1,150	1,730	1,730	2,210	6,400	5,330	1,900	1,150	1,490	1,960
15	1,940	1,730	1,150	1,730	1,370	1,730	6,630	5,340	2,210	1,240	1,340	1,740
16	1,370	1,370	1,660	1,800	1,510	1,480	8,370	5,420	1,980	1,200	1,010	1,720
17	1,660	1,800	1,510	1,660	1,370	1,120	8,230	4,660	1,940	1,440	816	1,340
18	1,580	1,870	1,370	1,370	1,370	2,140	8,380	3,940	1,940	1,920	1,060	1,630
19	1,220	1,730	1,730	1,370	1,580	2,210	7,770	3,450	1,940	1,550	1,100	1,460
20	1,220	1,730	1,660	1,730	1,790	1,940	11,800	3,540	1,730	1,100	912	685
21	1,590	1,440	1,580	1,660	2,020	2,290	9,150	4,140	1,080	1,280	1,100	1,060
22	1,730	1,870	1,440	1,660	1,660	1,630	9,330	3,800	1,730	1,870	832	1,370
23	1,800	1,080	1,080	1,660	2,020	1,410	9,700	4,040	1,730	1,370	816	1,060
24	2,020	1,200	1,510	1,730	2,230	2,260	10,200	3,370	1,730	1,210	818	1,030
25	1,940	1,080	1,440	1,300	2,160	1,230	10,700	3,450	1,660	1,760	1,010	1,060
26	1,580	1,220	1,440	1,300	2,210	1,960	10,300	3,520	1,730	1,440	1,010	854
27	1,800	1,510	1,370	1,150	1,930	2,120	11,300	3,380	1,660	1,510	1,300	582
28	1,940	1,300	1,510	1,580	2,020	2,390	13,500	3,370	1,010	1,070	1,010	860
29	1,870	1,510	1,850	1,220	-	2,050	13,800	3,520	1,300	1,390	1,060	1,060
30	1,800	1,220	2,090	1,150	-	1,940	13,200	3,210	1,510	1,490	528	1,260
31	1,800	-	2,420	1,730	-	2,440	-	3,540	-	1,580	816	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	53,872	2,670	912	1,738	0.459	0.53
November	49,720	2,450	1,080	1,657	.437	.49
December	44,736	2,420	936	1,443	.381	.44
Calendar year 1936	912,348	13,000	575	2,493	.658	8.93
January	56,040	2,860	1,150	1,808	.477	.55
February	45,250	2,230	1,150	1,616	.426	.44
March	61,810	2,530	1,120	1,994	.526	.61
April	210,800	13,800	2,400	7,027	1.85	2.06
May	187,570	12,800	3,210	6,051	1.60	1.84
June	62,920	3,000	1,010	2,097	.553	.62
July	39,497	1,920	400	1,274	.336	.39
August	35,738	1,680	528	1,153	.304	.35
September	36,307	1,960	582	1,210	.319	.36
Water year 1936-37	884,260	13,800	400	2,423	.639	8.68

Pine River at Pine River power plant, near Florence, Wis.

Location.- Lat. 45°49', long. 88°15', in sec. 28, T. 39 N., R. 18 E., at power plant of Wisconsin Michigan Power Co., 4 miles below Popple River, 6½ miles south of Florence.

Drainage area.- 543 square miles.

Records available.- October 1923 to September 1937. January 1914 to September 1923, at station 4 miles upstream, where drainage area is 511 square miles.

Average discharge.- 14 years (1923-37) 399 second-feet.

Extremes.- Maximum daily discharge during year, 2,110 second-feet Apr. 27; minimum, 38 second-feet, Sept. 5.
1923-37: Maximum daily discharge, 4,380 second-feet Apr. 9, 1929; no flow at times in 1924, 1926, 1927, 1930, 1931, 1933.

Remarks.- Records good for medium and low stages, fair for high stages. Discharge determined from power-house records. Flow regulated by power plant at station, but pondage is small and monthly discharge is very nearly natural flow. Records of daily discharge computed by Wisconsin Michigan Power Co. on basis of load-discharge rating of hydroelectric units by defined Geological Survey.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	192	260	197	419	198	212	241	1,730	518	122	*50	57
2	189	297	212	339	180	226	234	1,800	396	122	170	216
3	188	378	183	313	176	198	286	1,700	454	130	151	212
4	226	293	183	238	176	212	272	1,660	320	42	159	175
5	622	449	212	310	181	212	289	1,470	319	56	174	38
6	674	411	169	222	169	212	288	1,380	421	189	141	184
7	664	322	175	256	169	222	318	1,140	536	147	*50	122
8	664	313	169	258	183	258	403	1,010	532	137	*50	142
9	662	317	212	212	183	240	415	965	500	120	205	127
10	538	278	183	226	190	240	534	843	401	122	184	214
11	418	274	183	212	172	240	626	798	352	*50	*50	311
12	441	281	183	217	183	212	654	798	351	169	164	391
13	328	288	169	212	205	212	951	798	268	167	137	304
14	328	295	183	212	104	198	1,130	798	315	198	*40	190
15	271	197	183	212	212	240	1,370	755	260	198	41	202
16	318	233	183	212	212	177	1,220	675	263	186	203	200
17	281	311	183	198	212	212	1,180	675	305	135	56	189
18	258	134	183	212	180	212	1,220	669	270	*50	56	232
19	278	262	183	212	189	212	1,200	663	258	184	169	57
20	262	227	173	206	197	212	1,280	567	197	135	162	189
21	325	294	183	195	184	169	1,320	576	260	176	70	179
22	394	226	183	162	197	220	1,340	676	243	198	*50	178
23	428	212	183	224	192	212	1,320	678	199	160	102	136
24	353	176	183	84	189	212	1,360	678	203	104	69	177
25	339	145	197	212	212	212	1,810	678	203	108	65	172
26	362	*50	226	165	212	212	2,040	675	198	210	109	*50
27	312	240	226	162	212	212	2,110	678	*50	166	89	98
28	309	212	339	212	197	121	2,090	678	212	166	*40	182
29	306	198	445	189	-	226	1,840	678	176	169	46	130
30	279	183	383	189	-	226	1,700	628	176	132	49	174
31	261	-	495	134	-	241	-	550	-	83	72	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	11,470	674	188	370	0.681	0.79
November	7,756	449	50	259	.477	.53
December	6,744	495	169	218	.401	.46
Calendar year 1936	135,780	1,960	2	371	.683	9.30
January	6,826	419	84	220	.405	.47
February	5,266	212	104	188	.346	.36
March	6,622	258	121	214	.394	.45
April	31,041	2,110	234	1,035	1.91	2.13
May	28,076	1,800	550	906	1.67	1.92
June	9,156	536	50	305	.562	.63
July	4,331	210	42	140	.258	.30
August	3,173	205	40	102	.188	.22
September	5,228	391	38	174	.320	.36
Water year 1936-37	125,689	2,110	38	344	.634	8.62

*Estimated.

Pike River at Amberg, Wis.

Location.- Staff gage, lat. 45°29', long. 88°00', in sec. 21, T. 35 N., R. 20 E., 500 feet above Chicago, Milwaukee, St. Paul & Pacific Railroad bridge, a quarter of a mile south of Amberg, and 1¼ miles below North Branch of Pike River.

Drainage area.- 250 square miles.

Records available.- February 1914 to September 1937.

Average discharge.- 23 years, 228 second-feet (revised).

Extremes.- Maximum discharge observed during year, 920 second-feet Apr. 26 (gage height, 4.24 feet); minimum, 80 second-feet Aug. 30, Sept. 1.
1914-37: Maximum discharge observed, 2,730 second-feet Apr. 10, 1922 (gage height, 7.68 feet, former site and datum); minimum, 26 second-feet Dec. 27, 1925 (gage height, 1.30 feet, former site and datum).

Remarks.- Records excellent except those for periods of ice effect, Nov. 18-20, Nov. 23 to Mar. 28, which were computed on basis of three discharge measurements, gage heights, observer's notes, and weather records, and are fair. Discharge for Aug. 22 interpolated. Gage read once daily.

Rating table, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.5	74	2.0	150	2.6	306	3.4	577
1.6	86	2.2	196	2.8	367	3.8	741
1.8	114	2.4	249	3.0	432	4.2	920

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	106	150	99	184	131	140	292	577	184	106	99	80
2	106	150	99	184	122	150	292	656	172	106	99	99
3	106	172	99	161	114	161	306	616	172	106	99	99
4	140	184	92	150	114	172	321	539	161	106	131	99
5	196	172	92	131	114	184	352	466	172	106	114	99
6	236	172	86	131	106	209	352	416	222	106	106	99
7	209	161	86	140	106	209	432	383	209	99	99	99
8	184	161	92	140	106	209	502	336	196	99	92	99
9	161	150	92	140	99	184	577	321	184	99	99	92
10	150	150	92	114	92	172	656	306	172	99	99	99
11	131	150	99	131	92	184	656	277	161	99	99	99
12	131	140	92	140	106	161	698	306	150	131	114	106
13	131	140	114	140	106	161	741	321	150	140	106	106
14	131	140	150	140	122	150	830	306	150	131	106	106
15	131	140	150	131	122	161	785	277	161	131	99	99
16	131	140	140	140	114	150	656	277	150	131	92	99
17	131	140	140	122	106	161	577	277	140	122	92	99
18	131	140	131	140	92	196	539	263	131	114	92	99
19	131	131	131	131	106	196	539	249	131	106	92	99
20	131	150	122	122	114	209	539	236	131	106	92	92
21	161	131	122	122	150	249	502	236	131	99	86	92
22	209	131	114	122	172	249	466	263	131	122	89	99
23	196	122	106	122	172	222	502	249	140	114	92	92
24	172	122	122	122	161	236	502	236	131	114	86	92
25	172	114	131	131	161	222	830	236	122	106	86	106
26	161	114	150	131	150	249	920	236	114	114	86	99
27	150	114	196	122	150	263	875	236	114	114	86	99
28	150	114	196	131	140	249	741	222	114	106	86	99
29	140	106	209	131	-	263	616	209	106	99	86	99
30	140	106	184	131	-	236	539	196	106	99	80	99
31	140	-	209	122	-	249	-	196	-	99	80	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,695	236	106	151	0.604	0.70
November	4,207	184	106	140	.560	.62
December	3,937	209	86	127	.508	.59
Calendar year 1936	64,951	741	80	177	.708	9.67
January	4,199	184	114	135	.540	.62
February	3,440	172	92	123	.492	.51
March	6,206	263	140	200	.800	.92
April	17,135	920	292	571	2.28	2.54
May	9,920	656	196	320	1.28	1.48
June	4.508	222	106	150	.600	.67
July	3,429	140	99	111	.444	.51
August	2,964	131	80	95.6	.382	.44
September	2,944	106	80	98.1	.392	.44
Water year 1936-37	67,584	920	80	185	.740	10.04

Peshtigo River at High Falls, near Crivitz, Wis.

Location.- Lat. 45°17', long. 88°12', in sec. 1, T. 32 N., R. 18 E., at High Falls power house of Wisconsin Public Service Corporation, 1 mile above Thunder River and 10 miles west of Crivitz.

Drainage area.- 571 square miles.

Records available.- August 1912 to September 1937.

Average discharge.- 25 years, 485 second-feet.

Extremes.- Maximum daily discharge during year, 2,500 second-feet Apr. 26; minimum, 7 second-feet one or more times each month.
1912-37: Maximum daily discharge, 3,860 second-feet Apr. 11, 1922 (gage height, 7.80 feet); no flow several days during 1925, 1928, 1929, 1932, 1933.

Remarks.- Records poor. Discharge determined from power-house records. Flow regulated by storage in service reservoir at plant (capacity, 7,940 second-foot-days) and Caldron Falls Reservoir (capacity, 5,765 second-foot-days). Records of daily discharge computed by Wisconsin Public Service Corporation, on basis of load-discharge rating of hydroelectric units defined by Geological Survey.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	142	32	207	112	325	281	566	1,680	947	289	7	566
2	330	367	66	673	277	206	495	1,570	736	146	224	73
3	74	286	164	51	313	725	431	1,480	452	51	281	187
4	7	257	184	515	283	645	7	1,520	615	84	109	7
5	535	316	7	139	311	643	683	1,640	458	7	165	7
6	225	367	7	218	150	777	712	1,330	7	196	334	15
7	911	174	237	270	7	132	714	1,190	677	51	128	134
8	297	278	321	462	202	500	613	1,130	757	106	248	60
9	454	629	288	465	262	534	810	740	417	94	362	21
10	569	472	356	49	175	483	628	1,340	345	125	293	58
11	224	120	379	275	241	413	7	956	466	85	274	221
12	491	368	392	187	108	452	794	1,020	342	392	224	7
13	410	425	7	196	127	484	588	1,050	7	481	606	153
14	376	122	183	346	14	44	967	812	577	62	94	207
15	300	7	155	279	267	537	1,020	600	572	71	7	215
16	363	467	96	108	230	302	1,430	207	627	24	130	7
17	189	408	112	37	312	214	1,760	825	823	58	363	131
18	112	288	116	392	149	275	1,430	864	692	33	134	290
19	318	240	7	430	238	276	1,400	616	551	7	261	85
20	330	209	258	272	693	584	1,600	692	7	208	158	183
21	222	7	365	103	222	7	1,530	889	378	120	177	69
22	363	108	265	139	395	448	1,660	713	225	113	45	120
23	412	567	45	264	291	95	1,440	7	200	207	257	543
24	19	380	284	49	321	87	1,380	671	216	7	452	101
25	129	234	7	199	557	526	1,900	622	322	104	292	7
26	240	32	588	163	288	638	2,500	803	177	177	319	105
27	295	260	7	102	317	132	2,240	649	7	240	193	143
28	334	211	379	160	118	7	1,870	595	327	92	57	194
29	283	7	655	623	-	338	2,210	488	307	62	74	81
30	278	183	766	376	-	496	1,440	123	317	62	131	155
31	580	-	487	7	-	466	-	643	-	7	373	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,812	911	7	317	0.555	0.64
November	7,821	629	7	261	.457	.51
December	7,390	766	7	238	.417	.48
Calendar year 1936	134,541	1,550	7	368	.644	8.76
January	7,661	673	7	247	.433	.50
February	7,193	693	7	257	.450	.47
March	11,746	777	7	379	.664	.77
April	34,825	2,500	7	1,161	2.03	2.26
May	27,465	1,680	7	886	1.55	1.79
June	12,551	947	7	418	.732	.82
July	3,761	481	7	121	.212	.24
August	6,772	606	7	218	.382	.44
September	4,145	566	7	138	.242	.27
Water year 1936-37	141,142	2,500	7	387	.678	9.19

Oconto River near Gillett, Wis.

Location.- Chain gage, lat. 44°52', long. 88°18', in sec. 34, T. 28 N., R. 18 E. 2 miles above Christy Brook, at highway bridge, 2½ miles south of Gillett.

Drainage area.- 678 square miles.

Records available.- June 1906 to March 1909, January 1914 to September 1937.

Average discharge.- 23 years (1914-37), 598 second-feet.

Extremes.- Maximum discharge observed during year, 3,000 second-feet Oct. 22 (gage height, 4.78 feet); minimum, 172 second-feet Aug. 3 (gage height, 0.52 foot).
1906-09, 1914-37: Maximum discharge observed, 6,470 second-feet Apr. 11, 1922, caused by failure of dam at Pulcifer, 4 miles upstream (gage height, 9.1 feet); minimum, 95 second-feet June 3, 6, 1907 (gage height, 0.1 foot).

Remarks.- Records excellent except those for periods of ice effect, Nov. 19, Nov. 23 to Apr. 2 which were computed on basis of three discharge measurements, gage heights, observer's notes, and weather records, and are fair. Gage read once daily.

Rating table, water year 1936-37, except periods of ice effect (gage height, in feet, discharge, in second-feet)

0.4	150	2.2	910
.6	197	2.6	1,150
.8	258	3.0	1,440
1.0	331	3.5	1,840
1.2	413	4.0	2,280
1.5	550	4.5	2,730
1.8	700	5.0	3,180

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	331	457	258	392	371	599	965	2,280	503	312	258	197
2	331	480	276	371	371	624	1,020	2,280	480	312	226	197
3	331	480	258	371	371	650	1,080	2,280	457	276	172	197
4	331	480	258	371	371	599	1,080	2,010	457	276	293	226
5	312	480	258	371	371	700	1,080	1,920	503	276	312	226
6	331	480	276	371	371	800	1,080	1,680	503	312	293	212
7	413	480	276	371	371	965	1,150	1,440	526	276	276	226
8	371	480	276	371	371	1,020	1,150	1,440	550	276	197	212
9	351	480	293	371	371	1,020	1,220	1,290	550	258	226	226
10	371	450	312	371	371	1,080	1,220	1.150	503	258	242	226
11	371	457	312	371	371	910	1,150	1,020	480	242	276	226
12	331	413	312	331	392	855	1,220	1,020	457	226	242	242
13	331	392	312	351	413	800	1,150	1,080	457	226	212	258
14	331	392	293	331	413	750	1,220	1,080	457	258	197	258
15	331	392	312	351	435	700	1,220	1,080	435	258	197	258
16	331	392	312	331	435	650	1,220	1,020	435	258	184	242
17	331	392	293	351	435	700	1,290	965	413	258	184	242
18	331	392	293	351	435	800	1,220	910	413	258	184	226
19	331	242	293	331	457	910	1,150	800	392	258	197	242
20	371	276	293	331	480	910	1,150	750	392	242	197	226
21	2,550	293	293	331	480	965	1,220	700	392	242	184	226
22	3,000	312	312	331	910	1,080	1,220	650	371	242	184	226
23	800	312	293	331	855	1,150	1,220	624	371	226	184	226
24	574	293	312	331	800	1,290	1,520	624	371	226	197	226
25	371	293	312	331	700	1,220	1,680	624	371	226	197	226
26	371	276	312	331	650	1,220	2,370	599	351	242	197	226
27	371	276	331	312	599	1,020	2,460	599	331	242	197	242
28	435	293	392	312	599	965	2,550	574	312	226	197	242
29	392	276	392	312	-	800	2,460	550	293	226	197	226
30	413	258	392	331	-	910	2,280	526	312	258	197	242
31	435	-	392	371	-	855	-	503	-	276	197	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	16,575	3,000	312	535	0.789	0.91
November	11,399	480	242	380	.560	.62
December	9,499	392	258	306	.451	.52
Calendar year 1936	180,820	3,000	172	494	.729	9.90
January	10,785	392	312	348	.513	.59
February	13,569	910	371	485	.715	.74
March	27,517	1,290	599	888	1.31	1.51
April	42,015	2,550	965	1,400	2.06	2.30
May	34,068	2,280	503	1,099	1.62	1.87
June	12,838	550	293	428	.631	.70
July	7,948	312	226	256	.378	.44
August	6,693	312	172	216	.319	.37
September	6,873	258	197	229	.338	.38
Water year 1936-37	199,779	3,000	172	547	.807	10.95

Wheeler Lake near Lakewood, Wis.

Location.- Staff gage, lat. 45°19', long. 88°29', in sec. 26, T. 33 N., R. 16 E., on east shore of lake, near home of Chas. I. Vogt and 4 miles east of Lakewood.

Records available.- August 1936 to September 1937.

Extremes.- Maximum elevation of water surface observed during period August 1936 to September 1937, 94.92 feet May 1, 2; minimum, 93.89 feet Sept. 29, 1937.

Remarks.- Gage heights have been reduced to a datum assumed for this lake by Public Service Commission of Wisconsin.

Elevation, in feet, 1936-37

Day	1936				1937							
	Aug.	Sept.	Oct.	Nov.			Apr.	May	June	July	Aug.	Sept.
1	-	4.04	4.08	3.98			-	4.92	-	-	-	-
2	-	4.04	4.08	3.99			-	4.92	4.77	-	4.14	3.88
3	-	4.04	4.08	4.00			-	-	-	4.66	-	-
4	-	4.04	4.05	4.00			-	-	-	-	4.13	3.84
5	-	4.05	4.05	4.00			-	4.91	4.76	-	-	-
6	-	4.05	4.04	3.99			-	-	4.80	-	-	-
7	-	4.05	4.04	3.99			-	4.90	-	4.65	4.10	3.84
8	-	4.05	4.04	-			4.61	-	4.77	-	-	-
9	-	4.05	4.04	-			-	4.90	-	-	4.09	-
10	-	4.05	4.03	3.98			4.57	4.90	4.75	4.61	-	3.83
11	-	4.08	4.03	3.98			-	-	-	-	4.09	-
12	-	4.10	4.03	-			4.60	4.87	-	4.61	-	3.79
13	-	4.10	4.03	3.98			-	-	4.71	-	4.08	-
14	-	4.10	4.00	-			-	-	-	-	-	-
15	-	4.10	4.00	3.95			4.62	4.86	-	-	-	3.78
16	-	4.09	4.00	-			-	-	4.71	4.39	4.04	-
17	-	4.09	3.99	3.94			4.62	4.86	-	4.33	-	-
18	-	4.09	3.99	3.93			4.62	-	-	-	-	3.78
19	-	4.09	3.98	3.93			-	4.85	4.71	4.25	4.03	-
20	-	4.09	3.98	-			4.62	-	-	-	-	-
21	-	4.09	4.04	3.90			4.66	4.85	-	4.24	3.99	3.74
22	-	4.09	4.04	3.89			-	-	-	-	-	-
23	-	4.09	4.03	-			4.67	4.85	-	-	3.98	-
24	-	4.08	4.03	3.89			4.76	-	-	4.20	-	3.73
25	3.99	4.08	4.03	3.88			4.77	4.82	-	-	3.94	-
26	4.04	4.08	4.03	3.88			-	-	4.65	-	-	3.73
27	4.04	4.06	3.99	-			4.77	4.82	-	4.18	-	-
28	4.04	4.08	3.99	3.84			4.81	-	-	-	3.89	-
29	4.04	4.06	-	-			-	4.82	-	4.18	-	3.69
30	4.04	4.08	-	-			-	-	-	-	-	-
31	4.04	-	3.98	-			-	4.80	-	4.14	3.88	-

Note.- Add 90 feet to obtain elevation above lake datum of Public Service Commission of Wisconsin.

Boot Lake near Townsend, Wis.

Location.- Staff gage, lat. 45°15', long. 88°39', in sec. 9, T. 32 N., R. 15 E., on narrow neck of land cut by a small channel, extending across north end of lake, 5⅛ miles southwest of Townsend.

Records available.- August 1936 to September 1937 (*fragmentary*).

Extremes.- Maximum elevation of water surface observed during period August 1936 to September 1937, 95.59 feet May 13, 26, 31; minimum, 94.69 feet Oct. 31, Nov. 7, 1936.

Remarks.- Gage heights have been reduced to datum assumed for this lake by Public Service Commission of Wisconsin.

Elevation, in feet, 1936-37

1936				1936		1937		1937	
Aug. 26	94.84	Oct. 17	94.74			May 26	95.59		
Sept. 5	94.84	Oct. 24	94.79			May 31	95.59		
Sept.12	94.94	Oct. 7	94.69			June 10	95.54		
Sept.19	94.94					June 15	95.54		
Sept.26	94.79					June 22	95.49		
Oct. 3	94.79					July 12	95.29		
						May 13	95.59		
						May 21	95.57		

Fox River at Berlin, Wis.

Location.- Staff gage, lat. 43°57'05", long. 88°57'30", in sec. 16, T. 17 N., R. 13 E., at Government lock and dam, 2½ miles upstream from Barnes Creek.

Drainage area.- 1,430 square miles.

Records available.- January 1898 to September 1937.

Average discharge.- 39 years, 1,101 second-feet.

Extremes.- Maximum daily discharge during year, 3,260 second-feet Mar. 20; minimum, 310 second-feet Feb. 3.
1898-1937: Maximum daily discharge, 6,620 second-feet Mar. 21, 23, 1929; minimum, 250 second-feet Feb. 1-4, 1900.

Remarks.- Open-water records good; winter records fair. Daily discharge furnished by Corps of Engineers, U. S. Army.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	645	830	400	1,020	330	1,140	2,310	2,240	940	675	535	535
2	645	800	425	830	330	1,140	2,240	2,380	905	645	535	535
3	645	800	445	820	310	1,220	2,170	2,380	865	645	535	535
4	645	830	445	755	330	1,380	2,100	2,450	865	645	535	535
5	675	800	405	730	330	1,490	2,100	2,380	830	615	560	535
6	675	800	430	730	350	1,820	2,040	2,310	865	615	560	535
7	675	765	430	730	350	2,330	2,040	2,170	905	615	560	535
8	675	735	415	730	350	2,640	2,040	2,100	905	615	560	535
9	675	765	415	700	350	2,700	1,980	1,980	830	590	560	535
10	675	735	395	650	350	2,840	1,980	1,910	830	590	560	560
11	675	765	395	595	330	2,800	1,910	1,740	830	615	560	645
12	675	800	380	570	330	2,860	1,850	1,680	830	615	560	615
13	675	765	350	540	370	2,830	1,800	1,620	865	675	535	615
14	645	765	340	540	390	2,800	1,680	1,520	830	675	535	645
15	645	735	360	540	375	2,850	1,680	1,360	735	645	535	590
16	675	735	360	495	355	2,880	1,570	1,270	765	615	510	535
17	675	705	360	470	355	2,980	1,520	1,180	800	615	510	590
18	675	735	385	450	375	3,080	1,460	1,140	800	615	490	590
19	675	675	385	450	375	3,170	1,420	1,140	800	590	615	645
20	645	675	385	450	565	3,260	1,270	1,080	800	590	675	645
21	675	675	385	435	1,050	3,170	1,360	1,080	800	560	675	615
22	675	675	385	435	1,100	3,000	1,520	1,100	800	590	735	615
23	705	735	360	415	1,140	2,830	1,680	1,060	800	590	705	615
24	705	560	360	415	1,140	2,670	1,740	1,060	765	590	705	615
25	705	595	405	375	1,100	2,380	1,850	1,020	765	590	675	615
26	675	570	470	375	1,100	2,520	1,980	1,020	765	590	645	615
27	645	595	485	360	1,100	2,310	1,980	1,060	735	590	645	615
28	705	625	590	360	1,080	2,240	2,040	1,100	735	590	590	615
29	365	545	635	345	-	2,240	2,040	1,100	735	675	645	615
30	830	515	700	365	-	2,240	1,980	1,060	675	645	615	615
31	830	-	1,220	365	-	2,240	-	1,020	-	560	560	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	21,305	865	645	687	0.480	0.55
November	21,305	830	515	710	.497	.55
December	13,900	1,220	340	448	.313	.36
Calendar year 1936	303,435	4,340	340	829	.580	7.86
January	17,040	1,020	345	550	.385	.44
February	16,010	1,140	310	572	.400	.42
March	76,050	3,260	1,140	2,453	1.72	1.98
April	55,330	2,310	1,270	1,844	1.29	1.44
May	47,670	2,450	1,020	1,538	1.08	1.24
June	24,370	940	675	812	.568	.63
July	19,070	675	560	615	.430	.50
August	18,220	735	490	588	.411	.47
September	17,640	645	535	588	.411	.46
Water year 1936-37	347,910	3,260	310	953	.666	9.04

Fox River at Rapide Croche Dam, near Wrightstown, Wis.

Location.- Lat. 44°19', long. 88°12', in sec. 4, T. 21 N., R. 19 E., at Rapide Croche Dam, 2 miles above Wrightstown.

Drainage area.- 6,150 square miles.

Records available.- March 1896 to September 1937.

Average discharge.- 41 years, 4,265 second-feet.

Extremes.- Maximum daily discharge during year, 13,500 second-feet May 4; minimum, 583 second-feet Sept. 26.
1918-37: Maximum daily discharge, 20,600 second-feet Apr. 4, 1929; minimum, 138 second-feet Aug. 2, 1936.

Remarks.- Records good. Flow regulated by storage in Lake Winnebago (capacity, 13,600,000,000 cubic feet). Daily discharge computed from power-house records by Corps of Engineers, U. S. Army.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,400	2,280	2,360	2,510	2,720	3,510	6,600	11,100	4,170	3,300	754	1,360
2	1,300	2,520	2,280	2,940	3,340	3,720	5,270	13,200	4,340	3,350	673	1,060
3	1,450	2,870	2,190	2,630	3,420	4,080	5,140	13,300	4,210	2,740	1,130	1,240
4	1,040	2,520	1,910	2,400	3,900	4,640	5,280	13,500	4,240	2,520	1,130	937
5	1,460	2,600	2,410	2,490	3,890	4,860	5,360	12,300	4,120	2,100	1,060	636
6	1,550	2,640	1,760	2,830	3,960	5,720	5,630	10,700	4,060	2,950	1,010	891
7	1,320	2,560	1,960	2,730	3,620	5,570	4,620	7,520	3,940	2,880	1,170	1,300
8	1,400	2,200	2,560	2,720	4,030	5,180	4,830	8,990	3,780	2,640	915	1,140
9	1,510	2,440	2,400	2,480	3,750	4,970	4,940	10,200	3,840	2,560	1,030	1,150
10	1,260	2,600	2,530	2,780	4,010	5,010	4,800	10,200	3,760	2,350	1,120	1,360
11	1,320	2,670	2,430	3,050	4,060	5,190	3,620	8,630	3,900	1,830	1,160	1,020
12	1,030	2,760	2,550	3,330	3,890	5,120	3,760	8,040	3,810	2,720	1,010	833
13	1,550	2,740	2,020	3,290	3,960	4,520	4,070	7,560	3,330	2,700	1,030	1,030
14	1,370	2,530	2,510	3,160	3,630	4,890	4,200	7,030	3,470	2,770	1,320	1,270
15	1,710	1,700	2,350	3,240	3,550	4,710	4,120	7,200	3,880	2,650	1,010	1,130
16	2,130	2,480	2,430	3,240	3,700	4,760	4,000	7,380	3,860	2,610	1,200	873
17	1,850	2,690	2,440	2,910	3,820	4,970	3,040	6,290	3,760	2,430	1,110	1,210
18	1,900	2,490	2,560	2,780	3,840	5,320	2,730	4,360	3,590	2,140	1,190	1,040
19	1,820	2,850	2,580	3,130	3,950	5,340	3,040	4,670	3,800	2,320	1,580	697
20	2,210	2,310	2,020	3,240	4,820	5,420	3,210	4,160	3,820	2,750	1,330	1,220
21	1,960	2,250	2,300	3,160	5,150	5,950	3,720	4,860	3,580	2,360	1,130	1,150
22	2,330	2,080	2,180	3,140	3,370	6,090	3,860	4,100	3,740	1,980	847	1,080
23	2,280	2,170	2,640	3,200	3,980	6,240	4,040	3,880	3,840	1,470	1,270	1,060
24	2,450	2,180	1,430	3,270	4,470	6,050	4,350	3,950	3,900	1,570	1,200	1,080
25	1,680	1,850	1,330	3,170	3,750	6,440	5,740	4,760	3,730	1,330	1,370	1,010
26	2,040	1,750	2,260	3,320	3,820	6,450	5,460	4,850	2,980	1,130	1,230	583
27	2,580	2,340	1,440	3,420	3,880	6,300	6,520	4,590	2,920	1,140	1,350	1,220
28	2,680	2,140	2,320	3,550	3,590	6,350	8,280	4,630	3,540	1,500	1,230	1,110
29	2,640	1,970	2,560	3,440	-	6,720	9,690	4,620	3,240	1,050	819	1,010
30	2,340	2,280	2,880	3,590	-	6,750	9,650	4,230	3,280	1,220	1,280	1,150
31	2,740	-	1,600	3,020	-	6,660	-	4,710	-	1,460	1,250	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	56,300	2,740	1,030	1,816	0.295	0.34
November	71,460	2,870	1,700	2,382	.387	.43
December	69,190	2,880	1,330	2,232	.363	.42
Calendar year 1936	973,658	6,290	138	2,660	.433	5.90
January	94,360	3,590	2,400	3,044	.495	.57
February	107,890	5,150	2,720	3,853	.627	.65
March	167,520	6,750	3,510	5,404	.879	1.01
April	149,570	9,690	2,730	4,986	.811	.90
May	225,510	13,500	3,880	7,275	1.18	1.36
June	112,430	4,340	2,920	3,748	.609	.68
July	68,520	3,350	1,050	2,210	.359	.41
August	34,908	1,580	673	1,126	.183	.21
September	31,850	1,360	583	1,062	.173	.19
Water year 1936-37	1,189,468	13,500	583	3,259	.530	7.17

Silver Lake at Portage, Wis.

Location.- Staff gage, lat. 43°33', long. 89°29', in sec. 6, T. 12 N., R. 9 E., at ice hoist of C. Smith and Son's icehouse, on southeast end of lake.

Records available.- August 1936 to September 1937.

Extremes.- Maximum elevation of water surface observed during period August 1936 to September 1937, 92.2 feet May 1, 4; minimum, 90.85 Aug. 22, 24, 1936.

Remarks.- Gage heights have been reduced to datum for this lake assumed by Public Service Commission of Wisconsin.

Elevation, in feet, 1936-37

Day	1936					1937						
	Aug.	Sept.	Oct.	Nov.	Dec.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	5.9	-	-	6.1	-	-	7.2	6.9	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	6.05	6.15	-	-	7.0	-	-	6.8	6.3	-
4	-	-	-	-	-	-	-	7.2	-	-	-	6.0
5	-	5.9	-	-	6.1	-	-	-	6.9	-	-	-
6	-	-	6.1	-	-	6.5	7.0	-	-	6.8	-	-
7	-	-	-	6.2	-	-	-	-	-	-	6.3	6.0
8	-	5.95	-	-	-	-	-	7.15	6.9	-	-	-
9	-	-	-	-	-	6.5	-	-	-	-	-	-
10	-	-	6.2	6.2	-	-	6.9	-	-	6.8	6.25	-
11	-	-	-	-	-	-	-	7.15	-	-	-	6.0
12	-	5.95	-	-	-	-	-	-	6.9	-	-	-
13	-	-	6.2	-	-	6.5	6.9	-	-	6.7	-	-
14	-	-	-	6.2	-	-	-	-	-	-	6.2	6.05
15	-	6.05	-	-	-	-	-	7.15	6.9	-	-	-
16	-	-	-	-	-	6.5	-	-	-	-	-	-
17	-	-	6.2	6.15	-	-	6.9	-	-	6.7	6.2	-
18	-	-	-	-	-	-	-	7.15	-	-	-	6.0
19	-	6.15	-	-	-	-	-	-	6.9	-	-	-
20	-	-	6.15	-	-	6.5	6.9	-	-	6.5	-	-
21	-	-	-	6.15	-	-	-	-	-	-	6.15	-
22	5.85	6.1	-	-	-	-	-	7.1	6.9	-	-	-
23	-	-	-	-	-	6.8	-	-	-	-	-	-
24	5.85	-	6.15	6.1	-	-	7.0	-	-	6.4	6.1	-
25	5.9	-	-	-	-	-	-	7.1	-	-	-	-
26	-	6.05	-	-	-	-	-	-	6.8	-	-	-
27	-	-	6.15	-	-	7.0	7.1	-	-	6.4	-	-
28	-	-	-	6.1	-	-	-	-	-	-	6.1	6.1
29	5.9	6.1	-	-	-	-	-	7.0	6.8	-	-	-
30	-	-	-	-	-	7.0	-	-	-	-	-	-
31	-	-	6.15	-	-	-	-	-	-	6.4	6.05	-

Note.- Add 85 feet to obtain elevation above lake datum of Public Service Commission of Wisconsin.

Little Green Lake near Markesan, Wis.

Location.- Staff gage, lat. 43°44', long. 88°58', in sec. 32, T. 15 N., R. 13 E., within 50 feet of lake outlet and 1½ miles north of Markesan.

Records available.- August 1936 to September 1937.

Extremes.- Maximum elevation of water surface observed during period August 1936 to September 1937, 95.87 feet May 21, 22; minimum, 94.28 feet Sept. 10, 11, 1936.

Remarks.- Gage heights have been reduced to datum for this lake assumed by Public Service Commission of Wisconsin.

Elevation, in feet, 1936-37

Day	1936				1937						
	Aug.	Sept.	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	4.32	4.40	4.38	-	5.52	5.82	5.80	5.50	5.06	4.94
2	-	4.32	4.40	4.44	-	5.52	5.82	5.79	5.48	5.03	4.93
3	-	4.30	4.38	4.44	-	5.52	5.82	5.78	5.48	5.01	4.91
4	-	4.30	4.38	4.42	-	5.52	5.82	5.75	5.47	5.04	4.89
5	-	4.30	4.38	4.42	-	5.54	5.80	5.75	5.46	5.04	4.86
6	-	4.30	4.38	4.42	-	5.54	5.80	5.73	5.44	5.02	4.84
7	-	4.30	4.38	4.40	-	5.54	5.80	5.72	5.43	5.01	4.82
8	-	4.30	4.38	4.40	-	5.54	5.76	5.71	5.41	5.00	4.80
9	-	4.30	4.36	4.40	-	5.54	5.83	5.70	5.40	5.02	4.80
10	4.42	4.28	4.42	4.40	-	5.54	5.83	5.68	5.38	5.02	4.79
11	4.40	4.28	4.44	4.40	-	5.54	5.83	5.67	5.40	5.01	4.83
12	4.40	4.30	4.44	4.40	-	5.54	5.83	5.65	5.40	5.02	4.83
13	4.38	4.30	4.44	4.40	-	-	5.83	5.72	5.41	5.01	4.83
14	4.36	4.30	4.42	4.38	-	5.54	5.81	5.72	5.41	5.01	4.82
15	4.36	4.36	4.42	4.38	5.48	5.54	5.81	5.72	5.40	5.00	4.82
16	4.36	4.48	4.42	4.38	5.48	5.54	5.81	5.71	5.38	4.97	4.80
17	4.34	4.48	4.42	4.38	5.50	5.56	5.81	5.71	5.36	4.93	4.78
18	4.32	4.46	4.40	4.38	5.50	5.54	5.79	5.70	5.34	4.90	4.76
19	4.32	4.46	4.40	4.36	5.50	5.54	5.77	5.69	5.32	5.07	4.74
20	4.30	4.46	4.40	4.36	5.50	5.54	5.75	5.70	5.31	5.09	4.72
21	4.34	4.46	4.42	4.36	5.50	5.64	5.87	5.69	5.30	5.09	4.70
22	4.34	4.44	4.42	4.34	5.50	5.66	5.87	5.69	5.28	5.07	4.69
23	4.34	4.44	4.42	4.34	5.50	5.64	5.84	5.68	5.26	5.05	4.67
24	4.34	4.42	4.40	4.32	-	5.66	5.83	5.66	5.25	5.03	4.67
25	4.34	4.42	4.40	4.32	-	5.68	5.82	5.65	5.23	5.02	4.66
26	4.34	4.40	4.40	4.32	5.50	5.68	5.84	5.64	5.21	5.04	4.66
27	4.34	4.40	4.40	4.32	5.50	5.68	5.85	5.62	5.18	5.02	4.66
28	4.36	4.42	4.38	4.32	5.50	5.68	5.83	5.60	5.14	5.00	4.65
29	4.36	4.42	4.38	-	5.52	5.66	5.82	5.57	5.12	4.98	4.64
30	4.34	4.40	4.36	-	5.52	5.66	5.81	5.54	5.10	4.96	4.62
31	4.34	-	4.36	-	5.52	-	5.80	-	5.08	4.96	-

Note.- Add 90 feet to obtain elevation above lake datum of Public Service Commission of Wisconsin.

Wolf River near White Lake, Wis.

Location.- Staff gage, lat. 45°08', long. 88°41', in S½ sec. 25, T. 31 N., R. 14 E., about 80 feet downstream from upper footbridge in Valley Camp (Boy Scouts), 2¾ miles miles downstream from White Lake Outlet and 4 miles southeast of village of White Lake.

Drainage area.- 482 square miles.

Records available.- July 1935 to September 1937.

Extremes.- Maximum discharge observed during period July 19, 1935, to Sept. 30, 1936, 502 second-feet Aug. 8-11, Nov. 1, 2, 1935; maximum gage height, 2.19 feet Aug. 9, 1935; minimum, 165 second-feet Aug. 13, 14, 1936 (gage height, 1.30 feet).
Maximum discharge observed during year 1936-37, 941 second-feet May 1, 2 (gage height, 3.55 feet); minimum, 178 second-feet July 10, 11 (gage height, 1.35 feet).
1935-37: Maximum discharge observed, that of May 1, 2, 1937; minimum, that of Aug. 13, 14, 1936.

Remarks.- Records good except those for July 19 to Nov. 28, 1935, which are fair. No records for Nov. 29, 1935, to June 30, 1936, and Nov. 16, 1936, to Mar. 31, 1937. Period of ice effect, Nov. 19-25, 1935. Gage read once daily.

Rating table July 1, 1936 to Sept. 30, 1937, except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 19 to Nov. 28, 1935)

1.3	165	2.3	468
1.5	220	2.5	536
1.7	277	2.7	606
1.9	338	3.0	714
2.1	403	3.5	902

Discharge, in second-feet, 1935-37

Day	1935					1936						
	July	Aug.	Sept.	Oct.	Nov.					July	Aug.	Sept.
1	-	354	370	386	502					277	206	386
2	-	354	370	386	502					277	206	370
3	-	354	370	386	468					277	206	354
4	-	370	370	386	468					277	192	338
5	-	370	370	386	468					277	192	322
6	-	402	370	386	468					277	192	322
7	-	468	370	370	468					277	192	402
8	-	502	370	386	435					248	192	354
9	-	502	370	370	435					248	192	338
10	-	502	354	370	468					234	192	338
11	-	502	354	370	468					220	176	338
12	-	468	354	370	435					220	176	370
13	-	435	338	386	418					220	165	398
14	-	435	354	402	435					234	165	415
15	-	418	354	418	435					248	170	370
16	-	418	386	418	418					248	181	402
17	-	418	386	418	418					277	187	402
18	-	402	386	418	418					277	206	418
19	386	418	435	418	403					248	220	418
20	378	418	418	418	335					248	220	418
21	370	402	402	418	279					248	234	418
22	354	402	402	435	223					234	248	370
23	354	386	386	435	335					234	248	338
24	338	386	402	435	385					234	248	292
25	354	386	402	435	478					234	322	277
26	354	370	386	435	468					234	354	277
27	354	386	386	418	386					234	370	277
28	354	370	386	418	418					220	370	277
29	354	370	386	418	-					220	370	277
30	354	370	386	435	-					220	386	277
31	354	370	-	468	-					206	402	-

Discharge, in second-feet, of Wolf River near White Lake, Wis., 1935-37--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	277	354					184	941	343	220	220	206
2	277	354					220	941	343	220	220	248
3	292	370					307	864	319	220	220	248
4	307	402					354	826	368	220	248	248
5	338	386					468	751	402	220	234	234
6	370	370					606	714	418	192	220	234
7	338	370					571	642	402	187	220	220
8	354	354					642	642	386	181	220	220
9	338	354					642	606	338	181	220	220
10	338	354					678	606	322	178	220	220
11	338	354					678	571	322	178	220	220
12	322	354					714	536	322	187	206	234
13	322	354					751	536	322	234	206	248
14	322	354					788	502	322	292	206	234
15	338	354					788	502	322	292	206	248
16	338	-					788	468	307	292	206	248
17	370	-					788	502	322	277	206	248
18	370	-					788	468	307	248	206	234
19	370	-					751	468	307	248	206	234
20	370	-					751	468	307	234	206	220
21	402	-					751	468	292	220	206	220
22	402	-					751	468	277	220	206	220
23	386	-					751	454	292	206	206	220
24	386	-					751	424	277	206	206	248
25	370	-					864	424	277	220	206	248
26	370	-					902	394	248	220	206	248
27	370	-					902	394	248	220	206	234
28	354	-					864	394	234	220	206	234
29	354	-					826	394	220	220	206	234
30	354	-					788	368	220	220	206	234
31	354	-					-	368	-	220	206	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
July 19-31, 1935	4,658	386	338	358	0.743	0.36
August	12,708	502	354	410	.851	.98
September	11,373	435	338	379	.786	.88
Water year						
October 1935	12,598	468	370	406	.842	.97
November 1-28	11,837	502	223	423	.878	.91
December						
Calendar year						
January						
February						
March						
April						
May						
June						
July 1936	7,627	277	206	246	.510	.59
August	7,380	402	165	238	.494	.57
September	10,553	418	277	352	.730	.81
Water year						
October 1936	10,791	402	277	348	.722	.83
November 1-15	5,438	402	354	363	.753	.42
December						
Calendar year						
January						
February						
March						
April 1937	20,407	902	184	680	1.41	1.57
May	17,104	941	368	552	1.15	1.33
June	9,386	418	220	313	.649	.72
July	6,893	292	178	222	.461	.53
August	6,582	248	206	212	.440	.51
September	7,006	248	206	234	.485	.54
Water year						

Wolf River above West Branch of Wolf River, Wis.

Location.- Chain gage, lat. 44°55', long. 88°39', in E½ sec. 3, T. 28 N., R. 15 E., half a mile above West Branch of Wolf River and 4 miles north of Keshena. Zero of gage is 856.57 feet above mean sea level, by levels of Wisconsin Power & Light Co.

Drainage area.- 633 square miles.

Records available.- March 1928 to September 1937.

Extremes.- Maximum discharge observed during year, 1,960 second-feet May 1 (gage height, 5.07 feet); minimum daily discharge, 270 second-feet Aug. 24-26, Aug. 30 to Sept. 2. 1928-37: Maximum discharge observed, 2,580 second-feet Apr. 8, 1929 (gage height, 6.10 feet); minimum, 199 second-feet Feb. 20, 1936.

Remarks.- Records excellent except those for periods of ice effect, Nov. 18, 19, Nov. 24 to Apr. 7 which were computed on basis of four discharge measurements, gage heights, observer's notes, and weather records, and are fair. Gage read once daily.

Rating tables, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 10		Apr. 11 to Sept. 30			
1.6	247	1.5	258	3.5	1,070
1.8	304	2.0	396	4.0	1,340
2.0	372	2.5	578	4.5	1,620
2.2	448	3.0	818	5.1	1,960
2.5	576				
2.8	715				

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	320	390	337	489	337	390	621	1,960	620	348	294	270
2	304	428	337	468	337	372	621	1,900	578	333	306	270
3	304	466	337	446	337	372	621	1,850	578	333	320	320
4	337	466	337	428	337	390	621	1,620	538	333	333	294
5	409	448	337	409	337	409	667	1,510	620	333	333	294
6	446	448	337	409	337	448	667	1,400	716	320	320	294
7	448	448	337	390	337	448	715	1,340	665	306	294	294
8	428	428	337	390	337	448	814	1,230	620	294	306	294
9	409	409	337	372	337	409	865	1,180	578	294	306	294
10	390	390	354	372	337	390	970	1,130	538	294	294	348
11	372	354	372	372	337	390	970	1,070	538	281	306	396
12	372	448	372	372	337	372	1,020	1,130	500	294	306	396
13	372	446	372	372	337	372	1,130	1,020	500	294	320	348
14	354	409	390	354	354	372	1,180	970	500	396	306	348
15	354	372	390	354	354	372	1,290	869	500	413	294	333
16	390	304	372	354	372	372	1,290	869	500	396	281	333
17	409	320	337	337	372	372	1,340	818	464	380	281	320
18	409	372	337	337	372	409	1,340	816	464	348	281	320
19	409	304	337	337	390	409	1,400	818	430	333	294	306
20	409	337	337	337	428	448	1,340	767	464	320	294	306
21	576	409	337	337	468	448	1,400	767	430	306	281	306
22	554	354	337	337	448	448	1,340	818	430	294	281	306
23	510	274	337	320	428	448	1,400	767	430	294	281	294
24	468	274	337	320	409	448	1,570	767	430	294	270	320
25	448	304	337	320	390	409	1,900	716	413	306	270	333
26	428	320	448	320	390	409	1,900	716	396	306	270	320
27	409	337	576	320	390	409	1,790	665	380	320	281	306
28	390	337	576	304	390	448	1,740	665	348	306	281	306
29	390	337	576	320	-	446	1,680	665	348	306	281	306
30	372	337	576	337	-	489	1,620	665	333	306	270	320
31	390	-	532	337	-	621	-	620	-	294	270	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	12,582	576	304	406	0.641	0.74
November	11,276	468	274	376	.594	.66
December	11,972	576	337	386	.610	.70
Calendar year 1936	176,505	1,620	199	482	.761	10.36
January	11,273	489	304	364	.575	.66
February	10,336	468	337	369	.583	.61
March	12,989	621	372	419	.662	.76
April	35,822	1,900	621	1,194	1.89	2.11
May	32,100	1,960	620	1,035	1.64	1.89
June	14,849	716	333	495	.782	.87
July	9,975	413	281	322	.509	.59
August	9,105	333	270	294	.464	.53
September	9,495	396	270	316	.499	.56
Water year 1936-37	181,774	1,960	270	498	.787	10.68

Wolf River at Keshena Falls, Wis.

Location.- Water-stage recorder, lat. 44°53', long. 88°39', in E½ sec. 22, T. 28 N., R. 15 E., 500 feet below Keshena Falls, 1½ miles above Keshena, and 2⅛ miles below West Branch of Wolf River.

Drainage area.- 812 square miles.

Records available.- March 1928 to September 1937, May 1907 to March 1909, and February 1911 to March 1928, at site at Keshena, 1½ miles downstream.

Average discharge.- 26 years (1911-37), 777 second-feet.

Extremes.- Maximum discharge during year, 2,940 second-feet May 2 (gage height, 8.25 feet); minimum, 335 second-feet Aug. 18.
1911-37: Maximum discharge, 4,390 second-feet Apr. 10, 1922; minimum, 194 second-feet (estimated) Feb. 7, 1936.

Remarks.- Records good except those for period of ice effect, Nov. 26 to Mar. 28 which were computed on basis of three discharge measurements, gage heights, observer's notes, and weather records, and are poor. Discharge for Aug. 24-27 interpolated. Chain gage read once daily Dec. 2 to Apr. 5.

Rating table, Oct. 1 to Dec. 1, Apr. 6 to Sept. 30, except period of ice effect (gage height, in feet, and discharge, in second-feet)

5.2	315	6.0	785	7.2	1,820
5.4	418	6.4	1,090	7.7	2,330
5.7	590	6.8	1,440	8.2	2,880

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	456	560	500	555	451	538	880	2,490	841	472	386	376
2	456	609	497	555	451	530	880	2,880	820	467	397	376
3	450	640	489	555	451	522	858	2,710	792	461	418	472
4	450	666	489	555	435	522	858	2,880	772	461	434	418
5	500	666	489	555	428	530	928	2,490	765	461	445	392
6	560	653	482	547	420	538	970	1,820	922	461	423	397
7	590	640	482	547	420	538	1,060	1,670	970	445	397	397
8	590	622	482	538	420	538	1,130	1,530	930	429	397	360
9	560	622	474	538	420	538	1,070	1,440	885	413	418	355
10	560	578	474	538	420	538	1,180	1,350	848	413	407	376
11	529	541	474	538	428	538	1,180	1,300	820	407	386	472
12	535	541	474	538	443	538	1,220	1,300	792	407	418	456
13	529	560	474	538	458	538	1,300	1,350	772	413	418	478
14	518	566	466	522	474	538	1,480	1,300	752	461	397	440
15	512	553	458	497	474	538	1,620	1,180	752	523	397	429
16	512	541	458	482	474	547	1,570	1,090	738	512	392	418
17	518	472	451	458	474	555	1,530	1,070	718	478	355	407
18	541	518	443	443	482	563	1,530	1,050	692	472	350	397
19	553	523	443	420	497	580	1,570	1,030	666	472	376	413
20	560	512	443	420	538	580	1,620	1,000	640	418	392	413
21	640	500	443	420	607	580	1,670	986	634	402	397	376
22	772	553	451	414	598	589	1,720	994	615	397	413	381
23	778	529	451	407	589	598	1,720	994	596	392	407	365
24	738	500	458	407	580	598	1,820	978	590	370	398	370
25	698	500	466	407	572	607	2,550	954	590	397	388	418
26	666	518	474	401	563	607	2,710	938	572	413	379	418
27	634	529	489	401	563	607	2,490	930	560	392	369	418
28	603	529	497	401	555	625	2,330	915	541	402	360	397
29	584	500	497	407	-	690	2,170	885	512	402	360	386
30	566	500	514	420	-	750	2,020	878	483	381	376	392
31	560	-	538	458	-	814	-	862	-	376	376	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	17,718	778	450	572	0.704	0.81
November	16,741	666	472	558	.687	.77
December	14,720	538	443	475	.585	.67
Calendar year 1936	229,204	2,320	194	626	.771	10.51
January	14,882	555	401	480	.591	.68
February	13,685	607	420	489	.602	.63
March	17,912	814	522	578	.712	.82
April	45,634	2,710	858	1,521	1.87	2.09
May	43,244	2,880	862	1,395	1.72	1.98
June	21,580	970	483	719	.885	.99
July	13,370	523	370	431	.531	.61
August	12,226	445	350	394	.485	.56
September	12,163	478	355	405	.499	.56
Water year 1936-37	243,875	2,880	350	668	.823	11.17

Wolf River at New London, Wis.

Location.- Staff gage, lat. 44°23', long. 88°44', in sec. 12, T. 22 N., R. 14 E., at Pearl Street Bridge, three-quarters of a mile below Embarrass River. Zero of gage is 749.4 feet above mean sea level, by levels of Corps of Engineers, U. S. Army.

Drainage area.- 2,240 square miles.

Records available.- October 1913 to September 1937.

Average discharge.- 24 years, 1,776 second-feet.

Extremes.- Maximum discharge observed during year, 6,360 second-feet May 1-3 (gage height, 8.3 feet); minimum, 362 second-feet Sept. 8 (gage height, -0.3 foot).
1913-37: Maximum discharge observed, 15,500 second-feet Apr. 13, 1922 (gage height, 11.4 feet); minimum, 261 second-feet Sept. 6, 1933.
Maximum stage known, 11.6 feet Apr. 16, 1888, reported by Corps of Engineers, U. S. Army.

Remarks.- Records good except those for periods of ice effect, Nov. 25-27, Nov. 29 to Mar. 23 which were computed on basis of three discharge measurements, gage heights, observer's notes, and weather records and are fair. Gage read once daily. Gage heights furnished by Corps of Engineers, U. S. Army.

Rating tables, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 25				Mar. 26 to Sept. 30					
0.7	750	3.0	1,740	0	460	2.0	1,200	5.0	2,520
1.0	864	4.0	2,190	0.3	560	2.5	1,400	6.0	3,220
1.5	1,070	5.0	2,700	.6	664	3.0	1,600	7.0	4,320
2.0	1,290	6.0	3,390	1.0	808	3.5	1,800	8.0	5,850
2.5	1,520	6.5	3,820	1.5	1,000	4.0	2,010	8.5	6,710

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	904	1,120	825	1,380	787	1,610	3,500	6,360	1,640	961	629	427
2	864	1,160	825	1,340	787	1,560	3,600	6,360	1,560	922	594	493
3	825	1,250	825	1,340	787	1,560	3,710	6,360	1,480	808	560	526
4	787	1,340	825	1,290	787	1,560	3,710	6,190	1,400	808	526	493
5	787	1,430	787	1,250	787	1,740	3,710	6,190	1,360	884	560	493
6	864	1,470	787	1,160	787	2,060	3,600	6,190	1,400	884	526	526
7	987	1,470	787	1,120	787	2,430	3,600	6,020	1,440	808	594	493
8	1,030	1,430	787	1,120	787	2,650	3,600	5,850	1,600	808	594	362
9	1,030	1,380	645	1,030	787	2,890	3,500	5,520	1,680	846	664	460
10	1,030	1,290	714	1,030	787	3,030	3,400	5,040	1,640	808	629	560
11	987	1,250	750	987	787	3,240	3,400	4,600	1,560	735	560	664
12	945	1,160	750	945	787	3,310	3,310	4,190	1,400	664	735	629
13	904	1,120	750	945	787	3,390	3,310	3,940	1,360	664	735	594
14	904	1,070	750	945	750	3,390	3,220	3,710	1,320	594	735	594
15	945	1,030	750	904	750	3,470	3,220	3,500	1,360	664	629	560
16	987	1,160	750	904	750	3,550	3,220	3,310	1,400	735	560	699
17	987	1,030	750	864	750	3,550	3,130	3,220	1,400	808	493	664
18	945	1,030	750	864	750	3,550	3,130	2,970	1,400	808	493	629
19	904	987	750	864	750	3,640	3,130	2,830	1,320	771	664	629
20	904	945	750	825	787	3,730	3,130	2,640	1,280	735	699	594
21	945	1,030	750	825	1,250	3,730	3,130	2,520	1,280	629	594	526
22	1,160	987	750	787	1,650	3,730	3,600	2,460	1,240	699	629	460
23	1,380	945	750	787	1,740	3,730	3,820	2,350	1,240	699	629	560
24	1,560	787	787	787	1,830	3,730	4,060	2,250	1,200	629	594	664
25	1,560	787	864	750	1,830	3,640	4,600	2,150	1,200	629	493	629
26	1,470	787	904	750	1,790	3,500	4,740	2,100	1,160	629	594	629
27	1,380	825	945	750	1,740	3,600	5,040	2,010	1,120	526	594	560
28	1,290	825	1,070	750	1,650	3,400	5,360	1,890	1,080	526	526	526
29	1,160	825	1,120	750	-	3,310	5,680	1,800	1,000	594	560	493
30	1,070	825	1,250	750	-	3,310	5,850	1,760	961	629	560	560
31	1,070	-	1,290	787	-	3,310	-	1,720	-	560	560	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	32,565	1,560	787	1,050	0.469	0.54
November	32,745	1,470	787	1,092	.488	.54
December	25,787	1,290	645	832	.371	.43
Calendar year 1936	519,798	7,450	388	1,420	.634	8.62
January	29,580	1,380	750	954	.426	.49
February	28,998	1,830	750	1,036	.462	.48
March	94,800	3,730	1,560	3,058	1.37	1.58
April	114,010	5,850	3,130	3,800	1.70	1.90
May	118,000	6,360	1,720	3,806	1.70	1.96
June	40,481	1,680	961	1,349	.602	.67
July	22,464	961	526	725	.324	.37
August	18,512	735	493	597	.267	.31
September	16,696	699	362	557	.249	.28
Water year 1936-37	574,638	6,360	362	1,574	.703	9.55

Lucerne (Stone) Lake near Crandon, Wis.

Location.- Staff gage, lat. 43°33', long. 88°51', in lot 1, sec. 34, T. 36 N., R. 13 E., at pier of Planet Resort, in northeast corner of lake, four miles east of Crandon.

Records available.- August 1936 to September 1937 (fragmentary).

Extremes.- Maximum elevation of water surface observed during period August 1936 to September 1937, 94.35 feet July 16, 1937; minimum, 93.38 feet Nov. 26, 1936.

Remarks.- Gage heights have been reduced to datum for this lake assumed by Public Service Commission of Wisconsin.

Elevation, in feet, 1936-37

1936						1937	
Aug. 26	93.80	Oct. 10	93.70	Nov. 7	93.62		
Sept. 9	93.85	13	93.65	8	93.60		
12	93.90	14	93.62	10	93.50		
24	93.80	17	93.60	12	93.50		
26	93.70	19	93.58	14	93.45		
Oct. 1	93.70	20	93.55	16	93.48		
3	93.66	22	93.60	18	93.45		
4	93.70	24	93.60	21	93.40		
6	93.70	26	93.58	26	93.38		
7	93.70	28	93.55				
9	93.70	30	93.52	Apr. 8	93.88		
		Nov. 1	93.50	July 16	94.35		
		5	93.52				

Embarrass River near Embarrass, Wis.

Location.- Chain gage, lat. 44°43', long. 88°44', on line between sec. 13, T. 26 N., R. 14 E., and sec. 18, T. 26 N., R. 15 E., three-quarters of a mile below Mill Creek and 4 miles northwest of Embarrass.

Drainage area.- 395 square miles.

Records available.- June 1919 to September 1937.

Average discharge.- 18 years, 289 second-feet.

Extremes.- Maximum discharge observed during year, 1,680 second-feet Apr. 25, 26 (gage height, 5.93 feet); minimum, 24 second-feet Sept. 6.
1919-37: Maximum observed discharge, 6,760 second-feet Apr. 10, 1922 (gage height, 11.5 feet); minimum, 23 second-feet Aug. 3, 6, 7, 1931.

Remarks.- Records good except those for period of ice effect, Nov. 21 to Mar. 27, which were computed on basis of three discharge measurements, gage heights, observer's notes, and weather records and are poor. Gage read twice daily. Slight diurnal regulation by power plants above.

Rating table, water year 1936-37, except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 7 to Sept. 30)

2.5	30	3.4	296	4.5	810
2.6	47	3.6	381	5.0	1,100
2.8	92	3.8	469	5.5	1,420
3.0	147	4.0	560	6.0	1,740
3.2	216				

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	108	251	92	276	135	317	756	1,040	276	194	73	90
2	105	276	87	338	132	255	920	1,480	212	177	75	75
3	113	381	75	361	121	255	920	1,360	191	147	80	66
4	124	360	68	403	118	255	920	1,100	191	135	102	78
5	132	360	82	469	130	317	864	756	228	124	100	51
6	132	338	75	492	118	560	864	654	447	121	100	33
7	132	317	90	425	121	704	980	537	447	118	102	44
8	132	276	97	425	135	654	980	514	381	110	108	45
9	147	255	90	381	124	583	920	447	276	97	113	49
10	124	194	97	403	115	560	864	317	220	95	113	58
11	110	212	95	381	124	492	864	276	243	87	115	60
12	102	130	110	317	130	469	864	425	191	68	113	64
13	108	130	113	255	138	425	864	537	220	82	118	85
14	115	170	124	194	124	276	864	606	255	87	118	113
15	100	150	118	202	144	236	920	560	276	105	115	90
16	97	135	115	184	127	317	980	537	255	110	118	95
17	113	121	110	157	121	447	920	469	236	108	110	87
18	108	115	105	144	132	492	980	360	216	100	105	95
19	113	113	105	113	160	403	920	360	209	78	85	60
20	115	115	90	100	170	469	920	317	202	95	97	58
21	447	118	90	97	276	560	980	360	198	97	113	64
22	469	124	82	110	338	654	1,100	403	216	97	102	70
23	381	113	80	97	317	654	1,290	381	191	82	108	73
24	360	118	95	100	317	606	1,360	381	198	73	102	70
25	276	102	121	121	317	583	1,680	360	198	64	73	68
26	247	113	130	102	338	583	1,680	338	187	68	66	66
27	212	97	160	102	276	583	1,480	338	177	73	75	49
28	205	90	135	102	276	654	1,230	338	167	78	90	64
29	239	80	164	108	-	654	980	338	177	73	80	66
30	228	82	187	113	-	654	864	338	173	75	80	70
31	220	"	239	147	"	756	-	317	-	73	73	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,614	469	97	181	0.458	0.53
November	5,436	381	80	181	.458	.51
December	3,414	239	68	110	.278	.32
Calendar year 1936	85,906	1,610	38	235	.595	8.09
January	7,239	492	97	234	.592	.68
February	5,074	338	115	181	.458	.48
March	15,427	756	236	498	1.26	1.45
April	30,728	1,680	756	1,024	2.59	2.89
May	16,544	1,480	276	534	1.35	1.56
June	7,054	447	167	235	.595	.66
July	3,091	194	64	100	.253	.29
August	3,022	118	66	97.5	.247	.28
September	2,056	113	33	68.5	.173	.19
Water year 1936-37	104,699	1,680	33	287	.727	9.84

Little Wolf River at Royalton, Wis.

Location.- Water-stage recorder, lat. 44°24', long. 88°51', in sec. 1, T. 22 N., R. 13 E., 4 miles above mouth.

Drainage area.- 485 square miles.

Records available.- January 1914 to September 1937.

Average discharge.- 23 years, 434 second-feet.

Extremes.- Maximum discharge during year, 2,380 second-feet (estimated) Mar. 7, 8; maximum gage height, 4.82 feet (affected by ice); minimum discharge, 78 second-feet Aug. 30 (gage height, 0.83 foot); minimum daily discharge, 93 second-feet Aug. 30, 1914-37: Maximum discharge observed, 5,780 second-feet Apr. 10, 11, 1922 (gage height, 6.92 feet); minimum, 57 second-feet Feb. 10, 1934.

Remarks.- Records good except those for period of ice effect, Nov. 25 to Mar. 31 which were computed on basis of three discharge measurements, recorder record, observer's notes, and weather records and are poor. Diurnal regulation by power plant 6 miles upstream.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	163	260	170	232	156	470	829	1,450	277	168	120	122
2	163	359	170	232	229	370	822	1,450	244	122	103	118
3	188	356	160	203	149	400	888	1,300	213	147	115	140
4	155	339	150	229	371	490	782	1,040	217	151	136	132
5	235	348	160	225	213	690	772	823	257	205	136	133
6	303	308	165	235	251	1,550	868	653	304	223	175	99
7	279	284	170	164	143	2,380	882	598	347	171	145	125
8	197	259	170	153	271	2,380	823	508	322	159	139	120
9	213	252	170	246	94	1,860	772	486	272	147	164	126
10	223	251	170	172	163	1,400	711	476	209	135	168	161
11	140	226	170	224	299	810	672	420	228	147	163	179
12	182	231	160	190	262	690	653	452	233	145	166	173
13	203	248	155	148	385	570	622	577	232	138	175	139
14	184	236	155	168	156	324	640	567	283	163	170	159
15	181	206	165	142	175	417	731	570	302	171	132	152
16	209	196	170	230	257	323	691	477	334	218	116	150
17	220	182	175	104	251	348	704	455	331	172	117	149
18	160	223	190	124	263	680	659	426	214	147	122	150
19	190	204	180	135	239	1,020	552	370	205	132	158	137
20	201	196	180	169	369	1,140	575	363	222	135	138	134
21	314	238	150	205	1,300	1,140	752	396	296	131	171	129
22	372	166	160	155	740	1,160	1,170	488	332	136	159	132
23	404	256	165	198	850	1,210	1,400	440	250	134	123	139
24	392	271	170	164	600	1,130	1,300	407	213	115	124	139
25	247	280	200	173	550	580	1,400	333	193	131	135	147
26	247	285	269	120	560	469	1,500	359	211	117	123	139
27	228	220	319	130	515	469	1,350	323	171	126	119	120
28	225	200	311	115	460	426	1,080	308	164	130	143	152
29	210	190	258	133	-	505	966	298	174	137	123	145
30	216	180	280	315	-	567	882	279	155	128	93	144
31	252	-	348	227	-	563	-	279	-	117	128	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	7,096	404	140	229	0.472	0.54
November	7,450	359	166	248	.511	.57
December	5,985	348	150	193	.398	.46
Calendar year 1936	104,318	2,950	86	285	.588	7.99
January	5,660	315	104	183	.377	.43
February	10,271	1,300	94	367	.757	.79
March	26,531	2,380	323	856	1.76	2.03
April	26,450	1,500	552	882	1.82	2.03
May	17,371	1,450	279	560	1.15	1.33
June	7,405	347	155	247	.509	.57
July	4,598	223	115	148	.305	.35
August	4,299	175	93	139	.287	.33
September	4,184	179	99	139	.287	.32
Water year 1936-37	127,300	2,380	93	349	.720	9.75

Waupaca River near Waupaca, Wis.

Location.- Chain gage, lat. 44°21', long. 88°59', near north line of sec. 1, T. 21 N., R. 12 E., at highway bridge, 1½ miles below Crystal River, and 4 miles below Waupaca.

Drainage area.- 305 square miles.

Records available.- October 1917 to September 1937. June 1916 to October 1917 at site 1 mile downstream.

Average discharge.- 21 years, 247 second-feet.

Extremes.- Maximum discharge observed during year, 722 second-feet Mar. 25 (gage height, 3.22 feet); minimum, 104 second-feet Oct. 13, Dec. 5, Feb. 5, Sept. 5, 7.
1916-37: Maximum discharge observed, 2,600 second-feet Mar. 17, 1919 (gage height, 5.6 feet); minimum (estimated), 35 second-feet Jan. 22, 28, 1928.

Remarks.- Records fair except those for period of ice effect, Nov. 24 to Mar. 19, which were computed on basis of three discharge measurements, gage heights, observer's notes, and weather records and are poor. Discharge for Oct. 11, Dec. 23, May 4, 21, June 20, Aug. 15 interpolated. Slight diurnal regulation by power plants above. Gage read once daily.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

1.2	97	1.8	238	2.5	472
1.3	112	2.0	301	2.8	578
1.4	131	2.2	368	3.2	722
1.6	180				

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	194	154	578	208	254	351	437	208	167	131	154
2	112	238	180	316	122	238	368	437	238	142	112	112
3	112	254	194	285	180	223	285	420	223	154	154	180
4	122	208	142	368	180	194	238	344	180	167	122	154
5	142	208	104	437	104	285	208	269	254	180	112	104
6	223	180	194	285	167	301	334	285	194	131	122	142
7	285	194	194	385	180	301	351	254	223	142	154	104
8	180	180	154	318	131	334	269	269	154	167	208	154
9	142	194	208	269	154	334	180	254	194	131	142	180
10	194	180	142	254	167	318	285	269	208	167	194	180
11	180	208	142	351	131	223	254	254	154	154	194	122
12	167	154	223	194	167	194	269	301	269	180	154	142
13	104	223	180	351	142	154	254	301	269	131	142	112
14	223	208	180	194	167	180	269	301	223	208	154	167
15	167	194	142	238	223	167	223	194	208	285	138	167
16	180	238	208	238	142	194	269	238	223	194	122	154
17	180	154	142	180	180	223	223	269	194	154	167	154
18	142	223	194	167	112	254	269	254	167	142	194	122
19	131	208	167	167	167	402	223	223	112	131	142	112
20	180	154	142	180	238	402	254	180	160	194	122	154
21	318	180	180	208	385	368	269	224	208	142	154	112
22	318	180	154	167	269	334	454	269	180	180	154	131
23	208	194	174	131	238	301	368	238	180	167	167	154
24	194	180	194	208	285	334	285	180	167	167	112	142
25	254	167	154	154	254	722	402	223	194	167	142	131
26	223	154	167	180	269	507	351	223	154	194	142	131
27	223	154	167	131	254	334	301	208	167	112	167	194
28	208	180	223	142	208	420	334	254	154	112	112	208
29	194	194	180	180	-	254	285	254	180	122	142	167
30	194	142	301	180	-	368	301	194	194	112	131	131
31	180	-	614	194	-	285	-	208	-	112	154	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,792	318	104	187	0.613	0.71
November	5,719	254	142	191	.626	.70
December	5,894	614	104	190	.623	.72
Calendar year 1936	75,839	943	80	207	.679	9.25
January	7,632	578	131	246	.807	.93
February	5,424	385	104	194	.636	.66
March	9,402	722	154	303	.993	1.14
April	8,726	454	180	291	.954	1.06
May	8,228	437	180	265	.869	1.00
June	5,833	269	112	194	.636	.71
July	4,908	285	112	158	.518	.60
August	4,557	208	112	147	.482	.56
September	4,371	208	104	146	.479	.53
Water year 1936-37	76,486	722	104	210	.689	9.32

Lake de Neveu near Fond du Lac, Wis.

Location.- Staff gage, lat. 43°44', long. 88°24', in sec. 30, T. 15 N., R. 18 E., at boathouse on north end of lake, on farm of Nick Giebel, 4 miles southeast of Fond du Lac.

Records available.- August 1936 to September 1937.

Extremes.- Maximum elevation of water surface observed during period August 1936 to September 1937, 97.78 feet Apr. 24, 1937; minimum, 96.90 feet Aug. 15, 1936.

Remarks.- Gage heights have been reduced to datum for this lake assumed by Public Service Commission of Wisconsin.

Daily elevation, in feet, 1936-37

Day	1936				1937						
	Aug.	Sept.	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	7.24	-	-	-	-	7.76	7.52	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-
3	-	-	7.46	7.54	-	7.66	-	-	7.46	-	-
4	-	-	-	-	-	-	7.72	-	-	-	-
5	-	-	-	-	-	-	-	7.50	-	-	-
6	-	-	7.44	-	-	7.70	-	-	7.44	7.24	-
7	-	-	-	7.52	-	-	-	-	-	-	-
8	-	7.28	-	-	-	-	7.64	7.46	-	-	-
9	-	-	-	-	7.68	-	-	-	-	-	-
10	-	-	7.54	7.50	-	7.68	-	-	7.40	-	-
11	-	-	-	-	-	-	7.58	-	-	7.28	-
12	-	7.32	-	-	-	-	-	7.44	-	-	-
13	-	-	7.48	-	7.62	7.64	-	-	7.54	-	-
14	-	-	-	7.50	-	-	-	-	-	7.28	-
15	6.90	7.32	-	-	-	-	7.56	7.54	-	-	-
16	-	-	-	-	7.58	-	-	-	-	7.22	-
17	-	-	7.44	7.46	-	7.64	-	-	7.44	-	7.38
18	6.92	-	-	-	-	-	7.56	-	-	-	-
19	-	7.46	-	-	-	-	-	7.58	-	-	7.36
20	-	-	7.46	-	7.58	7.64	-	-	7.40	7.30	-
21	-	-	-	7.46	-	-	-	-	-	-	-
22	6.98	7.44	-	-	-	-	7.58	-	-	-	7.36
23	-	-	-	-	7.58	-	-	-	-	-	-
24	-	-	7.50	7.44	-	7.78	-	-	7.36	-	-
25	7.08	-	-	-	-	-	7.54	-	-	7.26	7.38
26	-	7.46	-	-	-	-	-	7.54	-	-	7.38
27	-	-	7.48	-	7.60	7.70	-	-	-	-	-
28	-	-	-	7.44	-	-	-	-	-	7.24	-
29	7.28	7.46	-	-	-	-	7.54	7.48	-	-	7.36
30	-	-	-	-	7.62	-	-	-	-	-	-
31	-	-	7.48	-	-	-	-	-	-	7.22	-

Note.- Add 90 feet to obtain elevation above lake datum of Public Service Commission of Wisconsin.

Cedar Lake near Kiel, Wis.

Location.- Staff gage, lat. 43°55', long. 87°56', in sec. 24, T. 17 N., R. 21 E., at Cedar Lake Resort, on narrows of lake, 5 miles from Kiel.

Records available.- August 1936 to September 1937.

Extremes.- Maximum elevation of water surface observed during period August 1936 to September 1937, 96.3 feet during May and June and on July 3, 1937; minimum, 94.95 feet Aug. 14, 1936.

Remarks.- Gage heights reduced to datum for this lake assumed by Public Service Commission of Wisconsin.

Daily elevation, in feet, 1936-37

Day	1936					1937						
	Aug.	Sept.	Oct.	Nov.	Dec.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	-	-	-	-	-	-	6.3	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	6.0	-	-	6.3	-	-
4	-	-	-	-	-	-	-	-	-	-	-	5.4
5	-	5.15	-	-	5.11	-	-	-	6.3	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	5.15	-	-	-	-	-	-	5.8	-
8	-	-	-	-	-	-	-	6.3	-	-	-	-
9	-	-	5.11	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	6.0	-	-	6.1	-	-
11	-	-	-	-	-	-	-	-	-	-	-	5.4
12	-	5.15	-	-	-	-	-	-	6.3	-	-	-
13	-	-	-	-	-	5.9	-	-	-	-	-	-
14	4.95	-	-	5.15	-	-	-	-	-	-	5.7	-
15	-	-	-	-	-	-	-	6.3	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	5.11	-	-	-	-	-	-	6.1	-	-
18	-	-	-	-	-	-	-	-	-	-	-	5.3
19	-	5.25	-	-	-	-	-	-	6.3	-	-	-
20	-	-	-	-	-	5.9	-	-	-	-	-	-
21	-	-	-	5.11	-	-	-	-	-	-	5.6	-
22	-	-	-	-	-	-	-	6.3	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-
24	5.05	-	-	-	-	-	6.1	-	-	6.0	-	-
25	-	-	-	-	-	-	-	-	-	-	-	5.3
26	-	5.15	-	-	-	-	-	-	6.3	-	-	-
27	-	-	-	-	-	5.9	-	-	-	-	-	-
28	-	-	-	5.11	-	-	-	-	-	-	5.5	-
29	-	-	-	-	-	-	-	6.3	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	5.15	-	-	-	-	-	-	5.9	-	-

Note.- Add 90 feet to obtain elevation above lake datum of Public Service Commission of Wisconsin.

Milwaukee River at Milwaukee, Wis.

Location.- Water-stage recorder, lat. 43°06'00", long. 87°54'30", in NE¼ sec. 5, T. 7 N., R. 22 E., on left bank of river, 2,000 feet below Port Washington Road bridge near north limits of Milwaukee and 6 miles above mouth. Zero of gage is 607.3 feet above mean sea level.

Drainage area.- 661 square miles.

Records available.- April 1914 to September 1937.

Average discharge.- 23 years, 414 second-feet.

Extremes.- Maximum discharge during year, 6,640 second-feet Feb. 21 (gage height, 5.93 feet) from rating curve extended above 3,000 second-feet; minimum, 16 second-feet Aug. 23 (gage height, 0.88 foot).

1914-37: Maximum discharge, 15,100 second-feet Mar. 20, 1918 (gage height, 9.00 feet, from high-water mark); minimum, 6 second-feet Aug. 6, 1936.

Remarks.- Records good except those for periods of ice effect, Nov. 23 to Dec. 27, Jan. 15 to Feb. 12, Feb. 21 which were computed on basis of two discharge measurements, recorder record, observer's notes, and weather records and are poor.

Rating tables, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 20								Feb. 21 to Sept. 30			
1.0	22	2.1	249	3.4	1,160	0.9	17	2.0	246	4.0	1,910
1.2	38	2.4	413	3.8	1,620	1.1	29	2.5	501	4.5	2,770
1.5	77	2.7	602			1.3	52	3.0	656	5.0	3,980
1.8	134	3.0	810			1.6	114	3.5	1,310	5.9	6,500

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	132	134	77	514	203	925	631	2,560	234	125	47	31
2	116	212	76	711	184	840	545	2,220	190	109	42	34
3	107	376	72	804	164	754	483	1,610	179	122	45	32
4	98	378	56	668	127	1,030	495	1,200	172	102	49	37
5	93	300	65	620	125	949	873	949	186	122	43	35
6	106	249	65	760	100	1,100	819	717	156	102	44	64
7	97	226	50	355	129	1,360	766	598	166	100	36	60
8	90	184	68	957	208	1,360	712	514	150	84	37	52
9	88	152	88	1,420	300	1,150	659	426	136	62	36	46
10	526	161	98	1,180	290	864	577	367	150	97	30	60
11	390	172	49	930	249	777	495	308	122	92	30	73
12	285	149	40	696	355	624	483	327	133	84	35	100
13	221	134	36	506	826	481	398	280	152	102	26	82
14	199	127	56	335	1,200	466	431	259	206	92	28	88
15	212	125	68	274	1,290	336	392	238	738	80	28	71
16	203	118	82	203	1,500	385	387	226	652	66	23	86
17	221	118	74	191	1,160	331	454	230	917	69	20	66
18	172	111	70	93	724	372	551	219	1,580	64	25	55
19	152	111	62	102	697	379	584	238	1,360	55	29	48
20	137	106	56	107	848	472	489	196	1,150	95	27	48
21	176	106	49	62	6,360	402	2,210	246	924	80	22	52
22	191	98	46	46	6,080	442	3,580	379	637	52	18	49
23	176	70	46	61	3,980	436	2,900	466	520	49	18	47
24	172	22	52	42	2,880	328	1,750	381	382	54	28	51
25	149	53	62	26	2,300	243	1,410	263	331	54	29	55
26	155	58	79	45	1,730	329	1,120	255	259	59	31	46
27	137	65	231	47	1,510	460	958	334	226	75	31	35
28	122	87	462	52	1,150	356	898	564	186	64	31	32
29	120	87	431	47	-	367	777	514	156	54	31	46
30	107	72	718	122	-	501	925	398	141	51	31	52
31	120	-	796	316	-	577	-	289	-	51	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,270	526	88	170	0.257	0.30
November	4,361	378	22	145	.219	.24
December	4,280	796	36	138	.209	.24
Calendar year 1936	83,311	2,880	6	228	.345	4.67
January	12,292	1,420	26	397	.601	.69
February	36,469	6,360	100	1,302	1.97	2.05
March	19,396	1,360	243	626	.947	1.09
April	27,752	3,580	387	925	1.40	1.56
May	17,771	2,560	196	573	.867	1.00
June	12,491	1,580	122	416	.629	.70
July	2,467	125	49	79.6	.120	.14
August	982	49	18	31.7	.048	.06
September	1,633	100	31	54.4	.082	.09
Water year 1936-37	145,164	6,360	18	398	.602	8.16

Cedar Creek near Cedarburg, Wis.

Location.- Chain gage, lat. 43°19'25", long. 87°58'50", on line between secs. 14 and 23, T. 10 N., R. 21 E., at bridge on State Trunk Highway, 2 miles north of Cedarburg and 6 miles above mouth.

Drainage area.- 113 square miles.

Records available.- August 1930 to September 1937.

Extremes.- Maximum discharge observed during year, 1,250 second-feet (gage height, 8.64 feet); minimum discharge, 3.0 second-feet Aug. 9, 17, 29; minimum gage height, 5.06 feet Aug. 17, 29.
1930-37: Maximum discharge observed, 1,420 second-feet Apr. 1, 1933; maximum gage height, 9.74 feet Mar. 6, 1935 (ice jam); minimum, 0.2 second-foot Aug. 9-12, 1936.

Remarks.- Records fair except those for period of ice effect, Dec. 1 to Mar. 29 which were computed on basis of three discharge measurements, gage heights, observer's notes, and weather records and are poor. Gage read once daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	25	5.9	418	54	100	152	664	38	17	4.4	3.9
2	19	44	6.7	418	49	76	235	498	38	17	3.9	3.9
3	17	60	6.7	165	30	232	94	418	35	15	3.9	3.9
4	14	60	5.9	91	22	235	76	221	32	14	4.4	3.9
5	14	44	4.4	132	15	235	214	186	32	14	3.9	3.9
6	13	35	4.4	70	14	622	325	132	35	13	3.5	3.5
7	13	29	6.7	29	14	518	165	113	32	11	3.5	3.5
8	13	27	7.4	165	13	438	132	88	27	10	3.5	3.5
9	12	23	7.4	152	13	221	119	76	25	9.2	3.0	3.5
10	25	23	5.2	142	14	162	106	65	23	9.2	3.9	13
11	44	21	4.4	132	14	116	88	60	18	8.2	5.2	8.2
12	60	21	4.4	44	16	119	82	65	19	12	5.2	5.9
13	60	19	5.9	52	18	88	68	60	27	12	4.2	6.7
14	54	19	6.7	44	20	73	94	54	76	11	3.9	6.7
15	44	19	8.2	34	24	54	94	49	94	14	3.5	5.9
16	41	18	8.2	25	28	52	88	44	70	13	3.5	5.9
17	41	19	9.2	15	36	116	132	44	253	12	3.0	5.2
18	35	15	10	12	47	126	193	44	307	9.2	3.5	5.2
19	29	13	12	11	70	152	152	41	271	8.2	3.5	3.9
20	25	5.2	11	7.4	106	165	113	41	253	6.7	3.9	3.5
21	27	12	9.2	6.7	974	165	418	65	145	5.9	5.2	3.5
22	35	12	7.4	7.1	974	165	1,250	126	94	5.2	5.2	3.5
23	41	6.7	7.4	9.2	882	76	580	82	65	5.2	5.2	3.5
24	32	14	8.2	8.2	794	35	343	60	41	5.2	4.4	3.9
25	27	14	14	7.4	538	23	271	41	38	5.9	3.9	3.9
26	25	11	18	5.5	343	32	235	41	35	8.2	3.9	3.9
27	21	7.4	106	8.7	218	25	214	158	29	10	3.5	4.4
28	19	7.4	106	8.2	148	30	186	207	23	10	3.9	4.4
29	13	6.7	113	8.2	-	113	165	186	21	5.9	3.0	4.4
30	13	5.9	94	8.2	-	235	145	88	21	5.9	3.5	4.4
31	19	-	135	82	-	214	-	54	-	5.2	3.9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	866	60	12	27.9	0.247	0.28
November	636.3	60	5.2	21.2	.188	.21
December	758.9	135	4.4	24.5	.217	.25
Calendar year 1936	12,759.9	664	.2	34.9	.309	4.20
January	2,317.8	418	5.5	74.8	.662	.76
February	5,488	974	13	196	1.73	1.80
March	5,013	622	23	162	1.43	1.65
April	6,549	1,250	76	218	1.93	2.15
May	4,071	664	41	131	1.16	1.34
June	2,217	307	18	73.9	.654	.73
July	308.3	17	5.2	9.95	.088	.10
August	122.9	5.2	3.0	3.96	.035	.04
September	143.4	13	3.5	4.78	.042	.05
Water year 1936-37	28,491.6	1,250	3.0	78.1	.691	9.36

St. Joseph River at Mottville, Mich.

Location.- Float gage, lat. 41°48', long. 85°45', in NE¼ sec. 6, T. 8 S., R. 12 W., at hydroelectric plant of Michigan Gas and Electric Company at Mottville, 5 miles below mouth of Fawn River. Zero of gage is 759.5 feet above mean sea level.

Records available.- December 1923 to September 1937.

Average discharge.- 13 years, 1,342 second-feet.

Extremes.- Maximum discharge during year, about 7,300 second-feet June 28 (gage height, not determined); minimum, 64 second-feet Sept. 26 (gage height, -1.56 feet); minimum daily discharge, 235 second-feet Sept. 26.
1924-37: Maximum discharge, 8,250 second-feet April 20, 1926 (gage height, 4.4 feet); minimum, 20 second-feet Sept. 7, 1930; minimum gage height, -1.90 feet July 26, 27, 1931; minimum daily discharge 78 second-feet Aug. 25, 1929.

Remarks.- Records good except those for June 26 to July 2, which were computed on basis of one discharge measurement and records for station at Niles, and are fair. Flow regulated by power plant. Gage read hourly.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	988	652	1,040	2,120	1,860	1,990	1,740	3,030	1,740	6,700	1,740	1,150
2	1,150	885	1,040	2,380	1,740	1,860	1,740	2,770	1,620	6,000	1,740	1,100
3	835	1,100	1,150	1,990	1,500	1,740	1,860	2,770	1,620	5,420	1,740	1,200
4	485	1,380	935	2,120	1,740	1,620	1,380	2,640	1,260	5,060	1,620	1,260
5	935	1,260	788	1,860	1,620	1,620	1,740	2,770	1,320	4,700	1,740	885
6	788	1,500	788	1,860	1,740	1,500	1,860	2,640	1,040	4,200	1,620	835
7	885	1,860	740	1,860	1,320	1,500	1,990	2,380	1,380	3,680	1,620	885
8	835	1,500	610	1,740	1,620	1,990	2,250	2,250	1,380	3,550	1,440	1,260
9	885	1,740	885	2,120	1,740	2,120	2,510	1,990	1,260	3,160	1,200	1,100
10	1,040	1,620	1,040	2,250	1,860	1,860	2,640	2,510	1,320	2,900	1,620	1,100
11	740	1,380	569	2,250	1,990	1,740	2,250	2,250	1,440	2,640	1,260	1,040
12	788	1,440	788	2,380	1,860	1,990	2,510	2,120	1,260	2,640	1,440	450
13	988	1,620	652	2,380	1,860	1,990	2,250	1,990	988	2,510	1,200	1,100
14	788	1,320	885	2,380	1,740	1,320	1,990	1,990	1,260	2,770	1,100	1,520
15	885	1,040	1,100	2,250	1,990	1,740	1,990	1,860	1,440	2,770	1,100	1,040
16	835	1,200	885	2,380	1,860	1,620	1,990	1,740	1,620	2,640	1,440	1,100
17	696	988	935	2,250	1,990	1,620	2,380	1,990	1,740	2,380	1,260	1,100
18	569	1,200	935	2,510	1,500	1,380	2,640	1,860	1,740	2,250	1,200	935
19	835	935	835	2,380	1,860	1,500	3,030	1,990	1,740	2,510	1,150	450
20	885	935	610	2,250	1,620	1,620	3,030	1,990	1,620	2,640	1,100	935
21	885	1,150	1,040	2,120	1,740	1,320	3,030	1,990	1,860	2,380	1,200	1,100
22	885	1,040	652	2,120	1,990	1,740	3,160	1,990	2,900	1,990	1,320	885
23	788	1,200	885	2,120	2,120	1,620	3,290	1,860	3,550	1,740	1,200	835
24	885	1,200	935	1,740	2,120	1,620	3,290	2,120	4,070	1,500	1,500	749
25	396	885	696	1,860	1,990	1,620	3,160	1,990	4,820	1,620	1,500	753
26	935	1,200	885	1,860	1,990	1,740	3,420	1,990	5,300	1,860	1,500	235
27	835	988	988	1,860	1,990	1,740	3,290	1,860	6,000	1,990	1,260	1,040
28	740	1,100	1,380	1,860	1,620	1,620	3,160	1,860	7,300	1,860	1,500	1,150
29	885	1,040	1,380	1,860	-	1,860	3,030	1,740	7,200	1,740	885	1,020
30	935	935	1,440	1,620	-	1,860	3,030	1,500	7,000	1,740	1,500	922
31	935	-	1,860	1,740	-	1,620	-	1,500	-	1,990	1,320	-

Month	Second-foot-days	Maximum	Minimum	Mean
October	25,939	1,150	485	837
November	36,293	1,860	652	1,210
December	29,351	1,860	569	947
Calendar year 1936	398,175	3,800	271	1,088
January	64,470	2,510	1,620	2,080
February	50,570	2,120	1,320	1,806
March	52,680	2,120	1,320	1,699
April	75,630	3,420	1,380	2,521
May	65,930	3,030	1,500	2,127
June	78,788	7,300	988	2,626
July	91,530	6,700	1,500	2,953
August	43,015	1,740	885	1,388
September	28,934	1,320	235	964
Water year 1936-37	643,130	7,300	235	1,762

St. Joseph River at Niles, Mich.

Location.- Water-stage recorder, lat. 41°49'45", long. 86°15'35", in sec. 26, T.7 S., R. 17 W., at Niles, one mile above Dowagiac Creek. Zero of gage is 634.98 feet above mean sea level.

Drainage area.- 3,620 square miles.

Records available.- October 1930 to September 1937.

Extremes.- Maximum discharge during year, 11,500 second-feet June 29 (gage height, 8.46 feet); minimum, 665 second-feet Aug. 28 (gage height, 1.78 feet).
1930-37: Maximum discharge, that of June 29, 1937; minimum, 244 second-feet Aug. 30, 1931.

Remarks.- Records good except those for Dec. 2-29, Apr. 11-26, which were computed on basis of records for station at Mottville and are poor. Flow regulated by operation of power plants upstream. Gage-height record furnished by city of Niles.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,940	1,810	2,260	5,880	4,110	3,550	3,090	6,250	3,690	10,200	3,200	2,070
2	2,140	2,180	2,100	5,450	3,830	3,550	3,190	6,090	3,130	9,060	3,410	2,070
3	2,140	2,530	2,200	4,700	3,550	3,270	2,990	6,090	2,920	7,420	2,720	1,940
4	1,760	3,970	2,300	4,120	3,270	3,550	2,720	5,300	2,720	7,080	3,340	2,070
5	2,070	3,830	2,250	3,690	3,220	4,250	3,550	5,770	2,350	6,410	2,590	2,000
6	2,200	3,270	2,150	3,410	3,550	3,970	3,970	5,450	2,330	6,250	2,720	1,840
7	2,070	3,690	1,950	3,550	2,980	3,970	5,610	5,150	2,850	5,150	2,460	2,330
8	2,000	3,380	1,850	4,110	3,550	3,690	5,450	4,700	2,590	4,700	2,780	1,680
9	2,070	3,270	1,750	5,780	3,970	4,250	5,770	5,830	2,780	4,240	3,060	1,940
10	2,000	3,830	2,100	6,570	4,110	3,970	5,300	3,180	2,900	4,400	2,780	2,070
11	2,200	3,550	2,250	5,930	3,690	3,480	5,150	4,850	2,520	4,550	2,850	1,940
12	1,880	2,990	2,100	5,150	3,830	3,130	5,000	4,250	2,330	4,700	3,340	1,600
13	1,810	3,690	1,800	5,000	3,690	3,410	4,700	4,250	2,400	4,400	3,550	1,960
14	2,200	2,990	1,950	5,650	3,460	3,100	4,300	3,970	2,460	4,550	1,680	1,610
15	1,810	2,520	2,200	6,740	4,110	3,120	4,100	3,410	3,060	5,150	2,030	1,940
16	1,810	2,850	2,150	6,740	3,550	2,850	4,100	3,340	3,060	4,700	2,260	1,640
17	1,650	2,850	2,100	5,770	3,830	2,990	4,500	4,250	2,990	4,250	2,200	1,740
18	1,510	2,380	2,000	6,090	3,410	2,920	5,300	4,400	3,060	3,690	2,000	1,660
19	1,940	2,620	1,950	5,770	3,060	2,720	6,000	5,000	2,920	4,110	1,800	1,530
20	1,740	2,520	1,900	5,450	3,200	2,920	6,200	4,250	2,850	4,110	2,140	1,650
21	1,880	2,400	1,900	5,450	3,440	3,130	6,200	3,970	4,060	3,970	2,020	1,860
22	1,880	2,360	2,000	5,000	5,300	3,550	6,300	3,690	4,700	3,480	2,180	2,200
23	1,740	2,660	1,850	4,700	5,400	3,690	6,500	3,970	5,450	3,130	2,300	1,930
24	1,740	2,520	1,750	4,250	5,000	3,410	6,700	4,110	5,930	2,520	2,200	2,000
25	1,550	2,590	1,700	4,110	4,040	3,200	7,000	4,110	6,740	2,660	2,470	1,890
26	1,680	2,260	1,700	3,970	3,830	3,340	7,300	4,110	8,680	3,970	2,330	1,680
27	1,880	2,720	1,700	3,970	4,110	4,110	7,590	3,970	9,250	4,110	2,200	2,070
28	1,880	2,330	1,800	4,400	3,410	2,590	7,250	3,970	9,840	3,830	1,820	2,200
29	1,880	2,030	2,250	4,400	-	3,970	6,570	3,480	10,900	3,550	2,020	2,400
30	2,000	2,850	3,090	3,970	-	3,550	6,090	3,300	10,900	3,270	2,250	2,200
31	1,810	-	4,940	3,690	-	3,200	-	2,720	-	2,960	2,260	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	58,860	2,200	1,510	1,899	0.525	0.61
November	85,440	3,970	1,810	2,848	.787	.88
December	65,990	4,940	1,700	2,129	.588	.68
Calendar year 1936	878,014	7,670	407	2,399	.663	9.03
January	153,460	6,740	3,410	4,950	1.37	1.58
February	106,500	5,400	3,060	3,804	1.05	1.09
March	106,400	4,250	2,590	3,432	.948	1.09
April	158,490	7,590	2,720	5,283	1.46	1.63
May	135,180	6,250	2,720	4,361	1.20	1.38
June	132,360	10,900	2,330	4,412	1.22	1.36
July	146,570	10,200	2,520	4,728	1.31	1.51
August	76,960	3,550	1,680	2,483	.686	.79
September	57,710	2,400	1,530	1,924	.531	.59
Water year 1936-37	1,283,920	10,900	1,510	3,518	.972	13.19

Elkhart River at Goshen, Ind.

Location.- Water-stage recorder, lat. 41°35', long. 85°50', in sec. 8, T. 36 N., R. 6 E., at River Avenue Bridge in Goshen.

Drainage area.- 573 square miles (revised).

Records available.- April 1931 to September 1937 in reports of Geological Survey; September 1924 to September 1927 in reports of Indiana Department of Conservation.

Extremes.- Maximum discharge during year, 1,580 second-feet Jan. 15 (gage height, 5.07 feet); minimum, 73 second-feet Oct. 4; minimum gage height, 1.44 feet Dec. 7.
1931-37: Maximum discharge, 3,060 second-feet Apr. 18, 1933 (gage height, 7.05 feet), from rating curve extended above 750 second-feet; minimum, 52 second-feet June 13, 1934; minimum gage height, 1.27 feet May 25 and 30, 1932; minimum daily discharge, 71 second-feet Sept. 20, 1936.

Remarks.- Records good. Regulation by operation of three power plants above gage.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	238	220	206	1,070	840	665	541	1,070	478	360	368	205
2	232	331	276	790	740	595	541	1,130	428	356	360	231
3	179	892	318	715	690	595	541	965	372	348	344	218
4	140	965	336	524	715	640	461	915	376	336	333	223
5	152	765	264	618	665	690	585	1,070	388	344	298	259
6	155	715	304	572	640	640	1,200	1,020	360	384	308	249
7	174	765	218	595	640	618	1,250	865	344	336	308	210
8	192	765	206	815	690	618	915	790	316	308	311	202
9	160	765	294	1,400	840	618	790	715	348	284	424	170
10	232	765	348	1,280	690	550	765	665	376	284	376	228
11	194	715	360	890	740	528	715	618	352	288	302	261
12	181	690	265	840	690	554	690	590	322	274	344	255
13	175	640	212	790	765	523	640	586	316	244	380	192
14	180	595	306	1,210	740	500	688	582	569	234	356	199
15	148	572	272	1,580	665	510	1,370	582	740	270	270	195
16	154	541	280	1,400	690	405	1,280	568	499	274	264	190
17	160	510	274	1,160	618	496	915	554	496	267	274	185
18	155	456	246	1,160	618	469	840	546	496	257	277	187
19	145	432	251	1,040	618	478	840	572	444	237	259	181
20	147	424	261	1,020	618	525	790	572	380	220	248	182
21	150	367	273	1,100	815	715	840	554	440	220	284	176
22	202	356	254	1,020	1,190	765	1,040	586	408	198	284	166
23	172	356	270	927	915	715	965	582	384	253	263	160
24	205	356	263	965	790	690	915	577	340	231	240	142
25	192	352	304	940	690	765	1,280	559	348	327	219	154
26	225	344	256	840	690	715	1,400	564	792	425	246	152
27	206	317	303	865	690	665	1,130	586	915	444	228	155
28	257	283	400	840	665	640	1,070	559	571	360	239	162
29	217	308	392	815	-	640	1,040	554	436	356	205	149
30	235	302	518	765	-	595	965	532	404	380	212	162
31	229	-	1,250	840	-	572	-	514	-	368	206	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,783	257	140	187	0.326	0.38
November	15,864	965	220	529	.923	1.03
December	9,980	1,250	206	322	.562	.65
Calendar year 1936	140,315	2,660	71	383	.668	9.12
January	29,386	1,580	524	948	1.65	1.90
February	20,357	1,190	618	727	1.27	1.32
March	18,694	765	405	603	1.05	1.21
April	27,002	1,400	461	900	1.57	1.75
May	21,142	1,130	514	682	1.19	1.37
June	13,438	915	316	448	.782	.87
July	9,467	444	198	305	.532	.61
August	9,030	424	205	291	.508	.59
September	5,800	261	142	193	.337	.38
Water year 1936-37	185,943	1,580	140	509	.888	12.06

Note.- Run-off for calendar year 1936 recomputed on basis of revised drainage area.

Kalamazoo River near Battle Creek, Mich.

Location.- Water-stage recorder, lat. 42°20'45", long. 85°15'45", in NE¼ sec. 32, T. 1 S., R. 8 W., three miles below city of Battle Creek and half a mile above Wabascon Creek.

Drainage area.- 849 square miles.

Records available.- July to September 1937.

Extremes.- Maximum discharge during period, 958 second-feet Aug. 19 (gage height, 2.24 feet), minimum, 160 second-feet Sept. 28 (gage height, 0.00 feet).

Remarks.- Records good. Gage-height record furnished by City of Battle Creek.

Rating table, July to Sept. 1937 (gage height, in feet, and discharge, in second-feet)

0	160
.2	215
.4	270
.6	332
.8	399
1.0	470
1.2	545
1.4	621
1.6	699
1.8	777
2.0	857

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1										-	488	629
2										-	488	507
3										-	362	316
4										-	488	209
5										-	448	270
6										-	430	372
7										-	488	372
8										-	488	257
9										-	602	351
10										-	256	362
11										-	345	434
12										-	564	332
13										-	507	427
14										-	427	346
15										-	416	212
16										-	507	430
17										-	358	382
18										-	306	402
19										-	460	378
20										-	738	348
21										-	660	378
22										-	738	324
23										-	699	401
24										-	602	302
25										-	621	466
26										-	545	488
27										583	470	434
28										583	410	292
29										545	402	399
30										470	459	421
31										507	452	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October						
November						
December						
Calendar year						
January						
February						
March						
April						
May						
June						
July 27-31	2,688	583	470	538	0.634	0.12
August	15,224	738	256	491	.578	.67
September	11,241	629	209	375	.442	.49
Water year						

Kalamazoo River at Comstock, Mich.

Location.- Wire-weight gage, lat. 42°17'10", long. 85°30'50", in NE¼ sec. 19, T. 2 S., R. 10 W., at highway bridge at Comstock. Prior to Oct. 29, staff gage 100 feet downstream. Datum not changed.
Drainage area.- 1,010 square miles.
Records available.- April to August 1931, October 1932 to September 1937.
Extremes.- Maximum discharge observed during year, 3,720 second-feet June 28 (gage height, 5.98 feet); minimum, 269 second-feet Dec. 14 (gage height, 0.80 foot).
1931, 1932-37: Maximum discharge observed, that of June 28, 1937; minimum 199 second-feet Oct. 14, 1934; minimum gage height, 0.58 foot May 4, 1931.
Remarks.- Records good except those for periods of ice effect, Nov. 27, Dec. 7-12, which were computed on basis of records on Battle Creek, gage heights and weather records and are poor. Flow regulated by operation of power plants upstream. Gage read once daily.

Revised discharge, in second-feet, for high-water periods 1932-36

1932		1933		1933		1934		1935		1936	
Dec. 25	1530	Apr. 6	1850	May 19	1290	Sept.14	1190	Mar.24	1410	Mar. 2	2750
26	1610	7	1850	20	1210	1935		25	1410	3	2600
27	1690	8	1850	21	1210	Jan. 12	1120	26	1260	4	2220
28	1770	9	1690	July 2	1290	19	1040	27	1260	5	1920
29	1690	10	1690	3	1290	Feb. 16	1190	May 7	1040	6	1770
30	1610	11	1610	4	1210	17	1040	8	1120	7	1770
31	1370	12	1530	1934		Mar. 3	1040	9	1040	8	1770
1933		13	1450	Apr. 3	1410	5	1120	10	1040	9	1770
Jan. 21	1210	14	1370	4	1620	6	1410	29	1040	10	1620
22	1210	15	1290	5	2000	7	1480	30	1620	11	1480
23	1290	16	1210	6	2370	8	1340	31	1480	12	1480
24	1290	17	1210	7	2670	9	1260	June 1	1550	13	1480
25	1290	18	1290	8	2750	10	1480	2	1480	14	1410
26	1210	19	1290	9	2440	11	1480	3	1480	15	1340
Feb. 26	1370	May 6	1370	10	2140	12	1700	4	1340	16	1340
27	1290	7	1370	11	1770	13	1700	5	1260	17	1260
28	1370	8	1450	12	1550	14	1840	6	1480	18	1260
Mar. 1	1370	9	1930	13	1480	15	1840	7	1120	19	1120
2	1290	10	1770	14	1410	16	1550	8	1040	20	1040
3	1210	11	1850	15	1410	17	1410	Aug. 8	1040	21	1040
30	1210	12	1850	16	1340	18	1340	1936		Apr.30	1040
Apr. 1	1290	13	1850	17	1260	19	1340	Jan. 3	1040	May 1	1040
2	1450	14	1690	18	1190	20	1120	Feb.27	1900	2	1120
3	1530	15	1530	19	1120	21	1340	28	2000	3	1120
4	1610	16	1370	20	1040	22	1410	29	2200	4	1120
5	1690	17	1370	21	1040	23	1480	Mar. 1	2520	5	1040
		18	1210							6	1040

Note.- The above figures supersede those published in Water-Supply Papers 744, 759, 784, and 804.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	580	590	560	1,240	775	742	775	1,380	840	3,160	650	560
2	728	530	338	1,170	710	742	742	1,450	840	2,780	620	840
3	615	775	389	1,040	775	710	710	1,240	620	2,430	650	650
4	615	775	470	905	808	775	650	1,100	650	2,010	500	500
5	478	840	470	840	775	680	840	1,100	500	1,590	680	292
6	448	840	470	840	620	742	970	970	650	1,310	590	363
7	652	840	460	840	590	840	1,040	1,170	530	1,100	560	500
8	580	560	450	970	970	840	1,100	970	500	1,100	680	500
9	544	680	450	1,100	905	840	1,240	905	389	1,040	680	389
10	544	710	440	1,100	1,040	808	1,240	840	560	970	808	470
11	580	710	420	1,100	840	775	1,240	775	650	840	363	470
12	544	620	400	1,040	742	775	1,040	710	415	742	470	530
13	544	620	389	1,100	905	742	808	680	560	840	808	442
14	544	530	269	1,100	905	650	808	840	620	590	650	530
15	544	560	470	1,100	905	620	1,240	808	905	808	590	442
16	448	530	389	1,100	742	680	1,380	1,040	680	840	530	300
17	448	500	415	1,100	808	590	1,520	970	970	970	710	560
18	478	500	470	1,100	808	560	1,800	970	1,100	970	560	500
19	478	500	300	840	808	680	1,940	970	1,170	905	470	590
20	511	415	305	808	742	650	2,080	840	1,100	808	970	415
21	361	442	470	1,040	775	680	2,290	808	1,660	775	1,170	442
22	448	530	500	840	970	680	2,150	905	1,800	742	1,240	442
23	511	530	415	742	840	650	1,940	808	2,010	710	1,170	389
24	389	500	442	710	905	650	1,940	808	2,570	650	1,040	530
25	478	530	530	970	840	680	1,940	742	3,320	590	905	470
26	511	470	650	775	840	742	1,870	840	3,560	680	905	650
27	652	470	680	710	808	710	1,800	970	3,720	840	840	560
28	448	470	775	680	775	680	1,730	905	3,640	742	710	650
29	580	470	742	680	-	650	1,660	970	3,560	742	590	338
30	650	470	808	680	-	650	1,520	905	3,400	710	560	500
31	470	-	1,170	775	-	742	-	970	-	650	620	-

Discharge, in second feet of, Kalamazoo River at Comstock, Michigan, 1932-37--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 1932	16,371	790	350	528	0.523	0.60
November	21,772	870	565	726	.719	.80
December	29,034	1,770	575	937	.928	1.07
Calendar year						
January 1933	30,860	1,290	638	995	.985	1.14
February	29,190	1,370	910	1,042	1.03	1.07
March	29,854	1,370	712	963	.953	1.10
April	39,680	1,850	790	1,323	1.31	1.46
May	39,330	1,930	830	1,269	1.26	1.45
June	17,394	1,150	404	580	.574	.64
July	23,990	1,290	530	774	.766	.88
August						
September						
Water year						
October						
November						
December						
Calendar year						
January 16-31.1934	10,402	765	580	650	.644	.38
February	10,520	700	280	376	.372	.39
March	16,293	690	320	526	.521	.60
April	40,795	2,750	544	1,360	1.35	1.51
May	15,939	652	307	514	.509	.59
June	9,070	417	267	302	.299	.33
July	8,328	346	199	269	.266	.31
August	7,273	346	185	235	.233	.27
September	11,256	1,190	259	375	.371	.41
Water year						
October 1934	9,274	448	199	299	.296	.34
November	11,406	615	236	380	.376	.42
December	12,774	615	289	412	.408	.47
Calendar year						
January 1935	20,654	1,120	350	666	.659	.76
February	18,495	1,190	356	661	.654	.68
March	40,425	1,840	765	1,304	1.29	1.49
April	19,039	840	544	635	.629	.70
May	25,281	1,620	361	816	.806	.93
June	22,226	1,550	389	741	.734	.82
July	11,198	544	244	361	.357	.41
August	22,252	1,040	307	718	.711	.82
September	11,274	544	263	376	.372	.42
Water year 1934-35	224,298	1,840	236	615	.609	8.26
October 1935	10,751	580	280	347	.344	.40
November	22,017	960	285	734	.727	.81
December	19,011	728	478	613	.607	.70
Calendar year 1935	242,623	1,840	244	665	.658	8.94
January 1936	19,357	1,040	425	624	.618	.71
February	18,545	2,200	400	639	.633	.68
March	43,975	2,750	690	1,419	1.40	1.61
April	23,697	1,040	478	790	.782	.87
May	19,352	1,120	271	624	.618	.71
June	10,542	652	232	351	.348	.39
July	8,575	389	214	277	.274	.32
August	8,561	321	224	276	.273	.31
September	14,025	880	289	468	.463	.52
Water year 1935-36	218,408	2,750	214	597	.591	8.03
October 1936	16,401	728	361	529	.524	.60
November	17,507	840	415	584	.578	.64
December	15,506	1,170	269	500	.495	.57
Calendar year 1936	216,043	2,750	214	590	.584	7.93
January 1937	29,035	1,240	680	937	.928	1.07
February	22,926	1,040	590	819	.811	.84
March	21,955	840	560	708	.701	.81
April	42,003	2,290	650	1,400	1.39	1.55
May	29,359	1,450	680	947	.938	1.08
June	43,489	3,720	389	1,450	1.44	1.61
July	33,634	3,160	590	1,085	1.07	1.23
August	22,289	1,240	363	719	.712	.82
September	14,814	840	292	494	.489	.55
Water year 1936-37	308,918	3,720	269	846	.838	11.37

Note.- The above figures of monthly discharge for the water years 1932-33 to 1935-36 supersede those published in Water-Supply Papers 744, 759, 784, and 804.

Battle Creek at Battle Creek, Mich.

Location.- Staff gage, lat. 42°19'55", long. 85°09'15", in sec. 5, T. 2 S., R. 7 W., 350 feet above Verona Street Bridge in Battle Creek.

Drainage area.- 241 square miles.

Records available.- October 1930 to July 1931, October 1932 to September 1937.

Extremes.- Maximum discharge observed during year, 1,920 second-feet June 28 (gage height, 2.96 feet); minimum, 48 second-feet Dec. 12 (gage height, 0.64 foot).
1930-31, 1932-37: Maximum discharge observed, that of June 28, 1937; minimum discharge, 22 second-feet Aug. 14, 1934; minimum gage height, about -0.5 foot in July 1936, due to opening of gates at dam forming control.

Remarks.- Records good. Gage read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	158	115	63	355	128	149	145	491	286	1,030	97	72
2	158	124	63	460	149	145	158	428	210	810	89	72
3	145	176	69	416	119	128	158	398	172	660	82	69
4	136	195	69	263	119	145	158	367	149	523	82	69
5	115	226	63	252	104	200	191	338	136	428	89	63
6	107	176	69	181	104	274	263	302	124	379	82	57
7	115	149	57	181	93	308	338	258	111	373	111	60
8	128	153	69	200	97	280	523	231	104	391	107	63
9	132	136	66	263	162	242	523	200	111	355	100	66
10	128	124	69	332	162	181	491	186	128	297	104	66
11	128	119	69	367	216	176	379	167	128	252	89	69
12	115	111	57	428	263	172	314	172	128	221	97	69
13	115	104	60	332	236	149	258	172	119	195	86	60
14	115	104	63	332	200	136	210	186	136	195	82	66
15	100	97	66	297	186	119	291	200	176	231	82	63
16	93	89	66	308	172	132	398	231	252	247	69	69
17	93	89	75	320	145	119	770	236	326	236	82	69
18	93	89	66	302	145	128	1,030	231	320	200	75	63
19	82	86	60	158	140	128	1,130	231	297	176	82	69
20	79	86	72	191	145	136	1,080	210	297	158	145	57
21	93	86	66	221	176	136	895	191	379	145	191	57
22	93	86	60	181	200	136	810	181	1,400	132	191	57
23	93	89	66	118	210	136	850	181	1,800	119	186	57
24	93	82	72	132	200	136	850	186	1,560	111	181	60
25	93	89	75	136	210	128	810	186	1,340	111	149	79
26	111	86	93	124	191	128	732	186	1,180	119	132	82
27	115	63	124	107	176	136	732	210	1,680	119	111	75
28	124	82	176	107	136	136	660	236	1,800	111	89	79
29	128	82	210	104	-	145	625	332	1,680	111	82	75
30	119	60	236	100	-	153	523	404	1,340	104	75	69
31	115	-	314	126	-	153	-	361	-	100	69	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,512	158	79	113	0.469	0.54
November	3,353	226	60	112	.465	.52
December	2,803	314	57	90.4	.375	.43
Calendar year 1936	46,497	890	24	127	.527	7.16
January	7,393	460	100	238	.988	1.14
February	4,384	263	93	164	.680	.71
March	4,970	308	119	160	.664	.77
April	16,295	1,130	145	543	2.25	2.51
May	7,889	491	167	254	1.05	1.21
June	17,869	1,800	104	596	2.47	2.76
July	8,639	1,030	100	279	1.16	1.34
August	3,288	191	69	106	.440	.51
September	2,001	82	57	66.7	.277	.31
Water year 1936-37	82,596	1,800	57	226	.938	12.75

Grand River at Jackson, Mich.

Location.- Water-stage recorder, lat. 42°17'05", long. 84°24'30", in sec. 22, T. 2 S., R. 1 W., 1 mile north of Jackson. Zero of gage is 900.00 feet above mean sea level.

Drainage area.- 174 square miles.

Records available.- April 1935 to September 1937.

Extremes.- Maximum discharge during year, 1,220 second-feet June 25 (gage height, 13.50 feet); minimum, 11 second-feet Dec. 4 (gage height, 8.07 feet).
1935-37: Maximum discharge, that of June 25, 1937; minimum, 9.2 second-feet on Aug. 22, 1936; minimum daily discharge, 12 second-feet Aug. 23, 1936.

Remarks.- Records good except those for periods of missing gage heights, Dec. 24 to Jan. 4, July 23 to Aug. 23, Sept. 11-26, which were computed on basis of weather records and records for station at Lansing and are fair.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

8.2	17	10.2	310
8.4	31	10.6	390
8.6	50	11.0	482
8.8	73	11.5	608
9.0	102	12.0	747
9.4	171	12.5	895
9.8	241	13.0	1,050

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	86	33	90	36	93	80	284	72	544	80	84
2	36	111	47	70	42	92	76	275	79	470	75	86
3	66	86	39	45	54	99	68	241	74	401	70	83
4	68	43	42	40	53	107	57	236	64	401	65	77
5	49	60	49	38	69	94	96	266	63	359	60	67
6	72	53	79	50	66	74	108	241	94	310	60	59
7	42	64	31	53	84	84	93	224	59	284	60	57
8	42	140	39	63	103	58	189	189	74	284	60	56
9	59	65	39	81	112	46	241	232	89	160	60	57
10	49	69	41	94	112	48	216	156	70	154	60	61
11	78	122	30	63	105	77	193	115	60	216	65	65
12	53	45	29	60	107	76	224	149	61	207	75	65
13	48	63	50	98	104	80	241	160	120	115	90	70
14	48	70	25	200	93	88	250	157	54	216	100	70
15	60	132	46	171	107	90	258	176	121	203	95	70
16	44	49	25	216	115	78	216	153	70	136	85	70
17	48	60	29	168	118	84	258	82	76	127	80	65
18	71	62	24	43	102	90	266	92	74	196	80	60
19	40	59	22	74	110	100	266	160	69	121	80	60
20	44	59	40	94	110	102	266	102	274	122	90	60
21	51	56	25	90	116	93	284	166	635	146	100	60
22	45	98	30	80	107	84	292	121	690	160	95	55
23	31	46	30	72	107	81	292	142	747	140	90	55
24	49	47	30	90	107	57	266	173	747	120	83	50
25	90	55	30	88	99	54	292	164	855	105	76	50
26	40	98	40	71	100	54	292	160	892	120	83	50
27	44	51	60	74	98	68	258	103	925	130	92	49
28	40	42	80	62	88	67	266	155	804	110	87	48
29	54	77	110	58	-	68	275	128	635	100	81	46
30	68	54	120	110	-	88	275	148	424	90	87	46
31	55	-	130	166	-	84	-	105	-	85	88	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,624	90	31	52.4	0.301	0.35
November	2,122	140	42	70.7	.406	.45
December	1,444	130	22	46.6	.268	.31
Calendar year 1936	25,691	303	12	70.4	.405	5.49
January	2,772	216	38	89.4	.514	.59
February	2,624	118	36	93.7	.539	.56
March	2,458	107	46	79.3	.456	.53
April	6,454	292	57	215	1.24	1.38
May	5,255	284	82	170	.977	1.13
June	9,082	926	59	303	1.74	1.94
July	6,332	544	85	204	1.17	1.35
August	2,452	100	60	79.1	.455	.52
September	1,851	86	46	61.7	.355	.40
Water year 1936-37	44,470	926	22	122	.701	9.51

Grand River at Lansing, Mich.

Location.- Water-stage recorder, lat. 42°45'20", long. 84°34'55", in SW¼ sec. 5, T. 4 N., R. 2 W., at northwest limits of Lansing.

Drainage area.- 1,230 square miles.

Records available.- November 1934 to September 1937. March 1901 to August 1906, at Seymour Street Bridge, one and three-quarter miles upstream.

Extremes.- Maximum discharge during year, 7,170 second-feet June 27 (gage height, 10.47 feet); minimum, 29 second-feet Dec. 19 (gage height, 0.32 foot).
1934-37: Maximum discharge, that of June 27, 1937; minimum, 22 second-feet July 19, 1936; minimum daily discharge, 25 second-feet Aug. 16, 1936.

Remarks.- Records good except those for periods of missing gage heights Jan. 29 to Feb. 5, May 30 to June 16, Aug. 12-20, Aug. 22 to Sept. 1, computed on basis of weather records and records for stations at Jackson and Grand Rapids and are poor. Flow regulated by operation of power plant upstream.

Rating table for water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Dec. 8)

0.4	32	2.2	384	6.0	2,650
.6	42	2.6	520	7.0	3,480
.8	63	3.0	690	8.0	4,410
1.0	100	3.5	940	9.0	5,450
1.4	182	4.0	1,230	10.0	6,570
1.8	275	5.0	1,890	10.5	7,170

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	244	252	196	752	500	456	493	2,170	850	3,050	484	260
2	198	301	226	523	400	479	508	2,100	700	2,570	441	274
3	223	462	185	492	380	420	632	1,890	680	2,170	382	265
4	208	549	166	245	370	597	552	1,890	670	2,100	482	285
5	205	552	177	428	370	772	144	1,610	670	2,330	413	236
6	238	520	194	295	366	872	323	1,510	650	2,490	402	253
7	262	481	157	246	259	883	1,170	1,330	620	2,030	399	279
8	244	381	158	318	436	824	1,420	1,370	580	1,560	390	254
9	173	417	187	502	1,120	676	1,430	1,130	560	1,320	392	194
10	193	433	196	713	963	431	1,280	1,150	600	1,170	380	206
11	154	400	193	553	821	372	1,060	1,030	700	886	398	200
12	152	375	198	575	665	400	960	904	700	831	390	213
13	154	355	130	538	702	346	987	948	680	1,010	400	247
14	141	356	178	886	652	308	927	809	620	890	450	221
15	150	347	153	987	524	384	1,370	1,020	600	1,010	420	290
16	110	309	188	1,030	494	360	1,910	1,080	620	1,140	380	216
17	76	339	182	634	414	341	4,040	1,400	861	1,040	360	219
18	38	350	199	741	472	362	5,670	1,270	1,200	876	350	254
19	44	280	142	659	447	299	5,340	942	1,380	848	350	224
20	68	309	66	524	494	489	4,210	1,080	1,270	703	380	227
21	129	264	118	581	481	253	3,750	1,060	2,370	721	429	193
22	103	234	190	564	813	454	4,210	1,350	4,110	617	400	224
23	116	273	161	503	522	339	4,020	1,440	4,810	559	380	179
24	108	294	191	277	501	420	3,570	1,370	4,610	522	360	160
25	127	305	227	308	416	306	3,570	1,220	4,510	511	350	178
26	257	226	191	427	325	352	3,480	1,170	6,890	595	330	164
27	269	223	372	443	367	423	3,300	1,570	6,930	630	310	229
28	317	185	345	349	429	316	2,970	1,970	6,110	742	290	224
29	269	244	415	300	-	430	2,810	2,180	4,910	685	280	248
30	248	256	512	420	-	551	2,490	2,000	3,840	609	270	234
31	265	-	502	580	-	349	-	1,200	-	528	260	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,483	317	38	177	0.144	0.17
November	10,272	552	185	342	.278	.31
December	6,693	512	66	216	.176	.20
Calendar year 1936	153,374	2,490	25	419	.341	4.64
January	16,391	1,030	245	529	.430	.50
February	14,703	1,120	259	525	.427	.44
March	14,264	883	253	460	.374	.43
April	68,594	5,670	144	2,286	1.86	2.08
May	43,163	2,180	809	1,392	1.13	1.30
June	63,101	6,930	560	2,103	1.71	1.91
July	36,741	3,050	511	1,185	.963	1.11
August	11,702	484	260	377	.307	.35
September	6,850	290	160	228	.185	.21
Water year 1936-37	297,957	6,930	38	816	.663	9.01

Grand River at Grand Rapids, Mich.

Location.- Water-stage recorder, lat. 42°57'10", long. 85°41'15", at municipal sewage-pumping plant near west limits of Grand Rapids, Kent County. Zero of gage is 589.01 feet above mean sea level.

Drainage area.- 4,900 square miles.

Records available.- October 1930 to September 1937. March 1901 to September 1918, at Fulton Street Bridge, in Grand Rapids.

Extremes.- Maximum discharge during year, 16,400 second-feet Apr. 25 (gage height, 9.59 feet); minimum observed, 785 second-feet Sept. 24 (gage height, -4.03 feet).
1930-37: Maximum discharge, 19,200 second-feet Mar. 7, 1935 (gage height, 10.87 feet); minimum observed, 341 second-feet Aug. 17, 1936; minimum daily, 381 second-feet Aug. 17, 1936.
A stage of 19.3 feet occurred at the Fulton Street gage on March 27, 1904, (discharge, 53,000 second-feet).

Remarks.- Records good except those for period of ice effect, Feb. 1-7 (computed on basis of gage heights and records for station at Lansing) and those for very low stages, which are fair. Flow slightly regulated by operation of power plants upstream. The City of Grand Rapids diverts about 30 second-feet above gage, most of which is returned to river 1 mile downstream. Gage-height record furnished by City of Grand Rapids.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,850	1,980	1,190	5,700	2,800	3,270	2,570	13,100	4,240	9,220	1,660	1,050
2	2,710	1,980	1,280	5,300	2,600	3,200	2,640	12,200	4,000	8,130	1,490	938
3	2,440	2,110	1,280	5,030	2,500	3,130	2,640	10,800	3,480	6,500	1,250	938
4	2,110	2,370	1,370	4,400	2,400	4,420	2,710	9,500	3,130	5,300	1,340	1,100
5	1,980	2,240	1,130	3,760	2,300	6,740	2,920	8,390	2,710	4,670	1,160	886
6	2,040	2,110	1,250	2,780	2,200	6,500	3,780	7,740	2,710	4,580	1,080	938
7	2,110	2,300	1,100	3,060	2,100	6,030	4,850	6,740	2,570	4,400	1,220	938
8	2,110	2,110	1,220	3,940	2,670	5,400	5,120	5,920	2,440	4,160	1,250	912
9	2,110	2,240	1,190	5,400	4,240	4,850	5,600	5,400	2,500	3,760	1,220	965
10	2,640	2,110	1,220	5,600	5,030	3,920	5,810	4,760	2,570	3,410	1,280	938
11	2,920	1,920	1,430	5,300	5,400	3,480	5,600	4,670	2,570	2,920	1,400	1,080
12	2,710	1,920	1,370	4,940	5,210	3,410	5,210	4,400	2,500	2,640	1,690	992
13	2,640	1,850	1,280	4,760	4,670	3,340	4,850	4,240	2,440	3,060	1,660	1,050
14	2,370	1,850	1,050	4,760	4,240	3,060	4,490	4,080	2,640	3,340	1,720	912
15	2,300	1,720	1,310	4,850	4,080	2,850	4,400	3,760	2,500	3,060	1,400	1,020
16	2,110	1,850	1,370	4,760	3,760	2,640	4,760	3,760	2,640	2,920	1,340	1,020
17	2,180	1,780	1,310	4,490	3,480	2,370	6,140	3,760	3,550	2,500	1,310	1,080
18	2,110	1,780	1,370	4,240	3,340	2,440	8,390	3,920	3,690	2,300	1,220	1,160
19	1,850	1,850	1,130	3,340	2,990	2,440	10,700	4,000	3,550	2,240	1,220	1,160
20	1,590	1,560	1,310	2,570	3,200	2,300	12,500	4,080	3,760	2,240	1,340	1,220
21	1,850	1,660	1,310	3,060	3,790	2,300	14,400	3,920	4,000	2,110	1,590	1,160
22	2,110	1,250	1,130	3,200	5,120	2,300	15,700	3,760	4,760	1,980	1,660	1,520
23	1,980	1,460	1,280	2,990	4,780	2,370	15,700	3,620	4,670	1,850	1,780	1,130
24	1,720	1,620	1,250	3,130	4,160	2,500	15,900	3,690	6,570	1,980	1,490	965
25	1,590	1,560	1,690	3,060	3,550	2,180	16,400	3,760	8,130	1,490	1,460	1,250
26	1,850	1,310	2,640	2,920	3,840	2,240	16,200	3,840	8,130	1,520	1,490	860
27	1,720	1,100	3,760	2,640	3,840	2,110	15,500	3,920	8,390	1,780	1,310	1,050
28	2,040	1,220	4,670	2,440	3,480	2,040	15,200	4,240	8,800	1,720	1,340	1,340
29	1,850	1,430	4,580	2,240	-	2,240	14,400	4,160	9,080	1,460	1,280	1,220
30	1,780	1,100	4,320	2,370	-	2,370	13,600	4,490	9,500	1,780	1,020	1,020
31	1,920	-	5,500	2,920	-	2,300	-	4,670	-	1,370	1,130	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	66,290	2,920	1,590	2,138	0.436	0.50
November	53,340	2,370	1,100	1,778	.363	.40
December	57,290	5,500	1,050	1,848	.377	.43
Calendar year 1936	918,935	15,500	381	2,511	.512	6.95
January	119,950	5,700	2,240	3,869	.790	.91
February	101,750	5,400	2,100	3,634	.742	.77
March	100,540	6,740	2,040	3,243	.662	.76
April	258,680	16,400	2,570	8,623	1.76	1.96
May	169,290	13,100	3,620	5,460	1.11	1.28
June	132,220	9,500	2,440	4,407	.899	1.00
July	100,390	9,220	1,370	3,238	.661	.76
August	42,800	1,780	1,020	1,381	.282	.33
September	31,812	1,520	860	1,060	.216	.24
Water year 1936-37	1,234,352	16,400	860	3,382	.690	9.34

Fish Creek near Carson City, Mich.

Location.- Water-stage recorder, lat. 43°10', long. 84°51', on line between sec. 14 and 23, T. 9 N., R. 5 W., at highway bridge 2 miles south of Carson City.

Drainage area.- 145 square miles.

Records available.- February 1936 to September 1937.

Extremes.- Maximum discharge during year, 430 second-feet Apr. 22 (gage height, 5.00 feet); minimum discharge observed, 19 second-feet Sept. 4; minimum stage, 2.97 feet Dec. 7.

1936-37: Maximum discharge observed, 1,190 second-feet Mar. 11, 1936 (gage height, 6.74 feet), from rating curve extended above 250 second-feet; minimum, 8.4 second-feet Aug. 7, 8; minimum daily discharge, 9.6 second-feet Aug. 9, 1936.

Remarks.- Records good except those for periods of ice effect, Dec. 5-14, 18, 19, Jan. 16-28, Mar. 11-14, 26 (computed on basis of one discharge measurement, weather records, and records for Grand River at Lansing and at Grand Rapids), which are poor, and those for periods of no recorder graph Oct. 1-9, 17, 18, Nov. 15-18, Jan. 12-15, July 27 to Sept. 30 (computed from two daily readings of chain gage), which are fair. Flow slightly regulated by operation of power plants upstream.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	63	48	226	178	136	89	219	66	54	28	35
2	61	69	47	163	127	111	92	209	60	74	34	28
3	60	77	62	127	124	76	89	178	54	48	32	32
4	48	77	50	98	110	211	114	163	56	55	35	27
5	54	71	48	131	86	219	168	156	56	44	35	27
6	57	67	48	136	112	184	252	142	58	44	31	27
7	66	67	47	100	95	169	221	127	52	38	35	34
8	60	61	46	178	200	150	195	123	42	39	35	36
9	57	63	46	298	290	114	174	118	51	36	46	22
10	72	58	45	238	297	115	156	112	52	39	42	22
11	105	57	45	176	173	90	144	104	46	34	72	35
12	96	57	44	160	136	85	132	102	46	41	62	33
13	79	58	44	142	114	85	134	106	44	41	62	35
14	72	57	48	184	123	80	132	106	64	36	54	34
15	69	57	56	156	125	79	144	99	67	50	40	37
16	67	57	53	120	129	76	136	102	54	45	42	35
17	72	57	54	100	110	69	156	121	81	41	39	37
18	72	51	55	80	82	84	189	114	125	34	40	37
19	71	47	55	50	82	72	178	106	112	40	40	36
20	66	48	72	50	99	74	152	96	94	39	48	37
21	66	52	93	50	176	76	224	109	84	36	58	37
22	71	36	84	80	183	79	396	116	66	35	52	35
23	71	51	52	70	146	76	298	102	56	34	46	34
24	68	45	47	60	154	74	247	99	56	31	43	36
25	63	50	85	60	141	70	349	86	77	33	50	43
26	67	60	131	60	142	70	334	99	112	39	38	39
27	67	71	171	60	137	89	331	129	84	42	35	58
28	66	55	193	70	125	86	337	129	69	39	42	42
29	64	57	160	79	-	82	273	109	64	38	30	38
30	63	67	157	64	-	86	224	89	52	37	37	42
31	62	-	267	169	-	86	-	76	-	36	30	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,101	105	48	67.8	0.468	0.54
November	1,763	77	36	58.8	.406	.45
December	2,453	267	44	79.1	.546	.63
Calendar year						
January	3,735	298	50	120	.828	.95
February	3,996	297	82	143	.986	1.03
March	3,153	219	69	102	.703	.81
April	6,060	396	89	202	1.39	1.55
May	3,746	219	76	121	.834	.96
June	2,000	125	42	66.7	.460	.51
July	1,272	74	31	41.0	.283	.33
August	1,313	72	28	42.4	.292	.34
September	1,049	58	22	35.0	.241	.27
Water year 1936-37	32,641	396	22	89.4	.617	8.37

Cedar River at East Lansing, Mich.

Location.- Water-stage recorder, lat. 42°43'40", long. 84°28'40", in SW¼ sec. 18, T. 4 N., R. 1 W., at East Lansing, 4 miles above mouth. Zero of gage is 824.96 feet above mean sea level.

Drainage area.- 355 square miles.

Records available.- March 1931 to September 1937. August 1902 to December 1903, at site three-quarters of a mile downstream.

Extremes.- Maximum discharge during year, 2,330 second-feet Apr. 18 (gage height, 7.12 feet); minimum discharge observed, 9.4 second-feet Dec. 19 (gage height, 3.02 feet).
1902-03, 1931-37: Maximum mean daily discharge, 2,700 second-feet Apr. 15, 1903 (gage height, 10.07 feet, former site and datum); minimum discharge, 3 second-feet July 31, 1931.
Maximum stage known, about 14.5 feet during flood of 1921 (discharge not determined).

Remarks.- Records excellent except those for periods of missing gage heights, Jan. 5-10, Jan. 29 to Feb. 4, May 14-21, May 29 to June 3, July 9-22, 28-31, which were computed on basis of records for Grand River at Jackson and at Lansing and are poor. Gage-height record furnished by Michigan State College. No records for periods for which discharge is not given.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

3.0	6.2	3.8	208	5.0	830
3.2	41	4.0	290	6.0	1,520
3.4	86	4.2	384	7.0	2,260
3.6	141	4.6	595		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	54	52	160	100	-	99	634	200	389	-	
2	45	56	30	126	96	-	107	590	160	290	-	
3	43	91	14	91	84	-	112	491	130	247	-	
4	41	104	18	69	72	-	104	389	126	302	-	
5	33	94	24	76	67	-	148	346	126	399	-	
6	48	86	24	78	67	-	469	308	147	299	-	
7	79	79	14	80	58	-	634	277	141	216	-	
8	57	72	18	105	123	-	556	256	-	167	-	
9	45	64	43	190	399	-	434	243	-	140	-	
10	56	64	45	250	346	-	336	216	-	130	-	
11	52	60	33	208	204	-	264	194	-	110	-	
12	37	58	16	132	-	-	220	180	-	100	-	
13	54	52	13	135	-	-	187	173	-	92	-	
14	58	62	29	118	-	-	180	170	-	86	-	
15	60	46	28	281	-	94	261	170	-	82	-	
16	47	26	56	346	-	76	650	165	-	79	-	
17	30	58	42	251	-	72	1,400	175	-	77	-	
18	33	58	26	235	-	67	2,260	240	-	74	-	
19	26	58	11	176	-	64	2,100	300	-	73	-	
20	62	43	11	112	-	60	1,660	450	-	71	74	
21	34	24	36	112	-	67	1,340	540	895	69	74	
22	51	24	37	135	-	67	1,620	605	1,240	66	69	
23	60	30	16	91	-	67	1,520	662	1,140	62	41	
24	41	76	42	76	-	67	1,280	551	1,030	54	-	
25	39	62	47	79	-	67	1,200	399	999	52	-	
26	40	30	24	72	-	67	1,280	327	1,770	67	-	
27	72	26	72	76	-	69	1,170	465	1,590	81	-	
28	69	26	72	86	-	67	1,060	650	1,200	76	-	
29	64	26	94	90	-	60	928	700	862	71	-	
30	60	41	96	97	-	79	746	500	578	65	-	
31	56	-	157	105	-	104	-	300	-	72	-	

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,544	79	26	49.8	0.140	0.16
November	1,650	104	24	55.0	.155	.17
December	1,240	157	11	40.0	.113	.13
Calendar year 1936	37,765.5	980	5.5	103	.290	3.95
January	4,238	346	69	137	.386	.44
February 1-11	1,616	399	58	147	.414	.17
March 15-31	1,214	104	60	71.4	.201	.13
April	24,325	2,260	99	811	2.28	2.54
May	11,666	700	165	376	1.06	1.22
June	-	-	-	-	-	-
July	4,158	399	52	134	.377	.43
August	-	-	-	-	-	-
September	-	-	-	-	-	-
Water year	-	-	-	-	-	-

Thornapple River near Caledonia, Mich.

Location.- Staff gage, lat. 42°48'40", long. 85°29'00", in sec. 22, T. 5 N., R. 10 W., in tailrace of La Barge power plant, 2½ miles northeast of Caledonia. Zero of gage is at mean sea level.

Drainage area.- 773 square miles.

Records available.- October 1930 to September 1937.

Extremes.- Maximum daily discharge during year, 3,780 second-feet Apr. 22 (gage height, 684.7 feet), from rating curve extended above 2,600 second-feet; minimum daily discharge, 123 second-feet Nov. 21 (gage height, 679.8 feet).
1930-37: Maximum daily discharge, that of Apr. 22, 1938; minimum daily discharge, 5 second-feet (estimated) Oct. 27, 1934 (gage height, 678.5 feet).

Remarks.- Records poor. Flow regulated by storage at La Barge power plant. Gage height furnished by Consumers Power Company.

Revised discharge, in second-feet, for high-water periods 1931-36

1931		1933		1933		1935		1936	
June 7	865	Feb. 26	1400	May 9	1570	Feb. 16	1320	Feb. 26	1320
8	800	27	1400	10	1750	Mar. 3	1320	27	1660
9	675	28	1400	11	1660	4	1840	28	2680
		Mar. 1	1320	12	1570	5	2480	29	2110
1932		2	1240	13	1480	6	2580	Mar. 1	2110
Feb.12	1480	Apr. 1	1320	14	1320	7	2290	2	2200
13	1660	2	1570	20	1400	8	1660	3	2110
14	1660	3	1570	21	1750	9	1320	4	2200
15	1750	4	1660	22	1570	10	1480	5	2200
16	1570	5	1660	23	1400	11	2110	6	1930
17	1400	6	1750	24	1320	12	2020	7	2020
18	1240	7	1660			13	2020	8	2020
Mar.28	1400	8	1570	1934		14	1930	9	2020
29	1660	9	1400	Apr. 3	1320	15	1840	10	1930
30	1840	10	1480	4	1750	16	1750	11	2020
31	1840	11	1660	5	1750	17	1570	12	2020
Apr. 1	1750	12	1570	6	1750	18	1480	13	1840
2	1570	13	1320	7	1660	19	1400	14	1660
3	1320	14	1240	8	1570	20	1320	15	1480
Dec.26	1320	May 6	1240	9	1320	21	1320	16	1400
27	1400	7	1320			22	1320	17	1320
28	1320	8	1320			24	1320	Sept.17	1400
						June 7	1320		

Note.- The above figures supersede those previously published in Water-Supply Papers 714, 729, 744, 759, 784, 804.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	800	456	321	1,240	456	408	561	1,750	617	1,570	321	321
2	800	456	321	1,240	456	507	507	1,750	561	1,400	321	321
3	617	456	865	1,240	456	561	561	1,400	456	1,320	321	321
4	561	456	321	1,080	456	800	507	1,320	363	865	321	321
5	561	456	321	935	456	1,320	561	1,240	321	800	321	321
6	561	456	321	561	363	1,320	561	1,000	408	561	321	321
7	561	456	321	561	321	1,240	800	865	363	507	408	321
8	363	456	321	617	408	1,160	1,000	865	321	507	321	321
9	408	456	321	1,320	935	1,000	1,240	735	321	456	321	321
10	456	408	363	1,320	800	800	1,240	617	363	321	321	321
11	507	408	363	1,240	935	561	1,160	561	408	363	321	321
12	507	408	321	1,400	1,160	561	935	561	321	363	321	321
13	561	408	321	1,240	1,080	408	735	507	363	1,080	321	321
14	507	408	321	1,240	935	561	561	507	456	800	321	321
15	507	408	408	1,160	735	507	617	561	617	617	321	321
16	507	363	321	1,080	561	408	1,080	507	561	561	321	321
17	561	408	321	456	561	408	1,570	561	617	408	321	321
18	507	408	321	408	408	507	2,780	561	800	507	321	321
19	507	408	321	675	507	321	3,380	561	800	363	321	321
20	507	507	321	561	456	408	3,680	507	865	321	321	321
21	507	123	321	675	617	408	3,680	507	935	321	321	321
22	456	321	321	617	1,080	408	3,780	456	1,080	321	321	321
23	456	456	321	321	865	408	3,180	456	1,240	321	321	321
24	456	321	321	456	865	363	2,980	456	1,570	321	321	321
25	456	321	865	561	735	408	3,180	456	1,660	321	363	321
26	456	321	165	363	675	363	3,080	456	1,570	321	321	321
27	507	321	1,160	408	561	408	2,680	507	1,480	321	321	321
28	507	321	735	456	561	408	2,480	561	1,480	321	321	321
29	456	321	865	363	-	408	2,290	561	1,570	321	321	321
30	456	321	865	321	-	507	2,020	675	1,570	321	321	321
31	456	-	1,240	507	-	507	-	675	-	321	321	-

Discharge, in second-feet, Thornapple River near Caledonia, Michigan, 1931-37--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 1930	8,060	260	260	260	0.336	0.39
November	7,840	300	260	261	.338	.38
December	8,000	260	230	258	.334	.39
Calendar year						
January 1931	8,100	300	260	261	.338	.39
February	7,290	300	230	260	.336	.35
March	8,610	410	260	278	.360	.42
April	7,930	350	260	264	.342	.38
May	8,060	260	260	260	.336	.39
June	10,210	865	260	340	.440	.49
July	8,060	260	260	260	.336	.39
August	4,794	187	138	155	.201	.23
September	4,895	230	144	163	.211	.24
Water year 1930-31	91,849	865	138	252	.326	4.44
October 1931	6,074	248	153	196	.254	.29
November	9,075	450	182	302	.391	.44
December	12,463	597	284	402	.520	.60
Calendar year 1931	95,561	865	138	262	.339	4.61
January 1932	26,006	1,230	405	839	1.09	1.26
February	23,616	1,750	405	814	1.05	1.13
March	18,313	1,840	284	591	.765	.88
April	19,760	1,750	362	659	.853	.95
May	21,249	1,230	362	685	.886	1.02
June	13,197	890	248	440	.569	.63
July	11,112	405	284	358	.463	.53
August	11,182	362	322	361	.467	.54
September	10,860	362	362	362	.468	.52
Water year 1931-32	182,907	1,840	153	500	.647	8.79
October 1932	11,394	405	362	368	.477	.55
November	11,476	497	362	383	.496	.55
December	17,928	1,400	362	578	.748	.86
Calendar year 1932	196,093	1,840	248	537	.693	9.42
January 1933	18,621	1,130	362	601	.778	.90
February	15,996	1,400	284	571	.739	.77
March	23,377	1,320	362	754	.975	1.12
April	34,994	1,750	497	1,166	1.51	1.68
May	36,990	1,750	546	1,193	1.54	1.78
June	11,610	497	322	387	.501	.56
July	11,570	450	362	373	.483	.56
August	11,265	405	362	363	.470	.54
September	10,860	362	362	362	.468	.52
Water year 1932-33	216,081	1,750	284	592	.766	10.39
October 1933	16,349	1,130	284	527	.682	.79
November	12,858	597	322	429	.555	.62
December	15,980	705	362	515	.666	.77
Calendar year 1933	220,470	1,750	284	604	.781	10.61
January 1934	14,795	597	284	477	.617	.71
February	10,187	405	284	364	.471	.49
March	17,077	1,230	362	551	.713	.82
April	28,822	1,750	405	961	1.24	1.38
May	11,615	497	362	375	.485	.56
June	10,785	405	284	360	.466	.52
July	11,064	362	284	357	.462	.53
August	10,929	405	182	353	.457	.53
September	10,584	362	284	353	.457	.51
Water year 1933-34	171,045	1,750	182	469	.607	8.23
October 1934	10,029	546	5	324	.419	.48
November	11,081	497	362	369	.477	.53
December	11,398	450	362	368	.476	.55
Calendar year 1934	158,366	1,750	5	434	.561	7.61
January 1935	13,819	890	322	446	.577	.67
February	15,641	1,320	362	559	.723	.75
March	44,688	2,580	405	1,442	1.87	2.16
April	11,360	556	330	379	.490	.55
May	16,723	970	330	539	.697	.80
June	18,734	1,380	330	624	.807	.90
July	11,055	718	254	357	.462	.53
August	9,318	506	254	301	.389	.45
September	8,730	291	291	291	.376	.42
Water year 1934-35	182,396	2,580	5	500	.647	8.79

Discharge, in second-feet, Thornapple River near Caledonia, Michigan, 1931-37--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 1935	9,268	310	291	299	0.387	0.45
November	13,718	662	310	457	.591	.66
December	12,373	531	350	399	.516	.59
Calendar year 1935	185,427	2,580	254	508	.657	8.93
January 1936	12,148	459	371	392	.507	.58
February	17,232	2,680	330	594	.768	.83
March	44,314	2,200	570	1,429	1.85	2.13
April	17,984	970	409	599	.775	.86
May	15,212	970	341	491	.635	.73
June	9,119	386	283	304	.393	.44
July	8,465	434	266	273	.353	.41
August	8,263	283	266	267	.345	.40
September	16,075	1,400	249	536	.693	.77
Water year 1935-36	184,171	2,680	249	503	.651	8.85
October 1936	16,035	800	363	517	.669	.77
November	11,793	507	123	393	.508	.57
December	14,314	1,240	165	462	.598	.69
Calendar year 1936	190,954	2,680	123	522	.675	9.18
January 1937	24,622	1,400	321	794	1.03	1.19
February	18,404	1,160	321	657	.850	.89
March	18,362	1,320	321	592	.766	.88
April	53,386	3,780	507	1,780	2.30	2.57
May	22,702	1,750	456	732	.947	1.09
June	24,057	1,660	321	802	1.04	1.16
July	17,221	1,570	321	556	.719	.83
August	10,080	408	321	325	.420	.48
September	9,630	321	321	321	.415	.46
Water year 1936-37	240,606	3,780	123	659	.853	11.58

Note.-The above figures supersede those previously published in Water-Supply Papers 714, 729, 744, 759, 784, 804.

Muskegon River at Evart, Mich.

Location.- Wire-weight gage, lat. 43°54', long. 85°15', in sec. 34, T. 18 N., R. 8 W., on highway bridge at east edge of Evart.

Drainage area.- 1,450 square miles.

Records available.- November 1930 to June 1931, January 1934 to September 1937.

Extremes.- Maximum discharge observed during year, 3,030 second-feet Apr. 28 (gage height, 10.19 feet): minimum, 374 second-feet Aug. 7 (gage height, 6.90 feet).
1930-31, 1934-37: Maximum discharge observed, 3,910 second-feet Mar. 24, 1935 (gage height, 11.59 feet); minimum, 275 second-feet July 29, 1934 (gage height, 6.70 feet).

Remarks.- Records good except those for periods of ice effect, Dec. 2-12, Jan. 20-28, Feb. 21 to Mar. 1, and of missing gage heights Jan. 2,3, 9-12, which were computed on basis of weather records and records for Manistee River near Sherman and are poor. Discharge for Nov. 7, 25, 27, Dec. 25, Jan. 16, Feb. 7, Mar. 16, 26, Apr. 9, June 3, 10, 26, July 7, Aug. 20, 29, Sept. 17, 25 interpolated. Gage read once daily.

Rating table, water year 1936-37 (gage height, in feet, and discharge in second-feet)

6.9	374
7.0	422
7.2	527
7.4	644
7.6	773
8.0	1,050
8.6	1,520
9.4	2,230
10.2	3,030

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	556	740	584	2,230	1,120	1,000	773	2,430	910	527	448	422
2	527	910	600	2,050	1,120	841	807	2,330	841	527	422	422
3	527	980	620	1,870	1,050	841	807	2,230	807	500	422	422
4	500	980	610	1,690	1,050	910	910	1,960	773	473	398	422
5	500	910	600	1,360	980	980	980	1,870	773	473	398	422
6	500	910	580	1,360	910	1,050	1,870	1,780	707	473	374	398
7	527	893	550	1,200	945	1,200	2,330	1,440	676	460	374	398
8	527	876	540	1,690	980	1,200	2,050	1,360	644	448	448	398
9	500	807	550	1,600	1,050	980	1,960	1,200	644	422	448	398
10	707	807	560	1,400	1,050	910	1,870	1,120	614	448	473	398
11	644	807	580	1,100	1,050	876	1,520	1,050	584	422	556	556
12	644	773	600	1,200	1,050	676	1,520	1,050	584	448	614	500
13	910	773	614	1,360	1,050	773	1,520	1,050	584	527	676	500
14	980	740	676	1,360	1,600	910	1,440	1,200	584	556	644	500
15	1,280	740	644	1,360	1,440	841	1,360	1,280	644	584	614	556
16	1,360	707	644	1,240	1,280	807	1,360	1,280	644	614	614	556
17	1,360	707	644	1,120	1,050	773	1,280	1,360	676	614	527	556
18	1,280	676	614	1,120	980	740	1,280	1,360	876	584	527	556
19	1,120	614	584	1,050	910	740	1,200	1,320	910	527	473	556
20	1,050	614	556	1,000	980	740	1,200	1,280	910	527	473	584
21	1,050	644	556	980	1,300	740	1,200	1,280	910	500	473	500
22	980	676	556	960	1,300	773	1,870	1,200	876	448	473	473
23	980	644	556	940	1,350	807	2,050	1,200	740	448	473	473
24	910	644	556	940	1,350	773	2,050	1,120	707	448	473	473
25	876	629	803	1,000	1,300	740	2,140	1,050	707	448	473	486
26	876	614	1,050	1,050	1,250	692	2,730	1,050	676	500	473	500
27	807	570	1,960	1,000	1,250	644	2,930	1,050	644	500	448	527
28	740	527	2,140	1,100	1,200	644	3,030	980	614	473	448	500
29	740	500	2,230	1,200	-	644	2,930	980	584	500	448	500
30	676	556	2,230	1,200	-	644	2,730	980	556	473	448	500
31	707	-	2,330	1,120	-	676	-	910	-	448	422	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	25,341	1,360	500	817	0.563	0.65
November	21,968	980	500	732	.505	.56
December	26,917	2,330	540	868	.599	.69
Calendar year 1936	251,253	2,440	288	686	.473	6.44
January	39,850	2,230	940	1,285	.886	1.02
February	31,945	1,600	910	1,141	.787	.82
March	25,565	1,200	644	825	.569	.66
April	51,697	3,030	773	1,723	1.19	1.33
May	41,750	2,430	910	1,347	.929	1.07
June	21,399	910	556	713	.492	.55
July	15,340	614	422	495	.341	.39
August	14,975	676	374	483	.333	.38
September	14,452	584	398	482	.332	.37
Water year 1936-37	331,199	3,030	374	907	.625	8.49

Muskegon River at Newaygo, Mich.

Location.- Staff gage, lat. 43°25', long. 85°48', in sec. 24, T. 12 N., R. 13 W., in tail-race of power plant operated by Consumers Power Company at Newaygo.

Drainage area.- 2,350 square miles.

Records available.- October 1930 to September 1937. June 1901 to December 1908, at site above Newaygo.

Extremes.- Maximum daily discharge during year, 6,250 second-feet Dec. 28, 30, 31 (gage height, 50.0 feet); minimum, 580 second-feet Aug. 15 (gage height, 46.5 feet). 1901-6, 1930-37: Maximum daily discharge, 8,000 second-feet May 3, 1933 (gage height, 50.7 feet); minimum, 390 second-feet July 13, 1934 (gage height, 46.2 feet).

Remarks.- Records fair except those for Sept. 20-30, which were computed on basis of weather records and records for station at Evart and are poor. Flow regulated at Croton Dam 18 miles upstream and by operation of power plant at Newaygo. Gage-height record furnished by Consumers Power Company.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

46.5	580
47.0	1,020
47.4	1,380
47.8	1,760
48.2	2,260
48.6	2,960
49.0	3,840
50.0	6,250

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,200	1,110	1,020	4,070	1,870	3,390	1,870	4,540	1,760	1,380	665	1,290
2	1,110	1,380	1,020	3,610	2,120	3,390	1,870	4,300	1,760	1,380	930	1,110
3	1.020	1,560	1,020	3,170	2,120	3,390	1,870	4,300	1,760	1,020	1,380	930
4	1,110	1,760	1,020	2,420	2,260	3,390	1,760	4,300	1,110	1,020	1,470	665
5	1,110	1,760	1,020	2,420	2,120	3,390	1,760	3,840	1,110	1,020	1,380	665
6	1,200	1,760	750	2.260	2,120	2,260	1,870	3,610	1,110	930	1,110	750
7	1,470	1,760	1,020	2,420	2,120	2,120	1,760	2,770	1,380	1,020	750	1,200
8	1,290	1,560	1,020	2,960	2,120	2,590	1,760	3,610	1,760	1,110	665	1,200
9	1,110	1,760	840	4,300	2,120	2,960	1,760	1,870	1,760	840	840	1,110
10	1,110	1,760	840	4,300	2,120	2,590	1,760	1,760	1,560	665	1,110	1,200
11	1,110	1,760	665	3,390	2,120	2,420	1,760	1,760	1,200	665	1,110	640
12	1,470	1,760	840	3,390	2,120	2,260	1,760	1,760	1,110	750	1,020	750
13	1,660	1,760	1,020	3,170	2,120	1,870	1,760	1,760	1,110	840	930	1,200
14	1,560	1,290	1,020	2,590	2,260	1,660	1,760	1,290	1,020	1,020	665	1,470
15	1,560	1,290	1,110	2,770	2,770	1,760	1,990	1,110	1,020	1,200	580	1,380
16	1,760	1,290	1,110	2,420	3,610	1,760	2,120	1,290	1,110	1,200	750	1,470
17	1,870	1,560	1,020	2,420	3,610	1,760	1,760	1,760	1,380	840	1,110	1,470
18	1,760	1,660	1,020	2,420	3,170	1,760	1,760	1,990	1,760	665	1,380	1,200
19	1,990	1,660	1,020	2,420	2,770	1,760	1,870	2,260	1,380	840	1,380	1,470
20	1,990	1,660	930	1,990	2,590	1,760	1,990	2,120	1,110	1,020	840	1,250
21	2,120	1,380	1,020	1,760	2,960	1,760	2,120	1,990	1,110	1,020	1,020	1,150
22	2,120	1,200	1,380	1,660	3.610	1,760	2,770	1,990	1,380	1,020	930	1,120
23	1,990	1,290	1,560	930	3,610	1,760	3,390	1,760	1,760	1,020	665	1,100
24	1,760	1,290	1,110	930	3,610	1,760	3,390	2,120	1,870	1,020	1,020	1,080
25	1,760	1,110	840	1,380	3,610	1,760	3,390	2,120	1,380	750	1,020	1,050
26	1,760	1,020	1,990	1,470	3,610	1,760	3,390	2,120	1,200	1,110	1,020	1,020
27	1,760	1,110	4,540	1,470	3,390	1,660	3,610	2,120	1,110	1,110	1,020	1,000
28	1,560	1,110	6,250	1,560	3,390	1,660	4,070	2,120	1,290	1,380	1,020	1,000
29	1,560	665	6,000	1,760	-	1,660	4,300	1,660	1,290	1,560	665	1,000
30	1,200	840	6,250	1,020	-	1,660	4,300	1,760	1,290	1,110	930	1,000
31	1,110	-	6,250	1,380	-	1,560	-	1,760	-	840	1,380	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	47,160	2,120	1,020	1,521	0.647	0.75
November	42,875	1,760	665	1,429	.608	.68
December	56,515	6,250	665	1,823	.775	.89
Calendar year 1936	485,455	6,250	425	1,326	.564	7.68
January	74,230	4,300	930	2,395	1.02	1.18
February	76,020	3,610	1,870	2,715	1.16	1.21
March	67,000	3,390	1,560	2,161	.920	1.06
April	71,300	4,300	1,760	2,377	1.01	1.13
May	73,520	4,540	1,110	2,372	1.01	1.16
June	40,950	1,870	1,020	1,365	.581	.65
July	31,365	1,560	665	1,012	.431	.50
August	30,755	1,470	580	992	.422	.49
September	33,140	1,470	665	1,105	.470	.52
Water year 1936-37	644,830	6,250	580	1,767	.752	10.22

Manistee River near Sherman, Mich.

Location.- Wire-weight gage, lat. 44°26', long. 85°42', on line between sec. 36, T. 24 N., R. 12 W. and sec. 31, T. 24 N., R. 11 W., 150 feet above mouth of Wheeler Creek and three-quarters of a mile north of Sherman.

Drainage area.- 900 square miles.

Records available.- July 1903 to May 1916, November 1930 to June 1931, January 1934 to September 1937.

Average discharge.- 15 years (1903-15, 1934-37), 1,102 second-feet.

Extremes.- Maximum discharge observed during year, 2,080 second-feet Jan. 7; maximum gage height, 12.31 feet Feb. 22 (backwater from ice); minimum discharge, about 600 second-feet Dec. 8 (backwater from ice).
1903-16, 1930-31, 1934-37: Maximum discharge observed, 3,500 second-feet Mar. 25, 1913 (gage height, 7.0 feet, former datum); minimum, 540 second-feet Aug. 9, 1936 (gage height, 8.55 feet).

Remarks.- Records good except those for periods of ice effect, Dec. 1-23, Jan. 12-15, 20-23, 25, 26, 28, Feb. 21-23, which were computed on basis of two discharge measurements, weather records, and records for stations on Muskegon River and are poor. Gage read once daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	862	955	850	1,550	1,220	955	923	1,220	892	833	862	778
2	862	1,100	840	1,400	1,060	990	923	1,180	862	805	833	778
3	833	862	830	1,260	955	955	923	1,140	862	805	833	862
4	833	1,180	820	1,180	955	955	923	1,140	862	805	833	833
5	833	1,140	800	805	1,060	955	1,100	1,100	862	805	805	892
6	862	1,100	770	805	1,100	990	1,220	1,060	862	805	1,020	862
7	862	1,060	720	2,080	955	1,020	1,220	1,060	862	805	923	833
8	862	1,020	650	1,220	990	1,060	1,140	1,020	862	805	923	833
9	833	990	700	1,500	1,060	990	1,140	1,020	833	805	892	805
10	1,020	955	750	1,260	990	955	1,140	1,020	833	778	892	1,020
11	990	955	750	1,180	990	833	1,100	990	833	805	892	1,060
12	1,140	955	700	1,200	923	955	1,060	990	833	892	862	1,020
13	1,100	955	700	1,200	1,140	923	1,060	990	833	955	892	923
14	1,100	923	750	1,180	1,310	923	1,060	990	833	955	862	923
15	1,100	892	750	1,150	1,220	923	1,140	990	833	990	833	923
16	1,100	923	770	1,140	1,020	923	1,100	990	833	1,100	833	1,060
17	1,140	923	800	1,260	923	892	1,060	990	955	1,180	1,020	1,060
18	1,100	923	820	1,220	955	923	1,060	990	1,020	1,060	923	1,020
19	1,140	923	820	1,060	955	923	1,060	990	990	955	892	990
20	1,060	892	810	1,020	1,020	923	1,060	955	923	892	892	923
21	1,060	892	800	1,000	1,350	892	1,060	955	923	862	892	923
22	1,060	923	800	950	1,300	923	1,310	990	892	862	862	892
23	990	923	840	900	1,200	923	1,360	990	862	833	862	892
24	990	892	892	805	1,220	923	1,360	955	862	805	1,060	862
25	955	892	923	850	1,140	923	1,360	955	833	805	1,020	862
26	955	892	805	850	1,100	892	1,450	923	862	862	1,020	862
27	923	892	1,550	805	1,020	892	1,500	955	862	923	990	862
28	923	892	1,800	1,000	923	892	1,450	923	862	955	923	862
29	923	862	1,650	1,310	-	892	1,400	923	862	955	862	833
30	923	862	1,600	1,400	-	892	1,310	923	833	955	778	833
31	892	-	1,650	1,600	-	892	-	892	-	892	778	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	30,226	1,140	833	975	1.08	1.24
November	28,548	1,180	862	952	1.06	1.18
December	28,710	1,800	650	926	1.03	1.19
Calendar year 1936	332,663	1,880	540	909	1.01	13.74
January	36,040	2,080	805	1,163	1.29	1.49
February	30,054	1,350	923	1,073	1.19	1.24
March	28,902	1,060	833	932	1.04	1.20
April	34,972	1,500	923	1,166	1.30	1.45
May	31,209	1,220	892	1,007	1.12	1.29
June	26,131	1,020	833	871	.968	1.08
July	27,544	1,180	778	889	.988	1.14
August	27,764	1,060	778	896	.996	1.15
September	27,081	1,060	778	903	1.00	1.12
Water year 1936-37	357,181	2,080	650	979	1.09	14.77

Rifle River at Michigan Highway 70, near Sterling, Mich.

Location.- Chain gage, lat. 44°04', long. 84°02', in sec. 5, T. 19 N., R. 4 E., at bridge on State Highway 70, 3 miles north of Sterling.

Drainage area.- 320 square miles.

Records available.- January to September 1937. 1905-8, at site 7 miles downstream.

Extremes.- Maximum discharge observed during period, 2,060 second-feet Apr. 27 (gage height, 7.48 feet); minimum, 110 second-feet Aug. 16, 17, 30 (gage height, 1.30 feet).

Remarks.- Records good except those for periods of ice effect and missing gage-height record, Jan. 17 to Mar. 28, May 18 to June 3, which were computed on basis of weather records and records for stations on Tittabawassee, Black, and Clinton Rivers. Gage read twice daily.

Rating table, water year 1936-37 (gage height, in feet and discharge, in second-feet)

1.3	110	3.2	500
1.4	121	3.6	618
1.6	146	4.0	743
1.8	175	5.0	1,090
2.0	210	6.0	1,460
2.4	292	7.5	2,060
2.6	390		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				-	350	260	249	618	240	160	192	140
2				-	340	260	239	558	230	153	121	153
3				-	320	270	249	444	210	153	153	175
4				-	300	280	260	444	192	160	160	201
5				-	290	300	390	417	260	127	153	292
6				-	280	310	915	364	201	168	168	192
7				-	280	320	680	364	175	153	160	210
8				-	310	310	529	339	201	127	184	184
9				-	330	300	444	339	192	146	127	175
10				-	320	280	390	315	184	175	146	160
11				-	320	270	339	292	175	192	160	315
12				-	310	260	339	339	201	260	184	390
13				364	310	255	339	339	175	220	201	229
14				417	320	250	364	364	175	210	184	210
15				417	320	250	364	315	192	192	175	239
16				315	320	250	339	315	201	184	116	292
17				350	310	245	339	364	315	192	140	239
18				320	310	240	339	340	472	175	146	201
19				300	320	240	339	310	249	146	140	201
20				300	320	235	339	320	239	168	153	160
21				310	330	230	339	300	175	140	153	192
22				310	350	230	1,380	280	192	146	184	175
23				300	340	225	915	260	168	160	127	175
24				290	340	220	610	280	160	146	153	175
25				280	330	220	845	290	175	175	146	229
26				280	310	220	1,060	300	184	201	146	281
27				280	290	215	1,940	330	184	210	146	201
28				290	270	210	1,380	320	146	184	140	220
29				300	-	201	985	300	160	160	127	192
30				310	-	239	775	280	160	146	133	192
31				330	-	249	-	260	-	153	160	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October						
November						
December						
Calendar year						
January 13-31	6,063	417	280	319	0.997	0.70
February	8,840	350	270	316	.988	1.03
March	7,844	320	201	253	.791	.91
April	18,214	1,940	239	607	1.90	2.12
May	10,700	618	280	345	1.08	1.24
June	6,183	472	146	206	.644	.72
July	5,282	260	127	170	.531	.61
August	4,778	201	116	154	.481	.55
September	6,390	390	140	213	.666	.74
Water year						

Shiawassee River at Owosso, Mich.

Location.- Water-stage recorder, lat. 43°00'45", long. 84°10'50", in sec. 13, T. 7 N., R. 2 E., at north city limits of Owosso. Zero of gage is 707.65 feet above mean sea level.

Drainage area.- 538 square miles.

Records available.- March 1931 to September 1937.

Extremes.- Maximum discharge during year, 2,310 second-feet Apr. 22 (gage height, 6.46 feet); minimum, 15 second-feet Sept. 14; minimum gage height, 1.75 feet Oct. 24.
1931-37: Maximum discharge, that of Apr. 22, 1937; minimum, 0.2 second-foot July 27, 1934 (gage height, 1.12 feet).
Maximum elevation known, 726 feet above mean sea level at former site during ice jam in 1918.

Remarks.- Records good except those for periods of ice effect Dec. 7-23, Jan. 10-12, Jan. 22 to Feb. 7, and period of missing gage heights, Feb. 12 to Mar. 1, which were computed on basis of two discharge measurements, weather records, gage heights, and records for stations on Flint River and are poor. Flow regulated by operation of power plant at Shiawasseetown. Gage-height record furnished by city of Owosso.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	95	117	134	205	220	300	169	1,010	492	175	156	99
2	104	132	104	237	200	308	196	860	380	172	127	41
3	101	132	108	172	170	308	196	760	286	159	117	74
4	108	144	110	183	150	386	183	692	264	151	106	65
5	99	169	121	157	130	472	253	692	270	167	72	68
6	113	172	111	227	125	394	648	648	315	136	67	54
7	156	151	105	169	170	352	625	532	292	154	67	65
8	141	169	100	194	253	318	625	476	264	132	65	90
9	141	149	95	295	540	286	580	439	243	134	145	49
10	139	151	90	220	411	243	492	414	246	110	140	49
11	141	132	85	170	404	258	390	341	240	93	205	60
12	129	127	80	170	420	255	380	341	234	93	208	38
13	132	127	75	244	440	258	352	315	219	93	202	62
14	132	132	75	359	430	206	335	348	240	106	196	42
15	124	146	75	408	370	192	523	180	261	108	172	47
16	127	154	75	345	350	188	670	208	255	124	180	39
17	132	141	75	331	320	183	1,200	985	334	149	168	47
18	117	124	75	299	280	180	1,650	785	208	167	245	50
19	117	129	75	267	250	175	1,350	670	366	164	267	37
20	117	136	75	236	250	167	1,320	560	308	177	308	49
21	108	129	75	213	375	164	1,590	500	283	144	352	39
22	113	124	80	200	475	169	2,030	442	274	126	237	46
23	162	120	90	170	450	169	1,500	476	286	120	228	26
24	90	101	106	150	425	175	1,320	560	352	134	191	41
25	134	108	117	170	400	169	1,830	560	372	122	164	44
26	124	127	120	160	375	149	1,530	520	362	159	151	45
27	120	132	134	150	350	164	1,500	524	292	156	124	48
28	117	91	149	140	325	194	1,650	648	261	183	113	38
29	127	126	150	130	-	191	1,380	648	252	196	110	48
30	134	146	154	130	-	191	1,170	648	222	164	101	36
31	124	-	205	200	-	169	-	560	-	164	97	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,818	162	90	123	0.229	0.26
November	4,038	172	91	135	.251	.28
December	3,223	205	75	104	.193	.22
Calendar year 1936	62,036.4	1,040	4.8	169	.314	4.27
January	6,701	408	130	216	.401	.46
February	9,058	540	125	324	.602	.63
March	7,333	472	149	237	.441	.51
April	27,637	2,030	169	921	1.71	1.91
May	17,342	1,010	180	559	1.04	1.20
June	8,673	492	208	289	.537	.60
July	4,432	196	93	143	.266	.31
August	5,081	352	65	164	.305	.35
September	1,535	99	26	51.2	.095	.11
Water year 1936-37	98,871	2,030	26	271	.504	6.84

Flint River at Genesee, Mich.

Location.- Wire gage, lat. 43°06'25", long. 83°37'00", in sec. 10, T. 8 N., R. 7 E., at highway bridge at Genesee. Zero of gage is 695.84 feet above mean sea level.

Drainage area.- 593 square miles.

Records available.- March 1931 to September 1937.

Extremes.- Maximum discharge observed during year, 1,460 second-feet Apr. 25 (gage height, 18.58 feet); minimum, 48 second-feet Aug. 3, 6 (gage height, 12.93 feet).
1931-37: Maximum discharge observed, 3,380 second-feet Mar. 8, 1935 (gage height, 22.50 feet); minimum, about 10 second-feet Aug. 15, 1936.

Remarks.- Records fair except those for periods of ice effect or missing gage heights Oct. 7, 18, Nov. 26, Dec. 1, 2, 11-24, 29-31, Jan. 23-26, Feb. 24 to Mar. 3, May 19, July 4, 5, which were computed on basis of records for station near Flint, and are poor.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	112	120	262	222	375	185	1,130	222	119	67	127
2	86	104	100	272	212	375	203	890	194	119	60	127
3	89	104	119	272	212	375	242	715	176	119	49	119
4	83	112	104	272	212	565	232	590	168	115	51	143
5	89	104	96	305	203	690	252	493	151	125	62	151
6	78	112	96	283	185	690	350	397	151	96	49	135
7	87	104	89	242	166	690	665	373	135	89	64	135
8	96	96	85	194	168	690	665	350	119	82	151	112
9	104	96	85	203	305	590	615	327	127	78	690	104
10	89	89	89	212	517	493	541	305	143	76	800	96
11	81	89	85	222	493	445	517	283	143	71	860	112
12	69	89	85	222	493	445	517	262	127	69	920	119
13	71	82	80	232	493	421	517	262	127	283	920	119
14	74	85	80	373	541	305	517	272	151	203	860	112
15	82	75	80	373	469	272	541	242	168	160	665	104
16	75	67	80	350	421	222	590	242	176	143	421	112
17	76	81	80	327	373	185	665	305	168	151	373	104
18	74	86	80	327	350	176	690	327	272	119	327	104
19	72	83	80	305	350	176	690	316	373	112	397	96
20	71	89	80	283	350	168	690	305	327	89	615	104
21	76	75	80	283	350	203	830	283	283	88	615	104
22	83	75	85	262	565	212	1,380	252	262	83	565	96
23	74	79	90	230	590	212	1,190	242	222	82	541	86
24	79	96	100	210	550	194	1,220	232	185	75	397	81
25	76	72	127	200	500	185	1,460	222	168	86	283	89
26	89	92	127	190	475	194	1,350	203	160	83	262	104
27	96	112	127	185	425	203	1,350	222	143	82	252	104
28	104	119	135	176	400	194	1,280	252	135	85	185	96
29	96	127	180	168	-	194	1,220	305	135	81	194	104
30	104	135	230	176	-	203	1,220	283	127	79	151	89
31	104	-	250	194	-	194	-	252	-	74	135	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,616	104	69	84.4	0.142	0.16
November	2,841	135	67	94.7	.160	.18
December	3,324	250	80	107	.180	.21
Calendar year 1936	74,679	1,730	10	204	.344	4.69
January	7,805	373	168	252	.425	.49
February	10,592	590	168	378	.637	.66
March	10,536	690	168	340	.573	.66
April	22,384	1,460	185	746	1.26	1.41
May	11,134	1,130	203	359	.605	.70
June	5,438	373	119	181	.305	.34
July	3,316	283	69	107	.180	.21
August	11,961	920	49	386	.651	.75
September	3,288	151	81	110	.185	.21
Water year 1936-37	95,235	1,460	49	261	.440	5.98

Flint River near Flint, Mich.

Location.- Water-stage recorder, lat. 43°02'20", long. 83°46'10", in SW¼ sec. 4, T. 7 N., R. 6 E., at sewage-treatment plant 2 miles below Flint. Zero of gage is 678.80 feet above mean sea level.

Drainage area.- 927 square miles.

Records available.- August 1932 to September 1937.

Extremes.- Maximum discharge during year, 3,250 second-feet Aug. 10 (gage height, 8.10 feet); minimum discharge, 45 second-feet July 21; minimum gage height, 2.34 feet Dec. 7.
1932-37: Maximum discharge, 5,740 second-feet Mar. 11, 1935 (gage height, 9.28 feet); minimum, 9.0 second-feet Aug. 7, 1934.

Remarks.- Records good. Some regulation at storage dams upstream. City of Flint diverts water for municipal and industrial use above gage, but sewage from city is included in flow at gage. Gage-height record furnished by city of Flint.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	137	157	106	319	237	373	296	1,700	382	119	83	115
2	113	261	72	301	241	337	332	1,380	306	117	83	113
3	113	205	79	261	211	306	337	1,040	265	109	85	115
4	107	188	86	229	191	516	360	795	233	119	93	150
5	107	191	86	176	162	795	526	795	208	130	82	140
6	135	185	98	194	150	770	1,360	720	215	117	59	160
7	171	171	92	222	137	745	1,310	670	201	115	291	179
8	128	165	90	292	342	770	1,130	602	171	94	78	147
9	126	157	83	378	795	670	1,190	580	142	64	1,740	106
10	126	150	80	296	562	362	1,160	576	188	75	2,600	104
11	107	144	90	278	479	274	1,070	566	165	77	1,250	126
12	104	133	90	176	490	440	745	512	162	238	1,200	94
13	106	130	83	342	530	360	720	445	188	611	613	109
14	104	142	86	526	571	271	580	558	324	436	902	104
15	102	135	82	562	517	174	745	504	229	270	820	126
16	94	130	86	440	468	198	985	493	237	160	695	117
17	107	126	91	346	422	211	1,520	820	288	233	544	106
18	96	130	94	404	368	233	2,180	648	432	237	602	113
19	102	119	91	306	288	225	1,740	602	517	198	720	111
20	96	122	93	253	283	211	1,620	548	508	107	1,040	104
21	106	124	91	265	442	211	2,010	517	445	58	1,250	113
22	119	126	85	270	745	229	3,220	517	400	83	902	150
23	135	122	90	215	602	241	2,260	481	355	75	745	104
24	122	113	93	168	576	257	2,020	278	257	68	468	77
25	126	115	107	185	526	253	2,440	373	142	72	372	124
26	191	100	124	165	508	261	2,440	404	191	98	422	115
27	144	91	186	152	476	225	2,530	540	162	94	292	104
28	152	118	241	147	422	211	2,350	580	154	86	274	106
29	157	135	245	144	-	306	2,100	530	126	94	201	102
30	154	130	261	135	-	306	1,860	468	122	83	157	111
31	147	-	337	222	-	306	-	422	-	85	107	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,834	191	94	124	0.134	0.15
November	4,315	261	91	144	.155	.17
December	3,618	337	72	117	.126	.15
Calendar year 1936	102,288	1,950	19	279	.301	4.11
January	8,369	562	135	270	.291	.34
February	11,741	795	137	419	.452	.47
March	11,067	795	174	357	.385	.44
April	43,136	3,220	296	1,438	1.55	1.73
May	19,664	1,700	278	634	.684	.79
June	7,735	517	122	258	.278	.31
July	4,522	611	58	146	.157	.18
August	18,970	2,600	59	612	.660	.76
September	3,545	179	77	118	.127	.14
Water year 1936-37	140,816	3,220	58	385	.415	5.63

Farmers Creek near Lapeer, Mich.

Location.- Staff gage, lat. 43°02', long. 83°20', at footbridge at Michigan Home and Training School, 2 miles West of Lapeer. Zero of gage is 806.48 feet above mean sea level.

Drainage area.- 57 square miles.

Records available.- March 1933 to September 1937.

Extremes.- Maximum discharge observed during year, 175 second-feet Apr. 23 (gage height, 16.88 feet); minimum discharge, 1.2 second-feet Jan. 1 (gage height, 14.18 feet).
1933-37: Maximum discharge observed, 238 second-feet Mar. 6, 1935; maximum gage height, 17.34 feet Feb. 28, 1936 (ice jam); minimum discharge not determined.

Remarks.- Records fair except those for periods of ice effect, Dec. 6-22, Jan. 11, 12, 21-29, which were computed on basis of weather records and records for Flint River near Flint and are poor. Occasional regulation at dam above gage. Gage read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	18	5.2	4.2	12	19	19	93	32	46	8.2	24
2	8.6	17	5.8	23	12	17	21	71	30	46	7.5	23
3	8.3	16	5.5	24	11	15	22	59	26	43	7.2	22
4	9.2	15	5.8	22	11	20	24	49	24	40	6.5	30
5	8.0	14	5.5	17	10	22	28	46	22	38	6.0	28
6	9.2	13	5	15	9.6	30	35	38	22	32	5.5	26
7	12	13	5	15	9.3	43	46	32	21	30	8.5	24
8	12	12	5	20	12	43	107	30	21	26	8.2	22
9	10	12	5	23	21	35	107	28	26	23	24	21
10	8.9	12	5	15	25	28	80	30	28	19	46	20
11	7.7	11	5	15	30	24	59	30	28	18	93	24
12	7.4	12	5	15	38	20	49	28	28	15	122	22
13	6.6	11	5	19	43	19	40	26	28	16	107	20
14	7.1	10	5	26	40	18	35	24	43	16	75	19
15	5.7	10	5	28	32	16	38	23	43	20	52	20
16	5.1	11	5	26	30	14	43	21	43	18	38	19
17	6.3	10	5	28	26	49	67	28	56	16	35	18
18	6.8	9.5	5	28	22	20	107	30	67	15	49	17
19	8.0	9.8	5	28	20	18	164	32	71	14	43	18
20	7.4	8.6	5	19	21	18	153	32	75	13	153	18
21	6.8	8.0	5	17	25	13	132	30	75	11	127	17
22	9.2	7.1	6	15	30	18	132	28	71	9.9	117	16
23	9.2	6.0	6.8	13	38	20	175	26	63	9.0	93	15
24	8.6	5.4	7.5	12	46	20	164	25	59	9.6	71	14
25	10	6.3	7.0	11	43	19	142	24	56	10	52	14
26	15	6.0	7.5	10	35	21	122	23	49	13	43	15
27	14	5.0	9.3	9	30	21	127	30	46	13	38	16
28	14	5.2	6.5	9	26	28	132	30	43	13	35	15
29	16	4.8	25	9	-	17	132	35	49	13	30	14
30	16	5.0	13	9.0	-	18	117	38	49	11	28	14
31	15	-	10	12	-	20	-	32	-	9.0	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	297.9	16	5.1	9.61	0.169	0.19
November	303.7	18	4.8	10.1	.177	.20
December	206.4	25	5	6.66	.117	.13
Calendar year 1936	5,628.1	130	.6	15.4	.270	3.65
January	536.2	28	4.2	17.3	.304	.35
February	707.9	46	9.3	25.3	.444	.46
March	698	49	13	22.5	.395	.46
April	2,619	175	19	87.3	1.53	1.71
May	1,071	93	21	34.5	.605	.70
June	1,294	75	21	43.1	.756	.84
July	625.5	46	9.0	20.2	.354	.41
August	1,551.6	153	5.5	50.1	.879	1.01
September	585	30	14	19.5	.342	.38
Water year 1936-37	10,496.2	175	4.2	28.8	.505	6.84

Tittabawassee River at Midland, Mich.

Location.- Water-stage recorder, lat. 40°36', long. 84°15', in NE¼ sec. 28, T. 14 N., R. 2 E., 0.5 mile south of Midland and 1 mile below Pine River.

Drainage area.- 2,400 square miles.

Records available.- March 1936 to September 1937.

Extremes.- Maximum discharge during year 11,600 second-feet Apr. 28 (gage height, 12.23 feet); minimum, 190 second-feet Nov. 27; minimum gage height, 0.22 foot Mar. 25. 1936-37: Maximum discharge, that of Apr. 28, 1937; minimum, 103 second-feet Aug. 14, 1936.

Remarks.- Records good. Water for industrial use is diverted from river a short distance above gage. A small part of the water diverted is returned to river a quarter of a mile below gage and remainder is returned to river 1 mile below gage and below control. Table of monthly discharge corrected for diversion. Gage-height records, some discharge measurements, and records of diversion furnished by Dow Chemical Company.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	841	425	280	3,180	1,800	927	1,710	3,930	850	329	393	279
2	624	682	476	3,080	1,320	962	1,800	3,480	630	357	336	372
3	292	1,100	425	2,230	799	877	1,060	2,470	684	288	386	384
4	310	1,440	613	2,100	1,110	1,830	1,160	2,230	866	378	362	302
5	341	1,070	440	1,320	888	2,410	2,110	1,910	740	363	336	292
6	437	1,140	315	652	630	2,500	4,110	1,800	670	343	414	261
7	381	1,120	359	910	613	1,680	4,480	1,760	447	311	325	248
8	423	508	374	2,000	770	1,760	3,750	1,280	485	320	309	227
9	371	562	471	3,680	1,680	2,140	3,030	995	466	290	516	239
10	594	662	650	3,780	2,000	1,450	3,300	1,080	754	428	502	788
11	575	613	546	3,080	1,220	1,200	3,030	995	575	1,020	593	629
12	548	521	513	2,360	1,050	950	2,150	1,140	398	445	524	628
13	915	492	473	1,480	1,880	875	1,620	1,340	465	292	442	455
14	886	642	454	1,880	1,960	737	1,830	1,950	362	480	381	572
15	948	415	585	1,680	2,220	790	2,150	2,150	411	710	406	613
16	1,260	585	469	1,300	1,690	800	1,910	1,260	432	1,080	628	381
17	1,150	672	573	1,020	1,220	820	1,240	2,310	1,660	601	937	411
18	635	662	807	1,240	1,440	600	1,140	1,850	1,800	306	389	401
19	721	832	536	942	1,020	737	1,520	1,360	1,310	353	294	381
20	551	930	419	674	980	765	1,680	1,610	965	611	416	338
21	877	613	376	998	1,210	1,010	2,070	1,440	935	716	446	467
22	913	395	461	562	3,480	935	2,450	816	1,280	484	343	447
23	652	629	504	550	3,780	758	3,500	634	1,130	466	334	372
24	604	630	596	445	2,880	980	5,900	1,020	749	553	311	386
25	497	625	562	519	1,500	637	7,830	1,220	639	315	311	566
26	671	416	1,520	525	1,250	620	8,500	1,360	458	390	315	530
27	710	242	2,780	540	1,000	788	10,300	1,690	411	462	297	574
28	680	361	2,780	540	882	773	10,400	1,910	442	437	362	794
29	634	361	2,410	510	-	935	6,980	1,160	408	377	297	943
30	537	319	2,590	466	-	1,300	4,680	816	357	546	274	651
31	425	-	2,680	831	-	1,430	-	681	-	648	292	-

Month	Discharge in second-feet				Mean diversion	Adjusted for diversion		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October	20,203	1,260	292	652	55	707	0.295	0.34
November	19,664	1,440	242	655	44	699	.291	.32
December	27,057	2,780	280	873	44	917	.382	.44
Calendar year								
January	45,274	3,780	445	1,460	46	1,506	.628	.72
February	42,272	3,780	613	1,510	48	1,558	.649	.66
March	35,196	2,500	620	1,135	44	1,179	.491	.57
April	107,410	10,400	1,080	3,580	47	3,627	1.51	1.68
May	49,667	3,930	634	1,602	55	1,657	.690	.80
June	21,797	1,800	357	727	64	791	.330	.37
July	14,699	1,080	288	474	62	536	.223	.26
August	12,477	937	274	402	67	469	.195	.22
September	13,931	943	227	464	59	523	.218	.24
Water year 1936-37	409,647	10,400	227	1,122	53	1,175	.490	6.64

Salt River near North Bradley, Mich.

Location.- Staff gage, lat. 43°42', long. 84°28', at Pere Marquette Railroad bridge, 1½ miles southeast of North Bradley.

Drainage area.- 138 square miles.

Records available.- June 1934 to September 1937.

Extremes.- Maximum discharge observed during year, 1,060 second-feet Apr. 27 (gage height, 7.42 feet); minimum, 2.7 second-feet Sept. 7 (gage height, 0.35 feet).
1934-37: Maximum discharge observed, about 2,400 second-feet Mar. 17, 1935; maximum gage height, about 11.6 feet Mar. 6, 1935 (ice jam); minimum discharge, 1.9 second-feet July 24, 1934.

Remarks.- Records good except those for periods of ice effect Nov. 26 to Dec. 24, Jan. 15 to Mar. 29, which were computed on basis of one discharge measurement, gage heights, and weather records and are poor. Gage read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	11	6.5	67	290	32	102	111	27	11	5.6	3.4
2	9.4	13	6.5	63	85	30	84	98	23	9.6	6.2	3.4
3	9.1	15	7.0	48	70	32	66	75	23	9.3	6.0	3.2
4	7.7	16	7.5	36	70	35	75	62	22	10	5.6	3.1
5	6.7	15	8.5	32	45	50	224	54	22	27	4.6	2.8
6	10	13	9.0	28	35	105	395	47	22	20	4.6	2.8
7	16	12	9.0	16	28	105	224	42	20	14	4.6	2.7
8	10	12	9.0	44	35	70	130	39	18	12	4.6	2.9
9	12	11	10	391	90	52	106	36	18	9.3	28	2.9
10	17	11	11	118	210	35	84	33	18	9.1	24	4.1
11	28	11	12	91	95	30	70	30	18	9.6	14	5.0
12	23	11	12	71	85	28	54	29	16	8.6	8.0	8.3
13	20	9.8	12	52	90	24	54	31	18	8.8	7.5	5.2
14	19	9.8	12	45	175	23	58	62	20	9.1	6.4	4.7
15	19	9.4	12	70	225	21	54	46	22	9.1	5.6	6.0
16	21	10	12	40	95	21	49	40	22	8.3	5.2	6.8
17	21	9.6	13	30	72	20	47	42	32	7.8	4.7	5.8
18	20	11	13	22	55	20	62	44	180	6.8	4.6	4.8
19	15	11	13	21	48	22	58	34	116	6.2	4.1	4.8
20	15	10	12	19	45	24	49	31	75	6.0	4.1	4.7
21	14	11	12	14	52	25	58	30	44	5.6	5.2	4.4
22	13	9.8	12	12	400	21	885	35	30	5.6	5.2	4.4
23	15	11	12	11	275	19	352	31	22	5.0	4.7	4.2
24	12	12	18	10	115	17	180	28	19	5.4	4.6	4.0
25	12	8.7	26	9.0	65	35	765	25	19	5.6	4.2	8.8
26	16	7.5	96	9.0	52	22	456	27	20	20	4.2	12
27	12	6.5	91	10	42	18	985	62	19	18	4.1	7.3
28	9.8	7.0	83	10	35	26	558	80	16	11	4.0	6.4
29	11	6.5	59	11	-	35	224	54	14	9.1	4.0	6.0
30	14	6.5	48	12	-	87	160	41	11	6.8	3.6	6.0
31	12	-	181	145	-	87	-	32	-	6.2	3.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	450.7	28	6.7	14.5	0.105	0.12
November	318.3	16	6.5	10.6	.077	.09
December	845.0	181	5.5	27.3	.198	.23
Calendar year 1936	16,208.9	811	2.1	44.3	.321	4.36
January	1,557	391	9.0	50.2	.364	.42
February	2,979	400	28	106	.768	.80
March	1,169	105	17	37.7	.273	.31
April	6,668	985	47	222	1.61	1.80
May	1,431	111	25	46.2	.335	.39
June	946	180	11	31.5	.228	.25
July	309.9	27	6.0	10.0	.072	.08
August	204.6	28	3.6	6.60	.048	.06
September	150.9	12	2.7	5.03	.036	.04
Water year 1936-37	17,029.4	985	2.7	46.7	.338	4.59

Chippewa River near Mount Pleasant, Mich.

Location.- Wire-weight gage, lat. 43°37'35", long. 84°42'30", on line between secs. 7 and 8, T. 14 N., R. 3 W., 4 miles northeast of Mount Pleasant.
Drainage area.- 416 square miles.
Records available.- October 1930 to July 1931, October 1932 to September 1937.
Extremes.- Maximum discharge observed during year, 1,010 second-feet Apr. 27 (gage height, 6.10 feet); minimum discharge, 41 second-feet Sept. 7; minimum gage height, 2.87 feet Dec. 16.
1930-31, 1932-37: Maximum discharge observed, about 2,500 second-feet (revised) Mar. 6, 1935 (gage height, 11.10 feet, backwater from ice); minimum discharge, 19 second-feet Aug. 16, 1935 (gage height, 3.04 feet).
Remarks.- Records fair except those for periods of ice effect and of missing gage heights, Jan. 25-30, Jan. 31, Feb. 1, Feb. 26 to Mar. 5, which were computed on basis of weather records and records for stations on Pine and Salt Rivers and are poor. Discharge for Aug. 23 interpolated. Gage read twice daily. Regulation at low stages by operation of power plant upstream.

Revised discharges in second-feet, for high-water periods, 1932-35

1932		1933		1933		1935	
Dec. 25	808	Apr. 1	808	May 5	1,690	Mar. 6	2,500
26	1,410	2	841	6	1,210	7	2,000
27	1,340	3	841	7	973	8	1,800
28	1,240	4	709	8	709	9	1,700
29	1,070	7	775	9	709	10	1,700
30	808	e	742	10	742	11	2,200
1933		11	841	1934		12	1,800
Jan. 2	742	12	973	Jan. 23	1,280	13	1,650
3	775	13	907	24	1,240	14	1,450
4	775	14	775	Mar. 18	1,300	15	1,410
Feb. 2	742	15	709	19	1,200	16	1,480
23	742	18	1,310	20	1,100	17	2,080
24	907	19	1,410	21	1,000	18	1,860
25	973	20	1,380	22	1,000	19	1,620
26	1,070	21	1,070	23	950	20	1,340
27	1,040	22	841	24	1,240	21	1,240
28	973	May 2	1,760	Apr. 4	841	22	1,240
Mar. 1	907	3	2,180	5	775	23	1,140
		4	2,280	6	709	24	1,170
						25	1,040

Note.- The above figures supersede those published in Water Supply Papers 744, 759 and 784.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	141	196	148	549	400	250	221	612	158	134	107	139
2	136	183	134	398	427	225	221	549	148	129	116	122
3	141	208	170	427	369	210	208	457	136	125	85	144
4	141	221	139	341	427	225	274	398	148	74	93	98
5	153	208	170	300	369	250	398	341	127	91	81	111
6	139	196	148	341	355	260	676	341	129	93	122	89
7	156	170	274	260	328	287	709	328	118	89	132	83
8	109	170	260	369	369	247	612	300	104	74	129	111
9	148	170	170	841	874	234	518	260	104	87	183	104
10	170	153	208	676	549	221	487	287	107	72	208	98
11	170	158	144	612	487	234	398	247	102	87	196	208
12	158	183	196	580	457	221	341	260	122	91	196	129
13	158	158	183	580	580	221	328	274	93	100	196	183
14	158	170	158	355	709	183	328	260	113	89	146	156
15	146	141	158	369	676	208	300	260	139	156	129	158
16	208	170	136	369	487	196	287	260	127	125	118	156
17	183	153	146	427	518	170	300	260	170	118	93	158
18	196	170	208	170	518	170	287	247	247	100	83	170
19	196	127	260	300	549	156	274	260	355	104	116	129
20	221	170	221	287	487	139	274	221	234	113	122	183
21	221	170	341	208	644	134	427	234	221	83	141	156
22	208	151	314	369	907	170	709	221	196	104	125	111
23	208	170	314	355	808	158	742	208	136	129	134	144
24	183	134	221	314	742	170	612	208	144	109	144	148
25	170	148	158	270	600	247	742	196	151	98	136	221
26	170	144	260	250	450	153	841	183	144	221	120	196
27	183	125	355	255	375	221	1,010	183	127	221	109	208
28	183	134	457	250	300	151	1,010	221	111	170	91	170
29	183	170	398	260	-	183	874	221	104	144	132	158
30	170	170	398	270	-	221	709	196	98	153	136	196
31	170	-	549	310	-	208	-	208	-	153	78	-

Discharge, in second feet of, Chippewa River near Mount Pleasant, Michigan, 1932-37--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 1932	5,196	310	54	168	0.404	0.47
November	7,066	374	150	236	.567	.63
December	12,705	1,410	181	410	.986	1.14
Calendar year						
January 1933	11,295	775	181	364	.875	1.01
February	13,054	1,070	250	466	1.12	1.17
March	10,720	907	208	346	.832	.96
April	23,195	1,410	456	773	1.86	2.08
May	21,989	2,280	250	709	1.70	1.96
June	5,445	295	88	182	.437	.49
July	4,508	208	77	145	.349	.40
August	4,288	194	96	138	.332	.38
September	4,767	250	85	159	.382	.43
Water year 1932-33	124,228	2,280	54	340	.817	11.12
October 1933	6,824	595	153	220	0.529	0.61
November	7,506	295	208	250	.601	.67
December	8,658	490	160	279	.671	.77
Calendar year 1933	122,249	2,280	77	335	.805	10.93
January 1934	15,281	1,280	250	493	1.19	1.37
February	7,120	310	240	254	.611	.64
March	15,368	1,300	222	496	1.19	1.37
April	12,391	841	236	413	.993	1.11
May	6,639	280	136	214	.514	.59
June	4,004	171	100	133	.320	.36
July	2,939	138	62	94.8	.228	.26
August	2,962	131	71	95.5	.230	.27
September	5,219	250	109	174	.418	.47
Water year 1933-34	94,911	1,300	62	260	.625	8.49
October 1934	4,175	196	66	135	0.324	0.37
November	8,772	775	98	292	.702	.78
December	8,889	644	170	287	.690	.80
Calendar year 1934	93,759	1,300	62	257	.618	8.32
January 1935	12,020	1,000	210	388	.933	1.08
February	8,710	600	200	311	.748	.78
March	40,068	2,500	400	1,293	3.11	3.58
April	10,254	549	221	342	.822	.92
May	7,998	398	183	258	.620	.71
June	5,457	234	134	182	.438	.49
July	4,386	183	81	141	.339	.39
August	4,399	274	74	142	.341	.39
September	3,738	183	68	125	.300	.33
Water year 1934-35	118,866	2,500	66	326	.784	10.62
October 1935	4,099	183	87	132	0.317	0.37
November	6,093	247	141	203	.488	.54
December	5,891	234	160	190	.457	.53
Calendar year 1935	113,113	2,500	68	310	.745	10.11
January 1936	6,365	240	160	205	.493	.57
February	6,600	550	155	228	.548	.59
March	20,857	915	457	673	1.62	1.87
April	10,723	487	234	357	.858	.96
May	6,205	274	127	200	.481	.55
June	3,649	183	68	122	.293	.33
July	2,396	132	45	77.3	.186	.21
August	2,319	129	19	74.8	.180	.21
September	3,972	196	78	132	.317	.35
Water year 1935-36	79,169	915	19	216	.519	7.08
October 1936	5,277	221	109	170	0.409	0.47
November	4,991	221	125	166	.399	.45
December	7,396	549	134	239	.575	.66
Calendar year 1936	80,750	915	19	221	.531	7.22
January 1937	11,672	841	170	377	.906	1.04
February	14,761	907	300	527	1.27	1.32
March	6,323	287	134	204	.490	.56
April	15,117	1,010	208	504	1.21	1.35
May	8,701	612	183	281	.675	.78
June	4,413	355	93	147	.353	.39
July	3,636	221	72	117	.281	.32
August	3,997	208	78	129	.310	.36
September	4,437	221	83	148	.356	.40
Water year 1936-37	90,721	1,010	72	249	.598	8.10

Note.- The above figures of monthly discharge for the water years 1932-33 to 1934-35 supersede those published in Water-Supply Papers 744, 759, and 784; those for the water year 1935-36 not revised.

Pine River at Alma, Mich.

Location.- Staff gage, lat. 43°23', long. 84°39', in sec. 34, T. 12 N., R. 3 W., 70 feet below highway bridge in Alma.

Drainage area.- 288 square miles.

Records available.- October 1930 to September 1937.

Extremes.- Maximum discharge observed during year, 720 second-feet Apr. 28 (gage height, 4.51 feet); minimum discharge, 29 second-feet Sept. 2, minimum gage height, 0.26 foot Dec. 12.
1930-37: Maximum discharge observed, 3,560 second-feet Mar. 5, 1935 (gage height, 9.50 feet); minimum discharge, 14 second-feet Aug. 16, 1936.

Remarks.- Records fair except those for periods of ice effect, Nov. 29 to Dec. 1, Dec. 7-11, Jan. 4-8, 19, 24-29 and period of missing gage heights, Aug. 14-17, which were computed on basis of two discharge measurements, gage heights, weather records, and records for station near Midland, and are poor. Discharge for Dec. 24, 25, May 26, Sept. 1 interpolated. Gage read once daily. Gage-height record furnished by city of Alma.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	138	101	60	365	260	184	150	563	107	84	64	42
2	101	107	66	311	260	157	164	491	113	78	57	29
3	90	125	84	294	213	138	157	401	107	71	51	40
4	90	131	69	310	144	150	184	365	95	84	48	46
5	84	119	73	200	125	294	244	311	84	84	48	44
6	90	119	64	180	119	294	437	260	71	84	47	36
7	107	119	100	155	101	311	455	228	66	70	45	36
8	119	107	65	240	107	311	437	213	66	69	50	36
9	138	101	65	455	599	228	455	198	66	69	52	38
10	95	95	65	294	437	157	401	131	71	68	47	38
11	119	95	60	294	365	138	329	157	78	59	57	40
12	150	95	38	383	347	150	260	157	78	66	78	36
13	150	95	71	311	198	164	244	157	78	78	95	33
14	144	90	78	277	244	138	228	184	90	73	85	48
15	107	84	73	329	125	125	228	198	101	78	75	62
16	101	84	84	311	198	113	198	228	107	64	65	64
17	101	78	107	213	177	119	244	228	125	71	55	64
18	107	78	107	177	131	125	260	228	144	70	45	73
19	107	84	113	175	125	131	294	198	228	68	47	71
20	113	73	101	125	150	125	277	164	213	60	47	78
21	113	73	101	125	184	125	244	157	184	58	44	64
22	101	78	101	138	365	125	599	157	144	57	52	70
23	101	78	101	125	311	125	527	157	131	56	54	51
24	113	101	113	110	365	125	563	170	107	46	56	49
25	119	95	125	105	347	107	695	144	95	45	66	48
26	101	84	138	95	228	90	617	147	101	46	69	64
27	107	71	213	85	184	107	695	150	125	64	54	72
28	107	58	365	80	184	157	720	184	144	63	52	78
29	101	60	419	95	-	157	695	184	107	73	46	84
30	101	85	401	119	-	150	617	150	95	72	42	71
31	95	-	419	198	-	164	-	131	-	66	56	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,410	150	84	110	0.382	0.44
November	2,763	131	58	92.1	.320	.36
December	4,044	419	38	130	.451	.52
Calendar year 1936	56,539	965	14	154	.535	7.31
January	6,674	455	80	215	.747	.86
February	6,593	599	101	235	.816	.85
March	4,984	311	90	161	.559	.64
April	11,618	720	150	387	1.34	1.50
May	6,791	563	131	219	.760	.88
June	3,321	228	66	111	.385	.43
July	2,094	84	45	67.5	.234	.27
August	1,749	95	42	56.4	.196	.23
September	1,605	84	29	53.5	.186	.21
Water year 1936-37	55,646	720	29	152	.528	7.19

Pine River near Midland, Mich.

Location.- Wire-weight gage, lat. 43°36', long. 84°19', on line between secs. 25 and 26, T. 14 N., R. 1 E., at highway bridge 3 miles southwest of Midland.

Drainage area.- 400 square miles.

Records available.- May 1934 to September 1937.

Extremes.- Maximum discharge observed during year, 1,160 second-feet Apr. 25; maximum gage height, 12.40 feet Feb. 9 (ice jam); minimum discharge, 15 second-feet Sept. 6 (gage height, 7.85 feet).

1934-37: Maximum discharge observed, about 3,000 second-feet Mar. 17, 1935 (gage height, estimated, 13.5 feet, backwater from ice); minimum discharge, 9.0 second-feet June 29, 1934; minimum gage height, 7.60 feet Apr. 28, 1935.

Remarks.- Records fair except those for periods of ice effect, Nov. 26 to Dec. 26, Jan. 20 to Mar. 7, Mar. 10-21, 25, and period of missing gage heights Apr. 10-12, which were computed on basis of gage heights, weather records, and records for station at Alma, and are poor. Gage read twice daily. Low-water flow regulated by operation of power plant upstream.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	145	88	90	360	300	275	221	609	253	125	44	142
2	140	75	95	419	325	250	206	522	163	34	56	54
3	135	145	90	342	325	250	287	439	177	111	113	28
4	107	94	80	287	300	275	221	380	185	88	94	120
5	102	98	95	305	260	350	305	270	188	73	26	86
6	77	158	110	177	200	375	654	206	206	77	27	20
7	82	135	120	253	170	375	419	253	221	169	50	24
8	125	127	115	253	200	360	253	253	94	82	24	46
9	169	118	110	380	700	439	270	237	79	64	68	79
10	237	135	100	399	650	450	260	206	64	150	127	47
11	71	125	95	380	500	350	260	150	160	71	27	44
12	86	132	90	360	450	275	290	221	145	50	79	61
13	127	73	95	360	475	225	323	221	125	70	140	27
14	145	130	95	342	450	210	323	270	71	305	61	105
15	191	137	105	287	375	190	323	180	160	132	96	84
16	102	135	120	323	300	180	253	221	132	177	75	115
17	206	125	130	342	275	180	237	221	147	71	150	82
18	81	130	140	188	225	190	287	221	137	36	-	118
19	84	158	140	185	225	200	342	253	130	61	-	71
20	109	111	140	210	250	200	270	253	166	135	-	63
21	145	115	130	200	325	200	544	183	191	92	-	163
22	188	94	130	190	500	166	945	237	120	38	-	36
23	191	109	140	180	450	145	895	221	127	40	-	171
24	135	94	160	170	450	166	654	221	120	46	-	47
25	132	98	180	160	425	175	1,160	253	142	42	-	66
26	132	100	210	150	400	127	945	206	137	31	-	71
27	118	110	253	140	350	253	995	221	92	31	-	48
28	140	125	287	140	300	206	1,040	221	94	120	-	100
29	130	110	522	150	-	163	845	169	206	58	-	94
30	137	75	342	180	-	206	700	237	123	125	-	123
31	88	-	360	220	-	169	-	113	-	120	56	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,057	237	71	131	0.328	0.38
November	3,459	158	73	115	.288	.32
December	4,869	522	80	157	.392	.45
Calendar year 1936	84,285	2,100	14	230	.575	7.83
January	8,032	419	140	259	.648	.75
February	10,155	700	170	363	.908	.95
March	7,575	450	127	244	.610	.70
April	14,727	1,160	206	491	1.23	1.37
May	7,868	609	113	254	.635	.73
June	4,355	253	64	145	.362	.40
July	2,824	305	31	91.1	.228	.26
August	-	-	-	-	-	-
September	2,335	171	20	77.8	.194	.22
Water year						

Black River near Port Huron, Mich.

Location.- Chain gage, lat. 42°59', long. 82°32', in sec. 2, T. 6 N., R. 16 E., at highway bridge 6 miles west of Port Huron.

Drainage area.- 634 square miles.

Records available.- April to June 1931; October 1932 to September 1937.

Extremes.- Maximum discharge observed during year 4,720 second-feet Apr. 23 (gage height, 15.52 feet); minimum discharge, 13 second-feet Oct. 5, Dec. 22.
1931, 1932-37: Maximum discharge observed, 6,740 second-feet Apr. 2, 1933; maximum gage height, 19.24 feet Mar. 6, 1935 (ice jam); minimum discharge, 4.0 second-feet June 22, 1931 (gage height, 4.48 feet).

Remarks.- Records good except those for periods of ice effect, Nov. 24 to Dec. 28, Jan. 4-8, 12, Jan. 16 to Feb. 8, Feb. 18-20, Feb. 28 to Mar. 3, Mar. 10, 11, which were computed on basis of two discharge measurements, weather records, and records for stations on Clinton River and are poor. Gage read once daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	21	21	152	250	160	129	919	124	80	29	24
2	16	24	25	92	210	150	148	554	98	72	27	24
3	15	38	23	72	180	150	166	458	80	83	25	22
4	14	30	23	65	175	161	190	404	74	62	22	32
5	13	23	20	58	125	1,090	216	352	65	54	23	41
6	16	22	25	46	90	961	1,760	288	54	49	22	30
7	16	25	17	46	85	758	2,000	243	57	47	27	24
8	19	22	22	50	130	554	1,260	243	49	42	-	22
9	21	20	23	72	3,150	230	633	230	59	39	-	24
10	18	19	19	72	1,090	175	477	216	72	49	-	22
11	16	17	22	53	1,360	160	352	190	62	54	-	50
12	14	16	19	60	1,260	148	272	166	57	230	-	38
13	15	17	16	72	877	118	243	157	47	352	-	32
14	18	17	16	122	440	103	216	130	57	422	-	26
15	24	19	16	216	369	92	335	122	54	673	-	28
16	21	19	19	195	111	85	836	126	52	272	-	30
17	19	25	21	155	122	61	593	352	87	164	-	26
18	19	20	20	135	110	75	1,260	258	68	120	-	28
19	17	14	17	95	90	79	795	230	335	71	-	26
20	17	23	15	70	55	79	633	178	312	52	-	24
21	17	22	14	95	14	72	633	137	288	52	-	24
22	25	20	13	85	1,360	72	4,060	124	230	49	-	20
23	23	20	14	60	633	69	4,720	118	178	39	-	20
24	22	27	18	58	673	66	1,760	96	150	62	-	21
25	23	22	20	45	795	66	1,820	85	116	52	-	30
26	42	14	27	36	618	79	1,490	89	98	49	-	26
27	27	23	38	28	440	61	4,120	143	83	42	34	24
28	27	22	47	26	180	66	3,680	152	77	29	30	22
29	25	25	103	24	-	69	2,550	159	83	33	32	22
30	20	22	114	27	-	92	1,580	166	77	33	32	21
31	21	-	148	110	-	110	-	145	-	29	26	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	619	42	13	20.0	0.032	0.04
November	648	38	14	21.6	.034	.04
December	955	148	13	30.8	.049	.06
Calendar year 1936	53,931.1	3,620	4.8	147	.232	3.18
January	2,492	216	24	80.4	.127	.15
February	14,992	3,150	14	535	.844	.88
March	6,211	1,090	61	200	.315	.36
April	38,727	4,720	129	1,291	2.04	2.28
May	7,230	919	85	233	.368	.42
June	3,243	335	47	108	.170	.19
July	3,456	673	29	111	.175	.20
August	-	-	-	-	-	-
September	803	50	20	26.8	.042	.05
Water year						

Clinton River at Pontiac, Mich.

Location.- Staff gage, lat. 42°38'45", long. 83°16'10", in sec. 27, T. 3 N., R. 10 E., at municipal sewage-treatment plant near east city limits of Pontiac. Zero of gage is 876.01 feet above mean sea level.

Drainage area.- 123 square miles.

Records available.- May 1935 to September 1937.

Extremes.- Maximum discharge observed during year, 231 second-feet Apr. 27 (gage height, 2.80 feet); minimum discharge, 11 second-feet Oct. 5 (gage height, 1.04 feet).
1935-37: Maximum discharge observed, about 300 second-feet Feb. 6, 1936 (gage height, 4.56 feet, backwater from ice); minimum discharge, 4.8 second-feet Sept. 4, 1936.

Remarks.- Records good. Gage read twice daily. Gage-height record furnished by city of Pontiac.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 8 to Jan. 23 Aug. 3 to Sept. 30)

Oct. 1 to Dec. 7		Dec. 8 to Sept. 30			
1.0	9.6	1.0	18	2.0	114
1.2	17	1.2	29	2.2	140
1.4	28	1.4	45	2.4	168
1.6	45	1.6	66	2.6	198
1.8	66	1.8	89	2.8	231
2.0	91				

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	49	51	56	114	95	59	168	114	45	38	40
2	18	78	30	55	95	95	60	168	114	134	39	40
3	15	58	30	56	83	101	59	176	108	43	39	41
4	13	53	30	52	77	114	59	198	101	41	43	40
5	11	52	45	48	77	114	66	198	95	40	39	40
6	19	51	33	66	77	108	95	183	101	40	37	39
7	15	51	46	48	95	101	89	183	95	40	66	40
8	15	50	72	72	108	101	89	183	89	39	46	34
9	15	50	41	62	120	95	89	176	89	37	101	28
10	20	50	54	58	114	108	89	168	89	40	72	29
11	19	50	40	58	127	89	89	154	83	36	62	27
12	20	49	40	60	101	83	89	147	77	72	59	24
13	22	47	38	60	95	83	89	140	77	133	58	25
14	22	46	40	83	101	77	101	161	83	59	53	25
15	23	45	39	77	101	77	134	140	41	89	48	26
16	23	44	39	77	101	77	114	154	28	56	47	27
17	60	44	36	77	101	72	127	147	30	53	47	24
18	73	41	36	77	101	72	127	140	24	48	47	25
19	76	41	36	95	95	66	134	134	24	48	45	24
20	71	42	35	83	101	66	127	140	36	45	44	24
21	67	42	46	95	127	66	176	134	89	43	66	25
22	67	42	56	89	108	66	168	140	53	43	43	24
23	62	41	34	120	108	66	154	134	51	41	44	25
24	59	41	37	127	108	66	154	127	51	41	42	27
25	57	42	34	101	114	64	183	127	49	48	41	31
26	64	46	34	101	101	72	190	127	49	45	39	24
27	56	76	39	127	95	65	214	154	51	44	40	22
28	55	30	37	83	95	64	214	127	49	43	41	20
29	55	30	36	95	-	62	198	127	48	41	40	20
30	53	38	44	83	-	60	168	127	45	41	40	18
31	53	-	63	114	-	59	-	120	-	40	40	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,230	76	11	39.7	0.323	0.37
November	1,419	78	30	47.3	.385	.43
December	1,271	72	30	41.0	.333	.38
Calendar year 1936	16,430.3	300	5.5	44.9	.365	4.96
January	2,455	127	48	79.2	.644	.74
February	2,840	127	77	101	.821	.85
March	2,504	114	59	80.8	.657	.76
April	3,704	214	59	123	1.00	1.12
May	4,702	198	120	152	1.24	1.43
June	2,033	114	24	67.8	.551	.61
July	1,656	183	36	53.5	.435	.50
August	1,506	101	37	48.6	.395	.46
September	858	41	18	28.6	.233	.26
Water year 1936-37	26,180	214	11	71.7	.583	7.91

Clinton River at Mount Clemens, Mich.

Location.- Wire-weight gage, lat. 42°35'45", long. 82°54'35", on Moravian Drive highway bridge, a quarter of a mile below junction of North and South Branches and half a mile west of Mount Clemens.

Drainage area.- 733 square miles.

Records available.- May 1934 to September 1937.

Extremes.- Maximum discharge observed during year, 6,290 second-feet Apr. 22 (gage height, 14.66 feet); minimum discharge, 72 second-feet Sept. 20; minimum gage height, 3.63 feet Nov. 23.
1934-37: Maximum discharge observed, that of Apr. 22, 1937; minimum discharge, 24 second-feet July 31, 1934; minimum gage height, 2.90 feet Oct. 15, 1934.

Remarks.- Records good except those for periods of ice effect, Nov. 27 to Dec. 28, Jan. 5-7, 25-30, Feb. 3-6, which were computed on basis of gage heights and weather records and are poor. Discharge for Nov. 20-22, Mar. 28, June 6, July 4, 18, Aug. 1, 8, 22 interpolated. Gage read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	334	162	145	1,550	1,600	412	306	1,130	396	205	136	118
2	293	162	170	1,260	1,500	349	380	912	349	196	132	118
3	178	445	170	954	1,150	320	396	786	306	196	132	112
4	162	445	155	628	825	396	396	664	256	192	125	112
5	125	334	155	825	650	664	828	664	245	187	118	112
6	162	293	180	775	500	625	2,250	587	269	178	118	112
7	234	245	160	740	380	587	2,790	550	293	178	214	112
8	196	214	155	704	1,600	550	1,600	550	256	170	330	112
9	170	205	165	1,400	3,730	445	1,040	514	224	170	445	106
10	170	205	190	786	2,730	954	745	479	280	187	514	100
11	162	196	210	445	1,550	1,040	625	445	245	187	320	100
12	146	170	180	412	954	412	550	396	224	178	224	94
13	146	178	170	445	828	306	479	380	224	214	196	94
14	146	170	180	1,850	1,130	306	479	380	245	162	170	106
15	139	162	200	1,950	954	268	2,000	445	268	550	154	82
16	146	162	200	1,040	625	245	4,080	445	224	1,130	146	77
17	139	154	210	587	550	256	2,430	954	293	306	139	77
18	146	162	210	1,080	479	268	3,210	664	625	251	146	82
19	154	154	200	745	479	268	2,670	550	412	196	162	77
20	162	150	200	828	479	268	1,360	445	349	178	170	77
21	154	146	190	2,200	996	280	1,400	479	334	178	162	82
22	162	142	175	1,360	2,970	293	5,890	745	380	170	154	77
23	196	139	180	954	1,450	293	3,940	786	280	170	146	82
24	187	162	195	925	828	293	2,050	625	245	170	146	82
25	196	154	205	875	1,040	293	2,100	445	234	306	146	82
26	224	162	215	800	1,500	214	2,310	479	245	268	139	118
27	306	170	245	700	1,400	214	3,210	664	256	146	139	94
28	245	180	250	580	704	267	2,970	1,040	268	146	125	88
29	224	185	256	525	-	320	2,050	1,040	234	146	118	82
30	205	170	280	540	-	306	1,400	825	214	139	118	88
31	187	-	1,900	2,000	-	306	-	610	-	139	118	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,796	334	125	187	0.255	0.29
November	5,978	445	139	199	.271	.30
December	7,696	1,900	145	248	.338	.39
Calendar year 1936	101,464	2,230	39	277	.378	5.14
January	30,663	2,200	412	989	1.35	1.56
February	33,581	5,730	380	1,199	1.64	1.71
March	12,018	1,040	214	388	.529	.61
April	55,934	5,890	306	1,864	2.54	2.83
May	19,878	1,130	380	635	.866	1.00
June	8,673	625	214	289	.394	.44
July	7,189	1,130	139	232	.317	.37
August	5,602	514	118	181	.247	.28
September	2,855	118	77	95.2	.130	.14
Water year 1936-37	195,663	5,890	77	536	.731	9.92

River Rouge at Detroit, Mich.

Location.- Chain gage, lat. 42°21'40", long. 83°15'15", on line between secs. 33 and 34, T. 1 S., R. 10 E., in Detroit. Zero of gage is 579.90 feet above mean sea level.

Drainage area.- 194 square miles.

Records available.- November 1930 to September 1937.

Extremes.- Maximum discharge observed during year, 1,440 second-feet Apr. 22 (gage height, 12.82 feet); minimum, not determined.
1930-37: Maximum discharge observed 3,300 second-feet May 1, 1933 (gage height, 18.10 feet); minimum, 2.7 second-feet Aug. 11, 1934 (gage height, 3.50 feet).

Remarks.- Records good except those for periods of ice effect, Nov. 24 to Dec. 28, Feb. 3-8, and of missing gage heights, Oct. 1-4, Jan. 1-3, 9, 10, 13, 14, 23, 24, Mar. 6, 7, 13, 14, 20, 21, 27, 28, Apr. 4, 5, 9-11, 17, 18, May 1, 2, 5-9, 15, 16, 22, 23, 29-31, June 5, 6, 12, 13, 19, 20, 26, 27, Sept. 25, 26, which were computed on basis of weather records and records for stations on Black and Clinton Rivers and are poor. Gage read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	*42	30	270	107	91	68	255	95	54		-
2	24	45	31	200	107	87	68	230	87	45		-
3	23	58	31	175	110	83	68	206	79	39		-
4	22	72	32	156	115	79	90	176	72	*36		-
5	21	79	32	138	225	79	250	150	80	34		-
6	24	66	32	116	130	76	474	125	100	34		-
7	46	54	31	91	130	74	367	110	111	-		-
8	46	*50	32	166	135	72	249	98	111	-		-
9	34	45	33	160	*214	68	190	90	111	-		-
10	35	43	35	140	282	68	140	83	111	-		-
11	*36	40	37	129	196	68	110	79	111	-		-
12	38	39	39	129	156	72	83	83	105	-		-
13	33	39	41	140	138	68	87	87	95	-		-
14	30	37	43	200	*152	65	91	129	87	-		-
15	27	*37	44	354	166	62	432	175	91	-		-
16	25	37	45	227	147	120	680	300	91	-		-
17	22	36	45	*232	129	30	550	446	83	-		-
18	*24	34	45	238	99	21	450	260	87	-		-
19	25	36	45	166	99	39	360	176	150	-		-
20	28	35	45	227	107	52	271	147	350	-		-
21	24	32	44	780	-	65	271	120	545	-		-
22	26	*32	40	330	-	83	1,410	140	*396	-		11
23	30	32	40	260	-	72	575	225	147	-		12
24	30	33	42	230	-	66	354	249	107	-		11
25	*36	34	45	196	-	68	*450	206	83	-		14
26	43	35	50	176	-	72	545	176	80	-		20
27	68	36	60	147	-	70	488	380	90	-		20
28	65	35	70	120	-	69	446	502	99	-		16
29	50	33	87	99	-	68	342	400	76	-		15
30	43	32	83	99	-	65	294	210	62	-		16
31	38	-	446	103	-	68	-	125	-	-		-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,042	68	21	33.6	0.173	0.20
November	1,260	79	32	42.0	.216	.24
December	1,755	446	30	56.6	.292	.34
Calendar year						
January	6,194	780	91	200	1.03	1.19
February 1-20	2,944	282	99	147	.758	.56
March	2,142	120	21	69.1	.356	.41
April	10,273	1,410	68	342	1.76	1.96
May	6,138	502	79	198	1.02	1.18
June	3,892	545	62	130	.670	.75
July 1-6	242	54	34	40.3	.208	.05
August	-	-	-	-	-	-
September 22-30	135	20	11	15.0	.077	.03
Water year						

*Interpolated.

Huron River at Barton, Mich.

Location.- Lat. 42°17'25", long. 83°44'40", in sec. 20, T. 2 S., R. 6 E., at dam and power plant of Eastern Michigan Edison Co. at Barton, Washtenaw County, near Ann Arbor.

Drainage area.- 723 square miles.

Records available.- January 1914 to September 1937.

Average discharge.- 23 years, 382 second-feet.

Extremes.- Maximum daily discharge during year, 1,960 second-feet June 21: minimum, 73 second-feet Sept. 15.
1914-1937: Maximum daily discharge, 5,840 second-feet Mar. 14, 1918; minimum, 4 second-feet Sept. 11, 1931.

Remarks.- Discharge computed from flow through undersluice during floods, head over dam and records of operation of power plant. Daily-discharge record furnished by Ayres, Lewis, Norris & May, consulting engineers, Ann Arbor, Mich.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	186	209	145	332	405	343	337	1,300	700	776	324	186
2	158	294	159	319	255	379	234	1,280	687	671	372	179
3	172	304	155	312	338	311	296	1,040	604	660	353	262
4	166	327	147	301	291	357	347	1,030	567	667	300	83
5	170	305	151	232	288	371	437	943	520	879	382	162
6	235	296	173	285	288	346	627	904	517	879	288	156
7	190	294	109	285	253	352	609	784	469	661	548	134
8	211	295	181	383	559	365	541	751	418	581	380	151
9	190	295	145	468	637	350	542	749	427	577	593	164
10	211	224	197	475	472	292	505	607	414	421	543	148
11	195	292	103	327	474	314	496	601	399	389	459	154
12	214	250	151	369	472	296	522	597	386	402	384	131
13	216	207	144	365	504	294	464	576	382	402	441	143
14	185	294	152	817	524	294	471	624	351	467	306	198
15	158	214	146	534	557	287	881	651	385	523	337	73
16	165	207	146	518	498	284	1,070	622	375	536	303	143
17	214	265	163	516	484	195	1,050	686	412	384	322	141
18	147	247	167	404	476	290	1,120	664	347	516	290	118
19	179	145	149	403	428	220	1,010	636	330	499	238	111
20	158	170	140	349	418	291	951	648	756	479	299	140
21	173	195	139	467	563	296	1,110	733	1,960	486	340	141
22	175	229	130	393	535	289	1,310	826	1,530	479	282	105
23	203	134	128	354	492	289	1,080	827	1,400	470	232	124
24	276	180	128	288	491	345	1,290	745	1,120	384	296	195
25	89	173	151	380	470	281	1,930	670	1,090	474	206	166
26	174	181	168	315	425	291	1,290	771	1,240	477	239	90
27	209	163	203	285	406	237	1,540	838	1,210	420	219	174
28	209	176	188	285	374	299	1,440	814	1,200	474	216	142
29	201	165	203	283	-	298	1,390	729	955	428	201	147
30	172	150	291	282	-	296	1,290	792	827	410	165	135
31	207	-	404	539	-	295	-	757	-	363	178	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,808	276	89	187	0.259	0.30
November	6,880	327	134	229	.317	.35
December	5,156	404	103	166	.230	.27
Calendar year 1936	88,052	1,040	6	241	.333	4.53
January	11,865	817	232	383	.530	.61
February	12,377	637	253	442	.611	.64
March	9,447	379	195	305	.422	.49
April	26,182	1,930	234	873	1.21	1.35
May	24,195	1,300	576	780	1.08	1.24
June	21,979	1,960	330	733	1.01	1.13
July	16,234	879	363	524	.725	.84
August	10,036	593	165	324	.448	.52
September	4,396	262	73	147	.203	.23
Water year 1936-37	154,555	1,960	73	423	.585	7.97

Raisin River near Adrian, Mich.

Location.- Chain gage, lat. 41°55', long. 83°59', on line between secs. 29 and 32, T. 6 S., R. 4 E., half a mile below South Branch of Raisin River and 3 miles northeast of Adrian.

Drainage area.- 416 square miles.

Records available.- October 1930 to August 1931, October 1932 to September 1937.

Extremes.- Maximum discharge observed during year, 2,950 second-feet June 22 (gage height, 16.98 feet); minimum, 38 second-feet Oct. 19 (gage height, 4.68 feet). 1930-31, 1932-37: Maximum discharge observed, that of June 22, 1937; minimum, 16 second-feet July 21, 1936.

Remarks.- Records good. Gage read twice daily.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet). Shifting-control method used Oct. 1 to Dec. 6, Dec. 16 to Jan. 15.

Oct. 1 to Jan. 15				Jan. 16 to Sept. 30			
4.8	41	7.0	250	4.8	52	8.0	361
5.0	53	8.0	407	5.0	61	9.0	510
5.4	80	9.0	599	5.2	72	10.0	702
5.8	113	10.0	825	5.6	100	11.0	950
6.2	152	12.0	1,320	6.0	135	14.0	1,850
6.6	198			7.0	239	17.0	2,950

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	174	113	127	1,200	875	250	250	638	135	1,040	285	126
2	118	132	104	641	659	239	261	659	145	825	250	145
3	122	407	73	599	389	309	261	527	175	750	285	185
4	100	776	92	340	335	239	165	447	206	875	322	195
5	73	499	41	293	273	261	261	417	239	1,190	250	145
6	118	278	73	278	322	250	544	403	638	1,460	195	108
7	96	324	66	236	228	195	775	361	510	1,040	273	175
8	70	186	92	443	297	250	510	309	285	702	239	185
9	122	174	88	900	1,070	217	417	285	322	580	285	135
10	113	152	92	1,150	950	185	285	273	375	510	261	155
11	104	142	96	558	527	195	309	261	348	432	250	85
12	113	174	92	407	417	185	273	309	297	417	228	72
13	163	142	56	324	361	175	261	273	297	562	228	165
14	66	132	76	1,100	389	135	261	335	389	494	206	155
15	96	127	66	1,600	389	217	1,340	403	562	950	135	145
16	62	132	80	1,430	335	195	1,730	389	361	1,520	135	155
17	70	132	76	638	297	206	1,340	375	335	1,400	195	145
18	66	92	70	527	273	217	1,100	348	361	618	239	145
19	44	132	62	462	261	217	1,220	309	375	527	361	104
20	80	127	56	335	273	217	680	309	447	447	285	54
21	88	122	56	638	375	217	925	297	2,590	361	195	56
22	113	76	66	875	659	273	1,670	273	2,710	273	273	135
23	92	73	73	432	389	297	1,340	361	1,990	261	261	82
24	88	88	70	309	335	261	980	309	1,790	335	239	117
25	84	84	44	389	309	273	1,490	285	2,130	389	185	135
26	108	88	53	361	285	250	1,460	285	2,300	725	206	58
27	118	53	70	309	273	195	950	273	2,130	478	185	155
28	127	108	108	273	239	165	800	273	1,820	389	217	117
29	122	62	152	273	-	239	680	239	1,580	309	135	112
30	132	53	340	273	-	261	478	228	1,250	297	195	155
31	100	-	1,120	462	-	239	-	217	-	273	135	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,142	174	44	101	0.243	0.28
November	5,180	776	53	173	.416	.46
December	3,730	1,120	41	120	.288	.33
Calendar year 1936	61,872	1,770	16	169	.406	5.52
January	18,055	1,600	236	582	1.40	1.61
February	11,784	1,070	228	421	1.01	1.05
March	7,024	309	135	227	.546	.63
April	23,016	1,730	165	767	1.84	2.05
May	10,670	659	217	344	.827	.95
June	27,092	2,710	135	903	2.17	2.42
July	20,429	1,520	261	659	1.58	1.82
August	7,133	361	135	230	.553	.64
September	3,901	195	54	130	.312	.35
Water year 1936-37	141,156	2,710	41	387	.930	12.59

St. Marys River near Fort Wayne, Ind.

Location.- Chain gage, lat. 41°00', long. 85°08', in sec. 35, T. 30 N., R. 12 E., at highway bridge 12 miles above mouth of river and 4 miles south of Ft. Wayne.

Drainage area.- 753 square miles (revised).

Records available.- November 1930 to September 1937 in reports of Geological Survey; October 1924 to October 1925 and July to September 1927 in reports of Indiana Department of Conservation.

Extremes.- Maximum discharge observed during year, 9,430 second-feet Jan. 17 (gage height, 16.83 feet), from rating curve extended above 4,000 second-feet; minimum, 20 second-feet Oct. 4 (gage height, 0.68 foot).
1930-37: Maximum discharge observed, that of Jan. 17, 1937; minimum, 3.4 second-feet Oct. 19, 1934 (gage height, 0.28 foot).

Remarks.- Records good except those for periods of ice effect, Dec. 7-12, 21-25, and for period of missing gage heights Feb. 5-9, which were computed on basis of weather records and records for Wabash River at Bluffton and are poor. Gage read once daily during entire year and twice daily during Jan. 14-19.

Rating table, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.6	15	2.5	272	8.0	2,190
.8	28	3.0	374	10.0	3,390
1.0	45	4.0	605	12.0	4,830
1.2	66	5.0	880	14.0	6,530
1.6	118	6.0	1,230	16.0	8,550
2.0	181	7.0	1,670	17.0	9,650

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	181	45	1,770	1,310	253	484	1,390	244	188	253	34
2	24	439	45	940	1,150	244	353	1,080	253	111	190	37
3	22	705	53	850	1,150	234	417	1,120	253	74	118	40
4	20	680	53	790	820	292	555	1,230	312	74	91	91
5	21	507	49	655	720	312	1,470	1,010	332	216	91	292
6	21	461	55	555	660	353	3,210	417	332	118	98	272
7	24	461	52	417	640	555	2,850	374	374	118	98	234
8	28	461	50	2,370	620	530	1,520	216	374	104	98	234
9	49	374	49	2,910	600	484	1,430	207	461	98	225	172
10	45	292	48	2,310	1,470	374	1,270	198	730	84	253	91
11	45	292	47	1,870	1,720	312	1,150	181	630	84	253	77
12	45	253	46	1,230	1,870	253	555	156	417	77	1,770	77
13	55	244	45	1,430	1,430	225	630	156	332	77	1,770	78
14	55	234	45	4,090	1,230	198	605	181	332	353	1,670	74
15	64	164	45	6,710	760	190	2,130	164	312	2,370	1,430	67
16	66	118	38	7,300	680	181	705	172	292	2,790	655	65
17	68	78	38	9,100	655	172	580	181	292	2,430	253	58
18	71	78	38	9,100	880	198	605	190	292	1,570	198	58
19	66	91	36	7,000	880	198	555	181	292	1,010	181	42
20	57	104	36	4,910	1,570	1,010	580	253	312	1,010	133	35
21	45	78	36	4,750	1,920	1,010	2,490	272	292	880	140	37
22	40	45	36	4,440	1,350	1,010	2,130	1,040	880	820	181	37
23	36	43	40	4,230	1,150	880	1,390	1,150	850	760	198	34
24	36	45	50	4,230	760	1,080	1,190	680	705	705	133	32
25	45	45	50	4,160	630	1,570	1,390	417	680	705	104	35
26	45	36	62	4,160	530	1,150	1,430	417	630	850	111	37
27	78	36	66	3,390	461	680	3,270	2,790	507	790	104	40
28	104	28	78	2,070	312	680	3,090	1,820	417	630	78	42
29	133	36	91	1,870	-	790	2,670	880	332	374	48	42
30	156	36	234	1,720	-	680	1,670	630	253	190	37	42
31	156	-	2,250	1,670	-	507	-	234	-	190	37	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,744	156	20	56.3	0.075	0.09
November	6,645	705	28	222	.295	.33
December	3,906	2,250	36	126	.167	.19
Calendar year 1936	111,322.2	7,500	7.6	304	.404	*5.50
January	102,997	9,100	417	3,322	4.41	5.08
February	27,928	1,920	312	997	1.32	1.37
March	16,605	1,570	172	536	.712	.82
April	42,374	3,270	353	1,412	1.88	2.10
May	19,387	2,790	156	625	.830	.96
June	12,714	880	244	424	.563	.63
July	19,780	2,790	74	638	.847	.98
August	10,999	1,770	37	355	.471	.54
September	2,506	292	32	83.5	.111	.12
Water year 1936-37	267,585	9,100	20	733	.973	13.21

*Computed on basis of revised drainage area.

Little Tonawanda Creek at Linden, N. Y.

Location.- Staff gage and concrete control, lat. 42°52'35", long. 78°09'45", at highway bridge in Linden, Genesee County.

Drainage area.- 22 square miles.

Records available.- July 1912 to September 1937.

Average discharge.- 24 years (1912-19, 1920-37), 26.8 second-feet.

Extremes.- Maximum discharge observed during year, 1,990 second-feet June 21 (gage heights, 12.5 feet), from rating curve extended logarithmically above 1,500 second-feet; minimum, 0.5 second-foot Oct. 4-6 (gage height, 0.255 foot).

1912-37: Maximum discharge, about 2,400 second-feet Apr. 22, 1916 (gage height, 14.6 feet), from rating curve extended logarithmically above 1,500 second-feet; minimum, about 0.1 second-foot Sept. 5-7, 1934, and several times during Aug. 4-28, 1936.

Remarks.- Records good except those for days of rapidly changing stage and those for extremely low stages, which are fair. Discharge for Nov. 28 to Dec. 5, Dec. 22, 23, Feb. 3-6, 16, Mar. 2, 11, 14-16, 27 computed from gage heights corrected for ice effect on basis of observer's and engineers' notes and weather records. Gage read twice daily. On days of rapidly changing stage the discharge is averaged for intervals of a day from gage-height graph based upon gage readings.

Rating table, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.16	0.10	0.5	2.95	0.9	12	2.0	69	3.6	223
.2	.23	.6	4.61	1.0	15	2.4	99	4.0	274
.3	.77	.7	6.63	1.2	23	2.8	135	5.0	420
.4	1.73	.8	9.13	1.6	44	3.2	177	6.0	584

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	1.3	4.4	26	21	13	116	33	15	10	3.0	4.4
2	.6	4.6	4.4	20	15	12	157	28	13	9.1	2.7	4.2
3	.5	3.9	4.6	26	13	12	108	23	17	11	2.4	4.1
4	.5	3.6	4.8	16	12	41	143	20	15	8.6	2.2	6.6
5	.5	4.6	5.0	14	11	51	248	22	11	7.1	2.2	7.1
6	.5	4.6	5.4	9.4	11	32	237	52	10	6.2	5.4	5.4
7	2.3	5.8	8.1	13	12	24	80	33	8.6	5.8	22	4.6
8	1.7	10	9.1	42	108	31	56	24	7.6	5.0	13	4.1
9	1.2	9.7	6.6	40	142	32	62	22	7.6	4.6	7.1	3.7
10	.9	7.8	8.5	30	38	19	53	19	17	4.2	5.8	3.4
11	.9	6.2	30	21	19	16	47	16	13	3.9	229	3.7
12	.8	5.4	20	18	17	15	44	14	8.6	4.2	166	3.6
13	.8	5.0	14	15	19	16	38	17	7.6	4.1	98	3.6
14	.9	5.5	10	175	21	15	36	17	33	3.6	36	3.2
15	.9	19	10	229	14	14	182	17	22	4.1	19	3.0
16	.8	13	10	68	12	13	120	14	12	3.9	13	3.0
17	1.3	12	11	51	11	13	64	224	11	3.2	12	3.0
18	1.5	13	8.3	117	13	15	81	155	66	3.0	22	2.7
19	1.5	7.1	7.7	54	15	16	64	64	50	3.0	15	2.7
20	1.3	8.6	17	28	16	17	44	48	23	2.8	23	2.6
21	1.1	10	13	81	25	24	66	36	532	2.7	12	2.4
22	.9	10	12	66	54	29	197	48	227	2.6	11	2.4
23	.9	8.1	12	41	35	45	98	49	61	2.4	9.1	2.2
24	1.1	7.6	16	41	15	57	60	30	32	2.4	8.6	2.2
25	.9	7.3	44	261	23	50	46	22	21	2.4	7.6	2.2
26	1.3	5.0	78	62	19	32	44	21	16	3.6	6.6	2.0
27	1.5	5.8	57	37	18	26	36	97	14	3.0	6.4	2.0
28	1.3	5.5	73	25	14	24	82	66	15	2.7	6.0	2.0
29	1.3	5.0	34	26	-	28	67	36	13	2.6	5.6	2.0
30	1.5	4.6	34	23	-	41	43	25	11	7.3	5.2	2.0
31	1.3	-	40	28	-	81	-	18	-	3.6	4.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	33.3	2.3	0.5	1.07	0.049	0.06
November	219.6	19	1.3	7.32	.333	.37
December	611.9	78	4.4	19.7	.895	1.03
Calendar year 1936	9,472.9	1,080	.1	25.9	1.18	16.00
January	1,703.4	261	9.4	54.9	2.50	2.88
February	743	142	11	26.5	1.20	1.25
March	854	81	12	27.5	1.25	1.44
April	2,719	248	36	90.6	4.12	4.60
May	1,310	224	14	42.3	1.92	2.21
June	1,310.0	532	7.6	43.7	1.99	2.22
July	142.7	11	2.4	4.60	.209	.24
August	781.5	229	2.2	25.2	1.15	1.33
September	100.1	7.1	2.0	3.34	.152	.17
Water year 1936-37	10,528.5	532	.5	28.8	1.31	17.80

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Genesee River at Scio, N. Y.

Location.- Staff gage, lat. 42°09'50", long. 77°58'50", at highway bridge, three-quarters of a mile above Scio, Allegany County.
Drainage area.- 309 square miles.
Records available.- June 1916 to September 1937.
Average discharge.- 21 years, 376 second-feet.
Extremes.- Maximum discharge during year, 6,640 second-feet Jan. 25 (gage height, 7.5 feet, from graph based on gage readings), from rating curve extended logarithmically above 3,600 second-feet; minimum, 23 second-feet Oct. 11 (gage height, 0.04 foot).
1916-37: Maximum discharge, about 10,600 second-feet May 22, 1919 (gage height, 9.1 feet), from rating curve extended logarithmically above 3,600 second-feet; minimum (estimated), 13 second-feet Sept. 12, 13, 22-26, 1932.
Remarks.- Records good. Discharge for periods of ice effect, Nov. 28 to Dec. 3, Feb. 4, 26, 27, Mar. 2, 3, 14-19, computed on basis of gage heights, observer's notes and weather records. Discharge for Mar. 14 and June 13 computed from records for station at St. Helena and for Allegheny River at Red House. Gage read twice daily. On days of rapidly changing stage the discharge is averaged for intervals of a day from gage-height graph based upon gage readings.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 14

0	20	0.8	125	3.0	1,200
.1	27	1.0	171	4.0	2,040
.2	35	1.5	325	5.0	3,100
.3	44	2.0	542	6.0	4,400
.4	55	2.5	835	7.0	5,870
.6	85				

Jan. 15 to Sept. 30

0.1	27	1.0	164
.2	35	1.5	320
.3	44	2.0	550
.4	55	2.5	845
.6	83	3.0	1,200
.8	119		

Note.- Same as preceding table above 2.8 feet.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	169	85	1,120	474	73	426	720	266	218	41	63
2	36	299	120	747	403	110	498	632	218	190	38	64
3	33	415	140	642	340	140	474	498	234	177	35	56
4	29	934	136	539	300	158	449	426	204	154	33	92
5	27	1,390	127	794	283	551	674	449	162	127	32	152
6	26	916	143	563	249	449	1,360	1,670	147	113	300	125
7	26	968	125	563	234	262	776	1,370	134	102	260	88
8	26	1,050	112	575	272	302	612	862	115	95	94	72
9	26	802	125	681	638	340	1,060	750	102	90	238	64
10	24	622	170	495	330	176	793	605	310	86	1,330	59
11	23	493	432	399	177	147	690	524	227	83	944	56
12	28	426	594	344	177	117	605	449	164	78	437	64
13	29	363	407	289	218	142	660	598	136	70	249	56
14	33	325	264	1,480	218	140	632	910	218	64	204	53
15	31	426	298	4,620	204	140	2,920	826	218	74	147	51
16	28	363	300	2,080	186	130	2,020	640	190	93	117	51
17	106	307	350	1,240	106	130	1,290	1,070	157	78	102	47
18	190	289	306	1,920	113	130	1,760	940	331	70	209	44
19	138	184	466	1,310	150	130	1,270	738	564	77	127	42
20	106	225	695	945	140	130	930	632	474	63	77	40
21	89	211	535	2,230	173	138	989	550	1,760	56	90	40
22	82	211	426	3,030	286	180	2,180	752	2,670	53	189	39
23	79	184	363	2,020	256	355	1,660	982	1,190	50	148	38
24	106	171	426	1,450	198	502	1,270	640	782	43	111	37
25	108	169	577	4,700	190	598	963	449	564	56	98	35
26	136	184	830	2,480	170	352	812	382	426	60	92	33
27	147	164	922	1,400	150	234	750	727	360	55	111	32
28	129	150	1,080	1,110	86	204	1,120	550	302	50	93	30
29	114	130	761	890	-	190	1,230	474	266	44	78	29
30	169	110	946	750	-	249	862	382	249	43	70	33
31	198	-	1,730	578	-	320	-	320	-	40	65	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,358	198	23	76.1	0.246	0.28
November	12,650	1,390	110	422	1.37	1.53
December	13,991	1,730	85	451	1.46	1.68
Calendar year 1936	157,732	6,600	19	431	1.39	18.98
January	41,184	4,700	289	1,329	4.30	4.96
February	6,721	638	86	240	.777	.81
March	7,219	598	73	233	.754	.87
April	31,735	2,920	426	1,058	3.42	3.82
May	21,517	1,670	320	694	2.25	2.59
June	13,140	2,670	102	438	1.42	1.58
July	2,652	218	40	85.5	.277	.32
August	6,159	1,330	32	199	.644	.74
September	1,685	152	29	56.2	.182	.20
Water year 1936-37	161,011	4,700	23	441	1.43	19.38

Genesee River at St. Helena, N. Y.

Location.- Water-stage recorder, lat. 42°37'20", long. 77°59'20", at highway bridge in St. Helena, Wyoming County, 1½ miles below mouth of Wolf Creek.

Drainage area.- 1,017 square miles.

Records available.- August 1908 to September 1937.

Average discharge.- 29 years, 1,204 second-feet.

Extremes.- Maximum discharge during year, 18,100 second-feet Jan. 25 (gage height, 9.5 feet, from floodmarks); minimum, 57 second-feet Oct. 4 (gage height, 1.98 feet).
1908-37: Maximum discharge, about 44,400 second-feet May 17, 1916 (gage height, 12.8 feet), from rating curve extended above 29,000 second-feet; minimum, about 18 second-feet Oct. 5, 17, 1913 (gage height, 1.70 feet).

Remarks.- Records good. Discharge for periods of ice effect, Nov. 19, Nov. 27 to Dec. 2, Dec. 7-12, 22, 23, Feb. 2-8, Feb. 26 to Mar. 3, Mar. 9-11, 13-16, computed on basis of gage heights, observer's notes, weather records, and records for other stations in Genesee River Basin. Discharge for Oct. 8, 9, Jan. 24-29, June 11-13 computed on basis of records for other stations in Genesee River Basin. Some diurnal fluctuation during low stages caused by power operations. Flow slightly regulated by storage in Caneadea Reservoir (capacity 1,106,000,000 cubic feet).

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.9	44	2.2	103	2.6	265	3.5	825	5.0	2,600	7.0	7,150
2.0	60	2.3	135	2.8	365	4.0	1,300	5.5	3,450	8.0	10,900
2.1	79	2.4	174	3.0	475	4.5	1,900	6.0	4,500	9.0	15,500

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	97	305	480	2,900	1,580	1,000	2,420	1,740	690	580	144	390
2	64	295	500	1,720	1,200	1,000	3,450	1,460	590	530	126	285
3	58	380	435	1,500	950	1,000	3,200	1,220	560	510	138	180
4	124	570	505	1,420	850	630	2,600	1,060	570	465	285	188
5	260	1,660	465	960	700	1,640	4,350	980	540	435	260	295
6	130	1,640	600	780	950	1,480	6,800	5,700	465	400	144	470
7	90	1,320	600	670	900	990	4,050	4,350	435	360	670	495
8	79	1,680	650	830	1,500	950	2,320	2,280	390	330	1,260	440
9	70	1,620	700	1,740	3,600	900	2,750	1,820	340	305	600	290
10	104	1,340	600	1,620	2,020	700	2,900	1,500	690	280	720	178
11	260	1,040	800	1,480	980	600	2,380	1,300	1,600	248	3,150	265
12	295	820	1,800	1,250	810	640	2,180	1,060	800	246	1,960	340
13	315	740	1,120	1,040	800	550	2,320	1,260	500	255	1,640	330
14	325	670	790	4,150	722	550	1,900	2,380	930	234	890	350
15	234	680	680	12,800	700	480	9,600	2,550	1,960	234	600	340
16	94	820	660	6,600	850	460	9,100	2,060	1,100	280	465	330
17	166	660	840	3,050	910	420	4,200	2,480	740	290	390	370
18	320	560	850	4,500	660	450	5,200	4,100	4,900	260	350	360
19	445	500	740	4,300	580	415	4,500	2,240	6,000	234	360	335
20	280	466	1,180	2,160	820	455	2,650	1,640	2,600	236	380	340
21	190	455	2,040	3,300	910	780	2,100	1,360	3,650	198	260	345
22	156	445	1,400	6,600	1,620	1,280	6,900	1,360	13,400	184	295	335
23	142	436	850	4,800	1,460	1,680	5,600	2,650	4,450	164	360	176
24	242	415	860	3,600	1,180	2,160	3,300	2,040	2,260	174	490	112
25	365	660	1,300	14,000	790	1,840	2,380	1,400	1,540	186	550	172
26	426	450	3,050	7,000	600	1,420	2,120	1,160	1,180	218	325	285
27	415	340	3,000	4,200	1,100	990	1,800	1,340	920	244	212	285
28	290	440	3,350	2,800	1,100	820	2,280	2,220	840	226	400	270
29	240	550	2,180	1,900	-	820	3,400	1,420	750	194	440	290
30	222	550	1,760	1,640	-	860	2,360	1,000	650	184	415	206
31	224	-	2,700	1,740	-	1,340	-	793	-	156	410	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,722	445	58	217	.213	.25
November	22,506	1,680	295	750	.737	.82
December	37,285	3,350	305	1,203	1.18	1.36
Calendar year 1936	436,125	19,200	36	1,192	1.17	15.95
January	107,050	14,000	670	3,453	3.40	3.92
February	30,842	3,600	580	1,102	1.08	1.12
March	29,300	2,160	415	945	.929	1.07
April	111,110	9,600	1,800	3,704	3.64	4.06
May	59,923	5,700	793	1,933	1.90	2.19
June	56,040	13,400	340	1,868	1.84	2.05
July	8,840	580	156	285	.280	.32
August	18,689	3,150	126	603	.593	.68
September	9,047	495	112	302	.297	.33
Water year 1936-37	497,354	14,000	58	1,363	1.34	18.17

Genesee River at Jones Bridge, near Mount Morris, N. Y.

Location.- Water-stage recorder, lat. 42°45'55", long. 77°50'25", at Jones Bridge, 3½ miles northeast of Mount Morris, Livingston County.

Drainage area.- 1,419 square miles.

Records available.- May 1903 to April 1906, August 1908 to April 1914, July 1915 to September 1937.

Average discharge.- 27 years (1908-13, 1915-37), 1,571 second-feet.

Extremes.- Maximum discharge during year, about 18,000 second-feet Jan. 25 (gage height, 21.45 feet); minimum, 44 second-feet Oct. 10 (gage height, 0.23 foot).
1903-06, 1908-14, 1915-37: Maximum discharge, 55,100 second-feet May 17, 1916 (gage height, 25.44 feet); minimum, about 18 second-feet Aug. 29, 1909.

Remarks.- Records good except those for periods of ice effect, Nov. 23, 24, Nov. 26 to Dec. 14, Feb. 2-14, Feb. 22 to Mar. 7, Mar. 9-18, 25-30 (computed on basis of one discharge measurement, gage heights, weather records, and the records for station at St. Helena and for Canaseraga Creek near Dansville), and those for periods of missing gage heights, Nov. 6, 7, Dec. 14-26, Jan. 5-10 (computed on basis of records for station at St. Helena and for Canaseraga Creek near Dansville), which are fair. Wire-weight gage read twice daily May 21 to June 29. Diurnal fluctuation at low stages caused by operation of power plants. Slight seasonal regulation caused by storage in Caneadea Reservoir (capacity, 1,106,000,000 cubic feet).

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	166	285	650	3,500	3,100	1,300	3,050	2,500	1,040	980	210	490
2	89	310	650	2,200	1,700	1,300	4,250	2,240	820	850	192	470
3	130	315	600	1,800	1,200	1,300	4,400	2,140	790	820	206	300
4	89	570	440	1,780	1,100	1,000	3,300	1,940	800	780	270	265
5	172	1,320	600	1,400	1,000	1,500	4,850	1,740	770	700	345	295
6	242	1,800	650	1,000	1,100	2,000	7,600	5,600	680	640	214	440
7	108	1,400	650	800	1,200	1,500	6,000	6,600	600	595	550	610
8	116	1,720	700	950	2,000	1,280	3,500	3,700	545	540	1,580	550
9	126	1,880	750	1,900	4,600	1,200	3,500	2,850	495	500	880	500
10	95	1,640	700	2,000	3,200	1,000	4,000	2,380	860	425	800	295
11	190	1,320	650	1,800	1,700	750	3,300	2,220	2,180	350	3,500	285
12	270	1,040	2,000	1,540	1,100	800	3,050	2,020	1,200	380	3,150	390
13	325	870	1,700	1,280	1,100	750	3,100	1,820	690	400	2,320	360
14	330	760	1,200	2,650	1,000	700	2,700	2,850	1,280	370	1,420	416
15	320	740	950	11,400	970	550	8,400	3,450	2,950	360	860	426
16	166	880	850	9,500	1,000	550	11,800	2,850	1,860	390	650	412
17	148	810	900	4,300	1,060	600	6,700	2,900	1,160	410	550	412
18	290	640	950	4,550	1,060	550	4,800	5,200	3,450	385	490	452
19	395	575	800	5,600	800	575	6,300	3,250	8,200	335	452	412
20	415	575	1,300	3,000	880	680	4,150	2,360	4,100	335	530	398
21	238	512	2,200	3,000	1,100	1,060	3,250	1,940	5,300	325	405	403
22	210	503	1,600	7,300	2,000	1,960	8,100	1,800	14,400	290	365	408
23	176	480	1,200	5,700	2,200	2,440	8,400	3,050	9,000	265	380	380
24	196	460	1,000	3,800	1,600	3,100	5,500	3,950	4,350	246	450	188
25	360	590	1,500	13,000	1,200	2,600	3,850	2,060	2,850	275	680	180
26	425	650	3,400	11,800	900	2,000	3,200	1,620	2,020	310	510	285
27	452	400	3,450	5,900	1,100	1,500	2,750	1,780	1,380	330	335	330
28	420	480	3,550	3,650	1,300	1,200	2,850	3,250	1,160	310	350	340
29	285	600	2,850	2,700	-	1,100	4,300	2,320	1,140	275	555	315
30	270	600	2,020	2,260	-	1,300	3,350	1,620	1,040	260	495	320
31	226	-	2,750	2,280	-	1,820	-	1,280	-	246	500	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	7,440	452	89	240	0.169	0.19
November	24,725	1,880	285	824	.581	.65
December	43,210	3,550	440	1,394	.982	1.13
Calendar year 1936	592,915	24,200	53	1,620	1.14	15.54
January	124,340	13,000	800	4,011	2.83	3.26
February	41,270	4,600	800	1,474	1.04	1.08
March	39,965	3,100	550	1,289	.908	1.05
April	144,300	11,800	2,700	4,810	3.39	3.78
May	85,280	6,600	1,280	2,751	1.94	2.24
June	77,110	14,400	495	2,570	1.81	2.02
July	13,677	980	246	441	.311	.36
August	24,194	3,500	192	780	.550	.63
September	11,327	610	180	378	.266	.30
Water year 1936-37	636,838	14,400	89	1,745	1.23	16.69

Genesee River at Driving Park Avenue, Rochester, N. Y.

Location.- Water-stage recorder, lat. 43°11'05", long. 77°37'40", 40 feet below Plant No. 5 of Rochester Gas & Electric Corporation and 100 feet above Driving Park Avenue Bridge, in Rochester, Monroe County.

Drainage area.- 2,467 square miles.

Records available.- December 1919 to September 1937.

Average discharge.- 17 years (1920-37), 2,676 second-feet.

Extremes.- Maximum discharge during year, 20,200 second-feet Apr. 23 (gage height, 10.32 feet); minimum (regulated), about 28 second-feet several times during year; minimum daily discharge, 465 second-feet Sept. 4.
1919-37: Maximum discharge, about 29,600 second-feet Dec. 2, 1927 (gage height, 13.5 feet); minimum, approaching zero, occurs frequently during low-water periods, when power plant is shut down; minimum daily discharge, 219 second-feet Aug. 14, 1927.
Maximum known discharge, about 54,000 second-feet March 1865.

Remarks.- Records good. New York State Barge Canal crosses river near southern boundary of Rochester. It discharges into river from the west water diverted from Lake Erie and diverts from it to the east a smaller amount for the canal. Some additional regulation is provided by headwater storage in Caneadea Reservoir.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	810	860	960	3,250	3,450	1,940	4,350	5,100	2,800	2,420	930	1,100
2	780	970	960	3,900	3,000	1,860	6,200	3,950	2,380	2,140	1,020	1,180
3	720	1,020	980	2,800	2,440	1,860	7,600	3,750	2,120	2,100	860	1,360
4	620	1,060	1,140	2,850	1,780	2,060	6,600	3,350	2,060	1,880	890	465
5	720	1,320	960	2,700	1,980	2,360	5,700	3,200	1,980	1,860	930	800
6	710	2,080	880	1,820	2,140	2,850	8,700	3,800	1,820	1,700	1,120	930
7	920	2,480	1,180	1,760	1,740	2,500	10,600	10,200	1,740	1,620	1,120	1,060
8	780	2,140	1,260	2,240	2,550	2,600	7,200	8,300	1,580	1,600	1,480	1,200
9	730	2,340	1,160	2,040	4,500	2,160	4,600	5,400	1,640	1,580	2,380	1,200
10	740	2,650	1,260	2,650	6,600	2,060	5,500	4,300	1,600	1,460	1,880	1,080
11	700	2,180	1,500	3,000	4,500	1,660	5,600	3,750	2,240	1,320	4,650	970
12	800	1,980	1,400	2,700	2,850	1,480	4,550	3,450	2,080	1,300	7,800	920
13	780	1,640	2,240	2,480	2,650	1,280	4,100	3,050	2,280	1,200	6,800	1,000
14	850	1,520	2,160	2,300	2,320	1,020	4,050	3,250	2,020	1,180	4,600	1,000
15	900	1,460	1,780	5,900	2,400	1,300	4,900	4,000	3,000	1,240	3,200	1,000
16	940	1,380	1,620	12,600	1,820	1,140	13,000	4,400	3,850	1,260	2,320	1,020
17	870	1,600	1,600	10,400	1,740	940	12,400	3,950	2,900	1,300	1,780	1,020
18	810	1,420	2,300	5,200	2,000	1,240	8,600	6,200	2,600	1,180	1,560	970
19	860	1,300	2,160	6,400	2,100	1,580	7,700	7,600	8,000	1,240	1,400	1,180
20	950	1,220	1,620	5,700	1,800	1,260	7,300	5,100	9,300	1,140	1,440	1,100
21	1,040	1,200	2,040	3,850	1,760	1,660	4,650	4,100	5,400	1,140	1,340	1,040
22	850	1,100	2,750	5,500	2,550	3,250	8,000	3,750	12,000	1,180	1,200	1,040
23	780	1,100	2,340	8,400	3,100	3,750	14,000	3,550	15,400	1,120	1,140	1,020
24	760	1,100	2,000	6,700	3,050	4,550	12,400	4,800	12,200	1,120	1,100	990
25	750	1,100	1,740	6,900	2,280	4,750	8,300	4,250	6,200	970	1,260	930
26	920	1,180	2,360	13,600	1,760	3,950	5,600	3,500	4,250	1,180	1,400	810
27	910	1,280	3,750	12,800	1,360	3,250	4,950	3,300	3,500	1,160	1,200	870
28	1,040	1,020	3,950	6,400	1,460	1,400	4,800	3,900	3,150	1,160	1,120	920
29	1,100	1,020	3,950	4,400	-	1,700	6,300	4,500	2,900	1,080	930	940
30	1,040	1,020	3,600	3,750	-	2,220	6,500	3,500	2,650	1,140	1,260	920
31	870	-	2,950	3,150	-	2,950	-	3,100	-	1,040	1,140	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	26,050	1,100	620	840		
November	43,740	2,650	860	1,458		
December	60,550	3,950	880	1,953		
Calendar year 1936	1,019,900	26,100	500	2,787	1.13	15.37
January	158,140	13,600	1,760	5,101		
February	71,680	6,600	1,360	2,560		
March	68,600	4,750	940	2,213		
April	214,750	14,000	4,050	7,158		
May	138,350	10,200	3,050	4,463		
June	125,640	15,400	1,580	4,188		
July	43,010	2,420	970	1,387		
August	61,250	7,800	860	1,976		
September	30,035	1,360	465	1,001		
Water year 1936-37	1,041,795	15,400	465	2,854	1.16	15.71

Canaseraga Creek near Dansville, N. Y.

Location.- Water-stage recorder, lat. 42°33'40", long. 77°42'55", at highway bridge 1 mile west of Dansville, Livingston County.
Drainage area.- 153 square miles.
Records available.- July 1910 to December 1912, July 1915 to June 1917, March 1919 to September 1937.
Average discharge.- 17 years (1920-37), 143 second-feet.
Extremes.- Maximum discharge during year, 2,830 second-feet June 21 (gage height, 9.77 feet), from rating curve extended logarithmically above 1,000 second-feet; minimum, 16 second-feet Oct. 4, 5, Nov. 19 (gage height, 6.05 feet).
1910-12, 1915-17, 1919-37: Maximum discharge, about 9,920 second-feet July 6, 1935 (gage height, 13.71 feet), from rating curve extended logarithmically above 2,300 second-feet; minimum, 10 second-feet Aug. 9, 1934; minimum gage height, 5.50 feet Sept. 25, 1935.
Remarks.- Records good except those for periods of ice effect, Nov. 15-19, Nov. 23 to Dec. 11, Dec. 18-24, 29, 30, Jan. 3-7, 10-14, 16, 17, Feb. 1-6, 10-12, 15-18, Feb. 22 to Mar. 3, Mar. 6-17, 23-30 (computed on basis of one discharge measurement, gage heights, weather records, and records for other stations in Genesee River Basin), those for periods of backwater from debris on control, Oct. 10-16, Aug. 1 to Sept. 30 (computed on basis of three discharge measurements and records of other stations in Genesee River Basin), and those for June 27 to Aug. 6, when intake was not functioning properly, all of which are fair. Discharge for Jan. 2, 23-30, Sept. 26 computed on basis of records for Genesee River at Jones Bridge, near Mount Morris, and at St. Helena. Slight diurnal fluctuation at low stages from operation of power plants upstream.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 10-16 and Aug. 1 to Sept. 30)

Oct. 1 to Jan. 14, May 7 to Sept. 30						Jan. 15 to May 6					
6.0	12	6.4	68	7.0	265	6.1	30	6.8	200	7.6	620
6.1	20	6.5	90	7.2	370	6.2	45	7.0	275	8.0	920
6.2	33	6.6	115	7.4	485	6.4	86	7.2	370	8.5	1,390
6.3	49	6.8	180	7.6	620	6.6	135	7.4	485	9.0	1,930

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	19	20	134	120	65	340	207	121	112	36	26
2	19	24	24	90	100	60	460	190	110	105	40	26
3	18	24	26	90	90	50	380	172	122	115	34	24
4	17	40	22	65	85	64	385	162	121	98	32	26
5	17	53	19	40	80	164	710	206	105	88	30	26
6	17	47	20	44	75	120	890	1,080	100	83	50	26
7	18	49	19	55	66	100	425	520	95	79	90	24
8	18	58	18	66	170	100	295	380	90	75	48	26
9	18	62	19	92	395	95	370	330	86	70	44	24
10	18	57	30	80	200	65	316	250	375	68	55	24
11	18	46	70	60	140	60	290	212	208	76	65	26
12	18	41	81	48	120	55	340	180	142	75	85	24
13	19	38	60	40	120	48	360	222	118	66	65	26
14	20	36	52	300	118	42	330	350	305	55	46	26
15	20	40	47	1,020	110	38	1,620	330	320	51	40	26
16	20	36	41	420	90	40	910	248	202	62	38	24
17	45	30	41	240	75	36	475	285	159	58	36	24
18	30	26	28	475	90	36	600	260	590	51	36	24
19	25	26	30	315	86	40	475	208	465	44	36	26
20	21	30	75	190	73	54	330	188	255	41	38	26
21	20	30	75	385	77	164	405	166	890	39	38	26
22	20	30	55	405	200	186	1,540	159	810	38	40	26
23	21	26	48	320	130	260	750	325	410	36	36	24
24	32	26	52	300	110	260	460	212	260	51	34	22
25	24	26	102	1,100	100	200	330	170	188	62	32	24
26	30	26	173	550	90	140	280	166	156	55	30	20
27	26	24	184	300	90	130	263	226	136	47	30	24
28	23	22	192	220	70	120	300	285	148	43	30	22
29	21	20	110	180	-	110	285	180	133	38	28	24
30	21	20	120	150	-	150	235	152	115	39	26	20
31	20	-	168	138	-	238	-	136	-	38	26	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	674	45	17	21.7	0.142	0.16
November	1,032	62	19	34.4	.225	.25
December	2,021	192	18	65.2	.426	.49
Calendar year 1936	58,836	3,500	17	161	1.05	14.29
January	7,912	1,100	40	255	1.67	1.92
February	3,270	395	66	117	.765	.80
March	3,292	260	36	106	.693	.80
April	15,149	1,620	235	505	3.30	3.68
May	8,157	1,080	136	263	1.72	1.98
June	7,335	890	86	244	1.59	1.77
July	1,958	112	36	63.2	.413	.48
August	1,294	90	26	41.7	.273	.31
September	736	26	20	24.5	.160	.18
Water year 1936-37	52,830	1,620	17	145	.948	12.82

Canadice Lake outlet near Hemlock, N. Y.

Location.- Hook gage, lat. 42°44'25", long. 77°34'15", above weir at foot of Canadice Lake, Ontario County, 4 miles southeast of Hemlock, Livingston County.

Drainage area.- 12.6 square miles.

Records available.- April 1903 to September 1937.

Average discharge.- 34 years, 11.4 second-feet.

Remarks.- Data collected and computed by Department of Public Works, Division of Water, City of Rochester, N. Y.

Monthly discharge, water year October 1936 to September 1937

	Mean elevation of lake above low-water mark (feet)	Discharge in second-feet		Run-off in inches
		Mean	Per square mile	
October	-0.541	8.347	0.662	0.763
November	-.837	2.215	.176	.196
December	-.941	.649	.052	.060
Calendar year 1936	+1.346	10.881	.864	11.760
January	-.493	14.296	1.135	1.309
February	-.351	17.735	1.408	1.466
March	-.436	14.266	1.132	1.305
April	+.892	22.322	1.772	1.977
May	+3.150	20.231	1.606	1.952
June	+3.355	33.298	2.643	2.949
July	+2.848	6.688	.531	.612
August	+2.239	6.413	.509	.587
September	+1.429	5.779	.459	.512
Water year 1936-37	+.860	12.610	1.001	13.588

Note.- Terminal water-surface elevation on Dec. 31, 1936 was 1.10 feet lower than on Dec. 31, 1935, corresponding to a decrease in storage of 30,727,581 cubic feet, or a discharge of 0.972 second-foot for the year. This correction applied to the above gives a mean for the year of 9.909 second-feet, 0.786 second-foot per square mile, and 10.699 inches run-off from drainage area.

Terminal water-surface elevation on Sept. 30, 1937 was 1.04 feet higher than on Sept. 30, 1936, corresponding to an increase in storage of 29,921,329 cubic feet, or a discharge of 0.949 second-foot for the year. This correction applied to the above, gives a mean for the year of 13.559 second-feet, 1.076 second-feet per square mile, and 14.606 inches run-off from drainage area.

Oswego River at Lock 7, Oswego, N. Y.

Location.- Water-stage recorders, lat. 43°27'00", long. 76°30'25", at Lock 7, in Oswego, Oswego County, three-quarters of a mile above mouth. Zero of gage is 246.00 feet above mean sea level (New York State Barge Canal datum).

Drainage area.- 5,121 square miles.

Records available.- November 1933 to September 1937. April 1897 to December 1901, October 1927 to September 1928 (accuracy doubtful), at High Dam, about three-quarters of a mile upstream.

Extremes.- Maximum discharge during year, 21,200 second-feet Apr. 24 (gage height, 9.10 feet); minimum (river only), 55 second-feet Oct. 15 (gage height, 1.07 feet); minimum daily discharge, 1,440 second-feet Oct. 11.

1933-37: Maximum discharge, 37,500 second-feet Mar. 28, 1936 (gage height, 13.10 feet); minimum (river only), 42 second-feet Oct. 23, 1935 (gage height, 1.01 feet); minimum daily discharge, 465 second-feet Aug. 12, 1934.

Remarks.- Records good. Discharge here recorded represents the total flow at Oswego, and including that of the Hydraulic and Barge Canals. Discharge of Hydraulic Canal for Dec. 15, 16, Mar. 14 to May 9, June 30, Aug. 25, 26 estimated. A large amount of natural storage and some artificial regulation is afforded in the river basin by the many large lakes and the Barge Canal system. Large diurnal fluctuations caused by operation of power plants upstream. Oswego River receives water from the Erie division of Barge Canal at Three Rivers. A small amount is occasionally diverted from tributary streams of the Oswego and is added to the summit level of the Barge Canal at New London.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,900	2,100	4,200	6,200	11,000	11,400	5,900	16,600	6,600	3,200	2,020	3,700
2	2,120	3,300	4,250	8,500	10,600	11,000	7,800	15,800	5,500	8,000	1,700	3,350
3	1,700	3,700	4,100	7,200	10,600	10,600	8,700	15,200	5,300	7,200	2,120	3,750
4	1,720	3,700	3,950	7,600	9,600	10,400	8,000	14,200	5,100	6,700	2,200	3,450
5	1,860	4,500	3,750	7,100	9,400	10,800	9,300	14,200	4,950	4,400	1,760	3,150
6	2,120	4,850	3,400	6,300	10,200	10,800	10,000	14,200	3,800	5,200	2,040	2,650
7	2,180	5,500	4,200	5,600	9,100	9,900	11,000	14,200	4,400	5,400	2,040	3,100
8	2,060	5,100	4,400	5,900	10,400	10,400	11,000	13,200	4,650	5,100	2,800	2,950
9	2,140	5,800	4,400	6,500	11,600	9,900	10,800	12,400	4,150	4,750	2,300	3,000
10	2,180	5,300	4,250	5,900	12,800	9,300	10,800	12,800	4,450	3,900	2,420	2,750
11	1,440	5,600	4,800	7,300	12,400	9,600	10,400	12,400	4,750	3,050	2,400	2,220
12	1,920	5,200	4,650	6,600	11,600	8,500	11,000	12,000	4,700	3,300	2,480	2,300
13	2,460	5,100	4,600	7,000	11,600	7,700	10,800	10,800	4,300	3,900	2,750	2,850
14	2,080	5,100	5,300	7,400	11,000	7,000	9,800	10,400	4,850	3,600	2,850	2,650
15	1,900	4,750	5,900	8,700	11,400	8,000	9,700	10,600	4,950	3,700	1,880	2,700
16	2,020	5,100	5,100	9,800	11,000	7,500	9,900	10,400	4,450	3,400	3,050	2,360
17	2,340	5,600	5,600	9,400	10,400	7,000	9,900	10,200	4,700	3,500	2,750	2,440
18	1,740	5,100	4,700	11,600	11,000	6,700	10,600	10,600	4,600	2,080	2,600	2,420
19	2,340	4,850	4,350	13,200	10,600	6,400	10,200	10,800	4,600	3,300	2,700	1,620
20	2,800	4,900	4,750	12,400	10,400	6,700	10,400	10,800	4,500	3,350	2,420	2,140
21	2,400	4,700	4,400	11,200	9,100	6,200	10,600	11,000	5,400	2,950	2,260	2,040
22	2,600	4,150	4,550	12,800	11,600	7,200	12,000	11,000	6,800	2,950	1,960	2,000
23	2,380	4,800	4,000	13,200	13,000	8,200	14,600	10,600	8,600	2,800	2,060	1,540
24	2,550	4,750	4,350	12,000	12,800	8,800	16,800	10,200	8,800	2,700	1,920	2,040
25	2,100	4,600	2,950	13,400	12,600	9,000	17,600	10,200	8,600	2,000	1,900	1,860
26	3,000	4,300	5,200	14,200	12,000	8,100	18,200	9,800	8,500	2,900	1,940	1,700
27	3,650	4,100	5,600	14,200	11,600	7,500	18,400	9,100	7,900	3,100	1,980	1,840
28	3,150	4,200	7,200	13,600	10,800	6,300	18,000	8,200	8,900	2,800	2,650	2,080
29	3,150	3,750	6,400	13,200	-	6,300	17,400	8,100	8,600	2,100	2,750	1,840
30	3,050	4,000	6,600	12,400	-	5,300	17,000	6,800	8,300	2,140	3,300	1,860
31	2,900	-	6,700	11,200	-	4,900	-	5,900	-	2,220	3,100	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	71,950	3,650	1,440	2,321	0.453	0.52
November	138,500	5,800	2,100	4,617	.902	1.01
December	148,600	7,200	2,950	4,794	.936	1.08
Calendar year 1936	2,542,330	37,000	700	6,946	1.36	18.45
January	301,600	14,200	5,600	9,729	1.90	2.19
February	310,200	13,000	9,100	11,080	2.16	2.25
March	257,400	11,400	4,900	8,303	1.62	1.87
April	356,600	18,400	5,900	11,890	2.32	2.59
May	352,700	16,600	5,900	11,380	2.22	2.56
June	175,700	8,900	3,800	5,857	1.14	1.27
July	120,690	8,200	2,000	3,893	.760	.88
August	73,100	3,300	1,700	2,358	.460	.53
September	74,350	3,750	1,540	2,478	.484	.54
Water year 1936-37	2,381,390	18,400	1,440	6,524	1.27	17.29

Cayuga Inlet near Ithaca, N. Y.

Location.- Water-stage recorder and concrete control, lat. 42°23'35", long. 76°32'40", half a mile above Butternut Creek and 5 miles south of Ithaca, Tompkins County. Zero of gage is 437.16 feet above mean sea level (general adjustment of 1912).

Drainage area.- 36.7 square miles.

Records available.- March to September 1937.

Extremes.- Maximum discharge during period, 2,100 second-feet Aug. 27 (gage height, 5.30 feet), from rating curve extended logarithmically above 350 second-feet; minimum, 5.5 second-feet Aug. 5 (gage height, 0.64 foot).

Remarks.- Records good except those for period of ice effect, Mar. 6-14 (computed on basis of gage heights, weather records, and records for Fall Creek near Ithaca and Owego Creek near Owego), and those for period of missing gage heights, Sept. 4-9 (computed on basis of weather records and records for Fall Creek near Ithaca and Owego Creek near Owego), which are fair.

Rating tables, Mar. 3 to Sept. 30, 1937, except period of ice effect (gage height, in feet, and discharge, in second-feet)

Mar. 3 to Aug. 27						Aug. 28 to Sept. 30			
0.6	4.3	1.2	43	3.0	547	0.7	10	1.4	80
.7	7.4	1.4	69	3.5	805	.8	15	1.6	116
.8	12	1.6	104	4.0	1,120	.9	22	1.8	157
.9	17	2.0	200			1.0	31		
1.0	24	2.5	350			1.2	52		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	73	74	25	36	7.1	54
2						-	77	63	23	23	7.1	70
3						31	65	55	36	27	6.8	67
4						44	63	49	32	19	6.5	56
5						57	92	47	22	15	6.2	46
6						38	216	200	20	14	7.0	38
7						34	130	106	19	13	9.5	32
8						40	93	82	16	12	9.6	28
9						34	126	69	16	12	7.7	26
10						30	100	62	29	11	35	26
11						30	93	54	22	21	47	27
12						30	91	48	16	34	25	25
13						28	80	59	15	15	15	31
14						26	85	73	36	20	11	84
15						26	220	88	28	24	9.9	40
16						25	170	65	19	20	8.9	33
17						25	114	79	16	14	7.4	28
18						25	108	69	37	13	7.1	25
19						28	91	61	37	12	6.8	25
20						33	72	58	24	11	11	22
21						55	87	51	71	9.7	35	20
22						53	202	52	88	9.2	39	19
23						62	176	53	46	8.8	19	17
24						66	119	44	33	7.7	15	16
25						83	91	38	25	6.8	13	14
26						51	75	36	20	8.4	52	14
27						45	120	53	18	7.4	860	14
28						40	144	51	41	7.9	148	14
29						36	108	37	29	6.8	78	14
30						42	85	32	21	8.3	53	14
31						58	-	28	-	9.1	42	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October						
November						
December						
Calendar year						
January	-	-	-	-	-	-
February	-	-	-	-	-	-
March 3-31	1,175	83	25	40.5	1.10	1.19
April	3,366	220	63	112	3.05	3.40
May	1,936	200	28	62.5	1.70	1.96
June	880	88	15	29.3	.798	.89
July	456.1	36	6.8	14.7	.401	.46
August	1,605.6	860	6.2	51.8	1.41	1.63
September	939	84	14	31.3	.853	.95
Water year						

Fall Creek near Ithaca, N. Y.

Location.- Water-stage recorder and concrete control, lat. 42°27'20", long. 76°28'30", in Forest Home, Tompkins County, half a mile above Cornell University dam and 1½ miles northwest of Ithaca. Zero of gage is 794.81 feet above sea level (general adjustment of 1912).
Drainage area.- 124 square miles.
Records available.- February 1925 to September 1937. July 1908 to June 1909, at site 1½ miles downstream.
Average discharge.- 12 years (1925-37), 186 second-feet.
Extremes.- Maximum discharge during year, 2,140 second-feet Apr. 6 (gage height, 3.64 feet); minimum, 13 second-feet Oct. 6 (gage height, 0.31 foot).
1925-37: Maximum discharge, 15,500 second-feet July 8, 1935 (gage height, 9.52 feet), from average of computed discharge over four dams; minimum, about 3 second-feet Aug. 25, 1927 (gage height, 0.18 foot).
Remarks.- Records good except those for periods of ice effect, Dec. 18-20, Jan. 4-7, Feb. 2-8, which were computed on basis of gage heights and weather records and are fair. During the year Cornell University diverted 227,874,000 gallons about a mile above gage for its water supply, thus reducing the mean discharge at station 0.97 second-foot for the year.

Rating table, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.3	12.0	1.4	163
.4	17.5	1.6	239
.6	32	2.0	463
.8	51	2.5	823
1.0	75	3.0	1,270
1.2	110	4.0	2,760

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	45	42	275	223	168	560	227	81	122	61	86
2	18	43	55	188	120	174	700	194	74	104	42	81
3	19	96	74	200	110	152	640	170	90	97	34	95
4	19	150	80	170	130	172	510	154	117	83	28	146
5	16	470	74	110	130	286	660	146	86	68	26	116
6	14	281	67	90	120	231	1,580	390	74	59	24	86
7	14	258	74	130	120	180	1,020	350	85	55	24	68
8	16	291	64	390	170	172	570	206	75	49	26	60
9	15	223	62	415	640	210	700	174	75	45	28	52
10	16	177	75	285	425	136	610	160	134	41	38	47
11	21	140	295	202	192	132	502	148	156	40	124	45
12	23	115	465	174	184	122	500	132	93	58	98	44
13	22	108	204	148	180	132	490	156	72	53	62	47
14	20	102	144	275	223	118	392	239	178	44	49	80
15	19	122	146	1,040	202	129	720	360	325	51	40	80
16	18	124	132	490	170	122	820	270	162	59	31	65
17	27	102	310	226	140	80	500	210	108	55	28	54
18	80	132	180	850	138	120	460	295	144	42	26	48
19	74	92	85	590	138	140	465	253	290	36	23	46
20	44	106	280	285	148	150	330	227	154	35	28	48
21	32	106	246	460	168	246	315	206	285	32	34	45
22	28	106	148	790	860	285	890	204	910	30	66	41
23	32	89	102	475	510	330	1,020	350	315	28	56	42
24	54	82	134	315	350	415	540	194	180	26	39	32
25	72	90	151	1,700	280	560	363	151	134	25	34	34
26	54	99	385	840	204	310	297	129	110	26	36	32
27	99	63	345	420	200	224	350	170	97	27	1,100	30
28	64	54	291	275	164	208	440	174	144	26	590	34
29	46	70	198	277	-	184	370	127	160	25	190	32
30	44	58	234	248	-	188	267	104	112	24	124	30
31	52	-	368	231	-	335	-	91	-	102	100	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,091	99	14	35.2	0.284	0.33
November	3,994	470	43	133	1.07	1.19
December	5,510	465	42	178	1.44	1.66
Calendar year 1936	73,827	5,020	12	202	1.63	22.12
January	12,564	1,700	90	405	3.27	3.77
February	6,639	860	110	237	1.91	1.99
March	6,411	560	80	207	1.67	1.92
April	17,581	1,580	267	586	4.73	5.28
May	6,361	390	91	205	1.65	1.90
June	5,020	910	72	167	1.35	1.51
July	1,567	122	24	50.5	.407	.47
August	3,209	1,100	23	104	.839	.97
September	1,746	146	30	58.2	.469	.52
Water year 1936-37	71,693	1,580	14	196	1.58	21.51

Owasco Lake outlet near Auburn, N. Y.

Location.- Water-stage recorder and concrete control, lat. 42°56'45", long. 76°36'05", 2½ miles below center of Auburn, Cayuga County, and 4 miles below State dam at outlet of Owasco Lake.

Drainage area.- 208 square miles.

Records available.- November 1912 to September 1937.

Average discharge.- 24 years (1913-37), 285 second-feet.

Extremes.- Maximum and minimum discharges for the water years indicated have been revised as follows:

1912-13: Maximum discharge during period, 1,950 second-feet during high water of Mar. 25-30 (gage height, 4.6 feet, from floodmarks); minimum not determined; minimum daily discharge, 19 second-feet June 22.

1913-14: Maximum discharge, 1,850 second-feet Apr. 3 (gage height, 4.43 feet); minimum, 5.9 second-feet Oct. 15 (gage height, 1.41 feet); minimum daily discharge, 47 second-feet Oct. 12 and Nov. 8.

1915-16: Maximum discharge, 1,720 second-feet Apr. 3 (gage height, 4.21 feet); minimum not recorded; minimum daily discharge, 48 second-feet Sept. 24.

1919-20: Maximum discharge, 1,460 second-feet Mar. 29 (gage height, 3.84 feet); minimum, 3.8 second-feet Aug. 21; minimum daily discharge, 15 second-feet Aug. 8.

1921-22: Maximum discharge, 1,620 second-feet June 22 (gage height, 4.05 feet); minimum, 5.6 second-feet Oct. 30 (gage height, 1.41 feet); minimum daily discharge, 9.8 second-feet Oct. 30.

1927-28: Maximum discharge, 1,620 second-feet Dec. 2 (gage height, 4.05 feet); minimum (regulated), 12 second-feet Oct. 15 (gage height, 1.48 feet); minimum daily discharge, 95 second-feet Sept. 30.

1928-29: Maximum discharge (regulated), 1,800 second-feet Apr. 22 (gage height, 4.35 feet); minimum, 9 second-feet Oct. 25 (gage height, 1.45 feet); minimum daily discharge, 34 second-feet Oct. 28.

1931-32: Maximum discharge (regulated), 1,620 second-feet Apr. 4 (gage height, 4.06 feet); minimum, 6 second-feet Nov. 8 (gage height, 1.42 feet); minimum daily discharge, 20 second-feet Nov. 8.

Maximum discharge during water year 1936-37 (regulated), 1,040 second-feet Jan. 28 (gage height, 3.46 feet); minimum, about 2 second-feet Dec. 5 (gage height, 1.36 feet); minimum daily discharge, 14 second-feet Nov. 29.

1912-37: Maximum discharge (regulated), 2,090 second-feet Mar. 19, 1936 (gage height, 4.88 feet); minimum, that of Dec. 5, 1936; minimum daily discharge, 5 second-feet Nov. 11, 1934.

Remarks.- Records for the year ending Sept. 30, 1937, are excellent except for the period of backwater from weeds, July 1 to Sept. 30, which were computed on basis of two discharge measurements, available gage heights and record of operations at Owasco Lake dam and are good.

Revised records good except those for periods of ice effect (computed on basis of gage heights, weather records and record of operations at Owasco Lake Dam), and those for periods of faulty or missing gage heights (computed on basis of weather records and record of operations at Owasco Lake Dam), which are fair. Dirunal fluctuation in flow caused by operation of mills in Auburn; seasonal regulation at State dam. Water supply for Auburn taken from Owasco Lake, part of which returns to outlet above gaging station as sewage. Revised records as here given for water years 1912-13, 1913-14, 1915-16, 1928-29 supersede those published in Water-Supply Papers 354, 384, 434, and 664.

Discharge, in second-feet water years 1912-13, 1913-14, 1915-16, 1928-29, 1936-37

1912-13

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		-	94	207	608	194	*1,510	203	168	149	132	109
2		-	305	218	534	196	1,430	204	174	129	119	117
3		-	287	320	469	230	1,300	234	171	132	37	92
4		-	280	367	424	203	1,220	117	175	98	130	93
5		-	289	388	391	210	1,170	209	171	133	115	87
6		-	338	471	386	197	1,110	198	181	69	121	71
7		-	371	569	306	214	1,030	154	165	127	114	86
8		-	304	606	231	234	924	169	152	135	112	106
9		-	258	675	207	216	820	172	171	131	87	92
10		-	374	741	200	227	*810	176	163	134	26	88
11		-	356	754	207	234	803	151	174	124	108	92
12		-	347	830	247	249	813	175	161	98	96	84
13		-	312	905	289	243	763	165	154	62	104	*86
14		-	215	915	244	278	716	160	177	128	114	*30
15		-	38	844	213	377	648	161	60	124	103	*86
16		-	143	799	166	464	598	150	135	136	81	*84
17		26	163	853	200	502	545	155	128	123	28	*84
18		238	260	931	189	472	522	147	119	139	103	*84
19		214	274	955	183	452	504	156	129	143	103	*84
20		245	259	1,010	187	*410	460	158	126	94	91	*82
21		274	257	961	178	*380	413	157	109	147	98	*34
22		293	249	932	180	*360	351	170	19	135	97	*90
23		278	264	948	169	*330	332	156	112	148	82	*110
24		141	262	881	204	*330	*265	153	126	131	34	*95
25		300	244	858	183	*700	*276	107	132	124	101	*86
26		283	255	821	196	*1,350	326	170	133	125	95	*80
27		316	245	765	194	*1,750	187	164	130	69	90	*80
28		70	244	708	197	*1,900	256	139	94	132	90	*30
29		231	217	681	-	*1,850	207	156	20	123	128	*80
30		193	236	654	-	*1,750	205	113	132	137	80	*78
31		-	246	643	-	*1,650	-	175	-	114	79	-

*Faulty or missing gage heights.

Discharge, in second-feet, of Owasco Lake outlet near Auburn, N. Y., 1912-13, 1913-14, 1915-16, 1928-29, 1936-37--*Continued*

1913-14

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*80	53	106	*120	388	*220	1,680	600	177	118	155	286
2	*80	56	83	*120	427	*220	1,740	530	159	121	155	372
3	79	*60	95	*120	333	*220	1,770	510	159	120	161	361
4	57	64	84	*130	222	*200	1,730	476	153	92	155	397
5	56	77	91	*130	217	*211	1,680	463	148	91	149	404
6	90	67	78	134	219	211	1,600	372	150	154	158	373
7	80	70	83	136	217	237	1,550	366	148	138	168	385
8	72	47	85	132	*220	247	1,620	372	174	136	156	296
9	73	100	*80	*135	*320	234	1,690	*360	176	148	149	349
10	68	90	*90	*130	*320	264	1,650	*340	169	137	170	375
11	65	67	*85	*130	*300	233	1,620	*330	163	144	153	373
12	47	66	*95	*120	*300	220	1,560	*360	176	128	151	357
13	99	77	*105	*110	*300	263	1,520	*540	152	149	147	312
14	74	76	*115	*90	*300	232	1,450	*600	134	136	142	326
15	74	56	*115	*120	*300	235	1,410	584	168	147	146	302
16	71	70	115	*140	*280	272	1,400	569	161	148	143	267
17	67	122	117	*120	*280	281	1,370	533	183	327	149	315
18	57	81	109	*120	*260	287	1,320	500	172	372	129	309
19	53	95	90	*130	294	307	1,260	486	181	397	134	262
20	113	93	75	*135	297	305	1,210	483	140	317	130	116
21	84	91	117	135	319	300	1,170	418	148	245	125	212
22	*80	71	144	167	338	301	1,120	370	158	246	133	102
23	*75	76	112	182	*380	299	1,080	351	163	241	127	227
24	69	103	110	236	*280	289	1,030	317	159	227	169	220
25	60	84	*110	254	*200	315	1,020	302	149	225	153	223
26	90	90	*110	221	*200	409	978	301	151	212	141	248
27	100	67	*100	254	*200	595	900	302	155	216	150	179
28	77	105	*90	266	*220	1,080	788	292	142	185	143	211
29	73	78	*110	308	-	1,370	714	287	140	149	202	203
30	74	78	*120	332	-	1,550	667	226	130	161	194	192
31	71	-	*120	395	-	1,640	-	156	-	156	228	-

1915-16

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	430	393	291	428	342	*†260	1,470	690	483	288	136	120
2	510	370	292	542	387	*†260	1,600	658	463	270	130	113
3	485	355	286	581	414	*†260	1,620	593	469	258	*120	74
4	475	363	279	619	331	*†260	1,600	528	486	260	*120	105
5	548	355	271	663	397	*†260	1,560	508	522	258	*130	132
6	575	337	266	*740	384	*†240	1,510	488	507	257	*95	141
7	579	331	273	*780	377	*240	1,450	461	499	246	*120	138
8	592	337	266	*760	342	*240	1,360	404	491	226	*130	133
9	587	322	248	*740	384	*220	1,250	320	487	196	*120	140
10	555	311	241	*740	†380	*220	1,070	323	452	221	84	53
11	540	250	236	*700	†360	*220	926	310	404	219	137	107
12	516	258	237	690	†360	*240	863	308	409	213	124	124
13	501	314	238	652	†360	*240	827	270	404	204	83	117
14	481	273	238	648	†340	*240	821	234	397	199	132	120
15	514	315	231	633	†340	*240	826	244	396	208	131	132
16	500	307	231	595	†340	*†240	792	254	402	174	128	108
17	502	311	240	649	336	*†260	772	494	398	214	135	65
18	493	310	273	632	326	*†280	736	699	376	212	131	112
19	525	324	283	591	†320	*†280	708	740	432	208	151	113
20	538	323	293	519	†300	*†280	679	743	422	206	54	107
21	529	331	308	404	†280	†280	642	699	403	185	107	108
22	524	330	301	182	†280	†260	642	678	396	187	131	113
23	505	331	326	166	261	†260	612	717	393	138	133	113
24	486	326	328	180	262	†260	674	766	388	194	125	48
25	484	330	354	175	273	†280	784	795	353	184	130	107
26	472	323	379	173	254	329	794	716	302	172	127	105
27	449	318	403	165	264	383	800	689	300	174	55	111
28	439	310	414	237	*260	479	816	649	290	173	104	111
29	423	308	422	314	*†260	646	756	594	303	171	120	116
30	400	297	424	323	-	875	687	566	297	148	125	103
31	389	-	419	336	-	1,190	-	513	-	140	121	-

*Faulty or missing gage heights. †Ice effect.

Discharge, in second-feet, of Owasco Lake outlet near Auburn, N. Y., 1912-13, 1913-14, 1915-16 1928-29, 1936-37--Continued

1928-29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	121	138	147	153	140	207	892	1,070	236	160	158	155
2	127	146	138	161	149	217	834	1,040	205	144	150	157
3	132	164	154	163	147	187	802	1,090	248	102	150	185
4	140	154	145	151	148	207	748	1,100	248	84	145	182
5	140	159	146	160	146	308	767	1,120	237	124	152	173
6	127	132	148	170	135	431	933	1,100	222	115	146	162
7	120	152	148	159	204	448	971	1,110	220	100	144	178
8	117	157	146	160	231	473	958	1,100	215	136	158	101
9	134	147	152	163	242	450	901	1,060	194	136	149	239
10	119	157	165	153	222	447	847	1,000	216	120	138	160
11	121	128	157	157	227	474	899	969	185	110	157	164
12	114	144	*160	159	251	547	865	930	160	116	165	157
13	99	144	*165	195	262	568	822	886	178	115	163	156
14	71	137	*155	*160	226	762	778	863	184	96	181	163
15	117	156	*170	*160	222	1,080	766	868	165	122	179	150
16	116	150	145	*160	207	1,260	786	899	174	122	172	189
17	111	167	172	*165	182	1,330	896	897	184	117	176	188
18	106	98	168	*165	188	1,320	1,060	876	183	127	169	176
19	138	162	172	163	193	1,310	1,030	854	184	137	180	168
20	98	151	181	164	195	1,300	1,120	840	185	119	183	167
21	123	146	163	190	212	1,260	1,530	811	185	124	182	141
22	124	150	160	169	179	1,210	1,640	782	179	147	181	149
23	116	142	176	153	*175	1,200	1,610	752	155	142	269	164
24	121	139	153	160	*180	1,180	1,570	724	173	142	176	162
25	120	132	139	153	*175	1,150	1,510	700	175	191	116	156
26	120	149	146	153	*165	1,100	1,460	670	168	146	193	172
27	120	152	154	163	*175	1,080	1,410	650	172	142	189	172
28	34	145	146	156	*195	1,010	1,340	595	171	168	178	151
29	104	138	142	154	-	973	1,220	443	170	177	174	157
30	141	168	149	*150	-	930	1,130	239	159	167	174	165
31	141	-	148	*145	-	912	-	245	-	158	200	-

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	22	20	232	700	490	387	504	350	260	145	130
2	58	50	23	228	670	483	414	483	355	260	135	140
3	40	32	25	222	650	468	461	476	365	260	130	180
4	32	37	25	228	620	461	490	468	355	250	130	175
5	37	43	22	280	540	461	530	425	350	245	130	155
6	34	39	19	345	530	461	550	390	365	260	135	165
7	39	39	25	360	480	450	645	387	360	260	*125	155
8	33	39	52	365	550	440	682	380	300	270	*125	160
9	39	32	126	350	550	427	698	374	260	195	*125	155
10	32	31	140	325	580	420	705	375	300	190	*124	165
11	30	28	152	335	440	407	698	375	270	205	*124	160
12	34	28	140	340	500	400	712	370	255	175	*122	155
13	31	26	128	340	540	385	712	395	250	180	*122	160
14	30	28	126	370	520	360	680	390	270	175	*122	160
15	23	24	150	380	526	355	700	385	275	170	110	155
16	21	23	148	385	511	350	720	380	270	160	118	150
17	44	29	136	430	430	350	735	530	265	165	116	150
18	23	29	138	530	470	350	728	675	275	165	118	118
19	27	22	136	590	455	345	735	675	265	170	118	135
20	18	25	124	610	440	340	705	668	255	165	116	140
21	16	21	116	650	445	340	668	610	305	165	118	150
22	16	18	134	660	510	355	750	510	280	160	108	155
23	23	24	136	690	541	360	788	468	265	160	114	170
24	22	26	138	700	555	370	788	461	260	155	116	170
25	20	22	200	800	555	375	758	415	265	150	114	160
26	29	22	242	850	541	385	720	475	255	150	120	145
27	24	23	228	850	526	380	682	630	255	140	145	145
28	17	22	230	830	497	374	638	580	270	125	125	155
29	24	14	240	780	-	374	608	420	265	130	125	155
30	26	27	240	740	-	374	548	340	255	130	124	145
31	21	-	240	720	-	375	-	340	-	130	125	-

*Faulty or missing gage heights.

Discharge, in second-feet, of Owasco Lake outlet near Auburn, N. Y., 1912-13, 1913-14, 1915-16, 1928-29, 1936-37--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 1912	-	-	-	-		
November 17-30	3,102	316	26	222		
December	7,986	374	38	258		
Calendar year						
January 1913	22,210	1,010	207	716		
February	7,382	608	166	264		
March	18,152	1,900	194	586		
April	20,514	1,510	187	684		
May	5,074	234	107	164		
June	4,061	181	19	135		
July	3,793	149	62	122		
August	2,898	132	26	93.5		
September	2,500	117	30	83.3		
Water year						
October 1913	2,308	113	47	74.5		
November	2,330	122	47	77.7		
December	3,139	144	75	101		
Calendar year 1913	94,361	1,900	19	259	1.25	16.88
January 1914	5,252	395	90	169		
February	7,931	427	200	283		
March	13,047	1,640	200	421		
April	40,297	1,770	667	1,340		
May	12,696	600	156	410		
June	4,738	183	130	158		
July	5,783	397	91	187		
August	4,765	228	125	154		
September	8,554	404	102	285		
Water year 1913-14	110,840	1,770	47	304	1.46	19.80
October 1915	15,546	592	389	501		
November	9,663	393	250	322		
December	9,291	424	231	300		
Calendar year 1915	121,547	1,170	57	333	1.60	21.74
January 1916	15,557	780	165	502		
February	9,514	414	254	328		
March	10,222	1,190	220	330		
April	29,647	1,620	612	988		
May	16,651	795	234	537		
June	12,324	522	290	411		
July	6,403	288	138	207		
August	3,669	151	54	118		
September	3,289	141	48	110		
Water year 1915-16	141,776	1,620	48	387	1.86	25.35
October 1928	3,632	141	34	117		
November	4,404	168	98	147		
December	4,810	181	138	155		
Calendar year 1928	93,878	696	34	256	1.23	16.80
January 1929	4,977	195	145	161		
February	5,373	262	135	192		
March	25,331	1,330	187	817		
April	32,095	1,640	748	1,070		
May	26,283	1,120	239	848		
June	5,730	248	155	191		
July	4,106	191	84	132		
August	5,247	269	116	169		
September	4,959	239	101	165		
Water year 1928-29	126,947	1,640	34	348	1.67	22.69
October 1936	909	58	16	29.3		
November	845	50	14	28.2		
December	3,999	242	19	129		
Calendar year 1936	107,898	2,030	14	295	1.42	19.27
January 1937	15,515	850	222	500		
February	14,872	700	430	531		
March	12,265	490	340	396		
April	19,635	788	387	654		
May	14,354	675	340	463		
June	8,685	365	250	290		
July	5,775	270	125	186		
August	3,824	145	108	123		
September	4,613	180	118	154		
Water year 1936-37	105,291	850	14	288	1.38	18.80

Note.- Increase in storage in Owasco Lake during calendar year 1936 approximately 28,715,000 cubic feet (equivalent mean discharge 0.91 second-foot); increase during water year 1936-37 approximately 433,593,000 cubic feet (equivalent mean discharge 13.7 second-feet).

East Branch of Fish Creek at Taberg, N. Y.

Location.- Water-stage recorder, lat. 43°18'05", long. 75°37'10", at highway bridge in Taberg, Oneida County, just below mouth of Furnace Creek.
Drainage area.- 189 square miles.
Records available.- April 1923 to September 1937.
Average discharge.- 14 years, 556 second-feet.
Extremes.- Maximum discharge during year, 5,260 second-feet Jan. 15 (gage height, 5.70 feet), from rating curve extended logarithmically above 4,400 second-feet; minimum (regulated), 10 second-feet Sept. 30 (gage height, 0.05 foot).
1923-37: Maximum discharge, about 16,500 second-feet Oct. 6, 1932 (gage height, 9.18 feet), from rating curve extended logarithmically above 2,700 second-feet; minimum, that of Sept. 30, 1937.
Remarks.- Records good except those for periods of ice effect, Nov. 28 to Dec. 10, Dec. 23-25, Jan. 4-7, Jan. 29 to Feb. 9, Mar. 1 to Apr. 4, (computed on basis of gage heights and weather records), and those for periods of missing gage heights, Oct. 25, 26, Dec. 20, 21, Sept. 4-21, (computed on basis of recorded range in stage, observer's readings, weather records, and records for stations on nearby streams), all of which are fair. Small amount of water diverted above station by city of Oneida for municipal supply. Some diurnal fluctuation at low stages.

Rating table, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.1	12	0.6	51	1.6	343	3.5	1,730
.2	17	.8	86	1.8	433	4.0	2,320
.3	23	1.0	135	2.0	531	4.5	3,010
.4	30	1.2	193	2.5	835	5.0	3,820
.5	39	1.4	262	3.0	1,230	5.5	4,810

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	440	634	200	2,550	340	360	200	1,040	169	262	40	21
2	568	910	190	1,340	300	320	220	842	146	219	78	21
3	361	1,700	190	842	280	280	320	688	212	181	69	28
4	248	1,620	190	650	260	300	340	579	297	163	46	75
5	190	1,660	200	550	240	380	650	570	240	130	38	37
6	149	1,040	200	440	220	320	1,880	980	200	107	44	27
7	315	828	280	380	200	260	2,900	890	193	93	65	23
8	590	814	360	910	200	220	2,320	676	163	64	54	21
9	387	779	320	1,700	550	220	2,060	558	143	45	44	19
10	387	676	280	1,660	920	220	1,380	481	370	46	51	19
11	491	536	821	920	786	200	1,040	428	430	47	242	20
12	443	471	835	688	646	190	910	361	262	40	280	42
13	392	467	606	552	542	180	1,120	452	190	38	390	80
14	301	481	521	3,000	630	180	1,900	584	172	37	186	181
15	251	1,260	452	4,400	856	170	2,850	910	213	57	98	146
16	314	940	387	1,940	746	170	2,340	790	178	160	62	104
17	1,120	563	365	960	573	160	1,900	760	152	154	44	73
18	2,020	500	289	2,800	467	160	1,500	2,100	200	170	39	53
19	1,100	343	237	2,750	424	170	1,620	1,280	193	136	53	69
20	752	387	370	1,140	387	190	2,140	972	163	86	93	188
21	536	405	620	1,920	630	220	1,760	740	240	49	61	125
22	410	447	424	1,860	2,260	220	3,100	573	282	43	46	91
23	365	352	340	1,080	1,760	220	2,600	547	203	36	37	50
24	610	309	320	680	1,140	220	1,800	510	141	36	34	66
25	720	314	360	2,950	800	220	1,920	438	100	43	30	31
26	940	309	1,020	2,020	595	200	1,820	361	86	46	28	37
27	580	266	1,720	1,140	506	190	1,740	387	82	49	27	57
28	462	240	2,800	779	395	180	1,520	352	285	41	32	20
29	433	220	1,480	650	-	180	1,340	278	540	38	44	50
30	700	220	1,280	480	-	170	1,180	230	335	33	30	16
31	793	-	1,280	400	-	170	-	200	-	38	23	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	17,368	2,020	149	560	2.96	3.41
November	19,691	1,700	220	656	3.47	3.87
December	18,937	2,800	190	611	3.23	3.72
Calendar year 1936	203,837	5,170	16	557	2.95	40.10
January	44,131	4,400	380	1,424	7.53	8.68
February	17,553	2,260	200	630	3.33	3.47
March	6,840	380	160	221	1.17	1.35
April	48,370	3,100	200	1,612	8.53	9.52
May	20,557	2,100	200	663	3.51	4.05
June	6,580	540	82	219	1.16	1.29
July	2,687	262	33	86.7	.459	.53
August	2,408	390	23	77.7	.411	.47
September	1,790	188	16	59.7	.316	.35
Water year 1936-37	207,012	4,400	16	567	3.00	40.71

Black River near Boonville, N. Y.

Location.- Water-stage recorder, lat. 43°30'35", long. 75°18'25", at highway bridge three-quarters of a mile above mouth of Sugar River and 2 miles northeast of Boonville, Oneida County.
Drainage area.- 295 square miles.
Records available.- February 1911 to September 1937.
Average discharge.- 26 years, 661 second-feet.
Extremes.- Maximum discharge during year, 3,660 second-feet Jan. 1 (gage height, 8.30 feet); minimum, 120 second-feet Sept. 30 (gage height, 3.76 feet).
1911-37: Maximum discharge, about 10,000 second-feet Mar. 28, 1913 (gage height, about 12.5 feet); minimum, about 5 second-feet Aug. 26, 1918 (gage height, 2.40 feet).
Remarks.- Records good except those for periods of ice effect, Nov. 16-20, Nov. 23 to Dec. 11, Dec. 16-27, Jan. 6, 7, 11-14, Jan. 26 to Feb. 8, Feb. 10-12, 16-21, Feb. 25 to Mar. 17, Mar. 25-27, (computed on basis of three discharge measurements, partial gage-height record, and records for Independence River at Sperryville), and those for periods of missing gage heights, Jan. 2, 3, 18-25, Feb. 13, May 25 to June 8 (computed on basis of records for Independence River at Sperryville and West Branch of Oswegatchie River near Harrisville), all of which are fair. Flow partially regulated by several headwater reservoirs. Forestport feeder diverts from State Pond at Forestport. That portion of the diverted water which does not pass down Black River Canal (flowing south) returns to Black River below station through Mill Creek sluiceway.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 6				Apr. 7 to Sept. 30			
4.2	219	6.0	1,100	3.8	126	4.6	339
4.4	279	6.5	1,470	4.0	164	5.0	505
4.6	348	7.0	1,910	4.2	211	5.5	770
5.0	518	7.5	2,470	4.4	270		
5.2	620	8.0	3,160	Note.- Same as preceding table above 5.9 feet.			
5.6	850	8.5	4,030				

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	320	776	280	3,500	600	550	500	1,280	340	545	339	175
2	386	770	280	2,480	500	550	543	1,060	300	510	314	168
3	360	1,060	300	1,980	440	480	543	920	380	385	310	171
4	295	1,080	320	1,760	400	500	578	810	600	310	283	194
5	242	1,440	340	1,400	480	550	840	790	500	267	251	182
6	231	1,300	320	1,000	500	500	2,320	910	400	239	242	164
7	300	1,040	420	750	500	480	1,920	1,040	440	217	360	154
8	680	970	500	724	600	460	1,920	950	340	191	277	148
9	560	960	550	870	900	500	1,900	870	286	186	245	144
10	449	890	500	1,140	1,000	440	1,520	840	465	188	234	139
11	560	760	1,000	1,200	800	500	1,260	780	870	194	415	139
12	533	692	1,100	900	700	700	1,100	450	540	1,060	650	140
13	423	642	950	750	675	650	1,180	451	377	1,420	810	156
14	356	680	840	700	870	650	1,440	510	325	730	570	380
15	309	970	653	1,440	1,180	600	2,120	1,240	366	460	393	355
16	405	950	550	3,250	1,000	600	2,440	1,820	366	490	314	233
17	810	650	460	2,480	700	550	2,120	1,300	325	550	270	175
18	1,440	550	400	1,700	550	573	1,800	1,480	321	640	248	487
19	1,460	460	380	2,800	480	548	1,800	2,020	350	560	250	166
20	890	500	460	1,700	460	538	2,200	1,740	362	420	465	191
21	630	548	480	2,000	700	548	2,040	1,460	375	343	409	186
22	528	553	400	1,700	1,900	553	2,420	1,140	540	293	320	164
23	490	460	380	1,300	2,040	518	2,700	970	485	238	267	156
24	670	440	440	1,000	1,380	467	2,000	860	355	198	233	148
25	880	420	500	2,000	950	440	1,960	748	283	191	216	140
26	850	400	650	1,400	700	440	1,900	660	248	186	206	139
27	1,120	360	900	1,100	600	440	1,840	644	236	198	206	139
28	850	320	1,380	950	550	449	1,720	565	325	233	198	137
29	680	300	1,320	850	-	449	1,600	482	690	245	188	135
30	770	280	1,180	700	-	450	1,420	420	660	242	182	135
31	890	-	1,820	650	-	465	-	380	-	335	171	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	19,367	1,460	231	625	2.12	2.44
November	21,223	1,440	280	707	2.40	2.68
December	20,053	1,820	280	647	2.19	2.52
Calendar year 1936	257,661	5,850	108	704	2.39	32.47
January	46,174	3,500	650	1,489	5.05	5.82
February	22,155	2,040	400	791	2.66	2.79
March	16,138	700	440	521	1.77	2.04
April	49,644	2,700	500	1,655	5.61	6.26
May	29,590	2,020	380	955	3.24	3.74
June	12,450	870	236	415	1.41	1.57
July	12,264	1,420	186	396	1.34	1.54
August	9,836	810	171	317	1.07	1.23
September	5,540	487	135	185	.627	.70
Water year 1936-37	264,434	3,500	135	724	2.45	33.33

Black River at Watertown, N. Y.

Location.- Water-stage recorder, lat. 43°59'05", long. 75°55'30", at Vanduzee Street bridge in Watertown, Jefferson County.

Drainage area.- 1,876 square miles.

Records available.- July 1920 to September 1937.

Average discharge.- 17 years, 3,908 second-feet.

Extremes.- Maximum discharge during year, 17,700 second-feet Apr. 7 (gage height, 7.17 feet); minimum, 48 second-feet Sept. 5 (gage height, -0.03 foot); minimum daily discharge, 480 second-feet Sept. 5.

1920-37: Maximum discharge, 33,900 second-feet Apr. 9, 1928 (gage height, 10.6 feet); minimum (estimated), 10 second-feet Sept. 2, 1934 (gage height, -0.19 foot); minimum daily discharge, 410 second-feet Aug. 13, 1923.

Maximum known discharge, about 39,700 second-feet in April 1869.

Remarks.- Records excellent. Flow partly regulated by storage in Stillwater Reservoir, Fulton Chain of Lakes, and other reservoirs in upper drainage basin. During canal season water is diverted out of drainage basin through Forestport Feeder and Black River Canal (flowing south). Large diurnal fluctuation caused by operation of mills and power plants in Watertown and above.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 6						Apr. 7 to Sept. 30					
1.8	1,440	3.0	3,490	5.0	8,940	0.8	435	2.0	1,790	4.0	6,400
2.0	1,720	3.5	4,620	6.0	12,380	1.0	592	2.5	2,690	5.0	9,450
2.5	2,520	4.0	5,920	8.0	21,280	1.2	777	3.0	3,780	6.0	13,000
						1.5	1,100	3.5	5,000	8.0	21,800

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,900	4,100	2,260	11,300	3,300	4,100	2,140	7,750	2,850	2,160	980	1,120
2	1,880	3,900	1,980	11,600	3,000	3,800	2,700	7,150	2,360	2,280	1,040	1,100
3	2,240	4,400	1,860	12,000	2,650	3,100	3,000	6,400	2,260	2,200	1,300	1,540
4	2,160	5,650	2,080	10,600	3,200	3,080	3,050	6,250	2,260	1,840	1,520	1,520
5	1,900	5,920	2,320	8,800	3,150	2,900	4,400	5,800	2,200	1,260	1,520	480
6	1,980	6,060	2,200	6,200	3,100	2,950	12,700	5,650	2,220	1,380	1,240	660
7	1,800	6,200	2,160	4,500	3,250	2,160	17,400	5,800	2,280	1,520	1,460	960
8	1,920	5,920	3,050	5,100	3,000	2,160	16,200	6,250	2,260	1,420	1,300	1,020
9	2,420	5,520	3,000	8,000	4,000	2,300	14,600	6,400	2,080	1,460	1,260	1,140
10	2,950	5,380	2,950	7,840	4,750	2,340	12,600	5,950	1,900	1,220	1,640	1,060
11	1,880	5,000	3,600	6,770	4,700	2,220	10,800	5,500	1,960	1,040	1,920	1,520
12	2,300	4,260	4,500	5,600	4,620	2,100	8,800	5,000	3,250	1,100	2,180	1,060
13	2,500	3,920	4,350	4,700	4,380	2,200	7,750	4,380	2,900	900	3,250	1,120
14	2,460	3,700	4,040	6,500	4,150	2,160	7,600	4,130	2,080	2,360	3,950	1,180
15	2,020	3,850	3,550	10,200	4,450	2,060	8,200	4,380	1,780	2,440	3,100	1,880
16	1,600	4,620	3,300	10,900	4,850	2,140	8,800	6,250	1,760	1,860	2,160	1,860
17	2,120	4,500	3,150	10,400	4,950	1,960	9,800	7,150	1,780	1,640	1,980	1,760
18	3,300	3,810	2,800	10,900	4,550	2,080	10,500	8,800	1,780	1,200	1,880	1,660
19	5,920	2,440	2,480	11,600	3,920	2,550	10,500	9,450	1,460	1,620	1,920	1,240
20	6,480	2,850	2,360	10,800	3,550	2,480	10,200	9,450	1,360	1,840	1,820	1,180
21	5,920	3,100	2,650	10,600	3,550	1,980	10,500	9,450	1,620	1,640	1,880	1,260
22	4,740	3,550	2,900	10,900	5,500	2,040	11,800	8,800	1,600	1,440	1,080	1,640
23	3,700	3,100	3,000	9,900	6,900	2,280	13,000	7,750	1,940	1,520	1,260	1,660
24	3,350	2,800	2,700	8,400	8,100	2,420	12,600	6,550	1,900	1,380	1,560	1,440
25	3,250	2,700	2,900	9,700	8,800	2,600	11,900	5,500	1,640	1,180	1,600	1,440
26	3,800	2,650	3,700	9,800	7,900	2,200	10,500	4,620	1,400	1,140	1,500	1,460
27	4,740	2,300	6,200	8,900	6,500	2,060	9,450	4,130	1,140	1,140	1,480	1,200
28	4,740	2,200	8,300	8,900	4,950	1,980	9,100	4,130	1,300	1,140	1,360	1,000
29	4,500	1,760	8,000	6,800	-	1,920	8,500	3,850	1,480	1,160	700	1,360
30	4,040	1,780	8,300	5,700	-	2,280	8,200	3,350	2,080	1,420	1,020	1,300
31	4,050	-	10,200	4,500	-	2,180	-	3,100	-	1,180	1,060	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	98,560	6,480	1,600	3,179	1.69	1.95
November	117,940	6,200	1,760	3,931	2.10	2.34
December	116,840	10,200	1,860	3,769	2.01	2.32
Calendar year 1936	1,372,120	26,900	570	3,749	2.00	27.20
January	268,410	12,000	4,500	8,658	4.62	5.33
February	129,720	8,800	2,650	4,633	2.47	2.57
March	74,780	4,100	1,920	2,412	1.29	1.49
April	287,290	17,400	2,140	9,576	5.10	5.69
May	189,120	9,450	3,100	6,101	3.25	3.75
June	58,880	3,250	1,140	1,963	1.05	1.17
July	47,080	2,440	900	1,519	.810	.93
August	51,920	3,950	700	1,675	.893	1.03
September	38,820	1,880	480	1,294	.690	.77
Water year 1936-37	1,479,360	17,400	480	4,053	2.16	29.34

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Mill Creek sluiceway at Boonville, N. Y.

Location.- Water-stage recorder, lat. 43°29'10", long. 75°19'40", about 500 feet above Schuyler Street in Boonville, Oneida County, and a quarter of a mile above confluence with Mill Creek.

Records available.- October 1933 to September 1937.

Extremes.- Maximum discharge during year, 74 second-feet Jan. 25 (gage height, 1.02 feet); no flow during periods of no diversion.
1933-37: Maximum discharge, 146 second-feet Oct. 3, 1934; maximum gage height, 2.86 feet sometime during Dec. 11-16, 1933; no flow during periods of no diversion.

Remarks.- Records good except those below 1 second-foot, which are fair, and those for periods of ice effect, Nov. 16-19, 24, Nov. 27 to Dec. 26, Dec. 29, 30, Jan. 6, 11-13, 16, 17, 20, Jan. 27 to Mar. 31 (computed on basis of three observations of open-water flow, gage heights to Feb. 3, and weather records), and for periods of missing gage heights, Feb. 4 to Apr. 8, Aug. 14, 20, 21, Sept. 18 (estimated), which are poor. The discharge at this station represents the amount of water returned to Black River after diversion. The sum of this discharge and that of Black River Canal (flowing south) represents the total amount diverted from Black River at Forestport through Forestport feeder and includes also the run-off from about 14 square miles tributary to the canal system and Mill Creek.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	4.4	0.4	7.7	1.6	0.7	0.1	0.2	0.3	14	8.8	13
2	9.4	9.0	.4	3.3	1.5	.6	.2	.1	.2	10	16	14
3	10	7.9	.4	4.1	1.3	.5	.7	.1	.2	8.6	19	13
4	7.3	8.4	.4	3.0	1.1	.5	6	.1	.2	6.1	19	11
5	10	12	.5	2.2	.9	.5	20	.1	.2	5.6	19	9.3
6	11	16	.6	1.3	.8	.4	40	1.4	.3	11	17	9.3
7	12	15	.8	2.4	.8	.4	8.5	.6	.3	9.7	14	14
8	12	14	1.8	8.5	.9	.4	11	.4	.3	11	14	13
9	12	14	1.3	6.9	8	.4	14	1.4	.3	10	14	14
10	11	13	4.4	3.3	3.0	.3	6.0	.1	3.2	11	13	14
11	5.7	3.2	11	1.5	1.8	.3	5.1	0	5.4	9.9	13	12
12	13	1.8	5.5	.8	1.3	.3	8.6	.1	5.4	13	11	8.3
13	13	2.2	3.8	.9	1.5	.2	11	.2	5.4	13	11	14
14	11	4.6	3.2	29	2.6	.2	12	.7	5.4	14	9.2	14
15	9.7	12	3.6	21	5.5	.2	13	5.7	5.4	14	7.3	11
16	8.2	2.8	4.6	6	2.4	.2	8.0	1.5	5.4	14	12	12
17	10	1.5	2.8	3.2	1.5	.2	5.5	2.6	5.4	11	12	11
18	4.4	1.1	2.0	43	1.3	.2	4.9	4.0	8.8	12	11	9.3
19	7.8	.7	1.6	9.8	1.2	.3	4.8	13	12	13	11	7.8
20	9.5	.7	8	4.8	1.5	.3	4.6	16	8.4	12	10	12
21	10	1.5	1.8	29	2.4	.3	3.6	13	4.1	12	9.0	13
22	9.2	1.4	1.6	6.3	18	.2	21	9.7	4.1	12	7.8	14
23	9.3	1.2	1.3	3.0	6.5	.2	7.1	8.7	4.1	13	13	23
24	8.1	1.1	1.2	5.3	3.0	.1	3.2	12	4.1	10	13	16
25	4.1	.9	2.6	39	1.8	.1	2.2	7.0	4.1	19	13	13
26	9.7	.6	9	5.5	1.3	.1	1.5	.5	3.8	16	12	9.9
27	9.3	.5	18	1.5	1.1	.1	1.0	.4	3.8	14	11	15
28	9.4	.5	27	1.2	.8	0	1.3	.4	3.7	14	9.5	14
29	8.9	.4	6.5	1.1	-	0	1.4	.3	4.1	14	7.8	13
30	9.6	.4	4.4	1.2	-	0	.4	.3	5.6	15	13	12
31	7.0	-	26	2.0	-	.1	-	.3	-	13	13	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	291.6	13	4.1	9.41		
November	152.8	16	.4	5.09		
December	156.5	27	.4	5.05		
Calendar year 1936	2,573.0	37	0	7.03		
January	257.8	43	.8	8.32		
February	75.4	18	.8	2.69		
March	8.3	.7	0	.27		
April	226.7	40	.1	7.56		
May	100.9	16	0	3.25		
June	114.0	12	.2	3.80		
July	374.9	19	5.6	12.1		
August	383.4	19	7.3	12.4		
September	378.9	23	7.8	12.6		
Water year 1936-37	2,521.2	43	0	6.91		

Black River Canal (flowing south) near Boonville, N. Y.

Location.- Two water-stage recorders and concrete controls, lat. 43°27'20", long. 75°19'25"—no. 1 on main canal at Lock 69 and no. 2 on Lansingkill spillway, 100 feet downstream from head gates in summit level of canal and 600 feet upstream from Lock 70—2 miles south of Boonville, Oneida County.

Records available.- September 1915 to September 1937 during canal seasons.

Remarks.- Records excellent. They include the combined flow at gages 1 and 2 and represent the total diversion from Black River through Forestport feeder, into Mohawk River Basin. Discharge estimated for Aug. 28-31, Sept. 9, 10, at gage no. 1 and for Oct. 13-16, Nov. 3-7 at gage no. 2. During Nov. 10 to June 9, for which period no water was diverted, the canal carried a small flow, made up of leakage through the head gates and run-off from the area draining into the canal above the station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	77						-	7	23	70	65
2	56	72						-	7	27	65	66
3	56	69						-	7	24	61	66
4	53	78						-	10	25	60	70
5	49	92						-	11	23	59	71
6	54	78						-	10	18	61	71
7	57	26						-	9	17	50	67
8	66	14						-	7	21	35	67
9	65	12						-	6	27	60	67
10	62	7						-	11	28	65	66
11	70	4						-	21	29	57	68
12	61	4						-	20	26	22	71
13	53	4						-	20	30	28	69
14	57	5						-	18	31	45	51
15	56	8						-	19	28	67	48
16	50	5						-	18	30	62	70
17	83	-						-	17	32	62	70
18	105	-						-	17	31	61	71
19	61	-						-	14	28	62	75
20	69	-						-	15	28	38	73
21	65	-						-	20	28	49	71
22	64	-						-	26	29	65	69
23	61	-						-	24	30	61	59
24	72	-						-	20	36	59	66
25	77	-						-	18	44	59	68
26	77	-						-	18	41	60	71
27	81	-						-	18	54	60	68
28	70	-						-	23	63	59	67
29	63	-						-	34	65	68	70
30	76	-						10	31	63	65	71
31	84	-						9	-	64	65	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	105	49	65.4			
November 1-16	92	4	34.7			
December	-	-	-			
Calendar year						
January						
February						
March						
April						
May 30,31	10	9	9.5			
June	34	6	16.5			
July	65	17	33.6			
August	70	22	56.8			
September	75	48	67.4			
Water year						

Moose River at McKeever, N. Y.

Location.- Water-stage recorder, lat. 43°36'40", long. 75°06'35" (erroneously published 77°06'35" in previous reports), half a mile west of McKeever, Herkimer County, and 2 miles below mouth of South Branch of Moose River.

Drainage area.- 365 square miles.

Records available.- May 1922 to September 1937. June 1900 to December 1922, at Village of Moose River, 2½ miles downstream.

Average discharge.- 29 years (1907-13, 1914-37), 845 second-feet.

Extremes.- Maximum discharge during year, 5,470 second-feet Jan. 1 (gage height, 8.89 feet); minimum, 114 second-feet Aug. 7 (gage height, 1.63 feet).
1900-37: Maximum discharge recorded, about 16,500 second-feet Mar. 27, 1913 (gage height, 16.2 feet, from floodmarks, at former site and datum); minimum, about 42 second-feet July 21, 23, 25-27, 1913.

Remarks.- Records excellent except those for periods of ice effect, Nov. 17-19, Nov. 23 to Dec. 27, Dec. 31, Jan. 3-7, 10-13, 17, Jan. 20 to Feb. 12, Feb. 15-19, Feb. 22 to Mar. 20, Mar. 29, 30, which were computed on basis of three discharge measurements, gage heights, weather records and are fair. Flow regulated to some extent by storage in Fulton Chain of Lakes. Occasional slight diurnal fluctuation during medium and low stages caused by operation of paper mill in McKeever.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.6	107	2.6	420	6.0	2,560
1.8	155	3.0	590	7.0	3,450
2.0	211	3.5	835	8.0	4,470
2.2	275	4.0	1,120	9.0	5,600
2.4	345	5.0	1,780		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	432	850	420	4,800	850	750	468	2,360	590	359	185	158
2	610	860	460	2,750	800	700	476	2,650	532	396	191	150
3	680	1,140	500	1,900	750	650	388	2,420	448	362	191	142
4	600	1,220	550	1,500	750	600	296	2,280	476	303	191	177
5	540	1,280	500	1,200	800	550	324	1,960	476	265	182	217
6	500	1,160	480	1,100	800	550	820	1,920	416	236	166	255
7	527	1,020	440	1,000	750	500	1,920	2,280	370	205	142	285
8	740	970	380	1,060	750	550	1,880	1,880	342	177	128	290
9	790	1,020	360	1,420	850	500	1,600	1,660	310	155	138	275
10	640	990	380	2,000	950	500	1,240	1,560	365	155	152	286
11	700	860	440	1,400	950	500	980	1,440	900	158	340	292
12	640	760	600	1,100	850	550	810	1,440	700	226	710	328
13	509	710	550	950	800	550	810	970	496	540	970	334
14	432	670	550	1,220	830	550	1,100	1,040	444	370	830	384
15	448	980	500	2,900	1,000	550	1,860	2,360	440	282	586	464
16	540	1,080	500	2,750	1,100	550	2,160	3,200	416	282	460	444
17	740	750	480	1,700	950	550	2,180	2,020	376	331	436	396
18	2,380	650	440	2,100	850	550	2,060	2,280	359	428	420	373
19	1,860	600	420	2,900	800	600	2,500	2,180	376	436	415	376
20	1,240	600	600	2,000	740	600	3,200	1,860	416	331	388	416
21	970	700	750	1,700	750	586	2,650	1,760	376	268	396	452
22	800	740	650	1,800	1,500	550	2,650	1,480	388	236	348	436
23	730	650	600	1,500	2,600	532	2,460	1,280	428	214	303	400
24	890	550	550	1,300	2,000	492	2,120	1,180	380	194	278	370
25	1,280	500	500	1,700	1,400	472	2,380	1,040	317	177	275	352
26	1,160	500	550	2,000	1,100	460	2,600	940	278	171	230	338
27	1,360	440	950	1,500	900	464	2,850	890	249	179	211	331
28	1,100	400	2,000	1,200	800	460	2,750	840	245	182	196	324
29	870	380	2,220	1,000	-	440	2,800	770	300	179	185	334
30	870	380	1,720	950	-	440	2,360	720	362	174	174	359
31	970	-	2,000	900	-	444	-	650	-	179	166	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	26,548	2,380	432	856	2.35	2.71
November	23,410	1,280	380	780	2.14	2.39
December	22,040	2,220	360	711	1.95	2.25
Calendar year 1936	308,918	7,000	123	844	2.31	31.50
January	53,300	4,800	900	1,719	4.71	5.43
February	27,970	2,600	740	999	2.74	2.85
March	16,740	750	440	540	1.48	1.71
April	52,692	3,200	296	1,756	4.81	5.37
May	51,310	3,200	650	1,655	4.53	5.22
June	12,571	900	245	419	1.15	1.28
July	8,150	540	155	263	.721	.83
August	9,983	970	128	322	.882	1.02
September	9,738	464	142	325	.890	.99
Water year 1936-37	314,452	4,800	128	862	2.36	32.05

Middle Branch of Moose River at Old Forge, N. Y.

Location.- Staff gage, lat. 43°42'50", long. 74°58'10", in Old Forge, Herkimer County, 400 feet below State dam.
Drainage area.- 52 square miles.
Records available.- November 1911 to September 1937.
Average discharge.- 25 years (1912-37), 106 second-feet.
Extremes.- Maximum discharge during year, about 385 second-feet May 1 (gage height, 3.3 feet, backwater from North Branch); minimum daily discharge, about 0.3 second-foot several times during year, when gates in dam were closed.
1911-37: Maximum discharge, 882 second-feet Mar. 23, 1921, from rating curve extended logarithmically above 450 second-feet; minimum, about 0.3 second-foot Mar. 12 to Apr. 22, 1935, and several times during 1936 and 1937 when gates in dam were closed.
Remarks.- Records good. Discharge for period of backwater due to tree on control, Jan. 15-29, computed on basis of gage heights and one discharge measurement, and that for periods of backwater from North Branch, Apr. 17 to May 4, May 11-22, computed on basis of records of gate operations at Old Forge Dam. On days of changes in gate openings the discharge is averaged for intervals of a day from graph based on gage readings and record of gate operations. Gage read twice daily. Flow regulated by storage in Fulton Chain of Lakes.

Rating tables, water year 1936-37 except periods of extreme low flow or backwater (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 10

0.0	0.4	0.6	9.6	1.6	79
.1	.7	.8	17	2.0	129
.2	1.6	1.0	28	2.5	207
.3	2.9	1.2	41	3.0	307
.4	4.6				

Mar. 11 to Sept. 30

2.3	174	3.0	314
2.5	209	3.5	444

Note.- Same as preceding table below 2.3 feet.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	244	0.3	158	158	190	198	209	270	114	27	23	32
2	234	.4	173	174	190	198	209	360	33	28	23	54
3	234	.4	216	182	205	198	145	350	.9	28	23	129
4	234	.4	216	174	254	198	.3	350	.9	28	23	137
5	234	.4	207	166	244	198	.3	338	.9	28	23	166
6	247	.4	207	166	234	198	.3	338	.9	28	23	166
7	285	14	142	166	234	190	.3	338	1.1	28	19	176
8	218	34	74	166	225	190	.3	338	2.4	28	13	209
9	158	28	74	174	225	190	.3	338	2.4	27	13	209
10	113	27	79	174	216	207	.3	338	2.9	27	13	218
11	.3	28	79	174	216	258	.3	330	4.1	27	12	248
12	.3	30	79	174	216	258	.3	180	5.0	28	18	238
13	.3	32	79	174	207	258	.3	.3	27	28	33	238
14	91	33	79	182	207	248	.3	.3	57	41	60	238
15	182	38	79	185	207	248	.3	.3	74	74	60	238
16	182	41	79	190	207	248	.3	.3	74	74	94	238
17	134	44	79	195	207	238	.3	.3	74	68	122	238
18	.3	47	106	205	207	238	.3	.4	74	68	115	238
19	.3	46	207	210	207	238	.3	.4	68	68	115	209
20	.3	109	254	210	207	238	.3	.4	68	68	102	228
21	.3	174	219	215	207	228	.3	.5	67	68	68	228
22	.3	166	129	220	207	228	.3	40	63	56	68	228
23	.3	136	129	210	207	214	.3	136	68	23	68	228
24	.3	68	129	205	207	182	.3	136	59	23	58	218
25	.3	64	129	215	207	174	.3	136	27	23	30	209
26	.3	66	129	225	207	174	.3	136	27	23	30	209
27	.3	65	129	215	207	174	.3	136	27	23	30	209
28	.3	62	136	210	207	174	.3	136	27	23	29	222
29	.3	62	143	205	-	174	.4	136	27	23	29	258
30	.3	90	143	198	-	182	.4	129	27	23	29	258
31	.3	-	143	190	-	209	-	129	-	23	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,795.1	285	0.3	90.2		
November	1,506.3	174	.3	50.2		
December	4,224	254	74	136		
Calendar year 1936	36,059.5	405	.3	98.5	1.89	25.80
January	5,907	225	158	191		
February	5,961	254	190	213		
March	6,548	258	174	211		
April	571.3	209	.3	19.0		
May	5,121.2	360	.3	165		
June	1,103.5	114	.9	36.8		
July	1,152	74	23	37.2		
August	1,395	122	12	45.0		
September	6,114	258	32	204		
Water year 1936-37	42,398.4	360	.3	116	2.23	30.32

Note.- The combined storage in Old Forge and Sixth Lake Reservoirs on Sept. 30, 1937, showed a net decrease of 281,400,000 cubic feet for the water year, equivalent to a yearly mean discharge of 8.92 second-feet, 0.172 second-foot per square mile, or 2.33 inches on drainage area.
The combined storage in Old Forge and Sixth Lake Reservoirs on Dec. 31, 1936 showed a net increase of 167,900,000 cubic feet for the calendar year, equivalent to a yearly mean discharge of 5.31 second-feet, 0.102 second-foot per square mile, or 1.39 inches on drainage area.

Middle Branch of Moose River near McKeever, N. Y.

Location.- Water stage recorder, lat. 43°37'45", long. 75°04'55", half a mile above confluence of Middle and South Branches of Moose River and 1½ miles northeast of McKeever, Herkimer County.

Drainage area.- 148 square miles.

Records available.- October 1925 to September 1937.

Average discharge.- 12 years, 336 second-feet.

Extremes.- Maximum discharge during year, 942 second-feet May 2 (gage height, 4.94 feet); minimum,63 second-feet July 25, 26 (gage height, 2.20 feet).
1925-37: Maximum discharge, 2,100 second-feet Apr. 27, 1926 (gage height, 6.6 feet); minimum, about 42 second-feet Aug. 26, 1931 (gage height, 1.98 feet).

Remarks.- Records excellent except those for Jan. 15-22 (computed on basis of records for station at Old Forge and for Moose River at McKeever), which are good, and those for periods of ice effect, Nov. 17-20, Nov. 24 to Dec. 27, Jan. 4-7, 11, 12, 23-25, 27-31, Feb. 2-8, 11, 12, 16-19, Feb. 24 to Mar. 14,(computed on basis of two discharge measurements, gage heights, weather records, and records for station at Old Forge and for Moose River at McKeever), which are fair. Flow partly regulated by storage in Fulton Chain of Lakes.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

2.2	63	3.2	240
2.4	88	3.5	325
2.6	117	4.0	500
2.8	151	4.5	715
3.0	192	5.0	975

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	285	322	240	670	520	420	325	720	328	133	67	101
2	364	319	280	670	480	420	328	930	284	131	70	94
3	374	328	320	740	480	400	214	920	199	125	71	101
4	367	335	340	700	500	380	120	880	186	119	68	151
5	357	357	320	650	550	380	127	760	179	114	67	190
6	347	351	300	600	550	380	280	780	173	108	64	215
7	383	351	260	550	500	360	400	820	157	82	67	215
8	418	367	200	560	480	380	380	740	147	76	68	213
9	325	364	170	540	500	360	390	770	138	83	67	235
10	304	357	190	520	492	360	370	800	163	80	68	254
11	232	354	220	500	480	380	347	790	182	82	80	270
12	153	325	260	500	460	400	322	710	167	110	122	295
13	133	307	240	492	446	400	325	445	153	116	201	298
14	131	292	240	540	460	400	377	450	190	106	270	313
15	218	354	220	650	476	397	464	530	201	110	281	304
16	289	354	200	850	460	394	488	510	197	135	273	301
17	335	340	200	700	440	387	500	540	192	153	310	295
18	365	320	200	700	420	377	530	660	192	155	310	292
19	301	300	280	850	420	390	580	660	190	142	295	301
20	310	300	360	800	411	387	660	620	182	128	275	307
21	335	390	400	750	414	380	680	580	179	119	251	301
22	328	428	240	800	590	370	770	530	171	114	218	295
23	335	397	220	750	600	364	770	540	171	104	204	289
24	347	320	220	650	550	325	780	550	167	75	192	284
25	316	260	240	750	500	310	760	510	140	65	173	278
26	338	240	280	770	480	301	720	476	125	64	146	273
27	341	220	340	700	460	298	710	426	114	64	131	270
28	328	200	442	700	440	295	690	387	117	64	123	267
29	322	190	460	650	-	292	680	390	130	65	117	287
30	331	180	456	600	-	284	660	380	125	65	111	310
31	328	-	620	550	-	304	-	357	-	65	105	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,640	418	131	311	2.10	2.42
November	9,522	428	180	317	2.14	2.39
December	8,958	620	170	289	1.95	2.25
Calendar year 1936	117,029	1,090	55	320	2.16	29.40
January	20,452	850	492	660	4.46	5.14
February	13,559	600	411	484	3.27	3.40
March	11,275	420	284	364	2.46	2.84
April	14,747	780	120	492	3.32	3.70
May	19,163	930	357	618	4.18	4.82
June	5,239	328	114	175	1.18	1.32
July	3,152	155	64	102	.689	.79
August	4,865	310	64	157	1.06	1.22
September	7,599	313	94	253	1.71	1.91
Water year 1936-37	128,171	930	64	351	2.37	32.20

Independence River at Sperryville, N. Y.

Location.- Staff gage, lat. 43°46'30", long. 75°18'05", half a mile above highway bridge at Sperryville, Lewis County, and 9½ miles east of Lowville.
Drainage area.- 85 square miles.
Records available.- December 1927 to September 1937.
Extremes.- Maximum discharge during year, 1,090 second-feet Dec. 28 and Jan. 1 (gage height, 4.7 feet, from graph based on gage readings); minimum, 15 second-feet Sept. 11 (gage height, 0.98 foot).
1927-37: Maximum discharge, 4,700 second-feet Oct. 6, 1932 (gage height, 9.2 feet), from rating curve extended above 1,310 second-feet; minimum, 14 second-feet Aug. 31 to Sept. 2, 1934 (gage height, 0.88 foot).
Remarks.- Records good except those for periods of ice effect, Nov. 18-20, Nov. 24 to Dec. 13, 22-27, Jan. 27 to Feb. 12, Feb. 17, 18, Feb. 28 to Mar. 19, Mar. 23-31, which were computed on basis of one discharge measurement, gage heights. and weather records, and are fair. Gage read twice daily. On days of rapidly changing stage the discharge is averaged for intervals of a day from graph based on gage readings.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to 18				Oct. 19 to Sept. 30					
1.4	48	2.2	171	0.9	11	1.6	68	3.0	358
1.5	59	2.6	263	1.0	16	1.8	95	3.5	527
1.6	71	3.0	377	1.1	23	2.0	126	4.0	735
1.8	99	3.5	547	1.2	30	2.2	162	4.5	975
2.0	132	4.0	740	1.4	47	2.6	249		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79	203	60	914	120	130	61	301	81	87	27	17
2	147	203	60	578	100	110	67	249	71	110	29	17
3	124	288	65	370	90	100	69	214	91	78	32	17
4	87	288	70	249	86	95	81	192	182	58	29	19
5	66	301	70	214	85	100	118	182	143	46	24	17
6	55	262	70	152	90	90	540	249	121	40	32	20
7	53	237	85	152	90	85	780	374	134	35	44	20
8	102	249	100	182	95	100	780	329	104	30	42	17
9	110	249	95	329	150	85	648	262	82	28	40	16
10	92	225	110	358	240	75	455	214	126	25	51	16
11	86	192	160	274	260	70	329	192	240	24	82	15
12	96	172	240	214	200	75	237	162	162	29	307	17
13	109	152	280	182	162	70	249	182	110	36	421	17
14	88	143	237	247	162	65	389	274	84	35	268	41
15	75	204	203	633	237	60	635	492	73	30	132	60
16	98	249	172	637	301	60	691	648	66	36	76	45
17	166	192	162	346	220	55	606	455	56	35	53	35
18	572	160	143	455	170	75	648	566	54	47	43	29
19	622	100	126	606	143	100	735	606	56	45	40	29
20	389	120	152	389	126	71	875	472	49	35	53	46
21	262	134	182	344	133	67	691	389	49	28	62	50
22	192	134	170	374	329	76	680	301	72	24	47	40
23	172	124	150	288	574	75	875	249	91	23	38	32
24	225	110	150	214	508	70	606	214	68	22	33	28
25	301	110	160	329	340	65	606	182	51	22	29	24
26	315	95	220	438	225	60	606	152	42	22	27	22
27	374	85	480	320	162	60	566	162	36	23	24	21
28	288	75	719	200	140	60	472	152	50	27	23	20
29	214	70	663	180	-	65	421	123	81	25	22	20
30	214	65	505	130	-	60	358	104	73	29	20	19
31	237	-	452	130	-	60	-	92	-	27	19	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,010	622	53	194	2.28	2.63
November	5,191	301	65	173	2.04	2.28
December	6,511	719	60	210	2.47	2.85
Calendar year 1936	63,406	2,030	16	173	2.04	27.74
January	10,428	914	130	336	3.95	4.55
February	5,537	574	85	198	2.33	2.43
March	2,389	130	55	77.1	.907	1.05
April	14,874	875	61	496	5.84	6.52
May	8,735	648	92	282	3.32	3.83
June	2,698	240	36	89.9	1.06	1.18
July	1,161	110	22	37.5	.441	.51
August	2,169	421	19	70.0	.824	.95
September	786	60	15	26.2	.308	.34
Water year 1936-37	66,489	914	15	182	2.14	29.14

Stillwater Reservoir near Beaver River, N. Y.

Location.- Float-tape gage, lat. 43°53'50", long. 75°03'05", at Stillwater Dam, 7½ miles west of Beaver River post office, Herkimer County. Zero of gage is at mean sea level (general adjustment of 1912); add 1,600 feet to figures given in daily tables to convert to elevations above mean sea level.

Drainage area.- 172 square miles.

Records available.- February 1925 to September 1937.

Extremes.- Maximum and minimum discharges are given in the following table:

Water year	Maximum			Minimum		
	Date	Elevation (feet)	Contents (million cubic feet)	Date	Elevation (feet)	Contents (million cubic feet)
1924-25	June 11	76.45	3,835	Feb. 11	54.32	204
1925-26	June 17	79.33	4,632	Oct. 3	69.42	2,224
1926-27	May 20	79.40	4,652	Mar. 10,11	70.66	2,477
1927-28	May 31	79.37	4,643	Oct. 4, 5	70.65	2,474
1928-29	May 4	79.48	4,669	Mar. 13,14	66.09	1,609
1929-30	May 25	79.35	4,638	Nov. 15	67.95	1,922
1930-31	June 22	77.83	4,206	Mar. 23	*44.94	-
1931-32	July 14	79.39	4,649	Oct. 24	69.46	2,232
1932-33	May 3	79.42	4,658	Sept.30	64.32	1,321
1933-34	May 28	77.31	4,064	Mar. 3	*47.55	-
1934-35	June 25	79.43	4,661	Mar. 4, 5	59.17	637
1935-36	May 22	79.41	4,655	Mar. 11	*48.21	-
1936-37	May 15	79.38	4,648	Oct. 15-17	65.11	1,446

*Elevation below that of established zero capacity (1,650.3, feet), contents not determined.

Remarks.- The flow of Beaver River below this reservoir and of Black River below Castorland is affected by the operation of the reservoir. Records furnished by the Board of Black River Regulating District, which has established the zero capacity of reservoir at elevation 1,650.3 feet, below which there is available about 90,000,000 cubic feet of storage. Capacity above 1,650.3 feet is 4,624,000,000 cubic feet. Gage read once daily.

Elevation, in feet, 1925-37

1925

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					-	59.10	70.18	75.24	75.95	75.04	74.64	71.44
2					-	59.05	70.50	75.27	76.08	75.06	74.70	71.45
3					-	59.10	70.90	75.25	76.15	75.13	74.70	70.82
4					-	59.05	71.18	75.26	76.17	75.11	74.67	70.00
5					-	59.10	71.45	75.26	76.24	75.11	74.61	69.98
6					-	59.19	71.77	75.28	76.23	75.08	74.58	69.91
7					-	59.24	72.00	75.28	76.31	75.00	74.57	69.97
8					-	59.31	72.30	75.25	76.34	74.97	74.58	70.00
9					-	59.37	72.55	75.26	76.36	74.88	74.68	70.02
10					-	59.42	72.73	75.26	76.43	74.79	74.69	69.77
11					54.32	59.82	73.07	75.27	76.45	74.69	74.63	69.49
12					54.75	60.35	73.47	75.35	76.42	74.68	74.62	69.30
13					55.93	61.05	73.57	75.40	76.32	74.63	74.56	69.38
14					56.63	61.40	73.40	75.43	76.24	74.52	74.45	69.58
15					57.25	61.95	73.20	75.45	76.15	74.40	74.46	69.72
16					57.88	62.09	73.22	75.45	76.06	74.29	74.50	69.60
17					58.18	62.65	73.12	75.52	75.98	74.31	74.43	69.67
18					58.51	62.68	73.09	75.71	75.88	74.23	74.34	69.80
19					58.73	63.73	73.05	75.82	75.79	74.11	74.24	69.94
20					58.93	64.20	73.16	75.92	75.69	74.13	74.07	70.06
21					58.93	64.73	73.14	75.99	75.53	74.06	73.96	70.21
22					59.08	65.22	73.12	76.11	75.50	74.17	73.72	70.22
23					59.13	65.72	73.19	76.15	75.44	74.32	73.75	70.20
24					59.28	66.04	73.42	76.12	75.35	74.39	73.68	70.16
25					59.55	66.49	73.69	76.12	75.33	74.48	73.48	70.15
26					59.58	66.78	74.04	76.10	75.23	74.59	73.33	70.09
27					59.18	67.35	74.38	76.08	75.16	74.67	73.16	69.90
28					59.15	68.35	74.70	76.03	75.13	74.68	72.94	69.93
29					-	69.05	74.97	76.00	75.09	74.67	72.72	69.89
30					-	69.45	75.19	75.98	75.00	74.61	72.72	69.80
31					-	69.85	-	75.96	-	74.63	72.28	-

Elevation, in feet, of Stillwater Reservoir near Beaver River, N. Y., 1925-37--Continued

1925-26

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69.86	73.45	77.92	77.65	77.63	74.23	71.88	78.68	78.66	79.11	77.24	76.02
2	69.50	73.56	77.90	77.65	77.62	74.06	71.92	78.71	78.72	79.07	77.18	75.93
3	69.42	73.72	77.88	77.63	77.60	73.99	71.96	79.01	78.76	79.02	77.12	75.82
4	69.58	73.75	77.87	77.61	77.59	73.92	72.02	79.05	78.80	78.95	77.07	75.71
5	69.86	73.87	77.90	77.60	77.56	73.81	72.07	78.80	78.78	78.87	76.96	75.66
6	69.74	73.90	78.12	77.65	77.49	73.73	72.12	78.68	78.72	78.79	76.85	75.58
7	69.85	73.90	78.29	77.65	77.44	73.65	72.16	78.70	78.65	78.83	76.81	75.47
8	70.03	74.05	78.30	77.64	77.40	73.59	72.28	78.75	78.65	78.78	76.81	75.40
9	70.16	74.17	78.27	77.57	77.34	73.51	72.51	78.87	78.65	78.73	76.78	75.32
10	70.25	74.23	78.20	-	77.28	73.42	72.73	78.83	78.63	78.75	76.70	75.32
11	70.32	74.32	78.16	-	76.97	73.34	72.98	78.37	78.65	78.82	76.67	75.28
12	70.37	74.37	78.12	-	76.85	73.25	73.27	78.03	78.67	78.90	76.66	75.20
13	70.47	74.52	78.07	-	76.74	73.16	73.47	77.74	78.68	78.87	76.67	75.12
14	70.55	74.82	78.00	77.63	76.80	73.02	73.73	77.90	78.68	78.82	76.60	75.03
15	70.64	75.36	77.92	77.57	76.72	72.93	74.03	78.06	78.82	78.76	76.52	74.94
16	70.75	75.80	77.90	77.52	76.53	72.77	74.32	78.17	79.25	78.70	76.43	74.86
17	70.82	76.31	77.88	77.46	76.34	72.57	74.56	78.26	79.33	78.62	76.31	74.88
18	70.99	76.64	77.85	77.43	76.16	72.41	74.90	78.31	79.29	78.61	76.22	74.87
19	71.13	76.87	77.84	77.44	75.99	72.25	75.08	78.37	79.25	78.57	76.08	74.86
20	71.21	77.08	77.85	77.59	75.81	72.03	75.27	78.40	79.28	78.47	75.97	74.82
21	71.40	77.28	77.84	77.69	75.61	71.85	75.46	78.48	79.28	78.36	75.82	74.73
22	61.54	77.46	77.90	77.77	75.45	71.67	75.72	78.51	79.23	78.26	75.67	74.63
23	71.64	77.60	77.88	77.82	75.24	71.52	76.26	78.59	79.26	78.18	75.55	74.54
24	71.71	77.67	77.87	77.89	75.07	71.55	77.05	78.65	79.24	78.07	75.68	74.53
25	71.86	77.75	77.85	77.93	74.87	71.58	78.19	78.62	79.21	77.97	75.88	74.64
26	72.21	77.92	77.82	77.93	74.74	71.64	78.92	78.64	79.21	77.86	75.97	74.69
27	72.56	77.85	77.78	77.91	74.59	71.69	79.05	78.67	79.20	77.78	76.02	74.77
28	72.81	77.91	77.73	77.89	74.40	71.73	78.92	78.67	79.21	77.61	76.12	74.76
29	73.00	77.93	77.68	77.79	-	71.75	78.82	78.66	79.14	77.56	76.14	74.75
30	73.18	77.92	77.68	77.76	-	71.78	78.75	78.65	79.14	77.45	76.17	74.70
31	73.32	-	77.68	77.64	-	71.84	-	78.66	-	77.34	76.12	-

1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74.64	77.60	78.38	76.05	72.74	70.91	76.45	79.32	79.32	78.14	76.67	73.88
2	74.65	77.81	78.54	75.93	72.72	70.91	76.52	79.33	79.28	78.07	76.57	73.98
3	74.76	77.91	78.28	75.77	72.66	70.96	76.64	79.34	79.28	78.04	76.45	74.07
4	74.79	77.95	78.22	75.65	72.66	70.93	76.73	79.35	79.30	78.08	76.32	74.12
5	74.76	78.02	78.17	75.50	72.60	70.85	76.81	79.33	79.23	78.03	76.17	74.20
6	75.19	78.05	78.15	75.36	72.60	70.77	76.88	79.29	79.19	77.96	76.08	74.20
7	75.57	78.04	78.11	75.20	72.58	70.70	77.00	79.29	79.26	77.91	75.94	74.13
8	75.78	78.06	78.10	75.04	72.52	70.68	77.11	79.28	79.29	77.86	75.81	74.09
9	75.91	78.06	78.00	74.87	72.46	70.70	77.20	79.26	79.31	77.81	75.71	73.98
10	76.04	78.20	77.88	74.70	72.41	70.67	70.31	79.30	79.31	77.81	75.61	73.88
11	76.10	78.33	77.84	74.53	72.34	70.66	77.39	79.36	79.38	77.76	75.51	73.81
12	76.17	78.36	77.82	74.31	72.29	70.78	77.46	79.39	79.33	77.67	75.38	73.72
13	76.16	78.32	77.78	74.06	72.20	70.95	77.51	79.34	79.28	77.57	75.27	73.59
14	76.18	78.26	77.72	73.88	72.15	71.25	77.52	79.29	79.23	77.48	75.14	73.40
15	76.14	78.24	77.66	73.64	72.07	71.68	77.61	79.32	79.16	77.40	75.22	73.22
16	76.13	78.24	77.60	73.45	71.94	72.18	77.70	79.36	79.09	77.39	75.11	73.02
17	76.08	78.54	77.58	73.18	71.81	72.61	77.82	79.36	79.05	77.41	75.03	72.90
18	76.07	78.66	77.56	72.98	72.67	73.14	78.04	79.39	78.99	77.45	74.92	72.95
19	76.04	78.68	77.46	72.82	71.54	73.87	78.22	79.39	78.92	77.44	74.82	72.94
20	76.01	78.71	77.42	73.73	71.52	74.53	78.38	79.40	78.87	77.41	74.70	72.77
21	75.98	78.67	77.33	72.70	71.38	75.03	78.65	79.23	78.79	77.34	74.60	72.59
22	75.92	78.59	77.25	72.67	71.23	75.20	78.78	79.17	78.71	77.25	74.52	72.52
23	75.91	78.51	77.11	72.75	71.07	75.32	78.94	79.29	78.64	77.20	74.39	72.49
24	76.00	78.42	77.01	72.85	70.93	75.41	79.06	79.33	78.59	77.22	74.27	72.43
25	76.10	78.38	76.90	72.81	70.86	75.43	79.15	79.25	78.45	77.22	74.13	72.23
26	76.40	78.31	76.76	72.77	70.82	75.55	79.23	79.20	78.48	77.15	74.02	72.03
27	76.64	78.32	76.66	72.72	70.89	75.76	79.31	79.24	78.43	77.05	73.90	71.83
28	76.77	78.43	76.52	72.65	70.91	75.95	79.32	79.25	78.35	76.95	73.78	71.60
29	76.90	78.40	76.43	72.65	-	76.15	79.35	79.28	78.27	76.87	73.79	71.35
30	77.07	78.42	76.30	72.73	-	76.25	79.35	79.29	78.20	76.78	73.80	71.13
31	77.36	-	76.18	72.75	-	76.36	-	79.29	-	76.74	73.78	-

Elevation, in feet, of Stillwater Reservoir near Beaver River, N. Y., 1925--Continued

1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70.92	72.95	78.80	78.33	77.84	74.90	71.73	77.61	79.33	78.75	76.92	75.39
2	70.86	72.78	78.94	78.44	77.79	74.78	71.65	77.55	79.22	78.79	76.85	75.41
3	70.74	72.73	78.87	78.42	77.66	74.66	71.55	77.61	79.25	78.79	76.82	75.42
4	70.69	72.87	78.76	78.36	77.57	74.51	71.53	77.64	79.24	78.86	76.83	75.34
5	70.65	73.17	78.66	78.27	77.41	74.38	71.73	77.76	79.25	78.90	76.89	75.18
6	70.70	73.42	78.55	78.21	77.30	74.26	72.20	78.05	79.29	78.92	76.99	75.00
7	70.80	73.63	78.47	78.15	77.17	74.12	73.15	78.25	79.29	78.90	77.02	74.83
8	71.07	73.79	78.46	78.11	77.07	74.01	74.68	78.41	79.28	78.91	77.01	74.70
9	71.29	73.94	78.65	78.08	76.98	73.91	75.67	78.61	79.29	78.90	77.01	74.67
10	71.40	74.06	78.64	78.07	76.90	73.68	76.32	78.80	79.28	78.75	76.98	74.59
11	71.51	74.15	78.61	78.08	76.82	73.48	76.78	78.96	79.29	78.64	76.93	74.48
12	71.59	74.28	78.55	78.06	76.70	73.22	77.15	79.11	79.29	78.55	76.98	74.34
13	71.78	74.44	78.47	78.04	76.59	73.01	77.51	79.22	79.28	78.46	77.00	74.22
14	71.85	74.82	78.51	78.03	76.47	72.87	77.76	79.35	79.27	78.36	77.00	74.09
15	72.23	75.02	78.60	78.04	76.92	72.73	78.04	79.33	79.27	78.20	76.97	74.02
16	72.41	75.17	78.60	78.04	76.35	72.57	78.16	79.29	79.28	78.06	76.92	74.01
17	72.55	75.40	78.60	78.06	76.26	72.41	78.24	79.24	79.16	77.92	76.80	73.91
18	72.68	75.79	78.53	78.04	76.17	72.23	78.23	79.23	79.10	77.75	76.67	73.77
19	72.82	76.15	78.46	78.01	76.08	72.12	78.28	79.23	79.10	77.65	76.64	73.60
20	72.94	76.40	78.41	78.03	75.98	71.97	78.36	79.27	79.10	77.59	76.57	73.43
21	73.08	76.60	78.33	78.04	75.84	71.80	78.43	79.34	78.93	77.53	76.42	73.21
22	73.09	76.77	78.27	78.01	75.72	71.61	78.40	79.30	78.88	77.50	76.30	73.02
23	73.21	77.11	78.22	77.99	75.63	71.41	78.33	79.23	78.79	77.49	76.21	72.96
24	73.30	77.64	78.16	77.96	75.57	71.21	78.27	79.26	78.73	77.36	76.06	72.80
25	73.28	77.97	78.12	77.97	75.47	71.11	78.20	79.21	78.62	77.27	76.09	72.61
26	73.26	78.12	78.07	77.99	75.35	71.02	78.13	79.29	78.61	77.20	76.12	72.44
27	73.24	78.20	78.04	77.96	75.23	71.25	77.99	79.30	78.58	77.10	76.03	72.29
28	73.16	78.32	78.00	77.94	75.12	71.47	77.86	79.33	78.52	77.08	75.85	72.22
29	73.17	78.32	78.00	77.91	75.00	71.62	77.73	79.33	78.48	77.10	75.67	72.13
30	73.16	78.45	78.03	77.88	-	71.67	77.58	79.33	78.58	77.07	75.51	72.12
31	73.15	-	78.08	77.86	-	71.75	-	79.37	-	77.00	75.42	-

1928-29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72.05	71.23	71.87	71.38	71.15	67.06	75.57	79.31	79.12	78.44	76.65	73.51
2	71.92	71.16	71.88	71.29	70.99	66.91	76.12	79.22	79.11	78.44	76.48	73.29
3	71.80	71.10	71.85	71.16	71.07	66.97	76.60	79.36	79.10	78.45	76.35	73.07
4	71.66	71.08	71.77	70.96	71.18	66.88	76.94	79.46	79.07	78.51	76.32	72.87
5	71.50	71.05	71.70	70.79	70.98	66.77	77.28	79.34	79.03	78.65	76.23	72.65
6	71.40	70.97	71.67	70.72	70.81	66.65	77.71	79.14	78.98	78.73	76.12	72.48
7	71.27	70.92	71.60	70.70	70.70	66.54	78.39	78.93	78.90	78.74	76.03	72.31
8	71.15	70.87	71.51	70.61	70.57	66.42	78.91	78.70	78.84	78.75	75.92	72.10
9	71.01	70.78	71.52	70.51	70.41	66.32	79.13	78.73	78.80	78.75	75.81	72.13
10	70.85	70.70	71.46	70.43	70.26	66.37	79.23	78.76	78.73	78.72	75.68	71.93
11	70.74	70.62	71.34	70.35	70.08	66.31	79.18	78.77	78.64	78.66	75.65	71.81
12	70.69	70.53	71.22	70.24	69.91	66.19	79.13	78.85	78.54	78.60	75.57	71.70
13	70.53	70.43	71.11	70.23	69.73	66.09	79.11	78.90	78.48	78.51	75.45	71.56
14	70.54	70.33	70.99	70.10	69.55	66.09	79.12	78.96	78.40	78.52	75.32	71.47
15	70.50	70.23	70.87	69.95	69.44	66.41	79.28	79.14	78.37	78.53	75.49	71.34
16	70.38	70.13	70.92	69.80	69.17	67.25	79.25	79.25	78.40	78.45	75.63	71.35
17	70.31	70.14	70.87	69.65	68.97	68.10	79.23	79.19	78.35	78.36	75.67	71.31
18	70.35	70.28	71.03	69.67	68.90	68.67	79.23	79.11	78.25	78.23	75.72	71.33
19	70.51	70.35	71.34	70.10	68.60	69.08	79.21	79.07	78.18	78.21	75.79	71.29
20	70.71	70.63	71.54	70.72	68.39	69.47	79.20	78.93	78.20	78.09	75.68	71.21
21	70.92	70.91	71.62	70.98	68.20	69.86	79.29	78.87	78.16	78.03	75.54	71.12
22	71.00	71.14	71.72	71.13	68.02	70.25	79.29	78.90	78.08	77.93	75.41	71.01
23	71.02	71.33	71.75	71.23	67.82	70.75	79.29	78.94	78.18	77.80	75.21	70.90
24	71.09	71.48	71.76	71.22	67.82	71.64	79.29	79.03	78.14	77.66	75.09	70.72
25	71.07	71.63	71.85	71.22	67.70	72.45	79.28	79.12	78.10	77.57	74.91	70.56
26	71.19	71.79	71.88	71.35	67.48	73.09	79.33	79.20	78.19	77.41	74.76	70.40
27	71.20	71.76	71.88	71.56	67.30	73.66	79.25	79.26	78.22	77.30	74.57	70.22
28	71.30	71.70	71.82	71.56	67.18	74.16	79.16	79.25	78.22	77.16	74.35	70.05
29	71.35	71.72	71.70	71.47	-	74.56	79.21	79.23	78.31	77.06	74.15	69.94
30	71.31	71.80	71.56	71.36	-	74.90	79.32	79.20	78.37	76.93	73.96	69.85
31	71.29	-	71.43	71.25	-	75.26	-	79.17	-	76.77	73.73	-

Elevation, in feet, of Stillwater Reservoir near Beaver, N. Y., 1925-37--Continued

1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69.66	68.22	70.21	70.08	74.97	71.38	73.42	78.91	79.17	78.93	76.98	72.88
2	69.48	68.21	70.21	70.21	74.79	71.50	73.65	79.08	79.23	78.97	76.81	72.83
3	69.56	68.45	70.06	70.35	74.64	71.58	73.88	79.31	79.25	78.98	76.74	72.71
4	69.79	68.49	69.90	70.45	74.49	71.53	74.07	79.31	79.18	79.00	76.69	72.51
5	70.02	68.48	69.79	70.58	74.31	71.46	74.19	79.20	79.08	79.03	76.56	72.32
6	70.19	68.45	69.65	70.63	74.13	71.41	74.34	79.26	78.99	79.09	76.39	72.13
7	70.39	68.43	69.51	70.65	73.98	71.34	74.78	79.30	78.95	79.13	76.23	72.01
8	70.58	68.38	69.49	70.87	73.81	71.38	75.48	79.32	78.86	79.03	76.08	71.92
9	70.65	68.34	69.45	72.41	73.64	71.63	75.86	79.28	78.78	78.92	75.98	71.73
10	70.68	68.26	69.35	73.29	73.43	71.75	76.12	79.25	78.75	78.84	75.94	71.51
11	70.68	68.21	69.23	73.80	73.34	71.83	76.34	79.22	78.64	78.74	75.89	71.30
12	70.61	68.17	69.08	74.21	73.08	71.91	76.65	79.22	78.56	78.68	75.73	71.09
13	70.63	68.05	69.01	74.58	72.88	72.03	77.20	79.23	78.48	78.71	75.55	70.91
14	70.63	67.98	68.95	74.89	72.72	72.07	77.72	79.27	78.37	78.80	75.39	70.95
15	70.52	67.96	68.97	75.25	72.54	72.10	78.09	79.26	78.27	78.77	75.22	70.86
16	70.40	68.28	68.93	75.49	72.35	72.21	78.26	79.20	78.18	78.72	75.05	70.65
17	70.29	68.39	68.80	75.70	72.16	72.32	78.30	79.19	78.19	78.62	74.95	70.60
18	70.16	68.66	68.78	75.80	71.97	72.40	78.31	79.17	78.28	78.55	74.91	70.34
19	70.04	68.89	68.83	75.87	71.76	72.48	78.37	79.19	78.32	78.46	74.76	70.18
20	69.99	69.19	69.05	75.90	71.45	72.53	78.47	79.28	78.38	78.42	74.60	69.95
21	69.90	69.38	69.38	75.89	71.21	72.54	78.48	79.22	78.45	78.38	74.42	69.90
22	69.77	69.64	69.70	75.89	71.14	72.58	78.62	79.24	78.58	78.21	74.24	69.91
23	69.63	69.75	69.94	75.87	71.20	72.65	78.69	79.26	78.65	78.09	74.07	69.70
24	69.48	69.84	70.05	75.81	71.46	72.77	78.74	79.27	78.66	77.93	73.99	69.46
25	69.32	69.92	70.24	75.77	71.52	72.79	78.76	79.35	78.64	77.74	73.94	69.29
26	69.17	70.06	70.33	75.81	71.54	72.87	78.76	79.34	78.64	77.59	73.78	69.18
27	69.07	70.03	70.27	75.74	71.48	73.02	78.75	79.28	78.69	77.57	73.62	69.01
28	68.97	70.12	70.22	75.60	71.42	73.13	78.74	79.21	78.79	77.57	73.42	68.87
29	68.81	70.26	70.11	75.45	-	73.23	78.76	79.20	78.87	77.44	73.23	68.88
30	68.62	70.21	70.03	75.29	-	73.31	78.77	79.23	78.92	77.30	73.05	68.67
31	68.42	-	69.95	75.13	-	73.36	-	79.23	-	77.13	72.92	-

1930-31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68.45	62.95	60.55	60.13	56.76	52.68	52.41	70.68	76.82	77.19	77.05	74.12
2	68.24	62.95	60.56	60.20	56.94	52.86	52.91	70.89	76.88	77.10	77.05	73.91
3	68.01	62.99	60.52	60.13	56.58	51.05	53.38	71.18	76.92	77.09	77.05	73.87
4	67.78	62.73	60.48	60.12	56.36	50.32	53.91	71.51	76.99	77.10	77.01	73.72
5	67.79	62.54	60.42	60.25	56.06	49.60	54.46	71.74	77.05	77.11	76.90	73.53
6	67.81	62.36	60.45	59.94	55.76	48.86	54.94	71.93	77.09	77.11	76.78	73.52
7	67.60	62.18	60.57	59.77	55.48	48.17	55.52	72.09	77.16	76.98	76.69	73.52
8	67.38	62.01	60.65	59.59	55.53	49.42	56.05	72.24	77.26	76.90	76.63	73.53
9	67.16	61.98	60.61	59.38	55.89	51.33	56.65	72.44	77.34	76.82	76.62	73.33
10	66.93	62.03	60.56	59.23	55.50	48.51	57.47	72.65	77.37	76.75	76.66	73.13
11	66.70	61.85	60.49	59.37	55.34	47.33	59.30	72.85	77.40	76.71	76.51	72.94
12	66.63	61.69	60.45	59.45	55.21	46.67	61.24	73.24	77.44	76.77	76.35	72.73
13	66.51	61.54	60.53	59.31	54.21	46.22	62.23	73.73	77.48	76.79	76.17	72.66
14	66.24	61.38	60.64	59.16	53.68	45.83	63.32	74.05	77.51	76.82	76.06	72.68
15	65.97	61.23	60.71	59.01	53.90	45.60	64.35	74.27	77.53	76.85	75.97	72.52
16	65.70	61.21	60.65	58.95	54.65	45.44	65.15	74.41	77.63	76.80	76.12	72.39
17	65.42	61.28	60.59	58.94	53.40	45.27	65.78	74.67	77.69	76.72	76.13	72.27
18	65.21	61.15	60.50	58.87	53.44	45.22	66.37	74.81	77.72	76.63	75.99	72.36
19	65.06	61.05	60.41	58.92	53.18	45.16	66.98	74.91	77.74	76.63	75.86	72.41
20	65.08	60.91	60.32	58.84	52.88	45.07	67.51	75.05	77.76	76.64	75.68	72.46
21	64.80	60.77	60.42	58.51	53.61	45.03	67.94	75.19	77.81	76.79	75.50	72.57
22	64.53	60.73	60.49	58.29	53.78	44.95	68.38	75.29	77.83	76.95	75.31	72.47
23	64.27	60.75	60.45	58.06	53.91	44.94	68.73	75.46	77.75	77.06	75.25	72.43
24	64.01	60.81	60.32	57.83	52.96	44.96	68.99	75.65	77.72	77.10	75.26	72.38
25	63.72	60.71	60.20	57.80	52.05	45.10	69.23	75.89	77.65	77.13	75.08	72.33
26	63.70	60.56	60.22	57.87	51.46	45.56	69.46	76.10	77.59	77.15	74.89	72.28
27	63.74	60.48	60.13	57.68	50.86	45.85	69.72	76.25	77.53	77.16	74.71	72.34
28	63.47	60.42	60.10	57.44	52.54	46.16	70.05	76.38	77.46	77.17	74.57	72.42
29	63.19	60.35	60.21	57.21	-	46.20	70.33	76.48	77.37	77.10	74.39	72.34
30	63.06	60.38	-	56.98	-	51.10	70.51	76.59	77.28	77.07	74.33	72.25
31	63.02	-	60.15	56.74	-	51.97	-	76.70	-	77.04	74.33	-

Elevation, in feet, of Stillwater Reservoir near Beaver River, N. Y., 1925-37--Continued

1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72.14	70.67	72.28	73.66	78.82	77.10	74.41	79.30	79.35	77.81	78.25	75.60
2	71.99	70.81	72.16	73.77	78.78	76.99	74.55	79.30	79.30	77.79	78.15	75.48
3	71.84	70.93	72.07	73.89	78.74	76.88	74.76	79.22	79.23	77.80	78.05	75.33
4	71.85	71.04	71.94	73.95	78.71	76.75	74.95	79.20	79.27	77.90	78.01	75.26
5	71.87	71.08	71.86	73.98	78.68	76.62	75.13	79.21	79.28	77.81	77.94	75.31
6	71.79	71.10	71.90	73.93	78.63	76.50	75.29	79.27	79.33	77.71	77.85	75.12
7	71.62	71.10	71.99	74.13	78.57	76.45	75.42	79.35	79.35	77.57	77.76	74.97
8	71.45	71.19	71.87	74.35	78.51	76.41	75.61	79.32	79.24	77.69	77.67	74.81
9	71.32	71.28	71.73	74.51	78.42	76.32	75.92	79.28	79.16	78.05	77.52	74.64
10	71.15	71.17	71.60	74.63	78.37	76.19	76.33	79.24	79.10	78.40	77.36	74.45
11	71.07	71.07	71.50	74.70	78.35	76.07	76.82	79.21	79.03	78.67	77.22	74.39
12	71.13	70.95	71.35	74.76	78.41	75.94	77.34	79.16	79.02	79.04	77.06	74.41
13	70.95	70.94	71.39	75.03	78.55	75.82	77.68	79.16	79.04	79.23	76.91	74.19
14	70.77	70.96	71.52	75.30	78.88	75.68	77.83	79.18	78.99	79.39	76.85	74.04
15	70.62	71.08	71.69	75.58	78.53	75.55	77.89	79.25	78.93	79.38	76.86	73.87
16	70.46	71.27	71.85	76.03	78.47	75.41	77.88	79.32	78.87	79.35	76.73	73.69
17	70.30	71.47	71.97	76.38	78.40	75.27	77.85	79.31	78.81	79.28	76.56	73.49
18	70.31	71.64	72.07	76.93	78.34	75.14	77.81	79.33	78.73	79.33	76.43	73.40
19	70.36	71.76	72.15	77.38	78.27	75.01	77.76	79.32	78.65	79.29	76.55	73.31
20	70.24	71.83	72.23	77.61	78.18	74.88	77.71	79.31	78.65	79.29	76.51	73.14
21	70.01	71.89	72.30	77.87	78.10	74.74	77.68	79.31	78.52	79.12	76.58	72.96
22	69.84	71.95	72.21	78.07	77.98	74.66	77.79	79.29	78.40	79.02	76.63	72.79
23	69.65	72.05	72.21	78.21	77.88	74.58	78.05	79.28	78.29	78.87	76.51	72.60
24	69.48	72.02	72.37	78.41	77.78	74.44	78.34	79.28	78.25	78.80	76.35	72.41
25	69.63	71.89	72.77	78.60	77.67	74.27	78.49	79.28	78.15	78.68	76.20	72.21
26	69.79	72.02	73.01	78.73	77.55	74.16	78.62	79.28	78.17	78.57	76.04	72.04
27	69.85	72.10	73.22	78.85	77.45	74.16	78.92	79.29	78.18	78.48	75.91	71.85
28	70.02	72.21	73.34	78.85	77.32	74.21	79.07	79.33	78.13	78.44	75.86	71.72
29	70.21	72.30	73.46	78.79	77.22	74.25	79.20	79.38	78.06	78.47	75.92	71.56
30	70.32	72.39	73.54	78.80	-	74.24	79.28	79.36	77.91	78.38	75.79	71.42
31	70.47	-	73.60	78.84	-	74.27	-	79.33	-	78.31	75.71	-

1932-33

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71.28	77.49	79.08	78.82	77.69	74.38	75.48	79.24	79.11	76.39	72.49	68.35
2	71.22	77.84	79.04	78.83	77.61	74.23	75.67	79.38	79.21	76.38	72.32	68.23
3	71.28	78.09	79.02	78.79	77.51	74.08	75.86	79.42	79.30	76.39	72.13	68.17
4	71.12	78.25	79.02	78.72	77.38	74.14	76.12	79.30	79.31	76.28	71.97	68.18
5	71.01	78.33	79.02	78.66	77.27	74.19	76.32	79.30	79.30	76.27	71.77	68.19
6	72.17	78.43	79.01	78.58	77.14	74.24	76.48	79.28	79.21	76.04	71.68	67.97
7	73.81	78.51	79.01	78.49	77.04	74.27	76.72	79.19	79.11	75.85	71.67	67.79
8	74.49	78.55	79.00	78.49	76.95	74.21	77.08	79.22	78.99	75.65	71.48	67.59
9	74.89	78.71	79.00	78.47	76.85	74.11	77.31	79.22	78.90	75.61	71.27	67.41
10	75.15	78.84	79.00	78.38	76.76	73.98	77.39	79.23	78.77	75.60	71.04	67.36
11	75.32	79.05	78.99	78.27	76.65	73.83	77.46	79.24	78.73	75.43	70.81	67.37
12	75.58	79.22	78.99	78.17	76.54	73.89	77.58	79.24	78.64	75.29	70.58	67.14
13	75.81	79.27	78.99	78.16	76.41	73.93	77.72	79.26	78.52	75.15	70.51	66.88
14	75.97	79.24	78.99	78.12	76.18	73.81	77.80	79.29	78.38	74.99	70.53	66.65
15	76.14	79.20	78.99	78.09	75.94	73.74	77.95	79.30	78.25	74.83	70.31	66.44
16	76.29	79.20	78.99	78.05	75.70	73.87	78.11	79.26	78.11	74.76	70.10	66.19
17	76.41	79.22	78.96	77.93	75.56	74.02	78.32	79.21	77.97	74.76	69.88	66.09
18	76.45	79.24	78.93	77.82	75.42	74.11	78.61	79.20	77.93	74.56	69.66	66.09
19	76.48	79.24	78.90	77.73	75.27	74.19	78.79	79.19	77.94	74.39	69.45	65.86
20	76.48	79.35	78.78	77.69	75.16	74.29	78.82	79.17	77.78	74.24	69.38	65.69
21	76.43	79.35	78.62	77.59	75.04	74.37	78.72	79.20	77.61	74.07	69.38	65.56
22	76.55	79.28	78.47	77.50	74.91	74.53	78.57	79.18	77.49	73.89	69.17	65.36
23	76.76	79.15	78.34	77.50	74.79	74.68	78.41	79.13	77.33	73.83	68.96	65.18
24	76.80	79.12	78.32	77.54	74.65	74.77	78.24	79.09	77.17	73.82	68.84	65.21
25	76.77	79.14	78.43	77.50	74.49	74.87	78.35	79.04	77.11	73.66	68.81	65.25
26	76.71	79.16	78.62	77.57	74.62	74.95	78.50	78.89	77.13	73.46	68.77	65.28
27	76.75	79.16	78.77	77.67	74.68	75.03	78.59	78.73	76.99	73.27	68.75	65.06
28	76.87	79.15	78.72	77.76	74.52	75.11	78.66	78.67	76.83	73.07	68.80	64.89
29	77.01	79.13	78.62	77.84	-	75.18	78.83	78.63	76.67	72.89	68.69	64.65
30	77.14	79.11	78.53	77.93	-	75.23	79.04	78.70	76.51	72.69	68.58	64.42
31	77.29	-	78.64	77.82	-	75.32	-	78.95	-	72.71	68.46	-

Elevation, in feet, of Stillwater Reservoir near Beaver River, N. Y., 1925-37--Continued

1933-34

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64.33	60.68	60.27	62.89	60.95	49.23	61.40	75.88	77.12	75.88	72.54	67.35
2	64.37	60.30	60.91	63.27	60.77	48.19	61.94	76.03	77.04	75.90	72.41	67.16
3	64.14	60.32	61.33	63.32	60.57	47.58	62.72	76.19	76.99	75.74	72.24	66.98
4	63.91	60.21	61.66	63.31	60.50	51.41	63.43	76.32	76.94	75.68	72.09	66.82
5	63.67	60.24	61.86	63.24	60.59	52.27	64.16	76.45	76.84	75.58	71.91	66.71
6	63.41	60.32	62.07	63.14	60.33	52.96	64.87	76.55	76.73	75.42	71.76	66.55
7	63.17	60.10	62.43	63.25	60.13	53.56	65.48	76.64	76.64	75.33	71.61	66.37
8	63.07	59.86	62.71	63.45	59.92	54.05	66.09	76.74	76.62	75.29	71.44	66.22
9	63.09	59.67	62.99	63.41	59.68	54.46	66.59	76.84	76.52	75.26	71.27	66.05
10	62.85	59.45	63.19	63.34	59.27	54.78	67.16	76.92	76.54	75.08	71.10	65.85
11	62.66	59.25	63.32	63.25	58.87	55.04	67.86	76.96	76.56	74.89	70.96	65.63
12	62.42	59.26	63.24	63.11	58.51	55.25	69.04	77.11	76.45	74.69	70.78	65.50
13	62.21	59.32	63.15	62.98	58.10	55.44	69.72	77.18	76.36	74.84	70.63	65.33
14	61.97	59.20	63.05	62.89	57.73	55.64	70.18	77.26	76.39	74.97	70.48	65.13
15	61.90	59.04	62.94	62.69	57.31	55.82	70.55	77.28	76.45	74.91	70.31	64.94
16	61.92	58.87	62.89	62.61	56.86	56.01	70.88	77.30	76.51	74.77	70.15	64.75
17	61.67	58.69	62.96	62.49	56.35	56.18	71.39	77.29	76.55	74.62	69.97	64.67
18	61.80	58.51	63.09	62.32	55.82	56.52	71.94	77.28	76.56	74.48	69.79	64.52
19	61.69	58.54	63.01	62.17	55.35	56.86	72.39	77.28	76.55	74.33	69.62	64.35
20	61.41	58.62	62.89	62.01	54.91	57.18	72.86	77.28	76.50	74.16	69.50	64.16
21	60.91	58.41	62.82	62.02	54.40	57.48	73.28	77.28	76.39	74.05	69.33	63.98
22	60.90	58.28	62.73	62.14	53.82	57.73	73.61	77.24	76.42	73.88	69.15	63.80
23	60.99	58.18	62.62	61.91	53.37	57.88	73.91	77.21	76.46	73.75	68.98	63.64
24	60.81	58.27	62.67	61.74	52.82	58.04	74.17	77.16	76.47	73.58	68.78	63.48
25	60.65	58.41	62.87	61.56	52.29	58.21	74.51	77.17	76.48	73.45	68.62	63.30
26	60.72	58.51	63.05	61.43	51.66	58.37	74.81	77.21	76.38	73.29	68.42	63.11
27	60.77	58.65	62.97	61.28	50.88	58.61	75.08	77.27	76.27	73.19	68.27	62.91
28	60.85	58.49	62.84	61.35	50.09	59.28	75.32	77.31	76.17	73.11	68.09	62.80
29	60.93	58.37	62.71	61.51	-	59.88	75.53	77.27	76.03	73.01	67.89	62.62
30	60.99	59.04	62.54	61.35	-	60.35	75.71	77.22	75.92	72.87	67.73	62.45
31	60.83	-	62.58	61.15	-	60.71	-	77.16	-	72.68	67.54	-

1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	62.32	60.45	62.59	62.63	65.71	59.72	66.57	76.07	79.17	79.16	77.51	73.56
2	62.13	60.44	63.37	62.42	65.51	59.55	66.82	76.60	79.15	79.08	77.37	73.57
3	61.93	60.42	63.95	62.34	65.30	59.34	67.06	76.96	79.11	78.98	77.22	73.58
4	61.75	60.42	64.27	62.25	65.09	59.17	67.25	77.26	79.10	78.91	77.16	73.57
5	61.55	60.52	64.59	62.13	64.88	59.17	67.42	77.52	79.15	78.95	77.16	73.23
6	61.34	60.63	64.85	62.03	64.65	59.26	67.57	77.74	79.17	79.01	77.05	73.03
7	61.17	60.69	65.05	62.01	64.40	59.35	67.72	78.10	79.17	79.14	76.89	72.81
8	61.10	60.73	65.22	62.03	64.16	59.55	67.85	78.52	79.26	79.27	76.73	72.72
9	60.93	60.78	65.31	62.38	63.94	59.78	68.01	78.85	79.29	79.26	76.56	72.74
10	60.75	60.80	65.36	63.59	63.71	59.96	68.18	79.01	79.28	79.31	76.39	72.54
11	60.56	60.88	65.31	64.75	63.49	60.17	68.36	79.07	79.25	79.33	76.36	72.34
12	60.56	60.99	65.22	65.42	63.25	60.45	68.60	79.12	79.21	79.31	76.38	72.12
13	60.56	61.00	65.18	65.89	63.01	60.69	68.89	79.14	79.17	79.28	76.20	71.93
14	60.44	61.02	65.11	66.30	62.76	60.90	69.17	79.21	79.12	79.24	76.04	71.73
15	60.39	61.00	64.98	66.61	62.55	61.08	69.40	79.26	79.07	79.21	75.87	71.77
16	60.48	60.99	64.85	66.71	62.38	61.20	69.71	79.31	79.07	79.16	75.71	71.85
17	60.44	60.96	64.71	66.78	62.19	61.58	69.97	79.31	79.02	79.12	75.53	71.65
18	60.36	60.98	64.56	66.85	61.99	62.01	70.21	79.28	79.22	79.01	75.46	71.51
19	60.30	61.08	64.40	66.89	61.78	62.41	70.41	79.27	79.33	78.88	75.46	71.39
20	60.32	61.28	64.31	66.90	61.55	62.76	70.63	79.27	79.26	78.81	75.28	71.27
21	60.40	61.44	64.18	66.89	61.34	63.10	70.93	79.27	79.23	78.79	75.09	71.16
22	60.52	61.53	64.07	66.93	61.13	63.38	71.28	79.26	79.25	78.81	74.99	71.11
23	60.58	61.57	63.92	66.86	60.91	63.69	71.64	79.23	79.32	78.68	74.80	71.14
24	60.59	61.80	63.78	66.76	60.67	64.06	72.04	79.19	79.37	78.57	74.61	70.95
25	60.59	62.04	63.77	66.70	60.44	64.46	72.50	79.17	79.43	78.45	74.53	70.73
26	60.56	62.21	63.88	66.56	60.27	64.82	73.01	79.13	79.37	78.31	74.53	70.52
27	60.56	62.29	63.72	66.41	60.10	65.14	73.46	79.09	79.24	78.16	74.34	70.34
28	60.51	62.32	63.49	66.26	59.92	65.42	74.07	79.05	79.26	78.01	74.09	70.37
29	60.48	62.35	63.34	66.15	-	65.79	74.69	79.12	79.24	77.91	73.98	70.38
30	60.48	62.46	63.11	66.05	-	66.12	75.29	79.17	79.20	77.82	73.79	70.49
31	60.46	-	62.86	65.91	-	66.34	-	79.15	-	77.66	73.63	-

. Elevation, in feet, of Stillwater Reservoir near Beaver River, N. Y., 1925-37--Continued

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70.30	66.02	64.21	60.97	56.46	51.67	70.16	78.96	79.23	77.61	74.64	70.39
2	70.22	65.85	64.24	60.82	56.26	51.97	70.71	79.20	79.22	77.55	74.52	70.29
3	70.07	65.71	64.15	60.73	56.04	52.10	71.12	79.33	79.21	77.46	74.41	70.25
4	69.94	65.56	64.08	60.62	55.82	52.31	71.49	79.35	79.16	77.41	74.27	70.16
5	69.82	65.38	64.03	60.54	55.61	51.31	71.81	79.24	79.12	77.35	74.15	70.05
6	69.81	65.40	63.99	60.41	55.44	51.04	72.10	79.23	79.08	77.30	74.02	69.92
7	69.85	65.36	64.00	60.29	55.25	50.09	72.63	79.26	79.03	77.21	73.86	69.81
8	69.71	65.26	63.88	60.16	55.03	49.44	73.01	79.27	78.99	77.12	73.72	69.73
9	69.56	65.18	63.79	60.14	54.79	48.90	73.35	79.27	79.01	77.06	73.55	69.62
10	69.36	65.06	63.94	59.95	54.58	48.37	73.64	79.25	78.97	76.99	73.39	69.46
11	69.14	64.96	63.89	59.83	54.37	48.21	73.92	79.30	78.92	76.91	73.28	69.28
12	68.97	64.87	63.79	59.69	54.15	49.30	74.23	79.33	78.90	76.82	73.12	69.11
13	68.93	64.84	63.66	59.55	53.92	50.91	74.53	79.31	78.84	76.75	72.96	69.08
14	68.96	64.88	63.53	59.43	53.72	51.65	74.78	79.34	78.78	76.66	72.80	68.93
15	68.75	64.89	63.43	59.29	53.51	52.99	75.04	79.32	78.73	76.56	72.65	68.76
16	68.57	64.89	63.35	59.15	53.25	54.09	75.24	79.35	78.65	76.41	72.49	68.59
17	68.39	64.91	63.25	59.01	53.02	54.89	75.64	79.31	78.55	76.31	72.38	68.48
18	68.21	64.86	63.14	58.85	52.81	56.20	75.95	79.30	78.51	76.18	72.20	68.34
19	68.08	64.80	63.03	58.70	52.54	58.06	76.15	79.36	78.44	76.07	72.01	68.17
20	67.96	64.74	62.91	58.57	52.28	59.72	76.32	79.39	78.36	75.93	71.83	67.99
21	67.73	64.72	62.79	58.42	51.96	60.96	76.58	79.41	78.28	75.82	71.63	67.80
22	67.58	64.67	62.65	58.27	51.67	61.98	76.82	79.39	78.19	75.68	71.49	67.64
23	67.41	64.63	62.51	58.12	51.37	62.72	77.08	79.32	78.12	75.56	71.35	67.45
24	67.30	64.56	62.35	57.97	51.01	63.42	77.29	79.30	78.04	75.53	71.21	67.26
25	67.14	64.47	62.19	57.81	50.68	64.15	77.47	79.33	77.94	75.50	71.04	67.16
26	66.97	64.40	62.04	57.65	50.40	65.14	77.64	79.32	77.86	75.40	70.86	67.01
27	66.82	64.28	61.89	57.43	50.04	66.02	77.82	79.33	77.81	75.28	70.66	66.86
28	66.87	64.18	61.71	57.26	49.79	67.12	78.01	79.38	77.75	75.16	70.46	66.71
29	66.74	64.19	61.54	57.08	51.36	68.03	78.31	79.34	77.68	75.02	70.37	66.61
30	66.50	64.18	61.37	56.88	-	68.68	78.72	79.31	77.68	74.91	70.40	66.44
31	66.27	-	61.19	56.67	-	69.39	-	79.26	-	74.78	70.45	-

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	66.33	67.72	69.56	68.72	73.14	71.66	70.12	79.02	79.07	77.85	74.97	73.76
2	66.28	67.82	69.44	69.19	73.09	71.67	70.06	79.25	79.02	77.81	74.89	73.56
3	66.19	67.99	69.38	69.54	72.99	71.67	69.99	79.27	78.98	77.75	74.75	73.37
4	66.06	68.19	69.27	69.81	72.89	71.67	69.94	79.25	79.02	77.68	74.57	73.19
5	65.92	68.51	69.14	69.96	72.79	71.69	70.01	79.24	79.01	77.60	74.42	73.09
6	65.77	68.70	69.01	70.02	72.68	71.69	70.29	79.30	78.98	77.54	74.26	73.07
7	65.61	68.85	68.93	70.05	72.55	71.66	70.72	79.29	78.94	77.44	74.21	72.95
8	65.57	68.96	68.76	70.14	72.43	71.63	71.11	79.30	78.90	77.37	74.19	72.74
9	65.47	69.16	68.59	70.31	72.37	71.61	71.44	79.25	78.83	77.29	74.17	72.55
10	65.35	69.28	68.43	70.53	72.32	71.58	71.70	79.25	78.88	77.21	74.05	72.32
11	65.28	69.41	68.30	70.67	72.23	71.54	71.92	79.26	78.87	77.12	73.92	72.26
12	65.28	69.50	68.17	70.77	72.12	71.49	72.09	79.26	78.82	77.07	74.46	72.27
13	65.29	69.59	68.09	70.83	71.99	71.45	72.26	79.28	78.79	76.95	74.90	72.17
14	65.22	69.68	67.98	70.93	71.91	71.41	72.47	79.33	78.75	76.84	75.15	71.99
15	65.11	69.83	67.93	71.22	71.87	71.37	72.79	79.38	78.70	76.73	75.27	71.87
16	65.11	69.95	67.86	71.53	71.81	71.35	73.19	79.31	78.65	76.70	75.35	71.67
17	65.11	70.01	67.78	71.67	71.66	71.37	73.55	79.32	78.60	76.62	75.23	71.47
18	65.40	70.07	67.65	71.87	71.49	71.38	73.92	79.29	78.53	76.58	75.11	71.28
19	65.59	70.11	67.49	72.22	71.31	71.38	74.30	79.30	78.48	76.49	74.95	71.24
20	65.89	70.10	67.40	72.38	71.15	71.35	74.85	79.31	78.41	76.38	74.91	71.18
21	66.07	70.12	67.31	72.51	70.96	71.31	75.29	79.32	78.35	76.27	74.91	70.99
22	66.19	70.17	67.18	72.64	71.05	71.28	75.76	79.31	78.32	76.16	75.01	70.82
23	66.34	70.18	67.01	72.73	71.21	71.23	76.27	79.25	78.27	76.05	74.91	70.62
24	66.51	70.14	66.83	72.74	71.30	71.10	76.65	79.28	78.21	75.93	74.75	70.44
25	66.69	70.07	66.67	72.90	71.34	70.96	77.02	79.29	78.14	75.82	74.58	70.23
26	66.87	70.01	66.65	73.12	71.34	70.79	77.40	79.29	78.06	75.70	74.42	70.14
27	67.13	69.94	66.71	73.24	71.42	70.63	77.80	79.29	77.99	75.60	74.26	70.17
28	67.27	69.84	66.99	73.27	71.55	70.48	78.16	79.29	77.94	75.50	74.22	69.95
29	67.36	69.79	67.35	73.27	-	70.32	78.47	79.26	77.92	75.40	74.23	69.74
30	67.49	69.72	67.55	73.24	-	70.22	78.76	79.21	77.88	75.25	74.13	69.53
31	67.62	-	67.93	73.19	-	70.17	-	79.15	-	75.12	73.96	-

Elevation and contents of Stillwater Reservoir near Beaver River, N. Y., 1925-37

Date (midnight)	Elevation (feet)	Contents (million cubic feet)	Monthly gain or loss in storage (equivalent mean second-feet)
Feb. 28, 1925.....	59.12	631	
Mar. 31.....	70.07	2,355	+644
Apr. 30.....	75.23	3,524	+451
May 31.....	75.96	3,708	+69
June 30.....	75.02	3,471	-91
July 31.....	74.64	3,378	-35
Aug. 31.....	71.72	2,703	-252
Sept.30.....	69.85	2,510	-152
Oct. 31.....	73.40	3,082	+288
Nov. 30.....	77.92	4,231	+443
Dec. 31.....	77.66	4,159	-27
Jan. 31, 1926.....	77.63	4,151	-3
Feb. 28.....	74.29	3,293	-355
Mar. 31.....	71.87	2,736	-208
Apr. 30.....	78.70	4,450	+661
May 31.....	78.66	4,439	-4
June 30.....	79.12	4,571	+51
July 31.....	77.27	4,053	-193
Aug. 31.....	76.05	3,731	-120
Sept.30.....	74.66	3,382	-135
Water year 1925-26...			+34.0
Oct. 31, 1926.....	77.52	4,121	+276
Nov. 30.....	78.39	4,362	+93
Dec. 31.....	76.10	3,744	-231
Calendar year 1926...			-13.2
Jan. 31, 1927.....	72.74	2,930	-304
Feb. 28.....	70.91	2,829	-166
Mar. 31.....	76.42	3,827	+485
Apr. 30.....	79.33	4,632	+311
May 31.....	79.31	4,626	-2
June 30.....	78.16	4,298	-127
July 31.....	76.70	3,901	-148
Aug. 31.....	73.85	3,188	-266
Sept.30.....	70.99	2,547	-247
Water year 1926-27...			-26.5
Oct. 31, 1927.....	73.02	2,995	+167
Nov. 30.....	78.68	4,444	+559
Dec. 31.....	78.25	4,323	-45
Calendar year 1927...			+18.4
Jan. 31, 1928.....	77.85	4,212	-41
Feb. 29.....	74.93	3,448	-305
Mar. 31.....	71.74	2,708	-276
Apr. 30.....	77.53	4,124	+546
May 31.....	79.34	4,635	+191
June 30.....	78.69	4,447	-73
July 31.....	76.93	3,962	-181
Aug. 31.....	75.38	3,561	-150
Sept.30.....	72.07	2,780	-301
Water year 1927-28...			+7.4
Oct. 31, 1928.....	71.25	2,602	-66
Nov. 30.....	71.85	2,732	+50
Dec. 31.....	71.39	2,632	-37
Calendar year 1928...			-53.5
Jan. 31, 1929.....	71.18	2,587	-17
Feb. 28.....	67.10	1,786	-331
Mar. 31.....	75.46	3,581	+670
Apr. 30.....	79.31	4,626	+403
May 31.....	79.14	4,577	-18
June 30.....	78.41	4,368	-81
July 31.....	76.89	3,898	-176
Aug. 31.....	73.59	3,127	-288
Sept.30.....	69.72	2,284	-32f
Water year 1928-29...			-15.7

Elevation and contents of Stillwater Reservoir near Beaver River, N. Y., 1925-37--Continued

Date (midnight)	Elevation (feet)	Contents (million cubic feet)	Monthly gain or loss in storage (equivalent mean second-feet)
Oct. 31, 1929	68.28	2,003	-105
Nov. 30	70.20	2,382	+146
Dec. 31	70.02	2,345	-14
Calendar year 1929			-9.2
Jan. 31, 1930	75.02	3,471	+420
Feb. 28	71.39	2,632	-347
Mar. 31	73.40	3,082	+168
Apr. 30	78.86	4,496	+546
May 31	79.19	4,591	+36
June 30	78.93	4,516	-29
July 31	77.03	3,989	-197
Aug. 31	72.89	2,965	-383
Sept.30	68.52	2,049	-354
Water year 1929-30			-7.4
Oct. 31, 1930	62.97	1,119	-337
Nov. 30	60.49	790	-127
Dec. 31	60.11	744	-17
Calendar year 1930			-51
Jan. 31, 1931	56.71	392	-131
Feb. 28	52.63	102	-120
Mar. 31	52.25	82	-7
Apr. 30	70.62	2,468	+921
May 31	76.78	3,922	+543
June 30	77.22	4,039	+45
July 31	77.05	3,994	-17
Aug. 31	74.19	3,269	-271
Sept.30	72.18	2,805	-179
Water year 1930-31			+24
Oct. 31, 1931	70.80	2,464	-127
Nov. 30	72.31	2,833	+142
Dec. 31	73.64	3,138	+114
Calendar year 1931			+76
Jan. 31, 1932	78.83	4,487	+504
Feb. 29	77.14	4,018	-187
Mar. 31	74.37	3,312	-264
Apr. 30	79.30	4,623	+506
May 31	79.34	4,635	+4
June 30	77.84	4,209	-164
July 31	78.27	4,329	+45
Aug. 31	75.64	3,626	-262
Sept.30	71.33	2,619	-389
Water year 1931-32			-5.9
Oct. 31, 1932	77.42	4,094	+551
Nov. 30	79.09	4,562	+181
Dec. 31	78.76	4,467	-35
Calendar year 1932			-42
Jan. 31, 1933	77.73	4,178	-108
Feb. 28	74.43	3,326	-352
Mar. 31	75.43	3,574	+93
Apr. 30	79.17	4,585	+390
May 31	79.06	4,563	-12
June 30	76.43	3,830	-279
July 31	72.56	2,890	-351
Aug. 31	68.39	2,024	-323
Sept.30	64.33	1,322	-271
Water year 1932-33			-41
Oct. 31, 1933	60.73	820	-187
Nov. 30	59.86	715	-41
Dec. 31	62.79	1,094	+142
Calendar year 1933			-107
Jan. 31, 1934	61.02	856	-89
Feb. 28	*49.52	-29	-366
Mar. 31	61.17	875	+338
Apr. 30	75.82	3,672	+1,079
May 31	77.13	4,015	+128
June 30	75.88	3,688	-126
July 31	72.59	2,897	-295
Aug. 31	67.41	1,842	-394
Sept.30	62.36	1,033	-312
Water year 1933-34			-9.2

*Elevation.

Elevation and contents of Stillwater Reservoir near Beaver River, N. Y., 1925-37--Continued

Date (midnight)	Elevation (feet)	Contents (million cubic feet)	Monthly gain or loss in storage (equivalent mean second-feet)
Oct. 31, 1934	60.45	785	-93
Nov. 30	62.55	1,059	+106
Dec. 31	62.71	1,082	+9
Calendar year 1934			-0.4
Jan. 31, 1935	65.78	1,557	+177
Feb. 28	59.79	707	-351
Mar. 31	66.49	1,678	+363
Apr. 30	75.81	3,670	+769
May 31	79.16	4,582	+341
June 30	79.17	4,585	+1
July 31	77.56	4,132	-169
Aug. 31	73.55	3,117	-379
Sept.30	70.40	2,423	-288
Water year 1934-35			+44
Oct. 31, 1935	66.10	1,611	-303
Nov. 30	64.20	1,302	-119
Dec. 31	61.05	860	-165
Calendar year 1935			-7.0
Jan. 31, 1936	56.53	376	-181
Feb. 29	51.57	50	-130
Mar. 31	69.90	2,321	+848
Apr. 30	78.88	4,501	+841
May 31	79.24	4,606	+39
June 30	77.63	4,151	-176
July 31	74.69	3,390	-284
Aug. 31	70.41	2,425	-360
Sept.30	66.37	1,658	-296
Water year 1935-36			-24
Oct. 31, 1936	67.68	1,891	+87
Nov. 30	69.61	2,262	+143
Dec. 31	68.45	2,036	-84
Calendar year 1936			+37.3
Jan. 31, 1937	73.16	3,027	+370
Feb. 28	71.62	2,681	-143
Mar. 31	70.14	2,369	-117
Apr. 30	78.93	4,516	+828
May 31	79.10	4,565	+18
June 30	77.86	4,214	-135
July 31	75.02	3,471	-277
Aug. 31	73.83	3,183	-108
Sept.30	69.38	2,216	-373
Water year 1936-37			+17.7

Note.- Due to change in method of computation, some of the figures in the above table differ slightly from storage corrections published in conjunction with the records for Beaver River below Stillwater Dam, near Beaver River, N. Y.

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Beaver River below Stillwater Dam, near Beaver River, N. Y.

Location.- Staff gage, lat. 43°53'50", long. 75°03'05", at Stillwater Dam, at outlet of Beaver River Flow, 7½ miles west of Beaver River post office, Herkimer County.

Drainage area.- 172 square miles.

Records available.- May 1908 to September 1937.

Average discharge.- 29 years, 360 second-feet.

Extremes.- 1908-37: Maximum discharge, 3,700 second-feet May 3, 1926; practically no flow when gates in dam are closed and there is no spilling.

Remarks.- Records good. Flow regulated by storage in Stillwater Reservoir (capacity, 4,624,000,000 cubic feet). Discharge determined from ratings of Stillwater Dam gate and spillway. Record of gate openings and reservoir elevations furnished by Board of Black River Regulating District.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	480	200	510	13	620	204	290	25	490	340	500	650
2	480	200	510	13	610	300	290	440	490	340	500	630
3	480	200	510	13	610	300	290	730	440	340	540	610
4	475	184	510	168	610	300	110	650	340	335	590	300
5	475	142	510	350	610	300	13	610	340	335	590	45
6	475	142	510	350	610	300	13	740	340	335	580	162
7	475	142	540	350	610	300	13	800	340	335	440	600
8	475	142	610	350	610	300	13	800	340	335	146	600
9	470	142	600	355	610	300	13	670	340	335	580	600
10	345	142	600	355	610	300	13	520	340	335	580	450
11	248	142	600	355	610	300	13	490	340	335	510	12
12	260	144	510	355	600	295	13	440	340	370	14	194
13	380	144	400	355	600	295	13	415	340	405	14	600
14	360	144	400	400	600	295	13	540	340	405	14	590
15	375	144	400	425	600	295	14	1,140	340	405	14	590
16	375	246	400	430	660	295	14	1,100	340	405	400	590
17	360	290	465	430	710	295	14	1,140	340	405	590	590
18	380	290	495	460	700	295	14	1,120	340	405	590	440
19	270	290	490	470	700	295	14	760	340	395	590	156
20	134	290	490	560	700	295	14	760	340	395	450	580
21	134	290	550	610	700	295	14	760	340	395	14	580
22	134	290	590	610	700	295	14	760	340	395	158	580
23	134	380	580	610	600	390	14	580	340	395	590	580
24	136	420	580	610	430	570	15	490	340	395	590	580
25	136	415	455	610	430	570	15	490	340	395	590	435
26	200	415	390	610	330	560	15	490	340	390	590	13
27	255	415	390	620	13	560	17	490	340	390	440	410
28	255	415	420	620	13	560	19	490	340	390	14	570
29	260	415	395	620	-	485	20	490	340	460	156	570
30	260	475	170	620	-	290	22	490	340	500	580	570
31	246	-	12	620	-	290	-	490	-	500	610	-

Month	Observed				Adjusted for storage		
	Second-foot-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October	9,962	480	134	321	408	2.37	2.73
November	7,690	475	142	256	399	2.32	2.59
December	14,592	610	12	471	387	2.25	2.59
Calendar year 1936	120,245	1,100	2	329	366	2.13	28.93
January	13,317	620	13	430	800	4.65	5.36
February	15,806	710	13	564	421	2.45	2.55
March	10,724	570	204	346	229	1.33	1.53
April	1,359	290	13	45.3	874	5.08	5.67
May	19,910	1,140	25	642	660	3.84	4.43
June	10,600	490	340	353	218	1.27	1.42
July	11,895	500	335	384	107	.622	.72
August	12,564	610	14	405	297	1.73	1.99
September	13,877	650	12	463	90	.523	.58
Water year 1936-37	142,296	1,140	12	390	408	2.37	32.16

Note.- Midnight elevation of water surface in Stillwater Reservoir was 1,661.05 feet Dec. 31, 1935, and 1,668.45 feet Dec. 31, 1936.

Midnight elevation of water surface in Stillwater Reservoir was 1,666.37 feet Sept. 30, 1936, and 1,669.38 feet Sept. 30, 1937.

Beaver River at Croghan, N. Y.

Location.- Water-stage recorder, lat. 43°53'50", long. 75°24'15", about 1,000 feet above Black Creek and half a mile west of Croghan, Lewis County.

Drainage area.- 294 square miles.

Records available.- September 1930 to September 1937.

Extremes.- Maximum discharge during year, 2,590 second-feet Apr. 6 (gage height, 5.12 feet); minimum, 59 second-feet June 13, 14 (gage height, 1.20 feet); minimum daily discharge, 83 second-feet June 20.
1930-37: Maximum discharge, 3,390 second-feet Apr. 19, 1933 (gage height, 5.80 feet); minimum, about 18 second-feet Feb. 24, 1936 (gage height, 0.89 foot); minimum daily discharge, 35 second-feet May 13, 1934.

Remarks.- Records excellent except those for period of missing gage heights, Mar. 13-20, which were computed on basis of record of output of High Falls power plant and are good. The flow of Beaver River was completely regulated during the year at Stillwater Dam. (See records for Beaver River below Stillwater Dam, near Beaver River.) Between Stillwater Dam and this station flow is further regulated and controlled by operation of nine power-plant ponds.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

1.3	77	1.8	199	2.6	510
1.4	97	1.9	230	3.0	720
1.5	119	2.0	264	3.5	1,060
1.6	143	2.2	338	4.0	1,460
1.7	170	2.4	420	4.5	1,920

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	760	485	690	900	620	750	560	500	610	520	98	630
2	670	630	850	690	420	750	170	620	690	380	650	
3	610	660	710	790	730	550	455	435	560	560	490	660
4	305	720	680	870	850	640	340	550	720	194	670	520
5	700	640	560	770	860	620	870	670	495	98	610	126
6	600	830	415	840	860	375	1,920	560	680	560	630	330
7	670	810	690	770	540	106	940	860	670	710	560	370
8	750	295	780	890	740	375	870	800	510	730	176	500
9	740	600	600	540	900	470	790	740	470	510	580	465
10	500	550	690	295	850	480	560	840	470	380	720	550
11	470	445	730	610	880	470	140	760	660	110	680	640
12	445	360	610	475	870	470	520	680	710	385	850	300
13	760	370	460	520	870	300	750	720	136	465	750	485
14	700	410	700	730	780	190	540	890	275	600	370	710
15	390	210	670	1,020	790	340	730	990	390	450	110	710
16	640	415	700	1,000	830	400	610	780	415	370	320	580
17	445	390	680	730	1,000	460	820	1,680	425	295	460	680
18	480	415	650	1,020	760	600	260	1,780	365	110	640	530
19	840	425	620	1,160	730	700	530	1,580	315	335	620	170
20	840	660	740	1,120	810	400	770	1,600	83	330	670	460
21	810	640	740	1,260	880	102	780	1,400	330	410	365	590
22	640	260	690	1,140	890	370	870	1,300	400	590	108	640
23	720	480	700	990	1,020	450	940	830	410	500	540	690
24	435	640	620	540	1,120	700	1,140	730	395	445	630	550
25	156	690	600	1,040	750	740	770	700	340	208	650	670
26	540	405	560	980	590	490	670	650	310	410	550	192
27	580	475	610	1,040	570	560	710	810	89	425	610	480
28	590	740	860	910	310	255	710	760	325	660	355	660
29	640	290	830	900	-	530	690	860	610	500	112	510
30	680	580	950	880	-	730	580	844	540	570	385	510
31	580	-	1,140	330	-	640	-	800	-	425	425	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	18,686	840	156	603	2.05	2.36
November	15,540	830	210	518	1.76	1.96
December	21,485	1,140	415	693	2.36	2.72
Calendar year 1936	200,800	2,000	50	549	1.87	25.42
January	25,910	1,260	295	836	2.84	3.27
February	22,090	1,120	310	789	2.68	2.79
March	14,683	750	102	474	1.61	1.86
April	21,785	1,920	140	726	2.47	2.76
May	27,269	1,780	170	880	2.99	3.45
June	13,328	720	83	444	1.51	1.68
July	13,545	730	98	437	1.49	1.72
August	15,115	850	99	488	1.66	1.91
September	15,608	710	126	520	1.77	1.98
Water year 1936-37	225,044	1,920	83	617	2.10	28.46

Deer River at Copenhagen, N. Y.

Location.- Water-stage recorder, lat. 43°53'55", long. 75°39'40", at power plant half a mile northeast of Copenhagen, Lewis County.
Drainage area.- 89 square miles.
Records available.- September 1929 to September 1937.
Extremes.- Maximum discharge during year, 4,560 second-feet Apr. 6 (gage height, 7.55 feet); minimum, 1.5 second-feet Aug. 17-20 (gage height, 0.33 foot); minimum daily discharge, 1.7 second-feet Aug. 18.
1929-37: Maximum discharge, that of Apr. 6, 1937; maximum gage height, 9.3 feet Jan. 8, 1930; minimum discharge, 0.8 second-foot July 22 to Aug. 2, 1933; minimum daily discharge, 0.8 second-foot July 22 to Aug. 2, 1933.
Remarks.- Records good except those for periods of ice effect, Nov. 28 to Dec. 9, Dec. 21-25, Mar. 7, 11-18, 24-29 (computed on basis of gage heights and weather records), those for periods of missing gage heights, Feb. 3-13, July 17, 18, 31, Aug. 1, Aug. 28 to Sept. 18 (computed on basis of records for Independence River at Sperryville and East Branch of Fish Creek at Taberg), and those below ten second-feet, all of which are fair. Diurnal fluctuation caused by operation of power plant.

Rating tables, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 14				Jan. 15 to Sept. 30					
1.0	34	2.6	380	0.3	1.1	1.0	35	2.6	353
1.2	55	3.0	524	.35	1.8	1.2	59	3.0	493
1.4	81	3.5	735	.4	2.75	1.4	91	3.5	715
1.6	115	4.0	980	.5	5.45	1.6	120	4.0	990
1.8	157	4.5	1,270	.6	9.5	1.8	154	5.0	1,710
2.0	206	5.5	1,970	.7	14.5	2.0	195	6.0	2,660
2.2	259			.8	20	2.2	242	7.0	3,850

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	265	70	900	123	118	82	263	50	35	7.3	5
2	123	430	75	510	97	99	98	220	46	33	7.5	5
3	78	980	80	610	85	100	108	187	50	31	7.4	6
4	62	780	85	228	80	105	118	149	99	27	8.3	12
5	61	640	90	204	80	108	365	134	65	24	7.4	7
6	37	504	85	148	85	98	2,800	242	52	23	7.5	6
7	41	510	140	170	85	90	1,600	341	44	22	12	5
8	104	570	220	880	85	100	1,480	345	39	17	15	5
9	68	501	260	1,500	180	90	1,200	335	39	7.5	17	5
10	64	460	250	650	260	79	800	218	98	6.2	8.4	4.5
11	112	315	740	360	280	75	550	191	116	5.3	3.5	5
12	198	293	570	214	240	75	500	136	70	7.0	32	5
13	154	348	340	160	200	75	800	244	44	7.7	30	13
14	93	465	256	1,540	200	65	1,580	225	39	7.1	24	22
15	72	830	198	2,000	258	60	1,380	495	28	7.7	21	15
16	140	410	176	690	224	50	1,080	320	25	8.1	14	12
17	244	290	172	359	172	40	850	375	25	9.3	1.8	9
18	580	236	110	1,900	128	60	790	970	53	44	1.7	9
19	690	172	64	890	116	73	890	530	58	28	1.8	15
20	465	194	118	365	120	73	880	560	40	21	8.8	13
21	275	330	130	790	290	73	680	350	39	15	11	16
22	194	335	150	480	790	78	1,720	209	55	11	10	14
23	176	194	150	320	448	81	1,000	280	49	12	8.6	14
24	295	159	160	214	410	75	670	247	29	14	8.2	13
25	250	140	220	1,540	295	70	602	180	24	14	7.3	12
26	510	115	1,120	580	220	60	541	143	24	11	8.6	8.1
27	395	90	1,540	385	160	60	478	216	23	9.2	9.1	12
28	250	80	1,620	248	128	70	426	172	25	8.1	6	13
29	206	75	620	187	-	75	385	114	47	7.8	5.5	12
30	405	70	520	156	-	75	309	88	39	9.3	5.5	9.1
31	320	-	1,480	126	-	76	-	69	-	7.3	5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,740	690	37	217	2.44	2.81
November	10,781	980	70	359	4.03	4.50
December	11,809	1,620	64	381	4.28	4.93
Calendar year 1936	89,723.1	2,210	3.2	245	2.75	37.44
January	19,304	2,000	126	623	7.00	8.07
February	5,839	790	80	209	2.35	2.45
March	2,426	118	40	78.3	.880	1.01
April	24,762	2,800	82	825	9.27	10.34
May	8,548	970	69	276	3.10	3.57
June	1,434	116	23	47.8	.537	.60
July	489.6	44	5.3	15.8	.178	.21
August	321.2	32	1.7	10.4	.117	.13
September	301.7	22	4.5	10.1	.113	.13
Water year 1936-37	92,755.5	2,800	1.7	254	2.85	38.75

East Branch of Oswegatchie River at Cranberry Lake, N. Y.

Location.- Staff gage, lat. 44°13'15", long. 74°51'00", 850 feet below dam at outlet of Cranberry Lake, in Cranberry Lake village, St. Lawrence County.
Drainage area.- 144 square miles.
Records available.- May 1923 to September 1937.
Average discharge.- 14 years, 306 second-feet.
Extremes.- Maximum discharge during year, 1,200 second-feet Jan. 18-20 and May 15-19 (gage height, 7.0 feet); minimum, about 6 second-feet several times during September (gage height, 2.89 feet).
1923-37: Maximum daily discharge, 1,620 second-feet Apr. 17-20, 1933; minimum occurred when gates in dam were closed and there was no discharge over spillway.
Remarks.- Records good except those for Sept. 1-30, which are fair. Discharge computed from once-daily gage readings and record of gate operations at Cranberry Lake Dam. On days of rapidly changing stage the discharge is averaged for intervals of a day from graph based on gage readings and record of operation at dam. Flow completely regulated by operation of gates in Cranberry Lake Dam.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to May 17				May 18 to Sept. 30			
3.4	31	4.6	181	3.6	47	4.4	151
3.6	47	5.0	280	3.8	66	4.6	190
3.8	66	5.5	445	4.0	89	5.0	283
4.0	87	6.0	650	4.2	117		
4.2	114	6.5	910				
4.4	145	7.0	1,200				

Note.- Same as preceding table above 5.2 feet.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	167	192	202	266	700	540	605	520	283	233	211	211
2	107	192	202	266	700	540	582	520	283	233	211	211
3	107	192	202	266	700	540	582	402	283	233	211	211
4	107	192	222	296	700	540	582	343	274	233	211	211
5	107	202	266	311	700	540	510	343	245	233	211	211
6	107	202	266	311	507	540	238	301	245	233	211	134
7	107	202	266	311	428	540	81	266	245	233	211	134
8	107	202	266	311	428	540	38	266	245	233	211	195
9	107	202	266	399	428	520	51	266	245	233	211	245
10	107	202	266	462	428	520	51	266	245	233	211	248
11	107	202	266	495	428	520	51	325	245	233	211	248
12	137	202	266	560	428	520	51	360	245	233	197	393
13	137	202	266	560	428	520	51	360	245	233	190	248
14	178	202	266	700	428	500	51	445	245	222	190	248
15	192	202	266	996	428	500	51	971	245	222	190	248
16	192	202	266	1,080	428	500	51	1,200	245	222	190	248
17	192	202	266	1,080	428	500	51	1,200	245	222	190	237
18	192	202	266	1,160	428	500	51	1,200	245	222	190	237
19	192	202	266	1,200	428	500	51	840	245	222	190	376
20	192	202	266	1,150	410	500	51	700	245	222	91	237
21	192	202	266	855	410	480	51	618	245	222	47	237
22	192	202	266	708	410	480	118	520	245	222	47	237
23	192	202	266	521	410	480	376	520	245	222	252	227
24	192	202	251	462	454	480	376	447	245	222	252	227
25	192	202	251	636	560	480	422	365	245	222	190	227
26	192	202	251	750	560	480	470	343	233	222	190	360
27	192	202	251	750	560	462	520	343	233	222	190	227
28	192	202	266	750	560	462	520	343	233	211	190	227
29	192	202	266	750	-	513	520	343	233	211	190	227
30	192	202	266	750	-	605	520	343	233	211	200	227
31	192	-	266	700	-	605	-	306	-	211	211	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,953	192	107	160		
November	6,020	202	192	201		
December	7,950	266	202	256		
Calendar year 1936	97,070	800	9	265	1.84	25.08
January	19,812	1,200	266	639		
February	13,905	700	410	497		
March	15,947	605	462	514		
April	7,723	605	38	257		
May	15,585	1,200	266	503		
June	7,433	283	233	248		
July	6,981	233	211	225		
August	5,898	252	47	190		
September	7,157	393	134	239		
Water year 1936-37	119,364	1,200	38	327	2.27	30.82

Note.- Elevation of water surface in Cranberry Lake Reservoir on Sept. 30, 1937, was 0.98 foot higher than on Sept. 30, 1936, corresponding to an increase in storage of 300,529,152 cubic feet. This is equivalent to a mean yearly discharge of 9.53 second-feet, 0.066 second-foot per square mile, or 0.90 inch on drainage area.
Elevation of water surface in Cranberry Lake Reservoir on Dec. 31, 1936, was 3.36 feet higher than on Dec. 31, 1935, corresponding to an increase in storage of 1,030,385,664 cubic feet. This is equivalent to a mean yearly discharge of 32.6 second-feet, 0.226 second-foot per square mile or 3.08 inches on drainage area.

East Branch of Oswegatchie River near Oswegatchie, N. Y.

Location.- Water-stage recorder, lat. 44°13'25", long. 75°04'35", at Flat Rock hydro-electric plant of Northern New York Utilities, Inc., 2¾ miles north of Oswegatchie, St. Lawrence County.
Drainage area.- 263 square miles.
Records available.- October 1924 to September 1937.
Average discharge.- 12 years (1925-37), 540 second-feet.
Extremes.- Maximum discharge during year, 2,090 second-feet May 18 (gage height, 5.42 feet); minimum, about 3 second-feet Sept. 20 (gage height, 0.78 foot); minimum daily discharge, 120 second-feet (estimated) Aug. 29.
1924-37: Maximum discharge, 4,010 second-feet Apr. 6, 1928 (gage height, 7.1 feet), from rating curve extended logarithmically above 1,900 second-feet; minimum, probably less than 1 second-foot during complete shut-down of power plant and ponding of entire flow of river; minimum daily discharge, 1 second-foot July 25, 1926.
Remarks.- Records excellent except those for June 19 to July 23, Aug. 7-21, and Sept. 8-15 (computed on basis of record of output for Flat Rock plant), and those for Aug. 22 to Sept. 7 (computed on basis of record of output and operations at South Edwards No. 2 plant), which are good. Large diurnal fluctuation caused by operation of power plant; seasonal flow partly regulated by storage in Cranberry Lake, (See records for East Branch of Oswegatchie River at Cranberry Lake, N. Y.).

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

2.0	108	2.8	300	4.0	865
2.2	144	3.0	368	4.5	1,220
2.4	188	3.2	447	5.0	1,660
2.6	240	3.6	632	5.5	2,180

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	620	420	405	820	970	640	800	1,020	335	480	315	340
2	385	590	530	760	1,020	670	620	370	335	550	244	300
3	590	750	450	760	1,160	820	590	820	335	480	232	300
4	218	630	325	650	870	890	360	860	790	420	248	240
5	470	740	280	650	1,020	770	750	910	790	360	270	140
6	325	890	226	630	840	355	1,680	1,000	360	340	244	130
7	320	540	440	690	340	495	1,760	1,100	540	320	200	160
8	415	345	530	730	570	660	1,560	485	405	300	260	300
9	445	700	440	1,120	950	630	1,420	375	540	280	190	240
10	330	570	510	830	820	760	610	630	640	280	340	260
11	265	570	570	980	660	610	465	700	510	340	300	170
12	450	520	485	1,080	750	830	415	750	580	340	400	140
13	550	510	340	780	570	390	520	900	335	280	440	360
14	450	650	560	990	415	590	900	800	325	340	550	170
15	520	470	425	1,460	610	630	1,240	1,420	425	280	300	420
16	440	640	540	1,580	640	560	1,320	800	395	320	200	385
17	270	690	445	1,400	800	500	770	1,660	335	260	340	355
18	425	590	345	1,700	620	780	980	1,600	495	280	400	216
19	870	520	305	1,740	630	910	1,160	1,620	320	240	600	212
20	650	570	310	1,560	610	550	1,220	1,540	400	280	260	295
21	480	275	390	1,560	355	375	1,140	1,320	240	280	150	355
22	510	218	485	1,580	800	520	1,380	1,320	500	280	320	355
23	510	570	680	1,360	770	485	1,780	550	460	340	380	405
24	520	510	520	1,020	680	700	1,560	670	460	260	400	330
25	520	540	375	1,340	840	580	590	1,160	340	255	300	170
26	760	202	400	1,360	950	800	810	770	260	350	280	154
27	720	465	680	1,360	820	415	820	1,000	280	385	320	305
28	510	520	1,280	1,120	330	460	1,060	495	260	320	240	295
29	560	170	1,140	1,080	-	760	1,060	410	300	238	120	225
30	670	390	1,160	580	-	920	960	192	400	188	260	345
31	315	-	960	640	-	620	-	260	-	190	380	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	15,083	870	218	487		
November	15,765	890	170	526		
December	16,531	1,280	226	533		
Calendar year 1936	195,313	2,180	120	534	2.03	27.62
January	33,910	1,740	580	1,094		
February	20,410	1,160	330	729		
March	19,695	920	355	635		
April	30,300	1,780	360	1,010		
May	27,707	1,800	192	894		
June	12,690	790	240	423		
July	9,856	550	188	318		
August	9,483	600	120	306		
September	8,072	420	130	269		
Water year 1936-37	219,502	1,800	120	601	2.29	31.04

Oswegatchie River near Heuvelton, N. Y.

Location.- Water-stage recorder, lat. 44°36'00", long. 75°22'45", 2½ miles above Heuvelton, St. Lawrence County.
Drainage area.- 973 square miles.
Records available.- June 1916 to September 1937.
Average discharge.- 21 years, 1,724 second-feet.
Extremes.- Maximum discharge during year, 14,200 second-feet Apr. 7 (gage height, 8.57 feet), from rating curve extended above 11,700 second-feet; minimum, 279 second-feet Sept. 8-11 (gage height, 0.90 foot).
1916-37: Maximum discharge, 15,600 second-feet Jan. 11, 1930 (gage height, 9.1 feet), from rating curve extended above 11,700 second-feet; minimum, 200 second-feet Aug. 18, 1934 (gage height, 0.65 foot).
Remarks.- Records excellent except those for Nov. 20 to Mar. 10, which are good. Discharge for periods of ice effect, Nov. 23, 24, 27, 28, Dec. 18, 19, 21-23, Jan. 6, 23-31, Feb. 2-12, 16-19, Feb. 25 to Mar. 1, Mar. 6-8, 28, corrected on basis of one discharge measurement, observer's notes, gage heights, and weather records. Discharge for periods of missing gage heights, Nov. 20-22, Jan. 20, 21, 27 computed on basis of sum of discharge of East Branch near Oswegatchie and that of West Branch near Harrisville. Seasonal flow slightly regulated by storage in Cranberry Lake; slight diurnal fluctuation caused by operation of power plants. During high stages on Grass River a portion of the flow of that stream may pass through Upper Lake, Indian River, and Lower Lake and into Oswegatchie River at Rensselaer Falls, 4½ miles upstream.

Rating table, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.9	279	1.4	592	2.5	1,650	4.0	3,790	7.0	10,200
1.0	331	1.6	753	3.0	2,270	5.0	5,640	8.0	12,700
1.2	451	2.0	1,120	3.5	2,990	6.0	7,790	9.0	15,300

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,120	2,300	890	4,750	2,360	1,500	1,230	2,650	1,040	788	401	354
2	2,080	2,080	796	4,700	2,600	1,280	1,240	2,460	903	831	371	331
3	1,980	2,460	876	4,450	2,200	1,300	1,840	2,280	912	903	331	360
4	1,800	3,400	1,020	4,050	1,900	1,310	2,700	1,800	921	948	365	407
5	1,630	4,000	1,060	3,500	1,800	1,430	4,150	1,740	990	885	388	388
6	1,380	4,100	903	2,800	1,600	1,400	9,200	1,820	1,440	788	382	401
7	1,230	4,050	814	2,080	1,500	1,200	13,800	2,360	1,420	745	377	342
8	1,150	4,000	867	2,120	1,400	1,000	13,400	2,850	1,170	678	388	295
9	1,110	3,600	930	2,900	1,700	1,020	11,800	2,900	1,100	631	401	300
10	1,260	3,150	1,100	3,950	2,400	1,110	10,200	2,500	1,000	585	388	295
11	1,480	3,000	1,320	4,100	2,000	1,130	8,100	2,280	984	512	401	310
12	1,430	2,700	1,640	3,500	1,800	1,160	6,000	2,100	1,140	451	510	315
13	1,470	2,440	1,780	3,000	1,680	1,070	4,350	2,020	1,170	438	800	360
14	1,560	2,160	1,700	4,050	1,680	1,090	3,450	2,060	1,040	505	885	394
15	1,700	2,240	1,570	6,300	1,620	823	3,250	2,380	930	526	1,060	382
16	1,540	2,700	1,570	6,800	1,500	912	3,750	3,000	831	505	1,100	388
17	1,520	2,650	1,460	6,500	1,400	1,010	4,250	3,350	779	526	948	438
18	1,800	2,360	1,300	6,000	1,400	957	4,500	3,550	860	592	762	556
19	2,380	2,020	1,200	5,800	1,300	966	4,400	3,900	1,280	577	639	570
20	2,950	1,700	1,140	6,200	1,340	1,130	4,250	4,050	1,450	577	703	492
21	3,200	2,000	1,100	5,900	1,420	1,200	4,200	4,200	1,390	548	788	401
22	2,900	1,900	1,000	5,200	1,800	1,010	4,850	4,050	1,310	505	728	413
23	2,600	1,600	1,100	5,000	1,920	894	6,400	3,700	1,260	458	585	438
24	2,320	1,400	1,150	4,400	2,160	930	6,900	3,200	1,280	451	519	485
25	2,160	1,460	1,280	4,200	2,000	975	6,600	2,550	1,230	451	541	478
26	2,260	1,530	1,280	5,000	1,900	1,020	5,600	2,340	1,090	465	563	512
27	2,750	1,400	1,420	5,000	1,800	1,040	4,250	2,320	948	465	510	471
28	3,000	1,100	3,050	4,200	1,700	1,100	3,500	2,080	770	492	438	407
29	2,900	939	4,100	3,600	-	966	3,100	2,000	782	471	471	382
30	2,700	1,080	4,050	3,200	-	823	2,950	1,660	753	485	432	365
31	2,460	-	4,300	2,800	-	1,040	-	1,320	-	445	371	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	62,820	3,200	1,110	2,026	2.08	2.40
November	71,519	4,100	939	2,384	2.45	2.73
December	47,766	4,300	796	1,541	1.58	1.82
Calendar year 1936	637,029	9,640	326	1,741	1.79	24.33
January	136,050	6,800	2,080	4,389	4.51	5.20
February	49,880	2,600	1,300	1,781	1.83	1.91
March	33,796	1,500	823	1,090	1.12	1.29
April	164,210	13,800	1,230	5,474	5.63	6.28
May	81,470	4,200	1,320	2,628	2.70	3.11
June	32,153	1,450	753	1,072	1.10	1.23
July	18,227	948	438	588	.604	.70
August	17,546	1,100	331	566	.582	.67
September	12,030	570	295	401	.412	.46
Water year 1936-37	727,467	13,800	295	1,993	2.05	27.80

West Branch of Oswegatchie River near Harrisville, N. Y.

Location.- Water-stage recorder, lat. 44°11'10", long. 75°19'55", at highway bridge half a mile northeast of Geers Corners and 4 miles below Harrisville, Lewis County.
Drainage area.- 258 square miles.
Records available.- July 1916 to September 1937.
Average discharge.- 21 years, 524 second-feet.
Extremes.- Maximum discharge during year, 4,210 second-feet Apr. 7 (gage height, 7.17 feet); minimum, 29 second-feet Sept. 5 (gage height, 0.92 foot).
1916-37: Maximum discharge, 6,920 second-feet Jan. 9, 1930 (gage height, 9.6 feet) from rating curve extended above 2,400 second-feet; minimum, 25 second-feet Sept. 1, 1934 (gage height, 0.86 foot).
Remarks.- Records good except those for periods of ice effect, Nov. 18-20, Nov. 23 to Dec. 13, Dec. 22-25, Jan. 26-30, Feb. 1-8, 16-18, Mar. 4-17, 25-30 (computed on basis of one discharge measurement, gage heights, and weather records), and those for periods of missing gage heights, Oct. 4-8, 28-30, Nov. 2, 3, 6, 7, 9-11, 21, Jan. 2, Apr. 1-3, 8-15 (computed on basis of records for Oswegatchie River near Heuvelton and East Branch near Oswegatchie), which are fair. Slight diurnal fluctuations, principally during low flows, caused by pondage for operation of power plants.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 5				Nov. 6 to Sept. 30					
2.8	401	3.4	665	1.1	43	2.0	175	3.5	805
2.9	439	3.6	775	1.2	53	2.2	223	4.0	1,170
3.0	479	4.0	1,025	1.4	76	2.4	279	5.0	1,990
3.2	566	4.5	1,400	1.6	103	2.6	344	6.0	2,930
				1.8	135	3.0	515	7.0	4,010

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	640	595	240	1,680	550	430	208	861	315	298	81	65
2	665	552	220	1,680	420	378	223	760	280	275	85	64
3	665	630	220	1,480	380	335	259	674	285	244	104	65
4	540	830	240	1,220	340	300	280	576	510	226	96	58
5	460	980	240	960	300	300	600	525	580	193	81	53
6	420	1,130	260	854	280	280	2,650	600	472	173	74	61
7	420	1,100	260	704	280	260	3,800	875	410	154	69	64
8	440	1,050	240	716	280	240	2,900	1,030	325	126	71	64
9	471	975	260	990	495	240	2,200	1,030	275	104	106	65
10	435	910	300	1,280	570	220	1,900	924	290	99	116	60
11	425	840	400	1,400	592	200	1,580	792	410	100	124	49
12	526	786	550	1,340	520	200	1,340	686	380	120	220	60
13	580	704	600	917	472	190	1,100	686	300	150	370	74
14	562	644	620	1,040	472	190	1,180	868	273	134	530	96
15	483	722	535	1,720	495	200	1,560	1,030	236	104	496	160
16	430	889	460	2,280	460	200	1,860	1,240	210	118	365	172
17	420	847	415	2,000	420	190	1,800	1,340	184	158	260	140
18	680	750	359	1,620	390	204	1,680	1,300	242	198	188	118
19	1,020	550	295	1,640	363	212	1,740	1,280	365	200	146	102
20	1,180	500	315	1,660	348	212	1,820	1,280	330	164	196	124
21	1,100	565	345	1,460	363	206	1,800	1,260	295	138	248	134
22	910	582	340	1,440	530	230	1,800	1,160	344	118	212	136
23	730	500	320	1,340	674	216	2,260	1,010	363	106	162	116
24	698	440	280	1,220	798	218	2,060	903	330	97	134	106
25	720	420	340	1,240	900	200	1,660	753	255	81	120	90
26	800	400	465	1,500	728	190	1,440	638	206	86	106	85
27	910	320	730	1,500	598	190	1,260	587	173	90	85	82
28	1,000	280	1,340	1,200	500	190	1,160	565	154	81	82	88
29	910	260	1,720	950	-	200	1,060	500	234	84	76	77
30	760	240	1,640	850	-	190	960	430	307	81	72	72
31	670	-	1,620	638	-	194	-	400	-	84	68	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	20,670	1,180	420	667	2.59	2.99
November	19,991	1,130	240	666	2.58	2.88
December	16,169	1,720	220	522	2.02	2.33
Calendar year 1936	189,529	3,820	46	518	2.01	27.34
January	40,519	2,280	638	1,307	5.07	5.84
February	13,508	900	280	482	1.87	1.95
March	7,205	430	190	232	.899	1.04
April	46,140	3,800	208	1,538	5.96	6.65
May	26,563	1,340	400	857	3.32	3.83
June	9,333	580	154	311	1.21	1.35
July	4,384	298	81	141	.547	.63
August	5,143	530	68	166	.643	.74
September	2,700	172	49	90.0	.349	.39
Water year 1936-37	212,325	3,800	49	582	2.26	30.62

Grass River at Pyrites, N. Y.

Location.- Water-stage recorder, lat. 44°31'30", long. 75°11'50", 1,000 feet below lower bridge in Pyrites, St. Lawrence County, and half a mile above mouth of Harrison Creek.
Drainage area.- 335 square miles.
Records available.- August 1924 to September 1937.
Average discharge.- 13 years, 603 second-feet.
Extremes.- Maximum discharge during year, 7,390 second-feet Apr. 6 (gage height, 11.99 feet), from rating curve extended logarithmically above 2,650 second-feet; minimum, 103 second-feet Sept. 11 (gage height, 1.40 feet from recorded range in stage).
1924-37: Maximum discharge, about 8,300 second-feet Nov. 18, 1927 (gage height, 13.0 feet), from rating curve extended logarithmically above 2,100 second-feet; minimum, 37 second-feet July 15, 1933; minimum daily discharge, 59 second-feet Aug. 29 to Sept. 1, 1934.
Remarks.- Records good except those for periods of ice effect, Nov. 18-21, Nov. 28 to Dec. 15, Dec. 18-25, Jan. 6, 7, Jan. 27 to Feb. 19, Feb. 24 to Mar. 18, Mar. 22 to Apr. 4 (computed on basis of three discharge measurements, gage heights, except those for Dec. 1-14, weather records, and records for St. Regis River at Brasher Center and West Branch of Oswegatchie River near Harrisville), and those for periods of missing gage heights, Oct. 1-29, Sept. 4-24 (computed on basis of records for St. Regis River and West Branch of Oswegatchie River), which are fair. Occasional diurnal fluctuations caused by operation of power plants.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 5						Apr. 6 to Sept. 30					
1.9	211	2.6	482	4.5	1,520	1.4	103	2.2	332	5.0	1,900
2.0	242	2.8	580	5.0	1,820	1.5	123	2.4	412	6.0	2,600
2.1	275	3.0	680	6.0	2,470	1.6	145	2.6	500	8.0	4,000
2.2	311	3.5	935	7.0	3,160	1.7	170	3.0	697	10.0	5,600
2.4	392	4.0	1,220			1.8	197	3.5	965	12.0	7,400
						2.0	260	4.0	1,250		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,100	770	380	1,880	550	380	280	980	400	557	267	127
2	1,200	800	360	1,600	500	360	300	870	375	552	340	125
3	1,200	1,120	340	1,360	460	340	340	790	375	500	367	121
4	1,000	1,540	340	1,100	440	320	480	710	650	390	292	118
5	800	1,580	320	800	420	320	1,600	682	770	306	218	116
6	700	1,380	320	600	400	300	6,900	860	616	257	178	114
7	650	1,220	320	550	380	300	5,000	1,240	473	221	172	112
8	650	1,200	320	760	360	280	2,950	1,560	383	200	280	110
9	700	1,140	320	1,340	650	280	2,700	1,520	336	186	387	108
10	700	1,060	400	1,680	550	280	1,960	1,300	370	175	295	106
11	700	890	800	1,300	480	260	1,460	1,060	620	165	460	104
12	750	780	800	1,080	460	260	1,180	880	621	165	910	110
13	800	730	750	890	440	260	1,180	860	533	168	1,460	140
14	750	720	650	1,700	480	260	1,580	1,180	468	160	1,400	150
15	650	1,000	550	2,700	550	260	2,400	1,540	400	152	820	160
16	600	1,300	492	2,440	500	240	2,500	2,100	344	174	720	240
17	650	1,020	473	1,500	460	240	2,200	2,100	306	355	325	220
18	1,000	750	440	1,680	440	260	2,340	1,740	630	325	325	190
19	1,400	600	440	1,680	420	286	2,700	1,380	1,300	278	317	160
20	1,500	550	500	1,180	405	289	2,550	1,280	1,260	212	317	200
21	1,400	650	460	1,340	480	297	2,280	1,300	930	178	383	280
22	1,200	675	420	1,340	810	280	3,200	1,240	870	160	325	260
23	1,000	665	400	1,080	910	260	4,800	1,100	810	145	257	200
24	1,000	590	360	740	800	260	3,450	1,020	640	143	215	173
25	1,000	560	420	1,480	700	260	2,100	880	465	160	189	155
26	1,100	535	670	1,640	550	260	1,800	730	359	162	170	145
27	1,200	492	1,240	1,200	460	260	1,400	700	299	160	162	138
28	1,000	460	2,420	900	400	260	1,300	692	295	162	155	134
29	850	440	2,420	650	-	240	1,200	601	400	158	143	132
30	780	400	1,860	500	-	260	1,100	514	514	155	138	130
31	790	-	1,900	440	-	260	-	451	-	190	130	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	26,820	1,500	600	930	2.78	3.20
November	25,617	1,580	400	854	2.55	2.84
December	21,905	2,420	320	707	2.11	2.43
Calendar year 1936	236,303	3,400	90	646	1.93	26.24
January	39,130	2,700	440	1,262	3.77	4.35
February	14,455	910	360	516	1.54	1.60
March	8,672	380	240	280	.836	.96
April	65,030	6,900	280	2,168	6.47	7.22
May	33,800	2,100	451	1,090	3.25	3.75
June	16,812	1,300	295	560	1.67	1.86
July	7,271	557	143	235	.701	.81
August	12,117	1,460	130	391	1.17	1.35
September	4,578	280	104	153	.457	.51
Water year 1936-37	278,207	6,900	104	762	2.27	30.86

Raquette River at Piercefield, N. Y.

Location.- Water-stage recorder, lat. 44°14'05", long. 74°34'20", half a mile below dam of International Paper Co. at Piercefield, St. Lawrence County.

Drainage area.- 722 square miles.

Records available.- August 1908 to September 1937.

Average discharge.- 29 years, 1,292 second-feet.

Extremes.- Maximum discharge during year, 4,600 second-feet May 22 (gage height, 9.58 feet); minimum, 283 second-feet July 17 (gage height, 3.29 feet); minimum daily discharge, 299 second-feet July 16.
1908-1937: Maximum discharge, 7,580 second-feet Apr. 17, 1922 (gage height, 11.8 feet); minimum, about 10 second-feet Sept. 2, 1913 (gage height, 0.85 foot); minimum daily discharge, 11 second-feet Sept. 2, 1913.

Remarks.- Records excellent. Large diurnal fluctuation in flow for short periods caused by operation of paper mill. Seasonal distribution of flow appreciably regulated by natural storage in lakes and ponds above station.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

3.2	262	4.4	604	7.0	1,980
3.4	309	4.6	677	7.5	2,400
3.6	360	5.0	840	8.0	2,850
3.8	415	5.5	1,070	8.5	3,350
4.0	474	6.0	1,320	9.0	3,900
4.2	537	6.5	1,620	10.0	5,150

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	677	1,620	785	1,560	2,110	1,270	975	3,810	2,880	827	604	688
2	707	1,620	686	1,640	2,010	1,270	952	3,870	2,690	818	622	610
3	741	1,620	781	1,670	1,880	1,240	908	3,940	2,580	742	658	568
4	768	1,630	828	1,710	1,780	1,230	862	3,900	2,420	690	658	611
5	779	1,660	822	1,750	1,720	1,220	849	3,950	2,290	626	611	797
6	783	1,660	797	1,710	1,680	1,180	952	3,970	2,140	556	597	755
7	797	1,660	818	1,620	1,620	1,160	1,060	4,020	2,000	556	587	712
8	869	1,660	806	1,560	1,590	1,130	1,140	4,070	1,870	554	576	668
9	1,020	1,670	776	1,750	1,540	1,110	1,200	4,060	1,760	544	561	713
10	1,210	1,670	772	2,140	1,500	1,070	1,260	3,980	1,710	493	554	514
11	1,550	1,670	862	2,090	1,440	1,030	1,300	3,900	1,660	372	579	664
12	1,460	1,660	862	2,010	1,400	998	1,310	3,800	1,610	360	729	868
13	1,380	1,620	797	1,940	1,350	975	1,340	3,650	1,570	339	990	780
14	1,310	1,620	755	2,030	1,320	930	1,410	3,520	1,440	334	1,160	817
15	1,110	1,620	751	2,260	1,300	908	1,500	3,670	1,120	326	1,310	807
16	811	1,590	735	2,730	1,270	908	1,590	3,850	1,120	299	1,710	764
17	733	1,610	711	2,630	1,240	916	1,690	3,970	1,060	304	1,790	752
18	1,020	1,380	728	2,580	1,220	961	1,900	4,080	885	309	1,700	767
19	1,400	1,200	721	2,610	1,200	1,010	2,170	4,150	885	337	1,710	746
20	1,470	1,260	715	2,580	1,150	1,060	2,440	4,260	930	360	1,940	792
21	1,490	1,280	735	2,560	1,140	1,100	2,660	4,440	975	374	1,880	814
22	1,490	1,340	797	2,550	1,210	1,130	3,000	4,560	975	381	1,770	810
23	1,490	1,360	908	2,520	1,220	1,150	3,200	4,540	930	436	1,680	816
24	1,520	1,220	862	2,460	1,240	1,160	3,320	4,380	930	639	1,590	827
25	1,530	1,140	806	2,540	1,240	1,160	3,410	4,280	908	633	1,130	824
26	1,560	1,180	818	2,560	1,270	1,160	3,430	4,100	908	622	546	820
27	1,570	1,080	862	2,580	1,280	1,140	3,500	3,900	885	611	636	790
28	1,600	917	1,090	2,490	1,270	1,140	3,570	3,700	885	594	715	815
29	1,620	903	1,110	2,350	-	1,090	3,650	3,510	862	587	741	751
30	1,620	908	998	2,250	-	1,070	3,710	3,290	840	595	743	789
31	1,620	-	1,220	2,180	-	1,020	-	3,060	-	587	696	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	37,699	1,620	677	1,216	1.68	1.94
November	43,028	1,670	903	1,434	1.99	2.22
December	25,714	1,220	686	829	1.15	1.33
Calendar year 1936	461,041	5,290	138	1,260	1.75	23.75
January	67,610	2,730	1,560	2,181	3.02	3.48
February	40,190	2,110	1,140	1,435	1.99	2.07
March	33,896	1,270	908	1,093	1.51	1.74
April	60,258	3,710	849	2,009	2.78	3.10
May	122,180	4,560	3,060	3,941	5.46	6.30
June	43,718	2,880	840	1,457	2.02	2.25
July	15,605	827	299	503	.697	.80
August	31,775	1,940	546	1,025	1.42	1.64
September	22,429	868	514	748	1.04	1.16
Water year 1936-37	544,100	4,560	299	1,491	2.07	28.03

St. Regis River at Brasher Center, N. Y.

Location.- Water-stage recorder, lat. 44°51'50", long. 74°46'45", 600 feet above highway bridge at Brasher Center, St. Lawrence County, and 6½ miles below junction of East and West Branches at Winthrop.
Drainage area.- 616 square miles.
Records available.- August 1910 to November 1917, January 1919 to September 1937.
Average discharge.- 24 years (1910-13, 1914-17, 1919-37), 1,099 second-feet.
Extremes.- Maximum discharge during year, 16,800 second-feet Apr. 6; maximum gage height, about 15.3 feet Apr. 6 (backwater from ice jam); minimum discharge, 192 second-feet Sept. 3 (gage height, 5.81 feet).
1910-17, 1919-37: Maximum discharge, that of Apr. 6, 1937; minimum, about 34 second-feet Aug. 8, 1917 (gage height, 5.25 feet).
Remarks.- Records good except those for periods of ice effect, Nov. 17-20, Nov. 23 to Dec. 28, Jan. 12-14, 23, 24, Jan. 27 to Feb. 22, Feb. 25 to Apr. 6 (computed on basis of one discharge measurement, gage heights except those for Dec. 8-11, 19, 20, and weather records), and those for periods of missing gage heights, July 26-30 (computed on basis of weather records and record for Grass River at Pyrites), which are fair. Discharge for Oct. 1 to Nov. 6, Nov. 14-23, Dec. 12-19, and July 31 to Sept. 25, computed from twice-daily readings of staff gage.

Rating table, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

5.8	185	8.0	3,020
6.0	321	8.5	3,950
6.2	485	9.0	4,970
6.4	683	9.5	6,070
6.7	1,040	10.0	7,350
7.0	1,440	11.0	10,340
7.5	2,180	12.0	13,740

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,640	1,540	700	2,600	1,000	850	550	1,980	1,090	1,330	485	352
2	1,930	1,680	650	2,220	900	800	600	1,940	965	1,310	630	321
3	1,840	2,280	600	2,220	800	700	650	1,870	843	1,120	621	198
4	1,640	2,550	600	1,780	750	650	900	1,650	1,140	903	632	278
5	1,340	2,340	550	1,510	700	600	2,000	1,500	1,650	879	542	337
6	1,180	2,180	550	1,020	650	600	11,000	1,570	1,650	855	450	264
7	1,030	2,050	600	1,000	650	550	6,500	3,750	1,480	683	293	218
8	1,000	2,080	550	1,380	600	550	3,600	4,550	1,120	542	300	216
9	1,040	2,070	550	2,550	1,400	500	3,850	3,650	915	494	375	244
10	1,120	2,040	650	2,750	1,200	500	3,200	3,050	855	425	408	211
11	1,160	1,780	1,300	2,260	1,000	500	2,600	2,550	928	468	390	204
12	1,140	1,610	1,400	1,800	900	480	2,160	2,180	952	293	1,060	278
13	1,090	1,370	1,300	1,400	850	460	1,920	2,020	1,040	314	1,640	329
14	1,040	1,370	1,100	3,000	950	460	2,220	2,240	1,020	352	1,820	300
15	978	1,540	1,000	4,150	1,100	440	3,050	3,000	940	278	1,550	530
16	940	1,780	900	3,300	950	440	3,650	4,350	867	293	1,340	442
17	1,100	1,700	800	2,650	850	440	3,550	3,850	819	271	1,130	468
18	1,660	1,400	700	2,800	800	460	3,550	3,200	1,220	355	915	416
19	2,220	1,200	700	2,650	750	480	3,850	2,550	2,700	340	879	329
20	2,220	1,100	850	2,460	750	500	3,750	2,900	2,650	310	1,090	430
21	2,150	1,330	750	2,600	850	550	3,600	4,400	2,160	278	1,340	739
22	1,990	1,400	650	2,220	1,600	500	5,000	4,150	2,080	293	1,330	683
23	1,840	1,200	600	1,600	2,040	480	6,700	3,400	1,920	264	1,140	523
24	1,780	1,100	700	1,400	1,700	460	4,800	2,750	1,410	325	965	425
25	1,840	1,000	750	2,420	1,500	460	3,650	2,180	1,090	494	680	307
26	1,990	1,100	850	2,150	1,300	440	3,100	1,870	928	442	532	329
27	2,300	1,000	1,400	1,800	1,100	440	2,800	1,690	831	320	504	337
28	2,020	950	3,000	1,400	950	440	2,500	1,550	784	280	494	368
29	1,840	850	2,360	1,200	-	440	2,300	1,410	820	260	465	376
30	1,710	800	2,320	1,000	-	440	2,100	1,300	1,340	260	344	329
31	1,620	-	2,720	900	-	460	-	1,180	-	459	337	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	48,388	2,300	940	1,561	2.53	2.92
November	46,390	2,550	800	1,546	2.51	2.80
December	32,150	3,000	550	1,037	1.68	1.94
Calendar year 1936	432,947	6,500	200	1,183	1.92	26.14
January	64,390	4,150	900	2,077	3.37	3.88
February	28,590	2,040	600	1,021	1.66	1.73
March	16,070	850	440	518	.841	.97
April	99,700	11,000	550	3,323	5.39	6.01
May	80,230	4,550	1,180	2,588	4.20	4.84
June	38,207	2,700	784	1,274	2.07	2.31
July	15,490	1,330	260	500	.812	.94
August	24,881	1,840	293	803	1.30	1.50
September	10,783	739	198	359	.583	.65
Water year 1936-37	505,269	11,000	198	1,384	2.25	30.49

Salmon River at Chasm Falls, N. Y.

Location.- Water-stage recorder, lat. 44°45'20", long. 74°13'10", at Chasm Falls, Franklin County, a quarter of a mile below power plant of Malone Light & Power Co.

Drainage area.- 132 square miles.

Records available.- July 1925 to September 1937.

Average discharge.- 12 years, 236 second-feet.

Extremes.- Maximum discharge during year, 2,050 second-feet Apr. 6 (gage height, 4.23 feet); minimum, 32 second-feet Aug. 24 (gage height, 0.64 foot); minimum daily discharge, 92 second-feet July 22, Sept. 8, 9.
1925-37: Maximum discharge, 2,890 second-feet Apr. 25, 1926 (gage height, 5.0 feet); minimum, 20 second-feet Oct. 25, 1934 (gage height, 0.46 foot); minimum daily discharge, 28 second-feet Sept. 4, 1934.

Remarks.- Records excellent except those for Feb. 22, 23, June 15-19, which are based upon recorded range in stage, and record for West Branch of Oswegatchie River near Harrisville and are fair. Diurnal fluctuation caused by operation of power plant. A small diversion from a tributary stream above gage is used as water supply for village of Malone.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

1.1	84	1.4	145	1.8	272	2.5	635
1.2	101	1.5	172	2.0	356	3.0	970
1.3	121	1.6	202	2.2	456	3.5	1,360

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	290	276	164	674	190	178	176	467	204	208	210	102
2	465	343	204	500	172	196	164	425	190	230	222	109
3	305	399	186	445	166	130	186	385	340	168	168	107
4	254	385	186	365	178	178	168	350	570	160	156	105
5	200	390	194	292	167	146	325	338	380	153	116	104
6	182	352	156	200	166	130	1,320	395	295	114	132	103
7	174	321	196	232	164	164	1,220	600	260	144	98	96
8	208	335	138	275	156	132	600	840	228	98	102	92
9	186	345	180	540	260	162	600	770	200	140	156	92
10	160	312	162	650	280	144	430	590	220	106	153	94
11	150	260	225	420	214	164	352	480	320	120	325	94
12	200	268	228	360	186	132	305	400	255	114	510	96
13	158	250	204	295	182	162	360	415	261	138	395	108
14	158	261	212	445	206	114	550	451	230	118	285	265
15	182	295	186	710	224	142	635	790	206	124	234	236
16	176	320	206	570	210	146	668	1,100	190	118	188	156
17	180	254	176	370	164	158	597	820	170	130	160	156
18	500	261	162	475	178	186	600	670	380	156	167	118
19	470	228	154	455	178	172	720	540	700	126	144	166
20	390	222	196	265	142	160	800	700	480	100	310	246
21	361	235	200	365	224	192	670	930	394	126	285	212
22	308	268	172	365	295	188	830	740	370	92	250	164
23	320	235	164	290	340	166	1,020	590	338	112	186	161
24	340	190	178	192	265	167	660	490	272	152	146	134
25	375	222	180	460	225	164	630	409	238	116	150	160
26	385	202	186	400	228	182	674	352	174	153	158	122
27	435	142	275	260	180	176	650	316	194	186	118	156
28	335	161	630	226	170	164	560	288	153	112	158	162
29	280	182	520	230	-	178	542	260	182	148	154	118
30	272	166	451	206	-	170	542	235	170	100	102	154
31	272	-	540	200	-	166	-	215	-	156	142	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,679	500	158	280	2.12	2.44
November	8,088	399	142	270	2.05	2.29
December	7,215	630	138	233	1.77	2.04
Calendar year 1936	88,694	1,750	62	242	1.83	25.00
January	11,752	710	192	379	2.87	3.31
February	5,712	340	142	204	1.55	1.61
March	5,049	196	114	163	1.23	1.42
April	17,554	1,320	164	585	4.43	4.94
May	16,351	1,100	215	527	3.99	4.60
June	8,564	700	153	285	2.16	2.41
July	4,238	230	92	137	1.04	1.20
August	6,080	310	98	196	1.48	1.71
September	4,188	265	92	140	1.06	1.18
Water year 1936-37	103,470	1,320	92	283	2.14	29.15

Chateaugay River near Chateaugay, N. Y.

Location.- Water-stage recorder, lat. 44°54'35", long. 74°05'10", 150 feet below dam of International Paper Co., 1 mile south of Chateaugay, Franklin County.

Drainage area.- 112 square miles.

Records available.- September to December 1908, October 1926 to September 1937.

Average discharge.- 11 years (1926-37), 180 second-feet.

Extremes.- Maximum discharge during year, 1,740 second-feet Apr. 6 (gage height, 6.21 feet), from rating curve extended logarithmically above 930 second-feet; minimum, 31 second-feet Oct. 15 (gage height, 0.82 foot); minimum daily discharge, 61 second-feet Oct. 16.

1908, 1926-37: Maximum discharge, 2,060 second-feet Apr. 8, 1928 (gage height, 7.3 feet), from rating curve extended logarithmically above 930 second-feet; minimum, 6 second-feet Nov. 20, 1928 (gage height, 0.23 foot); minimum daily discharge, 26 second-feet July 8, 1934.

Remarks.- Records good except those for periods of ice effect, Nov. 19, 20, 23, 24, 27-30, Dec. 3, 4, 9, 13, 14, 19, 22, 23, Jan. 6, 7, 11, 12, 16, 17, 20, Jan. 27 to Feb. 8, Feb. 11, 12, 16-19, 27, 28, Mar. 7-13, 26-30 (computed on basis of two discharge measurements, gage heights, and weather records), and those for Sept. 24-26, (estimated), which are fair. Flow regulated by storage in Upper and Lower Chateaugay Lakes. Large diurnal fluctuation caused by operation of power plants.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	95	167	156	315	200	226	164	490	158	138	118	126
2	70	190	152	320	200	214	160	445	156	140	118	126
3	63	214	140	320	200	218	158	415	180	136	116	126
4	63	204	130	290	200	216	154	410	160	132	116	136
5	62	236	126	255	200	212	190	340	144	131	116	127
6	62	244	136	240	200	222	1,080	260	144	128	114	126
7	68	242	122	220	200	220	325	240	142	126	114	128
8	62	240	142	210	240	220	485	275	142	126	117	126
9	63	234	140	270	335	220	500	340	142	126	136	126
10	64	208	134	285	224	220	465	425	142	126	126	126
11	64	216	146	280	220	220	475	415	136	128	250	124
12	65	206	124	260	220	200	460	410	134	126	450	124
13	63	194	120	236	220	200	420	360	134	126	440	128
14	63	203	120	275	236	184	445	365	134	126	470	146
15	68	196	122	315	224	158	420	640	134	128	435	128
16	61	172	124	300	220	158	420	830	134	124	395	124
17	90	212	116	320	220	158	410	880	136	89	370	124
18	89	192	110	340	220	160	410	870	176	108	315	124
19	81	190	130	290	220	160	410	820	156	127	238	127
20	83	190	140	280	221	158	415	930	181	116	335	132
21	80	198	118	290	255	158	425	880	224	114	260	126
22	80	190	110	246	275	158	540	830	270	114	255	118
23	89	160	180	230	226	158	520	770	260	114	246	118
24	108	170	150	244	222	158	500	730	246	114	210	110
25	110	180	120	350	219	158	485	700	218	117	184	106
26	138	160	132	265	219	160	500	560	152	118	178	100
27	140	150	222	240	220	160	530	460	146	116	178	120
28	150	140	228	220	240	160	530	315	138	114	172	146
29	162	140	310	220	-	160	520	216	130	114	132	150
30	164	130	305	200	-	160	495	174	132	130	128	150
31	154	-	300	200	-	162	-	156	-	122	128	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,774	164	61	89.5	0.799	0.92
November	5,788	244	130	193	1.72	1.92
December	4,817	310	110	155	1.38	1.59
Calendar year 1936	64,248	990	55	176	1.57	21.31
January	8,326	350	200	269	2.40	2.77
February	6,296	335	200	225	2.01	2.09
March	5,696	226	158	184	1.64	1.89
April	13,031	1,080	154	434	3.88	4.33
May	15,951	930	156	515	4.60	5.30
June	4,891	270	130	163	1.46	1.63
July	3,796	140	89	122	1.09	1.26
August	6,960	470	114	225	2.01	2.32
September	3,798	150	100	127	1.13	1.26
Water year 1936-37	82,124	1,080	61	225	2.01	27.28

Note.- Elevation of water surface of Chateaugay Lakes at midnight Sept. 30, 1937, was 0.25 foot lower than at midnight Sept. 30, 1936, corresponding to an approximate decrease in storage of 33,108,000 cubic feet. This is equivalent to a mean annual discharge of 1.05 second-feet, 0.0094 second-foot per square mile, or a run-off of 0.13 inch from the drainage area.

Elevation of water surface of Chateaugay Lakes at midnight Dec. 31, 1936, was 1.70 feet higher than at midnight Dec. 31, 1935, corresponding to an approximate increase in storage of 225,118,000 cubic feet. This is equivalent to a mean annual discharge of 7.12 second-feet, 0.065 second-foot per square mile, or a run-off of 0.88 inch from the drainage area.

Richelieu River (Lake Champlain) at Rouses Point, N. Y.

Location.- Staff gage, lat. 44°59'45", long. 73°21'40", at Rutland Railroad bridge in Rouses Point, Clinton County, 1 mile south of Fort Montgomery. Zero of gage is 92.50 feet above mean sea level (general adjustment of 1912).

Drainage area.- 8,277 square miles.

Records available.- January 1875 to September 1937. Prior to 1870, at St. Johns, Quebec (maximum and minimum monthly stage; see Water-Supply Paper 97, p. 340). January 1875 to September 1916, at Chambly, Quebec (monthly discharge, see Water-Supply Paper 424, pp. 20-24). 1871-75, unpublished record of gage heights obtained by Corps of Engineers, U. S. Army, at Fort Montgomery.

Extremes.- Maximum gage height observed during year, 7.12 feet May 23; minimum, 0.93 foot Sept. 28.

1871-1937: Maximum gage height observed, 8.80 feet Mar. 30, 1903; observations at St. Johns, Quebec, indicate a maximum computed gage height of 8.83 feet during April 1869; minimum observed, -0.60 foot Nov. 13, 1908.

Remarks.- Gage read once daily. Gage-height record furnished by Corps of Engineers, U. S. Army.

Gage height, in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.15	2.40	2.57	2.95	3.71	3.43	2.24	5.78	6.35	4.00	2.28	1.70
2	1.10	2.45	2.60	3.02	3.65	3.35	2.23	5.78	6.12	4.08	2.22	1.70
3	1.08	2.53	2.58	3.20	3.45	3.25	2.20	5.80	6.15	4.02	2.25	1.65
4	1.12	2.32	2.60	3.13	3.39	3.27	2.20	5.88	5.92	3.95	2.33	1.62
5	1.10	2.52	2.46	3.35	3.37	3.18	2.45	5.85	5.86	3.87	2.22	1.42
6	1.50	2.75	2.50	2.98	3.45	3.10	2.60	5.70	5.75	3.75	2.20	1.45
7	1.20	2.86	2.45	3.33	3.35	3.06	3.22	5.68	5.62	3.75	2.15	1.43
8	1.08	2.85	2.43	3.02	3.30	3.10	3.60	5.75	5.55	3.63	2.10	1.35
9	1.13	2.92	2.52	3.03	3.35	2.97	3.85	5.85	5.37	3.50	2.15	1.50
10	1.45	2.65	2.55	3.13	3.35	2.85	3.96	5.68	5.15	3.47	2.08	1.52
11	.95	3.10	2.47	3.20	3.22	2.75	4.02	5.70	5.23	3.43	2.03	1.50
12	.95	3.05	2.38	3.22	3.24	2.73	4.10	5.73	5.36	3.38	2.18	1.32
13	1.02	2.85	2.24	3.20	3.14	2.70	4.23	5.60	5.20	3.25	2.12	1.05
14	1.07	3.30	2.52	3.55	3.14	2.66	4.32	5.35	5.02	3.45	2.02	1.32
15	1.25	2.96	2.42	3.30	3.20	2.62	4.42	5.78	4.80	3.25	2.13	1.60
16	1.32	2.67	2.55	3.40	3.32	2.60	4.60	6.25	4.83	3.07	2.15	1.22
17	1.12	3.80	2.33	4.04	3.28	2.77	4.75	6.52	4.90	3.05	2.05	1.23
18	1.30	2.71	2.30	3.66	3.28	2.75	4.85	6.65	4.65	2.95	1.80	1.33
19	1.35	3.06	2.41	3.60	3.24	2.63	5.03	6.70	4.65	2.92	2.20	1.50
20	1.52	3.05	2.46	3.55	3.24	2.60	5.00	6.60	4.70	2.90	1.95	1.05
21	1.65	2.95	2.40	4.15	3.18	2.54	5.17	6.93	4.67	2.87	1.92	1.08
22	1.83	2.87	2.50	3.70	3.15	2.48	5.30	7.04	4.42	2.77	1.76	1.15
23	1.50	2.70	2.55	3.75	3.42	2.45	5.35	7.12	4.45	2.75	1.93	1.30
24	1.72	2.75	2.63	3.79	3.45	2.47	5.50	7.06	4.53	2.77	1.92	1.15
25	2.00	3.40	2.45	3.74	3.47	2.45	5.56	6.99	4.45	2.68	1.95	1.10
26	1.60	2.68	2.50	3.86	3.45	2.38	5.62	6.91	4.37	2.90	1.90	1.02
27	2.08	2.64	2.65	3.88	3.40	2.32	5.70	6.79	4.50	2.75	1.87	.95
28	2.30	2.98	2.50	3.86	3.40	2.34	5.73	6.73	4.25	2.50	1.65	.93
29	2.45	2.65	2.55	3.78	-	2.22	5.70	6.67	4.22	2.65	1.76	.96
30	2.28	2.62	3.05	3.76	-	2.24	5.75	6.55	4.05	2.63	1.75	1.03
31	2.28	-	3.08	3.83	-	2.20	-	6.47	-	2.37	1.73	-

Lake Champlain at Burlington, Vt.

Location.- Float gage, lat. 44°28'55", long. 73°13'30", in pump house of Burlington Water Department, half a mile north of railroad station in Burlington, Chittenden County. Zero of gage is about 92.5 feet above mean sea level. Prior to July 20, staff gage at site three-quarters of a mile south, on same datum.

Records available.- May 1907 to September 1937.

Extremes.- Maximum gage height observed during year, 7.55 feet May 20; minimum observed, 1.01 foot Sept. 30.
1907-37: Maximum gage height observed, 8.65 feet Mar. 27, 28, 1936; minimum, -0.25 foot Dec. 4, 1908.

Remarks.- Gage read once daily on days for which gage heights are shown; not read on other days. Gage-height record furnished by D. A. Loomis, General Manager, Champlain Transportation Co.

Gage height, in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	-	2.72	3.06	3.66	3.50	-	-	-	4.16	1.90	1.60
2	1.20	2.46	2.66	3.16	3.64	-	-	-	5.36	4.11	1.88	1.62
3	1.18	-	2.64	-	3.62	3.46	-	5.94	-	4.06	1.88	1.60
4	-	2.46	2.64	3.18	3.60	3.44	-	5.96	-	4.11	1.90	1.60
5	1.18	2.62	2.62	3.20	3.58	3.42	-	5.92	-	4.06	1.90	-
6	1.18	2.66	-	3.22	3.56	3.26	-	5.88	-	4.01	1.90	1.58
7	1.16	2.86	2.62	-	-	-	3.36	-	-	3.96	1.88	1.58
8	1.16	-	2.60	3.24	3.50	3.06	3.76	-	-	3.91	1.88	1.48
9	1.14	3.04	2.58	2.96	3.46	3.06	3.96	-	-	3.86	2.08	1.48
10	1.14	-	2.58	-	3.46	3.04	4.16	5.86	-	3.70	2.02	1.36
11	-	3.08	2.54	3.32	3.44	3.04	-	-	-	3.64	2.02	1.32
12	1.20	3.08	2.54	3.34	3.34	3.00	4.26	5.80	-	3.58	2.00	1.34
13	-	3.08	-	3.34	3.34	2.96	4.30	5.66	-	3.62	-	1.34
14	1.26	3.10	2.54	-	-	-	4.36	-	5.16	3.52	-	1.40
15	1.32	-	2.52	3.42	3.34	2.76	4.56	-	5.06	3.40	-	1.32
16	1.34	3.10	2.52	3.56	3.36	-	4.76	-	5.04	3.28	1.98	1.28
17	1.36	3.06	2.50	-	3.36	-	4.86	-	4.96	3.16	1.92	1.30
18	-	3.04	2.50	3.66	3.36	-	-	-	4.86	3.06	1.86	1.28
19	1.54	3.00	2.50	-	3.34	-	5.14	-	4.86	2.96	1.86	-
20	1.56	2.98	-	-	3.34	-	5.20	7.55	-	2.90	1.72	1.18
21	1.58	2.96	2.60	3.72	-	-	5.36	-	4.76	2.80	1.76	-
22	1.64	-	2.64	3.86	-	-	5.42	-	4.76	2.72	-	1.15
23	1.66	2.92	2.66	3.86	-	-	5.66	-	4.74	2.66	1.86	1.15
24	1.82	2.88	2.68	-	-	-	5.76	-	4.66	2.60	1.78	-
25	-	2.86	2.70	3.88	-	-	-	-	4.62	2.56	1.74	1.11
26	2.20	2.82	2.72	4.00	3.36	-	5.80	-	4.56	2.44	1.72	-
27	2.22	2.80	-	3.98	3.44	-	-	-	-	2.30	1.72	1.10
28	2.26	2.80	2.80	3.98	-	-	-	-	4.36	2.18	1.70	1.06
29	2.30	-	2.86	3.96	-	-	5.88	-	4.26	2.02	-	1.04
30	2.36	2.76	-	3.96	-	-	5.92	5.54	4.20	1.92	1.68	1.01
31	2.46	-	-	-	-	-	-	-	-	1.88	1.62	-

Great Chazy River at Perry Mills, N. Y.

Location.- Water-stage recorder, lat. 45°00'00", long. 73°30'05", 500 feet above highway bridge at Perry Mills, Clinton County.

Drainage area.- 247 square miles.

Records available.- September 1928 to September 1937.

Extremes.- Maximum discharge during year, 6,000 second-feet Apr. 7; maximum gage height, 9.96 feet Apr. 7 (backwater from ice); minimum discharge, 29 second-feet Aug. 7 (gage height, 1.86 feet); minimum daily discharge, 43 second-feet Aug. 7.
1928-37: Maximum discharge, that of Apr. 7, 1937; maximum gage height, 11.2 feet Mar. 15, 1929; minimum discharge, about 0.8 second-foot Sept. 18, 1932 (gage height, 1.33 feet); minimum daily discharge, 10 second-feet Sept. 18, 1932.

Remarks.- Records excellent except those for periods of ice effect, Nov. 18, 19, Nov. 29 to Dec. 10, Dec. 14-28, Jan. 4-7, 11-13, Jan. 27 to Apr. 5, which were computed on basis of two discharge measurements, gage heights, and weather records and are fair. Diurnal fluctuation caused by operation of sawmill nearby. Partial regulation due to storage in Chazy Lake. Clinton Prison, at Dannemora, obtains its water supply from Chazy Lake.

Rating table, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.9	33	2.2	70	2.8	194	3.4	388	4.5	910	7.0	2,910
2.0	44	2.4	104	3.0	252	3.6	466	5.0	1,210	8.0	3,970
2.1	56	2.6	146	3.2	316	4.0	640	6.0	1,960	9.0	5,110

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	202	200	610	260	190	240	600	152	345	184	85
2	196	270	190	495	240	200	240	490	152	445	164	85
3	134	370	190	390	220	240	240	410	190	224	122	82
4	96	320	170	320	200	240	360	355	485	182	94	77
5	87	410	140	280	190	240	750	320	295	146	77	95
6	86	465	160	260	220	220	2,850	355	212	128	58	84
7	79	470	180	260	220	200	4,200	475	174	114	43	77
8	82	555	200	290	200	190	1,140	770	164	80	74	73
9	86	610	190	970	280	200	1,160	1,100	190	86	102	69
10	84	475	240	960	500	220	570	790	196	79	148	67
11	86	275	365	550	360	240	490	510	335	90	670	67
12	90	270	580	480	280	220	480	365	226	87	930	63
13	58	275	365	420	260	200	600	320	160	81	560	67
14	53	280	280	435	320	200	990	400	156	80	340	174
15	49	293	260	1,140	440	190	1,080	2,320	142	70	220	172
16	48	315	280	690	320	200	1,020	3,000	128	70	160	100
17	63	198	190	485	280	200	610	1,040	130	106	120	97
18	450	190	140	485	260	240	650	1,200	320	138	120	98
19	310	220	120	550	260	260	700	750	910	102	152	106
20	260	255	180	460	280	260	900	1,360	560	74	570	110
21	198	295	360	560	340	240	650	2,200	375	63	510	142
22	154	411	220	590	600	220	630	1,000	350	62	295	122
23	160	295	200	360	950	220	890	600	300	59	204	102
24	236	238	220	380	650	220	1,200	460	232	72	152	102
25	285	246	240	960	480	200	1,640	350	176	90	120	97
26	255	238	260	610	340	220	1,580	280	144	102	100	94
27	350	180	320	380	280	240	1,120	280	130	88	92	94
28	300	170	1,900	280	260	260	730	248	124	77	90	92
29	214	180	1,080	260	-	240	830	206	140	71	85	92
30	204	190	550	300	-	220	900	182	365	73	79	93
31	224	-	380	280	-	220	-	168	-	122	77	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,027	450	48	162	0.656	0.76
November	9,161	610	170	305	1.23	1.37
December	10,350	1,900	120	334	1.35	1.56
Calendar year 1936	111,805	4,600	26	305	1.23	16.84
January	15,480	1,140	260	499	2.02	2.33
February	9,490	950	190	339	1.37	1.43
March	6,850	260	190	221	.895	1.03
April	29,640	4,200	240	988	4.00	4.46
May	22,904	3,000	168	739	2.99	3.45
June	7,613	910	124	254	1.03	1.15
July	3,606	445	59	116	.470	.54
August	6,732	930	43	217	.879	1.01
September	2,878	174	63	95.9	.388	.43
Water year 1936-37	129,731	4,200	43	355	1.44	19.52

Saranac River at Saranac, N. Y.

Location.- Water-stage recorder, lat. 44°38'45", long. 73°44'40", 500 feet above highway bridge at Saranac, Clinton County.
Drainage area.- 521 square miles.
Records available.- September 1930 to September 1937.
Extremes.- Maximum discharge during year, 5,080 second-feet Apr. 6; maximum gage height, 12.74 feet Dec. 2 (ice jam); minimum discharge, 135 second-feet Sept. 13 (gage height, 1.86 feet); minimum daily discharge, 290 second-feet Aug. 15.
1930-37: Maximum discharge, 5,780 second-feet Apr. 17, 1933, from rating curve extended logarithmically above 3,700 second-feet; maximum gage height, that of Dec. 2, 1936; minimum discharge, 67 second-feet Aug. 27, 1934 (gage height, 1.63 feet); minimum daily discharge, 96 second-feet Sept. 22, Nov. 10, 12, 1934.
Remarks.- Records good except those for periods of ice effect, Nov. 30 to Dec. 31, Jan. 2, 3, 11, 12, 16, 17, 20, 23, 24, 26-29, Feb. 2-11, 16, 17, 24-27, Mar. 1, 6-8, 10-15 (computed on basis of one discharge measurement, gage heights except those for Dec. 2-14 and Mar. 13-15, weather records, and record of power plant at Cadyville), and those for period of missing gage heights, Sept. 20-30 (computed on basis of record of power plant at Cadyville), which are fair. Considerable diurnal fluctuation caused by operation of power plants. Flow partly regulated by storage in Lower Saranac Lake and elsewhere.

Rating table, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

2.2	275	2.5	439	2.8	635	3.4	1,120	4.5	2,250
2.3	326	2.6	500	3.0	785	3.6	1,300	5.0	2,550
2.4	381	2.7	565	3.2	945	4.0	1,700	6.0	4,070

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	850	1,080	750	1,180	770	750	630	1,820	1,240	670	480	660
2	960	1,140	800	950	700	720	630	1,660	1,080	610	580	670
3	840	1,180	850	950	650	690	630	1,680	1,220	530	540	660
4	680	1,140	850	1,000	750	720	600	1,620	1,200	520	435	440
5	730	1,100	850	1,000	700	680	870	1,520	600	500	470	460
6	720	940	650	860	750	650	3,050	1,500	520	430	455	470
7	730	950	700	880	700	550	2,160	2,340	560	400	470	520
8	830	1,140	600	880	650	600	2,180	2,380	570	580	540	510
9	740	1,160	650	1,440	750	620	2,000	2,240	560	700	455	530
10	750	1,220	700	1,160	800	500	1,560	2,040	780	590	620	630
11	630	1,120	750	1,100	700	700	1,280	1,800	680	530	650	620
12	770	1,060	800	1,000	455	700	1,220	1,680	520	560	650	550
13	740	1,100	550	960	600	700	1,440	1,620	510	520	455	530
14	760	1,020	550	1,260	620	700	1,900	1,800	700	490	350	840
15	750	1,160	550	1,740	640	750	2,020	3,750	580	450	290	610
16	730	1,100	500	1,300	600	730	2,260	3,300	510	510	425	530
17	990	1,060	500	1,000	600	740	1,960	2,850	560	450	305	485
18	1,320	980	420	1,380	720	720	1,940	2,600	1,200	410	310	550
19	1,060	940	480	1,340	630	720	2,140	2,460	1,320	510	340	420
20	930	920	750	1,000	600	710	2,140	2,900	970	660	760	550
21	1,300	840	750	1,280	620	690	1,800	3,100	1,340	630	495	550
22	1,860	790	550	1,160	1,600	670	1,980	2,600	1,480	610	353	500
23	1,500	820	500	1,000	1,080	710	2,120	2,550	1,300	630	370	550
24	1,380	900	550	850	950	710	2,220	2,320	1,120	560	520	500
25	1,260	840	650	1,640	850	680	2,360	2,080	1,080	440	450	550
26	1,360	700	400	1,400	800	680	2,300	1,880	1,040	720	410	460
27	1,360	720	550	1,100	750	670	2,080	1,760	880	540	430	440
28	1,240	810	1,300	1,000	690	620	1,920	1,580	990	530	410	550
29	1,220	830	950	950	-	680	1,980	1,500	900	400	300	550
30	1,200	750	950	830	-	680	1,940	1,420	620	520	370	550
31	1,120	-	1,000	820	-	670	-	1,320	-	530	550	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	31,310	1,860	630	1,010	1.94	2.24
November	29,510	1,220	700	984	1.89	2.11
December	21,400	1,300	400	690	1.32	1.52
Calendar year 1936	294,750	4,200	192	805	1.55	21.05
January	34,410	1,740	820	1,110	2.13	2.46
February	20,725	1,600	455	740	1.42	1.48
March	21,110	750	500	681	1.31	1.51
April	53,310	3,050	600	1,777	3.41	3.80
May	65,670	3,750	1,320	2,118	4.07	4.69
June	26,630	1,480	510	888	1.70	1.90
July	17,030	860	400	549	1.05	1.21
August	14,320	760	290	462	.887	1.02
September	16,435	840	420	548	1.05	1.17
Water year 1936-37	351,860	3,750	290	964	1.85	25.11

West Branch of Ausable River near Newman, N. Y.

Location.- Water-stage recorder, lat. 44°18'40", long. 73°55'00", 4 miles northeast of Newman, Essex County, and 4 miles below mouth of Lake Placid outlet.
Drainage area.- 116 square miles.
Records available.- June 1916 to December 1917, July 1919 to September 1937.
Average discharge.- 18 years (1919-37) 221 second-feet.
Extremes.- Maximum discharge during year, 3,290 second-feet Apr. 6; maximum gage height, 7.89 feet Apr. 6 (ice jam); minimum discharge, 36 second-feet Sept. 11 (gage height, 2.33 feet); minimum daily discharge, 46 second-feet Sept. 10.
1916-17, 1919-37: Maximum discharge, 6,200 second-feet Oct. 6, 1932 (gage height, 9.61 feet), from rating curve extended logarithmically above 3,200 second-feet; practically no flow Sept. 13, 1920, caused by closing gates in logging dam (gage height, 1.60 feet); minimum daily discharge, 7.2 second-feet July 29, 1920.
Remarks.- Records excellent except those for periods of ice effect, Nov. 29 to Dec. 18, Dec. 23-28, Dec. 31 to Jan. 24, Jan. 27 to Feb. 28, Mar. 14 to Apr. 6 (computed on basis of two discharge measurements, gage heights except for Feb. 14-17, and weather records), and those for Sept. 25-29 (computed on basis of records for Ausable River near Ausable Forks and East Branch of Ausable River at Ausable Forks), which are good. Diurnal fluctuation at low and medium stages caused by operation of power plants.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

2.4	42	3.2	184	5.2	1,180
2.5	52	3.6	316	5.6	1,480
2.6	65	4.0	484	6.0	1,810
2.8	96	4.4	660	6.5	2,270
3.0	135	4.8	905	7.0	2,780

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	198	193	70	1,100	110	128	80	740	206	146	104	55
2	270	210	75	550	100	126	85	810	190	136	164	56
3	204	360	75	320	100	110	90	800	184	150	128	56
4	166	316	70	220	100	110	100	810	295	114	98	56
5	142	320	70	180	100	110	120	760	220	104	83	60
6	126	262	70	170	95	104	1,400	800	181	90	69	54
7	130	232	70	160	95	92	1,260	990	166	89	66	53
8	200	229	65	170	100	110	408	870	153	73	67	51
9	176	235	65	750	120	98	355	920	144	74	67	49
10	190	216	70	550	180	96	245	710	330	65	68	46
11	260	184	75	340	150	91	187	500	510	63	140	48
12	218	179	80	260	130	87	168	440	285	238	650	49
13	196	163	75	220	120	84	204	770	240	162	485	56
14	160	166	75	380	130	80	385	850	206	100	228	244
15	168	181	75	800	240	80	495	2,280	182	94	126	168
16	200	174	80	420	200	80	450	1,320	158	97	106	104
17	485	168	80	280	140	85	360	800	140	124	81	80
18	1,020	153	75	380	120	95	570	790	194	142	83	72
19	530	133	77	480	120	110	650	630	390	104	95	75
20	359	137	152	280	120	100	680	970	232	84	400	198
21	290	144	250	300	120	100	415	1,280	192	77	214	148
22	239	146	198	280	800	100	510	780	370	67	140	102
23	265	124	160	220	550	95	440	810	450	62	112	81
24	395	116	140	160	280	90	340	620	255	62	92	71
25	409	114	130	435	200	85	475	485	180	58	82	64
26	485	112	140	365	180	85	620	415	144	79	71	62
27	520	92	240	200	160	80	650	400	126	110	70	54
28	332	83	750	150	140	85	860	350	114	82	68	54
29	269	80	560	130	-	85	820	300	116	73	60	54
30	242	75	363	120	-	85	750	250	144	65	60	56
31	219	-	800	110	-	80	-	230	-	122	59	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,063	1,020	126	292	2.52	2.90
November	5,297	360	75	177	1.53	1.71
December	5,275	800	65	170	1.47	1.70
Calendar year 1936	83,220	3,200	36	227	1.96	26.69
January	10,480	1,100	110	338	2.91	3.36
February	5,000	800	95	179	1.54	1.60
March	2,946	128	80	95.0	.819	.94
April	14,172	1,400	80	472	4.07	4.54
May	23,480	2,280	230	757	6.53	7.53
June	6,697	510	114	223	1.92	2.14
July	3,156	238	58	102	.879	1.01
August	4,336	650	59	140	1.21	1.40
September	2,378	244	46	79.3	.684	.76
Water year 1936-37	92,280	2,280	46	253	2.18	29.59

Ausable River near Ausable Forks, N. Y.

Location.- Water-stage recorder, lat. 44°27'05", long. 73°38'35", 1⅝ miles below junction of East and West Branches of Ausable River at Ausable Forks, Clinton County.
Drainage area.- 448 square miles.
Records available.- September 1924 to September 1937. August 1910 to September 1925, at Ausable Forks 1⅛ miles upstream.
Average discharge.- 13 years, (1924-37), 693 second-feet.
Extremes.- Maximum discharge during year, 12,300 second-feet May 15 (gage height, 8.46 feet), from rating curve extended logarithmically above 9,100 second-feet; minimum, 97 second-feet Sept. 6 (gage height, 1.10 feet).
1910-37: Maximum discharge, about 25,000 second-feet Mar. 27, 1913 (gage height, 10.2 feet, former site and datum), from rating curve extended logarithmically above 9,100 second-feet; maximum gage height, about 12.0 feet, from floodmarks (ice jam), Mar. 27, 1934; practically no flow July 21, 1912.
Remarks.- Records good except those for periods of ice effect, Nov. 18, Nov. 28 to Dec. 28, Jan. 27 to Feb. 22, Feb. 25 to Apr. 6, which were computed on basis of three discharge measurements, gage heights, and weather records and are fair. Flow partly regulated by storage, principally in Taylor Pond and Fern Lake. Diurnal fluctuations caused by operation of power plants upstream.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.2	122	2.4	670	5.0	3,850
1.4	181	2.6	815	5.5	4,740
1.6	252	3.0	1,160	6.0	5,740
1.8	335	3.5	1,690	6.5	6,850
2.0	433	4.0	2,330	7.0	8,090
2.2	545	4.5	3,060	7.5	9,440

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	326	493	220	2,900	300	380	240	2,550	638	590	305	222
2	620	504	220	1,260	280	360	260	2,750	587	631	363	208
3	487	720	200	946	280	340	280	2,750	551	499	368	208
4	375	800	200	740	260	340	380	2,750	800	395	305	219
5	325	887	220	575	260	340	800	2,600	670	325	272	191
6	276	740	240	449	260	300	5,500	2,440	545	292	241	142
7	301	650	220	444	260	280	4,350	3,350	493	252	228	148
8	365	657	220	504	280	300	1,660	3,100	438	237	241	170
9	400	733	220	1,860	320	280	1,400	3,100	413	230	252	186
10	360	657	220	1,800	550	260	831	2,400	730	215	265	178
11	600	530	220	887	440	260	650	1,660	1,520	219	290	178
12	539	510	220	670	360	240	560	1,380	847	320	1,200	178
13	482	493	220	560	320	240	760	1,960	638	510	1,260	186
14	387	487	220	770	300	240	1,520	2,850	545	340	690	610
15	354	539	240	2,160	600	240	1,920	9,300	482	280	415	445
16	402	545	240	1,400	550	240	1,800	4,800	418	285	285	290
17	890	410	240	748	380	260	1,380	2,950	365	345	288	210
18	3,100	380	220	900	320	280	1,760	2,950	440	368	284	196
19	1,600	340	220	1,180	320	300	2,140	2,240	1,260	330	290	220
20	1,020	408	440	698	320	300	2,340	3,650	847	270	700	385
21	770	433	600	755	340	300	1,440	4,300	618	242	550	400
22	612	428	460	748	2,600	280	1,660	2,700	790	234	358	310
23	587	360	400	557	1,920	280	1,440	2,460	1,220	210	275	265
24	940	335	360	390	910	260	1,160	2,000	733	241	230	236
25	1,140	368	320	1,160	650	260	1,760	1,540	516	226	240	214
26	1,080	335	360	912	500	240	2,320	1,340	413	260	256	196
27	1,380	296	550	500	440	240	2,300	1,260	335	390	245	186
28	895	260	2,000	440	400	240	2,750	1,120	322	305	241	186
29	691	240	1,560	380	-	240	2,950	963	340	268	237	188
30	605	220	1,100	340	-	240	2,700	815	413	242	234	194
31	551	-	2,160	320	-	240	-	712	-	290	226	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	22,460	3,100	276	725	1.62	1.87
November	14,758	887	220	492	1.10	1.23
December	14,530	2,160	200	469	1.05	1.21
Calendar year 1936	246,722	10,600	117	674	1.50	20.48
January	27,953	2,900	320	902	2.01	2.32
February	14,720	2,600	260	526	1.17	1.22
March	8,600	380	240	277	.618	.71
April	51,011	5,500	240	1,700	3.79	4.23
May	80,740	9,300	712	2,605	5.81	6.70
June	18,927	1,520	322	631	1.41	1.57
July	9,841	631	210	317	.708	.82
August	11,636	1,260	226	375	.837	.96
September	7,145	610	142	238	.531	.59
Water year 1936-37	282,321	9,300	142	773	1.73	23.43

Black Brook at Black Brook, N. Y.

Location.- Water-stage recorder, lat. 44°26'50", long. 73°44'45", 100 feet below hydro-electric plant of Associated Gas & Electric System and three-quarters of a mile south of Black Brook, Clinton County. Prior to Oct. 24, staff gage at same site and datum.
Drainage area.- 49.4 square miles.
Records available.- September 1924 to September 1937.
Average discharge.- 13 years, 51.6 second-feet.
Extremes.- Maximum discharge during year, 1,050 second-feet Apr. 6 (gage height, 6.95 feet), from rating curve extended logarithmically above 450 second-feet; minimum, 3 second-feet Dec. 24-26, while power plant was shut down.
1924-37: Maximum discharge, that of Apr. 6, 1937; minimum, 0.8 second-foot July 2, and Aug. 29, 1931 (plant shut down).
Remarks.- Records good except those for periods of faulty gage-height record, which were computed from weather records, partial gage heights, and record of power output and reservoir elevations, and are fair. Gage read once daily or after each change of gate opening at plant during Oct. 1-24, Nov. 18-24, Dec. 20-28. Flow regulated by storage in Taylor Pond and Fern Lake and by operation of power plant.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 13 to Sept. 30)

Oct. 1 to Sept. 30

1.2	2.5	1.8	21	3.5	229
1.3	3.9	2.0	34	4.0	325
1.4	5.9	2.2	50	4.5	432
1.5	8.6	2.6	93	5.0	547
1.6	12	3.0	147	5.5	669

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	41	*40	*70	33	*34	45	130	76	29	66	79
2	38	38	34	*50	31	*38	48	115	70	39	78	78
3	24	40	*8	*46	30	*34	49	106	67	28	73	77
4	16	45	*15	*42	35	35	82	102	79	23	70	72
5	17	60	*40	*42	35	39	132	102	74	20	70	27
6	21	60	*50	*38	*33	41	640	102	66	18	69	11
7	22	56	*46	35	*38	33	445	160	56	17	67	19
8	28	57	35	32	*42	33	130	300	53	33	78	55
9	30	66	34	*34	*48	36	158	325	50	40	72	64
10	30	67	20	*34	*53	36	*60	250	61	42	77	65
11	30	*55	11	*34	49	32	*48	180	83	44	77	64
12	30	*46	*15	*35	34	33	*41	147	54	40	156	63
13	*27	*44	*30	34	29	33	*55	132	40	48	142	67
14	20	*42	*33	51	5	29	*154	136	35	56	43	97
15	*20	*42	*33	92	30	32	202	455	31	57	25	41
16	*21	*50	*33	93	35	40	168	485	27	58	21	18
17	*89	*60	*32	57	30	32	126	280	25	61	67	13
18	86	*40	32	51	27	30	106	290	46	57	79	16
19	89	38	*29	54	28	39	114	248	37	59	74	63
20	54	35	26	44	34	40	119	275	76	55	107	79
21	48	33	25	43	34	40	88	360	56	54	71	68
22	45	24	25	47	110	41	85	260	52	56	29	57
23	44	50	30	46	160	45	93	230	50	58	19	56
24	56	54	26	40	71	46	97	208	38	89	18	53
25	76	46	3	63	*46	46	129	172	29	80	44	51
26	71	23	21	87	*44	46	180	150	24	78	*73	49
27	69	*26	29	53	*42	45	162	140	21	77	72	48
28	62	*34	*70	42	*38	46	126	126	20	70	72	47
29	52	19	*70	36	-	52	126	112	17	70	80	48
30	48	28	60	36	-	46	144	102	19	66	83	49
31	44	-	*60	34	-	45	-	89	-	68	82	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,317	89	10	42.5		
November	1,319	67	19	44.0		
December	1,015	70	3	32.7		
Calendar year 1936	19,360	608	2	52.9	1.07	14.58
January	1,494	93	32	48.2		
February	1,214	150	5	43.4		
March	1,197	52	29	38.6		
April	4,152	640	41	138		
May	6,269	485	89	202		
June	1,482	87	17	49.4		
July	1,590	89	17	51.3		
August	2,154	156	18	69.5		
September	1,594	97	11	53.1		
Water year 1936-37	24,797	640	3	67.9	1.37	18.66

*Faulty gage-height record.

East Branch of Ausable River at Ausable Forks, N. Y.

Location.- Staff gage, lat. 44°26'20", long. 73°40'30", at lower highway bridge in Ausable Forks, Essex County, 400 feet above confluence with West Branch of Ausable River.

Drainage area.- 198 square miles.

Records available.- September 1924 to September 1937.

Average discharge.- 13 years, 312 second-feet.

Extremes.- Maximum discharge during year, 7,610 second-feet May 15 (gage height, 6.2 feet, from graph based on gage readings), from rating curve extended logarithmically above 6,500 second-feet; minimum, 40 second-feet Sept. 12 (gage height, 0.42 foot).

1924-37: Maximum discharge, about 11,000 second-feet Oct. 1, 1924; maximum gage height, 11.4 feet Mar. 28, 1925; minimum discharge, 20 second-feet Aug. 11, 14, 28, 1934.

Remarks.- Records fair. Discharge for periods of ice effect, Nov. 22 to Dec. 29, Jan. 3-8, 11-13, 16-18, Jan. 20 to Feb. 22, Feb. 27, 28, Mar. 2 to Apr. 6 computed on basis of four discharge measurements, observer's notes, and weather records; that for periods of backwater from trash on control, Sept. 20-28, 30 on basis of one discharge measurement, and observer's notes; and that for periods of faulty gage heights, June 7, 8, Sept. 3-9, 29, on basis of records for West Branch of Ausable River near Newman and Ausable River near Ausable Forks. Gage read twice daily except during Dec. 27 to Apr. 10, when it was read once daily for greater part of the period. On days of rapidly changing stage the discharge is averaged for intervals of a day from graph based upon gage readings.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 20-30)

Oct. 1 to Apr. 6				Apr. 7 to Sept. 30					
0.6	73	1.5	571	0.4	35	1.0	263	3.0	2,090
.7	104	2.0	1,010	.5	58	1.2	384	4.0	3,400
.8	140	3.0	2,080	.6	88	1.6	685	5.0	5,100
1.0	233	4.0	3,400	.7	123	2.0	1,035	6.0	7,170
1.2	353			.8	163	2.5	1,530		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	98	179	80	1,320	120	149	80	1,330	247	371	98	51
2	162	193	90	550	110	140	90	1,330	236	364	106	46
3	188	296	85	420	110	130	100	1,430	215	298	98	46
4	162	353	80	300	100	130	150	1,330	330	247	98	47
5	129	401	80	240	100	130	460	1,280	263	172	95	50
6	115	309	80	190	100	120	3,400	1,230	215	151	92	47
7	95	267	80	180	100	110	1,610	1,530	190	139	79	46
8	111	267	80	240	100	130	636	1,280	175	120	85	46
9	129	296	80	1,090	130	120	589	1,230	159	106	73	45
10	130	267	90	933	240	100	474	945	321	98	76	44
11	293	183	95	400	160	100	309	770	645	92	76	44
12	262	183	90	280	140	95	258	581	391	98	440	42
13	203	183	90	240	130	90	419	1,470	292	177	556	43
14	149	188	90	694	130	90	684	2,100	221	151	286	246
15	129	208	95	1,110	300	90	856	5,220	205	109	201	175
16	136	193	90	550	220	85	855	2,090	177	112	127	123
17	642	157	85	340	160	100	685	1,380	163	143	112	95
18	1,450	149	80	420	140	110	969	1,280	182	172	85	85
19	736	179	80	494	130	120	1,080	1,080	541	151	95	109
20	436	193	140	300	130	110	1,040	1,650	395	116	172	139
21	322	188	240	320	140	110	855	1,940	304	95	177	131
22	273	180	190	320	1,100	110	855	1,180	415	88	131	112
23	223	160	170	240	1,050	100	645	1,040	573	88	109	106
24	428	140	160	160	376	100	534	770	352	70	88	85
25	502	130	150	380	290	100	685	685	258	64	82	73
26	434	130	160	360	223	95	1,130	645	236	86	79	76
27	556	120	240	220	190	90	1,040	566	168	170	76	61
28	367	110	1,000	200	170	90	1,080	511	168	120	70	58
29	279	100	600	150	-	90	1,530	398	191	106	70	58
30	228	90	465	140	-	85	1,380	352	236	92	67	58
31	213	-	750	130	-	85	-	292	-	98	56	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,580	1,450	95	309	1.56	1.80
November	5,992	401	90	200	1.01	1.13
December	5,885	1,000	80	190	.960	1.11
Calendar year 1936	112,957	7,100	27	309	1.56	21.23
January	12,911	1,320	130	416	2.10	2.42
February	6,389	1,100	100	228	1.15	1.20
March	3,304	149	85	107	.540	.62
April	24,498	3,400	80	817	4.13	4.61
May	38,915	5,220	292	1,255	6.34	7.31
June	8,467	645	159	282	1.42	1.58
July	4,464	371	64	144	.727	.84
August	4,055	556	56	131	.662	.76
September	2,392	246	42	79.7	.403	.45
Water year 1936-37	126,852	5,220	42	348	1.76	23.83

Bouquet River at Willsboro, N. Y.

Location.- Water-stage recorder, lat. 44°21'30", long. 73°23'50", half a mile southwest of Willsboro, Essex County.
Drainage area.- 275 square miles.
Records available.- August and September 1904 (gage heights and discharge measurements only), August to November 1908, July 1923 to September 1937.
Average discharge. 14 years (1923-37), 307 second-feet.
Extremes.- Maximum discharge during year, 6,260 second-feet Apr. 6 (gage height, 7.99 feet), from rating curve extended logarithmically above 4,600 second-feet; minimum, 44 second-feet about Sept. 11 or 12, when recorder was not operating (gage height, 2.26 feet).
1923-37: Maximum discharge, about 11,800 second-feet Oct. 1, 1924 (gage height, 10.85 feet) from rating curve extended logarithmically above 4,600 second-feet; minimum, 27 second-feet Sept. 11, 1932 (gage height, 2.10 feet).
Remarks.- Records good except those for periods of ice effect, Nov. 18 to Dec. 31, Jan. 12-17, 20-23, Jan. 26 to Feb. 22, Feb. 25 to Apr. 5, (computed on basis of two discharge measurements, partial gage height record, and weather records), and those for Oct. 1-25, Jan. 1-8, 18, Apr. 18-21, May 15, 16, June 13-23, July 5-12, 25-29, Aug. 4, 5, Sept. 4-21, 26-30 (computed on basis of recorded range in stage, weather records and records for East Branch of Ausable River at Ausable Forks), all of which are poor.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 6

2.4	67	3.0	273	4.5	1,360
2.5	87	3.2	376	5.0	1,910
2.6	114	3.6	620	6.0	3,200
2.8	185	4.0	910	7.0	4,650

Apr. 7 to Sept. 30

2.2	35	2.6	121	3.6	640
2.3	50	2.8	193	4.0	940
2.4	68	3.0	281	4.5	1,390
2.5	92	3.2	385		

Note.- Same as preceding table above 5.0 feet.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	170	100	1,600	150	190	120	870	258	280	87	57
2	120	170	110	1,000	140	180	150	880	244	350	102	47
3	140	174	100	650	130	170	190	830	253	244	104	50
4	120	223	90	480	130	170	380	600	306	197	90	50
5	95	387	90	380	120	170	550	770	281	150	80	55
6	85	365	90	260	120	160	3,450	696	231	130	75	50
7	75	313	90	240	120	150	3,400	1,040	218	110	68	48
8	85	328	90	300	140	160	970	1,120	206	100	70	46
9	95	323	90	345	200	150	910	868	201	95	66	46
10	100	293	100	870	260	140	550	755	280	90	122	46
11	200	236	110	530	220	140	474	633	600	85	109	44
12	180	206	110	400	160	130	445	531	360	90	141	44
13	130	206	110	500	190	120	620	531	280	124	163	46
14	110	198	110	650	240	120	710	940	240	135	145	190
15	100	206	120	900	340	110	1,200	4,200	220	112	104	120
16	110	223	120	650	280	110	1,100	2,850	200	109	87	90
17	150	146	110	420	240	120	930	1,540	190	109	70	80
18	1,400	140	110	500	190	130	1,200	2,180	220	109	75	75
19	500	180	100	562	170	140	1,100	1,260	500	101	73	95
20	320	200	170	440	160	130	1,100	1,680	360	90	101	110
21	260	200	280	380	200	130	1,000	1,940	280	85	106	68
22	220	190	240	400	1,400	130	970	1,100	320	82	87	66
23	200	180	200	300	1,320	120	900	852	460	79	73	70
24	400	170	190	245	520	110	675	696	272	76	68	73
25	498	150	180	390	360	110	790	577	210	75	66	63
26	355	140	190	420	260	100	960	486	178	90	64	65
27	376	140	220	340	240	100	950	449	155	100	63	60
28	288	130	1,200	260	200	100	868	408	141	110	63	55
29	232	120	900	220	-	95	990	347	160	70	61	55
30	206	110	700	190	-	95	950	311	182	59	61	55
31	193	-	950	170	-	100	-	286	-	73	57	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	7,423	1,400	75	239	0.869	1.00
November	6,217	387	110	207	.753	.84
December	7,370	1,200	90	238	.865	1.00
Calendar year 1936	110,875	6,200	41	303	1.10	14.98
January	14,992	1,600	170	484	1.76	2.03
February	8,200	1,400	120	293	1.07	1.11
March	4,080	190	95	132	.480	.55
April	28,902	3,450	120	963	3.50	3.90
May	32,426	4,200	286	1,046	3.80	4.38
June	8,006	600	141	267	.971	1.08
July	3,709	350	59	120	.436	.50
August	2,701	163	57	87.1	.317	.37
September	2,019	190	44	67.3	.245	.27
Water year 1936-37	126,045	4,200	44	345	1.25	17.03

Lake George at Rogers Rock, N. Y.

Location.- Water-stage recorder, lat. 43°48'10", long. 73°27'25", about 500 feet north of Hooper's dock, on south side of Stones Bay, Rogers Rock, Essex County. Prior to Nov. 11, 1936, staff gage at same site and datum. Zero of gage is 315.93 feet above mean sea level (general adjustment of 1912).

Records available.- July 1913 to September 1937.

Extremes.- Maximum gage height during year, 4.63 feet May 20; minimum recorded, 1.98 feet Nov. 18.
1913-37: Maximum gage height observed, 5.09 feet April 9, 1936; minimum, 1.06 feet Dec. 29, 1922.

Remarks.- Records excellent except those for Oct. 1 to Nov. 10, which are good. Staff gage read once daily Oct. 1 to Nov. 10, Dec. 5, 18, and June 3-9, when recorder was not operating. Elevation of lake surface regulated by operation of power plants and floodgates at Ticonderoga.

Gage height, in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.39	2.43	2.35	2.70	3.55	3.67	3.21	3.71	4.00	3.83	3.44	3.33
2	2.37	2.44	2.36	2.72	3.55	3.65	3.21	3.68	3.96	3.84	3.44	3.32
3	2.35	2.47	2.43	2.77	3.52	3.62	3.18	3.66	3.99	3.81	3.44	3.32
4	2.36	2.44	2.45	2.84	3.49	3.61	3.17	3.64	3.96	3.79	3.43	3.24
5	2.33	2.66	2.42	2.90	3.48	3.59	3.19	3.60	3.92	3.79	3.40	3.11
6	2.31	2.68	2.47	2.80	3.47	3.57	3.29	3.59	3.88	3.75	3.38	3.17
7	2.29	2.65	2.46	2.85	3.47	3.56	3.43	3.62	3.88	3.76	3.35	3.15
8	2.31	2.70	2.43	2.88	3.48	3.55	3.46	3.64	3.84	3.73	3.33	3.12
9	2.31	2.65	2.46	2.95	3.49	3.53	3.47	3.67	3.83	3.67	3.33	3.12
10	2.29	2.75	2.43	2.87	3.48	3.52	3.50	3.65	3.84	3.66	3.33	3.10
11	2.36	2.73	2.41	2.93	3.47	3.47	3.49	3.65	3.96	3.68	3.42	3.04
12	2.26	2.71	2.38	2.94	3.46	3.45	3.49	3.67	3.96	3.72	3.56	3.02
13	2.25	2.66	2.42	2.92	3.44	3.42	3.51	3.66	3.96	3.68	3.58	2.86
14	2.17	2.71	2.47	3.00	3.48	3.41	3.53	3.62	3.92	3.72	3.57	3.06
15	2.22	2.67	2.45	3.08	3.55	3.40	3.59	4.04	3.87	3.71	3.56	3.06
16	2.17	2.67	2.44	3.10	3.51	3.51	3.63	4.32	3.90	3.69	3.55	2.99
17	2.13	2.69	2.40	3.19	3.51	3.53	3.67	4.39	3.88	3.67	3.54	2.97
18	2.34	2.54	2.38	3.26	3.52	3.50	3.70	4.45	3.86	3.61	3.45	2.96
19	2.32	2.60	2.39	3.28	3.52	3.47	3.73	4.45	3.83	3.61	3.51	3.00
20	2.31	2.59	2.53	3.29	3.51	3.43	3.73	4.51	3.89	3.60	3.53	2.94
21	2.30	2.56	2.58	3.41	3.50	3.45	3.70	4.50	3.91	3.58	3.54	2.88
22	2.31	2.50	2.53	3.41	3.61	3.41	3.76	4.46	3.87	3.57	3.42	2.84
23	2.23	2.50	2.53	3.42	3.69	3.38	3.82	4.44	3.87	3.56	3.47	2.83
24	2.38	2.48	2.53	3.42	3.69	3.34	3.82	4.40	3.87	3.53	3.47	2.81
25	2.45	2.49	2.50	3.51	3.69	3.32	3.82	4.33	3.84	3.61	3.45	2.78
26	2.50	2.49	2.50	3.51	3.70	3.33	3.77	4.29	3.82	3.56	3.43	2.80
27	2.45	2.46	2.53	3.48	3.70	3.33	3.76	4.25	3.82	3.55	3.40	2.72
28	2.48	2.44	2.57	3.50	3.66	3.29	3.77	4.18	3.81	3.49	3.36	2.70
29	2.47	2.42	2.54	3.50	-	3.27	3.76	4.16	3.82	3.46	3.37	2.70
30	2.48	2.39	2.61	3.48	-	3.25	3.73	4.14	3.79	3.47	3.36	2.68
31	2.44	-	2.68	3.50	-	3.22	-	4.11	-	3.47	3.33	-

Poultney River below Fair Haven, Vt.

Location.- Water-stage recorder, lat. 43°37'40", long. 73°18'50", a third of a mile below Carver Falls, 1.9 miles above mouth of Hubbardton River, and 3¼ miles northwest of Fair Haven, Rutland County.

Drainage area.- 187 square miles.

Records available.- October 1928 to September 1937.

Extremes.- Maximum discharge during year, 5,870 second-feet Apr. 6 (gage height, 16.10 feet), from rating curve extended above 1,800 second-feet on basis of computation of flow over dam; minimum (regulated), 2.3 second-feet July 18 (gage height, 1.69 feet).
1928-37: Maximum discharge, 6,190 second-feet Mar. 18, 1936, by computation of flow over dam; maximum gage height, 22.90 feet Mar. 12, 1936 (ice jam); minimum discharge, that of July 18, 1937.

Remarks.- Records good except those for periods of ice effect, Nov. 30 to Dec. 3, Dec. 9, 10, 23, 24, Jan. 27-31, Feb. 3-5, and of missing gage-heights, Oct. 1, Oct. 19 to Nov. 13, Sept. 14, 21-30 which were computed on basis of available gage heights, weather records, and records for Otter Creek at Center Rutland, and are fair. Lake Bomoseen may provide seasonal storage. Considerable diurnal regulation at low stages.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.8	4.1	2.8	84	4.5	510	7.0	1,030
1.9	7.8	3.1	134	5.0	615	9.0	1,550
2.0	11.5	3.4	202	5.5	705	10.0	1,900
2.2	21	3.7	281	6.0	805	11.0	2,360
2.5	48	4.1	397	6.5	905	13.0	3,560

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	95	140	130	567	284	214	433	444	344	428	42	41
2	103	190	135	350	291	233	423	357	314	474	66	52
3	119	240	150	420	240	180	386	374	254	285	71	71
4	19	400	159	466	250	222	509	345	430	223	82	50
5	96	800	142	294	200	216	635	309	286	195	99	5.2
6	99	700	80	229	157	178	2,560	305	235	156	100	6.8
7	102	550	195	204	167	83	2,620	337	265	114	33	71
8	102	470	211	221	168	160	1,120	363	262	131	31	83
9	121	500	200	282	200	184	898	298	224	95	74	100
10	113	400	185	271	274	184	669	310	445	83	95	77
11	84	340	228	200	185	168	636	280	693	60	118	80
12	141	300	564	164	190	181	640	334	471	142	121	17
13	107	290	397	188	225	168	711	195	340	174	119	82
14	80	271	339	369	719	46	801	269	339	109	54	100
15	74	254	234	1,430	901	153	1,040	3,230	316	111	18	121
16	95	235	196	897	456	167	1,380	2,370	297	122	83	119
17	141	207	312	532	354	159	936	1,480	261	92	96	121
18	214	197	309	827	330	180	929	1,600	346	32	81	122
19	145	162	235	920	285	182	867	1,200	486	90	74	142
20	130	181	525	587	290	98	778	1,350	316	62	47	115
21	115	146	510	566	262	104	632	1,340	340	85	56	120
22	100	142	322	691	699	144	717	1,000	452	81	38	130
23	150	166	260	508	653	212	785	802	388	44	74	130
24	500	159	220	346	448	219	691	727	316	66	77	125
25	370	164	184	1,070	373	218	605	648	237	29	84	120
26	300	97	180	861	330	182	585	587	174	78	86	40
27	380	151	183	500	260	203	534	596	143	103	76	90
28	250	136	355	430	158	169	511	555	142	92	61	90
29	220	83	249	390	-	162	489	479	178	64	17	100
30	200	140	203	340	-	268	504	376	260	82	73	100
31	180	-	395	260	-	326	-	324	-	81	49	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,945	500	19	160	0.856	0.99
November	8,211	800	83	274	1.47	1.64
December	7,987	564	80	258	1.38	1.59
Calendar year 1936	111,730	5,300	10	305	1.63	22.23
January	15,380	1,430	164	496	2.65	3.06
February	9,349	901	157	334	1.79	1.86
March	5,563	326	46	179	.957	1.10
April	25,024	2,620	386	834	4.46	4.98
May	23,184	3,230	195	748	4.00	4.61
June	9,554	693	142	318	1.70	1.90
July	4,003	474	29	129	.690	.80
August	2,195	121	17	70.8	.379	.44
September	2,621.0	142	5.2	87.4	.467	.52
Water year 1936-37	118,016.0	3,230	5.2	323	1.73	23.49

Otter Creek at Center Rutland, Vt.

Location.- Water-stage recorder, lat. 43°36'15", long. 73°00'50", at highway bridge in Center Rutland, Rutland County, 100 feet below dam and 1 mile below mouth of East Creek.

Drainage area.- 307 square miles.

Records available.- May 1928 to September 1937.

Extremes.- Maximum discharge during year, 4,800 second-feet May 15 (gage height, 7.72 feet); minimum, 37 second-feet Aug. 8; minimum daily discharge, 67 second-feet Sept. 12. 1928-37: Maximum discharge, 8,580 second-feet Mar. 18, 19, 1936 (gage height, 10.84 feet), by computation of flow over dam; minimum daily discharge, 61 second-feet Sept. 16, 1934.

Remarks.- Records good except those for periods of missing gage-heights, Dec. 1, 2, 24-27, which were computed on basis of records for station at Middlebury and are fair. Flow affected by diurnal regulation and seasonal storage on East Creek at Pittsford and Chittenden.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0.6	64	1.9	307	4.0	1,400
.8	85	2.2	395	5.0	2,180
1.0	112	2.5	510	6.0	3,040
1.3	166	3.0	755	7.0	4,030
1.6	230	3.5	1,060		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	278	319	260	1,980	601	497	458	1,540	578	807	137	183
2	334	437	270	1,280	572	478	512	1,440	519	838	225	184
3	256	529	280	1,120	413	433	383	1,500	477	460	219	193
4	114	725	283	1,290	483	410	514	1,360	332	333	176	172
5	180	2,260	242	853	471	535	774	1,220	870	309	192	151
6	164	2,020	172	539	436	322	2,120	1,090	514	335	179	156
7	208	1,300	651	502	368	314	3,040	1,330	610	298	238	195
8	328	937	699	826	366	308	2,000	1,190	560	305	231	189
9	283	1,050	471	1,230	396	333	1,620	990	430	225	336	186
10	246	833	517	1,070	672	214	1,020	900	1,170	240	325	174
11	274	650	867	690	526	248	755	840	1,710	159	278	135
12	298	554	1,420	549	411	289	810	700	918	300	260	67
13	237	538	848	500	398	260	1,060	626	639	506	243	186
14	220	507	878	775	930	175	1,580	987	580	318	203	268
15	224	456	562	2,230	1,560	284	2,180	3,900	608	258	111	274
16	247	496	467	1,870	747	230	2,590	3,920	545	259	212	248
17	520	393	847	795	529	246	2,340	2,420	409	272	189	208
18	1,010	373	700	1,540	452	247	2,260	2,180	911	379	189	253
19	658	310	366	1,780	475	230	2,340	1,940	1,600	287	201	122
20	430	357	820	989	451	250	2,260	2,100	1,070	239	247	243
21	362	350	1,400	882	476	248	2,020	2,500	903	212	680	246
22	291	305	736	1,190	2,420	297	1,780	2,100	1,480	175	767	222
23	407	371	402	872	2,730	252	1,500	1,400	1,330	190	460	220
24	1,470	315	450	547	1,180	273	1,350	1,260	898	146	318	223
25	1,120	307	500	1,990	804	261	1,440	1,090	626	116	267	213
26	891	258	600	2,180	705	259	1,540	990	522	190	253	113
27	1,130	350	1,200	1,120	603	238	1,470	1,240	380	329	236	139
28	654	226	1,660	679	441	189	1,500	1,580	456	289	265	140
29	518	219	1,160	712	-	233	1,700	1,090	449	260	129	172
30	464	277	794	603	-	273	1,660	840	401	194	239	171
31	420	-	1,350	527	-	383	-	675	-	236	199	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	14,215	1,470	114	459	1.50	1.73
November	18,022	2,260	219	601	1.96	2.19
December	21,872	1,660	172	706	2.30	2.65
Calendar year 1936	222,038	7,440	85	607	1.98	26.92
January	33,710	2,230	500	1,087	3.54	4.08
February	20,606	2,730	358	736	2.40	2.50
March	9,214	535	175	297	.967	1.11
April	46,556	3,040	383	1,552	5.06	5.64
May	46,938	3,920	626	1,514	4.93	5.68
June	22,495	1,710	332	750	2.44	2.72
July	9,464	838	116	305	.993	1.14
August	8,204	767	111	265	.863	.99
September	5,626	274	67	188	.612	.68
Water year 1936-37	256,929	3,920	67	704	2.29	31.11

Otter Creek at Middlebury, Vt.

Location.- Water-stage recorder, lat. 44°00'45", long. 73°10'05", 150 feet above highway bridge at Middlebury, Addison County, and 3½ miles below mouth of Middlebury River.
Drainage area.- 628 square miles.
Records available.- April 1903 to May 1907, October 1910 to January 1920, October 1928 to September 1937.
Average discharge.- 21 years (1903-6, 1910-19, 1928-37), 970 second-feet.
Extremes.- Maximum discharge during year, 4,370 second-feet May 21 (gage height, 5.77 feet); minimum observed, 210 second-feet Sept. 13, 27 (gage height, 1.30 feet).
1903-7, 1910-20, 1928-37: Maximum discharge, 11,000 second-feet Mar. 20, 21, 1936 (gage height, 10.3 feet); minimum, 93 second-feet Mar. 5, 1929.
Maximum discharge known, 13,600 second-feet Nov. 4, 1927 (gage height, 13.3 feet, at site of chain gage 1,800 feet upstream, present datum), from logarithmic extension of rating curve above 9,000 second-feet.
Remarks.- Records good except those for period of ice effect, Nov. 23, 24, Nov. 26 to Dec. 1, Jan. 6, 7, Jan. 27 to Feb. 8, Feb. 11, 12, 16-18, 22, Mar. 7, 9-11, 14 which were computed on basis of gage heights, weather records, and records for station at Center Rutland, and are fair. Discharge for Aug. 26 to Sept. 30 determined from stage graph based on twice daily float-gage readings. Small seasonal storage in Chittenden reservoir, on East Creek.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.3	210	1.8	460	4.0	2,400
1.4	240	2.0	605	5.0	3,470
1.5	280	2.5	980	6.0	4,610
1.6	330	3.0	1,410		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	276	935	370	2,050	1,460	1,060	770	2,810	2,050	1,100	366	330
2	446	815	404	2,100	1,200	1,010	1,040	2,760	1,650	1,600	325	305
3	545	890	432	2,100	980	958	1,100	2,700	1,280	1,460	384	320
4	453	1,040	516	2,050	960	905	1,410	2,650	1,410	1,100	397	336
5	320	1,950	568	1,900	940	890	1,900	2,550	1,600	792	366	290
6	280	2,200	509	1,600	840	898	2,600	2,500	1,410	702	320	260
7	295	2,300	568	1,320	770	650	2,920	2,450	1,060	688	325	290
8	628	2,350	996	1,280	750	590	2,810	2,400	1,050	672	348	330
9	635	2,400	996	1,600	822	620	2,810	2,250	972	620	446	354
10	605	2,250	920	1,750	1,030	660	2,920	2,050	1,140	509	538	330
11	748	2,100	996	1,500	1,050	480	3,030	1,900	1,900	502	623	360
12	665	1,850	1,410	1,230	950	474	2,920	1,600	2,000	481	950	285
13	620	1,550	1,600	1,030	882	509	2,810	1,360	1,900	635	958	228
14	545	1,360	1,410	1,040	1,300	450	2,760	1,600	1,550	800	665	336
15	453	1,190	1,230	2,060	2,000	397	2,700	2,920	1,280	688	502	453
16	516	1,060	1,100	2,300	2,050	404	2,810	3,030	1,100	605	300	481
17	628	965	1,100	2,300	1,750	509	2,810	3,030	942	590	378	474
18	1,230	845	1,320	2,400	1,400	538	3,030	3,360	920	568	390	460
19	1,360	642	1,060	2,450	1,230	516	3,030	3,580	1,550	658	372	446
20	1,100	688	1,100	2,400	1,060	516	3,140	3,910	1,750	582	390	354
21	845	778	1,600	2,300	1,060	516	3,250	4,250	1,650	502	439	404
22	695	778	1,600	2,250	1,650	467	3,360	4,250	1,600	425	952	404
23	785	725	1,280	2,100	2,350	628	3,360	4,130	1,750	372	1,040	342
24	1,620	670	965	1,850	2,400	612	3,360	4,020	1,750	354	755	315
25	1,950	650	920	1,900	2,400	642	3,360	3,800	1,500	384	560	320
26	1,950	665	875	2,200	2,300	628	3,250	3,580	1,140	310	460	285
27	2,000	640	1,100	2,200	2,000	582	3,140	3,360	935	481	432	225
28	1,850	475	1,600	2,050	1,500	538	3,030	3,030	815	523	397	260
29	1,550	450	1,750	1,950	-	481	2,920	2,810	860	516	372	256
30	1,280	450	1,750	1,880	-	530	2,920	2,650	882	474	285	268
31	1,100	-	1,750	1,850	-	590	-	2,400	-	467	348	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	27,973	2,000	276	902	1.44	1.66
November	35,641	2,400	450	1,188	1.89	2.11
December	33,795	1,750	370	1,090	1.74	2.01
Calendar year 1936	429,764	11,000	185	1,174	1.87	25.47
January	58,990	2,450	1,030	1,903	3.03	3.49
February	39,084	2,400	750	1,396	2.22	2.31
March	19,248	1,060	397	621	.989	1.14
April	81,270	3,360	770	2,709	4.31	4.81
May	89,690	4,250	1,360	2,893	4.61	5.32
June	41,396	2,050	815	1,380	2.20	2.46
July	20,160	1,600	310	650	1.04	1.20
August	15,383	1,040	285	496	.790	.91
September	10,101	481	225	337	.537	.60
Water year 1936-37	472,731	4,250	225	1,295	2.06	28.02

Winooski River at Montpelier, Vt.

Location.- Water-stage recorder, lat. 44°15'25", long. 72°35'35", three-eighths of a mile above mouth of Dog River and 1 mile downstream from depot in Montpelier, Washington County. Zero of gage is 499.97 feet above mean sea level.
Drainage area.- 433 square miles.
Records available.- May 1909 to September 1923, August 1928 to September 1937.
Average discharge.- 18 years (1914-23, 1928-37), 590 second-feet.
Extremes.- Maximum discharge during year, 8,990 second-feet May 15 (gage height, 11.64 feet); minimum daily discharge, 24 second-feet Sept. 19.
1909-23, 1928-37: Maximum discharge, 20,200 second-feet Apr. 7, 1912 (gage height, about 16.7 feet, present datum), from rating curve extended above 7,500 second-feet; minimum, 6 second-feet Sept. 30, 1921 (gage height, 2.58 feet); minimum daily discharge, 17 second-feet Sept. 3, 1933.
Maximum discharge known, 57,000 second-feet Nov. 3, 1927 (gage height, 27.1 feet), from rating curve extended above 7,500 second-feet.
Remarks.- Records good. Discharge for periods of ice effect, Dec. 8-10, 20-26, 28, Jan. 28 to Feb. 6, and of missing gage heights, Nov. 28 to Dec. 7, Feb. 12-25, Mar. 7, 8, computed on basis of power-plant records, available gage heights, and two discharge measurements. Flow affected by complete regulation of run-off from 24 square miles. Considerable diurnal fluctuation caused by operation of several small power plants above. Flood run-off affected since November 1935 by storage in Wrightsville and East Barre Detention Reservoirs, total capacity of which is 1,415,720,000 cubic feet.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 15				Apr. 16 to Sept. 30					
3.3	104	4.8	725	2.7	18	3.3	104	5.0	1,060
3.4	128	5.1	910	2.8	26	3.4	131	5.5	1,460
3.6	191	5.5	1,230	2.9	37	3.6	213	6.0	1,910
3.9	302	7.0	2,720	3.0	50	3.9	359	8.0	3,980
4.2	428	8.0	3,860	3.1	65	4.2	530	10.3	6,910
				3.2	83	4.6	780		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	152	364	310	1,230	300	334	306	1,860	520	879	196	132
2	219	378	270	918	320	382	269	1,730	522	865	325	107
3	194	462	330	736	350	348	282	1,640	514	460	287	111
4	108	534	410	838	380	400	328	1,500	760	339	216	124
5	160	1,190	340	741	400	367	538	1,380	580	266	194	75
6	138	918	310	650	370	311	3,420	1,420	501	227	157	110
7	162	682	350	670	302	230	3,330	2,250	411	237	134	163
8	216	780	390	540	322	260	2,600	2,100	416	204	102	115
9	254	1,090	410	1,180	297	341	2,100	1,680	377	193	152	105
10	258	849	350	1,200	402	322	1,320	1,500	1,160	228	212	112
11	318	556	462	841	338	306	1,230	1,260	1,430	184	563	99
12	270	525	792	808	320	272	1,800	1,060	856	336	836	33
13	272	534	580	748	360	216	2,760	1,020	558	331	697	57
14	226	524	489	578	700	180	3,270	1,960	439	241	332	110
15	234	559	462	2,430	1,300	207	3,050	6,900	459	216	173	90
16	333	596	430	1,490	1,100	234	3,760	3,460	383	280	219	112
17	382	477	436	1,010	600	236	3,320	2,300	350	284	179	84
18	902	472	502	909	450	286	2,800	2,150	784	276	189	69
19	692	402	405	980	520	248	2,910	2,250	1,340	180	193	24
20	542	406	800	785	470	258	3,100	3,210	833	248	1,050	102
21	406	410	1,500	655	450	226	2,400	2,900	630	227	601	138
22	336	414	900	525	2,700	228	2,450	2,200	648	200	328	113
23	492	386	700	506	1,300	275	2,300	1,960	763	200	270	108
24	1,510	414	620	496	1,000	314	2,150	2,300	494	195	224	82
25	1,160	430	650	474	800	258	2,150	1,780	392	106	178	68
26	964	362	600	714	487	226	2,150	1,550	312	189	180	28
27	995	324	557	580	460	211	2,100	1,420	261	538	200	78
28	712	250	2,000	450	343	171	1,960	1,120	259	267	146	85
29	598	180	1,310	470	-	182	2,100	815	313	227	90	92
30	496	350	914	490	-	240	2,100	689	393	208	126	101
31	434	-	1,080	360	-	278	-	587	-	254	142	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	14,135	1,510	108	456	1.05	1.21
November	15,818	1,190	180	527	1.22	1.36
December	19,659	2,000	270	634	1.46	1.68
Calendar year 1936	293,799	15,200	61	803	1.85	25.22
January	25,002	2,430	360	807	1.86	2.14
February	17,141	2,700	297	612	1.41	1.47
March	8,357	400	171	270	.624	.72
April	64,353	3,760	269	2,145	4.95	5.52
May	59,951	6,900	587	1,934	4.47	5.15
June	17,658	1,430	259	589	1.36	1.52
July	9,085	879	106	293	.677	.78
August	8,945	1,050	90	289	.667	.77
September	2,827	163	24	94.2	.218	.24
Water year 1936-37	262,931	6,900	24	720	1.66	22.56

Winooski River near Essex Junction, Vt.

Location.- Water-stage recorder, lat. 44°28'40", long. 73°08'20", half a mile below mouth of Muddy Brook and 2 miles southwest of Essex Junction, Chittenden County.

Drainage area.- 1,079 square miles.

Records available.- October 1928 to September 1937.

Extremes.- Maximum discharge during year, 28,400 second-feet May 16 (gage height, 15.07 feet); minimum daily discharge, 70 second-feet Sept. 25.

1928-37: Maximum discharge, 45,300 second-feet Mar. 19, 1936 (gage height, 23.54 feet), from rating curve extended above 25,000 second-feet on basis of slope-area measurement and computation of flow over dam; minimum daily discharge, that of Sept. 25, 1937.

Maximum discharge known, 113,000 second-feet Nov. 4, 1927 (gage height, 50.4 feet, from floodmarks), by slope-area measurement and computation of flow over dam.

Remarks.- Records excellent except those for periods of ice effect, Nov. 30 to Dec. 13, Dec. 18-21, 28, Jan. 6-8, 12-14, 17-26, Feb. 3-9, Feb. 28 to Mar. 2, Mar. 4-6, 9-19, 23-27, Mar. 29 to Apr. 6, and those for period of missing gage heights, May 27 to June 3, which were computed on basis of power-plant records, available gage heights, and weather records and are good. Considerable diurnal regulation at low stages. For statement concerning storage see "Remarks" for station at Montpelier.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.1	67	1.0	305	3.5	3,170
.2	80	1.2	395	4.0	4,060
.3	95	1.4	535	5.0	6,000
.4	116	1.7	780	7.0	10,200
.6	175	2.0	1,070	8.0	12,100
.8	235	2.5	1,640	12.0	20,000

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	642	1,640	900	5,800	956	700	740	5,400	1,200	1,000	165	392
2	710	1,580	880	3,550	1,050	850	860	5,200	1,100	2,660	570	392
3	676	1,650	620	2,650	760	984	800	4,820	1,200	1,770	628	248
4	530	2,140	980	2,910	720	840	940	4,540	1,410	1,380	550	267
5	518	3,640	1,100	2,380	860	900	1,200	4,150	1,480	478	541	184
6	480	3,680	1,000	1,800	800	1,000	7,000	3,790	1,070	564	472	268
7	425	2,900	1,400	1,300	720	628	12,900	6,200	1,010	700	154	302
8	761	3,040	1,600	1,200	950	880	5,600	8,310	916	661	294	408
9	1,090	3,990	1,400	2,800	700	580	6,280	5,200	879	466	450	260
10	1,080	3,480	1,200	5,010	1,370	820	3,620	4,130	1,140	382	416	194
11	1,190	2,670	1,500	2,830	1,050	760	3,320	3,480	3,780	308	603	139
12	1,090	2,080	2,000	1,800	896	760	3,630	2,880	2,290	522	994	169
13	780	2,020	2,100	1,700	760	800	5,800	2,650	1,730	900	1,300	212
14	796	1,970	1,730	1,600	1,390	450	8,090	3,720	1,380	819	1,430	303
15	914	2,000	1,600	5,060	3,670	560	8,310	17,900	984	678	410	344
16	973	2,280	1,540	5,840	2,910	640	8,530	19,600	820	599	488	352
17	1,370	1,840	1,470	2,100	1,790	500	8,090	6,620	776	272	520	291
18	3,890	1,640	1,500	1,900	1,560	600	6,620	6,200	1,060	434	386	177
19	3,430	1,360	1,600	2,600	1,280	680	6,830	5,200	3,340	768	468	116
20	2,170	1,420	1,200	2,000	1,020	770	8,530	8,090	2,670	678	1,420	351
21	1,680	1,450	3,000	1,600	1,230	564	5,800	8,970	1,880	530	1,990	570
22	1,360	1,810	3,830	1,700	3,010	680	5,800	5,800	1,780	510	1,370	545
23	1,600	1,660	2,800	1,350	7,430	720	5,400	4,710	1,860	464	1,210	462
24	4,590	1,520	2,200	1,000	3,220	800	4,820	4,460	1,620	259	674	396
25	5,400	1,240	1,800	1,500	2,100	720	5,200	4,040	1,400	116	414	70
26	3,770	1,340	1,700	2,100	1,680	620	5,400	3,540	718	455	309	118
27	4,720	1,280	1,910	1,780	1,430	540	5,600	3,000	363	527	250	304
28	3,140	838	5,600	1,120	1,000	500	5,010	2,400	926	666	278	266
29	2,400	369	7,880	912	-	560	5,600	2,000	734	628	296	199
30	2,130	990	3,450	1,130	-	580	6,200	1,700	600	484	405	164
31	1,970	-	3,180	924	-	600	-	1,300	-	313	432	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	56,275	5,400	425	1,815	1.68	1.94
November	59,517	3,990	369	1,984	1.84	2.05
December	64,670	7,880	620	2,086	1.93	*2.22
Calendar year 1936	813,837	41,600	116	2,224	2.06	28.05
January	71,946	5,840	912	2,321	2.15	2.48
February	46,312	7,430	700	1,654	1.53	1.59
March	21,586	1,000	450	696	.645	.74
April	162,520	12,900	740	5,417	5.02	5.60
May	170,000	19,600	1,300	5,484	5.08	5.86
June	42,116	3,780	363	1,404	1.30	1.45
July	20,991	2,660	116	677	.627	.72
August	19,887	1,990	154	642	.595	.69
September	8,463	570	70	282	.261	.29
Water year 1936-37	744,283	19,600	70	2,039	1.89	25.63

Jail Branch at East Barre, Vt.

Location.- Water-stage recorder, lat. 44°10', long. 72°27', in East Barre, Washington County, just below highway bridge, three-quarters of a mile below East Barre Detention Reservoir, and 2¾ miles above confluence with Stevens Branch. Zero of gage is 1,071.59 feet above mean sea level.
Drainage area.- 33.0 square miles.
Records available.- August 1920 to September 1923, November 1933 to September 1937.
Extremes.- Maximum discharge during year, 317 second-feet Apr. 7; maximum gage height, 2.71 feet Apr. 6 (ice jam); minimum discharge, 1.3 second-feet Sept. 12, 13.
1920-23, 1933-37: Maximum discharge observed, 1,350 second-feet Apr. 10, 1922 (gage height, 8.38 feet, former site and datum), from rating curve extended above 900 second-feet; minimum observed, 0.5 second-foot Sept. 11, 1921.
Remarks.- Records good except those for periods of ice effect, Nov. 17 to Dec. 14, Dec. 17-25, Dec. 28 to Jan. 1, Jan. 3, 4, 6-12, 15, 20, 21, Jan. 23 to Feb. 4, Feb. 9-11, 14-25, Feb. 27 to Mar. 1, Mar. 3-8, 10-13, 23, 24, Apr. 5-8 (computed on basis of five discharge measurements, gage heights, and records for other stations in Winooski River Basin), and of missing gage heights (computed on basis of records for other stations in Winooski River Basin), which are fair. Flood run-off affected by storage in East Barre Detention Reservoir (capacity, 522,720,000 cubic feet) since November 1935. Diversions from reservoir on Orange Brook, a tributary upstream, provide water supply for city of Barre.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 15

0.3	5.9	0.9	48
.4	9.0	1.0	65
.5	13	1.2	114
.6	19	1.4	174
.7	27	1.6	245
.8	36	1.8	321

Feb. 16 to Sept. 30

0	0.4	0.5	13.9
.1	1.7	.6	19.5
.2	3.7	.7	28
.3	6.4	.8	37
.4	9.8	.9	48

Note.- Same as preceding table above 0.9 foot.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	*50	20	140	32	43	16	220	48	*100	*25	2.3
2	28	*60	22	83	31	34	17	198	*40	*60	*35	2.5
3	13	*70	27	85	30	25	18	164	*45	*35	*25	2.1
4	9.4	*80	26	75	27	20	19	136	*70	*25	*22	2.3
5	7.8	*140	24	62	25	18	27	119	*55	*20	*17	2.1
6	6.8	*110	23	58	19	18	150	125	*45	*18	*12	2.1
7	11	*90	30	65	12	17	300	234	*40	*15	10	2.3
8	39	*100	60	80	*11	16	280	234	35	*13	9.3	1.9
9	18	*130	30	200	*17	14	249	216	*30	*12	11	2.1
10	19	*110	26	135	20	13	227	160	*110	*11	7.1	1.7
11	*50	*85	35	75	18	12	113	84	*80	*20	19	1.9
12	*25	*75	70	75	15	10	133	63	*50	62	40	1.4
13	18	*65	55	60	20	10	220	75	*40	32	62	1.7
14	14	*60	50	78	65	9.8	245	181	*32	18	42	4.7
15	28	*70	43	260	170	9.8	256	291	*30	13	8.1	4.5
16	34	*60	38	245	65	9.8	275	294	*29	16	5.3	3.7
17	84	40	40	106	41	9.8	287	291	*27	20	4.0	3.3
18	153	36	37	108	43	11	287	283	*50	41	3.1	3.7
19	54	25	35	118	36	11	291	283	*130	17	8.5	4.2
20	38	48	40	65	29	11	287	298	*70	11	68	9.1
21	32	52	150	60	32	12	275	294	*40	8.1	36	8.1
22	30	40	100	47	105	11	264	283	*45	6.7	32	5.0
23	75	30	80	42	230	10	249	279	*35	5.6	15	3.7
24	175	33	70	42	75	10	238	291	*30	5.6	9.5	3.3
25	90	28	65	65	45	11	234	283	*27	7.4	7.1	3.1
26	*120	27	56	60	40	10	231	264	*23	56	5.6	2.7
27	*100	22	60	42	38	9.8	227	245	*24	108	5.3	2.7
28	*85	20	250	35	40	9.8	216	213	*22	30	5.0	2.9
29	*75	28	105	38	-	9.1	223	94	*21	*15	4.2	2.9
30	*65	20	90	36	-	13	231	62	*20	*9	3.3	3.3
31	*55	-	110	35	-	13	-	53	-	*15	3.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,574.0	175	6.8	50.8	1.54	1.78
November	1,804	140	20	60.1	1.82	2.03
December	1,867	250	20	60.2	1.82	2.10
Calendar year 1936	24,386.5	425	1.0	66.6	2.02	27.48
January	2,675	260	35	86.3	2.62	3.02
February	1,331	230	11	47.5	1.44	1.50
March	440.9	43	9.1	14.2	.430	.50
April	6,085	300	16	203	6.15	6.86
May	6,310	298	53	204	6.18	7.12
June	1,343	130	20	44.8	1.36	1.52
July	825.4	108	5.6	26.6	.806	.93
August	559.5	68	3.1	18.0	.545	.63
September	97.3	9.1	1.4	3.24	.098	.11
Water year 1936-37	24,912.1	300	1.4	68.3	2.07	28.10

*Missing gage height.

North Branch of Winooski River at Wrightsville, Vt.

Location.- Water-stage recorder, lat. 44°18'00", long. 72°34'45", in Wrightsville, Washington County, three-quarters of a mile below Wrightsville Detention Dam and 3½ miles above confluence with Winooski River. Zero of gage is 550.53 feet above mean sea level.
Drainage area.- 69.2 square miles.
Records available.- October 1933 to September 1937.
Extremes.- Maximum discharge during year, 710 second-feet Apr. 20-22, May 16 (gage height, 3.56 feet); minimum daily discharge, 1.4 second-feet July 25.
1933-37: Maximum discharge, 2,170 second-feet Apr. 12, 1934 (gage height, 6.53 feet), from rating curve extended above 1,200 second-feet; minimum daily discharge, 0.5 second-foot Aug. 2, 1935; practically no flow at times on Jan. 2 and 3, 1936, when water was held back by mill dam.
Remarks.- Records good except those for periods of ice effect, Nov. 28, 29, Dec. 8, Jan. 6, 7, 11, 12, 20, 21, Jan. 23 to Feb. 12, Feb. 25, 26, 28, Mar. 1, 3, 4, 7, 8, 14-17, 23-25, Mar. 29 to Apr. 2, Apr. 4, and of missing gage heights, which were computed on basis of available gage heights, weather records, and records for nearby stations in Winooski River Basin, and are fair. Flood run-off affected by storage in Wrightsville Detention Reservoir (capacity, 893,000,000 cubic feet) since November 1935. Diurnal regulation at low stages caused by operation of small mill.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0	0	1.2	85
.1	1.7	1.5	139
.2	4.4	2.0	246
.3	8.6	2.5	368
.4	14	3.0	512
.6	26	3.3	612
.8	37	3.6	730
1.0	57		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	116	52	341	60	65	55	690	45	*150	14	*4
2	49	*130	57	277	55	57	50	670	40	*110	15	*7
3	48	161	71	217	60	55	46	650	37	*70	16	8.6
4	39	174	67	202	55	55	55	631	52	46	16	10
5	32	*320	54	157	55	56	70	594	51	35	16	10
6	29	*300	55	140	50	59	150	544	43	28	14	11
7	32	*220	60	115	45	50	328	594	38	24	13	*12
8	75	*230	70	97	45	45	341	631	38	21	16	*5
9	82	304	74	199	45	46	382	612	33	*19	21	*2
10	84	294	61	368	55	40	341	577	99	*16	20	2.0
11	143	211	67	310	45	40	286	528	182	*17	19	2.0
12	116	161	115	180	45	43	296	467	115	17	18	2.2
13	87	141	124	143	45	43	409	368	66	18	24	5.6
14	64	131	115	128	74	35	512	354	46	18	29	9.2
15	69	147	99	329	256	35	560	650	39	15	26	8.2
16	90	163	88	409	242	40	612	710	36	12	*22	6.6
17	121	135	87	354	161	45	650	690	32	11	*20	6.0
18	328	122	90	239	124	40	650	650	100	10	*19	6.8
19	354	90	90	248	95	38	670	612	228	9.4	*21	12
20	282	84	96	210	78	39	710	612	174	7.0	*160	22
21	170	84	257	140	65	41	710	650	115	9.0	121	31
22	113	92	228	113	115	41	710	631	100	9.0	63	27
23	133	87	180	100	201	40	690	594	100	7.9	39	23
24	378	69	155	95	162	45	670	544	76	6.0	30	14
25	452	66	124	90	120	45	650	467	53	1.4	24	16
26	438	65	120	95	90	39	670	382	41	7.8	19	15
27	452	64	113	95	82	38	670	244	32	9.4	18	13
28	382	60	322	85	70	35	670	139	*28	8.0	15	12
29	301	75	395	75	-	35	670	95	*28	7.0	13	9.2
30	187	58	341	75	-	40	690	72	26	5.0	81	9.0
31	145	-	301	70	-	45	-	57	-	8.2	*7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,304	452	29	171	2.47	2.85
November	4,354	320	58	145	2.10	2.34
December	4,128	395	52	133	1.92	2.21
Calendar year 1936	62,914.7	1,000	3.4	172	2.49	33.80
January	5,696	409	70	184	2.66	3.07
February	2,595	256	45	92.7	1.34	1.40
March	1,370	65	35	44.2	.639	.74
April	13,973	710	46	466	6.73	7.51
May	15,709	710	57	507	7.33	8.45
June	2,093	228	26	69.8	1.01	1.13
July	732.1	150	1.4	23.6	.341	.39
August	876.1	160	7	28.3	.409	.47
September	321.4	31	2.0	10.7	.155	.17
Water year 1936-37	57,151.6	710	1.4	157	2.27	30.73

*Missing gage heights.

Dog River at Northfield Falls, Vt.

Location.- Water-stage recorder, lat. 44°10'55", long. 72°38'30", 1 mile below Northfield Falls, Washington County, and 1½ miles below mouth of Cox Branch. Zero of gage is 603.00 feet above mean sea level.

Drainage area.- 76.1 square miles.

Records available.- November 1934 to September 1937.

Extremes.- Maximum discharge during year, 4,460 second-feet May 15 (gage height, 7.39 feet), from rating curve extended above 700 second-feet on basis of computation of flow over dam; minimum, 12 second-feet Sept. 3, 28, 27, 30 (gage height, 0.57 foot).
1934-37: Maximum discharge, 5,700 second-feet Mar. 18, 1936 (gage height, 8.49 feet), by computation of flow over dam; minimum, 10 second-feet Aug. 16, 1936 (gage height, 0.52 foot).

Remarks.- Records good except those for period of missing gage heights, Dec. 25 to Jan. 13 (computed on basis of records for Mad River near Moretown and North Branch of Winooski River at Wrightsville), and those above 1,000 second-feet, which are fair. Some diurnal regulation at low stages from power plant above gage.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0.6	13	1.6	107	3.5	895
.8	20	1.9	182	4.0	1,220
1.0	29	2.2	283	4.5	1,590
1.2	46	2.5	400	5.0	2,010
1.4	72	3.0	625	6.0	2,960

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	109	57	230	67	81	64	396	82	219	35	22
2	49	105	65	170	60	80	59	340	78	130	41	19
3	34	115	75	180	66	71	53	276	86	82	33	22
4	30	176	71	170	61	77	88	230	113	68	30	15
5	33	347	61	150	57	78	126	195	77	57	25	19
6	27	240	64	130	56	66	832	272	66	50	23	20
7	30	214	96	140	52	66	561	584	58	42	20	25
8	50	234	84	170	50	62	602	468	57	40	24	17
9	41	325	90	450	52	58	395	321	50	35	31	15
10	50	247	82	250	57	54	256	251	244	30	23	14
11	78	182	103	200	47	54	278	214	170	32	32	13
12	54	168	160	210	50	49	436	176	120	42	79	16
13	45	165	107	160	54	48	645	171	86	79	80	22
14	39	160	114	230	344	50	921	606	73	55	38	24
15	49	179	105	870	234	48	841	2,710	71	46	30	23
16	62	162	88	343	114	50	1,110	790	56	46	33	20
17	109	137	103	218	80	49	687	558	53	58	25	19
18	199	122	85	324	75	50	683	472	133	69	24	14
19	119	101	78	259	72	44	875	445	198	46	25	19
20	86	107	247	154	71	50	745	625	116	40	75	33
21	72	118	296	142	74	53	494	574	94	36	48	24
22	66	120	171	152	712	52	486	372	107	32	58	19
23	99	99	127	118	272	51	400	321	101	29	41	18
24	478	86	136	100	144	54	427	269	78	24	35	16
25	257	85	145	201	109	50	490	214	63	34	32	18
26	284	85	135	140	96	41	535	179	55	39	30	13
27	234	72	150	83	82	40	454	168	56	47	27	19
28	171	59	600	82	80	38	450	139	52	39	23	16
29	144	82	330	88	-	40	490	116	47	30	22	17
30	134	58	270	72	-	41	445	85	44	28	26	15
31	120	-	380	69	-	47	-	88	-	42	23	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,286	478	27	106	1.39	1.60
November	4,459	347	58	149	1.96	2.19
December	4,675	600	57	151	1.98	2.28
Calendar year 1936	59,167	4,390	11	162	2.13	28.90
January	6,255	870	69	202	2.65	3.06
February	3,288	712	47	117	1.54	1.60
March	1,692	81	38	54.6	.717	.83
April	14,928	1,110	53	498	6.54	7.30
May	12,625	2,710	85	407	5.35	6.17
June	2,684	244	44	89.5	1.18	1.32
July	1,646	219	24	53.1	.698	.80
August	1,091	80	20	35.2	.463	.53
September	566	33	13	18.9	.248	.28
Water year 1936-37	57,195	2,710	13	157	2.06	27.96

Mad River near Moretown, Vt.

Location.- Water-stage recorder, lat. 44°16'40", long. 72°44'35", at highway bridge 2.4 miles below Moretown, Washington County.

Drainage area.- 139 square miles.

Records available.- November 1928 to September 1937.

Extremes.- Maximum discharge during year, 6,980 second-feet May 15 (gage height, 8.88 feet), from rating curve extended above 3,500 second-feet on basis of computation of flow over dam; minimum, 9.7 second-feet July 30, Aug. 7, Sept. 30 (gage height, 3.03 feet).

1928-37: Maximum discharge, 9,450 second-feet Apr. 12, 1934, from rating curve extended above 3,500 second-feet on basis of computation of flow over dam; maximum gage height, 11.20 feet Mar. 17, 1935 (ice jam); minimum discharge, 1.4 second-feet Oct. 1, 1930.

Maximum stage known, about 20.5 feet Nov. 3, 4, 1927.

Remarks.- Records excellent except those for periods of ice effect, Nov. 29 to Dec. 7, Dec. 27, Jan. 5, 11-13, 20-23, Jan. 27 to Feb. 21, Feb. 24 to Mar. 29 (computed on basis of gage heights, weather records, and records for Dog River at Northfield Falls), and those for Sept. 14-30 (computed from stage graph based on twice-daily float-gage readings), which are fair. Considerable diurnal regulation.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet

3.0	7.0	3.3	39	3.6	102	4.0	260	4.9	922	6.0	2,160
3.1	16	3.4	56	3.7	132	4.3	445	5.2	1,220	7.0	3,640
3.2	26	3.5	77	3.8	168	4.6	661	5.6	1,650	8.0	5,340

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	152	282	130	844	160	140	98	991	130	422	55	33
2	147	281	150	506	120	110	108	960	123	235	97	33
3	102	348	160	518	130	100	92	871	145	141	62	32
4	85	496	170	444	140	110	126	786	225	108	50	63
5	80	754	160	360	130	120	239	665	143	94	38	39
6	75	510	140	276	140	80	1,760	704	120	82	36	38
7	83	450	280	332	120	80	1,120	1,510	102	69	29	36
8	191	524	233	368	110	90	873	1,070	93	62	25	32
9	122	680	217	822	100	85	612	692	85	56	48	33
10	189	494	235	528	130	70	407	568	504	52	53	26
11	250	366	297	340	110	65	419	450	373	55	64	25
12	175	321	476	375	90	70	658	360	222	243	238	12
13	138	319	266	300	110	70	883	442	161	133	282	27
14	118	296	238	412	400	75	1,370	1,570	130	85	108	46
15	168	382	247	1,190	340	80	1,210	4,900	126	69	73	39
16	217	318	212	575	210	80	1,310	1,350	100	73	55	44
17	376	278	290	502	170	75	875	1,050	86	92	49	36
18	734	247	227	910	180	75	1,090	986	336	165	47	42
19	359	190	144	598	150	75	1,290	977	500	81	49	21
20	262	231	632	400	150	80	1,160	1,220	274	63	212	60
21	212	266	738	350	130	80	762	1,010	215	55	145	71
22	182	281	380	310	1,150	80	797	648	274	51	158	51
23	370	203	266	250	480	75	648	548	233	46	100	48
24	1,490	182	294	209	300	70	682	458	154	43	75	32
25	652	202	318	584	200	70	768	360	113	42	64	31
26	899	194	283	323	150	70	898	300	96	48	54	25
27	664	157	500	200	140	70	817	274	87	61	48	36
28	450	124	1,900	200	130	65	868	239	85	51	41	18
29	378	185	698	170	-	70	1,020	195	81	43	30	19
30	334	130	542	150	-	77	1,010	169	75	42	45	22
31	306	-	1,070	140	-	71	-	145	-	66	44	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,960	1,490	75	321	2.31	2.66
November	9,691	754	124	323	2.32	2.59
December	11,893	1,900	130	384	2.76	3.18
Calendar year 1936	122,973	7,020	13	336	2.42	32.93
January	13,486	1,190	140	435	3.13	3.61
February	5,870	1,150	90	210	1.51	1.57
March	2,528	140	65	81.5	.586	.68
April	23,970	1,760	92	799	5.75	6.42
May	26,468	4,900	145	854	6.14	7.08
June	5,391	504	75	180	1.29	1.44
July	2,928	422	42	94.5	.680	.78
August	2,474	282	25	79.8	.574	.66
September	1,070	71	12	35.7	.257	.29
Water year 1936-37	115,729	4,900	12	317	2.28	30.96

Waterbury River near Waterbury, Vt.

Location.- Water-stage recorder, lat. 44°22'10", long. 72°46'10", 1 2/3 miles above mouth and 2½ miles north of Waterbury, Washington County. Zero of gage is 428.00 feet above mean sea level.
Drainage area.- 111 square miles.
Records available.- December 1935 to September 1937.
Extremes.- Maximum discharge during year, 3,740 second-feet May 15 (gage height, 14.18 feet); minimum, about 2 second-feet Aug. 17-19, 25, 26, caused by installation of gate in flume of Waterbury Dam.
1935-37: Maximum discharge, 6,520 second-feet (revised) Mar. 18, 1936 (gage height, 19.38 feet); minimum, that of Aug. 17-19, 25, 26, 1937.
Remarks.- Records fair. Discharge for periods of faulty intake action, Feb. 26 to Apr. 4, June 12-17, 24-30 and July 1 to Sept. 30, computed on basis of eight discharge measurements and records for stations on nearby streams. Computations not of sufficient accuracy to warrant publication of daily discharge for July 1 to Sept. 30. Slight diurnal regulation at low stages caused by operation of power plant upstream. Some diurnal regulation during August and September caused by construction operations at Waterbury Dam.

Revised discharge, in second-feet, for high-water periods, 1936

Day	Discharge
Mar. 12	3,040
13	2,680
17	2,180
18	4,830
19	5,960
20	2,270
Apr. 30	3,250

Note.- Mean discharge Mar. 1-31, 1,121 second-feet (run-off 11.64 inches); mean discharge Apr. 1-30, 781 second-feet (run-off 7.86 inches). The above records supersede those published in Water-Supply Paper 804.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	133	245	98	700	88	79	66	1,050	93			
2	206	306	99	340	85	77	76	1,090	82			
3	137	523	110	298	90	72	70	994	79			
4	114	404	107	298	94	67	78	932	159			
5	107	554	108	208	89	71	110	820	142			
6	101	392	116	136	80	67	836	693	99			
7	120	326	147	130	79	64	1,050	1,890	88			
8	361	364	245	170	81	70	474	1,850	82			
9	183	588	309	759	76	62	631	814	71			
10	173	397	127	750	97	64	276	587	183			
11	245	286	154	252	92	62	298	392	330			
12	181	245	264	191	82	60	449	322	150			
13	164	238	172	166	76	58	733	455	114			
14	137	231	158	204	280	55	1,140	901	100			
15	168	282	142	917	480	53	1,060	3,170	88			
16	187	283	127	543	154	51	1,120	1,940	78			
17	311	212	132	208	105	55	1,010	767	70			
18	1,250	208	125	379	91	56	803	692	456			
19	699	127	104	549	83	57	1,030	624	633			
20	340	158	254	227	76	57	1,380	1,050	245			
21	274	178	526	175	73	61	836	1,120	137			
22	212	243	268	199	741	64	749	574	127			
23	265	177	202	164	531	63	636	428	132			
24	1,000	130	215	146	189	62	535	433	103			
25	681	137	187	202	121	62	627	306	85			
26	752	142	170	226	104	61	859	238	74			
27	775	124	265	178	90	61	967	205	66			
28	394	107	1,520	162	81	60	795	175	63			
29	298	108	654	128	-	62	1,060	142	59			
30	264	114	339	106	-	60	1,240	122	57			
31	282	-	459	95	-	60	-	106	-			

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	10,514	1,250	101	339	3.05	3.52
November	7,829	588	107	261	2.35	2.62
December	7,903	1,520	98	255	2.30	2.65
Calendar year 1936	112,513	4,830	22	307	2.77	37.70
January	9,206	917	95	297	2.68	3.09
February	4,308	741	73	154	1.39	1.45
March	1,933	79	51	62.4	.562	.65
April	20,994	1,380	66	700	6.31	7.04
May	24,682	3,170	106	796	7.17	8.27
June	4,245	633	57	142	1.28	1.43
July	2,117	-	-	68.3	.615	.71
August	1,804	-	-	58.2	.524	.60
September	780	-	-	26.0	.234	.26
Water year 1936-37	96,315	3,170	-	264	2.38	32.29

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Lamoille River at Johnson, Vt.

Location.- Water-stage recorder, lat. 44°37'20", long. 72°40'50", at falls 0.9 mile above original site at bridge in Johnson, Lamoille County, and 1 1/8 miles above mouth of Gihon River.
Drainage area.- 335 square miles.
Records available.- July 1910 to December 1913, September 1928 to September 1937.
Extremes.- Maximum discharge during year, 7,730 second-feet May 15 (gage height, 12.54 feet), from rating curve extended above 5,000 second-feet on basis of computation of flow over dam; minimum, 24 second-feet July 26, Sept. 6; minimum daily discharge, 43 second-feet Sept. 6.
1910-13, 1928-37: Maximum discharge, 13,000 second-feet Mar. 18, 1936 (gage height, 16.48 feet), by computation of flow over dam; minimum, 11 second-feet Sept. 2, 1935; minimum daily discharge, 27 second-feet Sept. 8, 1935.
Remarks.- Records good except those for periods of ice effect, Nov. 23 to Dec. 14, Dec. 17-29, Jan. 24 to Feb. 20, Feb. 25 to Mar. 27, Mar. 29 to Apr. 9 (computed on basis of two discharge measurements, gage heights, weather records, and records for station near Milton) and those for period of missing gage heights, Jan. 1-22, June 16, 17, Aug. 1-23 (computed on basis of weather records and records for station near Milton), which are fair. Probably backwater from ice during period of missing gage heights in winter. Diurnal fluctuation at low stages caused by power plant above.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.7	33	4.0	1,040
1.8	53	6.0	2,020
1.9	86	7.0	2,600
2.0	122	8.0	3,280
2.2	205	9.0	4,050
2.4	300	10.0	4,940
2.7	452	11.3	6,310
3.0	610		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	250	509	240	900	210	320	180	1,920	320	486	60	183
2	178	578	260	750	200	200	160	1,710	286	833	140	194
3	222	789	230	680	250	260	160	1,440	261	412	200	149
4	174	793	230	600	220	270	190	1,170	326	251	140	107
5	213	989	240	480	190	200	250	999	301	214	70	54
6	206	962	260	380	180	220	1,250	1,060	200	229	110	43
7	214	916	320	310	200	240	2,250	1,840	263	212	200	97
8	354	533	420	400	230	260	1,700	1,760	243	184	500	105
9	360	974	350	800	170	170	1,850	1,090	221	169	250	163
10	324	997	300	1,300	230	190	1,160	942	495	137	160	180
11	415	737	320	870	280	190	1,050	757	975	63	150	159
12	416	631	820	520	240	210	1,390	644	498	142	200	83
13	356	702	680	440	230	160	2,040	645	315	173	250	130
14	317	427	500	650	640	140	2,860	1,350	299	129	260	173
15	312	414	414	1,600	880	160	2,680	6,300	277	98	200	134
16	395	813	358	1,100	700	120	3,340	3,300	230	128	150	144
17	563	556	370	800	520	150	3,140	1,600	200	171	130	139
18	2,150	564	310	880	400	160	2,480	1,250	930	87	110	150
19	1,450	461	280	1,120	320	180	2,840	1,330	1,700	199	200	81
20	882	431	550	700	280	170	3,850	3,380	859	151	350	168
21	613	508	1,080	620	249	160	2,140	3,360	570	128	550	169
22	621	643	840	660	1,010	210	2,130	1,650	535	109	400	136
23	640	340	640	448	1,050	190	1,720	1,190	745	131	300	177
24	2,060	290	560	280	734	170	1,620	1,300	451	117	250	147
25	1,560	300	480	310	558	190	2,020	988	281	66	228	164
26	1,430	270	440	330	390	190	2,480	823	208	65	170	76
27	1,410	270	480	310	330	170	2,490	835	128	114	178	135
28	899	220	2,000	290	280	146	2,020	450	212	108	145	164
29	665	180	1,200	250	-	180	2,880	288	192	130	107	191
30	624	220	895	210	-	200	2,830	304	256	131	186	141
31	568	-	840	160	-	190	-	280	-	122	164	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	20,841	2,150	174	672	2.01	2.32
November	17,017	997	180	567	1.69	1.89
December	16,907	2,000	230	545	1.63	1.88
Calendar year 1936	252,457	* 10,700	90	690	2.06	28.04
January	19,148	1,600	160	618	1.84	2.12
February	11,171	1,050	170	399	1.19	1.24
March	5,966	320	120	192	.573	.66
April	57,130	3,850	160	1,905	5.69	6.35
May	45,955	6,300	280	1,482	4.42	5.10
June	12,777	1,700	128	426	1.27	1.42
July	5,691	833	63	184	.549	.63
August	6,508	550	60	210	.627	.72
September	4,136	194	43	138	.412	.46
Water year 1936-37	223,267	6,300	43	612	1.83	24.79

Lamoille River near Milton, Vt.

Location.- Water-stage recorder, lat. 44°40'15", long. 73°06'25", 2½ miles north of Milton, Chittenden County.

Drainage area.- 723 square miles.

Records available.- August 1929 to September 1937.

Extremes.- Maximum discharge during year, 13,500 second-feet May 16; maximum gage height, 9.55 feet Apr. 6 (ice affected); minimum discharge, 119 second-feet Sept. 28 (gage height, 1.15 feet); minimum daily discharge, 177 second-feet Sept. 7.
1929-37: Maximum discharge, 23,200 second-feet Mar. 19, 1936 (gage height, 12.52 feet), by computation of flow over dam; minimum, 49 second-feet July 30, 1933 (gage height, 0.69 foot); minimum daily discharge, 91 second-feet July 30, 1933.

Remarks.- Records excellent except those for periods of ice effect, Nov. 17-19, Nov. 25 to Dec. 7, Dec. 14-20, 24-26, Jan. 24 to Feb. 9, Feb. 18-21, Feb. 26 to Apr. 7, and for period of missing gage-heights, Feb. 10-15, which were computed on basis of available gage heights, one discharge measurement, weather records, and records for nearby streams and are fair. Probably some backwater from ice during Feb. 10-15. Diurnal regulation from power plants above.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.3	157	3.0	1,250	5.5	4,930
1.5	223	3.5	1,830	6.0	5,840
1.8	335	4.0	2,500	6.5	6,840
2.1	490	4.5	3,240	7.0	8,000
2.4	690	5.0	4,060	8.0	10,400
2.7	940			9.0	13,000

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	585	1,460	530	3,160	480	700	440	4,750	627	1,010	237	282
2	1,130	1,460	470	2,220	480	720	460	4,060	620	2,090	437	295
3	770	2,300	500	1,710	480	600	480	3,480	613	1,270	502	327
4	627	2,180	620	1,590	440	620	580	3,000	1,040	778	358	322
5	544	2,900	640	1,360	450	540	1,000	2,570	940	564	310	240
6	514	2,570	590	922	470	480	4,000	2,220	676	490	265	244
7	526	2,360	750	802	460	420	6,000	2,980	620	440	298	177
8	1,550	2,640	1,050	969	420	450	4,750	4,840	606	424	1,370	188
9	1,300	2,780	913	1,660	480	420	4,570	3,000	538	387	676	220
10	998	2,640	940	3,400	520	400	3,090	2,220	620	382	434	231
11	1,440	1,960	1,490	1,960	550	380	2,780	1,830	1,660	249	413	264
12	1,130	1,580	2,020	1,240	520	370	2,750	1,480	1,180	360	556	201
13	1,020	1,520	1,490	1,040	480	350	4,060	1,350	770	339	810	269
14	810	1,590	1,120	1,370	1,100	340	6,030	2,110	648	340	818	306
15	818	1,260	980	3,760	1,750	350	6,030	9,040	578	327	550	345
16	1,150	1,770	910	4,040	1,960	350	6,030	12,100	496	299	440	312
17	1,160	1,400	940	1,800	1,420	340	6,520	4,980	451	259	392	308
18	4,680	1,270	760	1,960	1,000	400	5,470	3,160	807	434	335	304
19	4,990	1,200	680	2,780	880	450	5,650	2,640	3,630	440	525	240
20	2,640	1,330	1,100	1,640	820	470	7,180	5,060	2,370	384	1,010	397
21	1,900	1,240	2,780	1,390	800	470	5,400	7,520	1,360	335	1,570	701
22	1,470	1,650	2,430	1,470	2,810	500	4,940	4,680	1,240	301	1,250	473
23	2,420	1,300	1,530	1,130	3,200	520	4,400	2,860	1,420	253	835	368
24	4,220	960	1,200	730	2,160	480	3,640	2,570	1,170	268	564	346
25	4,890	820	1,230	1,150	1,480	450	3,890	2,220	794	319	456	340
26	4,020	710	1,140	1,000	1,100	430	4,750	1,710	606	462	390	237
27	4,750	650	1,670	750	900	420	5,110	1,490	403	526	357	318
28	2,740	600	4,200	620	730	400	4,400	1,460	424	434	327	211
29	2,020	600	4,460	600	-	410	5,110	848	445	319	245	272
30	1,710	570	2,500	550	-	420	6,220	721	561	311	291	311
31	1,650	-	2,360	500	-	420	-	690	-	303	301	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	60,172	4,990	514	1,941	2.68	3.09
November	47,270	2,900	570	1,576	2.18	2.43
December	43,993	4,460	470	1,419	1.96	2.26
Calendar year 1936	596,146	21,700	149	1,629	2.25	30.66
January	49,273	4,040	500	1,589	2.20	2.54
February	28,330	3,200	420	1,012	1.40	1.46
March	14,070	720	340	454	.628	.72
April	125,730	7,180	440	4,191	5.80	6.47
May	103,639	12,100	690	3,343	4.62	5.33
June	27,913	3,630	403	930	1.29	1.44
July	15,097	2,090	249	487	.674	.78
August	17,322	1,570	237	559	.773	.89
September	9,049	701	177	302	.418	.47
Water year 1936-37	541,858	12,100	177	1,485	2.05	27.88

Missisquoi River near North Troy, Vt.

Location.- Water-stage recorder, lat. 44°58'20", long. 72°23'15", just above Big Falls, 1⅛ miles below mouth of Jay Branch, and 2⅛ miles above North Troy, Troy County.

Drainage area.- 131 square miles.

Records available.- August 1931 to September 1937.

Extremes.- Maximum discharge during year, 2,860 second-feet May 15 (gage height, 8.33 feet), from rating curve extended above 2,000 second-feet on basis of computation of flow over dam; minimum, 20 second-feet Sept. 13 (gage height, 1.07 feet).
1931-37: Maximum discharge, 5,140 second-feet Oct. 7, 1932 (gage height, 12.26 feet), from rating curve extended above 2,000 second-feet on basis of computation of flow over dam; minimum, 10 second-feet Aug. 22, 1934 (gage height, 0.81 foot).

Remarks.- Records good except those for periods of ice effect or missing gage heights, Nov. 25 to Dec. 11, Dec. 16-19, Jan. 26 to Feb. 13, Feb. 25 to Mar. 30 (computed on basis of three discharge measurements, available gage heights, weather records, and records for Dog River at Northfield Falls), and those for another period of missing gage heights, Aug. 2-5 (computed on basis of records for station at Richford), which are fair. Some diurnal regulation from small power plant above station.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.2	27	2.4	187	4.5	920
1.4	39	2.7	263	5.0	1,140
1.6	54	3.0	350	6.0	1,640
1.8	76	3.5	526	7.0	2,140
2.1	124	4.0	720	8.0	2,700

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	286	320	140	880	145	105	92	1,140	115	195	162	32
2	352	526	154	442	135	97	103	1,120	95	217	143	30
3	192	780	174	344	145	95	93	965	96	108	107	35
4	135	489	166	271	135	91	100	880	230	75	86	73
5	113	563	155	212	129	91	180	680	185	62	72	68
6	104	448	158	176	127	78	998	544	122	61	54	48
7	122	386	212	176	123	77	1,390	680	104	47	47	40
8	468	442	186	252	116	82	900	720	101	37	98	35
9	563	660	197	1,980	123	82	800	474	84	35	83	40
10	278	424	185	1,370	128	74	526	382	223	38	57	30
11	356	296	295	414	113	77	508	276	304	38	80	31
12	271	271	438	290	118	80	581	222	126	44	276	26
13	204	293	253	234	123	76	977	268	87	44	283	31
14	149	296	224	347	422	75	1,490	897	83	42	130	75
15	280	686	190	1,340	760	84	1,290	2,580	69	41	77	75
16	293	463	175	783	386	71	1,340	1,390	58	121	65	51
17	465	263	175	293	274	73	1,170	582	55	447	50	50
18	1,340	263	163	667	212	73	1,060	434	409	253	48	47
19	663	194	149	858	156	72	1,350	571	583	106	45	50
20	379	220	305	314	130	70	1,790	1,890	224	64	166	544
21	302	297	680	276	137	77	920	1,690	160	47	182	258
22	237	478	438	232	366	80	900	641	154	45	104	113
23	110	260	335	185	350	77	700	452	169	41	76	82
24	996	200	285	156	237	72	720	452	106	40	55	61
25	644	182	237	320	162	68	920	302	87	49	51	53
26	1,120	172	202	240	134	70	1,140	232	66	124	47	40
27	856	160	344	176	115	69	1,220	255	48	164	41	52
28	400	152	1,880	173	100	69	1,140	207	60	98	35	45
29	317	146	974	183	-	74	1,740	178	52	62	34	38
30	285	142	459	154	-	75	1,540	147	63	105	34	39
31	293	-	744	149	-	79	-	120	-	120	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	12,573	1,340	104	406	3.10	3.57
November	10,472	780	142	349	2.66	2.97
December	10,672	1,880	140	344	2.63	3.03
Calendar year 1936	128,207	3,820	24	350	2.67	36.40
January	13,887	1,980	149	448	3.42	3.94
February	5,601	760	100	200	1.53	1.59
March	2,433	105	68	78.5	.599	.69
April	27,678	1,790	92	923	7.05	7.87
May	21,371	2,580	120	689	5.26	6.06
June	4,318	583	48	144	1.10	1.23
July	2,970	447	35	95.8	.731	.84
August	2,817	283	29	90.9	.694	.80
September	2,192	544	26	73.1	.558	.62
Water year 1936-37	116,984	2,580	26	321	2.45	33.21

Missisquoi River near Richford, Vt.

Location.- Water-stage recorder, lat. 44°57'30", long. 72°41'55", 1 2/3 miles above mouth of Trout River, 3 miles south of Richford, Franklin County, and 3¾ miles below mouth of North Branch.
Drainage area.- 479 square miles.
Records available.- May 1909 to November 1910, July 1911 to September 1923, October 1928 to September 1937.
Average discharge.- 17 years (1911-19, 1928-37), 932 second-feet.
Extremes.- Maximum discharge during year, 6,640 second-feet May 20; maximum gage height, 14.78 feet Apr. 6 (ice jam); minimum discharge, 91 second-feet Sept. 13 (gage height, 2.49 feet).
1909-10, 1911-23, 1928-37: Maximum discharge, 14,000 second-feet Mar. 19, 20, 1936, by computation of flow over dam; maximum gage height, 17.64 feet Apr. 1, 1918 (ice jam); minimum discharge, 8 second-feet July 14, 1911.
Maximum discharge known, 45,000 second-feet, during flood of November 1927 (gage height, 23.1 feet), from rating curve extended above 14,000 second-feet.
Remarks.- Records good except those for period of ice effect, Nov. 25 to Apr. 9, which were computed on basis of two discharge measurements, available gage heights and records for stations on nearby streams and are fair. Slight diurnal regulation at low stages.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

2.4	72	4.6	1,040
2.6	114	5.0	1,350
2.8	162	5.5	1,760
3.0	220	6.0	2,220
3.2	286	7.0	3,200
3.4	362	8.0	4,300
3.8	552	10.0	6,640
4.2	774		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	716	1,210	540	3,220	620	405	350	3,480	356	495	460	108
2	1,190	1,730	530	1,950	570	370	395	2,800	323	750	401	97
3	800	2,950	660	1,420	580	355	365	2,350	308	478	308	115
4	538	2,430	650	1,100	550	345	480	2,030	446	312	246	250
5	423	2,360	620	850	530	350	880	1,710	547	239	208	242
6	366	2,080	580	670	520	315	3,000	1,390	401	202	170	176
7	360	1,680	850	570	500	280	4,800	1,450	316	173	150	140
8	715	1,780	720	1,040	495	320	3,950	1,940	279	152	137	121
9	748	2,310	740	3,700	490	330	3,350	1,480	252	135	176	99
10	771	1,940	700	4,500	740	275	2,920	1,190	319	121	233	119
11	1,190	1,310	1,150	1,580	560	295	2,400	935	674	114	187	101
12	969	1,080	1,650	1,140	500	315	2,450	774	492	119	287	95
13	830	1,080	1,050	930	470	295	3,520	727	312	114	555	93
14	627	1,080	850	1,240	1,300	280	5,260	1,030	249	112	594	135
15	715	2,040	740	3,630	2,350	275	5,200	4,710	230	108	312	176
16	1,270	2,190	670	3,100	1,840	275	5,040	5,830	208	204	211	162
17	1,380	1,340	660	2,040	1,160	270	4,700	3,360	187	1,250	168	150
18	3,400	1,000	610	1,970	940	270	4,080	1,850	472	1,140	147	132
19	3,110	1,140	570	2,440	770	275	4,220	1,590	1,380	522	268	150
20	1,920	1,200	1,300	1,690	670	280	5,200	4,100	872	304	1,670	783
21	1,370	1,230	2,080	1,200	680	305	4,740	5,920	582	230	994	872
22	1,070	1,850	1,750	920	1,450	350	4,270	4,140	627	193	575	1,010
23	1,370	1,360	1,370	760	1,600	325	3,530	2,240	573	168	331	272
24	2,300	1,040	1,100	670	990	300	3,200	1,720	433	180	249	214
25	2,580	760	920	1,550	670	280	3,080	1,270	312	246	205	184
26	3,500	690	790	1,140	525	275	3,350	969	255	244	165	137
27	3,640	640	1,600	790	450	270	3,530	824	214	1,030	154	121
28	2,270	600	4,400	770	395	265	3,470	744	184	516	140	130
29	1,550	570	3,250	800	-	275	4,190	605	268	304	135	126
30	1,350	560	2,360	710	-	275	4,300	500	259	233	119	110
31	1,310	-	2,760	660	-	305	-	419	-	283	108	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	44,348	3,640	360	1,431	2.99	3.45
November	43,230	2,950	560	1,441	3.01	3.36
December	38,220	4,400	530	1,233	2.57	2.96
Calendar year 1936	442,329	13,100	77	1,209	2.52	34.34
January	48,750	4,500	570	1,573	3.28	3.78
February	22,915	2,350	395	818	1.71	1.78
March	9,400	405	265	303	.633	.73
April	100,200	5,260	350	3,341	6.97	7.78
May	64,077	5,920	419	2,067	4.32	4.98
June	12,332	1,380	184	411	.858	.96
July	10,671	1,250	108	344	.718	.83
August	10,063	1,670	108	325	.678	.78
September	6,620	1,010	93	221	.461	.51
Water year 1936-37	410,846	5,920	93	1,126	2.35	31.90

Lake Memphremagog at Newport, Vt.

Location.- Chain gage, lat. 44°56'10", long. 72°12'15", on concrete highway bridge in Newport, Orleans County. Zero of gage is 673.15 feet above mean sea level.

Records available.- May 1931 to September 1937.

Extremes.- Maximum gage height observed during year, 10.75 feet May 21; minimum observed, 7.32 feet Sept. 30.
1931-37: Maximum gage height observed, 12.92 feet Apr. 20, 1933; minimum, 6.69 feet Nov. 4, 1934.

Remarks.- Gage read once daily on days for which gage heights are shown; not read on other days. Some readings for Nov. 27 to Apr. 7 taken from top of ice.

Gage height, in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.42	9.82	9.87	10.28	9.95	9.87	9.57	10.39	10.26	9.92	8.89	-
2	8.48	9.84	9.87	10.14	-	-	9.57	10.33	10.23	9.89	8.87	8.26
3	8.54	9.84	-	10.08	9.95	9.87	9.53	10.25	10.21	9.84	8.89	8.24
4	8.54	9.86	9.87	9.99	9.95	-	-	10.20	10.18	9.80	8.91	8.18
5	8.53	9.84	9.87	9.88	9.95	9.87	9.51	10.14	10.16	9.76	-	8.15
6	8.52	9.82	9.87	9.81	9.95	-	9.51	10.10	10.14	9.71	8.89	8.10
7	8.50	9.79	9.87	9.78	-	-	9.49	10.05	10.11	9.66	8.85	8.06
8	8.50	9.78	9.87	9.78	9.95	9.81	9.51	10.07	10.08	9.62	8.83	8.02
9	8.49	9.78	9.87	9.84	9.95	-	9.53	10.11	10.04	9.59	8.80	7.97
10	8.49	9.77	9.87	9.95	9.95	9.78	9.57	10.11	10.01	9.55	8.77	7.92
11	8.50	9.76	9.87	10.00	9.95	-	9.59	10.09	10.02	9.50	8.74	7.90
12	8.50	9.76	9.95	10.00	9.95	9.75	9.65	10.06	10.01	9.45	8.76	7.88
13	8.50	9.74	10.00	10.00	9.95	-	9.73	10.03	9.97	9.41	8.82	7.88
14	8.51	9.74	10.05	10.00	-	-	9.81	10.02	9.94	9.39	8.83	7.82
15	8.52	9.74	10.07	10.02	9.95	9.75	9.90	10.07	9.91	9.33	8.80	7.76
16	8.58	9.74	10.07	10.07	9.83	-	9.97	10.19	9.87	9.28	8.78	7.71
17	8.70	9.72	10.07	10.11	9.83	9.75	10.03	-	9.86	9.23	8.72	7.70
18	-	9.74	10.07	10.13	9.83	-	10.11	-	9.91	9.21	8.78	7.69
19	9.06	9.75	-	10.11	9.85	9.71	10.19	10.42	9.93	9.18	8.75	7.67
20	9.10	9.75	10.07	10.06	9.87	9.71	10.25	10.63	9.91	9.16	8.76	7.65
21	9.16	9.76	10.07	10.03	-	9.65	10.36	10.75	9.90	9.14	8.74	7.63
22	9.24	9.77	10.07	10.01	9.87	-	10.51	-	9.90	9.12	8.72	7.60
23	9.40	9.77	10.07	9.99	-	9.69	10.57	10.69	9.89	9.11	8.70	7.56
24	9.40	9.80	10.07	9.97	9.87	9.65	10.59	10.67	9.89	9.09	-	7.54
25	9.66	9.84	-	9.96	-	-	10.57	10.63	9.88	9.09	-	7.50
26	9.67	9.84	10.07	9.96	9.87	9.65	10.55	10.57	9.87	9.05	-	7.46
27	9.70	9.87	10.10	9.95	9.87	9.65	10.52	10.54	9.85	9.02	-	7.41
28	9.72	9.87	10.12	9.95	-	-	10.50	10.49	9.83	8.98	-	7.38
29	9.75	9.87	10.18	-	-	9.61	10.47	10.42	9.87	8.94	-	7.36
30	9.77	9.87	10.30	9.95	-	9.61	10.45	10.36	9.91	8.91	-	7.32
31	9.80	-	10.31	-	-	9.55	-	10.30	-	8.89	-	-

In addition to the records of stream flow obtained at gaging stations in the St. Lawrence River Basin and reported in the preceding pages, measurements of flow were made also at the points indicated in the following table.

Miscellaneous discharge measurements in the St. Lawrence River Basin during the water year October 1936 to September 1937

Date	Stream	Tributary to-	Locality	Discharge
				Sec.-ft.
June 6	Little Clear Pond Outlet	Upper Saranac Lake	At Saranac Inn railroad station, N. Y.	8.54
July 28	.....do.....	.....do.....	.....do.....	20.5

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