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SURFACE WATER SUPPLY *of the* UNITED STATES 1936

PART 4
ST. LAWRENCE RIVER BASIN

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ILLUSTRATION

Plate 1. Typical river-measurement stations.....

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, 1936. The work was begun in 1888 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 1936, 3,160 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 11.

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-foot" is an abbreviation for "cubic feet per second." A second-foot is 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-foot 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 in regard to the general accuracy of the records. "Excellent" indicates that, in general, the daily records are accurate within



A. ARTIFICIAL CONTROL, RECORDER HOUSE, AND MEASURING CABLE ON OLEN-TANGY RIVER, DELAWARE, OHIO.



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

TYPICAL RIVER-MEASUREMENT STATIONS.

5 percent; "good", within 10 percent; "fair", within 15 percent; and "poor", within 20 percent or more.

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 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 United States 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.
 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., 808 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., 305 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., 403 Post Office Building.
 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., 303 Customhouse.
 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, United States 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 United States 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 heights, 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 10.

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 reports containing records obtained prior to 1904 has been published in Water-Supply Paper 119.

The following table gives, by years and drainage basins, the numbers of the papers on surface-water supply published from 1899 to 1936. 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, 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. Special papers containing compilation of records previously published and also records not contained in the annual series of water-supply papers have been published for some States and drainage basins. For example, stream-flow records for the New-Kanawha River Basin in part 3 from 1895 to 1920 are contained in Water-Supply Paper 536.

Numbers of water-supply papers containing results of stream measurements, 1899-1936
(For basins included see p. 7)

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1899 a.....			36	36	c 36, 37	37	37	37	d 37, 38	38, e 39	39, f 39	38	38	38
1900 g.....	47, h 48	48, i 49	48	49	49, j 50	50	50	50	50	51	51	51	51	51
1901.....	65, 76	65, 75	65, 75	65, 75	k 65, 66, 75	66, 75	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, 84	84	84	84	84	85	85	85	85	85
1903.....		b 87, 88	88	k 87, 88	k 88, 89	89	89	89	89	90	90	90	90	90
1904.....	o 124, p 125	q 124	123	123	130, r 131	130, r 131	130, r 131	130, r 131	133, s 134	133, s 134	133, s 134	133, s 134	133, s 134	133, s 134
1905.....	o 165, p 166, q 167	q 167, 168	169	170	170, 171	172	172	172	t 175, 176, s 177	177	177	178	178	u 177, 178
1906.....	o 165, p 166, q 167	q 167, 168	169	170	170, 171	172	172	172	210	213	213	214	214	214
1907-8.....	o 201, p 202, q 203	q 203, 204	243	244	245	246	246	246	211, t 249	250, s 251	251	252	252	252
1909.....	261	262	263	264	265	266	266	266	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.....	411	412	413	414	415	416	417	418	419	420	421	422	423	424
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

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 McJave River only.
 f Kings and Kern Rivers.
 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.
 h Monthly discharge for 1900 in 22d Annual Report, part 4.
 i Upper and Sonnykill Rivers to James River.
 j Loup, Platte, and Elbowm 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 Yackin 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.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The following table contains a list of gaging stations for the area covered by this report at which records of discharge were collected during the year ending September 30, 1936, by agencies other than the Geological Survey. The records for these stations are not contained in publications of the Geological Survey.

Records of discharge collected by agencies other than the Geological Survey

Stream	Location	Period	Operated by	Remarks
Brule River (head of Menominee River).	Power plant near Florence, Wis.	1917-36	Wisconsin-Michigan Power Co.	Records available at Wisconsin-Michigan Power Co., Appleton, Wis.
Cayuga Lake outlet	Lock 1 (Mud Lock), N. Y.	1926-36	State Department of Public Works, Albany, N. Y.	Unpublished.
Clyde River	Clyde, N. Y.....	1924-36	.....do.....	Do.
Indian River	Theresa, N. Y.....	1934-36	Syracuse Lighting Co., Inc., Syracuse, N. Y.	Do.
New York Barge Canal	Brewerton, N. Y..	1925-36	State Department of Public Works, Albany, N. Y.	Unpublished. Diversion around Oneida River at Caughdenoy, N. Y.
Oneida River.....	Caughdenoy, N. Y..	1917-36	Oswego River Watershed Corp., Fulton, N. Y.	Unpublished.
Ontonagon River ...	Near Rockland, Mich., sec. 29, T. 50 N., R. 59 W.	1906-21 1931-36	Copper District Power Co.	Records available at Copper District Power Co., Ontonagon, Mich.
East Branch of Oswegatchie River.	Brown Falls, N. Y.	1934-36	Syracuse Lighting Co., Inc., Syracuse, N. Y.	Unpublished.
Oswego River.....	Lower Dam, Fulton, N. Y.	1928-36	Oswego River Watershed Corp., Fulton, N. Y.	Do.
Raquette River	Colton, N. Y.....	1934-36	Syracuse Lighting Co., Inc., Syracuse, N. Y.	Do.
West Branch of St. Regis River.	Parishville, N. Y.	1934-36	.....do.....	Do.
Salmon River.....	Bennetts Bridge, near Altmar, N. Y.	1934-36	.....do.....	Do.
Seneca River	Jacks Reef, near Baldwinsville, N. Y.	1935-36	State Department of Public Works, Albany, N. Y.	Do.
Sturgeon River	Near Loreto, Mich., in SE $\frac{1}{4}$ sec. 8, T. 39 N., R. 28 W., above Pine Creek.	1923-36	Wisconsin-Michigan Power Co.	Computed from powerhouse records.

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 Ohio until December 31, 1935, with the Ohio Cooperative Topographic Survey, C. E. Sherman, inspector. In Vermont with Charles M. Smith, 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 Minnesota the Pigeon River station was maintained from

DIVISION OF WORK

funds appropriated by the United States Department of State and the Corps of Engineers, U. S. Army. In New York by the Federal Emergency Administration of Public Works; Northern New York Utilities, Inc.; Syracuse Lighting Co.; International Paper Co.; Utica Gas & Electric Co.; Cornell University; Malone Light & Power Co.; New York & Pennsylvania Co.; Associated Gas & Electric System; Rochester Gas & Electric Corp.; and Deer River Power Co. In Vermont by the Newport Electric Light Co. In Wisconsin by the Wisconsin Power & Light 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 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 Ohio, Lasley Lee; 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 at New York. All water-surface elevations are heights of water surface above mean tide at New York.

Drainage area.- 263,452 square miles.

Records available.- January 1905 to September 1936 (only monthly discharge prior to October 1935).

Average discharges.- 31 years, 191,000 second-feet (does not include diversions from Lakes Michigan and Erie).

Extremes.- Maximum daily discharge during year ending Sept. 30, 1936, 199,000 second-feet Oct. 3, 1935, corresponding to a gage height of 572.27 feet on Buffalo gage; minimum daily discharge, 115,600 second-feet Feb. 13, 1936, corresponding to a gage height of 568.83 feet on Buffalo gage.

1905-36: Maximum monthly mean discharge, 242,000 second-feet May 1929, corresponding to a gage height of 574.14 feet on Buffalo gage; minimum monthly mean discharge, 117,000 second-feet February 1936, corresponding to a gage height of 569.48 feet on Buffalo gage.

Remarks.- Records published herein, except mean discharge for water years ending Sept. 30 and computations for water year October 1935 to September 1936, have been furnished by the Corps of Engineers, U. S. Army. Records do not include flow diverted from Lake Michigan by Chicago Sanitary Canal and from Lake Erie by Welland Canal in Ontario and by Black Rock and Erie Canals at Buffalo.

Monthly discharge, in thousands of second-feet, 1905-36

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Mean (Year ending Sept. 30)	Oct.	Nov.	Dec.	Mean (Calendar year)
1905	185	177	180	187	204	217	222	217	213	-	209	203	206	202
1906	199	192	189	193	202	206	206	204	200	201	201	203	206	200
1907	210	203	199	205	214	218	222	214	212	209	211	209	210	211
1908	209	200	206	217	227	224	219	215	208	213	196	199	195	210
1909	180	184	189	192	213	216	214	207	200	199	195	190	197	198
1910	178	174	186	191	207	207	202	196	190	193	194	192	186	192
1911	174	171	175	177	192	192	187	183	183	184	185	193	188	183
1912	181	172	173	193	205	206	204	204	204	192	201	204	200	196
1913	196	206	202	228	233	232	227	216	205	213	204	206	204	213
1914	191	188	180	192	211	214	209	203	199	200	193	195	185	197
1915	171	174	180	174	184	189	194	199	197	186	186	195	187	187
1916	182	190	188	199	213	220	218	210	204	201	197	193	193	201
1917	184	178	181	198	214	224	232	224	219	203	214	215	212	208
1918	190	184	196	190	197	204	206	203	205	201	200	205	198	198
1919	202	198	201	210	226	229	222	218	211	210	203	206	198	210
1920	174	165	169	178	197	202	206	202	200	192	195	196	203	191
1921	191	188	192	203	212	209	207	200	199	200	191	187	198	198
1922	163	174	176	199	207	211	207	200	196	194	193	187	182	193
1923	172	168	173	182	188	197	193	189	182	184	180	177	187	182
1924	188	173	177	184	200	201	204	196	191	188	188	186	183	189
1925	169	160	173	175	182	180	175	173	171	175	172	176	174	172
1926	149	143	156	169	169	182	176	175	177	168	189	193	186	172
1927	175	172	174	184	195	197	197	191	186	187	180	180	201	186
1928	192	180	181	184	193	201	207	202	197	192	192	196	199	194
1929	192	189	203	221	242	241	239	230	220	214	213	222	213	219
1930	219	214	223	216	231	231	224	211	208	219	199	197	194	214
1931	186	176	170	179	184	185	187	181	179	185	174	173	172	179
1932	189	193	184	185	188	190	188	181	175	183	172	168	171	182
1933	173	166	162	172	182	194	186	177	172	175	167	163	159	174
1934	158	142	144	156	160	160	160	157	155	157	153	149	152	154
1935	149	143	147	155	162	168	169	170	163	157	158	156	157	158

ST. LAWRENCE RIVER MAIN STEM

Niagara River at Buffalo, N. Y.

(Continued)

Discharge, in thousands of second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	161	154	163	150	122	131	153	173	182	171	170	164
2	162	150	158	147	116	132	174	176	178	174	171	165
3	199	150	169	160	118	136	179	178	178	177	172	164
4	174	158	166	150	134	138	169	177	177	174	171	162
5	162	167	169	172	127	138	163	176	176	172	163	162
6	155	166	148	143	100	137	171	175	173	174	170	166
7	155	156	156	148	100	136	165	177	176	174	168	169
8	154	157	152	141	110	137	166	177	176	176	168	167
9	155	154	158	146	115	140	166	176	175	176	170	164
10	150	158	158	156	113	141	166	176	176	177	168	163
11	156	147	153	148	108	142	170	177	178	176	162	164
12	152	137	147	148	105	148	170	177	175	174	167	168
13	155	148	151	171	103	157	170	182	176	176	167	156
14	157	152	149	148	113	155	169	180	175	176	168	162
15	149	142	154	151	119	149	170	180	175	173	172	167
16	147	135	162	144	114	147	183	170	171	174	171	166
17	156	151	155	139	117	144	175	180	174	174	169	158
18	163	155	158	139	122	144	172	179	175	175	167	154
19	160	159	164	131	114	151	171	183	177	171	170	159
20	150	172	167	139	209	150	172	177	175	169	161	164
21	156	169	160	159	118	155	175	172	173	171	161	165
22	156	154	153	151	120	155	175	173	173	173	162	165
23	161	149	154	173	118	153	171	178	169	175	170	170
24	159	151	158	136	125	157	170	179	175	175	169	162
25	168	163	155	112	127	159	170	176	177	175	162	162
26	162	155	175	113	125	152	174	176	176	174	157	163
27	155	155	161	120	126	160	170	179	177	176	158	171
28	152	172	149	113	132	161	172	175	177	176	164	163
29	153	169	138	117	133	159	173	178	178	173	183	147
30	153	171	149	122	-	159	169	177	172	173	180	152
31	151	-	183	125	-	170	-	178	-	172	172	-

Month	Thousands of second-foot days	Thousands of second-feet			Per square mile*	Run-off in inches
		Maximum	Minimum	Mean		
October.....	4,808	199	147	158	0.600	0.69
November.....	4,876	172	135	156	.592	.66
December.....	4,862	175	138	157	.596	.69
Calendar year						
January.....	4,413	173	112	142	.539	.62
February.....	3,403	134	100	117	.444	.48
March.....	4,593	170	131	148	.562	.65
April.....	5,133	185	153	171	.649	.72
May.....	5,457	183	170	177	.672	.75
June.....	5,255	182	169	175	.663	.75
July.....	5,397	177	169	174	.660	.77
August.....	5,203	183	157	168	.638	.74
September.....	4,862	171	147	163	.619	.69
Water year 1935-36.....	58,222	199	100	159	.603	8.22

*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°31'0", long. 43°27'45". Reference point of the Ogdensburg gage is 248.09 feet above mean tide at New York; reference point of the Oswego gage is 248.74 feet above mean tide at New York. All water-surface elevations are heights of water surface above mean tide at New York.

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

Records available.- January 1919 to September 1936 (only monthly discharge prior to October 1935).

Average discharge.- 17 years, 219,000 second-feet (does not include diversion from Lake Michigan).

Extremes.- Maximum daily discharge during year ending Sept. 30, 1936, 227,000 second-feet May 19, 1936, corresponding to a height of 244.60 feet on Ogdensburg gage; minimum daily discharge, 139,000 second-feet Feb. 7, 1936, corresponding to a height of 242.14 feet on Ogdensburg gage.

1919-36: Maximum monthly mean discharge, 289,000 second-feet June 1929, corresponding to a height of 248.46 feet on Oswego gage; minimum monthly mean discharge, 166,000 second-feet January 1935, corresponding to a height of 242.13 feet on Ogdensburg gage.

Remarks.- Records published herein, except mean discharge for water years ending Sept. 30 and computations for water year October 1935 to September 1936, have been furnished by the Corps of Engineers, U. S. Army. Records do not include flow diverted from Lake Michigan by Chicago Sanitary Canal. Diversions from Lake Erie and Niagara River by Black Rock Canal and Erie Canal (improved later to form New York State Barge Canal) are discharged into Lake Ontario at Oswego and at various points between Niagara River and Irondequoit Bay, except for water lost by seepage and evaporation.

Monthly discharge, in thousands of second-feet, 1919-36

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Mean (Year ending Sept. 30)	Oct.	Nov.	Dec.	Mean- (Calendar year)
1919	236	232	236	247	265	280	276	266	256	-	245	240	229	251
1920	212	205	207	228	229	228	231	228	226	226	223	218	222	221
1921	226	221	232	244	251	250	244	236	226	233	218	210	212	231
1922	209	197	212	240	243	252	257	247	236	228	227	216	204	229
1923	202	195	195	218	228	235	231	225	216	216	208	206	204	213
1924	209	204	206	223	238	242	242	237	229	220	225	216	207	223
1925	182	188	214	226	229	225	220	214	207	213	202	203	206	210
1926	195	179	185	213	223	223	220	215	212	206	215	223	222	210
1927	210	198	219	234	235	239	237	231	221	224	214	212	228	223
1928	236	228	230	246	248	248	252	242	239	236	231	229	230	239
1929	230	227	235	262	266	289	287	279	266	254	255	251	237	259
1930	249	251	268	278	280	281	280	266	253	262	240	228	220	258
1931	211	204	203	215	218	223	220	212	206	217	200	196	192	208
1932	201	214	217	231	239	236	234	227	216	217	208	203	201	219
1933	201	197	196	210	220	223	217	209	203	207	193	184	178	203
1934	168	172	182	202	205	201	196	187	181	187	177	171	167	184
1935	166	168	174	189	195	199	221	198	190	185	183	173	173	186

St. Lawrence River at Ogdensburg, N. Y.

(Continued)

Discharge, in thousands of second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	188	176	174	173	156	160	206	219	220	215	210	197
2	186	176	173	171	153	158	204	222	219	213	207	195
3	198	173	174	177	149	160	201	222	220	217	206	197
4	203	177	173	172	154	160	213	220	222	215	205	195
5	186	179	174	179	159	158	208	220	219	212	201	194
6	182	178	171	171	143	161	212	223	217	212	202	198
7	184	176	172	173	139	160	210	222	217	216	203	199
8	184	177	173	168	148	157	220	219	216	214	203	198
9	182	173	173	170	155	161	213	224	216	212	203	197
10	184	177	172	176	151	162	211	222	217	212	202	193
11	183	174	172	173	146	160	213	221	216	212	201	195
12	181	160	171	174	149	172	214	220	214	213	200	195
13	180	167	184	147	173	173	214	225	217	212	200	190
14	185	173	170	169	148	173	214	223	218	213	194	190
15	178	169	169	174	157	173	217	225	215	210	200	196
16	177	162	174	172	155	175	226	219	214	210	200	197
17	181	164	174	170	152	174	225	224	215	209	199	194
18	183	170	177	164	157	177	221	222	217	208	198	190
19	185	174	175	164	151	177	219	227	217	208	201	193
20	179	178	172	156	148	185	218	221	219	206	192	193
21	179	176	176	172	153	182	220	221	214	206	190	196
22	183	175	173	173	156	192	225	219	217	207	194	195
23	181	171	170	174	154	184	221	219	215	210	200	194
24	179	172	176	167	156	182	219	224	215	209	200	196
25	189	174	174	148	155	194	219	220	217	210	194	194
26	182	173	173	156	154	195	222	218	214	210	193	193
27	182	174	176	158	155	199	217	221	214	210	193	198
28	178	176	173	158	159	203	221	219	216	210	191	194
29	176	177	169	151	159	202	220	220	216	208	198	190
30	178	175	169	147	-	201	221	218	214	208	202	189
31	178	-	172	151	-	209	-	220	-	208	198	-

Month	Thousands of second-foot days	Thousands of second-feet			Per square mile*	Run-off in inches
		Maximum	Minimum	Mean		
October.....	5,674	203	176	183	0.608	0.70
November.....	5,196	179	160	173	.574	.64
December.....	5,351	177	167	173	.574	.66
Calendar year						
January.....	5,185	184	147	167	.554	.64
February.....	4,418	159	139	152	.505	.54
March.....	5,479	209	157	177	.588	.66
April.....	6,484	226	201	216	.717	.80
May.....	6,859	227	218	221	.734	.85
June.....	6,497	222	214	217	.720	.80
July.....	6,535	217	206	211	.701	.81
August.....	6,180	210	190	199	.661	.76
September.....	5,837	199	189	195	.647	.72
Water year 1935-36.....	69,695	227	139	190	.631	8.60

*Expressed in second-feet.

Pigeon River at International Bridge, Minn.

(International gaging station)

Location.- Wire-weight gage, lat. 48° 1', long. 89° 43', in sec. 20, T. 64 N., R. 6 E. Fourth principal meridian, on International Bridge, 9.3 miles above mouth. Prior to Sept. 2, 1936, a staff gage at site 100 feet upstream. Gages set to same datum.

Drainage area.- 590 square miles.

Records available.- April 1924 to September 1936 in reports of U. S. Geological Survey; October 1925 to September 1932 in House Document 92, 73d Congress, 1st Session; June 1921 to September 1923 in reports of the Dominion Water Power and Hydrometric Bureau, Department of the Interior, Canada.

Average discharge.- 13 years (1923-36), 471 second-feet.

Extremes.- Maximum discharge observed during year, 7,390 second-feet May 7 (gage height, 6.8 feet); minimum daily discharge, 75 second-feet (estimated) Feb. 16 to Mar. 10, Aug. 19-27; minimum gage height, 0.45 foot, former site, Aug. 19-27.

1923-36: Maximum discharge observed, 11,000 second-feet May 5, 1934 (gage height, 7.6 feet) (date given in previous water-supply papers in error); minimum, 30 second-feet Feb. 11 to Mar. 5, 1926 (published in House Document 92, 73d Congress, 1st Session).

Remarks.- Records fair except those for Jan. 29 to Mar. 31, which are poor. Discharge for period of ice effect, Nov. 7 to Apr. 17, computed on basis of four discharge measurements, gage heights, and weather records. Gage read once daily. This station is one of the international gaging stations maintained by the United States under agreement with Canada.

Rating table, Oct. 1, 1935 to Sept. 1, 1936, except period of ice effect (gage height, in feet,

and discharge, in second-feet)									
0.4	66	1.0	206	2.5	1,075	4.0	2,450	5.5	4,530
.6	104	1.5	420	3.0	1,490	4.5	3,025	6.0	5,590
.8	148	2.0	715	3.5	1,930	5.0	3,710	6.5	7,050
								7.0	8,300

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	125	430	148	125	88	75	125	5,340	1,000	475	94	94
2	125	530	148	125	88	75	125	7,050	925	448	94	88
3	125	530	148	125	88	75	125	4,020	790	420	84	84
4	125	420	148	125	86	75	125	3,430	530	420	84	79
5	125	370	148	123	84	75	125	3,430	475	395	84	79
6	125	322	148	121	84	75	136	4,530	420	370	84	80
7	125	279	148	119	83	75	136	7,390	475	370	84	80
8	125	240	148	117	82	75	148	5,840	475	346	84	80
9	125	253	176	117	81	75	162	4,720	475	322	84	80
10	125	206	162	114	80	75	176	3,710	448	300	84	84
11	125	206	162	114	80	80	191	3,430	448	300	84	82
12	125	191	148	112	80	80	260	3,300	420	279	84	82
13	125	176	136	110	80	80	395	2,900	420	260	84	82
14	125	176	136	110	80	80	530	2,560	420	240	84	82
15	125	176	136	110	80	80	715	2,340	420	223	80	100
16	125	176	136	110	75	80	1,000	2,130	420	223	84	100
17	148	176	139	110	75	80	1,300	1,930	420	206	84	92
18	148	176	139	108	75	80	1,460	1,930	420	206	84	90
19	176	176	136	106	75	80	1,550	1,730	448	191	75	86
20	176	176	134	104	75	80	1,640	1,640	448	125	75	96
21	176	176	132	104	75	90	1,640	1,550	475	125	75	92
22	176	162	132	102	75	95	1,730	1,460	650	114	75	90
23	162	162	132	100	75	100	1,730	1,460	790	114	75	82
24	162	162	132	98	75	105	1,640	1,460	715	114	75	82
25	162	162	132	96	75	110	1,640	1,460	715	104	75	80
26	148	162	130	94	75	115	1,640	1,380	715	104	75	80
27	148	162	127	94	75	120	1,640	1,300	650	104	75	80
28	148	162	125	94	75	125	1,730	1,220	590	104	94	80
29	162	156	125	92	75	130	2,900	1,150	530	94	114	80
30	148	154	125	90	-	130	3,570	1,150	475	94	114	80
31	206	-	125	90	-	125	-	1,030	-	94	104	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	4,446	206	125	143	0.242	0.28
November.....	6,965	530	154	232	.393	.44
December.....	4,341	176	125	140	.237	.27
Calendar year 1935.....	199,957	5,340	125	548	.929	12.59
January.....	3,359	125	90	108	.183	.21
February.....	2,294	88	75	79.1	.134	.14
March.....	2,795	130	75	90.2	.153	.18
April.....	30,284	3,570	125	1,009	1.71	1.91
May.....	87,920	7,390	1,030	2,836	4.81	5.54
June.....	16,592	1,000	420	553	.937	1.05
July.....	7,284	475	94	235	.398	.46
August.....	2,629	114	75	84.8	.144	.17
September.....	2,562	100	79	85.4	.145	.16
Water year 1935-36.....	171,461	7,390	75	468	.793	10.61

Poplar River at Lutsen, Minn.

Location.- Chain gage, lat. 47°38', long. 90°42', in sec. 33, T. 60 N., R. 3 W., on Highway bridge about 1,500 feet above mouth and about 200 feet above new concrete bridge on U. S. Highway 61 at Lutsen. Zero of gage is 690.99 feet above mean sea level.

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 1935.

Extremes.- Maximum discharge observed during year, 790 second-feet May 6, 7 (gage height, 7.95 feet); minimum, 7 second-feet Aug. 10-13.

1912-17, 1928-35: Maximum discharge, 1,390 second-feet Apr. 25, 1916 (gage height, 4.7 feet, old site and datum); minimum, that of Aug. 10-13, 1936.

Remarks.- Records poor. Discharge for periods of ice effect, Nov. 14-25, Nov. 29 to Dec. 6, Dec. 10-13, Dec. 17 to Mar. 21, computed on basis of four discharge measurements, gage heights, and weather records. Discharge for Oct. 13 to Nov. 4 computed by shifting-control method based on one discharge measurement, gage heights, and engineers' notes. Discharge Aug. 30 to Sept. 13, when observer's readings were inconsistent, computed on basis of two discharge measurements and record of Baptism River near Beaver Bay, Minn. Discharge interpolated Nov. 28. Gage read once daily.

Rating tables, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 13 to Nov. 4)

Oct. 1-29		Oct. 30 to Sept. 30	
3.0	41	1.9	7
3.1	46	2.0	8
3.2	55	2.5	22
		3.0	65
		3.5	115
		4.0	163
		4.5	223
		5.0	290
		5.5	363
		6.0	440
		6.5	522
		7.0	610
		8.0	790

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	70	55	48	26	20	54	229	179	48	13	20
2	48	70	54	47	24	20	53	229	168	44	13	17
3	48	65	53	47	24	20	53	212	162	42	13	16
4	48	65	54	47	22	20	51	218	157	39	13	16
5	47	65	59	47	21	20	50	754	157	39	12	16
6	45	63	65	46	21	20	49	790	157	38	12	15
7	44	60	90	45	21	20	49	790	162	37	10	15
8	44	58	85	45	22	20	49	772	157	35	10	15
9	45	63	75	47	21	20	52	772	146	33	8	15
10	44	61	65	49	21	23	59	754	125	32	7	15
11	44	61	55	49	20	23	105	754	115	30	7	15
12	44	59	53	49	20	26	115	754	115	29	7	15
13	48	54	53	46	20	26	125	736	110	28	7	15
14	52	57	55	45	20	26	135	736	110	28	12	22
15	52	58	53	45	20	26	140	646	110	32	11	22
16	52	58	53	45	20	26	152	574	105	30	8	21
17	52	57	50	44	20	28	179	522	105	32	8	18
18	48	57	50	44	20	31	201	424	105	30	8	17
19	45	59	49	42	19	34	201	348	105	28	8	25
20	42	59	49	39	19	38	201	290	95	23	6	24
21	41	58	49	39	19	45	206	248	85	23	8	22
22	41	55	49	35	19	53	212	255	85	22	8	22
23	39	58	47	35	19	54	212	255	75	22	8	20
24	38	55	47	32	19	59	212	255	80	23	8	18
25	38	54	46	32	20	61	212	248	59	22	8	14
26	39	54	46	32	20	64	218	229	56	20	8	14
27	40	56	46	30	20	65	218	223	55	18	8	13
28	40	55	46	30	20	70	218	201	54	18	19	11
29	43	54	46	30	20	64	218	190	52	17	80	9
30	70	55	46	29	-	59	223	190	49	16	50	9
31	75	-	46	29	-	59	-	184	-	15	30	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,445	75	38	46.6	0.388	0.39
November.....	1,773	70	54	59.1	.428	.48
December.....	1,689	90	46	54.5	.395	.46
Calendar year 1935.....	42,168	1,000	25	116	.641	11.38
January.....	1,269	49	29	40.9	.286	.34
February.....	597	26	19	20.6	.149	.16
March.....	1,140	70	20	36.8	.267	.31
April.....	4,222	223	49	141	1.02	1.14
May.....	13,732	790	194	445	3.22	3.71
June.....	3,295	179	49	110	.797	.89
July.....	893	48	13	28.8	.209	.24
August.....	450	80	7	13.9	.101	.12
September.....	506	25	9	16.9	.122	.14
Water year 1935-36.....	31,041	790	7	84.8	.614	6.38

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 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 1936.

Extremes.- Maximum discharge during year, 3,120 second-feet May 1 (gage height, 5.52 feet); minimum, 2.0 second-feet Aug. 20 (gage height, 1.55 feet).

1928-29, 1930-36: Maximum observed discharge, 3,350 second-feet Nov. 10, 1932 (gage height, 6.00 feet); minimum, 1.5 second-feet Aug. 13, 1934.

Remarks.- Records excellent except those for periods of ice effect, Nov. 23-25, Nov. 29 to Apr. 15, which were computed on basis of five measurements, gage heights, weather records, and comparison with records for Poplar River at Lutsen and Pigeon River at International Bridge, and are fair.

Rating table, water year 1935-36 except periods of ice effect, (gage height, in feet, and discharge, in second-feet)

1.5	1.5	2.6	56	4.0	1,000
1.6	2.4	2.6	77	4.2	1,260
1.7	3.8	3.0	111	4.4	1,530
1.8	5.6	3.2	174	4.6	1,810
2.0	10	3.4	272	4.8	2,090
2.2	20	3.6	400	5.0	2,370
2.4	37	3.8	660	5.5	3,120

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	324	83	41	16	11	45	2,440	170	43	3.2	15
2	70	272	81	41	15	11	44	2,230	160	64	4.3	10
3	105	225	73	42	14	12	43	1,400	131	68	3.8	8.8
4	114	192	74	42	13	12	42	1,170	111	73	3.2	7.8
5	111	164	69	42	12	12	41	1,060	99	56	3.4	7.2
6	103	128	68	41	11	12	42	1,010	106	47	3.1	6.8
7	91	131	80	38	11	13	45	1,090	139	38	2.6	6.2
8	88	121	111	36	11	13	42	1,050	142	29	2.4	5.4
9	87	128	105	36	11	13	47	961	139	21	2.4	4.9
10	85	133	84	37	12	14	66	870	119	16	2.4	6.6
11	80	114	73	37	12	16	170	828	97	14	2.7	9.3
12	75	123	68	36	12	18	358	681	81	11	2.8	8.1
13	74	118	66	37	12	18	365	807	69	9.5	3.0	7.8
14	74	111	61	36	12	18	420	723	61	7.8	3.1	36
15	78	103	58	36	12	17	612	556	55	7.6	3.7	42
16	90	111	56	35	12	16	702	427	80	6.8	3.7	25
17	234	101	54	33	12	15	807	358	107	6.4	4.0	18
18	241	95	54	32	11	15	1,000	318	109	6.4	3.0	15
19	202	93	50	31	11	16	1,420	313	101	5.8	2.1	13
20	174	102	45	29	10	22	1,530	284	80	5.8	2.0	30
21	183	111	40	28	10	26	1,250	256	65	5.6	2.2	19
22	220	108	41	26	10	36	1,120	225	55	5.4	2.2	22
23	202	111	44	25	10	47	1,030	271	47	5.2	3.4	16
24	174	106	47	21	10	50	768	318	42	4.9	7.4	12
25	150	103	44	20	10	50	780	284	34	4.3	7.0	10
26	122	101	45	19	11	50	961	393	32	4.3	6.0	10
27	114	87	42	19	10	50	1,040	365	29	6.1	5.4	10
28	105	80	42	19	11	50	1,030	289	24	6.6	60	9.8
29	95	81	43	18	10	52	1,390	236	22	5.1	54	9.5
30	95	81	42	17	-	50	1,390	202	27	4.5	32	9.3
31	179	-	41	16	-	47	-	179	-	3.8	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,873	241	58	125	0.919	1.06
November.....	3,858	324	80	129	.949	1.06
December.....	1,884	111	40	60.8	.447	.62
Calendar year 1935.....	71,049	1,570	26	195	1.43	19.43
January.....	966	42	16	31.2	.229	.26
February.....	354	16	10	11.5	.085	.09
March.....	802	52	11	25.9	.190	.22
April.....	18,597	1,530	41	620	4.56	5.09
May.....	21,584	2,440	179	696	5.12	5.90
June.....	2,523	170	22	84.1	.612	.69
July.....	581.9	68	3.8	18.8	.138	.16
August.....	256.0	60	2.0	8.58	.063	.07
September.....	410.5	42	4.9	13.7	.101	.11
Water year 1935-36.....	55,679.4	2,440	2.0	152	1.12	15.23

Tahquamenon River at Newberry, Mich.

Location.- Staff gage, lat. 46°22', long. 85°31', at highway bridge between secs. 23 and 24, T. 46 N., R. 10 W., three-quarters of a mile north of Newberry.

Drainage area.- 200 square miles.

Records available.- August 1934 to September 1936 (discontinued).

Extremes.- Maximum discharge observed during year, 654 second-feet Apr. 17 (gage height, 12.35 feet); minimum, 74 second-feet July 20 (gage height, 801 feet). 1934-36: Maximum and minimum discharge occurred in 1936.

Remarks.- Records good except those for period of ice effect Dec. 21 to Mar. 9, which were computed on basis of gage heights and weather records and are poor. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	152	195	299	120	110	110	441	558	152	113	86	208
2	162	195	311	120	110	120	427	590	162	113	82	195
3	184	195	335	120	110	120	427	622	162	108	82	184
4	217	195	335	130	110	120	413	638	152	104	82	173
5	228	195	348	130	100	130	387	622	142	100	82	162
6	251	206	335	130	100	130	374	622	142	95	82	152
7	263	217	311	140	100	130	361	622	142	95	82	152
8	275	239	299	140	100	140	348	606	142	90	86	152
9	275	263	287	140	100	140	323	590	142	95	82	142
10	275	287	287	140	100	152	335	574	142	104	82	152
11	263	299	263	130	100	162	348	543	132	108	78	173
12	251	311	239	130	100	184	387	513	132	108	78	217
13	239	299	239	130	100	184	469	483	122	100	82	239
14	228	287	239	130	100	195	558	455	122	90	82	263
15	228	275	228	130	100	195	606	413	122	86	95	287
16	217	251	217	130	100	195	638	374	122	82	100	299
17	206	239	206	130	100	206	638	335	132	78	104	311
18	206	228	195	120	100	206	638	299	142	78	104	311
19	195	228	173	120	100	206	622	275	152	78	104	311
20	184	239	173	120	100	217	622	251	152	74	104	299
21	195	239	160	120	100	217	590	228	132	74	100	275
22	206	173	140	120	100	228	558	206	132	78	122	263
23	217	184	140	110	100	239	543	195	122	86	132	239
24	228	217	130	110	100	275	513	217	122	90	142	228
25	239	228	130	110	100	299	498	217	113	90	152	217
26	239	228	120	110	100	311	498	228	113	90	162	206
27	239	251	120	110	110	323	498	217	113	90	173	206
28	228	311	120	110	110	348	498	206	122	90	173	206
29	217	299	120	110	110	374	528	184	122	86	195	195
30	206	311	120	110	-	413	558	173	122	86	195	195
31	195	-	120	110	-	427	-	162	-	86	206	-
Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches						
October.....	8,908	275	152	223	1.12	1.29						
November.....	7,284	311	173	243	1.22	1.36						
December.....	6,729	348	120	217	1.08	1.24						
Calendar year 1935.....	80,585	590	90	221	1.10	14.95						
January.....	3,810	140	110	123	.615	.71						
February.....	2,970	110	100	102	.510	.55						
March.....	6,696	427	110	216	1.08	1.24						
April.....	14,644	638	323	483	2.44	2.72						
May.....	12,218	638	162	394	1.97	2.27						
June.....	4,023	162	113	134	.670	.75						
July.....	2,846	113	74	91.8	.459	.53						
August.....	3,511	206	78	113	.565	.65						
September.....	6,610	311	142	220	1.10	1.23						
Water year 1935-36.....	78,248	638	74	214	1.07	14.54						

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

Location.- Lat. 45°52', long. 86°4', 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 1936.

Average discharge.- 22 years, 1,723 second-feet.

Extremes.- Maximum daily discharge during year, 7,770 second-feet May 4; minimum, 467 second-feet Aug. 7.

1914-36: 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. Besides regulation by power plant at which station is located, flow is regulated by a 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., based on load-discharge rating of units by U. S. Geological Survey.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	670	1,320	619	900	857	762	2,180	6,060	1,690	1,100	560	1,070
2	783	1,400	1,020	929	845	790	1,770	6,960	1,690	1,110	599	1,030
3	825	1,120	912	916	833	801	1,650	7,430	1,690	1,150	548	921
4	995	1,290	924	1,050	807	810	1,480	7,770	1,790	1,080	570	955
5	1,110	1,360	938	1,020	836	772	1,270	6,660	1,600	1,030	571	906
6	1,180	1,410	937	1,000	791	789	1,390	7,160	1,670	1,150	496	834
7	1,220	1,320	1,020	1,030	783	837	1,440	7,450	1,470	1,060	487	879
8	1,240	1,390	992	1,020	708	837	1,440	7,460	1,720	1,000	487	978
9	1,220	1,430	1,150	1,050	744	982	1,490	6,950	1,780	1,040	485	1,030
10	1,090	1,430	1,150	1,100	718	897	1,510	6,920	2,210	961	470	966
11	1,040	1,240	1,130	1,100	708	1,030	1,860	6,710	2,360	925	510	1,140
12	991	1,330	1,140	926	734	1,150	1,580	6,240	2,410	855	508	1,260
13	965	1,380	1,130	949	687	1,140	2,640	4,980	2,390	827	532	1,280
14	1,290	1,190	1,120	930	720	1,090	4,440	4,960	1,960	767	552	1,760
15	1,280	1,080	968	860	732	945	5,180	4,340	2,190	708	608	2,390
16	1,440	1,120	1,110	854	659	1,040	4,790	4,140	1,610	664	681	2,110
17	1,780	1,200	1,090	862	797	967	4,720	4,260	1,690	644	772	1,600
18	1,710	1,320	1,100	825	760	966	4,350	3,410	1,660	652	943	1,470
19	1,690	1,300	1,130	869	788	938	4,780	3,690	1,640	644	902	1,340
20	960	1,180	1,060	998	846	975	4,940	2,630	1,470	684	920	1,030
21	1,300	1,140	1,010	960	841	1,050	5,260	3,140	1,250	660	967	1,120
22	1,330	1,050	967	955	781	1,080	4,960	3,180	1,300	654	1,610	1,080
23	1,300	913	914	937	806	1,330	3,870	2,940	1,220	659	1,940	1,060
24	1,320	829	763	934	813	2,300	3,750	2,470	1,200	628	1,800	1,100
25	1,690	944	786	886	856	2,400	4,150	2,760	1,200	579	1,860	1,070
26	1,510	949	738	850	861	2,410	3,810	3,370	1,120	616	1,440	1,030
27	958	1,180	747	903	876	2,340	4,120	2,750	1,130	632	1,310	937
28	1,380	1,360	710	913	855	2,060	4,500	2,760	1,020	592	1,170	1,020
29	1,300	1,210	724	858	807	1,690	5,230	2,400	1,040	565	1,140	941
30	1,200	1,090	868	869	-	1,730	6,140	2,440	1,100	560	1,030	861
31	1,240	-	941	861	-	2,180	-	1,990	-	582	1,090	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	38,027	1,780	670	1,227	0.685	0.79
November.....	36,475	1,430	829	1,216	.679	.76
December.....	30,108	1,150	710	971	.542	.62
Calendar year 1935.....	616,106	5,600	670	1,688	.943	12.82
January.....	29,194	1,100	625	942	.526	.61
February.....	22,849	976	659	738	.440	.47
March.....	35,003	2,410	782	1,256	.703	.81
April.....	100,670	6,140	1,270	3,356	1.87	2.09
May.....	148,400	7,770	1,990	4,723	2.64	3.04
June.....	48,650	2,410	1,020	1,623	.907	1.01
July.....	24,788	1,150	560	800	.447	.52
August.....	27,478	1,940	467	886	.495	.57
September.....	35,408	2,390	834	1,180	.659	.74
Water year 1935-36.....	579,065	7,770	467	1,582	.884	12.05

Menominee River below Koss, Mich.

Location.- Lat. 45°22', long. 87°39', in sec. 9, T. 34 N., R. 27 W., at pedal 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 1936.

Average discharge.- 23 years, 3,121 second-feet.

Extremes.- Maximum daily discharge during year, 13,000 second-feet May 9; minimum, 575 second-feet Jan. 25.
1913-36: 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 based on load-discharge rating of units by U. S. Geological Survey.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,280	1,880	1,800	1,030	912	1,390	4,040	10,400	3,050	1,940	768	1,910
2	1,800	2,490	1,460	1,500	1,490	1,060	4,290	10,200	2,840	1,220	672	1,940
3	1,280	1,840	1,870	1,580	960	1,340	4,520	9,720	2,750	1,730	720	1,730
4	2,020	2,240	1,940	1,900	1,150	1,150	4,800	11,300	2,620	1,840	720	2,020
5	1,370	1,910	1,730	1,940	1,300	1,670	4,140	11,800	2,620	1,010	672	1,810
6	852	2,300	1,730	1,210	1,300	1,200	2,160	11,500	2,400	1,500	1,010	1,940
7	1,370	2,380	2,020	1,480	1,010	972	2,420	11,400	1,820	1,730	1,010	1,300
8	1,870	2,400	1,940	1,730	864	1,590	2,770	11,300	2,260	1,920	912	1,080
9	2,090	2,400	1,510	1,660	1,200	935	2,840	13,000	2,690	1,480	728	1,730
10	1,960	2,210	1,730	1,370	1,010	1,520	2,730	12,000	2,590	1,440	864	1,940
11	1,730	1,630	1,230	1,370	1,440	1,300	5,390	11,000	2,500	1,580	816	1,730
12	1,940	2,320	1,440	1,800	1,340	1,800	4,740	9,950	2,780	1,370	720	1,220
13	1,560	2,590	1,870	1,300	846	1,370	4,600	9,420	2,780	1,020	720	1,800
14	1,510	2,490	1,940	1,510	1,300	1,660	5,760	9,410	2,980	690	720	1,940
15	1,660	2,500	1,940	1,660	1,200	2,210	6,220	8,630	2,450	1,510	720	2,310
16	2,300	1,730	1,510	1,730	912	1,010	7,730	7,610	2,590	1,080	816	2,300
17	1,800	2,230	1,940	1,730	720	1,580	9,620	7,260	2,880	956	624	2,780
18	2,260	1,520	1,730	1,500	912	1,510	9,690	6,220	2,780	1,440	624	2,590
19	2,550	1,940	1,640	1,080	1,060	2,090	10,300	6,130	2,830	792	816	2,590
20	2,120	2,230	1,570	1,150	1,100	1,440	8,280	5,860	2,690	1,080	1,580	2,670
21	2,310	2,400	1,370	1,440	1,100	1,920	8,110	3,980	1,910	1,080	1,330	1,300
22	1,730	2,110	1,580	1,730	1,150	1,960	7,640	3,580	1,870	1,010	1,300	2,020
23	2,150	1,490	1,730	1,510	1,300	1,670	7,610	4,230	1,870	1,080	1,940	1,940
24	2,230	1,660	1,370	969	1,200	1,950	7,030	4,080	1,940	880	1,980	1,440
25	2,020	1,510	1,370	575	1,150	3,300	7,130	3,660	1,800	1,730	3,080	1,370
26	2,290	1,660	1,370	1,490	1,100	4,270	7,470	3,320	1,870	1,220	2,700	1,940
27	2,350	1,660	1,510	908	1,300	4,140	7,200	3,520	1,660	793	2,210	1,870
28	1,580	2,160	1,300	1,390	1,200	4,590	6,590	3,970	1,730	764	2,300	1,140
29	2,290	1,660	1,220	1,390	1,150	5,380	7,130	3,820	1,160	912	2,500	816
30	2,300	2,110	1,660	1,490	-	4,660	9,360	3,200	1,720	720	2,400	1,560
31	1,720	-	1,150	1,470	-	4,940	-	2,420	-	820	2,110	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	58,672		2,850	852	1,893	0.499	0.58					
November.....	61,760		2,590	1,490	2,059	.543	.61					
December.....	50,170		2,020	1,150	1,618	.427	.49					
Calendar year 1935.....	1,067,042		13,600	720	2,923	.771	10.47					
January.....	44,092		1,940	575	1,422	.375	.43					
February.....	32,676		1,490	720	1,127	.297	.32					
March.....	67,577		5,380	935	2,180	.575	.66					
April.....	182,310		10,300	2,160	6,077	1.60	1.76					
May.....	235,990		13,000	2,420	7,548	1.99	2.29					
June.....	70,450		3,050	1,130	2,349	.620	.65					
July.....	38,117		1,940	690	1,230	.325	.37					
August.....	40,052		3,050	624	1,292	.341	.39					
September.....	54,726		2,780	816	1,824	.481	.54					
Water year 1935-36.....	934,622		13,000	575	2,554	.674	9.15					

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 and 6¼ miles south of Florence.

Drainage area.- 543 square miles (revised).

Records available.- October 1923 to September 1936; January 1914 to September 1923 at station 4 miles upstream, where drainage area was 511 square miles (revised).

Average discharge.- 13 years (1923-36) 404 second-feet.

Extremes.- Maximum daily discharge during year, 1,960 second-feet May 8; minimum, 2 second-feet July 19, 28, Aug. 1, 2, 9.
1923-36: 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. based on load-discharge rating of units by the U. S. Geological Survey.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	325	379	310	226	183	166	510	1,340	455	226	2	650
2	226	511	226	188	113	183	472	1,550	391	226	2	502
3	331	379	355	226	183	183	381	1,720	438	226	122	324
4	325	461	216	226	127	183	390	1,760	339	240	54	325
5	333	437	216	226	183	226	412	1,660	339	197	54	334
6	325	383	226	226	141	162	296	1,730	325	197	54	322
7	325	455	240	226	169	164	339	1,930	339	166	54	325
8	325	325	339	226	151	193	339	1,960	339	155	54	226
9	218	435	240	226	122	212	344	1,960	403	189	2	272
10	233	430	240	226	169	158	485	1,760	390	129	17	216
11	325	491	325	226	123	226	546	1,450	339	129	81	233
12	333	339	226	184	169	226	858	1,400	335	52	92	334
13	248	363	240	212	152	226	912	1,160	329	112	106	303
14	325	388	240	212	155	226	1,240	872	205	116	70	382
15	339	459	339	226	168	169	1,340	859	333	116	21	559
16	387	383	226	226	127	226	1,340	784	216	116	41	568
17	460	226	240	226	164	226	1,340	754	378	129	122	543
18	460	339	226	226	169	226	1,340	673	523	181	95	391
19	529	339	325	198	155	226	1,290	647	483	2	143	325
20	352	339	147	212	127	226	1,180	650	339	142	127	380
21	391	333	129	212	165	226	1,180	635	327	118	214	343
22	394	228	104	198	183	339	1,180	546	351	114	448	332
23	399	258	226	198	135	226	1,100	549	339	116	620	220
24	391	226	271	198	162	432	944	648	220	162	608	230
25	394	226	172	162	162	605	915	642	226	169	608	198
26	441	339	226	169	152	644	915	648	226	2	605	189
27	226	339	226	122	169	635	915	659	226	135	517	107
28	339	339	226	189	141	615	915	580	113	122	558	220
29	325	334	212	162	183	583	995	432	226	122	716	226
30	339	226	212	169	-	575	1,100	369	226	51	639	226
31	325	-	226	198	-	536	-	381	-	99	650	-
Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches						
October.....	10,688	529	218	345	0.635	0.73						
November.....	10,699	511	226	357	.657	.73						
December.....	7,352	339	104	237	.436	.50						
Calendar year 1935.....	166,854	1,490	104	457	.842	11.42						
January.....	6,347	226	122	205	.378	.44						
February.....	4,502	183	113	155	.285	.31						
March.....	9,505	644	158	307	.665	.65						
April.....	25,513	1,340	296	850	1.57	1.75						
May.....	32,708	1,960	369	1,055	1.94	2.24						
June.....	9,698	523	113	323	.595	.66						
July.....	4,236	240	2	137	.252	.29						
August.....	7,495	716	2	242	.446	.51						
September.....	8,805	650	107	327	.602	.67						
Water year 1935-36.....	138,549	1,960	2	379	.698	9.48						

STREAMS TRIBUTARY TO LAKE MICHIGAN

Pike River at Amberg, Wis.

Location.- Staff gage, lat. 45°29', long. 88°0', 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 (revised).

Records available.- February 1914 to September 1936.

Average discharge.- 22 years, 231 second-feet.

Extremes.- Maximum discharge observed during year, 741 second-feet Apr. 15 (gage height, 3.84 feet); minimum, 80 second-feet Aug. 9 (gage height, 1.54 feet).

1914-36: Maximum discharge, 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. 20-27, Nov. 29 to Mar. 26, which are poor and were computed on basis of three discharge measurements, gage heights, observer's notes, and weather records. Discharge interpolated for Oct. 2, 13, Nov. 3, July 26, Aug. 23.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, discharge, in second-feet)

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

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	236	196	140	114	140	383	466	196	131	86	150
2	136	222	184	150	106	131	336	502	196	122	86	131
3	150	209	161	161	114	140	292	466	184	122	86	131
4	150	196	161	172	106	172	263	432	172	122	86	131
5	150	196	150	184	99	150	263	416	161	114	86	114
6	140	196	150	172	99	122	236	466	161	106	86	114
7	140	184	150	161	106	122	249	616	172	106	86	140
8	140	184	150	150	114	131	236	539	150	114	80	161
9	131	184	161	172	99	150	263	466	161	99	80	131
10	131	209	172	161	106	161	292	416	161	92	92	131
11	131	236	150	150	106	184	356	367	150	99	92	131
12	131	236	140	140	106	196	466	336	150	99	96	140
13	140	209	140	114	106	184	677	306	131	92	86	150
14	150	209	140	131	106	161	656	277	140	92	86	150
15	161	184	140	150	106	161	741	249	140	86	86	150
16	150	184	140	131	106	161	698	236	150	86	92	172
17	150	184	150	131	106	150	577	222	150	86	92	161
18	172	172	140	122	114	140	502	222	161	92	99	140
19	172	184	140	114	114	196	432	249	140	86	106	131
20	161	172	131	114	114	196	399	249	131	86	99	114
21	161	172	131	106	114	196	367	222	131	86	106	151
22	161	172	122	114	114	263	352	222	122	99	140	122
23	161	172	122	106	114	321	352	277	114	122	136	122
24	150	161	122	106	122	466	356	336	122	114	131	114
25	150	161	114	106	131	416	336	277	122	106	184	114
26	150	161	114	106	122	466	352	263	114	102	196	106
27	140	184	114	106	122	432	352	306	114	99	184	114
28	140	209	114	106	122	466	336	263	114	92	222	114
29	150	209	114	106	131	466	383	222	114	92	249	114
30	150	209	122	114	-	466	466	209	131	92	249	106
31	184	-	131	114	-	383	-	196	-	86	172	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	4,805	184	122	149	0.596	0.69
November.....	5,950	263	161	196	.780	.87
December.....	4,366	196	114	141	.564	.65
Calendar year 1935.....	76,472	875	61	210	.840	11.37
January.....	4,110	184	106	133	.532	.61
February.....	3,239	131	99	112	.448	.48
March.....	7,489	466	122	242	.966	1.12
April.....	11,829	741	236	394	1.58	1.76
May.....	10,291	616	196	332	1.33	1.53
June.....	4,355	196	114	145	.580	.65
July.....	3,122	131	86	101	.404	.47
August.....	3,747	249	80	121	.484	.56
September.....	3,930	172	106	131	.524	.58
Water year 1935-36.....	66,933	741	80	183	.732	9.97

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 (revised).

Records available.- August 1912 to September 1936.

Average discharge.- 24 years, 489 second-feet.

Extremes.- Maximum daily discharge during year, 1,550 second-feet May 9; minimum, 7 second-feet one or more times each month.

1912-36: 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 5,785 second-foot days). Records of daily discharge computed by Wisconsin Public Service Corporation, based on load-discharge rating by U. S. Geological Survey.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	336	417	205	79	243	7	613	1,200	907	280	183	341
2	279	483	342	144	7	425	547	1,110	982	324	7	512
3	185	237	262	42	350	124	734	1,020	882	127	233	421
4	128	888	314	149	179	500	510	1,590	897	7	193	421
5	266	607	331	7	108	234	62	1,130	765	8	144	333
6	40	467	186	397	174	514	913	1,410	486	333	27	38
7	97	282	593	228	169	165	853	1,270	7	330	121	309
8	62	337	157	429	115	7	831	1,440	572	288	17	513
9	174	139	457	281	7	867	743	1,550	684	228	50	426
10	200	113	302	30	208	487	670	1,210	255	270	85	194
11	317	870	585	210	292	655	366	1,010	234	118	109	337
12	197	617	454	26	199	654	7	1,140	189	17	126	317
13	117	874	322	383	210	979	573	1,070	32	335	51	35
14	426	489	137	291	58	980	656	615	17	134	43	328
15	287	341	7	173	78	29	697	785	119	221	52	572
16	259	350	361	250	81	878	695	657	70	73	42	247
17	597	7	297	250	560	827	813	858	180	71	7	414
18	570	378	256	316	164	228	1,240	889	194	22	7	628
19	269	173	307	7	175	452	1,280	766	208	7	7	787
20	27	495	368	373	143	642	1,100	938	137	66	7	7
21	858	278	538	366	139	241	1,130	676	7	121	13	478
22	897	215	385	343	18	7	1,040	551	311	122	370	319
23	719	95	485	325	7	755	1,020	367	295	76	79	212
24	239	7	73	456	595	794	1,110	7	235	7	465	174
25	122	352	7	467	665	759	580	695	316	7	982	175
26	369	350	477	563	552	804	652	599	294	7	937	104
27	7	448	445	357	280	450	1,120	593	249	53	773	7
28	479	183	361	186	385	239	838	624	107	96	849	334
29	119	440	7	184	262	7	912	862	239	107	895	119
30	259	226	154	121	-	441	953	13	320	235	7	121
31	51	-	110	97	-	534	-	118	-	133	564	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,942	867	7	288	0.504	0.68
November	11,058	883	7	369	.646	.72
December	9,106	593	7	294	.515	.59
Calendar year 1935	162,654	1,410	7	446	.781	10.60
January	7,530	563	7	243	.426	.49
February	6,423	665	7	221	.387	.42
March	14,685	980	7	474	.830	.96
April	23,288	1,290	7	776	1.35	1.52
May	26,763	1,550	7	863	1.51	1.74
June	9,970	962	7	332	.581	.65
July	4,223	335	7	136	.238	.27
August	7,445	982	7	240	.420	.48
September	9,191	757	7	306	.536	.60
Water year 1935-36	138,624	1,550	7	379	.664	9.02

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 $2\frac{1}{2}$ miles south of Gillett.

Drainage area.- 678 square miles.

Records available.- June 1906 to March 1909; January 1914 to September 1936.

Average discharge.- 22 years (1914-36), 600 second-feet.

Extremes.- Maximum discharge during year, 2,100 second-feet Mar. 29; maximum gage height, 7.38 feet Mar. 26, 27 (ice jam); minimum, 172 second-feet Aug. 15 (gage height, 0.50 foot).

1906-9, 1914-36: Maximum discharge, 6,470 second-feet Apr. 11, 1922, caused by failure of a 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 period of ice effect, Nov. 21 to Mar. 30, which are fair and were computed from four discharge measurements, gage heights, observer's notes, and weather records. Gage read once daily.

Rating table, water year 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)

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

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	392	413	371	351	258	226	1,290	965	503	512	212	700
2	392	435	351	351	242	242	1,080	965	503	512	197	650
3	392	457	331	351	242	276	910	965	480	512	197	550
4	392	503	331	371	242	293	800	1,020	457	293	197	435
5	392	503	351	371	242	293	800	1,080	457	293	197	435
6	392	480	371	371	242	293	750	1,080	457	293	197	413
7	371	480	392	371	242	312	750	1,220	457	293	197	435
8	371	480	371	371	242	312	750	1,520	457	276	197	413
9	371	480	392	371	242	312	800	1,920	457	258	184	392
10	371	480	392	371	258	322	855	1,920	457	258	184	392
11	371	457	413	371	242	331	910	1,760	457	258	184	392
12	371	413	413	371	242	331	910	1,440	455	258	184	413
13	371	435	413	371	242	351	910	1,150	435	258	172	413
14	371	413	413	371	242	331	965	1,020	435	226	172	413
15	371	413	435	351	242	351	1,020	1,020	435	226	172	413
16	371	413	371	351	242	392	1,150	1,020	435	226	371	413
17	371	413	351	351	226	413	1,150	965	457	351	371	392
18	371	413	331	351	226	457	1,150	910	455	371	371	392
19	371	413	331	331	226	503	1,150	910	413	371	371	392
20	371	435	331	312	226	574	1,150	855	392	371	371	371
21	371	435	331	312	226	624	1,080	800	392	331	371	371
22	371	435	331	312	226	750	1,080	750	392	293	331	371
23	371	413	351	302	226	855	1,020	650	371	242	331	351
24	371	392	331	293	242	965	965	965	351	242	312	351
25	371	371	351	276	226	1,150	910	910	331	226	331	351
26	371	351	351	276	226	1,370	910	800	331	226	457	351
27	371	351	351	276	226	1,600	910	750	312	226	624	351
28	371	371	351	258	226	1,920	910	624	312	226	750	351
29	371	371	351	242	226	2,100	910	574	312	212	855	351
30	371	331	331	258	-	2,010	910	574	312	212	800	331
31	392	-	331	258	-	1,600	-	526	-	212	800	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	11,648	392	371	376	0.555	0.64
November.....	12,750	503	331	425	.627	.70
December.....	11,216	435	331	362	.534	.62
Calendar year 1935.....	193,652	3,180	226	531	.783	10.60
January.....	10,244	371	242	330	.487	.56
February.....	6,856	258	226	236	.348	.38
March.....	21,889	2,100	226	705	1.04	1.20
April.....	28,855	1,290	750	962	1.42	1.58
May.....	31,628	1,920	526	1,020	1.50	1.73
June.....	12,430	503	312	414	.611	.68
July.....	8,464	371	212	273	.403	.46
August.....	10,660	855	172	344	.507	.58
September.....	12,349	700	331	412	.608	.68
Water year 1935-36.....	178,961	2,100	172	489	.721	9.81

Fox River at Berlin, Wis.

Location.- Staff gage, lat. 43°57'15", long. 88°57'30", in sec. 18, 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 1936.

Average discharge.- 38 years, 1,105 second-feet.

Extremes.- Maximum daily discharge during year, 4,340 second-feet Mar. 27; minimum, 355

second-feet Jan. 28.

1898-1936: 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 records furnished by Corps of Engineers, U. S. Army.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	675	705	1,140	540	360	525	3,350	1,020	645	560	490	560
2	705	765	1,020	540	390	530	3,170	1,100	675	560	490	560
3	675	765	930	570	390	535	3,000	1,100	705	560	490	560
4	735	830	830	570	410	545	2,910	1,100	675	590	490	560
5	735	1,060	785	595	390	560	2,750	1,020	675	590	490	560
6	735	1,060	745	595	390	560	2,600	1,020	705	560	490	535
7	735	1,060	735	595	390	560	2,520	975	735	535	490	560
8	735	1,020	785	595	390	590	2,360	975	765	535	490	560
9	735	1,020	785	595	390	615	2,310	975	765	510	490	560
10	735	1,020	755	595	390	695	2,240	975	765	510	490	560
11	735	1,020	605	620	390	895	2,170	940	705	535	490	560
12	735	940	605	620	390	1,010	2,100	905	705	535	490	590
13	735	940	665	620	405	1,100	2,040	905	675	535	490	615
14	765	905	695	610	400	1,210	1,980	865	675	535	490	615
15	765	905	725	595	400	1,310	1,910	865	645	535	490	590
16	735	865	720	585	395	1,430	1,850	830	645	510	490	675
17	735	865	750	580	420	1,670	1,740	865	645	510	490	705
18	735	905	745	570	415	2,000	1,620	865	645	510	510	705
19	735	905	710	535	415	2,440	1,620	800	645	510	510	675
20	735	905	530	515	410	2,680	1,460	735	615	510	510	675
21	735	940	560	510	410	3,300	1,360	705	615	510	510	645
22	735	800	620	505	430	3,920	1,270	705	590	490	510	648
23	735	765	645	475	440	4,020	1,220	735	590	510	535	675
24	705	975	625	445	450	4,120	1,180	735	590	535	535	645
25	705	905	615	415	460	4,230	1,140	705	590	535	535	645
26	705	905	640	385	475	4,120	1,140	705	590	535	535	645
27	705	905	600	360	480	4,340	1,100	705	590	510	535	645
28	705	940	560	355	490	4,120	1,060	645	590	490	590	645
29	705	940	550	370	515	3,920	1,060	645	590	490	560	645
30	675	1,020	540	365	-	3,720	1,020	645	590	490	590	645
31	675	-	540	360	-	3,530	-	615	-	490	590	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	22,395	765	675	722	0.505	0.58
November.....	27,555	1,060	705	918	.642	.72
December.....	21,755	1,140	530	702	.491	.57
Calendar year 1935.....	411,700	4,340	485	1,128	.789	10.72
January.....	16,185	620	355	522	.365	.42
February.....	12,090	515	380	417	.292	.31
March.....	64,800	4,340	525	2,090	1.45	1.63
April.....	57,170	3,350	1,020	1,905	1.33	1.48
May.....	26,360	1,100	615	851	.595	.69
June.....	19,635	765	590	654	.457	.51
July.....	16,320	590	490	526	.368	.42
August.....	15,885	590	490	512	.368	.41
September.....	16,460	705	535	615	.430	.48
Water year 1935-36.....	318,630	4,340	355	871	.609	8.27

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 Rapids Croche Dam, 2 miles above Wrightstown.

Drainage area.- 6,150 square miles.

Records available.- March 1896 to September 1936.

Average discharge.- 40 years, 4,290 second-feet.

Extremes.- Maximum daily discharge during year, 6,290 second-feet Apr. 4; minimum, 138 second-feet Aug. 2.

1918-36: Maximum daily discharge, 20,600 second-feet Apr. 4, 1929; minimum, that of Aug. 2, 1936.

Remarks.- Records good. Flow regulated by storage in Lake Winnebago (capacity, 13,800,000,000 cubic feet). Daily-discharge records computed by Corps of Engineers, U. S. Army, from power-house records.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,530	2,350	1,540	2,840	2,750	3,360	4,340	4,360	3,860	2,480	746	977
2	2,750	2,140	2,480	2,830	2,660	3,940	3,930	4,200	3,820	2,430	138	544
3	2,710	1,880	2,760	2,820	3,230	3,920	5,780	4,110	3,960	1,980	1,270	659
4	2,290	2,430	2,860	2,540	3,500	3,860	6,290	4,050	3,990	2,250	699	928
5	2,600	2,610	2,830	2,100	3,610	3,900	6,230	4,330	3,770	1,930	726	706
6	1,620	2,700	2,760	2,610	3,900	3,820	5,720	4,800	4,090	1,920	825	552
7	2,870	2,750	2,700	2,770	3,890	3,680	5,460	4,570	2,840	1,300	846	626
8	2,630	2,500	1,900	2,870	3,450	4,000	5,850	4,500	4,060	1,190	746	886
9	2,750	2,570	2,790	2,790	3,070	3,830	6,220	4,020	3,510	1,290	603	854
10	2,710	1,610	2,770	3,460	2,820	3,940	4,290	4,340	3,510	1,110	978	797
11	2,700	2,170	2,520	2,770	3,150	4,310	3,450	4,020	3,800	1,380	840	928
12	2,900	2,660	2,710	2,880	3,280	4,400	3,090	4,190	3,500	1,340	772	905
13	1,720	2,640	2,750	3,240	3,330	4,060	3,860	4,210	3,530	1,330	875	832
14	2,650	2,680	2,640	3,400	3,500	4,020	4,000	4,490	3,000	1,110	826	931
15	2,710	2,490	1,920	3,580	3,810	4,230	3,760	4,660	3,160	1,260	722	1,000
16	2,650	2,570	2,650	3,440	3,680	3,820	3,910	4,170	3,660	1,300	324	822
17	2,590	1,920	2,770	3,120	3,880	3,900	3,750	4,180	3,570	1,210	866	750
18	2,560	2,490	2,820	2,870	3,780	4,360	4,090	4,370	3,050	1,200	1,040	881
19	2,570	3,020	2,450	2,620	4,050	4,590	3,530	4,470	3,350	827	777	1,140
20	1,530	2,770	2,130	2,810	3,810	4,870	3,770	4,420	3,560	1,310	742	586
21	2,500	2,720	2,690	3,160	3,860	5,210	3,610	4,380	2,480	1,190	1,000	932
22	2,540	2,660	2,250	2,950	3,860	4,900	4,070	4,450	2,720	1,140	871	794
23	2,400	2,450	2,770	3,130	3,050	5,010	4,280	4,140	3,210	1,120	336	1,220
24	2,520	2,030	2,060	3,620	3,500	5,140	4,200	3,640	2,590	1,010	728	881
25	2,440	2,520	2,240	3,250	3,660	4,700	4,330	3,860	2,760	1,050	869	1,020
26	2,570	2,690	2,970	3,090	3,860	4,120	3,890	4,300	2,630	793	801	1,210
27	1,630	2,920	2,570	3,050	3,560	4,960	3,830	3,890	2,590	994	780	766
28	2,370	2,970	2,900	3,220	4,020	4,140	4,210	3,780	2,200	822	936	1,170
29	2,440	2,850	2,300	3,530	3,610	3,920	4,220	3,900	2,250	944	783	991
30	2,560	2,260	2,770	3,650	-	3,890	4,230	4,140	2,030	820	506	1,060
31	2,570	-	2,740	3,150	-	4,080	-	3,000	-	660	928	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	76,580		2,900	1,530	2,464	0.401	0.46					
November.....	74,910		3,020	1,610	2,497	.406	.45					
December.....	79,000		2,970	1,540	2,548	.414	.48					
Calendar year 1935.....	1,445,490		11,100	1,520	3,960	.644	8.74					
January.....	94,330		3,650	2,100	3,043	.495	.57					
February.....	102,080		4,050	2,660	3,520	.572	.62					
March.....	130,980		5,210	3,360	4,222	.697	.79					
April.....	132,170		6,290	3,090	4,406	.716	.80					
May.....	129,930		4,800	3,000	4,191	.681	.79					
June.....	96,830		4,090	2,030	3,228	.525	.59					
July.....	40,740		2,480	660	1,514	.214	.25					
August.....	25,600		1,270	138	761	.124	.14					
September.....	26,148		1,220	544	782	.142	.16					
Water year 1935-36.....	1,006,998		6,290	138	2,751	.447	6.10					

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 Wisconsin Power & Light Co. levels.

Drainage area.- 633 square miles.

Records available.- March 1928 to September 1936.

Extremes.- Maximum discharge observed during year, 1,620 second-feet May 7 (gage height, 4.52 feet); minimum, 199 second-feet Feb. 20, 1928-36; Maximum discharge observed, 2,580 second-feet Apr. 8, 1929 (gage height, 6.10 feet); minimum, that of Feb. 20, 1936.

Remarks.- Records excellent except those for periods of ice effect, Nov. 20-25, Nov. 29 to Apr. 9, which are fair and were computed from three discharge measurements, gage heights, observer's notes, and weather records. Discharge interpolated Apr. 11. Gage read once daily.

Rating table, water year 1935-36 except period of ice effect (gage height, in feet, discharge, in second-feet)

1.4	199	2.5	576
1.5	222	2.8	715
1.6	247	3.1	865
1.8	304	3.5	1,070
2.0	372	4.0	1,340
2.2	448	4.6	1,680

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	428	667	428	304	260	289	667	1,230	667	354	222	532
2	448	621	428	337	247	304	667	1,290	667	390	234	510
3	468	576	372	354	247	320	667	1,290	621	372	234	448
4	448	576	390	372	247	320	667	1,230	576	372	222	438
5	428	576	390	354	247	304	715	1,230	576	354	222	409
6	428	532	409	372	247	304	715	1,510	576	337	222	390
7	409	532	428	354	247	320	621	1,620	576	304	234	532
8	409	510	428	354	247	304	576	1,570	532	304	234	489
9	409	510	409	372	247	320	715	1,510	532	289	222	409
10	409	489	372	372	260	337	764	1,460	489	274	222	390
11	409	510	354	372	260	372	892	1,340	489	304	222	409
12	409	532	372	337	260	372	1,020	1,340	468	372	222	409
13	428	448	354	304	247	390	1,230	1,230	448	320	222	428
14	448	489	390	354	260	409	1,230	1,130	448	289	222	489
15	468	532	354	337	247	409	1,400	1,070	428	337	247	510
16	468	489	337	320	247	409	1,460	1,020	409	337	247	532
17	468	468	337	337	247	409	1,460	970	448	337	234	510
18	489	448	320	354	247	409	1,460	917	409	320	247	510
19	468	468	304	320	234	448	1,340	764	409	304	274	510
20	468	448	304	320	199	468	1,340	667	390	289	260	510
21	468	372	304	304	222	489	1,290	621	372	274	269	510
22	468	310	289	289	222	532	1,180	667	372	274	337	489
23	468	247	289	274	222	621	1,130	715	354	274	320	448
24	489	372	304	274	234	715	1,130	814	337	260	304	372
25	489	428	289	260	234	715	1,070	814	337	260	510	337
26	468	532	289	260	247	764	1,070	764	337	247	510	337
27	468	621	289	260	260	715	1,020	715	354	260	510	337
28	468	554	274	260	234	764	1,020	715	337	247	764	337
29	428	468	274	260	260	764	1,070	715	320	247	621	337
30	448	409	289	247	-	715	1,180	667	320	234	532	320
31	576	-	274	260	-	715	-	621	-	234	532	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	14,045	576	409	453	0.716	0.83
November.....	14,734	667	247	431	.776	.37
December.....	10,644	428	274	343	.542	.62
Calendar year 1935.....	198,001	1,680	247	542	0.856	11.65
January.....	9,848	372	247	318	.502	.58
February.....	7,079	260	199	244	.385	.42
March.....	14,726	764	289	476	.760	.36
April.....	30,766	1,460	576	1,026	1.62	1.31
May.....	32,218	1,620	621	1,039	1.64	1.89
June.....	13,598	667	320	453	.716	.80
July.....	9,370	390	234	302	.477	.55
August.....	9,894	764	222	319	.504	.58
September.....	13,178	532	320	439	.694	.77
Water year 1935-36.....	180,098	1,620	199	492	.777	10.58

STREAMS TRIBUTARY TO LAKE MICHIGAN

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 2½ miles below West Branch of Wolf River.

Drainage area.- 812 square miles.

Records available.- March 1928 to September 1936, May 1907 to March 1909, February 1911 to March 1928 at station 1½ miles downstream, at Keshena.

Average discharge.- 25 years (1911-36), 782 second-feet.

Extremes.- Maximum discharge during year, 2,320 second-feet May 8 (gage height, 7.65 feet); minimum, 194 second-feet (estimated) Feb. 7.

1911-36: Maximum discharge, 4,390 second-feet Apr. 10, 1922; minimum, that of Feb. 7, 1936.

Remarks.- Records good except those for Nov. 5 to Apr. 9, which are poor. Discharge for periods of ice effect, Nov. 21-25, Nov. 29 to Apr. 9, based on three discharge measurements, gage heights, observer's notes, and weather records; Nov. 5-11, computed on basis of records for station above West Branch. Chain gage read once a day Nov. 12-20, 26-28.

Rating table, Oct. 1 to Nov. 4 and Apr. 10 to Sept. 30 (gage height, in feet, discharge, in second-feet)

5.1	268	6.3	1,000
5.3	356	6.5	1,180
5.5	455	6.8	1,460
5.7	566	7.1	1,760
5.9	694	7.5	2,160
6.1	858	8.0	2,700

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	554	764	680	368	292	401	816	1,460	786	445	334	756
2	549	823	546	334	292	499	750	1,310	779	466	334	674
3	566	608	590	359	317	435	722	1,610	779	482	338	622
4	572	786	546	334	284	418	729	1,510	764	476	334	591
5	566	730	546	351	267	368	628	1,460	729	471	320	609
6	560	674	486	393	218	393	648	1,610	708	455	316	537
7	554	674	590	368	194	401	616	2,160	729	435	316	645
8	543	646	590	401	284	435	661	2,320	729	430	311	801
9	537	646	546	435	268	452	757	2,060	701	409	311	708
10	537	618	546	469	334	426	950	1,810	661	385	316	622
11	537	646	546	494	326	469	975	1,710	628	385	316	591
12	531	435	478	494	284	503	1,180	1,610	609	460	311	572
13	537	418	460	376	258	469	1,370	1,560	597	497	311	566
14	554	590	503	452	267	494	1,460	1,420	578	450	311	578
15	572	726	503	452	309	590	1,660	1,320	578	445	307	635
16	585	680	546	503	300	590	1,860	1,210	560	471	385	745
17	585	680	503	486	326	546	1,660	1,140	560	476	435	756
18	591	680	426	351	342	590	1,760	1,120	572	466	385	708
19	597	635	369	452	334	635	1,660	1,020	549	445	375	674
20	591	680	369	503	326	635	1,560	925	537	424	375	648
21	585	455	326	503	326	590	1,560	870	520	404	375	641
22	585	388	393	546	334	680	1,460	846	514	385	404	628
23	585	309	292	494	351	726	1,370	854	487	380	435	597
24	597	464	300	452	418	866	1,320	980	476	375	435	572
25	597	535	360	384	401	726	1,270	1,020	466	366	508	525
26	597	726	356	418	393	773	1,260	963	455	370	708	487
27	597	1,010	393	410	384	773	1,250	942	455	375	729	476
28	597	1,060	359	292	359	866	1,230	901	450	366	831	492
29	591	726	292	317	368	913	1,250	862	445	352	1,040	450
30	578	820	326	317	-	913	1,370	825	445	342	967	445
31	616	-	359	284	-	801	-	794	-	338	662	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	17,743	616	531	572	0.704	0.81
November.....	19,832	1,060	309	661	.814	.91
December.....	14,048	680	292	453	.558	.64
Calendar year 1935.....	254,449	2,060	292	697	.858	11.65
January.....	12,842	546	284	414	.510	.59
February.....	9,146	418	194	315	.388	.42
March.....	18,346	913	368	592	.729	.84
April.....	35,982	1,860	616	1,199	1.48	1.65
May.....	40,490	2,320	794	1,306	1.61	1.86
June.....	17,846	786	445	595	.733	.82
July.....	13,026	497	338	420	.517	.60
August.....	14,035	1,040	307	453	.555	.64
September.....	18,312	901	445	610	.751	.84
Water year 1935-36.....	231,648	2,320	194	633	.780	10.62

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 1936.

Average discharge.- 23 years, 1,785 second-feet.

Extremes.- Maximum discharge observed during year, 7,450 second-feet Mar. 28 (gage height, 8.8 feet); minimum, 388 second-feet Aug. 4, 5 (gage height, -0.4 foot).

1913-36: 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. 20-24, Nov. 30 to Mar. 24, which are fair and were computed from three discharge measurements, gage heights, observer's notes, and weather records. Gage read once daily. Gage-height record furnished by Corps of Engineers, U. S. Army.

Rating tables, water year 1935-36 except periods of ice effect (gage height, in feet, discharge, in second-feet)

Oct. 1 to Mar. 24				Mar. 25 to Sept. 30			
0	420	2.5	1,380	-0.4	388	2.5	1,520
.2	492	3.0	1,610	-.2	452	3.0	1,740
.4	564	3.5	1,830	0	516	4.0	2,190
.6	636	4.0	2,060	.2	580	5.0	2,700
.8	708	5.0	2,570	.4	645	6.0	3,390
1.0	780	6.0	3,260	.7	750	7.0	4,330
1.5	962	7.0	4,160	1.0	864	8.0	5,700
2.0	1,160			1.5	1,070	8.8	7,450
				2.0	1,290		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,000	1,040	1,430	744	564	708	6,470	2,890	1,430	714	516	1,520
2	962	1,040	1,430	744	528	708	6,050	2,820	1,430	787	516	1,380
3	1,000	1,160	1,380	744	492	708	5,700	2,890	1,430	787	484	1,250
4	1,040	1,290	1,200	852	492	744	5,240	2,890	1,430	787	388	1,120
5	962	1,430	1,160	852	564	744	4,830	2,890	1,380	787	388	1,030
6	924	1,470	1,200	816	528	744	4,450	2,960	1,340	714	484	987
7	924	1,290	1,250	816	492	780	4,220	3,030	1,380	714	452	904
8	962	1,250	1,200	816	492	816	3,730	3,170	1,380	750	452	904
9	982	1,250	1,250	888	492	816	3,390	3,240	1,470	750	420	1,030
10	1,040	1,250	1,250	924	492	852	3,170	3,310	1,380	714	420	1,290
11	1,040	1,250	1,080	924	492	888	2,960	3,310	1,290	714	452	1,340
12	1,040	1,250	1,040	924	492	1,080	2,890	3,470	1,200	679	484	1,470
13	1,000	1,250	1,080	888	456	1,250	2,890	3,640	1,200	679	452	1,290
14	1,000	1,200	1,200	780	456	1,430	2,960	3,750	1,190	645	452	1,120
15	1,000	1,160	1,290	708	456	1,520	2,960	3,750	1,070	645	484	1,030
16	1,000	1,160	1,340	816	492	1,610	3,100	3,550	987	750	484	1,160
17	1,040	1,160	1,290	852	528	1,740	3,240	3,390	1,030	714	452	1,250
18	1,080	1,120	1,250	888	492	1,700	3,390	3,170	1,070	714	516	1,380
19	1,040	1,120	1,160	888	456	1,740	3,550	3,030	1,030	679	645	1,380
20	1,040	1,080	1,080	780	456	1,880	3,640	2,700	1,070	645	645	1,340
21	1,040	1,040	924	708	492	2,250	3,730	2,530	987	645	714	1,290
22	1,040	924	888	708	492	2,770	3,820	2,360	904	645	612	1,200
23	1,040	962	924	744	528	3,260	3,820	2,150	864	645	612	1,160
24	1,000	1,000	924	744	564	3,940	3,820	1,970	864	612	679	1,030
25	1,000	1,000	852	708	600	5,870	3,730	1,790	904	612	612	987
26	962	1,120	708	636	564	6,470	3,470	1,740	864	612	714	945
27	962	1,160	708	600	636	7,190	3,310	1,830	864	548	825	945
28	962	1,380	780	492	672	7,450	3,240	1,790	864	452	1,030	945
29	962	1,470	780	492	708	7,190	3,100	1,700	825	484	1,250	825
30	962	1,470	816	600	-	6,940	2,960	1,700	750	580	1,360	825
31	962	-	780	600	-	6,700	-	1,740	-	548	1,470	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	30,948	1,080	924	998	0.446	0.51
November.....	35,746	1,470	924	1,192	.552	.59
December.....	35,694	1,430	708	1,087	.485	.56
Calendar year 1935.....	620,416	9,570	708	1,700	.759	10.29
January.....	23,676	924	492	764	.341	.39
February.....	15,168	708	456	523	.233	.25
March.....	82,488	7,450	708	2,661	1.19	1.37
April.....	115,830	6,470	2,890	3,794	1.69	1.89
May.....	85,130	3,730	1,700	2,745	1.23	1.42
June.....	33,847	1,470	750	1,128	.504	.56
July.....	20,751	787	452	669	.299	.34
August.....	19,484	1,470	368	629	.281	.32
September.....	34,327	1,520	825	1,144	.511	.57
Water year 1935-36.....	529,089	7,450	388	1,446	.646	8.77

Embarrass River near Embarrass, Wis.

Location.- Chain gage, lat. 44°43', long. 88°44', on line between sec. 15, 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 1936.

Average discharge.- 17 years, 289 second-feet.

Extremes.- Maximum discharge during year, 1,810 second-foot (estimated) Mar 25 (gage height, 5.96 feet); minimum, 38 second-foot Feb. 4, 15.
1919-36: Maximum observed discharge, 6,780 second-foot Apr. 10, 1922 (gage height, 11.5 feet); minimum, 23 second-foot Aug. 3, 6, 7, 1931.

Remarks.- Records good except those for periods of ice effect, Nov. 21-26, Nov. 30 to Dec. 4, Dec. 18 to Mar. 26, which are poor and were computed from four discharge measurements, gage heights, observer's notes, and weather records. Gage read twice daily. Slight diurnal regulation by power plants above.

Rating tables, water 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 26				Mar. 27 to Sept. 30			
2.6	33	4.0	560	2.5	30	5.8	469
2.8	74	4.5	810	2.6	47	4.0	560
3.0	134	5.0	1,100	2.8	92	4.5	810
3.2	208	5.5	1,420	3.0	147	5.0	1,100
3.4	292	6.0	1,740	3.2	216	5.5	1,420
3.6	380			3.4	296	6.0	1,740
				3.6	381		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	185	249	228	94	42	85	704	492	177	115	73	127
2	173	237	200	94	51	118	583	654	232	105	70	115
3	158	292	188	99	40	121	537	756	232	105	66	127
4	148	336	208	99	38	141	492	756	232	105	66	115
5	131	270	270	112	46	118	469	606	216	97	62	108
6	131	249	336	105	49	69	425	756	216	85	60	110
7	138	228	241	115	47	60	338	960	255	90	60	132
8	177	228	188	115	40	96	317	1,420	220	90	60	202
9	185	237	177	105	51	155	338	1,480	194	82	58	514
10	188	241	177	102	51	216	403	1,040	173	82	53	514
11	169	224	166	102	56	241	492	756	167	85	53	360
12	166	216	169	108	56	241	654	654	177	82	58	296
13	162	152	141	124	51	270	864	537	170	66	49	209
14	158	192	184	128	51	249	920	492	138	66	49	194
15	162	192	118	102	38	224	1,100	425	121	75	49	198
16	181	185	112	82	44	358	1,290	381	154	75	62	224
17	169	185	99	74	40	270	1,230	350	130	78	78	247
18	181	177	94	67	40	270	1,040	296	124	73	82	338
19	200	196	99	74	51	314	864	276	127	73	75	296
20	152	200	102	85	47	380	704	296	124	66	75	276
21	158	173	118	77	47	468	606	276	118	78	147	224
22	152	138	121	82	49	630	550	255	110	90	118	160
23	173	162	118	82	40	1,100	492	255	115	87	108	154
24	173	162	105	65	38	1,420	447	276	118	85	95	147
25	166	152	124	72	65	1,610	381	381	115	82	127	127
26	185	166	105	67	62	1,550	425	403	118	66	135	115
27	158	237	96	56	72	1,230	447	317	110	62	157	105
28	121	292	91	58	74	1,160	425	276	105	66	220	105
29	96	270	88	53	85	1,040	425	236	97	66	381	110
30	124	270	94	60	-	864	425	160	95	70	360	108
31	148	-	85	56	-	766	-	167	-	75	276	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	4,968	200	96	160	0.405	0.47
November.....	6,508	336	138	217	.549	.61
December.....	4,579	336	65	148	.375	.43
Calendar year 1935.....	111,233	1,810	80	305	.772	10.48
January.....	2,714	128	53	87.5	.222	.26
February.....	1,461	85	38	50.4	.128	.14
March.....	15,824	1,610	60	51.0	1.29	1.49
April.....	18,397	1,290	317	61.3	1.55	1.73
May.....	16,435	1,480	167	53.0	1.34	1.54
June.....	4,650	255	95	155	.392	.44
July.....	2,522	115	62	81.4	.206	.24
August.....	3,582	361	49	109	.275	.32
September.....	6,057	514	105	202	.511	.57
Water year 1935-36.....	87,497	1,610	38	239	.605	8.24

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 1936.

Average discharge.- 22 years, 437 second-feet.

Extremes.- Maximum discharge during year, 3,420 second-feet Mar. 25 (gage height, 5.00 feet); minimum, 62 second-feet Aug. 4 (gage height, 0.77 foot).
1914-36: 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 periods of ice effect, Nov. 21-25, Dec. 1-7, Dec. 10 to Mar. 24, which were computed from four discharge measurements, recorder record, observer's notes, and weather record and are poor. Diurnal regulation by power plant 6 miles upstream.

Rating table, water year 1935-36 except periods of ice effect (gage height in feet, discharge, in second-feet)
(Shifting-control method used June 19 to Sept. 21)

0.8	76	2.4	772
1.0	115	2.6	920
1.2	168	2.8	1,080
1.4	239	3.0	1,260
1.6	325	3.5	1,750
1.8	418	4.0	2,270
2.0	525	4.5	2,850
2.2	640	5.0	3,420

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	245	284	351	138	143	142	718	442	229	128	90	161
2	211	307	306	200	123	189	640	572	257	136	87	168
3	248	272	271	246	138	205	548	577	285	133	89	154
4	290	313	230	232	126	197	508	597	239	131	86	164
5	282	333	187	262	132	227	476	480	186	117	98	165
6	187	329	248	207	119	175	437	523	227	124	100	143
7	205	263	295	229	125	268	409	543	200	121	96	151
8	215	290	268	206	132	233	457	610	231	109	91	183
9	252	295	272	207	122	416	404	564	230	101	88	274
10	269	300	296	181	118	418	411	461	216	100	92	114
11	290	299	253	204	136	500	503	434	174	105	103	157
12	273	297	164	195	110	560	580	444	189	112	102	170
13	267	289	210	195	107	600	724	418	193	113	95	141
14	265	282	165	190	96	640	685	344	146	121	99	122
15	284	258	161	224	130	650	799	318	123	116	95	225
16	263	300	190	221	95	660	816	287	146	118	101	345
17	280	238	167	163	132	670	772	304	146	119	97	289
18	260	233	164	185	93	675	772	295	156	141	133	277
19	276	282	154	147	101	594	640	262	184	117	154	225
20	246	301	189	103	153	940	598	222	191	104	172	172
21	231	302	204	140	106	1,580	462	261	133	109	189	181
22	270	244	179	175	112	1,720	470	235	114	100	167	193
23	259	245	182	187	203	1,990	469	270	112	97	181	147
24	237	245	215	135	223	2,470	434	223	111	101	122	186
25	240	255	171	211	221	2,950	460	234	127	102	158	147
26	267	266	144	128	155	2,440	369	239	123	88	211	162
27	222	334	187	178	116	1,800	444	228	167	92	214	148
28	210	347	178	149	169	1,400	390	224	163	100	266	146
29	251	422	130	115	198	1,170	374	197	122	105	285	162
30	266	384	162	136	-	992	383	208	129	98	354	162
31	266	191	141	-	-	798	-	148	-	95	254	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	7,827		290	187	252	0.520	0.60					
November.....	8,829		422	233	294	.606	.69					
December.....	6,484		351	130	209	.431	.50					
Calendar year 1935.....	139,181		2,160	111	301	.786	10.69					
January.....	5,670		262	115	183	.377	.43					
February.....	3,934		223	93	136	.280	.30					
March.....	28,269		2,950	142	912	1.86	2.17					
April.....	16,142		816	359	538	1.11	1.24					
May.....	11,164		610	148	360	.742	.86					
June.....	5,219		265	111	174	.359	.40					
July.....	3,456		141	88	111	.229	.26					
August.....	4,499		354	86	145	.299	.34					
September.....	5,434		345	114	181	.373	.42					
Water year 1935-36.....	106,927		2,950	86	292	.602	8.20					

STREAMS TRIBUTARY TO LAKE MICHIGAN

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., 1½ miles below Crystal River at highway bridge 4 miles below Waupaca.

Drainage area.- 305 square miles.

Records available.- October 1917 to September 1936. June 1916 to October 1917 at station 1 mile below present site.

Average discharge.- 20 years, 249 second-feet.

Extremes.- Maximum discharge observed during year, 980 second-feet Mar. 25; maximum gage height, 5.80 feet Mar. 23 (ice jam); minimum (estimated), 80 second-feet Feb. 22, 1916-36; Maximum discharge, 2,600 second-feet Mar. 17, 1919 (gage height, 5.6 feet); minimum (estimated), 35 second-feet Jan. 22, 28, 1926.

Remarks.- Records fair except those for periods of ice effect, Nov. 24, Dec. 2-7, 10-13, Dec. 19 to Mar. 23, which were computed from two discharge measurements, gage heights, observer's notes, and weather records and are poor. Discharge interpolated Apr. 16. Slight diurnal regulation by power plants above. Gage read once daily.

Rating table, water year 1935-36 except periods of ice effect (gage height in feet, discharge in second-feet)

1.0	76	2.2	368
1.2	97	2.5	472
1.3	112	2.8	578
1.4	131	3.2	722
1.6	180	3.6	869
1.8	238	3.9	980
2.0	301		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	254	223	254	194	112	167	318	301	238	122	131	194
2	238	254	254	180	97	142	334	318	194	180	131	112
3	167	223	223	238	112	208	254	269	238	122	194	142
4	208	269	238	208	131	194	420	269	208	167	97	208
5	208	223	238	167	131	194	269	269	223	180	167	167
6	208	238	254	194	167	194	208	265	254	154	180	131
7	223	238	238	208	154	223	269	265	223	154	194	167
8	238	223	238	180	142	269	285	269	254	180	180	154
9	154	254	223	167	131	208	254	238	208	122	194	154
10	223	180	223	194	97	223	318	223	254	154	154	167
11	269	238	208	131	122	269	285	285	208	142	208	167
12	208	194	223	167	112	285	269	223	142	180	180	97
13	254	238	238	180	142	365	368	269	154	131	142	142
14	238	208	238	122	131	351	254	238	122	167	180	238
15	238	254	208	167	122	368	351	223	154	223	167	131
16	254	269	223	142	104	368	342	301	112	180	112	254
17	254	238	208	85	112	402	334	238	154	180	112	194
18	269	238	194	131	131	368	254	238	238	142	167	208
19	269	254	194	142	131	437	265	180	194	131	154	223
20	208	269	180	97	122	758	254	223	167	194	142	142
21	223	254	167	131	167	632	269	167	142	154	238	238
22	223	269	238	131	80	669	208	167	142	97	194	194
23	180	265	194	122	180	906	301	167	194	81	180	223
24	223	301	208	122	122	943	269	208	194	97	154	122
25	238	238	154	91	194	943	269	254	180	112	208	194
26	154	208	167	104	174	722	269	223	180	112	238	131
27	254	285	142	122	154	578	238	180	180	167	194	194
28	223	285	131	122	208	454	254	167	154	142	238	208
29	238	238	180	91	142	402	285	208	154	131	208	154
30	223	254	167	154	-	368	223	180	122	154	180	112
31	269	-	122	122	-	334	-	167	-	167	208	-

Month	Second foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	7,030	269	154	227	0.744	0.86
November.....	7,342	301	180	245	.803	.90
December.....	6,367	254	122	206	.672	.77
Calendar year 1935.....	69,913	670	112	246	.607	10.96
January.....	4,606	238	85	149	.489	.56
February.....	3,924	208	80	135	.443	.48
March.....	13,364	943	142	431	1.41	1.63
April.....	8,510	420	208	284	.931	1.04
May.....	7,232	318	167	233	.764	.88
June.....	5,581	254	112	186	.610	.68
July.....	4,629	223	91	149	.489	.56
August.....	5,426	238	97	176	.574	.66
September.....	5,162	254	97	172	.564	.63
Water year 1935-36.....	79,173	943	80	216	.708	9.65

Milwaukee River at Milwaukee, Wis.

(Formerly published as Milwaukee River near Milwaukee, Wis.)

Location.- Water-stage recorder, lat. 43°6'0", 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 highway 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 1936.

Average discharge.- 22 years, 414 second-feet.

Extremes.- Maximum discharge during year, 2,340 second-feet Mar. 13 (gage height, 4.27 feet); minimum, 6 second-feet Aug. 6 (gage height, 0.48 foot).
1914-36: Maximum discharge, 15,100 second-feet Mar. 20, 1918 (gage height, 9.00 feet, from high water mark); minimum, that of Aug. 6, 1936.

Remarks.- Records good except those for Oct. 1-8, Nov. 7-14, when chain gage 2,000 feet upstream was used, and for periods of ice effect, Nov. 21-24, Nov. 29 to Dec. 5, Dec. 10-12, Dec. 18 to Mar. 12, which are poor. Winter records computed from three discharge measurements, recorder record, observer's notes, and weather records.

Rating table, Oct. 9 to Nov. 6, Nov. 15 to Sept. 30 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.5	6	1.5	77	3.0	810
.6	8	1.8	134	3.5	1,260
.8	13	2.1	249	4.0	1,690
1.0	22	2.4	413	4.5	2,760
1.2	38	2.7	602	4.6	2,990

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	104	149	90	54	149	636	137	90	47	11	77
2	47	95	143	85	54	143	570	203	125	44	12	70
3	41	122	168	107	54	180	498	249	107	36	12	64
4	38	195	122	104	70	306	487	328	155	27	9	90
5	39	176	199	82	80	355	462	259	134	28	7	79
6	39	184	116	77	61	344	444	217	113	39	6	66
7	41	129	122	111	49	300	474	931	109	30	7	80
8	50	125	118	97	62	322	512	928	98	41	8	70
9	82	114	120	83	61	401	524	717	97	37	9	74
10	95	121	146	82	54	355	615	531	97	26	12	68
11	78	114	129	98	53	629	669	390	87	23	11	80
12	77	106	113	97	56	1,320	683	300	90	27	11	104
13	72	106	120	82	62	2,110	656	264	66	28	11	118
14	64	91	122	95	45	1,920	537	269	57	26	13	118
15	93	116	162	91	39	1,680	512	212	72	20	16	297
16	97	107	164	87	36	1,340	456	168	74	22	24	656
17	118	93	244	91	39	1,390	437	158	70	20	35	322
18	113	82	254	88	48	1,530	372	140	61	20	47	235
19	85	132	132	79	48	1,590	316	120	61	18	61	155
20	87	106	97	77	77	1,570	322	118	57	19	50	129
21	79	118	111	80	42	1,780	280	106	52	20	62	120
22	82	95	71	77	49	1,920	269	88	52	18	52	120
23	87	116	90	71	68	2,250	244	70	56	19	50	102
24	87	113	93	64	137	2,880	226	98	65	20	38	109
25	82	97	85	77	155	2,390	203	65	56	20	48	111
26	80	122	72	56	155	1,880	212	74	48	20	104	118
27	97	122	102	64	149	1,490	195	82	44	21	61	155
28	72	129	100	58	158	1,210	176	82	42	17	131	140
29	70	120	74	62	180	988	199	76	42	15	83	146
30	85	180	57	58	-	863	212	66	47	16	80	143
31	97	-	85	58	-	724	-	49	-	11	76	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,313	118	38	74.6	0.113	0.13
November.....	3,630	195	82	121	.183	.20
December.....	3,850	254	57	124	.198	.22
Calendar year 1935.....	127,927	3,300	37	350	.530	7.19
January.....	2,528	111	56	81.5	.123	.14
February.....	2,197	180	38	75.8	.115	.12
March.....	36,319	2,880	143	1,172	1.77	2.04
April.....	12,399	683	176	413	.625	.70
May.....	7,495	931	49	242	.366	.42
June.....	2,314	155	42	77.1	.117	.13
July.....	775	47	11	25.0	.038	.04
August.....	1,157	131	6	37.3	.056	.06
September.....	4,216	656	64	141	.213	.24
Water year 1935-36.....	79,193	2,880	6	216	.327	4.44

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 (revised).

Records available.- August 1930 to September 1936.

Extremes.- Maximum discharge during year, 664 second-feet (estimated) Mar. 14 (gage height, 8.94 feet, ice jam); minimum discharge, 0.2 second-foot Aug. 9-12; minimum gage height, 4.74 feet Aug. 9, 11.
1930-36: Maximum discharge observed, 1,420 second-feet Apr. 1, 1933; maximum gage height, 9.74 feet Mar. 6, 1935 (ice jam); minimum, that of Aug. 9-12, 1936.

Remarks.- Records fair except those for period of ice effect, Nov. 20 to Mar. 22, which are poor and were computed from three discharge measurements, gage heights, observer's notes, and weather records. Discharge interpolated for Oct. 13. Gage read once daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.4	10	17	3.9	4.4	7.8	62	25	15	2.1	0.3	8.2
2	5.2	8.2	10	4.2	5.5	5.5	36	36	25	3.0	.3	9.2
3	4.4	15	9.6	2.1	5.2	3.9	62	79	35	4.4	.3	5.9
4	4.1	18	5.9	2.3	3.6	7.8	57	52	29	2.1	.3	3.5
5	5.2	25	5.2	1.9	2.1	7.8	47	30	21	1.9	.3	3.5
6	5.2	25	6.7	4.2	3.9	5.9	52	30	14	3.0	.3	4.4
7	5.2	18	7.8	4.4	4.4	4.8	62	40	19	2.6	.3	5.2
8	5.2	15	9.2	5.5	3.0	7.4	57	30	13	1.9	.3	5.2
9	5.9	13	12	5.9	2.6	15	67	29	18	1.7	.2	5.2
10	6.7	14	9.2	6.3	2.6	186	79	29	18	1.7	.2	5.2
11	8.2	14		10	3.0	352	97	25	13	1.4	.2	9.2
12	8.2	14	7.1	9.2	3.9	622	91	25	12	1.2	.2	10
13	8.7	14	4.4	9.6	3.0	538	73	23	11	1.6	.3	15
14	9.2	13	4.4	10	3.0	664	62	25	11	1.3	.9	17
15	9.2	12	5.9	10	3.9	380	47	19	7.4	1.3	.9	13
16	9.2	12	6.7	13	5.2	289	41	17	5.9	1.1	.9	42
17	8.2	12	6.7	13	5.5	289	36	11	5.9	.9	.8	42
18	8.2	12	6.7	12	4.4	289	34	10	7.4	.7	1.1	36
19	5.9	13	4.8	11	3.9	418	34	10	7.4	.6	2.3	36
20	7.4	14	1.9	6.3	2.3	307	28	10	9.2	.5	1.8	36
21	8.2	13	2.1	7.1	1.4	380	28	11	3.5	.5	3.2	28
22	9.2	13	.5	7.4	1.6	438	28	11	3.5	.7	3.7	25
23	9.2	11	1.0	7.8	2.0	343	29	13	3.9	.9	3.2	21
24	9.2	12	1.7	4.2	5.2	320	29	4.4	4.4	.9	3.2	18
25	7.4	12	1.9	4.2	17	343	29	4.4	4.4	1.3	2.8	19
26	6.7	12	2.0	5.9	21	228	25	10	3.9	.9	3.7	19
27	7.4	15	2.6	10	26	190	25	9.2	4.4	.8	3.7	21
28	7.4	22	3.0	4.8	29	142	25	8.2	4.4	.9	15	25
29	7.4	17	3.0	1.5	16	103	23	5.9	3.5	.7	11	27
30	7.4	21	3.0	7.1	-	91	23	3.0	2.6	.5	8.7	27
31	7.4	-	3.9	5.2	-	24	-	10	-	.4	7.8	-
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	221.1			9.2	4.4	7.13	0.063	0.07				
November.....	439.2			25	8.2	14.6	.129	.14				
December.....	175.9			17	.5	6.57	.050	.06				
Calendar year 1935.....	22,371.5			974	.5	61.3	.542	7.37				
January.....	214.0			13	1.9	6.90	.061	.07				
February.....	194.6			29	1.4	6.71	.059	.06				
March.....	7,061.9			664	3.9	229	2.02	2.33				
April.....	1,395			97	23	46.3	.410	.46				
May.....	845.1			79	3.0	20.8	.184	.21				
June.....	335.7			35	2.6	11.2	.099	.11				
July.....	43.5			4.4	.4	1.40	.012	.01				
August.....	76.2			13	.2	2.46	.022	.03				
September.....	539.7			42	3.5	18.0	.159	.18				
Water year 1935-36.....	11,334.9			664	.2	31.0	.274	3.73				

St. Joseph River at Mottville, Mich.

Location.- Float gage, lat. 41°48', long. 85°45', in NE $\frac{1}{4}$ sec. 6, T. 8 S., R. 12 W., at hydroelectric plant of Michigan Gas & Electric Co. 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 1936.

Average discharge.- 12 years (1924-36), 1,308 second-feet.

Extremes.- Maximum discharge during year, 4,550 second-feet Mar. 9 (gage height, 2.30 feet); minimum, 27 second-feet Oct. 20, 21 (gage height, -1.60 feet); minimum daily discharge, 271 second-feet Sept. 7.

1923-36: Maximum discharge, 8,250 second-feet Apr. 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 period of ice effect, Jan. 21-26, which were computed on basis of gage heights and records for station at Niles and are fair. Flow regulated by power plant. Gage read hourly.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	665	622	812	712	812	2,790	1,640	1,640	812	464	449	500
2	712	665	1,030	665	314	3,210	1,580	2,100	760	556	297	524
3	865	478	1,030	1,210	760	3,210	1,640	1,520	812	434	349	500
4	665	712	975	1,210	1,030	3,600	1,710	2,370	1,090	361	361	414
5	865	1,150	760	760	865	3,800	1,450	2,100	712	292	401	414
6	532	1,270	865	760	865	3,650	2,100	2,230	712	516	442	337
7	622	1,270	975	1,090	812	3,800	1,970	1,640	665	580	387	271
8	760	920	812	975	920	3,600	1,970	1,970	975	548	394	297
9	665	1,030	975	975	622	3,800	1,970	1,450	865	516	314	381
10	712	1,030	1,030	1,150	1,150	3,500	1,970	1,210	760	516	355	478
11	760	1,210	1,090	920	1,390	3,210	1,710	1,640	712	297	314	500
12	760	1,390	920	865	812	3,350	1,710	1,520	665	332	381	540
13	414	1,210	975	1,090	1,210	3,210	2,230	1,390	622	622	326	556
14	712	1,520	1,090	1,090	1,090	3,210	2,100	1,270	434	622	420	622
15	622	1,330	760	1,210	812	2,930	1,840	1,450	665	540	394	865
16	665	1,450	1,210	1,090	1,270	3,210	1,710	1,270	712	456	314	1,150
17	449	760	1,030	1,090	920	2,650	1,640	812	712	471	302	975
18	580	1,450	1,270	975	975	2,790	1,580	1,330	622	485	374	975
19	712	1,450	975	920	1,210	2,650	1,390	975	665	314	308	812
20	349	1,450	1,030	812	760	2,930	1,840	1,270	622	622	493	622
21	297	1,090	975	850	1,270	2,510	1,390	920	361	442	471	712
22	580	975	665	850	1,270	2,230	1,450	812	712	427	355	920
23	622	1,090	622	825	516	2,650	1,640	760	665	434	292	665
24	540	760	1,090	800	1,640	2,510	1,330	572	564	485	308	580
25	622	1,150	920	750	1,520	1,970	1,030	865	622	485	337	760
26	580	1,150	920	700	1,710	1,970	920	920	622	456	368	665
27	394	1,150	812	622	1,840	2,100	1,710	975	456	401	564	532
28	580	760	812	1,330	1,970	1,970	1,520	812	414	434	580	712
29	564	1,090	812	1,090	2,510	1,970	1,390	865	572	427	414	1,090
30	622	1,030	865	548	-	2,230	1,390	622	548	381	297	865
31	622	-	920	1,150	-	2,100	-	500	-	420	292	-
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	19,109			865	297	616						
November.....	32,612			1,520	478	1,087						
December.....	29,027			1,270	622	936						
Calendar year 1935.....	385,068			3,210	297	1,055						
January.....	29,084			1,330	548	938						
February.....	32,845			2,510	314	1,133						
March.....	89,410			3,800	1,970	2,894						
April.....	49,520			2,230	920	1,651						
May.....	40,380			2,370	500	1,303						
June.....	20,130			1,090	361	671						
July.....	14,336			822	292	462						
August.....	11,653			580	292	378						
September.....	19,234			1,150	271	641						
Water year 1935-36.....	387,340			3,800	271	1,058						

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, 1 mile above Dowagiac Creek. Zero of gage is 634.98 feet (revised) above mean sea level.

Records available.- October 1930 to September 1936.

Extremes.- Maximum discharge during year, 9,600 second-feet Mar. 23 (gage height, 7.49 feet); minimum, 334 second-feet Aug. 2; minimum gage height, 1.12 feet July 26, 1930-36; Maximum discharge, 10,000 second-feet Apr. 18, 1933 (gage height, 7.53 feet); minimum, 244 second-feet Aug. 30, 1931.

Remarks.- Records good except those for periods of ice effect, Dec. 20 to Jan. 2, Jan. 22 to Feb. 22, which were computed on basis of gage heights and records for station at Mottville and are poor. Flow regulated by power plants upstream. Gage-height record furnished by city of Niles.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,510	1,520	2,130	2,000	1,700	5,870	3,560	3,720	2,390	1,240	602	1,210
2	1,470	1,370	2,350	2,000	1,700	6,220	3,560	5,190	1,720	1,240	407	1,050
3	1,500	1,250	2,280	2,210	1,700	6,400	3,480	7,500	1,600	1,240	580	1,130
4	1,610	1,770	1,920	2,550	1,800	6,760	3,480	6,220	1,380	758	791	1,250
5	1,520	2,200	1,920	2,420	1,800	7,300	3,480	5,190	1,520	1,090	933	1,130
6	1,330	2,650	2,200	2,800	1,900	7,120	4,200	4,620	1,210	1,350	1,020	700
7	1,520	2,420	2,130	2,360	2,000	6,400	4,680	4,200	1,130	1,320	1,010	999
8	1,540	2,130	2,350	2,650	1,900	6,580	4,360	3,250	1,740	1,190	1,050	1,250
9	1,470	1,990	2,850	2,580	1,800	6,580	3,880	3,250	1,610	1,080	780	1,200
10	1,450	1,910	2,800	2,470	1,800	6,400	3,360	2,590	1,370	1,350	1,220	1,290
11	1,420	2,720	2,440	2,450	1,900	6,040	3,960	2,800	1,260	1,440	1,300	1,120
12	1,590	2,850	2,440	2,490	1,900	5,700	3,560	3,480	1,170	782	1,120	1,050
13	1,290	3,800	2,250	2,650	2,000	5,700	3,960	3,320	999	1,120	1,170	921
14	1,510	2,720	2,080	2,940	1,900	5,020	4,040	2,650	741	1,290	1,290	1,820
15	1,510	2,650	2,010	2,770	1,900	4,850	3,880	2,500	1,740	1,500	1,260	1,460
16	1,460	2,420	2,580	2,900	1,800	5,360	3,400	2,200	1,390	1,380	784	1,920
17	1,460	2,300	2,650	2,110	1,800	5,190	2,770	2,090	1,200	1,390	1,070	2,200
18	1,510	2,500	2,540	2,440	1,750	5,360	2,650	1,990	1,320	1,340	1,200	1,850
19	1,580	2,580	2,440	2,090	1,800	5,530	2,420	2,060	1,290	724	1,200	1,460
20	1,440	2,580	2,400	2,350	1,800	5,700	2,580	1,920	1,030	1,090	1,080	1,520
21	1,650	2,650	2,200	2,130	1,900	5,530	3,100	2,350	850	1,250	955	1,680
22	1,420	2,580	2,200	2,100	2,300	6,040	2,500	1,420	1,430	1,010	1,120	1,580
23	1,340	2,200	2,100	2,100	3,020	6,940	2,420	890	1,350	719	732	1,780
24	1,370	2,130	2,100	2,100	4,160	4,850	2,550	1,250	1,300	595	1,110	1,670
25	1,420	2,420	2,000	2,000	6,400	4,680	1,990	1,550	1,250	616	911	1,610
26	1,530	2,280	2,000	2,000	7,480	5,530	1,980	1,370	1,330	497	1,130	1,430
27	1,160	2,420	2,000	2,000	7,670	5,360	1,990	1,560	1,370	812	1,140	1,590
28	1,630	2,280	1,900	1,900	6,760	5,870	3,400	1,510	838	781	1,130	1,850
29	1,550	2,280	1,900	1,900	6,400	6,220	3,640	1,300	1,550	630	1,130	2,350
30	1,350	2,280	1,900	1,800	-	5,020	3,960	1,280	1,360	602	1,010	2,200
31	1,440	-	1,900	1,700	-	4,200	-	951	-	564	1,170	-
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	44,420			1,650	1,140	1,433						
November.....	69,350			3,800	1,250	2,328						
December.....	68,990			2,880	1,900	2,225						
Calendar year 1935.....	852,752			6,400	842	2,356						
January.....	71,260			2,940	1,700	2,299						
February.....	62,740			7,670	1,700	2,353						
March.....	180,320			7,500	4,200	5,817						
April.....	99,490			4,680	1,900	3,316						
May.....	85,831			7,300	890	2,769						
June.....	40,468			2,390	741	1,349						
July.....	31,980			1,500	497	1,032						
August.....	31,385			1,300	407	1,012						
September.....	44,250			2,350	700	1,475						
Water year 1935-36.....	850,984			7,670	407	2,325						

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.- 530 square miles.

Records available.- April 1931 to September 1936 in reports of U. S. Geological Survey; September 1924 to September 1927 in reports of Indiana Department of Conservation.

Extremes.- Maximum discharge during year, 2,820 second-feet Feb. 25 (gage height, 6.78 feet), from rating curve extended above 750 second-feet; minimum, 58 second-feet Sept. 24; minimum gage height, 1.34 feet Oct. 17; minimum daily discharge, 71 second-feet Sept. 20.

1931-36: 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, 30, 1932.

Remarks.- Records good except those for periods of ice effect, Dec. 22 to Jan. 2, Jan. 21 to Feb. 24, which were computed on basis of gage heights and records for St. Joseph River at Mottville and at Niles, Mich., and are poor. Regulation at three hydro-electric plants above gage.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	213	350	260	245	1,580	715	603	194	111	90	100
2	123	226	396	290	245	1,780	715	1,380	198	115	85	115
3	133	207	206	317	250	1,780	690	1,640	194	107	82	111
4	115	308	283	370	255	1,920	665	1,040	174	116	82	111
5	123	455	350	469	250	1,710	665	865	176	104	84	113
6	113	424	368	384	255	1,520	740	790	199	107	87	112
7	128	396	376	346	260	1,380	765	765	190	82	86	102
8	126	392	509	379	250	1,310	690	715	154	98	94	101
9	126	292	546	351	235	1,190	640	690	170	99	87	98
10	131	412	446	356	220	1,100	640	640	162	96	89	99
11	131	418	420	376	210	1,040	640	618	160	108	89	106
12	145	606	420	372	215	990	640	618	141	108	81	122
13	134	665	420	408	225	940	640	554	152	104	85	136
14	143	564	412	479	230	890	590	546	142	91	83	136
15	153	444	392	512	225	940	510	460	131	88	93	126
16	227	460	396	498	220	1,040	514	487	138	92	93	115
17	105	474	400	403	210	940	480	412	130	86	91	115
18	113	464	412	442	205	890	482	408	126	87	97	118
19	195	469	408	333	205	840	489	404	126	87	107	85
20	173	523	353	340	210	840	448	376	131	86	113	71
21	175	474	222	340	210	840	456	352	117	89	100	104
22	195	487	310	320	215	815	464	352	119	90	104	88
23	189	428	300	300	225	790	460	284	112	90	92	99
24	185	420	280	280	350	840	464	253	112	108	93	84
25	187	388	270	260	2,040	940	384	272	108	103	97	90
26	197	376	265	250	2,660	890	396	224	106	98	114	139
27	187	384	260	245	2,580	840	428	231	113	94	114	109
28	195	392	255	250	2,060	815	492	215	96	94	138	211
29	196	388	250	245	1,580	790	690	206	108	97	123	184
30	216	376	250	245	-	765	690	158	113	93	117	172
31	220	-	250	250	-	740	-	204	-	89	111	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	4, 895		227	105	158	0.298	0.34					
November.....	12, 525		665	207	418	.789	.88					
December.....	10, 755		546	206	347	.655	.76					
Calendar year 1935.....	131, 930		1, 310	105	361	.681	9.27					
January.....	10, 680		512	245	345	.651	.75					
February.....	16, 540		2, 660	205	570	1.08	1.16					
March.....	33, 685		1, 920	740	1, 087	2.05	2.36					
April.....	17, 242		765	384	575	1.08	1.20					
May.....	16, 762		1, 640	168	541	1.02	1.18					
June.....	4, 292		199	96	143	.270	.30					
July.....	3, 018		116	82	97.4	.184	.21					
August.....	3, 001		138	81	96.8	.183	.21					
September.....	3, 468		211	71	116	.219	.24					
Water year 1935-36.....	136, 863		2, 660	71	374	.706	9.59					

STREAMS TRIBUTARY TO LAKE MICHIGAN

Kalamazoo River at Comstock, Mich.

Location.- Staff gage, lat. 42°17'10", long. 85°30'50", in NE¼ sec. 19, T. 2 S., R. 10 W., 40 feet below highway bridge at Comstock. Location changed in April 1936, datum unchanged.

Drainage area.- 1,010 square miles.

Records available.- April to August 1931, October 1932 to September 1936.

Extremes.- Maximum discharge observed during year, 3,290 second-feet Mar. 2 (gage height, 4.27 feet); minimum, 214 second-feet July 22, 23 (gage height, 0.80 foot). 1931, 1932-35: Maximum discharge observed, 3,290 second-feet Apr. 8, 1934, Mar. 2, 1936; maximum gage height, 4.30 feet Apr. 8, 1934; minimum discharge, 199 second-feet Oct. 14, 1934; minimum gage height, 0.56 foot May 4, 1931.

Remarks.- Records fair except those for periods of ice effect, Dec. 4-6, Dec. 26 to Jan. 2, Jan. 20 to Feb. 29, which were computed on basis of records on Battle Creek, gage heights, and weather records, and are poor. Flow regulated by power plants upstream. Gage read once daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	311	285	652	700	410	2,960	690	1,080	389	341	271	298
2	316	417	652	800	420	3,290	728	1,160	544	331	271	326
3	307	361	652	1,080	430	3,070	728	1,160	580	302	224	351
4	302	448	625	802	440	2,560	690	1,160	478	311	240	321
5	311	802	600	728	440	2,160	728	1,080	652	361	289	702
6	285	840	550	840	420	1,960	802	1,080	417	399	248	331
7	580	960	478	802	410	1,960	840	920	448	326	263	356
8	389	728	690	728	400	1,960	920	920	389	298	280	356
9	361	802	652	765	400	1,960	880	802	448	255	289	361
10	289	802	652	728	410	1,780	880	690	417	280	248	307
11	351	802	690	728	420	1,600	840	615	311	280	248	289
12	302	880	728	690	420	1,600	920	580	276	280	271	356
13	321	840	728	580	430	1,600	1,000	652	321	263	240	351
14	359	880	652	544	430	1,510	1,000	652	316	298	240	690
15	417	960	615	511	440	1,420	960	544	271	276	263	880
16	351	840	652	615	440	1,420	840	544	361	251	255	840
17	280	802	728	690	440	1,330	840	448	263	228	271	802
18	321	802	728	728	430	1,330	802	511	263	228	248	690
19	336	802	652	448	430	1,160	728	448	361	251	289	652
20	361	765	580	500	420	1,080	728	389	289	244	289	544
21	389	802	544	525	420	1,080	728	361	361	228	293	417
22	389	802	511	540	420	960	728	448	251	214	276	511
23	389	765	511	540	475	1,000	802	389	293	214	321	361
24	289	728	580	520	600	960	690	448	251	285	293	331
25	298	728	544	510	800	1,000	580	389	263	289	267	478
26	311	728	540	500	1,250	1,000	478	448	232	298	321	448
27	298	690	540	480	2,000	880	615	336	255	271	316	321
28	307	652	550	460	2,250	920	652	271	263	271	316	511
29	417	652	560	450	2,500	940	840	389	249	248	307	690
30	448	652	675	440	-	765	1,080	289	361	224	316	544
31	356	-	600	425	-	690	-	389	-	240	298	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	10,751	580	280	347	0.344	0.40
November.....	22,017	960	285	754	.727	.81
December.....	19,011	728	478	613	.607	.70
Calendar year 1935.....	246,513	2,060	244	675	.668	9.07
January.....	19,397	1,080	425	626	.620	.71
February.....	19,195	2,500	400	662	.655	.71
March.....	47,805	3,290	690	1,542	1.53	1.76
April.....	23,737	1,080	478	791	.763	.87
May.....	19,592	1,160	271	632	.626	.72
June.....	10,542	652	252	351	.346	.39
July.....	8,575	399	214	277	.274	.32
August.....	8,561	321	224	276	.273	.31
September.....	14,025	880	289	468	.463	.52
Water year 1935-36.....	223,208	3,290	214	610	.604	8.22

Kalamazoo River at Calkins Bridge, near Allegan, Mich.

Location.- Water-stage recorder, lat. 42°34', long. 85°57', in sec. 15, T. 2 N., R. 14 W., at Calkins Bridge, 1 mile above Swan Creek and 6 miles northwest of Allegan. Record obtained from staff gage June 24 to Sept. 30. Zero of gage is at mean sea level.

Drainage area.- 1,540 square miles.

Records available.- April 1929 to September 1936.

Extremes.- Maximum discharge during year, 3,150 second-feet Feb. 28 (gage height, 603.50 feet); minimum discharge observed, 123 second-feet June 25 (gage height, 595.00 feet). 1929-36: Maximum discharge, 3,580 second-feet Jan. 8, 1930 (gage height, 603.82 feet); minimum discharge observed, that of June 25, 1936.

Remarks.- Records good except those for periods of ice effect, Dec. 21-26, Jan. 22, 23, Feb. 3-8, which were computed on basis of gage heights and records for station at Comstock and are poor, those for Dec. 4-6, Dec. 27 to Jan. 7, Jan. 24 to Feb. 2, Feb. 9-24, June 22, 23, July 10-17, 19-25, which were computed on basis of records for station at Comstock and are poor, and those for June 24 to July 9, July 18, July 26 to Sept. 30, which are based on twice-daily staff-gage readings and are fair. Flow regulated by power plant in Allegan; also by power plant just above gage after June 22.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	920	860	1,240	1,100	840	2,950	1,340	1,600	680	144	337	545
2	1,060	800	1,240	1,160	830	2,950	1,360	1,680	955	162	234	545
3	550	860	1,130	1,270	830	2,950	1,300	1,760	1,130	167	262	545
4	470	1,240	1,130	1,450	840	2,950	1,300	1,720	1,160	134	252	292
5	441	1,440	1,130	1,320	860	3,050	1,340	1,720	955	134	413	314
6	349	1,760	1,130	1,260	830	3,000	1,410	1,560	1,020	140	441	770
7	361	1,520	1,130	1,500	820	2,950	1,410	1,520	1,060	134	326	252
8	830	1,480	1,130	1,720	810	2,850	1,560	1,520	860	134	470	575
9	830	1,410	1,440	1,600	800	2,800	1,560	1,440	710	194	217	680
10	890	1,440	1,360	1,410	800	2,800	1,560	1,410	860	250	337	560
11	860	1,440	1,410	1,270	790	2,750	1,560	1,240	920	275	530	400
12	740	1,560	1,100	1,270	790	2,800	1,560	1,130	830	290	262	660
13	890	1,600	1,060	1,240	780	2,700	1,520	1,100	695	290	470	695
14	830	1,600	1,800	1,380	780	2,550	1,480	955	605	290	441	920
15	830	1,520	1,540	1,270	770	2,400	1,520	1,020	740	290	314	990
16	860	1,440	1,300	1,240	760	2,300	1,520	1,100	770	290	314	1,380
17	860	1,440	1,270	1,240	750	2,250	1,480	1,020	605	280	262	1,540
18	800	1,410	1,500	1,200	730	2,050	1,410	955	605	262	413	1,060
19	725	1,380	1,270	1,270	720	2,000	1,320	955	650	290	413	920
20	800	1,300	1,200	1,130	750	1,920	1,300	890	655	300	650	1,020
21	860	1,410	1,170	990	770	1,920	1,200	890	515	310	590	740
22	920	1,440	1,120	950	800	1,800	1,240	830	400	320	575	1,100
23	955	1,440	1,080	920	880	1,720	1,270	800	300	330	349	590
24	890	1,440	1,060	910	1,200	1,680	1,240	830	190	340	400	770
25	860	1,340	1,040	890	1,800	1,680	1,160	830	130	350	500	955
26	955	1,270	1,030	880	2,350	1,600	1,200	860	135	292	470	605
27	770	1,240	1,020	870	2,600	1,480	1,130	860	147	740	361	690
28	920	1,240	1,020	860	3,050	1,480	1,160	860	147	456	665	1,020
29	860	1,340	1,020	850	3,000	1,480	1,200	725	149	456	456	1,300
30	830	1,160	1,030	840	-	1,480	1,380	695	152	243	361	1,100
31	890	-	1,050	840	-	1,410	-	725	-	530	209	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	24,586	1,060	349	793	0.515	0.59
November.....	40,820	1,760	800	1,361	.884	.99
December.....	36,520	1,440	1,020	1,178	.765	.88
Calendar year 1935.....	440,661	2,700	349	1,207	.784	10.63
January.....	36,110	1,720	840	1,165	.756	.87
February.....	32,330	3,050	720	1,115	.724	.78
March.....	70,700	3,050	1,410	2,281	1.48	1.71
April.....	41,070	1,560	1,130	1,369	.889	.99
May.....	35,200	1,760	695	1,135	.737	.85
June.....	18,740	1,160	130	625	.406	.45
July.....	8,837	740	134	285	.185	.21
August.....	12,294	665	209	397	.258	.30
September.....	23,553	1,380	252	785	.510	.57
Water year 1935-36.....	380,760	3,050	130	1,040	.675	9.19

STREAMS TRIBUTARY TO LAKE MICHIGAN

Battle Creek at Battle Creek, Mich.

Location.- Staff gage, lat. 42°19'55", long. 85°9'15", in sec. 5, T. 2 S., R. 7 W., 350 feet above Verona Street Bridge.

Drainage area.- 241 square miles.

Records available.- October 1930 to July 1931; October 1932 to September 1936.

Extremes.- Maximum discharge observed during year, 890 second-feet Feb. 29 (gage height, 2.11 feet); minimum discharge not determined.

1930-31, 1933-36: Maximum discharge observed, 1,300 second-feet Apr. 6, 1934 (gage height, 2.48 feet); minimum, 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 except those for periods June 17-22, 28, 29, July 9 to Aug. 25, Sept. 1, when gates at dam were open, and for period of ice effect, Feb. 6-9, which were computed on basis of discharge measurement of July 20, records for station on Kalamazoo River at Comstock, and weather records and are poor. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	60	128	86	79	850	153	326	63	51	27	34
2	63	63	111	89	75	770	155	404	119	48	27	38
3	57	63	104	97	75	695	140	385	140	45	26	40
4	54	82	82	104	75	660	149	361	145	45	25	45
5	57	156	100	104	75	590	153	555	132	42	26	40
6	57	172	97	107	75	625	181	320	111	40	26	45
7	51	210	104	111	75	660	195	269	97	40	26	40
8	54	210	132	111	75	590	221	221	89	40	27	42
9	57	172	149	119	75	523	221	186	86	39	27	51
10	57	158	162	119	75	491	221	162	75	38	26	45
11	57	153	158	119	69	491	210	140	72	38	25	45
12	57	172	153	119	69	491	210	128	66	38	24	63
13	54	181	140	128	69	491	210	124	63	38	24	63
14	48	205	128	128	72	491	221	128	63	38	24	176
15	51	200	128	136	75	428	221	119	54	36	25	216
16	54	181	128	128	75	385	200	111	57	33	25	286
17	51	155	132	128	72	343	191	104	52	31	26	274
18	51	156	123	111	75	352	175	97	48	30	26	200
19	66	136	128	97	79	308	162	97	48	29	27	153
20	69	140	97	111	79	274	153	89	45	28	27	128
21	63	145	89	115	75	247	153	89	41	27	28	104
22	63	153	100	104	75	231	149	86	38	26	29	93
23	69	162	97	97	75	221	140	86	35	26	29	82
24	69	153	89	89	69	221	136	82	40	28	30	72
25	69	132	89	82	145	216	128	69	40	29	31	69
26	63	119	86	82	181	216	119	75	35	29	32	69
27	60	128	86	75	326	195	111	75	30	28	35	97
28	63	128	89	79	391	181	145	66	32	26	32	119
29	63	128	86	82	890	181	205	69	35	25	35	140
30	63	128	79	79	-	167	263	63	51	25	35	149
31	60	-	79	79	-	158	-	57	-	26	30	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,833	69	48	59.1	0.245	0.28
November.....	4,359	210	60	145	.602	.67
December.....	3,458	162	79	112	.465	.54
Calendar year 1935.....	58,711	930	40	161	.668	9.06
January.....	3,215	136	75	104	.432	.50
February.....	3,715	890	69	128	.551	.57
March.....	12,722	850	158	410	1.70	1.96
April.....	5,290	263	111	176	.730	.81
May.....	4,543	404	57	169	.660	.76
June.....	2,002	145	30	66.7	.277	.31
July.....	1,062	51	25	34.3	.142	.16
August.....	862	35	24	27.9	.115	.13
September.....	3,018	286	34	101	.419	.47
Water year 1935-36.....	46,479	890	24	127	.527	7.16

Grand River at Jackson, Mich.

Location.- Water-stage recorder, lat. 42°17'5", 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 (staff gage used April to September 1935 was at same datum, but 900.00 feet was added to readings).

Drainage area.- 174 square miles.

Records available.- April 1935 to September 1936.

Extremes.- Maximum discharge during year, 497 second-feet Mar. 4 (gage height, 10.78 feet); minimum, 9.2 second-feet Aug. 22 (gage height, 8.03 feet).
1935-36: Maximum discharge, that of Mar. 4, 1936; minimum, that of Aug. 22, 1936.

Remarks.- Records good except those for periods of ice effect, Jan. 25-30, Feb. 12, and those for periods of missing gage heights, Nov. 6-10, 22-26, Nov. 29 to Dec. 1, Dec. 3, 4, 11-16, Feb. 6-11, which were computed on basis of records for station at Lansing and weather records and are fair.

Rating table, water year 1935-36 (gage height, in feet and discharge, in second-feet)

8.0	8	9.4	167
8.2	17	9.6	206
8.4	30	9.8	242
8.6	47	10.0	281
8.8	68	10.2	326
9.0	95	10.4	377
9.2	128	10.6	433

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	26	60	43	43	252	109	109	49	24	15	17
2	28	26	47	47	43	281	91	95	59	22	14	22
3	27	25	50	51	44	293	89	92	42	21	16	16
4	26	53	52	53	45	303	82	92	42	30	14	16
5	26	86	52	51	47	281	91	91	41	21	14	15
6	24	95	52	54	50	281	103	87	41	22	14	16
7	25	90	70	54	48	281	101	82	40	21	14	14
8	25	85	95	55	47	271	100	77	40	24	14	16
9	25	80	114	55	45	261	103	72	66	24	14	16
10	26	105	125	57	48	271	125	64	76	24	14	16
11	26	128	115	58	60	281	188	69	47	23	14	18
12	26	130	105	59	80	261	208	57	34	20	14	44
13	25	163	90	64	78	240	208	55	28	21	16	26
14	26	175	85	65	73	235	206	52	26	21	16	31
15	26	175	85	65	60	261	231	49	27	21	14	21
16	26	155	80	62	80	242	240	46	26	21	13	20
17	26	128	72	62	69	237	233	43	33	19	16	22
18	26	126	71	55	70	252	222	43	26	18	18	22
19	27	138	146	57	71	261	177	41	25	16	14	22
20	26	149	98	60	62	242	151	38	24	16	13	22
21	28	147	55	58	71	242	143	37	21	16	16	28
22	28	125	54	55	77	242	139	36	22	16	14	27
23	27	130	53	49	87	242	134	34	22	19	12	26
24	26	115	50	47	162	215	126	34	21	16	14	45
25	26	95	45	45	226	196	120	32	21	16	28	28
26	26	80	46	44	187	189	114	31	21	14	15	27
27	24	74	47	44	151	179	118	32	19	16	14	71
28	24	95	45	44	179	173	125	29	18	16	20	25
29	28	85	43	43	206	165	132	27	43	15	16	28
30	25	80	44	43	-	165	128	25	30	15	14	46
31	26	-	44	45	-	157	-	24	-	15	14	-
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	818			36	24	26.4	0.152	0.18				
November.....	3,164			175	25	105	.603	.67				
December.....	2,190			146	43	70.6	.406	.47				
Calendar year												
January.....	1,644			65	43	53.0	.305	.35				
February.....	2,509			226	43	86.5	.497	.54				
March.....	7,452			303	157	240	1.38	1.59				
April.....	4,337			240	82	145	.833	.93				
May.....	1,695			109	24	54.7	.314	.36				
June.....	1,030			76	18	34.3	.197	.22				
July.....	603			30	14	19.5	.112	.13				
August.....	468			28	12	15.1	.087	.10				
September.....	763			71	14	25.4	.146	.16				
Water year 1935-36.....	26,673			303	12	72.9	.419	5.70				

STREAMS TRIBUTARY TO LAKE MICHIGAN

Grand River at Lansing, Mich.

Location.- Water-stage recorder, lat. 42°45'20", long. 84°34'55", in SW $\frac{1}{4}$ sec. 5, T. 4 N., R. 2 W., at northwest limit of Lansing.

Drainage area.- 1,230 square miles.

Records available.- November 1934 to September 1936; March 1901 to August 1906 at Seymour Street Bridge, 1 $\frac{3}{4}$ miles upstream.

Extremes.- Maximum discharge during year, 2,490 second-feet Mar. 12 (gage height, 5.85 feet); minimum discharge, 22 second-feet July 19; minimum gage height, 0.26 foot Sept. 7.

1934-36: Maximum discharge, 4,980 second-feet Mar. 12, 1935 (gage height, 7.57 feet); minimum, that of July 19, 1936.

Remarks.- Records good except those for periods of ice effect and of missing gage heights, Dec. 20-22, 29, 30, Jan. 21-23, Feb. 9, 10, 15, May 16, 17, June 20 to July 17, which were computed on basis of records for stations at Jackson and Grand Rapids and weather records and are poor. Flow regulated at power plant upstream.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	149	463	248	200	2,170	760	820	177	160	48	66
2	106	127	433	250	201	2,410	760	1,020	375	175	52	128
3	130	156	370	306	206	2,330	735	993	280	175	54	92
4	110	283	292	346	181	2,330	668	1,190	240	150	69	68
5	133	244	266	284	186	2,410	645	951	427	130	38	116
6	75	469	338	309	163	2,490	885	929	222	115	37	143
7	122	424	478	342	147	2,330	1,130	748	93	105	63	156
8	99	387	508	326	143	2,170	1,090	605	93	110	87	173
9	119	250	458	342	145	2,100	1,110	615	239	110	27	73
10	141	338	610	343	160	2,100	1,180	449	183	100	55	82
11	151	422	567	393	182	2,330	871	470	190	90	46	119
12	140	566	548	341	211	2,490	1,140	459	247	90	40	224
13	127	525	570	355	210	2,330	1,260	363	102	90	58	163
14	108	624	503	391	200	2,030	1,270	563	146	95	76	207
15	186	602	537	435	175	1,920	1,440	238	183	90	52	206
16	150	565	489	430	156	1,890	1,180	300	192	80	25	310
17	94	587	471	369	145	1,890	1,050	290	159	80	49	188
18	119	575	597	355	182	1,920	1,100	283	129	80	35	163
19	117	630	532	281	195	1,610	1,000	244	118	62	35	196
20	164	468	450	274	173	1,500	891	160	135	69	41	88
21	182	595	400	260	198	1,410	922	280	120	82	74	69
22	147	532	360	250	245	1,320	775	210	115	87	85	137
23	193	598	343	240	165	1,230	745	180	130	100	68	138
24	176	702	391	230	233	1,230	691	150	115	101	51	178
25	146	301	313	220	605	1,260	708	202	110	88	80	149
26	147	538	247	210	1,230	1,170	454	188	100	73	80	165
27	137	489	326	208	1,580	1,080	489	135	95	77	109	289
28	147	470	260	200	1,580	1,020	696	101	95	95	73	227
29	128	458	250	198	1,820	968	861	96	100	66	73	262
30	161	446	250	212	-	885	979	128	120	73	67	281
31	157	-	282	197	-	835	-	133	-	50	136	-
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	4,164			193	72	134	0.109	0.13				
November.....	15,520			702	127	451	.367	.41				
December.....	12,902			610	247	416	.338	.39				
Calendar year 1935.....	180,426			4,470	72	494	.402	5.47				
January.....	9,182			435	197	296	.241	.28				
February.....	10,987			1,820	143	379	.308	.33				
March.....	54,958			2,400	835	1,773	1.44	1.66				
April.....	27,483			1,440	454	916	.745	.83				
May.....	13,493			1,190	96	455	.354	.41				
June.....	5,028			427	93	168	.137	.15				
July.....	3,048			175	50	98.3	.080	.09				
August.....	1,893			136	25	61.1	.050	.06				
September.....	4,854			310	66	162	.132	.15				
Water year 1935-36.....	161,512			2,490	25	441	.359	4.89				

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 1936; March 1901 to September 1918 at Fulton Street Bridge, in Grand Rapids.

Extremes.- Maximum discharge during year, 15,900 second-feet Mar. 12 (gage height, 9.68 feet); minimum, 341 second-feet Aug. 17 (gage height, -4.85 feet).
1930-36: Maximum discharge, 19,200 second-feet Mar. 7, 1935 (gage height, 10.87 feet); minimum, that of Aug. 17, 1936.

A stage of 19.3 feet occurred at the Fulton Street gage on Mar. 27, 1904 (discharge, 53,000 second-feet, revised).

Remarks.- Records good except those for periods of ice effect, Dec. 22 to Jan. 2, Jan. 19 to Feb. 23 (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 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 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,370	1,310	2,440	1,650	1,500	8,000	4,080	3,480	1,250	860	457	886
2	1,439	1,220	2,500	1,780	1,450	8,590	3,840	3,920	1,620	1,190	395	1,020
3	1,370	1,220	2,110	1,950	1,450	8,800	3,850	4,400	1,780	1,130	647	1,080
4	1,250	2,370	1,350	1,920	1,500	8,800	3,890	4,400	1,730	1,020	355	1,020
5	1,080	2,850	1,690	1,920	1,550	8,080	3,820	4,400	1,680	1,020	691	886
6	1,050	3,130	1,720	1,980	1,500	9,500	3,840	4,240	1,780	1,090	474	1,020
7	1,100	3,200	2,110	2,040	1,450	9,500	4,320	4,080	1,780	1,050	491	1,280
8	1,080	2,890	2,570	2,040	1,400	9,640	4,760	3,760	1,690	992	474	1,520
9	1,100	2,920	2,780	1,980	1,300	10,100	4,940	3,550	1,490	938	381	1,400
10	1,280	2,850	3,060	1,980	1,350	10,700	4,940	3,200	1,260	835	474	1,340
11	1,190	2,850	2,920	2,110	1,400	12,900	4,940	2,920	1,280	761	457	1,460
12	1,280	2,780	2,710	1,980	1,450	15,500	4,940	2,780	1,190	546	425	1,850
13	1,370	2,920	2,710	2,110	1,500	14,600	5,050	2,710	1,340	737	395	1,720
14	1,400	3,060	2,570	2,180	1,550	14,600	5,050	2,500	938	810	457	1,980
15	1,190	2,990	2,500	2,240	1,600	13,600	5,030	2,440	912	647	546	2,710
16	1,190	2,850	2,570	2,180	1,650	12,900	4,940	2,240	1,080	785	425	2,990
17	1,250	2,640	2,570	2,110	1,650	11,700	4,760	2,240	1,080	912	351	3,620
18	1,280	2,710	2,570	2,110	1,550	10,200	4,580	1,960	1,160	835	441	3,550
19	1,340	2,570	2,570	2,250	1,500	9,860	4,400	2,110	1,250	827	509	2,710
20	1,250	2,710	2,180	2,200	1,500	8,520	4,000	1,980	1,020	546	626	2,440
21	1,190	2,920	1,920	2,100	1,500	7,740	3,920	1,560	810	565	527	1,920
22	1,020	2,920	1,800	2,000	1,600	6,980	3,690	1,660	691	546	714	1,780
23	1,280	2,780	1,700	1,950	1,800	6,620	3,620	1,520	860	626	1,130	1,560
24	1,310	2,710	1,650	1,900	2,240	6,580	3,410	1,400	1,020	585	1,100	1,850
25	1,310	2,500	1,600	1,800	2,780	6,140	3,200	1,430	737	647	965	1,850
26	1,250	2,370	1,700	1,700	3,200	5,700	2,990	1,430	668	546	965	2,040
27	1,250	2,440	1,750	1,600	5,300	5,400	2,780	1,560	810	755	860	2,370
28	1,280	2,440	1,700	1,500	6,820	5,210	2,780	1,590	761	985	1,080	3,480
29	1,190	2,640	1,600	1,450	7,220	4,760	2,920	1,160	668	785	1,130	3,340
30	1,190	2,370	1,500	1,450	-	4,490	2,990	1,080	810	491	1,080	3,130
31	1,220	-	1,550	1,450	-	4,240	-	1,080	-	491	1,080	-
Month	Second-foot-days			Maximum	Minimum	Mean	Per square foot-mile	Run-off in inches				
October.....	30,340			1,430	1,050	1,237	0.252	0.29				
November.....	79,230			3,200	1,220	2,605	.532	.59				
December.....	66,970			3,060	1,500	2,160	.441	.51				
Calendar year 1935.....	1,087,480			18,600	900	2,979	.608	8.24				
January.....	59,540			2,250	1,450	1,921	.392	.45				
February.....	62,060			7,220	1,300	2,140	.437	.47				
March.....	280,250			15,500	4,240	9,040	1.84	2.12				
April.....	121,530			5,030	2,730	4,061	.827	.92				
May.....	79,800			4,400	1,090	2,542	.519	.60				
June.....	35,197			1,780	669	1,173	.239	.27				
July.....	24,224			1,190	491	771	.159	.18				
August.....	20,612			1,130	381	665	.136	.16				
September.....	59,802			3,620	886	1,993	.407	.45				
Water year 1935-36.....	925,555			15,500	381	2,523	.516	7.01				

STREAMS TRIBUTARY TO LAKE MICHIGAN

Fish Creek near Carson City, Mich.

Location.- Chain gage, lat. 43°10', long. 84°51', on line between secs. 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 to September 1936.

Extremes.- Maximum discharge observed during period, 1,190 second-feet Mar. 11, from rating curve extended above 200 second-feet (gage height, 6.74 feet); minimum, 8.4 second-feet Aug. 7, 8; minimum stage, 2.98 feet Aug. 16.

Remarks.- Records fair. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					-	477	137	107	54	48	28	34
2					-	477	133	131	60	46	18	40
3					-	477	133	127	67	36	30	37
4					-	570	133	105	61	32	27	34
5					-	590	135	100	54	36	19	31
6					-	570	173	102	51	41	17	51
7					-	550	221	94	60	40	19	79
8					-	570	186	87	51	30	19	63
9					-	610	190	80	45	23	9.6	48
10					-	710	203	98	51	28	28	43
11					-	1,060	226	67	47	26	23	46
12					-	930	237	84	43	10	23	48
13					-	550	190	89	41	20	23	50
14					-	442	173	89	39	31	23	55
15					-	346	169	79	43	33	23	53
16		*107		*59	-	395	173	75	41	35	10	61
17					-	382	164	72	43	32	32	67
18					-	356	146	79	47	28	28	53
19					-	313	135	82	57	19	28	48
20					-	319	129	69	51	28	37	45
21					-	290	129	75	35	35	42	43
22					-	290	113	67	39	28	47	41
23					-	293	109	66	45	27	55	40
24					-	307	105	60	34	19	60	61
25					-	290	94	60	43	22	58	57
26					-	251	96	57	35	19	40	48
27					495	234	94	57	35	34	41	69
28					477	203	94	60	40	40	51	104
29					477	180	104	50	39	36	58	80
30					-	162	105	48	46	29	46	67
31					-	148	-	51	-	29	43	-
Month	Second-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....												
November.....												
December.....												
Calendar year												
January.....	-			-	-	-	-	-				
February.....	-			-	-	-	-	-				
March.....	13,402			1,060	148	432	2.98	3.44				
April.....	4,427			237	94	148	1.02	1.14				
May.....	2,467			131	46	79.6	.549	.63				
June.....	1,397			67	34	45.6	.321	.36				
July.....	940			48	10	30.3	.209	.24				
August.....	1,005.6			60	9.6	32.4	.223	.26				
September.....	1,596			104	31	53.2	.367	.41				
Water year												

*Discharge measurement.

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.

Records available.- March 1931 to September 1936. August 1902 to December 1903 at site three-quarters of a mile downstream.

Extremes.- Maximum discharge during year, 1,360 second-feet Feb. 27 (gage height, 5.87 feet); minimum, 4.8 second-feet Aug. 17 (gage height, 2.96 feet).
 1902-3, 1931-36: Maximum 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 period of backwater from construction work below gage, Oct. 1 to Dec. 2, which were computed on basis of gage heights and records for Grand River at Jackson and at Lansing and are fair, and those for Dec. 22 to Jan. 2, Jan. 13 to Feb. 15, 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.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

2.9	2.5	3.8	208	5.0	790
3.0	6.3	4.0	288	5.5	1,120
3.1	20	4.2	376		
3.2	39	4.4	470		
3.4	83	4.6	570		
3.6	139	4.6	675		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	33	62	42	33	682	149	230	16	30	19	15
2	27	29	55	47	32	772	139	239	78	39	12	19
3	21	30	52	54	32	654	139	297	93	33	9.0	19
4	15	30	47	56	31	697	139	297	88	41	5.9	22
5	21	70	45	56	30	790	146	239	83	17	5.5	12
6	15	62	43	47	30	760	235	194	64	12	5.5	12
7	15	56	65	56	29	675	354	159	41	22	6.3	15
8	14	60	76	54	23	606	331	139	45	30	15	13
9	19	56	106	56	27	580	284	112	69	30	13	23
10	19	56	115	67	27	580	285	93	47	15	7.7	28
11	23	52	101	62	28	664	255	96	45	10	5.5	24
12	38	89	86	58	30	742	314	101	20	9.0	9.0	22
13	17	115	83	60	34	654	367	96	16	16	10	19
14	15	105	78	64	36	509	331	88	43	30	10	30
15	22	96	78	67	42	456	288	78	43	13	6.3	47
16	21	86	86	69	45	550	272	74	28	9.0	5.9	45
17	22	80	99	66	39	544	259	62	22	6.3	5.5	35
18	23	72	93	62	37	460	235	54	13	22	8.0	31
19	40	67	96	58	37	376	208	60	22	9.0	15	30
20	36	70	72	52	39	331	186	58	26	5.9	9.0	22
21	20	72	56	50	43	292	165	60	12	5.9	9.0	15
22	32	70	52	48	45	272	142	47	15	5.9	15	16
23	42	72	48	47	39	251	136	26	22	9.0	17	13
24	25	63	46	45	39	255	124	20	36	19	13	16
25	28	61	44	43	273	272	112	42	12	12	17	17
26	25	50	42	41	762	259	104	41	9.0	7.7	22	15
27	25	65	40	40	980	224	99	36	10	12	17	22
28	24	66	39	38	915	204	106	36	19	12	17	54
29	26	56	38	36	882	186	187	42	16	10	12	60
30	33	65	39	35	-	176	297	31	15	7.7	7.7	50
31	36	-	40	35	-	152	-	16	-	9.0	6.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	759	42	14	24.5	0.069	0.08
November.....	1,962	115	29	65.4	.184	.21
December.....	2,022	115	38	65.2	.184	.21
Calendar year						
January.....	1,609	69	33	51.9	.146	.17
February.....	4,644	980	27	160	.451	.49
March.....	14,825	882	152	478	1.35	1.56
April.....	6,356	367	99	212	.597	.67
May.....	3,213	297	16	104	.293	.34
June.....	1,066.0	93	9.0	35.6	.100	.11
July.....	517.4	41	5.9	16.7	.047	.05
August.....	336.1	22	5.5	10.8	.030	.03
September.....	761	60	12	25.4	.072	.08
Water year 1935-36.....	38,074.1	980	5.5	104	.293	4.00

Thornapple River near Caledonia, Mich.

Location.- Staff gage, lat. 42°48'40", long. 85°29'0", 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 1936.

Extremes.- Maximum daily discharge during year, 3,840 second-feet Feb. 28 (gage height, 635.5 feet), from rating curve extended above 1,600 second-feet; minimum daily discharge, 249 second-feet Sept. 12 (gage height, 680.4 feet).
1930-36: Maximum daily discharge, that of Feb. 28, 1936; minimum, 5 second-feet (estimated) Oct. 27, 1934 (gage height, 678.5 feet).

Remarks.- Records poor. Gage read hourly. Flow regulated by storage at La Barge power plant. Gage-height record furnished by Consumers Power Co.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	291	310	394	371	371	2,720	513	630	386	283	266	283
2	291	310	354	371	371	2,890	570	758	283	283	266	283
3	291	310	356	371	371	2,720	513	970	363	283	266	283
4	291	436	350	371	371	2,890	513	970	321	266	266	283
5	291	531	394	414	371	2,890	570	895	363	266	266	283
6	291	531	350	414	371	2,390	513	758	321	266	266	283
7	291	531	394	414	371	2,560	758	630	321	266	266	283
8	291	556	436	414	371	2,560	825	570	363	266	266	283
9	291	506	531	414	371	2,560	970	570	302	266	266	283
10	291	556	462	414	330	2,390	825	459	302	266	266	283
11	291	662	482	414	371	2,560	825	409	302	266	266	321
12	291	506	436	414	371	2,560	825	459	302	266	266	249
13	291	556	436	414	371	2,240	758	409	302	266	266	283
14	291	556	436	414	371	1,950	693	409	302	266	266	895
15	291	556	436	459	371	1,680	630	363	341	266	266	758
16	291	459	436	414	371	1,560	630	363	283	266	266	970
17	291	459	436	414	371	1,440	630	363	283	266	266	1,560
18	291	459	436	371	371	1,230	513	409	283	266	266	1,180
19	310	414	436	371	371	1,140	570	409	283	266	266	860
20	310	414	350	371	371	1,050	513	409	283	266	266	662
21	310	414	350	371	371	1,140	570	409	283	266	266	542
22	310	414	350	371	371	825	513	409	283	266	266	434
23	310	459	394	371	371	825	459	409	283	266	266	341
24	310	414	350	371	414	825	459	341	283	266	266	386
25	310	414	350	414	556	758	409	341	283	266	266	542
26	310	371	350	371	1,440	825	409	341	283	434	266	434
27	310	371	350	371	1,950	693	409	341	283	266	266	542
28	310	371	371	371	3,840	693	459	341	283	266	266	860
29	310	436	371	371	2,720	630	570	341	283	266	266	860
30	310	436	371	371	-	630	570	341	283	266	266	726
31	310	-	371	371	-	570	-	386	-	266	283	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	9,268	310	291	299	0.387	0.45
November.....	13,718	662	310	457	.591	.86
December.....	12,373	531	350	399	.516	.89
Calendar year 1935.....	191,497	3,640	254	525	.679	9.21
January.....	12,148	459	371	392	.507	.58
February.....	19,412	3,840	330	669	.865	.93
March.....	52,344	2,890	570	1,658	2.18	2.51
April.....	17,964	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.....	16,235	1,560	249	541	.700	.71
Water year 1935-36.....	194,541	3,840	249	532	.686	9.34

Muskegon River at Evert, 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 Evert.

Drainage area.- 1,450 square miles.

Records available.- November 1930 to June 1931, January 1934 to September 1936.

Extremes.- Maximum discharge observed during year, 2,440 second-feet Mar. 27 (gage height, 9.92 feet); minimum, 288 second-feet Aug. 13 (gage height, 6.68 feet).
1930-31, 1934-36: 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. 4-11, Dec. 24 to Mar. 10, which were computed on basis of records for station at Newaygo and weather records and are poor, and those for days of missing gage heights Nov. 24, Dec. 2, 3, 20, July 11-15. which were computed on same basis and are fair. Gage read once daily.

Rating tables, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 25				Mar. 26 to Sept. 30			
6.6	245	7.8	855	6.6	251	7.8	911
6.8	309	8.0	985	6.8	328	8.0	1,050
7.0	389	8.5	1,330	7.0	419	8.5	1,400
7.2	485	9.0	1,680	7.2	524	9.0	1,760
7.4	597	9.5	2,080	7.4	643	9.5	2,140
7.6	725	10.0	2,460	7.6	775	10.0	2,510

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	368	460	660	440	330	410	1,910	1,050	553	396	308	460
2	368	435	650	470	330	420	1,760	1,120	612	396	288	419
3	368	435	650	500	330	440	1,610	1,190	676	396	288	396
4	389	460	650	500	330	470	1,470	1,190	643	372	288	396
5	389	512	650	490	330	500	1,330	1,260	612	372	288	372
6	412	597	660	490	330	520	1,260	1,400	582	350	288	372
7	412	597	660	490	330	540	1,190	1,330	612	350	288	396
8	412	597	660	490	330	570	1,120	1,190	612	350	288	396
9	389	568	660	490	330	600	1,050	1,190	582	350	288	396
10	435	597	660	490	330	630	1,120	1,120	553	328	288	396
11	460	597	660	490	330	660	1,260	1,050	553	320	288	396
12	460	597	660	480	330	322	1,610	980	497	320	288	396
13	460	628	660	470	330	855	1,470	980	497	310	288	444
14	460	597	568	450	320	855	1,540	911	470	310	288	470
15	460	597	597	430	320	855	1,640	911	470	310	308	444
16	435	568	597	420	320	920	1,610	843	470	308	308	524
17	435	568	568	400	310	855	1,610	809	470	308	288	553
18	435	568	568	380	310	920	1,680	775	470	308	288	524
19	435	568	568	370	310	985	1,610	742	444	308	288	497
20	412	568	460	370	300	985	1,540	708	444	288	288	470
21	435	597	389	360	300	1,260	1,470	676	419	288	308	444
22	412	597	368	360	300	1,330	1,400	643	419	288	419	444
23	412	597	368	360	300	1,610	1,330	612	396	328	497	444
24	435	597	380	360	310	1,900	1,190	643	396	328	470	444
25	435	597	350	360	320	2,220	1,260	612	396	350	419	444
26	435	597	390	350	340	2,360	1,190	612	396	350	419	444
27	435	628	390	350	360	2,440	1,120	676	372	350	444	582
28	435	692	400	350	380	2,360	1,120	643	372	328	524	612
29	435	692	400	340	490	2,280	1,120	582	372	328	524	582
30	435	660	400	340	-	2,210	1,360	582	419	308	497	524
31	435	-	400	330	-	2,080	-	553	-	308	497	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	13,133	460	368	424	0.292	0.34
November.....	17,368	692	435	579	.399	.45
December.....	16,671	660	368	538	.371	.43
Calendar year 1935.....	284,694	3,820	347	780	.538	7.32
January.....	12,970	500	330	418	.288	.33
February.....	9,490	400	300	327	.226	.24
March.....	35,842	2,440	410	1,156	.797	.92
April.....	41,540	1,910	1,050	1,385	.955	1.07
May.....	27,583	1,400	553	890	.614	.71
June.....	14,779	676	372	498	.340	.38
July.....	10,304	396	288	332	.229	.26
August.....	10,833	524	288	350	.241	.28
September.....	15,681	612	372	456	.314	.35
Water year 1935-36.....	224,199	2,440	288	613	.423	5.76

Muskegon River at Newaygo, Mich.

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

Drainage area.- 2,350 square miles.

Records available.- October 1930 to September 1936. June 1901 to December 1906 at a site above Newaygo.

Extremes.- Maximum daily discharge during year, 3,390 second-feet Mar. 27 (gage height, 48.8 feet); minimum, 425 second-feet Aug. 23 (gage height, 46.3 feet).
1901-6, 1930-36: 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 periods of ice effect, Dec. 19-27, Jan. 20 to Mar. 7, which were computed on basis of records for station at Evert and weather records and are poor. Flow regulated at Croton Dam, 18 miles upstream, and by power plant at Newaygo. Gage-height record furnished by Consumers Power Co. Gage read hourly.

Rating tables, water year 1935-36 except periods of ice effect (gage height in feet, and discharge, in second-feet)

Oct. 1 to May 14				May 15 to Sept. 30			
46.2	390	47.4	1,220	46.3	425	47.4	1,390
46.4	495	47.6	1,410	46.4	500	47.6	1,560
46.6	615	47.8	1,640	46.6	665	47.8	1,760
46.8	745	48.0	1,910	46.8	840	48.0	1,990
47.0	885	48.2	2,220	47.0	1,020	48.2	2,260
47.2	1,040			47.2	1,200		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	960	1,120	960	1,310	800	1,000	2,570	1,640	1,020	1,110	930	1,360
2	960	960	960	960	800	1,050	2,570	1,220	1,110	950	580	1,380
3	960	960	960	1,040	800	1,100	2,220	1,220	1,110	500	665	1,380
4	855	1,040	1,040	1,040	800	1,200	2,060	1,520	1,110	665	640	1,360
5	960	1,310	960	1,040	800	1,250	1,910	2,060	1,020	580	1,110	1,200
6	960	1,220	960	1,220	800	1,300	2,060	2,220	1,020	840	665	930
7	960	1,220	960	1,220	800	1,350	2,220	2,220	1,110	1,110	665	1,110
8	1,040	1,310	1,040	1,520	800	1,410	2,220	2,220	1,380	840	665	1,290
9	1,040	1,220	1,220	1,910	800	1,410	1,910	1,770	1,560	640	665	1,290
10	1,040	1,220	1,640	1,910	800	1,640	1,770	1,640	1,470	930	665	1,380
11	1,040	1,120	1,770	1,120	790	1,640	1,640	1,640	1,110	840	840	1,290
12	1,040	1,220	1,770	960	790	2,060	1,640	2,060	1,110	580	1,110	1,110
13	1,040	1,220	1,770	1,120	790	1,910	1,630	2,220	930	640	580	560
14	1,040	1,220	1,770	1,220	790	1,770	1,640	2,220	1,110	580	580	930
15	1,040	1,220	1,410	1,220	790	1,640	1,640	1,870	1,020	500	580	1,020
16	1,040	1,220	1,040	1,220	780	1,640	1,770	1,660	1,110	750	500	1,110
17	1,040	1,120	1,120	1,220	780	1,910	2,060	1,290	1,200	840	580	1,200
18	1,040	1,120	1,120	960	780	2,060	1,770	1,380	1,200	1,020	1,020	1,110
19	1,040	1,310	1,100	960	780	2,060	1,640	1,760	1,110	950	1,020	930
20	1,040	1,220	1,060	950	770	1,770	1,910	1,380	930	580	840	1,020
21	1,040	1,040	1,000	950	770	1,770	2,570	1,560	500	500	580	1,290
22	1,220	1,040	960	950	780	1,640	2,760	1,200	840	500	500	1,380
23	1,220	1,040	900	950	780	1,910	2,390	1,020	1,110	580	425	1,290
24	1,220	1,040	860	840	800	3,170	2,220	1,110	1,110	930	665	1,200
25	1,040	1,040	820	920	820	3,170	1,910	1,020	1,110	665	1,020	1,110
26	1,040	960	760	900	850	3,170	1,770	1,290	665	580	1,110	930
27	1,040	960	700	880	870	3,390	1,640	1,020	580	665	1,020	1,200
28	1,120	1,040	615	860	890	2,220	2,060	1,020	580	665	1,020	1,200
29	1,220	1,120	555	840	1,000	2,220	2,220	1,110	840	580	1,110	1,200
30	1,220	1,040	745	820	-	2,760	1,770	1,110	1,110	840	930	1,200
31	1,220	-	1,040	800	-	2,760	-	1,110	-	1,020	1,290	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	32,765	1,220	885	1,057	0.450	0.52
November.....	33,890	1,310	960	1,130	.481	.54
December.....	33,585	1,770	555	1,083	.461	.53
Calendar year 1935.....	574,055	6,500	555	1,573	.669	9.07
January.....	33,930	1,910	800	1,095	.466	.54
February.....	23,580	1,000	760	806	.343	.37
March.....	59,350	3,390	1,000	1,915	.815	.94
April.....	60,160	2,760	1,630	2,005	.353	.95
May.....	47,780	2,220	1,020	1,541	.656	.96
June.....	31,185	1,560	500	1,040	.443	.49
July.....	23,330	1,110	500	753	.320	.37
August.....	24,770	1,290	425	799	.340	.39
September.....	35,020	1,580	580	1,167	.497	.55
Water year 1935-36.....	439,145	3,390	425	1,200	.511	6.95

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 1936.

Extremes.- Maximum discharge observed during year, 1,880 second-feet Mar. 25, 26; maximum gage height, 11.48 feet Mar. 26; minimum discharge, 540 second-feet Aug. 9 (gage height, 8.56 feet).

1903-16, 1930-31, 1934-36: Maximum discharge observed, 3,500 second-feet Mar. 25, 1913 (gage height, 7.0 feet, former datum); minimum, that of Aug. 9, 1936.

Remarks.- Records good except those for period of ice effect, Dec. 22 to Mar. 8, which were computed on basis of records for stations on Muskegon River and weather records and are poor. Discharge interpolated July 17, 18. Gage read once daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	825	851	995	840	650	640	1,420	1,180	892	778	727	833
2	825	851	935	900	650	660	1,340	1,460	923	752	703	805
3	851	878	935	880	650	700	1,260	1,310	923	752	727	805
4	851	878	878	860	650	740	1,180	1,460	923	752	703	778
5	906	878	878	850	650	770	1,140	1,360	862	778	703	752
6	906	935	906	840	640	800	1,140	1,340	892	778	703	752
7	935	935	935	830	640	860	1,140	1,300	892	752	703	805
8	906	935	935	820	640	920	1,060	1,260	892	752	703	778
9	878	935	935	810	640	995	1,060	1,140	862	752	680	605
10	906	906	935	800	640	1,160	1,100	1,140	862	727	727	805
11	906	935	935	800	630	1,020	1,140	1,140	862	727	703	805
12	935	906	935	790	630	1,160	1,260	1,060	862	727	703	833
13	906	906	906	760	620	1,160	1,300	1,180	833	727	727	805
14	906	906	906	780	610	1,060	1,300	1,340	833	727	703	805
15	878	878	935	780	600	1,060	1,380	1,380	833	703	727	833
16	878	878	935	780	590	1,020	1,460	1,260	805	703	703	833
17	878	878	935	770	590	1,060	1,460	1,180	805	703	703	833
18	851	878	906	750	570	1,020	1,420	1,140	833	703	703	892
19	878	851	935	730	560	1,100	1,300	1,020	805	703	703	862
20	851	906	906	710	550	1,100	1,260	990	805	727	727	833
21	851	965	878	690	540	1,100	1,220	990	805	703	727	833
22	851	935	860	680	540	1,200	1,180	990	805	703	752	805
23	851	906	880	670	540	1,240	1,140	955	778	752	833	805
24	878	935	880	660	560	1,480	1,100	923	778	778	833	805
25	851	906	880	660	560	1,880	1,100	923	778	805	805	833
26	851	878	880	660	580	1,880	1,100	892	778	778	805	833
27	825	906	870	660	600	1,830	1,180	923	778	778	833	892
28	878	965	860	650	610	1,830	1,140	923	778	752	892	923
29	825	965	860	650	620	1,830	1,180	892	778	727	862	892
30	825	995	850	650	-	1,660	1,220	862	778	727	862	892
31	878	-	840	650	-	1,560	-	892	-	727	833	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	27,020		935	825	872	0.969	1.12					
November.....	27,260		995	851	909	1.01	1.13					
December.....	28,059		995	840	905	1.01	1.16					
Calendar year 1935.....	374,692		2,290	776	1,027	1.14	15.50					
January.....	23,380		900	650	754	.838	.97					
February.....	17,530		650	540	604	.671	.72					
March.....	36,495		1,880	640	1,177	1.31	1.51					
April.....	36,680		1,460	1,060	1,223	1.36	1.52					
May.....	35,125		1,610	862	1,133	1.26	1.45					
June.....	25,033		923	778	834	.927	1.03					
July.....	22,953		805	703	740	.822	.95					
August.....	23,218		892	680	749	.832	.96					
September.....	24,765		923	752	826	.918	1.02					
Water year 1935-36.....	327,518		1,880	540	895	.994	13.54					

STREAMS TRIBUTARY TO LAKE HURON

Shiawassee River at Owosso, Mich.

Location.- Water-stage recorder, lat. 43°0'45", 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 1936.

Extremes.- Maximum discharge during year, 1,110 second-feet Mar. 12; maximum gage height, 7.97 feet Mar. 4 (ice jam); minimum discharge, 2.6 second-feet Aug. 12 (gage height, 1.34 feet).

1931-36: Maximum discharge, 1,960 second-feet Mar. 11, 1935 (gage height, 5.98 feet); minimum, 0.2 second-foot July 27, 1934 (gage height, 1.12 feet).

Maximum stage known, 726 feet above mean sea level at former gage during an ice jam in 1918.

Remarks.- Records good except those for periods of ice effect, Dec. 21 to Jan. 3, Jan. 22 to Mar. 5, and for periods of missing gage height record, Dec. 3-9, Mar. 6-10, which are poor and were computed from weather records, gage heights, and records on Flint River. Flow regulated by power plant at Shiawassee town. Gage-height record furnished by City of Owosso.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	58	128	135	135	525	269	344	78	38	18	28
2	70	77	128	140	135	525	256	328	86	38	16	29
3	70	96	125	150	135	500	256	352	97	47	5.8	27
4	74	115	120	169	135	550	242	376	115	41	16	31
5	67	148	120	205	140	575	301	344	129	38	7.0	21
6	70	192	120	188	140	575	360	328	129	45	7.8	25
7	66	192	150	228	140	575	446	284	110	34	8.2	20
8	58	204	170	116	140	575	428	298	129	39	9.0	40
9	48	180	180	202	135	575	410	256	141	35	12	41
10	53	186	191	177	150	600	376	262	129	49	5.4	30
11	59	192	196	175	135	955	376	269	175	23	5.8	38
12	49	192	199	169	140	1,040	420	269	134	18	6.2	41
13	44	229	164	183	140	985	464	242	32	11	11	29
14	38	216	156	175	140	835	464	180	81	17	9.0	52
15	20	229	167	162	140	785	446	148	80	29	8.2	67
16	19	216	172	191	140	810	428	180	54	23	9.0	86
17	45	210	188	183	140	738	446	148	56	18	4.8	63
18	80	204	177	164	140	692	446	117	47	13	8.6	56
19	59	180	172	186	140	625	411	101	54	14	16	45
20	57	180	134	216	140	580	376	101	70	11	18	50
21	65	192	140	199	145	540	328	93	16	9.0	16	52
22	63	204	135	185	150	500	298	86	15	16	19	47
23	56	242	135	175	170	496	369	97	36	13	8.2	44
24	50	211	130	170	260	468	269	97	34	16	24	63
25	42	180	150	165	400	446	269	80	29	17	24	67
26	70	180	130	155	650	423	242	84	38	9.8	24	75
27	74	128	130	140	600	393	216	82	31	14	24	104
28	80	160	130	135	575	376	216	112	22	31	26	108
29	70	192	130	130	550	352	229	96	65	21	28	110
30	65	128	130	130	-	328	344	90	38	8.6	17	117
31	59	-	150	130	-	298	-	83	-	19	19	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	1,823	82	19	58.8	0.109	0.13						
November.....	5,313	242	58	177	.329	.37						
December.....	4,607	199	120	149	.277	.32						
Calendar year												
January.....	5,228	228	116	169	.314	.36						
February.....	6,250	650	130	215	.402	.43						
March.....	18,225	1,040	298	588	1.09	1.26						
April.....	10,301	464	216	343	.638	.71						
May.....	5,929	376	80	191	.355	.41						
June.....	2,234	175	15	74.5	.138	.15						
July.....	755.4	47	8.6	24.4	.045	.05						
August.....	431.0	28	4.8	13.9	.026	.03						
September.....	1,604	117	21	53.5	.099	.11						
Water year 1935-36.....	82,700.4	1,040	4.8	171	.317	4.33						

Flint River at Genesee, Mich.

Location.- Wire gage, lat. 43°6'25", long. 83°37'0", 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 1936.

Extremes.- Maximum discharge observed during year, 1,730 second-feet Mar. 15 (gage height, 19.15 feet); minimum, about 10 second-feet Aug. 15.

1931-36: Maximum discharge observed, 3,380 second-feet Mar. 8, 1935 (gage height, 22.50 feet); minimum, that of Aug. 15, 1936.

Remarks.- Records fair except those for periods of ice effect and of missing gage heights, Dec. 17 to Feb. 23, Mar. 29 to Apr. 4, July 15-19, Aug. 12-21, which were computed on the basis of records for the station near Flint and are poor. Gage read twice daily Oct. 1 to Sept. 11; once daily thereafter.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	48	194	80	50	980	360	597	49	60	33	36
2	46	52	194	80	50	1,040	380	421	104	57	31	43
3	49	48	203	90	80	1,130	410	541	112	56	30	45
4	60	89	194	100	50	1,130	450	541	119	53	30	48
5	58	135	185	110	50	1,130	493	541	112	48	28	45
6	54	160	185	110	50	1,130	493	541	104	44	23	44
7	53	160	185	110	50	1,130	493	517	104	39	21	42
8	49	160	194	120	50	1,130	517	493	104	38	20	43
9	47	151	194	120	50	1,190	517	445	96	35	16	40
10	44	151	185	120	50	1,220	517	397	89	34	13	36
11	56	151	176	130	50	1,280	517	327	85	31	11	42
12	62	168	176	130	50	1,350	517	272	82	24	11	44
13	64	194	176	130	50	1,460	517	222	78	21	11	28
14	60	194	176	130	60	1,610	541	212	75	20	11	38
15	53	168	168	130	60	1,730	541	203	71	20	10	29
16	51	151	168	130	60	1,730	590	194	68	20	11	43
17	47	155	160	130	60	1,570	590	185	80	20	11	47
18	47	119	160	130	60	1,390	541	155	57	25	11	43
19	44	135	160	120	70	1,130	517	176	49	25	11	40
20	40	143	150	120	70	950	469	168	47	24	11	39
21	40	151	150	120	80	740	397	151	44	24	12	29
22	53	160	150	110	80	690	373	143	44	22	13	29
23	47	151	140	110	80	665	327	119	42	23	36	27
24	42	143	140	100	232	615	305	104	39	22	39	76
25	47	143	130	90	350	565	272	89	39	20	39	45
26	53	135	120	70	590	541	252	76	36	19	38	48
27	58	143	110	60	770	517	232	64	39	25	40	89
28	61	160	90	60	950	493	212	52	39	43	42	76
29	56	176	90	50	960	440	272	47	42	39	40	85
30	48	185	80	50	-	380	350	39	61	36	39	86
31	48	-	80	50	-	360	-	39	-	35	38	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,591	64	40	51.3	0.086	0.10
November.....	4,259	194	48	142	.239	.27
December.....	4,863	203	80	157	.265	.31
Calendar year 1935.....	103,421	3,320	31	283	.477	6.50
January.....	3,190	130	50	103	.174	.20
February.....	5,212	930	50	180	.304	.33
March.....	31,406	1,730	360	1,013	1.71	1.97
April.....	12,962	590	212	432	.728	.81
May.....	7,901	541	39	255	.430	.50
June.....	2,090	119	36	69.7	.118	.13
July.....	1,002	60	19	32.3	.054	.06
August.....	730	42	10	23.5	.040	.05
September.....	1,405	89	27	46.8	.079	.09
Water year 1935-36.....	76,611	1,730	10	209	.352	4.82

Flint River near Flint, Mich.

Location.- Water stage recorder, lat. 43°2'20", long. 83°46'10", in SW $\frac{1}{4}$ sec. 4, T. 7 N., R. 6 E., at sewage-treatment plant 2 miles below Flint. Zero of gage is 878.80 feet above mean sea level.

Drainage area.- 927 square miles.

Records available.- August 1932 to September 1936.

Extremes.- Maximum discharge during year, 2,250 second-feet Feb. 26 (gage height, 6.54 feet); minimum, 14 second-feet Aug. 25, 26 (gage height, 2.15 feet).
1932-36: 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 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	97	82	184	70	62	1,240	392	710	103	73	44	44
2	87	68	176	84	62	1,310	425	710	184	73	42	47
3	23	37	145	93	60	1,280	402	1,060	234	70	40	42
4	18	285	138	110	68	1,470	342	810	196	70	37	37
5	32	259	93	116	62	1,640	360	785	264	68	30	32
6	47	188	84	123	60	1,440	557	760	234	70	30	79
7	49	322	192	120	53	1,310	810	620	208	51	30	58
8	44	160	204	120	51	1,210	810	548	200	40	32	65
9	60	234	251	127	81	1,120	892	373	200	44	31	40
10	90	255	281	134	68	1,150	920	334	186	51	34	40
11	87	268	281	142	53	1,280	810	481	103	55	31	42
12	90	347	268	145	55	1,580	920	448	103	47	31	100
13	31	329	264	145	58	1,640	948	467	93	42	28	79
14	68	329	251	149	60	1,600	975	338	62	53	25	103
15	58	325	281	156	62	1,790	920	356	70	60	24	90
16	55	285	281	145	70	1,950	920	374	84	73	22	157
17	51	276	281	142	73	1,750	920	259	90	73	21	84
18	156	242	289	123	79	1,400	920	204	103	76	21	76
19	106	196	281	103	76	1,310	865	221	106	70	28	73
20	17	276	192	145	79	1,180	760	221	359	70	21	65
21	31	342	184	127	82	1,000	685	153	149	70	28	70
22	113	316	184	120	82	892	587	87	53	73	46	76
23	79	272	208	130	90	865	538	87	44	73	23	73
24	47	200	168	116	437	810	462	120	22	84	25	53
25	40	217	130	110	1,160	810	425	120	23	76	23	360
26	17	213	134	103	1,910	785	415	110	30	70	25	338
27	44	204	120	57	1,500	735	365	103	28	356	28	232
28	58	204	100	19	1,310	625	439	93	26	70	52	156
29	58	204	87	53	1,310	635	533	90	56	56	44	127
30	58	188	82	58	-	610	685	87	138	51	37	127
31	70	-	76	58	-	472	-	93	-	55	38	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,878	156	17	60.6	0.065	0.07
November.....	7,123	347	37	237	.256	.29
December.....	5,850	289	76	189	.204	.24
Calendar year 1935.....	153,277	5,090	17	420	.453	6.15
January.....	3,443	156	19	111	.120	.14
February.....	9,143	1,910	51	315	.340	.37
March.....	56,789	1,950	472	1,187	1.28	1.48
April.....	19,972	975	342	666	.718	.80
May.....	11,222	1,060	87	362	.391	.45
June.....	3,751	359	22	125	.135	.15
July.....	2,285	356	40	73.1	.079	.09
August.....	971	52	21	31.3	.034	.04
September.....	2,965	360	32	98.8	.107	.12
Water year 1935-36.....	105,372	1,950	17	288	.311	4.24

Farmers Creek near Lapeer, Mich.

Location.- Staff gage, lat. 43°2', long. 83°20', at footbridge at Michigan Home & 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 1936.

Extremes.- Maximum discharge observed during year, 130 second-feet Mar. 13, 14; maximum gage height, 17.34 feet Feb. 28 (ice jam); minimum discharge, 0.6 second-foot Aug. 18 (gage height, 14.26 feet).

1933-36: Maximum discharge observed, 238 second-feet Mar. 6, 1935; maximum gage height, that of Feb. 28, 1936; minimum discharge not determined.

Remarks.- Records fair except those for periods of ice effect, Dec. 21 to Jan. 6, Jan. 20 to Mar. 14, which were computed on basis of records for station on Flint River near Flint and weather records and are poor. Occasional regulation at dam above gage. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.6	4.6	12	2	4	80	26	36	3.7	4.9	2.3	1.2
2	3.8	4.1	7.2	2	3	70	24	42	7.7	4.6	2.3	1.1
3	3.6	3.6	6.0	2	4	70	21	42	12	4.4	2.5	1.5
4	3.6	6.0	5.0	2	4	70	25	38	20	3.7	2.3	1.8
5	3.6	13	4.3	3	5	70	21	31	24	3.7	2.2	2.3
6	3.4	14	4.3	4	4	80	23	27	20	3.5	1.7	4.0
7	3.3	22	5.3	5.3	4	80	32	24	14	2.6	1.4	3.5
8	3.3	23	8.1	5.8	4	80	45	25	12	2.8	1.1	3.7
9	2.8	23	11	6.3	4	80	52	21	11	2.8	1.1	2.6
10	2.8	23	13	6.3	4	80	52	17	11	2.5	1.1	3.0
11	3.2	21	10	6.3	4	90	43	15	11	2.3	1.5	2.8
12	3.3	22	9.9	6.3	4	100	48	14	9.2	2.2	2.5	4.4
13	3.2	22	12	6.6	4	130	45	18	6.6	2.2	1.0	4.0
14	3.3	21	13	6.0	4	130	59	16	3.3	1.7	1.0	3.7
15	3.0	21	13	5.8	4	106	59	16	7.4	1.0	1.1	4.0
16	3.0	9.3	12	7.2	4	106	56	14	7.4	1.1	1.8	4.2
17	2.1	3.3	9.3	6.9	5	93	52	12	6.0	1.0	1.0	4.4
18	2.2	9.1	13	6.0	5	93	48	11	5.7	1.5	.6	4.0
19	2.4	13	13	6.0	5	84	48	8.6	6.6	1.4	1.2	3.3
20	2.4	13	8.7	6	5	71	42	8.6	6.0	1.2	1.1	2.6
21	3.6	14	7	6	6	52	38	7.7	4.9	1.0	1.5	2.3
22	4.3	13	6	6	6	52	33	8.3	4.6	1.0	2.0	1.7
23	4.3	12	5	6	6	52	30	9.8	3.7	1.0	2.8	2.3
24	5.3	12	4	6	5	46	26	8.6	3.5	1.1	2.5	4.6
25	5.3	10	4	5	18	45	22	5.7	3.0	1.0	2.8	4.2
26	5.8	9.6	3	5	20	45	20	4.9	2.6	1.0	2.5	4.4
27	6.9	10	3	4	30	42	13	4.0	3.0	2.5	1.3	11
28	7.5	11	3	4	80	38	16	3.7	3.0	2.2	2.2	9.6
29	6.0	10	2	4	80	42	24	3.3	2.3	2.2	1.7	8.6
30	5.3	11	2	4	-	34	32	2.8	4.9	2.2	1.1	9.5
31	4.3	-	2	4	-	30	-	2.8	-	2.0	1.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	122.0	7.5	2.1	3.94	0.069	0.08
November.....	402.6	23	3.3	13.4	.235	.26
December.....	231.1	13	2	7.45	.131	.15
Calendar year 1935.....	7,941.3	226	2	21.8	.382	5.13
January.....	155.3	7.2	2	5.03	.068	.10
February.....	339	80	3	11.7	.205	.22
March.....	2,248	130	30	72.5	1.27	1.45
April.....	1,090	59	16	36.3	.637	.71
May.....	497.8	42	2.8	16.1	.282	.33
June.....	247.6	24	2.6	8.25	.145	.16
July.....	63.5	4.9	1.0	2.21	.039	.04
August.....	53.0	2.8	.6	1.71	.030	.03
September.....	120.4	11	1.1	4.01	.070	.08
Water year 1935-36.....	5,575.8	130	.6	15.2	.257	3.62

STREAMS TRIBUTARY TO LAKE HURON

Cass River at Frankenmuth, Mich.

Location.- Water-stage recorder, lat. 43°19'40", long. 83°45'30", on line between secs. 27 and 28, T. 11 N., R. 6 E., at highway bridge half a mile west of Frankenmuth.

Drainage area.- 848 square miles.

Records available.- February 1908 to March 1909, July 1935 to September 1936.

Extremes.- Maximum discharge during year, about 3,000 second-feet Mar. 13 (gage height, 15.80 feet, backwater from ice); minimum, 2.2 second-feet July 8 (gage height, 1.71 feet).

1908-9, 1935-36: Maximum discharge observed, 9,530 second-feet Mar. 16, 1908 (gage height, 20.98 feet, former site and datum); minimum, 2 second-feet Sept. 28, 1908 (gage height, 3.80 feet, former site and datum).

Remarks.- Records good except those for periods of ice effect, Dec. 22 to Mar. 21, and of missing gage heights, Sept. 24-30, which were computed on basis of records for station at Flint River near Flint and weather records and are poor, and those for period Aug. 22-25, which were computed from partial gage-height record and are fair. Discharges Oct. 6-9, 20-25, Oct. 29 to Nov. 1, Nov. 12-14, 22-24, Nov. 29 to Dec. 6, Dec. 10-13, 15-20, Dec. 31 to Jan. 10, Feb. 9-14, Feb. 25 to May 18, June 16, 17 based on twice daily wire-weight gage readings. Flow regulated by power plants upstream.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	57	128	90	110	800	375	790	78	46	18	69
2	58	42	93	110	110	750	342	820	106	46	5.3	44
3	36	6.1	134	115	110	750	455	690	101	103	14	159
4	20	57	162	130	110	800	300	790	87	70	15	286
5	14	223	144	140	105	900	398	618	66	19	17	311
6	4.2	147	150	145	105	900	718	444	74	3.4	18	106
7	36	96	111	150	105	950	1,090	364	91	2.3	18	89
8	37	110	211	155	100	900	1,210	310	80	2.6	15	86
9	36	70	120	160	100	900	1,000	230	91	3.7	5.0	110
10	20	117	190	160	100	900	890	321	98	4.0	16	34
11	55	92	194	160	100	1,500	760	106	98	10	16	25
12	48	192	148	160	100	2,500	880	386	82	4.6	17	26
13	24	222	168	160	100	3,000	1,050	364	70	11	15	9.9
14	71	185	249	160	95	2,500	910	342	89	13	18	33
15	58	124	123	160	95	2,000	850	226	85	12	18	43
16	61	114	185	155	70	1,750	1,120	197	79	14	6.2	38
17	42	110	204	155	100	1,500	1,440	249	102	17	14	38
18	19	74	353	150	105	1,350	1,150	82	64	36	25	36
19	16	112	173	150	110	1,250	910	150	50	5.3	42	46
20	5.3	197	126	145	115	1,150	718	129	33	40	45	12
21	49	140	104	140	120	1,100	655	94	5.3	16	44	30
22	39	190	120	135	120	1,060	455	81	39	15	43	28
23	65	150	110	130	125	1,000	364	70	48	15	44	23
24	64	120	115	125	200	940	432	84	44	13	44	15
25	43	81	120	120	400	1,000	353	77	44	16	44	10
26	42	113	115	115	850	910	375	74	42	5.0	44	110
27	6.7	173	110	110	900	730	241	85	35	23	44	100
28	42	173	110	100	860	642	342	90	5.8	16	36	80
29	37	106	105	110	850	580	396	69	46	17	21	40
30	70	157	105	110	-	555	270	44	46	16	9.9	40
31	56	-	100	115	-	530	90	68	-	16	23	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	1,229.2	71	4.2	39.7	0.047	0.05						
November.....	3,750.1	223	6.1	125	.147	.16						
December.....	4,585	353	93	148	.175	.20						
Calendar year												
January.....	4,220	160	90	136	.160	.18						
February.....	6,480	900	70	223	.235	.28						
March.....	36,097	3,000	530	1,164	1.37	1.58						
April.....	21,121	1,440	241	704	.830	.93						
May.....	8,434	820	44	272	.321	.37						
June.....	2,006.1	106	5.3	66.9	.079	.09						
July.....	630.9	103	2.3	20.4	.024	.03						
August.....	754.4	45	5.0	24.3	.029	.03						
September.....	2,076.9	311	9.9	69.2	.082	.09						
Water year 1935-36	91,364.6	3,000	2.3	250	.296	3.96						

Tittabawassee River at Freeland, Mich.

Location.- Chain gage, lat. 43°31', long. 84°8', on line between secs. 16 and 21, T. 13 N., R. 3 E., at highway bridge at Freeland.

Drainage area.- 2,530 square miles.

Records available.- August 1903 to December 1909, January 1912 to September 1936.

Average discharge.- 24 years (1912-36), 1,766 second-feet.

Extremes.- Maximum discharge observed during year, 5,820 second-feet Mar. 23 (gage height, 6.78 feet); minimum, 182 second-feet Aug. 15, 18 (gage height, 0.30 foot).
1930-36: Maximum discharge observed, 24,500 second-feet May 3, 1933 (gage height, 15.02 feet); minimum, 155 second-feet Aug. 1, 1934.

Remarks.- Records good except those for low water, which are fair, and those for periods of ice effect, Dec. 21 to Jan. 2, Jan. 19 to Feb. 23, which are poor and were computed on basis of weather records, gage heights, and records on tributaries. Low-water flow regulated by power plants upstream. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	407	468	815	500	550	1,360	2,830	815	468	283	230	725
2	490	562	514	500	550	1,140	2,400	1,070	668	354	239	371
3	427	614	940	490	550	1,210	2,560	1,070	597	407	230	354
4	514	447	1,000	468	575	1,280	2,480	1,070	562	324	220	447
5	371	1,840	1,070	695	590	1,440	1,520	1,210	562	407	203	371
6	356	1,210	447	490	600	1,680	1,840	1,920	640	371	212	371
7	356	1,140	514	755	600	1,440	2,920	1,520	537	339	220	339
8	340	1,000	614	875	600	1,210	2,480	1,360	468	354	212	339
9	371	614	725	725	575	1,360	2,520	1,210	668	339	196	339
10	427	668	695	875	550	1,690	3,010	668	562	354	220	514
11	587	640	875	755	550	3,010	3,190	815	567	597	212	537
12	640	562	875	725	575	5,050	3,370	940	562	354	196	725
13	562	875	875	587	600	5,600	3,550	1,000	468	339	203	447
14	514	1,520	875	668	625	4,940	3,460	1,000	447	354	196	407
15	468	1,600	695	815	625	4,140	3,460	1,000	371	354	182	562
16	668	1,140	640	815	650	3,940	3,290	725	328	309	196	668
17	614	668	755	815	650	4,240	3,190	725	468	296	188	614
18	447	640	1,000	725	675	4,340	3,100	725	537	283	188	468
19	490	875	1,000	700	700	4,240	2,400	815	399	260	272	427
20	490	940	875	700	700	4,240	2,080	815	340	239	260	407
21	399	940	800	700	725	4,340	2,080	640	340	230	239	427
22	490	815	700	675	750	4,540	1,680	490	328	220	272	562
23	614	725	650	675	850	5,710	1,760	668	356	324	407	427
24	537	875	600	650	1,140	5,600	1,280	668	371	260	260	668
25	427	640	575	650	3,100	5,490	1,360	468	340	220	212	815
26	427	614	550	625	3,100	4,940	815	614	468	220	230	1,140
27	407	940	525	600	3,160	4,540	940	875	399	338	296	1,280
28	399	940	525	575	2,650	4,340	940	695	315	324	296	1,070
29	514	668	500	550	1,680	3,940	815	668	340	260	371	562
30	407	695	500	550	-	3,550	815	514	328	250	597	562
31	371	-	500	575	-	3,550	-	427	-	250	562	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	14,511	668	340	468	0.185	0.21
November.....	25,775	1,840	447	859	.340	.38
December.....	22,224	1,070	447	717	.283	.33
Calendar year 1935.....	518,798	15,400	328	1,421	.562	7.64
January.....	20,503	875	468	661	.261	.30
February.....	29,275	3,190	550	1,009	.399	.43
March.....	108,080	5,710	1,140	3,486	1.38	1.59
April.....	67,925	3,550	815	2,264	.895	1.00
May.....	27,200	1,920	427	877	.347	.40
June.....	13,794	668	315	460	.182	.20
July.....	9,800	587	220	316	.125	.14
August.....	8,007	537	182	258	.102	.12
September.....	17,044	1,290	338	563	.225	.25
Water year 1935-36.....	364,138	5,710	182	995	.393	5.35

Salt River near North Bradley, Mich.

Location.- Staff gage, lat. 43°42', long. 84°28', at Pere Marquette Railroad bridge $\frac{1}{2}$ miles southeast of North Bradley.

Drainage area.- 138 square miles.

Records available.- June 1934 to September 1936.

Extremes.- Maximum discharge observed during year, 885 second-feet Mar. 22; maximum gage height, 6.80 feet Mar. 13 (ice jam); minimum discharge, 2.1 second-feet Aug. 12.

1934-36: 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 (gage height, 0.51 foot).

Remarks.- Records good except those for period of ice effect, Dec. 21 to Mar. 20, which are poor and were computed on basis of one discharge measurement, gage heights, and weather records. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.0	8.4	18	16	17	80	67	35	21	6.0	2.7	6.3
2	5.8	8.0	11	18	17	80	59	35	26	9.1	2.7	5.3
3	7.0	8.7	14	20	17	75	52	37	30	7.7	2.7	5.3
4	6.7	23	14	21	17	75	59	34	30	7.4	2.9	5.3
5	9.4	34	15	22	17	80	56	31	24	7.7	2.7	4.8
6	8.0	26	12	23	17	80	71	29	20	7.4	5.2	5.5
7	7.4	21	15	23	17	80	123	34	19	7.4	2.7	7.0
8	8.0	16	27	23	17	80	91	34	18	7.4	2.7	3.4
9	6.7	14	34	23	17	90	104	29	18	6.3	2.7	7.0
10	8.7	15	30	24	17	120	181	29	17	6.0	2.7	4.8
11	11	14	22	24	18	200	193	25	17	5.3	2.3	4.6
12	17	17	23	24	18	500	230	24	15	4.2	2.1	5.8
13	12	17	21	23	19	700	148	39	14	3.9	2.3	5.1
14	11	20	19	23	19	500	118	45	14	3.7	2.3	6.3
15	9.8	19	22	23	20	400	128	30	12	3.4	2.7	6.7
16	8.4	17	24	22	21	350	138	26	13	2.9	2.7	11
17	8.4	17	22	22	20	350	109	23	15	2.9	2.4	11
18	7.7	15	23	21	20	400	83	26	15	2.6	2.7	12
19	8.0	16	21	21	20	450	71	27	14	2.6	3.2	8.4
20	7.4	20	16	20	20	500	63	21	13	2.4	2.9	6.3
21	6.7	24	16	19	20	515	59	20	9.4	2.6	4.2	5.3
22	8.0	22	16	18	21	811	52	18	8.4	2.6	5.5	4.8
23	8.4	16	16	18	25	496	46	13	7.7	3.9	4.6	5.1
24	7.7	17	17	30	573	43	16	6.3	4.6	4.4	9.1	
25	7.7	16	17	17	45	425	40	15	6.0	4.4	3.9	5.3
26	7.7	15	17	17	60	217	37	15	6.0	3.9	4.6	8.7
27	9.1	14	16	17	70	158	35	37	6.3	5.1	5.1	12
28	8.0	15	16	16	80	128	35	45	5.9	4.6	7.7	25
29	7.4	20	16	16	80	109	38	29	5.3	4.8	12	21
30	8.0	15	15	17	-	91	38	23	6.7	3.9	9.8	14
31	9.8	-	15	17	-	75	-	20	-	3.2	7.0	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	262.9		17	5.8	8.48	0.061	0.07					
November.....	520.1		34	8.0	17.3	.125	.14					
December.....	580		34	11	18.7	.135	.16					
Calendar year 1935.....	30,746.1		2,250	3.7	84.2	.610	8.30					
January.....	625		24	16	20.2	.146	.17					
February.....	796		80	17	27.4	.198	.21					
March.....	8,789		811	75	283	2.05	2.56					
April.....	2,566		230	35	85.5	.620	.69					
May.....	867		45	15	28.0	.203	.23					
June.....	432.9		30	5.3	14.4	.104	.12					
July.....	149.9		9.1	2.4	4.84	.035	.04					
August.....	121.9		12	2.1	3.95	.028	.03					
September.....	247.2		25	4.8	8.24	.060	.07					
Water year 1935-36.....	15,957.9		811	2.1	43.6	.316	4.29					

STREAMS TRIBUTARY TO LAKE HURON

Kinney Creek near Clare, Mich.

Location.- Staff gage on V-notch weir, lat. 43°45', long. 84°42', in NW¼ sec. 29, T. 16 N., R. 3 W., 4 miles southeast of Clare.

Drainage area.- Not determined.

Records available.- July 1935 to March 1936 (discontinued).

Extremes.- Maximum discharge during period not determined; minimum discharge observed, 0.8 second-foot Dec. 2, 1935 (gage height, 0.62 foot).

Remarks.- Records good except those for periods of missing gage heights or ice effect, Feb. 5, 6, Feb. 14 to Mar. 12, Mar. 22-31, which were computed on basis of records on nearby streams and weather records and are poor, and those above 25 second-feet, which are based on extension of the rating curve and are fair. Discharge interpolated Dec. 23. Gage read twice daily.

Rating table, water year 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)

0.6	0.7	1.0	2.5	1.8	22	2.6	80
.7	1.0	1.2	4.8	2.0	32	2.8	101
.8	1.3	1.4	8.6	2.2	45	3.0	125
.9	1.8	1.6	14	2.4	61	3.5	197

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	1.2	1.2	1.2	1.3	2.0						
2	1.1	1.2	.9	1.2	1.2	4.0						
3	1.4	1.3	1.3	1.3	1.4	8						
4	1.2	4.5	1.2	1.4	1.4	16						
5	1.2	3.8	1.2	1.6	1.4	20						
6	1.2	1.7	1.3	1.6	1.3	19						
7	1.2	1.6	2.2	1.6	1.4	15						
8	1.1	1.4	2.7	1.6	1.4	15						
9	1.2	1.4	2.2	1.9	1.4	20						
10	2.8	1.9	2.2	1.8	1.5	25						
11	1.8	1.6	2.1	1.8	1.6	60						
12	1.6	1.9	1.6	1.8	1.5	90						
13	1.4	2.0	1.6	1.8	1.5	159						
14	1.3	1.8	1.6	1.6	1.4	119						
15	1.2	1.6	1.9	1.7	1.3	96						
16	1.2	1.5	1.9	1.4	1.2	90						
17	1.2	1.5	1.8	1.2	1.1	85						
18	1.2	1.4	1.8	1.1	1.1	57						
19	1.2	1.9	1.6	1.3	1.1	29						
20	1.2	2.3	1.2	1.4	1.2	31						
21	1.2	2.1	1.5	1.4	1.3	30						
22	1.4	1.5	1.2	1.4	1.3	30						
23	1.2	1.2	1.2	1.2	1.4	30						
24	1.2	1.3	1.1	1.6	1.5	30						
25	1.2	1.4	1.2	1.5	1.6	20						
26	1.1	1.5	1.2	1.4	2.2	15						
27	1.1	2.1	1.3	1.4	2.1	15						
28	1.1	2.1	1.2	1.5	1.8	10						
29	1.2	1.7	1.0	1.4	1.6	10						
30	1.2	1.6	.9	1.2	-	9						
31	1.2	-	1.0	1.2	-	8						
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	39.9		2.8	1.1	1.29							
November.....	54.0		4.5	1.2	1.80							
December.....	46.3		2.7	.9	1.49							
Calendar year												
January.....	45.5		1.9	1.1	1.47							
February.....	41.5		2.2	1.1	1.43							
March.....	1,167.0		169	2.0	37.6							
April.....	-		-	-	-							
May.....	-		-	-	-							
June.....	-		-	-	-							
July.....	-		-	-	-							
August.....	-		-	-	-							
September.....	-		-	-	-							
Water year												

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 1936.

Extremes.- Maximum discharge observed during year, 950 second-feet Mar. 25; maximum gage height, 6.63 feet Mar. 13 (ice jam); minimum discharge, 19 second-feet Aug. 16 (gage height, 3.04 feet).
1930-31, 1932-36: Maximum discharge observed, about 3,200 second-feet Mar. 6, 1935 (gage height, 11.10 feet, backwater from ice); minimum discharge, that of Aug. 16, 1936.

Remarks.- Records fair except those for period of ice effect, Dec. 21 to Mar. 16, which are poor and were computed on the basis of gage heights and weather records. Discharge interpolated Nov. 5. Gage read twice daily. Regulation at low stages from power plant upstream.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	141	254	160	160	500	457	274	139	132	89	109
2	111	170	183	170	160	500	497	274	151	98	29	87
3	87	153	170	175	160	550	355	274	170	116	81	89
4	91	247	196	180	160	570	398	260	183	89	47	113
5	113	247	196	190	160	580	369	247	158	102	85	78
6	93	247	196	210	160	580	369	254	127	113	78	109
7	122	254	208	220	160	570	369	247	136	68	47	144
8	134	196	221	230	155	570	355	274	136	83	78	144
9	116	196	221	240	155	600	355	260	146	66	39	120
10	127	196	208	240	155	600	398	221	118	100	53	122
11	170	208	196	240	160	800	427	221	81	96	55	146
12	153	221	196	240	160	900	457	208	111	89	55	151
13	183	196	196	230	160	900	427	234	81	64	45	120
14	170	208	183	230	170	900	398	234	72	58	55	153
15	158	196	196	230	170	900	427	208	122	51	64	139
16	102	221	196	230	170	850	457	183	116	53	19	141
17	144	196	221	220	170	880	457	183	170	55	83	144
18	144	208	183	220	170	518	355	196	125	55	72	139
19	158	183	183	220	170	457	355	183	122	87	93	141
20	156	196	183	220	170	487	328	170	118	58	58	129
21	125	208	180	220	170	487	314	158	116	55	96	139
22	158	196	180	210	175	644	287	158	109	45	98	127
23	148	183	190	210	200	676	297	153	78	51	64	136
24	136	196	190	200	300	810	297	151	116	83	108	129
25	156	196	185	200	400	915	260	127	113	51	66	96
26	144	196	180	190	550	915	274	151	118	72	100	127
27	102	208	170	180	550	810	260	153	122	122	98	151
28	158	221	165	170	500	709	260	153	68	89	107	196
29	129	221	165	170	500	612	234	141	109	89	129	183
30	118	208	180	160	-	549	260	136	118	55	118	170
31	107	-	160	160	-	518	-	139	-	51	109	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	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.....	116,043	3,000	66	318	.764	10.37
January.....	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	.35
July.....	2,596	132	45	77.3	.186	.21
August.....	2,519	129	19	74.8	.160	.21
September.....	3,972	196	78	132	.317	.35
Water year 1935-36.....	79,169	915	19	216	.519	7.08

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 1936.

Extremes.- Maximum discharge observed during year, 965 second-feet Mar. 18 (gage height, 5.06 feet); minimum discharge, 14 second-foot Aug. 16; minimum gage height, 0.16 feet Aug. 7.

1930-36: Maximum discharge observed, 3,560 second-feet Mar. 5, 1935 (gage height, 9.50 feet); minimum discharge, that of Aug. 16, 1936.

Remarks.- Records fair except those for periods of ice effect, Dec. 24 to Jan. 4, Jan. 13 to Mar. 6, which are poor and were computed on the basis of one discharge measurement, gage heights, weather records, and records at station near Midland, and those for June to September, which are fair. Discharge interpolated Apr. 3. Gage read once daily. Gage-height record furnished by city of Alma.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	66	55	136	112	110	300	305	196	78	55	32	58
2	65	55	142	115	110	325	273	211	83	57	29	57
3	58	69	136	118	110	350	250	196	88	56	29	58
4	69	100	68	120	110	375	226	182	111	50	33	66
5	72	168	70	129	115	400	257	196	111	41	32	62
6	78	196	72	129	115	425	289	182	100	41	28	78
7	68	226	105	142	115	390	390	148	88	48	17	68
8	63	182	155	142	115	373	289	148	78	47	26	94
9	62	136	211	148	115	373	408	148	83	49	23	86
10	53	123	196	168	120	289	408	155	78	39	24	83
11	62	111	305	168	120	558	405	155	78	37	16	83
12	72	142	182	142	125	595	462	129	78	31	20	70
13	72	129	168	145	125	595	428	143	67	29	19	70
14	71	148	155	145	125	595	408	117	53	30	20	68
15	88	136	142	145	130	735	390	175	52	30	19	94
16	88	136	148	145	130	795	408	155	51	28	14	100
17	83	129	162	145	130	860	408	129	59	31	17	94
18	62	117	155	140	125	965	373	117	60	29	17	100
19	52	136	148	140	125	765	322	129	67	28	20	100
20	60	148	129	135	125	795	273	129	67	28	23	83
21	55	175	129	130	125	710	257	129	64	26	36	78
22	57	182	123	130	125	685	241	123	59	28	40	69
23	61	182	111	125	130	598	226	117	49	28	49	65
24	66	117	108	125	170	619	211	111	48	28	55	78
25	72	117	105	120	210	598	196	100	47	32	54	65
26	60	129	105	120	250	558	211	94	43	32	54	78
27	62	142	105	120	300	598	175	100	42	39	51	94
28	63	155	105	120	325	538	175	88	41	41	78	100
29	69	155	105	115	300	462	182	88	39	69	61	129
30	71	162	108	115	-	390	182	88	52	32	72	136
31	72	-	110	110	-	356	-	78	-	32	63	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,072	88	52	66.8	0.232	0.27
November.....	4,158	226	55	139	.483	.54
December.....	4,199	305	68	135	.469	.54
Calendar year 1935.....	76,745	2,040	41	210	.729	9.92
January.....	4,103	168	110	132	.458	.53
February.....	4,350	325	110	149	.517	.56
March.....	17,870	965	289	576	2.00	2.31
April.....	9,029	462	175	301	1.05	1.17
May.....	4,261	211	78	137	.478	.55
June.....	2,014	111	39	67.1	.233	.26
July.....	1,173	69	28	37.8	.131	.15
August.....	1,076	78	14	34.7	.120	.14
September.....	2,466	136	57	82.2	.285	.32
Water year 1935-36.....	56,751	965	14	155	.538	7.34

Pine River near Midland, Mich.

Location.- Staff and wire gages, 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 1936.

Extremes.- Maximum discharge observed during year, about 2,100 second-feet Mar. 12, (gage height, 13.30 feet, backwater from ice); minimum, 12 second-feet Aug. 19 (gage height, 7.68 feet).

1934-36: Maximum discharge observed, about 3,000 second-feet Mar. 17, 1935 (gage height, estimated, 13.5 feet); minimum discharge, 9.0 second-feet June 29, 1934; minimum gage height, 7.60 feet Apr. 23, 1935.

Remarks.- Records fair except those for periods of ice effect, Dec. 5-14, Dec. 24 to Mar. 22, which are poor and were computed on the basis of weather records, gage heights and records at stations at Alma and in nearby drainage areas. Gage read twice daily. Low-water flow regulated by power plant upstream.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	111	255	160	150	500	351	222	132	37	41	53
2	48	105	273	165	150	500	351	222	84	47	42	96
3	73	54	417	170	150	550	255	722	150	46	38	68
4	64	150	197	175	160	600	206	153	66	68	53	73
5	58	115	200	180	155	600	238	145	160	47	52	68
6	58	160	210	190	150	650	291	216	153	47	44	84
7	59	183	220	200	150	750	515	137	115	42	41	120
8	135	200	230	210	145	800	515	158	92	48	24	86
9	42	194	230	220	145	900	515	137	88	68	44	147
10	81	82	230	220	145	1,100	542	158	73	48	50	96
11	73	166	230	230	150	1,400	542	130	255	46	15	75
12	111	153	220	230	155	1,750	570	191	56	42	40	132
13	155	177	210	230	155	1,750	570	147	255	36	17	125
14	73	86	200	230	160	1,700	490	185	82	29	16	71
15	102	177	132	220	165	1,700	542	84	127	44	18	123
16	73	100	166	220	165	1,800	570	127	137	34	18	142
17	68	127	291	210	165	2,100	542	88	127	34	19	137
18	63	125	222	210	160	2,000	417	107	100	37	15	137
19	132	120	194	210	155	1,900	417	163	44	33	14	123
20	81	127	219	210	150	1,800	351	291	41	28	25	132
21	52	118	222	210	150	1,750	273	155	132	17	27	130
22	98	142	203	210	150	1,600	291	132	120	50	26	118
23	64	142	163	200	175	1,170	238	180	56	46	37	111
24	98	155	155	190	250	890	222	102	46	48	29	64
25	64	145	150	190	400	788	222	155	44	46	40	66
26	105	132	150	180	650	630	219	163	41	40	58	111
27	82	115	150	170	600	690	238	113	33	38	54	59
28	47	132	150	160	550	660	166	115	34	32	56	115
29	75	130	150	160	550	670	185	135	38	37	54	98
30	105	222	150	155	-	542	222	98	38	33	84	115
31	111	-	150	150	-	417	-	75	-	50	66	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,520	155	42	81.5	0.203	0.23
November.....	4,145	222	54	156	.345	.58
December.....	6,339	417	132	204	.510	.59
Calendar year 1935.....	99,843	3,000	26	274	.685	9.27
January.....	6,065	230	150	196	.490	.56
February.....	6,555	650	145	226	.555	.61
March.....	34,557	2,100	417	1,115	2.79	3.22
April.....	11,066	570	166	369	.922	1.03
May.....	5,206	722	75	168	.420	.48
June.....	2,619	255	33	97.3	.243	.27
July.....	1,298	68	17	41.9	.105	.12
August.....	1,159	84	14	37.4	.094	.11
September.....	3,075	147	53	102	.255	.28
Water year 1935-36.....	84,804	2,100	14	232	.580	7.88

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 1936.

Extremes.- Maximum discharge observed during year, 3,620 second-feet Mar. 16 (gage height, 13.40 feet); minimum, 4.8 second-feet Aug. 12, 14 (gage height, 4.65 feet).

1931, 1932-36: 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. 24-26, Dec. 2-9, Dec. 21 to Mar. 15, which were computed on basis of weather records and records for stations on Clinton River and are poor. Gage read once daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	15	23	15	15	200	258	303	35	22	6.8	16
2	11	19	20	15	15	200	243	458	77	16	6.3	16
3	12	16	20	15	15	180	230	386	68	16	5.3	12
4	14	29	20	20	15	240	190	369	65	13	8.2	10
5	13	109	20	20	15	280	190	335	68	13	8.2	8.2
6	13	94	20	20	15	300	335	272	66	13	7.1	11
7	14	44	25	20	15	300	1,040	216	61	12	6.6	13
8	13	47	30	20	15	300	754	190	50	12	6.1	19
9	14	37	35	20	15	220	554	159	46	12	6.1	21
10	15	29	39	20	15	300	458	154	38	13	5.5	18
11	16	39	42	20	15	400	440	135	37	10	7.1	17
12	16	52	42	20	15	650	422	319	37	8.8	4.8	13
13	16	63	47	20	15	1,500	795	369	35	10	5.8	11
14	16	80	47	20	15	2,800	633	258	44	10	4.8	18
15	15	80	59	20	15	2,500	477	178	39	16.8	5.8	19
16	13	77	57	20	15	3,620	795	122	31	7.2	5.8	14
17	13	52	42	15	15	2,900	1,310	101	23	6.8	5.8	13
18	26	33	48	15	15	1,950	919	87	27	6.6	5.8	10
19	26	25	49	15	15	3,570	515	72	27	8.5	19	11
20	14	29	37	15	15	1,220	422	66	22	6.1	6.8	9.9
21	13	33	30	15	15	1,000	352	59	15	5.8	8.5	9.2
22	18	31	25	15	15	795	238	55	18	5.8	15	8.5
23	20	16	20	15	15	713	272	22	17	6.3	17	10
24	22	25	20	15	15	673	243	20	18	8.8	15	19
25	15	30	20	15	20	673	216	19	14	9.6	14	17
26	13	30	20	15	40	713	203	17	17	9.9	11	16
27	15	31	15	15	90	458	166	17	15	11	9.2	30
28	14	31	15	15	160	404	166	22	15	12	11	26
29	14	31	15	15	190	352	164	26	15	11	15	22
30	14	29	15	15	-	319	216	22	24	9.2	12	21
31	13	-	15	15	-	288	-	28	-	8.2	9.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	474	26	11	15.3	0.024	0.03
November.....	1,276	109	15	42.5	.067	.07
December.....	933	59	15	30.1	.047	.05
Calendar year 1935.....	68,993.6	6,500	8.8	189	.298	4.04
January.....	530	20	15	17.1	.027	.03
February.....	860	180	15	28.7	.047	.05
March.....	30,078	3,620	180	970	1.53	1.76
April.....	13,266	1,310	164	442	.697	.78
May.....	4,856	458	17	157	.248	.29
June.....	1,066	77	14	35.5	.056	.06
July.....	321.3	22	5.8	10.4	.016	.02
August.....	273.0	19	4.8	6.31	.014	.02
September.....	458.8	30	8.2	15.3	.024	.03
Water year 1935-36.....	54,392.1	3,620	4.8	149	.235	3.19

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 limits of Pontiac. Zero of gage is 876.01 feet above mean sea level (revised figure).

Drainage area.- 123 square miles.

Records available.- May 1935 to September 1936.

Extremes.- Maximum discharge observed during year, about 300 second-feet Feb. 6 (gage height, 4.56 feet, backwater from ice); minimum discharge, 4.8 second-feet Sept. 4; minimum gage height, 0.54 feet June 8, 9.
1935-36: Maximum and minimum discharge occurred in 1936.

Remarks.- Records good except those for periods of ice effect, Dec. 4, 5, Dec. 20 to Jan. 6, Jan. 19 to Feb. 29, which were computed on basis of gage heights, observer's notes, and weather records and are poor. Gage read twice daily. Gage-height record furnished by City of Pontiac.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.0	7.8	50	20	7	125	106	100	33	13	7.7	5.5
2	8.4	7.2	57	30	6	94	106	125	38	11	7.4	8.2
3	8.7	7.5	46	55	15	112	106	100	23	10	7.2	5.7
4	8.4	15	40	35	45	118	106	100	13	9.6	7.4	5.5
5	8.4	33	40	35	190	106	106	94	10	8.2	7.2	5.7
6	8.7	25	44	40	300	112	112	88	9.0	7.4	7.0	7.2
7	8.1	20	55	46	180	76	112	69	8.4	7.4	6.8	7.4
8	7.8	22	52	48	140	88	106	63	7.2	7.7	6.8	11
9	7.5	22	51	50	70	94	106	63	7.5	7.7	6.6	7.4
10	8.7	30	53	46	30	94	106	65	7.8	7.9	6.6	7.2
11	7.8	28	53	46	30	94	118	73	8.4	8.2	6.4	6.4
12	7.8	44	51	46	25	100	125	88	8.4	8.2	6.4	9.1
13	7.2	52	53	47	20	94	132	67	8.7	15	6.4	8.4
14	6.9	76	54	48	15	94	125	65	8.7	14	6.4	28
15	7.2	80	56	46	20	82	125	65	8.4	9.6	9.6	12
16	7.2	80	56	46	15	82	138	64	9.0	8.6	6.8	9.6
17	7.5	79	56	49	10	100	125	63	9.4	7.7	6.4	9.1
18	12	73	56	48	15	106	106	63	11	7.2	6.4	11
19	8.7	73	55	40	20	100	106	62	11	7.2	5.9	9.1
20	7.8	72	50	35	15	100	106	61	9.9	7.2	5.7	9.1
21	11	72	45	25	15	100	112	58	9.1	7.2	36	8.2
22	8.1	65	40	15	20	100	118	53	8.9	7.7	13	8.6
23	8.1	54	25	10	20	106	112	52	8.9	7.9	8.2	7.7
24	7.5	52	25	15	40	100	118	51	9.4	7.7	7.7	20
25	7.8	50	20	10	90	106	112	48	8.9	7.2	13	12
26	7.2	50	35	10	90	100	106	48	8.6	7.2	7.9	11
27	7.2	53	35	10	60	112	106	47	11	14	6.8	9.1
28	7.5	51	35	9	100	106	106	45	8.6	9.1	7.7	16
29	7.5	51	35	6	110	106	106	42	7.7	7.9	7.0	12
30	7.2	50	30	6	6	118	100	40	17	8.2	5.9	11
31	7.5	-	25	6	-	106	-	34	-	7.4	5.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	250.4	12	6.9	8.08	0.066	0.08
November.....	1,394.5	80	7.2	46.5	.378	.42
December.....	1,378	57	20	44.5	.362	.42
Calendar year						
January.....	978	55	6	31.5	.256	.30
February.....	1,713	300	6	59.1	.480	.52
March.....	3,131	125	76	101	.821	.95
April.....	3,374	138	100	112	.911	1.02
May.....	2,056	125	34	66.3	.539	.62
June.....	347.9	38	7.2	11.6	.094	.10
July.....	274.3	15	7.2	8.85	.072	.08
August.....	266.0	36	5.7	8.26	.087	.08
September.....	350.1	91	5.5	12.7	.103	.11
Water year 1935-36.....	15,533.2	300	5.5	42.4	.345	4.70

Clinton River at Mount Clemens, Mich.

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

Drainage area.- 733 square miles.

Records available.- May 1934 to September 1936.

Extremes.- Maximum discharge observed during year, 2,300 second-feet Apr. 12; maximum gage height, 10.50 feet Mar. 12 (backwater from ice); minimum discharge, 39 second-feet July 22, Aug. 4; minimum gage height, 3.69 feet Sept. 24.
1934-36: Maximum discharge observed, 4,360 second-feet Mar. 12, 1935 (gage height, 11.14 feet); minimum discharge, 24 second-feet July 31, 1934; minimum gage height, 2.50 feet Oct. 15, 1934.

Remarks.- Records good except those for period of ice effect, Dec. 21 to Mar. 14 (computed on basis of two discharge measurements, gage heights and weather records) and those for period of missing gage heights, May 7-16 (based on comparative hydrographs and weather records), which are poor. Discharge interpolated Nov. 23, 24, Dec. 9. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	67	162	150	90	800	337	485	125	125	45	56
2	62	72	254	160	80	750	187	485	265	94	44	62
3	62	72	254	180	70	650	205	710	276	85	44	62
4	67	82	244	200	65	900	450	520	162	77	39	62
5	72	205	214	200	70	1,600	485	390	139	77	46	62
6	77	337	265	210	60	1,500	1,120	363	118	67	49	62
7	72	205	276	210	90	1,200	1,600	320	106	62	51	72
8	77	154	300	210	70	850	880	290	106	58	49	112
9	77	132	262	210	60	700	670	260	100	62	46	82
10	82	146	224	210	60	550	790	260	94	58	43	72
11	94	178	205	220	60	1,200	1,660	360	94	58	42	67
12	72	234	205	220	60	1,700	2,230	450	88	62	44	82
13	88	265	214	220	60	2,200	1,480	500	82	67	45	94
14	77	224	205	220	60	1,500	1,020	400	77	62	42	234
15	72	205	214	220	60	1,120	880	320	77	62	44	276
16	67	196	254	210	60	1,320	1,070	270	77	62	49	170
17	62	187	254	200	60	1,170	925	224	77	49	48	125
18	77	187	254	190	60	790	710	205	82	49	45	100
19	94	196	214	180	60	710	630	196	72	49	45	88
20	62	205	324	140	60	670	555	196	72	44	46	82
21	67	224	320	130	60	630	450	187	67	42	72	77
22	72	205	240	140	60	590	450	170	72	39	125	82
23	72	190	200	140	60	630	420	162	67	41	82	77
24	72	175	180	120	120	790	390	154	67	49	72	88
25	72	162	170	110	860	750	363	139	67	51	67	118
26	67	170	160	100	1,200	630	324	139	72	44	88	106
27	67	162	160	100	1,200	670	324	132	94	46	88	125
28	67	196	160	100	1,100	750	390	139	67	72	72	214
29	72	178	160	100	1,000	590	485	132	72	62	62	170
30	72	162	160	100	-	520	590	118	178	52	62	139
31	72	-	150	100	-	485	-	106	-	52	54	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	2,253		94	58	73.0	0.100	0.12					
November.....	5,380		337	67	179	.244	.27					
December.....	6,808		324	150	220	.300	.35					
Calendar year 1935.....	124,410		4,000	58	341	.465	6.32					
January.....	5,180		220	100	167	.228	.26					
February.....	7,105		1,200	60	245	.334	.36					
March.....	28,915		2,200	465	933	1.27	1.46					
April.....	22,070		2,230	167	736	1.00	1.12					
May.....	8,762		710	105	283	.386	.45					
June.....	3,112		276	67	104	.142	.16					
July.....	1,882		125	39	60.7	.083	.10					
August.....	1,750		125	39	56.5	.077	.09					
September.....	3,218		276	56	107	.146	.16					
Water year 1935-36.....	96,445		2,230	39	264	.360	4.90					

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 1936.

Extremes.- Maximum discharge observed during year, 760 second-feet Mar. 5 (gage height, 10.26 feet); minimum not determined.
1930-36: 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, Dec. 2-6, Dec. 21 to Feb. 27, Mar. 10-15, and those for June 7, 10-23, which were computed on basis of weather records and records for Raisin River near Adrian and are poor. Gage read twice daily. No records July 3 to Sept. 30.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	19	30	32	17	446	95	147	14	26		
2	13	19	30	34	17	406	91	156	65	16		
3	21	18	29	35	18	380	103	153	76	-		
4	17	19	23	36	20	502	99	120	51	-		
5	11	61	23	37	20	700	116	99	32	-		
6	11	51	29	33	19	660	156	79	28	-		
7	10	37	31	39	18	502	147	65	23	-		
8	10	29	41	40	17	419	120	58	18	-		
9	9.6	26	58	40	15	354	111	49	20	-		
10	11	34	51	40	13	350	147	45	17	-		
11	15	49	49	40	13	380	206	42	15	-		
12	18	58	44	38	14	410	216	47	14	-		
13	16	62	34	40	14	360	238	72	13	-		
14	14	46	30	42	15	320	186	76	12	-		
15	14	38	34	44	15	300	166	72	12	-		
16	13	32	46	43	14	294	176	65	11	-		
17	14	34	48	42	13	306	176	50	11	-		
18	15	32	43	40	13	271	138	38	12	-		
19	18	28	40	38	12	227	120	32	12	-		
20	16	32	44	35	11	138	111	26	11	-		
21	14	34	44	32	11	107	99	23	10	-		
22	15	37	41	28	11	99	91	22	10	-		
23	17	37	38	26	12	95	87	20	9	-		
24	17	34	36	25	40	116	79	21	8.8	-		
25	15	30	35	24	125	129	63	21	8.5	-		
26	15	28	35	22	250	111	65	21	8.5	-		
27	15	27	34	21	350	120	76	18	8.3	-		
28	16	32	32	19	530	147	120	18	8.8	-		
29	19	30	30	18	460	238	166	17	9.0	-		
30	19	29	30	17	-	111	147	16	18	-		
31	17	-	30	17	-	107	-	15	-	-		
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	456.6		21	9.6	14.7	0.075	0.09					
November.....	1,032		62	18	34.4	.177	.20					
December.....	1,152		58	28	37.2	.192	.22					
Calendar year 1935.....	20,653		750	6.3	56.6	.292	3.97					
January.....	1,022		44	17	33.0	.170	.20					
February.....	2,097		530	11	72.3	.373	.40					
March.....	9,125		700	95	294	1.52	1.75					
April.....	3,916		238	65	131	.676	.75					
May.....	1,688		156	15	64.5	.281	.32					
June.....	566.9		76	8.5	18.9	.097	.11					
July.....	-		-	-	-	-	-					
August.....	-		-	-	-	-	-					
September.....	-		-	-	-	-	-					
Water year	-		-	-	-	-	-					

STREAMS TRIBUTARY TO LAKE ERIE

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 1936.

Average discharge.- 22 years, 380 second-feet.

Extremes.- Maximum daily discharge during year, 1,040 second-feet Mar. 16; minimum, 6 second-feet June 18, 19, July 4, 27, Aug. 12, 15.
1914-36: Maximum daily discharge, 5,840 second-feet Mar. 14, 1918; minimum, 4 second-feet Sept. 11, 1931.

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

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	120	243	175	157	732	524	449	180	80	17	48
2	96	120	239	196	126	720	520	375	132	88	59	57
3	75	108	285	203	148	686	477	526	208	12	30	56
4	112	178	176	196	140	886	482	356	178	6	30	49
5	87	211	145	200	141	980	454	459	162	183	33	34
6	89	219	218	208	135	882	539	404	174	105	41	54
7	93	259	289	201	150	877	555	342	152	89	30	43
8	89	250	288	213	127	870	493	345	215	102	30	84
9	92	242	260	211	136	801	496	309	177	76	31	72
10	98	291	304	211	137	739	545	374	101	65	37	65
11	95	270	291	214	129	885	695	296	166	93	30	68
12	63	375	292	221	133	1,000	735	313	120	76	6	102
13	111	366	291	221	186	929	728	282	129	70	30	79
14	111	352	292	222	119	861	618	275	175	75	25	100
15	99	343	294	225	146	871	654	181	219	59	6	80
16	93	343	331	214	171	1,040	669	190	166	71	30	170
17	91	294	313	218	148	953	655	226	144	51	18	92
18	122	338	291	157	96	886	615	234	6	66	16	61
19	112	291	289	209	139	787	586	207	6	61	16	110
20	111	322	219	177	198	773	570	285	88	54	16	88
21	120	326	233	252	137	690	557	191	73	68	18	131
22	125	293	249	177	85	686	516	97	68	36	18	91
23	120	291	240	89	250	627	456	178	69	47	19	104
24	119	290	190	153	213	659	459	155	66	49	15	84
25	119	222	224	169	445	668	481	208	68	43	68	96
26	155	288	219	180	615	616	420	182	68	64	18	90
27	134	240	213	177	660	656	452	129	31	6	50	162
28	69	260	164	150	647	644	438	140	105	47	45	132
29	124	288	206	152	744	617	457	66	183	46	40	135
30	119	241	190	110	-	567	460	134	129	32	35	159
31	117	-	172	132	-	444	-	161	-	15	36	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	3,260		155	63	105	0.145	0.17					
November.....	8,031		375	108	268	.371	.41					
December.....	7,650		331	145	247	.342	.39					
Calendar year 1935.....	96,159		1,160	63	263	.364	4.93					
January.....	5,863		252	89	189	.261	.30					
February.....	6,648		744	85	229	.317	.34					
March.....	24,032		1,040	444	775	1.07	1.23					
April.....	16,306		735	420	544	.752	.84					
May.....	8,072		526	66	260	.360	.42					
June.....	3,758		219	6	125	.173	.19					
July.....	1,935		183	6	62.4	.086	.10					
August.....	893		68	6	28.8	.040	.05					
September.....	2,701		170	34	90.0	.124	.14					
Water year 1935-36.....	89,149		1,040	6	244	.337	4.58					

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.- 418 square miles.

Records available.- October 1930 to August 1931, October 1932 to September 1936.

Extremes.- Maximum discharge observed during year, 1,800 second-feet Mar. 5 (gage height, 15.75 feet); minimum, 16 second-feet July 21 (gage height, 4.54 feet).
1930-31, 1932-36: Maximum discharge observed, 2,010 second-feet Apr. 2, 1933, and Apr. 5, 1934; maximum gage height, 14.50 feet Apr. 2, 1933; minimum discharge, that of July 21, 1936.

Remarks.- Records fair except those for periods of ice effect, Dec. 4-7, Dec. 21 to Jan. 3, Jan. 21 to Mar. 2, which were computed on basis of records on Battle Creek and weather records and are poor. Discharge interpolated Oct. 25. Gage read twice daily.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	42	90	80	50	1,100	278	293	56	62	23	29
2	39	38	122	80	50	1,200	264	356	100	36	17	38
3	40	44	154	100	50	1,280	264	407	70	84	17	47
4	40	46	150	132	50	1,550	278	324	92	80	23	38
5	35	82	140	122	50	1,770	264	250	92	50	34	34
6	30	78	180	127	50	1,620	278	210	76	38	29	41
7	28	74	100	143	50	1,350	285	198	92	80	31	54
8	41	98	98	138	50	1,020	264	153	66	73	29	34
9	44	82	112	112	50	875	250	163	66	84	50	70
10	33	103	127	112	50	825	264	163	59	60	21	50
11	33	117	98	122	50	850	293	186	80	31	34	27
12	52	127	98	108	50	950	373	132	41	56	27	92
13	40	143	90	122	50	800	373	152	70	29	29	62
14	36	132	108	98	50	663	324	96	34	73	38	127
15	58	132	143	94	50	620	293	92	62	31	41	225
16	55	103	138	108	50	875	293	70	163	66	29	174
17	46	127	117	94	50	850	293	84	36	27	25	84
18	40	86	112	108	50	578	293	47	54	25	36	53
19	37	108	127	117	50	499	250	53	27	53	44	66
20	40	112	117	117	60	443	198	50	29	23	44	59
21	33	138	110	110	60	407	264	108	34	16	27	56
22	56	138	100	100	60	373	278	84	25	59	31	47
23	55	143	90	90	70	373	278	70	27	25	31	44
24	44	112	80	80	70	407	210	62	41	59	41	36
25	46	90	80	70	110	499	174	36	36	80	76	34
26	49	90	80	60	300	443	142	62	44	29	41	38
27	40	90	80	60	500	443	186	59	53	36	25	70
28	36	90	80	50	900	518	223	44	34	31	27	59
29	52	78	80	50	1,000	499	250	56	25	29	29	80
30	48	94	80	50	-	390	264	66	66	73	25	56
31	46	-	80	50	-	340	-	44	-	44	31	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	1,308		58	28	42.2	0.101	0.12					
November.....	2,937		143	38	97.9	.255	.26					
December.....	3,301		154	80	106	.255	.29					
Calendar year 1935.....	52,246		881	28	143	.344	4.67					
January.....	3,004		143	50	96.9	.233	.27					
February.....	4,080		1,000	50	141	.339	.37					
March.....	24,410		1,770	340	787	1.89	2.18					
April.....	7,949		373	142	265	.637	.71					
May.....	4,180		407	36	135	.325	.37					
June.....	1,728		163	23	57.6	.138	.15					
July.....	1,562		84	16	50.4	.121	.14					
August.....	1,005		76	17	32.4	.076	.09					
September.....	1,902		223	27	63.4	.152	.17					
Water year 1935-36.....	57,366		1,770	16	157	.377	5.12					

STREAMS TRIBUTARY TO LAKE ERIE

Maumee River at Antwerp, Ohio

Location.- Water-stage recorder, lat. 41°11'56", long. 84°44'40", in sec. 22, T. 3 N., R. 1 E., just below highway bridge 1 mile north of Antwerp and about 7 miles downstream from State boundary. Zero of gage is 695.49 feet above mean sea level.

Drainage area.- 2,049 square miles.

Records available.- September 1921 to December 1935 (discontinued).

Average discharge.- 14 years, 1,568 second-feet.

Extremes.- Maximum discharge during period, 879 second-feet Oct. 21 (gage height, 3.01 feet); minimum, 51 second-feet Nov. 2 (gage height, 0.46 foot).
1921-35: Maximum discharge, 22,000 second-feet Jan. 16, 1930 (gage height, 19.4 feet); minimum, 24 second-feet Oct. 17, 1930, and June 21, 22, 1933 (gage height, 0.32 foot).

Remarks.- Records good except those estimated because of ice effect, Dec. 10-31, which are fair. Record discontinued because of lack of funds.

Rating table, 1935, except period of ice effect (gage height, in feet, and discharge, in second-feet)

0.4	43	1.4	251
.6	72	1.6	312
.8	106	1.8	377
1.0	140	2.0	446
1.2	197	2.2	520

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	94	192									
2	110	56	187									
3	106	66	210									
4	104	114	196									
5	102	164	190									
6	101	248	213									
7	101	192	187									
8	101	202	205									
9	104	210	272									
10	106	207	340									
11	108	150	380									
12	110	182	360									
13	106	401	380									
14	112	322	380									
15	130	312	380									
16	128	249	350									
17	110	120	320									
18	114	99	310									
19	112	192	310									
20	110	394	300									
21	462	251	290									
22	301	248	280									
23	174	251	270									
24	133	245	260									
25	122	237	250									
26	116	226	240									
27	116	215	240									
28	120	210	240									
29	124	202	230									
30	135	200	230									
31	167	-	230									
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	4,147			462	101	134	0.065	0.07				
November.....	6,269			401	56	209	.102	.11				
December.....	8,452			390	187	273	.133	.15				
Calendar year 1935.....	341,604			8,980	56	936	.457	6.19				
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Maumee River near Defiance, Ohio

Location.- Water-stage recorder, lat. 41°17'31", long. 84°16'49", in NW¼ sec. 22, T. 4 N., R. 5 E., at Independence Dam, 5 miles east of Defiance, Defiance County. Zero of gage is 659.12 feet above mean sea level.

Drainage area.- 5,530 square miles.

Records available.- November 1924 to December 1935 (discontinued).

Average discharge.- 10 years (1925-35), 3,704 second-feet (flow in Miami & Erie Canal not included).

Extremes.- Maximum discharge during period, 1,210 second-feet Dec. 13 (gage height, 2.04 feet); minimum, 60 second-feet Oct. 3 (gage height, 1.38 feet).
1924-35: Maximum discharge, 87,000 second-feet Jan. 16, 1930 (gage height, 12.9 feet); minimum, 18 second-feet Aug. 2, 1934 (gage height, 1.24 feet).

Remarks.- Records good except those below 400 second-feet, which are fair. Flow at extremely low water affected by regulation of Auglaize River at Toledo Edison Co.'s dam 3 miles south of Defiance. Water diverted into Miami & Erie Canal above station; diversion not included in tables of discharge. Record discontinued because of lack of funds.

Rating table, 1935 (gage height, in feet, and discharge, in second-feet)

1.4	70	1.8	673
1.5	154	1.9	880
1.6	304	2.0	1,110
1.7	480	2.1	1,360

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	143	239									
2	122	143	264									
3	121	113	223									
4	104	202	192									
5	113	263	143									
6	113	222	255									
7	122	358	432									
8	122	339	374									
9	113	269	476									
10	122	412	538									
11	122	314	912									
12	122	322	770									
13	122	272	672									
14	104	477	775									
15	113	427	666									
16	122	406	744									
17	122	450	692									
18	132	271	658									
19	122	337	678									
20	95	288	579									
21	122	358	630									
22	268	322	410									
23	382	288	445									
24	206	288	423									
25	154	374	427									
26	143	357	480									
27	132	304	392									
28	143	403	300									
29	132	288	339									
30	113	255	304									
31	113	-	304									

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	4,258	392	95	137	
November.....	9,245	477	113	308	
December.....	14,941	912	143	482	
Calendar year 1935	743,316	27,300	81	2,036	
January.....					
February.....					
March.....					
April.....					
May.....					
June.....					
July.....					
August.....					
September.....					
Water year					

Maumee River at Waterville, Ohio

Location.- Water-stage recorder, lat. 41°30'0", long. 83°42'46", at highway bridge at Waterville, Lucas County, 3 miles below mouth of Tontogany Creek.

Drainage area.- 6,314 square miles.

Records available.- November 1898 to December 1901, August 1921 to December 1935 (discontinued).

Average discharge.- 14 years (1921-35), 4,320 second-feet (does not include flow in abandoned Miami & Erie Canal).

Extremes.- Maximum discharge during period, 1,060 second-feet Dec. 15; maximum gage height, 2.65 feet Dec. 15 (ice gorge); minimum discharge, 51 second-feet Oct. 7 (gage height, 1.45 feet).

1921-35: Maximum discharge recorded, about 94,700 second-feet (revised) Jan. 16, 1930 (gage height, 13.60 feet); minimum, 39 second-feet Aug. 2, 1934 (gage height, 1.32 feet).

Remarks.- Records good except those for extremely low stages and those estimated because of ice effect, Dec. 3-6, 21-31, which are fair. Flow at low water affected by regulation of Auglaize River at hydroelectric plant of Toledo Edison Co. 3 miles south of Defiance. Record discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	177	193	185									
2	138	185	312									
3	270	177	280									
4	202	220	230									
5	77	490	210									
6	62	265	300									
7	53	211	292									
8	66	362	440									
9	104	362	490									
10	138	405	599									
11	161	383	627									
12	117	428	854									
13	110	462	822									
14	153	372	822									
15	166	503	932									
16	124	440	760									
17	169	529	775									
18	229	464	745									
19	177	362	775									
20	136	516	760									
21	104	338	700									
22	202	416	600									
23	322	362	540									
24	416	342	510									
25	265	362	500									
26	213	405	550									
27	145	383	490									
28	145	490	410									
29	185	440	440									
30	202	312	370									
31	153	-	360									
Month	Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet						
October.....	5,185		416	53	167							
November.....	11,159		529	177	372							
December.....	16,680		932	185	538							
Calendar year 1935.....	873,228		31,300	53	2,392							
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

St. Marys River near Fort Wayne, Ind.

Location.- Chain gage, lat. 41°, long. 85°8', in sec. 35, T. 30 N., R. 12 E., at highway bridge 12 miles above mouth of river and 4 miles south of Fort Wayne.

Drainage area.- 810 square miles.

Records available.- November 1930 to September 1936 in reports of U. S. Geological Survey; October 1925 to November 1926, July to September 1927 in reports of the Indiana Department of Conservation.

Extremes.- Maximum discharge during year (estimated), 7,500 second-feet Feb. 27 (gage height, 18.90 feet, backwater from ice); minimum, 7.6 second-feet July 20, 21 (gage height, 0.44 foot).

1930-36: Maximum discharge observed, 6,820 second-feet May 14, 1933 (gage height, 14.08 feet); minimum, 3.4 second-feet Oct. 19, 1934 (gage height, 0.28 foot).

Remarks.- Records good except those for periods of ice effect, Nov. 28 to Dec. 7, Dec. 18 to Mar. 3, which were computed on the basis of records for the station on Wabash River at Bluffton and weather records and are poor. Gage read once daily.

Rating tables, water year 1935-36, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 29				Mar. 1 to Sept. 30									
0.4	7	1.6	123	4.0	605	12.0	4,830	0.4	6	1.6	118	6.0	1,230
.6	16	1.8	153	5.0	880	14.0	6,530	.6	15	1.8	148	8.0	2,190
.8	30	2.0	185	6.0	1,230			.8	28	2.0	191		
1.0	49	2.5	274	7.0	1,670			1.0	45	2.5	272		
1.2	70	3.0	374	8.0	2,190			1.2	66	3.0	374		
1.4	95	3.5	484	10.0	5,390			1.4	91	4.0	605		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	21	20	23	32	4,000	1,010	98	30	22	15	15
2	14	20	19	24	32	3,000	730	2,550	24	20	16	17
3	13	20	19	27	34	2,250	630	2,310	25	11	15	16
4	13	21	19	30	45	1,470	374	1,390	24	10	15	15
5	12	29	19	42	58	975	332	555	28	12	17	13
6	13	31	21	55	65	680	312	374	36	11	10	14
7	15	36	23	70	60	507	374	312	225	10	8.4	13
8	15	38	29	85	55	395	439	244	181	10	8.4	12
9	16	38	69	110	52	353	439	181	104	10	8.4	10
10	21	44	82	130	50	332	439	164	78	10	9.2	10
11	14	52	88	165	50	312	439	148	45	10	8.4	10
12	16	48	88	185	55	292	484	133	41	10	8.4	9.2
13	16	46	88	300	75	312	439	118	36	10	8.4	13
14	12	38	95	450	90	312	374	104	36	9.2	8.4	13
15	12	38	98	400	110	630	353	91	33	9.2	8.4	14
16	12	36	82	350	130	605	292	84	31	9.2	8.4	15
17	12	34	76	300	120	484	253	78	25	9.2	8.4	15
18	12	38	72	260	100	484	181	66	22	9.2	31	16
19	12	42	68	210	85	439	164	84	21	9.2	31	17
20	12	38	60	190	80	395	148	118	22	7.6	28	16
21	16	34	55	170	75	417	126	98	22	7.6	22	14
22	16	34	50	140	75	417	118	79	21	8.4	17	13
23	16	29	45	105	175	439	104	64	20	15	13	13
24	21	28	40	75	2,500	3,030	91	57	20	19	12	12
25	21	24	32	60	3,750	3,090	78	55	16	15	12	11
26	20	23	28	48	5,500	2,970	78	55	12	12	13	11
27	18	23	25	39	7,500	2,250	84	53	11	11	14	11
28	16	22	23	35	6,000	3,210	91	55	11	11	12	12
29	21	21	22	33	5,000	3,090	98	53	12	12	15	13
30	21	20	22	32	-	2,250	91	36	22	25	16	15
31	26	-	22	32	-	2,070	-	36	-	14	15	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	487	26	12	15.7	0.019	0.02
November.....	956	52	20	32.2	.040	.04
December.....	1,489	95	19	48.0	.059	.07
Calendar year 1935.....	121,169.4	4,830	9.4	332	.410	5.55
January.....	4,174	450	23	135	.167	.19
February.....	31,953	7,500	32	1,102	1.36	1.47
March.....	41,460	4,000	292	1,337	1.65	1.90
April.....	9,165	1,010	78	305	.378	.42
May.....	9,842	2,550	36	317	.391	.45
June.....	1,234	225	11	41.1	.051	.06
July.....	368.8	25	7.6	11.9	.015	.02
August.....	432.2	31	8.4	13.9	.017	.02
September.....	398.2	17	9.2	13.3	.016	.02
Water year 1935-36.....	101,969.2	7,500	7.6	279	.344	4.68

Tiffin River near Brunersburg, Ohio

Location.- Water-stage recorder, lat. $41^{\circ}20'48''$, long. $84^{\circ}25'8''$, near highway bridge between secs. 32 and 33, T. 5 N., R. 4 E., three-eighths of a mile below mouth of Mud Creek and 3 miles northwest of Brunersburg, Defiance County.

Drainage area.- 766 square miles.

Records available.- August 1928 to December 1935 (discontinued).

Extremes.- Maximum discharge during period, 120 second-feet Dec. 11, 12 (gage height, 2.33 feet); minimum, 17 second-feet Oct. 4-10.
1928-35: Maximum discharge, 9,990 second-feet Jan. 14, 1930 (gage height, 23.3 feet); minimum, 2.6 second-feet July 30, 31, 1934 (gage height, 0.41 foot).

Remarks.- Records fair. Discharge estimated because of ice effect, Dec. 3-5, 24-31. Records discontinued because of lack of funds.

Rating table, 1935, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.8	14	1.6	57
.9	18	1.8	72
1.0	23	2.0	89
1.2	33	2.5	140
1.4	45		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	32	49									
2	20	32	45									
3	18	31	40									
4	17	36	35									
5	17	51	33									
6	17	62	41									
7	17	62	50									
8	17	57	89									
9	17	53	99									
10	18	55	104									
11	18	57	97									
12	21	60	89									
13	22	62	89									
14	25	63	69									
15	24	60	63									
16	26	60	64									
17	24	58	64									
18	24	55	70									
19	24	56	72									
20	22	63	91									
21	23	59	89									
22	24	58	80									
23	25	58	58									
24	29	62	51									
25	27	57	45									
26	28	52	43									
27	28	55	41									
28	28	51	40									
29	30	50	39									
30	34	48	37									
31	32	-	37									
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	721			34	17	23.3	0.030	0.03				
November.....	1,615			63	31	53.8	.070	.08				
December.....	1,915			104	33	61.8	.081	.09				
Calendar year 1935.....	81,841			2,240	12	223	.291	3.94				
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Auglaize River near Fort Jennings, Ohio

Location.- Water-stage recorder, lat. 40°56'55", long. 84°15'58", in SE¼ sec. 15, T. 1 S., R. 5 E., at highway bridge 3½ miles northeast of Fort Jennings, Putnam County, and 6 miles above mouth of Ottawa River. Zero of gage is 713.92 feet above mean sea level.

Drainage area.- 333 square miles.

Records available.- August 1921 to December 1935 (discontinued).

Average discharge.- 14 years, 294 second-feet.

Extremes.- Maximum discharge during period, 404 second-feet Dec. 10 (gage height, 3.90 feet); minimum, 14 second-feet Oct. 7, 8 (gage height, 0.98 foot).
1921-35: Maximum discharge, 7,860 second-feet Jan. 15, 1930 (gage height, 18.6 feet); minimum, 5.0 second-feet Aug. 28, 1932 (gage height, 0.75 foot).

Remarks.- Records good except those estimated because of ice effect, Dec. 13-31, which are fair. Diversion into this basin from Lake St. Marys by Miami & Erie Canal above station. Records discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	28	33									
2	29	28	34									
3	29	32	33									
4	22	28	32									
5	20	33	32									
6	16	34	37									
7	14	41	41									
8	16	70	49									
9	17	60	70									
10	20	54	345									
11	23	46	251									
12	21	45	164									
13	20	43	98									
14	22	45	85									
15	23	47	90									
16	23	53	110									
17	26	55	130									
18	30	50	120									
19	19	45	100									
20	21	44	80									
21	21	37	75									
22	19	36	75									
23	21	30	70									
24	23	27	60									
25	30	30	50									
26	50	29	50									
27	39	31	50									
28	30	28	50									
29	31	33	40									
30	28	30	30									
31	28	-	40									
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	758		50	14	24.5							
November.....	1,192		70	27	39.7							
December.....	2,524		345	30	81.4							
Calendar year 1935.....	68,133		3,310	14	187							
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

STREAMS TRIBUTARY TO LAKE ERIE

Auglaize River near Defiance, Ohio

Location.- Water-stage recorder, lat. $41^{\circ}14'15''$, long. $84^{\circ}24'2''$, in NE $\frac{1}{4}$ sec. 9, T. 3 N., R. 4 E., below dam and power plant of Toledo Edison Co. 3 miles south of Defiance, Defiance County, and just below mouth of Beetree Creek. Zero of gage is 660.00 feet above mean sea level.

Drainage area.- 2,329 square miles.

Records available.- April 1915 to December 1935 (discontinued). May to August 1903 at highway bridge $1\frac{1}{2}$ miles downstream.

Average discharge.- 20 years (1915-35), 1,621 second-feet.

Extremes.- Maximum mean daily discharge during period, 480 second-feet Dec. 11; minimum, 27 second-feet Dec. 1.
1915-35: Maximum mean daily discharge, 38,700 second-feet Jan. 15, 1930; minimum, 6 second-feet Oct. 17, 1923.

Remarks.- Records good. Some water is diverted from Lake St. Marys by Miami & Erie Canal into Jennings Creek, tributary to Auglaize River above station. Records discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	30	27									
2	66	30	100									
3	34	70	116									
4	32	170	28									
5	29	137	30									
6	30	110	30									
7	60	140	234									
8	40	102	28									
9	32	201	182									
10	32	36	238									
11	32	121	480									
12	28	120	361									
13	30	128	360									
14	32	134	440									
15	29	124	136									
16	30	180	258									
17	32	32	263									
18	30	124	267									
19	30	248	298									
20	29	114	278									
21	50	118	138									
22	30	28	140									
23	30	28	126									
24	29	30	256									
25	31	128	123									
26	50	112	132									
27	32	34	134									
28	64	196	146									
29	32	40	28									
30	32	31	114									
31	30	-	113									
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	1,101			66	28	35.5						
November.....	3,096			248	28	103						
December.....	5,594			480	27	180						
Calendar year 1935.....	307,242			15,900	27	842						
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year.....												

Ottawa River at Allentown, Ohio

Location.- Water-stage recorder, lat. 40°45'18", long. 84°11'41", above concrete control in NW¼ sec. 29, T. 3 S., R. 6 E., at highway bridge at Allentown, Allen County. Zero of gage is 789.67 feet above mean sea level.

Drainage area.- 168 square miles.

Records available.- November 1923 to December 1935 (discontinued).

Average discharge.- 11 years (1924-35), 115 second-feet.

Extremes.- Maximum discharge during period, 105 second-feet Nov. 5 (gage height, 3.32 feet); minimum, 6.5 second-feet Oct. 14-17 (gage height, 2.20 feet). 1923-35: Maximum discharge, 2,910 second-feet Mar. 20, 1927 (gage height, 9.0 feet); minimum, 1.4 second-feet June 28, 29, 1933.

Remarks.- Records excellent except those estimated for Dec. 29-31 because of ice effect, which are fair. Records discontinued because of lack of funds.

Rating table, 1935 except period of ice effect (gage height, in feet, and discharge, in second-feet)

2.2	65	2.7	26
2.3	9.0	2.8	32
2.4	12.3	2.9	38
2.5	16.1	3.0	48
2.6	21		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12.4	9.6	11.2									
2	10.3	9.8	10.4									
3	8.9	9.4	11.0									
4	8.8	8.4	10.4									
5	9.2	47	9.7									
6	8.2	20	10.0									
7	8.4	14.4	19.5									
8	9.4	13.7	27									
9	8.8	11.3	38									
10	8.8	17.9	29									
11	15.1	12.2	31									
12	9.4	16.4	19.8									
13	9.0	14.4	20									
14	8.6	12.9	22									
15	10.8	11.4	26									
16	8.4	11.8	31									
17	8.6	10.3	28									
18	10.6	10.1	27									
19	12.0	12.5	23									
20	8.8	14.5	18.8									
21	7.8	10.8	24									
22	15.0	10.6	22									
23	31.0	10.4	21									
24	12.2	10.0	18.4									
25	10.1	9.2	14.4									
26	9.9	11.1	14.6									
27	10.1	12.6	15.9									
28	8.0	13.0	15.5									
29	11.6	9.8	12									
30	10.6	10.2	9									
31	9.8	-	11									
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	330.6		31	7.8	10.7	0.064	0.07					
November.....	395.7		47	8.4	13.2	.079	.09					
December.....	600.6		38	9	19.4	.115	.13					
Calendar year 1935.....	23,795.4		1,960	7.2	65.2	.388	5.26					
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

STREAMS TRIBUTARY TO LAKE ERIE

Blanchard River near Findlay, Ohio

Location.- Water-stage recorder, lat. 41°3'21", long. 83°41'17", on east line of sec. 10, T. 1 N., R. 10 E., at highway bridge 2 miles northwest of Findlay, Hancock County. Zero of gage is 754.55 feet above mean sea level.

Drainage area.- 343 square miles.

Records available.- November 1923 to December 1935 (discontinued).

Average discharge.- 11 years (1924-35), 225 second-feet.

Extremes.- Maximum discharge during period, 178 second-feet Dec. 10 (gage height, 2.01 feet); minimum, 1.0 second-foot Oct. 7.

1923-35: Maximum discharge, 6,320 second-feet Dec. 1, 1927 (gage height, 14.5 feet); minimum, 0.4 second-foot Aug. 28, 27, Sept. 3, 1934.

Flood of March 1913 reached a stage corresponding to 18.5 feet on gage.

Remarks.- Records fair. Records discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	6.3	5.8									
2	4.9	5.3	5.8									
3	4.5	4.5	11									
4	4.5	6.3	9.2									
5	3.3	22	9.2									
6	3.3	8.5	7.8									
7	2.0	8.5	13									
8	4.9	11	11									
9	4.9	9.2	14									
10	7.8	12	101									
11	6.8	9.2	126									
12	4.9	10	77									
13	4.5	10	61									
14	3.7	8.8	48									
15	3.3	8.5	43									
16	3.7	7.8	52									
17	1.8	6.3	69									
18	3.3	7.3	64									
19	4.5	11	51									
20	1.6	11	33									
21	2.3	9.2	27									
22	3.7	7.8	26									
23	4.5	7.3	22									
24	3.0	6.8	18									
25	3.3	6.3	14									
26	4.1	5.8	20									
27	4.9	6.3	17									
28	6.3	7.3	16									
29	6.8	4.9	11									
30	6.3	5.3	10									
31	6.3	-	6.3									
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	135.5			7.8	1.6	4.37	0.013	0.01				
November.....	248.5			22	4.5	8.28	.024	.03				
December.....	998.1			126	5.8	32.2	.094	.11				
Calendar year 1935.....	34,486.8			2,750	1.6	94.5	.276	3.74				
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Blanchard River near Dupont, Ohio

Location.- Water-stage recorder, lat. 41°2'28", long. 84°13'37", on east line of sec. 13, T. 1 N., R. 5 E., at highway bridge 4 miles east of Dupont, Putnam County. Zero of gage is 691.42 feet above mean sea level.

Drainage area.- 749 square miles.

Records available.- July 1928 to December 1935 (discontinued).

Extremes.- Maximum discharge during period, 125 second-feet (estimated) Dec. 13 (gage height, 2.47 feet); minimum, 8.0 second-feet Oct. 4 (gage height, 0.71 foot).
 1928-35: Maximum discharge, 16,800 second-feet Jan. 15, 1930 (gage height, 26.7 feet); minimum, 0.9 second-foot Aug. 31 and Sept. 1, 1934 (gage height, 0.44 foot).

Remarks.- Records good except those estimated because of ice effect, Dec. 12-31, which are fair. Records discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	15	22									
2	13	17	22									
3	10	16	21									
4	8.4	17	19									
5	8.4	26	20									
6	9.1	30	20									
7	9.5	26	25									
8	9.5	31	41									
9	8.7	26	46									
10	8.7	22	41									
11	9.1	23	35									
12	11	40	60									
13	11	41	120									
14	13	32	96									
15	13	28	80									
16	11	26	70									
17	11	26	62									
18	14	25	62									
19	13	24	72									
20	11	26	78									
21	11	28	70									
22	11	28	60									
23	11	27	46									
24	11	26	37									
25	11	24	34									
26	11	22	32									
27	11	21	30									
28	10	21	29									
29	11	21	25									
30	11	21	21									
31	11	-	18									
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	336.4			14	8.4	10.9	0.015	0.02				
November.....	759			41	15	25.3	.034	.04				
December.....	1,414			120	18	45.6	.061	.07				
Calendar year 1935.....	71,147.6			4,330	4.4	195	.260	3.54				
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

STREAMS TRIBUTARY TO LAKE ERIE

Miami & Erie Canal near Florida, Ohio

Location.- Staff gage at dam, lat. $41^{\circ}19'55''$, long. $84^{\circ}10'38''$, in SE $\frac{1}{4}$ sec. 4, T. 4 N., R. 6 E., $\frac{1}{8}$ miles east of Florida.

Records available.- May to December 1935 (discontinued).

Extremes.- Maximum discharge recorded during period, 52 second-feet Oct. 17 (gage height, 1.23 feet); minimum, 1.7 second-feet Dec. 26-31 (gage height, 0.54 foot).

Remarks.- Records good. Water for canal is diverted from Maumee River at Independence Dam and returned to river just below gage, being used for sewage dilution at Florida. Record discontinued because of lack of funds.

Rating table, 1935 (gage height, in feet, and discharge, in second-feet)

0.4	0.5
.5	1.1
.6	3.1
.7	6.3
.8	11
.9	18
1.0	27
1.1	37
1.2	48

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	25	24									
2	33	24	25									
3	31	24	25									
4	29	26	23									
5	29	29	23									
6	29	23	9.0									
7	30	23	24									
8	30	23	32									
9	30	23	1.0									
10	31	25	9.0									
11	31	23	7.2									
12	31	25	10									
13	30	25	27									
14	31	25	12									
15	31	25	20									
16	41	25	10									
17	46	27	6.7									
18	34	25	17									
19	27	27	8.1									
20	38	26	4.9									
21	29	25	3.4									
22	29	29	2.6									
23	27	31	2.6									
24	26	26	2.6									
25	25	26	2.1									
26	25	27	1.9									
27	25	27	1.7									
28	23	27	1.7									
29	23	27	1.7									
30	32	25	1.7									
31	26	-	1.7									
Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches						
October.....	933	46	23	30.1								
November.....	763	31	23	25.6								
December.....	350.6	32	1.7	11.3								
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Portage River at Woodville, Ohio

Location.- Water-stage recorder, lat. 41°26'55", long. 83°21'41", at highway bridge in Woodville, Sandusky County. Zero of gage is 615.14 feet above mean sea level.

Drainage area.- 433 square miles.

Records available.- July 1928 to December 1935 (discontinued).

Extremes.- Maximum discharge during period, 164 second-feet Dec. 10 (gage height, 3.21 feet); minimum, 2.9 second-feet Oct. 10 (gage height, 2.01 feet).
1928-35: Maximum discharge, about 10,500 second-feet Jan. 15, 1930 (gage height, 12.96 feet); minimum, 0.3 second-foot Aug. 26, 1931; minimum gage height, 1.60 feet July 25, 26, 1934.

Remarks.- Records fair. Discharge estimated because of ice effect Dec. 23-31. Record discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.4	11	22									
2	6.5	10	18									
3	6.3	9.5	17									
4	5.5	10	18									
5	5.0	16	16									
6	4.2	26	15									
7	3.8	30	18									
8	3.6	24	44									
9	3.0	18	124									
10	3.2	18	128									
11	4.0	18	94									
12	5.0	34	70									
13	5.8	55	57									
14	6.0	45	44									
15	5.8	36	72									
16	4.5	31	100									
17	4.5	26	119									
18	4.8	23	104									
19	4.5	22	87									
20	4.5	21	61									
21	6.5	24	56									
22	9.2	29	51									
23	12	30	35									
24	11	25	30									
25	10	25	26									
26	9.6	23	23									
27	9.6	22	22									
28	8.4	23	20									
29	9.6	25	19									
30	10	22	17									
31	10	-	16									
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	204.7			12	3.0	6.60	0.015	0.02				
November.....	731.6			55	9.6	24.4	.056	.06				
December.....	1,543			128	15	49.7	.115	.13				
Calendar year 1935.....	38,060.2			2,200	3.0	104	.240	3.27				
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Sandusky River near Upper Sandusky, Ohio

Location.- Water-stage recorder, lat. 40°51'2", long. 83°15'23", in sec. 21, T. 2 S., R. 14 E., at highway bridge 2 miles northeast of Upper Sandusky, Wyandot County, and three-quarters of a mile above mouth of Rock Run.

Drainage area.- 299 square miles.

Records available.- October 1921 to December 1935 (discontinued).

Average discharge.- 14 years, 257 second-feet.

Extremes.- Maximum discharge during period, 1,370 second-feet Dec. 10 (gage height, 4.50 feet); minimum, 2.9 second-feet Oct. 8, 9.

1921-35: Maximum discharge, 6,750 second-feet Dec. 15, 1927 (gage height, 10.5 feet); minimum, 1.0 second-foot Sept. 6, 7, 1934 (gage height, 0.67 foot).

Remarks.- Records good except those below 500 second-feet and those estimated because of ice effect, Dec. 5, 6, 22-31, which are fair. Records discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.0	31	151									
2	7.0	30	101									
3	4.8	30	72									
4	4.2	30	68									
5	3.6	30	62									
6	3.6	30	58									
7	3.4	29	64									
8	2.9	29	131									
9	2.9	29	1,040									
10	4.2	29	1,100									
11	10	30	527									
12	11	30	390									
13	10	30	244									
14	9.0	67	222									
15	10	76	290									
16	10	74	405									
17	10	72	440									
18	10	64	250									
19	10	55	179									
20	10	52	129									
21	10	50	110									
22	14	49	98									
23	61	48	86									
24	106	47	76									
25	151	47	68									
26	77	45	62									
27	53	44	56									
28	44	44	52									
29	39	123	48									
30	34	312	44									
31	32	-	42									
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				765.6	151	2.9	24.7	0.083	0.10			
November.....				1,656	312	29	55.2	.185	.21			
December.....				6,663	1,100	42	215	.719	.83			
Calendar year 1935.....				40,779.2	2,020	2.1	112	.375	5.07			
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Sandusky River near Mexico, Ohio

Location.- Water-stage recorder, lat. 41°2'39", long. 83°11'42", in sec. 13, T. 1 N., R. 14 E., at highway bridge 4 1/4 miles north of Mexico and 3 miles above mouth of Honey Creek.

Drainage area.- 776 square miles.

Records available.- March 1923 to December 1935 (discontinued).

Average discharge.- 12 years, 580 second-feet.

Extremes.- Maximum discharge during period, 2,040 second-feet Dec. 10 (gage height, 7.38 feet); minimum, 11 second-feet Oct. 4, 1923-35: Maximum discharge recorded, 13,900 second-feet Mar. 22, 1927 (gage height, 19.9 feet); minimum, 4 second-feet Aug. 25, 1928.

Remarks.- Records good except those estimated because of ice effect, Dec. 5-7, 22-31, which are fair. Records discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	39	293									
2	12	38	192									
3	12	37	128									
4	11	37	104									
5	12	44	87									
6	11	44	78									
7	12	43	88									
8	12	38	119									
9	12	37	668									
10	13	37	1,930									
11	20	37	1,560									
12	19	37	895									
13	15	44	607									
14	13	48	454									
15	13	82	520									
16	13	105	699									
17	12	102	795									
18	12	82	620									
19	15	71	422									
20	20	50	353									
21	14	60	298									
22	30	54	260									
23	37	51	240									
24	69	50	210									
25	11.7	50	180									
26	150	46	160									
27	94	44	140									
28	66	51	125									
29	54	71	110									
30	50	225	95									
31	44	-	80									
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	997			150	11	32.2	0.041	0.05				
November.....	1,754			225	37	53.5	.075	.08				
December.....	12,430			1,930	78	403	.519	.60				
Calendar year 1935.....	100,440			4,360	11	275	.354	4.82				
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

STREAMS TRIBUTARY TO LAKE ERIE

Sandusky River near Fremont, Ohio

Location.- Water-stage recorder, lat. 41°18'28", long. 83°9'32", in sec. 17, T. 4 N., R. 15 E., at highway bridge $3\frac{1}{2}$ miles southwest of Fremont, Sandusky County, and $2\frac{1}{2}$ miles below mouth of Wolf Creek.

Drainage area.- 1,248 square miles.

Records available.- November 1923 to December 1935 (discontinued); November 1898 to March 1901 at station 4 miles below present site.

Average discharge.- 12 years (1923-35), 887 second-feet.

Extremes.- Maximum discharge during period, 1,790 second-feet Dec. 11; maximum gage height, 3.76 feet Dec. 24 (ice jam); minimum discharge, 9.8 second-feet Oct. 8 (gage height, 0.88 foot).

1923-35: Maximum discharge, 21,000 second-feet Mar. 14, 1933 (gage height, 9.73 feet); minimum (ice jam above gage), estimated, 7 second-feet Dec. 24, 1934 (gage height, 0.85 foot).

Remarks.- Records good except those estimated because of ice effect, Dec. 4-7, 21-31, which are fair. Records discontinued because of lack of funds.

Rating table, 1935, except periods of ice effect (gage heights, in feet, and discharge, in second-feet)

0.8	4.5	1.8	457
.9	12	2.0	637
1.0	28	2.2	862
1.2	90	2.4	1,160
1.4	189	2.6	1,550
1.6	310		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	53	332									
2	24	47	317									
3	21	44	235									
4	19	39	170									
5	19	53	130									
6	21	74	110									
7	16	63	130									
8	11	53	162									
9	14	50	268									
10	17	50	1,320									
11	21	50	1,600									
12	22	53	1,080									
13	26	63	791									
14	19	63	618									
15	16	59	580									
16	24	82	690									
17	26	122	802									
18	24	117	814									
19	19	99	648									
20	19	90	516									
21	14	82	410									
22	13	70	360									
23	24	63	310									
24	26	63	280									
25	34	56	250									
26	112	56	220									
27	147	53	190									
28	99	63	170									
29	82	66	150									
30	66	90	130									
31	56	-	110									
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	1,075	147	11	54.6	0.028	0.03						
November.....	1,936	122	39	65.2	.053	.06						
December.....	13,893	1,600	110	448	.359	.41						
Calendar year 1935.....	132,784	6,230	11	364	.292	3.95						
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Cuyahoga River near Hiram, Ohio

Location.- Water-stage recorder, lat. 41°18'43", long. 81°11'46", 600 feet above highway bridge on road between Hiram and Mantua Corners and 2½ miles west of Hiram, Portage County.

Drainage area.- 152 square miles.

Records available.- August 1927 to December 1935 (discontinued).

Extremes.- Maximum discharge during period, 400 second-feet Dec. 17; maximum gage-height, 4.70 feet Dec. 22 (ice jam); minimum, 23 second-feet Oct. 17 (gage height, 1.07 feet). 1927-35: Maximum discharge, 2,260 second-feet Jan. 20, 1929 (gage height, 8.2 feet); minimum, 5.1 second-feet Sept. 2, 1933.

Remarks.- Records good except those for discharges above 500 second-feet and those estimated because of ice effect, Dec. 4-6, 18-31, which are fair. Record discontinued because of lack of funds.

Rating table, 1935 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.0	19	2.0	119
1.1	25	2.2	148
1.2	32	2.4	180
1.3	40	2.6	212
1.4	50	2.8	248
1.5	60	3.0	285
1.6	71	3.2	324
1.7	83	3.4	366
1.8	95	3.6	412
1.9	107		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	34	101									
2	28	34	99									
3	26	33	95									
4	26	31	72									
5	24	35	64									
6	25	44	62									
7	25	52	61									
8	26	53	97									
9	28	46	180									
10	26	43	226									
11	26	42	285									
12	28	45	304									
13	31	50	324									
14	33	54	276									
15	29	57	285									
16	26	56	344									
17	26	52	377									
18	26	49	360									
19	25	43	310									
20	26	43	210									
21	29	48	160									
22	46	50	150									
23	53	50	140									
24	60	48	140									
25	62	42	140									
26	55	40	130									
27	45	40	130									
28	38	57	130									
29	35	83	120									
30	34	95	120									
31	35	-	110									
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	1,032	62	24	33.3	0.219	0.25						
November.....	1,449	95	31	48.3	.318	.35						
December.....	5,592	377	61	180	1.18	1.36						
Calendar year 1935.....	48,871	860	11	134	.882	11.94						
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

STREAMS TRIBUTARY TO LAKE ERIE

Cuyahoga River near Kent, Ohio

Location.- Water-stage recorder, lat. $41^{\circ}10'48''$, long. $81^{\circ}20'9''$, in T. 3 N., R. 9 W., at highway bridge a quarter of a mile below Lake Rockwell Dam, 300 feet below Pennsylvania Railroad bridge, and 2 miles northeast of Kent, Portage County. Zero of gage is 1,027.56 feet above mean sea level.

Drainage area.- 205 square miles.

Records available.- October 1933 to December 1935 (discontinued).

Extremes.- Maximum discharge during period, 490 second-feet Dec. 16 (gage height, 5.85 feet); minimum discharge, 6.7 second-feet Oct. 10, 12, 13.
1933-35: Maximum discharge 1,400 second-feet Mar. 7, 1934 (gage height, 7.30 feet); minimum, 1.2 second-feet Aug. 22, 1934; minimum gage height, 1.15 feet Oct. 15, 1933.

Remarks.- Records good. Flow regulated at Lake Rockwell Dam (capacity, about 2.4 billion gallons) for power and municipal water supply. Water is diverted at dam for municipal supply at Akron. Part of tables corrected for storage and diversion. Record of storage and diversion furnished by City of Akron, Bureau of Water Supply. Records discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.2	50	51									
2	8.6	50	52									
3	8.6	45	50									
4	7.8	46	51									
5	7.8	51	54									
6	7.4	54	52									
7	7.4	52	54									
8	8.2	52	57									
9	8.2	52	92									
10	8.6	49	193									
11	8.6	47	193									
12	8.2	50	250									
13	7.4	54	317									
14	10	56	301									
15	11	56	338									
16	11	54	466									
17	10	50	431									
18	11	51	420									
19	11	54	442									
20	11	56	394									
21	11	55	265									
22	13	50	215									
23	36	51	210									
24	50	46	210									
25	50	47	220									
26	50	51	210									
27	42	50	193									
28	44	50	193									
29	45	53	193									
30	49	51	193									
31	50	-	193									
Month	Observed				Adjusted for storage and diversion							
	Second-foot-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches					
October.....	620	50	7.4	20.0	51.7	0.252	0.29					
November.....	1,533	56	45	51.1	68.0	.332	.37					
December.....	6,578	466	50	212	254	1.24	1.43					
Calendar year 1935	57,620.8	1,120	6.2	158	190	.927	12.58					
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Cuyahoga River at Old Portage, Ohio

Location.- Water-stage recorder, lat. 41°8'4", long. 81°32'49", at highway bridge at Old Portage, Summit County, 4 miles northwest of Akron and 1½ miles below mouth of Little Cuyahoga River.

Drainage area.- 405 square miles.

Records available.- September 1921 to December 1935 (discontinued).

Average discharge.- 14 years, 434 second-feet.

Extremes.- Maximum discharge during period, 1,070 second-feet Dec. 16 (gage height, 4.18 Feet); minimum, 38 second-feet Oct. 7.
1921-35: Maximum discharge, 3,820 second-feet Apr. 5, 1929 (gage height, 10.1 feet); minimum, 25 second-feet Dec. 7, 11, 1934.

Remarks.- Records fair. Discharge estimated Dec. 28-31. Diurnal fluctuation caused by operation of power plants above gage. Water diverted for municipal supply of city of Akron above gage. Sewage returned to river below gage. Records discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	95	91	134									
2	103	147	157									
3	55	98	141									
4	55	112	110									
5	48	221	125									
6	43	163	122									
7	64	156	172									
8	70	148	246									
9	74	117	422									
10	76	106	473									
11	86	158	495									
12	75	147	414									
13	111	180	553									
14	81	187	620									
15	119	168	756									
16	112	116	1,010									
17	86	148	908									
18	77	140	825									
19	72	161	804									
20	60	167	745									
21	133	147	517									
22	158	121	378									
23	212	106	368									
24	114	97	391									
25	82	169	372									
26	137	135	360									
27	103	115	350									
28	108	166	340									
29	123	166	340									
30	129	163	340									
31	130	-	340									
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,991	212	43	96.5			
November.....						4,316	221	91	144			
December.....						13,348	1,010	110	431			
Calendar year 1935						119,820	1,980	43	328			
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Congress Lake outlet near Kent, Ohio

Location.- Water-stage recorder, lat. 41°9'21", long. 81°19'10", at bridge on Kent-Ravenna highway 2 miles east of Kent, Portage County, and 1 mile below mouth of Muddy Lake outlet. Zero of gage is 1,035.54 feet above mean sea level.

Drainage area.- 76.9 square miles.

Records available.- July 1927 to December 1935 (discontinued).

Extremes.- Maximum discharge during period, 160 second-feet Dec. 18, 19 (gage height, 4.18 feet); minimum, 10 second-feet Oct. 7, 1927-35; Maximum discharge, 1,060 second-feet Feb. 28, 1929 (gage height, 9.5 feet); minimum, 3.1 second-feet July 12, 1930.

Remarks.- Records fair. Records discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	18	36									
2	12	16	28									
3	13	14	24									
4	12	13	24									
5	11	18	24									
6	11	19	21									
7	11	19	22									
8	12	20	34									
9	12	20	78									
10	13	18	90									
11	13	17	98									
12	13	24	89									
13	13	32	78									
14	12	34	75									
15	13	35	96									
16	15	32	134									
17	15	27	149									
18	16	26	160									
19	13	29	149									
20	13	30	108									
21	12	27	67									
22	18	27	77									
23	28	24	60									
24	23	19	50									
25	24	18	47									
26	20	18	47									
27	18	20	44									
28	17	28	44									
29	17	32	40									
30	17	38	38									
31	17	-	38									
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	466			28	11	15.0	0.195	0.22				
November.....	714			38	13	23.8	.309	.34				
December.....	2,071			160	21	66.8	.869	1.00				
Calendar year 1935.....	17,602.7			372	4.4	48.2	.627	8.51				
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Little Cuyahoga River at Akron, Ohio

Location.- Water-stage recorder, lat. 41°3'34", long. 81°28'32", at foot of Seiberling Street, Akron, Summit County, half a mile below mouth of Springfield Lake outlet. Zero of gage is 997.41 feet above mean sea level.

Drainage area.- 42.0 square miles.

Records available.- July 1920 to December 1935 (discontinued).

Average discharge.- 15 years, 34.8 second-feet.

Extremes.- Maximum discharge during period, 101 second-feet Oct. 22 (gage height, 0.93 foot); minimum, 6.8 second-feet Nov. 2 (gage height, 0.17 foot).
1920-35: Maximum discharge not known; no flow June 24, July 14, 1923, on account of regulation above station.

Remarks.- Records good. Gage-height record furnished by Goodyear Tire & Rubber Co. An average flow of 0.43 second-foot was diverted into this basin at Massillon Road above gage during the period Oct. 1 to Dec. 31, 1935, from City of Akron municipal water supply, which is obtained from Cuyahoga River. Beginning Dec. 10, 1935, 5.57 second-feet was deducted from recorded flow because that quantity was pumped from below the gage, used for condensing, and returned above the gage. Records discontinued because of lack of funds.
From May 1 to Sept. 30, 1934, an average of 2.16 second-feet was diverted into this basin from City of Akron municipal supply, which was not noted in Water-Supply Paper 759.

Rating table, 1935 (gage height in feet, and discharge, in second-feet)

0.1	3.3	.3	16.6	.5	38	.7	64
.2	8.7	.4	27	.6	50	.8	80

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.1	8.0	16.5									
2	8.7	7.3	13.4									
3	8.7	7.2	14.8									
4	12.4	8.6	15.2									
5	8.7	16.6	15.1									
6	8.7	14.7	14.2									
7	16.6	13.5	18.0									
8	14.0	12.0	40									
9	12.1	10.6	75									
10	11.3	10.3	53									
11	11.8	11.0	41									
12	11.6	18.9	31									
13	11.4	32	28									
14	12.4	27	31									
15	12.1	19.6	61									
16	11.3	15.3	78									
17	10.8	13.7	58									
18	10.8	14.2	45									
19	9.4	16.0	33									
20	8.3	17.0	23									
21	12.0	16.6	14.3									
22	25	17.6	16.4									
23	32	13.3	21									
24	19.3	12.7	22									
25	13.5	20	21									
26	10.8	21	22									
27	9.8	18.1	21									
28	9.0	32	18.4									
29	9.2	31	17.4									
30	9.2	21	18.4									
31	8.9	-	16.4									

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	379.9	32	8.3	12.3		
November.....	496.8	32	7.2	16.6		
December.....	912.5	78	13.4	29.4		
Calendar year 1935.....	9,411.7	314	4.1	25.8		
January.....						
February.....						
March.....						
April.....						
May.....						
June.....						
July.....						
August.....						
September.....						
Water year.....						

Ohio Canal at Independence, Ohio

Location.- Water-stage recorder, lat. 41°23'43", long. 81°37'49", at highway bridge opposite gaging station on Cuyahoga River 1 mile northeast of Independence, Cuyahoga County.

Records available.- September 1921 to May 1923, August 1927 to December 1935 (discontinued).

Extremes.- Maximum discharge during period, 75 second-feet Oct. 20; minimum, 45 second-feet Nov. 28.

1927-35: Maximum discharge, 99 second-feet Apr. 5, 1929 (gage height, 5.09 feet); minimum not determined.

Remarks.- Records fair. Discharge estimated for Dec. 27-31. Water is diverted into canal from Cuyahoga River by feeder at dam at Brecksville, 8 miles above station. Records discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	64	57									
2	64	64	57									
3	68	64	57									
4	68	64	57									
5	68	64	57									
6	68	64	57									
7	68	60	57									
8	68	64	60									
9	71	64	60									
10	71	64	57									
11	71	64	57									
12	71	68	57									
13	71	68	57									
14	71	64	57									
15	71	68	60									
16	71	64	60									
17	71	60	57									
18	71	64	57									
19	71	64	57									
20	71	64	60									
21	71	64	64									
22	71	64	54									
23	71	60	57									
24	68	60	64									
25	68	60	60									
26	68	60	60									
27	68	60	60									
28	64	57	60									
29	64	57	60									
30	64	57	60									
31	64	-	60									
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	2,129			71	64	68.7						
November.....	1,885			68	57	62.8						
December.....	1,814			64	54	58.5						
Calendar year 1935.....	19,263			79	22	52.8						
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Grand River near Madison, Ohio

Location.- Chain gage, lat. 41°44'28", long. 81°2'48", at highway bridge 2 miles south of Madison, Lake County, and half a mile above Griswold Creek. Zero of gage is 674.47 feet above mean sea level.

Drainage area.- 587 square miles.

Records available.- July 1922 to December 1935 (discontinued).

Average discharge.- 13 years, 624 second-feet.

Extremes.- Maximum discharge recorded during period, 1,900 second-feet Dec. 16 (gage height, 5.72 feet); minimum, 8.8 second-feet Oct. 20, 21 (gage height, 1.30 feet); 1922-35: Maximum discharge, about 16,400 second-feet Jan. 19, 1929 (gage height, 12.0 feet); practically no flow July 31, Aug. 1-2, 1934.

Remarks.- Records fair except those estimated because of ice effect Dec. 4-6, 23-31, which are poor. Gage read twice daily. Some regulation at low water by mill dam above gage. Records discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	26	109									
2	29	16	100									
3	21	18	88									
4	20	25	80									
5	16	25	74									
6	18	28	82									
7	19	27	101									
8	24	25	332									
9	11	25	820									
10	13	25	715									
11	17	33	615									
12	17	36	615									
13	15	58	565									
14	15	79	498									
15	27	52	1,170									
16	14	40	1,720									
17	10	39	1,640									
18	14	48	1,490									
19	10	52	1,360									
20	9.3	86	1,170									
21	8.8	98	665									
22	13	80	410									
23	20	64	350									
24	20	60	300									
25	29	61	270									
26	29	38	250									
27	34	34	220									
28	42	90	210									
29	29	156	190									
30	17	130	180									
31	25	-	170									
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	602.1			42	8.8	19.4	0.033	0.04				
November.....	1,574			156	16	52.5	.089	.10				
December.....	16,559			1,640	74	534	.910	1.05				
Calendar year 1935.....	145,654.3			6,080	8.3	399	.680	9.24				
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Ashtabula River near Ashtabula, Ohio

Location.- Water-stage recorder, lat. 41°51'19", long. 80°45'43", at highway bridge 1 1/2 miles southeast of Ashtabula.

Drainage area.- 118 square miles.

Records available.- July 1924 to December 1935 (discontinued).

Average discharge.- 11 years, 134 second-feet.

Extremes.- Maximum discharge during period, 795 second-feet Dec. 16 (gage height, 2.72 feet); minimum, 0.3 second-foot Oct. 21 (gage height, 0.33 foot).

1924-35: Maximum discharge, about 6,270 second-feet Jan. 19, 1929; maximum gage height, 9.0 feet Feb. 8, 1925 (ice jam); no flow at times during 1925-35.

Remarks.- Records fair. Discharge estimated because of ice effect Dec. 4, 5, 22-31. Record discontinued because of lack of funds.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	1.4	32									
2	2.0	1.6	24									
3	2.3	1.8	24									
4	1.8	1.6	24									
5	1.8	1.8	27									
6	1.8	1.8	32									
7	1.8	1.8	36									
8	1.6	1.8	239									
9	1.0	2.0	522									
10	.9	2.3	245									
11	1.0	2.6	133									
12	1.2	5.7	146									
13	1.0	8.5	105									
14	1.0	12	122									
15	.9	10	526									
16	.7	7.7	708									
17	.7	6.9	301									
18	.9	5.2	188									
19	1.0	3.1	160									
20	.9	8.4	108									
21	.6	20	66									
22	2.6	21	58									
23	2.3	15	53									
24	2.3	16	50									
25	2.6	9.0	46									
26	4.9	4.5	44									
27	3.1	4.5	43									
28	2.6	32	42									
29	2.6	79	40									
30	2.0	52	38									
31	1.2	-	36									
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	52.5		4.9	0.6	1.69	0.014	0.02					
November.....	341.1		79	1.4	11.4	.097	.11					
December.....	4,218		706	24	136	1.15	1.33					
Calendar year 1935	32,995.4		1,560	.1	90.4	.766	10.40					
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Conneaut Creek at Amboy, Ohio

Location.- Water-stage recorder, lat. 41°55'34", long. 80°36'18", at highway bridge half a mile east of Amboy, Ashtabula County, 3 miles southwest of Conneaut, and about 6 miles above mouth.

Drainage area.- 178 square miles.

Records available.- July 1922 to December 1935 (discontinued).

Average discharge.- 13 years, 218 second-feet.

Extremes.- Maximum discharge during period, 1,430 second-feet Dec. 16 (gage height, 4.00 feet); minimum, 2.8 second-feet Oct. 15-17 (gage height, 1.19 feet).
1922-35: Maximum discharge, 6,160 second-feet Dec. 1, 1927, Jan. 19, 1929; maximum gage height, 12.94 feet (ice jam) Mar. 4, 1934; minimum discharge, 0.2 second-foot July 31, Aug. 1, 1933, Aug. 1, 2, 1934.

Remarks.- Records good except those estimated because of ice effect Dec. 5, 6, 22-31, WHICH are fair. Record discontinued because of lack of funds.

Rating table, 1935, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.1	0.6	1.8	67	2.6	316
1.2	3.1	2.0	110	3.0	545
1.4	13	2.2	166	3.5	940
1.6	33	2.4	234	4.0	1,430

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	7.3	96									
2	9.4	18	69									
3	11	12	66									
4	10	7.8	53									
5	7.8	14	50									
6	14	13	60									
7	12	13	87									
8	8.5	9.2	255									
9	7.3	12	877									
10	4.2	16	797									
11	7.9	15	299									
12	11	18	242									
13	11	15	220									
14	5.0	39	185									
15	3.1	40	496									
16	2.8	28	1,230									
17	9.8	27	851									
18	14	25	355									
19	11	24	266									
20	4.6	30	198									
21	3.4	32	101									
22	14	30	84									
23	14	38	78									
24	12	48	74									
25	11	38	72									
26	14	23	70									
27	5.8	24	68									
28	14	45	86									
29	21	94	84									
30	12	142	62									
31	6.8	-	60									

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	310.4	21	2.8	10.0	0.056	0.06
November.....	897.3	142	7.3	29.9	.168	.19
December.....	7,551	1,230	50	244	1.37	1.58
Calendar year 1935.....	55,792.3	3,240	2.5	153	.860	11.65
January.....						
February.....						
March.....						
April.....						
May.....						
June.....						
July.....						
August.....						
September.....						
Water year						

Little Tonawanda Creek-at Linden, N. Y.

Location.- Staff gage, lat. 42°52'35", long. 78°9'45", above concrete weir at highway bridge in Linden, Genesee County.

Drainage area.- 22 square miles.

Records available.- July 1912 to September 1936.

Average discharge.- 23 years (1912-19, 1920-36), 26.8 second-feet.

Extremes.- Maximum discharge observed during year, 1,490 second-feet Mar. 25 (gage height, about 10.1 feet); minimum, 0.1 second-foot several times Aug. 4-28 (gage height, 0.165 foot).

1912-36: Maximum discharge, about 2,400 second-feet Apr. 22, 1916 (gage height, 14.6 feet), from rating curve extended above 1,500 second-feet; minimum, about 0.1 second-foot Sept. 5-7, 1934, and several times 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 corrected for ice effect Dec. 3-6, 21, 26-29, Jan. 25, 30, Feb. 6, 9, and Feb. 25 to Mar. 3 on basis of observer's notes, gage heights, and weather records. Gage read twice daily. On days of rapidly changing stage the discharge is averaged in intervals of a day from gage-height graph based upon gage readings.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.16	0.10	.6	4.61	1.2	23	3.2	177	7.0	770
.2	.23	.7	6.63	1.6	44	3.6	223	8.0	970
.3	.77	.8	9.15	2.0	89	4.0	274	9.0	1,200
.4	1.73	.9	12	2.4	99	5.0	420		
.5	2.95	1.0	15	2.8	135	6.0	584		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	2.1	3.6	6.9	6.9	46	82	26	3.6	1.1	0.3	0.2
2	1.1	2.0	3.2	6.9	6.9	40	143	28	3.2	1.1	.3	1.4
3	1.1	1.7	2.8	10	6.6	42	85	24	3.0	1.0	.2	1.6
4	1.1	1.7	2.6	14	6.9	111	58	18	2.7	.9	.1	.5
5	1.0	2.0	2.4	14	6.6	158	55	16	2.4	.8	.2	.4
6	.9	2.8	2.4	12	6.5	72	111	14	2.3	.8	.4	.4
7	.9	2.3	3.6	11	6.6	54	71	15	2.2	.3	.6	.4
8	1.0	2.1	15	10	6.2	44	47	11	2.2	.7	.3	.4
9	1.0	2.0	61	12	6.0	83	62	9.7	2.1	.6	.2	.4
10	.9	1.7	35	16	6.2	104	66	8.8	2.0	.5	.2	.3
11	.9	1.7	20	15	6.2	358	60	8.6	2.2	.5	.2	.3
12	1.0	4.8	15	14	5.8	362	88	8.1	2.1	.5	.2	1.3
13	.9	7.2	13	19	6.2	82	95	9.9	1.8	.5	.2	.8
14	.9	7.1	12	21	6.2	58	59	11	1.7	.4	.2	.6
15	.8	4.8	17	19	6.6	175	69	8.3	1.7	.4	.3	.6
16	.8	5.8	44	15	6.6	149	62	7.6	1.5	.3	.2	.6
17	.8	5.2	28	13	6.4	67	59	6.9	1.5	.3	.2	.5
18	1.1	3.7	19	10	5.2	73	59	5.8	2.9	.4	.1	.4
19	1.1	3.2	17	11	5.3	88	56	7.3	5.2	.3	.2	.5
20	1.0	3.6	14	11	6.6	91	47	6.2	2.4	.3	.2	.4
21	1.0	4.2	12	10	6.2	79	84	5.8	1.8	.3	.2	.4
22	1.4	4.1	11	9.8	5.6	62	57	5.4	1.7	.3	.2	.4
23	1.1	3.4	11	4.5	5.4	62	38	4.6	1.6	.4	.3	.4
24	1.4	2.7	9.7	8.9	5.4	379	32	5.4	1.5	.6	.2	.8
25	1.5	2.8	8.6	9.0	23	1,080	28	6.2	1.5	.5	.2	.8
26	1.2	2.7	8.5	8.8	75	393	26	4.8	1.4	.5	.2	.5
27	1.3	3.0	8.5	8.6	150	474	21	4.8	1.5	.4	.1	.5
28	1.3	3.6	8.0	8.1	75	196	24	4.2	1.3	.4	.2	.8
29	1.5	4.6	7.5	7.8	55	139	29	4.2	1.1	.4	.2	.6
30	1.7	4.1	7.1	7.5	-	125	27	4.2	1.2	.4	.3	.5
31	2.3	-	7.1	7.6	-	294	-	4.1	-	.3	.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	35.1	2.3	0.8	1.13	0.051	0.06
November.....	102.7	7.2	1.7	3.42	.155	.17
December.....	429.6	61	2.4	13.9	.632	.73
Calendar year 1935.....	7,608.7	321	.8	20.8	.945	12.87
January.....	351.2	21	4.3	11.3	.514	.59
February.....	532.1	150	5.2	18.3	.832	.90
March.....	5,520	1,080	40	178	6.09	9.33
April.....	1,798	143	21	59.9	2.72	3.04
May.....	301.9	28	4.1	9.74	.443	.51
June.....	63.3	5.2	1.1	2.11	.096	.11
July.....	16.7	1.1	.3	.64	.025	.03
August.....	7.2	.6	.1	.23	.010	.01
September.....	17.7	1.6	.2	.59	.027	.03
Water year 1935-36.....	9,175.5	1,080	.1	25.1	1.14	15.51

Genesee River at Scio, N. Y.

Location.- Staff gage, lat. 42°9'50", 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 1936.

Average discharge.- 20 years, 372 second-feet.

Extremes.- Maximum discharge during year, 7,760 second-feet Mar. 12 (gage height, 8.2 feet, from graph based on gage readings), from rating curve extended above 3,600 second-feet; minimum (estimated), 18 second-feet Sept. 15 (gage height, about -0.03 foot).

1916-36: Maximum discharge, about 10,800 second-feet May 22, 1919 (gage height, 9.1 feet), from rating curve extended above 3,600 second-feet; minimum (estimated), 13 second-feet Sept. 12, 13, 22-26, 1932.

Remarks.- Records good. Discharge corrected for ice effect Dec. 4-6, Dec. 23 to Jan. 3, Jan. 19 to Feb. 24 on basis of one discharge measurement, gage heights, and weather records. Discharge July 22, 23, Aug. 4, 5, Sept. 12-14 computed from records at St. Helena and on Allegheny River at Red House. Gage read twice daily. One 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 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 11			Mar. 12 to Sept. 30		
0.4	60	270	-0.1	15	542
.6	90	1,210	0	20	855
.8	128	2,040	.2	35	1,200
1.0	174	3,100	.4	55	2,040
1.5	359	4,400	.6	85	3,100
2.0	576		1.0	171	4,400
			1.5	325	7,440

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	141	150	188	100	85	473	1,600	363	87	42	23	41
2	300	155	169	100	80	426	1,350	379	90	41	21	37
3	216	128	148	170	80	381	1,200	672	75	39	20	34
4	231	124	110	201	80	831	947	470	72	37	20	32
5	188	126	100	201	80	1,710	802	384	72	35	19	30
6	172	164	95	174	75	1,340	1,760	344	72	34	37	29
7	162	126	106	169	75	1,050	1,310	289	85	33	48	27
8	148	160	159	162	75	742	1,200	256	256	32	45	26
9	139	145	986	169	75	1,420	1,200	240	154	30	42	25
10	130	135	591	174	70	2,050	1,120	225	91	29	40	22
11	122	126	498	174	70	3,760	1,120	197	68	27	37	20
12	114	164	426	174	70	6,600	1,050	197	93	42	32	20
13	108	499	404	201	70	2,930	1,120	197	80	33	27	20
14	103	498	426	188	75	1,770	905	184	71	27	26	19
15	95	426	736	188	70	2,060	770	152	66	26	24	28
16	90	381	692	164	65	3,590	678	134	63	25	23	329
17	85	339	450	148	65	4,430	594	117	61	24	21	104
18	80	320	404	150	65	6,210	542	114	63	25	20	71
19	88	300	360	150	65	3,850	493	246	112	21	24	61
20	84	264	339	140	65	2,980	470	211	71	21	78	51
21	80	248	201	130	60	2,340	594	184	62	20	42	43
22	82	231	172	130	60	1,680	518	154	56	20	61	40
23	85	201	160	120	60	1,520	447	147	52	20	51	36
24	76	141	150	110	100	2,830	384	143	46	35	41	45
25	85	126	140	110	292	5,600	363	132	45	34	37	56
26	79	130	130	100	989	4,830	325	127	44	31	37	40
27	74	152	120	100	1,390	3,850	289	127	50	26	35	35
28	71	216	120	95	1,160	3,410	272	119	53	24	35	33
29	100	262	110	90	663	2,290	447	106	45	24	51	31
30	453	201	110	90	-	2,040	363	98	42	26	52	29
31	202	-	110	85	-	2,340	-	93	-	24	45	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	4,183	453	71	135	0.437	0.50
November.....	6,628	499	124	221	.715	1.80
December.....	8,910	986	95	287	.929	1.07
Calendar year 1935.....	151,531	5,870	41	415	1.34	18.23
January.....	4,467	201	85	144	.466	.54
February.....	6,229	1,390	60	215	.696	.75
March.....	31,313	6,600	321	2,623	8.49	9.79
April.....	24,243	1,750	272	808	2.61	2.31
May.....	6,801	572	93	219	.709	.82
June.....	2,247	236	42	74.9	.242	.27
July.....	905	42	20	29.2	.094	.11
August.....	1,114	78	19	35.9	.116	.13
September.....	1,414	329	19	47.1	.152	.17
Water year 1935-36.....	148,454	6,600	19	406	1.31	17.86

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 1936.

Average discharge.- 28 years, 1,198 second-feet.

Extremes.- Maximum discharge during year, 25,500 second-feet Mar. 26; maximum gage height, 11.3 feet Feb. 27 (ice jam); minimum discharge, 34 second-feet Aug. 3, 4 (gage height, 1.83).

1908-36: 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 except those for period of ice effect, Dec. 21 to Feb. 27, which were based on gage heights, weather records, and the discharge records from other stations in the Genesee Basin and are fair. Some diurnal fluctuation during low stages caused by power operations. Flow slightly regulated by storage in Caneades Reservoir (capacity, 1,106,000,000 cubic feet).

Rating tables, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 27			Feb. 28 to Sept. 30		
2.2	106	3.5	1.8	30	4.0
2.4	178	4.0	2.0	60	5.0
2.6	265	5.0	2.2	105	6.0
3.0	495	6.0	2.4	174	7.0
			2.6	265	8.0
			3.0	475	10.0
			3.5	825	21.100

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	354	364	642	300	190	1,950	4,920	1,460	275	113	40	245
2	334	427	600	240	190	1,460	4,120	1,270	260	106	38	98
3	530	476	579	320	190	1,280	4,180	1,360	227	101	36	102
4	430	462	523	440	180	1,280	2,910	1,360	205	98	36	71
5	412	462	304	550	180	5,480	2,170	1,130	192	81	40	66
6	382	450	285	550	170	3,540	5,390	910	258	77	49	64
7	354	359	418	440	170	2,290	4,870	777	355	81	54	165
8	332	285	551	400	170	1,750	2,850	656	376	79	55	190
9	305	418	1,310	440	160	2,650	2,600	621	517	75	71	73
10	280	530	2,180	480	160	6,160	2,580	614	448	71	64	64
11	270	502	1,250	480	150	12,500	2,680	548	325	70	81	54
12	385	530	1,030	480	150	16,500	3,470	487	223	62	58	54
13	443	532	888	500	150	9,380	5,050	475	281	54	54	49
14	405	1,410	830	550	150	4,120	3,180	548	335	60	55	47
15	382	714	822	500	160	4,600	3,170	511	335	60	60	166
16	564	742	1,470	480	150	8,790	2,380	448	260	58	52	315
17	272	688	1,330	450	150	6,740	1,930	398	162	57	47	325
18	186	742	978	420	140	10,200	1,640	376	241	52	49	190
19	248	750	822	380	140	8,720	1,770	455	342	50	49	135
20	348	718	734	360	140	7,820	1,640	649	256	47	76	261
21	354	581	500	320	130	6,780	2,060	587	208	49	86	315
22	370	495	400	300	130	4,920	2,760	453	161	50	208	335
23	398	592	600	280	130	4,280	1,620	398	162	46	340	315
24	289	607	600	280	130	5,640	1,220	355	143	57	320	208
25	220	551	600	260	140	19,000	1,020	355	129	62	133	101
26	327	544	400	240	1,500	19,200	910	335	116	71	81	152
27	412	551	280	240	3,400	15,600	825	315	119	55	73	315
28	388	408	340	220	4,370	13,500	868	335	116	85	71	315
29	388	448	420	220	2,520	7,380	1,320	335	106	85	166	164
30	412	658	420	200	-	6,730	1,460	300	119	52	280	133
31	519	-	400	200	-	7,880	-	285	-	40	310	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	11,072	530	186	357	0.351	0.40
November.....	16,996	1,410	285	567	.658	.62
December.....	22,546	2,180	280	727	.715	.82
Calendar year 1935.....	426,872	11,600	158	1,170	1.15	15.59
January.....	11,550	550	200	372	.366	.42
February.....	15,890	4,370	130	548	.539	.53
March.....	228,170	19,200	1,280	7,360	7.24	8.35
April.....	77,363	5,390	825	2,579	2.54	2.83
May.....	19,106	1,460	285	616	.606	.70
June.....	7,242	517	106	241	.237	.26
July.....	2,104	113	40	67.9	.067	.08
August.....	3,132	340	36	101	.099	.11
September.....	5,075	335	47	169	.166	.19
Water year 1935-36.....	420,226	19,200	36	1,148	1.13	15.36

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, 3 1/2 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 1936.

Average discharge.- 26 years (1908-13, 1915-36), 1,564 second-feet.

Extremes.- Maximum discharge during year, 26,300 second-foot Mar. 26 (gage height, 24.03 feet); minimum, 36 second-foot Aug. 3 (gage height, 0.16 foot).
1903-6, 1908-14, 1915-36: Maximum discharge, 55,100 second-feet May 17, 1916 (gage height, 25.44 feet); minimum, about 18 second-foot Aug. 29, 1909.

Remarks.- Records good except those for periods of ice effect, Dec. 4-8 and Dec. 21 to Mar. 12, which were based on two discharge measurements, gage heights, weather records, and discharge records at St. Helena and Canaseraga Creek near Dansville and are fair. Discharge Apr. 24 computed from St. Helena record. Diurnal fluctuation at low stages caused by power operations. Slight seasonal regulation by storage in Canadea Reservoir (capacity, 1,106,000,000 cubic feet).

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	456	536	760	460	300	2,800	7,940	2,060	456	173	63	338
2	442	474	685	380	300	2,200	6,360	2,130	456	175	69	191
3	530	580	685	440	280	1,900	6,200	2,000	314	182	55	124
4	550	560	600	500	280	1,800	4,640	2,040	366	142	53	127
5	500	560	480	650	260	7,000	3,760	1,700	340	137	57	97
6	493	565	360	700	260	6,500	5,760	1,490	286	134	86	93
7	452	520	420	600	240	3,800	7,150	1,250	464	126	97	130
8	438	419	600	550	240	2,400	4,540	1,070	480	134	33	251
9	428	392	1,060	600	220	3,000	3,940	927	589	124	95	152
10	414	610	2,900	650	220	9,000	3,540	871	589	118	96	101
11	299	600	1,700	650	220	16,000	3,710	816	503	120	109	85
12	410	615	1,360	650	220	20,000	4,520	752	356	94	96	84
13	438	677	1,210	700	200	14,400	7,280	710	370	110	92	97
14	486	1,610	1,120	750	200	8,740	5,160	811	347	82	85	88
15	471	1,250	1,090	700	200	6,970	4,760	789	372	88	95	86
16	456	952	1,800	700	200	10,600	3,970	684	361	94	76	281
17	436	848	2,000	650	190	9,070	3,170	609	254	84	69	349
18	352	854	1,380	600	190	12,700	2,780	546	313	89	73	297
19	286	898	1,150	550	180	11,700	2,650	634	781	80	82	183
20	387	842	1,010	500	180	11,100	2,620	844	439	62	86	239
21	339	754	700	500	180	10,000	2,640	890	311	75	135	287
22	442	635	600	480	180	8,020	3,990	684	247	84	140	338
23	471	643	700	460	170	6,910	2,730	589	246	88	333	344
24	461	710	750	440	170	7,670	2,060	546	231	85	361	322
25	371	672	750	420	440	18,500	1,760	503	221	108	260	205
26	433	635	700	400	1,700	24,200	1,580	503	192	87	140	117
27	452	655	550	390	4,000	20,600	1,430	480	195	96	129	274
28	476	610	440	360	6,500	19,400	1,370	466	150	112	115	324
29	476	476	550	340	4,800	13,000	1,570	484	192	116	134	302
30	561	711	600	320	-	10,300	2,200	432	181	86	293	176
31	633	-	550	320	-	10,900	-	423	-	81	294	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	13,861	633	286	447	0.315	0.36
November.....	20,863	1,610	392	695	.490	.55
December.....	29,240	2,900	360	943	.666	.77
Calendar year 1935.....	532,491	12,200	224	1,459	1.03	13.95
January.....	16,400	750	320	529	.573	.43
February.....	22,520	6,500	170	777	.548	.59
March.....	310,180	24,200	1,800	10,010	7.05	8.13
April.....	116,670	7,940	1,370	3,856	2.72	3.04
May.....	28,743	2,130	423	927	.653	.75
June.....	10,640	781	160	355	.250	.23
July.....	3,354	182	62	139	.077	.08
August.....	3,941	351	53	127	.089	.10
September.....	6,082	349	84	203	.143	.16
Water year 1935-36.....	581,494	24,200	53	1,589	1.12	15.25

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

Location.- Water-stage recorder, lat. 43°11'5", 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 1936.

Average discharge.- 16 years (1920-36), 2,665 second-feet.

Extremes.- Maximum discharge during year, 27,700 second-feet Mar. 28 (gauge height, 12.50 feet); minimum, 39 second-feet several times during August and September; minimum daily discharge, 500 second-feet July 12.

1919-36: Maximum discharge, about 29,600 second-feet Dec. 2, 1927 (gauge 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.

Remarks.- Records good. Barge Canal crosses river near southern boundary of Rochester. It discharges water from Lake Erie into Genesee River and diverts, in general, a smaller amount to the east for canal purposes. Some additional regulation is provided by headwater storage in Canadea Reservoir.

Rating tables, water year 1935-36 (gauge height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 27

Mar. 28 to Sept. 30

1.5	845	4.0	4,390	0.6	476	3.0	2,460
1.4	910	5.0	6,470	.6	569	4.0	4,310
1.6	1,050	6.0	8,650	1.0	675	5.0	6,450
2.0	1,390	8.0	13,390	1.2	795	6.0	8,650
2.5	1,950	10.0	19,200	1.6	1,055	8.0	13,390
3.0	2,640	12.0	25,970	2.0	1,340	10.0	19,200
				2.5	1,820	12.1	26,320

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,120	1,300	1,380	1,340	1,100	7,500	16,600	3,460	1,360	860	700	790
2	1,120	1,260	1,540	1,360	1,060	5,000	12,100	3,400	1,300	830	600	740
3	1,120	1,020	1,480	1,540	1,060	3,900	9,800	3,050	1,260	650	600	900
4	1,220	1,220	1,400	1,460	1,080	3,850	8,400	3,300	1,160	740	650	750
5	1,280	1,280	1,340	1,160	1,040	5,300	6,200	3,160	1,180	740	620	640
6	1,120	1,280	1,180	1,540	1,080	8,000	4,900	2,850	910	810	630	620
7	1,160	1,260	1,080	1,540	1,060	7,700	8,800	2,600	930	820	700	620
8	1,040	1,220	1,100	1,540	1,020	5,300	7,000	2,460	1,120	800	590	740
9	1,040	1,100	1,620	1,580	1,000	4,700	4,250	2,180	1,240	790	550	750
10	1,100	930	2,700	1,620	1,000	5,500	3,700	1,800	1,240	950	650	740
11	1,080	1,240	3,750	2,060	1,020	10,000	4,150	1,880	1,340	660	610	700
12	930	1,240	2,460	1,800	970	15,500	5,900	1,800	1,220	500	670	760
13	940	1,400	2,260	1,960	960	16,400	9,100	1,780	1,100	740	650	580
14	1,140	1,520	2,160	2,120	950	20,500	10,400	1,760	1,020	760	690	650
15	1,140	2,460	2,180	2,280	970	15,700	8,500	1,820	1,160	710	690	630
16	1,080	1,960	2,550	2,080	890	13,700	7,600	1,740	1,100	690	680	730
17	1,140	1,540	3,400	1,340	1,020	16,000	5,900	1,700	1,040	700	660	740
18	1,140	1,680	3,200	1,580	980	16,200	5,400	1,660	1,180	630	670	740
19	1,020	1,580	2,550	1,180	950	18,900	4,200	1,620	1,120	620	690	810
20	930	1,700	2,160	1,350	980	20,500	4,100	1,660	1,420	700	680	660
21	990	1,540	1,380	1,300	950	20,400	3,700	1,820	1,140	650	630	770
22	990	1,500	1,240	1,280	940	17,900	4,700	1,720	1,140	640	620	790
23	1,080	1,280	1,320	1,220	890	14,600	5,400	1,620	920	670	710	890
24	1,120	1,280	1,400	1,220	930	13,100	3,950	1,480	860	780	880	1,200
25	1,160	1,340	1,480	1,260	1,600	17,300	3,450	1,560	960	670	910	850
26	1,140	1,360	1,540	1,140	4,950	21,800	2,950	1,340	890	560	850	810
27	940	1,320	1,560	1,120	7,600	24,800	3,100	1,400	880	690	740	770
28	1,120	1,280	1,340	1,120	8,900	26,100	2,900	1,360	830	690	750	850
29	1,160	1,400	1,440	1,140	9,300	25,100	2,850	1,380	920	700	660	810
30	1,140	1,340	1,620	1,140	-	23,200	3,300	1,280	860	710	670	800
31	1,280	-	1,880	1,140	-	19,600	-	1,200	-	720	790	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	33,980	1,280	930	1,096		
November	41,830	2,460	930	1,394		
December	57,690	3,750	1,080	1,861		
Calendar year 1935	690,570	13,800	630	2,440	0.969	13.42
January	45,960	2,280	1,120	1,483		
February	56,250	9,300	890	1,940		
March	443,050	26,100	3,850	14,290		
April	183,100	16,600	2,850	6,103		
May	61,820	3,450	1,200	1,994		
June	32,800	1,420	830	1,093		
July	22,400	950	500	723		
August	21,270	910	550	686		
September	22,910	1,200	580	764		
Water year 1935-36	1,023,060	26,100	500	2,795	1.13	16.42

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, and March 1919 to September 1936.

Average discharge.- 16 years (1920-36), 143 second-feet.

Extremes.- Maximum discharge during year, 4,240 second-feet Mar. 25 (gage height, 10.80 feet), from rating curve extended above 2,300 second-feet; minimum, 15 second-feet Aug. 3; minimum gage height, 5.51 feet Oct. 18, 19, 20, and 22.
1910-12, 1915-17, 1919-36: Maximum discharge, about 9,920 second-feet July 8, 1935 (gage height, 13.71 feet), from rating curve extended 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, Dec. 2-7, Dec. 21 to Jan. 2, and Jan. 18 to Mar. 10, which were based on one discharge measurement, gage heights, weather records, and discharge records for other stations in the Genesee Basin and are poor, those for the periods Jan. 3-5 and Mar. 11-24, which were computed from record on Genesee River at Jones Bridge, near Mount Morris and Genesee River at St. Helena and are fair, and those for the period May 1 to July 15, which are also fair. Slight diurnal fluctuations at low stages from operations upstream.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	45	43	34	38	300	570	242	72	44	24	40
2	39	45	40	34	38	260	529	245	60	40	20	34
3	35	42	38	40	36	220	446	258	53	37	18	34
4	37	40	36	55	36	190	336	202	55	36	20	29
5	36	40	34	60	36	700	308	182	53	34	22	26
6	35	42	32	54	36	420	770	166	49	31	26	24
7	35	39	40	53	34	320	508	156	47	32	24	35
8	35	46	53	51	34	280	387	142	63	31	22	31
9	34	42	31.4	59	34	300	334	132	60	28	19	31
10	34	40	188	69	32	500	327	126	46	25	21	29
11	34	39	140	67	32	1,500	334	123	47	25	22	25
12	34	47	131	67	32	3,000	493	117	51	31	21	27
13	32	207	118	80	34	1,200	768	120	62	28	20	29
14	34	145	116	81	34	500	505	135	39	25	21	29
15	32	100	133	80	32	600	631	114	37	24	22	30
16	32	65	248	73	32	900	418	105	34	22	21	34
17	31	74	178	62	30	700	348	92	36	22	20	31
18	34	67	135	55	30	1,700	305	88	272	22	19	26
19	35	61	122	55	30	1,400	280	126	117	21	21	25
20	31	61	102	50	30	1,200	255	111	62	22	31	24
21	31	58	85	48	28	1,000	392	95	49	22	28	25
22	34	54	70	46	28	900	362	88	39	22	23	25
23	43	50	60	44	28	700	272	85	34	24	26	24
24	37	41	55	44	28	2,200	237	88	32	36	21	33
25	39	42	50	42	60	3,500	214	85	31	24	18	30
26	36	45	46	42	150	1,750	198	76	32	22	20	26
27	35	45	44	42	320	1,750	182	76	50	25	18	25
28	34	48	40	40	600	1,300	170	76	49	21	19	28
29	51	50	38	40	380	844	228	83	44	21	24	25
30	90	48	38	35	-	892	237	74	46	24	19	25
31	57	-	36	38	-	956	-	80	-	24	18	-
Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches						
October.....	1,173	90	31	37.8	0.247	0.28						
November.....	1,790	207	39	59.7	.390	.44						
December.....	2,803	314	32	90.4	.591	.68						
Calendar year 1935.....	57,497	4,770	29	158	1.03	13.99						
January.....	1,642	81	34	55.0	.346	.40						
February.....	2,292	600	23	79.0	.516	.56						
March.....	31,982	3,500	190	1,032	6.75	7.78						
April.....	11,231	770	170	374	2.44	2.72						
May.....	3,889	258	74	125	.817	.94						
June.....	1,701	272	31	56.7	.371	.41						
July.....	845	44	21	27.3	.178	.21						
August.....	688	31	18	21.5	.141	.16						
September.....	859	40	24	28.6	.187	.21						
Water year 1935-36.....	60,875	3,500	18	166	1.08	14.79						

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 1936.

Average discharge.- 33 years, 11.4 second-feet.

Remarks.- Data collected, computed, and furnished for publication by the city engineer of Rochester, N. Y.

Monthly discharge, water year October 1935 to September 1936

	Mean elevation of lake above low-water mark (feet)	Discharge in second-feet		Run-off in inches
		Mean	Per square mile	
October.....	-0.749	3.663	0.291	0.335
November.....	-.583	6.423	.510	.569
December.....	-.048	7.418	.589	.679
Calendar year 1935...	+0.050	11.364	.902	12.244
January.....	+0.049	9.001	.714	.823
February.....	+0.334	1.005	.080	.086
March.....	+3.040	53.185	4.221	4.866
April.....	+3.176	20.630	1.637	1.827
May.....	+3.409	9.879	.768	.885
June.....	+3.162	3.900	.310	.346
July.....	+2.576	4.723	.375	.432
August.....	+1.739	3.829	.304	.350
September.....	+0.981	12.643	1.003	1.119
Water year 1935-36...	+1.424	11.403	.905	12.317

Note.- Terminal water-surface elevation on Dec. 31, 1935, was 1.12 feet higher than on December 31, 1934, corresponding to an increase in storage of 31,276,438 cubic feet, or a discharge of 0.992 second-foot for the year. This correction applied to the above, gives a mean for the calendar year 1935 of 12.356 second-feet, 0.961 second-foot per square mile, and 13.316 inches run-off from drainage area.

Terminal water-surface elevation on Sept. 30, 1936, was 0.52 foot higher than on Sept. 30, 1935, corresponding to an increase in storage of 14,560,191 cubic feet, or a discharge of 0.460 second-foot for the year. This correction applied to the above, gives a mean for the water year 1935-36 of 11.863 second-feet, 0.942 second-foot per square mile, and 12.822 inches run-off from drainage area.

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

Location.- Water-stage recorders, lat. 43°27'0", long. 76°30'25", at Lock 7, in Oswego, Oswego County, three-quarters of a mile above mouth. Zero of gage is 246.000 feet above mean sea level (New York State Barge Canal datum).

Drainage area.- 5,121 square miles.

Records available.- November 1933 to September 1936.

Extremes.- Maximum discharge during year, 37,500 second-feet Mar. 28 (gage height, 13.10 feet); minimum (river only), 42 second-feet Oct. 23 (gage height, 1.01 feet); minimum daily discharge, 700 second-feet July 22.

1933-36: Maximum discharge, that of Mar. 28, 1936; minimum (river only), that of Oct. 23, 1935; minimum daily discharge, 465 second-feet Aug. 12, 1934.

Remarks.- Records good. This record represents the total discharge at Oswego (and includes the flow in the Hydraulic Canal and Barge Canal). Discharge estimated for Hydraulic Canal Oct. 6-14, Dec. 5-23, Jan. 25, 26 and for the river only Oct. 19-23. A large amount of natural storage and some artificial regulation is afforded by the many large lakes and the Barge Canal system in the river basin. Large diurnal fluctuations caused by power operations upstream. The Oswego River receives canal water from the Erie division of Barge Canal at Three Rivers, and a small diversion is occasionally made from tributary streams of the Oswego, which is added to the summit level of the Barge Canal at New London.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,620	3,050	4,350	6,100	6,000	6,400	33,500	11,000	4,450	1,320	800	1,120
2	1,980	3,050	5,300	6,600	5,900	7,500	33,000	11,200	4,400	1,800	970	1,100
3	2,080	2,850	5,400	6,700	6,100	7,200	32,000	11,200	3,800	2,140	880	1,160
4	1,980	3,900	4,450	7,000	6,500	7,100	31,000	10,600	3,650	1,280	950	1,360
5	1,780	4,350	4,150	6,800	6,500	7,400	30,500	11,000	3,000	1,600	780	1,060
6	1,460	4,000	4,100	8,900	6,500	7,700	30,500	10,600	3,000	2,750	950	1,240
7	1,960	3,900	4,250	8,300	6,500	7,900	30,000	10,600	2,900	2,750	780	1,460
8	2,140	3,600	4,700	8,000	6,500	7,200	29,000	10,200	3,300	1,300	980	840
9	1,960	3,700	5,500	7,500	6,400	8,500	29,500	10,700	3,250	1,840	1,100	910
10	2,280	3,500	6,500	8,100	7,100	9,100	28,000	9,900	3,350	1,920	1,260	1,020
11	1,900	4,500	6,900	7,800	6,800	9,800	27,500	10,000	3,000	870	1,260	1,120
12	1,400	4,600	6,600	7,000	3,800	15,200	26,500	9,200	2,650	980	1,100	1,400
13	1,240	4,350	6,600	8,400	6,600	18,600	26,000	8,400	2,600	1,380	1,040	1,320
14	2,100	4,650	6,500	8,300	6,400	19,000	25,500	7,500	2,700	1,180	740	1,140
15	1,840	4,600	5,900	8,600	6,400	18,000	24,400	7,500	3,150	1,060	860	1,440
16	1,660	4,600	8,400	8,200	6,000	18,400	22,600	7,200	3,100	1,140	750	1,340
17	1,840	4,250	8,000	7,800	6,100	21,000	21,400	6,200	2,950	1,100	590	1,280
18	1,980	5,200	9,600	6,500	6,500	24,200	20,600	7,200	2,750	1,000	1,060	1,800
19	1,520	6,000	9,000	6,600	6,200	25,500	19,600	6,200	2,550	1,100	870	1,200
20	1,040	6,400	7,700	6,400	6,200	30,500	18,200	5,600	1,960	1,120	830	1,620
21	1,380	5,800	6,700	7,300	6,100	32,500	18,000	5,900	2,020	950	960	1,560
22	1,760	5,100	8,000	6,900	5,100	34,000	17,000	5,800	2,440	700	770	1,640
23	1,620	5,000	7,600	5,800	6,500	35,600	16,400	4,950	2,850	1,120	720	1,580
24	1,820	4,700	7,700	5,200	5,500	35,500	15,000	6,200	2,600	780	960	1,620
25	1,740	5,300	5,900	6,100	5,500	36,000	14,200	5,500	2,550	980	1,060	1,900
26	1,560	5,300	8,500	6,100	5,400	36,000	13,600	5,200	2,380	990	910	2,220
27	1,060	5,000	7,300	6,100	5,600	36,500	13,200	4,900	1,780	1,200	750	1,900
28	1,860	3,450	7,600	6,200	6,500	37,000	13,000	4,250	2,140	920	890	1,980
29	1,920	6,300	6,300	6,500	6,900	36,600	12,400	4,300	2,550	1,000	1,140	2,100
30	2,380	4,900	7,700	5,900	-	35,500	11,400	3,600	2,700	790	1,100	2,200
31	2,900	-	7,400	5,900	-	34,500	-	3,800	-	780	1,080	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	55,860	2,900	1,040	1,802	0.352	0.41
November.....	135,500	6,400	2,850	4,610	.881	.98
December.....	204,100	9,600	4,100	6,684	1.29	1.49
Calendar year 1935.....	2,335,800	15,000	1,040	6,399	1.25	16.97
January.....	218,100	8,900	5,200	7,035	1.37	1.58
February.....	150,000	7,100	5,100	6,207	1.21	1.30
March.....	668,700	37,000	6,400	21,570	4.21	4.85
April.....	682,500	33,500	11,400	22,780	4.45	4.96
May.....	233,400	11,200	3,600	7,529	1.47	1.70
June.....	86,720	4,450	1,780	2,891	.565	.63
July.....	39,840	2,750	700	1,285	.251	.29
August.....	29,190	1,260	720	942	.184	.21
September.....	45,350	2,220	840	1,461	.285	.32
Water year 1935-36.....	2,578,540	37,000	700	7,045	1.38	18.72

Fall Creek near Ithaca, N. Y.

Location.- Water-stage recorder, 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 mean sea level (adjustment of 1912).

Drainage area.- 124 square miles.

Records available.- February 1925 to September 1936. July 1908 to June 1909, 1½ miles below present site.

Average discharge.- 11 years (1925-36), 185 second-feet.

Extremes.- Maximum discharge during year, 6,240 second-feet Mar. 18 (gage height, 5.57 feet); minimum, 11 second-feet Aug. 4 (gage height, 0.27 foot).

1925-36: Maximum discharge, 15,500 second-feet July 8, 1935 (gage height, 9.52 feet), from average of discharge computed 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. 2-9, Dec. 21 to Jan. 8, Jan. 17 to Feb. 11, Feb. 20-24 and Mar. 1-11 (based on one discharge measurement, gage heights, and weather records), those for Nov. 11-20, May 1-7, and Sept. 3-6 (computed from records of Tioughnioga River at Itaska, N. Y., and Owego Creek near Owego, N. Y.), and those for discharges above 3,000 second-feet, which are fair. During the year Cornell University diverted 218,000,000 gallons about a mile above gage for water supply, thus reducing the mean discharge at the station 0.92 second-foot for the year. (During water year 1934-35 Cornell University diverted 223,370,000 gallons--223,370 gallons erroneously published in Water-Supply Paper 784.)

Rating tables, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 17			Mar. 18 to Sept. 30				
0.5	25	1.6 243	0.3	12	1.2 110	3.0	1,270
.6	33	2.0 437	.4	18	1.4 163	4.0	2,760
.8	51	2.5 749	.6	32	1.6 239	5.0	4,900
1.0	72	3.0 1,250	.8	51	2.0 463	6.0	7,270
1.2	107	4.0 2,760	1.0	75	2.5 823		
1.4	166	5.0 4,900					

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	104	95	60	55	300	418	198	72	26	15	22
2	117	71	90	60	55	240	632	180	65	23	14	21
3	76	60	70	130	55	200	660	800	58	26	13	19
4	56	51	50	260	60	190	370	600	56	36	12	16
5	46	54	46	320	60	340	328	460	52	30	13	14
6	41	79	44	240	60	280	524	360	50	24	18	13
7	41	82	42	200	55	220	574	224	42	22	21	14
8	41	100	48	180	55	170	411	239	51	21	17	15
9	38	99	460	170	55	220	374	174	55	19	15	16
10	35	74	506	220	55	460	380	146	47	17	14	14
11	34	90	283	215	55	1,600	380	134	45	16	14	13
12	37	90	219	196	55	4,190	424	124	48	16	16	13
13	34	380	192	192	54	1,320	924	157	46	16	14	15
14	32	600	338	168	54	658	489	223	32	16	14	16
15	31	360	472	164	56	1,080	626	148	37	15	13	19
16	30	260	620	177	58	2,270	450	127	37	15	15	19
17	27	220	358	110	57	2,040	351	115	33	15	23	19
18	27	200	274	95	57	5,020	334	102	38	15	18	21
19	34	190	243	80	51	3,150	334	362	50	15	16	20
20	32	215	216	70	50	1,620	286	374	46	14	18	18
21	28	219	130	70	50	2,000	302	173	39	14	18	15
22	30	156	110	65	48	1,320	380	137	35	14	17	15
23	34	117	100	65	48	939	253	117	33	16	16	14
24	37	85	90	60	46	795	227	106	30	20	15	13
25	38	88	85	60	54	1,230	194	106	30	22	15	18
26	39	89	80	60	124	942	174	95	28	19	14	19
27	36	91	75	60	294	796	166	99	31	16	14	19
28	31	110	70	55	379	796	151	95	28	16	12	18
29	34	143	70	55	359	549	184	91	29	16	16	21
30	101	112	65	55	-	463	235	83	27	16	23	16
31	128	-	65	55	-	531	-	80	-	15	22	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,389	128	27	44.8	0.361	0.42
November.....	4,589	600	51	153	1.23	1.37
December.....	5,606	620	42	181	1.46	1.68
Calendar year 1935.....	86,564	9,280	25	237	1.91	25.97
January.....	3,987	320	55	129	1.04	1.20
February.....	2,514	379	46	86.7	.699	.75
March.....	36,009	5,020	170	1,162	9.37	10.80
April.....	11,435	824	151	381	3.07	3.42
May.....	6,429	800	80	207	1.67	1.92
June.....	1,277	72	27	42.5	.344	.38
July.....	561	36	14	15.7	.151	.17
August.....	495	23	12	15.0	.123	.15
September.....	505	22	13	16.8	.135	.15
Water year 1935-36.....	74,816	5,020	12	204	1.55	22.41

Owasco Lake outlet near Auburn, N. Y.

Location.- Water-stage recorder, lat. 42°56'45", long. 76°36'15", above concrete dam 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 1936.

Average discharge.- 23 years (1913-36), 285 second-feet.

Extremes.- Maximum discharge during year, 2,090 second-feet Mar. 19 (gauge height, 4.88 feet); minimum, 6.0 second-feet Oct. 25, 27 (gauge height, 1.43 feet); minimum daily discharge, 18 second-feet Aug. 16, 25.

1912-36: Maximum discharge, that of Mar. 19, 1936; revised discharge for previously recorded maximum, 1,950 second-feet (gauge height, 4.6 feet, revised, from flood-marks); minimum, 2.2 second-feet Nov. 29, 1933 (gauge height, 1.37 feet); minimum daily discharge, 5 second-feet Nov. 11, 1934.

Remarks.- Records excellent. Diurnal 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.

Rating tables, water year 1935-36 (gauge height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 18		Mar. 19 to Sept. 30	
1.7	40	3.0	660
1.9	79	3.5	1,080
2.1	130	4.0	1,580
2.3	205	4.5	1,890
2.5	315	5.0	2,100

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	110	99	134	360	415	250	1,470	433	362	142	70	28
2	110	98	146	350	395	260	1,390	425	350	140	27	31
3	110	94	146	300	355	275	1,340	420	260	126	23	27
4	114	95	144	250	305	295	1,200	433	258	134	80	27
5	112	102	148	250	295	305	1,110	435	251	136	81	24
6	102	98	146	248	310	310	1,080	427	260	138	83	26
7	104	102	146	250	320	310	1,040	435	260	142	79	29
8	102	106	154	242	310	320	980	427	270	144	74	28
9	112	102	194	315	265	355	953	427	270	150	73	38
10	95	98	220	260	290	390	862	420	280	152	106	36
11	104	104	232	345	280	498	842	405	290	150	70	30
12	104	106	255	340	265	812	834	380	290	152	73	35
13	98	100	260	350	246	1,040	834	374	224	152	72	22
14	108	122	265	360	234	1,090	810	374	156	150	71	25
15	98	132	260	355	226	1,110	795	374	144	148	21	23
16	75	126	360	355	218	1,240	788	368	178	148	18	33
17	50	122	395	360	220	1,450	758	362	162	144	81	40
18	84	132	385	350	226	1,700	742	355	146	116	65	46
19	75	136	385	255	146	1,950	720	375	144	110	41	42
20	75	136	375	315	192	2,000	670	355	142	100	61	20
21	77	138	370	246	170	2,030	640	365	150	122	42	37
22	74	128	365	232	158	2,020	622	350	152	86	40	36
23	68	130	360	270	148	2,000	600	344	154	97	19	41
24	71	114	365	234	150	1,950	570	344	152	100	41	38
25	66	122	365	240	176	1,950	555	362	156	95	18	59
26	66	130	365	224	184	1,920	533	362	154	95	21	30
27	66	128	370	228	226	1,860	511	365	156	97	32	32
28	68	124	365	225	238	1,800	493	368	150	100	34	38
29	73	134	355	350	248	1,690	460	370	144	86	37	28
30	102	130	365	340	-	1,620	440	366	140	92	32	34
31	91	-	360	340	-	1,540	-	356	-	90	38	-

Month	Observed				Adjusted for storage		
	Second-foot-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October.....	2,764	114	50	89.2	57.0	0.274	0.32
November.....	3,478	158	82	115	195	.928	1.04
December.....	8,759	395	134	283	374	1.80	2.08
Calendar year 1935	119,634	1,030	50	328	355	1.61	21.85
January.....	9,309	360	224	308	284	1.37	1.58
February.....	7,201	415	146	248	179	.861	.93
March.....	36,310	2,030	250	1,171	1,600	7.69	8.87
April.....	24,652	1,470	440	822	600	2.88	3.21
May.....	11,943	435	344	385	289	1.39	1.60
June.....	6,190	362	142	206	56.7	.273	.30
July.....	3,834	152	86	124	-15.7	-.075	-.09
August.....	1,723	106	18	55.6	2.0	.010	.01
September.....	983	58	20	32.8	10.6	.051	.06
Water year 1935-36	117,146	2,030	18	320	304	1.46	19.91

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

Location.- Water-stage recorder, lat. 43°16'5", 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 1936.

Average discharge.- 13 years, 555 second-feet.

Extremes.- Maximum discharge during year, 7,180 second-feet Mar. 18 (gage height, 6.35 feet) from rating curve extended above 2,700 second-feet; minimum, 14 second-feet Aug. 5 (gage height, 0.15 foot).

1923-36: Maximum discharge, about 16,500 second-feet Oct. 6, 1932 (gage height, 9.18 feet), from rating curve extended above 2,700 second-feet; minimum, 11 second-feet Sept. 2, 1933 (gage height, 0.08 foot).

Remarks.- Records good except those for periods of ice effect, Dec. 5-7, Dec. 17 to Jan. 3, and Jan. 18 to Mar. 12 (based upon one discharge measurement, gage heights and weather records), and those estimated for Apr. 1-4 and 8, 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, Mar. 18 to Sept. 30, 1936 (gage height, in feet, and discharge, in second-feet)

0.1	12	2.0	521
.2	17	2.5	850
.4	30	3.0	1,270
.6	51	4.0	2,400
1.0	135	5.0	4,010
1.5	295	6.0	6,300

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	207	1,170	604	100	140	190	2,830	1,430	190	61	44	333
2	454	653	478	100	140	170	1,720	1,240	193	49	25	192
3	359	455	363	320	140	170	1,120	1,310	175	53	21	180
4	465	351	240	569	140	220	946	1,270	155	146	18	297
5	380	423	240	390	140	220	954	836	138	175	16	173
6	354	1,020	240	322	130	200	4,000	621	122	102	28	104
7	278	646	260	326	130	200	2,960	609	119	64	34	80
8	208	672	314	316	130	190	1,500	555	130	46	29	86
9	169	547	652	299	130	200	1,280	453	242	41	24	35
10	143	426	863	270	120	300	1,360	392	178	35	27	75
11	136	508	692	274	120	480	1,900	356	135	30	34	55
12	136	711	552	270	120	1,900	2,020	322	117	26	29	87
13	130	1,290	446	270	120	1,870	1,670	310	102	26	26	239
14	119	1,110	380	244	120	1,410	1,510	406	91	30	23	158
15	111	666	376	253	120	1,280	1,820	362	82	29	22	98
16	101	503	416	244	120	1,370	2,150	341	71	26	23	209
17	96	421	300	228	120	1,970	1,490	303	64	24	23	221
18	103	394	240	200	120	5,060	1,150	256	78	24	21	163
19	141	347	200	190	110	4,750	1,050	529	86	32	21	117
20	138	465	190	180	110	3,460	970	1,030	78	24	21	86
21	115	616	180	170	110	3,140	1,450	594	67	23	19	64
22	276	508	160	170	110	2,740	1,580	392	62	22	21	57
23	524	390	150	160	100	2,170	954	310	54	24	58	49
24	441	231	140	160	100	2,190	843	270	54	51	102	83
25	359	232	140	150	110	3,550	801	242	47	71	61	256
26	338	257	130	150	130	3,360	943	215	50	54	40	209
27	295	264	120	150	150	5,170	914	209	61	44	29	149
28	237	941	120	150	190	4,600	1,090	239	76	34	33	251
29	199	1,160	110	140	220	3,080	2,210	242	76	29	420	295
30	2,210	868	110	140	-	2,880	2,160	215	71	27	453	187
31	2,970	-	100	140	-	3,820	-	196	-	34	429	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	12,172	2,970	96	393	2.08	2.40
November.....	18,245	1,290	231	608	3.22	3.59
December.....	9,509	868	100	307	1.62	1.87
Calendar year 1935.....	185,005	6,000	18	501	2.65	36.03
January.....	7,017	569	100	226	1.20	1.38
February.....	3,740	220	100	129	.683	.74
March.....	62,310	5,170	170	2,010	10.63	12.26
April.....	46,955	4,000	801	1,565	8.28	9.24
May.....	16,457	1,810	196	531	2.81	3.24
June.....	3,164	242	47	105	.556	.62
July.....	1,456	175	22	47.0	.249	.29
August.....	2,174	453	16	70.1	.371	.43
September.....	4,568	333	35	152	.804	.90
Water year 1935-36.....	187,767	5,170	16	513	2.71	36.96

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 1936.

Average discharge.- 25 years, 659 second-feet.

Extremes.- Maximum discharge during year, 6,300 second-feet Mar. 18; maximum gage height, 11.64 feet Mar. 17 (backwater from ice); minimum discharge, 107 second-feet July 15, 16 (gage height, 3.88 feet).
1911-36: 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, Dec. 3-8, Dec. 22 to Mar. 18, which are fair and were computed on basis of two discharge measurements, fragmentary gage heights, and weather records, and those for Dec. 19-21, June 19, 20, which are fair and were computed on basis of records for Independence River at Sperryville and West Branch of Oswegatchie River near Harrisville. Flow partly regulated by storage in several headwater reservoirs. Forestport feeder diverts water from State Pond at Forestport. That portion of diversion which does not pass down Black River Canal (flowing south) returns to Black River below station through Mill Creek sluiceway.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

3.6	95	4.2	219	5.5	790	7.0	1,910
3.8	127	4.6	348	6.0	1,100	8.0	3,160
4.0	168	5.0	518	6.5	1,470	10.0	7,860

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	422	1,200	940	150	170	380	3,300	1,280	445	167	216	514
2	670	850	790	150	170	340	2,290	1,170	423	150	206	397
3	636	708	650	180	170	320	2,120	2,250	382	209	197	439
4	604	610	550	280	160	360	1,760	2,620	367	546	190	436
5	518	553	500	340	160	400	1,510	1,740	344	418	192	320
6	427	670	500	320	160	380	2,900	1,240	326	262	250	259
7	390	658	528	280	160	340	5,200	1,100	319	196	254	219
8	371	631	604	280	160	320	3,010	1,000	350	164	234	208
9	352	534	721	280	150	360	2,010	850	455	183	206	197
10	341	513	970	260	150	420	1,760	790	496	136	210	192
11	337	504	890	260	150	800	1,760	742	390	131	248	182
12	337	579	760	240	150	2,000	1,910	692	363	117	234	233
13	330	986	670	240	150	2,400	1,760	708	341	113	208	419
14	319	1,390	620	240	150	2,000	1,470	910	316	117	197	347
15	309	1,080	594	240	150	1,700	1,430	850	292	108	206	264
16	305	820	642	240	150	1,900	1,720	754	252	115	208	260
17	292	652	548	220	150	3,200	1,720	675	222	136	192	540
18	302	604	460	220	150	5,000	1,310	604	219	153	185	520
19	326	589	420	220	140	5,850	1,170	1,030	210	157	182	371
20	305	688	380	220	140	4,770	1,030	1,860	200	159	180	299
21	296	778	340	200	140	3,620	1,180	1,370	187	164	182	257
22	323	719	320	200	140	3,320	1,510	1,060	170	166	203	234
23	497	626	280	200	140	2,600	1,280	850	164	176	253	236
24	670	513	260	190	150	2,290	1,100	686	150	267	299	249
25	568	499	240	190	180	2,860	1,000	615	150	296	248	312
26	480	513	220	190	240	3,580	940	563	148	257	208	309
27	419	513	190	180	300	3,720	910	553	161	242	192	251
28	398	1,080	180	180	380	5,100	850	548	175	228	185	245
29	375	1,820	170	180	440	3,700	938	504	173	228	512	260
30	642	1,240	160	170	-	3,080	1,240	471	178	222	914	236
31	1,770	-	150	170	-	3,580	-	462	-	219	617	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	14,331	1,770	292	462		
November.....	23,169	1,820	499	772		
December.....	15,257	970	150	492		
Calendar year 1935.....	242,372	2,920	120	664	2.25	30.57
January.....	6,870	340	150	222		
February.....	5,200	440	140	179		
March.....	70,590	5,850	320	2,277		
April.....	52,088	5,200	850	1,736		
May.....	30,547	2,620	462	985		
June.....	8,348	496	148	278		
July.....	6,162	546	108	199		
August.....	8,008	914	180	258		
September.....	9,205	540	162	307		
Water year 1935-36.....	249,775	5,850	108	682	2.31	31.48

Black River at Watertown, N. Y.

Location.- Water-stage recorder, lat. 43°59'5", long. 75°55'30", at Vanduzee Street Bridge in Watertown, Jefferson County.

Drainage area.- 1,876 square miles.

Records available.- July 1920 to September 1936.

Average discharge.- 18 years, 3,898 second-feet.

Extremes.- Maximum discharge during year, 28,000 second-feet Mar. 20 (gage height, 9.24 feet); minimum, 34 second-feet Aug. 2 (gage height, -0.12 foot); minimum daily discharge, 570 second-feet Aug. 16.
1920-36: 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.

Remarks.- Records excellent except those for Dec. 1 to Mar. 13, which are good. 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.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,880	5,300	5,300	2,040	1,840	2,100	14,900	7,380	2,400	1,180	1,420	2,220
2	2,060	4,750	4,400	1,780	1,660	2,140	14,200	7,680	2,440	1,100	650	2,220
3	2,750	3,700	3,800	1,820	1,360	2,080	15,000	7,530	2,240	1,140	1,040	2,040
4	2,950	2,750	2,500	2,100	1,480	2,160	11,200	7,120	1,980	1,160	920	1,940
5	2,900	2,850	2,160	2,480	1,660	2,220	9,740	8,000	2,020	1,540	1,000	2,080
6	2,600	3,000	2,650	2,080	1,720	2,380	8,690	8,800	1,620	1,960	1,020	1,820
7	2,280	3,300	2,560	2,000	1,860	2,550	9,300	8,160	1,660	1,900	1,080	1,200
8	2,220	3,150	2,020	2,200	1,680	2,000	10,500	6,930	1,400	1,640	1,080	1,260
9	2,120	3,150	2,550	2,200	1,560	1,960	12,800	5,770	1,660	1,500	1,060	1,280
10	1,740	2,800	3,600	2,160	1,280	2,300	12,000	4,710	1,960	1,420	1,000	1,200
11	1,680	2,480	4,550	2,120	1,560	3,400	10,300	4,540	2,260	1,220	920	1,360
12	1,640	2,700	4,400	1,860	1,720	9,000	9,220	3,980	2,220	980	1,040	1,340
13	1,540	3,250	4,050	1,820	1,560	10,600	9,150	3,450	1,560	920	1,200	1,140
14	1,560	4,500	3,650	2,420	1,480	8,920	8,800	3,800	1,180	820	1,260	1,000
15	1,660	5,200	3,100	2,160	1,460	8,420	8,480	4,250	1,300	1,020	1,360	1,520
16	1,620	5,100	3,000	2,080	1,320	8,690	7,840	4,540	1,140	1,060	570	1,640
17	1,600	4,000	3,350	2,320	1,100	9,050	7,840	4,100	1,320	1,180	1,080	1,480
18	1,680	3,250	2,700	2,460	1,220	10,500	8,160	3,600	1,320	920	1,000	1,760
19	1,520	3,150	2,380	2,650	1,640	16,300	8,320	3,500	1,280	690	1,080	2,000
20	1,560	2,950	2,460	2,550	1,600	26,200	8,000	4,450	1,140	900	1,080	1,700
21	1,480	3,500	1,940	1,920	1,580	26,900	7,840	5,900	1,040	780	1,140	1,600
22	1,500	3,550	2,550	2,020	1,580	23,600	7,530	6,400	920	1,060	970	1,580
23	1,860	3,200	2,340	1,900	1,480	20,000	7,380	6,200	1,060	1,020	1,140	1,400
24	1,880	2,460	2,650	2,200	1,180	16,800	7,250	5,360	1,080	1,360	1,120	1,480
25	2,520	2,040	2,440	2,220	1,340	15,800	7,040	4,200	1,080	1,380	1,100	1,440
26	2,440	2,220	1,980	2,000	1,540	15,800	6,200	3,400	1,120	690	1,460	1,580
27	2,200	2,340	1,820	1,740	2,120	16,200	5,360	2,900	1,260	1,120	1,340	1,500
28	2,140	2,500	2,460	1,880	1,980	17,800	5,100	2,800	1,060	1,120	1,240	1,360
29	2,500	3,850	2,300	2,200	2,080	19,200	5,560	2,650	1,080	1,260	1,320	1,320
30	2,220	5,400	2,380	2,100	-	18,200	6,480	2,750	760	1,340	1,180	1,800
31	3,700	-	2,500	1,980	-	16,200	-	2,400	-	1,460	1,920	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	63,200	3,700	1,360	2,039	1.09	1.26
November.....	102,390	5,400	2,040	3,413	1.82	2.03
December.....	90,330	5,300	1,820	2,914	1.55	1.79
Calendar year 1935.....	1,275,026	16,000	720	3,493	1.86	25.28
January.....	65,460	2,650	1,740	2,112	1.13	1.30
February.....	45,640	2,120	1,100	1,574	.839	.90
March.....	339,470	26,900	1,960	10,950	5.84	6.73
April.....	267,940	14,900	5,100	8,931	4.76	5.31
May.....	156,850	8,800	2,400	5,060	2.70	3.11
June.....	44,530	2,440	750	1,484	.791	.88
July.....	36,840	1,960	690	1,188	.633	.73
August.....	34,790	1,920	570	1,122	.598	.69
September.....	47,260	2,220	1,000	1,575	.840	.94
Water year 1935-36.....	1,294,700	26,900	570	3,537	1.89	25.67

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, Boonville, Oneida County, and a quarter of a mile above confluence with Mill Creek.

Records available.- October 1933 to September 1936.

Extremes.- Maximum discharge during year, 84 second-feet Nov. 20 (gage height, 1.08 feet); no flow during periods of no diversion.

1933-36: Maximum discharge, 148 second-feet Oct. 3, 1934; maximum gage height, 2.86 feet some time during period Dec. 11-16, 1933; no flow during periods of no diversion.

Remarks.- Records good except those for periods of ice effect, Nov. 24, 25, Dec. 4-8, Dec. 16 to Mar. 12, (computed on basis of two observations of no flow, fragmentary gage heights, and weather records) and those below 1 second-foot, which are fair. Discharge for Oct. 3-5, Mar. 13-21 computed. The sum of this record and that of Black River Canal (flowing south) represents the total diversion 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. This record shows the amount of water returned to Black River.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	4.0	1.9	0	0	1.1	5.1	2.5	5.1	10	9.9	11
2	12	9.1	1.6	0	0	1.0	6.8	3.8	15	10	6.9	13
3	13	3.1	1.1	.4	0	.9	7.0	12	4.7	12	13	11
4	12	11	.8	.2	0	1.0	4.9	6.1	.5	6.1	12	10
5	9.5	11	.6	.8	0	1.1	4.4	4.0	12	6.1	9.9	8.2
6	4.8	11	.5	.4	0	1.2	37	3.2	6.5	11	12	5.7
7	10	10	.5	.1	0	1.0	14	3.8	2.2	11	12	5.4
8	9.2	10	1.1	.1	0	1.9	8.5	3.0	9.7	9.9	10	10
9	8.9	7.1	9.5	0	0	1.0	5.8	2.7	26.7	11	5.7	11
10	9.4	3.1	5.8	0	0	1.1	6.5	2.9	24	12	12	11
11	9.0	9.4	3.2	0	0	1.8	8.7	2.2	24	9.0	12	11
12	7.0	10	1.7	0	0	6.5	8.4	1.9	24	6.9	12	10
13	2.6	16	1.3	0	0	9.5	6.8	3.0	21	13	12	5.7
14	9.5	16	1.2	0	0	8.5	8.2	2.6	20	12	12	11
15	9.3	9.6	1.3	0	0	7.5	4.7	2.1	20	12	9.3	11
16	9.6	5.9	1.5	0	0	7.0	8.2	1.9	20	13	6.1	10
17	10	3.1	1.1	0	0	8.0	6.1	2.3	16	13	12	9.8
18	10	11	.8	0	0	24	3.6	1.4	11	11	13	9.3
19	7.4	9.8	.6	0	0	32	2.7	1.2	11	7.3	12	8.7
20	3.1	17	.5	0	0	22	2.4	.8	7.6	13	12	4.7
21	10	5.6	.4	0	0	19	5.8	.7	5.4	13	12	10
22	11	2.7	.3	0	0	15	2.7	5.4	9.4	12	8.8	9.7
23	10	1.2	.2	0	0	11	1.9	12	11	12	5.4	9.8
24	10	.6	.2	0	.2	11	1.5	12	13	12	14	9.8
25	10	.5	.1	0	.5	18	2.0	12	12	10	15	10
26	6.8	.6	.1	0	.7	11	3.1	11	12	6.5	14	7.6
27	1.2	.9	.1	0	.9	28	1.6	11	8.9	12	14	3.8
28	10	16	.1	0	1.1	15	1.6	11	5.4	12	8.9	9.5
29	11	9.8	0	0	1.2	7.1	4.7	11	10	13	6.7	9.4
30	15	2.8	0	0	-	7.8	4.2	11	10	13	6.5	9.9
31	7.2	-	0	0	-	9.0	-	7.7	-	13	6.1	-
Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches						
October.....	278.5	15	1.2	8.98								
November.....	227.9	17	.5	7.60								
December.....	38.1	9.5	0	1.23								
Calendar year 1935.....	2,420.1	40	0	6.63								
January.....	2.0	.8	0	.06								
February.....	4.6	1.2	0	.16								
March.....	289.0	32	.9	9.32								
April.....	188.9	37	1.5	6.30								
May.....	168.2	12	.7	5.43								
June.....	377.4	26	.5	12.6								
July.....	337.8	13	6.1	10.9								
August.....	327.2	15	5.4	10.6								
September.....	277.0	13	3.8	9.23								
Water year 1935-36.....	2,516.6	37	0	6.88								

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

Location.— Two water-stage recorders—No. 1 on main canal at Lock 69 and No. 2 in lat. $43^{\circ}27'20''$, long. $75^{\circ}19'25''$, on Lansingkill spillway 100 feet downstream from head gates in summit level of canal, 600 feet upstream from Lock 70, and 2 miles south of Boonville, Oneida County.

Records available.— September 1915 to September 1936 during canal seasons.

Remarks.— Records excellent. Discharge estimated for gage No. 1 Nov. 30, May 23, and 27-29, and for gage No. 2 Oct. 4 and 7-12. This record includes the combined flow at gages 1 and 2 and represents the total diversion from Black River through Forestport feeder, which passes out of the Black River drainage into Mohawk River drainage.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	74						-	1	39	43	54
2	51	64						-	4	39	47	50
3	65	59						-	6	42	42	55
4	54	63						-	16	32	42	54
5	62	62						-	16	44	43	56
6	59	71						-	13	44	43	57
7	54	69						-	16	46	44	55
8	54	70						-	17	45	45	48
9	54	71						-	16	44	48	49
10	54	72						-	22	41	46	49
11	54	66						-	24	44	45	49
12	55	72						-	26	49	43	56
13	58	78						-	32	41	42	58
14	52	42						-	35	41	41	52
15	51	49						-	34	41	43	50
16	49	46						-	35	40	49	51
17	50	60						-	37	41	42	46
18	51	66						-	42	45	42	47
19	56	60						-	44	49	42	52
20	60	32						-	45	40	41	54
21	52	5						-	47	36	41	47
22	54	4						-	42	38	45	47
23	64	3						9	40	40	53	46
24	56	3						8	38	41	43	49
25	62	3						5	42	47	40	53
26	67	3						4	40	47	39	54
27	63	3						3	44	42	39	56
28	61	8						4	45	42	45	49
29	55	7						4	41	41	67	49
30	78	4						5	42	40	67	48
31	74	-						2	-	41	62	-

Month	Maximum	Minimum	Mean			
October.....	78	49	57.8			
November.....	76	3	43.0			
December.....	-	-	-			
Calendar year						
January.....	-	-	-			
February.....	-	-	-			
March.....	-	-	-			
April.....	-	-	-			
May 23-31.....	9	2	4.9			
June.....	47	1	30.1			
July.....	49	32	41.9			
August.....	67	39	46.6			
September.....	58	46	51.3			
Water year						

Moose River at McKeever, N. Y.

Location.- Water-stage recorder, lat. 43°36'40", long. 77°6'35", 0.5 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 1936.

Average discharge.- 14 years, 836 second-feet.

Extremes.- Maximum discharge during year, 7,340 second-feet Mar. 19; maximum gage height, 12.28 feet Mar. 19 (backwater from ice); minimum discharge, 123 second-feet Aug. 20, 21 (gage height, 1.87 feet).
1922-36: Maximum discharge, 11,000 second-feet June 22, 1922 (gage height, 12.9 feet); minimum, 64 second-feet Sept. 2, 1925 (gage height, 1.37 feet).

Remarks.- Records excellent except those for period of ice effect, Dec. 4 to Mar. 19, which are fair and were computed on basis of three discharge measurements, gage heights, and weather records, and those for Nov. 24, July 25-30, which are fair and were computed on basis of records for Middle Branch of Moose River near McKeever. 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 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)

1.5	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	11.0	8,130

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	488	890	862	320	380	550	3,670	2,600	635	275	179	612
2	618	660	660	340	380	500	2,560	2,000	568	275	171	468
3	710	468	522	550	360	460	2,180	3,410	480	275	174	579
4	660	380	450	650	360	460	1,780	3,600	424	574	166	710
5	660	352	440	550	360	550	1,670	3,000	400	654	148	476
6	554	511	400	500	360	500	2,330	1,600	345	468	150	352
7	464	660	380	480	360	480	4,730	1,360	306	362	158	282
8	404	576	380	460	360	460	2,690	1,210	306	303	160	245
9	366	500	400	440	360	480	1,880	1,120	440	268	148	220
10	345	432	500	420	340	500	1,710	1,090	448	239	130	205
11	351	400	550	460	340	600	1,710	1,000	373	223	130	211
12	317	404	460	460	340	850	1,850	945	342	220	142	292
13	303	562	420	460	340	1,600	1,850	972	306	208	150	392
14	296	1,530	400	440	340	2,000	1,610	1,150	272	202	142	384
15	334	1,140	380	440	320	1,800	2,040	1,180	252	191	140	362
16	408	835	380	440	320	1,800	2,680	1,120	226	162	135	352
17	408	685	340	400	320	1,900	2,470	1,000	214	179	130	440
18	400	590	300	380	320	3,400	2,040	862	208	174	128	458
19	306	514	260	380	320	7,000	1,800	1,010	202	171	128	452
20	230	492	220	360	300	6,240	1,610	2,060	202	163	123	368
21	211	522	200	360	300	4,460	1,860	1,740	199	163	125	345
22	220	518	180	380	300	3,650	2,490	1,330	182	166	142	317
23	309	484	170	400	300	2,910	2,120	1,150	166	163	224	303
24	652	440	160	420	300	2,400	1,750	1,000	150	171	331	306
25	760	408	160	420	300	3,140	1,580	918	138	190	284	352
26	660	408	260	400	360	4,150	1,330	835	140	200	208	348
27	635	370	300	400	480	3,820	1,180	785	145	195	179	348
28	576	432	320	400	550	5,300	1,370	760	155	190	160	352
29	564	1,500	340	400	600	3,660	1,880	760	182	185	168	362
30	612	1,320	320	380	-	3,270	3,390	735	214	150	525	356
31	890	-	320	380	-	4,060	-	685	-	182	635	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	14,681	890	211	474	1.30	1.50
November.....	16,585	1,330	352	619	1.70	1.90
December.....	11,464	862	160	370	1.01	1.16
Calendar year 1935.....	268,299	4,430	158	735	2.01	27.35
January.....	13,270	650	320	428	1.17	1.35
February.....	10,370	600	300	358	.981	1.06
March.....	72,970	7,000	460	2,354	6.45	7.44
April.....	63,890	4,730	1,180	2,130	5.84	6.52
May.....	42,867	3,600	685	1,367	3.80	4.38
June.....	8,620	635	138	287	.786	.88
July.....	7,591	654	163	245	.671	.77
August.....	5,913	635	123	191	.523	.60
September.....	11,509	710	205	377	1.03	1.15
Water year 1935-36.....	281,648	7,000	123	770	2.11	26.71

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 1936.

Average discharge.- 24 years (1912-36), 106 second-foot.

Extremes.- Maximum mean daily discharge during year, 405 second-foot Apr. 15 and 18 (gage height, 3.4 feet); minimum mean daily discharge, 0.3 second-foot several times during year when gates in dam were closed.

1911-36: Maximum discharge, 862 second-foot Mar. 23, 1921, from rating curve extended above 450 second-foot; minimum, 0.3 second-foot Mar. 12 to Apr. 22, 1935, and several times during 1936 when gates in dam were closed.

Remarks.- Records good. Discharge Mar. 20 to Apr. 9 corrected for backwater from North Branch, and discharge Oct. 20-22 and Nov. 2 to Dec. 17 computed on basis of record 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 1935-36 except periods of extreme low flow and backwater from North Branch

Oct. 1 to Dec. 25 (11 a.m.)		Dec. 25 (11 a.m.) to Sept. 30	
0.2	1.1	0	0.4
.4	3.9	.1	.7
.6	8.7	.2	1.6
.8	16	.4	4.6
1.2	35	.6	9.6
1.6	74	.8	17
2.0	124		3.5
2.5	206		532

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	206	145	0.3	207	190	158	0.3	51	137	66	64	21
2	131	.3	.3	198	190	158	.3	5.7	68	66	64	21
3	64	.3	.3	169	182	143	.3	8.5	68	66	62	21
4	64	.3	.3	122	182	129	.3	18	68	74	62	21
5	64	.3	.3	122	182	129	.3	31	35	74	62	21
6	64	.3	.3	122	182	122	.3	24	1.4	74	64	21
7	64	.3	.3	122	182	115	3.0	6.6	1.4	74	64	21
8	69	.3	.3	122	182	115	10	52	1.4	66	62	21
9	69	.3	.3	122	182	108	20	190	1.4	66	62	21
10	69	.3	.3	122	174	102	30	182	1.4	66	62	82
11	69	.3	.4	122	174	102	32	182	1.4	66	50	129
12	69	.3	.6	122	174	102	35	182	1.4	66	37	129
13	69	.3	.6	122	174	102	52	174	1.4	66	35	129
14	110	.3	.7	122	174	102	266	174	1.4	66	35	129
15	196	.3	.8	122	174	108	405	174	1.4	66	35	122
16	206	.3	.9	122	166	89	379	148	1.4	66	35	122
17	206	.3	.9	122	166	38	379	129	1.4	66	35	129
18	105	.3	1.1	122	166	40	405	96	1.4	64	35	122
19	4.5	.3	1.1	122	166	33	379	68	1.4	64	35	122
20	.3	.3	1.1	122	158		354	68	1.4	64	35	122
21	.3	.3	1.1	148	158	.3	354	109	1.4	64	35	122
22	.3	.3	1.1	198	158	.3	354	136	1.4	64	31	122
23	91	.3	1.1	198	150	.3	354	156	1.4	64	21	122
24	196	.3	1.1	198	150	.3	354	156	1.4	64	21	122
25	196	.3	81	198	157	.3	244	162	1.4	66	21	122
26	196	.3	150	190	166	.3	1.6	182	1.4	64	21	122
27	196	.3	145	190	166	.3	330	174	1.4	64	20	122
28	187	.3	159	190	158	.3	330	174	1.4	62	20	122
29	187	.3	207	190	158	.3	330	174	2.1	62	21	122
30	187	.3	207	190	-	.3	228	174	34	64	21	177
31	187	-	207	190	-	.3	-	174	-	64	21	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,522.4	206	0.3	114		
November	153.7	145	.3	5.12		
December	1,179.6	207	.3	38.1		
Calendar year 1935	34,153.8	432	.3	93.6	1.80	24.41
January	4,728	207	122	153		
February	4,941	190	150	170		
March	1,998.6	158	.3	64.5		
April	5,630.4	405	.3	188		
May	3,694.8	190	5.7	119		
June	444.3	137	1.4	14.8		
July	2,048	74	62	56.1		
August	1,348	64	20	40.3		
September	2,801	177	21	93.4		
Water year 1935-36	32,389.8	405	.3	88.5	1.70	23.19

Note.- Maximum daily discharge supersedes that published in Water-Supply Paper 799.

The combined storage in Old Forge and Sixth Lake Reservoirs on Sept. 30, 1935, showed a net increase of 99,150,000 cubic feet. For the water year, equivalent to a yearly mean discharge of 2.85 second-foot, 0.055 second-foot per square mile, or 0.75 inch on drainage area. The combined storage in Old Forge and Sixth Lake Reservoirs on Dec. 31, 1935, showed a net decrease of 14,450,000 cubic feet for the calendar year, equivalent to a yearly mean discharge of 0.46 second-foot, 0.009 second-foot per square mile, or 0.12 inch on drainage area.

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

Location.- Water-stage recorder, lat. 43°37'45", long. 75°4'55", 0.5 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 1936.

Average discharge.- 11 years, 335 second-feet.

Extremes.- Maximum discharge during year, 1,110 second-feet Mar. 29 (gauge height, 5.24 feet); minimum, 53 second-feet June 26, 27 (gauge height, 2.10 feet).
1925-36: Maximum discharge, 2,100 second-feet Apr. 27, 1926 (gauge height, 6.6 feet); minimum, about 42 second-feet Aug. 26, 1931 (gauge height, 1.98 feet).

Remarks.- Records excellent except those for periods of ice effect, Nov. 25, Dec. 4-10, Dec. 17 to Mar. 19, which are fair and were computed on basis of three discharge measurements, gage heights, weather records, and records for Middle Branch of Moose River at Old Forge and Moose River at McKeever. Discharge for Apr. 25-30 computed on basis of records for Middle Branch of Moose River at Old Forge and Moose River at McKeever. Flow partly regulated by storage in Fulton Chain of Lakes.

Rating table, water year 1935-36 except periods of ice effect (gauge height, in feet, and discharge, in second-feet)

2.1	53	3.0	192
2.2	63	3.2	240
2.3	75	3.5	326
2.4	88	4.0	500
2.6	117	4.5	715
2.8	151	5.5	1,270

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	316	319	182	260	260	280	1,030	670	390	98	114	140
2	341	223	175	280	240	260	975	580	313	133	111	122
3	272	120	163	320	240	260	920	625	261	147	108	147
4	208	94	150	230	240	260	790	602	215	164	106	133
5	201	91	140	240	240	280	692	602	210	222	106	117
6	197	110	140	220	240	260	740	580	167	210	110	108
7	188	120	140	220	220	260	715	540	146	179	110	99
8	179	130	150	200	220	240	715	472	147	159	85	94
9	173	125	160	200	220	240	715	520	151	146	69	89
10	169	116	180	200	220	240	692	560	140	138	68	88
11	163	112	177	200	220	260	670	540	130	133	85	130
12	161	116	165	200	220	300	670	520	150	130	95	214
13	157	137	155	220	220	400	625	500	117	127	84	248
14	153	171	151	200	220	550	648	520	105	125	75	213
15	231	190	147	200	220	480	892	500	98	122	73	210
16	292	201	151	200	220	440	975	500	92	120	70	213
17	298	220	140	190	220	480	975	446	68	117	70	232
18	288	204	120	190	220	600	975	418	85	114	68	230
19	157	198	100	180	200	700	975	408	83	106	67	228
20	90	179	90	180	200	815	948	460	78	106	70	220
21	73	179	80	190	200	1,000	948	468	74	110	75	206
22	76	167	70	240	200	1,050	920	500	63	110	82	204
23	87	159	65	300	200	975	920	500	59	111	91	201
24	205	159	60	280	200	1,000	920	492	57	120	101	206
25	295	190	55	280	220	1,000	840	500	56	122	82	220
26	298	169	170	260	240	948	660	476	55	127	73	210
27	292	147	220	280	280	1,000	540	468	57	122	68	206
28	273	153	260	260	320	1,090	750	446	59	117	63	215
29	264	188	260	260	300	1,090	860	432	63	114	82	213
30	316	186	260	260	-	1,090	760	422	65	114	99	210
31	331	-	260	260	-	1,090	-	408	-	116	122	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	6,764	341	73	218	1.47	1.70
November.....	4,963	319	91	162	1.09	1.22
December.....	4,736	260	55	153	1.03	1.19
Calendar year 1935.....	107,224	1,410	55	294	1.99	26.93
January.....	7,270	320	180	235	1.59	1.83
February.....	6,660	320	200	230	1.55	1.67
March.....	18,948	1,090	240	611	4.13	4.76
April.....	24,465	1,050	540	816	5.51	6.15
May.....	15,375	670	408	506	3.42	3.94
June.....	3,744	390	55	125	0.845	0.94
July.....	4,099	222	98	132	0.892	1.03
August.....	2,682	122	63	86.5	0.584	0.67
September.....	5,366	248	88	179	1.21	1.35
Water year 1935-36.....	105,272	1,090	55	288	1.95	26.45

Independence River at Sperryville, N. Y.

Location.- Staff gage, lat. 43°46'30", long. 75°18'5", 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 1936.

Extremes.- Maximum discharge during year, 2,150 second-feet Mar. 19 (gage height, 6.3 feet, from graph based on gage readings), from rating curve extended above 1,310 second-feet; minimum, 15 second-feet Aug. 19 (gage height, 0.98 foot).
 1927-36: 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. 25, 26, Dec. 5-14, and Dec. 17 to Mar. 12, which are based on three discharge measurements, 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 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 18				Mar. 19 to Sept. 30							
1.1	24	2.0	132	4.0	740	1.0	16	2.0	132	4.0	740
1.2	31	2.5	238	4.5	960	1.2	31	2.5	238	4.5	980
1.4	48	3.0	377	5.0	1,270	1.4	48	3.0	377	5.5	1,590
1.6	71	3.5	547	5.5	1,590	1.6	71	3.5	547	6.5	2,300

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	132	151	40	34	70	767	511	102	83	31	104
2	144	125	118	42	34	60	512	426	99	58	25	72
3	161	102	90	60	34	55	409	409	96	50	23	74
4	161	79	71	95	34	60	332	459	76	46	20	79
5	151	93	60	130	34	70	276	332	69	79	20	57
6	120	182	55	120	32	75	350	263	65	70	20	48
7	99	192	55	100	32	65	604	250	61	55	20	33
8	81	151	70	90	30	55	486	238	66	45	21	32
9	70	124	100	85	30	60	332	192	115	35	19	29
10	61	105	170	90	30	70	318	182	102	31	20	27
11	56	93	220	85	28	110	362	182	79	29	24	25
12	51	105	180	85	28	420	494	182	76	29	25	31
13	46	204	150	85	28	597	494	182	66	30	20	56
14	44	325	130	75	25	547	409	236	55	27	18	56
15	43	263	122	80	30	460	362	250	47	25	20	44
16	40	192	122	75	28	442	377	238	44	22	19	40
17	39	142	120	65	28	507	393	182	36	20	19	68
18	43	124	110	60	28	1,490	332	151	50	20	16	81
19	48	109	95	55	26	2,030	304	214	46	20	16	56
20	50	110	80	50	26	1,410	276	453	42	20	16	43
21	46	132	70	50	26	946	442	377	37	20	18	34
22	48	127	65	46	24	701	551	263	31	20	25	30
23	65	109	60	44	24	566	426	214	29	20	37	27
24	74	93	55	42	26	529	332	161	29	44	48	28
25	71	85	50	40	32	705	290	132	29	91	37	68
26	70	80	48	40	42	1,020	263	118	29	74	26	76
27	66	79	46	36	55	1,060	250	112	36	50	22	57
28	60	113	44	38	70	1,270	238	129	46	38	20	71
29	55	203	42	36	80	905	376	142	49	32	36	99
30	79	192	40	36	-	700	547	132	89	42	82	72
31	140	-	40	36	-	780	-	112	-	40	78	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,343	161	39	75.6	0.889	1.02
November.....	4,163	323	79	139	1.64	1.83
December.....	2,829	220	40	91.3	1.07	1.23
Calendar year 1935.....	63,703	1,760	22	175	2.06	27.85
January.....	2,013	130	36	64.9	.764	.88
February.....	981	80	24	33.8	.396	.43
March.....	17,837	2,030	55	575	6.76	7.79
April.....	11,914	767	238	397	4.67	5.21
May.....	7,426	511	112	240	2.82	3.25
June.....	1,793	115	29	59.9	.705	.79
July.....	1,265	91	20	40.8	.430	.55
August.....	843	82	16	27.2	.320	.37
September.....	1,617	104	25	53.9	.634	.71
Water year 1935-36.....	55,029	2,030	16	150	1.76	24.06

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

Location.- Staff gage, lat. 43°53'50", long. 75°3'5", 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 1936.

Average discharge.- 28 years, 359 second-feet.

Extremes.- 1908-36: Maximum discharge, 3,700 second-feet May 3, 1926; practically no flow at times when gates in dam are closed and there is no spilling.

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

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	650	560	240	385	325	51	13	9	345	330	420	390
2	540	435	360	380	325	56	13	375	345	330	420	390
3	570	435	420	380	320	36	13	790	345	330	420	390
4	650	435	365	380	315	77	13	1,100	340	330	420	390
5	475	430	310	360	315	236	13	860	340	330	455	390
6	13	430	166	375	310	255	13	510	340	330	465	390
7	365	430	320	375	310	260	14	485	340	330	465	390
8	540	430	290	375	305	240	14	485	340	330	465	385
9	590	430	184	375	300	224	14	485	340	325	465	460
10	610	430	340	375	295	204	14	445	340	325	480	510
11	610	430	450	370	295	200	14	345	340	325	480	510
12	450	425	470	370	290	236	14	425	340	320	480	510
13	13	425	470	365	285	285	14	460	340	320	480	510
14	410	425	450	365	280	106	14	460	340	320	480	510
15	610	380	410	365	280	8	14	460	340	325	475	510
16	550	335	410	365	275	8	14	460	340	430	475	510
17	520	335	410	360	270	9	14	460	340	430	510	500
18	520	335	410	360	265	9	14	460	340	430	540	500
19	520	335	405	360	260	10	14	640	340	430	540	500
20	520	335	405	365	255	10	14	730	340	430	540	500
21	520	335	405	355	250	11	15	730	340	430	530	495
22	510	335	405	350	242	11	15	730	340	425	530	495
23	510	335	400	350	236	11	15	550	340	425	530	490
24	510	330	400	350	230	11	15	385	340	425	530	490
25	510	330	400	345	222	11	16	345	340	425	530	490
26	510	390	395	345	214	12	6	345	340	425	530	490
27	146	420	395	340	206	12	2	345	335	425	520	490
28	360	420	395	340	120	12	4	500	330	425	520	485
29	550	420	390	335	6	12	5	500	330	425	395	485
30	690	380	390	335	-	13	7	460	330	425	13	480
31	690	-	385	330	-	13	-	385	-	420	275	-

Month	Observed				Adjusted for storage		
	Second-foot-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October.....	15,192	680	13	490	187	1.09	1.26
November.....	11,900	560	330	397	278	1.62	1.81
December.....	11,665	470	168	376	211	1.23	1.42
Calendar year 1935.	132,562	1,020	10	363	356	2.07	28.16
January.....	11,190	385	330	361	180	1.05	1.21
February.....	7,601	325	6	262	132	0.767	.83
March.....	2,649	285	8	85.5	933	5.42	6.25
April.....	374	16	2	12.5	854	4.97	5.54
May.....	15,719	1,100	9	507	546	3.17	3.66
June.....	10,180	345	330	339	163	0.948	1.06
July.....	11,795	430	320	380	96	0.558	.64
August.....	14,458	540	13	466	106	0.616	.71
September.....	14,035	510	385	468	172	1.00	1.12
Water year 1935-36..	126,758	1,100	2	346	322	1.87	25.51

Notes.- Adjustments for storage based on data furnished by Board of Black River Regulating District. Midnight elevation of water surface in Stillwater Reservoir was 1,662.71 feet Dec. 31, 1934, and 1,661.05 feet Dec. 31, 1935. Midnight elevation of water surface in Stillwater Reservoir was 1,670.40 feet Sept. 30, 1935, and 1,666.37 feet Sept. 30, 1936.

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 0.5 mile west of Croghan, Lewis County.

Drainage area.- 294 square miles.

Records available.- September 1930 to September 1936.

Extremes.- Maximum discharge during year, 2,230 second-feet Mar. 20 (gage height, 4.79 feet); minimum, about 18 second-feet (computed) Feb. 24 (gage height, 0.89 foot); minimum daily discharge, 50 second-feet (computed) Feb. 23.

1930-36: Maximum discharge, 3,390 second-feet Apr. 19, 1933 (gage height, 5.80 feet); minimum, that of Feb. 24, 1936; minimum daily discharge, 35 second-feet May 13, 1934.

Remarks.- Records excellent except those for period of ice effect, Feb. 5 to Mar. 11, which are good and were computed on basis of one discharge measurement, gage heights, and weather records. Flow of Beaver River was completely regulated during 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 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)

1.1	43	2.0	264	3.5	1,060
1.2	59	2.2	338	4.0	1,460
1.4	97	2.4	420	4.6	1,920
1.6	143	2.6	510	5.0	2,460
1.8	199	3.0	720		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	530	710	204	500	280	75	810	880	520	400	530	470
2	780	410	440	465	58	260	840	930	540	580	162	470
3	620	260	550	680	480	320	820	520	490	430	495	560
4	550	690	560	530	410	300	380	820	680	168	510	660
5	480	720	590	305	600	300	122	1,020	560	88	510	700
6	270	560	630	440	420	320	650	760	660	395	520	116
7	470	540	465	670	420	260	750	770	146	570	520	204
8	620	540	168	540	380	80	600	800	386	570	490	590
9	650	550	530	550	120	200	580	540	670	670	132	540
10	530	415	700	580	320	460	420	760	680	435	430	700
11	660	550	660	550	420	1,000	295	760	750	315	530	490
12	510	560	530	140	440	1,440	106	660	420	122	510	390
13	295	730	620	530	420	890	305	770	330	290	530	150
14	840	710	530	690	420	750	430	760	124	580	640	560
15	690	430	310	510	320	230	510	730	300	600	690	680
16	670	510	570	455	80	930	490	660	370	490	140	650
17	600	265	520	640	300	1,080	460	590	460	380	840	680
18	530	590	610	440	400	1,520	510	780	520	315	520	690
19	445	670	510	158	420	1,560	196	780	446	136	520	630
20	246	580	560	485	380	2,000	445	960	320	280	640	220
21	530	580	700	600	360	1,520	670	960	140	400	580	490
22	670	560	365	450	280	780	560	1,420	440	455	590	720
23	630	435	475	500	50	830	560	1,420	480	470	166	650
24	460	214	490	460	220	310	550	1,120	470	490	640	630
25	485	490	150	385	380	950	670	590	560	420	660	660
26	435	600	335	116	380	820	194	510	690	146	600	425
27	385	690	530	260	380	910	600	570	435	550	570	142
28	580	455	495	460	400	1,080	500	455	130	580	640	510
29	630	520	265	445	320	455	830	680	330	580	660	660
30	690	480	405	450	-	1,020	870	490	365	590	172	660
31	680	-	720	440	-	990	-	470	-	690	510	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	16,961	780	246	547		
November.....	16,264	730	214	542		
December.....	15,187	720	160	490		
Calendar year 1935.....	207,570	1,680	53	569	1.94	26.25
January.....	14,094	680	116	455		
February.....	9,768	500	50	336		
March.....	24,040	2,000	75	775		
April.....	15,663	870	106	522		
May.....	23,926	1,420	455	772		
June.....	13,410	760	124	447		
July.....	13,085	670	88	422		
August.....	15,427	690	132	498		
September.....	15,687	720	116	523		
Water year 1935-36.....	193,491	2,000	50	529	1.80	24.49

Deer River at Copenhagen, N. Y.

Location.- Water-stage recorder, lat. 43°53'55", long. 75°39'40", at power plant 0.5 mile northeast of Copenhagen, Lewis County.

Drainage area.- 89 square miles.

Records available.- September 1929 to September 1936.

Extremes.- Maximum discharge during year, 2,800 second-feet (revised) Mar. 12; maximum gage height, 8.42 feet Mar. 12 (backwater from ice); minimum discharge, 2.0 second-feet June 27 (gage height, 0.37 foot); minimum daily discharge, 3.2 second-feet Aug. 9, 1929-36; Maximum discharge, about 4,500 second-feet Jan. 8, 1930 (gage height, 9.3 feet); minimum, 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, Dec. 5-7, 22-30, Jan. 24 to Mar. 12, which are fair and were computed on basis of one discharge measurement, gage heights, and weather records, and those for Aug. 28, 29, Sept. 11-13, which are fair and were computed on basis of power-plant records. Diurnal fluctuation caused by operation of power plant.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.4	2.5	1.2	55	3.0	524
.5	4.9	1.4	81	3.5	755
.6	8.5	1.6	115	4.0	980
.8	19	2.0	206	5.0	1,600
1.0	34	2.5	348	6.0	2,370

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	305	305	39	40	100	850	617	44	22	6.0	33
2	184	198	231	42	38	90	686	407	48	20	4.6	35
3	164	152	164	77	35	80	505	358	47	19	5.9	27
4	285	110	67	217	36	85	398	311	56	76	6.3	19
5	171	248	70	183	36	90	382	262	28	68	6.0	19
6	191	496	65	129	36	100	1,220	206	18	39	5.8	19
7	150	274	75	171	34	90	999	194	21	24	6.0	19
8	106	230	146	184	34	80	593	157	32	20	5.7	20
9	75	196	436	167	34	85	495	82	84	20	3.2	20
10	60	148	549	137	34	100	564	65	64	12	5.2	14
11	50	188	393	127	34	440	568	54	40	11	6.1	5.0
12	47	328	305	123	34	2,000	647	48	37	3.7	6.3	7.0
13	43	487	232	117	34	1,210	605	87	24	4.3	7.4	1.0
14	38	380	184	110	32	787	524	315	22	4.4	8.2	28
15	33	262	179	104	32	767	584	178	19	3.8	8.3	23
16	29	196	203	104	32	980	654	191	18	4.0	4.3	21
17	27	157	143	87	32	1,170	480	130	17	5.1	6.9	19
18	36	128	115	84	32	2,210	498	98	17	6.8	5.3	18
19	58	125	129	77	30	2,070	622	244	21	4.2	5.6	19
20	48	364	99	74	30	1,670	615	436	19	8.9	4.7	18
21	39	355	74	67	30	1,370	988	258	16	5.6	3.6	12
22	88	240	65	65	30	1,020	560	148	16	5.4	4.2	7.8
23	167	153	60	62	30	997	416	101	17	7.7	3.8	9.0
24	157	69	60	55	30	1,280	370	74	18	4.8	16	11
25	133	78	55	55	36	2,070	320	62	15	7.2	20	88
26	131	88	50	50	50	1,640	279	54	13	9.0	14	69
27	106	97	48	48	70	1,900	273	55	13	19	6.1	38
28	81	413	46	46	95	1,860	319	67	6.0	16	5.0	244
29	65	624	42	44	110	1,140	1,070	67	16	8.4	10	172
30	235	372	40	42	-	1,180	911	64	26	6.9	19	120
31	566	-	38	40	-	1,560	-	52	-	5.6	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,640	566	27	117	1.31	1.51
November.....	7,461	624	69	249	2.80	3.12
December.....	4,668	549	38	151	1.70	1.96
Calendar year 1935.....	69,512.4	2,010	2.5	190	2.13	29.04
January.....	2,927	217	39	94.4	1.06	1.22
February.....	1,163	110	30	40.1	.451	.49
March.....	30,201	2,210	80	974	10.9	12.57
April.....	17,995	1,220	273	600	6.74	7.52
May.....	5,422	617	48	175	1.97	2.27
June.....	812.0	84	6.0	27.1	.304	.34
July.....	471.8	76	3.7	15.2	.171	.20
August.....	239.5	20	3.2	7.73	.087	.10
September.....	1,161.8	244	5.0	38.7	.435	.49
Water year 1935-36.....	76,162.1	2,210	3.2	208	2.34	31.79

Note.- Maximum daily discharge supersedes that published in Water-Supply Paper 799.

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

Location.- Staff gage, lat. 44°13'15", long. 74°51'0", 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 1938.

Average discharge.- 13 years, 504 second-feet.

Extremes.- Maximum discharge during year (supersedes figure published in Water-Supply Paper 799), 800 second-feet Apr. 9-15 (gage height, 6.3 feet); minimum, about 9 second-feet Mar. 19-26.

1925-36: Maximum daily discharge, 1,620 second-feet Apr. 17-20, 1933; minimum occurs when gates in dam are closed and there is no discharge over spillway.

Remarks.- Records good. Discharge Mar. 20-25 and May 9-11 computed from record of gate operations at Cranberry Lake Dam. Gage read once daily. 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 the dam. Flow completely regulated by operation of gates in Cranberry Lake Dam.

Rating table, water year 1935-36 (gage height, in feet, and discharge in second-feet)

2.9	6.4
3.0	9.5
3.2	18.2
3.4	31
3.6	47
4.0	87
4.5	162
5.0	280
5.5	445
6.0	650
6.5	910

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	225	225	192	220	266	296	181	540	238	225	214	192
2	225	225	192	238	266	280	181	660	238	225	214	192
3	225	225	220	238	290	280	181	700	238	225	214	192
4	225	225	266	238	327	280	225	700	238	225	214	192
5	225	225	266	238	327	280	245	700	238	225	214	192
6	225	225	266	238	327	280	376	600	238	225	214	192
7	225	225	266	238	327	280	450	540	238	225	214	192
8	225	225	266	238	327	280	540	490	238	225	214	192
9	225	225	266	238	311	280	720	340	238	225	214	192
10	225	225	266	238	311	280	800	280	238	225	214	192
11	225	225	266	238	311	280	800	260	238	225	214	192
12	225	200	240	238	311	245	800	238	238	225	214	192
13	225	192	225	238	311	162	800	238	238	225	214	192
14	225	192	225	238	311	162	800	238	238	225	202	192
15	225	180	225	238	311	162	680	238	238	225	202	192
16	225	172	225	238	311	162	560	238	238	214	202	192
17	225	172	225	238	311	172	620	238	225	214	202	192
18	225	172	225	238	311	172	700	238	225	214	202	192
19	225	180	225	238	311	130	700	410	225	214	202	192
20	225	192	225	238	311	9	700	680	225	214	202	192
21	225	192	225	238	311	9	700	700	225	214	202	192
22	225	192	225	280	311	9	700	700	225	214	192	192
23	225	192	225	280	311	9	700	700	225	214	192	192
24	225	192	214	280	311	9	700	700	225	214	192	192
25	225	192	214	280	311	9	600	580	225	214	192	192
26	225	192	214	280	296	106	540	350	225	214	192	192
27	225	192	214	280	296	154	440	238	240	214	192	192
28	225	192	214	280	296	162	376	238	266	214	192	192
29	225	192	214	280	296	162	376	238	245	214	192	192
30	225	192	214	280	-	162	480	238	225	214	192	192
31	225	-	214	266	-	172	-	238	-	214	192	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	6,975	225	235	225		
November.....	6,047	225	172	202		
December.....	7,159	266	192	231		
Calendar year 1935.....	95,944	950	120	267	1.78	24.25
January.....	7,736	280	220	250		
February.....	8,928	327	266	308		
March.....	5,435	296	9	175		
April.....	16,661	800	181	555		
May.....	13,476	700	238	435		
June.....	7,034	266	225	234		
July.....	6,799	225	214	219		
August.....	6,318	214	192	204		
September.....	5,760	192	192	192		
Water year 1935-36.....	98,328	800	9	269	1.87	25.39

Note.- Maximum daily discharge supersedes figure published in Water-Supply Paper 799.
 Elevation of water surface in Cranberry Lake Reservoir on Sept. 30, 1935, was 1.12 feet lower than on Sept. 30, 1934, corresponding to a decrease in storage of 345,461,888 cubic feet. This is equivalent to a mean yearly discharge of 10.9 second-feet, 0.076 second-foot per square mile, or 1.03 inches on drainage area.
 Elevation of water surface in Cranberry Lake Reservoir on Dec. 31, 1935, was 1.12 feet higher than on Dec. 31, 1934, corresponding to an increase in storage of 345,461,888 cubic feet. This is equivalent to a mean yearly discharge of 10.9 second-feet, 0.076 second-foot per square mile, or 1.03 inches on drainage area.

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

Location.- Water-stage recorder, lat. 44°13'25", long. 75°4'35", at Flat Rock hydro-electric plant of Northern New York Utilities, Inc., 2½ miles north of Oswegatchie, St. Lawrence County.

Drainage area.- 263 square miles.

Records available.- October 1924 to September 1936.

Average discharge.- 11 years (1925-36), 534 second-feet.

Extremes.- Maximum discharge during year, 2,650 second-feet Mar. 18 (gage height, 5.91 feet), from rating curve extended above 1,900 second-feet; minimum, 11 second-feet July 27 (gage height, 1.14 feet); minimum daily discharge, 120 second-feet Aug. 29. 1924-36: Maximum discharge, 4,010 second-feet Apr. 6, 1928 (gage height, 7.1 feet), from rating curve extended above 1,900 second-feet; minimum, probably less than 1 second-foot during complete shut-down of the power plant and the ponding of the entire flow of the river; minimum daily discharge, 1 second-foot July 25, 1926.

Remarks.- Records good. Discharge Nov. 19-26 computed on basis of Flat Rock plant output. 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 1935-36 (gage height, in feet, and discharge, in second-feet)

2.0	108	3.5	582
2.2	144	4.0	865
2.4	183	4.5	1,220
2.6	240	5.0	1,660
3.0	368	5.5	2,180

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	470	335	275	200	170	365	1,100	1,240	370	450	212	335
2	620	160	455	400	206	560	890	890	410	355	204	430
3	650	196	450	495	470	590	760	510	470	350	340	530
4	730	330	460	184	430	435	640	1,260	425	156	315	400
5	490	295	475	226	465	580	335	1,100	435	166	310	350
6	420	440	320	218	650	470	890	1,200	510	270	250	156
7	520	540	158	365	410	390	1,000	940	136	365	325	208
8	540	395	152	395	138	370	930	960	500	415	194	320
9	500	216	275	430	232	455	1,080	770	475	325	360	450
10	475	242	590	520	415	600	1,120	285	440	465	214	335
11	370	430	580	242	455	790	1,040	570	460	170	350	295
12	380	500	570	168	630	1,240	310	580	425	198	280	485
13	220	580	590	380	620	1,060	1,360	450	460	290	310	365
14	270	520	350	510	570	790	1,280	440	192	345	255	570
15	440	600	186	540	610	640	1,100	620	345	485	202	480
16	495	345	500	455	250	930	1,180	455	420	355	238	440
17	340	246	560	470	530	1,060	1,060	310	415	204	305	530
18	410	255	395	200	385	1,820	1,080	460	490	265	270	570
19	360	580	430	198	335	2,180	630	610	260	226	265	340
20	420	460	435	400	530	1,780	1,280	970	500	340	280	210
21	370	560	350	500	500	1,220	1,420	1,000	194	335	236	335
22	340	540	146	490	350	790	1,400	1,340	270	176	198	385
23	450	340	325	450	223	830	1,440	970	385	465	148	395
24	340	245	158	455	425	900	1,400	770	360	182	320	380
25	465	480	170	224	500	1,100	1,280	620	360	325	315	355
26	335	480	300	156	560	1,340	610	780	400	170	246	230
27	305	340	480	380	580	1,460	1,260	790	166	380	285	192
28	250	234	300	405	610	1,300	1,100	730	188	340	320	520
29	280	510	176	495	600	850	860	850	260	250	120	620
30	320	440	244	445	-	1,080	1,160	440	320	300	192	600
31	290	-	470	480	-	960	-	375	-	355	315	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	12,875	730	220	415		
November.....	11,824	600	160	394		
December.....	11,305	590	146	365		
Calendar year 1935.....	185,117	1,500	146	507	1.93	26.15
January.....	11,476	540	156	370		
February.....	12,884	650	138	444		
March.....	28,825	2,180	290	930		
April.....	30,975	1,440	310	1,032		
May.....	23,285	1,340	285	751		
June.....	11,041	610	156	368		
July.....	9,473	485	136	306		
August.....	8,164	360	120	263		
September.....	11,811	620	156	394		
Water year 1935-36.....	183,938	2,180	120	503	1.91	26.01

Oswegatchie River near Heuvelton, N. Y.

Location.- Water-stage recorder, lat. 44°36'0", long. 75°22'45", 2½ miles above Heuvelton, St. Lawrence County.

Drainage area.- 973 square miles.

Records available.- June 1916 to September 1936.

Average discharge.- 20 years, 1,710 second-feet.

Extremes.- Maximum discharge during year, 9,980 second-foot Mar. 23 (gage height, 6.91 feet); minimum, 295 second-foot Aug. 18 (gage height, 0.93 foot).

1916-36: Maximum discharge, 15,600 second-foot Jan. 11, 1930 (gage height, 9.1 feet), from rating curve extended above 11,700 second-foot; minimum, 200 second-foot Aug. 18, 1934 (gage height, 0.65 foot).

Remarks.- Records excellent except those for period Dec. 1 to Mar. 11, which are good.

Discharge Feb. 13 to Mar. 11 corrected for ice effect on basis of observer's notes, gage heights, and weather records. Discharge Jan. 3 and 4 computed from sum of East Branch near Oswegatchie and West Branch near Harrisville. Seasonal flow slightly regulated by storage in Cranberry Lake; slight diurnal fluctuation caused by power operations.

Rating tables, water year 1935-36 except period of ice effect (gage height, in feet, and discharge in second-feet)

Oct. 1 to Mar. 22				Mar. 23 to Sept. 30			
1.1	419	2.5	1,710	0.9	279	2.5	1,650
1.2	481	3.0	2,370	1.0	331	3.0	2,270
1.4	620	3.5	3,120	1.2	451	3.5	2,900
1.6	779	4.0	3,950	1.4	592	4.0	3,790
1.8	960	5.0	5,800	1.6	753	5.0	5,640
2.0	1,160	6.0	7,890	2.0	1,120	6.0	7,790
		7.0	10,200			7.0	10,200

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	555	689	1,440	513	788	1,600	5,240	3,380	1,280	639	465	430
2	613	674	1,470	475	867	1,500	4,670	3,620	1,110	720	499	516
3	893	689	1,340	650	765	1,400	4,310	3,620	975	805	455	570
4	1,160	705	1,240	950	620	1,400	3,850	3,240	1,000	745	413	674
5	1,300	643	984	1,250	669	1,700	3,330	2,840	993	610	413	736
6	1,390	628	1,140	1,120	841	2,000	2,950	2,840	903	570	420	745
7	1,290	759	1,000	970	895	1,900	2,920	2,690	849	577	432	712
8	1,140	975	1,000	886	886	1,700	3,220	2,440	796	534	438	596
9	1,130	1,180	960	932	981	1,400	3,250	2,140	757	555	413	534
10	1,120	1,090	1,320	980	870	2,000	3,140	1,970	665	577	401	548
11	1,000	904	1,940	1,050	674	3,400	3,140	1,720	1,130	577	401	499
12	849	895	2,160	1,050	666	5,650	3,140	1,310	1,390	548	417	531
13	754	991	2,160	909	700	6,640	3,220	1,300	1,360	510	365	592
14	713	1,290	1,960	814	900	7,070	2,990	1,250	1,240	428	388	859
15	635	1,470	1,770	868	1,000	6,870	3,220	1,180	1,070	413	382	1,120
16	570	1,560	1,510	1,060	1,000	6,080	3,220	1,140	906	485	426	1,200
17	606	1,560	1,420	1,100	950	5,650	3,420	1,280	814	485	369	1,170
18	674	1,350	1,500	960	800	5,960	3,620	1,250	840	492	336	967
19	705	1,150	1,590	814	700	6,710	3,700	1,100	858	478	439	814
20	645	1,090	1,350	688	750	7,720	3,540	1,260	867	458	397	876
21	674	1,140	1,340	598	700	8,640	3,220	1,450	814	395	371	831
22	697	1,200	1,160	586	700	9,200	3,460	1,890	745	402	326	666
23	713	1,240	919	814	900	9,640	3,540	2,140	667	417	386	570
24	771	1,180	823	883	800	9,400	3,620	2,080	615	452	406	580
25	841	971	682	779	650	8,400	3,620	1,850	600	534	377	626
26	876	832	635	779	700	7,450	3,220	1,510	608	570	420	687
27	895	949	635	735	1,400	6,840	2,780	1,340	668	556	407	698
28	858	970	628	596	1,600	6,610	2,390	1,350	654	606	375	946
29	814	970	606	643	1,700	6,510	2,750	1,340	593	600	424	1,320
30	697	1,150	651	682	1,600	6,230	3,060	1,520	556	577	451	1,580
31	689	-	606	738	-	5,680	-	1,520	-	563	388	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	26,265	1,390	555	847	0.871	1.00
November.....	30,864	1,560	628	1,029	1.06	1.18
December.....	37,849	2,160	606	1,221	1.25	1.44
Calendar year 1935.....	597,351	6,500	400	1,637	1.68	22.81
January.....	25,880	1,250	475	835	.858	.99
February.....	25,472	1,700	620	878	.902	.97
March.....	162,950	9,640	1,400	5,256	5.40	6.23
April.....	101,760	5,240	2,390	3,392	3.49	3.89
May.....	59,540	3,620	1,100	1,921	1.97	2.27
June.....	26,333	1,330	566	876	.902	1.01
July.....	16,878	805	396	544	.589	.64
August.....	12,600	499	326	406	.417	.48
September.....	23,611	1,890	438	784	.806	.90
Water year 1935-36.....	649,922	9,640	326	1,503	1.64	21.00

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 1936.

Average discharge.- 20 years, 521 second-feet.

Extremes.- Maximum discharge during year (supersedes figure published in Water-Supply Paper 799), 4,180 second-feet Mar. 19; maximum gage height, 7.33 feet Mar. 19 (ice jam); minimum discharge, 43 second-feet Aug. 21 (gage height, 1.10 feet).
1916-36: 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. Discharge corrected for ice effect Jan. 21 to Feb. 27 on basis of one discharge measurement, gage heights, and weather records. Discharge Dec. 22-28 and Jan. 1-10 computed on basis of records for Oswegatchie River near Heuvelton and East Branch near Oswegatchie. Slight diurnal fluctuations, principally during low flows, caused by pondage regulation.

Rating tables, water year 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 19				Mar. 20 to Sept. 30			
1.6	109	3.0	508	1.1	43	2.5	302
1.8	144	3.5	745	1.2	53	3.0	479
2.0	183	4.0	1,050	1.4	76	3.5	720
2.2	229	5.0	1,850	1.6	103	4.0	1,025
2.6	352	6.0	2,880	1.8	135	5.0	1,850
		7.0	4,010	2.0	175	7.0	4,010

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	292	242	593	120	150	381	1,660	1,360	367	267	78	197
2	407	232	530	140	150	374	1,520	1,410	365	222	81	211
3	566	224	434	180	140	370	1,360	1,240	327	197	76	204
4	593	217	310	300	140	374	1,140	1,060	306	162	74	260
5	617	217	312	280	150	415	934	695	276	169	69	199
6	570	324	280	240	150	422	865	775	246	152	66	150
7	495	438	248	220	150	394	928	660	206	139	64	125
8	418	446	271	220	140	359	1,060	595	218	132	61	112
9	349	442	344	240	140	370	1,060	528	433	115	61	113
10	302	403	516	268	140	412	960	467	826	105	61	107
11	263	363	641	251	140	592	892	417	774	99	60	95
12	242	356	617	259	140	1,420	895	371	634	83	58	158
13	219	440	566	262	140	2,020	960	342	564	82	56	400
14	203	622	500	271	130	1,610	922	350	432	84	53	513
15	194	700	462	292	130	1,460	928	482	330	85	52	360
16	181	661	462	292	130	1,460	895	528	268	77	52	235
17	164	584	446	271	130	1,540	895	504	228	76	52	210
18	171	508	403	242	130	2,130	928	480	236	74	54	214
19	204	450	359	232	120	3,820	928	447	265	74	50	163
20	232	396	328	227	120	3,780	928	608	234	85	48	148
21	215	418	283	220	120	3,220	960	748	202	71	46	134
22	222	438	240	200	120	2,500	1,180	720	191	70	51	112
23	279	399	250	200	120	2,000	1,280	634	167	66	62	95
24	342	328	190	190	120	1,670	1,160	530	161	90	84	104
25	352	279	170	180	140	1,750	1,010	444	148	210	86	161
26	330	302	150	180	200	2,290	835	341	131	215	80	260
27	302	277	140	170	300	2,450	775	306	164	221	71	228
28	274	229	130	160	363	2,550	748	402	211	152	64	528
29	245	454	124	150	377	2,540	635	539	252	126	89	365
30	237	593	121	160	-	2,080	1,020	513	273	114	175	865
31	237	-	118	150	-	1,800	-	436	-	99	171	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	9,717	617	164	313	1.21	1.40
November.....	12,032	700	217	401	1.55	1.73
December.....	10,508	641	118	339	1.31	1.51
Calendar year 1935.....	190,716	3,600	88	523	2.03	27.49
January.....	6,767	300	120	218	.845	.97
February.....	4,620	377	120	159	.616	.66
March.....	48,553	3,820	359	1,566	6.07	7.00
April.....	30,531	1,660	748	1,016	3.95	4.41
May.....	19,162	1,410	306	618	2.40	2.77
June.....	9,423	826	131	314	1.22	1.36
July.....	3,913	267	66	126	.488	.56
August.....	2,206	175	46	71.1	.275	.32
September.....	7,525	865	95	251	.973	1.09
Water year 1935-36.....	164,956	3,820	46	451	1.75	23.78

Note.- Maximum daily discharge supersedes figure published in Water-Supply Paper 799.

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 1936.

Average discharge.- 12 years, 590 second-feet.

Extremes.- Maximum discharge during year, 3,510 second-feet Mar. 21 (gauge height, 7.50 feet); from rating curve extended above 2,100 second-feet; minimum daily discharge (estimated), 90 second-feet Aug. 20, 21.

1924-36. Maximum discharge, about 8,300 second-feet Nov. 18, 1927 (gauge height, 13.0 feet), from rating curve extended 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. 24, 25, Dec. 3-13, and Dec. 16 to Mar. 20, which were based on three discharge measurements, gage heights, weather records, and records for St. Regis River at Brasher Center and West Branch of Oswegatchie River near Harrisville and are fair, and those for periods Aug. 20 to Sept. 13 and Sept. 15-30, which were also computed on basis of records for St. Regis River and West Branch of Oswegatchie River and are fair. Occasional diurnal fluctuations from power operations.

Rating tables, water year 1935-36 except periods of ice effect (gauge height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 20				Mar. 21 to Sept. 30			
1.6	142	3.0	620	1.4	94	3.0	680
1.8	185	3.5	870	1.6	134	3.5	935
2.0	236	4.0	1,140	1.8	183	4.0	1,220
2.2	295	5.0	1,750	2.0	242	5.0	1,820
2.4	362	6.0	2,440	2.2	311	6.0	2,470
2.6	440	8.0	3,900	2.6	482	8.0	3,900

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	269	217	453	140	140	400	2,020	2,100	392	465	152	320
2	354	217	368	140	140	360	1,760	1,680	392	335	136	360
3	453	217	300	190	140	340	1,480	1,490	383	272	130	340
4	491	214	260	300	140	360	1,220	1,250	350	258	124	400
5	526	222	240	280	140	440	1,020	1,040	315	268	119	340
6	453	292	220	260	130	420	1,140	908	282	272	117	300
7	366	373	220	240	130	400	1,520	805	258	252	121	240
8	303	348	260	220	130	380	1,600	755	255	208	130	190
9	269	326	560	220	120	400	1,370	675	278	194	124	260
10	241	300	750	240	120	480	1,160	605	333	240	113	280
11	227	275	700	240	120	650	1,070	550	269	239	109	260
12	214	281	600	220	120	1,100	1,220	508	350	214	104	320
13	204	339	490	240	120	1,500	1,310	477	404	191	102	700
14	197	464	408	240	120	1,300	1,190	516	321	173	102	935
15	190	500	358	240	110	1,100	1,040	580	255	165	94	700
16	181	432	380	220	110	1,200	1,060	580	223	150	96	550
17	181	362	340	220	110	1,400	1,280	605	208	134	104	480
18	183	323	300	200	110	2,200	1,570	575	305	132	102	460
19	214	300	260	200	110	2,800	1,920	605	619	130	100	400
20	257	293	240	190	110	3,400	1,370	943	506	130	90	360
21	235	354	220	190	100	3,350	1,420	1,130	348	130	90	300
22	219	408	220	180	100	2,810	1,820	990	264	124	95	260
23	264	389	200	180	100	2,260	1,730	780	220	121	150	240
24	388	280	190	170	100	2,000	1,400	615	194	168	260	240
25	400	260	180	170	130	2,210	1,190	511	180	471	300	300
26	344	272	170	160	240	2,600	1,040	441	183	635	240	420
27	300	252	160	160	420	2,640	982	410	270	602	200	420
28	257	274	160	160	500	2,890	908	478	602	404	140	900
29	241	396	150	150	450	2,640	1,170	545	680	268	180	1,400
30	227	513	150	150	-	2,080	1,710	477	615	200	280	1,300
31	219	-	140	150	-	2,000	-	432	-	167	280	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	8,847	526	181	285	0.851	0.98
November.....	9,693	513	214	323	.964	1.08
December.....	9,644	750	140	311	.928	1.07
Calendar year 1935.....	201,134	3,020	120	551	1.64	22.34
January.....	6,260	300	140	202	.603	.70
February.....	4,640	500	100	160	.478	.52
March.....	45,110	3,400	340	1,552	4.53	5.34
April.....	40,280	2,020	908	1,343	4.01	4.47
May.....	24,221	2,100	410	781	2.33	2.69
June.....	10,279	680	190	343	1.02	1.14
July.....	7,712	635	121	249	.743	.86
August.....	4,484	300	90	145	.433	.50
September.....	13,975	1,400	190	466	1.39	1.55
Water year 1935-36.....	188,145	3,400	90	514	1.53	20.90

Raquette River at Piercefield, N. Y.

Location.- Water-stage recorder, lat. 44°14'5", 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 1936.

Average discharge.- 28 years, 1,285 second-feet.

Extremes.- Maximum discharge during year, 5,330 second-feet Mar. 30 (gage height, 10.13 feet); minimum, 76 second-feet Sept. 1 (gage height, 2.03 feet); minimum daily discharge, 138 second-feet Aug. 6.

1908-36: 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 except those estimated for Nov. 3 and Aug. 29-31, which are good. Large diurnal fluctuation in flow 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 1935-36 (gage height, in feet, and discharge, in second-feet)

2.4	121	3.6	360	5.0	940	8.0	2,850
2.6	150	3.9	415	5.5	1,070	8.5	3,350
2.8	183	4.0	474	6.0	1,320	9.0	3,900
3.0	220	4.2	537	6.5	1,620	10.0	5,150
3.2	262	4.4	604	7.0	1,980	11.0	6,600
3.4	309	4.6	677	7.5	2,400		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	686	510	696	594	271	307	5,260	2,400	2,030	526	304	380
2	429	459	751	597	265	334	5,250	2,450	1,740	373	297	429
3	692	444	768	601	307	368	5,100	2,150	1,640	334	280	618
4	862	444	770	592	312	337	4,890	2,420	1,610	326	248	741
5	920	438	766	553	352	337	4,760	3,020	1,520	324	196	820
6	903	430	776	541	424	387	4,600	3,370	1,430	326	138	952
7	835	430	796	595	426	387	4,420	3,330	1,300	319	152	1,010
8	885	435	952	587	424	337	4,280	3,200	943	516	161	840
9	876	436	1,030	587	415	387	4,190	3,000	854	629	161	868
10	852	430	1,030	580	430	387	4,040	2,900	894	622	176	801
11	818	444	928	576	424	401	3,920	2,760	908	569	147	798
12	797	450	503	582	430	464	3,810	2,680	930	537	164	861
13	776	479	920	582	372	655	3,660	2,590	872	436	174	798
14	765	1,140	1,000	587	297	696	3,530	2,720	854	407	169	840
15	745	1,000	986	587	347	755	3,350	2,680	792	411	168	885
16	933	1,040	962	580	387	840	3,220	2,380	486	407	148	885
17	897	1,060	939	587	387	930	3,110	2,070	395	401	141	908
18	916	1,040	908	573	387	1,210	3,050	3,020	705	411	148	908
19	1,070	1,020	885	573	387	1,560	3,000	3,100	980	407	183	894
20	1,220	824	862	580	374	2,120	2,980	3,110	898	407	220	885
21	1,220	832	858	576	374	2,840	2,890	3,120	935	401	274	870
22	1,220	840	840	549	349	5,330	2,960	3,140	962	401	284	836
23	1,170	854	797	564	292	4,020	2,890	3,100	689	395	395	810
24	1,370	840	725	574	302	4,380	2,760	3,050	495	401	269	806
25	814	831	562	543	384	4,700	2,700	2,860	339	407	262	795
26	735	831	526	553	399	4,890	2,560	2,700	285	415	282	753
27	715	823	521	483	387	5,120	2,460	2,610	260	430	389	604
28	677	827	521	483	387	5,180	2,390	2,500	276	430	401	633
29	604	809	537	486	363	5,230	2,340	2,290	368	401	330	622
30	587	686	557	486	-	5,290	2,350	2,200	520	374	330	629
31	570	-	582	297	-	5,290	-	2,110	-	339	380	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	26,599	1,370	429	858	1.19	1.37
November.....	21,126	1,140	430	704	.975	1.09
December.....	24,254	1,030	503	782	1.08	1.24
Calendar year 1935.....	432,650	4,430	255	1,185	1.64	22.27
January.....	17,234	601	297	556	.770	.89
February.....	10,675	430	271	368	.510	.65
March.....	63,819	5,290	307	2,069	2.85	3.29
April.....	106,820	5,260	2,340	3,561	4.93	5.50
May.....	86,030	5,370	2,070	2,743	3.80	4.38
June.....	26,910	2,030	260	897	1.24	1.38
July.....	13,082	3,220	319	422	.584	.67
August.....	7,371	401	138	258	.330	.38
September.....	25,659	1,030	380	769	1.09	1.22
Water year 1935-36.....	426,579	5,290	138	1,166	1.61	21.96

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 1936.

Average discharge.- 23 years (1910-13, 1914-17, 1919-36), 1,087 second-feet.

Extremes.- Maximum discharge during year, 7,080 second-feet Mar. 20 (gauge height, 9.90 feet); minimum, 185 second-feet Aug. 17 (gauge height, 5.30 feet).
1910-17, 1919-36: Maximum discharge, about 16,200 second-feet Mar. 27, 1914 (gauge height, 9.1 feet, former datum); minimum, about 34 second-feet Aug. 8, 1917 (gauge height, 5.25 feet).

Remarks.- Records good except those for periods of ice effect, Dec. 2-8 and Dec. 18 to Mar. 13 (based on two discharge measurements, fragmentary gage-height record, and weather records) and those for Mar. 19, 20, 26-28, May 29, and Sept. 15-25 (computed on basis of fragmentary gage heights, observer's notes, and record for Grass River at Pyrites), which are fair. Twice-daily staff-gage readings used Sept. 26-30.

Rating tables, water year 1935-36 except periods of ice effect (gauge height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 20			Mar. 21 to Sept. 30		
5.8	176	7.0 1,440	5.8	185	7.0 1,440
6.0	305	7.5 2,180	6.0	321	7.5 2,180
6.2	470	8.0 3,020	6.2	485	8.0 3,020
6.6	910	9.0 4,970	6.6	915	9.0 4,970
		10.0 7,350			10.0 7,350

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	574	418	798	260	300	600	2,930	2,760	1,000	729	352	705
2	530	426	750	280	280	750	2,670	2,670	1,000	546	368	773
3	728	474	600	400	300	750	2,420	2,420	990	665	321	750
4	1,010	409	340	650	300	800	2,080	2,180	928	1,780	307	750
5	1,180	453	300	600	300	850	1,810	1,980	807	1,800	314	819
6	1,010	556	280	550	280	800	1,960	1,740	750	1,410	321	773
7	848	608	300	500	280	750	2,760	1,570	601	1,130	360	611
8	774	640	550	480	280	700	2,670	1,410	570	739	344	442
9	660	650	906	460	260	800	2,340	1,260	580	652	321	733
10	556	650	1,660	480	260	950	2,050	1,220	542	652	264	928
11	453	598	1,450	500	260	1,300	1,980	1,180	485	867	286	867
12	528	629	1,180	460	240	2,200	2,180	1,140	459	784	271	872
13	425	806	1,000	460	240	2,800	2,260	1,080	459	590	257	1,340
14	426	892	898	440	240	2,340	2,000	1,070	532	552	250	1,510
15	383	1,030	810	460	240	2,180	1,860	1,080	468	558	237	1,260
16	435	1,000	728	420	240	2,420	1,840	1,210	433	321	224	1,140
17	352	860	608	400	220	2,670	2,930	1,210	433	337	218	1,140
18	395	694	550	400	220	4,260	2,840	1,360	523	337	224	1,200
19	363	629	480	380	220	5,000	2,760	1,510	662	321	218	1,260
20	418	650	440	360	220	6,500	2,420	2,420	784	300	218	1,100
21	418	751	400	360	220	5,960	2,500	2,500	642	293	230	915
22	435	835	380	340	220	4,860	2,840	2,870	552	286	237	773
23	453	810	360	340	200	3,760	2,760	1,260	425	257	478	739
24	657	566	340	320	200	3,570	2,480	1,500	399	300	940	739
26	717	536	320	320	280	3,660	2,150	1,270	376	680	1,090	761
26	751	556	320	320	480	4,000	1,960	1,140	344	1,290	819	879
27	636	499	300	320	850	4,200	1,860	1,030	565	1,410	652	1,040
28	480	587	280	320	1,000	4,050	1,810	928	683	1,080	399	1,620
29	453	785	230	300	950	3,570	1,920	1,080	807	746	468	1,930
30	508	860	260	300	-	3,200	2,840	1,070	795	408	590	1,710
31	470	-	260	300	-	2,930	-	1,080	-	399	611	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	18,047	1,180	352	582	0.945	1.09
November.....	19,857	1,030	409	662	1.07	1.19
December.....	18,128	1,660	260	585	.950	1.10
Calendar year 1935.....	375,032	5,440	220	1,027	1.67	22.65
January.....	12,480	650	260	403	.654	.75
February.....	9,580	1,000	200	330	.536	.58
March.....	83,380	6,500	700	2,690	4.37	5.04
April.....	69,350	2,930	1,810	2,312	3.75	4.18
May.....	48,158	2,760	928	1,553	2.52	2.90
June.....	19,594	1,000	344	620	1.01	1.15
July.....	22,219	1,800	257	717	1.16	1.34
August.....	12,179	1,090	218	393	.638	.74
September.....	30,079	1,930	442	1,003	1.63	1.82
Water year 1935-36.....	362,051	6,500	200	989	1.61	21.86

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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 1936.

Average discharge.- 11 years, 231 second-feet.

Extremes.- Maximum daily discharge during year, 1,750 second-feet (computed) Mar. 20; minimum discharge, 26 second-feet Aug. 6 (gage height, 0.55 foot); minimum daily discharge, 62 second-feet (computed) Feb. 17, 1925-26. 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 May 18 to Sept. 30, good Oct. 1 to Dec. 31 and Apr. 1 to May 17, and fair Jan. 1 to Mar. 31. Discharge for periods of ice effect, Dec. 27-29, Mar. 11, 12, computed on basis of gage heights and weather records. 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 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.9	58	1.6	202
1.0	70	1.8	272
1.1	84	2.0	356
1.2	101	2.5	635
1.3	121	3.0	970
1.4	145	4.0	1,820

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*160	92	120	92	*92	*125	538	*750	196	176	138	195
2	196	138	158	*70	*92	*130	444	*620	202	147	94	124
3	*245	96	108	*120	91	*160	420	*500	196	159	92	139
4	*260	89	117	*94	87	*155	358	*460	184	371	94	131
5	*230	133	122	*125	80	*160	308	*380	169	299	125	113
6	184	127	111	*94	91	*165	*360	*350	162	259	91	117
7	*185	164	154	*114	91	*140	*520	*320	115	186	120	96
8	*190	113	119	*110	*91	*140	462	*300	142	158	122	105
9	*125	145	161	*116	*81	*145	404	*270	150	161	96	159
10	131	*96	223	*104	*91	*160	380	*240	143	163	113	147
11	121	*140	194	*110	*91	180	345	*240	170	164	87	120
12	142	*108	164	*120	*78	420	348	*290	194	164	81	142
13	114	*140	164	*114	*88	494	364	*290	178	108	92	254
14	*98	193	164	*106	*91	401	*330	*300	169	161	77	179
15	*135	172	128	*120	*72	392	*320	*270	159	104	92	140
16	*106	188	168	*102	*91	400	*330	292	115	133	86	144
17	*130	150	110	*94	*62	*520	*430	305	126	98	117	140
18	94	108	144	*92	*91	*1,250	*462	329	162	134	94	191
19	*122	144	124	*118	*72	*1,650	431	380	228	92	75	113
20	115	112	125	*92	*91	*1,750	420	716	166	108	92	145
21	*114	190	118	*114	*82	*1,350	442	636	176	111	63	94
22	*114	124	92	*92	*91	1,010	484	462	108	128	141	123
23	*135	156	108	*106	*82	782	*430	370	136	94	149	98
24	*190	93	92	*94	*90	637	*390	311	94	181	248	114
25	*118	130	92	*92	*88	*760	*350	283	107	197	102	168
26	*145	141	92	*92	*104	928	*330	257	122	301	144	113
27	106	115	90	*92	*135	806	*350	246	174	229	93	150
28	138	144	90	*104	*130	765	*340	242	246	167	94	280
29	94	166	90	*92	*125	672	*460	232	233	121	122	259
30	133	182	92	*92	-	582	*640	215	181	143	166	200
31	95	-	92	*92	-	560	-	211	-	113	97	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	4,425	260	94	143	1.08	1.24
November.....	4,092	193	89	136	1.03	1.15
December.....	3,896	223	90	126	.955	1.10
Calendar year 1935.....	71,052	831	60	195	1.48	20.03
January.....	3,169	125	70	102	.773	.89
February.....	2,631	156	62	90.7	.687	.74
March.....	17,769	1,750	125	574	4.35	5.02
April.....	15,180	640	308	406	3.03	3.44
May.....	11,073	750	211	357	2.70	3.11
June.....	4,866	246	94	162	1.23	1.37
July.....	5,134	371	92	166	1.26	1.45
August.....	3,389	248	63	109	.826	.95
September.....	4,481	230	94	149	1.13	1.26
Water year 1935-36.....	77,125	1,750	62	211	1.60	21.72

*Computed from power-plant record furnished by Malone Light & Power Co.

Note.- Maximum discharge published in Water-Supply Paper 799 is superseded by the maximum daily discharge contained herein.

Chateaugay River near Chateaugay, N. Y.

Location.- Water-stage recorder, lat. 44°54'35", long. 74°5'10", 150 feet below dam of International Paper Co. and 1 mile south of Chateaugay, Franklin County.

Drainage area.- 112 square miles.

Records available.- September to December 1908, October 1926 to September 1936.

Average discharge.- 10 years (1926-36), 176 second-feet.

Extremes.- Maximum discharge during year, 1,080 second-feet (revised) Mar. 25; maximum gage height, 5.19 feet Mar. 25 (backwater of short duration from ice); minimum discharge, 26 second-feet Sept. 23 (gage height, 0.73 foot); minimum daily discharge, 45 second-feet Oct. 13.

1908, 1926-36: Maximum discharge, 2,060 second-feet Apr. 8, 1928 (gage height, 7.3 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. Discharge for periods of ice effect, Dec. 5-8, Dec. 18 to Jan. 4, Jan. 14, 15, Jan. 20 to Mar. 4, computed on basis of one discharge measurement, gage heights, and weather records. Flow regulated by storage in Upper and Lower Chateaugay Lakes. Large diurnal fluctuation caused by power operations.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.0	41	2.5	223
1.2	55	3.0	328
1.4	72	3.5	462
1.6	91	4.0	630
2.0	141	5.0	1,060

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	118	108	110	110	100	100	134	480	168	124	99	69
2	126	108	108	120	100	100	146	475	164	124	98	64
3	120	108	110	120	100	100	144	440	154	132	100	66
4	124	106	102	130	100	110	128	400	150	133	100	64
5	118	108	100	128	100	138	130	365	142	130	100	64
6	116	106	100	113	100	124	150	365	140	130	99	63
7	118	106	110	114	100	116	142	430	140	124	102	68
8	114	106	120	112	100	114	142	408	136	124	84	65
9	114	106	126	116	95	116	136	355	134	130	89	66
10	114	106	120	118	95	124	146	325	130	132	93	67
11	114	106	118	119	95	375	164	295	134	122	88	66
12	112	108	114	119	95	510	182	295	130	122	90	75
13	45	114	114	120	95	330	166	300	126	124	88	69
14	106	112	112	120	95	390	146	260	124	122	86	68
15	108	110	112	120	95	400	168	270	124	122	82	69
16	108	108	114	116	95	390	200	250	122	122	84	66
17	108	108	112	118	95	445	246	275	122	120	88	75
18	108	110	110	112	90	640	330	255	130	120	81	65
19	106	110	110	110	90	830	360	335	126	119	68	55
20	106	120	110	110	90	920	340	445	124	118	68	58
21	106	116	110	110	90	920	325	440	123	118	68	63
22	106	110	110	110	90	898	310	420	124	120	68	60
23	112	110	110	110	90	898	330	385	124	118	68	63
24	106	108	110	110	90	900	315	355	122	122	73	63
25	108	110	110	110	90	990	330	305	124	120	65	65
26	106	108	110	110	100	898	295	290	126	116	68	61
27	107	108	110	100	140	898	295	260	130	108	68	65
28	106	112	110	100	120	852	310	210	126	104	72	74
29	108	112	110	100	100	830	345	206	126	104	70	64
30	109	110	110	100	-	495	415	198	124	104	68	61
31	108	-	110	100	-	112	-	188	-	102	69	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,385	126	45	109		
November.....	3,274	120	106	109		
December.....	3,442	126	100	111		
Calendar year 1935.....	65,304	715	45	173	1.54	20.98
January.....	3,500	130	100	113		
February.....	2,835	140	90	97.8		
March.....	15,063	990	100	486		
April.....	6,970	415	128	232		
May.....	10,277	480	188	332		
June.....	3,969	168	122	132		
July.....	3,750	152	102	121		
August.....	2,544	102	65	82.1		
September.....	1,961	75	55	65.4		
Water year 1935-36.....	60,970	990	45	167	1.49	20.23

Note.- Elevation of water surface of Chateaugay Lakes on Sept. 30, 1936, was 0.33 foot lower than on Sept. 30, 1935, corresponding to an approximate decrease in storage of 43,699,000 cubic feet. This is equivalent to a mean annual discharge of 1.39 second-feet, 0.012 second-foot per square mile, or a run-off of 0.16 inch from drainage area.

Elevation of water surface of Chateaugay Lakes on Dec. 31, 1935, was 0.55 foot lower than on Dec. 31, 1934, corresponding to an approximate decrease in storage of 72,852,000 cubic feet. This is equivalent to a mean annual discharge of 2.31 second-feet, 0.021 second-foot per square mile, or a run-off of 0.29 inch from drainage area.

Maximum daily discharge supersedes that published in Water-Supply Paper 799.

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 (adjustment of 1912).

Drainage area.- 8,277 square miles.

Records available.- 1871 to September 1936. Supplemental records prior to 1870 observed at St. Johns, Quebec. (See Water-Supply Paper 97, p. 340.)

Records of monthly discharge of Richelieu River at Chambly, Quebec, 1875-1916, published in Water-Supply Paper 424.

Extremes.- Maximum gage height recorded during year, 8.61 feet Mar. 27; minimum, 0.75 foot Nov. 12.

1871-1936: 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 height for July 2 estimated. Gage read once daily. Gage-height record furnished by Corps of Engineers, U. S. Army.

Gage height, in feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.65	1.10	1.82	1.74	1.84	1.76	8.54	6.77	5.00	2.52	1.70	1.00
2	1.43	.98	1.75	1.72	1.86	1.78	8.31	6.87	4.78	2.48	1.63	1.10
3	1.80	.97	1.93	1.64	1.87	1.76	8.33	6.69	4.62	2.55	1.65	1.07
4	1.68	1.50	1.75	1.71	1.90	1.80	8.02	6.72	4.57	2.62	1.52	1.05
5	1.65	1.35	1.72	1.74	1.81	1.77	8.03	6.67	4.48	2.40	1.47	1.12
6	1.50	.98	1.75	1.75	1.84	1.73	8.21	6.68	4.36	2.35	1.50	1.35
7	1.52	1.02	1.80	1.75	1.80	1.79	8.04	6.65	4.35	2.45	1.55	1.18
8	1.58	.98	1.94	1.74	1.83	1.80	8.05	6.45	4.17	2.32	1.57	1.10
9	1.55	.90	1.85	1.82	1.90	1.85	8.11	6.30	4.08	2.30	1.50	1.07
10	1.80	1.05	1.95	1.76	1.81	1.85	8.07	6.30	4.05	2.40	1.42	1.05
11	1.30	.92	1.68	1.80	1.78	1.87	8.03	6.10	3.98	2.35	1.35	1.30
12	1.40	.75	1.97	1.77	1.81	2.22	8.12	5.98	3.88	2.28	1.33	1.10
13	1.48	.82	1.95	1.97	1.74	3.08	7.91	5.95	3.80	2.37	1.28	1.10
14	1.50	1.00	1.97	1.71	1.80	3.80	7.87	5.82	3.73	2.28	1.15	1.20
15	1.15	1.18	1.97	1.90	1.81	4.20	7.92	6.10	3.60	2.15	1.40	1.50
16	1.25	1.10	1.98	1.74	1.80	4.43	7.79	5.85	3.45	2.10	1.15	1.38
17	1.48	1.24	2.00	1.76	1.77	4.85	7.67	6.25	3.50	2.06	1.05	1.20
18	1.42	1.15	2.02	1.79	1.78	5.50	7.67	5.73	3.70	2.13	1.15	1.32
19	1.33	1.45	2.05	1.80	1.80	6.37	7.67	5.67	3.35	2.02	1.35	1.25
20	1.02	1.50	1.97	1.81	1.82	7.17	7.69	5.55	3.30	1.98	1.03	1.30
21	1.55	1.48	1.93	1.93	1.74	7.69	7.63	5.83	3.05	1.92	1.02	1.45
22	1.35	1.42	1.98	2.02	1.78	7.99	7.31	5.80	3.02	1.95	1.10	1.45
23	1.12	1.32	1.90	1.81	1.74	8.22	7.43	5.75	3.05	1.90	1.25	1.42
24	1.10	1.36	1.90	1.87	1.74	8.27	7.26	5.75	2.95	1.85	1.00	1.52
25	1.32	1.42	1.86	1.89	1.75	8.39	7.23	5.53	2.97	1.88	.98	1.10
26	.97	1.50	1.84	1.90	1.74	8.47	6.87	5.50	2.68	1.88	.98	1.35
27	1.26	1.58	1.80	1.86	1.78	8.61	6.97	5.37	2.78	1.85	.95	1.40
28	1.15	1.80	1.78	1.87	1.74	8.57	7.17	5.28	2.73	1.83	1.00	1.03
29	1.13	1.58	1.76	1.88	1.78	8.53	6.77	5.15	2.65	1.74	1.70	1.10
30	1.08	1.62	1.71	1.87	-	8.42	6.72	5.07	2.55	1.68	1.07	1.05
31	1.05	-	1.70	1.88	-	8.34	-	4.98	-	1.68	1.10	-

Lake Champlain at Burlington, Vt.

Location.- Staff gage, lat. 44°28'40", long. 73°13'25", on south side of wharf of Champlain Transportation Co., at foot of King Street, Burlington, Chittenden County. Zero of gage is about 92.5 feet above mean sea level.

Records available.- May 1907 to September 1936.

Extremes.- Maximum gage height observed during year, 8.65 feet Mar. 27, 28; minimum, 0.96 foot Nov. 11, 12.
1907-36: Maximum gage height observed, that of Mar. 27, 28, 1936; minimum, -0.25 foot Dec. 4, 1908.

Remarks.- Gage read once daily. No record for days on which no gage heights are shown. Gage-height record furnished by D. A. Loomis, General Manager, Champlain Transportation Co.

Gage height, in feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.54	1.10	-	1.82	-	-	8.45	6.66	4.96	-	1.76	1.16
2	1.54	1.08	1.84	1.80	-	1.88	8.55	-	4.86	2.42	-	1.16
3	1.52	-	1.94	1.80	1.94	-	8.53	-	4.76	2.26	1.68	1.22
4	1.52	1.06	1.94	1.78	-	1.88	-	6.85	4.74	2.24	1.64	1.24
5	1.56	1.04	1.96	-	-	1.90	-	6.66	4.60	-	1.60	1.20
6	-	1.02	1.94	1.78	-	1.92	-	6.64	4.46	2.22	1.58	-
7	1.56	1.02	1.96	1.78	-	-	8.25	-	-	2.20	1.56	1.18
8	1.54	1.00	-	1.76	-	-	8.23	-	4.56	2.18	1.46	1.16
9	1.54	.98	1.96	1.76	-	1.92	8.15	-	4.26	-	-	1.26
10	1.52	-	1.98	1.78	-	1.94	8.15	-	4.16	2.16	1.44	1.28
11	1.50	.96	2.04	1.78	-	1.94	8.13	6.22	4.04	-	1.38	1.30
12	1.50	.96	2.04	-	1.86	-	-	6.12	4.00	-	1.36	1.32
13	-	1.04	2.04	-	1.86	3.54	8.05	6.04	3.86	2.14	1.34	-
14	1.48	1.14	2.06	1.74	1.84	3.96	8.03	6.02	-	2.12	1.32	1.28
15	1.46	1.30	-	1.74	-	-	7.86	6.02	3.72	-	1.30	1.30
16	1.44	1.32	2.12	1.78	-	4.54	-	-	3.66	-	-	1.32
17	1.42	-	2.14	1.80	1.84	4.54	-	-	3.58	-	1.28	1.34
18	1.40	1.34	2.14	-	1.84	5.40	7.73	5.94	3.52	-	1.26	1.38
19	1.38	1.44	2.12	-	1.84	6.46	-	5.86	3.36	-	1.22	1.36
20	-	1.44	2.10	-	-	7.25	7.73	5.84	3.26	2.06	1.20	-
21	1.32	1.50	2.10	1.84	-	7.75	7.69	5.84	-	2.04	1.18	1.34
22	1.30	1.54	-	1.86	1.84	-	-	-	3.18	2.02	1.18	1.34
23	1.28	1.56	-	-	-	-	7.55	5.84	3.14	2.00	-	1.32
24	1.24	-	2.06	1.90	1.84	8.45	7.45	-	3.10	1.98	1.14	1.30
25	1.24	1.58	2.04	-	1.84	8.51	7.53	5.66	3.06	1.96	1.14	1.28
26	1.18	1.58	1.96	-	1.86	8.60	-	5.62	2.96	-	1.12	1.26
27	-	1.60	1.94	1.96	1.86	8.65	7.05	5.46	-	1.94	1.12	-
28	1.16	1.62	1.90	1.96	1.86	8.65	-	5.42	-	1.90	1.10	1.20
29	1.14	1.64	-	1.96	-	-	-	6.85	5.32	2.76	1.08	1.20
30	1.12	1.78	1.84	-	-	8.45	6.66	5.18	2.66	1.84	-	1.16
31	1.12	-	1.84	-	-	8.45	-	-	-	1.78	1.14	-

Great Chazy River at Perry Mills, N. Y.

Location.- Water-stage recorder, lat. 45°0'0", long. 73°30'5", 500 feet above highway bridge at Perry Mills, Clinton County.

Drainage area.- 247 square miles.

Records available.- September 1928 to September 1936.

Extremes.- Maximum discharge during year, about 4,700 second-feet (revised) Mar. 19; maximum gage height, 10.57 feet Mar. 19 (backwater from ice); minimum discharge, 3.6 second-feet Aug. 20 (gage height, 1.43 feet); minimum daily discharge, 26 second-feet Sept. 25.

1928-36: Maximum discharge, 5,810 second-feet Mar. 16, 1929; 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 period of ice effect, Dec. 5 to Mar. 19, which are fair and were computed on basis of three discharge measurements, gage heights, and weather records. Diurnal fluctuation caused by operation of sawmill nearby. Partial regulation by storage in Chazy Lake. Clinton Prison at Dannemora obtains its water supply from Chazy Lake.

Rating tables, water year 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 18				Mar. 19 to Sept. 30				
2.0	44	3.0	252	5.0	1,210	1.8	23	640
2.2	70	3.2	316	6.0	1,910	2.2	70	5.0 1,210
2.4	104	3.5	426	7.0	2,740	2.6	146	6.0 1,960
2.6	146	4.0	640	8.0	3,650	3.0	252	7.0 2,910
2.8	194	4.5	910			3.5	426	8.0 5,110

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	106	88	151	260	160	170	560	360	174	94	74	80
2	174	90	180	260	160	160	480	300	166	77	75	89
3	204	62	128	260	160	150	740	344	146	79	77	69
4	166	53	120	240	160	140	580	325	130	97	76	69
5	152	47	110	240	150	140	442	285	138	91	70	75
6	128	54	120	220	140	120	450	246	130	88	70	66
7	110	46	130	220	140	110	740	224	120	78	71	45
8	106	51	150	220	130	110	570	360	108	68	63	51
9	102	51	180	220	130	130	490	415	97	69	50	88
10	104	52	300	220	130	170	440	293	102	240	41	71
11	95	54	290	220	120	240	490	244	128	550	52	76
12	94	85	260	200	120	1,200	770	360	234	340	52	99
13	95	164	260	200	110	2,400	660	445	160	180	76	96
14	93	222	260	190	100	1,900	480	370	131	144	76	59
15	90	170	260	190	100	1,400	390	305	110	110	84	54
16	90	146	240	200	100	1,200	475	330	104	93	88	62
17	90	131	240	190	95	1,300	1,100	323	96	82	100	57
18	85	126	220	220	95	2,800	1,140	380	108	76	76	48
19	92	136	190	200	95	4,600	880	510	124	79	63	72
20	93	154	170	220	90	3,930	620	1,630	110	76	29	73
21	87	254	160	200	90	2,460	540	940	99	85	42	69
22	84	240	220	200	90	2,380	495	540	96	59	55	57
23	91	198	240	220	85	1,220	380	400	88	47	83	32
24	102	137	240	190	85	1,060	360	320	82	40	58	31
25	106	144	260	190	100	2,150	350	275	80	60	80	26
26	106	150	240	190	120	2,040	326	246	75	104	90	40
27	104	142	260	190	150	1,100	325	224	96	122	85	35
28	97	154	260	190	190	1,040	305	224	116	94	90	38
29	95	188	260	180	190	730	405	224	108	77	99	46
30	95	186	240	170	-	600	480	200	102	73	95	57
31	89	-	260	170	-	590	-	190	-	73	80	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,325	204	84	107	0.435	0.50
November.....	3,775	254	46	126	.510	.57
December.....	6,559	300	110	212	.858	.99
Calendar year 1935.....	93,210	2,090	46	255	1.03	14.03
January.....	6,480	280	170	209	.846	.98
February.....	3,595	190	85	124	.502	.54
March.....	37,740	4,600	110	1,217	4.93	5.68
April.....	16,466	1,140	308	549	2.22	2.48
May.....	11,832	1,630	190	362	1.55	1.79
June.....	3,553	254	75	119	.482	.53
July.....	3,549	580	40	114	.462	.53
August.....	2,220	100	29	71.6	.290	.33
September.....	1,830	99	26	61.0	.247	.28
Water year 1935-36.....	100,926	4,600	26	276	1.12	15.21

Note.- Revised maximum discharge for current year supersedes that published in Water-Supply Paper 799.

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 1936.

Extremes.- Maximum mean daily discharge during year (estimated), 4,200 second-feet Mar. 19; maximum gage height, 10.78 feet Mar. 18 (ice jam); minimum discharge, 103 second-feet Aug. 10 (gage height, 1.78 feet); minimum daily discharge, 192 second-feet Sept. 6 and 7.

1930-36: Maximum discharge, 5,780 second-feet Apr. 17, 1933, from rating curve extended above 3,700 second-feet; maximum recorded gage height, about 12.0 feet Feb. 10, 1933 (ice jam); minimum discharge, 67 second-feet Aug. 27, 1934 (gage height, 1.63 feet); minimum daily discharge, 96 second-feet Sept. 22, Nov. 10 and 12, 1934.

Remarks.- Records good except those for periods of ice effect, Dec. 3-10 and Dec. 16 to Mar. 20 (based on two discharge measurements, gage heights, weather records, and power-plant record at Cadyville), and those for periods Apr. 23, 24, and May 30, 31 (based on power-plant record at Cadyville), which are fair. Considerable diurnal fluctuation caused by power operations. Flow partly regulated by storage in Lower Saranac Lake and elsewhere.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	330	395	530	580	300	350	1,560	1,960	430	450	320	370
2	465	375	540	360	300	300	1,700	2,000	470	400	235	340
3	400	300	480	360	280	490	1,720	1,980	450	800	350	425
4	420	360	440	390	280	460	1,580	1,960	445	860	430	385
5	275	350	420	350	280	550	1,500	1,760	425	570	335	305
6	275	420	440	340	300	500	1,620	1,540	430	550	430	192
7	300	420	460	320	320	460	1,840	1,560	365	610	445	192
8	380	340	500	320	320	550	1,680	1,500	420	660	410	365
9	370	295	600	340	320	480	1,600	1,300	420	660	214	440
10	390	300	700	340	300	650	1,520	1,120	410	610	234	310
11	360	425	650	320	300	900	1,520	1,260	460	570	300	242
12	380	570	610	300	300	2,200	1,600	1,300	490	465	255	495
13	370	580	590	280	300	1,900	1,540	1,140	465	540	290	485
14	385	640	650	260	300	1,200	1,400	1,120	430	620	320	375
15	400	540	500	280	300	900	1,280	990	470	490	340	390
16	475	450	460	280	300	1,100	1,440	980	510	470	280	465
17	445	305	460	280	340	1,400	1,600	1,000	430	400	360	910
18	415	355	440	260	430	3,000	1,540	1,200	600	360	410	750
19	470	425	440	350	440	4,200	1,380	1,380	530	265	330	660
20	400	510	420	260	380	4,000	1,360	1,600	540	345	300	540
21	375	540	420	260	360	3,700	1,400	1,500	400	400	275	513
22	415	480	420	280	360	3,500	1,460	1,440	370	345	385	513
23	500	520	420	300	360	2,700	1,340	1,400	405	405	365	513
24	470	650	420	340	340	2,360	1,300	1,260	395	405	295	506
25	400	680	400	360	380	2,850	1,200	1,240	415	390	345	526
26	495	680	400	340	550	2,800	1,200	1,160	510	320	280	520
27	395	670	380	320	600	2,480	1,100	1,080	720	280	255	488
28	380	680	380	300	550	2,380	1,080	1,080	450	345	216	640
29	435	810	380	300	350	2,240	1,280	1,000	415	310	380	630
30	435	560	380	300	-	2,020	1,880	720	460	300	295	590
31	455	-	380	300	-	2,000	-	470	-	300	270	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	12,480	500	275	403	0.774	0.89
November.....	14,655	810	295	488	.937	1.05
December.....	14,670	700	380	473	.908	1.05
Calendar year 1935.....	251,328	2,360	170	689	1.32	17.97
January.....	9,700	380	260	313	.601	.69
February.....	10,320	600	280	358	.683	.74
March.....	54,640	4,200	300	1,765	3.38	3.90
April.....	44,520	1,880	1,080	1,484	2.85	3.18
May.....	41,000	2,000	470	1,323	2.54	2.93
June.....	13,730	720	365	458	.879	.98
July.....	14,515	860	265	468	.898	1.04
August.....	10,050	445	214	324	.622	.72
September.....	14,055	910	192	468	.898	1.00
Water year 1935-36.....	254,335	4,200	192	695	1.33	18.17

Note.- Maximum daily discharge supersedes that published in Water-Supply Paper 799.

West Branch of Ausable River near Newman, N. Y.

Location.- Water-stage recorder, lat. 44°18'40", long. 73°55'0", 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 1936.

Average discharge.- 17 years (1919-36), 219 second-feet.

Extremes.- Maximum discharge during year, 4,440 second-foot Mar. 18 (gage height, 6.39 feet); from rating curve extended above 3,200 second-foot; minimum, 27 second-foot Aug. 14 and 20 (gage height, 2.22 feet); minimum daily discharge, 38 second-foot Feb. 22, 23.

1916-17, 1919-36: Maximum discharge, 6,200 second-foot Oct. 6, 1932 (gage height, 9.61 feet), from rating curve extended above 3,200 second-foot; practically no flow Sept. 13, 1920, caused by closing gates in logging dam (gage height, 1.60 feet); minimum daily discharge, 7.2 second-foot July 29, 1920.

Remarks.- Records good except those for periods of ice effect, Nov. 23-27, Dec. 3-8, Dec. 18 to Mar. 12, and Mar. 17, 18, which were based upon two discharge measurements, gage heights, and weather records and are fair. Discharge interpolated June 23, 24. Diurnal fluctuation at low and medium stages caused by power operations.

Rating table, water year 1935-36, except periods of ice effect (gage height, in feet, and discharge, in second-foot)

2.3	33	2.8	96	3.8	396	5.5	1,400
2.4	42	3.0	135	4.2	580	6.0	1,810
2.5	52	3.2	164	4.6	785	7.0	2,780
2.6	65	3.4	245	5.0	1,040	8.0	3,930

Discharge, in second-foot, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	130	67	208	40	44	50	630	942	146	95	44	315
2	360	69	154	46	44	46	415	656	138	77	42	186
3	275	70	110	60	44	48	405	1,380	120	74	42	590
4	280	70	85	80	46	50	325	834	114	86	41	565
5	210	74	75	75	46	80	270	531	104	76	41	196
6	164	180	70	70	46	70	1,850	413	94	72	40	134
7	136	154	70	65	44	60	1,100	388	93	70	47	108
8	120	130	85	60	44	55	508	462	86	58	46	95
9	112	120	114	55	44	60	343	409	85	96	42	86
10	102	106	162	60	42	80	320	347	87	104	42	77
11	97	104	142	60	42	140	332	475	83	94	41	77
12	95	126	126	55	42	750	312	457	95	74	39	162
13	91	310	106	60	40	900	285	444	98	69	39	310
14	85	530	106	65	40	560	232	539	78	66	38	178
15	77	310	89	65	40	405	214	400	74	61	38	152
16	73	206	100	65	42	440	404	395	68	57	41	176
17	80	160	90	60	42	600	406	475	59	51	41	345
18	78	132	80	60	40	3,200	305	550	73	48	39	265
19	87	184	70	55	40	2,650	276	800	85	50	38	176
20	80	136	65	55	36	1,500	218	890	75	50	37	134
21	81	140	60	55	38	940	306	560	69	47	39	118
22	71	134	55	55	36	910	363	390	50	46	51	102
23	95	110	50	55	36	590	265	315	50	46	198	89
24	112	95	50	50	38	465	256	262	51	54	208	86
25	106	85	48	50	46	920	216	223	52	68	102	92
26	88	85	46	50	80	890	213	190	53	78	70	91
27	81	90	44	48	95	760	219	151	154	62	61	84
28	75	158	44	48	80	1,000	232	201	165	55	50	206
29	75	560	42	46	60	540	760	198	140	50	186	210
30	77	330	42	46	-	470	1,290	172	120	49	250	146
31	75	-	40	46	-	870	-	160	-	43	246	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,688	360	71	118	1.02	1.18
November.....	4,997	560	67	167	1.44	1.61
December.....	2,625	208	40	84.8	.731	.84
Calendar year 1935.....	71,652	1,460	40	196	1.69	22.99
January.....	1,760	80	40	56.6	.490	.56
February.....	1,359	95	36	46.9	.404	.44
March.....	20,189	3,200	46	651	5.61	6.47
April.....	13,270	1,850	213	442	3.81	4.25
May.....	14,629	1,380	160	472	4.07	4.69
June.....	2,752	168	50	91.7	.791	.88
July.....	2,026	104	43	65.4	.564	.65
August.....	2,279	250	37	73.5	.634	.73
September.....	5,321	580	77	177	1.53	1.71
Water year 1935-36.....	74,878	3,200	36	205	1.77	24.01

Ausable River near Ausable Forks, N. Y.

Location.- Water-stage recorder, lat. 44°27'5", long. 73°38'35", 1½ 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 1936.

Average discharge.- 12 years, 687 second-feet.

Extremes.- Maximum discharge during year, 16,700 second-feet Mar. 18 (gage height, 9.77 feet), from rating curve extended above 9,100 second-feet; minimum, 89 second-feet Aug. 19 (gage height, 1.06 feet).

1924-36: Maximum discharge, about 19,100 second-feet Oct. 1, 1924, from rating curve extended above 9,100 second-feet; maximum gage height, about 12.0 feet Mar. 27, 1934; minimum discharge, 77 second-feet Aug. 31, 1934 (gage height, 0.98 foot).

Remarks.- Records good except those for periods of ice effect, Nov. 25-27, and Dec. 6 to Mar. 12, which were based on three discharge measurements, gage heights, and weather records and are fair. Flow partly regulated by storage, principally in Taylor Pond and Fern Lake.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.1	97	2.0	433	4.0	2,350
1.2	122	2.2	545	5.0	3,050
1.4	181	2.6	815	6.0	5,740
1.6	252	3.0	1,160	7.0	8,090
1.8	355	3.5	1,690	8.0	10,900

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	296	188	638	130	150	280	2,100	3,060	397	248	139	748
2	650	201	493	160	150	260	1,470	2,760	363	222	130	465
3	691	226	344	220	160	240	1,420	3,740	344	241	133	1,090
4	691	219	276	260	160	260	1,110	2,620	309	201	133	876
5	569	212	241	300	160	340	912	1,660	292	186	130	504
6	444	292	220	280	150	320	2,350	1,260	264	196	133	340
7	373	382	200	260	140	280	3,340	1,070	226	198	130	260
8	326	335	220	240	140	260	1,810	1,210	226	184	142	252
9	296	318	320	220	150	280	1,260	1,160	226	208	139	245
10	276	264	440	220	160	360	1,130	1,020	230	292	136	195
11	260	252	400	220	150	750	1,080	1,470	248	301	128	175
12	248	268	360	220	150	2,400	1,120	1,510	280	234	128	212
13	241	545	320	220	150	3,580	1,030	1,210	237	198	128	650
14	226	1,280	280	240	150	1,620	895	1,420	201	191	125	468
15	222	839	260	220	160	1,030	815	1,110	201	178	130	326
16	208	575	260	220	150	1,320	1,230	1,080	205	175	130	363
17	205	444	240	220	150	2,290	1,520	1,180	178	162	133	802
18	215	344	240	220	150	10,600	1,140	1,440	212	150	136	638
19	230	438	220	220	140	8,980	989	1,770	230	144	117	428
20	215	377	200	200	140	5,280	839	2,480	212	150	133	322
21	198	416	180	200	140	3,820	920	1,580	215	156	136	256
22	201	408	170	200	170	3,630	1,160	1,110	169	147	166	241
23	226	359	160	190	180	2,080	946	539	150	144	306	234
24	264	234	150	180	180	1,690	823	705	147	162	532	215
25	260	220	140	180	170	2,840	712	618	144	188	322	215
26	237	220	140	170	300	3,180	664	528	159	208	219	226
27	222	260	130	170	480	2,450	664	493	292	195	159	194
28	215	314	130	170	420	3,360	670	528	402	169	130	228
29	205	1,520	120	170	340	1,970	1,800	522	322	153	238	402
30	198	964	120	160	-	1,640	3,790	455	288	142	954	296
31	201	-	120	160	-	2,650	-	397	-	142	704	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	9,309	691	198	300	0.670	0.77
November.....	12,915	1,520	188	430	.960	1.07
December.....	7,732	638	120	249	.556	.64
Calendar year 1935.....	218,986	4,180	120	600	1.34	18.16
January.....	6,450	300	130	208	.464	.53
February.....	5,590	480	140	186	.415	.45
March.....	70,040	10,600	240	2,259	5.04	5.61
April.....	39,689	3,790	664	1,323	2.95	3.29
May.....	41,805	3,740	397	1,349	3.01	3.47
June.....	7,359	402	144	245	.547	.61
July.....	5,865	301	142	189	.422	.49
August.....	6,520	954	117	210	.469	.54
September.....	11,856	1,080	175	395	.882	.98
Water year 1935-36.....	224,930	10,600	117	615	1.37	18.65

Black Brook at Black Brook, N. Y.

Location.- Staff gage, lat. 44°26'50", long. 73°44'45", 100 feet below hydroelectric plant of Associated Gas & Electric System and three-quarters of a mile south of Black Brook, Clinton County.

Drainage area.- 49.4 square miles.

Records available.- September 1924 to September 1936.

Average discharge.- 12 years, 50.3 second-feet.

Extremes.- Maximum discharge observed during year, 800 second-feet Mar. 19 (gage height, 6.0 feet) from rating curve extended above 300 second-feet; minimum, 2 second-feet several times during June, July, and August, when plant is shut down.

1924-36: Maximum discharge observed, that of Mar. 19, 1936; minimum, 0.8 second-foot July 2 and Aug. 29, 1931 (plant shut down).

Remarks.- Records good. Discharge corrected for ice effect Dec. 25-31, Jan. 20 to Feb. 1, and Feb. 5-13, on basis of one discharge measurement, gage heights, and weather records. Gage read once daily or after each change of gate opening at plant. On days of rapidly changing stage the discharge is averaged for intervals of a day from gage-height graph based on gage readings. Flow regulated by storage in Taylor Pond and Fern Lake and by operation of power plant.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 1-31)

1.0	0.9	1.4	5.9	2.0	37	3.5	246
1.1	1.5	1.5	8.9	2.2	55	4.0	341
1.2	2.5	1.6	13	2.6	102	5.0	556
1.3	3.9	1.8	24	3.0	160	5.5	675

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	11	26	22	40	84	92	136	28	34	36	18
2	7	27	25	32	50	122	84	90	28	32	36	5
3	7	42	19	50	55	78	80	84	27	18	36	32
4	7	46	7	58	55	92	84	60	27	3	36	18
5	7	47	28	62	55	83	73	70	27	2	36	5
6	*7	46	37	*58	50	72	90	57	17	17	36	5
7	23	44	19	*58	44	72	115	50	7	39	36	5
8	18	*42	13	54	44	66	*108	47	7	41	36	31
9	12	26	21	*51	48	72	90	43	16	41	36	36
10	12	12	26	*51	50	78	88	*41	23	54	36	5
11	16	10	37	51	48	80	84	71	22	69	36	5
12	18	12	36	51	50	106	98	70	3	47	36	29
13	18	23	28	51	55	136	108	46	2	37	40	42
14	18	38	24	47	60	122	71	67	2	37	42	25
15	19	45	22	41	57	90	*66	59	18	37	39	6
16	19	45	21	42	55	115	70	46	24	37	40	5
17	19	*45	25	44	53	174	122	39	24	35	42	49
18	21	40	27	43	53	377	108	51	24	32	45	120
19	18	17	23	42	55	608	96	66	27	22	43	56
20	11	25	17	40	56	399	80	59	20	43	42	21
21	11	33	16	40	76	265	72	55	10	37	42	5
22	13	37	16	42	96	303	*78	50	16	37	45	30
23	14	32	16	42	96	172	70	45	17	37	71	37
24	14	30	16	42	88	136	60	41	18	37	61	37
25	14	30	11	40	72	148	56	45	19	38	43	38
26	14	30	10	36	71	185	39	34	35	46	37	41
27	14	35	11	38	64	136	53	38	36	54	18	9
28	22	37	14	40	82	122	56	34	31	48	2	4
29	17	40	14	44	86	108	53	30	26	40	11	4
30	12	41	8	42	-	96	97	27	20	38	45	4
31	11	-	14	38	-	85	-	15	36	49	-	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	447	23	7	14.4		
November.....	988	47	10	32.9		
December.....	627	37	7	20.2		
Calendar year 1935.....	16,539	294	7	45.3	0.917	12.45
January.....	1,392	62	22	44.9		
February.....	1,764	96	40	50.3		
March.....	4,782	608	66	154		
April.....	2,441	122	39	81.4		
May.....	1,686	136	15	54.4		
June.....	601	36	2	20.0		
July.....	1,125	69	2	36.3		
August.....	1,199	71	2	38.4		
September.....	729	120	4	24.3		
Water year 1935-36.....	17,771	608	2	46.6	.984	13.39

*Estimated or interpolated from record of gate changes at power plant.

East Branch of Ausable River at Ausable Forks, N. Y.

Location.- Staff gage, lat. 44°28'20", 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 1936.

Average discharge.- 12 years, 309 second-feet.

Extremes.- Maximum discharge during year, about 10,800 second-feet Mar. 18 (gage height, 7.5 feet, from graph based on gage readings), from rating curve extended above 6,500 second-feet; minimum, 27 second-feet Aug. 13, 14 (gage height, 0.38 foot).

1924-36: 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 good except those for periods of ice effect, Nov. 18, 19, 26, 27, and Dec. 4 to Mar. 12, which were based on two discharge measurements, gage heights, and weather records and are fair. Discharge June 14, Sept. 2, 3, and 5-9 computed on basis of records for West Branch of Ausable River near Newman and Ausable River near Ausable Forks. 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 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet

Oct. 1 to Mar. 18			Mar. 19 to Sept. 30		
0.4	24	2.0 950	0.5	16	2.0 1,010
.6	70	2.5 1,410	.4	30	2.5 1,520
.8	140	3.0 1,960	.6	73	3.0 2,080
1.0	238	4.0 3,340	.8	140	4.0 3,400
1.2	354	5.0 5,100	1.0	235	5.0 5,100
1.4	482	6.0 7,170	1.2	353	6.0 7,170
1.6	617		1.6	652	

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	113	76	318	44	50	85	1,090	1,760	153	76	34	328
2	322	79	252	55	46	70	762	1,450	154	66	34	220
3	417	79	181	80	46	75	720	2,040	86	73	34	600
4	386	79	120	95	50	100	501	857	82	90	32	487
5	392	82	90	100	50	140	408	414	111	66	32	270
6	324	132	75	90	50	120	1,510	233	122	60	34	165
7	170	149	85	85	46	90	1,250	472	92	56	39	120
8	132	122	95	80	46	85	837	525	95	53	32	100
9	124	113	140	75	44	100	596	548	108	56	30	90
10	113	109	190	80	44	140	532	571	98	66	34	79
11	109	105	150	75	42	240	532	806	88	79	37	70
12	101	117	100	75	42	1,100	525	668	76	68	32	93
13	101	242	80	90	40	1,370	472	574	66	63	27	245
14	95	593	90	85	40	797	434	684	68	70	29	166
15	89	364	100	90	44	618	493	510	68	53	34	125
16	86	266	95	85	46	744	747	498	70	48	34	173
17	82	203	85	80	46	1,260	746	541	66	44	35	279
18	79	190	75	80	44	7,100	576	668	58	41	37	204
19	86	180	65	75	42	6,080	436	1,060	58	43	35	162
20	82	177	65	75	40	2,700	387	1,330	56	41	32	108
21	79	181	60	70	38	2,020	387	738	58	43	34	88
22	76	191	60	65	38	1,680	401	502	60	44	39	95
23	89	166	55	65	36	940	387	384	50	41	50	79
24	113	111	55	60	40	726	367	308	46	48	96	66
25	101	95	50	60	55	1,390	328	230	43	60	117	63
26	101	90	50	55	100	1,500	309	207	63	63	85	60
27	95	100	50	55	190	1,240	259	193	96	56	66	66
28	89	152	50	55	160	1,720	326	223	122	63	53	82
29	79	712	46	55	120	940	928	218	92	56	111	122
30	76	492	46	50	-	840	1,610	203	79	43	749	95
31	76	-	44	50	-	1,270	-	170	-	37	481	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	4,377	417	76	141	0.712	0.82
November.....	5,747	712	76	192	.970	1.08
December.....	2,997	318	44	96.7	.488	.56
Calendar year 1935.....	98,894	2,360	44	271	1.37	16.54
January.....	2,234	100	44	72.1	.364	.42
February.....	1,675	190	36	57.8	.292	.31
March.....	37,280	7,100	70	1,203	6.08	7.01
April.....	19,066	1,810	259	635	3.21	3.58
May.....	19,575	2,040	170	631	3.19	3.68
June.....	2,466	153	43	82.2	.415	.46
July.....	1,766	90	37	57.0	.286	.33
August.....	2,548	749	27	82.2	.415	.48
September.....	4,900	600	60	163	.823	.92
Water year 1935-36.....	104,621	7,100	27	286	1.44	19.65

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 1906, July 1923 to September 1936.

Average discharge.- 13 years (1923-36), 304 second-feet.

Extremes.- Maximum discharge during year, 8,310 second-feet Mar. 19 (gage height, 9.13 feet), from rating curve extended above 4,600 second-feet; minimum, 38 second-feet July 31 (gage height, 2.22 feet).

1923-36: Maximum discharge, about 11,800 second-feet Oct. 1, 1924 (gage height, 10.85 feet), from rating curve extended 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. 24-27 and Dec. 2 to Mar. 14 (based on three discharge measurements, gage heights, and weather records), and those for the periods Nov. 12-22, May 17-20, May 28 to June 9, June 21-23, and Sept. 12-30 (based on fragmentary gage-height record and the discharge record for East Branch of Ausable River at Ausable Forks), which are fair.

Rating tables, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

	Oct. 1 to Mar. 18				Mar. 19 to Sept. 30						
2.3	53	3.5	575	7.0	4,650	2.2	35	3.5	555	7.0	4,650
2.4	72	4.0	940	8.0	6,280	2.4	67	4.0	910	8.0	6,280
2.6	123	5.0	1,910			2.6	114	5.0	1,910		
3.0	288	6.0	3,200			3.0	273	6.0	3,200		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	106	101	324	55	70	100	883	607	160	83	49	144
2	239	103	220	70	70	80	646	524	160	81	49	114
3	319	98	160	100	70	90	762	624	140	73	45	167
4	254	98	120	120	76	140	620	600	130	79	51	232
6	227	103	90	130	80	190	530	444	140	77	49	162
6	173	112	75	120	80	150	1,030	371	140	73	51	109
7	143	115	65	110	75	130	1,790	334	130	69	53	87
8	133	126	100	100	70	110	990	328	110	67	51	83
9	130	123	160	95	70	130	792	308	120	73	49	77
10	120	123	300	100	65	190	706	283	106	106	45	75
11	117	115	220	95	60	650	741	394	103	111	43	69
12	109	140	180	95	60	1,500	886	480	98	87	46	80
13	101	240	160	120	65	2,800	778	460	98	73	45	110
14	101	420	190	110	60	1,700	666	415	92	73	43	70
15	101	300	200	110	65	838	568	344	90	69	51	50
16	103	240	150	110	70	1,260	719	318	85	65	48	65
17	103	200	130	100	70	2,380	822	334	81	63	45	120
18	95	180	110	100	65	4,960	614	460	79	60	45	110
19	101	170	100	95	60	6,200	524	700	79	58	46	100
20	98	170	90	90	60	3,670	486	741	77	58	43	90
21	95	180	85	90	55	2,500	492	505	75	49	45	80
22	93	264	80	85	58	2,670	524	397	75	60	67	80
23	103	231	75	85	55	1,220	456	334	65	63	92	75
24	117	140	70	80	60	928	404	298	63	73	137	65
25	117	100	65	80	70	1,460	376	266	69	79	109	60
26	106	90	65	75	120	1,490	355	227	67	77	75	50
27	101	95	60	75	220	1,050	339	210	92	62	65	55
28	98	176	60	75	180	1,500	323	210	140	65	65	65
29	101	488	60	70	140	934	350	210	109	63	81	90
30	101	482	55	70	-	800	640	190	98	54	222	85
31	103	-	55	70	-	822	-	170	-	41	206	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October	4,008		319	93	129	0.469	0.54					
November	5,523		488	90	184	.669	.75					
December	3,874		324	55	125	.455	.52					
Calendar year 1935	96,960		1,840	50	266	0.967	13.12					
January	2,880		130	55	92.9	.338	.39					
February	2,305		220	55	79.5	.289	.31					
March	42,640		6,200	80	1,375	5.00	5.76					
April	19,812		1,790	323	660	2.40	2.68					
May	12,055		741	170	389	1.41	1.63					
June	3,061		160	63	102	.371	.41					
July	2,184		111	41	70.5	.256	.30					
August	2,109		222	43	68.0	.247	.28					
September	2,819		232	50	94.0	.342	.38					
Water year 1935-36	103,270		6,200	41	282	1.03	13.95					

Lake George at Rogers Rock, N. Y.

Location.- Staff gage, 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. Zero of gage is 315.93 feet above mean sea level (adjustment of 1912).

Records available.- July 1913 to September 1936.

Extremes.- Maximum gage height observed during year, 5.09 feet Apr. 9; minimum, 1.99 feet Mar. 10.

1913-36: Maximum gage height observed, that of Apr. 9, 1936; minimum, 1.06 feet Dec. 29, 1922.

Remarks.- Records good. Gage read once daily. Elevation of lake surface regulated by power operations and flood gates at Ticonderoga.

Gage height, in feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.03	2.47	2.83	2.67	2.57	2.09	4.65	4.15	3.77	3.27	3.01	2.71
2	3.05	2.45	2.79	2.65	2.55	2.11	4.79	4.17	3.75	3.28	3.03	2.67
3	3.03	2.43	2.83	2.69	2.51	2.13	4.59	4.11	3.71	3.25	2.99	2.69
4	3.09	2.45	2.87	2.75	2.53	2.09	4.85	4.09	3.73	3.33	2.95	2.65
5	3.01	2.43	2.81	2.81	2.55	2.07	4.73	4.07	3.69	3.37	2.89	2.63
6	2.95	2.51	2.77	2.77	2.53	2.01	4.87	4.03	3.67	3.29	2.89	2.69
7	2.93	2.47	2.81	2.75	2.47	2.03	4.99	4.01	3.67	3.37	2.91	2.65
8	2.91	2.47	2.77	2.75	2.45	2.01	5.05	3.97	3.65	3.33	2.89	2.59
9	2.89	2.43	2.79	2.77	2.41	2.03	5.09	3.91	3.63	3.29	2.91	2.57
10	2.91	2.41	2.83	2.83	2.43	1.99	5.03	3.89	3.63	3.33	2.89	2.53
11	2.89	2.43	2.79	2.79	2.47	2.05	4.97	3.83	3.65	3.37	2.79	2.55
12	2.85	2.37	2.77	2.77	2.43	2.27	4.99	3.81	3.55	3.35	2.83	2.57
13	2.79	2.47	2.81	2.79	2.39	2.63	4.95	3.87	3.59	3.39	2.81	2.48
14	2.77	2.57	2.79	2.81	2.37	2.75	4.91	3.83	3.55	3.41	2.75	2.54
15	2.75	2.55	2.81	2.79	2.39	2.85	4.85	3.97	3.57	3.35	2.81	2.61
16	2.69	2.53	2.89	2.87	2.37	2.89	4.91	3.89	3.43	3.33	2.79	2.56
17	2.71	2.47	2.87	2.81	2.33	3.27	4.93	3.93	3.51	3.29	2.69	2.56
18	2.71	2.57	2.89	2.79	2.31	3.73	4.81	3.91	3.53	3.27	2.75	2.57
19	2.69	2.63	2.91	2.81	2.33	4.27	4.75	3.87	3.47	3.23	2.79	2.54
20	2.67	2.69	2.83	2.83	2.35	4.59	4.71	3.81	3.51	3.21	2.63	2.55
21	2.65	2.67	2.87	2.81	2.29	4.69	4.63	3.83	3.39	3.19	2.63	2.50
22	2.63	2.69	2.85	2.79	2.25	4.85	4.67	3.81	3.45	3.17	2.69	2.54
23	2.61	2.65	2.77	2.77	2.23	4.85	4.59	3.81	3.43	3.21	2.75	2.52
24	2.59	2.53	2.81	2.79	2.25	4.83	4.47	3.81	3.35	3.19	2.77	2.54
25	2.61	2.61	2.77	2.69	2.19	4.89	4.45	3.79	3.37	3.21	2.73	2.52
26	2.59	2.63	2.79	2.65	2.21	4.91	4.43	3.77	3.33	3.17	2.69	2.46
27	2.59	2.61	2.81	2.67	2.15	4.85	4.33	3.79	3.31	3.15	2.65	2.43
28	2.53	2.67	2.79	2.63	2.13	4.95	4.35	3.75	3.35	3.17	2.63	2.41
29	2.51	2.77	2.71	2.67	2.11	4.97	4.27	3.79	3.29	3.11	2.75	2.35
30	2.49	2.79	2.69	2.61	-	4.91	4.23	3.75	3.25	3.07	2.75	2.33
31	2.49	-	2.67	2.59	-	4.93	-	3.79	-	3.05	2.73	-

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 1936.

Extremes.- Maximum discharge during year, 6,190 second-feet Mar. 18; maximum gage height, 22.90 feet Mar. 12 (ice jam); minimum (regulated), 2.7 second-feet Oct. 12, 13 (gage height, 1.72 feet).

1928-36: Maximum discharge, that of Mar. 18, 1936; maximum gage height, that of Mar. 12, 1936; minimum discharge, that of Oct. 12, 13, 1935.

Remarks.- Records good except those for periods of ice effect, Dec. 16-20, Jan. 17 to Mar. 12 (computed on basis of one discharge measurement, gage heights, and records for Otter Creek at Center Rutland), and those for periods of no gage-height record, Oct. 26 to Nov. 20, Dec. 5-10, Dec. 21 to Jan. 16, Mar. 13-17, Sept. 30 (computed by hydrographic comparison), which are fair. Lake Bomoseen may produce seasonal storage. Considerable diurnal regulation at low stages.

Rating tables, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 15

Mar. 19 to Sept. 30

1.7	2.4	3.4	196	9.0	1,610	1.9	8.5	3.0	125
1.8	4.1	3.8	284	10.0	1,980	2.0	13	3.4	206
1.9	7.3	4.2	375	11.0	2,410	2.2	24	3.9	291
2.0	11	4.6	468	12.0	2,930	2.4	39	4.2	381
2.2	21	5.0	564	13.0	3,560	2.6	60	5.0	565
2.4	36	5.5	685	14.0	4,280	2.8	88	5.5	685
2.6	54	6.0	810	15.0	5,000				
2.8	78	7.0	1,060	16.0	5,790				
3.0	114	8.0	1,320						

Note.- Above 5.5 feet same as preceding table.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	80	602	95	130	155	637	255	165	23	37	60
2	59	75	492	85	100	150	608	225	128	22	12	62
3	121	70	398	300	140	160	825	260	100	86	40	63
4	86	80	526	560	120	185	685	226	81	54	30	95
5	78	90	230	340	140	220	554	226	67	28	29	52
6	59	160	220	220	150	260	1,000	198	78	57	40	24
7	60	130	210	200	150	210	1,620	190	43	29	41	42
8	76	120	210	180	120	175	1,320	214	80	45	31	69
9	89	115	290	170	80	210	1,100	165	104	78	12	123
10	68	105	360	170	140	430	1,010	136	120	53	39	88
11	102	120	282	160	120	1,500	936	164	85	47	33	114
12	46	190	261	150	90	4,270	656	150	115	28	32	123
13	2.9	400	240	190	110	3,350	777	248	106	66	29	19
14	44	670	229	200	130	2,020	729	439	34	40	13	100
15	65	400	219	190	90	1,470	652	394	64	61	16	122
16	42	270	250	520	110	1,980	593	348	55	32	74	110
17	80	210	260	380	100	3,670	570	314	48	34	59	253
18	70	230	220	270	150	5,300	563	344	43	30	31	172
19	43	250	180	210	120	4,620	510	341	47	19	33	78
20	40	290	170	170	130	2,990	484	408	52	39	64	85
21	79	375	160	200	110	2,080	478	357	28	59	85	96
22	67	339	120	180	130	1,780	471	319	63	42	28	119
23	72	293	140	170	100	1,320	380	299	17	45	16	87
24	84	242	130	170	120	1,120	355	214	42	60	53	108
25	93	220	100	160	110	1,070	274	228	27	110	77	92
26	85	207	120	130	170	960	247	211	36	52	75	78
27	50	203	110	160	140	936	266	236	54	49	79	32
28	80	383	100	150	150	1,090	267	248	10	29	70	99
29	75	1,360	100	150	160	779	209	212	65	62	94	108
30	70	884	110	140	-	685	281	144	34	62	27	90
31	75	-	100	140	-	685	-	85	-	41	90	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	2,107.9		121	2.9	68.0	0.364	0.42					
November.....	8,561		1,360	70	285	1.62	1.70					
December.....	6,919		602	80	223	1.19	1.37					
Calendar year 1935.....	99,190.9		2,530	2.9	272	1.45	19.75					
January.....	6,510		560	85	210	1.12	1.29					
February.....	3,550		170	80	122	.652	.70					
March.....	45,830		5,300	150	1,478	7.90	9.11					
April.....	19,257		1,620	209	642	3.43	3.83					
May.....	7,818		439	85	252	1.35	1.56					
June.....	2,011		165	10	67.0	.358	.40					
July.....	1,487		110	19	47.0	.251	.29					
August.....	1,539		94	12	44.8	.240	.28					
September.....	2,765		253	19	92.2	.493	.55					
Water year 1935-36.....	108,174.9		5,300	2.9	296	1.58	21.50					

Otter Creek at Center Rutland, Vt.

Location.- Water-stage recorder, lat. 43°36'15", long. 73°0'50", 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 1936.

Extremes.- Maximum discharge during year, 8,580 second-feet Mar. 18, 19 (gage height, 10.84 feet); minimum, 30 second-feet Aug. 8; minimum daily discharge, 85 second-feet July 19.

1928-36: Maximum discharge, that of Mar. 18, 19, 1936; minimum daily discharge, 61 second-feet Sept. 16, 1934.

Remarks.- Records good except those for periods of no gage height record, Dec. 23 to Jan. 5, Jan. 18 to Feb. 13, Feb. 19 to Mar. 8, Apr. 29 to May 13, which were computed on basis of records for station at Middlebury and are fair. Diurnal regulation. Seasonal storage on East Creek at Pittsford and Chittenden.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 30

1.2	147	4.5	1,960	0.8	85	2.0	327
1.5	207	5.0	2,060	.9	97	2.4	450
1.8	276	5.5	2,500	1.0	112	2.8	620
2.1	355	6.0	2,980	1.2	147	3.2	825
2.4	445	6.5	3,480	1.4	186	3.6	1,080
2.7	550	7.0	4,030	1.7	252		
3.0	690	8.0	5,150				
3.5	965	9.0	6,550				
4.0	1,300	10.0	7,550				

May 1 to Sept. 30

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	206	193	1,350	190	260	300	1,300	1,050	213	133	129	294
2	282	183	888	180	210	290	1,080	960	227	164	111	226
3	314	162	686	600	270	300	1,440	750	211	200	166	252
4	331	200	540	1,200	260	340	1,110	670	195	240	182	244
5	281	189	405	720	260	400	905	620	184	128	125	213
6	214	329	412	480	250	540	2,000	560	180	163	117	108
7	225	276	372	400	250	410	3,860	530	110	146	138	155
8	206	262	418	359	240	330	2,580	590	162	135	126	202
9	227	249	544	330	210	399	1,840	470	167	166	104	203
10	224	202	698	338	260	709	1,620	380	143	154	161	170
11	208	235	594	333	230	1,680	1,510	440	140	174	137	149
12	179	264	509	287	210	5,700	1,580	500	310	187	118	158
13	176	908	452	370	260	6,130	1,330	590	326	240	110	142
14	219	1,240	384	402	212	3,200	1,210	660	182	220	112	152
15	214	684	439	398	267	2,080	1,100	525	198	159	120	162
16	210	451	473	1,100	190	2,890	1,160	405	184	133	159	159
17	298	417	462	767	262	5,550	1,150	550	153	122	181	431
18	200	351	399	540	231	7,020	1,030	590	152	123	172	243
19	203	406	341	420	260	7,440	1,090	505	225	65	136	188
20	167	477	355	370	250	4,960	959	640	195	118	119	112
21	200	620	298	350	240	3,580	1,090	468	157	112	122	155
22	207	562	242	330	230	3,570	1,310	396	170	101	171	173
23	272	482	260	310	200	2,390	992	334	166	96	210	176
24	362	365	250	300	240	1,710	807	316	147	187	248	138
25	278	284	210	290	230	1,870	731	336	173	208	203	174
26	209	357	230	260	250	1,890	619	293	192	126	178	154
27	208	336	220	290	280	1,700	628	278	195	126	172	114
28	215	780	210	280	290	1,930	589	296	105	143	169	137
29	214	2,830	190	260	310	1,700	600	320	177	158	215	154
30	208	2,600	210	270	-	1,330	780	264	171	142	251	137
31	206	-	200	270	-	1,330	-	208	-	134	312	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	7,162	362	167	231	0.752	0.87
November.....	16,894	2,830	162	563	1.83	2.04
December.....	13,241	1,350	190	427	1.39	1.60
Calendar year 1935.....	188,537	5,930	102	517	1.68	22.83
January.....	13,014	1,200	180	420	1.37	1.58
February.....	7,112	310	190	245	.798	.86
March.....	75,668	7,440	290	2,376	7.74	8.92
April.....	38,000	3,860	589	1,267	4.13	4.61
May.....	18,474	1,050	208	499	1.63	1.88
June.....	5,510	326	105	184	.599	.67
July.....	4,723	240	85	152	.495	.57
August.....	4,973	312	104	160	.621	.60
September.....	5,455	431	108	182	.593	.66
Water year 1935-36.....	205,226	7,440	85	561	1.83	24.86

Otter Creek at Middlebury, Vt.

Location.- Water-stage recorder, lat. 44°0'45" N, long. 73°10'5" W, 150 feet above highway bridge at Middlebury, Addison County, and 3 1/4 miles below Middlebury River.

Drainage area.- 628 square miles.

Records available.- April 1903 to May 1907, October 1910 to January 1920, October 1928 to September 1936.

Average discharge.- 20 years (1903-6, 1910-19, 1928-36), 954 second-feet.

Extremes.- Maximum discharge during year, 11,000 second-feet Mar. 20, 21 (gage height, 10.3 feet); minimum, 175 second-feet July 20 (gage height, 1.16 feet).

1903-7, 1910-20, 1928-36: Maximum discharge, that of Mar. 20, 21, 1936; minimum, 93 second-feet Mar. 5, 1929.

Maximum known discharge, 13,800 second-feet Nov. 4, 1927 (gage height, 13.3 feet, at chain-gage site 1,800 feet upstream, present datum).

Remarks.- Records good except those for periods of ice effect, Dec. 22 to Jan. 2, Jan. 10-14, Jan. 19 to Mar. 4 (computed on basis of one discharge measurement, gage heights, and hydrographic comparison), and those for period of no gage-height record, Apr. 11-27 (computed on basis of records for station at Center Rutland), which are fair. Small seasonal storage in Chittenden Reservoir, on East Creek.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.1	160	4.5	2,800
1.3	210	5.0	3,300
1.5	280	5.5	3,890
1.7	360	6.0	4,480
1.9	515	7.0	5,770
2.1	660	8.0	7,210
2.5	980	9.0	8,770
3.0	1,390	10.0	10,500
3.5	1,830	11.0	12,300
4.0	2,300		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	668	393	2,300	380	510	580	3,440	1,650	529	393	234	676
2	600	358	2,400	370	500	550	3,220	1,650	494	320	228	608
3	622	330	2,400	715	490	570	3,060	1,660	473	312	195	946
4	684	316	2,250	1,520	480	590	2,900	1,520	459	543	225	724
5	610	393	1,970	1,520	500	734	2,600	1,390	419	487	272	592
6	564	494	1,600	1,300	490	882	2,900	1,220	364	374	252	480
7	459	615	1,380	1,100	480	1,060	2,900	1,140	298	369	244	364
8	494	622	924	955	470	644	2,900	1,100	284	320	225	302
9	426	600	1,020	792	470	720	2,900	980	406	547	231	342
10	412	487	1,390	700	460	1,060	3,010	644	364	452	202	369
11	426	426	1,430	660	450	1,750	2,980	740	317	558	225	380
12	419	432	1,300	630	440	2,950	2,850	836	622	480	237	431
13	352	873	1,140	600	440	3,040	2,700	1,140	550	432	222	592
14	336	1,970	1,040	670	440	3,280	2,490	2,060	550	501	205	414
15	369	1,970	932	808	450	5,190	2,350	1,880	406	432	213	393
16	393	1,850	1,080	1,200	450	6,880	2,200	1,600	412	330	234	426
17	393	1,430	1,220	1,540	440	7,550	2,100	1,390	412	268	222	725
18	473	1,140	1,120	1,390	450	8,000	2,020	1,480	406	240	260	972
19	438	972	972	900	460	9,010	1,950	1,480	400	225	265	748
20	352	1,020	876	770	470	10,600	1,900	1,640	419	185	234	488
21	336	1,300	740	710	460	11,000	1,920	1,430	358	216	228	321
22	364	1,390	700	670	450	10,300	2,000	1,220	330	244	268	336
23	419	1,260	600	640	430	9,250	2,200	1,000	374	237	379	364
24	571	1,060	550	610	410	8,280	1,980	812	352	449	445	342
25	660	828	520	690	420	7,360	1,800	740	312	682	438	380
26	557	756	490	570	450	6,480	1,450	756	325	459	386	369
27	412	788	470	560	500	5,640	1,280	716	432	347	312	342
28	374	927	460	550	530	4,850	1,180	756	466	298	284	253
29	445	2,200	430	540	580	4,240	1,140	748	364	264	288	248
30	438	2,300	480	530	-	3,890	1,390	716	369	262	578	256
31	393	-	400	520	-	3,550	-	585	-	244	557	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	14,469	684	336	466	0.742	0.86
November.....	29,480	2,300	316	983	1.57	1.75
December.....	34,524	2,400	400	1,114	1.77	2.04
Calendar year 1935.....	394,361	3,410	310	1,080	1.72	23.35
January.....	24,990	1,540	370	806	1.28	1.48
February.....	13,570	580	410	468	.745	.80
March.....	140,680	11,000	550	4,538	7.23	8.34
April.....	69,930	3,440	1,140	2,331	3.71	4.14
May.....	36,679	2,060	585	1,183	1.86	2.17
June.....	12,266	622	284	409	.651	.75
July.....	11,263	682	185	363	.578	.67
August.....	8,794	578	195	284	.452	.52
September.....	14,183	972	248	473	.753	.84
Water year 1935-36.....	410,818	11,000	185	1,122	1.79	24.34

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 1936.

Average discharge.- 17 years (1914-23, 1928-36), 583 second-feet.

Extremes.- Maximum discharge during year, 20,000 second-feet Mar. 18 (gage height, 16.57 feet); minimum daily discharge, 61 second-feet Aug. 9.

1909-23, 1928-36: Maximum discharge, 20,200 second-feet Apr. 7, 1912 (gage height, about 16.7 feet, present datum); 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).

Remarks.- Records good. Discharge computed on basis of power-plant records and five discharge measurements for period of ice effect, Dec. 6, 7, Dec. 23 to Mar. 17, and for period Mar. 20 to June 12 when the intake pipe was partially clogged. Complete storage on 24 square miles and considerable diurnal fluctuation caused by several small 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.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	300	149	662	220	260	200	2,600	1,720	375	192	202	223
2	597	134	692	200	210	190	2,450	1,650	360	161	102	214
3	522	110	516	260	210	230	3,090	1,260	320	151	154	544
4	442	157	405	330	270	260	2,480	1,700	305	184	179	440
5	369	173	374	340	360	300	1,990	1,500	298	149	160	264
6	299	358	390	520	350	250	3,180	1,120	269	146	148	171
7	271	315	450	350	310	250	3,710	930	248	221	124	150
8	260	262	376	270	285	220	3,200	800	224	224	137	161
9	227	250	400	250	240	260	2,980	710	223	185	61	274
10	221	215	425	290	200	360	2,650	680	248	282	129	247
11	221	214	450	300	280	550	2,700	660	223	264	154	187
12	227	222	420	260	240	3,500	3,090	640	190	159	156	188
13	169	1,320	371	290	210	6,200	2,600	700	239	158	158	280
14	234	2,170	548	305	200	4,750	2,210	1,200	120	203	119	209
15	229	1,160	354	290	260	3,600	1,880	1,540	166	204	97	191
16	223	800	357	350	170	4,380	1,770	1,100	256	210	90	195
17	258	568	355	370	155	8,950	2,210	980	256	209	170	254
18	331	498	326	330	200	15,200	2,450	930	196	169	169	277
19	220	450	541	330	220	12,100	2,100	960	177	68	115	192
20	161	586	547	300	200	7,250	1,820	1,240	159	158	116	124
21	196	668	292	270	190	5,820	1,720	1,170	87	208	122	148
22	222	598	248	300	180	5,350	1,770	980	142	205	112	167
23	242	477	270	315	170	4,050	1,660	760	147	201	150	161
24	265	343	300	280	170	3,540	1,380	630	162	308	174	148
25	225	352	255	255	170	4,370	1,250	508	149	370	130	143
26	154	352	230	220	180	4,080	1,110	455	146	237	116	141
27	151	348	205	255	230	3,520	1,000	430	171	182	101	66
28	169	584	300	255	285	3,750	971	505	188	226	64	155
29	170	1,680	250	270	240	3,090	1,020	510	170	218	87	143
30	165	1,220	190	305	-	2,760	1,390	425	193	213	283	128
31	151	-	160	330	-	2,700	-	375	-	219	266	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	7,921	597	151	256	0.591	0.68
November.....	16,966	2,170	110	566	1.31	1.46
December.....	11,189	862	160	361	.834	.96
Calendar year 1935.....	239,277	12,000	80	656	1.52	20.54
January.....	9,220	520	200	297	.686	.79
February.....	6,665	360	155	230	.531	.57
March.....	112,010	15,200	190	3,613	8.34	9.62
April.....	64,391	3,710	971	2,146	4.96	5.53
May.....	28,745	1,720	375	927	2.14	2.47
June.....	6,382	375	87	213	.492	.55
July.....	6,264	370	68	202	.467	.54
August.....	4,305	283	61	139	.321	.37
September.....	6,205	544	66	207	.478	.53
Water year 1935-36.....	280,263	15,200	61	766	1.77	24.07

Winooski River near Essex Junction, Vt.

Location.- Water-stage recorder, lat. 44°28'40", long. 73°8'20", 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 1936.

Extremes.- Maximum discharge during year, 45,300 second-feet Mar. 19 (gage height, 23.54 feet); minimum daily discharge, 118 second-feet Aug. 15, 16.

1928-36: Maximum discharge, that of Mar. 19, 1936; minimum, that of June 26; 27, 1936; minimum daily, 95 second-feet Sept. 16, 1934.

Maximum discharge known, 113,000 second-feet (revised) Nov. 4, 1927 (gage height, 50.4 feet from floodmarks).

Remarks.- Records good. Discharge computed for periods of ice effect, Dec. 6-9, 16, Jan. 3 to Mar. 12, and for periods of missing gage-height record, Dec. 21 to Jan. 2, Jan. 30 to Feb. 3, June 10-19, on basis of power-plant records. Considerable diurnal regulation at low stages. For statement concerning storage see "Remarks" for station at Montpelier.

Rating tables, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge in second-feet)

Oct. 1 to Apr. 30				May 1 to Sept. 30			
0.4	116	2.0	980	6.0	8,090	1.2	395
.6	175	2.4	1,420	7.0	10,200	1.4	524
.8	235	2.8	1,990	8.0	12,100	1.6	680
1.0	308	3.2	2,620	10.0	16,000	1.8	849
1.2	395	3.6	3,320	12.0	20,000	2.0	1,030
1.4	510	4.0	4,060	14.0	24,100		
1.6	640	4.5	5,010	16.0	28,300		
1.8	800	5.0	6,000	19.0	34,900		
				22.0	41,700		

Note.- Below 1.3 feet and above 3.8 feet same as previous table.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	888	441	2,910	320	560	560	5,800	5,810	991	517	315	1,390
2	1,610	326	2,280	450	450	580	4,630	4,890	1,050	455	212	1,460
3	1,930	218	1,790	530	570	650	5,670	4,640	812	554	278	1,880
4	1,640	368	1,370	750	640	610	4,870	4,480	790	280	250	2,910
5	1,500	422	1,040	550	580	610	4,160	3,690	883	310	347	1,470
6	868	794	550	1,050	720	770	6,170	2,880	564	539	316	784
7	854	802	900	950	500	600	10,900	2,540	488	512	260	387
8	776	851	880	820	350	700	6,410	2,330	534	474	245	740
9	792	518	1,400	800	500	820	5,400	2,130	490	508	209	921
10	690	426	1,840	650	550	800	5,010	1,780	668	714	329	1,010
11	586	559	1,520	470	600	1,100	5,060	1,620	527	694	301	695
12	479	800	1,390	550	620	12,000	6,000	1,590	608	944	254	613
13	202	1,130	1,220	820	650	27,600	4,980	1,730	563	863	271	993
14	596	5,900	974	790	550	18,900	4,350	6,630	548	595	262	1,210
15	598	3,220	1,090	810	400	10,500	3,910	4,070	368	478	116	688
16	474	2,220	980	770	270	9,670	4,130	2,920	402	469	116	672
17	459	1,590	1,090	810	650	19,700	4,550	2,590	482	490	245	1,150
18	540	1,440	955	700	500	28,600	4,930	2,760	491	405	376	1,350
19	454	1,450	916	550	580	41,600	4,700	2,860	447	273	348	1,010
20	253	1,490	918	950	500	25,300	4,220	4,310	361	367	162	467
21	581	1,910	750	750	530	13,100	4,190	3,260	253	261	366	710
22	578	2,070	400	630	270	17,900	4,600	2,500	512	318	194	573
23	504	1,780	550	700	320	9,010	3,670	2,050	297	300	214	478
24	516	1,040	900	700	570	6,830	3,250	1,700	300	953	715	547
25	668	888	450	600	550	9,510	2,850	1,480	354	1,510	537	348
26	468	900	710	470	520	9,080	2,630	1,330	281	1,030	332	356
27	372	1,120	410	650	630	6,850	2,440	1,100	413	667	268	272
28	518	1,300	300	600	700	7,040	2,330	1,080	281	554	354	377
29	478	6,220	250	570	600	5,800	3,380	1,480	600	570	261	425
30	526	4,470	620	550	-	5,600	6,950	1,250	556	556	1,390	578
31	537	-	430	650	-	6,520	-	1,150	-	458	1,590	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	21,752	1,830	202	701	0.650	0.75
November.....	46,683	6,220	218	1,555	1.44	1.61
December.....	31,813	2,910	250	1,026	.961	1.11
Calendar year 1935.....	578,675	26,600	140	1,585	1.47	19.10
January.....	20,940	1,050	320	675	.626	.72
February.....	15,370	720	270	530	.491	.53
March.....	298,890	41,600	560	9,642	8.94	10.31
April.....	142,120	10,900	2,330	4,737	4.39	4.80
May.....	84,630	6,630	1,090	2,730	2.53	2.92
June.....	15,914	1,050	283	530	.491	.55
July.....	17,628	1,510	261	569	.527	.61
August.....	11,429	1,590	116	369	.342	.39
September.....	26,454	2,910	272	882	.817	.91
Water year 1935-36.....	733,583	41,600	116	2,004	1.86	25.30

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 2½ miles above confluence with Stevens Branch. Zero of gage is 1,071.59 feet above mean sea level. Nov. 4, 1933, to Jan. 25, 1935, staff gage at same site and datum. Staff gage August 1920 to September 1923 at different datum a quarter of a mile upstream.

Drainage area.- 33.0 square miles (revised).

Records available.- August 1920 to September 1923, November 1933 to September 1936.

Extremes.- Maximum discharge observed during water year 1933-34, 1,260 second-feet Apr. 12 (gage height, 4.00 feet), from rating curve extended above 500 second-feet; minimum observed, 0.8 second-foot Aug. 15 (gage height, 0.06 foot).

Maximum discharge observed during water year 1934-35, 821 second-feet Jan. 10 (gage height, 3.00 feet); minimum, 1.3 second-foot Sept. 4 (gage height, 0.10 foot).

Maximum discharge during water year 1935-36, 461 second-foot Mar. 18; maximum gage height, 2.68 feet Mar. 12 (ice jam); minimum discharge, 1.0 second-foot Aug. 14 (gage height, 0.08 foot).

1920-23, 1933-36: 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, Dec. 12-24, 1933, Jan. 24-31, Mar. 5-9, Dec. 7-10, 21-24, 1934, Jan. 7, 8, 13-31, Feb. 15 to Mar. 10, Dec. 5, 6, 13-16, 1935, Jan. 11-18, Mar. 10-13, 1936 (computed on basis of four discharge measurements, gage heights, and records for other stations in Winoski River Basin), those for periods of no gage-height record (computed on basis of records for other stations in Winoski River Basin), and those above 500 second-feet, which are fair. Discharge prior to Jan. 28, 1935, based on one or more daily gage readings furnished by Corps of Engineers, U. S. Army, or on graph constructed from gage readings. Run-off at high stages affected since November 1935 by East Barre Detention Reservoir (capacity, 522,720,000 cubic feet). Diversions from Orange Brook Reservoir, a tributary upstream, for municipal use by city of Barre.

Rating table, 1933-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0	0	.3	5.9	.8	36	1.4	174	2.5	607
.1	1.3	.4	9.0	1.0	62	1.7	283	3.0	821
.2	3.2	.6	19	1.2	110	2.0	401		

Discharge, in second-feet, water year October 1933 to September 1934

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		*39	83	*25	16	8.4	259	83	9.0	3.2	1.9	1.3
2		*33	62	*40	16	6.8	491	83	9.0	3.2	1.3	2.2
3		*32	62	*50	16	7.1	425	91	9.0	3.2	3.2	1.3
4		29	47	*35	16	9.0	256	141	9.0	3.2	16	28
5		21	42	*28	16	65	245	110	9.0	3.2	6.8	26
6		14	42	*25	13	180	202	83	12	3.0	5.4	7.6
7		14	50	*26	13	135	169	88	43	3.5	3.2	3.2
8		14	45	*27	13	95	264	62	13	3.2	3.7	3.2
9		14	36	*28	11	70	338	54	9.0	3.0	3.2	184
10		14	34	*27	9.8	54	300	135	9.8	3.5	2.2	31
11		11	27	*25	9.8	39	302	99	12	1.3	1.3	11
12		9.8	25	21	9.0	32	700	64	9.0	3.2	1.7	6.5
13		11	20	21	8.4	28	361	54	21	16	1.2	5.4
14		47	21	21	9.0	28	220	54	36	23	1.3	4.6
15		12	21	21	9.0	34	209	47	38	5.9	1.2	3.2
16		13	20	21	9.0	31	340	42	44	3.2	2.8	6.5
17		13	20	21	9.0	27	655	42	23	3.2	1.7	97
18		11	21	21	9.0	45	291	42	11	2.2	1.7	55
19		13	20	21	8.4	119	245	42	110	2.8	1.3	27
20		13	20	17	7.4	56	300	42	91	2.2	1.3	*11
21		11	19	15	8.4	38	209	40	34	3.2	1.3	*4.5
22		50	18	13	8.4	32	174	37	31	2.2	1.3	*3.2
23		54	17	17	8.4	27	184	35	13	1.7	3.2	*4.2
24		27	17	19	8.4	23	265	36	9.0	1.3	1.3	*5.8
25		19	19	21	8.4	19	565	32	7.4	2.2	2.2	9.0
26		17	*19	19	9.0	19	202	27	6.5	2.2	2.2	*6.0
27		59	*19	18	9.0	65	174	27	5.6	3.2	1.3	3.2
28		36	*18	17	9.0	412	110	19	5.1	10	1.9	7.4
29		27	*18	17	-	213	96	16	5.1	4.2	2.6	7.4
30		110	*18	17	-	131	102	13	3.7	3.0	2.2	23
31		-	*20	16	-	86	-	12	-	2.8	2.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	-	-	-	-	-	-
November.....	797.8	110	9.8	26.3	0.797	0.89
December.....	918	83	17	29.6	.897	1.03
Calendar year						
January.....	710	50	13	22.9	.694	.80
February.....	296.8	16	7.4	10.6	.321	.33
March.....	2,134.3	412	6.8	68.8	2.08	2.40
April.....	8,642	700	96	288	8.73	9.74
May.....	1,782	141	12	56.5	1.71	1.97
June.....	647.2	110	3.7	21.6	.655	.73
July.....	131.2	23	1.3	4.23	.128	.15
August.....	83.1	16	1.2	2.68	.081	.09
September.....	528.7	124	1.3	17.6	.533	.59
Water year						

*No gage-height record.

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

Jail Branch at East Barre, Vt.

(Continued)

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	13	232	23	26	23	86	216	47	25	8.1	2.2
2	9.0	26	145	21	26	23	70	135	33	20	5.4	2.1
3	7.4	17	62	21	27	22	79	96	26	17	*5	1.9
4	5.9	44	58	20	26	22	64	77	24	13	*6	1.7
5	4.6	76	52	21	25	22	59	72	32	12	*35	8.7
6	12	99	47	22	23	30	59	79	29	11	*25	5.1
7	24	210	35	40	21	40	59	211	24	11	*20	3.2
8	9.8	79	30	150	18	31	87	270	44	37	*12	2.6
9	7.4	50	28	575	18	24	90	126	64	28	*7	2.6
10	5.9	42	25	715	19	25	132	110	83	18	*4	34
11	13	47	21	279	20	30	139	102	59	11	*35	16
12	22	44	13	186	18	72	122	77	42	8.4	*30	7.8
13	25	36	19	120	18	70	150	64	30	7.4	*20	5.1
14	25	34	21	80	15	43	200	66	26	5.6	*25	4.8
15	36	32	18	*56	21	35	178	70	36	6.2	*20	68
16	39	33	21	*56	30	36	180	56	33	16	*15	30
17	30	32	21	*56	27	306	122	47	68	10	*10	13
18	25	47	19	*52	26	446	134	44	134	5.6	*5	8.7
19	16	62	16	*45	25	137	207	46	56	4.6	*5	6.8
20	13	62	28	*38	23	109	231	43	119	14	*6	11
21	13	52	27	39	22	170	220	39	74	8.4	*10	12
22	25	44	26	40	21	79	195	37	91	4.8	18	11
23	27	39	25	39	20	81	216	34	68	42	6.2	8.7
24	19	166	27	34	19	131	260	33	44	90	3.2	7.1
25	16	68	25	32	18	138	223	31	37	21	2.2	8.4
26	13	46	27	33	22	105	195	28	32	13	2.1	7.4
27	39	44	27	33	25	94	213	26	68	5.9	2.1	7.1
28	32	47	23	31	25	75	238	23	128	4.3	5.8	8.9
29	19	54	25	30	-	75	188	32	44	32	3.2	20
30	12	47	21	29	-	105	268	42	32	30	2.2	13
31	14	-	21	28	-	96	-	45	-	14	2.6	-
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....	586.0			39	4.6	18.9	0.573	0.66				
November.....	1,682			210	13	56.1	1.70	1.90				
December.....	1,183			232	13	38.2	1.16	1.34				
Calendar year 1934.....	18,376.3			700	1.2	50.3	1.52	20.70				
January.....	2,943			715	20	94.9	2.88	3.32				
February.....	624			30	15	22.3	.676	.70				
March.....	2,745			446	22	88.5	2.68	3.09				
April.....	4,664			268	59	155	4.70	5.24				
May.....	2,375			270	23	76.6	2.32	2.68				
June.....	1,627			134	24	54.2	1.64	1.83				
July.....	546.2			90	4.3	17.6	.533	.61				
August.....	356.1			35	2.1	11.5	.348	.40				
September.....	338.9			68	1.7	11.3	.342	.38				
Water year 1935-36.....	19,670.2			715	1.7	53.9	1.63	22.15				

*No gage-height record.

Jail Branch at East Barre, Vt.

(Continued)

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.4	6.8	54	*10	*13	15	369	110	27	7.1	2.2	15
2	51	9.7	46	*10	*13	14	365	86	24	5.1	1.7	11
3	32	7.4	38	*15	*12	14	365	96	18	5.5	1.7	136
4	32	6.2	30	*45	*12	15	357	154	17	31	1.7	47
5	18	6.2	27	*35	12	18	349	86	14	11	2.2	22
6	11	46	30	*50	12	23	357	62	11	16	2.2	12
7	13	27	*30	*25	12	17	353	56	9.4	6.5	3.2	9.8
8	12	25	*30	*23	11	17	341	52	8.4	4.3	2.4	9.4
9	6.8	20	*32	*20	11	18	337	46	9.8	*4	1.9	25
10	6.5	14	*35	*17	11	24	333	43	6.8	*31	1.5	*20
11	6.2	17	*32	17	11	50	325	40	6.2	*34	1.7	*11
12	6.2	15	*28	14	11	245	321	39	18	*25	1.3	*25
13	5.9	148	26	14	11	345	313	52	10	*15	1.2	*40
14	5.9	238	26	16	11	337	298	157	6.2	*10	1.0	*20
15	5.6	134	25	15	11	321	287	65	14	*6	1.3	*13
16	5.4	45	26	15	11	329	275	54	23	*5	4.9	*12
17	7.2	37	*25	14	12	357	268	56	8.5	*4	15	*41
18	6.2	38	*22	14	13	425	256	59	6.5	*3.5	5.4	*27
19	7.4	37	*20	*15	12	405	234	104	8.1	3.0	3.5	*17
20	6.5	53	*20	*16	12	393	143	118	6.8	2.6	2.6	*11
21	6.2	70	*16	*18	12	397	126	59	5.4	2.4	2.6	*9.4
22	7.7	58	*16	*15	12	389	126	46	4.3	2.1	21	*8.4
23	12	44	*17	*15	12	401	79	42	3.7	2.2	37	*8
24	27	34	*18	*13	12	393	72	37	3.5	14	18	*7.8
25	14	29	*17	*12	12	393	66	33	3.5	25	6.5	*15
26	13	30	*15	*13	12	381	59	31	3.2	19	4.8	*9
27	8.1	31	*14	*14	14	377	54	35	23	6.8	3.7	*6.8
28	7.4	93	*13	*14	15	377	53	46	28	4.3	3.0	*7.2
29	6.8	227	*12	*13	14	381	89	37	16	3.2	24	6.0
30	8.1	147	*10	*13	-	381	164	32	18	2.3	52	5.1
31	7.1	-	*10	*13	-	373	-	32	-	3.4	23	-
Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches						
October.....	371.6	51	5.4	12.0	0.364	0.42						
November.....	1,693.3	238	6.2	56.4	1.71	1.91						
December.....	760	54	10	24.5	.742	.86						
Calendar year 1935.....	19,044.1	715	1.7	52.2	1.58	21.44						
January.....	531	45	10	17.1	.518	.60						
February.....	349	15	11	12.0	.364	.39						
March.....	7,625	425	14	246	7.45	8.59						
April.....	7,134	369	53	238	7.21	8.04						
May.....	1,966	157	31	63.4	1.92	2.21						
June.....	361.3	28	3.2	12.0	.364	.41						
July.....	314.8	34	2.1	10.2	.309	.36						
August.....	253.5	52	1.0	8.18	.248	.29						
September.....	605.9	136	5.1	20.2	.612	.68						
Water year 1935-36.....	21,966.4	425	1.0	60.0	1.82	24.76						

*No gage-height record.

North Branch of Winooski River at Wrightsville, Vt.

Location.- Water-stage recorder, lat. 44°18'0", 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. Prior to Nov. 21, 1934, staff gage at same site and datum. Zero of gage is 550.53 feet above mean sea level.

Drainage area.- 69.2 square miles.

Records available.- October 1933 to September 1936.

Extremes.- Maximum discharge observed during water year 1933-34, 2,170 second-foot Apr. 12 (gage height, 6.53 feet); minimum observed (regulated), 1.0 second-foot Aug. 23; minimum daily discharge, 3.2 second-foot Aug. 24.

Maximum discharge during water year 1934-35, 1,470 second-foot Jan. 10 (gage height, 5.22 feet); minimum (regulated), 0.2 second-foot Aug. 2, 3; minimum daily discharge, 0.5 second-foot Aug. 2.

Maximum discharge during water year 1935-36, 1,040 second-foot Mar. 21; maximum gage height, 5.43 feet Mar. 12 (ice jam); minimum daily discharge, 3.4 second-foot Aug. 14; practically no flow at times on Jan. 2, 3, when water was held back by mill dam.

Remarks.- Records good except those computed on basis of hydrographic comparison and weather records for periods of ice effect, Dec. 9-11, 15, 1933, Jan. 15-17, Feb. 2-10, 12-19, Dec. 13-16, 21, 22, 1934, Jan. 9, 14-30, Dec. 7, 21, 22, 25-31, 1935, Jan. 3, 4, 16-19, Mar. 12. 15, 1936, those for periods of no gage-height record, and those above 1,200 second-feet, which are fair. Possibly some backwater during periods of no gage-height record. Prior to Nov. 21, 1934, gage-height record obtained from graph constructed from one or more daily staff-gage readings furnished by Corps of Engineers, U. S. Army. Run-off at high stages affected since November 1935 by storage in Wrightsville Detention Reservoir (capacity, 893,000,000 cubic feet). Diurnal regulation at low stages caused by operation of small mill.

Discharge, in second-feet, water year October 1933 to September 1934

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*25	124	250	30	28	25	584	209	25	21	20	3.3
2	*27	109	148	43	26	24	1,080	197	27	18	12	4.8
3	*24	104	148	125	28	23	900	177	24	16	18	6.5
4	*22	88	99	111	*25	40	730	173	20	15	32	9.0
5	*30	85	76	42	*25	94	628	161	18	16	30	16
6	*26	84	97	36	25	374	528	122	19	17	28	13
7	*23	46	106	46	25	274	481	157	34	14	22	13
8	*19	21	73	55	24	173	498	129	31	*8	17	7.8
9	*21	32	41	*55	24	115	793	94	25	12	14	100
10	32	33	33	55	24	*110	942	183	22	9.7	6.7	82
11	31	28	29	48	26	73	949	149	22	5.7	12	37
12	28	26	28	34	24	76	1,370	104	18	5.2	11	33
13	22	27	27	35	23	62	1,160	85	36	6.5	9.7	23
14	36	45	26	35	23	76	567	73	44	13	9.7	11
15	47	41	24	35	23	78	470	67	78	11	6.2	16
16	17	24	26	40	23	73	720	60	73	12	7.1	23
17	22	24	*22	35	22	67	1,620	43	57	13	9.0	278
18	55	26	26	32	22	106	956	14	37	11	11	266
19	39	26	26	41	22	127	786	27	54	11	6.5	84
20	24	24	*25	42	24	109	773	56	184	15	6.5	50
21	31	22	26	37	26	95	466	38	89	22	5.2	36
22	35	32	28	33	*27	88	316	44	46	22	8.2	34
23	185	86	28	32	25	79	286	141	33	13	5.8	28
24	70	62	28	41	26	70	414	85	*27	9.7	3.2	15
25	62	46	*31	37	24	64	674	62	50	10	4.0	30
26	58	44	37	31	23	57	499	46	44	9.1	3.6	27
27	54	56	33	33	24	76	259	42	33	11	17	17
28	100	56	26	32	24	438	238	39	28	273	19	22
29	99	52	27	26		304	191	39	22	222	8.2	10
30	94	309	28	*25	-	261	177	30	20	57	4.8	45
31	82	-	28	28	-	230	-	26	-	34	4.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,438	185	17	46.4	0.671	0.77
November.....	1,782	309	21	59.4	.858	.86
December.....	1,652	250	22	53.3	.770	.89
Calendar year						
January.....	1,330	125	25	42.9	.620	.71
February.....	693	28	22	24.4	.353	.37
March.....	3,370	438	24	125	1.81	2.09
April.....	20,025	1,620	177	668	9.65	10.77
May.....	2,842	209	14	91.7	1.33	1.53
June.....	1,242	184	18	41.4	.598	.67
July.....	932.9	273	5.2	30.1	.435	.50
August.....	371.5	32	3.2	12.0	.173	.20
September.....	1,340.4	278	3.3	44.7	.646	.72
Water year 1933-34.....	37,508.8	1,620	3.2	103	1.49	20.18

*No gage-height record.

North Branch of Winooski River at Wrightsville, Vt.

(Continued)

Rating table, water years 1933-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.1	1.7	.8	37	2.8	440
.2	4.4	1.0	57	3.2	575
.3	8.6	1.2	85	3.6	730
.4	14	1.4	120	4.0	900
.5	21	1.7	177	4.5	1,120
.6	26	2.0	238	5.0	1,370
.7	31	2.4	329	5.5	1,620

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	42	258	44	66	42	244	956	80	74	17	11
2	32	44	708	46	56	42	203	484	54	54	.5	13
3	35	44	356	43	49	47	195	297	46	47	1.7	8.6
4	37	62	199	42	43	53	175	217	38	41	10	8.2
5	36	328	161	41	51	45	165	175	50	33	40	18
6	28	202	133	41	52	58	169	189	52	33	56	28
7	35	710	88	67	46	113	163	310	46	28	48	25
8	55	315	70	201	45	111	208	678	78	36	36	22
9	45	181	65	650	44	84	324	396	97	44	31	19
10	35	156	60	1,410	45	70	424	514	118	42	28	53
11	36	113	43	1,080	46	72	525	240	118	33	42	64
12	60	110	42	452	47	131	558	175	87	31	71	43
13	68	94	45	396	45	155	440	146	58	20	52	32
14	70	80	47	230	39	109	650	133	41	18	53	25
15	88	58	45	150	39	87	468	133	73	14	42	373
16	112	65	40	155	52	85	592	109	147	17	31	368
17	137	67	32	155	55	177	440	92	143	20	26	226
18	74	124	38	150	53	396	382	80	437	17	22	107
19	43	212	39	130	45	283	368	94	234	17	17	65
20	58	240	44	115	46	211	485	88	427	17	17	48
21	38	197	60	120	42	256	670	70	324	17	14	55
22	43	151	58	115	39	195	575	67	252	14	22	49
23	42	134	47	105	42	197	592	61	270	74	24	49
24	43	364	47	95	42	270	710	58	177	131	20	45
25	45	312	43	85	41	283	650	48	115	64	18	40
26	*50	171	44	80	41	244	493	43	80	36	17	36
27	62	129	48	80	49	207	558	42	129	26	14	33
28	62	113	40	75	45	195	610	44	440	17	20	36
29	54	125	44	70	47	171	422	56	172	28	20	60
30	41	157	42	70	-	201	643	76	107	50	17	80
31	38	-	43	67	-	213	-	72	-	36	14	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	1,645		137	28	53.1	0.767	0.98					
November.....	5,080		710	42	169	2.44	2.72					
December.....	3,006		708	32	97.0	1.40	1.61					
Calendar year 1934.....	42,367.8		1,620	3.2	116	1.68	22.77					
January.....	6,560		1,410	41	212	3.06	3.53					
February.....	1,505		66	39	46.6	.673	.70					
March.....	4,783		396	42	154	2.23	2.57					
April.....	13,101		710	163	437	6.32	7.05					
May.....	5,943		956	42	192	2.77	3.19					
June.....	4,490		440	38	150	2.17	2.42					
July.....	1,129		131	14	36.4	.526	.61					
August.....	841.2		71	.5	27.1	.392	.45					
September.....	2,038.8		373	8.2	68.0	.983	1.10					
Water year 1934-35.....	49,923		1,410	.5	137	1.98	26.83					

*No gage-height record.

North Branch of Winooski River at Wrightsville, Vt.

(Continued)

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	*33	342	23	33	*40	878	592	54	25	13	83
2	135	*33	220	27	33	*38	855	592	50	21	10	65
3	159	*33	141	35	33	*38	832	575	42	21	10	123
4	159	*35	98	68	31	37	810	540	39	30	7.6	146
5	131	*37	64	*70	32	38	770	498	36	30	6.2	88
6	95	*80	66	*60	32	38	770	410	35	25	7.7	50
7	72	*65	70	*50	31	*37	790	319	28	24	7.7	36
8	60	*52	*73	*45	31	*35	790	199	23	22	4.9	43
9	54	*47	*77	42	30	35	770	153	22	22	5.7	96
10	48	*45	*83	42	31	47	750	120	21	34	8.7	76
11	45	*48	*80	39	31	67	710	99	23	36	6.8	50
12	42	*54	76	37	31	296	690	84	25	30	5.4	46
13	39	179	69	38	33	675	670	136	24	23	5.6	74
14	37	470	63	41	34	675	630	505	22	18	3.4	60
15	37	425	58	41	32	658	575	522	20	15	4.2	43
16	36	347	61	41	29	638	540	470	17	14	8.2	36
17	33	213	60	41	29	720	505	396	15	13	13	55
18	32	140	56	40	30	862	488	342	16	11	18	75
19	33	111	58	40	31	945	470	268	20	8.2	18	55
20	32	102	57	40	33	990	455	338	23	7.7	14	40
21	31	127	45	40	34	1,000	455	320	22	7.0	11	33
22	*33	135	45	42	32	990	488	226	17	7.4	10	29
23	*40	122	46	44	31	958	455	159	14	6.3	17	27
24	*60	88	45	44	29	951	396	124	14	52	16	25
25	*48	70	45	42	28	951	342	99	13	122	14	24
26	*42	66	42	39	28	945	274	79	14	72	12	23
27	*38	65	38	37	37	922	213	74	22	47	11	22
28	*36	91	36	36	42	922	217	100	24	35	10	20
29	*35	87	35	35	*41	900	380	87	24	28	23	23
30	*34	410	32	32	-	900	532	70	27	22	84	25
31	*34	-	29	32	-	878	-	62	-	17	81	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches					
October.....	1,779		159	31	57.4	0.829	0.96					
November.....	3,811		470	33	127	1.64	2.05					
December.....	2,308		342	29	74.5	1.08	1.24					
Calendar year 1935.....	48,090		1,410	.5	132	1.91	25.87					
January.....	1,285		70	23	41.5	.600	.69					
February.....	932		42	28	32.1	.464	.50					
March.....	17,236		1,000	36	556	8.03	9.26					
April.....	17,480		878	213	583	8.42	9.39					
May.....	8,548		592	62	276	3.99	4.60					
June.....	744		54	13	24.8	.358	.40					
July.....	845.6		122	6.3	27.3	.395	.46					
August.....	487.1		84	3.4	15.1	.218	.25					
September.....	1,591		146	20	53.0	.766	.85					
Water year 1935-36.....	57,026.7		1,000	3.4	156	2.25	30.65					

*No gage-height record.

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 1936.

Extremes.- Maximum discharge during water year 1934-35, 3,800 second-feet Jan. 10 (gage height, 6.78 feet); minimum, 10 second-feet Sept. 7 (gage height, 0.54 foot). Maximum discharge during water year 1935-36, 5,700 second-feet Mar. 18 (gage height, 8.49 feet); minimum, 10 second-feet Aug. 16 (gage height, 0.52 foot).

Remarks.- Records good except those for periods of ice effect, Dec. 6-11, 1934, Jan. 14 to Feb. 14, 1935 (computed on basis of two discharge measurements, gage heights, and records for Mad River near Moretown, Vt.), those for periods of no gage-height record, Dec. 27-31, 1934, Jan. 1-6, 23-25, 1935, Apr. 5-7, 1936 (computed on basis of records of nearby stations in Winooski River Basin), and those above 1,000 second-feet, which are fair. Some diurnal regulation at low stages from power plant above gage.

Rating tables, water years 1934-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Nov. 27, 1934 to Jan. 31, 1936, and May 1 to Sept. 30, 1936				Feb. 1 to Apr. 30, 1936			
0.6	12	2.6	445	4.9	1,920	1.0	30
.8	19	2.8	535	5.2	2,190	1.2	46
1.0	30	3.0	625	5.6	2,560	1.4	77
1.2	47	3.2	725	6.0	2,960	1.6	117
1.4	74	3.4	836	6.4	3,330	1.8	161
1.6	110	3.6	955	6.8	3,800	2.2	232
1.8	155	3.8	1,080	7.2	4,240	2.4	360
2.0	214	4.0	1,220	7.6	4,680	Note.- Above gage height 2.4 feet same as previous table.	
2.2	283	4.3	1,440				
2.4	360	4.6	1,670				

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	-	170	40	63	54	217	380	75	48	33	15
2	-	-	248	40	60	49	208	265	55	42	26	18
3	-	-	143	40	57	60	202	237	52	38	22	25
4	-	-	114	40	55	66	177	208	48	31	25	20
5	-	-	100	37	50	58	163	177	63	30	60	25
6	-	-	90	42	50	151	155	175	52	30	47	25
7	-	-	55	70	52	195	150	413	47	30	36	19
8	-	-	50	215	50	140	163	592	67	85	31	12
9	-	-	50	801	48	100	195	329	79	55	26	26
10	-	-	45	2,690	50	95	224	283	105	44	19	30
11	-	-	45	944	45	138	258	240	110	40	65	31
12	-	-	42	421	45	251	291	202	86	34	56	24
13	-	-	45	273	50	191	332	169	90	24	42	20
14	-	-	46	200	48	141	436	161	54	23	52	20
15	-	-	42	135	51	120	380	150	70	36	42	108
16	-	-	38	140	66	176	463	125	64	36	29	57
17	-	-	42	140	58	752	372	110	97	39	25	40
18	-	-	36	130	52	503	344	102	199	28	21	32
19	-	-	36	110	52	313	396	104	133	26	27	26
20	-	-	52	95	52	333	481	89	195	48	21	41
21	-	-	48	100	47	301	522	88	155	33	20	32
22	-	-	42	100	47	239	468	84	170	38	31	29
23	-	-	39	85	42	229	427	81	155	65	30	36
24	-	-	47	80	48	348	454	73	118	102	20	24
25	-	-	39	75	45	283	422	71	93	48	20	25
26	-	-	42	72	55	245	344	60	72	46	24	25
27	-	58	45	75	59	214	360	62	66	30	18	22
28	-	59	45	75	63	205	352	55	93	24	20	24
29	-	70	48	70	-	223	258	62	64	44	23	43
30	-	68	45	68	-	244	399	67	54	55	19	42
31	-	-	38	65	-	224	-	71	-	41	15	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	-	-	-	-	-	-
November.....	-	-	-	-	-	-
December.....	1,967	248	36	63.5	0.634	0.96
Calendar year						
January.....	7,468	2,690	37	241	3.17	3.66
February.....	1,459	66	42	52.1	.685	.71
March.....	6,641	752	49	214	2.81	3.24
April.....	9,613	522	150	320	4.20	4.69
May.....	5,285	592	55	170	2.23	2.57
June.....	2,741	195	47	91.4	1.20	1.34
July.....	1,293	102	23	41.7	.548	.63
August.....	947	65	15	30.5	.401	.46
September.....	921	108	12	30.7	.403	.46
Water year						

Dog River at Northfield Falls, Vt.

(Continued)

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	22	192	29	40	35	409	189	54	24	19	52
2	59	22	158	29	41	34	360	155	47	19	11	40
3	54	17	131	35	39	35	414	145	42	21	17	244
4	54	29	97	70	39	35	312	183	40	41	14	108
5	42	21	68	71	37	39	300	150	38	28	15	66
6	38	28	77	62	56	42	1,200	127	27	34	17	52
7	40	33	72	58	36	39	850	112	27	23	18	46
8	31	30	79	52	34	38	550	102	36	22	18	44
9	27	26	81	48	34	41	445	91	27	18	11	47
10	30	25	93	48	35	44	427	82	28	42	14	40
11	29	27	82	47	35	60	490	79	28	31	13	36
12	25	34	79	47	35	1,220	468	76	40	27	12	74
13	20	165	74	45	34	1,700	380	91	24	30	14	94
14	23	408	65	45	34	656	315	208	26	25	11	58
15	28	192	71	45	33	493	293	125	30	23	14	52
16	24	133	71	46	32	802	332	108	25	19	28	48
17	24	104	66	44	34	2,150	332	112	24	20	42	98
18	24	89	60	42	34	4,390	328	114	32	17	20	72
19	25	82	53	46	33	3,240	320	125	24	11	17	59
20	17	77	55	49	33	1,520	272	145	18	20	15	48
21	28	89	45	44	33	1,890	320	112	21	19	17	45
22	22	99	44	44	32	1,200	290	97	30	17	25	42
23	27	102	46	43	32	675	231	88	17	15	72	36
24	30	95	48	38	33	568	212	77	19	42	49	36
25	30	86	46	36	33	1,110	186	70	21	51	28	36
26	23	79	42	40	33	725	176	60	20	32	23	29
27	21	74	40	45	36	700	159	60	28	31	19	29
28	28	90	37	41	37	650	152	72	31	22	19	33
29	24	640	32	40	35	504	178	65	35	20	68	30
30	25	292	29	39	-	508	261	68	27	21	142	25
31	23	-	29	42	-	602	-	68	-	18	64	-
Month			Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....			930	59	17	30.0	0.394	0.45				
November.....			3,210	640	17	107	1.41	1.57				
December.....			2,163	192	29	69.8	.917	1.05				
Calendar year 1935.....			42,671	2,690	12	117	1.54	20.83				
January.....			1,410	71	29	45.5	.598	.69				
February.....			1,012	41	32	34.9	.459	.50				
March.....			25,755	4,390	34	831	10.9	12.57				
April.....			10,963	1,200	152	365	4.80	5.36				
May.....			3,354	208	60	108	1.42	1.64				
June.....			884	54	17	29.5	.398	.43				
July.....			784	51	11	25.3	.332	.39				
August.....			866	142	11	27.9	.367	.42				
September.....			1,719	244	25	57.3	.753	.84				
Water year 1935-36.....			53,050	4,390	11	145	1.91	25.91				

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 1936.

Extremes.- Maximum discharge during year, 9,070 second-feet Mar. 18 (gage height, 9.98 feet); minimum, 8.4 second-feet June 25 (gage height, 3.02 feet).

1928-36: Maximum discharge, 9,450 second-feet (revised) Apr. 12, 1934; maximum gage height, 11.20 feet Mar. 17, 1935 (ice jam); minimum discharge, 1.4 second-feet Oct. 1, 1930.

Maximum known stage, about 20.5 feet Nov. 3, 4, 1927.

Remarks.- Records good except those for period of ice effect Dec. 23 to Mar. 12, which were computed on basis of two discharge measurements, gage heights, and record for Dog River at Northfield Falls and are fair. Considerable diurnal regulation.

Rating tables, water year 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 30					May 1 to Sept. 30				
3.4	51	4.2	369	6.5	2,970	3.0	7	3.8	161
3.5	70	4.5	590	7.0	3,640	3.1	14	4.0	260
3.6	94	4.8	830	8.0	5,340	3.2	24	4.2	390
3.7	124	5.2	1,220	9.0	7,170	3.3	36	4.5	585
3.8	161	5.6	1,650			3.4	51	4.8	830
4.0	253	6.0	2,160			3.6	94		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	46	402	55	70	75	795	848	121	61	30	365
2	200	48	320	60	75	70	643	722	103	43	17	186
3	139	46	253	140	70	75	786	653	89	44	37	1,040
4	208	50	186	260	68	80	550	608	81	138	23	412
5	124	48	135	190	65	95	484	438	74	78	20	236
6	93	185	157	150	65	130	1,950	349	66	61	30	164
7	85	101	150	120	62	100	1,320	336	59	48	37	132
8	73	88	195	110	60	95	867	277	60	40	30	114
9	65	80	214	90	60	100	668	244	56	37	13	109
10	62	69	253	95	70	140	655	213	50	201	35	92
11	57	72	204	90	68	240	776	194	49	153	21	78
12	53	72	178	85	65	4,590	700	175	86	135	21	277
13	47	876	154	85	62	3,240	572	508	60	89	18	312
14	52	850	142	95	60	1,980	470	989	49	67	19	161
15	49	368	139	90	65	742	435	445	51	55	17	150
16	43	248	146	85	62	1,500	520	342	44	45	16	121
17	46	195	131	75	62	4,150	520	392	42	41	62	324
18	44	200	118	85	60	7,020	520	361	47	35	32	202
19	47	182	118	90	60	4,520	528	450	51	32	27	147
20	41	241	118	90	60	2,210	435	506	44	37	20	116
21	46	302	77	65	62	2,400	580	348	34	33	20	96
22	44	270	70	90	65	1,680	520	277	38	28	71	82
23	68	228	85	90	65	993	402	239	36	28	251	73
24	100	147	90	75	65	801	369	203	29	231	131	64
25	76	131	100	70	60	1,480	320	170	27	166	66	96
26	62	154	85	65	65	1,150	320	146	30	101	50	77
27	57	142	80	70	70	1,050	308	170	164	68	38	70
28	56	489	70	80	95	1,040	332	239	114	55	34	73
29	52	1,860	60	75	85	786	636	184	80	46	401	65
30	61	622	65	70	85	848	1,320	146	89	34	678	58
31	50	-	50	70	-	1,340	-	135	-	35	296	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,280	208	41	72.9	0.524	0.60
November.....	8,350	1,860	46	278	2.00	2.23
December.....	4,545	402	50	147	1.06	1.22
Calendar year 1935.....	84,061	3,630	27	230	1.65	22.48
January.....	2,980	260	55	96.1	.691	.80
February.....	1,921	95	60	68.2	.476	.61
March.....	43,820	7,020	70	1,414	10.2	11.76
April.....	19,281	1,950	308	643	4.63	5.17
May.....	11,206	889	135	361	2.60	3.00
June.....	1,923	164	27	64.1	.461	.51
July.....	2,265	231	28	73.1	.526	.61
August.....	2,561	678	13	82.6	.594	.68
September.....	5,472	1,040	58	182	1.31	1.46
Water year 1935-36.....	106,584	7,020	13	291	2.09	28.55

Waterbury River near Waterbury, Vt.

Location.- Water-stage recorder, lat. 44°22'10", long. 72°46'10", 1 2/3 miles above mouth and 2 1/2 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 1936.

Extremes.- Maximum discharge during year, 5,510 second-feet Mar. 18 (gage height, 19.38 feet); minimum, 20 second-feet Aug. 21.

Remarks.- Records good except those for periods of ice effect, Dec. 22 to Jan. 2, Jan. 7-22, Jan. 25 to Feb. 2, Feb. 5-13, 16-20, 22-28, Mar. 5-11, those for period of no gage-height record, Dec. 1, 2 (computed on basis of two discharge measurements, gage heights and records for North Branch at Wrightsville), and those for period Apr. 6 to July 8, when intake pipes were partially clogged (based on recorder chart and frequent staff-gage readings), which are fair. Slight diurnal regulation at low stages caused by power plant upstream.

Rating tables, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet) (shifting-control method used May 29 to June 4)

Dec. 1 to Jan. 8, Mar. 13-18, June 5-26, July 13 to Sept. 30				Jan. 9 to Mar. 12, Mar. 19 to June 4, June 27 to July 12			
1.0	20	5.5	570	1.2	47	4.0	302
1.4	32	6.0	689	1.6	62	4.5	391
1.8	48	7.0	935	2.0	82	5.0	494
2.2	70	8.0	1,200	2.4	109	6.0	717
2.6	97	9.0	1,480	2.8	144	7.0	952
3.0	129	10.0	1,780	3.2	189	8.0	1,200
3.4	171	11.0	2,080	3.6	242		
3.8	222	12.0	2,420				
4.2	285	14.0	3,180				
4.6	364	17.0	4,440				
5.0	455						

Note.- Above 7.9 feet same as previous table.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			290	48	59	67	888	1,630	102	51	32	390
2			220	46	58	67	682	1,510	106	49	29	136
3			160	69	56	64	833	1,450	109	55	30	367
4			127	105	55	60	638	903	92	106	29	224
5			106	83	54	60	527	535	80	93	28	112
6			114	75	53	59	1,460	353	70	70	29	86
7			122	70	52	58	1,150	326	64	60	29	76
8			138	67	52	56	784	421	70	57	29	90
9			154	66	51	54	626	372	67	62	27	221
10			183	65	52	60	666	256	64	114	27	109
11			154	63	51	170	809	196	57	109	26	86
12			138	64	51	2,720	706	222	63	88	26	140
13			125	66	52	2,450	549	327	57	64	27	219
14			117	70	56	931	440	1,190	47	56	25	108
15			117	69	55	615	440	461	52	47	28	84
16			125	68	49	968	585	278	50	42	84	80
17			117	68	48	2,080	644	345	49	40	42	525
18			109	68	48	4,160	814	272	54	38	30	210
19			102	67	49	3,450	798	576	43	36	24	117
20			100	67	50	2,140	632	902	38	36	22	92
21			72	67	54	1,680	846	382	27	35	22	83
22			70	69	50	1,620	717	249	30	34	23	75
23			71	74	50	952	549	202	42	34	26	71
24			74	72	48	780	458	163	28	351	46	68
25			78	71	48	1,430	362	160	24	287	42	74
26			76	70	48	1,140	382	125	28	125	46	75
27			70	67	60	970	340	166	95	74	44	70
28			67	65	69	916	404	154	55	52	42	33
29			60	63	67	774	1,450	113	80	42	64	88
30			56	61	-	892	2,880	109	64	36	398	76
31			50	60	-	1,350	-	106	-	34	151	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	-	-	-	-	-	-
November.....	-	-	-	-	-	-
December.....	3,562	290	50	115	1.04	1.20
Calendar year						
January.....	2,105	105	46	67.9	.612	.71
February.....	1,545	69	48	53.3	.480	.52
March.....	32,793	4,160	54	1,058	9.53	10.99
April.....	23,059	2,880	340	769	6.93	7.73
May.....	14,454	1,630	106	466	4.20	4.84
June.....	1,837	109	24	61.2	.551	.61
July.....	2,382	351	34	76.8	.692	.80
August.....	1,827	398	22	49.3	.444	.51
September.....	4,255	525	68	141	1.27	1.42
Water year						

Lamoille River at Johnson, Vt.

Location.- Water-stage recorder, lat. 44°37'20", long. 72°40'50", at falls 0.9 mile above original location 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 1923 to September 1936.

Extremes.- Maximum discharge during year, 15,000 second-feet Mar. 18 (gauge height, 16.48 feet); minimum, 33 second-feet Aug. 10; minimum daily discharge, 90 second-feet Aug. 9.

1910-13, 1928-36: Maximum discharge, that of Mar. 18, 1936; 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, Dec. 5-8, Dec. 19 to Mar. 11 (computed on basis of gage heights, one discharge measurement and records for station near Milton), and those for periods of no gage-height record, Mar. 21-23, June 15, 16, (computed on basis of records for station near Milton), which are fair. Slight diurnal fluctuation at low stages caused by power plant above.

Rating tables, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 18				Mar. 19 to Apr. 30		May 1 to Sept. 30			
2.0	83	9.0	4,050	3.4	740	1.9	85	3.1	668
2.5	288	10.0	4,940	4.0	1,030	2.1	159	3.3	760
3.0	510	11.0	5,980	5.0	1,510	2.3	240	3.5	844
4.0	1,000	12.0	7,130	6.0	2,010	2.5	327	4.0	1,060
5.0	1,500	13.0	8,370			2.6	386	5.0	1,510
6.0	2,010	14.0	9,670		Above 6.0 feet same as previous table.	2.7	460	6.0	2,010
7.0	2,600	15.0	11,000			2.9	570		
8.0	3,280								

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	284	199	740	120	145	175	1,760	2,300	359	133	145	315
2	1,000	194	566	140	120	220	1,220	1,560	311	127	102	214
3	778	154	438	130	145	180	1,660	1,560	300	135	134	238
4	719	122	368	280	130	200	1,270	1,560	284	118	143	297
5	488	210	240	240	120	200	1,050	1,180	268	143	142	190
6	317	205	250	245	130	235	3,120	905	222	147	139	168
7	300	263	260	200	140	210	3,500	774	182	153	136	168
8	238	265	250	175	135	170	2,040	758	258	150	129	215
9	229	262	348	168	120	220	1,870	720	214	143	90	278
10	214	208	336	180	115	210	1,510	601	160	145	109	219
11	216	196	302	175	135	400	1,900	573	178	150	139	202
12	267	251	292	165	125	3,140	2,170	763	150	107	135	270
13	182	546	282	185	115	7,010	1,640	829	144	184	125	589
14	168	1,950	279	175	130	4,270	1,240	3,620	148	178	104	465
15	240	874	253	170	135	2,220	1,100	1,610	200	161	100	242
16	132	540	273	220	125	2,320	1,500	1,210	180	145	96	205
17	194	360	278	210	185	5,340	2,070	1,060	155	144	91	685
18	177	352	256	190	155	10,700	2,060	998	155	151	117	453
19	192	349	235	160	165	10,500	1,990	1,090	182	118	129	261
20	177	386	210	175	155	7,860	1,660	1,700	192	134	120	176
21	189	582	185	155	145	4,420	1,580	1,210	100	152	122	206
22	210	572	155	160	140	4,220	1,540	884	170	149	118	205
23	250	447	165	170	125	2,840	1,140	726	163	130	104	200
24	242	270	160	155	195	1,840	1,030	604	126	518	139	175
25	224	258	150	145	155	2,830	805	640	129	715	166	162
26	186	259	140	135	175	2,480	786	367	130	267	148	166
27	206	290	150	160	200	2,060	764	277	133	250	137	133
28	181	520	150	140	230	2,180	788	185	98	186	131	198
29	199	2,140	130	145	210	1,660	1,270	506	157	168	149	162
30	190	1,350	140	120	-	1,610	3,410	460	163	159	213	210
31	180	-	135	125	-	2,120	-	376	-	164	355	-

Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off in inches
	Second-foot-days	Maximum					
October.....	6,768	1,000	132	283	0.845	0.97	
November.....	14,565	2,140	122	466	1.45	1.62	
December.....	6,116	740	130	262	.782	.90	
Calendar year 1935.....	192,575	4,680	27	523	1.58	21.36	
January.....	5,310	280	120	171	.510	.59	
February.....	4,300	230	115	148	.442	.48	
March.....	84,040	10,700	170	2,711	8.09	9.33	
April.....	49,245	3,500	764	1,642	4.90	5.47	
May.....	31,606	3,620	185	1,020	3.04	3.50	
June.....	5,621	359	98	187	.558	.62	
July.....	5,724	715	107	165	.552	.64	
August.....	4,207	355	90	136	.405	.47	
September.....	7,639	589	133	255	.761	.85	
Water year 1935-36.....	229,141	10,700	90	626	1.87	25.44	

Lamoille River near Milton, Vt.

Location.- Water-stage recorder, lat. 44°40'15", long. 73°6'25", 2½ miles north of Milton, Chittenden County.

Drainage area.- 723 square miles.

Records available.- August 1929 to September 1936.

Extremes.- Maximum discharge during year, 23,200 second-feet Mar. 19 (gage height, 12.52 feet); minimum, 94 second-feet Aug. 16 (gage height, 1.02 feet); minimum daily discharge, 149 second-feet Aug. 10.

1929-36: Maximum discharge, that of Mar. 19, 1936; minimum, 49 second-feet July 30, 1933 (gage height, 0.69 foot); minimum daily discharge, 91 second-feet July 30, 1933.

Remarks.- Records good except those for period of ice effect, Dec. 5 to Mar. 12 (computed on basis of two discharge measurements, gage heights, and weather records), and those for periods of no gage-height record, Nov. 13-18, Dec. 30 to Jan. 8, Feb. 1, 2, June 29 (computed by hydrographic comparison), which are fair. Diurnal regulation from power plants above.

Rating table, water year 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)

1.2	128	2.4	700	6.0	5,900
1.3	154	2.7	970	7.0	8,000
1.4	184	3.0	1,280	8.0	10,400
1.6	255	3.5	1,880	9.0	13,000
1.8	335	4.0	2,550	10.0	15,700
2.0	434	4.5	3,500	11.0	18,600
2.2	550	5.0	4,900	12.0	21,700
		5.5	4,960		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	708	354	1,980	250	260	415	4,270	6,410	794	328	314	1,500
2	2,080	358	1,420	270	270	410	2,850	5,140	708	325	207	1,090
3	2,600	363	1,110	270	280	410	3,700	4,780	636	328	329	833
4	2,080	363	776	400	275	435	3,150	4,020	606	226	313	1,040
5	1,640	335	570	630	280	435	2,410	3,080	544	340	302	742
6	1,080	379	590	570	270	540	2,970	2,340	496	340	304	424
7	803	599	590	500	270	465	7,160	1,590	349	318	314	445
8	700	557	650	430	255	350	5,000	1,760	405	335	261	490
9	592	587	930	410	275	390	3,620	1,700	451	338	174	1,300
10	526	544	1,720	405	290	550	3,220	1,450	398	418	149	978
11	502	468	1,290	430	220	1,000	3,380	1,200	357	462	212	660
12	479	451	1,040	420	265	8,000	4,270	1,400	334	377	251	931
13	496	1,600	890	430	250	14,600	3,460	1,840	295	370	244	2,400
14	490	3,000	820	450	270	12,300	2,780	5,360	233	443	245	1,380
15	377	2,500	760	440	230	6,580	2,340	4,680	348	424	188	912
16	424	1,400	810	490	255	5,690	3,150	2,630	330	341	152	717
17	363	1,100	725	540	285	8,710	4,440	2,140	304	318	347	2,290
18	363	920	600	440	335	14,300	5,500	2,140	302	287	318	1,940
19	451	884	510	370	330	21,700	4,610	2,200	322	179	300	1,110
20	496	1,040	420	380	315	15,600	3,780	4,400	318	319	306	742
21	440	1,480	365	355	320	9,680	3,380	3,430	301	242	219	613
22	424	1,520	320	345	305	9,020	3,540	2,280	314	252	176	550
23	451	1,250	340	330	275	6,940	2,780	1,760	296	285	192	496
24	532	853	320	305	300	4,370	2,410	1,420	280	2,290	363	462
25	532	571	290	285	350	5,620	2,140	1,220	265	2,720	421	479
26	462	660	335	290	430	6,110	1,880	1,130	292	1,480	367	460
27	429	652	305	320	430	4,440	1,880	875	280	917	307	403
28	408	939	290	300	540	4,440	1,880	932	240	641	300	496
29	434	3,730	270	295	500	3,700	2,890	803	300	394	316	700
30	382	3,510	255	285	-	3,150	6,580	942	335	458	1,430	536
31	387	-	250	230	-	3,910	-	866	-	420	1,260	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	22,131	2,600	363	714	0.988	1.14
November.....	32,937	3,730	335	1,098	1.52	1.70
December.....	21,541	1,980	250	695	.961	1.11
Calendar year 1935.....	439,290	9,920	160	1,204	1.67	22.62
January.....	11,865	630	230	383	.530	.61
February.....	8,930	540	220	308	.426	.45
March.....	174,290	21,700	380	5,622	7.78	8.97
April.....	105,420	7,160	1,880	3,514	4.86	5.42
May.....	78,208	8,410	803	2,523	3.49	4.02
June.....	11,431	794	233	381	.527	.59
July.....	16,815	2,720	179	542	.750	.86
August.....	10,601	1,430	149	342	.473	.55
September.....	27,151	2,400	403	905	1.25	1.40
Water year 1935-36.....	521,320	21,700	149	1,424	1.97	26.83

Missisquoi River near North Troy, Vt.

Location.- Water-stage recorder, lat. 44°58'20", long. 72°23'15", just above Big Falls, 1½ miles below mouth of Jay Branch, and 2½ miles above North Troy, Troy County.

Drainage area.- 131 square miles.

Records available.- August 1931 to September 1936.

Extremes.- Maximum discharge during year, 4,600 second-feet Mar. 18 (gage height, 11.40 feet); minimum, 16 second-feet sometime during Aug. 11-24 (gage height, 0.98 foot). 1931-36: Maximum discharge, 5,140 second-feet (revised) Oct. 7, 1932 (gage height, 12.26 feet); minimum, 10 second-feet Aug. 22, 1934 (gage height, 0.81 foot).

Remarks.- Records good except those for periods of ice effect, Dec. 26 to Jan. 8, Feb. 16-18, Mar. 12 (computed on basis of gage heights, weather records, and hydrographic comparison), and those for periods of no gage-height record, Jan. 14 to Feb. 15, Apr. 13-16, 21-27, May 5, July 29, 30, Aug. 11-24 (computed on basis of record for station at Richford), which are fair. Some diurnal regulation from small power plant above station.

Rating tables, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 18	Mar. 19 to Apr. 30	May 1 to Sept. 30
1.5 45	2.8 321	1.2 25
1.7 52	3.2 451	1.4 38
1.9 86	3.6 595	1.6 56
2.2 130	4.0 751	1.8 80
2.5 197	4.5 951	2.0 110
2.8 278	5.0 1,170	2.2 147
3.1 370	7.0 2,160	2.4 190
3.5 501	10.5 4,070	3.0 357
4.0 690		4.0 725
5.0 1,140		5.0 1,140
7.0 2,140		6.0 1,640
10.5 4,070		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	174	59	332	50	55	71	953	1,670	137	75	48	396
2	1,080	59	242	55	55	63	634	1,690	135	54	36	176
3	454	51	170	65	50	61	770	1,340	118	53	50	152
4	478	67	123	110	52	71	493	886	107	92	42	152
5	258	57	96	105	55	83	406	700	98	74	38	100
6	207	113	116	100	55	85	1,340	446	82	62	36	72
7	152	112	122	95	50	78	1,660	393	74	47	31	67
8	122	109	132	85	50	66	950	367	96	35	30	75
9	105	115	177	81	52	74	634	354	71	33	26	211
10	96	90	236	85	52	78	634	271	66	43	29	129
11	90	91	210	83	52	183	770	246	59	53	28	95
12	80	110	172	81	50	1,100	810	450	58	41	27	298
13	85	438	144	86	48	3,280	700	520	56	157	26	497
14	89	720	127	90	48	1,640	400	1,240	55	90	25	184
15	75	307	134	90	50	988	450	595	51	54	24	113
16	68	192	130	95	45	1,020	1,530	548	50	45	33	129
17	59	140	120	100	45	1,800	1,220	397	46	42	70	1,050
18	68	116	107	85	47	3,760	1,260	340	52	35	58	318
19	106	152	110	80	48	3,820	1,150	548	66	34	48	176
20	89	192	105	75	50	2,820	861	1,370	62	30	40	124
21	80	344	86	70	48	1,690	700	715	40	28	37	101
22	73	298	80	65	48	1,850	550	478	47	27	36	92
23	96	202	83	65	47	935	450	354	40	27	40	83
24	105	109	78	60	48	741	380	273	34	521	60	65
25	94	103	74	60	49	1,250	340	226	42	905	80	105
26	71	113	68	60	58	1,150	340	195	44	357	57	95
27	66	110	64	58	77	1,010	380	211	68	202	46	86
28	76	680	58	57	80	1,120	693	202	128	125	40	403
29	64	1,700	54	55	85	790	1,440	178	116	105	45	202
30	62	627	50	55	-	910	2,490	161	125	80	468	129
31	62	-	50	55	-	1,590	-	153	-	64	281	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	4,784	1,080	59	154	1.18	1.36
November.....	7,576	1,700	51	253	1.93	2.15
December.....	3,850	332	50	124	.947	1.09
Calendar year 1935.....	95,627	2,840	24	262	2.00	27.15
January.....	2,356	110	50	76.0	.580	.67
February.....	1,549	85	45	53.4	.408	.44
March.....	34,177	3,820	61	1,102	8.41	9.70
April.....	25,288	2,490	340	843	6.44	7.18
May.....	17,507	1,690	153	565	4.31	4.97
June.....	2,213	137	34	73.8	.563	.63
July.....	3,590	905	27	116	.885	1.02
August.....	1,935	468	24	62.4	.476	.55
September.....	5,875	1,050	65	196	1.50	1.67
Water year 1935-36.....	110,700	3,820	24	302	2.31	31.43

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 3 1/2 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 1936.

Average discharge.- 16 years (1911-19, 1928-36), 920 second-feet.

Extremes.- Maximum discharge during year, 14,000 second-feet Mar. 19, 20 (gage height, 14.70 feet); minimum, 75 second-feet Aug. 15 (gage height, 2.42 feet).
 1909-10, 1911-23, 1928-36: Maximum discharge, that of Mar. 19, 20, 1936; maximum gage height, 15.20 feet Jan. 9, 1935 (ice jam); minimum discharge, 8 second-feet July 14, 1911.
 Maximum discharge known, 45,000 second-feet, flood of November 1927 (gage height, 23.1 feet).

Remarks.- Records good except those for period of ice effect, Dec. 5 to Mar. 15 (computed on basis of two discharge measurements, gage heights, and hydrographic comparison), and those for period of no gage height record, May 7 to June 22 (computed on basis of records for station at North Troy), which are fair. Slight diurnal regulation at low stages.

Rating table, water year 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)

2.4	69	3.4	371	5.5	1,760	10.0	6,640
2.6	111	3.8	555	6.0	2,220	11.0	7,890
2.8	162	4.2	774	7.0	3,200	12.0	9,350
3.0	222	4.6	1,040	8.0	4,300	13.0	11,000
3.2	292	5.0	1,350	9.0	5,440	14.0	12,700

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	606	219	1,670	220	200	270	3,640	4,850	460	292	174	774
2	2,880	222	1,120	210	200	270	2,490	4,020	430	213	157	608
3	2,400	216	836	280	190	260	2,700	3,860	390	197	154	350
4	1,810	206	617	500	200	260	2,120	2,850	350	300	143	311
5	1,230	219	460	430	210	290	1,650	1,900	310	354	130	278
6	868	516	480	400	200	290	2,690	1,390	270	292	118	219
7	681	482	580	380	190	270	4,960	1,350	250	253	111	191
8	545	501	700	360	190	260	4,300	1,530	240	197	107	191
9	454	497	900	350	200	260	2,950	1,300	260	174	93	194
10	384	410	1,150	355	200	280	2,360	1,200	200	203	91	296
11	355	367	950	355	200	600	2,360	1,000	170	222	89	229
12	350	454	820	355	190	3,250	2,600	1,200	160	191	91	369
13	311	1,630	700	355	180	6,590	2,220	1,500	150	176	89	814
14	292	3,100	600	330	180	9,000	1,720	1,300	145	253	87	624
15	278	1,120	550	370	190	6,000	1,630	2,500	140	188	77	418
16	239	1,190	560	400	170	4,270	3,290	2,300	135	151	100	370
17	222	868	530	450	170	5,810	5,410	1,900	130	133	192	1,790
18	219	762	480	350	180	11,000	5,960	1,400	160	125	168	1,450
19	292	715	450	330	190	13,100	4,890	1,800	190	111	133	695
20	288	536	420	300	180	12,700	3,920	3,500	160	102	111	482
21	246	1,190	370	270	180	8,700	3,000	2,500	140	98	107	371
22	263	1,190	340	260	180	7,160	2,380	1,900	160	91	104	311
23	482	969	360	250	180	5,370	1,850	1,300	151	87	111	274
24	535	648	350	240	170	3,710	1,600	1,000	135	272	162	246
25	428	492	340	230	180	4,270	1,430	860	111	1,310	219	267
26	355	487	330	230	230	3,970	1,350	760	138	1,030	182	235
27	303	478	300	220	270	3,630	1,350	300	182	572	140	256
28	278	1,290	270	220	290	3,420	1,330	760	294	375	121	623
29	260	3,860	250	210	280	3,000	3,000	680	355	285	116	648
30	246	3,430	220	210	-	2,600	5,030	600	423	225	190	414
31	222	-	230	210	-	3,730	-	520	-	203	670	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	18,302	2,880	219	590	1.23	1.42
November	26,564	3,860	206	952	1.99	2.22
December	17,933	1,670	220	878	1.21	1.40
Calendar year 1935	324,483	6,530	59	889	1.86	25.21
January	9,670	500	210	312	.651	.75
February	5,770	290	170	199	.415	.45
March	124,400	13,100	260	4,013	8.38	9.66
April	86,220	5,960	1,350	2,874	6.00	6.69
May	56,140	4,850	520	1,811	3.78	4.36
June	6,791	460	111	226	.472	.53
July	8,655	1,310	87	279	.582	.67
August	4,537	770	77	146	.305	.35
September	14,348	1,790	191	478	.998	1.11
Water year 1935-36	381,330	13,100	77	1,042	2.18	29.61

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 1936.

Extremes.- Maximum gage height observed during year, 12.79 feet Mar. 22; minimum observed, 7.40 feet Nov. 9, 10.

1931-36: Maximum gage height observed, 12.92 feet Apr. 20, 1933; minimum, 6.69 feet Nov. 4, 1934.

Remarks.- No record Jan. 10, Jan. 15 to Mar. 13, Apr. 30, May 7, 11, June 18, Sept. 6-19. Gage read once daily. Readings for period Dec. 29 to Jan. 14 taken from top of ice.

Gage height, in feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.94	7.50	8.22	8.68		-	11.45	10.05	9.54	9.12	9.01	8.41
2	7.98	7.49	8.29	8.68		-	11.43	10.17	9.54	9.05	8.99	8.41
3	8.01	7.47	8.33	8.68		-	11.43	10.19	9.54	9.01	8.97	8.40
4	8.07	7.47	8.45	8.68		-	11.37	10.20	9.53	9.01	8.95	8.40
5	8.15	7.46	8.52	8.68		-	11.33	10.17	9.53	9.01	8.93	8.39
6	8.18	7.44	8.56	8.68		-	11.22	10.15	9.53	9.00	8.90	-
7	8.22	7.43	8.61	8.68		-	11.15	-	9.55	8.99	8.86	-
8	8.20	7.41	8.65	8.68		-	11.09	10.10	9.53	8.99	8.81	-
9	8.15	7.40	8.69	8.68		-	10.87	9.99	9.53	9.97	8.79	-
10	8.09	7.40	8.71	-		-	10.79	9.93	9.50	9.93	8.78	-
11	8.03	7.43	8.72	8.68		-	10.69	-	9.47	8.89	8.76	-
12	8.00	7.45	8.72	8.68		-	10.60	9.87	9.45	8.87	8.73	-
13	7.97	7.49	8.71	8.68		-	10.53	9.83	9.43	8.82	8.70	-
14	7.92	7.59	8.71	8.68		8.80	10.43	10.13	9.41	8.79	8.67	-
15	7.88	7.67	8.70	-		8.93	10.34	10.19	9.39	8.72	8.64	-
16	7.85	7.73	8.70	-		9.25	10.27	10.20	9.36	8.67	8.62	-
17	7.84	7.77	8.70	-		9.53	10.16	10.11	9.33	8.61	8.59	-
18	7.79	7.81	8.71	-		10.32	10.09	10.02	-	8.57	8.57	-
19	7.76	7.96	8.71	-		11.42	10.01	9.93	9.27	8.53	8.55	-
20	7.74	7.90	8.71	-		12.21	9.93	10.07	9.23	8.51	8.53	8.43
21	7.70	7.96	8.71	-		12.53	9.91	10.03	9.20	8.49	8.51	8.45
22	7.65	7.99	8.71	-		12.79	9.88	9.94	9.17	8.48	8.50	8.49
23	7.61	7.99	8.70	-		12.73	9.82	9.87	9.16	8.49	8.48	8.52
24	7.59	8.00	8.70	-		12.63	9.78	9.76	9.14	8.56	8.49	8.55
25	7.57	8.02	8.69	-		12.49	9.71	9.64	9.13	8.75	8.47	8.55
26	7.57	8.02	8.68	-		12.31	9.67	9.59	9.13	9.91	8.47	8.55
27	7.56	8.03	8.68	-		12.13	9.59	9.58	9.12	9.17	8.45	8.51
28	7.56	8.05	8.68	-		11.99	9.78	9.58	9.13	9.15	8.45	8.49
29	7.55	8.11	8.68	-		11.81	9.87	9.56	9.14	9.09	8.45	8.47
30	7.55	8.16	8.68	-		11.64	-	9.55	9.15	9.06	8.44	8.49
31	7.52	-	8.68	-		11.49	-	9.55	-	9.03	8.41	-

Clyde River at Newport, Vt.

Location.- Water-stage recorder, lat. 44°56'10", long. 72°10'50", just below plant of Newport Electric Light Co., Newport, Orleans County, and 1 3/4 miles above mouth.

Drainage area.- 140 square miles.

Records available.- May 1909 to September 1924, November 1928 to May 1936 (discontinued).

Average discharge.- 16 years (1909-19, 1929-35), 244 second-feet.

Extremes.- Maximum discharge during period, 3,900 second-feet Mar. 20 (gage height, 5.76 Feet); minimum daily discharge, 67 second-feet Mar. 11.

1909-24, 1928-36: Maximum discharge, that of Mar. 20, 1936; minimum daily discharge, 3.0 second-feet Oct. 27, 1930. Practically no flow at various times when water was held back by dams.

Remarks.- Records good except those for periods of ice effect, Jan. 2, 10, 11, 23, Feb. 1-16 (computed on basis of two discharge measurements, gage heights, and weather records), and those for periods of no gage-height record (computed on basis of records for Otter Creek at Middlebury), which are fair. Some diurnal regulation caused by power plant above station.

Rating tables, water year 1935-36, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 20				Mar. 21 to May 4					
2.3	61	2.9	245	4.0	1,180	3.1	295	4.2	1,290
2.4	80	3.0	295	4.5	1,830	3.3	405	4.5	1,720
2.5	102	3.2	410	5.0	2,560	3.5	540	5.0	2,520
2.6	129	3.4	550	5.6	3,610	3.7	710	5.5	3,420
2.7	161	3.6	730			3.9	920		
2.8	200	3.8	945						

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	253	95	312	*93	*80	*76	1,020	444				
2	232	91	344	90	*80	*76	1,020	604				
3	264	107	356	121	*79	*75	*900	790				
4	231	100	374	121	*80	74	*830	932				
5	172	106	268	110	*82	76	770	-				
6	189	100	222	107	*81	*80	791	-				
7	132	99	232	101	*80	*85	1,000	-				
8	102	145	255	84	*79	85	1,200	-				
9	95	*140	204	96	*73	82	1,210	-				
10	97	126	148	105	*77	70	1,110	-				
11	132	139	111	101	*77	67	956	-				
12	161	192	107	101	*76	80	854	-				
13	164	*205	106	104	*75	586	730	-				
14	218	214	105	104	*73	1,100	710	-				
15	149	236	142	101	72	1,220	647	-				
16	99	262	163	96	*75	1,330	647	-				
17	99	275	118	96	98	1,640	665	-				
18	105	250	111	102	107	2,470	665	-				
19	105	270	135	91	91	3,150	692	-				
20	101	245	135	*90	*90	3,610	665	-				
21	101	310	124	*90	*88	3,230	620	-				
22	102	209	110	*89	*86	2,690	613	-				
23	107	141	116	88	*84	2,270	540	-				
24	95	197	*115	*88	*80	2,030	491	-				
25	*105	186	*113	*87	*80	1,700	464	-				
26	116	171	*110	*87	89	1,430	444	-				
27	105	158	*108	*86	82	1,300	424	-				
28	93	160	*105	*85	78	1,240	431	-				
29	105	222	*102	*83	*77	1,160	300	-				
30	104	260	*100	*82	-	1,090	405	-				
31	93	-	*96	*81	-	1,040	-	-				
Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches						
October.....	4,227	264	93	136	0.971	1.12						
November.....	5,441	310	91	181	1.29	1.44						
December.....	5,147	374	96	166	1.19	1.37						
Calendar year 1935.....	98,039	1,430	84	269	1.92	26.03						
January.....	2,860	121	81	95.5	.632	.79						
February.....	2,372	107	72	81.8	.594	.63						
March.....	35,210	3,610	67	1,136	8.11	9.35						
April.....	21,864	1,210	300	729	5.21	5.61						
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

*No gage-height record.

In addition to the records of stream flow obtained at gaging stations and reported in the preceding pages, measurements of flow were made at a number of other points, as shown by the following table:

Miscellaneous discharge measurements in the St. Lawrence River drainage basin during the year ending September 30, 1936

Date	Stream	Tributary to or diverting from-	Locality	Discharge
Nov. 16	Grand River.....	Lake Michigan....	Ionia, Mich.....	Sec.-ft. 1,280
16	Maple River.....	Grand River.....	Muir, Mich.....	347
May 7	Rifle River.....	Lake Huron.....	West Branch, Mich.....	70.2
Jan. 16	Pine River.....	Tittabawassee River.	Sumner, Mich.....	107
8	.....do.....	.....do.....	St. Louis, Mich.....	72.4
8	.....do.....	.....do.....	.....do.....	242
Aug. 5	Raisin River.....	Lake Erie.....	Palmyra, Mich.....	36.8
July 15	.....do.....	.....do.....	Blissfield, Mich.....	36.2
Jan. 8	Middle Branch of Moose River.	Moose River.....	At Old Forge, 200 feet below mouth of North Branch of Moose River, N. Y.	209
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