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GEOLOGICAL SURVEY
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Water-Supply Paper 784

SURFACE WATER SUPPLY *of the* UNITED STATES

1935

PART 4

ST. LAWRENCE RIVER BASIN

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SURFACE WATER SUPPLY OF ST. LAWRENCE RIVER BASIN, 1935

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 year ending September 30, 1935. The work was begun in 1888 in connection with special studies relating to irrigation. In the execution of the work, measurements of stream flow have been made at about 7,020 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July 1935, 3,020 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at other points.

DEFINITION OF TERMS

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

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

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

"Run-off in inches" is the depth to which an area would be covered if all the water flowing from it in a given period were uniformly distributed on the 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 information in regard to the location and type of gage, 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 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



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



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

TYPICAL RIVER-MEASUREMENT STATIONS.

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.

In order to permit greater refinement in analysis and comparison of records for adjacent stations, the following changes in computation procedure were followed in preparing some of the records published in the series of reports for 1934 and all the records for 1935: (a) Mean monthly discharge above 1,000 second-feet and monthly run-off above 10,000 acre-feet are expressed to four significant figures instead of three significant figures, as formerly; (b) monthly run-off in acre-feet is computed from the total second-foot-days for the month and not from the mean discharge for the month; (c) drainage areas above 1,000 square miles, if measured on topographic maps, or if otherwise warranted, are expressed to four significant figures instead of three as formerly.

PUBLICATIONS

The results of stream-flow measurements are now published annually in 14 parts (parts 12, 13, and 14 were formerly 12-A, 12-B, and 12-C), 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., 528 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., 801 National Loan & Exchange Bank Building.
 Ocala, Fla., Post Office Building.
 Montgomery, Ala., Post Office Building.
 Chattanooga, Tenn., 217 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., 421 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.

Stream-flow data in reports of the United States Geological Survey--Continued

(A = Annual Report; B = Bulletin; W = Water-Supply Paper)

Report	Character of data	Year
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 8.

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 1935. 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, 1890-1935
(For basins included see p. 5)

Year	1	2	3	4	5	6	7	8	9	10	11	12 (12-A)	13 (12-B)	14 (12-C)
1899 a...	35	b 35, 36	36	36	c 36, 37	37	37	37	d 37, 38	38	38	38	38	38
1900 e...	47, h 48	65, 76	49, i 49	49	49 j 50	50	50	50	50	51	51	51	51	51
1901...	66, 82	b 82, 83	83	83	83	83	83	83	83	83	83	83	83	83
1902...	97	b 97, 98	98	98	98	98	98	98	98	98	98	98	98	98
1903...														
1904...	o 124, p 125, q 126	q 126, 127	128	129	k 128, 130	130, r 131	k 128, 131	132	133	133, s 134	134	135	135	135
1905...	o 165, p 166, q 167	q 167, 168	169	170	172	172	k 169, 173	174	175, t 177, s 177	177	177	178	178	178
1906...	o 201, p 202, q 203	q 203, 204	205	206	207	208	k 205, 209	210	211, t 213	213, s 213	214	214	214	214
1907...			243	244	245	246	247	248	249	250, s 251	251	252	252	252
1908...			283	284	285	286	287	288	289	290, s 291	291	292	292	292
1909...			301	302	303	304	305	306	307	308	309	310	311	312
1910...			351	352	353	354	355	356	357	358	359	360	361	362
1911...			381	382	383	384	385	386	387	388	389	390	391	392
1912...			401	402	403	404	405	406	407	408	409	410	411	412
1913...			431	432	433	434	435	436	437	438	439	440	441	442
1914...			461	462	463	464	465	466	467	468	469	470	471	472
1915...			471	472	473	474	475	476	477	478	479	480	481	482
1916...			501	502	503	504	505	506	507	508	509	510	511	512
1917...			521	522	523	524	525	526	527	528	529	530	531	532
1918...			541	542	543	544	545	546	547	548	549	550	551	552
1919...			561	562	563	564	565	566	567	568	569	570	571	572
1920...			581	582	583	584	585	586	587	588	589	590	591	592
1921...			601	602	603	604	605	606	607	608	609	610	611	612
1922...			621	622	623	624	625	626	627	628	629	630	631	632
1923...			641	642	643	644	645	646	647	648	649	650	651	652
1924...			661	662	663	664	665	666	667	668	669	670	671	672
1925...			681	682	683	684	685	686	687	688	689	690	691	692
1926...			697	698	699	700	701	702	703	704	705	706	707	708
1927...			713	714	715	716	717	718	719	720	721	722	723	724
1928...			723	724	725	726	727	728	729	730	731	732	733	734
1929...			741	742	743	744	745	746	747	748	749	750	751	752
1930...			756	757	758	759	760	761	762	763	764	765	766	767
1931...			781	782	783	784	785	786	787	788	789	790	791	792
1932...														
1933...														
1934...														
1935...														

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 Gallatin River only.

c Snake River only.

d Green and Gunnison Rivers and Colorado River above Gunnison River.

e Mojave River only.

f Kings and Kern Rivers and south Pacific slope basins.

g Rating tables and index to Water-Supply Papers 47-52 and data on precipitation, wells, and irrigation in California and Utah contained in Water-Supply Paper 52.

h Colorado River and Colorado River at Fort Collins, part 4.

i Wasatch and Schuykill Rivers to James River.

j Snake River.

k Lake Ontario and tributaries to St. Lawrence River proper.

l Hudson River to Delaware River, inclusive.

m Susquehanna River to Yackin River, inclusive.

n Flathead and Kansas Rivers.

o The Great Basin in California, except Truckee and Carson River Basins.

p Below Junction with Uila River.

q Rogue, Umpqua, and Siletz Rivers only.

r Below Junction with Uila River.

s Below Junction with Uila River.

t Below Junction with Uila River.

u Below Junction with Uila River.

v Below Junction with Uila River.

w Below Junction with Uila River.

x Below Junction with Uila River.

y Below Junction with Uila River.

z Below Junction with Uila River.

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, 1935, 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

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.

River	Location	Period	Operated by	Remarks
Brule River (head of Monominee River)	Power plant near Florence, Wis.	1917-35	Wisconsin-Michigan Power Co.	Records available at Wisconsin-Michigan Power Co., Appleton, Wis.
Cayuga Lake outlet	Lock 1, (Mud Lock) N. Y.	-	State Department of Public Works, Albany, N. Y.	
Clyde River	Clyde, N. Y.	-	do.....	
Indian River	Theresa, N. Y.	-	Syracuse Lighting Co., Inc., Syracuse, N. Y.	
New York Barge Canal	Brewerton, N. Y.	-	State Department of Public Works, Albany, N. Y.	Diversion around Oneida River at Caughdenoy, N. Y.
Oneida River	Caughdenoy, N. Y.	-	Oswego River Water- shed Corporation, Fulton, N. Y.	Also available through State Department of Public Works, Albany, N. Y.
East Branch of Oswegatchie River	Browns Falls, N. Y.	-	Syracuse Lighting Co., Inc., Syracuse, N. Y.	
Oswego River	Lower dam, Fulton, N. Y.	-	Oswego River Water- shed Corporation, Fulton, N. Y.	
Raquette River	Colton, N. Y.	-	Syracuse Lighting Co., Inc., Syracuse, N. Y.	
West Branch of St. Regis River	Parishville, N. Y.	-	do.....	
Seneca Lake outlet	Near Waterloo, N. Y.	-	State Department of Public Works, Albany, N. Y.	
Seneca River	Jacks Reef, near Baldwinsville, N. Y.	-	Oswego River Water- shed Corporation, Fulton, N. Y.	Also available through State Department of Public Works, Albany, N. Y.
Sturgeon River	Near Loretto, Mich., in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 39 N., R. 23 W., above Pine Creek	1923-35	Wisconsin-Michigan Power Co.	Computed from power- house records

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. E. Fell, chairman; and city of Rochester, Morgan D. Hayes, city engineer. In Ohio with the Ohio Cooperative Topographic Survey, C. E. Sherman, inspector. In Vermont with Charles M. Smith, governor. In Wisconsin with the Public Service Commission, John C. Damon, 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 funds appropriated by the United States Department of State, and the Corps of Engineers, United States Army; in New York by the Northern New York Utilities, Inc., International

Paper Co., Utica Gas & Electric Co., Cornell University, Malone Light & Power Co., New York & Pennsylvania Co., Associated Gas & Electric System, Rochester Gas & Electric Corporation, and Deer River Power Co.; in Vermont by the Newport Electric Light Co.; and in Wisconsin by the Wisconsin Power & Light Co., Wisconsin Public Service Corporation, and the Corps of Engineers, United States Army.

Prior to June 30, 1935, funds for the rehabilitation of gaging stations, repairs, replacement of equipment, and improvement of records were allocated by the Public Works Administration from funds made available by the National Industrial Recovery Act.

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'.

STREAMS TRIBUTARY TO LAKE SUPERIOR

Pigeon River at International Bridge, Minn.

Location.- Staff gage, lat. 48°1', long. 89°43', in lot 3, sec. 20, T. 64 N., R. 6 E. Fourth principal meridian, 100 feet above International Bridge and 9.3 miles above mouth.

Drainage area.- 590 square miles.

Records available.- April 1924 to September 1935 in reports of U. S. Geological Survey; October 1923 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.- 12 years (1923-35), 471 second-feet.

Extremes.- Maximum discharge observed during year, 5,340 second-feet Apr. 28; maximum observed gage height, 7.1 feet Apr. 14 (backwater from ice); minimum discharge, 131 second-feet Sept. 1, 2, 21-30 (gage height, 0.7 foot).
1923-35: Maximum discharge, 11,000 second-feet May 6, 1934; minimum, 35 second-feet Mar. 11-15, 1924.

Remarks.- Records good except those for period of ice effect, Dec. 4 to Apr. 17, and those above 2,000 second-feet, which are fair.

Rating table, water year 1934-35 except period of ice effect (gage height, in feet, and discharge, in second-feet)

0.4	85	1.2	279	2.0	715	2.8	1,300	3.6	2,030	5.2	4,020
.6	114	1.4	370	2.2	850	3.0	1,460	4.0	2,450	5.6	4,720
.8	151	1.6	475	2.4	1,000	3.2	1,640	4.4	2,900	6.0	5,580
1.0	206	1.8	590	2.6	1,150	3.4	1,850	4.8	3,450		

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	279	370	370	240	223	191	620	2,560	1,300	502	240	131
2	206	322	370	240	223	191	590	2,130	1,550	475	240	131
3	206	279	370	240	223	191	560	1,830	1,650	475	240	141
4	176	279	370	240	223	176	530	1,550	1,550	448	240	191
5	151	279	322	240	223	176	530	1,460	1,560	475	223	223
6	590	279	322	240	223	176	530	1,460	1,460	530	223	279
7	590	279	322	240	223	176	530	1,380	1,460	530	223	240
8	530	240	322	240	223	176	590	1,550	1,380	502	223	206
9	420	240	322	223	223	176	650	1,550	1,380	475	223	240
10	322	206	279	223	223	176	780	1,550	1,300	448	206	240
11	279	206	279	223	223	176	1,150	1,460	1,300	420	240	206
12	240	206	279	223	223	176	1,380	1,460	1,300	448	240	206
13	240	206	279	223	223	176	1,730	1,460	1,300	448	223	176
14	206	206	279	223	223	176	2,030	1,380	1,930	420	223	151
15	176	176	279	223	223	176	2,450	1,300	2,130	395	206	135
16	164	176	279	223	223	176	2,130	1,220	1,730	370	206	151
17	420	176	279	223	223	176	1,550	1,150	1,150	370	191	151
18	530	176	240	223	223	176	1,300	1,080	1,150	346	191	141
19	530	176	240	223	206	191	1,300	1,000	1,220	346	191	141
20	780	322	240	223	206	206	1,550	2,130	1,460	346	206	141
21	1,220	1,550	248	223	206	240	2,130	1,220	1,380	346	191	131
22	1,080	1,550	240	223	206	279	2,560	1,460	1,300	322	191	131
23	780	1,550	240	223	206	322	2,900	925	1,150	322	176	131
24	1,000	1,550	240	223	206	448	3,160	650	925	322	176	131
25	1,080	1,220	240	223	206	590	3,450	1,220	850	500	164	131
26	1,000	715	240	223	191	682	3,710	1,150	780	300	164	131
27	925	590	240	223	191	715	4,720	850	715	279	151	131
28	715	475	240	223	191	682	5,340	850	650	279	151	131
29	590	475	240	223	-	620	4,530	1,000	590	279	151	131
30	475	420	240	223	-	590	3,300	1,150	560	260	141	131
31	370	-	240	223	-	590	-	1,150	-	260	141	-
Month				Second-foot-days		Maximum	Minimum	Mean	Per square mile		Run-off in inches	
October.....				16,270		1,220	151	525	0.890		1.03	
November.....				14,894		1,550	176	496	.841		.94	
December.....				8,690		370	240	280	.475		.55	
Calendar year 1934.....				220,324		10,700	96	604	1.02		13.89	
January.....				7,049		240	223	227	.585		.44	
February.....				6,029		223	191	215	.564		.38	
March.....				9,368		715	176	302	.512		.59	
April.....				58,260		5,340	530	1,942	3.29		3.67	
May.....				42,285		2,560	650	1,364	2.31		2.66	
June.....				38,050		2,130	560	1,268	2.15		2.40	
July.....				12,038		530	260	388	.658		.76	
August.....				6,195		240	141	200	.539		.39	
September.....				4,931		279	131	164	.278		.31	
Water year 1934-35.....				224,059		5,340	131	614	1.04		14.12	

STREAMS TRIBUTARY TO LAKE SUPERIOR

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 1923 to February 1929, March 1930 to September 1935.

Extremes.- Maximum discharge observed during year, 1,000 second-feet Apr. 30 (gage height, 7.98 feet); minimum, 25 second-feet Sept. 1, 2 (gage height, 2.77 feet). 1912-17, 1928-35: Maximum discharge, 1,390 second-feet Apr. 25, 1916 (gage height, 4.7 feet, old datum); minimum, 8.3 second-feet Aug. 13, 17, 1934.

Remarks.- Records fair below 100 second-feet and poor above. Stage-discharge relation affected by ice Jan. 10 to Feb. 2, Mar. 20-22, and by shifting control Oct. 6 to Dec. 1, Sept. 10-17. Discharge estimated Dec. 6-29, May 29 to June 2, June 16-18.

Discharge, in second-feet, water year October 1928 to September 1929

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	144	91	71	53	30							
2	142	91	69	53	30							
3	133	94	65	53	30							
4	130	101	63	50	30							
5	159	104	60	50	30							
6	160	99	56	50	30							
7	158	96	56	47	30							
8	144	97	56	46	30							
9	125	95	56	47	30							
10	125	95	56	45	30							
11	120	90	56	45	30							
12	116	89	56	42	27							
13	114	93	56	40	20							
14	111	97	70	39	25							
15	118	144	86	35	25							
16	142	210	95	32	24							
17	131	164	90	35	24							
18	126	130	86	38	23							
19	125	111	82	37	22							
20	124	163	74	33	23							
21	130	116	67	35	22							
22	136	118	63	32	22							
23	138	93	63	33	21							
24	139	82	66	30	21							
25	144	62	70	30	21							
26	142	82	70	30	20							
27	140	82	66	30	20							
28	133	80	63	30	20							
29	104	77	65	30	-							
30	99	74	60	30	-							
31	98	-	56	30	-							
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-foot		
October.....				4,055	160	98	131	0.949	1.09			
November.....				3,133	210	74	104	.754	.84			
December.....				2,067	95	56	66.7	.483	.56			
Calendar year												
January.....				1,216	53	30	39.2	.284	.33			
February.....				710	30	20	25.4	.184	.19			
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Note.- No record for months left blank. Records for water year 1928-29 were omitted from Water-Supply Paper 759, which contains records from July to September 1928 and March 1930 to September 1934.

Poplar River at Lutsen, Minn.

(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	58	116	192	58	52	47	76	795	160	95	66	25
2	55	109	192	58	55	45	76	660	300	95	71	25
3	52	102	180	58	55	45	76	492	230	102	62	48
4	48	95	170	58	58	47	76	475	192	102	58	52
5	58	88	132	58	58	47	76	434	160	95	58	52
6	150	88	132	62	58	47	76	413	141	170	62	48
7	141	82	124	62	55	47	82	530	141	160	62	48
8	141	82	124	62	55	47	82	510	132	95	58	48
9	109	88	116	62	52	47	95	492	132	88	62	52
10	82	82	109	58	52	46	102	434	124	88	58	52
11	71	76	109	58	52	46	192	413	109	255	52	55
12	71	71	102	58	52	47	268	395	109	230	48	58
13	62	71	102	58	48	47	300	404	109	141	46	62
14	58	66	95	58	48	48	349	395	280	116	45	62
15	58	66	95	58	48	48	377	386	230	95	41	62
16	55	66	88	58	48	48	404	377	315	88	40	55
17	102	62	88	55	48	48	268	368	242	82	39	52
18	102	62	82	55	48	52	255	368	230	82	39	47
19	102	62	82	55	48	52	218	265	218	82	35	43
20	180	230	82	55	48	55	242	242	205	109	40	40
21	170	230	76	55	47	55	300	230	205	109	37	36
22	160	230	76	55	46	58	327	218	192	95	37	33
23	150	218	71	52	46	62	349	205	170	76	35	31
24	218	218	71	52	46	62	510	170	160	71	48	30
25	205	205	66	52	39	62	630	150	180	62	47	58
26	170	205	66	52	39	66	760	170	150	62	42	55
27	141	192	62	52	46	82	935	170	116	71	42	48
28	124	192	62	52	47	82	935	160	102	66	40	46
29	124	192	58	52	-	82	935	150	95	62	28	46
30	124	192	58	52	-	82	1,000	130	95	88	28	45
31	116	-	58	52	-	82	-	125	-	76	27	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	3,457	218	48	112	0.812	0.94	
November.....	3,838	230	62	128	.928	1.04	
December.....	3,120	192	58	101	.792	.84	
Calendar year 1934.....	45,716.7	1,280	8.3	125	.906	12.31	
January.....	1,742	62	52	56.2	.407	.47	
February.....	1,394	58	39	49.8	.361	.58	
March.....	1,731	82	45	55.8	.404	.47	
April.....	10,371	1,000	76	346	2.51	2.80	
May.....	10,716	795	125	346	2.51	2.89	
June.....	5,224	315	95	174	1.26	1.41	
July.....	3,208	255	62	103	.746	.86	
August.....	1,451	71	27	46.8	.339	.39	
September.....	1,414	62	25	47.1	.341	.38	
Water year 1934-35.....	47,666	1,000	25	131	.949	12.87	

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 260 feet above highway bridge 6 miles northeast of Beaver Bay. Prior to Oct. 6 a staff gage at same location and datum was used. 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 1935.

Extremes.— Maximum discharge during year, 1,890 second-feet Apr. 14 (gage height, 4.41 feet); minimum, 25 second-feet Mar. 13.

1928-29, 1930-35: 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 good except those for periods of ice effect, Nov. 13-16, Dec. 6 to Feb. 3, Mar. 4 to Apr. 8, those for periods estimated, Oct. 2, 3, June 12-15, June 29 to July 3, July 30 to Aug. 4, which are fair, and those above 1,000 second-feet, which are poor.

Rating table, water year 1934-35 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

2.2	21	2.8	77	3.4	275	4.0	1,070
2.3	26	2.9	90	3.5	335	4.1	1,270
2.4	35	3.0	112	3.6	405	4.2	1,470
2.5	44	3.1	142	3.7	490	4.3	1,670
2.6	54	3.2	179	3.8	670	4.4	1,870
2.7	65	3.3	223	3.9	870	4.5	2,070

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	45	72	97	33	29	28	166	910	107	75	550	44
2	36	63	82	33	29	28	175	670	305	70	420	40
3	31	60	101	32	32	28	188	544	299	68	350	53
4	26	55	92	31	34	28	175	439	239	65	300	172
5	37	65	51	30	34	27	179	370	210	72	254	160
6	192	50	60	34	33	27	175	384	192	105	201	127
7	175	48	72	35	33	26	179	396	197	103	168	97
8	136	46	70	36	33	27	225	422	175	81	136	77
9	105	47	66	34	33	27	390	430	160	64	115	70
10	84	45	61	32	33	27	613	393	175	66	94	64
11	66	42	61	32	33	27	870	370	149	205	61	55
12	54	38	63	30	32	27	930	504	120	275	73	94
13	46	36	58	31	32	26	1,070	662	105	205	66	219
14	41	30	60	31	32	27	1,450	598	200	153	60	228
15	35	31	58	31	32	29	1,290	439	660	124	53	192
16	35	32	53	32	32	33	1,110	542	670	96	45	160
17	58	41	52	31	31	40	950	281	544	75	40	130
18	77	45	49	31	32	42	730	239	414	70	38	101
19	73	47	49	31	32	52	670	219	323	80	38	82
20	157	306	47	30	31	67	750	192	270	85	77	69
21	249	690	45	29	32	72	950	179	239	214	92	60
22	205	509	44	29	31	80	1,190	168	210	482	81	51
23	164	363	44	29	32	90	1,310	149	172	404	69	50
24	226	288	43	30	31	106	1,330	136	139	263	63	47
25	287	223	42	29	29	121	1,310	118	200	174	102	66
26	239	210	40	29	28	157	1,290	118	179	118	105	76
27	188	183	36	29	28	201	1,670	142	149	512	51	73
28	157	164	36	29	28	285	1,430	139	112	1,110	71	66
29	121	142	35	29	-	259	1,390	124	95	770	63	62
30	94	115	35	29	-	233	1,190	110	82	900	56	58
31	85	-	34	29	-	228	-	99	-	700	51	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off
						Inches Acre-feet
October.....	3,526	287	28	114	0.838	0.97
November.....	4,074	690	30	136	1.00	1.12
December.....	1,768	101	34	57.7	.424	.49
Calendar year 1934.....	36,699	1,010	2	101	.743	10.04
January.....	959	35	29	30.9	.227	.26
February.....	881	34	28	31.5	.232	.24
March.....	2,455	265	26	79.2	.582	.67
April.....	26,167	1,670	175	839	6.17	6.88
May.....	10,283	910	99	332	2.44	2.81
June.....	7,081	670	82	236	1.74	1.94
July.....	7,782	1,110	64	261	1.85	2.13
August.....	3,993	550	38	129	.949	1.09
September.....	2,833	228	40	94.4	.694	.77
Water year 1934-35.....	70,822	1,670	26	194	1.43	19.37

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 1935.

Extremes.— Maximum discharge observed during year, 590 second-feet Mar. 27-30; maximum gage height, 12.01 feet Mar. 28, 29; minimum discharge, 90 second-feet July 27 (gage height, 8.07 feet).

1934-35: Maximum discharge, that of Mar. 27-30, 1935; maximum gage height, that of Mar. 28, 29, 1935; minimum discharge, 78 second-feet Aug. 14, 1934; minimum gage height, that of July 27, 1935.

Remarks.— Records good except those for period of ice effect, Dec. 26 to Mar. 18, which are poor.

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	217	184	558	175	145	130	558	311	142	228	113	113
2	195	184	558	170	145	130	558	299	142	195	108	113
3	184	184	528	170	145	135	558	275	152	173	104	113
4	162	251	483	170	145	140	558	263	162	152	108	122
5	152	299	469	170	145	145	543	239	162	142	104	122
6	162	348	441	175	140	150	528	228	173	142	104	132
7	173	374	427	175	140	155	528	217	184	132	108	142
8	173	400	400	180	140	155	528	217	195	132	113	142
9	173	400	387	180	140	160	528	206	206	132	113	142
10	173	413	374	185	140	160	543	206	217	132	132	142
11	173	413	348	195	140	165	558	206	228	132	132	132
12	162	400	311	190	145	165	543	195	239	132	132	132
13	162	361	275	190	145	170	543	217	261	122	132	132
14	152	323	251	185	145	175	528	228	287	113	122	132
15	142	299	228	180	140	180	543	239	323	113	113	142
16	142	311	217	170	140	190	483	228	361	113	108	152
17	142	299	206	160	140	210	498	217	387	108	104	173
18	132	275	195	160	140	240	498	195	400	104	100	173
19	132	275	195	160	140	263	469	184	427	108	100	184
20	132	287	184	160	135	275	465	173	483	108	104	195
21	132	311	184	155	135	311	427	162	513	113	113	195
22	142	427	184	155	135	348	413	152	528	113	122	195
23	142	498	184	150	135	400	400	142	528	108	122	184
24	152	528	184	150	135	441	374	142	498	104	122	173
25	173	543	184	150	130	498	361	132	469	100	122	162
26	184	543	180	150	130	558	348	132	441	95	122	162
27	195	543	180	145	130	590	335	142	400	90	122	152
28	206	543	180	145	130	590	323	152	361	95	122	142
29	206	558	175	145	-	590	323	162	311	104	122	142
30	195	543	175	145	-	590	323	152	263	108	113	142
31	195	-	175	145	-	558	-	152	-	113	113	-
Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off					
							Inches	Acre-feet				
October.....	5,147	217	132	166	0.830	0.96						
November.....	11,317	558	184	377	1.88	2.10						
December.....	9,020	558	175	291	1.46	1.68						
Calendar year												
January.....	5,125	190	145	165	.825	.95						
February.....	3,895	145	130	139	.695	.72						
March.....	8,967	590	130	289	1.44	1.66						
April.....	14,175	558	323	472	2.36	2.63						
May.....	6,165	311	132	199	.995	1.15						
June.....	9,453	528	142	314	1.87	1.75						
July.....	3,856	228	90	124	.620	.71						
August.....	3,569	132	100	115	.575	.66						
September.....	4,479	195	113	149	.745	.83						
Water year 1934-35.....	85,149	590	90	233	1.16	15.80						

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

Location.- Lat. 45°52', long. 88°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 1935.

Average discharge.- 21 years, 1,730 second-feet.

Extremes.- Maximum daily discharge during year, 5,600 second-feet Apr. 28; minimum, 777 second-feet Sept. 30.
1914-35: 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 per cent 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 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,420	1,400	2,970	1,200	1,100	1,020	4,100	5,130	1,830	1,460	982	1,010
2	1,920	1,450	2,620	1,210	1,110	991	4,060	5,030	1,430	1,450	1,040	937
3	1,530	1,440	2,080	1,230	1,100	929	4,180	4,680	1,400	1,610	1,010	966
4	1,520	1,520	1,980	1,210	1,150	993	3,850	4,640	1,320	1,380	904	936
5	1,510	2,120	2,220	1,240	1,190	940	3,360	4,220	1,160	1,300	929	973
6	1,710	2,930	2,220	1,100	1,180	971	3,460	3,570	1,240	1,540	1,020	936
7	1,270	3,040	1,630	1,380	1,160	999	3,310	2,930	1,290	1,400	1,090	938
8	1,280	2,620	1,390	1,430	1,140	1,100	2,690	2,590	1,300	1,420	1,110	901
9	1,390	2,650	1,390	1,200	1,110	1,100	2,520	2,970	1,360	1,730	1,080	928
10	1,240	2,640	1,360	1,180	1,150	1,230	2,950	2,960	1,560	1,890	1,050	900
11	1,130	2,130	1,520	1,360	1,120	1,470	4,000	2,420	1,380	1,800	1,010	938
12	1,050	2,020	1,550	1,270	1,140	1,500	4,660	3,310	1,680	1,760	1,030	889
13	1,020	1,910	1,840	1,180	1,120	1,370	4,850	2,440	1,770	1,180	1,190	866
14	1,100	1,890	1,980	1,170	1,080	1,290	4,610	3,240	1,850	1,080	1,200	958
15	1,140	1,820	1,950	1,140	1,100	1,370	5,270	3,200	2,260	1,120	1,500	1,020
16	1,140	1,720	1,560	1,160	1,090	1,040	4,880	2,950	2,120	1,120	1,200	1,140
17	1,160	1,760	1,350	1,180	1,060	1,240	4,860	2,410	2,270	1,160	1,120	1,170
18	1,140	1,740	1,420	1,150	1,130	1,400	4,360	2,470	2,230	1,170	1,120	1,200
19	1,090	1,740	1,310	1,110	1,090	2,080	4,380	2,070	2,320	1,120	1,160	1,230
20	1,050	1,890	1,310	1,080	1,130	1,860	4,370	1,980	2,950	1,160	1,160	1,260
21	1,270	2,110	1,460	1,150	1,080	2,370	4,300	1,910	3,080	1,020	1,130	1,270
22	1,950	3,000	1,380	1,160	1,010	2,480	4,230	1,940	3,410	1,290	1,260	1,170
23	2,120	4,130	1,360	1,110	1,030	2,460	4,360	1,690	2,980	1,350	1,390	1,130
24	2,080	4,320	1,250	1,100	1,100	2,170	4,370	1,680	3,100	1,460	1,220	1,050
25	2,090	4,180	1,240	1,250	1,140	4,370	4,350	1,560	2,450	1,610	1,500	958
26	1,920	3,440	1,200	1,260	1,110	4,440	4,440	1,250	2,440	1,730	1,350	856
27	1,450	3,140	1,240	1,120	1,080	4,240	4,970	1,210	2,850	1,560	1,260	813
28	1,480	3,460	1,250	1,140	1,060	4,690	5,600	1,360	2,360	1,260	1,200	780
29	1,460	3,450	1,220	1,160	-	4,480	5,470	1,420	1,950	1,120	1,140	829
30	1,490	3,190	1,220	1,130	-	4,150	5,440	1,400	1,670	1,130	1,120	777
31	1,470	-	1,220	1,140	-	4,120	-	1,700	-	1,030	976	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				45,580	2,420	1,020	1,470	0.821	0.95			
November.....				74,830	4,320	1,400	2,494	1.39	1.55			
December.....				49,680	2,970	1,200	1,603	.896	1.03			
Calendar year 1934.....				609,676	10,000	442	1,670	.933	12.68			
January.....				36,900	1,430	1,080	1,190	.665	.77			
February.....				31,060	1,190	1,010	1,109	.620	.65			
March.....				64,868	4,690	929	2,093	1.17	1.35			
April.....				128,240	5,600	2,520	4,275	2.39	2.67			
May.....				82,330	5,130	1,210	2,656	1.48	1.71			
June.....				61,010	3,410	1,160	2,034	1.14	1.27			
July.....				42,310	1,890	1,020	1,365	.763	.88			
August.....				35,051	1,390	904	1,131	.632	.73			
September.....				29,729	1,270	777	991	.554	.62			
Water year 1934-35.....				681,588	5,600	777	1,867	1.04	14.18			

Menominee River below Koss, Mich.

Location.- Lat. 45°22', long. 87°39', in sec. 9, T. 34 N., R. 27 W., at power plant of Wisconsin Public Service Corporation (formerly owned by Menominee & Marinette Light & Traction Co.), 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 1935.

Average discharge.- 22 years, 3,146 second-feet.

Extremes.- Maximum daily discharge during year, 13,600 second-feet Mar. 28; minimum, 720 second-feet Sept. 30.

1913-35: 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 furnished by Wisconsin Public Service Corporation.

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	3,320	2,400	7,040	2,020	1,670	1,890	9,150	8,160	2,690	2,950	1,730	1,940
2	3,090	2,300	5,060	1,870	1,940	1,870	8,560	6,780	2,780	3,360	2,020	1,200
3	3,140	2,400	6,520	1,940	1,800	1,870	7,530	6,620	2,300	2,800	1,730	915
4	2,300	3,060	4,310	2,090	1,480	1,300	7,060	6,720	2,590	2,250	1,580	1,580
5	2,110	3,100	2,830	2,310	1,760	1,440	7,690	7,360	2,590	2,600	1,220	1,940
6	1,760	3,250	2,640	1,960	1,870	1,340	6,810	5,440	2,210	2,820	1,730	1,940
7	2,250	3,950	2,250	1,420	1,740	1,800	7,260	3,780	2,110	3,340	1,940	1,800
8	2,350	4,040	2,870	1,800	1,960	1,940	5,920	3,790	1,790	2,440	2,300	1,870
9	1,820	3,690	2,730	1,870	1,840	2,020	5,040	4,350	2,320	2,410	2,120	945
10	2,290	4,180	2,530	2,380	1,730	2,020	4,020	5,690	1,980	2,820	2,450	1,560
11	1,870	3,310	2,490	2,040	1,580	1,580	4,030	6,930	2,650	3,010	2,280	1,370
12	1,730	2,830	2,580	1,800	1,730	1,970	7,680	5,920	2,690	2,900	1,660	1,300
13	1,800	2,880	3,020	2,050	1,890	2,590	7,040	6,260	2,750	3,020	1,940	1,300
14	1,220	2,780	2,800	1,900	1,940	2,480	8,040	5,930	2,950	2,440	1,940	940
15	1,220	2,310	3,000	1,820	2,020	2,460	8,520	5,330	2,880	1,830	1,940	1,740
16	1,730	2,500	3,310	1,870	1,940	2,230	8,490	6,500	4,900	2,080	1,940	1,100
17	1,660	2,290	3,350	1,900	1,730	2,260	9,220	5,390	4,560	2,400	1,940	1,520
18	1,660	2,500	2,510	1,750	1,580	1,970	8,350	5,750	3,940	2,210	1,800	1,730
19	1,580	3,000	2,590	1,660	1,660	2,550	9,430	4,310	5,000	2,400	1,340	2,090
20	1,650	2,690	2,590	2,060	2,020	2,690	8,540	3,350	5,650	2,050	1,780	1,940
21	2,020	2,800	2,300	1,640	1,870	3,640	8,840	3,500	7,850	1,800	1,730	1,940
22	1,790	4,440	2,300	1,730	1,800	3,970	6,740	3,000	6,980	1,660	1,870	1,940
23	4,210	5,220	2,530	1,770	1,870	4,620	6,770	3,100	7,170	2,270	1,730	1,800
24	2,750	6,290	2,060	1,730	1,680	6,680	5,820	3,080	6,590	2,320	1,800	1,660
25	4,450	8,300	2,050	1,940	1,420	7,220	5,320	2,510	5,440	2,230	1,660	2,020
26	4,340	6,560	2,020	1,800	1,640	8,420	5,560	3,110	4,720	2,230	1,870	1,940
27	3,880	6,420	2,030	2,000	1,800	12,800	5,440	1,920	4,290	2,370	1,580	1,800
28	3,990	6,760	2,110	1,580	1,730	13,600	6,940	2,590	4,000	2,510	2,020	1,940
29	3,260	7,010	2,050	1,730	-	11,600	8,410	2,490	3,410	1,870	1,940	1,300
30	2,590	6,360	2,110	1,800	-	10,500	8,220	2,300	3,050	1,750	1,800	720
31	2,320	-	2,150	1,870	-	9,580	-	1,820	-	2,250	1,660	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				76,160	4,450	1,220	2,457	0.648	0.75			
November.....				119,420	8,500	2,290	3,981	1.05	1.17			
December.....				90,830	7,040	2,020	2,930	.773	.99			
Calendar year 1934.....				926,522	13,400	336	2,538	.670	9.09			
January.....				58,340	2,380	1,420	1,882	.497	.57			
February.....				49,890	2,020	1,420	1,782	.470	.49			
March.....				132,900	13,600	1,300	4,287	1.13	1.30			
April.....				216,440	9,430	4,020	7,215	1.90	2.12			
May.....				143,780	8,160	1,820	4,638	1.22	1.41			
June.....				114,930	7,560	1,790	3,931	1.01	1.13			
July.....				75,390	3,560	1,660	2,430	.642	.74			
August.....				56,990	2,450	1,220	1,838	.485	.56			
September.....				47,780	2,090	720	1,593	.420	.47			
Water year 1934-35.....				1,182,850	13,600	720	3,241	.855	11.60			

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., 6½ miles south of Florence.

Drainage area.- 520 square miles.

Records available.- October 1923 to September 1935; January 1914 to September 1923 at station 4 miles upstream, where drainage area was 488 square miles.

Average discharge.- 12 years, 406 second-feet.

Extremes.- Maximum daily discharge during year, 1,490 second-feet June 21, 22; minimum, 84 second-feet Oct. 14.

1923-35: Maximum daily discharge, 4,390 second-feet Apr. 9, 1929; no flow at times in 1924, 1928, 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 U. S. Geological Survey.

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	684	339	704	339	212	140	1,130	1,120	339	432	314	216
2	669	339	479	226	240	234	1,010	999	339	460	230	230
3	495	420	514	339	222	194	898	917	339	460	230	230
4	542	509	647	229	240	187	844	795	339	342	325	325
5	585	677	553	226	240	231	779	706	329	457	325	230
6	405	678	487	155	240	273	675	666	325	555	392	230
7	334	678	429	329	240	281	676	678	331	820	615	238
8	325	677	442	238	240	249	662	664	427	890	612	214
9	325	671	361	234	226	256	675	664	392	780	620	236
10	325	582	395	339	224	337	752	664	569	700	605	173
11	226	509	393	240	240	273	860	634	590	605	605	214
12	226	431	339	240	240	273	969	784	556	590	523	217
13	334	383	339	226	240	289	1,020	1,010	473	523	325	217
14	84	339	345	240	240	269	1,090	984	652	536	376	217
15	254	325	344	212	240	281	1,180	926	1,090	509	325	190
16	198	339	339	240	212	245	1,140	754	1,160	493	310	239
17	198	339	393	212	226	313	1,120	649	1,190	450	310	231
18	190	339	339	240	240	326	1,130	664	1,020	432	325	239
19	198	472	339	240	212	470	982	620	1,250	432	224	332
20	226	542	325	198	240	498	951	508	1,460	482	230	467
21	369	571	226	240	240	493	950	458	1,490	298	325	403
22	597	1,020	339	240	240	701	943	379	1,490	431	456	333
23	556	1,060	339	240	240	1,030	978	396	1,420	310	454	339
24	664	1,020	339	240	127	1,290	947	400	1,180	325	441	339
25	654	938	226	279	240	1,280	904	325	1,020	317	318	326
26	650	895	339	240	240	1,210	880	325	890	310	325	325
27	569	764	339	197	240	1,420	1,240	379	805	310	325	325
28	589	763	226	240	240	1,260	1,370	379	766	205	325	243
29	467	729	331	254	-	1,130	1,360	507	737	220	325	108
30	438	798	216	240	-	1,100	1,240	392	635	349	310	243
31	384	-	226	240	-	1,090	-	332	-	314	271	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				12,570	684	84	405	0.779	0.90			
November.....				18,146	1,060	325	605	1.16	1.29			
December.....				11,672	704	216	377	.725	.84			
Calendar year 1934.....				130,728	1,600	10	358	.688	9.36			
January.....				7,592	339	155	245	.471	.54			
February.....				6,461	240	127	231	.444	.46			
March.....				17,615	1,420	140	568	1.09	1.26			
April.....				29,555	1,370	662	978	1.88	2.10			
May.....				19,588	1,120	325	631	1.21	1.40			
June.....				23,833	1,490	325	798	1.52	1.70			
July.....				14,337	890	205	462	.888	1.02			
August.....				11,696	620	224	377	.725	.84			
September.....				7,868	467	108	262	.504	.56			
Water year 1934-35.....				180,503	1,490	84	494	.950	12.91			

Pike River at Amberg, Wis.

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

Drainage area.- 240 square miles.

Records available.- August 1934 to September 1935; February 1914 to May 1931 at Chicago, Milwaukee, St. Paul & Pacific Railroad bridge 500 feet below; May 1931 to August 1934 at highway bridge 3,500 feet below present site.

Average discharge.- 21 years, 233 second-feet.

Extremes.- Maximum discharge observed during year, 875 second-feet Mar. 25 (gage height, 4.08 feet); minimum, 61 second-feet Aug. 7 (gage height, 1.40 feet).
1914-35: 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 good except those for period of ice effect, Dec. 5 to Mar. 21, which are poor.

Rating table, water year 1934-35 except period of ice effect (gage height, in feet, and discharge, in second-feet)

1.4	61	2.0	152	2.6	292	3.4	572
1.6	87	2.2	193	2.8	353	3.8	741
1.8	117	2.4	240	3.0	420	4.2	920

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	117	143	456	152	152	162	493	353	172	193	134	117
2	117	134	370	152	152	172	438	307	172	193	134	117
3	109	134	292	152	162	172	438	265	172	182	152	117
4	109	240	252	143	162	172	420	252	162	172	143	126
5	109	278	252	152	162	193	353	240	162	172	143	117
6	117	252	240	162	152	216	338	240	162	307	134	117
7	109	216	240	162	143	204	322	228	172	386	61	134
8	109	193	240	162	152	204	322	240	172	292	87	152
9	101	182	240	162	152	204	322	353	172	228	216	143
10	101	172	240	162	152	228	338	353	193	193	182	143
11	109	162	240	152	152	204	386	370	216	193	152	134
12	101	152	240	152	152	162	474	438	216	193	152	134
13	101	152	240	152	152	216	474	493	216	193	152	126
14	101	143	258	172	152	182	438	474	240	182	143	143
15	94	143	228	172	152	182	438	370	307	172	143	134
16	94	134	228	172	152	182	420	322	292	162	134	143
17	101	134	228	162	152	193	386	278	292	162	134	134
18	94	152	216	152	152	216	353	252	265	162	134	134
19	94	162	216	152	152	252	322	228	353	152	172	172
20	109	204	216	152	143	307	307	216	654	143	152	143
21	152	265	216	152	152	353	292	204	265	143	143	172
22	182	532	216	162	143	420	278	204	216	265	134	152
23	172	572	204	152	143	612	265	193	403	240	126	143
24	204	612	204	143	143	758	252	182	322	204	126	134
25	240	532	193	152	134	875	240	182	265	172	152	134
26	216	420	172	152	134	830	240	172	228	162	152	134
27	193	370	172	152	134	875	386	182	216	152	143	126
28	172	456	172	152	134	875	572	193	216	152	134	134
29	152	572	172	152	-	654	532	182	204	143	126	126
30	152	532	162	152	-	612	438	172	182	134	126	126
31	143	-	152	152	-	532	-	172	-	134	126	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				4,084	240	94	132	0.550	0.63			
November.....				8,365	612	134	279	1.16	1.29			
December.....				7,137	456	152	230	.958	1.10			
Calendar year 1934.....				64,612	1,160	70	177	.738	10.00			
January.....				4,834	172	143	156	.650	.75			
February.....				4,169	162	134	149	.621	.65			
March.....				11,446	875	162	369	1.54	1.78			
April.....				11,277	572	240	376	1.57	1.75			
May.....				8,310	493	172	268	1.12	1.29			
June.....				7,279	654	162	243	1.01	1.13			
July.....				5,933	386	134	191	.796	.92			
August.....				4,542	216	61	140	.583	.67			
September.....				4,061	172	117	135	.562	.63			
Water year 1934-35.....				81,237	875	61	223	.929	12.59			

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.- 585 square miles.

Records available.- August 1912 to September 1935.

Average discharge.- 23 years, 494 second-feet.

Extremes.- Maximum daily discharge during year, 1,410 second-feet Apr. 1; minimum, 7 second-feet each month except November and April.
1912-35: Maximum daily discharge, 3,880 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. 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 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	636	663	1,070	90	23	723	1,410	1,130	117	772	376	7
2	434	681	402	541	20	223	1,170	1,130	7	710	377	7
3	470	295	239	468	97	7	1,240	1,190	288	488	109	356
4	513	31	1,040	437	407	757	1,010	974	262	125	7	289
5	135	518	907	7	623	748	1,110	413	407	279	551	164
6	287	564	412	307	667	822	1,210	713	282	428	409	160
7	7	303	483	419	507	832	775	542	373	182	507	415
8	534	682	282	308	556	563	1,100	436	265	563	265	7
9	754	859	7	205	176	245	912	916	7	526	219	348
10	159	907	364	124	7	7	812	1,090	414	545	197	188
11	175	302	588	203	556	236	715	929	400	390	7	332
12	167	314	464	167	652	91	864	15	231	368	719	289
13	8	357	390	64	586	44	960	756	232	274	567	411
14	7	232	398	280	557	7	1,100	738	305	7	516	274
15	355	197	207	337	507	7	1,340	765	421	656	537	7
16	8	293	7	268	154	96	1,230	831	561	694	361	252
17	7	100	519	183	7	271	1,060	784	878	829	128	174
18	52	51	595	495	574	340	1,030	642	1,020	614	7	111
19	167	900	475	219	657	263	1,070	49	1,020	558	696	420
20	237	943	459	7	602	341	1,010	767	902	277	459	679
21	300	869	531	488	387	214	587	724	980	44	320	317
22	397	868	261	503	552	619	932	642	1,190	372	37	7
23	513	933	52	592	372	347	1,060	660	715	306	24	774
24	732	989	168	598	7	83	1,210	631	1,320	325	50	576
25	658	594	7	265	503	733	977	564	1,090	293	7	460
26	671	1,160	211	220	820	795	857	152	1,060	225	708	495
27	600	1,190	231	240	834	999	635	706	1,060	75	437	425
28	155	1,200	397	136	681	1,320	270	115	997	7	381	291
29	683	826	272	219	-	1,350	910	263	661	345	373	7
30	680	941	7	335	-	1,380	1,040	7	160	223	283	355
31	713	-	377	60	-	1,360	-	336	-	312	157	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	11,214	754	7	362	0.619	0.71	
November.....	18,780	1,200	31	626	1.07	1.19	
December.....	11,822	1,070	7	381	.651	.75	
Calendar year 1934.....	124,639	1,320	7	341	.583	7.92	
January.....	8,805	598	7	284	.485	.56	
February.....	12,091	834	7	432	.738	.77	
March.....	15,813	1,380	7	510	.872	1.01	
April.....	29,506	1,410	270	987	1.69	1.89	
May.....	19,610	1,190	7	633	1.08	1.24	
June.....	17,625	1,320	7	588	1.01	1.13	
July.....	11,600	772	7	374	.639	.74	
August.....	9,801	719	7	316	.540	.62	
September.....	8,597	774	7	287	.491	.55	
Water year 1934-35.....	175,364	1,410	7	490	.821	11.16	

Oconto River near Gillett, Wis.

Location.- Chain gage, lat. 44°52', long. 88°18', in sec. 34, T. 28 N., R. 18 E., 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 1935.

Average discharge.- 21 years (1914-35), 805 second-feet.

Extremes.- Maximum discharge during year (estimated), 3,180 second-feet Mar. 22 (gage height, 6.98 feet); minimum, 226 second-feet (estimated) Feb. 22-25; minimum gage height, 0.77 foot Oct. 12, 1906-9, 1914-35: 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 good except those for period of ice effect, Dec. 6 to Mar. 22, which are poor.

Rating table, water year 1934-35 except period of ice effect (gage height, in feet, and discharge, in second-feet)

0.4	150	1.2	413	2.6	1,150	4.5	2,730
.6	197	1.5	550	3.0	1,440	5.0	3,180
.7	258	1.8	700	3.5	1,840		
1.0	331	2.2	910	4.0	2,280		

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	312	480	1,290	526	276	242	1,760	700	413	526	392	331
2	293	480	1,290	526	276	258	1,600	700	413	503	413	312
3	293	503	1,290	503	276	276	1,440	700	392	503	413	293
4	276	503	1,290	480	276	293	1,370	700	392	503	413	293
5	258	503	1,290	480	276	293	1,290	700	371	526	392	293
6	258	503	1,290	457	276	293	1,220	700	371	526	413	293
7	258	526	1,220	457	276	293	1,220	700	371	550	550	312
8	258	526	1,080	457	276	293	1,220	650	392	503	526	312
9	258	503	1,020	457	276	293	1,220	650	392	503	503	293
10	258	503	965	457	276	312	1,050	650	392	480	526	293
11	258	526	910	435	276	331	1,020	700	392	457	526	293
12	242	526	910	413	258	371	965	700	413	435	503	293
13	258	526	855	392	258	413	965	750	392	413	503	293
14	258	526	800	371	258	457	965	750	392	392	457	293
15	258	526	800	351	258	457	965	800	392	392	435	293
16	258	550	800	351	258	503	910	700	392	392	392	293
17	258	550	800	331	258	550	910	650	526	392	392	312
18	258	574	800	331	258	624	910	624	550	371	371	331
19	258	599	750	331	242	624	855	624	599	371	371	1,080
20	258	750	750	331	242	910	855	599	750	371	371	910
21	258	800	750	312	242	1,440	855	574	800	371	371	965
22	258	910	700	312	226	3,180	855	550	855	371	371	910
23	293	910	700	312	226	2,910	800	526	910	371	371	800
24	293	1,020	700	293	226	2,820	800	503	855	351	371	700
25	331	1,020	650	293	226	2,640	800	480	750	351	371	599
26	435	1,080	624	293	242	2,550	800	457	750	392	371	550
27	457	1,080	624	293	242	2,280	750	457	650	413	371	480
28	457	1,150	599	293	242	2,010	750	457	624	413	371	457
29	457	1,290	574	293	-	1,920	750	435	599	413	351	413
30	457	1,290	574	276	-	1,920	700	435	550	413	351	413
31	480	-	550	276	-	1,760	-	413	-	413	351	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				9,462	480	242	305	0.450	0.52			
November.....				21,233	1,290	480	708	1.04	1.16			
December.....				27,245	1,290	550	879	1.30	1.60			
Calendar year 1934.....				153,342	2,490	150	420	.619	8.42			
January.....				11,683	526	276	377	.556	.64			
February.....				7,198	276	226	257	.379	.39			
March.....				33,516	3,180	242	1,081	1.59	1.83			
April.....				30,600	1,760	700	1,020	1.50	1.67			
May.....				19,034	800	413	614	.906	1.04			
June.....				16,040	910	371	535	.789	.88			
July.....				13,381	550	351	432	.637	.73			
August.....				12,883	550	351	416	.614	.71			
September.....				13,703	1,080	293	457	.674	.75			
Water year 1934-35.....				215,978	3,180	226	592	.873	11.82			

Fox River at Berlin, Wis.

Location.- Staff gage, lat. 43°57'5", long. 88°57'30", in sec. 16, T. 17 N., R. 13 E., at Government lock and dam 2 1/3 miles upstream from Berlin.

Drainage area.- 1,430 square miles.

Records available.- January 1898 to September 1935.

Average discharge.- 37 years, 1,111 second-feet.

Extremes.- Maximum daily discharge during year, 4,340 second-feet Mar. 21, 22; minimum, 485 second-feet Jan. 24, 25.

1898-1935: 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 Engineer, U. S. Army.

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	675	645	1,460	565	560	575	3,080	1,570	865	1,220	800	865
2	705	615	1,570	565	570	570	3,000	1,620	865	1,320	1,020	865
3	705	645	1,520	535	605	565	2,850	1,570	905	1,320	1,220	900
4	675	705	1,520	535	615	595	2,670	1,570	940	1,270	1,270	765
5	675	765	1,680	535	625	615	2,600	1,620	940	1,270	1,320	765
6												
7	645	735	1,710	535	635	1,120	2,450	1,620	905	1,220	1,320	765
8	645	765	1,600	535	640	1,220	2,310	1,620	905	1,180	1,360	735
9	645	735	1,360	585	610	1,170	2,240	1,570	905	1,100	1,420	800
10	645	735	1,300	605	630	1,120	2,100	1,570	965	1,100	1,420	800
11	615	765	1,350	610	650	1,170	1,980	1,520	905	1,060	1,460	765
12												
13	590	765	1,280	630	690	1,320	1,980	1,460	865	975	1,460	735
14	645	765	1,100	620	670	1,460	2,040	1,620	865	940	1,460	735
15	645	765	1,010	590	650	1,600	2,100	1,680	830	905	1,460	735
16	645	735	865	570	635	1,700	2,170	1,910	765	865	1,420	735
17	615	735	900	540	620	1,900	2,240	1,980	765	850	1,360	705
18												
19	615	735	865	540	630	2,410	2,040	1,980	765	735	1,360	705
20	615	735	865	500	635	2,700	2,040	1,910	800	675	1,460	705
21	615	735	865	570	630	3,070	1,980	1,860	600	645	1,460	705
22	615	765	830	560	630	3,380	1,910	1,680	1,060	645	1,520	705
23	645	735	830	550	625	3,430	1,800	1,460	1,270	645	1,570	765
24												
25	645	830	795	570	620	4,340	1,740	1,320	1,460	645	1,570	905
26	675	1,020	785	535	605	4,340	1,620	1,220	1,620	705	1,460	905
27	675	1,100	785	510	590	4,230	1,520	1,140	1,740	705	1,360	765
28	675	1,140	755	485	585	4,020	1,460	1,100	1,800	705	1,270	705
29	705	1,180	695	465	575	3,920	1,520	1,060	1,800	735	1,180	705
30												
31	705	1,180	675	510	560	3,820	1,520	1,060	1,740	765	1,100	735
2	675	1,180	615	510	555	3,820	1,570	1,060	1,680	765	1,060	735
3	645	1,320	615	510	570	3,720	1,570	1,020	1,520	630	975	800
4	675	1,360	565	510	-	3,530	1,620	975	1,460	865	940	765
5	645	1,420	565	520	-	3,350	1,620	940	1,320	830	905	705
6	675	-	565	550	-	3,170	-	905	-	850	905	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	20,270	705	590	654	0.457	0.63	
November.....	26,310	1,420	615	877	.613	.68	
December.....	32,055	1,710	565	1,034	.723	.83	
Calendar year 1934.....	253,175	1,910	360	694	.485	6.57	
January.....	17,070	630	485	551	.385	.44	
February.....	17,205	680	555	614	.429	.45	
March.....	74,250	4,340	565	2,595	1.67	1.92	
April.....	61,320	3,080	1,460	2,044	1.43	1.60	
May.....	45,180	1,980	905	1,457	1.02	1.18	
June.....	33,925	1,800	765	1,151	.791	.88	
July.....	28,300	1,320	645	913	.638	.74	
August.....	39,865	1,570	800	1,286	.899	1.04	
September.....	22,880	905	705	765	.634	.60	
Water year 1934-35.....	418,630	4,340	485	1,147	.802	10.89	

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

Location.- Lat. 44°19', long. 86°12', in sec. 4, T. 21 N., R. 19 E., at Rapide Croche Dam, 2 miles above Wrightstown.

Drainage area.- 6,150 square miles.

Records available.- March 1896 to September 1935.

Average discharge.- 39 years, 4,330 second-feet.

Extremes.- Maximum daily discharge during year, 11,100 second-feet Apr. 4, 6; minimum, 928 second-feet Oct. 7.

1918-35: Maximum daily discharge, 20,600 second-feet Apr. 4, 1929; minimum, 273 second-feet Sept. 24, 1933.

Remarks.- Records good. Flow regulated by storage in Lake Winnebago. Daily discharge records computed by Corps of Engineers, U. S. Army, from power-house records.

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	2,060	1,610	4,010	3,530	3,730	3,710	9,240	6,760	3,570	4,280	3,320	1,940
2	1,800	2,490	3,650	3,320	3,740	4,310	9,890	7,050	3,620	4,160	3,120	2,170
3	1,680	1,950	4,930	3,390	2,980	4,010	10,400	7,210	3,930	3,000	2,740	3,140
4	1,800	1,510	5,190	3,960	4,280	4,520	11,100	7,160	3,940	4,360	2,640	2,900
5	1,910	1,910	6,540	4,030	4,280	5,320	11,000	5,500	3,960	3,770	3,060	2,820
6	1,640	2,240	5,580	2,820	4,850	4,900	11,100	5,600	4,200	3,930	3,430	2,870
7	928	2,540	5,090	4,080	4,870	4,770	10,500	5,860	4,010	3,530	3,250	2,710
8	1,680	2,270	5,350	3,940	4,620	4,820	10,500	4,980	3,600	3,950	3,370	1,620
9	1,620	2,260	4,360	3,940	3,970	4,570	8,960	4,650	3,220	4,500	3,530	2,540
10	1,500	2,060	4,630	3,970	3,800	5,090	8,990	5,040	4,090	4,200	2,820	2,960
11	1,750	1,650	4,940	3,500	4,490	5,660	7,960	4,730	3,790	4,220	2,770	3,010
12	1,450	1,970	5,820	3,140	4,320	6,220	7,920	4,240	3,900	4,040	3,130	2,830
13	1,610	2,240	5,460	2,610	4,070	6,100	7,850	4,660	3,820	3,400	3,430	2,480
14	1,440	2,240	4,610	3,610	4,120	6,650	7,370	4,390	3,770	3,180	3,460	2,170
15	1,460	2,480	3,890	3,670	4,110	6,910	7,620	6,140	3,600	3,960	3,430	1,960
16	1,790	2,620	3,400	3,730	4,030	7,690	8,440	7,210	2,730	3,690	3,480	2,710
17	1,710	2,680	4,360	3,440	3,320	7,320	8,380	7,280	3,750	3,840	2,910	2,630
18	1,470	1,720	4,440	3,700	4,120	6,930	8,330	6,740	3,760	3,500	2,470	2,760
19	1,760	2,470	4,430	3,470	4,020	6,940	7,910	4,940	5,450	3,650	2,930	2,890
20	1,850	2,740	4,440	2,750	3,900	7,850	6,540	5,040	5,110	3,100	3,440	2,850
21	1,300	3,420	4,230	3,400	4,100	8,010	4,900	5,280	4,820	2,230	3,310	2,630
22	1,800	3,700	3,880	3,170	4,000	7,420	5,280	5,220	3,140	2,910	3,280	2,010
23	1,690	3,370	2,850	4,100	3,950	7,180	5,300	4,800	3,720	3,000	2,900	3,030
24	1,950	3,250	2,830	3,530	2,730	7,070	4,970	4,110	4,190	3,300	3,030	2,820
25	1,820	2,420	3,390	3,980	3,470	7,420	4,580	3,810	4,440	3,110	2,280	2,920
26	1,800	3,050	3,800	3,460	4,440	7,950	4,610	3,540	4,220	3,160	3,080	2,720
27	1,510	3,490	3,800	2,220	4,550	8,220	4,540	4,260	4,320	3,290	3,180	2,520
28	934	3,960	3,790	3,440	4,180	8,140	4,150	4,020	4,290	2,550	2,920	2,610
29	1,700	4,150	3,520	3,290	-	8,210	4,930	4,090	3,540	2,970	3,060	1,690
30	1,540	3,370	2,680	3,410	-	8,240	5,940	3,860	4,040	3,470	3,080	2,820
31	1,840	-	3,270	3,640	-	8,170	-	3,440	-	3,400	2,690	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	50,892	2,060	928	1,642	0.267	0.31	
November.....	79,030	4,150	1,610	2,601	.423	.47	
December.....	133,380	6,540	2,550	4,303	.700	.81	
Calendar year 1934.....	810,496	6,650	343	2,221	.361	4.91	
January.....	110,250	4,100	2,220	3,556	.578	.67	
February.....	113,170	4,870	2,730	4,042	.657	.68	
March.....	199,820	8,240	3,710	6,446	1.05	1.21	
April.....	228,290	11,100	4,150	7,643	1.24	1.38	
May.....	161,610	7,280	3,440	5,213	.848	.98	
June.....	118,540	5,450	2,730	3,951	.642	.72	
July.....	109,350	4,360	2,230	3,527	.573	.66	
August.....	98,540	3,530	2,280	3,082	.501	.58	
September.....	77,650	3,140	1,620	2,598	.421	.47	
Water year 1934-35.....	1,477,502	11,100	928	4,048	.658	8.94	

Wolf River above West Branch of Wolf River, Wis.

Location.- Staff gage, lat. 44°55', long. 88°39', in E¹/₄ sec. 3, T. 28 N., R. 15 E., half a mile above West Branch of Wolf River and 3 miles upstream from 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 1935.

Extremes.- Maximum discharge observed during year (estimated), 1,880 second-feet Mar. 25 (gage height, 5.95 feet); minimum (estimated), 348 second-feet Sept. 13 (gage height, 1.92 feet).

1928-35: Maximum discharge observed, 2,580 second-feet Apr. 8, 1929 (gage height, 6.10 feet); minimum, 201 second-feet Nov. 21, 1929, and Sept. 6, 1933 (gage height, 1.35 feet).

Remarks.- Records excellent except those for period of ice effect, Dec. 3 to Apr. 2, which are fair.

Rating table, water year 1934-35 except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 6 to Sept. 30)

1.3	218	2.0	396	3.5	1,070
1.4	237	2.2	464	4.0	1,340
1.5	258	2.5	578	4.6	1,680
1.6	281	2.8	716		
1.8	333	3.1	869		

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	538	578	716	464	380	396	1,180	818	396	716	350	413
2	500	538	578	413	350	413	1,230	767	413	665	350	396
3	500	578	578	396	396	430	1,230	767	413	620	350	396
4	500	716	578	396	396	464	1,130	716	396	620	396	413
5	500	818	578	396	396	464	1,130	716	390	665	380	413
6	464	767	578	430	396	464	1,070	665	396	716	578	413
7	464	716	538	413	380	500	1,020	665	396	767	620	413
8	464	665	578	390	380	500	970	665	413	665	620	413
9	430	665	538	380	380	500	970	716	430	578	620	396
10	413	620	464	380	380	500	1,020	665	430	500	578	396
11	413	578	464	363	380	500	1,130	665	430	464	578	396
12	430	538	464	380	380	500	1,180	716	430	464	538	363
13	413	578	538	413	380	500	1,180	767	430	500	600	348
14	413	538	500	413	380	500	1,130	716	464	500	600	380
15	396	464	464	396	380	500	1,180	665	578	464	464	380
16	380	538	464	380	380	500	1,130	665	620	464	464	396
17	380	538	538	363	380	500	1,020	620	716	464	464	413
18	380	538	500	380	396	538	1,070	620	716	464	464	538
19	363	578	430	366	380	578	970	578	970	430	464	313
20	430	767	464	413	380	578	920	578	1,070	430	464	620
21	538	767	464	413	380	620	920	538	1,070	430	464	578
22	620	1,130	464	396	380	818	869	538	1,020	413	464	500
23	620	1,180	538	396	363	1,130	869	538	970	413	430	464
24	716	1,230	396	396	396	1,290	818	500	970	396	430	430
25	767	1,130	430	413	396	1,680	818	500	970	430	430	430
26	716	869	464	413	396	1,400	767	500	669	413	430	396
27	665	869	464	396	380	1,130	970	538	669	413	413	413
28	620	970	396	380	380	1,230	920	500	618	396	413	430
29	620	970	464	380	-	1,180	920	464	767	413	413	430
30	620	970	430	380	-	1,230	869	396	665	396	413	430
31	620	-	430	380	-	1,400	-	396	-	380	413	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off Inches	Acres-feet
October.....	15,893	767	363	513	0.810	0.93	
November.....	22,401	1,230	464	747	1.19	1.32	
December.....	15,490	716	396	500	.790	.91	
Calendar year 1934.....	167,572	1,620	228	469	.725	9.83	
January.....	12,288	464	363	396	.626	.72	
February.....	10,751	396	363	354	.607	.63	
March.....	22,897	1,680	396	739	1.17	1.32	
April.....	30,600	1,230	767	1,020	1.61	1.80	
May.....	19,158	818	396	618	.976	1.13	
June.....	19,475	1,070	380	649	1.03	1.15	
July.....	15,649	767	380	505	.798	.92	
August.....	14,545	620	380	469	.741	.86	
September.....	13,215	818	348	440	.695	.78	
Water year 1934-35.....	212,362	1,680	348	582	.919	12.49	

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.

Drainage area.- 812 square miles.

Records available.- March 1928 to September 1935; May 1907 to March 1909, February 1911 to March 1928 at station 1½ miles downstream, at Keshena.

Average discharge.- 24 years (1911-35), 788 second-feet.

Extremes.- Maximum discharge during year, 2,160 second-feet Mar. 28 (gage height, 7.48 feet); minimum, 401 second-feet (estimated), Feb. 14, 15 (gage height, 6.50 feet).
1911-35: Maximum discharge, 4,390 second-feet Apr. 10, 1922; minimum, 223 second-feet (estimated), Jan. 12, 1933.

Remarks.- Records good except those for period of ice effect, Dec. 2 to Mar. 26, which are poor.

Rating table, water year 1934-35 except period of ice effect (gage height, in feet, and discharge, in second-feet)

5.1	268	5.9	694	6.8	1,460
5.3	356	6.1	838	7.1	1,760
5.5	456	6.3	1,000	7.5	2,160
5.7	566	6.5	1,160	8.0	2,700

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	616	674	1,230	546	426	452	1,760	1,070	537	538	466	508
2	591	668	878	478	443	478	1,660	1,020	531	876	460	514
3	566	654	757	503	443	486	1,510	983	543	893	476	508
4	560	801	701	590	462	546	1,420	950	537	831	492	508
5	560	1,000	687	590	426	503	1,370	934	520	794	487	508
6	531	1,010	668	486	443	546	1,320	909	508	838	628	508
7	531	925	654	478	452	546	1,260	878	520	870	838	514
8	525	862	648	452	426	546	1,220	846	525	870	893	531
9	497	808	628	460	418	546	1,190	854	531	838	831	531
10	482	764	578	452	426	546	1,210	885	543	779	764	525
11	460	722	578	443	426	546	1,320	862	560	674	743	593
12	455	708	578	460	426	590	1,560	854	549	654	722	497
13	455	687	635	494	410	590	1,660	901	554	648	661	482
14	455	648	590	546	401	546	1,560	917	560	628	628	482
15	455	585	546	503	401	590	1,610	901	597	609	597	482
16	445	597	546	460	410	680	1,560	870	681	609	572	482
17	450	648	590	478	418	690	1,370	838	585	597	572	520
18	450	641	590	460	443	680	1,320	801	933	585	585	572
19	450	694	546	494	426	726	1,280	771	1,080	566	578	1,230
20	460	893	546	546	443	773	1,210	743	1,370	549	572	1,320
21	566	1,060	546	546	418	820	1,160	715	1,510	537	566	1,090
22	701	1,320	546	460	410	913	1,140	687	1,370	543	560	893
23	729	1,560	590	460	410	1,170	1,120	674	1,220	525	549	736
24	729	1,460	590	469	443	1,460	1,080	654	1,160	514	543	681
25	856	1,280	546	478	443	1,880	1,050	635	1,110	531	537	616
26	909	1,170	546	478	443	2,000	1,030	622	1,090	525	537	597
27	808	1,120	546	469	418	2,010	1,080	628	1,040	508	525	585
28	743	1,160	590	503	426	2,060	1,260	641	1,010	525	508	578
29	715	1,320	546	460	-	1,960	1,230	648	950	525	508	566
30	694	1,320	546	443	-	1,760	1,140	609	893	508	508	566
31	697	-	546	426	-	1,760	-	566	-	487	508	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				18,160	909	445	586	0.722	0.83			
November.....				27,759	1,660	555	925	1.14	1.27			
December.....				19,312	1,230	546	623	.767	.88			
Calendar year 1934.....				212,215	2,120	268	581	.716	9.71			
January.....				15,111	590	426	497	.600	.69			
February.....				11,970	452	401	428	.527	.65			
March.....				29,389	2,060	452	948	1.17	1.35			
April.....				39,660	1,760	1,030	1,322	1.63	1.82			
May.....				24,866	1,070	566	802	.988	1.14			
June.....				24,487	1,610	508	816	1.00	1.12			
July.....				20,276	893	497	654	.905	.93			
August.....				18,414	893	460	594	.732	.84			
September.....				18,673	1,320	482	622	.766	.85			
Water year 1934-35.....				268,057	2,060	401	734	.904	12.27			

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 1935.

Average discharge.- 22 years, 1,800 second-feet.

Extremes.- Maximum discharge observed during year, 9,570 second-feet Mar. 25, 26 (gage height, 9.6 feet); minimum, 672 second-feet Oct. 16, 17 (gage height, 0.70 foot).
1913-35: Maximum discharge observed, 15,500 second-feet Apr. 13, 1922 (gage height, 11.4 feet); minimum, 261 second-feet Sept. 6, 1935.
Maximum stage known, 11.6 feet Apr. 16, 1888, reported by Corps of Engineers, U. S. Army.

Remarks.- Records good except those for period of ice effect, Dec. 22 to Mar. 21, which are fair. Gage-height record furnished by Corps of Engineers, U. S. Army.

Rating table, water year 1934-35 except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 1 to Aug. 31)

0.0	420	1.0	780	3.5	1,830	8.0	5,450
.2	492	1.5	962	4.0	2,060	9.0	7,670
.4	564	2.0	1,160	5.0	2,570	9.6	9,570
.6	636	2.5	1,380	6.0	3,260		
.8	708	3.0	1,610	7.0	4,160		

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	1,000	1,250	4,270	1,290	852	852	6,150	2,770	1,290	2,400	1,250	816
2	962	1,120	4,640	1,290	852	852	5,610	2,700	1,250	2,300	1,120	816
3	962	1,040	4,390	1,290	852	852	5,450	2,630	1,200	2,350	1,040	744
4	924	1,120	4,160	1,290	852	852	5,030	2,630	1,160	2,400	1,000	780
5	924	1,340	4,160	1,290	852	924	4,770	2,570	1,080	2,460	962	852
6	888	1,560	4,390	1,290	852	924	4,510	2,510	1,080	2,350	924	852
7	888	1,700	3,840	1,290	852	1,000	4,270	2,460	1,080	2,150	1,000	816
8	888	1,790	3,650	1,250	888	1,080	3,940	2,350	1,040	2,010	1,120	862
9	780	1,790	3,480	1,200	888	1,080	3,740	2,200	1,040	1,970	1,380	852
10	780	1,650	3,260	1,160	858	1,120	3,560	2,150	1,040	1,860	1,520	852
11	816	1,520	3,050	1,120	888	1,200	3,480	2,100	1,000	1,700	1,610	852
12	780	1,380	2,840	1,040	924	1,200	3,480	2,100	1,080	1,560	1,650	888
13	780	1,340	2,570	1,000	924	1,250	3,480	2,150	1,080	1,520	1,470	888
14	708	1,250	2,460	962	924	1,340	3,560	2,150	1,120	1,620	1,290	888
15	708	1,160	2,400	962	962	1,430	3,560	2,150	1,080	1,520	1,160	852
16	672	1,120	2,300	962	962	1,610	3,650	2,100	1,040	1,520	1,080	816
17	672	1,040	2,100	1,040	962	1,790	3,650	2,010	1,160	1,430	1,000	708
18	708	1,040	2,010	1,040	924	1,970	3,650	1,920	1,380	1,340	1,000	780
19	780	1,080	2,010	1,000	924	2,260	3,650	1,830	1,290	1,200	1,000	1,000
20	780	1,430	2,010	962	924	2,840	3,650	1,700	2,510	1,120	1,040	1,290
21	816	1,740	1,920	962	924	4,160	3,650	1,610	2,840	1,040	1,040	1,740
22	816	2,300	1,880	924	924	6,150	3,480	1,520	3,060	1,000	1,040	1,970
23	882	2,770	1,780	924	924	8,190	3,260	1,430	3,190	1,040	962	2,060
24	1,000	2,950	1,700	924	888	9,210	3,190	1,290	3,190	1,040	924	2,010
25	1,290	3,120	1,610	924	888	9,570	3,120	1,250	3,190	1,340	852	1,920
26	1,430	3,190	1,520	924	852	9,670	3,050	1,200	3,190	1,430	816	1,790
27	1,520	3,330	1,430	888	816	8,860	2,910	1,200	3,260	1,520	816	1,620
28	1,560	3,660	1,340	852	852	8,190	2,840	1,250	3,120	1,610	852	1,250
29	1,660	3,940	1,290	852	-	7,570	2,770	1,340	2,910	1,560	816	1,160
30	1,470	4,050	1,290	852	-	7,030	2,770	1,840	2,650	1,430	816	1,080
31	1,380	-	1,290	852	-	6,350	-	1,290	-	1,340	816	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	30,094	1,560	672	971	0.433	0.50	
November.....	57,790	4,050	1,040	1,926	.680	.96	
December.....	81,050	4,640	1,290	2,615	1.17	1.35	
Calendar year 1934.....	469,050	6,000	348	1,286	.874	7.79	
January.....	32,606	1,290	852	1,052	.470	.64	
February.....	25,014	962	816	895	.369	.42	
March.....	111,256	9,670	852	3,589	1.60	1.84	
April.....	113,880	6,160	2,770	3,796	1.69	1.89	
May.....	59,900	2,770	1,200	1,932	.862	.99	
June.....	56,160	3,260	1,000	1,839	.821	.92	
July.....	51,140	2,460	1,000	1,650	.737	.86	
August.....	35,366	1,650	816	1,076	.480	.55	
September.....	35,694	2,060	706	1,125	.501	.66	
Water year 1934-35.....	684,960	9,570	672	1,877	.838	11.37	

Embarrass River near Embarrass, Wis.

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

Drainage area.- 395 square miles.

Records available.- June 1919 to September 1935.

Average discharge.- 16 years, 292 second-feet.

Extremes.- Maximum discharge observed during year, 1,810 second-feet Mar. 24 (gage height, 6.10 feet); minimum, 60 second-feet Oct. 14, 15 (gage height, 2.74 feet).
1919-35: Maximum observed discharge, 6,760 second-feet Apr. 10, 1922 (gage height, 11.5 feet); minimum, 23 second-feet Aug. 3, 6, 7, 1931.

Remarks.- Records fair except those for period of ice effect, Dec. 6 to Mar. 18, which are poor.

Rating table, water year 1934-35 except period of ice effect (gage height, in feet, and discharge, in second-feet)

2.6	33	3.2	208	4.0	560	5.5	1,420
2.8	74	3.4	292	4.5	810	6.0	1,740
3.0	134	3.6	380	5.0	1,100	6.4	2,020

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	169	155	920	237	237	181	704	491	249	336	216	112
2	156	124	704	228	249	208	654	491	208	468	220	108
3	155	204	606	249	228	196	606	468	188	491	200	96
4	162	336	491	237	204	200	560	491	192	380	196	96
5	144	380	446	237	192	249	514	468	188	336	144	96
6	162	514	424	270	204	249	514	424	208	380	249	94
7	141	514	402	208	169	292	514	380	200	514	424	96
8	77	402	380	181	177	292	491	380	192	468	468	94
9	80	402	380	233	200	249	468	380	188	380	491	91
10	86	336	358	237	208	292	468	380	186	314	468	96
11	112	241	358	245	177	292	514	336	121	241	314	162
12	88	196	336	228	188	292	810	380	131	292	233	138
13	82	181	336	228	177	292	920	380	141	380	196	80
14	69	134	314	208	200	314	864	380	181	424	204	91
15	72	108	292	188	196	336	810	336	173	424	186	99
16	77	85	292	216	200	380	810	292	200	336	192	96
17	88	102	314	216	200	424	704	249	336	249	196	102
18	82	95	270	241	188	468	654	241	514	200	185	314
19	77	292	314	249	208	514	560	224	766	166	181	810
20	116	446	292	249	188	560	468	220	1,290	141	152	810
21	204	810	292	249	208	756	424	196	1,230	148	162	704
22	249	1,230	249	228	208	1,230	380	196	1,040	162	162	514
23	380	1,550	292	245	177	1,740	380	196	810	148	138	380
24	336	1,230	249	245	188	1,810	424	188	606	155	138	314
25	468	810	292	177	196	1,740	424	181	424	630	128	270
26	468	756	270	241	188	1,550	468	192	336	560	118	155
27	468	704	249	249	188	1,360	514	241	314	358	108	185
28	380	756	249	233	169	1,290	514	249	336	270	91	249
29	336	756	270	241	-	1,100	514	270	336	270	94	121
30	292	920	270	224	-	980	491	270	336	292	96	128
31	204	-	249	233	-	810	-	245	-	245	108	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				5,977	468	69	193	0.489	0.56			
November.....				14,770	1,550	85	492	1.25	1.40			
December.....				11,160	920	249	360	.911	1.05			
Calendar year 1934.....				78,491	2,100	32	215	.544	7.38			
January.....				7,150	270	177	231	.685	.87			
February.....				5,512	249	169	197	.499	.62			
March.....				20,646	1,810	181	666	1.69	1.95			
April.....				17,140	920	380	571	1.45	1.62			
May.....				9,815	491	181	317	.803	.93			
June.....				11,609	1,290	121	387	.980	1.09			
July.....				10,148	630	141	327	.828	.95			
August.....				6,457	491	91	208	.527	.61			
September.....				6,701	810	80	223	.565	.63			
Water year 1934-35.....				127,065	1,810	69	348	.881	11.98			

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 1935.

Average discharge.- 21 years, 444 second-feet.

Extremes.- Maximum discharge during year, 2,860 second-feet Mar. 24 (gage height, 4.35 feet); minimum, 60 second-feet Oct. 11 (gage height, 0.70 foot).

1914-35: Maximum discharge observed, 5,780 second-feet Apr. 10, 11, 1922 (gage height, 6.92 feet, former site); minimum, 57 second-feet Feb. 10, 1934.

Remarks.- Records good except those for period of ice effect, Dec. 8 to Mar. 23, which are poor.

Rating tables, water year 1934-35 except period of ice effect (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Mar. 22 Table for Mar. 23 to Sept. 30
(Shifting-control method used Oct. 1 to Nov. 15)

1.0	128	2.2	682	1.0	115	2.4	772
1.2	194	2.4	806	1.2	168	2.6	920
1.4	270	2.6	942	1.4	239	2.8	1,080
1.6	360	2.8	1,090	1.6	325	3.0	1,260
1.8	460	3.0	1,260	1.8	418	3.5	1,750
2.0	567	3.5	1,750	2.0	525	4.0	2,270
		4.0	2,270	2.2	640	4.5	2,850

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	221	188	1,050	428	365	287	751	465	275	339	310	214
2	181	197	974	351	282	240	616	457	274	580	323	192
3	210	238	789	327	287	256	604	464	277	336	310	196
4	212	339	553	346	238	179	580	510	279	1,120	301	223
5	142	430	582	353	370	257	564	473	249	860	283	206
6	179	396	683	387	309	272	569	439	234	594	315	217
7	177	332	692	308	273	317	564	400	241	547	329	256
8	147	375	940	360	315	300	542	395	258	470	415	226
9	165	309	1,000	381	292	292	498	462	216	327	401	204
10	166	277	1,050	386	286	319	444	454	209	369	329	216
11	147	261	880	350	196	333	640	444	262	334	275	216
12	156	238	1,000	329	322	335	779	498	264	364	277	213
13	180	247	650	335	335	920	586	380	265	562	269	215
14	139	246	760	303	216	336	830	263	253	568	230	212
15	140	244	740	311	295	340	752	256	256	451	220	206
16	164	231	660	352	258	340	772	*360	272	389	223	182
17	173	251	580	424	282	360	678	468	304	304	250	200
18	181	264	600	356	214	580	610	521	318	249	248	248
19	172	286	599	261	286	1,050	536	380	668	276	270	366
20	217	511	520	301	256	1,350	498	251	1,120	268	308	571
21	195	594	529	307	212	1,750	441	174	1,280	269	313	608
22	209	1,220	552	324	245	2,000	445	370	1,120	325	278	585
23	239	1,100	516	249	224	2,100	430	272	882	325	243	454
24	323	1,050	420	290	188	2,160	435	247	672	370	248	411
25	407	971	487	327	111	1,750	581	184	533	444	216	302
26	368	838	456	356	179	1,450	523	346	451	477	234	290
27	357	759	497	266	208	1,350	569	231	382	483	230	293
28	343	779	471	247	231	1,450	569	365	421	445	170	261
29	253	1,050	481	353	-	1,040	575	328	366	441	198	192
30	236	979	333	315	-	936	550	268	293	361	208	245
31	236	-	277	342	-	616	-	310	-	306	213	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	6,655	407	139	214	0.441	0.51	
November.....	15,266	1,220	188	509	1.05	1.17	
December.....	20,651	1,050	277	663	1.37	1.58	
Calendar year 1934.....	108,012	3,370	57	296	.610	8.29	
January.....	10,265	428	247	331	.662	.79	
February.....	7,167	370	111	256	1.528	.55	
March.....	24,882	2,160	179	803	1.66	1.91	
April.....	17,845	920	430	595	1.23	1.57	
May.....	11,370	510	174	367	.787	.87	
June.....	13,419	1,260	209	447	.922	1.03	
July.....	14,203	1,120	268	468	.944	1.09	
August.....	8,438	415	170	272	.561	.65	
September.....	8,452	609	182	262	.581	.65	
Water year 1934-35.....	158,483	2,160	111	434	.895	12.17	

*Estimated.

Waupaca River near Waupaca, Wis.

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

Drainage area.- 305 square miles.

Records available.- October 1917 to September 1935. June 1916 to October 1917 at station 1 mile below present site.

Average discharge.- 19 years, 252 second-feet.

Extremes.- Maximum discharge observed during year, 670 second-feet June 19 (gage height, 2.99 feet); minimum, 104 second-feet Oct. 13 (gage height, 1.25 feet).
1916-35: 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 period of ice effect, Dec. 3 to Mar. 15, which are poor. Slight diurnal fluctuation.

Rating table, water year 1934-35 except period of ice effect (gage height, in feet, and discharge, in second-feet)

1.2	97	2.0	301
1.3	112	2.2	368
1.4	131	2.5	476
1.6	180	2.9	591
1.8	236	3.2	750

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	194	223	351	254	208	238	269	254	285	254	180	208
2	142	208	334	194	167	167	318	265	254	439	318	223
3	223	180	301	269	154	180	254	301	238	592	301	154
4	142	269	318	269	208	208	285	301	223	368	223	194
5	194	254	334	269	194	254	318	285	208	318	208	208
6	167	238	301	208	154	223	269	269	254	301	238	194
7	167	223	301	269	180	223	238	238	194	301	269	208
8	154	180	265	265	154	238	301	301	154	254	269	208
9	154	238	269	223	154	194	254	269	223	238	238	180
10	208	180	269	269	154	208	301	254	180	194	269	208
11	167	180	285	254	154	194	334	238	223	238	254	223
12	167	194	269	238	142	208	421	334	285	238	238	223
13	104	223	285	167	154	238	318	318	167	223	254	223
14	180	208	334	223	154	254	265	269	254	223	208	208
15	180	223	310	160	154	269	334	301	223	208	194	208
16	208	208	285	254	154	285	269	208	238	238	238	223
17	194	180	318	238	154	334	301	254	285	208	238	194
18	184	208	301	180	142	269	269	194	285	254	254	180
19	194	238	269	238	112	368	254	180	670	180	318	368
20	194	368	334	194	154	458	254	194	691	223	254	403
21	223	301	301	238	131	552	269	194	476	208	269	334
22	194	421	301	208	131	630	254	254	334	238	223	285
23	208	439	269	208	154	591	194	223	334	254	208	285
24	238	334	142	180	154	552	351	167	301	223	223	269
25	254	301	223	180	112	476	301	254	301	334	238	254
26	254	301	223	167	112	421	301	223	269	351	180	238
27	254	318	167	167	208	403	285	254	269	269	208	269
28	238	268	269	208	238	351	334	223	223	286	208	194
29	208	368	269	167	-	368	285	238	254	285	167	223
30	208	351	254	223	-	285	285	269	254	269	223	223
31	180	-	194	208	-	318	-	269	-	285	208	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-foot
October.....	6,033	285	104	195	0.639	0.74	
November.....	7,943	439	180	265	.869		
December.....	8,665	351	142	280	.918	1.06	
Calendar year 1934.....	81,404	1,980	95	223	.731	9.93	
January.....	6,829	285	167	220	.721	.83	
February.....	4,441	238	112	159	.521	.54	
March.....	9,957	630	167	321	1.05	1.21	
April.....	8,752	421	194	292	.957	1.07	
May.....	7,815	334	167	252	.826	.95	
June.....	8,449	670	154	282	.925	1.03	
July.....	8,554	552	180	276	.905	1.04	
August.....	7,565	318	167	238	.780	.90	
September.....	7,012	403	154	234	.767	.86	
Water year 1934-35.....	91,815	670	104	252	.826	11.20	

Milwaukee River near Milwaukee, Wis.

Location.- Water-stage recorder, lat. 43°6', 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.

Drainage area.- 661 square miles.

Records available.- January 1934 to September 1935; April 1914 to April 1929 at slope gage 180 feet below; April 1929 to January 1934 at chain gage 2,000 feet above present site.

Average discharge.- 21 years, 424 second-feet.

Extremes.- Maximum discharge during year, 3,300 second-feet Mar. 17 (gage height, 5.60 feet); minimum, 29 second-feet Oct. 11, 16 (gage height, 0.62 foot).
1914-35: Maximum discharge, 15,100 second-feet Mar. 20, 1918 (gage height, 9.00 feet, from high-water mark); minimum, 9 second-feet Aug. 18, 1934 (gage height, 0.30 foot).

Remarks.- Records poor. Records affected by ice Dec. 2 to Jan. 6, Jan. 11 to Mar. 7. Excavation work for increasing the capacity of channel has caused uncertainty regarding the stage-discharge relation the entire year.

Rating table, water year 1934-35 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Nov. 29, Dec. 26 to Mar.

4, and May 4 to Sept. 30

(Shifting-control method used Jan. 7-11)

Table for Nov. 30 to Dec. 25, Mar. 5 to Apr. 17

0.6	27	1.4	276	2.4	914	2.0	38	2.8	182	4.0	910
.8	61	1.6	387	2.8	1,230	2.2	66	3.0	238	4.5	1,430
1.0	99	1.8	507	3.1	1,480	2.4	100	3.4	420	5.0	2,180
1.2	178	2.0	635			2.6	138	3.7	560	5.5	3,100

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	36	36	1,570	59	74	74	660		118	110	65	55
2	41	59	1,060	67	60	106	580	*510	178	303	212	51
3	41	59	1,060	67	61	185	580		88	118	358	60
4	41	114	808	67	74	418	790		701	126	129	140
5	36	82	566	79	153	2,900	780		952	140	99	47
6	38	114	324	96	77	2,900	865	1,150	121	125	110	44
7	48	99	244	99	63	2,520	740	1,150	121	67	82	46
8	41	69	251	476	51	2,350	580	914	110	85	144	50
9	36	99	248	319	68	2,520	500	668	63	82	144	44
10	36	67	214	216	106	2,900	180	735	136	67	79	38
11	29	82	161	125	77	3,100	294	635	121	55	63	41
12	36	55	166	157	144	2,900	1,200	476	88	61	48	42
13	36	99	161	91	77	2,900	1,640	807	110	61	91	43
14	36	48	176	287	170	2,620	1,710	570	110	48	53	44
15	36	29	157	129	701	2,520	1,510	538	66	44	44	46
16	29	67	140	153	416	2,710	1,100	476	63	41	41	39
17	36	67	130	197	256	3,300	780	416	69	46	44	43
18	41	129	151	187	187	2,710		347	136	46	44	38
19	34	93	107	71	129	2,520		292	538	38	44	39
20	206	178	109	65	51	2,350		266	840	42	86	55
21	82	225	79	99	85	2,710		230	668	41	65	96
22	114	914	76	161	61	2,520		216	570	41	71	99
23	114	701	65	74	55	2,520		192	476	39	66	93
24	114	538	62	53	93	1,940		165	446	77	60	110
25	178	507	89	103	100	1,780		144	314	118	47	39
26	67	387	77	91	106	1,430		136	292	91	48	48
27	55	376	69	93	82	1,260		110	292	136	50	53
28	59	769	63	96	93	1,050		132	216	110	44	55
29	43	769	48	61	-	955		125	161	74	39	50
30	59	1,570	43	50	-	820		110	144	77	47	39
31	59	-	47	37	-	700	-	91	-	71	50	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	1,657	206	29	59.9	0.091	0.10	
November.....	8,431	1,570	29	231	.425	.47	
December.....	8,490	1,570	43	274	.415	.46	
Calendar year 1934.....	56,943	2,070	9	156	.236	3.18	
January.....	3,925	476	37	127	.192	.22	
February.....	3,720	701	50	133	.201	.21	
March.....	62,034	3,300	74	2,003	3.03	3.49	
April.....	20,769	1,710	180	692	1.05	1.17	
May.....	13,974	1,150	91	451	.682	.79	
June.....	6,939	840	63	231	.349	.39	
July.....	2,534	303	38	81.7	.124	.14	
August.....	2,563	358	39	92.7	.125	.14	
September.....	1,626	110	38	54.2	.082	.09	
Water year 1934-35.....	136,912	3,300	29	375	.567	7.69	

Estimate.

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.

Drainage area.- 122 square miles.

Records available.- August 1930 to September 1935.

Extremes.- Maximum discharge observed during year, 1,020 second-feet (estimated) Mar. 6 (gage height, 9.74 feet, ice jam); minimum, 2.6 second-feet Oct. 8, 11 (gage height, 5.02 feet).
1930-35: Maximum discharge observed, 1,420 second-feet Apr. 1, 1933; maximum gage height, that of Mar. 6, 1935; minimum discharge, 0.3 second-foot (estimated) Dec. 28, 1933.

Remarks.- Records good except those for periods of ice effect, Dec. 5-11 and Dec. 28 to Mar. 24, which are fair.

Rating tables, water year 1934-35 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Dec. 4

4.6	0.0	5.6	37
4.8	.4	5.8	68
5.0	2.1	6.0	117
5.2	8.2	6.2	190
5.4	19	6.5	352

Table for Dec. 5 to Sept. 30

4.6	0.0	5.6	44	7.5	750
4.8	.4	5.8	100	8.0	974
5.0	2.1	6.0	165		
5.2	6.2	6.5	343		
5.4	19	7.0	538		

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	3.9	5.9	112	15	11	44	100	92	21	19	6.7	3.5
2	3.0	5.9	249	13	13	60	88	88	25	18	8.2	3.5
3	3.7	7.4	239	13	15	100	88	108	27	17	11	3.9
4	3.7	13	112	11	17	165	82	106	25	17	13	3.9
5	3.7	19	100	11	15	538	70	218	21	17	14	3.9
6	5.7	17	88	13	18	974	70	343	19	14	15	3.5
7	3.0	15	49	17	18	750	60	271	17	14	18	3.9
8	2.6	13	32	19	22	458	60	253	17	14	18	3.5
9	3.5	12	25	25	25	478	49	172	17	13	18	3.0
10	2.8	10	19	29	25	539	44	165	18	11	15	3.2
11	2.6	8.2	17	29	24	664	89	132	21	10	12	3.5
12	3.0	8.7	16	29	25	928	221	119	25	8.7	11	3.5
13	2.8	7.8	16	23	22	664	271	145	19	8.7	9.2	3.5
14	3.7	7.8	15	21	20	418	165	139	17	6.7	5.9	3.0
15	3.0	9.2	14	18	32	380	132	113	15	6.7	5.9	3.5
16	3.5	6.7	14	17	40	974	89	88	13	5.9	6.7	3.5
17	3.2	6.7	15	18	34	664	82	70	14	5.5	5.9	4.4
18	3.2	12	16	18	27	580	70	60	21	5.2	4.4	4.2
19	3.2	13	17	18	36	838	70	44	88	5.2	6.7	6.7
20	12	21	14	18	44	418	60	41	94	5.9	7.4	18
21	13	37	15	18	60	253	54	38	88	5.9	6.7	19
22	14	45	16	17	49	253	49	35	82	5.9	5.2	14
23	13	47	14	16	52	235	41	35	44	6.3	6.7	11
24	11	45	14	15	47	235	76	32	41	6.7	7.4	7.4
25	9.2	34	14	13	44	235	106	27	29	17	5.9	6.7
26	8.2	29	14	12	42	221	103	25	27	12	6.7	5.2
27	8.2	27	14	9.2	41	186	119	23	25	12	5.2	5.2
28	6.3	47	13	5.9	44	158	158	25	23	11	4.4	5.2
29	6.7	54	13	5.9	-	145	162	23	21	7.4	3.9	4.4
30	5.9	106	13	5.2	-	119	115	23	19	6.7	3.9	5.9
31	5.9	-	13	11	-	106	-	21	-	6.7	3.9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	175.2	14	2.6	5.65	0.046	0.05	
November.....	690.3	106	5.9	23.0	.189	.21	
December.....	1,331	249	13	42.9	.352	.41	
Calendar year 1934.....	6,414.4	328	.8	17.6	.144	1.96	
January.....	509.2	29	5.9	16.4	.134	.15	
February.....	869	60	11	30.3	.252	.29	
March.....	12,479	974	44	403	3.30	3.80	
April.....	2,929	271	41	97.6	.800	.89	
May.....	3,052	343	21	98.8	.810	.93	
June.....	930	94	13	31.0	.254	.28	
July.....	320.1	19	5.2	10.3	.084	.10	
August.....	270.4	18	5.8	8.72	.071	.08	
September.....	173.6	19	3.0	5.78	.047	.05	
Water year 1934-35.....	23,731.8	974	2.6	65.0	.553	7.21	

St. Joseph River at Mottville, Mich.

Location.- Float gage, lat. 41°48', long. 85°45', in NE¼ sec. 6, T. 8 S., R. 12 W., at hydroelectric plant of Michigan Gas & 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 1935.

Average discharge.- 11 years, 1,330 second-feet.

Extremes.- Maximum discharge during year, 3,950 second-feet May 30 (gage height, 1.90 feet); minimum, 228 second-feet July 21; minimum gage height, -1.14 feet Dec. 9, 10; minimum daily discharge, 355 second-feet July 21.
1924-35: Maximum discharge, 8,250 second-feet Apr. 20, 1928 (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 periods of ice effect, Dec. 29 to Jan. 1, Jan. 25 to Feb. 6, which are fair. Flow regulated by power plant.

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	516	493	665	500	600	1,210	1,450	1,580	3,210	760	760	812
2	622	622	540	427	600	1,450	1,390	1,090	3,070	712	865	865
3	622	516	532	485	575	1,210	1,520	1,520	2,650	712	812	622
4	580	471	712	548	600	1,210	1,640	1,210	2,230	760	760	1,030
5	508	442	812	622	600	1,640	1,390	1,090	1,970	622	760	975
6	665	665	812	622	600	1,710	1,330	1,970	1,710	865	975	975
7	524	622	865	760	622	1,640	712	1,840	1,640	975	1,150	975
8	464	493	622	1,090	712	1,970	1,210	1,640	1,640	812	975	812
9	524	508	368	1,270	622	1,640	1,210	1,840	1,390	975	1,030	760
10	471	500	564	1,270	556	1,520	1,270	1,840	1,450	920	975	712
11	572	456	812	1,330	665	1,840	1,390	1,710	1,390	865	760	812
12	540	493	540	1,390	920	1,970	1,330	1,640	975	812	712	920
13	524	524	622	1,030	812	2,230	1,520	1,840	1,090	580	975	865
14	442	508	556	1,210	920	1,840	975	1,970	920	449	865	665
15	449	622	524	920	1,030	1,840	1,270	1,970	1,030	760	865	622
16	564	427	516	920	1,270	2,100	1,030	1,970	622	760	865	540
17	564	442	434	1,210	812	1,840	1,210	1,840	712	580	865	812
18	532	456	622	1,030	920	1,970	1,390	1,840	1,090	712	920	622
19	464	471	622	975	1,030	1,840	920	1,520	1,150	622	1,030	712
20	401	712	665	812	1,030	1,640	1,090	1,330	1,210	580	1,210	712
21	442	665	712	1,580	1,030	1,840	865	1,270	1,150	355	1,150	622
22	401	622	712	920	760	2,100	1,150	1,330	1,150	622	1,090	622
23	401	812	556	1,030	712	2,230	1,330	1,150	812	665	1,030	622
24	508	665	580	760	865	2,100	1,210	1,270	1,150	665	975	622
25	524	556	580	650	1,090	2,100	760	1,030	712	712	975	865
26	516	478	712	600	1,390	2,230	1,030	760	760	665	865	812
27	493	812	556	600	1,030	1,710	975	812	920	665	1,090	865
28	456	812	471	625	975	1,580	665	1,150	812	464	975	760
29	420	712	550	650	-	1,450	1,030	1,840	865	572	812	760
30	548	812	575	650	-	1,970	1,210	2,930	712	712	1,210	712
31	532	-	550	625	-	1,330	-	2,510	-	920	712	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile		Run-off in inches		
October.....				15,789	665	401	509					
November.....				17,389	812	427	580					
December.....				18,959	812	368	612					
Calendar year 1934.....				344,481	4,400	349	944					
January.....				27,111	1,580	427	875					
February.....				23,348	1,390	556	834					
March.....				54,950	2,230	1,210	1,773					
April.....				35,472	1,640	665	1,182					
May.....				49,302	2,930	760	1,590					
June.....				40,192	3,210	622	1,340					
July.....				21,850	975	355	705					
August.....				29,013	1,210	712	936					
September.....				23,082	1,030	540	769					
Water year 1934-35.....				356,457	3,210	355	977					

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 634.91 feet above mean sea level.

Records available.- October 1930 to September 1935.

Extremes.- Maximum discharge during year, 7,120 second-feet May 31 (gage height, 5.89 feet); minimum, 346 second-feet Jan. 4 (gage height, 1.00 foot).

1930-35: 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. 11-14, Dec. 26 to Jan. 4, Jan. 23 to Feb. 8, and estimated period Mar. 6-11, which are poor. Gage-height record furnished by city of Niles.

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	1,120	1,220	1,310	1,150	1,500	2,410	2,960	2,580	5,360	1,920	1,750	1,520
2	936	1,140	1,380	1,100	1,200	2,200	2,950	2,720	5,700	1,850	2,060	1,650
3	1,010	1,080	1,440	1,050	1,200	2,420	2,540	2,660	6,040	1,850	2,060	2,130
4	960	1,170	1,210	1,000	1,200	2,580	2,730	4,040	5,190	2,180	1,990	1,550
5	1,020	1,460	1,290	842	1,200	2,650	2,880	3,400	4,860	2,200	2,060	1,670
6	797	1,110	1,630	1,450	1,200	3,000	2,350	3,610	4,200	1,780	1,780	1,680
7	1,120	1,380	1,270	1,560	1,250	3,400	2,140	4,520	3,320	2,130	1,850	1,420
8	1,110	1,310	1,290	2,040	1,500	3,800	2,060	4,680	3,560	2,350	1,850	1,410
9	920	1,130	1,310	3,100	1,480	4,000	2,420	4,520	2,800	1,990	1,780	1,920
10	763	1,150	1,190	3,180	1,590	3,500	2,200	4,360	3,020	1,990	1,700	1,590
11	975	1,060	1,200	2,620	1,630	4,000	2,580	3,900	3,020	1,710	1,560	1,520
12	1,170	1,360	1,200	2,080	1,600	4,550	2,650	3,800	2,720	1,790	1,990	1,650
13	1,010	1,340	1,150	2,060	1,610	4,360	2,800	5,020	2,200	1,460	1,590	1,630
14	1,010	1,280	1,160	2,060	1,770	4,360	2,650	6,040	2,350	1,510	1,700	1,600
15	972	1,080	1,100	1,790	2,200	3,280	2,650	5,360	1,920	1,610	1,750	1,280
16	1,120	1,350	1,260	1,650	1,180	3,020	2,650	4,680	2,200	1,830	1,740	1,720
17	1,210	1,120	1,750	2,050	1,820	3,500	2,420	4,520	2,280	1,720	1,850	1,580
18	1,130	1,340	1,260	2,120	2,060	3,740	2,650	3,800	2,130	1,410	2,950	1,540
19	1,180	1,080	1,120	1,850	2,130	3,880	2,350	3,720	2,800	1,590	3,960	1,500
20	821	1,440	1,280	1,790	2,130	3,370	2,060	3,480	2,800	1,240	2,950	1,470
21	974	1,700	1,330	2,400	2,060	4,850	2,070	2,890	2,950	1,470	2,650	1,440
22	1,180	1,360	1,350	2,650	2,090	5,560	2,220	2,740	2,350	2,020	2,280	1,240
23	1,040	1,360	1,540	1,850	1,590	5,190	2,350	2,660	2,060	1,720	2,200	1,780
24	1,060	1,530	1,330	1,500	1,730	4,680	2,420	2,580	2,280	1,700	1,990	1,500
25	1,120	1,300	1,260	1,400	2,650	5,190	1,920	2,280	2,500	1,470	1,680	1,390
26	1,240	1,430	1,100	1,300	3,320	5,190	1,850	2,350	1,990	1,740	2,280	1,850
27	1,080	1,220	1,050	1,250	2,800	4,680	2,130	2,350	2,280	1,480	1,920	1,780
28	1,150	1,450	1,050	1,250	2,130	3,880	1,990	5,170	2,200	1,580	1,920	1,610
29	1,530	1,210	1,000	1,300	-	3,250	2,350	5,360	2,130	1,770	1,920	1,590
30	1,130	1,530	950	1,300	-	3,130	2,720	5,700	1,670	1,470	1,710	1,920
31	1,200	-	1,100	1,300	-	3,370	-	6,400	-	1,470	1,740	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				32,912	1,390	763	1,062					
November.....				38,720	1,700	1,060	1,291					
December.....				38,630	1,760	950	1,246					
Calendar year 1934.....				618,666	8,050	466	1,695					
January.....				53,862	3,180	842	1,737					
February.....				49,570	3,320	1,180	1,770					
March.....				117,170	5,360	2,200	3,760					
April.....				72,770	2,960	1,850	2,426					
May.....				120,010	6,400	2,280	3,871					
June.....				91,070	6,040	1,870	3,036					
July.....				54,000	2,350	1,240	1,742					
August.....				65,210	3,960	1,560	2,039					
September.....				47,630	2,130	1,240	1,594					
Water year 1934-35.....				779,760	6,400	763	2,136					

Elkhart River at Goshen, Ind.

Location.— Water-stage recorder, lat. $41^{\circ}35'$, long. $85^{\circ}50'$, 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 1935 in reports of U. S. Geological Survey; September 1924 to September 1927 in reports of the Indiana Department of Conservation.

Extremes.— Maximum discharge during year, 1,310 second-feet May 14 (gage height, 4.52 feet); minimum, 58 second-feet Oct. 9; minimum gage height, 1.34 feet Dec. 17; minimum daily discharge, 79 second-feet Oct. 12.
1931-35: Maximum discharge, 3,060 second-feet Apr. 18, 1933 (gage height, 7.05 feet); minimum, 52 second-feet June 13, 1934; minimum gage height, 1.27 feet May 25 and 30, 1932.

Remarks.— Records good except those for periods of ice effect, Dec. 28 to Jan. 5, Jan. 23 to Feb. 10, which are poor. Regulation at 3 hydroelectric plants above gage.

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	116	68	175	135	210	541	586	412	425	186	209	215
2	109	86	158	155	210	554	559	420	459	191	239	169
3	99	99	159	140	200	536	492	374	532	191	280	203
4	106	97	160	145	200	443	491	915	582	209	207	195
5	105	85	160	150	200	532	497	740	496	210	200	174
6	82	96	148	161	200	550	428	665	466	184	176	154
7	84	100	149	208	200	586	424	840	464	178	184	146
8	84	94	142	401	210	790	462	865	426	197	186	129
9	83	94	139	590	220	665	430	765	412	171	179	197
10	89	97	144	577	230	640	426	765	396	178	160	148
11	83	105	136	518	235	790	442	715	376	180	175	130
12	79	105	133	505	272	715	556	715	317	162	165	159
13	93	105	163	406	262	595	618	968	277	184	186	155
14	91	111	108	414	356	582	595	1,310	290	161	160	138
15	89	111	176	340	502	559	516	990	292	176	170	120
16	93	111	206	330	514	546	503	840	255	169	169	136
17	99	133	83	392	420	550	465	790	280	167	217	131
18	91	135	146	428	420	554	442	740	268	169	587	125
19	92	146	166	420	368	546	463	665	347	187	791	120
20	86	146	126	449	376	523	444	640	352	229	452	117
21	86	166	172	467	322	915	420	618	333	181	400	120
22	89	166	157	360	372	940	380	577	287	169	356	144
23	89	178	163	340	244	740	398	541	293	232	333	107
24	89	163	137	320	330	715	356	556	271	207	308	114
25	93	153	127	300	576	765	292	440	256	199	305	116
26	91	148	180	280	765	790	368	444	250	336	298	109
27	86	150	118	260	618	715	321	400	258	377	294	144
28	84	157	125	250	489	690	397	546	234	226	284	168
29	90	152	130	240	-	640	420	640	214	214	254	120
30	91	153	125	230	-	618	456	618	218	222	270	120
31	86	-	130	220	-	595	-	518	-	165	252	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	2,819	116	79	90.9	0.172	0.20	
November.....	3,721	178	85	124	.254	.26	
December.....	4,523	206	83	146	.275	.32	
Calendar year 1934.....	75,756	1,130	74	207	.391	5.32	
January.....	10,111	590	135	326	.615	.71	
February.....	9,491	765	200	339	.640	.67	
March.....	19,920	940	445	645	1.21	1.40	
April.....	13,607	618	292	454	.857	.96	
May.....	21,312	1,310	400	697	1.30	1.50	
June.....	10,376	582	214	346	.653	.73	
July.....	6,187	377	161	200	.377	.43	
August.....	8,426	791	160	272	.513	.59	
September.....	4,325	215	107	144	.272	.30	
Water year 1934-35.....	114,823	1,310	79	315	.594	8.07	

Kalamazoo River near Albion, Mich.

Location.- Chain gage, lat. $42^{\circ}16'$, long. $84^{\circ}48'$, on line between secs. 29 and 32, T. 2 S., R. 4 W., 3 miles west of Albion. Zero of gage is 919.44 feet above mean sea level.

Drainage area.- 246 square miles.

Records available.- October 1930 to July 1931, October 1932 to October 1935 (discontinued).

Extremes.- Maximum discharge observed during year, 371 second-feet Mar. 12; maximum gage height, 3.32 feet Jan. 23 (backwater from ice); minimum, 30 second-feet Apr. 1 (gage height, 1.16 feet).

1930-31, 1932-35: Maximum discharge observed, 875 second-feet Apr. 4, 1934 (gage height, 4.16 feet); minimum, that of Apr. 1, 1935.

Remarks.- Records fair except those for periods of ice effect, Dec. 11-13, Dec. 27 to Jan. 6, Jan. 23 to Feb. 9, Feb. 25, 26, which are poor. Flow regulated by power plant at Albion.

Rating table, water year 1934-35 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 6 to Sept. 30)

1.2	31	2.2	162
1.4	38	2.4	216
1.6	53	2.6	275
1.8	80	2.8	338
2.0	116	3.0	405

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	48	66	58	65	100	127	71	170	103	60	85	61
2	70	49	55	70	65	152	78	52	202	90	99	72
3	77	56	105	65	55	152	87	106	290	92	112	43
4	76	58	95	70	60	112	59	162	162	140	118	57
5	92	42	105	70	60	148	76	116	99	66	127	61
6	54	54	70	65	65	94	60	216	80	103	101	108
7	53	45	95	66	55	103	150	260	155	145	77	54
8	48	65	134	172	60	80	92	216	216	58	99	74
9	64	53	59	188	60	116	105	202	85	53	95	92
10	76	74	64	306	66	338	88	90	127	76	85	68
11	54	60	60	165	70	245	65	74	165	58	90	53
12	78	65	62	114	129	371	160	80	150	80	78	78
13	46	103	64	101	88	202	188	162	216	63	61	92
14	55	77	65	94	86	83	90	172	167	114	60	83
15	55	77	88	92	260	188	127	180	157	49	123	77
16	99	71	70	152	202	131	136	175	134	70	59	92
17	65	74	82	63	138	152	112	162	188	66	97	70
18	68	59	85	85	183	322	123	108	202	65	82	68
19	82	95	66	88	129	183	54	167	118	48	70	76
20	52	97	72	125	157	275	138	54	106	47	80	66
21	152	63	116	188	165	245	245	83	78	43	97	68
22	53	143	87	175	99	150	216	82	99	62	90	85
23	245	78	49	150	230	54	57	90	92	63	101	87
24	61	83	51	125	90	150	90	82	48	74	80	52
25	60	59	49	110	100	260	136	70	92	66	57	66
26	129	110	50	120	95	245	129	76	72	83	63	105
27	97	86	75	100	88	148	47	145	105	80	54	106
28	65	145	70	105	94	123	66	275	103	97	94	118
29	47	106	65	95	-	120	103	165	70	95	65	63
30	82	110	65	80	-	65	306	145	61	77	66	59
31	77	-	65	90	-	90	-	185	-	57	92	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	2,380	245	46	76.8	0.312	0.36	
November.....	2,361	145	42	78.7	.320	.36	
December.....	2,294	134	48	74.0	.301	.35	
Calendar year 1934.....							
January.....	3,554	306	63	115	.467	.54	
February.....	3,027	260	55	108	.439	.46	
March.....	5,224	371	64	169	.687	.79	
April.....	3,474	306	47	116	.472	.53	
May.....	4,302	275	52	139	.565	.65	
June.....	3,942	290	48	131	.533	.59	
July.....	2,349	145	43	75.8	.308	.36	
August.....	2,637	127	54	85.1	.346	.40	
September.....	2,243	118	43	74.6	.304	.34	
Water year 1934-35.....	37,787	371	42	104	.423	5.73	

Discharge, in second-feet, October 1935

Oct. 1	40	Oct. 6	116	Oct. 15	42	Oct. 20	106
Oct. 2	97	Oct. 7	47	Oct. 16	85	Oct. 21	48
Oct. 3	134	Oct. 8	48	Oct. 17	44	Oct. 22	43
Oct. 4	103	Oct. 9	42	Oct. 18	46	Oct. 23	68
Oct. 5	64	Oct. 14	43	Oct. 19	71		

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., 95 feet below highway bridge at Comstock.

Drainage area.- 1,010 square miles.

Records available.- April to August 1931, October 1932 to September 1935.

Extremes.- Maximum discharge observed during year, 2,060 second-feet Mar. 14, 15 (gage height, 3.02 feet); minimum, 199 second-feet Oct. 14 (gage height, 1.01 feet).
1931, 1932-35: Maximum discharge observed, 3,290 second-feet Apr. 8, 1934 (gage height, 4.30 feet); minimum, that of Oct. 14, 1934.

Remarks.- Records fair except those for periods of ice effect, Dec. 8-14, Dec. 29 to Jan. 5, Jan. 24-30, Feb. 6-9, which are poor. Flow regulated by power plants upstream.

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	336	236	478	350	580	960	840	580	1,690	417	307	417
2	326	389	289	350	478	765	802	615	1,600	326	448	448
3	271	361	316	375	580	1,080	728	728	1,600	341	652	389
4	271	341	478	350	544	960	765	920	1,420	417	960	361
5	240	417	448	350	544	1,160	690	1,000	1,350	389	880	417
6	263	417	417	361	500	1,510	652	1,000	1,600	448	880	389
7	271	356	361	389	500	1,600	652	1,080	1,160	417	1,000	326
8	298	326	389	728	500	1,420	652	1,160	1,080	417	1,080	341
9	331	326	375	880	500	1,350	652	1,080	920	389	880	448
10	263	248	350	920	478	1,600	615	1,000	765	417	765	448
11	276	289	375	1,000	544	1,600	615	802	690	298	765	478
12	285	346	375	1,160	580	1,870	652	840	511	289	728	448
13	351	389	350	880	652	1,870	652	880	478	271	728	389
14	199	316	350	840	356	2,060	615	920	478	244	580	361
15	221	248	375	1,000	802	2,060	652	880	417	259	580	321
16	331	248	389	840	1,240	1,690	652	920	417	302	580	341
17	289	248	615	840	1,080	1,510	652	802	417	298	652	341
18	267	346	615	880	880	1,420	615	652	448	331	802	356
19	276	336	580	1,080	880	1,420	615	802	478	307	1,000	316
20	285	511	511	728	880	1,160	580	728	511	351	1,000	346
21	307	511	417	690	880	1,420	580	652	544	326	960	351
22	389	580	448	690	640	1,510	544	580	615	351	840	351
23	361	615	389	652	615	1,600	544	448	615	280	728	326
24	228	544	417	615	615	1,510	544	478	448	351	690	326
25	263	511	389	575	652	1,510	580	448	544	248	652	263
26	351	417	478	600	615	1,350	615	448	417	341	652	311
27	448	417	389	550	580	1,350	580	417	389	511	615	321
28	399	389	361	500	690	920	544	361	478	544	544	544
29	361	311	350	525	-	920	580	1,080	448	511	448	448
30	311	417	350	525	-	1,000	580	1,750	448	478	448	417
31	236	-	350	511	-	880	-	1,600	-	389	448	-
Month				Second-foot-days		Maximum	Minimum	Mean	Per square mile		Run-off in inches	
October.....				9,274		448	199	299	0.296		0.34	
November.....				11,406		615	236	380	.376		.42	
December.....				12,774		615	289	412	.408		.47	
Calendar year 1934.....												
January.....				20,734		1,160	350	669	.662		.76	
February.....				18,585		1,240	356	664	.657		.68	
March.....				42,975		2,060	765	1,386	1.37		1.58	
April.....				19,039		840	544	635	.629		.70	
May.....				25,651		1,730	361	823	.820		.95	
June.....				22,956		1,690	389	765	.757		.84	
July.....				11,198		544	244	361	.357		.41	
August.....				22,292		1,080	307	719	.712		.82	
September.....				11,274		544	263	376	.372		.42	
Water year 1934-35.....				228,188		2,060	199	625	.619		8.39	

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, 6 miles northwest of Allegan and 1 mile above Swan Creek. Zero of gage is at mean sea level.

Drainage area.- 1,540 square miles.

Records available.- April 1929 to September 1935.

Extremes.- Maximum discharge during year, 2,800 second-feet Mar. 12 (gage height, 602.94 feet); minimum, 349 second-feet Oct. 13 (gage height, 596.44 feet); minimum daily discharge, 500 second-feet Oct. 16.
1929-35: Maximum discharge, 3,580 second-feet Jan. 8, 1930 (gage height, 603.82 feet); minimum, 164 second-feet Aug. 23, 1931 (gage height, 595.25 feet).

Remarks.- Records good except those for periods of ice effect and estimated periods, Dec. 8 to Jan. 6, Jan. 21 to Feb. 10, July 18, 19, Sept. 7, 8, which are poor. Flow regulated by power plant in Allegan.

Rating table, water year 1934-35 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 3 to Sept. 30)

596.4	337	598.0	800	601.0	1,880
596.6	396	598.5	955	601.5	2,100
596.8	441	599.0	1,130	602.0	2,350
597.0	500	599.5	1,300	602.5	2,600
597.3	590	600.0	1,480	603.0	2,850
597.6	680	600.5	1,680		

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	710	755	1,080	700	900	1,160	1,480	1,060	1,840	1,160	800	882
2	684	748	1,020	700	925	1,340	1,300	1,240	1,840	1,240	975	800
3	655	792	920	700	925	1,720	1,340	1,410	2,250	1,540	1,270	770
4	630	740	920	700	900	1,680	1,300	1,640	2,250	1,560	1,200	770
5	610	800	990	700	900	1,840	1,340	1,520	1,920	1,240	1,240	800
6	575	718	955	750	850	2,000	1,130	1,480	1,840	1,160	1,240	770
7	590	830	1,020	876	950	2,200	1,200	1,560	1,640	1,060	1,270	760
8	618	770	950	1,240	875	2,100	1,130	1,560	1,680	1,130	1,200	750
9	609	695	875	1,720	850	2,000	1,100	1,760	1,560	1,060	1,240	740
10	605	770	825	1,680	850	2,050	1,060	1,380	1,520	890	1,160	800
11	604	695	800	1,640	815	2,650	1,200	1,800	1,410	955	1,200	802
12	580	665	800	1,640	1,200	2,700	1,200	1,600	1,270	860	1,160	850
13	531	686	825	1,520	1,200	2,550	1,200	1,600	1,020	770	1,020	920
14	583	745	825	1,440	920	2,450	1,160	1,560	1,060	740	890	830
15	620	742	850	1,410	1,110	2,450	1,160	1,520	990	770	920	725
16	500	655	875	1,480	1,760	2,450	1,100	1,520	890	770	863	740
17	659	688	925	1,440	1,720	2,450	1,160	1,410	1,240	770	1,100	770
18	560	669	1,000	1,440	1,560	2,550	1,060	1,240	1,440	715	1,270	770
19	628	990	1,100	1,600	1,520	2,100	1,340	1,160	1,680	660	1,480	1,100
20	615	1,160	1,100	1,250	1,440	1,960	1,200	1,050	1,680	620	1,380	1,060
21	680	1,130	1,050	1,200	1,270	2,150	1,020	1,020	1,520	605	1,410	1,060
22	762	1,240	975	1,150	1,270	2,350	731	1,060	1,340	636	1,300	1,060
23	761	1,380	900	1,100	1,520	2,220	864	955	1,300	650	1,130	1,200
24	960	1,150	825	1,050	825	2,150	990	1,270	1,200	725	1,130	1,060
25	648	920	750	1,000	1,100	2,100	955	1,020	1,060	749	955	800
26	770	1,060	700	950	1,130	2,050	955	606	1,100	990	990	860
27	745	1,020	675	900	1,130	1,880	955	770	1,480	830	955	990
28	800	1,060	675	875	920	1,840	990	916	1,480	958	955	1,060
29	820	990	650	875	-	1,720	1,020	1,380	1,270	800	785	1,020
30	721	1,020	875	875	-	1,560	1,020	1,440	1,240	860	860	1,020
31	770	-	700	875	-	1,560	-	1,300	-	800	787	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	20,483	860	500	661	0.429	0.49
November.....	26,261	1,380	655	876	.569	.63
December.....	27,210	1,100	650	878	.570	.66
Calendar year 1934.....						
January.....	35,876	1,880	700	1,157	.751	.87
February.....	31,035	1,760	815	1,108	.719	.75
March.....	63,810	2,700	1,160	2,068	1.34	1.54
April.....	35,660	1,480	731	1,122	.729	.81
May.....	41,807	1,880	606	1,349	.876	1.01
June.....	44,010	2,250	890	1,467	.953	1.06
July.....	27,893	1,380	605	990	.584	.67
August.....	34,135	1,480	785	1,101	.715	.82
September.....	26,508	1,200	725	884	.574	.64
Water year 1934-35.....	412,709	2,700	500	1,131	.734	9.95

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 1935.

Extremes.- Maximum discharge observed during year, 1,020 second-feet Mar. 13 (gage height, 2.18 feet); minimum, 35 second-feet Oct. 12, 15, 16 (gage height, 0.56 foot).
1930-31, 1932-35: Maximum discharge observed, 1,300 second-feet Apr. 6, 1934 (gage height, 2.48 feet); minimum, 22 second-feet Aug. 14, 1934 (gage height, 0.51 foot).

Remarks.- Records good.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 18 to Sept. 30)

0.5	20	1.1	252	1.7	625
.6	45	1.2	308	1.8	695
.7	75	1.3	367	1.9	770
.8	111	1.4	428	2.0	850
.9	153	1.5	491	2.2	1,020
1.0	200	1.6	555	2.4	1,200

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	40	57	107	69	75	115	221	153	428	158	63	63
2	40	57	89	63	75	172	210	162	398	140	86	57
3	42	63	97	63	75	282	210	191	326	140	153	60
4	42	69	119	63	79	423	172	252	326	145	200	86
5	42	57	93	63	79	625	158	302	460	140	291	63
6	45	63	82	66	75	660	172	343	523	153	280	57
7	45	60	63	82	69	625	172	343	428	136	221	51
8	40	57	82	149	69	523	168	302	355	128	181	63
9	40	57	75	221	69	460	136	291	269	115	167	57
10	40	57	72	286	69	460	119	263	216	107	163	63
11	40	57	66	373	69	460	132	242	167	97	124	60
12	35	60	69	332	75	732	145	231	145	82	100	60
13	40	60	69	332	72	930	153	221	132	72	93	57
14	40	57	69	242	75	850	162	205	115	69	82	57
15	35	51	63	153	167	695	149	205	107	79	79	51
16	36	48	75	128	231	523	149	191	89	72	75	42
17	40	45	79	153	314	491	145	167	100	66	89	45
18	40	54	75	140	460	460	145	140	107	66	104	45
19	40	82	86	128	367	491	145	136	172	63	111	48
20	40	104	75	128	258	460	136	145	140	72	115	48
21	51	132	75	145	172	460	128	145	158	66	124	51
22	51	153	82	145	445	523	119	124	145	60	100	51
23	51	128	75	162	128	625	119	104	128	60	89	40
24	51	119	66	153	124	590	128	97	115	66	82	45
25	57	111	72	145	128	523	128	82	107	128	75	45
26	57	104	63	124	136	416	128	82	93	162	69	60
27	57	100	63	111	111	349	128	82	115	158	72	75
28	57	86	69	93	111	314	136	128	136	124	66	75
29	57	97	69	82	-	291	145	252	167	97	69	75
30	51	119	69	75	-	269	158	291	176	75	72	63
31	54	-	63	75	-	247	-	355	-	69	72	-
Month					Second-foot-days	Maximum	Minimum	Mean	Per square mile		Run-off in inches	
October.....					1,398	57	35	45.1	0.187		0.22	
November.....					2,364	153	45	78.8	.327		.36	
December.....					2,571	119	63	76.5	.317		.37	
Calendar year 1934.....												
January.....					4,544	373	63	147	.610		.70	
February.....					3,877	460	69	136	.573		.60	
March.....					15,019	930	115	484	2.01		2.32	
April.....					4,506	221	119	150	.622		.69	
May.....					6,257	385	82	202	.838		.97	
June.....					6,343	523	69	211	.876		.98	
July.....					3,165	162	60	102	.423		.49	
August.....					3,657	291	63	118	.490		.56	
September.....					1,693	75	40	56.4	.234		.26	
Water year 1934-35.....					55,194	930	35	151	.627		8.52	

Grand River at Jackson, Mich.

Location.- Staff gage, lat. $42^{\circ}17'5''$, long. $84^{\circ}24'50''$, in sec. 22, T. 2 S., R. 1 W., 1 mile north of Jackson. Zero of gage is at mean sea level.

Drainage area.- 174 square miles.

Records available.- April to September 1935.

Extremes.- Maximum discharge observed during period, 236 second-feet June 4 (gage height, 909.68 feet); minimum, 17 second-feet July 19 (gage height, 908.21 feet).

Remarks.- Records good. Gage not read, discharge interpolated on Sundays, also on May 18, 19, 25, 30, June 22, July 4, 13, 20, Aug. 3, 9, 17, 22, 23, 28, 31, Sept. 2, 6, 9, 12, 14, 20.

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

908.1	11	909.0	99
908.2	16	909.2	133
908.4	29	909.4	172
908.6	47	909.6	214
908.8	70	909.7	236

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							-	57	133	39	27	45
2							-	68	152	33	29	38
3							-	124	172	35	33	31
4							-	193	225	41	37	28
5							-	198	193	47	41	21
6							-	204	142	44	84	23
7							-	162	142	57	51	25
8							-	107	133	70	51	25
9							-	124	124	48	68	26
10							-	152	115	37	84	26
11							-	99	109	33	74	24
12							-	103	88	37	64	24
13							-	107	66	36	54	25
14							-	152	60	34	51	24
15							-	162	55	33	49	23
16							-	152	45	31	56	22
17							-	142	42	32	55	21
18							65	123	65	28	53	23
19							63	105	46	20	52	21
20							59	86	44	23	54	42
21							58	66	43	25	51	64
22							58	58	41	28	51	43
23							54	52	38	25	50	22
24							48	49	36	29	50	28
25							51	46	36	24	46	28
26							49	42	35	23	42	22
27							60	39	38	23	51	70
28							60	43	37	23	55	28
29							60	152	45	23	59	27
30							54	147	42	23	59	26
31							-	142	-	29	52	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April 18-30				739	65	49	56.8	0.326	0.16			
May.....				3,456	204	39	111	.638	.74			
June.....				2,545	225	36	84.8	.487	.54			
July.....				1,033	70	20	33.3	.191	.22			
August.....				1,633	84	27	52.7	.303	.35			
September.....				695	70	21	29.8	.171	.19			
Water year 1934-35.....												

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 1935; March 1901 to August 1906 at Seymour Street Bridge, 1 $\frac{1}{2}$ miles upstream.

Extremes.- Maximum discharge during year, 4,980 second-feet Mar. 12 (gage height, 7.57 feet); minimum, 45 second-feet Aug. 16; minimum gage height, 1.04 feet Feb. 12.

Remarks.- Records good except those for periods of ice effect, Dec. 12-14, Jan. 21-28, Feb. 6-10, which are fair. Flow regulated at power plant upstream.

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		-	224	141	141	258	740	463	1,430	331	105	111
2		-	181	165	150	549	670	447	1,500	292	168	130
3		-	241	152	150	1,060	786	886	1,680	294	140	131
4		-	207	146	144	1,830	695	892	1,880	249	137	133
5		-	215	139	142	2,160	612	965	1,400	238	199	96
6		-	179	139	135	3,510	669	1,020	1,120	256	226	160
7		-	152	172	130	2,760	338	1,040	1,030	147	214	96
8		-	205	366	130	1,740	545	1,160	952	211	174	142
9		-	135	759	125	1,400	425	1,170	695	234	205	186
10		-	175	876	125	1,550	447	1,050	677	216	183	108
11		-	133	872	121	3,750	512	938	609	209	135	108
12		-	130	793	121	4,470	595	664	530	158	154	124
13		-	130	674	128	3,510	600	722	465	143	142	132
14		-	130	545	141	2,850	527	827	470	128	136	147
15		-	132	437	183	2,720	575	813	396	136	134	111
16		-	146	360	296	1,700	524	768	303	140	152	109
17		-	141	302	468	1,960	461	746	426	146	88	150
18		-	142	300	580	1,960	483	665	420	126	126	137
19		-	191	286	540	1,830	500	496	477	133	156	125
20		-	176	226	397	1,660	589	516	501	343	171	113
21		-	182	230	340	2,030	276	452	506	126	233	145
22		-	167	240	288	2,610	338	436	417	148	178	88
23		201	154	240	282	2,170	365	344	274	147	143	86
24		297	146	225	253	2,040	307	294	246	167	179	89
25		157	142	200	253	1,570	294	363	271	246	126	144
26		234	148	175	261	1,420	308	181	321	164	115	189
27		232	142	165	251	1,190	360	280	779	183	143	176
28		183	146	160	228	1,080	283	447	531	137	134	118
29		163	157	157	-	1,120	372	842	436	121	137	241
30		279	141	146	-	990	456	1,530	321	117	128	91
31		-	142	142	-	664	-	1,690	-	104	127	-
Month				Second-foot-days		Maximum	Minimum	Mean	Per square mile		Run-off in inches	
October.....				-		-	-	-	-		-	
November 25-30.....				1,746		297	157	213	0.177		0.05	
December.....				5,032		241	130	162	.132		.15	
Calendar year 1934.....												
January.....				9,930		876	139	320	.280		.30	
February.....				5,493		580	121	232	.189		.20	
March.....				60,111		4,470	258	1,939	1.59		1.82	
April.....				14,652		786	276	458	.397		.44	
May.....				23,097		1,690	181	745	.606		.70	
June.....				21,063		1,880	246	702	.571		.64	
July.....				5,790		343	104	187	.152		.18	
August.....				4,788		233	88	154	.125		.14	
September.....				3,916		241	86	131	.107		.12	
Water year 1934-35.....												

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 1935; March 1901 to September 1918 at Fulton Street Bridge, in Grand Rapids.

Extremes.- Maximum discharge during year, 19,200 second-feet Mar. 7 (gage height, 10.87 feet); minimum, 686 second-feet Sept. 14 (gage height, -4.25 feet).

1930-35: Maximum discharge, that of Mar. 7, 1935; minimum, 486 second-feet Aug. 7, 1934 (gage height, -4.64 feet).

A stage of 19.3 feet occurred at the Fulton Street gage on Mar. 27, 1904 (discharge, 39,400 second-feet).

Remarks.- Records good except those for periods of ice effect, Dec. 11-15, Jan. 21 to Feb. 9, 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 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,090	1,310	2,370	1,560	1,650	2,710	4,320	2,040	3,480	3,340	1,690	1,120
2	1,040	1,200	2,500	1,560	1,600	2,850	3,220	2,110	3,620	3,620	1,620	1,140
3	1,090	1,090	2,370	1,400	1,550	3,550	4,000	2,370	3,690	3,940	1,690	1,220
4	1,010	1,310	2,370	1,370	1,500	4,910	3,620	2,780	4,160	4,400	1,590	1,120
5	960	1,250	2,370	1,400	1,500	8,520	3,520	3,270	4,490	3,840	1,720	1,010
6	985	1,090	2,240	1,430	1,500	11,800	3,270	3,550	4,400	3,480	2,110	935
7	935	1,140	2,040	1,560	1,450	18,600	3,060	3,690	4,220	3,200	2,110	1,120
8	985	1,200	1,850	1,980	1,450	18,200	2,990	3,620	3,620	2,990	2,040	1,090
9	985	1,200	1,590	2,920	1,450	15,500	2,920	3,690	3,410	2,730	1,980	985
10	910	1,170	1,490	3,410	1,460	13,900	2,710	4,160	3,060	2,570	2,040	935
11	820	1,170	1,400	3,690	1,490	14,400	2,500	4,400	2,990	2,370	1,920	910
12	758	1,060	1,400	3,690	1,430	14,400	2,640	4,160	2,640	2,180	1,690	810
13	778	1,120	1,450	3,480	1,490	14,600	2,850	3,840	2,500	1,920	1,690	935
14	820	1,090	1,500	3,480	1,590	14,800	2,780	3,620	2,180	1,790	1,560	900
15	686	1,090	1,600	3,270	2,210	14,000	2,850	3,480	2,110	1,660	1,220	900
16	886	1,040	1,690	3,270	4,260	13,100	2,710	3,270	2,110	1,620	1,250	950
17	886	965	1,850	3,200	5,120	12,200	2,640	3,270	2,240	1,310	1,520	1,140
18	865	1,170	1,780	2,790	5,500	11,500	2,710	2,990	3,240	1,250	2,370	1,090
19	910	1,490	1,890	2,850	5,120	11,200	2,500	2,780	3,840	1,200	2,240	1,120
20	1,040	2,240	1,560	2,710	4,580	10,500	2,440	2,570	4,240	1,250	1,980	1,140
21	1,370	2,370	1,560	2,850	4,160	9,780	2,300	2,300	4,400	1,220	1,980	1,120
22	1,620	2,780	1,660	2,950	3,620	9,080	2,180	2,110	4,160	1,090	1,850	1,140
23	1,490	3,200	1,720	3,000	3,480	9,220	2,180	2,110	3,690	1,490	1,920	1,120
24	1,250	3,150	1,620	2,750	2,850	9,220	2,040	2,040	3,340	1,920	1,850	1,120
25	1,250	2,780	1,560	2,700	2,640	8,940	2,040	1,850	3,200	2,990	1,690	960
26	1,340	2,300	1,590	2,400	3,480	8,000	1,780	1,780	3,040	3,200	1,560	1,200
27	1,310	2,370	1,520	2,300	3,200	6,980	1,690	1,660	3,620	3,200	1,250	1,250
28	1,370	2,500	1,560	2,250	3,060	6,360	1,850	2,080	3,760	2,990	1,490	1,430
29	1,220	2,300	1,590	2,000	-	5,810	1,820	3,060	4,160	2,710	1,370	1,460
30	985	2,240	1,620	1,850	-	5,210	1,850	3,200	3,760	2,500	1,200	1,430
31	1,200	-	1,720	1,700	-	4,760	-	3,270	-	2,180	1,090	-
Month	Second-foot-days		Maximum		Minimum		Mean		Per square foot		Run-off in inches	
October.....	33,050		1,620		758		1,066		0.218		0.25	
November.....	50,565		3,200		910		1,660		.343		.33	
December.....	54,830		2,500		1,400		1,769		.361		.42	
Calendar year 1934.....	681,168		9,310		494		1,866		.381		5.17	
January.....	77,760		3,690		1,370		2,508		.512		.59	
February.....	74,190		5,300		1,430		2,650		.541		.56	
March.....	314,520		16,600		2,710		10,150		2.07		2.39	
April.....	60,810		4,320		1,690		2,694		.550		.61	
May.....	91,120		4,400		1,660		2,950		.600		.69	
June.....	103,270		4,490		2,110		3,442		.702		.78	
July.....	76,090		4,400		1,090		2,455		.501		.58	
August.....	53,280		2,370		1,090		1,719		.351		.40	
September.....	32,900		1,460		900		1,097		.224		.25	
Water year 1934-35.....	1,042,205		18,600		758		2,855		.583		7.90	

Cedar River at East Lansing, Mich.

Location.- Water-stage recorder, lat. $42^{\circ}43'40''$, long. $84^{\circ}28'40''$, in SW $\frac{1}{4}$ 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 1935. August 1902 to December 1903 at a site three-quarters of a mile downstream.

Extremes.- Maximum discharge during year, 1,800 second-feet Mar. 5 (gage height, 6.19 feet); minimum, 6.5 second-feet Aug. 13 (gage height, 2.07 feet).
1902-3, 1931-35: Maximum mean daily discharge, 2,700 second-feet Apr. 15, 1903 (gage height, 10.07 feet, old datum); minimum discharge, 3 second-feet July 31, 1931. Maximum stage known, about 14.5 feet during the flood of 1921 (discharge not determined).

Remarks.- Records excellent except those for periods Oct. 1 to Jan. 8, Sept. 18-30, which are fair. No record for periods when discharge is not given. Gage-height record furnished by Michigan State College.

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	-	14	25	30	-	124	186	109	218	-	-	-
2	-	14	25	28	-	360	196	106	167	-	-	-
3	-	14	24	23	47	690	168	149	400	-	-	-
4	-	20	25	21	44	900	158	272	355	-	-	-
5	15	14	24	19	51	1,250	148	-	256	-	14	-
6	-	14	22	17	54	1,310	142	-	200	-	37	-
7	-	15	19	16	49	790	129	-	168	-	32	-
8	13	15	24	42	51	444	120	-	142	-	20	-
9	14	15	22	268	40	377	116	-	117	-	16	-
10	18	15	20	-	34	581	112	-	103	-	24	-
11	18	16	18	-	25	1,380	100	-	100	-	32	-
12	18	16	18	-	40	1,380	109	-	86	-	14	-
13	18	16	18	-	-	1,190	-	-	73	-	24	-
14	14	-	18	-	-	958	-	-	69	-	33	-
15	14	-	22	-	-	740	-	-	53	-	14	-
16	14	-	24	-	-	690	-	-	60	-	11	14
17	15	-	23	-	-	690	-	-	54	-	17	19
18	22	-	24	-	-	616	-	-	86	-	30	42
19	16	-	25	-	-	516	-	-	103	-	16	36
20	12	-	24	-	-	444	-	-	132	-	20	23
21	11	-	23	-	-	690	75	-	123	-	48	15
22	13	-	24	-	120	740	82	88	95	-	34	12
23	17	28	24	-	112	680	82	75	67	37	50	14
24	15	27	22	-	100	590	88	64	69	60	56	56
25	12	23	22	-	100	468	80	62	67	50	32	30
26	12	22	22	-	98	377	85	49	-	36	27	86
27	13	22	22	-	95	313	73	47	-	54	33	71
28	13	20	24	-	85	292	62	73	-	24	50	44
29	14	21	25	-	-	272	85	250	-	22	31	65
30	14	23	24	-	-	245	112	355	-	51	22	30
31	13	-	24	-	-	214	-	292	-	-	46	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				-	-	-	-	-	-			
November.....				-	-	-	-	-	-			
December.....				700	25	18	22.6	0.064	0.07			
Calendar year 1934.....												
January 1-9				464	268	16	51.6	.145	.05			
February.....				20,317	1,380	124	655	1.85	2.13			
March.....				-	-	-	-	-	-			
April.....				-	-	-	-	-	-			
May.....				-	-	-	-	-	-			
June 1-25				3,361	400	53	134	.377	.35			
July 23-30.....				334	60	22	41.8	.118	.04			
August 5-31				783	56	11	29.0	.082	.08			
September 16-30				557	86	12	37.1	.105	.06			
Water year 1934-35.....												

Thornapple River near Caledonia, Mich.

Location.— Staff gage, lat. 42°48'40", long. 85°29', in sec. 22, T. 5 N., R. 10 W., in tailrace of LaBarge 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 1935.

Extremes.— Maximum mean daily discharge during year, 3,640 second-feet Mar. 6 (gage height, 683.5 feet); minimum daily discharge (estimated), 5 second-feet Oct. 27 (gage height, 676.5 feet).
1930-35: Maximum mean daily discharge, that of Mar. 6, 1935; minimum, that of Oct. 27, 1934.

Remarks.— Records poor. Flow regulated by storage at LaBarge power plant. Gage-height record furnished by Consumers Power Co.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Mar. 7

679.1	9	680.4	322	681.8	1,130
679.2	17	680.6	406	682.0	1,330
679.4	42	680.8	497	682.2	1,560
679.6	79	681.0	597	682.6	2,090
679.8	126	681.2	705	683.0	2,720
680.0	182	681.4	825	683.6	3,840
680.2	248	681.6	960		

Table for Mar. 8 to Sept. 30
(Shifting-control method used June 15 to Sept. 30)

680.2	220	681.8	1,050
680.4	291	682.0	1,240
680.6	371	682.2	1,450
680.8	459	682.4	1,690
681.0	556	682.6	1,960
681.2	662	682.8	2,250
681.4	776	683.0	2,560
681.6	900		

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	362	362	362	362	362	405	556	330	556	662	254	291
2	362	362	362	362	362	546	556	662	556	556	291	291
3	362	362	450	362	362	1,440	506	459	900	606	254	291
4	362	362	362	362	362	2,340	459	506	1,140	718	254	291
5	362	362	362	362	362	3,440	414	556	1,140	662	254	291
6	362	362	362	362	362	3,640	414	662	1,140	556	254	291
7	362	362	362	362	362	3,070	371	718	1,340	371	254	291
8	362	362	362	362	362	1,820	414	662	1,050	371	254	291
9	362	362	362	362	362	1,340	371	718	776	371	254	291
10	362	362	362	705	362	1,570	371	970	718	291	254	291
11	362	362	362	890	362	2,560	371	970	506	291	254	291
12	362	362	362	825	362	2,400	371	900	459	291	254	291
13	362	362	362	765	362	2,400	371	776	371	291	254	291
14	362	362	362	597	405	2,250	371	718	371	254	254	291
15	362	362	362	450	960	2,100	371	608	330	291	254	291
16	362	362	362	362	1,440	1,960	371	556	371	291	254	291
17	362	362	362	450	1,130	1,890	330	459	459	291	330	291
18	362	362	362	362	1,130	1,570	371	414	459	291	506	291
19	362	362	362	405	1,230	1,450	330	371	556	291	459	291
20	546	362	362	450	960	1,340	330	371	556	291	459	291
21	497	362	362	450	765	1,340	330	330	556	291	459	291
22	362	497	362	362	597	1,340	330	330	556	291	371	291
23	248	405	362	405	450	1,240	330	330	506	291	414	291
24	248	405	362	362	497	1,340	330	330	414	291	330	291
25	248	362	362	362	362	1,240	330	330	371	291	291	291
26	248	362	362	362	362	1,050	330	330	371	291	291	291
27	5	362	362	362	362	900	330	330	506	254	291	291
28	10	362	362	405	405	835	330	459	556	254	254	291
29	15	362	362	362	-	776	371	506	556	254	254	291
30	362	362	362	362	-	718	330	506	608	254	254	291
31	362	-	362	362	-	608	-	556	-	254	254	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	10,029	546	5	324	0.419	0.48
November.....	11,081	497	362	369	.477	.53
December.....	11,398	450	362	368	.476	.56
Calendar year 1934.....	160,156	2,090	5	439	.568	7.70
January.....	13,819	890	322	446	.577	.67
February.....	16,761	1,440	362	563	.728	.76
March.....	50,618	3,640	405	1,633	2.11	2.43
April.....	11,360	556	330	379	.490	.55
May.....	16,723	970	330	539	.697	.80
June.....	18,764	1,340	330	625	.809	.90
July.....	11,055	718	254	357	.462	.53
August.....	9,318	506	254	301	.389	.45
September.....	8,730	291	291	291	.376	.42
Water year 1934-35.....	188,646	3,640	5	517	.669	9.07

Muskegon River at Evart, Mich.

Location.- Wire-weight gage, lat. 43°54', long. 85°15', in sec. 34, T. 18 N., R. 8 W., on highway bridge at east edge of Evart. Chain gage at same datum at Pere Marquette Railroad bridge 100 feet downstream prior to May 21, 1935.

Drainage area.- 1,450 square miles.

Records available.- November 1930 to June 1931, January 1934 to September 1935.

Extremes.- Maximum discharge observed during year, 3,910 second-feet Mar. 24 (gage height, 11.59 feet); minimum, 347 second-feet Aug. 5, 15 (gage height, 6.84 feet). 1930-31, 1934-35: Maximum discharge observed, that of Mar. 24, 1935; minimum, 275 second-feet July 29, 1934 (gage height, 6.70 feet).

Remarks.- Records good except those for period of ice effect, Dec. 8 to Mar. 4, which are poor.

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	539	692	1,820	650	700	725	2,220	985	692	539	412	412
2	512	692	1,750	625	725	725	2,140	920	628	512	412	412
3	485	692	1,750	625	725	750	2,060	985	628	485	412	412
4	485	692	1,610	625	725	775	1,900	985	628	485	368	399
5	485	692	1,400	625	725	1,190	1,820	1,120	597	485	347	412
6	460	725	1,330	650	700	1,260	1,750	1,190	597	485	399	399
7	460	725	1,330	700	675	1,330	1,610	1,260	597	460	435	399
8	460	725	1,250	750	675	1,400	1,540	1,260	597	460	435	399
9	460	692	1,100	800	675	1,400	1,470	1,190	568	460	435	399
10	435	692	1,000	800	700	1,400	1,470	1,190	568	460	412	399
11	435	660	1,050	800	700	1,610	1,400	1,190	568	435	412	399
12	412	660	950	750	700	1,610	1,400	1,120	539	412	368	368
13	412	660	850	725	700	1,610	1,470	1,120	539	412	368	368
14	412	660	800	725	700	1,470	1,330	1,050	539	412	368	399
15	435	660	750	700	725	1,400	1,330	1,050	597	412	347	399
16	435	660	750	700	725	1,470	1,330	985	597	435	347	368
17	460	660	725	725	725	2,140	1,330	985	597	412	399	460
18	460	692	725	725	725	2,780	1,260	920	628	412	460	460
19	460	790	700	700	725	3,280	1,190	920	692	399	460	460
20	485	920	700	700	725	3,020	1,190	855	758	368	539	435
21	539	1,050	700	675	750	3,550	1,190	622	758	368	628	435
22	660	1,330	700	675	750	3,370	1,120	725	758	368	597	399
23	660	1,470	700	700	725	3,730	1,120	725	758	412	568	412
24	660	1,540	675	700	725	3,620	1,050	692	725	412	539	399
25	660	1,470	675	700	700	3,620	1,050	692	660	412	435	399
26	692	1,400	700	700	725	3,640	985	660	692	412	435	399
27	725	1,400	700	700	725	3,280	985	660	660	399	412	368
28	725	1,470	675	700	725	3,020	985	692	628	399	412	368
29	692	1,540	675	700	-	2,860	985	725	568	368	399	368
30	692	1,610	650	700	-	2,700	985	725	568	347	412	368
31	692	-	650	700	-	2,460	-	692	-	368	412	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile		Run-off in inches		
October.....				16,594	725	412	535	0.369		0.43		
November.....				28,321	1,610	660	944	.651		.73		
December.....				29,840	1,820	650	963	.664		.77		
Calendar year 1934.....												
January.....				21,750	800	625	702	.484		.56		
February.....				20,000	750	675	714	.492		.51		
March.....				67,595	3,820	725	2,160	1.50		1.73		
April.....				41,665	2,220	985	1,399	.958		1.07		
May.....				29,090	1,260	660	938	.647		.75		
June.....				18,929	758	539	631	.435		.49		
July.....				13,175	539	347	425	.293		.34		
August.....				13,375	628	347	431	.297		.34		
September.....				11,943	460	368	398	.274		.31		
Water year 1934-35.....				312,267	3,820	347	856	.590		8.03		

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 1935. June 1901 to December 1906 at a site above Newaygo.

Extremes.- Maximum daily discharge during year, 6,500 second-feet Mar. 28 (gage height, 50.1 feet); minimum, 555 second-feet July 21, 22, Aug. 3, 4, 18 (gage height, 46.5 feet).

1901-6, 1930-35: 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. 26-29, Jan. 2-4, 21-23, 25, Feb. 7-9, which are poor. Flow regulated at Croton Dam, 18 miles upstream, and by power plant at Newaygo. Gage-height record furnished by Consumers Power Co.

Rating table, water year 1934-35 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

46.4	495	47.6	1,410	48.8	3,390
46.6	615	47.8	1,640	49.0	3,840
46.8	745	48.0	1,910	49.3	4,540
47.0	885	48.2	2,220	49.6	5,260
47.2	1,040	48.4	2,570	50.0	6,250
47.4	1,220	48.6	2,960	50.3	7,000

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	1,220	1,410	3,390	960	1,640	2,960	4,300	885	885	1,310	960	960
2	1,120	1,510	3,610	1,200	1,640	2,220	4,070	885	960	1,410	745	960
3	1,120	1,510	3,390	1,200	1,640	1,910	4,300	745	1,040	1,220	555	1,040
4	1,220	1,220	3,170	1,200	1,640	2,760	4,070	745	960	1,120	555	1,120
5	1,040	1,520	3,390	960	1,640	3,170	5,500	745	1,220	1,120	745	1,120
6	960	1,520	3,390	960	1,640	4,540	3,390	745	1,220	960	960	960
7	960	1,770	3,170	1,770	1,700	5,020	3,170	745	1,220	960	960	960
8	1,040	1,770	2,220	1,910	1,750	3,840	2,760	1,040	1,120	960	960	960
9	1,220	1,770	2,060	2,960	1,650	3,610	2,760	1,310	1,120	885	960	960
10	1,120	1,410	1,910	3,390	1,640	3,390	2,760	1,520	960	885	960	960
11	1,040	1,220	1,770	2,960	1,910	3,610	2,760	1,520	1,220	960	960	960
12	1,040	1,520	1,770	2,060	2,390	3,840	2,760	1,770	1,220	960	960	960
13	885	1,520	1,770	1,770	2,220	3,840	2,570	1,910	1,120	960	680	960
14	885	1,120	1,770	1,770	2,220	3,840	2,060	1,640	1,120	960	745	960
15	960	1,220	1,040	1,640	2,220	3,840	2,220	2,060	885	960	960	960
16	1,120	1,220	1,040	1,640	2,220	3,610	2,220	1,910	885	885	1,040	960
17	1,120	1,120	1,310	1,520	1,640	3,390	2,220	1,520	1,120	885	960	1,040
18	1,220	1,220	1,640	1,640	1,910	3,390	2,220	1,120	1,220	680	555	960
19	1,220	1,510	1,770	1,040	2,220	3,840	2,220	960	1,220	680	815	1,040
20	1,040	1,410	1,770	1,040	2,390	4,070	2,060	1,310	1,220	615	1,120	1,040
21	1,040	1,520	1,770	1,300	2,960	4,300	1,910	1,410	1,220	555	1,040	1,040
22	1,120	1,910	1,040	1,500	2,960	4,780	1,770	1,520	1,220	555	960	960
23	1,220	2,570	1,040	1,500	2,220	4,780	1,640	1,310	1,120	815	960	1,120
24	1,120	2,570	1,040	1,410	2,220	5,020	1,770	1,120	1,120	1,040	960	1,120
25	1,220	1,770	1,120	1,500	2,960	5,020	1,770	1,120	1,310	1,040	960	1,120
26	1,220	2,570	1,200	1,520	2,960	6,000	1,770	1,120	1,220	960	960	1,220
27	1,120	2,960	1,200	1,040	2,960	6,000	1,770	1,040	1,120	960	960	1,120
28	1,220	2,760	1,200	1,520	2,960	6,500	960	1,220	1,120	960	960	1,040
29	1,220	2,220	1,150	1,640	-	6,250	885	960	1,120	960	960	960
30	1,220	2,760	960	1,640	-	5,500	885	815	1,120	960	1,040	1,040
31	1,410	-	960	1,640	-	4,780	-	815	-	960	960	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile		Run-off in inches		
October.....				34,680	1,410	885	1,119	0.476		0.55		
November.....				51,500	2,960	1,120	1,717	.751		.82		
December.....				58,030	3,610	960	1,872	.797		.92		
Calendar year 1934.....				559,950	3,610	390	1,534	.653		8.88		
January.....				49,800	3,390	960	1,606	.685		.79		
February.....				50,120	2,960	1,640	2,147	.914		.95		
March.....				129,620	6,500	1,910	4,181	1.78		2.05		
April.....				75,520	5,500	885	2,517	1.07		1.19		
May.....				37,535	2,060	745	1,211	.516		.59		
June.....				33,625	1,510	885	1,121	.477		.53		
July.....				29,140	1,410	555	940	.400		.46		
August.....				27,875	1,120	555	899	.383		.44		
September.....				30,580	1,220	960	1,019	.434		.48		
Water year 1934-35.....				618,025	6,500	555	1,693	.720		9.77		

Manistee River near Sherman, Mich.

Location.- Wire-weight and staff gages, 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 1935.

Extremes.- Maximum discharge observed during year, 2,290 second-feet Mar. 24 (gage height, 12.21 feet); minimum, 776 second-feet Feb. 27 (gage height, 8.63 feet). 1903-16, 1930-31, 1934-35: Maximum discharge observed, 3,500 second-feet Mar. 25, 1913 (gage height, 7.0 feet, former datum); minimum, 580 second-feet Jan. 17, 1916 (gage height, 1.00 foot, former datum).

Remarks.- Records good except those for periods of ice effect, Dec. 10-17, 29, 30, Jan. 28-29, which are poor.

Rating table, water year 1934-35 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

8.4	731	9.4	995	10.4	1,360	11.4	1,850
8.6	776	9.6	1,060	10.6	1,440	11.6	1,930
8.8	825	9.8	1,130	10.8	1,530	11.8	2,050
9.0	876	10.0	1,200	11.0	1,630	12.0	2,170
9.2	935	10.2	1,280	11.2	1,730	12.2	2,290

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	1,060	1,100	1,530	1,100	1,130	995	1,580	1,060	935	1,200	825	851
2	1,020	1,060	1,530	995	1,130	1,060	1,530	1,100	935	1,100	800	851
3	1,020	1,060	1,530	1,160	1,160	1,100	1,480	1,060	935	1,130	825	851
4	995	1,100	1,560	1,060	1,130	1,100	1,440	1,100	935	935	800	825
5	935	1,160	1,280	906	1,060	1,130	1,400	1,130	906	935	825	851
6	965	1,130	1,280	1,060	1,060	1,530	1,400	1,200	935	935	851	825
7	935	1,130	1,200	1,240	851	1,320	1,360	1,200	906	965	935	825
8	935	1,130	1,100	1,240	906	1,240	1,320	1,200	1,130	935	935	851
9	935	1,130	995	1,130	935	1,200	1,320	1,160	878	906	906	851
10	906	1,100	1,160	1,100	1,020	1,160	1,280	1,130	935	878	906	825
11	878	1,100	1,500	1,060	1,060	1,280	1,280	1,130	935	1,100	1,160	825
12	878	1,100	1,500	1,020	1,060	1,280	1,280	1,100	1,060	1,200	878	825
13	878	1,100	1,500	995	1,060	1,200	1,320	1,130	906	1,200	825	825
14	906	1,060	1,250	995	1,060	1,160	1,320	1,130	878	851	825	825
15	878	1,020	1,250	995	1,060	1,160	1,320	1,060	906	1,200	825	825
16	878	1,020	1,200	965	1,060	1,400	1,320	1,060	906	1,200	825	825
17	878	1,020	1,050	1,440	995	1,890	1,240	1,060	906	851	825	851
18	906	995	1,060	1,200	1,020	1,850	1,240	906	935	851	906	851
19	878	1,130	1,020	1,200	995	1,680	1,240	1,020	935	825	851	965
20	878	1,200	1,060	1,240	995	1,730	1,240	995	965	851	851	935
21	935	1,240	1,020	1,240	995	1,930	1,200	995	1,020	825	965	935
22	995	1,530	1,020	1,100	878	2,170	1,200	965	995	825	935	878
23	1,020	1,730	995	1,280	851	2,250	1,160	965	995	825	906	878
24	995	1,630	995	1,020	1,020	2,290	1,130	935	965	825	851	851
25	1,060	1,530	965	965	965	2,230	1,160	965	935	935	851	851
26	1,060	1,440	995	1,000	851	2,170	1,130	935	906	825	851	878
27	1,020	1,380	995	1,200	776	2,050	1,130	965	935	825	825	1,160
28	1,130	1,400	1,020	1,000	906	1,980	1,130	965	878	825	825	825
29	1,100	1,580	1,200	1,000	-	1,780	1,100	935	1,130	825	851	825
30	1,130	1,630	1,150	995	-	1,730	1,100	935	1,200	800	825	851
31	1,100	-	1,060	1,060	-	1,630	-	935	-	800	851	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	36,067	1,130	878	971	1.08	1.65
November.....	36,815	1,730	995	1,227	1.36	1.52
December.....	36,360	1,530	965	1,173	1.30	1.50
Calendar year 1934.....						
January.....	34,041	1,440	906	1,098	1.22	1.41
February.....	27,989	1,160	776	1,000	1.11	1.16
March.....	48,635	2,290	995	1,569	1.74	2.01
April.....	38,360	1,680	1,100	1,278	1.42	1.58
May.....	32,515	1,200	935	1,049	1.17	1.35
June.....	28,721	1,200	878	987	1.06	1.18
July.....	29,185	1,200	800	941	1.05	1.21
August.....	26,860	1,160	800	866	.962	1.11
September.....	26,059	1,160	825	869	.966	1.06
Water year 1934-35.....	395,615	2,290	776	1,084	1.20	16.36

Shiawassee River at Owosso, Mich.

Location.- Water-stage recorder, lat. 43°45', long. 84°10'50", in sec. 13, T. 7 N., R. 2 E., at north 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 1935.

Extremes.- Maximum discharge during year, 1,960 second-feet Mar. 11 (gage height, 5.98 feet); minimum discharge, 3.0 second-feet Oct. 11 (gage height, 1.26 feet).
1931-35: Maximum discharge, that of Mar. 11, 1935; 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.- No gage-height record for part of year. Records good except those for estimated periods, which are poor. Flow regulated by power plant at Shiawassee town. Gage-height record furnished by city of Owosso.

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	55	-	-	101	-	*237	450	-	321	*172	-	-
2	50	-	127	95	*100	502	432	-	292	172	-	-
3	26	-	133	95	*90	960	394	-	299	*159	-	-
4	45	-	141	94	*100	1,060	355	-	267	-	-	-
5	32	-	120	97	*100	1,440	338	-	267	-	-	-
6	38	-	122	110	*110	1,590	308	-	299	-	-	-
7	36	-	120	136	-	1,200	292	-	-	-	-	-
8	44	-	117	254	-	835	255	-	-	-	-	-
9	34	-	*110	500	-	785	214	-	-	*108	-	*57
10	50	-	*110	456	-	1,230	170	-	-	*99	-	59
11	18	-	*105	442	*100	1,830	202	-	*177	-	-	63
12	49	-	*125	422	*90	1,410	199	-	169	-	-	68
13	19	54	-	362	*100	1,380	196	-	162	-	-	86
14	22	57	-	302	-	1,350	219	-	139	-	-	56
15	45	56	-	289	-	1,260	216	-	100	-	-	59
16	35	*57	-	196	-	1,230	219	-	92	-	-	53
17	49	-	-	194	-	1,140	196	-	132	-	-	53
18	36	-	-	211	-	1,040	205	-	-	-	-	56
19	44	-	-	194	-	960	177	-	-	-	-	56
20	27	-	-	177	450	885	164	-	-	-	-	53
21	-	108	74	*170	366	1,110	172	-	-	-	-	42
22	-	106	87	*175	345	1,040	175	202	-	-	-	42
23	-	*113	78	*175	315	1,110	149	196	-	-	-	*42
24	-	-	*100	-	295	1,040	161	186	-	-	-	35
25	-	-	*90	-	305	885	129	175	-	-	-	50
26	-	-	88	-	-	738	113	172	-	-	-	61
27	-	-	*104	-	-	670	101	151	-	*106	-	59
28	-	-	124	-	-	602	117	177	-	*95	-	47
29	-	-	70	-	-	560	144	308	-	*97	-	*50
30	-	-	108	-	-	508	156	321	-	*93	-	52
31	-	-	117	-	-	472	-	321	-	-	-	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October 1-20				754	55	18	37.7	0.070	0.05			
November				-	-	-	-	-	-			
December				-	-	-	-	-	-			
Calendar year 1934												
January 1-23				5,225	500	93	227	.422	.36			
February				-	-	-	-	-	-			
March				31,089	1,830	237	1,063	1.86	2.14			
April				6,608	450	101	220	.409	.46			
May 22-31				2,209	321	151	221	.411	.15			
June				-	-	-	-	-	-			
July				-	-	-	-	-	-			
August				-	-	-	-	-	-			
September 9-30				1,199	86	35	54.5	.101	.08			
Water year 1934-35												

*Estimated.

77057 O-36-4

Flint River at Genesee, Mich.

Location.- Wire gage, lat. 43°6'25", long. 83°37', in sec. 10, T. 8 N., R. 7 E., at highway bridge at Genesee. Zero of gage is 695.64 feet above mean sea level.

Drainage area.- 593 square miles.

Records available.- March 1931 to September 1935.

Extremes.- Maximum discharge observed during year, 3,380 second-feet Mar. 8 (gage height, 22.50 feet); minimum, 30 second-feet July 29 (gage height, 12.77 feet).
1931-35: Maximum discharge observed, that of Mar. 8, 1935, minimum, 19 second-feet Aug. 22-24, 26, 1931 (gage height, 12.62 feet).

Remarks.- Records good except those for periods of ice effect and estimated period Dec. 5 to Jan. 7, Jan. 20 to Feb. 15, Feb. 19 to Mar. 1, which are poor. Diversions below station for municipal use at Flint. Gage-height record furnished by city of Flint.

Rating table, water year 1934-35 except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Mar. 15 to July 31)

12.6	12	14.0	222	18.0	690	19.5	1,850
12.8	35	14.2	262	18.5	830	20.0	2,080
13.0	61	14.4	305	17.0	980	20.5	2,330
13.2	89	14.6	350	17.5	1,130	21.0	2,580
13.4	119	15.0	445	18.0	1,280	21.5	2,830
13.6	151	15.3	517	18.5	1,460	22.0	3,080
13.8	186	15.6	590	19.0	1,650	22.5	3,380

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	86	112	143	90	125	300	397	262	212	305	43	51
2	81	119	143	90	125	565	350	272	194	272	45	45
3	79	112	135	95	125	1,100	327	252	176	238	53	48
4	76	112	143	95	125	1,550	305	350	151	204	61	51
5	72	112	150	100	125	1,850	285	421	127	171	56	51
6	74	104	125	110	125	2,980	263	469	119	137	79	52
7	78	96	120	125	125	3,260	272	493	151	104	96	48
8	68	96	115	421	125	3,320	262	517	151	96	104	45
9	65	89	110	860	125	2,830	252	493	135	96	89	47
10	62	89	110	860	125	2,580	242	469	119	96	85	51
11	62	96	100	860	125	2,430	232	469	112	96	78	53
12	61	88	100	860	125	2,080	232	445	112	89	72	51
13	60	79	90	860	125	1,980	242	421	96	85	64	48
14	60	71	90	770	150	1,850	252	350	96	83	65	48
15	57	65	95	690	300	1,610	242	283	83	81	58	61
16	57	69	95	615	615	1,420	242	262	79	75	51	58
17	57	78	90	565	665	1,520	232	242	89	71	48	58
18	54	79	85	469	665	1,250	222	222	119	68	44	51
19	53	96	90	445	550	1,220	203	203	143	85	40	48
20	57	119	95	350	500	1,160	203	194	185	62	45	53
21	68	151	95	350	450	1,130	203	185	203	60	57	53
22	65	151	95	350	400	1,040	194	168	183	57	69	51
23	65	151	100	325	375	1,010	185	160	176	54	60	48
24	65	151	100	325	350	980	176	151	143	54	54	45
25	70	143	100	300	325	890	176	151	135	57	54	43
26	80	135	95	270	300	770	168	127	127	57	53	43
27	112	135	95	250	275	665	168	143	305	52	53	48
28	112	143	95	220	275	615	185	176	350	40	48	67
29	119	135	95	180	-	541	203	212	373	31	44	68
30	112	135	90	150	-	469	242	242	397	42	45	61
31	104	-	90	125	-	421	-	252	-	44	53	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,291	119	53	73.9	0.125	0.14
November.....	3,309	161	65	110	.185	.21
December.....	3,254	143	85	105	.177	.20
Calendar year 1934.....	76,642	2,430	21	210	.354	4.82
January.....	12,175	860	90	393	.663	.76
February.....	7,820	665	125	279	.470	.49
March.....	44,986	3,320	300	1,451	2.45	2.82
April.....	7,175	397	168	239	.403	.45
May.....	9,056	517	127	232	.492	.57
June.....	5,043	397	79	168	.283	.32
July.....	3,042	305	31	98.1	.165	.19
August.....	1,866	104	40	60.2	.102	.12
September.....	1,545	68	43	51.5	.097	.10
Water year 1934-35.....	101,562	3,320	31	278	.469	6.37

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 676.80 feet above mean sea level.

Drainage area.- 927 square miles.

Records available.- August 1932 to September 1935.

Extremes.- Maximum discharge during year, 5,740 second-feet Mar. 11 (gage height, 9.28 feet); minimum, 14 second-feet Dec. 9 (gage height, 2.15 feet).
1932-35: Maximum discharge, that of Mar. 11, 1935; 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 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	176	192	120	180	448	645	383	338	605	36	55
2	116	111	188	130	156	864	586	429	370	476	138	58
3	59	40	200	123	145	1,830	509	650	294	370	196	73
4	134	116	196	127	138	1,950	490	838	242	356	120	76
5	53	113	188	116	184	3,240	392	710	251	229	49	70
6		184	180	149	225	3,490	388	865	242	97	228	70
7		184	176	208	38	3,840	397	1,000	246	172	285	62
8		118	124	793	156	3,840	392	948	238	221	145	70
9		55	33	1,440	156	3,160	388	638	225	97	123	87
10		55	138	1,240	160	3,780	505	810	138	87	127	82
11		62	130	983	156	5,090	352	875	53	38	123	68
12	*90	97	113	975	138	3,600	329	685	123	38	120	73
13		100	116	1,060	134	3,270	234	600	168	38	53	65
14		100	120	948	209	2,830	356	587	196	38	58	68
15		93	106	810	878	2,430	360	490	153	142	60	68
16		106	153	655	1,230	2,340	352	448	100	90	62	68
17		145	168	538	785	2,160	347	383	153	82	62	123
18	20	153	82	505	735	1,870	329	365	172	79	60	73
19	31	192	90	444	685	1,790	285	342	251	70	51	93
20	80	166	120	415	620	1,680	184	233	285	90	40	84
21	113	208	172	587	635	1,990	264	156	356	103	100	79
22	103	303	113	549	605	1,750	268	238	365	82	73	68
23	83	329	116	436	486	1,640	259	221	347	129	73	62
24	20	268	142	538	467	1,440	200	196	272	305	68	55
25	111	184	130	448	462	1,440	204	134	208	130	55	49
26	106	213	134	388	352	1,340	204	65	317	204	60	70
27	113	208	156	329	300	1,060	221	79	710	184	82	100
28	123	304	123	307	374	1,000	217	298	660	160	65	65
29	120	276	120	281	-	920	298	325	615	127	53	70
30	116	208	110	242	-	810	392	320	600	100	55	84
31	138	-	123	200	-	710	-	379	-	100	60	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,619	138	20	90.9	0.098	0.11
November.....	4,837	329	40	161	.174	.19
December.....	4,252	200	33	137	.148	.17
Calendar year 1934.....	112,268	3,720	14	308	.332	4.49
January.....	16,063	1,440	116	518	.559	.64
February.....	10,789	1,230	38	385	.415	.43
March.....	67,602	5,090	448	2,181	2.36	2.71
April.....	10,347	845	184	345	.372	.43
May.....	14,780	1,000	65	477	.515	.59
June.....	8,758	710	53	291	.314	.35
July.....	5,039	605	38	163	.176	.20
August.....	2,890	285	36	92.9	.100	.12
September.....	2,188	123	49	72.9	.079	.09
Water year 1934-35.....	150,334	5,090	20	412	.444	6.02

*Estimated.

STREAMS TRIBUTARY TO LAKE HURON

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 1935.

Extremes.- Maximum discharge observed during year, 238 second-feet Mar. 6 (gage height, 17.15 feet); minimum discharge, 1.7 second-feet Nov. 8; minimum gage height, 14.41 feet Dec. 8.
1933-35: Maximum discharge, that of Mar. 6, 1935; minimum, less than 0.6 second-foot in 1934.

Remarks.- Records fair except those for periods of ice effect, Jan. 2-4, 28-30, Feb. 6-9, 22, which are poor. Occasional regulation at dam above gage.

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	5.8	13	12	5.2	5.2	25	36	27	15	35	2.8	4.1
2	5.8	14	7.2	5.0	5.2	21	32	29	14	27	3.3	4.3
3	5.8	13	6.6	4.8	5.2	24	29	33	14	22	3.4	4.3
4	5.3	13	6.3	4.5	5.2	42	27	35	13	18	4.6	4.6
5	4.8	13	5.9	4.5	5.9	204	26	45	12	15	4.8	4.6
6	4.3	2.2	10	4.5	6.0	226	24	52	11	10	8.7	4.3
7	4.1	2.1	12	7.0	6.0	204	22	53	11	8.4	8.4	4.1
8	3.6	1.7	9.2	22	6.0	161	20	55	10	8.1	8.7	4.3
9	4.6	1.9	6.6	29	5.9	131	18	55	11	7.2	9.6	4.8
10	4.3	3.8	5.2	55	5.9	103	18	50	11	6.3	10	5.3
11	4.1	9.0	4.8	112	5.9	141	17	45	9.6	6.6	8.7	5.3
12	4.1	10	4.5	35	5.9	226	18	40	7.5	5.3	8.7	5.5
13	4.3	8.4	4.3	68	5.5	193	18	35	7.5	5.0	6.9	5.3
14	3.8	9.3	4.5	52	5.9	141	20	33	6.6	5.0	6.8	4.6
15	3.8	9.6	4.1	41	14	121	20	29	6.9	5.5	5.3	4.1
16	3.8	10	5.2	31	12	126	18	27	6.0	5.8	4.1	3.8
17	4.3	10	5.6	25	13	131	16	24	8.1	4.3	3.0	4.1
18	4.3	10	5.9	20	39	131	16	22	14	4.3	3.4	4.3
19	4.6	13	6.2	18	60	112	15	19	21	3.6	3.2	5.3
20	4.3	16	5.6	15	68	90	28	16	23	4.3	3.0	5.5
21	6.0	21	5.9	16	60	90	20	14	25	3.8	3.6	6.0
22	6.9	26	5.9	15	56	90	19	13	23	3.4	3.3	5.5
23	7.2	24	6.6	15	52	98	18	12	20	3.6	3.3	5.3
24	7.5	10	6.6	14	22	94	17	11	18	3.4	3.3	4.6
25	8.4	13	5.9	13	20	30	15	10	14	3.5	3.2	3.8
26	8.7	23	6.2	12	35	73	15	10	14	3.4	3.0	4.3
27	9.0	14	6.2	10	29	64	15	9.3	29	3.0	3.2	7.5
28	10	13	4.8	8.0	20	56	17	10	29	3.2	3.3	7.5
29	11	9.0	4.1	6.0	-	48	22	15	38	3.3	3.3	6.6
30	12	2.4	4.3	5.5	-	44	24	17	38	2.8	3.4	6.6
31	12	-	4.5	5.2	-	39	-	19	-	3.3	4.1	-
Month					Second-foot-days	Maximum	Minimum	Mean	Per square mile		Run-off in inches	
October.....					188.5	12	3.6	6.08	0.107		0.12	
November.....					338.4	26	1.7	11.3	.198		.22	
December.....					192.7	12	4.1	6.22	.109		.13	
Calendar year 1934.....												
January.....					758.2	112	4.5	24.5	.430		.50	
February.....					580.8	68	5.2	20.7	.363		.38	
March.....					3,329	226	21	107	1.88		2.17	
April.....					620	36	15	20.7	.363		.40	
May.....					869.3	58	9.3	28.0	.491		.57	
June.....					480.5	38	6.0	16.0	.281		.31	
July.....					244.2	35	2.8	7.88	.133		.16	
August.....					153.4	10	2.8	4.95	.087		.10	
September.....					150.2	7.5	3.8	5.01	.088		.10	
Water year 1934-35.....					7,905.2	226	1.7	21.7	.381		5.16	

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 to September 1935.

Extremes.- Maximum discharge observed during period, 138 second-feet July 31 (gage height, 3.19 feet); minimum observed, 4.5 second-feet Sept. 15 (gage height, 1.86 feet).

Remarks.- Records good. Flow regulated by power plants upstream.

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

1.6	2.9	2.4	40	3.4	170
1.9	5.6	2.6	61	3.6	204
2.0	10	2.8	84	3.8	241
2.2	23	3.0	110	4.0	280
		3.2	139		

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										-	50	5.3
2										-	37	10
3										-	19	51
4										-	6.9	32
5										-	39	34
6										-	37	56
7										-	85	69
8										-	80	37
9										-	96	71
10										-	51	32
11										-	34	30
12										-	52	37
13										-	36	14
14										-	43	13
15										-	40	4.8
16										-	43	41
17										-	31	42
18										84	5.3	41
19										62	36	67
20										59	33	74
21										57	36	42
22										68	31	5.0
23										89	34	44
24										113	36	40
25										63	5.3	41
26										71	29	47
27										73	26	46
28										68	14	44
29										57	13	14
30										84	13	68
31										114	29	-
Month					Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches		
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July 18-31.....					1,062	114	57	75.9	0.090	0.05		
August.....					1,119.5	96	5.3	36.1	.045	.05		
September.....					1,153.1	74	4.8	38.4	.045	.05		
Water year												

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 1935.

Average discharge.- 23 years (1912-35), 1,800 second-feet.

Extremes.- Maximum discharge observed during year, 15,700 second-feet Mar. 18 (gage height, 12.92 feet); minimum, 305 second-feet Aug. 2, 3 (gage height, 0.32 foot). 1930-35: 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. 26-28, Jan. 4, 5, Jan. 22 to Feb. 3, Feb. 25-28, which are poor. Low-water flow regulated by power plants upstream.

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	514	1,140	3,010	1,140	750	1,280	3,010	815	815	640	371	389
2	695	1,070	3,460	1,360	700	1,440	3,100	875	614	725	340	447
3	614	490	2,740	815	650	1,000	2,740	1,600	695	1,070	328	640
4	514	490	3,010	900	587	1,210	1,840	1,210	940	725	356	490
5	490	427	1,840	900	755	3,940	1,440	1,280	755	447	371	447
6	427	514	1,920	875	1,920	8,250	1,840	2,000	587	514	407	371
7	340	875	1,440	562	1,140	10,500	2,000	2,490	568	587	725	389
8	371	875	940	1,600	1,140	8,120	1,440	2,400	815	447	815	389
9	340	940	1,000	3,840	1,000	6,270	1,920	2,160	640	614	562	371
10	356	940	1,140	4,140	514	6,990	1,760	2,560	562	755	427	356
11	340	537	1,680	3,010	468	7,860	2,000	2,080	640	695	389	371
12	340	407	1,440	2,080	875	8,640	2,080	1,210	587	468	389	537
13	325	447	2,000	1,680	875	7,750	1,840	1,070	695	389	356	447
14	389	447	1,600	1,440	875	5,890	1,210	2,080	687	389	755	371
15	371	640	1,360	1,600	1,210	4,740	1,440	1,760	668	447	427	468
16	356	427	1,280	1,640	1,760	6,870	1,520	1,760	407	427	447	371
17	562	468	725	2,080	1,210	12,500	1,920	1,360	940	389	427	490
18	587	427	695	2,080	1,280	15,400	2,160	1,000	1,600	356	562	514
19	537	815	1,140	2,000	1,680	13,000	1,600	640	4,640	427	614	490
20	340	1,680	1,070	1,000	1,280	10,200	1,140	725	5,160	514	562	427
21	407	2,650	1,000	1,000	1,000	9,460	815	1,140	3,550	389	1,210	389
22	427	2,320	695	1,100	1,280	11,400	1,210	695	2,490	427	1,140	371
23	447	4,040	940	1,100	1,140	10,000	1,600	640	1,680	514	815	356
24	755	3,940	1,070	1,100	815	7,860	1,210	514	1,070	447	537	490
25	755	3,550	614	1,050	800	6,040	940	640	940	614	447	668
26	1,280	2,080	650	1,000	850	4,940	1,140	490	695	614	490	468
27	1,360	1,600	700	950	900	4,440	695	695	940	447	514	537
28	815	2,000	750	850	1,000	3,940	695	1,280	755	490	587	427
29	514	2,160	815	900	-	4,140	668	1,280	940	427	427	389
30	514	1,920	875	850	-	3,840	1,000	1,140	562	371	389	389
31	1,000	-	1,070	800	-	3,370	-	562	-	537	614	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	17,085	1,360	328	551	0.218	0.25
November.....	40,316	4,040	427	1,544	.531	.59
December.....	42,669	3,460	614	1,376	.544	.63
Calendar year 1934.....	400,626	5,970	185	1,098	.434	5.88
January.....	45,642	4,140	562	1,472	.582	.67
February.....	28,454	1,920	468	1,016	.402	.42
March.....	211,190	15,400	1,000	6,813	2.69	3.10
April.....	47,973	3,100	668	1,599	.632	.71
May.....	40,141	2,560	490	1,295	.612	.69
June.....	36,527	5,160	407	1,218	.481	.54
July.....	16,502	1,070	356	526	.208	.24
August.....	16,800	1,210	328	542	.214	.25
September.....	13,259	668	356	442	.175	.20
Water year 1934-35.....	556,358	15,400	328	1,524	.602	8.19

Salt River near North Bradley, Mich.

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

Drainage area.- 138 square miles.

Records available.- June 1934 to September 1935.

Extremes.- Maximum discharge observed during year, about 2,400 second-feet Mar. 17; maximum gage height, about 11.6 feet Mar. 6, backwater from ice; minimum discharge, 3.5 second-feet August 16; minimum gage height, 0.64 foot Oct. 15.
1934-35: Maximum discharge, that of Mar. 17, 1935; maximum gage height, that of Mar. 6, 1935; minimum discharge, 1.9 second-feet July 24, 1934 (gage height, 0.51 foot).

Remarks.- Records good below and fair above 750 second-feet, except those for periods of ice effect, Dec. 8 to Jan. 8, Jan. 15 to Mar. 17, and estimated days, Mar. 23, 24, which are poor.

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	10	12	230	22	23	65	100	26	19	16	5.1	7.0
2	9.4	12	170	23	24	60	96	25	17	13	5.1	7.0
3	9.1	11	96	23	25	60	118	30	25	12	4.6	6.7
4	8.4	12	75	24	25	75	96	48	26	12	4.4	6.7
5	8.4	12	63	24	25	200	87	128	21	13	4.2	6.7
6	8.4	12	52	25	24	1,250	79	114	19	16	5.8	6.0
7	8.4	12	48	35	22	1,000	67	83	19	16	9.1	6.0
8	8.0	11	42	125	23	750	59	63	17	14	12	6.3
9	8.0	11	35	811	24	650	52	63	16	12	9.8	7.0
10	8.0	11	28	765	24	650	48	75	15	13	8.7	6.7
11	8.0	12	25	375	24	1,250	45	59	14	10	7.4	6.0
12	8.0	11	22	230	25	1,000	59	48	13	7.7	7.7	6.0
13	7.7	9.8	23	243	25	700	71	45	12	6.3	6.3	5.8
14	8.0	9.8	23	193	25	450	63	56	11	5.5	4.2	5.5
15	7.4	9.4	23	150	75	400	52	45	10	7.7	3.9	5.1
16	8.0	9.8	25	120	150	1,500	48	37	9.4	6.0	3.7	5.3
17	8.4	9.8	25	95	200	2,250	45	31	19	6.3	5.3	12
18	8.0	12	24	75	200	1,710	43	28	27	5.5	52	12
19	8.0	22	24	65	150	553	41	25	63	4.8	49	12
20	8.7	9.7	23	55	125	496	37	23	79	6.3	33	8.7
21	17	148	23	50	100	898	34	21	63	6.3	56	9.1
22	22	243	22	50	80	985	32	20	48	5.3	37	8.0
23	17	313	22	45	75	700	30	18	38	5.3	22	8.0
24	13	138	21	40	70	400	29	17	28	11	16	7.4
25	16	87	22	35	65	243	29	17	23	12	12	6.7
26	15	67	22	30	60	181	27	16	21	12	12	7.4
27	17	63	21	25	60	138	26	16	24	11	10	7.0
28	16	87	20	25	60	256	27	18	25	8.4	9.1	8.7
29	15	170	21	23	-	217	29	25	24	6.7	8.0	11
30	13	104	21	23	-	138	28	27	21	5.1	7.4	6.7
31	13	-	21	23	-	118	-	22	-	4.8	7.4	-
Month	Second-foot-days		Maximum		Minimum		Mean		Per square mile		Run-off in inches	
October.....	340.3		22		7.4		11.0		0.080		0.09	
November.....	1,728.6		313		9.4		57.6		.417		.47	
December.....	1,512		230		20		42.3		.307		.35	
Calendar year 1934.....												
January.....	3,847		811		22		124		.699		1.04	
February.....	1,808		200		22		64.6		.468		.49	
March.....	19,143		2,250		60		618		4.48		5.16	
April.....	1,597		118		26		53.2		.386		.43	
May.....	1,269		128		16		40.9		.296		.34	
June.....	766.4		79		9.4		25.5		.185		.21	
July.....	291.0		16		4.8		9.39		.063		.08	
August.....	437.2		56		3.7		14.1		.102		.12	
September.....	224.5		12		5.1		7.48		.054		.06	
Water year 1934-35.....	32,764.0		2,250		3.7		89.8		.651		8.84	

Kinney Creek near Clare, Mich.

Location.- Staff gage on V-notch weir, lat. 43°45', long. 84°42', in NW¼ sec. 29, T. 18 N., R. 3 W., 4 miles southeast of Clare.

Drainage area.- Not determined.

Records available.- July to September 1935.

Extremes.- Maximum discharge observed during period, 11 second-feet Aug. 7 (gage height, 1.50 feet); minimum, 0.9 second-foot Aug. 13 (gage height, 0.68 foot).

Remarks.- Records good.

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

0.6	0.7	1.1	3.5
.7	1.0	1.2	4.8
.8	1.3	1.3	6.5
.9	1.8	1.4	8.6
1.0	2.5	1.5	11

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										-	1.1	1.1
2										-	1.1	1.1
3										-	1.2	1.1
4										-	1.2	1.1
5										-	1.1	1.1
6										-	2.1	1.1
7										-	4.5	1.2
8										-	1.2	1.1
9										-	1.2	1.1
10										-	1.2	1.1
11										-	1.1	1.0
12										-	1.1	1.0
13										-	1.0	1.0
14										-	1.0	1.1
15										-	1.0	1.0
16										1.1	1.0	1.1
17										1.1	1.9	1.8
18										1.1	4.3	1.2
19										1.1	3.4	1.4
20										1.1	5.1	1.2
21										1.0	3.1	1.2
22										1.4	1.8	1.2
23										2.7	1.5	1.1
24										1.6	1.4	1.1
25										2.5	1.3	1.1
26										1.8	1.2	1.7
27										1.4	1.2	1.2
28										1.3	1.2	1.2
29										1.2	1.2	1.2
30										1.5	1.1	1.1
31										1.2	1.1	-
Month					Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches		
October.....					-	-	-	-	-	-	-	-
November.....					-	-	-	-	-	-	-	-
December.....					-	-	-	-	-	-	-	-
Calendar year 1934.....												
January.....					-	-	-	-	-	-	-	-
February.....					-	-	-	-	-	-	-	-
March.....					-	-	-	-	-	-	-	-
April.....					-	-	-	-	-	-	-	-
May.....					-	-	-	-	-	-	-	-
June.....					-	-	-	-	-	-	-	-
July 16-31.....					23.1	2.7	1.0	1.44				
August.....					52.9	5.1	1.0	1.71				
September.....					35.0	1.8	1.0	1.17				
Water year 1934-35.....												

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 1935.

Extremes.- Maximum discharge during year, about 3,200 second-feet Mar. 6 (gage height, 11.10 feet, backwater from ice); minimum, 60 second-feet Oct. 18 (gage height, 3.01 feet).

1930-31, 1932-35: Maximum discharge, that of Mar. 6, 1935; minimum, 54 second-feet Oct. 2, 1932 (gage height, 2.90 feet).

Remarks.- Records fair except those for period of ice effect, Dec. 26 to Mar. 14, which are poor.

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	151	170	369	250	200	400	549	208	158	158	87	132
2	146	196	644	250	200	500	513	220	221	158	74	120
3	98	183	457	250	210	600	497	274	183	136	109	183
4	98	98	427	225	220	700	457	274	196	156	132	156
5	102	170	398	225	230	950	457	355	183	148	134	96
6												
7	144	170	341	225	220	3,000	398	398	146	189	127	120
8	128	185	247	350	220	2,250	398	369	183	158	170	127
9	113	139	274	500	220	2,000	369	341	183	146	170	107
10	104	158	287	1,000	220	1,800	369	341	183	133	127	120
11	100	125	274	1,000	220	1,800	355	341	183	136	127	87
12	107	139	274	750	230	2,500	328	300	134	122	102	125
13	100	148	274	650	230	2,000	341	274	183	136	183	132
14	146	170	260	580	240	1,750	369	300	134	134	122	122
15	86	144	170	500	300	1,550	369	287	183	125	158	120
16	115	170	287	500	450	1,490	341	274	141	170	125	96
17												
18	98	148	274	450	600	1,570	328	274	148	141	118	148
19	98	116	234	425	500	2,380	328	247	196	139	170	129
20	72	144	247	400	500	2,080	314	247	170	141	116	170
21	122	247	208	350	450	1,750	314	221	234	102	274	134
22	116	427	260	325	425	1,410	274	196	234	132	221	127
23												
24	128	518	234	325	375	1,290	274	183	221	100	221	134
25	196	709	247	325	350	1,290	274	209	208	158	196	91
26	170	775	234	300	325	1,170	287	196	196	116	132	139
27	146	612	247	275	300	1,210	234	196	183	208	141	83
28	170	457	196	260	300	1,080	260	183	183	170	132	68
29												
30	196	497	225	250	300	915	260	183	170	183	141	125
31	183	398	250	240	325	810	234	196	196	170	104	125
32	170	427	275	230	350	775	221	196	208	116	134	151
33	196	457	275	220	-	742	287	234	170	118	129	139
34	196	487	250	210	-	644	260	221	146	116	89	132
35	196	-	250	210	-	612	-	221	-	81	134	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	4,175	196	66	135	0.324	0.37
November.....	8,772	775	98	292	.702	.78
December.....	8,699	644	170	287	.690	.80
Calendar year 1934.....	95,954	1,550	62	263	.632	8.59
January.....	12,020	1,000	210	398	.933	1.08
February.....	8,710	600	200	311	.748	.78
March.....	42,998	3,000	400	1,397	3.33	3.84
April.....	10,254	549	221	342	.822	.92
May.....	7,998	398	183	258	.620	.71
June.....	5,457	234	134	182	.438	.49
July.....	4,386	183	81	141	.359	.39
August.....	4,599	274	74	142	.341	.39
September.....	3,738	183	68	125	.300	.33
Water year 1934-35.....	121,796	3,000	66	334	.803	10.88

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 1935.

Extremes.- Maximum discharge observed during year, 3,560 second-feet Mar. 5 (gage height, 9.50 feet); minimum, 29 second-feet Oct. 12 (gage height, 0.17 foot).
1930-35: Maximum discharge observed, that of Mar. 5, 1935; minimum, 17 second-feet July 22, 1934.

Remarks.- Records good except those for periods of ice effect, Dec. 11 to Jan. 9, Jan. 18 to Feb. 9, Feb. 21 to Mar. 4, which are poor. Gage-height record furnished by city of Alma.

Rating table, water year 1934-35, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
Shifting-control method used Oct. 1 to Dec. 10, Sept. 4-30

0.0	24	1.2	155	2.4	339	3.6	558	4.8	860	7.0	1,860
.2	42	1.4	182	2.6	373	3.8	598	5.0	930	7.5	2,160
.4	62	1.6	211	2.8	408	4.0	640	5.3	1,040	8.0	2,460
.6	83	1.8	241	3.0	444	4.2	685	5.6	1,160	8.5	2,810
.8	105	2.0	273	3.2	481	4.4	735	6.0	1,360	9.0	3,160
1.0	129	2.2	305	3.4	519	4.6	795	6.5	1,610	9.5	3,560

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	100	88	339	100	100	180	339	155	211	123	57	63
2	71	78	339	90	100	160	322	155	168	129	67	61
3	69	83	358	90	110	170	289	175	136	117	67	63
4	65	78	373	90	115	190	289	241	129	123	67	58
5	55	88	322	85	125	710	289	339	123	123	67	58
6	61	88	273	85	135	1,760	273	356	123	111	72	59
7	51	100	195	90	130	1,410	241	241	123	111	88	59
8	52	105	168	95	125	1,210	241	339	111	123	100	58
9	52	88	142	150	125	1,510	211	322	105	136	88	54
10	56	83	123	462	129	1,120	182	305	105	123	94	59
11	62	83	110	462	129	1,560	196	305	111	111	100	59
12	29	83	100	500	148	1,360	211	273	105	111	100	58
13	37	88	100	481	148	1,260	257	241	94	88	83	58
14	40	78	100	444	148	930	257	241	94	83	72	61
15	45	78	100	356	162	735	257	241	78	71	94	61
16	51	83	110	322	356	1,120	226	226	78	53	88	64
17	49	78	120	257	322	1,860	211	211	168	57	83	54
18	47	78	120	225	305	2,040	211	211	578	69	78	61
19	53	78	110	200	322	1,610	196	168	795	67	72	67
20	57	155	100	180	226	1,080	175	142	662	69	78	66
21	60	339	90	170	210	1,040	162	123	519	67	94	66
22	62	408	90	175	200	860	148	123	426	67	111	69
23	88	481	100	170	190	765	148	105	356	65	111	71
24	123	500	110	160	180	710	148	111	257	65	105	72
25	111	500	100	140	175	640	142	100	182	69	88	72
26	117	481	90	130	175	538	142	105	148	78	88	67
27	117	390	90	120	170	500	129	105	182	83	78	67
28	105	322	85	120	160	444	142	111	196	78	78	66
29	100	305	85	130	-	408	155	196	111	78	71	68
30	175	305	90	120	-	257	168	226	142	105	71	67
31	117	-	100	110	-	289	-	241	-	41	65	-
Month	Second-foot-days				Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....	2,277				175	29	73.5	0.255	0.29			
November.....	5,772				500	63	192	.667	.74			
December.....	4,731				373	85	153	.531	.61			
Calendar year 1934.....	48,352				864	17	132	.458	6.23			
January.....	6,309				500	85	204	.708	.82			
February.....	4,940				356	100	176	.611	.64			
March.....	28,406				2,040	160	916	3.18	3.67			
April.....	6,357				339	129	212	.736	.82			
May.....	6,433				356	100	208	.722	.83			
June.....	6,616				795	78	221	.767	.86			
July.....	2,794				136	41	90.1	.313	.36			
August.....	2,575				111	57	83.1	.289	.33			
September.....	1,886				72	54	62.9	.218	.24			
Water year 1934-35.....	79,096				2,040	29	217	.753	10.21			

Pine River near Midland, Mich.

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

Drainage area.- 400 square miles.

Records available.- May 1934 to September 1935.

Extremes.- Maximum discharge during year, about 3,000 second-feet Mar. 17 (gage height, estimated 13.5 feet); 13 second-feet Sept. 16; minimum gage height, 7.60 feet Apr. 28.

1934-35: Maximum discharge, that of Mar. 17, 1935; minimum, 9.0 second-feet June 29, 1934; minimum gage height, that of Apr. 28, 1935.

Remarks.- Records fair except those for period of ice effect and missing gage heights, Dec. 11 to Mar. 21, which are poor. Low-water flow regulated by power plant upstream.

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	88	81	372	120	125	250	441	163	291	88	75	66
2	206	66	330	110	150	300	394	140	200	65	68	44
3	68	52	394	110	150	350	417	132	238	111	96	50
4	44	66	351	110	160	450	210	155	155	98	56	75
5	107	158	330	110	160	600	310	273	147	94	50	81
6	58	77	330	110	160	2,400	310	515	169	174	86	86
7	59	73	310	110	160	1,750	255	394	153	158	120	86
8	79	84	142	120	170	1,500	273	394	155	171	92	86
9	48	79	115	500	180	1,500	273	394	135	140	111	94
10	41	84	147	750	160	1,500	171	394	155	79	109	70
11	44	48	125	650	160	2,000	155	351	160	123	102	46
12	53	50	125	600	160	1,500	210	394	115	115	120	68
13	50	84	125	550	160	1,500	183	351	137	113	92	48
14	33	79	125	500	200	1,500	222	291	100	123	81	64
15	36	70	125	450	300	1,800	238	255	145	59	113	47
16	42	81	135	400	500	2,000	273	273	88	47	127	26
17	53	84	150	350	750	3,000	238	177	515	50	59	77
18	120	68	100	325	500	2,250	142	222	1,410	26	61	75
19	48	140	140	300	400	1,750	213	109	1,570	48	50	79
20	75	140	120	275	400	1,750	171	238	1,170	41	58	79
21	59	238	140	300	250	1,500	186	197	890	81	153	82
22	42	490	135	300	250	1,100	155	98	690	105	73	77
23	90	455	125	250	200	1,170	130	153	490	118	109	37
24	54	542	125	200	200	960	142	68	372	135	105	330
25	142	515	125	150	200	890	150	61	273	200	171	54
26	115	600	125	125	200	722	140	90	183	147	86	66
27	71	465	120	150	200	490	171	185	165	125	98	71
28	102	158	110	175	200	310	90	147	255	92	42	71
29	115	291	110	150	-	542	186	219	273	70	75	46
30	100	281	120	140	-	490	135	111	153	273	52	118
31	125	-	125	130	-	465	-	166	-	84	70	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				2,367	206	33	75.4	0.191	0.22			
November.....				5,749	600	48	192	.480	.54			
December.....				5,451	394	100	176	.440	.61			
Calendar year												
January.....				8,620	750	110	278	.695	.80			
February.....				8,798	750	125	242	.605	.63			
March.....				38,389	3,000	250	1,238	3.10	3.67			
April.....				6,574	441	90	219	.548	.61			
May.....				7,110	515	61	229	.572	.66			
June.....				10,953	1,570	88	365	.912	1.02			
July.....				3,549	273	26	108	.270	.31			
August.....				2,760	171	42	89.0	.222	.26			
September.....				2,299	330	26	76.6	.192	.21			
Water year 1934-35.....				100,406	3,000	26	275	.688	9.34			

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 1935.

Extremes.- Maximum discharge observed during year, about 6,500 second-feet Mar. 6 (gage height, 19.24 feet, backwater from ice); minimum, 8.8 second-feet Aug. 26, 27 (gage height, 4.67 feet).
1931, 1932-35: Maximum discharge observed, 6,740 second-feet Apr. 2, 1933; maximum gage height, that of Mar. 6, 1935; minimum discharge, 4.0 second-feet June 22, 1931 (gage height, 4.48 feet).

Remarks.- Records good except those for periods of ice effect, Dec. 8-11, 16-23, Dec. 25 to Jan. 12, Jan. 17 to Feb. 16, Feb. 19, Feb. 23 to Mar. 9, which are poor.

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	25	21	41	17	50	80	243	54	216	203	15	10
2	22	20	39	16	45	110	216	57	105	141	16	9.6
3	20	21	36	18	45	1,000	203	116	111	124	20	12
4	20	28	43	17	40	1,100	178	166	94	94	16	13
5	19	28	53	17	35	1,750	166	203	79	83	15	12
6	17	30	41	18	23	6,500	154	190	65	74	17	13
7	19	28	21	25	21	3,000	132	243	65	62	20	12
8	17	20	35	175	40	2,250	128	288	62	52	22	11
9	16	22	35	750	40	1,800	116	259	49	49	19	14
10	16	22	35	750	40	1,720	112	243	47	42	17	13
11	16	22	25	550	38	3,620	109	216	37	37	19	12
12	15	21	13	350	35	2,400	120	190	35	35	19	11
13	15	20	12	319	38	1,760	120	178	33	31	17	11
14	15	20	11	190	40	1,040	101	145	31	29	15	11
15	14	20	13	190	55	856	98	116	178	31	14	12
16	14	18	15	143	1,000	1,360	98	105	42	27	13	9.6
17	14	17	18	125	1,040	1,850	94	94	45	25	13	16
18	14	20	18	100	477	1,620	83	83	89	25	14	15
19	15	34	20	100	475	1,040	83	77	79	23	13	15
20	16	38	20	100	458	713	87	74	139	22	14	15
21	31	41	20	100	386	1,180	77	68	139	20	22	14
22	39	43	20	100	335	1,680	74	59	118	23	15	13
23	27	53	21	110	200	1,040	65	52	82	22	11	12
24	25	43	15	100	150	835	77	47	72	23	11	12
25	23	36	18	90	125	633	42	44	66	20	9.6	12
26	23	34	19	80	65	515	42	39	58	17	8.8	14
27	32	32	19	75	50	440	39	37	107	16	8.8	17
28	22	32	20	65	70	352	44	49	422	15	9.6	16
29	22	32	20	60	-	319	44	90	477	14	9.6	16
30	20	30	21	50	-	288	57	440	303	14	12	15
31	22	-	18	50	-	258	-	335	-	14	11	-
Month					Second-foot-days	Maximum	Minimum	Mean	Per square mile		Run-off in inches	
October.....					615	39	14	19.8	0.031		0.04	
November.....					846	53	17	28.2	.044		.05	
December.....					754	53	11	24.3	.038		.04	
Calendar year												
January.....					4,850	750	16	156	.246		.28	
February.....					5,416	1,040	21	193	.304		.32	
March.....					42,790	6,500	80	1,380	2.18		2.51	
April.....					3,202	243	39	107	.169		.19	
May.....					4,356	440	37	141	.222		.26	
June.....					3,445	477	31	115	.181		.20	
July.....					1,407	203	14	45.4	.072		.08	
August.....					456.4	22	8.8	14.7	.023		.03	
September.....					398.2	17	9.6	12.9	.020		.02	
Water year 1934-35.....					58,525.6	6,500	8.8	188	.297		4.02	

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 876.02 feet above mean sea level.

Drainage area.- 123 square miles.

Records available.- May to September 1935.

Extremes.- Maximum discharge observed during period, 187 second-feet Aug. 6 (gage height, 2.60 feet); minimum, 8.7 second-feet Sept. 30 (gage height, 0.96 foot).

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

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								-	65	33	22	19
2								-	56	32	35	18
3								-	64	32	37	20
4								-	66	32	36	22
5								-	59	32	33	20
6								-	58	31	80	20
7								-	59	31	41	20
8								92	56	32	37	33
9								92	53	33	35	23
10								86	51	31	35	21
11								86	44	31	32	20
12								86	36	30	31	20
13								80	36	30	33	20
14								78	35	29	33	19
15								65	34	33	33	18
16								57	32	29	36	18
17								55	45	23	36	16
18								56	47	18	36	16
19								54	44	34	36	21
20								52	42	21	37	16
21								52	41	17	49	14
22								52	32	16	44	14
23								39	32	19	43	11
24								33	31	23	42	11
25								33	31	23	42	9.4
26								33	31	22	40	9.4
27								43	37	22	43	16
28								47	34	22	41	9.8
29								71	34	22	30	10
30								76	32	21	19	9.0
31								73	-	21	20	-
Month					Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches		
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May 8-31.....					1,491	92	33	62.1	0.505	0.45		
June.....					1,337	86	31	44.6	.363	.40		
July.....					825	34	16	26.6	.216	.25		
August.....					1,147	80	19	37.0	.301	.35		
September.....					512.6	33	9.0	17.1	.139	.16		
Water year												

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 1935.

Extremes.- Maximum discharge observed during year, 4,360 second-feet Mar. 12 (gage height, 11.14 feet); minimum, 42 second-feet Oct. 15 (gage height, 2.90 feet). 1934-35: Maximum discharge, that of Mar. 12, 1935; minimum, 24 second-feet July 31, 1934; minimum gage height, 2.90 feet Oct. 15, 1934.

Remarks.- Records good except those for period of ice effect, Dec. 10 to Mar. 5, which are poor.

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	72	77	125	125	150	400	363	254	288	162	94	72
2	62	82	132	125	150	1,300	363	265	244	146	106	72
3	58	77	125	125	150	2,750	337	450	288	132	125	72
4	58	77	132	125	150	3,100	324	880	390	125	146	82
5	58	94	154	130	150	3,100	288	790	450	125	125	82
6	55	106	132	160	160	3,020	288	288	390	132	154	77
7	51	88	139	250	160	1,600	265	925	390	125	288	67
8	49	100	118	500	160	710	244	970	390	118	224	67
9	44	88	106	1,750	160	590	265	520	312	118	178	94
10	49	100	105	2,000	170	630	254	450	244	118	139	88
11	47	112	105	1,300	180	3,180	244	390	214	118	132	94
12	45	106	105	750	180	4,000	337	337	196	118	125	94
13	52	100	105	500	180	1,960	750	363	187	106	118	100
14	46	82	110	350	190	1,120	485	324	162	100	112	100
15	44	77	110	325	600	1,020	390	288	154	112	112	100
16	46	72	115	300	2,500	1,480	312	254	146	112	106	100
17	51	77	120	275	1,500	1,720	288	224	187	100	100	100
18	58	72	125	300	900	1,480	265	196	555	100	100	94
19	51	139	125	300	550	790	244	187	710	94	100	66
20	53	288	125	300	500	710	224	178	485	106	106	88
21	82	170	125	900	475	1,660	214	170	312	112	132	82
22	106	154	125	1,150	450	1,720	205	170	234	112	146	88
23	106	187	130	450	425	1,270	205	170	205	112	118	72
24	94	162	130	325	425	970	187	146	154	170	100	58
25	82	118	130	250	425	750	146	139	154	214	100	77
26	77	100	125	200	400	630	139	146	146	324	94	77
27	77	118	120	180	380	520	139	139	170	224	94	77
28	88	106	115	170	360	485	170	170	254	154	88	88
29	77	125	120	160	-	450	214	1,370	214	132	88	72
30	77	118	120	150	-	420	265	750	187	118	82	62
31	72	-	120	150	-	363	-	420	-	112	72	-
Month				Second-foot-days		Maximum	Minimum	Mean	Per square mile		Run-off in inches	
October.....				1,987		106	44	64.1	0.097		0.10	
November.....				3,372		288	72	112	.153		.17	
December.....				3,773		154	106	122	.166		.19	
Calendar year												
January.....				14,075		2,000	125	454	.619		.71	
February.....				12,380		2,500	150	442	.603		.63	
March.....				43,898		4,000	363	1,416	1.93		2.22	
April.....				8,412		750	139	280	.392		.43	
May.....				12,523		1,370	139	398	.543		.63	
June.....				8,412		710	146	280	.392		.43	
July.....				4,151		324	94	134	.183		.21	
August.....				3,804		288	72	123	.168		.19	
September.....				2,504		100	67	83.5	.114		.13	
Water year 1934-35				119,093		4,000	44	326	.445		6.04	

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 1935.

Extremes.- Maximum discharge during year, 760 second-feet (estimated) Mar. 11 (gage height, 10.70 feet, backwater from ice); minimum, 7.5 second-feet Oct. 10-13 (gage height, 3.70 feet).
1930-35: 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 estimated periods, and those during period of ice effect Dec. 7 to Mar. 11, which are poor. Gage-height records October to March furnished by city of Dearborn.

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	*11	14	*15	21	40	70	54	72	91	26	9.3	7.0
2	*10	14	*20	21	40	350	54	65	72	22	6.3	7.3
3	10	16	21	21	40	700	54	87	72	20	12	8.9
4	*10	*20	*21	21	40	350	50	176	83	18	13	8.5
5	*10	24	24	21	35	300	47	156	95	16	12	9.0
6	10	*24	26	28	35	350	43	116	97	15	17	9.2
7	*10	18	21	35	35	225	41	176	83	15	47	7.0
8	*9.0	*16	19	75	35	150	39	156	83	14	32	9.0
9	*8.0	*16	16	250	37	140	43	116	65	15	19	9.6
10	7.5	17	12	175	40	225	44	111	51	15	20	10
11	7.5	*16	14	100	42	750	44	87	41	12	19	10
12	*7.5	16	14	90	45	474	65	79	35	12	17	9.5
13	7.5	*15	14	90	47	216	216	103	28	12	14	8.2
14	*8.5	14	14	70	50	156	156	99	26	12	11	8.5
15	10	14	14	62	100	138	103	76	26	15	12	9.9
16	9.3	*14	15	58	100	166	83	62	24	26	11	9.9
17	12	*14	15	60	110	196	72	49	30	14	11	8.3
18	11	*16	15	65	120	147	58	47	39	12	11	8.2
19	12	20	17	75	110	150	58	41	62	11	9.3	8.5
20	13	*25	17	100	100	107	54	38	58	23	9.9	8.8
21	*20	*28	17	150	95	206	49	38	45	14	12	8.8
22	*24	*29	17	100	90	196	46	34	38	13	13	9.0
23	22	25	17	80	90	156	43	32	32	12	14	8.0
24	14	24	17	70	85	156	41	28	29	16	8.8	8.0
25	*12	*22	16	60	90	107	56	26	23	16	8.5	8.5
26	11	21	19	50	78	95	35	24	21	17	9.3	8.0
27	*11	16	20	45	75	79	36	24	20	15	9.6	9.6
28	*12	14	21	42	70	76	47	28	28	14	9.0	14
29	16	*14	21	41	-	72	62	406	33	11	7.8	14
30	*15	*14	21	40	-	68	99	215	32	12	8.5	11
31	14	-	21	40	-	62	-	129	-	10	8.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	365.1	24	7.5	11.5	0.061	0.07
November.....	550	29	14	18.3	.094	.10
December.....	554	26	12	17.9	.092	.11
Calendar year 1934.....	16,991.9	1,650	2.7	46.6	.240	3.28
January.....	2,146	250	21	69.2	.357	.41
February.....	1,864	120	35	66.6	.343	.36
March.....	6,603	750	62	213	1.10	1.27
April.....	1,874	218	35	62.5	.322	.36
May.....	2,997	406	24	93.5	.482	.56
June.....	1,460	95	21	48.7	.251	.28
July.....	475	26	10	15.3	.079	.09
August.....	421.3	47	6.3	13.6	.070	.08
September.....	272.1	14	7.0	9.07	.047	.05
Water year 1934-35.....	19,481.5	750	6.3	53.4	.275	3.74

*Estimated.

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 1935.

Average discharge.- 21 years, 387 second-feet.

Extremes.- Maximum daily discharge during year, 1,160 second-feet Mar. 11; minimum, 51 second-feet Oct. 16.

1914-35: 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 engineer, Ann Arbor, Mich.

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	79	98	143	115	146	419	412	335	502	223	149	90
2	69	76	150	103	133	611	455	319	516	221	199	94
3	76	94	106	126	140	530	399	459	431	224	206	97
4	71	95	143	93	132	518	404	470	512	230	177	110
5	73	93	138	111	133	606	382	473	456	207	123	86
6	64	109	127	121	121	619	359	509	462	205	152	99
7	57	93	132	123	129	604	339	619	398	198	173	96
8	85	93	129	266	142	579	289	487	362	170	154	106
9	89	98	123	344	146	595	289	507	401	181	160	117
10	74	102	124	317	139	785	316	505	343	176	149	102
11	65	85	114	289	139	1,160	297	440	354	154	144	101
12	70	98	93	312	114	878	375	491	308	162	124	119
13	65	95	141	302	133	794	397	475	328	135	130	98
14	59	81	105	299	204	735	376	500	298	127	131	114
15	61	85	113	290	545	740	319	407	215	123	108	89
16	51	86	128	212	379	980	344	448	272	110	125	99
17	52	93	112	300	298	822	284	350	288	97	181	90
18	63	99	120	119	284	721	315	363	131	74	119	117
19	52	127	132	231	293	710	284	365	292	86	126	86
20	70	118	108	227	284	748	322	295	221	113	145	97
21	99	119	129	255	254	751	226	359	252	99	149	113
22	65	131	142	207	252	797	284	233	268	100	130	100
23	73	141	101	179	246	734	220	215	270	104	137	70
24	66	126	117	178	235	667	239	236	117	183	125	89
25	84	148	136	203	355	615	226	221	211	164	130	92
26	77	226	130	187	236	633	236	205	220	173	137	86
27	70	61	80	166	222	617	287	202	293	140	131	113
28	95	133	131	159	249	542	208	430	256	135	119	89
29	82	127	150	169	-	539	335	593	297	133	115	107
30	83	156	109	146	-	496	349	609	234	112	115	94
31	82	-	111	126	-	537	-	548	-	130	143	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,221	99	51	71.6	0.099	0.11
November.....	3,272	228	61	109	.151	.17
December.....	3,817	150	80	123	.170	.20
Calendar year 1934.....	68,249	2,590	6	187	.259	3.51
January.....	6,255	344	93	202	.279	.32
February.....	6,062	545	114	215	.299	.31
March.....	21,081	1,160	419	680	.941	1.08
April.....	9,527	455	208	318	.440	.49
May.....	12,657	619	202	403	.564	.65
June.....	9,593	516	117	320	.445	.49
July.....	4,689	230	74	151	.209	.24
August.....	4,406	206	108	142	.196	.23
September.....	2,948	119	70	98.3	.136	.15
Water year 1934-35.....	66,528	1,160	51	237	.328	4.44

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 north-east of Adrian.

Drainage area.- 416 square miles.

Records available.- October 1930 to August 1931, October 1932 to September 1935.

Extremes.- Maximum discharge observed during year, 1,020 second-feet Mar. 11 (gage height, 10.50 feet); minimum, 24 second-feet Oct. 14, 15 (gage height, 4.42 feet). 1930-31, 1932-35: 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, 18 second-feet Aug. 22, 1934 (gage height, 4.23 feet).

Remarks.- Records fair except those for periods of ice effect, Dec. 11-16, Dec. 27 to Jan. 7, Jan. 24 to Feb. 3.

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	32	31	86	58	95	330	165	165	169	78	68	71
2	46	31	42	55	90	330	165	165	189	98	94	42
3	78	32	44	62	85	490	117	215	165	71	228	37
4	35	44	94	60	71	346	86	265	122	90	154	71
5	31	37	82	60	71	285	98	270	127	64	132	82
6	33	41	78	55	117	315	94	285	112	94	143	64
7	33	39	68	58	108	394	82	411	189	94	189	74
8	27	46	58	228	58	228	98	428	165	64	165	61
9	29	37	58	591	78	202	103	315	154	103	108	44
10	31	68	40	572	61	362	108	362	112	103	112	48
11	38	44	65	394	58	881	127	285	86	74	143	40
12	46	31	67	285	71	752	215	270	64	81	165	42
13	30	64	67	215	112	428	330	378	64	103	112	38
14	24	32	57	177	74	346	428	480	108	71	86	38
15	24	68	57	202	394	228	256	394	78	71	61	38
16	25	33	60	256	731	285	177	265	103	61	47	34
17	45	71	55	242	462	346	189	228	108	68	45	36
18	40	35	68	202	189	330	177	228	132	61	47	55
19	30	35	94	177	165	285	165	98	143	78	58	51
20	32	74	61	189	165	270	138	143	108	61	108	40
21	48	68	68	330	138	428	127	132	94	117	103	46
22	32	78	86	498	122	378	112	94	98	74	92	46
23	47	74	58	346	202	346	132	122	94	103	68	30
24	48	48	35	250	154	285	138	154	117	74	46	61
25	46	52	98	200	228	270	103	143	122	74	143	52
26	71	40	44	175	498	228	103	132	68	64	44	50
27	44	78	55	150	591	177	122	68	86	75	41	61
28	55	78	60	135	534	177	127	112	68	55	58	46
29	48	38	58	125	-	215	143	127	98	41	58	38
30	78	46	55	110	-	202	154	189	78	46	71	28
31	34	-	62	100	-	189	-	256	-	68	71	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,260	78	24	40.6	0.098	0.11
November.....	1,493	78	31	49.8	.120	.13
December.....	1,970	98	35	63.5	.153	.18
Calendar year						
January.....	6,557	591	55	212	.510	.59
February.....	5,722	731	58	204	.490	.51
March.....	10,318	881	177	333	.800	.92
April.....	4,579	428	82	153	.369	.41
May.....	7,219	480	68	233	.560	.65
June.....	3,429	189	64	114	.274	.31
July.....	2,362	117	41	78.2	.183	.21
August.....	3,050	228	41	98.4	.237	.27
September.....	1,464	82	28	48.8	.117	.13
Water year 1934-35.....	49,423	881	24	135	.325	4.42

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 895.49 feet above mean sea level.

Drainage area.- 2,049 square miles.

Records available.- September 1921 to September 1935.

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

Extremes.- Maximum discharge during year, 9,280 second-feet May 7 (gage height, 12.07 feet); minimum, 40 second-feet Oct. 18, 19, 20 (gage height, 0.33 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, Jan. 23 to Feb. 13, and periods of missing record, Dec. 9 to Jan. 9, Apr. 17-23, which are fair.

Rating table, water year 1934-35, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

0.0	0	1.4	251	3.5	1,140	7.0	3,480
.2	18	1.6	312	4.0	1,420	7.5	3,880
.4	43	1.8	377	4.5	1,730	8.0	4,320
.6	72	2.0	446	5.0	2,060	9.0	5,350
.8	106	2.2	520	5.5	2,590	10.0	6,500
1.0	148	2.5	645	6.0	2,740	11.0	7,780
1.2	197	3.0	879	6.5	3,100	12.0	9,120

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	263	62	200	130	500	1,660	1,280	482	391	464	344	133
2	272	142	205	250	450	1,540	1,110	1,310	360	379	257	126
3	224	74	200	180	400	1,360	954	4,720	384	370	226	128
4	99	216	197	140	350	929	854	7,910	414	458	202	153
5	57	102	187	125	320	831	735	7,520	453	970	165	128
6	92	98	172	150	280	1,460	667	6,870	645	1,540	148	124
7	278	123	182	210	280	2,600	602	8,620	689	1,060	204	120
8	288	178	172	1,000	280	4,800	560	8,980	1,220	624	251	116
9	148	78	170	5,700	300	4,010	540	8,430	464	486	210	130
10	116	151	130	4,700	320	2,810	520	8,080	167	349	177	153
11	106	324	103	3,500	380	4,500	624	5,450	418	334	160	150
12	99	160	120	2,520	450	4,500	996	4,050	397	264	155	133
13	100	124	130	1,800	560	3,560	2,040	4,390	344	226	155	128
14	165	114	150	1,360	806	3,010	2,530	5,400	323	194	153	126
15	90	110	155	1,080	1,460	2,460	2,250	4,230	306	141	202	122
16	59	110	150	782	2,320	2,180	1,920	3,640	292	158	306	120
17	46	108	160	879	2,180	1,860	1,650	3,570	278	150	311	116
18	42	110	150	1,220	1,730	1,600	1,350	2,460	319	141	457	116
19	40	118	140	1,500	1,460	1,460	1,150	1,920	1,080	124	663	114
20	42	229	140	1,170	1,080	1,280	930	1,460	645	126	830	112
21	50	257	150	2,080	929	1,920	800	1,140	515	130	645	114
22	46	342	260	3,180	929	2,530	720	659	326	125	512	112
23	50	404	180	2,600	712	2,880	650	511	645	137	428	106
24	46	351	170	1,800	560	3,640	520	667	540	446	344	101
25	51	306	160	1,500	929	3,330	464	602	450	624	257	101
26	117	260	170	1,000	2,600	3,260	439	540	411	520	207	101
27	72	229	150	880	2,600	3,030	436	490	674	895	184	110
28	100	207	140	900	1,920	2,460	428	468	969	758	162	135
29	85	194	120	800	-	2,120	345	454	505	560	144	126
30	144	190	116	680	-	1,800	466	505	560	460	139	106
31	79	-	110	600	-	1,480	-	446	-	422	141	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,446	288	40	111	0.654	0.06
November.....	5,471	404	62	132	.039	.10
December.....	4,929	250	103	159	.078	.09
Calendar year 1934.....	230,171	7,520	40	631	.308	4.17
January.....	43,616	5,700	125	1,407	.687	.79
February.....	27,085	2,600	280	967	.472	.49
March.....	76,860	4,800	830	2,479	1.21	1.40
April.....	28,620	2,530	345	951	.484	.52
May.....	105,984	8,980	446	3,419	1.67	1.92
June.....	14,894	1,220	167	496	.242	.27
July.....	13,418	1,540	124	433	.211	.24
August.....	8,739	830	139	282	.138	.16
September.....	3,640	153	101	121	.059	.07
Water year 1934-35.....	336,592	8,980	40	922	.450	6.11

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 gauge is 659.12 feet above mean sea level.

Drainage area.- 5,530 square miles.

Records available.- November 1924 to September 1935.

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

Extremes.- Maximum discharge during year, 28,200 second-feet May 8 (gauge height, 6.45 feet); minimum, 28 second-feet Oct. 27 (gauge height, 1.32 feet).

1924-35: Maximum discharge, 87,000 second-feet Jan. 16, 1930 (gauge height, 12.9 feet); minimum, 18 second-feet Aug. 2, 1934 (gauge height, 1.24 feet).

Remarks.- Records good except those below 400 second-feet and those above 20,000 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. Leakage into abandoned Miami & Erie Canal above station; diversion not included in tables of discharge (see list of miscellaneous measurements and record of Miami & Erie Canal).

Rating tables, water year 1934-35 (gauge height, in feet, and discharge, in second-feet)

Table for Oct. 1 to May 5

Table for May 6 to Sept. 30

1.2	16	1.8	673	3.5	6,850	5.5	20,200	1.2	18	1.5	154
1.3	23	2.0	1,110	4.0	9,720	6.0	24,600	1.3	34	1.6	304
1.4	59	2.5	2,510	4.5	12,800	6.5	29,200	1.4	70		
1.5	141	3.0	4,360	5.0	16,200	7.0	34,100				
1.6	304										

Note.- Above 1.6 feet same as previous table.

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	190	108	519	108	839	3,760	2,130	776	776	654	818	178
2	357	83	288	271	776	3,120	1,860	2,360	694	634	811	132
3	359	83	357	304	854	3,080	1,670	11,500	735	619	445	203
4	265	157	322	206	838	2,440	1,640	26,500	673	714	304	192
5	333	141	271	174	576	2,380	1,390	27,300	596	1,140	358	132
6	117	190	255	190	410	2,660	903	22,000	756	1,820	496	122
7	64	117	239	392	410	5,460	859	23,700	818	2,350	462	113
8	200	117	255	2,470	427	8,840	1,980	26,400	1,040	1,690	711	104
9	322	190	222	5,790	462	9,420	1,490	23,700	1,540	1,110	986	192
10	206	174	222	9,130	480	8,550	690	17,800	926	880	1,010	154
11	128	108	141	7,410	557	10,000	1,130	13,100	538	735	959	143
12	99	339	157	4,630	596	11,800	1,840	9,420	480	596	1,060	166
13	99	271	174	2,840	949	12,100	3,440	9,420	654	724	797	166
14	99	174	206	2,160	1,140	9,420	4,450	12,100	634	2,400	502	166
15	117	174	206	1,670	2,380	6,800	4,450	11,200	634	1,420	444	122
16	128	141	190	1,180	2,980	5,390	3,340	9,130	538	1,700	509	122
17	108	128	206	1,760	3,520	4,070	2,710	7,130	519	582	684	143
18	83	128	190	1,180	3,280	2,810	2,070	4,640	392	357	527	113
19	64	424	174	1,670	2,880	2,900	1,760	2,680	410	357	776	95
20	64	271	174	2,380	2,190	2,520	1,660	2,320	960	339	1,080	113
21	76	262	206	4,380	1,700	5,000	1,230	2,010	756	292	1,160	88
22	59	615	374	6,050	1,670	6,100	1,240	1,730	797	686	926	89
23	64	427	339	8,950	1,110	6,260	972	1,120	557	634	864	81
24	64	615	206	3,890	1,020	6,800	880	867	756	1,590	576	88
25	64	519	190	2,290	2,440	8,260	859	1,060	714	2,810	552	88
26	70	462	222	1,890	3,990	7,980	903	954	673	3,490	374	81
27	70	427	174	1,260	4,950	7,130	694	967	735	3,960	395	104
28	76	410	167	1,360	3,990	5,890	634	714	639	3,260	239	164
29	76	271	621	1,210	-	4,630	762	756	999	1,960	178	104
30	76	271	339	1,040	-	2,990	756	735	780	1,280	166	122
31	83	-	128	903	-	2,450	-	859	-	908	166	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	4,160	357	59	134		
November.....	7,797	615	83	260		
December.....	7,724	621	128	249		
Calendar year 1934.....	521,081	22,800	34	1,428		
January.....	76,138	9,130	108	2,456		
February.....	46,794	4,950	410	1,671		
March.....	161,210	12,100	2,360	5,646		
April.....	50,492	4,450	634	1,683		
May.....	273,958	27,300	714	8,837		
June.....	21,715	1,340	392	724		
July.....	41,591	3,950	292	1,342		
August.....	19,125	1,160	166	617		
September.....	3,869	203	81	129		
Water year 1934-35.....	734,543	27,300	59	2,012		

Maumee River at Waterville, Ohio

Location.- Water-stage recorder, lat. 41°30', 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 September 1935.

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

Extremes.- Maximum discharge during year, 33,300 second-feet May 8 (gage height, 8.87 feet); minimum, 55 second-feet Oct. 9 (gage height, 1.44 feet).
1921-35: Maximum discharge recorded, 75,000 second-feet 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, those estimated because of ice effect, Jan. 15-19, Feb. 20, 21, Mar. 2, 3, and those estimated because of missing gage-height record, Nov. 7-23, Dec. 7 to Jan. 10, Jan. 24 to Feb. 19, 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.

Rating table, water year 1934-35, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
Shifting-control method used May 1 to Sept. 30

1.4	47	1.8	292	2.6	1,570	4.0	5,400	6.0	14,100
1.5	71	2.0	516	2.8	2,000	4.5	7,500	6.5	16,900
1.6	124	2.2	806	3.0	2,460	5.0	9,350	7.0	19,900
1.7	202	2.4	1,160	3.5	3,780	5.5	11,600	8.0	26,900
								9.0	36,300

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	283	59	585	130	900	4,200	2,340	585	922	715	921	161
2	312	61	282	240	820	3,600	2,180	987	938	599	745	161
3	342	71	173	290	700	3,300	1,760	6,110	730	685	854	185
4	342	137	549	350	600	3,150	1,610	26,100	606	921	613	283
5	342	229	225	200	540	2,960	1,360	31,300	745	1,320	354	247
6	518	108	138	210	620	2,750	1,070	28,900	665	1,890	356	193
7	254	290	225	900	410	4,910	845	28,600	955	2,370	585	153
8	99	124	280	2,500	470	6,900	1,550	31,300	990	2,460	516	145
9	64	220	260	7,000	490	10,200	2,300	29,500	1,580	1,600	754	185
10	258	190	230	10,600	520	10,000	1,310	23,900	1,380	1,140	1,120	256
11	333	170	200	9,800	580	12,100	972	17,500	921	904	1,080	229
12	258	290	160	7,410	680	13,100	1,900	12,400	571	745	1,040	202
13	79	395	200	4,070	1,000	13,600	3,460	11,600	599	571	1,010	202
14	83	170	220	2,660	1,500	11,200	5,050	15,800	685	1,240	790	220
15	117	160	220	2,000	2,500	8,500	5,400	15,200	585	2,240	557	185
16	131	125	200	1,400	3,300	6,510	4,250	11,600	660	1,700	464	124
17	134	130	220	1,900	4,400	5,300	3,360	9,350	599	1,590	603	169
18	163	150	200	1,600	4,000	3,340	2,650	7,300	434	585	760	193
19	79	500	180	1,400	3,100	2,860	2,120	4,030	604	372	613	153
20	71	390	180	2,280	2,500	2,960	1,790	2,910	677	352	838	138
21	92	290	300	4,160	2,000	4,790	1,740	2,780	858	394	1,160	124
22	174	660	350	8,500	1,700	6,900	1,160	2,160	870	628	1,060	131
23	79	760	430	9,350	1,570	7,100	1,200	1,800	922	1,510	622	98
24	65	362	300	5,000	1,400	6,700	955	1,140	571	1,780	627	93
25	65	516	230	3,200	1,630	7,900	870	1,100	745	3,020	599	131
26	79	477	200	2,100	5,220	6,500	972	1,260	745	3,920	516	138
27	115	477	260	1,700	6,200	7,900	972	887	790	5,050	428	145
28	283	428	200	1,300	5,000	6,900	790	1,030	715	4,380	428	169
29	79	395	500	1,600	-	5,480	730	760	838	3,170	264	247
30	68	278	700	1,100	-	3,500	1,140	838	955	1,910	211	185
31	69	-	300	1,000	-	2,750	-	622	-	1,200	220	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	5,420	516	34	175		
November.....	8,612	760	59	287		
December.....	8,697	700	138	281		
Calendar year 1934.....	605,654	24,500	47	1,659		
January.....	95,770	10,500	130	3,089		
February.....	54,330	6,200	410	1,940		
March.....	201,860	13,600	2,760	6,512		
April.....	57,696	5,400	730	1,923		
May.....	329,649	31,300	685	10,830		
June.....	23,685	1,580	464	796		
July.....	50,961	5,050	352	1,644		
August.....	20,908	1,160	211	674		
September.....	5,245	283	93	175		
Water year 1934-35.....	962,933	31,300	59	2,364		

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 1935 in reports of U. S. Geological Survey; October 1925 to November 1928, July to September 1927, in reports of the Indiana Department of Conservation.

Extremes.- Maximum discharge observed during year, 4,830 second-feet May 7 (gage height, 12.00 feet); minimum, 3.4 second-foot Oct. 19 (gage height, 0.28 foot).
1930-35: Maximum discharge observed, 6,820 second-feet May 14, 1933 (gage height, 14.08 feet); minimum, that of Oct. 19, 1934.

Remarks.- Records good except those for periods of ice effect, Dec. 7 to Jan. 7, Jan. 16, 18, Jan. 23 to Feb. 14, Feb. 22, 23, which are poor. Discharge estimated Jan. 16, 21.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to May 5

0.3	4	2.6	293	5.5	1,040
.6	18	3.0	374	6.0	1,230
1.0	52	3.4	461	6.5	1,430
1.4	97	3.8	555	7.0	1,670
1.8	153	4.3	680	7.5	1,920
2.2	219	5.0	880	8.0	2,190

Table for May 6 to Sept. 30

0.4	7	1.4	95
.6	16	1.6	123
.8	30	1.8	153
1.0	49	2.0	185
1.2	70		

Note.- Same as previous table above gage height 2.0 feet.

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	97	16	27	27	100	333	439	85	66	39	153	11
2	64	17	28	30	95	274	353	2,670	63	39	49	12
3	78	18	27	35	90	185	313	4,250	66	96	43	15
4	71	19	27	40	90	255	274	4,670	63	186	39	16
5	58	21	27	75	85	219	228	4,510	59	605	30	17
6	35	18	25	100	75	219	210	4,300	49	333	27	16
7	35	18	24	400	75	1,970	219	4,830	70	202	25	17
8	25	17	23	1,390	85	1,520	194	4,830	68	153	25	20
9	18	16	22	1,390	100	1,570	185	4,300	63	138	28	22
10	14	16	20	760	150	1,820	417	3,030	59	130	35	24
11	11	16	19	507	250	1,920	507	1,920	49	68	43	30
12	11	18	18	374	200	1,430	910	1,470	39	61	59	32
13	11	18	18	237	350	1,080	1,040	1,570	35	49	95	22
14	7.0	14	19	185	425	940	730	1,010	39	41	123	21
15	6.4	10	20	169	374	880	605	880	49	35	177	16
16	5.2	8.0	21	210	255	920	461	820	169	30	237	16
17	5.2	6.4	21	240	293	655	353	680	202	16	333	12
18	4.0	7.0	22	270	333	461	274	555	237	15	333	11
19	3.4	91	23	274	274	333	237	395	274	17	228	10
20	4.0	153	23	484	237	293	202	274	169	16	185	11
21	6.4	202	24	670	228	333	185	219	123	15	130	9.4
22	7.0	185	24	1,190	210	374	155	177	109	16	95	11
23	8.0	138	24	800	200	1,820	131	153	95	138	59	12
24	8.0	104	24	800	219	1,390	124	150	109	293	41	11
25	7.0	52	24	500	1,770	1,570	110	109	109	555	30	10
26	10	46	23	400	555	1,770	91	102	102	439	24	10
27	11	42	22	300	507	1,150	110	95	109	333	22	11
28	14	33	23	250	374	1,080	91	95	70	293	21	14
29	14	28	23	250	-	880	117	95	66	293	17	16
30	17	27	23	175	-	630	97	88	49	374	16	16
31	16	-	25	125	-	530	-	70	-	293	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	681.6	97	3.4	22.0	0.027	0.03
November.....	1,374.4	202	6.4	23.0	.057	.06
December.....	713	28	18	23.0	.028	.03
Calendar year						
January.....	12,457	1,390	27	402	.496	.57
February.....	7,999	1,770	75	325	.553	.57
March.....	28,704	1,970	185	926	1.14	1.31
April.....	9,360	1,040	91	312	.385	.43
May.....	48,362	4,830	70	1,560	1.93	2.22
June.....	2,829	274	35	94.3	.116	.13
July.....	5,309	605	15	171	.211	.24
August.....	2,736	333	14	88.3	.109	.13
September.....	471.4	32	9.4	15.7	.019	.02
Water year 1934-35.....	120,996.4	4,830	3.4	331	.409	5.54

Tiffin River near Brunersburg, Ohio

Location.— Water-stage recorder, lat. 41°20'48", long. 84°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 September 1935.

Extremes.— Maximum discharge during year, 2,320 second-feet May 15 (gage height, 11.24 feet); minimum, 12 second-feet Oct. 14-17, Sept. 19-22.
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 Nov. 18-21, because of missing gage-height record, and Dec. 7 to Mar. 5, because of ice effect.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

0.7	10	1.8	72	5.0	542	8.5	1,370
0.8	14	2.0	89	5.5	637	9.0	1,520
.9	18	2.5	140	6.0	735	9.5	1,680
1.0	23	3.0	206	6.5	841	10.0	1,860
1.2	33	3.5	279	7.0	960	10.5	2,040
1.4	46	4.0	361	7.5	1,080	11.0	2,240
1.6	57	4.5	450	8.0	1,220	12.0	2,670

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	32	23	33	37	100	700	206	135	117	49	24	17
2	26	24	35	37	90	560	185	251	117	43	22	18
3	24	24	35	37	84	540	160	1,130	98	44	24	20
4	22	27	35	38	80	520	142	1,620	87	75	24	20
5	18	28	35	38	76	500	130	1,220	98	84	44	18
6	17	30	34	39	74	715	116	1,100	106	66	60	18
7	16	32	32	50	72	958	105	2,120	105	50	57	18
8	15	30	31	250	68	1,110	109	1,860	99	39	45	17
9	15	30	30	1,000	68	735	136	1,520	93	33	43	18
10	15	28	29	700	70	830	140	1,430	87	32	55	18
11	14	26	29	450	74	1,280	142	985	79	30	45	20
12	13	26	29	350	80	1,220	363	755	70	28	41	21
13	13	24	29	300	88	1,060	910	1,120	62	26	37	19
14	12	24	29	280	100	863	863	2,040	56	24	32	17
15	12	23	29	260	170	637	656	2,240	51	22	28	16
16	12	23	29	260	900	504	496	1,500	47	22	29	14
17	12	23	30	260	800	441	352	928	47	21	35	14
18	13	23	31	260	600	396	279	599	50	20	39	14
19	13	24	32	270	500	370	234	423	58	18	44	12
20	14	30	32	290	350	344	199	319	74	17	55	12
21	18	40	33	400	280	1,070	172	256	103	20	53	12
22	20	44	34	900	230	1,460	148	213	118	38	37	12
23	21	42	35	800	200	1,110	128	178	103	146	30	13
24	24	39	35	600	190	819	112	150	84	167	24	14
25	27	36	35	430	210	637	101	128	68	106	22	15
26	26	35	35	310	1,000	580	93	114	59	102	19	14
27	26	34	35	240	980	504	88	102	70	136	20	17
28	24	34	35	180	840	396	88	94	94	115	22	16
29	22	32	36	150	-	327	94	94	70	70	20	21
30	22	34	36	120	-	278	114	95	56	41	17	22
31	22	-	37	110	-	242	-	98	-	29	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	580	32	12	18.7	0.024	0.03
November.....	592	44	25	29.7	.039	.04
December.....	1,014	37	29	32.7	.043	.05
Calendar year 1934.....	73,756.0	5,270	2.7	202	.264	3.59
January.....	9,446	1,000	37	305	.398	.46
February.....	8,364	1,000	68	299	.380	.41
March.....	21,707	1,460	242	700	.914	1.05
April.....	7,051	910	88	235	.307	.34
May.....	24,817	2,240	94	801	1.05	1.21
June.....	2,426	118	47	80.9	.106	.12
July.....	1,713	167	17	55.3	.072	.08
August.....	1,087	60	17	34.4	.045	.05
September.....	499	22	12	16.6	.022	.02
Water year 1934-35.....	79,576	2,240	12	218	.285	3.86

Auglaize River near Fort Jennings, Ohio

Location.- Water-stage recorder, lat. 40°56'55", long. 84°15'58", in SE $\frac{1}{4}$ sec. 15, T. 1 S., R. 5 E., at highway bridge $\frac{3}{4}$ 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 September 1935.

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

Extremes.- Maximum discharge during year, 3,380 second-feet May 4 (gage height, 12.40 feet); minimum, 12 second-feet Oct. 23 (gage height, 0.90 foot).
1921-35: Maximum discharge, 7,860 second-feet, Jan. 15, 1930 (gage height, 16.6 feet); minimum, 5.0 second-feet Aug. 28, 1932 (gage height, 0.75 foot).

Remarks.- Records excellent except those estimated because of ice effect, Dec. 8-11, 13-17, Jan. 1-7, 10-17, Feb. 1-13, 20-24, and those estimated because of missing gage-height record, Jan. 24-31, July 17-25, which are fair. Diversion into this basin from Lake St. Marys by Miami & Erie Canal above station.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Shifting-control method used May 5 to Sept. 30

0.9	12	1.8	61	4.0	439	6.5	1,080	9.0	1,760	11.5	2,830
1.0	16	2.0	76	4.5	555	7.0	1,190	9.5	1,930	12.0	3,130
1.2	24	2.5	129	5.0	675	7.5	1,320	10.0	2,120	13.0	3,800
1.4	35	3.0	214	5.5	795	8.0	1,460	10.5	2,320		
1.6	47	3.5	324	6.0	920	8.5	1,610	11.0	2,570		

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	34	16	25	44	30	159	137	55	53	23	105	30
2	53	17	24	37	28	116	135	472	48	23	92	25
3	52	16	23	37	27	91	116	2,430	42	20	79	22
4	53	18	26	31	27	74	104	3,310	40	40	70	24
5	40	18	23	32	26	73	98	2,640	46	44	102	28
6	33	15	21	32	25	77	92	1,260	42	56	143	25
7	24	20	20	34	25	120	92	2,040	53	53	212	28
8	21	21	19	53	27	456	87	1,820	57	45	264	30
9	18	22	19	250	47	324	222	974	50	43	520	28
10	18	22	18	170	100	214	347	675	40	36	336	33
11	17	22	19	105	120	443	235	439	39	28	178	31
12	20	20	20	68	84	1,140	272	324	38	25	121	24
13	19	20	21	50	52	1,190	439	404	33	93	101	25
14	18	20	21	43	76	657	382	795	30	399	90	28
15	17	19	21	40	177	404	261	591	32	1,480	116	33
16	13	17	21	42	312	290	194	358	33	840	105	23
17	14	16	20	47	250	218	149	231	28	225	115	20
18	14	18	21	61	157	169	126	173	33	110	125	20
19	14	21	25	116	120	164	116	136	41	56	501	22
20	15	22	33	121	88	148	102	114	36	53	237	19
21	17	78	40	340	66	149	93	100	39	50	149	20
22	14	55	35	832	62	159	83	92	39	250	104	18
23	12	49	28	603	55	637	83	86	37	700	82	17
24	14	53	24	350	58	1,240	74	78	35	2,000	62	16
25	20	39	28	150	78	1,080	70	71	37	2,800	47	16
26	22	30	26	80	210	947	69	64	24	2,110	40	15
27	20	28	23	46	250	603	69	55	29	1,320	37	16
28	18	25	26	33	208	404	64	53	33	640	38	24
29	16	24	32	35	-	312	55	63	24	311	34	27
30	15	23	34	33	-	210	61	50	18	187	35	23
31	16	-	59	31	-	164	-	55	-	136	34	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	691	53	12	22.3		
November.....	784	78	15	26.1		
December.....	795	59	18	25.6		
Calendar year 1934.....	43,567	2,200	12	119		
January.....	3,946	832	31	127		
February.....	2,767	312	25	98.8		
March.....	12,412	1,240	73	400		
April.....	4,424	439	55	147		
May.....	20,008	3,310	50	645		
June.....	1,127	57	18	37.6		
July.....	14,181	2,800	20	458		
August.....	4,076	520	34	131		
September.....	708	33	15	23.6		
Water year 1934-35.....	65,929	3,310	12	181		

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 September 1935. May to August 1903 at highway bridge $\frac{1}{4}$ miles downstream.

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

Extremes.- Maximum mean daily discharge during year, 15,900 second-feet May 5; minimum, 19 second-feet Nov. 18.
1915-35: Maximum mean daily discharge, 38,700 second-feet Jan. 15, 1930; minimum, 6 second-feet Oct. 17, 1923.

Remarks.- Records good except those estimated because of ice effect Dec. 8-21, and those Jan. 23 to Feb. 2, which are fair. Discharge Jan. 23 to Feb. 2 determined from power-plant records supplemented by estimated leakage. Other discharges determined by means of discharge integrator. Some water is diverted from Lake St. Marys by Miami & Erie Canal into Jennings Creek, tributary to Auglaize River above station. Records of daily discharge as determined from power-plant record furnished by Toledo Edison Co.

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	134	22	258	45	110	1,110	498	144	366	158	491	39
2	24	22	31	48	170	922	417	2,050	36	152	426	38
3	104	23	65	54	49	456	474	7,500	304	138	104	142
4	23	34	41	58	116	572	422	14,800	240	307	40	117
5	214	26	33	71	121	748	416	15,900	300	840	141	42
6	24	22	31	76	60	790	129	12,100	45	955	363	40
7	20	24	64	220	120	2,240	114	11,300	130	954	225	40
8	100	20	30	1,740	181	2,630	1,560	13,700	302	774	706	38
9	21	23	30	2,390	166	3,600	490	11,400	180	634	836	144
10	20	22	30	2,620	44	3,450	200	7,000	264	493	858	66
11	22	22	30	2,180	294	3,900	627	4,900	222	369	613	56
12	22	22	30	1,070	283	5,290	650	3,300	90	240	898	76
13	22	38	30	332	462	6,400	976	3,150	146	918	721	78
14	22	20	30	284	614	4,650	810	3,600	249	2,300	296	89
15	22	44	30	242	1,100	3,020	1,180	3,600	346	1,400	320	31
16	21	24	30	388	1,310	2,350	636	3,020	146	1,600	516	68
17	42	21	30	696	856	1,510	593	2,280	232	260	516	62
18	24	19	30	468	770	506	400	774	78	156	236	35
19	23	290	30	593	796	1,090	387	52	38	287	410	34
20	22	30	30	924	502	995	666	476	45	246	540	68
21	24	161	30	2,240	299	2,150	44	608	38	243	327	30
22	22	194	272	2,580	436	1,840	374	536	338	272	302	30
23	22	26	30	2,550	302	2,050	154	326	40	366	142	63
24	26	242	32	1,350	292	2,500	162	308	138	1,830	255	50
25	22	24	33	757	1,270	3,600	326	494	150	2,710	120	32
26	50	109	33	1,050	1,140	3,600	331	78	199	3,450	121	34
27	22	117	29	50	1,180	3,020	133	363	141	3,450	171	32
28	20	114	30	531	1,080	2,420	49	168	33	2,650	68	140
29	23	34	582	259	-	1,850	257	217	208	1,120	30	31
30	22	48	42	126	-	610	294	234	68	653	38	66
31	22	-	42	116	-	418	-	258	-	414	116	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,200	214	20	38.7		
November.....	1,837	290	19	61.2		
December.....	2,088	582	29	67.4		
Calendar year 1934.....	208,076	12,400	14	570	.245	3.33
January.....	26,097	2,620	45	842		
February.....	14,123	1,310	44	504		
March.....	70,277	6,400	418	2,267		
April.....	13,868	1,560	44	466		
May.....	124,658	15,900	52	4,021		
June.....	5,133	386	33	171		
July.....	30,239	3,450	138	975		
August.....	11,147	898	31	360		
September.....	1,811	144	30	60.4		
Water year 1934-35.....	302,576	15,900	19	829	.356	4.83

Ottawa River at Allentown, Ohio

Location.- Water-stage recorder, lat. 40°45'18", long. 84°11'41", above concrete control in NW $\frac{1}{4}$ sec. 29, T. 3 S., R. 6 E., at highway bridge at Allentown, Allen County. Zero of gage is 789.87 feet above mean sea level.

Drainage area.- 168 square miles.

Records available.- November 1923 to September 1935.

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

Extremes.- Maximum discharge during year, 2,180 second-feet May 4 (gage height, 7.82 feet); minimum discharge, 3.0 second-feet Jan. 1 (gage height, 2.01 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 that estimated Oct. 1, which is fair.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

2.0	2.8	2.7	26	3.8	313	5.5	1,150
2.1	4.4	2.8	32	4.0	434	6.0	1,380
2.2	6.5	2.9	38	4.2	543	6.5	1,620
2.3	9.0	3.0	48	4.4	641	7.0	1,980
2.4	12.3	3.2	78	4.6	739	7.5	2,120
2.5	16.1	3.4	126	4.8	833	8.0	2,360
2.6	21	3.6	200	5.0	925		

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	10.0	9.8	13.0	14.0	12.3	31	49	19.1	10.4	36	14.5	10.4
2	10.9	8.2	8.9	12.2	12.4	28	30	698	16.8	12.2	17.7	9.4
3	9.5	7.8	7.3	12.0	12.0	33	32	1,960	22	10.8	54	14.0
4	8.3	16.2	12.0	10.2	11.0	23	30	1,720	17.6	37	66	13.5
5	7.6	11.2	9.1	10.5	11.6	33	24	684	16.6	23	27	10.8
6	6.8	12.4	8.4	10.6	11.4	44	22	633	18.6	13.2	80	9.4
7	6.4	9.0	8.4	10.9	10.2	165	22	1,180	28	13.2	101	9.8
8	5.6	9.4	8.2	57	18.2	244	49	499	19.5	11.6	180	10.2
9	6.9	8.9	8.2	75	37	114	54	335	15.1	11.2	101	33
10	7.0	8.5	7.5	38	18.4	72	51	202	13.8	10.9	84	14.8
11	7.3	8.2	8.8	23	13.2	332	46	135	13.6	11.1	49	9.6
12	6.8	7.0	8.4	16.8	14.6	816	100	111	13.5	160	34	8.9
13	7.6	8.0	9.2	16.7	14.2	446	132	210	13.8	954	34	9.2
14	7.0	8.2	9.1	14.8	33	196	128	151	13.8	110	36	8.5
15	6.1	8.0	6.9	13.5	82	129	91	102	14.2	44	23	9.7
16	9.4	7.3	9.2	13.4	52	94	62	73	13.6	30	26	8.6
17	12.6	7.9	8.2	38	30	90	52	52	13.0	22	36	9.9
18	12.2	8.8	8.8	23	20	70	46	43	24	17.8	39	9.5
19	9.6	89	12.9	20	19.9	53	40	36	14.4	16.2	27	9.4
20	7.8	49	17.4	44	18.0	45	20	32	11.6	14.0	23	9.5
21	14.5	17.3	10.8	232	15.2	86	18.9	24	20	13.1	19.1	9.0
22	9.4	13.0	13.2	204	12.9	101	21	19.0	13.8	19.5	19.8	8.6
23	8.5	14.8	10.9	58	13.9	782	18.6	27	13.0	323	15.6	7.4
24	8.2	10.3	10.4	24	20	666	20	21	10.2	161	13.0	8.4
25	8.4	9.6	11.8	15.6	52	415	17.0	20	11.2	73	12.4	8.1
26	9.7	8.0	14.8	14.0	166	248	17.8	16.0	11.0	99	10.8	8.0
27	8.4	9.4	13.2	12.4	73	149	17.8	16.6	11.7	48	12.6	30
28	7.9	9.0	11.4	10.3	29	101	17.7	17.6	19.9	27	12.6	20
29	6.8	8.6	29	12.6	-	79	18.6	33	16.3	19.0	11.2	11.0
30	7.8	11.2	25	12.7	-	51	20	17.1	12.2	16.4	11.1	7.2
31	8.7	-	14.4	12.5	-	56	-	14.0	-	16.8	10.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	263.7	14.5	5.6	8.51	0.051	0.06
November.....	414.0	89	7.0	13.8	.082	.09
December.....	357.3	29	7.5	11.5	.068	.08
Calendar year 1934.....	16,562.6	946	5.6	45.4	.270	3.65
January.....	1,081.9	232	10.2	34.9	.208	.24
February.....	833.4	166	10.2	29.8	.177	.18
March.....	5,812	816	23	187	1.11	1.28
April.....	1,267.4	132	17.0	42.2	.251	.28
May.....	9,100.4	1960	14.0	294	1.75	2.02
June.....	464.2	28	10.2	15.5	.092	.10
July.....	2,363.0	934	10.8	75.0	.452	.56
August.....	1,210.4	180	10.7	39.0	.232	.27
September.....	345.8	33	7.2	11.5	.068	.08
Water year 1934-35.....	25,603.5	1,960	5.6	64.4	.383	5.20

Ottawa River at Kalida, Ohio

Location.- Chain gage, lat. 40°58'51", long. 84°12'12", in SW $\frac{1}{4}$ sec. 5, T. 1 S., R. 6 E., at highway bridge in Kalida, Putnam County. Zero of gage is 707.41 feet above mean sea level.

Drainage area.- 315 square miles.

Records available.- September 1930 to November 1935 (discontinued).

Extremes.- Maximum discharge recorded during period Oct. 1, 1934, to Nov. 30, 1935, 3,430 second-feet May 4 (gage height, 13.4 feet); minimum, 4.4 second-feet Oct. 12, 1935; (minimum gage height, 1.32 feet Oct. 11, 1934).
1930-35: Maximum discharge recorded, 4,110 second-feet Jan. 1, 1933 (gage height, 13.90 feet); minimum, 4.3 second-feet Sept. 18, 1932 (gage height, 1.22 feet).

Remarks.- Records good except those estimated because of ice effect, Dec. 6-7, 17-19, 22-26, Jan. 1-7, 24-31, Feb. 1-15, 21-23, which are fair.

Rating table, water year 1934-35 except periods of ice effect (gage height, in feet, and discharge, in second-feet) (Shifting-control method used July 14 to Sept. 30)

1.3	4.7	2.0	31	4.0	232	7.5	914
1.4	7.0	2.2	45	4.5	308	8.0	1,030
1.5	10	2.4	56	5.0	392	9.0	1,290
1.6	13	2.6	72	5.5	480	10.0	1,570
1.7	16	2.8	88	6.0	578	11.0	1,850
1.8	20	3.0	107	6.5	682	12.0	2,230
1.9	25	3.5	163	7.0	794	13.0	2,970

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	60	11	14	23	20	64	88	32	26	23	22	10
2	19	11	13	20	20	72	76	704	25	27	22	10
3	16	12	14	20	19	46	76	2,540	25	24	18	10
4	14	15	13	17	19	43	68	5,300	40	31	21	13
5	12	18	12	16	19	36	49	2,280	29	76	80	13
6	10	27	12	18	17	34	36	1,140	27	88	40	7.3
7	8.5	14	12	21	14	261	36	2,340	37	34	49	7.9
8	7.0	15	12	40	16	538	43	1,680	46	23	134	10
9	6.5	13	11	261	27	308	88	890	46	20	218	11
10	6.1	12	10	117	64	308	102	598	29	20	134	19
11	5.4	12	11	72	62	426	128	392	26	20	112	22
12	7.0	12	12	40	24	1,290	145	261	23	28	151	12
13	7.3	12	11	32	25	914	218	444	22	1,790	46	10
14	6.8	11	11	23	35	444	246	498	22	1,400	35	8.2
15	5.6	12	12	23	68	308	190	292	21	324	43	7.6
16	6.1	12	13	21	134	308	122	204	22	176	36	7.0
17	9.7	14	13	22	122	151	97	145	24	64	30	6.8
18	8.5	13	13	33	80	139	80	112	36	43	40	6.5
19	13	16	14	76	52	60	76	56	49	32	52	6.1
20	15	40	16	46	43	80	72	56	36	24	33	6.6
21	13	68	24	358	40	88	40	64	36	22	30	7.0
22	12	34	17	538	31	151	32	52	25	56	18	7.0
23	10	20	16	232	29	660	40	49	24	163	16	7.3
24	14	20	15	90	29	1,190	37	46	22	1,320	15	7.0
25	9.4	16	18	40	46	704	34	36	21	409	13	6.5
26	9.7	14	19	24	139	558	46	33	18	962	12	6.1
27	9.7	14	20	21	232	308	40	30	18	368	11	9.1
28	9.7	13	16	19	117	246	32	30	16	139	10	11
29	13	14	21	21	-	204	36	43	18	128	10	14
30	11	13	37	21	-	176	33	49	35	43	11	12
31	11	-	68	21	-	134	-	35	-	30	11	-
Month				Second-foot-days		Maximum	Minimum	Mean		Per square mile		Run-off in inches
October.....				364.0		60	5.4	11.7		0.037		0.04
November.....				528		68	11	17.6		.056		.06
December.....				520		68	10	16.8		.053		.06
Calendar year 1934.....				33,819.1		2,140	4.7	92.7		.294		3.98
January.....				2,326		538	16	75.0		.238		.27
February.....				1,533		232	14	54.8		.174		.18
March.....				10,249		1,290	34	331		1.05		1.21
April.....				2,406		246	32	80.2		.265		.28
May.....				18,431		3,300	30	595		1.89		2.18
June.....				844		49	16	28.1		.089		.10
July.....				7,897		1,790	20	265		.810		.93
August.....				1,473		218	10	47.5		.151		.17
September.....				291.2		22	6.1	9.71		.031		.03
Water year 1934-35.....				46,862.2		3,300	5.4	128		.406		5.51

Ottawa River at Kalida, Ohio

(Continued)

Discharge, in second-feet, October 1 to November 30, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.5	7.9										
2	8.5	7.3										
3	5.8	7.0										
4	8.5	8.2										
5	5.2	11										
6	5.2	12										
7	5.6	11										
8	5.2	14										
9	5.4	12										
10	6.5	14										
11	6.3	15										
12	4.4	18										
13	11	15										
14	5.8	16										
15	5.4	14										
16	4.7	13										
17	4.7	12										
18	6.1	14										
19	6.8	14										
20	6.5	11										
21	6.5	10										
22	9.7	11										
23	7.9	11										
24	35	10										
25	12	11										
26	8.8	11										
27	6.5	12										
28	5.6	10										
29	6.5	9.7										
30	8.8	9.1										
31	7.9	-										
Month			Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....			233.3	35	4.4	7.53	0.024	0.03				
November.....			349.2	16	7.0	11.6	.037	.04				
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

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 September 1935.

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

Extremes.- Maximum discharge during year, 2,900 second-feet May 4 (gage height, 8.16 feet); minimum, 0.7 second-foot Oct. 15.

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

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

Remarks.- Records fair. Discharge estimated Jan. 25-31, Feb. 1-6, 19-22, Mar. 1-3 because of ice effect and Apr. 19-22 because of missing gage-height record.

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	1.6	4.1	3.0	6.8	7.0	70	48	22	26	6.4	24	19
2	1.6	3.0	3.3	9.2	6.0	50	42	258	22	2.1	23	20
3	3.7	3.3	4.1	6.3	6.0	35	37	2,110	22	19	35	15
4	3.0	4.1	3.7	6.3	6.0	32	34	2,750	20	65	44	15
5	2.0	3.3	3.3	5.3	6.0	32	32	1,580	20	475	78	12
6	1.8	3.0	3.7	6.3	6.0	43	26	611	20	392	93	11
7	2.5	3.0	3.7	6.3	5.8	122	20	2,320	29	362	164	11
8	2.0	3.0	3.7	22	6.5	239	28	1,650	22	259	225	11
9	2.0	3.0	3.7	20	16	173	28	768	20	137	777	23
10	1.6	2.5	3.3	40	41	139	29	442	20	70	1,130	16
11	1.2	2.6	3.7	34	44	306	39	289	20	44	321	16
12	1.4	2.3	4.1	24	37	887	43	214	16	30	173	17
13	1.6	2.5	2.6	20	27	666	51	286	15	23	147	17
14	1.6	2.5	2.5	15	32	305	96	438	14	17	105	12
15	.9	2.8	2.8	11	134	189	95	314	12	16	91	11
16	1.4	2.5	3.0	10	167	134	75	201	12	16	70	11
17	1.2	3.3	3.3	23	96	102	64	147	13	19	55	10
18	1.6	2.8	3.7	12	55	80	52	108	22	14	59	9.4
19	2.3	8.0	4.5	9.2	30	65	43	66	52	8.4	87	6.8
20	2.0	3.0	5.3	29	22	78	39	67	33	8.4	91	6.4
21	6.2	3.0	5.3	125	19	156	47	61	27	9.6	7	5.8
22	3.3	4.9	6.3	207	16	125	52	26	139	47	5.2	
23	3.3	3.7	5.3	192	17	153	31	45	25	107	33	4.9
24	3.3	4.9	5.3	70	22	474	27	40	20	75	24	5.0
25	4.9	4.9	5.3	33	75	346	26	36	16	116	20	2.0
26	3.7	5.3	5.3	22	384	198	22	30	13	321	18	1.8
27	1.8	5.8	5.3	16	224	161	19	28	14	192	32	16
28	2.5	4.9	5.3	9.0	108	108	16	30	10	139	23	5.4
29	3.0	4.5	6.8	9.0	-	77	23	44	8.0	77	20	3
30	3.0	3.3	5.8	9.0	-	65	23	34	7.6	46	20	5.5
31	3.0	-	5.8	8.0	-	53	-	29	-	30	20	-
Month	Second-foot-days		Maximum		Minimum		Mean		Per square mile		Run-off in inches	
October.....	75.2		6.2		0.9		2.43		0.0071		0.008	
November.....	110.0		8.0		2.3		3.67		.011		.01	
December.....	132.7		6.8		2.5		4.28		.012		.01	
Calendar year 1934.....	25,612.0		1520		.4		70.7		.206		2.79	
January.....	1,015.7		207		5.3		32.8		.096		.11	
February.....	1,617.3		384		5.8		57.8		.169		.18	
March.....	5,655		987		32		135		.367		.554	
April.....	1,215.5		98		16		40.5		.113		.13	
May.....	15,290		2,750		22		493		1.44		1.66	
June.....	596.6		52		7.6		19.9		.058		.06	
July.....	3,254.9		475		2.1		105		.306		.35	
August.....	4,126		1,130		18		133		.388		.45	
September.....	324.2		23		1.8		10.8		.031		.03	
Water year 1934-35.....	33,422.6		2,750		.9		91.6		.267		3.68	

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 September 1935.

Extremes.— Maximum discharge during year, 4,400 second-feet May 8 (gage height, 15.33 feet); minimum, 4.2 second-feet Sept. 22 (gage height, 0.59 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. 20-31, Jan. 1-4, 8-20, 24-31, Feb. 1-8, 18-25, which are fair.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 7-10, 23-27, Aug. 10-13)

Table for Oct. 1 to Mar. 13

0.6	4.0	1.6	69	4.0	311	9.0	1,580
.8	10	2.0	76	5.0	800	10.0	1,910
1.0	18	2.5	124	6.0	740	12.0	2,640
1.2	29	3.0	178	7.0	1,000	14.0	3,580
1.4	38	3.5	237	8.0	1,280	16.0	4,960
1.6	48						

Table for Mar. 14 to Sept. 30

0.6	4.4	1.8	72				
.8	11	2.0	89				
1.0	20	2.5	133				
1.2	30	3.0	182				
1.4	42	3.3	212				
1.6	56						

Note.— Above 3.3 feet same as previous table.

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	8.8	10	14	13	28	311	128	34	79	22	89	24
2	17	9.7	15	14	26	218	111	188	67	18	69	21
3	23	9.8	13	16	24	167	96	1,910	55	31	59	20
4	22	8.8	12	18	23	116	64	3,760	51	98	47	21
5	15	8.2	12	22	22	93	74	4,330	49	331	47	22
6	11	8.2	12	29	22	89	66	3,640	48	413	54	20
7	8.2	9.4	11	36	22	214	80	3,470	48	467	60	17
8	6.4	9.4	11	60	25	407	59	4,330	60	336	92	15
9	5.2	9.4	11	90	36	489	57	3,680	66	303	180	16
10	5.2	9.4	11	80	53	518	56	2,320	63	224	307	16
11	5.8	9.1	9.1	65	81	656	61	1,170	52	160	690	17
12	5.5	9.1	9.7	46	104	1,050	74	669	44	108	541	20
13	5.2	8.2	9.7	38	101	1,430	104	545	40	80	292	21
14	5.2	8.2	9.7	34	107	1,170	124	714	36	141	187	19
15	5.5	8.2	9.7	30	187	718	128	897	36	76	172	17
16	5.6	7.9	9.7	27	200	416	147	664	35	65	133	16
17	5.8	7.9	9.7	50	250	295	142	428	35	41	107	15
18	5.8	7.9	9.4	40	160	224	115	311	31	31	90	14
19	6.4	13	8.8	33	110	182	95	230	32	26	72	12
20	6.7	20	9.2	80	86	171	80	192	44	24	62	11
21	7.0	12	9.3	296	62	417	68	162	72	29	84	7.3
22	7.3	15	9.4	544	49	369	59	142	61	62	87	4.4
23	7.0	20	9.5	456	42	327	83	126	64	275	81	5.4
24	7.0	18	9.7	300	48	453	51	111	48	456	60	7.0
25	7.3	14	9.6	200	60	568	51	95	48	568	42	7.0
26	8.2	12	10	140	176	639	43	85	38	1,020	32	7.0
27	8.5	13	10	100	298	415	40	74	31	848	27	7.6
28	8.5	13	10	70	369	295	38	89	27	532	24	8.0
29	8.2	12	11	58	—	224	38	73	24	286	23	8.0
30	7.9	13	12	44	—	177	37	76	23	192	28	9.5
31	8.2	—	13	35	—	147	—	86	—	132	28	—

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	289.6	28	5.2	8.70	0.012	0.01
November.....	332.8	20	7.9	11.1	.015	.02
December.....	330.4	15	8.8	10.7	.014	.02
Calendar year 1934.....	59,993.1	3,580	1.1	1.64	.219	2.96
January.....	2,864	456	13	92.4	.123	.14
February.....	2,774	369	22	99.1	.132	.14
March.....	12,984	1,430	49	419	.659	.64
April.....	2,339	147	37	78.0	.104	.12
May.....	34,601	4,330	34	1,116	1.49	1.72
June.....	1,427	81	23	47.6	.064	.07
July.....	7,391	1,020	18	238	.318	.37
August.....	3,835	680	23	124	.166	.19
September.....	424.2	24	4.4	14.1	.019	.02
Water year 1934-35.....	69,572.0	4,330	4.4	191	.255	3.46

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., $1\frac{1}{4}$ miles east of Florida.

Records available.— May to September 1935.

Extremes.— Maximum daily discharge recorded during period, 35 second-feet May 14; minimum not determined.

Remarks.— Records good except those for May 10, 11, 16, 17, July 23, 30, 31, which are fair. 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.

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								-	16	-	3.7	17
2								-	17	-	2.9	17
3								-	17	-	3.1	18
4								-	23	-	2.1	17
5								-	21	-	1.9	17
6								-	11	-	2.1	17
7								-	13	-	2.1	17
8								-	7.2	-	2.6	17
9								-	6.3	0.4	3.7	19
10								29	6.3	2.1	4.9	18
11								15	5.9	3.1	3.9	17
12								15	5.9	3.7	4.9	17
13								29	5.6	3.1	4.9	17
14								35	6.3	3.4	3.7	15
15								28	12	3.7	4.2	14
16								28	14	3.9	10	9.0
17								26	10	-	18	-
18								-	7.2	-	12	-
19								-	6.3	-	12	17
20								-	5.2	-	13	33
21								-	5.9	-	15	31
22								-	5.6	25	15	31
23								-	5.5	31	14	31
24								11	5.5	-	12	31
25								16	9.0	-	12	31
26								14	5.6	-	12	30
27								18	4.9	-	17	35
28								12	-	-	17	33
29								16	-	-	17	33
30								15	-	28	18	39
31								16	-	15	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....						
November.....						
December.....						
Calendar year						
January.....						
February.....						
March.....						
April.....						
May.....						
June.....						
July.....						
August.....	-	18	1.9	9.09		
September.....						
Water year						

Note.— Water surface below gage on days for which no discharge is shown after May 9.

South Branch of Portage River near Pemberville, Ohio

Location.-- Chain gage, lat. 41°22'45", long. 83°28'35", in sec. 21, T. 5 N., R. 12 E., at highway bridge $2\frac{1}{2}$ miles southwest of Pemberville, Wood County.

Drainage area.-- 334 square miles.

Records available.-- August 1930 to September 1935 (discontinued).

Extremes.-- Maximum discharge recorded during year, 2,680 second-feet May 7 (gage height, 8.25 feet); minimum, 0.2 second-foot Oct. 13-15, 1930-35; Maximum discharge recorded, 7,350 second-feet Mar. 14, 1933 (gage height, 13.00 feet); minimum, that of Oct. 13-15, 1934.

Remarks.-- Records fair except those estimated because of ice effect Dec. 7-21, 25-31, Jan. 1-7, 14-19, 24-31, Feb. 1-14, 16-25, which are poor.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Apr. 25

0.3	0.1	1.2	29
.4	1.4	1.4	49
.5	1.4	1.6	80
.6	3.3	1.8	122
.8	9.0	2.0	166
1.0	16	2.5	286

3.0	406
4.0	663
5.0	996
6.0	1,380
7.0	1,850
8.0	2,520

Table for Apr. 26 to Sept. 30

0.4	0.1	1.4	63
.5	1.8	1.6	91
.6	3.6	1.8	126
.8	10	2.0	167
1.0	22	2.5	286
1.2	40		

Note.-- Above gage height 2.5 feet same as previous table.

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	5.7	0.7	2.3	3.0	5.8	72	33	18	24	3.4	8.9	7.3
2	3.8	.9	2.5	2.8	5.8	75	29	20	18	2.9	7.7	5.9
3	2.3	1.2	2.1	2.7	5.9	124	26	750	16	2.9	17	5.3
4	1.7	1.7	1.7	2.7	6.0	68	22	1,220	17	67	18	5.3
5	1.4	1.4	1.7	2.7	6.1	52	19	555	15	310	27	5.9
6	1.2	1.4	1.4	2.7	6.0	135	16	505	15	310	22	5.9
7	1.7	1.7	1.3	2.8	5.9	144	16	2,290	56	102	609	5.9
8	1.4	1.6	1.2	12	5.8	480	21	1,500	156	63	609	5.9
9	.6	1.4	1.1	90	5.8	202	23	663	118	32	286	6.9
10	.4	1.7	1.1	84	6.3	226	22	530	74	17	156	13
11	.4	1.4	1.1	34	7.4	785	17	358	49	5.6	91	17
12	.3	1.1	1.1	13	10	855	23	238	29	4.8	88	10
13	.2	1.0	1.0	10	15	430	80	298	21	4.2	430	6.2
14	.2	.9	1.0	6.2	22	274	104	1,140	15	5.9	334	3.9
15	.2	.7	1.0	5.4	86	214	86	555	12	4.2	214	3.4
16	.3	.7	1.0	5.0	298	178	70	310	10	5.3	238	3.1
17	.3	.6	1.0	5.6	155	126	53	238	15	4.2	167	2.7
18	.3	.5	1.1	7.0	70	80	39	167	18	3.9	140	2.3
19	.4	1.9	1.2	13	40	59	31	118	20	3.6	120	2.2
20	.4	3.3	1.5	24	30	65	28	88	14	42	101	2.2
21	.4	4.8	2.0	86	26	480	25	73	12	16	37	2.5
22	.6	5.1	3.5	430	21	505	23	59	10	226	20	2.2
23	.9	3.5	4.3	250	20	274	19	52	10	455	14	2.0
24	1.1	3.3	3.8	95	18	178	19	36	9.7	382	11	1.8
25	1.4	3.3	3.0	45	23	144	17	25	9.7	262	8.9	1.5
26	2.3	2.5	2.7	28	505	124	16	18	8.5	156	7.3	1.1
27	2.3	2.1	2.2	19	382	86	14	14	6.9	88	7.7	2.2
28	1.6	1.9	1.9	15	430	73	12	15	6.2	50	15	3.9
29	1.1	1.7	1.8	11	-	59	12	40	4.8	22	14	5.9
30	1.0	2.1	1.9	80	-	49	14	58	3.6	19	9.3	3.6
31	.8	-	2.3	60	-	41	-	38	-	14	7.7	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				36.7	5.7	0.2	1.18	0.0035	0.004			
November.....				56.1	5.1	.5	1.87	.0056	.006			
December.....				56.8	4.3	1.0	1.83	.0055	.006			
Calendar year 1934.....				26,891.8	2,520	0.2	73.7	.221	2.99			
January.....				1,447.6	430	2.7	46.7	.140	.16			
February.....				2,217.8	505	5.8	79.2	.237	.25			
March.....				6,655	855	41	215	.644	.74			
April.....				929	104	12	31.0	.093	.10			
May.....				11,939	2,290	14	387	1.16	1.34			
June.....				790.4	156	3.6	26.3	.079	.09			
July.....				2,621.9	455	2.9	86.5	.269	.30			
August.....				3,835.5	609	7.3	124	.371	.43			
September.....				147.0	17	1.1	4.90	.015	.02			
Water year 1934-35.....				30,842.8	2,290	0.2	84.5	.253	3.45			

Sandusky River near Bucyrus, Ohio

Location.— Chain gage, lat. 40°48'13", long. 83°21", in NE $\frac{1}{4}$ sec. 10, T. 3 S., R. 16 E., at highway bridge $1\frac{1}{2}$ miles west of Bucyrus, Crawford County.

Drainage area.— 89.8 square miles.

Records available.— August 1925 to November 1935 (discontinued).

Extremes.— Maximum discharge recorded during period Oct. 1, 1934, to Nov. 30, 1935, 1,020 second-feet May 3; maximum gage height, 5.25 feet July 5; minimum discharge, 0.6 second-foot Oct. 24 (gage height, 0.57 foot).
1925-35: Maximum discharge recorded, 6,900 second-feet Dec. 14, 1927 (gage height, 9.15 feet); minimum, 0.6 second-foot Aug. 13-14, 1933, and Oct. 24, 1934.

Remarks.— Records good except those estimated because of ice effect Dec. 5-16, 22, Jan. 13-17, 24-31, Feb. 1-13, 21-24, 27-28, Mar. 1, which are fair.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 4-5, and Aug. 7-8)

Table for Oct. 1 to Mar. 12

0.6	0.7	1.4	23	3.5	399
.7	1.2	1.6	38	4.0	547
.8	2.1	1.8	57	4.5	730
.9	3.4	2.0	78	5.0	935
1.0	5.5	2.5	154	5.5	1,160
1.2	12	3.0	262		

Table for Mar. 13 to Nov. 30

0.6	0.6	1.4	25
.7	1.4	1.6	41
.8	2.6	1.8	60
.9	4.3	2.0	82
1.0	6.6	2.5	157
1.2	14	3.0	262

Note.— Above gage height 3.0 feet same as previous table.

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	1.7	1.8	1.1	1.2	1.7	17	18	2.9	4.3	3.9	3.9	2.9
2	1.2	1.7	1.0	1.9	1.6	16	16	418	2.5	3.2	2.9	2.6
3	1.1	1.9	1.1	1.7	1.6	15	14	1,020	3.9	4.7	5.6	2.9
4	1.1	3.1	1.1	1.4	1.5	16	12	448	2.0	184	3.2	8.2
5	1.0	1.7	1.0	1.1	1.5	26	11	194	3.9	513	13	26
6	1.1	1.3	1.0	1.1	1.5	33	10	157	2.0	88	7.6	14
7	1.1	.9	1.0	1.2	1.5	55	10	935	5.4	60	389	7.1
8	1.0	1.2	1.0	3.8	2.5	90	12	310	4.1	36	418	4.3
9	1.2	.8	1.0	2.5	7.0	40	15	148	3.3	20	88	9.5
10	1.2	1.0	.9	3.2	20	32	14	82	4.7	14	44	12
11	1.2	.9	.9	2.2	11	286	16	56	2.6	10	30	16
12	1.1	.9	.9	1.1	6.0	770	15	41	2.0	8.2	123	8.9
13	1.2	.9	.9	1.1	6.2	148	16	43	2.3	6.6	66	5.6
14	1.4	.9	.9	1.1	27	94	16	62	1.6	4.7	29	4.7
15	1.3	.9	.9	1.2	216	62	15	47	1.6	12	21	3.2
16	1.4	1.0	1.0	1.3	97	52	13	34	1.8	4.7	16	2.9
17	1.4	1.0	1.2	2.2	47	41	11	26	4.7	6.9	14	2.6
18	1.4	.9	1.7	3.8	24	36	10	21	8.5	8.9	12	2.3
19	1.4	4.6	3.8	8.4	22	39	9.5	17	46	5.2	11	2.6
20	1.4	1.2	1.5	14	18	50	8.5	16	24	3.3	9.2	1.8
21	3.2	1.0	1.3	104	14	238	4.3	14	21	6.6	7.6	1.8
22	.9	1.5	1.2	154	11	101	3.5	14	23	4.3	7.1	1.6
23	.8	1.4	1.1	26	10	74	2.6	11	41	5.6	5.4	1.6
24	.8	1.1	1.7	10	9.0	75	3.2	9.2	21	5.0	3.5	1.6
25	1.1	1.1	1.9	5.5	39	56	2.0	7.9	13	78	2.9	1.6
26	1.2	1.0	4.6	4.0	274	45	1.6	6.6	8.9	49	2.6	1.6
27	1.0	1.0	1.5	3.0	35	26	3.9	6.1	7.1	17	4.5	11
28	1.4	1.0	1.4	2.5	23	28	2.0	6.1	6.1	10	3.0	2.7
29	1.4	1.1	1.9	2.1	-	28	2.7	6.4	4.3	6.9	3.5	2.0
30	1.5	1.4	1.4	1.9	-	24	2.5	5.2	3.5	4.7	5.9	2.3
31	1.6	-	1.2	1.8	-	19	-	5.2	-	3.9	3.9	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				39.8	3.2	0.8	1.28	0.014	0.02			
November.....				40.2	4.6	.8	1.34	.015	.02			
December.....				43.1	4.6	.9	1.39	.015	.02			
Calendar year 1934				7,011.3	935	.8	19.2	.214	2.92			
January.....				370.3	154	1.1	11.9	.133	.15			
February.....				930.6	274	1.5	33.2	.370	.39			
March.....				2,632	770	15	84.9	.945	1.09			
April.....				289.3	18	1.6	9.64	.107	.12			
May.....				4,168.6	1,020	2.9	134	1.49	1.72			
June.....				280.1	46	1.6	9.34	.104	.12			
July.....				1,186.2	513	3.2	38.3	.427	.49			
August.....				1,555.1	418	2.6	43.7	.487	.56			
September.....				168.1	26	1.6	5.60	.062	.07			
Water year 1934-35.....				11,503.4	1,020	.8	31.5	.352	4.77			

Sandusky River near Bucyrus, Ohio

(Continued)

Discharge, in second-feet, 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.3	4.7										
2	2.9	4.3										
3	2.7	3.5										
4	2.5	3.5										
5	2.3	5.6										
6	2.2	3.3										
7	2.5	4.3										
8	2.6	5.2										
9	2.3	5.6										
10	3.9	6.6										
11	2.9	4.7										
12	2.3	9.5										
13	1.9	54										
14	2.0	52										
15	2.0	30										
16	1.8	20										
17	2.0	17										
18	2.9	14										
19	3.2	15										
20	3.5	12										
21	6.4	15										
22	2.7	15										
23	75	6.1										
24	41	3.9										
25	22	2.9										
26	14	2.5										
27	9.5	5.4										
28	6.6	45										
29	6.1	166										
30	8.2	62										
31	6.1	-										
Month			Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October.....			250.3	75	1.8	8.07	0.090	0.10				
November.....			596.6	166	2.5	19.9	.222	.25				
December.....												
Calendar year												
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 September 1935.

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

Extremes.— Maximum discharge during year, 2,380 second-feet May 4 (gage height, 5.96 feet); minimum, 1.9 second-feet Oct. 14 (gage height, 0.73 foot).
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, 0.87 foot).

Remarks.— Records good except those below 500 second-feet and those estimated because of ice effect Dec. 9-14, 22-27, Jan. 1-7, 17-19, 23-31, Feb. 1-13, 19-24, 27-28, Mar. 1-3, which are fair.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 18 to May 2)

0.7	1.4	1.4	44	2.4	286	4.0	1,080
.8	3.4	1.6	68	2.6	369	4.5	1,370
.9	7.0	1.8	101	2.8	460	5.0	1,680
1.0	12	2.0	151	3.0	556	5.5	2,020
1.2	25	2.2	211	3.5	814	6.0	2,380

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	26	7.5	7.0	12	10	200	71	18	20	18	20	9.0
2	12	6.5	7.0	11	9.4	120	62	218	17	15	24	9.0
3	6.5	6.5	6.5	9.0	8.8	80	58	1,060	16	22	33	9.0
4	4.2	6.5	6.0	6.0	8.5	62	2,020	16	68	92	9.0	
5	2.9	6.5	6.0	7.0	8.0	68	48	976	15	369	65	9.5
6	2.5	9.0	6.0	7.0	8.0	87	45	546	14	422	31	15
7	2.3	11	5.6	8.0	8.1	140	43	1,060	16	151	335	22
8	2.3	14	5.2	14	8.5	365	42	1,370	19	87	170	22
9	2.3	11	4.9	23	9.4	252	42	604	20	62	656	22
10	2.3	7.5	4.6	32	14	145	45	339	21	47	230	22
11	2.3	6.0	4.3	31	70	282	44	208	20	34	116	22
12	2.3	5.6	4.1	25	50	1,400	48	143	19	27	80	21
13	2.1	5.2	4.0	20	42	1,110	57	123	19	23	114	21
14	2.3	5.2	3.9	17	44	450	60	140	18	19	96	20
15	2.9	5.2	3.9	11	269	310	61	162	16	17	53	19
16	2.9	5.2	3.9	10	532	233	60	119	15	16	41	12
17	3.1	5.2	3.9	11	173	176	53	97	16	14	35	8.0
18	3.4	6.5	4.5	12	87	131	50	72	23	14	33	6.0
19	3.1	15	7.0	17	50	110	45	60	38	13	34	4.8
20	2.9	13	9.5	26	40	108	43	51	64	13	33	3.9
21	3.9	24	9.5	90	30	176	41	46	88	15	29	3.4
22	5.2	24	9.5	412	35	542	39	43	71	15	24	3.4
23	8.0	17	9.4	240	45	435	32	40	64	11	21	2.9
24	5.2	12	9.2	90	40	422	30	36	72	12	18	2.5
25	5.6	9.0	8.8	55	68	294	28	30	64	18	16	2.3
26	7.0	8.0	9.0	36	546	211	24	28	47	218	14	2.3
27	8.5	8.5	9.2	27	460	157	19	25	56	386	13	2.5
28	8.0	7.0	10	21	280	123	19	23	29	99	12	3.5
29	8.0	6.5	11	17	-	105	18	22	24	48	10	4.5
30	8.0	6.5	12	14	-	92	18	22	21	33	9.5	7.5
31	7.0	-	14	12	-	82	-	22	-	24	9.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	165.0	26	2.1	5.26	0.018	0.02
November.....	279.7	24	5.2	9.32	.031	.05
December.....	219.4	14	3.9	7.08	.024	.03
Calendar year 1934.....	23,425.3	1,920	1.0	64.2	.215	2.90
January.....	1,325.0	412	7.0	42.7	.145	.16
February.....	2,945.5	546	5.0	101	.351	.37
March.....	9,472	1,400	66	273	.913	1.05
April.....	1,295	71	18	43.2	.144	.16
May.....	10,603	2,020	18	342	1.14	1.31
June.....	938	88	14	31.3	.105	.12
July.....	2,330	422	11	75.2	.252	.29
August.....	3,467.0	1,170	9.5	112	.375	.45
September.....	321.1	22	2.3	10.7	.056	.04
Water year 1934-35.....	32,356.7	2,020	2.1	88.6	.296	4.01

Sandusky River near Mexico, Ohio

Location.— Water-stage recorder, lat. $41^{\circ}2'39''$, long. $83^{\circ}11'42''$, in sec. 13, T. 1 N., R. 14 E., at highway bridge $4\frac{1}{2}$ miles north of Mexico and 3 miles above mouth of Honey Creek.

Drainage area.— 776 square miles.

Records available.— March 1923 to September 1935.

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

Extremes.— Maximum discharge during year, 4,600 second-feet May 4 (gage height, 11.10 feet); minimum, 6.2 second-feet Oct. 20, 21; minimum gage height, 1.60 feet Oct. 11, 12, 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. 11-16, 26-27, Jan. 1-6, 14-17, 24-31, Feb. 1-13, 27, 28, Mar. 1, 2, and those Oct. 10 to Nov. 21, which are fair.

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	62	11	23	40	40	330	198	62	60	46	95	36
2	36	12	22	32	37	300	176	563	58	41	80	33
3	30	13	21	27	34	286	164	3,080	57	37	107	31
4	25	14	19	23	35	176	134	4,360	56	175	156	26
5	21	12	18	21	31	164	123	4,120	54	503	407	27
6	19	12	18	19	30	205	111	2,460	52	699	320	26
7	16	12	17	22	30	423	100	2,400	52	661	646	25
8	14	12	17	28	30	895	98	2,880	51	392	1,680	25
9	12	12	17	79	37	680	102	2,480	50	347	2,040	30
10	10	15	16	116	60	438	107	1,310	51	200	1,730	41
11	9.7	15	14	93	130	744	109	737	51	122	1,240	44
12	9.0	15	13	76	110	2,420	118	503	50	80	446	45
13	9.0	13	13	58	100	2,640	136	438	48	60	300	39
14	8.5	15	13	43	136	1,640	186	699	47	47	361	37
15	8.5	15	14	35	503	815	233	625	42	44	242	34
16	6.1	19	14	30	699	537	209	486	39	47	156	33
17	6.1	18	15	32	607	407	174	392	37	54	134	30
18	6.1	18	16	58	333	513	148	293	40	52	134	31
19	7.2	23	17	47	231	258	127	207	192	46	250	31
20	6.7	26	23	74	184	240	113	158	253	42	407	27
21	9.0	31	24	547	172	394	102	138	174	39	356	24
22	12	34	26	998	166	607	93	125	166	37	190	20
23	13	41	27	589	209	625	86	107	164	34	132	17
24	12	47	27	350	122	855	76	95	145	33	102	15
25	12	39	27	220	333	975	71	87	132	31	82	15
26	12	33	26	140	1,200	718	66	80	107	30	64	15
27	12	27	25	100	940	520	63	74	86	261	51	17
28	10	26	25	80	620	407	63	66	72	625	48	15
29	9.7	24	28	64	-	320	62	63	60	795	48	14
30	9.0	24	41	54	-	276	62	63	52	317	41	15
31	9.7	-	48	45	-	236	-	62	-	144	37	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				448.3	62	6.7	14.5	0.019	0.02			
November.....				630	47	11	21.0	.027	.03			
December.....				663	48	13	21.4	.028	.03			
Calendar year 1934.....				58,601.0	4,360	6.7	161	.207	2.80			
January.....				4,120	998	19	133	.171	.20			
February.....				7,157	1,200	30	256	.330	.34			
March.....				19,846	2,640	164	640	.825	.95			
April.....				3,900	233	62	120	.155	.17			
May.....				29,133	4,360	62	940	1.21	1.40			
June.....				2,501	253	37	83.4	.107	.12			
July.....				6,041	795	30	195	.251	.29			
August.....				11,982	2,040	37	397	.499	.58			
September.....				619	44	14	27.3	.035	.04			
Water year 1934-35.....				86,940.3	4,360	6.7	258	.307	4.27			

Sandusky River near Fremont, Ohio

Location.— Water-stage recorder, lat. 41°18'28", long. 83°0'32", in sec. 17, T. 4 N., R. 15 E., at highway bridge $\frac{3}{4}$ 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 September 1935; November 1898 to March 1901 at station 4 miles below present site.

Average discharge.— 12 years, 887 second-feet.

Extremes.— Maximum discharge during year, 6,780 second-feet May 4; maximum gage height, 6.31 feet Jan. 24 (backwater from ice jam); minimum (caused by ice jam above gage), estimated, 7 second-feet Dec. 24 (gage height, 0.85 foot).
1923-35: Maximum discharge, 21,000 second-feet Mar. 14, 1933 (gage height, 9.73 feet); minimum, that of Dec. 24, 1934.

Remarks.— Records good except those estimated because of ice effect, Dec. 8 to Jan. 7, Jan. 13-19, Jan. 23 to Mar. 4, which are fair.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

0.8	4.5	1.6	310	2.6	1,550	4.5	7,910
.9	12	1.8	457	2.8	2,070	5.0	9,280
1.0	28	2.0	637	3.0	2,800	5.5	10,600
1.2	90	2.2	862	3.5	4,480	6.0	11,800
1.4	189	2.4	1,160	4.0	6,230	6.5	13,000

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	236	24	42	74	62	750	266	108	90	53	168	53
2	99	17	39	56	58	500	235	122	90	50	126	47
3	65	19	39	45	52	430	206	4,110	90	50	90	47
4	59	22	26	37	50	350	189	6,230	90	150	117	55
5	50	21	34	32	48	310	168	2,830	86	972	230	39
6	39	26	37	32	46	331	141	1,790	90	969	457	39
7	26	21	32	42	46	490	126	3,190	94	805	2,440	39
8	19	19	29	56	47	1,280	147	2,440	108	449	2,800	39
9	24	21	27	122	54	1,030	126	1,320	90	434	2,570	42
10	19	19	25	138	180	755	126	1,140	90	338	1,990	66
11	16	21	24	224	300	948	136	1,060	90	206	1,590	59
12	14	19	23	195	190	2,850	152	791	74	141	823	56
13	14	22	23	130	170	3,220	173	755	66	99	902	53
14	14	24	23	104	450	2,100	206	1,130	63	66	690	47
15	13	22	24	80	900	1,180	297	890	56	63	576	39
16	12	24	25	68	1,100	802	291	701	53	56	925	34
17	13	24	26	72	1,000	928	241	552	50	52	566	39
18	13	22	26	78	900	516	206	426	53	74	330	34
19	14	26	28	90	700	442	178	338	268	56	338	28
20	12	30	36	136	580	395	147	285	472	56	474	28
21	13	34	40	317	330	771	126	247	304	50	491	24
22	14	42	41	1,510	280	1,000	126	218	247	53	609	26
23	14	39	42	1,000	270	878	117	199	241	74	224	22
24	13	59	43	630	300	802	90	178	224	56	152	24
25	11	66	42	400	210	1,050	63	147	189	78	117	22
26	12	59	41	230	700	903	78	131	168	70	74	13
27	16	59	42	150	1,900	646	78	122	112	318	86	16
28	21	50	45	120	800	534	86	117	90	1,110	90	32
29	21	30	55	100	-	418	82	112	82	1,060	78	32
30	16	44	80	90	-	352	90	131	56	611	66	28
31	24	-	80	70	-	310	-	90	-	272	56	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				944	236	11	30.5	0.024	0.03			
November.....				925	66	17	30.5	.026	.03			
December.....				1,150	80	23	37.1	.030	.03			
Calendar year 1934.....				97,565	6,440	11	267	.214	2.90			
January.....				6,428	1,510	32	207	.166	.19			
February.....				11,633	1,900	46	415	.333	.35			
March.....				26,951	3,220	310	969	.896	.80			
April.....				4,693	297	63	156	.125	.14			
May.....				31,885	6,230	90	1,029	.825	.95			
June.....				3,876	472	50	129	.103	.11			
July.....				8,911	1,110	50	287	.230	.27			
August.....				20,335	2,800	56	656	.526	.61			
September.....				1,120	66	13	37.3	.030	.03			
Water year 1934-35.....				111,851	6,230	11	326	.261	3.54			

East Branch of Huron River near Norwalk, Ohio

Location.- Chain gage, lat. 41°14'58", long. 82°38'52", at highway bridge 1½ miles northwest of Norwalk, Huron County, and 1½ miles below mouth of Cole Creek.

Drainage area.- 84.9 square miles.

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

Average discharge.- 12 years, 65.5 second-feet.

Extremes.- Maximum discharge recorded during period October 1934 to November 1935, 830 second-feet July 24 (gage height, 3.65 feet); minimum, 0.9 second-foot Sept. 18-24; minimum gage-height, 0.74 foot several days in October 1934, July and September.

1923-35: Maximum discharge recorded, 4,610 second-feet Mar. 14, 1933; minimum, 0.1 second-foot July 26, 1934.

Remarks.- Records fair. Discharge estimated because of ice effect Dec. 8 to Jan. 9, Jan. 14-20, 24-31, Feb. 1-8, 17-25, 28, Mar. 1.

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	21	7.0	6.6	18	14	38	15	11	6.6	3.8	4.8	3.4
2	9.4	6.6	6.2	16	13	36	14	50	6.2	3.6	4.3	3.4
3	7.0	5.8	6.6	15	13	43	12	230	6.6	3.4	84	3.4
4	5.8	6.6	6.6	14	13	41	12	200	6.6	3.8	39	3.6
5	5.4	6.6	7.0	13	13	53	11	69	5.8	3.8	14	3.6
6	4.8	6.2	6.6	13	14	62	10	61	6.6	41	8.4	2.9
7	3.8	6.2	7.4	14	14	174	9.4	409	8.4	12	389	2.7
8	3.8	6.2	6.6	14	15	151	12	214	9.4	6.6	80	2.2
9	3.6	5.8	6.6	20	246	53	15	94	6.4	4.8	30	4.4
10	3.4	5.1	6.6	34	174	48	15	130	7.4	4.2	20	5.1
11	3.4	5.1	6.6	21	113	180	15	70	6.6	3.6	18	3.1
12	3.4	5.1	6.8	14	72	534	18	36	6.2	3.6	11	2.3
13	3.4	4.8	6.8	9.4	50	130	33	70	5.8	14	7.8	2.0
14	3.4	4.8	6.8	9.4	117	96	29	141	5.1	7.4	7.4	1.7
15	3.4	4.8	7.0	10	315	58	22	76	5.1	8.4	7.0	1.4
16	3.6	4.4	7.2	11	87	41	17	42	4.4	8.8	6.6	1.3
17	4.2	3.8	7.6	14	20	32	15	29	5.8	5.4	7.4	1.1
18	4.2	3.8	8.0	33	13	27	13	23	102	4.4	7.4	.9
19	3.8	5.4	9.0	28	9.0	24	12	19	50	9.4	6.8	.9
20	3.8	6.6	10	24	7.2	24	10	16	14	20	5.4	.9
21	5.4	5.8	10	246	6.5	128	8.8	14	8.8	44	5.1	.9
22	5.4	6.2	10	156	6.8	77	8.4	12	10	102	4.4	.9
23	4.8	7.0	10	72	8.0	43	7.8	12	49	35	4.2	.9
24	4.8	6.2	10	40	11	33	7.4	9.4	16	512	3.8	.9
25	4.8	5.8	11	28	30	27	7.0	8.8	9.4	71	3.6	.9
26	5.4	6.4	12	22	263	23	6.6	8.4	6.6	42	3.8	.9
27	6.2	5.8	13	20	82	18	7.0	7.8	5.8	28	5.8	1.5
28	7.0	6.2	15	17	45	21	7.8	7.0	5.1	18	6.6	2.0
29	7.0	6.2	19	16	-	21	8.4	10	4.8	10	4.8	1.5
30	6.2	6.6	20	15	-	18	11	8.4	4.4	7.0	4.4	1.4
31	6.2	-	19	14	-	16	-	7.4	-	5.4	4.2	-
Month	Second-foot-days		Maximum		Minimum		Mean		Per square mile		Run-off in inches	
October.....	184.4		21		3.4		5.30		0.062		0.07	
November.....	171.9		7.0		3.8		5.73		.087		.07	
December.....	291.5		20		6.2		9.40		.111		.13	
Calendar year 1934.....	10,748.0		2,390		.2		29.4		.346		4.71	
January.....	990.8		246		9.4		32.0		.377		.43	
February.....	1,784.5		315		6.5		63.7		.760		.78	
March.....	2,270		534		16		73.2		.882		.99	
April.....	389.6		35		6.6		13.0		.153		.17	
May.....	2,115.2		409		7.0		69.2		.808		.83	
June.....	398.9		102		4.4		13.2		.155		.17	
July.....	1,044.6		512		3.3		33.7		.397		.46	
August.....	810.1		389		3.8		26.1		.307		.36	
September.....	62.1		5.1		.9		2.07		.024		.03	
Water year 1934-35.....	10,491.6		534		.9		28.7		.338		4.58	

East Branch of Huron River near Norwalk, Ohio

(Continued)

Discharge, in second-feet, for period October to November 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	5.4										
2	1.8	5.4										
3	1.8	5.4										
4	1.8	4.8										
5	1.8	8.4										
6	1.8	7.4										
7	1.8	5.8										
8	1.8	5.1										
9	1.8	5.1										
10	2.2	5.1										
11	3.1	5.8										
12	2.5	7.0										
13	2.2	15										
14	2.3	10										
15	2.5	8.4										
16	2.5	7.0										
17	2.7	6.6										
18	3.4	5.8										
19	4.2	5.8										
20	4.2	5.8										
21	4.4	5.8										
22	4.8	5.4										
23	7.0	5.1										
24	6.6	4.4										
25	5.8	4.4										
26	5.4	4.4										
27	5.1	4.8										
28	4.8	11										
29	5.4	12										
30	5.4	12										
31	5.4											
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				107.7	7.0	1.4	3.47	0.041	0.05			
November.....				204.4	15	4.4	6.81	.080	.09			
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

East Branch of Black River at Elyria, Ohio

Location.- Chain gage, lat. 41°20'51", long. 82°5'40", at Fuller Street Bridge, 1½ miles southeast of center of Elyria, Lorain County, and 3 miles above junction with West Branch.

Drainage area.- 211 square miles.

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

Average discharge.- 13 years, 175 second-feet.

Extremes.- Maximum gage-height recorded during period October 1934 to November 1935, 10.00 feet Aug. 7 (discharge not determined); minimum discharge, 0.2 second-foot several days in October 1934 (gage height, 0.68 foot).
1922-35: Maximum gage-height recorded, 10.10 feet Mar. 14, 1933 (discharge not determined, previously published discharge probably much too low); no flow Aug. 9-18, 18-22, 1930, Aug. 28 to Sept. 3, Sept. 5-19, 1933.

Remarks.- Records poor. Discharge estimated because of ice effect Dec. 9-17, Jan. 14-17, Jan. 25 to Feb. 8, Feb. 18-23. Discharges above 2,500 second-feet for previously published records are probably much too low.

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	20	3.4	4.4	20	16	110	21	22	11	2.9	10	13
2	16	7.5	3.4	18	17	210	19	30	12	2.1	18	10
3	10	5.0	3.4	16	17	210	21	386	10	2.9	890	8.2
4	5.0	5.0	2.9	12	17	192	21	624	6.9	3.9	560	8.9
5	3.9	5.0	2.9	10	17	203	19	360	8.2	3.9	130	6.2
6	2.9	3.9	3.9	10	18	195	19	174	5.6	3.4	133	4.4
7	1.7	3.9	3.9	12	19	311	19	560	7.5	6.8	6,270	2.9
8	1.1	2.9	5.6	16	25	658	15	694	6.8	4.4	6,620	2.1
9	1.1	2.9	9.0	43	36	246	12	336	6.8	3.9	980	10
10	.7	3.4	8.0	57	45	133	17	181	6.2	3.4	241	10
11	.3	2.9	6.2	80	133	298	18	113	6.2	2.9	145	8.2
12	.2	3.4	6.0	50	121	2,050	21	87	5.6	3.9	102	6.8
13	.2	4.4	5.9	29	83	1,260	69	73	5.0	14	75	5.6
14	.2	3.4	5.8	22	142	221	73	127	6.5	694	51	4.4
15	.3	2.9	5.8	21	890	139	63	108	5.6	591	42	3.4
16	.5	2.9	5.8	21	1,070	110	45	83	5.0	206	37	2.5
17	.5	2.9	5.7	26	360	87	33	55	5.0	73	33	2.5
18	.2	2.9	5.6	40	150	65	29	50	6.2	50	29	1.7
19	.2	3.9	6.8	67	90	55	27	39	7.5	36	27	2.1
20	.2	3.9	6.2	57	52	47	24	33	9.7	27	27	2.5
21	.3	2.9	4.4	63	48	106	22	20	14	19	23	2.5
22	.3	2.9	6.2	275	48	254	22	24	18	18	16	2.9
23	.2	3.9	14	181	50	135	21	22	43	18	16	2.5
24	.3	3.9	18	97	55	73	20	21	40	124	15	1.7
25	.3	6.8	20	64	441	51	20	21	34	413	18	1.7
26	.3	5.6	20	50	2,050	46	19	21	23	336	16	1.4
27	.7	5.0	22	40	980	40	20	20	15	102	15	1.7
28	.9	4.4	19	32	188	34	20	18	11	45	14	2.5
29	.5	4.4	22	27	-	30	20	23	8.2	29	13	2.5
30	.2	5.0	24	22	-	25	22	17	7.5	23	12	2.5
31	.2	-	22	19	-	22	-	13	-	20	15	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				69.4	20	0.2	2.24	0.011	0.01			
November.....				121.2	7.5	2.9	4.04	.019	.02			
December.....				298.8	24	2.9	9.64	.046	.05			
Calendar year 1934.....				15,640.0	2,460	.2	42.8	.203	2.77			
January.....				1,527	275	10	49.3	.234	.27			
February.....				7,180	2,050	17	286	1.21	1.26			
March.....				7,612	2,050	22	246	1.17	1.35			
April.....				791	73	12	26.4	.125	.14			
May.....				4,373	694	13	141	.668	.77			
June.....				358.7	43	5.0	12.0	.067	.06			
July.....				2,876.4	694	2.1	92.9	.440	.51			
August.....				16,593	6,620	10	535	2.54	2.93			
September.....				137.3	13	1.4	4.58	.022	.02			
Water year 1934-35.....				41,939.8	6,620	.2	115	.545	7.39			

East Branch of Black River at Elyria, Ohio

(Continued)

Discharge, in second-feet, for period October to November 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	5.0										
2	2.9	4.4										
3	2.1	4.4										
4	1.7	4.4										
5	1.4	6.2										
6	1.4	5.0										
7	1.4	5.0										
8	1.4	4.4										
9	1.4	3.9										
10	2.1	3.9										
11	2.9	5.0										
12	2.9	6.2										
13	2.1	7.5										
14	2.1	8.9										
15	2.1	8.9										
16	2.1	8.9										
17	1.7	8.9										
18	1.4	8.9										
19	1.1	8.9										
20	1.1	10										
21	1.4	10										
22	2.9	8.9										
23	6.2	7.5										
24	6.8	7.5										
25	9.7	7.5										
26	11	6.8										
27	7.5	7.5										
28	6.2	16										
29	7.5	30										
30	6.2	36										
31	5.0	-										
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				107.1	11	1.1	3.45	0.016	0.02			
November.....				266.4	36	3.9	8.88	.042	.05			
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Rocky River near Berea, Ohio

Location.— Staff gage, lat. 41°24'22", long. 81°53'13", at highway bridge just below junction of East and West Branches and 3 miles northwest of Berea, Cuyahoga County. Zero of gage is 650.52 feet above mean sea level.

Drainage area.— 269 square miles.

Records available.— November 1923 to September 1935 (discontinued).

Average discharge.— 12 years, 255 second-feet.

Extremes.— Maximum discharge recorded during year, about 14,400 second-feet Aug. 7 (gage height, 10.50 feet); minimum, 1.8 second-feet Oct. 13 (gage height, 0.56 foot). 1923-35: Maximum discharge recorded, that of Aug. 7, 1935; maximum stage, 18.6 feet June 29, 1924 (backwater caused by tornado); minimum discharge, 0.2 second-foot Sept. 2, 1932, Aug. 18, 19, 22, 27, 28, 30, 31, 1933. Maximum known stage, 20.9 feet March 1913.

Remarks.— Records fair. Discharge estimated because of ice effect Dec. 10-16, 26-31, Jan. 1-8, 23-31, Feb. 1-14, 19-22.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Shifting-control method used Aug. 1 to Sept. 30

0.5	1.0	1.2	47	1.8	152	3.0	650	5.0	3,040	8.0	8,810
.7	6.5	1.4	74	2.0	200	3.5	1,000	6.0	4,760	9.0	11,100
.9	16	1.6	109	2.5	372	4.0	1,600	7.0	6,660	10.0	13,500

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	38	12	21	42	66	188	43	24	13	9.0	13	23
2	20	14	32	59	84	176	39	20	7.3	44	20	
3	16	14	36	38	62	517	37	227	14	6.3	2,440	20
4	14	14	24	39	60	276	34	276	15	8.4	630	23
5	7.8	20	21	38	58	276	33	152	12	6.3	164	28
6	4.9	20	24	39	56	294	30	113	10	22	79	32
7	3.8	22	23	41	56	294	30	908	22	17	8,880	24
8	2.7	22	27	45	54	440	32	491	23	15	2,740	24
9	3.2	16	20	440	54	176	30	227	20	13	491	36
10	2.7	12	19	276	54	148	32	242	17	9.0	258	32
11	2.7	12	20	164	53	601	34	115	16	8.4	242	31
12	2.2	16	20	102	53	1,600	113	84	11	17	188	26
13	2.0	24	20	76	54	394	330	84	9.0	7.8	134	16
14	3.2	26	21	69	200	276	164	176	8.4	4.6	111	14
15	2.2	23	22	68	2,890	214	105	122	7.3	6.8	91	12
16	2.2	28	25	82	1,110	164	88	82	9.0	6.6	77	8.4
17	2.0	24	32	200	465	122	70	59	14	5.8	72	6.3
18	2.0	21	47	416	227	109	68	51	33	5.3	71	4.5
19	2.2	26	59	276	190	95	60	40	42	6.3	60	4.1
20	2.2	39	82	145	150	132	53	33	47	4.5	54	5.3
21	4.5	49	105	1,870	120	372	45	30	33	4.5	46	4.9
22	3.2	37	72	1,000	110	227	37	27	68	31	45	4.9
23	2.2	32	59	400	105	141	34	26	93	351	39	4.1
24	2.2	28	57	140	109	100	30	24	76	572	35	3.5
25	2.2	26	57	120	416	82	29	24	36	440	30	3.0
26	3.8	24	58	100	2,150	74	28	21	25	276	28	2.2
27	3.8	22	58	100	988	59	24	20	18	105	37	8.4
28	9.0	20	58	88	276	59	23	22	15	55	28	6.3
29	13	19	56	80	-	62	28	21	9.6	29	24	5.3
30	6.3	14	52	72	-	51	25	14	8.4	21	38	5.3
31	5.8	-	45	70	-	45	-	13	-	17	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	192.0	38	2.0	6.19	0.023	0.03
November.....	676	49	12	22.5	.064	.09
December.....	1,272	105	19	41.0	.152	.18
Calendar year 1934.....	30,271.6	4,030	1.0	82.9	.308	4.19
January.....	8,662	1,870	38	215	.799	.92
February.....	10,129	2,890	53	362	1.35	1.41
March.....	7,764	1,600	45	250	.929	1.07
April.....	1,728	330	23	57.6	.214	.24
May.....	3,790	908	13	122	.454	.52
June.....	762.7	93	7.3	25.4	.084	.10
July.....	2,066.0	572	4.5	57.3	.250	.29
August.....	17,148	8,810	13	553	2.06	2.37
September.....	436.5	36	2.2	14.6	.054	.06
Water year 1934-35.....	52,649.2	8,810	2.0	144	.555	7.28

Cuyahoga River near Hiram, Ohio

Location.- Water-stage recorder, lat. $41^{\circ}18'43''$, long. $81^{\circ}11'46''$, 600 feet above highway bridge on road between Hiram and Mantua Corners and $2\frac{1}{2}$ miles west of Hiram, Portage County.

Drainage area.- 152 square miles.

Records available.- August 1927 to September 1935.

Extremes.- Maximum discharge during year (estimated), 1,000 second-feet Feb. 17 (gage height, 8.66 feet); minimum, 11 second-feet probably July 20 (gage height, 0.76 foot). 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 above 500 second-feet and those estimated, which are fair. Discharge estimated Dec. 10-14, Dec. 26 to Jan. 5, Jan. 14 to Feb. 2, Feb. 6 to Mar. 4, because of ice effect, June 5 to July 30, because of missing gage-height record.

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	81	93	149	180	100	540	91	47	29	20	99	19
2	92	101	150	140	90	620	86	59	27	16	389	18
3	90	116	151	120	89	660	84	78	27	15	544	18
4	79	150	145	98	87	710	79	97	28	16	449	19
5	62	178	136	90	85	745	73	112	31	15	436	20
6	47	204	123	104	78	712	67	120	34	16	424	22
7	36	226	110	110	76	617	62	150	35	17	493	23
8	29	239	99	144	76	516	63	178	41	21	436	23
9	23	225	91	228	76	400	71	201	47	22	355	30
10	20	201	78	334	76	324	76	230	45	21	304	44
11	19	162	70	449	76	324	75	276	39	20	266	59
12	19	164	66	436	60	424	81	266	33	20	223	64
13	18	154	61	366	86	475	98	239	28	19	191	62
14	17	161	58	250	98	488	110	196	24	16	164	52
15	16	175	62	210	200	424	118	165	25	16	132	42
16	16	196	63	190	600	344	120	137	24	14	108	34
17	16	221	62	180	800	294	120	114	28	13	87	30
18	16	248	101	180	860	257	122	96	34	12	63	28
19	20	285	121	190	540	218	128	78	49	11	43	28
20	20	314	144	210	390	193	132	64	49	11	33	28
21	27	324	160	300	300	190	126	53	54	13	29	26
22	37	294	176	580	240	188	109	46	74	13	33	27
23	42	276	196	740	210	186	93	40	76	25	46	25
24	42	257	207	680	200	179	78	37	80	42	44	24
25	38	239	198	580	220	167	65	33	73	75	35	24
26	38	219	165	400	280	151	55	31	60	129	27	24
27	42	199	150	300	380	133	46	31	47	96	24	28
28	32	179	140	210	470	123	45	30	36	88	24	32
29	72	162	165	180	-	112	44	30	30	94	24	38
30	83	153	175	140	-	107	45	31	23	91	21	34
31	89	-	170	120	-	98	-	31	-	64	20	-
Month	Second-foot-days		Maximum		Minimum		Mean		Per square mile		Run-off in inches	
October.....	1,280		92		16		41.3		0.272		0.31	
November.....	6,135		324		93		204		1.34		1.50	
December.....	3,962		207		58		128		.842		.97	
Calendar year 1934.....	41,761.3		1,540		9.6		114		.750		10.21	
January.....	8,359		740		90		270		1.78		2.05	
February.....	6,863		860		76		245		1.31		1.68	
March.....	10,917		745		98		352		2.32		2.67	
April.....	2,562		132		44		85.4		.562		.63	
May.....	3,296		276		30		106		.697		.80	
June.....	1,232		80		23		41.1		.270		.30	
July.....	1,061		129		11		54.2		.225		.26	
August.....	5,861		544		20		179		1.18		1.36	
September.....	947		64		18		31.6		.208		.23	
Water year 1934-35.....	52,175		860		11		143		.941		12.76	

Cuyahoga River near Kent, Ohio

Location.— Water-stage recorder, lat. 41°10'48", long. 81°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 September 1935.

Extremes.— Maximum discharge during year, 1,160 second-feet Feb. 18 and Aug. 3 (gage height, 7.05 feet); minimum discharge, 5.3 second-feet Oct. 8.
1933-35: Maximum discharge (revised), 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 are corrected for storage and diversion. Record of storage and diversion furnished by City of Akron, Bureau of Water Supply.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

1.2	4.2	1.5	15	1.6	32	2.2	60	2.8	106	3.4	163	5.0	369
1.3	7.0	1.6	20	1.9	39	2.4	76	3.0	126	3.6	183	6.0	616
1.4	11	1.7	26	2.0	46	2.6	92	3.2	144	4.0	226	7.0	1,120

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	182	80	153	116	193	616	55	9.8	6.2	7.0	78	52
2	64	76	60	196	126	664	56	31	8.2	7.4	142	51
3	66	84	156	193	59	805	56	132	9.4	7.4	835	32
4	62	83	204	204	58	805	56	204	10	9.0	860	8.2
5	62	86	162	82	60	880	100	204	8.2	7.8	542	8.2
6	32	192	58	61	63	905	142	141	6.2	9.0	490	7.4
7	6.4	220	55	62	62	805	62	168	8.6	8.6	327	7.0
8	6.4	215	59	64	64	700	60	204	6.6	9.0	760	6.7
9	6.2	215	56	192	128	556	53	204	7.0	9.0	528	8.2
10	8.2	215	58	294	144	442	63	204	7.0	9.0	399	7.8
11	7.0	215	59	389	60	442	56	249	7.4	8.2	333	7.4
12	7.0	215	62	466	60	448	110	325	7.4	8.6	280	7.4
13	7.0	175	63	453	60	800	210	317	7.4	9.4	243	7.0
14	7.0	66	62	369	144	600	78	273	7.4	8.6	226	6.7
15	6.7	108	59	273	221	584	160	226	7.4	7.0	226	6.7
16	7.8	210	58	226	587	490	220	204	7.0	7.4	220	6.7
17	7.8	210	60	226	935	399	130	185	9.9	7.8	226	6.7
18	7.8	210	60	210	1,120	325	80	108	29	7.8	220	7.0
19	7.8	210	66	204	965	287	56	13	62	7.8	171	7.0
20	7.8	261	63	243	720	261	56	42	58	7.8	58	7.0
21	9.0	309	62	469	503	243	56	71	56	7.0	58	7.0
22	6.2	309	60	792	379	212	57	65	145	8.2	57	6.7
23	8.6	317	130	880	294	237	58	65	129	7.0	54	6.2
24	12	280	193	935	226	230	28	41	69	9.4	53	6.7
25	13	261	196	740	237	210	7.0	11	67	9.0	51	6.7
26	13	237	204	664	389	193	7.8	11	50	40	53	6.7
27	14	215	204	490	431	183	6.2	10	47	39	56	8.2
28	25	184	204	341	490	183	8.2	10	26	43	62	7.8
29	66	198	204	261	-	183	6.2	9.6	7.8	45	51	7.4
30	84	204	204	204	-	103	9.6	8.6	7.4	47	53	7.0
31	82	-	164	183	-	56	-	6.2	-	41	60	-

Month	Observed				Corrected for storage and diversion		
	Second-foot-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October.....	903.7	192	6.2	29.2	50.5	.246	0.28
November.....	5,880	517	66	195	226	1.10	1.23
December.....	3,460	204	55	112	142	.693	.80
Calendar year 1934	35,716.4	1,040	1.4	97.9	136	.663	8.99
January.....	10,474	935	61	338	373	1.62	2.10
February.....	9,778	1,120	58	314	365	1.73	1.80
March.....	13,836	905	55	446	466	2.27	2.62
April.....	2,099.2	280	7.0	70.0	119	.580	.65
May.....	3,782.4	325	6.2	121	156	.761	.88
June.....	890.5	145	7.0	29.7	64.2	.313	.35
July.....	459.2	47	7.0	14.8	47.7	.233	.27
August.....	8,262	860	51	287	276	1.34	1.64
September.....	329.5	52	6.2	11.0	51.0	.249	.28
Water year 1934-35	59,113.5	1,120	6.2	1.62	193	.941	12.80

Cuyahoga River at Old Portage, Ohio

Location.- Water-stage recorder, lat. $41^{\circ}8'4''$, long. $81^{\circ}32'49''$, at highway bridge at Old Portage, Summit County, 4 miles northwest of Akron and $1\frac{1}{4}$ miles below mouth of Little Cuyahoga River.

Drainage area.- 405 square miles.

Records available.- September 1921 to September 1935.

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

Extremes.- Maximum discharge during year, 2,750 second-feet Aug. 4 (gage height, 7.92 feet); minimum, 25 second-feet Dec. 7, 11.
1921-35: Maximum discharge, 3,820 second-feet Apr. 5, 1929 (gage height, 10.1 feet); minimum, that of Dec. 7, 11, 1934.

Remarks.- Records fair. 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.

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	245	89	218	77	176	870	121	112	64	69	209	110
2	196	97	88	169	174	985	165	279	81	106	795	100
3	130	90	135	169	60	1,170	164	276	163	117	1,920	133
4	124	114	209	149	71	1,210	125	670	131	88	1,980	134
5	113	142	218	123	62	1,210	143	498	120	66	1,300	112
6	70	111	125	48	70	1,290	304	473	126	85	1,190	98
7	107	204	60	66	71	1,210	155	616	180	58	1,910	76
8	78	235	91	92	96	1,100	180	618	59	86	1,810	48
9	80	201	56	162	104	886	127	619	46	85	1,340	106
10	65	159	83	547	194	746	144	757	51	77	1,040	130
11	65	213	58	446	102	890	148	664	58	92	860	89
12	57	217	47	529	82	1,320	184	742	102	114	719	71
13	50	233	55	548	84	1,170	360	612	89	68	610	55
14	44	173	59	501	207	1,060	187	699	93	47	510	50
15	47	75	60	369	677	1,030	211	543	99	87	480	54
16	41	150	54	250	880	910	324	439	47	69	431	96
17	49	220	65	330	1,180	741	262	402	241	63	450	268
18	57	208	63	305	1,350	638	150	321	424	71	355	88
19	36	262	81	235	1,280	544	192	154	358	79	348	68
20	51	226	68	420	1,050	503	114	122	218	71	184	65
21	70	366	68	829	761	510	141	178	242	45	157	77
22	90	383	72	1,260	566	452	189	165	340	135	201	51
23	48	433	65	1,170	465	464	137	155	401	149	159	106
24	54	363	183	1,190	368	445	154	150	307	227	139	95
25	79	304	181	1,010	525	373	138	115	199	169	112	96
26	50	308	230	888	890	356	86	53	194	819	151	56
27	34	233	197	722	810	314	97	85	146	577	166	75
28	32	164	193	629	785	344	59	147	137	395	136	73
29	30	246	194	587	-	320	55	109	117	358	104	58
30	77	246	176	264	-	278	170	70	84	369	116	96
31	108	-	193	183	-	145	-	54	-	339	133	-
Month	Second-foot-days		Maximum		Minimum		Mean		Per square mile		Run-off in inches	
October.....	2,377		245		30		78.7					
November.....	6,455		433		75		216					
December.....	3,638		230		47		117					
Calendar year 1934.....	68,106		1,700		30		187					
January.....	13,757		1,250		48		444					
February.....	18,160		1,350		50		470					
March.....	23,464		1,320		145		758					
April.....	4,975		360		55		186					
May.....	10,977		812		53		354					
June.....	4,897		424		46		163					
July.....	5,156		519		45		166					
August.....	19,995		1,980		104		645					
September.....	2,763		268		48		92.1					
Water year 1934-35.....	111,646		1,980		30		306					

Cuyahoga River at Independence, Ohio

Location.- Water-stage recorder, lat. 41°23'44", long. 81°37'54", in T. 6 N., R. 12 W., at highway bridge 1 mile northeast of Independence, Cuyahoga County. Zero of gage is 584.14 feet above mean sea level.

Drainage area.- 709 square miles.

Records available.- September 1903 to July 1906, September 1921 to May 1923, September 1927 to September 1935.

Extremes.- Maximum combined discharge of river and canal during year, 5,990 second-feet Feb. 28 (gage height of river, 13.80 feet); minimum combined daily discharge, 101 second-feet Oct. 15.

1921-23, 1927-35: Maximum combined discharge, 9,780 second-feet Jan. 19, 1929 (gage height of river, 18.9 feet); minimum combined discharge, 48 second-feet Aug. 29, 1933.

Remarks.- Records good except those estimated because of missing gage-height record Oct. 1-4, Nov. 22 to Feb. 19, and those partly estimated Feb. 27-28, which are fair. Water is diverted into the Ohio Canal at Brecksville, 6 miles upstream, and carried past station. (For a record of this diversion see Ohio Canal at Independence, Ohio.) A small amount of water from Tuscarawas River is diverted into this basin at Portage Lakes.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

2.6	44	3.2	155	4.8	479	5.5	1,010	7.0	1,740	9.0	2,850	12.0	4,750
2.8	72	3.4	209	4.6	635	6.0	1,240	7.5	2,020	10.0	3,450	13.0	5,380
3.0	109	3.8	339	5.0	795	6.5	1,490	8.0	2,290	11.0	4,080		

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	660	158	320	130	250	1,310	251	162	70	114	328	140
2	460	148	130	245	240	1,730	258	357	86	110	771	120
3	250	160	220	250	100	2,280	233	485	104	140	5,200	110
4	200	256	300	240	110	2,020	234	782	181	193	3,860	192
5	166	234	310	190	120	1,910	220	644	185	152	2,360	181
6	185	200	200	90	110	1,890	245	644	152	110	1,620	140
7	130	264	95	110	100	1,830	282	1,660	170	156	4,910	120
8	88	316	130	150	120	1,690	222	1,180	228	104	3,610	96
9	117	298	92	250	150	1,300	246	996	108	136	2,470	124
10	106	306	120	450	280	1,060	218	1,010	85	136	1,690	202
11	76	278	105	580	200	1,670	208	892	96	123	1,340	170
12	82	307	90	780	120	3,560	304	758	96	136	962	122
13	80	328	95	900	120	2,330	427	907	126	176	772	105
14	73	362	95	660	700	1,850	442	572	124	106	639	82
15	59	214	92	500	1,000	1,550	265	672	130	84	521	74
16	72	203	90	380	2,000	1,300	352	538	128	148	470	89
17	74	298	100	480	3,000	1,020	416	470	86	119	479	116
18	78	300	110	400	3,800	853	447	368	372	102	412	349
19	74	347	120	350	2,300	770	244	288	626	108	360	132
20	61	407	110	800	1,760	748	250	186	345	120	305	109
21	90	396	102	2,300	1,260	959	205	206	316	116	212	100
22	100	580	100	3,500	990	783	180	214	528	90	201	102
23	110	610	170	3,200	818	664	220	194	520	710	180	91
24	86	520	280	2,900	702	645	194	196	447	527	160	116
25	99	440	260	2,200	2,320	554	181	178	262	652	144	109
26	120	440	330	1,700	4,130	496	152	142	230	2,230	118	110
27	78	300	300	1,300	2,180	468	136	98	206	1,180	163	84
28	94	240	290	900	1,590	436	144	124	189	820	181	150
29	71	340	270	600	-	427	104	152	179	538	150	103
30	88	340	280	350	-	400	158	143	152	511	127	70
31	136	-	270	270	-	288	-	86	-	416	146	-

Month	River				Canal (mean)	Combined		
	Second-foot-days	Maximum	Minimum	Mean		Maximum	Minimum	Mean
October.....	4,107	660	59	132	37.2	690	101	164
November.....	9,548	610	146	318	46.2	660	189	364
December.....	5,526	330	90	178	46.5	380	128	224
Calendar year 1934	107,441	5,750	24	294	49.1	5,804	75	343
January.....	27,155	3,500	90	978	51.2	3,554	154	997
February.....	30,570	4,130	100	1,092	62.1	4,180	150	1,144
March.....	38,781	3,560	288	1,251	55.0	3,610	342	1,306
April.....	7,339	442	104	245	49.2	492	160	294
May.....	15,644	1,660	86	505	39.4	1,706	128	544
June.....	6,517	628	70	217	52.8	683	112	270
July.....	10,653	2,230	90	344	46.3	2,237	127	390
August.....	34,849	5,200	118	1,124	42.7	5,236	165	1,197
September.....	6,798	349	69	126	54.5	403	119	181
Water year 1934-35	194,477	5,200	59	533	47.7	5,804	101	581

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 September 1935.

Extremes.— Maximum discharge during year, 395 second-feet Aug. 7 (gage height, 6.02 feet); minimum, 3.4 second-feet July 22.

1927-35: Maximum discharge, 1,080 second-feet Feb. 28, 1929 (gage height, 9.5 feet); minimum, 3.1 second-feet July 12, 1930.

Remarks.— Records fair. Discharge estimated Dec. 10-15, 29-31, Jan. 1-4, Feb. 4-12, because of ice effect, and Jan. 24 to Feb. 3, because of missing gage-height record.

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	20	15	24	18	25	165	28	13	15	7.0	63	8.2
2	24	16	24	17	24	139	30	26	15	7.5	54	7.5
3	24	14	22	16	23	149	30	54	15	7.8	208	6.0
4	19	21	23	16	23	154	28	106	19	9.5	258	10
5	16	21	24	16	23	154	27	96	18	8.0	264	12
6	12	22	23	17	23	134	26	84	17	9.5	319	12
7	8.8	23	21	19	24	117	24	110	18	9.3	372	10
8	8.8	20	18	26	24	102	24	124	17	7.5	372	9.0
9	8.8	18	16	43	25	68	26	119	14	8.2	264	11
10	9.0	18	14	51	27	72	27	124	12	6.0	218	13
11	8.8	19	14	49	28	144	26	163	12	7.5	200	12
12	7.6	22	15	42	30	188	31	251	11	6.5	154	12
13	6.8	25	13	34	35	208	36	203	9.0	6.7	108	10
14	6.0	26	13	28	57	206	35	112	9.0	4.4	76	10
15	5.8	22	14	27	139	182	32	70	8.2	4.9	58	9.0
16	6.0	20	14	26	188	126	30	53	6.0	5.8	48	8.2
17	6.5	22	15	38	194	90	28	38	9.1	5.4	40	9.5
18	6.6	20	16	55	165	70	28	28	30	5.2	35	11
19	6.8	24	18	53	134	60	27	23	40	5.0	27	11
20	6.8	25	22	73	87	59	26	19	31	5.0	22	12
21	7.8	24	22	125	65	64	24	16	22	4.6	19	11
22	8.0	25	23	194	56	62	22	17	35	8.0	18	9.5
23	8.2	28	22	188	50	63	19	17	47	12	14	8.8
24	8.5	26	23	100	50	55	17	17	45	21	11	9.5
25	8.8	23	23	65	69	44	16	16	38	21	8.8	9.5
26	10	21	26	48	154	59	16	14	24	43	8.0	9.5
27	11	20	26	38	165	36	14	14	16	76	9.4	11
28	14	20	24	31	165	34	13	15	12	93	10	12
29	14	22	22	29	-	33	12	16	10	113	10	11
30	14	23	20	27	-	31	13	14	8.2	120	10	11
31	14	-	19	26	-	29	-	14	-	92	9.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	337.5	24	5.8	10.9	0.142	0.16
November.....	644	28	14	21.5	.280	.31
December.....	610	26	13	19.7	.256	.30
Calendar year 1934.....	10,996.7	372	4.6	30.1	.391	5.32
January.....	1,534	194	16	49.5	.644	.74
February.....	2,072	194	23	74.0	.962	1.00
March.....	3,087	206	29	99.6	1.30	1.50
April.....	735	36	12	24.5	.319	.36
May.....	1,988	251	13	64.1	.834	.96
June.....	590.5	47	6.0	19.4	.262	.28
July.....	741.3	120	4.4	23.9	.311	.36
August.....	3,305.7	372	8.0	107	1.39	1.60
September.....	306.2	13	7.5	10.3	.134	.15
Water year 1934-35.....	15,945.2	372	4.4	43.7	.568	7.72

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 September 1935.

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

Extremes.— Maximum discharge during year, 387 second-feet Aug. 3 (gage height, 2.12 feet); minimum, 3.7 second-feet July 20 (gage height, 0.11 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. A total of 53,000,000 cubic feet of water was diverted into this basin during the year from water mains of city of Akron.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

0.1	3.3	1.2	150
.2	8.7	1.4	192
.4	27	1.6	237
.6	50	1.8	286
.8	80	2.0	339
1.0	113	2.2	395

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	25	14.7	13.6	8.6	13.6	27	18.0	13.6	10.6	12.1	24	8.1
2	13.3	14.4	11.8	14.0	13.2	36	17.2	39	10.0	11.6	85	7.4
3	9.9	11.1	14.2	13.5	9.0	58	16.2	61	16.7	12.0	514	7.6
4	10.0	23	13.5	12.9	13.7	47	14.9	63	17.0	10.4	204	10.8
5	9.7	24	13.4	11.8	13.2	44	13.8	41	13.2	7.3	100	9.5
6	8.1	16.8	13.4	7.0	13.9	43	13.4	36	12.0	7.7	71	8.1
7	6.3	12.9	13.0	14.0	14.1	37	13.5	83	13.5	8.1	162	7.0
8	8.7	14.5	9.0	18.6	16.2	37	21	63	10.3	13.1	119	6.3
9	8.9	15.9	7.1	26	21	28	19.1	62	9.2	10.7	76	11.0
10	8.6	10.8	11.1	28	19.5	28	16.8	188	12.6	8.0	52	10.7
11	7.9	9.2	12.4	22	16.3	72	15.2	105	12.6	12.8	49	9.2
12	7.6	15.2	11.7	16.0	13.7	125	22	58	11.6	12.7	41	8.2
13	7.0	12.6	13.1	13.4	14.1	76	28	46	11.5	6.8	35	8.4
14	5.8	14.5	14.1	16.8	41	50	24	45	11.8	5.6	29	9.3
15	7.7	14.3	6.8	15.6	111	39	17.3	36	8.3	9.7	24	11.3
16	9.1	12.6	6.9	14.8	96	33	15.3	30	7.0	8.8	22	11.9
17	9.9	9.8	16.0	33	61	29	14.6	26	19.0	8.2	20	23
18	10.1	9.6	15.4	32	38	26	14.2	22	27	8.4	18.5	23
19	10.0	16.4	17.6	22	31	26	15.3	21	29	7.4	15.4	14.2
20	8.2	15.7	16.6	48	27	29	17.5	20	21	6.2	14.9	13.1
21	11.2	16.2	15.2	123	22	35	16.7	15.3	24	6.6	18.9	11.5
22	11.8	15.5	15.1	118	19.5	31	15.9	14.4	43	8.6	16.8	11.1
23	12.1	19.4	15.2	58	18.6	25	15.9	13.4	44	8.3	11.3	10.9
24	11.9	15.4	13.6	29	23	24	15.5	12.5	34	18.6	6.5	10.1
25	12.2	12.8	12.5	17.0	53	21	14.7	11.5	25	16.6	4.1	9.8
26	13.0	18.4	16.1	15.2	94	18.8	14.0	11.3	15.7	74	10.7	9.8
27	11.8	15.5	19.3	10.7	52	17.5	11.0	14.0	12.9	102	10.8	13.0
28	12.5	13.8	16.5	14.8	32	21	8.8	16.0	11.7	51	10.0	16.7
29	16.3	13.4	12.7	15.0	-	23	14.2	14.2	11.0	84	9.4	8.4
30	15.2	16.4	11.4	14.5	-	17.9	14.5	9.4	8.7	48	9.4	8.4
31	14.4	-	10.0	14.2	-	17.3	-	14.4	-	29	9.8	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				334.2	25	5.8	10.8					
November.....				444.8	24	9.2	14.8					
December.....				410.3	19.3	6.9	13.2					
Calendar year 1934.....				5,522.8	172	5.8	15.1					
January.....				817.4	123	7.0	26.4					
February.....				910.6	111	9.0	32.5					
March.....				1,141.5	125	17.3	36.8					
April.....				488.5	28	8.8	16.3					
May.....				1,203.0	182	9.4	38.8					
June.....				511.9	44	7.0	17.1					
July.....				632.3	102	5.6	20.4					
August.....				1,593.5	314	4.1	51.4					
September.....				323.8	23	6.3	10.8					
Water year 1934-35.....				8,811.8	514	4.1	24.1					

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 September 1935.

Extremes.- Maximum discharge during year, 83 second-feet June 28 (gage height, 5.14 feet); minimum, 20 second-feet July 6; minimum gage height, 2.80 feet Nov. 8. 1927-35: Maximum discharge, 99 second-feet Apr. 5, 1929 (gage height, 5.09 feet); minimum not determined.

Remarks.- Records fair. Discharge estimated Dec. 12-20, Jan. 23 to Feb. 9, Feb. 22-28, because of ice effect and Oct. 1-3, because of missing gage-height record. Water is diverted into the canal from Cuyahoga River by feeder at dam at Brecksville, 6 miles above station.

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	30	43	50	50	50	57	54	46	42	75	34	50
2	30	43	46	57	50	57	50	46	38	58	38	50
3	30	43	46	50	50	57	50	46	36	52	43	50
4	29	46	46	50	50	57	50	46	36	29	43	50
5	26	46	46	50	50	57	50	43	34	29	40	50
6	26	46	46	64	50	57	50	43	38	22	34	50
7	26	46	46	60	50	57	50	46	43	24	40	50
8	26	40	46	57	50	57	50	42	42	28	36	50
9	26	36	46	57	50	54	50	40	40	29	46	54
10	32	38	46	54	54	54	50	38	42	31	40	54
11	45	38	46	54	54	57	50	38	43	32	40	54
12	43	42	45	54	54	50	50	36	45	40	40	54
13	42	50	45	50	54	54	54	43	50	42	40	54
14	40	50	45	54	50	57	50	43	50	40	40	54
15	42	46	46	50	54	57	50	40	50	43	40	54
16	42	46	45	54	54	54	50	38	50	43	42	50
17	42	50	45	54	54	57	50	38	54	46	42	54
18	42	50	45	50	54	54	50	38	57	57	42	54
19	40	50	45	50	57	54	50	36	57	57	43	54
20	40	50	45	54	57	54	50	36	57	50	43	54
21	42	50	46	54	54	54	50	36	54	46	43	54
22	42	46	46	54	55	54	50	36	57	50	46	54
23	42	50	46	45	55	54	46	34	60	57	46	57
24	40	50	46	45	50	54	46	34	64	57	46	60
25	40	50	46	45	50	54	46	34	71	60	46	60
26	42	50	50	45	50	54	46	34	71	57	50	60
27	40	46	50	45	50	54	46	32	75	64	50	54
28	42	46	50	45	50	54	46	34	79	60	50	64
29	40	50	50	45	-	54	46	42	75	60	50	64
30	42	50	50	45	-	54	46	40	75	57	46	64
31	42	-	46	45	-	54	-	42	-	40	50	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,153	45	26	37.2		
November.....	1,386	50	38	46.2		
December.....	1,441	50	45	46.5		
Calendar year 1934.....	17,911	75	20	49.1		
January.....	1,566	64	45	51.2		
February.....	1,450	57	50	52.1		
March.....	1,706	57	50	55.0		
April.....	1,476	54	46	49.2		
May.....	1,220	46	32	39.4		
June.....	1,585	79	34	52.8		
July.....	1,435	75	22	46.3		
August.....	1,524	50	34	42.7		
September.....	1,645	64	50	54.8		
Water year 1934-35.....	17,417	79	22	47.7		

Chagrin River at Willoughby, Ohio

Location.- Staff gage, lat. 41°37'51", long. 81°24'13", at dam 0.9 mile southeast of Willoughby, Lake County, about 5 miles above mouth, and a sixth of a mile below mouth of East Branch.

Drainage area.- 251 square miles.

Records available.- July 1925 to November 1935 (discontinued).

Average discharge.- 10 years, 287 second-feet (diversion not included).

Extremes.- Maximum discharge during year, 4,790 second-feet Aug. 3 (gage height, 3.98 feet); minimum, 11 second-feet July 3 (gage height, 0.23 foot).
1925-35: Maximum discharge, 20,500 second-feet June 28, 1931 (gage height, 9.90 feet); minimum, 3.0 second-feet July 25, 26, 1934 (gage height, 0.16 foot).

Remarks.- Records good except those estimated because of ice effect Dec. 10-19, Jan. 1-3, 14-17, 25-31, Feb. 1-14, 18-24, which are fair. Water is diverted above dam for municipal water supply of city of Willoughby. Monthly summaries of flow corrected for diversion.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

(Gates out of dam and rating table not applicable Nov. 23-24, July 8-13)

0.2	7	.5	92	.8	220	1.2	450	1.8	1,080	2.4	1,930	3.0	2,900
.3	30	.6	131	.9	268	1.4	620	2.0	1,350	2.6	2,240	3.5	3,800
.4	58	.7	174	1.0	320	1.6	830	2.2	1,603	2.8	2,560	4.0	4,790

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	89	72	144	120	110	315	119	78	50	19	58	47
2	61	108	115	105	110	415	115	78	41	17	157	41
3	47	100	108	90	105	450	115	152	41	14	3,990	36
4	33	225	92	85	105	530	100	258	38	78	890	36
5	33	183	78	84	100	530	89	174	41	33	299	108
6	30	148	72	85	100	530	89	152	36	33	183	72
7	30	115	65	95	100	380	85	720	41	36	1,020	41
8	24	78	41	150	97	338	82	620	96	42	530	30
9	24	65	58	1,490	96	258	85	310	65	30	239	100
10	22	75	56	620	95	239	85	530	52	22	174	239
11	24	65	54	356	94	530	78	310	41	16	170	119
12	19	100	54	230	94	1,780	104	258	36	16	131	78
13	19	140	54	135	94	575	239	206	30	36	100	58
14	19	220	54	130	150	490	183	202	30	27	85	55
15	17	174	56	130	4,380	450	152	165	41	14	75	47
16	22	157	56	140	1,930	344	161	131	38	19	78	38
17	19	206	58	200	620	268	174	112	30	22	65	36
18	19	220	70	490	350	228	299	92	52	19	72	36
19	24	188	150	220	260	202	211	78	52	22	58	38
20	19	258	366	1,700	230	258	157	85	52	19	47	36
21	30	188	278	2,730	220	415	123	65	47	24	55	30
22	36	144	220	1,700	220	332	108	72	131	490	72	33
23	41	205	225	450	220	239	100	68	115	1,630	75	30
24	30	234	174	192	240	206	92	65	72	2,080	47	24
25	30	148	170	165	575	192	85	58	52	530	36	24
26	36	115	175	150	2,400	165	78	55	38	174	24	22
27	41	100	175	140	720	148	75	52	36	115	33	38
28	65	92	175	140	368	157	78	44	30	202	85	65
29	72	131	170	130	-	148	78	58	30	183	55	62
30	65	202	170	130	-	140	62	50	24	112	44	44
31	61	-	140	120	-	119	-	50	-	72	41	-

Month	Observed				Mean diversion	Corrected for diversion		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October.....	1,101	89	17	35.5	1.18	36.7	0.146	0.17
November.....	4,456	258	65	149	1.11	150	.598	.67
December.....	3,876	368	41	125	1.22	126	.502	.58
Calendar year 1934	52,982.2	2,900	3.0	145	1.54	146	.582	7.91
January.....	12,692	2,730	84	409	1.32	410	1.63	1.86
February.....	14,183	4,380	94	507	1.42	508	2.02	2.10
March.....	11,368	1,780	119	387	1.43	388	1.47	1.69
April.....	3,621	299	75	121	1.44	122	.486	.54
May.....	5,368	720	44	173	1.45	174	.693	.80
June.....	1,478	131	24	49.3	1.56	50.9	.203	.23
July.....	8,146	2,080	14	198	1.76	200	.800	.92
August.....	9,008	3,990	24	291	1.63	293	1.17	1.35
September.....	1,653	239	22	55.1	1.44	56.5	.225	.25
Water year 1934-35	74,949	4,380	14	205	1.40	206	.821	11.19

Chagrin River at Willoughby, Ohio

(Continued)

Discharge, in second-feet, for period October to November 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	52										
2	41	50										
3	41	44										
4	44	47										
5	44	51										
6	47	104										
7	52	100										
8	47	72										
9	38	72										
10	38	72										
11	47	89										
12	52	85										
13	41	115										
14	41	123										
15	36	96										
16	30	85										
17	30	75										
18	36	72										
19	44	78										
20	47	92										
21	41	115										
22	55	100										
23	78	92										
24	89	78										
25	72	72										
26	68	72										
27	52	82										
28	47	211										
29	50	289										
30	52	202										
31	55	-										
Month			Observed				Mean diversion	Corrected for diversion				
			Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches		
October.....			1,486	89	50	47.9	1.27	49.2	0.196	0.23		
November.....			2,897	289	44	96.6	1.29	97.9	.390	.44		
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Grand River near Madison, Ohio

Location.- Chain gage, lat. $41^{\circ}44'26''$, long. $81^{\circ}2'48''$, 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 September 1935.

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

Extremes.- Maximum discharge recorded during year, 6,520 second-feet Jan. 22 (gage height, 8.20 feet); minimum, 6.8 second-feet July 3; minimum gage height, 1.02 feet Oct. 18, 20, 24, 25.

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. Discharge estimated because of ice effect Dec. 5-18, 24-30, Jan. 3-7, 17-19, 25-31, Feb. 1-14, 27-28, Mar. 1-10. Some regulation at low water by mill dam above gage.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Shifting-control method used May 13 to Sept. 30

1.0	8.3	1.4	34	2.0	114	2.6	276	3.5	665	5.0	1,560	6.5	3,210
1.1	13	1.6	54	2.2	156	2.8	350	4.0	930	5.5	2,000	7.0	4,070
1.2	19	1.8	80	2.4	210	3.0	430	4.5	1,230	6.0	2,540	8.0	6,080

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	128	103	542	332	270	860	145	61	31	31	112	41
2	145	118	820	226	250	1,200	143	91	11	32	61	16
3	114	193	590	200	220	1,300	132	159	50	9.3	188	39
4	96	350	370	190	190	1,400	128	350	39	28	134	59
5	74	715	230	180	180	1,500	120	498	30	188	143	26
6	45	542	170	200	170	1,400	110	410	9.8	190	410	29
7	77	390	140	280	160	1,200	114	1,420	15	242	990	28
8	50	294	110	430	150	980	79	2,000	17	188	820	25
9	28	226	95	3,890	150	800	114	1,230	34	114	820	130
10	24	188	84	2,790	140	740	109	2,100	9.8	64	930	152
11	19	161	76	1,640	140	2,000	120	2,200	23	38	930	90
12	17	276	70	1,170	140	4,280	141	1,360	9.8	313	640	76
13	15	370	60	875	135	2,420	242	820	44	990	313	46
14	14	820	58	590	180	2,000	332	430	8.8	332	182	37
15	12	665	60	350	2,790	1,810	294	259	9.3	122	110	38
16	12	520	70	259	5,040	1,490	276	193	13	48	90	16
17	11	475	90	240	2,790	990	294	154	13	36	59	34
18	9.3	410	155	250	1,900	665	452	130	8.3	33	143	11
19	11	370	410	290	1,420	410	370	109	14	29	259	13
20	9.8	332	1,050	665	1,050	370	242	94	12	29	199	15
21	13	313	1,170	3,540	765	590	174	60	40	46	138	14
22	16	313	930	6,080	475	930	143	50	91	30	128	12
23	11	313	765	3,060	350	715	116	48	86	27	77	10
24	9.3	410	580	1,900	294	875	110	46	86	59	87	9.3
25	12	390	620	800	820	498	93	45	174	110	41	9.8
26	14	294	620	660	3,210	332	66	43	152	77	41	10
27	17	242	620	520	2,000	242	93	38	116	79	109	15
28	36	196	580	450	1,500	188	114	43	85	76	130	17
29	59	154	510	400	-	179	90	43	43	85	79	16
30	74	242	480	350	-	177	64	15	34	107	38	17
31	91	-	430	310	-	164	-	50	-	107	59	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,282.4	145	9.3	40.7	0.069	0.08
November.....	10,385	820	103	346	.589	.66
December.....	12,630	1,170	58	407	.593	.80
Calendar year 1934.....	125,178.0	5,660	0	543	.584	7.94
January.....	33,127	6,080	180	1,069	1.82	2.10
February.....	26,879	5,040	135	960	1.64	1.71
March.....	32,685	4,280	184	1,084	1.80	2.08
April.....	5,020	452	64	187	.284	.32
May.....	14,549	2,200	15	469	.799	.82
June.....	1,308.8	174	8.3	43.6	.074	.08
July.....	3,859.3	990	9.3	124	.211	.24
August.....	6,440	990	38	272	.463	.53
September.....	1,051.1	152	9.3	35.0	.060	.07
Water year 1934-35.....	161,196.6	6,080	8.3	414	.705	9.59

Ashtabula River near Ashtabula, Ohio

Location.-- Water-stage recorder, lat. 41°51'19", long. 80°45'43", at highway bridge 1½ miles southeast of Ashtabula. Staff gage at same site and datum used July 21 to Aug. 27, 1924.

Drainage area.-- 118 square miles.

Records available.-- July 1924 to September 1935.

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

Extremes.-- Maximum discharge during year ending Sept. 30, 1935, 2,500 second-feet Feb. 15 (gage height, 4.98 feet); no flow July 7.

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

Remarks.-- Records good except those for extremely low water, those for discharges above 4,000 second-feet, and those estimated, which are fair.

Discharge, in second-feet, 1924-35
1924

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1											2.2	2.9
2											1.9	6.4
3											1.6	5.4
4											1.4	5.4
5											1.6	13
6											1.6	9.6
7											2.0	7.1
8											1.8	5.4
9											1.6	16
10											1.6	283
11											1.6	190
12											1.6	70
13											1.6	45
14											1.6	164
15											1.4	70
16											1.2	32
17											1.3	13
18											1.4	12
19											1.1	8.3
20											1.1	7.1
21											1.0	7.1
22											1.0	8.7
23											1.0	141
24											128	73
25											40	32
26											16	17
27											8.3	10
28											5.4	9.6
29											3.6	1,130
30											2.7	1,720
31										2.5	2.1	-

1924-25

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,370	2.9	*5.0	*42	*65	*50	63	62	2.5	*0.9	65	0
2	374	3.0	*5.0	*41	*48	*35	52	122	2.2	*.6	24	0
3	140	3.2	7.4	*41	*41	*34	52	82	2.9	*.6	14	.1
4	65	3.2	8.5	*40	*38	*32	47	58	1.7	*.8	7.5	.1
5	40	3.4	8.7	*39	*38	*50	37	62	.9	*.6	4.0	.1
6	28	3.6	15	*38	*44	90	31	80	.1	*.2	2.9	.1
7	21	3.6	44	*37	*66	148	26	68	.1	.1	3.2	.1
8	15	5.4	58	*37	*412	*305	22	60	.2	.1	2.5	.1
9	14	6.0	260	*37	2,430	*157	18	42	.2	.1	7.5	.1
10	13	6.7	171	*37	1,440	*85	18	32	.3	3.6	3.2	.1
11	10	6.7	*61	*37	755	*298	18	27	*.1	2.0	2.0	.1
12	8.7	6.4	*41	*37	547	*272	23	35	*.3	.6	1.1	.1
13	7.4	6.7	232	*37	*178	*73	18	31	*.1	.3	17	240
14	6.4	5.3	447	*37	*128	*223	17	22	*.1	.3	55	278
15	5.4	8.3	144	*37	*109	*444	18	16	*.1	.1	24	130
16	5.2	8.7	133	*38	*94	*94	17	15	*.1	1.3	12	285
17	4.9	9.1	617	*38	*73	*52	17	24	*.1	6.5	6.2	182
18	4.4	9.1	1,150	*39	*62	*65	16	75	*.1	3.2	3.6	82
19	4.1	8.7	1,870	*40	*47	*328	32	46	*.1	1.3	2.5	33
20	3.6	7.4	770	*40	*49	*394	67	28	*0	.6	1.7	24
21	3.4	9.6	174	*41	163	165	70	19	*.1	.3	2.9	212
22	3.2	15	*80	*42	1,140	101	40	16	*.1	1.1	1.3	115
23	3.0	26.0	*68	*43	1,610	68	233	11	*.9	.5	.6	46
24	3.0	29	*60	*44	1,040	54	273	9.0	*.8	.2	.3	25
25	3.0	*22	*55	*45	332	52	99	3.2	*2.9	.2	.1	16
26	2.9	*14	*52	*48	572	49	53	6.8	*2.9	.6	.1	10
27	3.0	*10	*50	*50	172	53	35	6.2	*5.6	.8	.1	9.0
28	3.2	*8.0	*47	*70	90	26	5.6	*6.2	2.0	.1	.1	9.0
29	3.2	*6.0	*45	*55	-	80	18	5.6	*3.2	2.2	0	12
30	3.0	*5.0	*44	*58	-	65	22	4.0	*1.5	1.1	0	13
31	2.9	-	*42	*62	-	80	-	3.2	-	5.1	0	-

*Estimated.

Discharge, in second-feet, of Ashtabula River near Ashtabula, Ohio, 1924-35--Continued

1925-26

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.0	208	*101	*30	*73	*220	85	85	2.6	4.6	0.9	0.6
2	7.5	165	141	*35	*450	*190	87	58	2.6	2.8	98	1.0
3	16	124	150	*40	*300	*185	640	48	1.9	2.1	156	.9
4	43	89	130	*52	*220	*150	1,090	74	1.7	1.4	99	3.1
5	371	68	234	*80	*170	*140	349	62	1.7	1.3	89	33
6	259	58	774	890	*150	*130	257	43	1.7	1.2	65	124
7	112	117	252	338	*130	*120	217	32	2.3	1.0	95	86
8	71	1,140	126	134	*120	*180	1,770	26	1.6	.7	98	53
9	116	490	103	85	*110	*850	1,740	19	1.3	.5	47	427
10	353	186	*60	*60	*98	*540	378	14	1.2	.6	19	504
11	233	109	*54	*57	*85	*440	158	9.5	1.2	.6	6.6	153
12	126	96	*53	*60	*74	*320	99	8.0	1.2	.4	82	322
13	71	1,280	108	*74	*67	*200	72	7.2	1.3	.7	*98	52
14	50	921	132	*68	*60	*150	59	6.0	2.6	1.0	*80	37
15	42	266	73	*62	*58	*130	52	6.0	2.5	.7	*70	292
16	46	301	60	*60	*80	*110	47	5.5	38	.5	*60	574
17	360	294	56	*62	*65	*100	45	4.6	19	.3	*50	195
18	350	258	92	*87	*70	*100	40	4.2	116	.2	*40	99
19	132	961	86	*800	*80	224	32	8.7	138	.2	37	54
20	114	710	50	718	*110	1,610	28	11	56	.2	17	32
21	229	255	38	533	*160	1,300	22	8.0	26	.1	11	18
22	422	141	*32	*120	*180	899	30	6.6	14	1.1	16	9.5
23	770	105	*30	*64	*180	1,950	22	7.2	8.7	0	32	2,650
24	654	89	*27	*76	*170	2,140	26	7.2	23	0	22	4,350
25	1,580	78	*25	*74	*320	969	47	6.0	8.7	0	9.5	2,550
26	1,230	73	*24	*73	*1,200	390	83	4.6	9.5	0	4.2	648
27	1,270	987	*24	*68	*720	160	67	3.8	65	0	2.8	220
28	770	1,380	*25	*68	*420	96	215	3.1	56	1.3	1.6	200
29	349	425.6	*27	*67	-	69	269	2.9	25	1.3	1.6	171
30	208	*115	*27	*67	-	58	131	2.6	9.5	1.0	1.2	127
31	178	-	*28	*67	-	58	-	2.6	-	.5	.8	-

*Estimated.

1926-27

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	104	567	*303	*125	269	*120	56	55	43	1.4	4.2	1.3
2	212	273	*150	*122	192	*100	71	43	37	1.6	1.7	1.4
3	227	211	*100	*120	273	*98	108	43	29	3.4	1.0	1.2
4	145	171	*70	*116	332	*82	113	55	58	1.9	.9	1.0
5	911	169	*50	*112	214	*78	818	79	212	1.2	.9	.8
6	1,210	243	*75	*105	257	*150	610	58	106	1.2	.9	.5
7	1,500	176	*80	*96	455	1,200	162	45	65	1.4	.7	.5
8	574	129	*98	*88	*150	1,480	96	35	41	1.3	1.2	.4
9	209	356	*130	*95	*110	429	71	32	30	1.0	3.3	.2
10	210	722	*150	*105	*96	182	56	37	24	.7	26	.2
11	912	265	*135	*105	*84	136	45	42	16	.8	14	.2
12	332	166	*130	*105	*75	121	40	47	14	.6	6.6	.2
13	164	138	*250	*105	*68	108	40	41	11	.5	3.8	.7
14	122	127	1,140	*105	*82	362	40	40	9.5	.5	2.6	1.0
15	98	116	*150	*105	329	289	37	86	8.0	.9	2.3	.6
16	78	1,960	*50	*106	292	151	34	464	6.6	1.2	38	.2
17	90	959	*75	*116	753	108	54	313	6.0	.7	18	.5
18	338	261	*78	*125	384	116	140	160	6.0	.6	9.5	1.9
19	675	284	*95	*140	*100	273	78	240	8.0	.5	4.6	1.9
20	294	203	*130	*1,000	*65	538	59	218	6.6	.3	2.8	1.3
21	298	164	*125	1,160	*76	1,960	58	121	7.2	.4	2.1	1.2
22	330	164	*122	2,280	*90	957	55	76	6.6	2.7	1.4	2.6
23	1,140	185	*118	1,070	*100	206	50	314	6.0	7.2	1.2	4.2
24	1,040	224	*116	390	*800	127	43	1,060	5.5	9.5	1.2	2.6
25	3,330	429	*118	*150	416	102	48	1,080	5.0	22	1.2	1.7
26	1,440	793	*120	*100	504	95	106	458	4.6	17	.9	1.3
27	955	1,140	*122	*76	303	111	272	195	3.1	20	.5	1.2
28	1,120	396	*125	*92	164	108	355	110	2.1	4.6	.5	1.0
29	809	416	*125	*110	-	68	125	71	1.9	3.6	.3	1.4
30	448	670	*125	*1,400	-	75	76	52	1.9	3.6	.6	2.6
31	898	-	*125	*700	-	65	-	48	-	4.2	2.3	-

*Estimated.

Discharge, in second-feet, of Ashtabula River near Ashtabula, Ohio, 1924-35--Continued

1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.7	3.1	3,890	1,750	*100	*26	476	25	5.0	60	12	0.9
2	11	3.4	919	*240	*92	*22	230	22	5.3	49	9.4	.7
3	5.5	3.8	393	*220	*90	*20	143	18	4.6	24	7.4	.7
4	4.6	4.6	244	*215	*88	*19	174	14	6.9	14	6.1	1.0
5	3.8	8.0	*120	*210	*100	*18	108	14	17	12	5.7	.7
6	2.8	30	*100	*210	*260	*18	68	12	405	35	5.7	.7
7	2.3	37	*110	*220	756	*20	52	10	436	43	6.1	.9
8	2.3	30	280	*220	*1,100	*21	65	8.8	185	22	6.9	.8
9	1.9	24	*110	*250	1,900	*22	96	8.4	137	14	5.7	.5
10	1.3	18	*72	398	*300	*24	100	7.4	467	13	4.3	.4
11	1.2	15	*84	267	*190	*25	116	6.5	143	64	4.3	.4
12	2.1	14	*110	202	*160	*50	93	6.1	58	98	2.9	.7
13	6.6	15	*350	165	*130	*150	93	6.1	32	63	2.4	.5
14	55	26	5,680	152	218	1,610	68	5.7	21	388	2.4	.4
15	65	24	856	121	1,180	497	84	5.7	14	286	2.2	.3
16	42	35	809	93	732	198	68	5.7	10	113	3.1	.2
17	28	652	847	74	331	93	43	6.9	8.4	50	2.4	.2
18	19	1,180	393	90	233	70	36	12	11	25	2.6	.2
19	16	333	*140	191	*72	50	29	57	98	125	1.8	.2
20	12	182	*110	1,100	*64	50	23	77	84	212	1.2	.6
21	8.7	194	*96	*120	*60	58	26	46	50	98	1.3	1.2
22	11	412	*92	*116	*58	148	863	27	116	40	1.6	1.2
23	15	230	*91	*115	*56	178	460	17	97	31	1.2	.9
24	12	1,230	*90	*115	*52	149	236	12	149	38	2.0	1.5
25	8.0	1,180	*90	*130	*49	129	132	10	88	25	2.9	1.3
26	7.2	284	*92	455	*45	118	90	7.8	48	15	2.0	2.0
27	4.6	600	*94	270	*42	203	57	6.5	27	18	1.6	2.0
28	3.6	1,140	*110	*180	*36	198	40	6.1	17	277	1.6	2.4
29	3.4	1,320	*140	*150	*80	96	31	6.1	13	90	1.3	2.6
30	3.4	1,610	1,880	*125	-	482	26	5.7	13	42	1.2	2.9
31	2.8	-	2,080	*110	-	501	-	5.3	-	20	1.1	-

*Estimated.

1928-29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	16	990	*23	*42	365	180	130	33	18	6.3	0
2	2.0	13	343	*21	*42	339	283	428	20	9.4	3.2	0
3	2.2	17	165	*22	*42	202	118	2,310	14	5.5	2.2	0
4	1.8	65	103	*25	*43	388	128	1,180	11	4.4	1.6	0
5	3.1	63	103	*32	*43	704	1,870	425	10	13	.8	0
6	3.4	37	116	*700	*43	254	938	286	8.8	47	.3	0
7	2.2	24	*60	407	*43	208	214	176	7.7	75	.3	0
8	1.6	18	*42	*54	*43	372	110	144	6.7	179	.1	0
9	1.8	21	*36	*47	*43	*60	98	92	5.5	149	0	0
10	2.4	26	*24	*43	*43	*45	713	66	4.8	60	0	0
11	1.8	23	*21	*40	*43	*44	449	52	3.8	30	0	0
12	1.5	21	*21	*38	*43	52	533	44	3.5	19	0	0
13	2.2	118	22	*36	*43	68	336	50	3.5	14	0	0
14	3.1	185	24	*35	*43	494	153	143	7.2	22	0	0
15	2.9	82	66	*36	*43	540	100	834	6.7	42	0	0
16	6.1	50	103	*38	*43	502	169	286	6.7	19	0	0
17	6.1	88	149	*44	*44	472	114	161	5.1	8.8	0	0
18	8.8	110	912	*1,600	*44	199	71	86	4.4	6.3	0	0
19	19	109	379	4,360	*44	127	48	250	11	3.8	0	0
20	25	928	178	845	*44	1,220	373	311	7.2	2.5	0	0
21	16	472	*56	*200	*44	546	2,880	171	4.4	1.6	0	0
22	12	428	*56	*140	*44	1,200	558	209	3.5	1.0	0	0
23	12	613	*55	*92	*44	762	178	88	5.9	.7	0	0
24	12	306	*62	*76	*45	365	109	55	4.4	.4	0	0
25	14	282	*48	*66	*54	244	99	46	5.9	.3	0	0
26	40	168	*47	*60	*900	641	810	36	6.3	.2	0	0
27	63	106	*45	*54	2,560	339	334	7.7	.2	.2	0	0
28	43	96	*43	*47	606	148	151	24	7.7	.8	0	.2
29	38	126	*37	*43	-	91	315	420	8.2	4.1	0	.3
30	36	365	*53	*42	-	68	237	133	19	2.7	0	.5
31	25	-	*27	*42	-	58	-	61	-	15	0	-

*Estimated.

Discharge, in second-feet, of Ashtabula River near Ashtabula, Ohio, 1924-35--Continued

1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	8.2	*58	110	35	291	628	22	5.8	1.0		0
2	.2	15	*56	2,360	40	291	926	19	4.4	.7		0
3	.2	12	*55	1,360	50	178	378	15	4.4	.7		0
4	.2	33	*54	304	*52	188	188	13	3.6	.4		0
5	.3	27	*52	128	*56	208	127	12	1.8	.7		0
6	.2	20	*62	128	*60	329	93	11	3.0	1.8		0
7	.2	18	*90	407	*66	868	228	10	5.0	1.8		0
8	.8	15	1,000	2,160	*72	1,390	587	25	4.4	.6		0
9	2.2	13	813	1,350	*78	828	610	13	*15	.2		0
10	1.8	*12	323	617	*84	610	390	8.3	26	.1		0
11	1.5	*11	192	178	*90	410	211	5.0	58	.1		0
12	1.3	*10	128	1,160	*100	410	134	3.6	31	.1		0
13	1.3	*12	932	2,210	*500	227	91	3.6	19	.1		0
14	1.6	*16	998	1,220	*1,000	492	69	4.4	10	.1		0
15	2.2	*25	331	650	*250	215	54	8.3	5.8	.1		0
16	1.6	*35	186	189	*150	134	451	11	23	0		.1
17	1.1	*43	488	84	*110	113	1,830	12	181	.1		.7
18	.8	*55	1,600	74	*90	176	749	10	134	.1		.2
19	.7	*600	346	66	*110	538	289	20	121	0		.1
20	.4	*250	137	64	*450	252	150	46	99	.1		.1
21	.4	*150	90	60	686	170	101	45	50	.1		.1
22	2.2	*120	96	55	322	110	79	30	26	.1		.1
23	7.2	*90	83	54	289	76	63	19	14	.1		.1
24	7.2	*82	80	52	465	63	47	13	9.2	.1		.1
25	22	*78	78	51	1,180	406	40	9.2	5.0	.1		.5
26	24	*72	77	50	1,810	1,670	37	6.6	4.4	.1		.6
27	30	*68	76	49	796	458	30	6.6	3.6	.1		.2
28	20	*66	76	48	360	248	28	5.8	2.4	0		.2
29	11	*64	76	48	-	304	25	6.6	1.4	0		.1
30	9.4	*60	82	43	-	731	21	5.8	1.0	0		.1
31	7.7	-	90	36	-	887	-	5.8	-	0		-

*Estimated.

1930-31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	5.8	*76	*25	170	74	410	69	8.3	0.9	0.1	0.5
2	.1	3.0	*170	*25	93	52	1,560	47	7.5	.7	.1	1.5
3	.1	2.4	*110	*25	50	26	692	36	6.0	.6	.1	1.8
4	.1	2.4	*68	*30	67	34	634	30	5.4	.4	.1	1.5
5	.1	1.8	*54	*42	81	28	268	26	3.8	.2	.1	1.5
6	0	1.4	*300	*110	61	21	115	20	9.8	.8	.1	.8
7	0	2.4	1,020	*410	93	15	74	20	224	2.5	.1	.7
8	0	1.8	452	*160	110	22	52	1,060	440	3.5	.1	.5
9	0	2.4	190	*100	167	26	39	498	231	2.3	.1	.3
10	0	2.4	99	*80	*130	29	33	156	95	1.8	.1	.3
11	0	1.8	65	*68	*80	29	31	103	39	1.7	.1	.3
12	0	2.4	58	*56	*50	25	33	192	20	1.2	.1	.3
13	0	3.6	*52	*46	*70	29	26	396	12	.9	.1	.2
14	0	3.6	*44	*37	*340	36	21	280	7.5	.8	.1	.2
15	.1	4.4	*58	*32	*230	96	16	108	6.8	1.2	.1	.2
16	.1	6.6	*33	*31	*140	192	14	53	8.3	1.5	.1	.3
17	.4	8.3	*30	*29	172	273	12	136	5.4	1.2	0	.3
18	3.0	10	*29	*28	520	355	11	170	3.8	1.2	0	.3
19	3.6	10	*28	*27	341	552	10	69	3.5	1.0	0	.2
20	3.6	10	*27	*90	240	498	9.2	51	2.8	1.2	0	.2
21	4.4	11	*27	*190	227	757	8.3	33	2.3	1.5	0	.2
22	3.6	11	*26	*170	174	476	88	27	2.0	1.8	0	.2
23	2.4	11	*26	*150	181	256	816	154	1.8	1.5	0	.1
24	2.4	12	*26	*140	134	160	322	534	1.7	.9	0	.1
25	3.6	12	*26	*150	81	178	137	181	1.3	.7	0	.2
26	3.0	12	*35	*350	81	252	634	103	1.3	5	0	.5
27	3.6	12	*31	932	69	150	804	53	1.5	.3	.1	.8
28	7.4	13	*28	538	60	205	246	27	1.3	.3	.1	.8
29	5.8	14	*27	295	-	770	147	16	1.3	.2	0	.5
30	5.0	*34	*26	181	-	512	121	11	1.2	.1	.2	.3
31	8.3	-	*25	208	-	166	-	9.2	-	.1	.1	-

*Estimated.

Discharge, in second-feet, of Ashtabula River near Ashtabula, Ohio, 1924-35--Continued

1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	3.3	42	270	103	28	242	40	16	*2.2	1.5	0.2
2	.2	3.8	38	1,100	76	21	558	46	14	*2.8	1.2	0
3	.2	3.8	24	597	76	17	318	26	13	*1.8	1.7	0
4	.1	4.3	34	285	308	17	106	19	12	*2.2	1.3	.2
5	2.2	3.8	364	142	235	*17	62	16	11	*3.0	.8	.4
6	1.1	4.3	212	330	214	*17	46	32	9.2	*2.1	.7	.2
7	.7	4.3	84	490	145	*17	34	786	7.5	*2.6	.6	.1
8	.6	4.3	45	165	584	*17	46	2,400	4.8	*2.3	.4	0
9	.5	4.3	37	85	313	*16	180	802	3.8	*2.0	.3	0
10	.4	3.8	65	58	233	*16	160	244	3.5	*2.1	.6	0
11	.6	4.8	222	46	887	*16	354	145	3.1	2.3	.7	0
12	.8	6.0	548	39	1,250	*15	749	268	2.3	2.5	.6	0
13	.7	8.7	263	40	314	*15	460	136	2.3	1.8	.4	0
14	.7	35	672	42	95	*15	489	78	2.3	1.5	.3	0
15	.7	40	520	49	*44	*15	1,150	53	1.8	1.5	.1	0
16	1.2	58	182	206	*34	*14	452	40	2.0	1.7	.1	0
17	2.3	38	86	789	*30	*14	157	39	2.3	1.3	.1	0
18	2.5	28	56	1,500	*27	*14	77	34	1.8	.8	.2	0
19	5.3	50	39	365	*25	*14	51	26	1.7	.5	.1	0
20	3.8	44	38	148	*24	*20	35	20	1.7	.4	.1	0
21	3.1	35	53	105	*23	*50	27	15	1.7	.8	0	0
22	2.3	97	370	1,030	*22	*200	21	12	2.0	2.5	0	0
23	1.8	66	1,280	838	*21	1,210	16	11	1.7	1.9	0	0
24	1.8	38	418	576	*20	900	14	9.2	1.5	3.6	0	0
25	1.8	27	253	207	*19	835	13	7.5	1.5	2.0	0	0
26	1.8	28	145	95	19	770	16	22	1.5	1.8	0	0
27	1.3	25	68	426	34	453	21	197	*1.4	7.0	.1	.2
28	1.3	17	49	302	46	164	22	108	*2.0	4.4	0	3.6
29	1.3	16	38	142	38	88	16	65	*1.2	2.8	.1	2.0
30	1.3	24	31	1,200	-	53	20	36	*1.7	2.8	.3	1.3
31	1.7	-	37	354	-	51	-	21	-	1.8	.3	-

*Estimated.

1932-33

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	9.2	*9.3	870	111	*76	260	15	15		0	0
2	.6	13	*7.5	*320	224	*70	311	13	10		0	0
3	.4	13	7.5	*180	195	68	442	32	7.5		.1	.2
4	.3	10	8.3	*180	*85	*86	569	66	7.0		.5	.1
5	.5	8.3	9.2	348	*49	*58	292	49	7.0		.5	.1
6	.7	7.5	14	282	*49	*43	312	39	6.5		.2	0
7	.6	6.8	98	184	*54	*47	633	48	6.5		.1	0
8	.5	6.0	166	147	*600	363	378	52	6.1		.1	0
9	.3	6.8	*77	117	*380	516	166	64	4.9		.1	0
10	.3	28	*30	*98	*160	*240	114	104	3.4		.1	0
11	.2	60	*22	97	*113	*120	200	94	2.5		.1	0
12	.3	44	*21	*82	*96	*78	2,080	64	2.2		.1	0
13	.5	30	*20	*72	*95	*67	474	49	1.5		.1	0
14	.6	19	*20	*60	*92	2,380	173	38	1.1		.1	.1
15	.5	13	*19	*54	*88	1,140	106	29	.9		.1	0
16	.4	20	*19	*49	*85	428	177	78	.8		.1	0
17	.5	100	*17	*52	*80	210	663	269	.9		0	0
18	1.3	106	*17	65	*78	147	278	134	.9		0	0
19	1.5	317	*16	106	*70	148	248	64	.9		0	0
20	1.3	319	*16	214	*250	482	819	38	.6		0	.1
21	1.0	111	*16	156	*640	569	282	25	.2		0	.1
22	.9	60	*19	257	*250	330	128	17	.2		0	0
23	1.5	*37	*190	782	*160	173	81	12	.1		0	.1
24	2.3	*31	1,500	325	*145	150	56	10	.1		0	.1
25	2.5	*30	551	184	648	147	46	10	.1		0	0
26	4.9	27	181	250	923	117	38	9.4	0		0	0
27	24	*24	85	360	*200	111	33	223	0		0	.2
28	24	*17	*47	470	*98	418	28	154	0		0	.1
29	11	*13	*51	233	-	496	23	70	0		0	.1
30	7.5	*11	*72	*130	-	480	20	39	0		0	0
31	5.4	-	3,840	*110	-	235	-	27	-		0	-

*Estimated.

Discharge, in second-feet, of Ashtabula River near Ashtabula, Ohio, 1924-35--Continued

1933-34

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.5	214	*1,000	*72	*10	222	14	0.9	0	0	2.0
2	0	.4	79	1,610	*64	*14	251	12	.5	0	0	2.8
3	0	.3	56	278	*56	*80	222	9.1	.3	0	0	1.5
4	.1	.4	668	126	*50	*300	1,610	8.0	.2	0	0	1.1
5	.1	.4	480	92	*45	*1,400	546	7.0	.2	0	0	1.1
6	.1	1.1	184	152	39	*760	230	7.0	.3	0	0	.6
7	0	1.1	104	210	33	*320	177	6.1	.3	.1	0	.8
8	0	3.1	68	269	*30	*170	128	5.3	.3	.2	.1	4.2
9	.1	3.4	48	247	*27	*85	85	4.2	.3	1	1,730	3.8
10	.1	3.8	36	184	*25	*80	63	3.8	.2	0	627	2.8
11	.1	4.2	*31	134	*23	*50	373	3.1	.1	.1	36	3.1
12	.2	12	*28	72	*21	*44	512	3.1	.1	.1	30	4.2
13	.2	12	*24	63	*20	41	278	3.8	.1	.1	16	3.4
14	.2	*12	*22	72	*18	42	287	5.3	.1	.1	14	4.9
15	.2	*12	*20	114	*17	128	230	4.5	.1	0	10	10
16	.2	*12	375	*70	*18	126	156	4.5	0	0	9.7	40
17	.5	*11	296	*58	*15	123	150	4.2	0	0	7.0	32
18	.5	*11	346	*52	*14	163	99	4.2	0	0	6.1	24
19	.6	*11	188	*46	*13	166	63	4.2	.3	0	4.5	13
20	.4	*50	109	*43	*12	110	45	3.8	.2	0	3.1	8.0
21	.3	210	1,050	*40	*12	195	33	3.8	.1	0	2.8	5.7
22	1.1	1,130	484	*38	*11	452	28	3.1	0	0	2.2	4.5
23	2.2	480	180	*100	*11	153	35	2.8	0	0	2.9	3.4
24	1.5	177	117	*250	*10	85	51	2.8	0	0	1.5	3.1
25	1.7	92	*68	131	*10	56	56	3.1	0	0	1.1	2.5
26	1.5	68	*43	134	*10	49	45	2.8	0	0	.6	2.2
27	1.1	*55	28	83	*10	324	34	2.2	0	0	1.1	3.8
28	.8	*70	*26	*160	*10	301	29	1.7	0	0	4.2	2.8
29	.6	*150	*24	*350	-	210	25	1.6	0	0	4.9	3.1
30	.6	417	*25	101	-	192	19	1.3	0	0	2.5	4.5
31	.6	-	*30	*70	-	122	-	1.1	-	0	2.0	-

*Estimated.

1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	22	476	*35	*42	128	46	26	3.7	1.6	0.8	10
2	3.1	30	403	*32	*41	211	44	31	2.0	1.4	1.0	5.3
3	4.2	42	111	*31	*40	1,060	40	49	2.6	1.0	2.0	3.7
4	4.2	62	63	*30	*39	609	35	151	4.5	.7	1.6	6.9
5	3.8	114	49	*29	*39	1,020	29	128	2.6	.3	1.0	8.5
6	3.1	52	35	*28	*38	958	25	114	3.1	.2	1.0	6.1
7	2.5	30	28	49	*38	380	22	733	6.1	.5	8.5	4.5
8	2.0	29	*28	469	*37	243	22	585	9.4	6.4	10	3.7
9	1.7	68	*29	1,560	*37	121	22	162	6.1	7.7	5.3	20
10	1.3	54	*29	599	*36	284	24	551	4.5	6.1	4.5	92
11	1.1	44	*30	239	*38	900	21	162	3.7	2.3	4.5	55
12	.9	154	*31	*106	*36	1,120	30	74	2.6	2.0	2.6	30
13	.8	112	*32	*66	*36	320	76	54	3.1	5.3	2.8	16
14	.5	194	*33	*55	*37	191	85	49	2.3	2.3	1.6	8.5
15	.4	112	*36	*52	1,400	184	62	44	2.0	1.6	1.0	7.7
16	.4	59	*41	*52	1,290	177	60	35	1.6	1.0	.7	4.5
17	.2	49	*50	56	366	133	74	28	1.2	.6	.6	4.5
18	.5	42	*60	74	153	105	114	22	1.2	.3	.2	3.1
19	.2	34	140	137	*75	63	74	16	1.2	.2	6.1	2.0
20	.2	38	474	76	*62	99	49	14	1.2	.1	2.3	1.4
21	.8	41	274	1,090	*68	207	35	12	1.6	.2	4.5	1.0
22	1.3	31	156	990	61	177	25	10	8.5	.3	6.1	.9
23	.9	64	134	210	76	216	22	8.5	26	2.3	5.3	1.0
24	.9	188	192	63	111	272	17	7.7	29	1.6	2.6	.6
25	.6	61	137	*56	210	123	14	6.9	20	3.1	1.8	.5
26	1.1	45	*110	*52	1,290	79	12	6.1	13	6.9	1.8	.3
27	2.6	30	*90	*50	675	56	9.4	3.7	10	11	26	1.0
28	2.5	23	*76	*48	765	49	9.4	3.7	6.1	6.9	117	2.3
29	10	42	*60	*46	-	61	10	5.3	4.5	2.6	45	1.6
30	17	250	*50	*44	-	58	14	4.5	2.6	1.8	30	1.2
31	19	-	*40	*43	-	52	-	4.5	2.6	1.2	27	-

*Estimated.

Discharge, in second-feet, of Ashtabula River near Ashtabula, Ohio, 1924-35--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August, 1924.....	240.3	128	1.0	7.75	0.066	0.08
September.....	4,164.0	1,720	2.9	139	1.18	1.32
October, 1924.....	2,179.9	1,370	2.9	70.5	.596	.69
November.....	253.0	29	2.9	8.77	.074	.08
December.....	6,764.4	1,870	5.0	218	1.86	2.13
January, 1925.....	1,310	62	37	42.3	.358	.41
February.....	11,768	2,430	38	420	3.56	3.71
March.....	4,086	444	32	132	1.12	1.29
April.....	1,503	273	16	50.1	.425	.47
May.....	1,084.6	122	3.2	35.0	.297	.34
June.....	36.4	6.2	0	1.21	.010	.01
July.....	36.2	6.8	.1	1.23	.010	.01
August.....	264.4	65	0	8.53	.072	.08
September.....	1,675.0	288	0	55.8	.473	.53
Water year 1924-25.....	30,972.9	2,430	0	84.9	.719	9.75
October, 1925.....	10,541.5	1,580	7.5	340	2.88	3.32
November.....	11,320	1,380	58	377	3.19	3.56
December.....	3,143	774	24	101	.856	.99
Calendar year 1925.....	46,770.1	2,430	0	128	1.08	14.72
January, 1926.....	5,089	1,230	30	164	1.39	1.60
February.....	5,890	2,260	72	210	1.78	1.85
March.....	13,778	2,140	53	444	3.77	4.35
April.....	8,728	1,770	20	271	2.30	2.67
May.....	586.2	85	2.6	18.9	.160	.18
June.....	660.3	138	1.2	22.0	.186	.21
July.....	25.3	4.6	0	.82	.007	.008
August.....	1,410.2	156	.8	45.5	.386	.45
September.....	14,196.1	4,350	.6	473	4.01	4.47
Water year 1925-26.....	74,757.6	4,350	0	205	1.74	23.56
October, 1926.....	20,243	3,330	78	653	5.53	6.38
November.....	12,057	1,960	116	402	3.41	3.80
December.....	4,782	1,140	50	154	1.51	1.61
Calendar year 1926.....	86,466.1	4,350	0	237	2.01	27.27
January, 1927.....	10,604	2,260	76	342	2.90	3.34
February.....	6,835	753	65	244	2.07	2.16
March.....	9,903	1,960	65	319	2.70	3.11
April.....	3,916	818	34	131	1.11	1.24
May.....	5,738	1,030	32	184	1.56	1.80
June.....	700.6	212	1.9	26.0	.220	.25
July.....	116.8	22	.3	3.77	.032	.04
August.....	155.2	38	.3	5.01	.042	.05
September.....	35.8	4.2	.2	1.19	.01	.01
Water year 1926-27.....	75,146.4	3,330	.2	206	1.75	23.69
October, 1927.....	365.0	65	1.2	11.8	.100	.12
November.....	10,837.9	1,610	3.1	361	3.06	3.41
December.....	18,472	3,890	72	596	5.05	5.82
Calendar year 1927.....	67,739.3	3,890	.2	186	1.58	21.35
January, 1928.....	8,274	1,750	74	267	2.28	2.61
February.....	8,594	1,900	30	294	2.49	2.69
March.....	5,263	1,610	18	170	1.44	1.66
April.....	4,126	863	23	138	1.17	1.31
May.....	477.8	77	5.3	15.4	.130	.15
June.....	2,766.2	467	4.6	92.2	.781	.87
July.....	2,394	388	12	77.2	.654	.76
August.....	112.4	12	1.1	3.63	.031	.04
September.....	29.6	2.9	.2	.98	.008	.009
Water year 1927-28.....	61,641.8	3,890	.2	168	1.42	19.44
October, 1928.....	415.4	68	1.5	13.4	.114	.13
November.....	4,976	928	13	166	1.41	1.57
December.....	4,350	990	21	140	1.19	1.37
Calendar year 1928.....	41,708.3	1,900	.2	114	.966	13.16
January 1929.....	9,308	4,360	21	300	2.54	2.93
February.....	4,958	2,560	42	177	1.50	1.56
March.....	10,807	1,820	44	349	2.96	3.41
April.....	12,446	2,600	48	415	3.52	3.93
May.....	8,725	2,310	24	281	2.38	2.74
June.....	253.6	33	3.5	8.45	.072	.08
July.....	752.7	179	.2	24.3	.206	.24
August.....	14.7	6.3	0	.47	.0040	.005
September.....	1.0	.5	0	.03	.00025	.0003
Water year 1928-29.....	57,007.4	4,360	0	156	1.32	17.97

Discharge, in second-feet, of Ashtabula River near Ashtabula, Ohio, 1924-35--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October, 1929.....	160.0	30	0.2	5.16	0.044	0.05
November.....	2,080.2	600	8.2	69.3	.587	.65
December.....	8,843	1,600	52	285	2.42	2.79
Calendar year 1929.....	58,549.2	4,360	0	160	1.36	18.39
January, 1930.....	15,566	2,360	36	496	4.20	4.84
February.....	9,531	1,810	35	333	2.82	2.94
March.....	13,269	1,870	63	428	3.63	4.18
April.....	8,654	1,830	21	288	2.44	2.72
May.....	425.6	46	3.6	13.7	.116	.13
June.....	872.2	181	1.0	29.1	.247	.28
July.....	9.4	1.8	0	.30	.0025	.003
August.....	0	0	0	0	0	0
September.....	3.2	.7	0	.11	.00093	.001
Water year 1929-30.....	59,013.6	2,560	0	162	1.37	18.58
October, 1930.....	60.8	8.5	0	1.96	.017	.02
November.....	228.5	34	1.4	7.62	.065	.07
December.....	3,228	1,020	25	104	.881	1.02
Calendar year 1930.....	51,445.7	2,580	0	141	1.19	16.20
January, 1931.....	4,735	932	26	153	1.30	1.50
February.....	4,212	520	50	150	1.27	1.32
March.....	6,064	770	15	196	1.66	1.91
April.....	7,383.5	1,560	8.3	246	2.08	2.32
May.....	4,658.2	1,080	9.2	150	1.27	1.46
June.....	1,155.6	440	1.2	38.5	.328	.36
July.....	33.5	3.5	.1	1.08	.0092	.01
August.....	2.1	.2	0	.07	.00059	.0007
September.....	15.6	1.8	.1	.52	.0044	.006
Water year 1930-31.....	31,772.8	1,560	0	87.0	.737	10.00
October, 1931.....	44.3	5.3	.1	1.43	.012	.01
November.....	728.5	97	3.3	24.2	.205	.23
December.....	6,513	1,280	24	204	1.73	1.99
Calendar year 1931.....	35,340.3	1,560	0	96.8	.820	11.12
January, 1932.....	11,997	1,600	39	387	3.28	3.78
February.....	5,259	1,250	19	181	1.53	1.65
March.....	5,109	1,210	14	185	1.40	1.61
April.....	5,812	1,150	13	197	1.67	1.86
May.....	5,751.7	2,400	7.5	186	1.58	1.82
June.....	132.3	16	1.9	4.41	.037	.04
July.....	68.8	7.0	.4	2.22	.019	.02
August.....	12.6	1.7	0	.41	.0035	.004
September.....	8.2	3.6	0	.27	.0023	.003
Water year 1931-32.....	41,333.4	2,400	0	113	.968	13.02
October, 1932.....	97.1	24	.2	3.13	.027	.03
November.....	1,496.6	319	6.0	49.9	.423	.47
December.....	7,114.8	3,840	7.6	230	1.95	2.25
Calendar year 1932.....	42,959.1	3,840	0	117	.992	13.54
January, 1933.....	6,819	870	49	220	1.86	2.14
February.....	6,016	923	49	215	1.82	1.90
March.....	10,223	2,580	43	330	2.80	3.23
April.....	9,250	2,080	20	308	2.61	2.91
May.....	1,935.4	269	9.4	62.4	.529	.61
June.....	86.9	15	0	2.90	.026	.03
July.....	0	0	0	0	0	0
August.....	2.1	.5	0	.07	.00059	.0007
September.....	1.3	.2	0	.04	.00034	.0004
Water year 1932-33.....	45,042.2	3,840	0	118	1.00	13.57
October, 1933.....	15.2	2.2	0	.49	.0042	.005
November.....	3,010.7	1,130	.3	100	.847	.94
December.....	5,449	1,060	20	176	1.49	1.72
Calendar year 1933.....	42,806.6	2,580	0	117	.992	13.49
January, 1934.....	6,549	1,610	38	205	1.74	2.01
February.....	694	72	10	24.8	.210	.22
March.....	6,401	1,400	10	206	1.75	2.02
April.....	6,090	1,610	19	203	1.72	1.92
May.....	143.4	14	1.1	4.63	.039	.04
June.....	4.6	.9	0	.15	.0013	.001
July.....	.8	.2	0	.03	.00025	.0003
August.....	2,568.4	1,730	0	82.9	.703	.81
September.....	198.9	40	.6	6.63	.056	.06
Water year 1933-34.....	30,925.0	1,730	0	84.7	.718	9.75

Discharge, in second-feet, of Ashtabula River near Ashtabula, Ohio, 1924-35--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October, 1934.....	90.9	19	0.2	2.93	0.025	0.03
November.....	2,136	250	22	71.2	.603	.67
December.....	3,497	476	28	113	.958	1.10
Calendar year 1934.....	28,174.0	1,730	0	77.2	.654	8.88
January, 1935.....	6,467	1,560	28	209	1.77	2.04
February.....	7,124	1,400	36	254	2.15	2.24
March.....	9,676	1,120	49	312	2.64	3.04
April.....	1,121.8	114	9.4	37.4	.317	.36
May.....	3,100.9	733	3.7	100	.847	.98
June.....	186.0	29	1.2	6.20	.053	.06
July.....	79.5	11	.1	2.56	.022	.03
August.....	324.8	117	.2	10.5	.089	.10
September.....	505.8	92	.3	10.1	.086	.10
Water year 1934-35.....	34,107.7	1,560	.1	93.4	.792	10.74

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 September 1935.

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

Extremes.- Maximum discharge during year, 4,230 second-feet Feb. 16; maximum gage height, 10.2 feet Feb. 15; minimum, 2.2 second-feet June 22 (gage height, 1.17 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 above 2,000 second-feet, and those estimated because of ice effect and missing gage-height record, which are fair. Discharge estimated Dec. 6-19, 24-31, Jan. 1-7, 14-16, Feb. 9-14, 20-23, because of ice effect, and Jan. 24 to Feb. 8, because of missing gage-height record.

Rating tables, water year 1934-35 except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Feb. 15

1.2	1.2	2.0	101	3.0	545
1.4	9.0	2.2	159	3.5	940
1.6	24	2.4	229	4.0	1,430
1.8	55	2.6	315	4.5	2,050

Table for Feb. 16 to Sept. 30

1.1	0.6	1.6	67	2.6	316	5.0	2,810
1.2	3.1	2.0	110	3.0	545	5.5	3,680
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 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.8	37	696	70	140	312	98	57	18	8.4	15	21
2	5.4	52	1,180	56	140	308	92	69	15	15	14	10
3	11	39	352	64	130	931	87	30	11	10	24	14
4	9.0	61	186	58	130	1,160	77	184	19	10	14	24
5	13	88	123	52	120	1,000	69	312	19	4.2	4.6	13
6	12	118	95	66	120	1,270	63	212	16	9.4	10	11
7	7.4	76	79	90	120	611	53	553	18	10	20	13
8	4.1	74	70	615	120	409	58	1,130	20	12	11	12
9	4.6	70	77	1,510	120	286	52	395	18	13	11	29
10	5.4	96	74	1,440	115	299	48	875	20	10	16	37
11	3.2	98	70	495	115	854	49	661	14	11	18	110
12	7.4	138	68	251	115	1,480	60	211	14	20	14	69
13	7.7	203	68	162	110	1,080	61	128	14	9.0	11	36
14	4.1	207	66	140	180	340	115	108	13	18	6.2	19
15	2.8	196	66	130	1,120	278	110	92	11	4.6	7.5	22
16	2.5	129	68	130	3,240	295	92	77	13	5.0	7.7	14
17	2.5	123	72	132	935	246	98	63	5.0	5.0	3.8	14
18	2.5	207	110	135	341	205	131	53	13	16	8.2	17
19	2.5	176	250	194	220	169	154	62	13	5.8	13	14
20	6.4	126	562	162	160	163	98	37	10	5.0	14	8.2
21	6.4	121	526	982	130	238	71	33	13	3.4	7.6	8.9
22	6.4	88	297	2,110	110	345	60	28	25	2.5	13	9.0
23	4.6	96	222	616	100	227	48	29	133	11	18	4.2
24	12	342	200	300	142	321	39	27	105	33	16	15
25	4.1	224	190	210	387	273	37	22	68	28	15	8.4
26	8.4	118	170	190	1,480	166	31	19	39	56	3.4	4.2
27	10	74	150	180	1,280	120	31	21	28	78	18	6.2
28	14	59	130	170	573	105	29	21	18	35	22	16
29	17	74	120	160	-	110	29	21	15	23	32	16
30	33	303	110	150	-	120	37	22	15	18	47	4.2
31	31	-	90	150	-	110	-	14	-	17	33	-
Month				Second-foot-days		Maximum	Minimum	Mean	Per square mile		Run-off in inches	
October.....				267.2		33	2.5	8.62	0.048		0.06	
November.....				3,813		342	37	127	.713		.80	
December.....				6,517		1,180	66	210	1.18		1.36	
Calendar year 1934.....				48,342.2		2,600	.3	132	.742		10.11	
January.....				11,170		2,110	52	360	2.02		2.32	
February.....				11,993		3,240	100	428	2.40		2.50	
March.....				13,831		1,480	105	446	2.51		2.89	
April.....				2,097		154	29	69.9	.393		.44	
May.....				5,616		1,130	14	181	1.02		1.18	
June.....				753.0		133	5.0	25.1	.141		.16	
July.....				506.3		78	2.5	16.3	.092		.11	
August.....				468.0		47	3.4	15.1	.085		.10	
September.....				599.3		110	4.2	20.0	.112		.12	
Water year 1934-35.....				57,630.8		3,240	2.5	158	.888		12.04	

Note.- Run-off in inches shown in Water-Supply Paper 744 for June, 1933, and year ending Sept. 30, 1933, is in error; correct value for June is 0.11 inch and for year 12.01 inches.

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 1935.

Average discharge.- 22 years (1912-19, 1920-35), 26.8 second-feet.

Extremes.- Maximum discharge during year, 516 second-feet Feb. 15 (gage height, 5.6 feet, from graph based on gage readings); minimum, 0.5 second-foot Oct. 14 (gage height, 0.285 foot).
1912-35: Maximum discharge, about 2,400 second-feet Apr. 22, 1916 (gage height, 14.6 feet); minimum, about 0.1 second-foot Sept. 5-7, 1934.

Remarks.- Records good except those for periods of ice effect, Dec. 8-15, 18, 30, Jan. 4, 14-19, 25-30, Feb. 9-14, and 22, and those for extremely low stages, which are fair.

Rating table, water year 1934-35 except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

0.2	0.23	.7	6.63	1.4	33	2.4	99	3.4	199
.3	.777	.8	9.13	1.6	44	2.6	116	3.6	223
.4	1.73	.9	12	1.8	56	2.8	135	3.8	248
.5	2.95	1.0	15	2.0	69	3.0	155	4.0	274
.6	4.61	1.2	23	2.2	83	3.2	177	4.5	345

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	0.9	2.4	50	12	11	41	44	18	5.8	3.4	2.6	1.1
2	.8	2.0	34	11	12	76	44	13	5.2	3.0	2.7	.8
3	.8	1.5	20	11	13	137	34	20	5.5	2.8	2.7	.8
4	.8	1.5	19	8.5	12	84	29	76	24	2.7	2.7	1.1
5	.8	1.5	15	8.1	11	207	26	44	13	2.4	2.2	1.1
6	.8	1.5	13	16	10	79	25	45	10	2.6	2.2	.9
7	.8	1.5	11	130	9.1	24	22	194	8.1	47	2.6	.8
8	.6	2.0	9.5	150	9.1	44	20	95	8.6	130	2.4	.9
9	.6	2.2	8.5	321	9.5	36	29	48	6.9	28	2.4	1.2
10	.6	2.4	7.5	181	9.5	46	44	70	6.0	14	2.2	1.0
11	.6	2.4	7.0	76	8.0	97	31	38	5.0	9.1	2.2	.8
12	.6	2.4	6.5	45	7.5	92	25	29	4.6	7.6	2.0	.8
13	.6	2.7	6.5	32	7.0	48	28	24	4.2	36	1.7	.8
14	.6	3.6	6.5	24	11	41	26	22	3.9	14	1.7	.8
15	.6	3.4	7.0	20	223	63	22	19	3.6	8.6	1.6	2.8
16	.6	4.1	9.1	18	170	124	20	16	3.2	6.4	1.5	1.3
17	.6	8.3	11	17	70	106	20	14	3.9	5.4	1.5	1.1
18	.6	8.8	7.0	16	49	54	21	13	8.3	4.6	1.4	1.1
19	.5	9.1	8.1	15	36	44	21	11	6.2	3.9	1.3	.9
20	.6	9.1	17	19	30	41	17	10	4.8	3.6	1.1	1.1
21	.8	7.3	16	133	25	90	15	10	5.4	3.2	1.2	1.1
22	1.6	6.0	14	97	22	56	14	8.8	20	2.8	1.3	.9
23	1.1	18	12	45	21	41	13	8.6	16	2.8	1.1	.9
24	.9	20	12	25	20	36	12	8.1	15	6.2	1.1	.8
25	.8	12	11	20	26	30	11	7.6	15	4.2	1.0	.8
26	.9	9.4	12	18	144	24	10	6.9	8.6	3.4	1.0	.8
27	.9	8.1	11	16	77	21	9.7	6.4	6.6	3.0	.9	1.3
28	.9	7.6	10	15	53	28	11	6.6	5.6	3.4	1.1	1.5
29	1.1	8.9	18	15	-	24	10	8.6	4.6	6.2	.9	1.1
30	1.3	16	15	14	-	54	20	7.3	4.1	3.6	.9	1.1
31	1.5	-	13	13	-	48	-	6.2	-	3.1	1.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	25.2	1.6	0.5	0.81	0.037	0.04
November.....	185.7	20	1.5	6.19	.281	.31
December.....	417.2	50	6.5	13.5	.614	.71
Calendar year 1934.....	6,156.4	461	.1	16.9	.768	10.40
January.....	1,539.6	321	8.1	49.7	2.26	2.61
February.....	1,105.7	223	7.0	39.5	1.80	1.97
March.....	2,116	209	21	66.3	3.10	3.57
April.....	673.7	44	9.7	22.5	1.02	1.14
May.....	904.1	194	6.2	29.2	1.33	1.53
June.....	241.7	24	3.2	8.06	.366	.41
July.....	377.0	130	2.4	12.2	.555	.64
August.....	52.5	2.8	.9	1.59	.077	.09
September.....	31.0	2.3	.8	1.03	.047	.05
Water year 1934-35.....	7,669.4	321	.5	21.0	.955	12.97

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 1935.

Average discharge.- 19 years, 371 second-feet.

Extremes.- Maximum discharge during year, 8,560 second-feet July 8 (gage height, 8.1 feet, from graph based on gage readings); minimum, 28 second-feet Oct. 20 (gage height, 0.16 foot).

1916-35: Maximum discharge, about 10,600 second-feet May 22, 1919 (gage height, 9.1 feet); minimum, estimated, 13 second-feet Sept. 12-13, 22-26, 1932.

Remarks.- Records good except those for periods of ice effect, Dec. 8-14, Dec. 30 to Jan. 1, Jan. 4, 5, 16-19, 25-31, Feb. 6-8 and 22, which are fair.

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	97	110	734	90	134	302	990	362	107	67	157	114
2	72	116	678	86	144	466	990	283	96	59	120	97
3	66	92	464	97	166	905	815	321	88	56	164	92
4	60	128	423	95	142	550	690	550	129	52	137	146
5	56	199	357	90	127	585	577	524	107	69	114	396
6	53	153	297	84	120	1,390	577	906	92	53	104	207
7	59	143	226	192	120	1,220	524	2,820	83	518	143	155
8	48	194	180	770	110	631	428	1,910	88	5,870	397	139
9	42	194	160	2,450	111	428	499	1,230	77	2,340	195	385
10	39	158	150	2,580	113	531	837	2,470	70	1,710	380	401
11	36	150	140	1,350	105	1,580	1,460	1,390	64	930	2,790	231
12	33	142	130	804	94	2,390	2,300	990	59	833	1,260	201
13	31	138	130	804	90	928	1,750	850	56	1,950	662	172
14	31	130	120	524	88	632	1,590	750	52	729	498	156
15	30	128	123	384	284	499	1,300	577	48	550	404	188
16	31	128	150	340	640	815	1,140	451	43	763	360	146
17	31	164	145	320	342	1,060	990	384	41	426	550	126
18	30	226	107	280	201	750	920	321	70	320	294	118
19	30	209	92	260	186	698	815	283	77	248	231	130
20	28	242	148	248	154	647	690	248	69	216	201	277
21	30	194	130	679	127	1,740	577	232	62	188	174	220
22	40	153	118	1,290	120	1,190	524	216	150	201	432	174
23	41	339	110	480	111	850	451	201	232	174	216	141
24	38	702	101	266	109	885	405	183	141	216	169	126
25	36	420	116	220	195	750	362	167	122	206	143	114
26	42	357	116	200	1,740	604	321	154	109	257	124	106
27	77	316	86	190	654	499	302	139	100	162	137	116
28	60	278	84	180	472	670	283	134	94	124	332	231
29	47	278	125	160	-	690	266	127	88	216	172	216
30	72	278	110	180	-	1,170	405	120	76	155	146	152
31	69	-	100	140	-	1,060	-	116	-	201	128	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,452	97	28	46.8	0.161	0.17
November.....	6,464	702	92	215	.696	.78
December.....	6,150	734	84	198	.641	.74
Calendar year 1934.....	82,372	4,120	18	228	.731	9.92
January.....	15,603	2,580	84	503	1.63	1.88
February.....	6,959	1,740	88	249	.806	.84
March.....	27,112	2,390	302	875	2.83	3.26
April.....	23,578	2,300	266	786	2.54	2.83
May.....	19,209	2,620	116	620	2.01	2.32
June.....	2,690	232	41	89.7	.290	.32
July.....	19,858	5,870	52	641	2.07	2.39
August.....	11,529	2,790	104	365	1.18	1.36
September.....	5,472	401	92	182	.589	.66
Water year 1934-35.....	145,876	5,870	28	400	1.29	17.55

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 1935.

Average discharge.— 27 years, 1,200 second-feet.

Extremes.— Maximum discharge during year, 17,400 second-feet July 9; maximum gage height, 12.38 feet Feb. 27 (ice jam); minimum discharge, 69 second-feet Oct. 21 (gage height, 2.11 feet).
1908-35: Maximum discharge, about 44,400 second-feet May 17, 1916 (gage height, 12.8 feet); minimum, about 18 second-feet Oct. 5, 17, 1913 (gage height, 1.70 feet).

Remarks.— Records good except those for periods of ice effect, Dec. 9, 30, Jan. 4-7, 16-18, Jan. 26 to Feb. 15, Feb. 28 to Mar. 4, and those estimated, which are fair. Some diurnal fluctuation during low stages caused by power operations. Flow slightly regulated by storage in Canada Reservoir.

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	391	358	1,020	536	300	1,400	2,580	1,180	370	272	469	220
2	*460	290	2,140	354	700	2,200	2,580	848	389	218	431	199
3	*440	472	1,290	341	850	4,800	2,120	876	350	194	310	186
4	*320	542	1,230	320	800	3,400	1,650	3,170	351	177	295	195
5	*150	589	1,130	320	750	2,540	1,370	2,360	412	169	310	182
6	*190	672	800	340	700	7,090	1,270	2,220	401	158	256	462
7	*400	620	635	600	550	5,010	1,200	4,210	318	173	247	320
8	433	540	764	4,940	340	1,950	1,040	6,480	318	4,680	271	260
9	427	556	750	10,100	550	1,480	1,160	3,560	293	11,600	418	280
10	415	735	691	8,920	700	1,460	1,870	7,540	274	8,180	354	554
11	290	740	637	4,440	600	4,850	4,170	4,010	264	2,820	835	548
12	115	702	617	2,340	550	9,690	6,700	2,330	241	1,590	2,130	400
13	98	688	438	1,500	550	3,460	5,330	1,770	210	2,400	1,010	326
14	83	665	301	1,120	800	2,070	3,940	1,830	198	1,680	766	390
15	86	453	480	882	1,600	1,740	2,990	1,350	189	1,030	650	488
16	86	341	702	800	3,260	4,340	2,670	1,100	173	879	537	412
17	83	613	710	750	2,110	5,010	2,440	950	162	840	544	359
18	80	1,020	672	700	1,110	2,820	2,440	862	208	758	579	332
19	78	1,050	642	627	818	2,020	2,090	815	303	750	394	326
20	76	984	426	605	725	1,900	1,620	778	264	652	337	342
21	86	906	380	1,220	570	4,180	1,350	713	259	502	305	456
22	122	630	634	5,550	536	4,220	1,150	671	426	436	300	430
23	159	742	507	2,120	670	2,550	1,010	552	890	443	442	394
24	140	2,360	404	670	762	2,510	926	480	711	520	326	342
25	115	1,530	386	620	868	1,960	830	519	686	726	265	295
26	133	1,020	363	500	5,000	1,590	778	443	608	923	238	260
27	225	1,020	314	420	3,000	1,260	755	468	439	790	224	280
28	409	922	332	380	1,700	1,140	741	493	344	635	220	305
29	409	668	711	340	-	1,460	734	474	350	612	406	385
30	421	570	600	320	-	2,420	802	392	344	718	290	400
31	427	-	560	300	-	3,380	-	339	-	537	234	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	7,346	460	75	237	0.233	0.27
November.....	22,998	2,360	290	767	.754	.84
December.....	21,266	2,140	301	686	.675	.78
Calendar year 1934.....	268,688	11,100	28	736	.724	9.61
January.....	53,075	10,100	300	1,712	1.68	1.94
February.....	31,169	5,000	300	1,113	1.09	1.14
March.....	95,920	9,690	1,140	3,094	3.04	3.50
April.....	60,306	6,700	734	2,010	1.96	2.21
May.....	54,283	7,840	339	1,751	1.72	1.96
June.....	10,744	890	152	358	.352	.39
July.....	46,062	11,600	158	1,466	1.46	1.68
August.....	14,391	2,130	220	464	.456	.53
September.....	10,318	554	182	344	.338	.38
Water year 1934-35.....	427,868	11,600	75	1,172	1.15	15.64

*Estimated.

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

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

Drainage area.- 1,419 square miles.

Records available.- May 1903 to April 1906, August 1908 to December 1913, July 1915 to September 1935.

Average discharge.- 25 years (1908-13, 1915-35), 1,583 second-feet.

Extremes.- Maximum discharge during year, 14,500 second-feet July 9 (gage height, 19.90 feet); minimum, 39 second-feet Oct. 17 (gage height, 0.23 foot).
1903-6, 1908-13, 1915-35: Maximum discharge, 55,100 second-feet May 17, 1916 (gage height, 25.44 feet); minimum, about 18 second-feet Aug. 29, 1909.

Remarks.- Records good except those for periods of ice effect, Dec. 9 to Jan. 6, Jan. 15-20, Jan. 23 to Mar. 5, and those estimated, which are fair. Diurnal fluctuation during low stages caused by power operations. Flow slightly regulated by storage in Canadea Reservoir.

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	205	470	814	550	*360	*1,700	3,200	1,400	466	370	585	300
2	493	339	2,150	480	*900	*2,600	3,080	1,250	457	335	600	315
3	484	410	1,600	400	950	6,000	2,720	1,050	457	288	545	275
4	448	560	1,370	380	950	4,200	2,200	3,910	498	224	445	265
5	243	555	1,280	360	550	3,200	1,880	3,640	545	321	465	320
6	180	695	1,020	340	700	8,180	1,700	2,950	535	236	435	335
7	311	870	748	1,090	*600	7,460	1,640	5,110	506	*262	415	466
8	353	645	710	5,080	*460	3,460	1,460	8,200	493	*1,920	410	380
9	418	570	800	9,430	440	2,330	1,580	4,680	393	12,200	460	385
10	422	720	750	9,690	750	2,200	2,330	7,300	396	10,800	545	470
11	410	802	700	5,860	800	4,150	4,480	5,710	406	5,650	500	710
12	206	748	650	2,560	700	10,800	6,530	3,190	398	3,350	2,320	550
13	122	720	650	1,920	600	5,680	6,190	2,480	326	2,300	1,360	461
14	135	720	350	1,400	500	2,800	4,830	2,320	338	3,100	950	447
15	149	645	400	1,200	2,600	2,390	3,610	2,000	290	2,000	810	*585
16	93	434	650	1,100	3,600	4,750	3,370	1,640	233	1,540	680	*500
17	118	479	750	950	2,400	5,850	2,910	1,370	262	1,380	610	*450
18	105	988	750	900	1,600	4,130	2,840	1,190	295	1,040	710	*400
19	112	1,130	700	800	1,000	2,780	2,780	1,130	343	840	540	*360
20	106	1,060	700	750	900	2,390	2,260	1,050	355	700	466	*400
21	122	1,020	460	1,430	600	4,320	1,880	995	351	595	419	*500
22	200	808	500	5,870	800	5,540	1,640	912	428	590	440	540
23	172	640	700	2,800	800	3,370	1,430	830	890	570	410	486
24	226	2,140	480	1,200	950	3,240	1,310	670	950	820	428	447
25	175	1,940	420	850	1,200	2,720	1,160	645	910	1,140	415	425
26	158	1,230	400	*700	5,000	2,260	1,080	645	630	1,740	340	350
27	249	1,130	380	*600	*5,000	1,880	968	530	605	1,360	305	340
28	363	1,050	360	*600	*2,000	1,640	968	540	493	910	320	447
29	402	868	750	*400	-	1,760	912	595	415	850	360	365
30	444	645	700	*400	-	2,770	968	560	430	880	*360	500
31	462	-	600	*360	-	4,140	-	484	-	750	*320	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	8,066	493	93	261	0.184	0.21
November.....	24,841	2,140	339	828	.584	.65
December.....	23,522	2,150	360	752	.530	.61
Calendar year 1934.....	330,867	13,600	36	906	.638	6.66
January.....	60,590	9,690	340	1,955	1.38	1.59
February.....	36,110	6,000	360	1,597	.984	1.02
March.....	120,460	10,600	1,640	3,886	2.74	3.16
April.....	74,106	6,530	912	2,470	1.74	1.94
May.....	69,156	8,200	484	2,231	1.57	1.61
June.....	14,304	950	233	477	.336	.37
July.....	60,041	12,200	224	1,937	1.37	1.58
August.....	17,976	2,320	305	580	.409	.47
September.....	12,792	710	265	426	.300	.33
Water year 1934-35.....	524,786	12,200	93	1,438	1.01	13.74

*Estimated.

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 1935.

Average discharge.— 15 years (1920-35), 2,656 second-feet.

Extremes.— Maximum discharge during year, 22,700 second-feet Jan. 23 (gage height, 11.04 feet); minimum, 26 second-feet Oct. 1-3; minimum daily discharge, 610 second-feet Oct. 20.

1919-35: Maximum discharge, about 29,600 second-feet Dec. 2, 1927 (gage height, 13.5 feet); minimum, approaching zero, occurs frequently during low-water periods when power plant shuts 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 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Mar. 12

-2.0	32	2.0	1,390	7.0	10,900
.4	170	3.0	2,640	9.0	16,200
.8	540	5.0	6,470	11.0	22,500
1.2	750				

Table for Mar. 13 to Sept. 30

1.0	670	3.0	2,640
1.5	980	7.0	10,900
2.0	1,390		

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	730	1,120	1,500	1,540	1,460	3,750	5,100	2,400	1,300	1,120	1,500	950
2	740	1,000	1,820	1,300	1,400	2,800	4,000	2,480	1,200	1,080	1,620	920
3	970	880	2,950	1,220	1,140	5,100	3,800	2,140	1,400	1,040	1,660	870
4	1,000	870	2,480	1,040	1,180	5,400	3,600	3,060	1,580	960	1,440	930
5	940	1,060	2,200	970	1,280	5,900	2,320	6,700	1,690	1,020	1,420	860
6	860	1,120	2,060	920	1,200	7,300	2,260	5,100	1,480	980	1,140	960
7	780	1,380	1,720	1,280	1,080	9,500	2,200	5,700	1,520	1,220	1,120	910
8	880	1,280	1,440	2,040	990	7,600	2,020	11,000	1,420	1,180	1,100	1,000
9	920	1,160	*1,140	6,600	880	4,050	2,550	10,600	1,280	7,200	1,120	1,040
10	980	1,120	*1,160	15,800	680	2,850	3,200	8,300	1,260	12,200	1,440	1,060
11	1,060	1,280	1,240	12,600	780	3,650	4,500	11,200	1,260	10,200	1,480	1,100
12	920	1,320	1,280	7,300	890	9,500	6,900	7,200	1,200	5,800	1,860	1,320
13	780	1,280	*1,660	3,900	970	12,000	8,900	4,600	1,200	4,080	3,000	1,100
14	740	1,300	1,860	2,700	1,220	6,300	8,100	3,600	1,080	4,600	2,020	1,140
15	820	1,380	1,440	1,820	2,960	3,900	6,400	3,500	1,160	3,500	1,640	1,080
16	820	1,240	1,060	1,800	6,600	5,400	5,100	3,100	950	2,550	1,540	1,200
17	680	1,100	1,200	1,640	6,900	9,100	4,600	2,800	1,100	2,220	1,400	1,180
18	730	1,020	1,580	1,580	5,100	8,300	4,200	2,600	1,000	2,100	1,280	1,240
19	640	1,680	1,380	1,420	3,850	4,600	4,200	2,400	950	1,800	1,400	1,160
20	610	1,640	1,400	1,560	2,800	4,050	3,950	2,240	1,140	1,520	1,200	1,140
21	660	1,560	1,420	1,760	2,120	3,900	3,450	2,060	1,140	1,440	1,220	1,240
22	760	1,540	1,320	4,100	1,720	7,700	3,100	1,940	1,280	1,420	1,200	1,140
23	700	1,480	1,000	6,100	1,540	6,600	2,760	1,680	1,260	1,420	1,160	1,180
24	740	1,480	1,460	4,450	1,120	4,700	2,480	1,880	1,780	1,400	1,060	1,100
25	750	2,700	1,220	2,560	1,560	4,150	2,300	1,540	1,880	1,600	980	1,140
26	780	2,300	1,560	2,080	2,060	3,850	2,180	1,460	1,740	2,100	1,160	1,060
27	770	1,800	1,140	1,540	4,550	2,750	2,080	1,460	1,700	2,360	1,060	1,100
28	730	1,740	1,120	1,660	5,500	2,500	2,040	1,280	1,460	1,980	1,000	1,080
29	960	1,780	1,100	1,560	-	2,500	1,980	1,620	1,240	1,660	1,000	1,100
30	1,000	1,500	910	-	-	2,700	2,160	1,420	1,080	1,580	1,080	1,040
31	1,060	-	1,540	1,480	-	5,100	-	1,490	-	1,640	1,060	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	25,280	1,060	610	615	-	-
November.....	42,090	2,700	870	1,405	-	-
December.....	45,500	2,950	910	1,468	-	-
Calendar year 1934.....	611,226	17,200	451	1,675	0.679	9.21
January.....	95,530	15,800	920	3,082	-	-
February.....	63,370	6,800	630	2,283	-	-
March.....	167,700	12,000	2,600	8,410	-	-
April.....	112,420	8,900	1,960	3,747	-	-
May.....	116,590	11,200	1,280	3,625	-	-
June.....	39,740	1,880	950	1,325	-	-
July.....	84,920	12,200	960	2,739	-	-
August.....	42,360	3,000	980	1,366	-	-
September.....	32,440	1,320	870	1,081	-	-
Water year 1934-35.....	869,940	15,800	610	2,383	.966	13.11

*Estimated.

Lost Nation Brook near Centerville, N. Y.

Location.- Water-stage recorder, lat. 42°30', long. 78°15'45", three-quarters of a mile above confluence with Sixtown Creek and 1½ miles northwest of Centerville, Allegany County.

Records available.- October 1934 to August 1935 (discontinued).

Extremes.- Maximum discharge during period, 49 second-feet Jan. 9 (gage height, 3.36 feet); minimum, 0.018 second-foot Aug. 6 (gage height, 1.12 feet).

Remarks.- Records good except those for periods of ice effect, Dec. 8-12, 17-20, 25, Jan. 4, 5, Feb. 21, Mar. 1 and Mar. 7-9, for estimated periods, and for period Oct. 20 to Dec. 31, which are fair.

Rating table, water year 1934-35, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

1.1	0.012	1.45	.365	2.1	4.40	2.8	20.4
1.15	.030	1.5	.475	2.2	5.9	2.9	24
1.2	.058	1.6	.74	2.3	7.5	3.0	29
1.25	.096	1.7	1.08	2.4	9.5	3.1	34
1.3	.145	1.8	1.61	2.5	11.5	3.2	39
1.35	.202	1.9	2.37	2.6	14.4		
1.4	.275	2.0	3.35	2.7	17.4		

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	-	1.61	9.5	1.17	*0.48	1.6	6.2	*1.2	0.160	*0.202	0.065	
2	-	1.00	3.85	1.04	*.42	2.7	6.1	*1.1	.145	*.159	.062	
3	-	.83	2.12	.92	*.40	7.3	3.2	*4.0	.148	*.177	.065	
4	-	1.80	1.82	.8	*.36	3.85	3.05	*8.0	2.08	*.177	.048	
5	-	1.27	1.43	.7	*.32	14.8	2.55	6.1	.71	*.165	.028	
6	-	.83	1.32	1.64	*.30	17.3	2.10	5.9	.66	*.165	.040	
7	-	2.28	1.17	14.6	*.30	6.0	1.62	14.2	.56	2.13	.157	
8	-	3.9	1.0	23.1	*.28	3.8	1.49	6.3	.65	.77	.128	
9	-	2.04	.9	.32	*.26	2.8	1.62	8.9	.45	.50	.100	
10	-	1.43	.8	*16	*.28	3.8	6.4	10.2	.345	.44	.096	
11	-	1.43	.75	*7.5	*.28	19.6	12.3	4.25	.29	.32	.092	
12	-	1.17	.65	*3.8	*.30	8.9	9.9	3.05	.245	.42	.080	
13	-	1.00	.58	*2.4	*.3	3.9	7.1	2.37	.209	.50	.058	
14	-	.89	.50	*1.6	.54	3.85	4.8	1.96	.189	.275	.062	
15	-	.68	.50	*1.2	7.2	8.5	3.85	1.61	.189	.223	.068	
16	-	1.49	.52	*.95	8.4	19.5	3.15	1.27	.165	.196	.055	
17	-	8.5	.48	*.85	3.65	11.8	2.85	1.08	.245	.165	-	
18	-	6.0	.46	*.75	2.6	5.0	4.0	.98	.216	.145	-	
19	-	4.4	.42	*.7	2.05	3.95	3.3	.80	.223	.153	-	
20	0.065	3.05	.44	*.6	1.63	4.45	2.42	.70	.218	.114	-	
21	.080	2.12	.50	6.5	1.4	12.0	1.90	.62	.30	.177	-	
22	1.83	1.55	.62	4.25	1.17	5.2	1.61	.59	.27	.147	-	
23	.77	9.6	.405	3.45	1.14	5.0	1.37	.56	.71	.148	-	
24	.45	5.0	.425	*1.3	.98	3.9	1.22	.50	.52	.189	-	
25	.305	2.75	.38	*1.0	3.4	2.85	1.04	*.425	.47	.222	-	
26	.91	1.89	.425	*.9	12.3	2.05	.92	*.325	.385	.133	-	
27	.54	1.61	.62	*.8	4.20	1.68	.86	.29	.345	.106	-	
28	.50	1.37	.65	*.7	2.46	2.10	.64	.29	.275	.235	-	
29	.46	1.22	2.6	*.65	-	2.35	*1.1	.305	*.245	.082	-	
30	.52	1.12	2.65	*.6	-	4.15	*1.4	.230	*.230	.065	-	
31	.92	-	1.61	*.5	-	4.4	-	.202	-	.068	-	

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 20-31.....	7.350	1.63	0.065	0.612		
November.....	73.83	9.6	.68	2.46		
December.....	39.995	9.6	.38	1.29		
Calendar year						
January.....	153.27	32	.5	4.30		
February.....	57.33	12.3	.28	2.05		
March.....	199.10	19.6	1.6	6.42		
April.....	101.18	12.3	.68	3.37		
May.....	88.247	14.2	.202	2.85		
June.....	12.345	2.08	.145	.412		
July.....	8.995	2.13	.065	.290		
August 1-15.....	1.194	.157	.028	.075		
September.....	-	-	-	-		
The period 1934-35 (301 days)		32	.028	2.40		

*Estimated.

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 1935.

Average discharge.- 15 years (1920-35), 141 second-feet.

Extremes.- Maximum discharge during year, about 9,920 second-feet July 8 (gage height, 13.71 feet); minimum, 14 second-feet Oct. 9; minimum gage height, 5.50 feet Sept. 25. 1910-12, 1915-17, 1919-35: Maximum discharge, that of July 8, 1935; minimum, 10 second-feet Aug. 9, 1934; minimum gage height, that of Sept. 25, 1935.

Remarks.- Records good except those for periods of ice effect, Dec. 6-13, 18, 21, 22, Dec. 27 to Jan. 8, Jan. 14-20, Jan. 25 to Feb. 12, Feb. 18-25, and those for June, July, and August, which are fair. Slight diurnal fluctuations at low stages.

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	18	32	108	46	48	136	282	193	53	38	110	37
2	16	32	126	44	55	155	282	157	50	32	102	37
3	16	29	81	40	46	243	232	245	46	29	96	35
4	16	32	64	36	42	177	196	688	84	47	78	44
5	16	33	57	34	40	286	180	402	75	49	65	43
6	15	29	48	40	36	510	174	358	61	37	74	36
7	14	28	40	184	34	298	150	733	55	76	86	34
8	14	46	36	390	50	183	134	547	59	4,770	76	36
9	14	53	34	855	40	173	174	373	53	2,120	72	64
10	14	40	34	598	36	162	384	700	48	1,600	69	44
11	15	36	32	298	36	741	579	362	43	760	70	38
12	14	35	32	171	34	818	570	269	39	487	63	35
13	14	35	32	125	36	316	485	228	38	414	58	34
14	15	38	31	100	61	217	408	202	35	358	54	32
15	16	37	31	90	465	304	319	180	32	278	53	44
16	17	39	32	85	393	559	263	153	31	212	51	36
17	16	50	35	80	204	492	221	137	34	166	56	35
18	16	75	36	75	160	288	303	120	*50	128	53	35
19	17	59	37	75	130	234	354	109	38	104	50	37
20	16	57	47	75	110	225	264	101	35	90	48	43
21	18	47	46	364	95	621	209	93	36	78	50	45
22	30	38	44	393	80	386	184	86	76	72	63	36
23	25	62	43	195	75	318	166	81	66	67	50	34
24	23	130	39	120	70	296	153	79	108	63	46	32
25	20	88	38	95	100	244	134	77	101	996	42	30
26	32	62	43	75	573	198	123	72	70	457	39	30
27	26	46	40	66	217	174	114	68	52	192	48	37
28	30	39	48	55	144	166	114	64	46	190	36	53
29	26	38	46	50	-	174	118	64	43	240	*32	43
30	28	38	44	48	-	368	220	61	39	148	*37	39
31	28	-	46	46	-	322	-	57	-	107	*36	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	594	32	14	19.2	0.125	0.14
November.....	1,403	130	28	46.8	.306	.34
December.....	1,450	126	31	46.8	.306	.35
Calendar year 1934.....	29,261	2,000	12	80.2	.524	7.10
January.....	4,947	855	34	160	1.05	1.21
February.....	3,410	573	34	122	.797	.83
March.....	9,784	818	136	316	2.07	2.39
April.....	7,491	579	114	250	1.63	1.82
May.....	7,059	733	67	228	1.49	1.72
June.....	1,616	108	31	53.9	.362	.39
July.....	14,403	4,770	29	465	3.04	3.50
August.....	1,863	110	32	60.1	.393	.46
September.....	1,158	64	30	38.6	.252	.28
Water year 1934-35.....	55,178	4,770	14	151	.987	13.48

*Estimated.

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 1935.

Average discharge.- 32 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 1934 to September 1935

Month	Mean elevation of lake above low-water mark (feet)	Discharge in second-feet		Run-off in inches
		Mean	Per square mile	
October	-1.431	1.316	0.104	0.120
November	-1.521	.026	.002	.002
December	-1.089	.031	.002	.002
Calendar year 1934	-	4.553	.361	4.903
January	+.207	.977	.078	.090
February	+.617	17.905	1.421	1.430
March	+.890	22.184	1.761	2.030
April	+.857	21.581	1.713	1.911
May	+.782	20.467	1.624	1.872
June	-.250	10.555	.838	.935
July	+.191	15.622	1.240	1.430
August	-.596	5.737	.455	.525
September	-.712	4.392	.349	.389
Water year 1934-35	-.172	10.012	.795	10.786

Note.- Terminal water surface elevation on Sept. 30, 1935, was 0.55 foot higher than on Sept. 30, 1934, corresponding to an increase in storage of 15,143,853 cubic feet, or a discharge of 0.480 second-foot for the year. This correction applied to the above, gives a mean for the water year of 10.492 second-feet, 0.833 second-foot per square mile, and 11.307 inches run-off from drainage area.

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

Location.- Water-stage recorders, lat. 43°27', long. 76°30'25", at Lock 7, in Oswego, Oswego County, three-quarters of a mile above mouth.

Drainage area.- 5,121 square miles.

Records available.- November 1933 to September 1935.

Extremes.- Maximum discharge during year, about 18,900 second-feet July 14 (gage height, 8.32 feet); minimum, about 235 second-feet Nov. 6 (gage height, 1.01 feet); minimum daily discharge, 820 second-feet Oct. 14.

1933-35: Maximum discharge, that of July 14, 1935; minimum, about 176 second-feet Aug. 24, 1934 (gage height, 0.97 foot); minimum daily discharge, 465 second-feet Aug. 12, 1934.

Remarks.- Records good. This record represents the total discharge at Oswego. 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 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,480	1,540	4,250	2,800	7,000	7,300	10,800	9,900	4,700	3,700	8,700	2,550
2	1,400	1,250	3,400	4,200	6,100	6,600	10,200	10,200	3,000	3,750	7,900	2,550
3	1,390	1,840	6,200	3,550	4,950	6,500	9,800	10,200	5,800	3,500	7,500	3,600
4	1,620	1,440	5,100	3,050	7,500	9,000	9,300	11,000	4,900	1,920	6,500	3,750
5	1,580	1,800	4,900	2,900	6,800	9,100	8,800	10,800	4,850	3,100	7,800	3,450
6	1,320	1,840	4,800	3,000	6,600	9,300	8,800	11,800	4,350	3,300	6,700	3,200
7	1,140	2,000	4,900	3,400	6,100	9,300	6,600	12,400	3,900	4,000	6,800	2,900
8	1,160	1,800	4,400	4,450	5,800	9,300	8,800	13,800	4,000	9,300	6,700	2,500
9	1,400	1,900	3,950	7,500	9,000	8,200	7,700	14,000	3,650	10,200	6,300	3,500
10	1,040	1,800	6,800	9,400	4,900	6,200	7,700	14,200	4,050	12,400	6,000	3,550
11	1,320	1,520	5,000	11,200	6,900	8,500	7,800	13,000	4,200	14,600	5,500	3,350
12	1,100	2,450	4,950	12,400	6,400	8,400	8,300	12,400	4,050	14,600	6,100	3,000
13	900	2,440	4,250	9,700	6,100	8,400	8,300	13,000	3,750	16,000	5,100	2,800
14	820	2,550	3,750	9,400	6,000	8,800	7,600	12,000	3,580	15,000	4,480	2,600
15	1,200	1,840	3,400	8,200	6,600	8,300	10,200	11,400	3,400	14,600	4,550	2,500
16	1,640	2,100	2,800	9,400	8,400	7,900	10,000	11,200	2,550	15,000	4,350	3,700
17	1,740	2,380	5,500	8,200	7,600	7,400	11,600	11,200	3,850	14,400	4,000	3,400
18	1,240	1,740	4,500	8,100	8,800	9,500	11,000	10,600	4,200	13,800	3,700	3,400
19	1,200	3,350	4,400	7,200	9,400	9,200	11,800	9,200	4,600	13,800	4,150	3,350
20	1,140	2,950	3,750	6,400	8,900	8,600	12,000	10,400	4,400	13,000	4,250	2,800
21	1,480	3,950	3,900	8,400	8,400	8,700	12,200	9,400	3,750	13,000	4,000	2,600
22	1,390	3,400	5,100	8,400	8,600	8,700	12,000	9,400	3,550	11,000	3,700	2,000
23	1,840	3,250	2,480	8,500	8,100	8,700	12,000	6,200	3,450	10,400	3,250	2,750
24	1,460	3,400	4,100	8,300	5,900	7,600	11,600	6,000	4,350	9,800	2,800	2,950
25	1,780	3,300	2,650	8,800	7,700	10,000	10,600	5,500	4,450	8,800	3,050	2,900
26	1,580	5,000	5,600	7,700	7,100	9,600	10,200	4,400	4,400	9,400	3,750	2,440
27	1,800	4,700	3,450	8,600	7,600	8,800	10,400	4,700	3,950	9,800	3,800	1,540
28	1,320	4,100	4,050	8,400	7,000	8,800	9,800	4,600	3,700	10,400	3,550	1,560
29	1,400	3,650	3,850	8,200	-	8,600	10,400	4,750	3,450	9,900	3,150	1,780
30	1,460	4,100	3,250	7,800	-	9,200	9,900	3,450	2,600	9,800	2,900	1,700
31	1,500	-	3,350	7,600	-	8,500	-	5,600	-	9,800	2,900	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	42,760	1,840	880	1,379	0.269	0.31
November.....	79,300	5,000	1,260	2,643	.616	.58
December.....	129,280	6,200	2,480	4,170	.814	.94
Calendar year 1934.....	1,376,755	13,800	465	3,772	.737	10.08
January.....	222,950	12,400	2,800	7,192	1.40	1.61
February.....	196,250	9,400	4,900	6,973	1.36	1.48
March.....	263,200	10,000	6,200	8,490	1.66	1.91
April.....	296,000	12,200	6,600	9,867	1.93	2.15
May.....	294,500	14,200	3,450	9,500	1.86	2.14
June.....	119,400	5,800	2,550	3,980	.777	.87
July.....	310,870	15,000	1,920	10,030	1.96	2.26
August.....	153,900	8,700	2,800	4,965	.970	1.12
September.....	84,470	3,750	1,340	2,916	.560	.61
Water year 1934-35.....	2,191,880	15,000	820	6,005	1.17	15.92

*Estimated.

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.

Drainage area.- 124 square miles.

Records available.- February 1925 to September 1935. July 1908 to June 1909, 1½ miles below present site.

Average discharge.- 10 years (1925-35), 183 second-feet.

Extremes.- Maximum discharge during year, 15,500 second-feet July 8 (gage height, 9.52 feet); minimum, 17 second-feet Oct. 21 (gage height, 0.44 foot).

1925-35: Maximum discharge, that of July 8, 1935; minimum, about 3 second-feet Aug. 25, 1927 (gage height, 0.18 foot).

Remarks.- Records good except those for periods of ice effect, Dec. 8-21, Jan. 14-20, Jan. 23 to Feb. 18, Feb. 22, 26, Mar. 3 and 4, those estimated, and those for discharges above 3,000 second-feet, which are fair. Water supply for Cornell University is diverted from Fall Creek about a mile above this gage.

Rating tables, water year 1934-35, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to July 7

Table for July 8 to Sept. 30

0.4	14	1.5	191	3.0	1,250	0.4	17.8	1.0	72	2.5	749	4.0	2,780
.6	29	2.0	423	3.5	1,930	.6	33	1.5	203	3.0	1,250	5.0	4,900
.8	48	2.5	755	4.0	2,760	.8	51	2.0	437	3.5	1,930	6.0	7,270
1.0	72											7.0	9,700

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	91	64	461	*70	*65	125	396	404	69	38	130	37
2	66	77	633	*65	*90	133	429	247	60	32	115	36
3	49	63	302	*60	*90	260	329	239	56	28	99	34
4	44	74	230	*55	*85	300	264	640	72	27	87	38
5	37	125	207	*60	*75	271	252	415	80	25	78	50
6	37	102	191	*60	*65	870	273	466	64	26	74	42
7	41	153	154	*190	*60	702	273	1,370	87	104	76	36
8	35	286	130	*600	65	331	230	981	79	9,280	80	35
9	33	256	100	*2,000	75	224	388	487	80	4,460	72	60
10	30	174	90	2,100	80	247	558	510	69	1,310	68	80
11	30	195	85	735	65	499	883	368	56	624	200	52
12	24	191	80	399	60	991	552	282	49	455	125	44
13	22	156	80	250	60	412	493	256	41	745	90	39
14	23	144	75	200	70	292	532	226	38	349	71	37
15	22	130	75	180	130	241	554	199	34	269	65	71
16	26	142	85	170	400	549	482	177	34	329	80	91
17	28	191	100	190	300	826	346	180	37	223	85	57
18	22	170	85	160	220	487	573	144	89	173	63	55
19	20	147	150	160	174	365	867	130	71	146	52	55
20	22	156	320	170	147	349	863	122	76	143	51	50
21	*22	130	220	374	119	664	504	113	73	133	45	52
22	*24	116	166	814	110	564	385	106	108	128	44	50
23	*34	144	144	380	103	405	339	100	133	153	43	42
24	*45	477	125	220	106	493	287	99	90	304	39	38
25	*56	248	111	170	118	349	289	93	86	278	*37	34
26	*42	170	116	140	260	299	203	83	68	219	*35	28
27	*104	147	65	120	216	236	188	79	56	150	38	32
28	83	142	91	110	142	328	184	78	58	120	44	37
29	72	142	113	100	-	507	170	91	47	117	40	45
30	69	150	*86	*95	-	863	489	88	42	112	38	40
31	62	-	*80	*90	-	544	-	78	-	133	38	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,295	104	20	41.8	0.337	0.39
November.....	4,662	477	63	162	1.31	1.46
December.....	4,989	633	65	160	1.29	1.49
Calendar year 1934.....	50,028	2,200	10	137	1.10	14.99
January.....	10,337	2,100	50	333	2.69	3.10
February.....	3,570	400	60	128	1.03	1.07
March.....	13,665	991	125	441	3.56	4.10
April.....	12,405	887	170	414	3.34	3.73
May.....	8,831	1,370	78	285	2.30	2.65
June.....	1,971	153	34	65.7	0.530	0.59
July.....	20,632	9,280	25	666	5.37	6.19
August.....	2,172	200	35	70.1	.565	.65
September.....	1,397	91	28	46.6	.376	.46
Water year 1934-35.....	86,106	9,280	20	236	1.90	25.84

Note.- During the year Cornell University diverted 223,370 gallons for water supply purposes, thus reducing the mean yearly discharge at the gaging station about 0.95 second-foot.

*Estimated.

Owasco Lake outlet near Auburn, N. Y.

Location.- Water-stage recorder, lat. 42°56'45", long. 76°36'5", 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 1935.

Average discharge.- 22 years (1913-35), 284 second-feet.

Extremes.- Maximum discharge during year, 1,080 second-feet Apr. 20 (gage height, 3.50 feet); minimum, 2.5 second-feet Oct. 27 (gage height, 1.38 feet); minimum daily discharge, 5 second-feet Nov. 11.

1912-35: Maximum discharge, 2,750 second-feet during period Mar. 25-30, 1913 (gage height, 6.4 feet, determined from flood marks); minimum, 2.2 second-feet Nov. 29, 1933 (gage height, 1.37 feet); minimum daily discharge, that of Nov. 11, 1934.

Remarks.- Records good. Backwater from weeds Oct. 1 to Nov. 30, June 1 to July 8, and Sept. 1-30. 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 table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

1.3	0.5	1.7	40	2.1	130	2.5	315	2.9	590	3.3	890
1.5	13	1.9	79	2.3	205	2.7	450	3.1	730	3.5	1,080

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	49	28	134	184	367	335	555	541	230	145	610	210
2	68	30	172	186	341	334	562	510	220	140	485	200
3	54	14	174	186	328	328	555	465	225	140	390	195
4	38	10	166	186	310	345	555	530	245	130	367	200
5	47	49	190	140	290	355	541	541	230	135	367	160
6	32	15	166	186	334	348	499	550	235	125	380	120
7	18	26	192	184	341	341	478	670	240	140	325	122
8	34	25	189	196	341	375	450	830	225	145	275	122
9	52	23	166	232	348	429	475	874	220	315	265	135
10	44	12	188	194	328	415	478	882	215	540	275	125
11	46	5	186	250	325	422	513	850	220	604	285	122
12	42	39	186	355	348	425	541	815	215	611	360	130
13	11	15	176	405	334	450	546	750	220	530	295	125
14	19	20	184	390	335	465	610	690	225	660	218	135
15	47	17	178	429	355	492	680	600	230	620	215	145
16	44	20	170	445	341	465	730	560	225	540	246	125
17	60	19	178	460	328	455	840	527	245	490	270	125
18	40	42	182	429	340	499	899	500	195	435	279	125
19	32	80	184	430	330	499	900	465	155	395	275	130
20	11	54	170	408	320	492	990	425	135	385	270	135
21	21	78	176	435	325	492	1,030	370	150	410	270	130
22	60	92	174	500	325	506	1,010	365	140	425	250	114
23	23	94	166	527	328	506	980	360	135	550	240	125
24	23	82	168	520	322	499	920	355	135	760	246	122
25	28	62	172	520	340	506	655	348	135	820	240	122
26	42	86	178	490	345	506	780	341	125	800	244	120
27	11	82	182	485	340	485	730	355	135	760	246	116
28	10	76	182	485	335	480	653	355	135	720	232	104
29	52	74	188	464	-	478	570	360	135	680	214	102
30	23	94	184	470	-	506	541	354	135	640	202	100
31	28	-	186	440	-	548	-	290	-	650	204	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,108	68	10	35.7		
November.....	1,595	94	5	46.2		
December.....	5,497	192	134	177		
Calendar year 1934.....	63,314	648	5	173	.832	11.30
January.....	11,212	527	140	362		
February.....	9,544	367	290	334		
March.....	13,851	548	326	447		
April.....	20,471	1,030	450	682		
May.....	16,451	882	290	551		
June.....	5,710	245	125	190		
July.....	14,520	820	125	468		
August.....	9,033	610	202	291		
September.....	4,041	210	100	135		
Water year 1934-35.....	112,623	1,030	5	309	1.49	20.14

Note.- Elevation of surface of Owasco Lake was 1.2 foot higher at midnight Sept. 30, 1935, than at beginning of year, corresponding to an increase in storage of approximately 344,880,000 cubic feet for the water year. This is equivalent to an average discharge for the year of 10.9 second-feet, 0.0524 second-foot per square mile, or a run-off of 0.71 inch from drainage area.

Elevation of surface of Owasco Lake was 0.6 foot higher at midnight Dec. 31, 1934, than at beginning of year, corresponding to an increase in storage of approximately 172,290,000 cubic feet for the calendar year. This is equivalent to an average discharge for the year of 5.46 second-feet, 0.0262 second-foot per square mile, or a run-off of 0.56 inch from drainage area.

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

Location.- Water-stage recorder, lat. 43°18'5", 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 1935.

Average discharge.- 12 years, 559 second-feet.

Extremes.- Maximum discharge during year, 6,800 second-feet Jan. 10; maximum gage height, 6.41 feet Jan. 10 (backwater from ice); minimum, 13 second-feet Aug. 27 (gage height, 0.09 foot).
1923-35: Maximum discharge, about 16,500 second-feet Oct. 6, 1932 (gage height, 9.18 feet); minimum, 11 second-feet Sept. 2, 1933 (gage height, 0.08 foot).

Remarks.- Records good except those for periods of ice effect, Dec. 8 to Jan. 10, Jan. 24 to Feb. 15, Feb. 28 to Mar. 4, and those estimated, which are fair. Small amount of water diverted above station by city of Oneida for municipal supply. Some diurnal fluctuation at low stages.

Rating tables, water year 1934-35, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Jan. 10 (Shifting-control method used July 10 to Sept. 30)					Table for Jan. 11 to July 9				
0.2	16	1.5	260	4.0	2,190	0.8	110	2.5	896
.4	30	2.0	470	5.0	3,820	1.0	153	3.0	1,290
.6	54	2.5	776	6.0	6,000	1.5	312	4.0	2,280
1.0	123	3.0	1,160	7.0	8,900	2.0	565	5.0	3,750

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	*140	364	2,220	180	*260	240	*690	2,140	*242	137	75	50
2	*130	360	2,070	170	*240	280	*638	1,160	190	118	80	44
3	*110	253	989	200	*260	300	*644	882	169	105	75	40
4	*90	597	680	190	240	320	*856	1,290	214	99	66	76
5	*60	973	574	180	220	363	*652	1,100	285	96	68	215
6	130	548	455	260	200	517	*553	1,330	217	96	72	145
7	348	403	368	440	*200	716	*742	2,140	188	888	68	92
8	257	510	*300	850	*200	664	*638	2,060	340	1,960	*65	*80
9	169	481	*260	3,400	*190	571	*670	1,090	267	1,140	*60	*70
10	127	380	*240	6,000	*180	505	*755	1,090	201	964	*70	*80
11	111	359	*220	3,510	*170	563	*895	811	166	478	116	*94
12	132	351	*200	1,900	*160	993	*1,250	606	145	308	110	82
13	125	299	*190	*1,290	*170	920	*1,230	494	122	*215	64	75
14	110	260	*180	*970	*180	718	*1,000	456	106	*180	*55	79
15	214	247	*180	*790	*260	553	*960	410	317	*150	*46	661
16	376	267	190	*625	644	614	*900	354	361	*135	*48	516
17	249	316	220	*635	632	1,230	*850	308	1,110	180	27	250
18	182	740	220	*450	511	1,290	788	278	2,620	130	32	169
19	150	1,010	200	*400	425	*1,530	908	260	1,410	*150	47	121
20	132	1,150	280	*377	359	*1,100	1,090	246	1,320	*250	18	107
21	127	759	400	*535	316	*950	1,140	229	772	211	42	122
22	512	507	460	*755	278	*900	1,160	210	1,040	*145	75	115
23	617	728	*340	*690	267	*1,000	1,090	201	922	*162	37	90
24	373	1,300	*280	*650	282	*1,600	1,110	193	566	*344	58	79
25	260	762	*240	*450	270	*1,900	1,250	187	395	220	22	66
26	227	477	*220	*400	260	*1,500	1,100	*180	274	136	54	58
27	260	390	*200	*360	240	*1,100	1,040	*175	*220	104	30	64
28	237	380	*190	*340	240	*900	1,420	*190	*196	89	50	104
29	215	486	*160	*320	-	*1,300	1,210	*260	185	107	41	125
30	208	1,070	180	*300	-	*1,200	2,340	*360	161	98	50	192
31	226	-	170	*280	-	*640	-	*320	-	87	47	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	6,624	617	80	214	1.13	1.30
November.....	16,747	1,300	247	556	2.95	3.29
December.....	15,096	2,220	170	422	2.23	2.67
Calendar year 1934.....	139,162	4,110	18	381	2.02	27.36
January.....	27,707	6,000	170	894	4.73	5.45
February.....	7,854	644	160	280	1.48	1.64
March.....	27,077	1,900	240	873	4.62	5.33
April.....	29,617	2,340	553	994	5.21	5.81
May.....	21,010	2,140	175	678	3.59	4.14
June.....	14,622	2,520	106	487	2.58	2.88
July.....	9,482	1,950	87	306	1.62	1.87
August.....	1,769	116	18	57.1	.302	.35
September.....	4,041	651	40	135	.714	.80
Water year 1934-35.....	179,546	6,000	18	492	2.60	35.33

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 1935.

Average discharge.- 24 years, 658 second-feet.

Extremes.- Maximum discharge during the year ending Sept. 30, 1934, 5,200 second-feet Apr. 17; maximum gage height, 11.30 feet Mar. 27 (backwater from ice); minimum discharge, 44 second-feet Sept. 16 (gage height, 3.25 feet).

Maximum discharge during the year ending Sept. 30, 1935, 3,350 second-feet June 18 (gage height, 8.12 feet); minimum, 110 second-feet Aug. 20 (gage height, 3.70 feet).
1911-35: Maximum discharge, about 10,000 second-feet Mar. 28, 1913 (gage height, about 12.5 feet); minimum, about 5 second-feet Aug. 26, 1918 (gage height, 2.40 feet).

Remarks.- Records good, except those for periods of ice effect, Nov. 12-22, Dec. 11-17, 23-31, 1933, Jan. 15 to Apr. 3, Nov. 14-16, Dec. 7-31, 1934, Jan. 1-12, Jan. 20, 21, Jan. 26 to Mar. 29, 1935, and those estimated, which are fair. 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.

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	70	216	1,700	*320	500	140	2,200	675	222	124	260	243
2	71	248	1,080	*850	500	150	2,400	653	214	117	248	316
3	67	242	940	*850	480	400	2,600	642	206	115	234	267
4	69	264	970	*750	460	850	2,730	642	195	164	228	272
5	66	234	910	*650	460	1,200	2,600	604	197	108	211	266
6	64	176	820	*550	440	1,200	2,470	589	200	108	197	162
7	66	146	820	*500	440	1,000	2,350	543	197	127	192	113
8	82	131	692	*550	420	900	2,210	316	192	136	187	98
9	115	122	522	*600	420	700	2,120	296	206	169	220	140
10	115	110	359	*650	400	550	2,180	390	251	190	252	98
11	110	95	*340	*600	400	480	2,550	610	246	144	203	81
12	90	90	*300	*550	420	440	3,490	686	225	120	182	67
13	82	100	*300	*494	420	460	2,700	600	330	192	175	68
14	85	300	*280	471	400	550	2,000	518	282	357	286	73
15	59	380	260	440	400	500	1,720	485	248	309	219	50
16	72	280	300	420	380	500	2,010	440	216	195	200	46
17	78	220	320	380	360	500	4,530	411	197	146	203	119
18	93	180	341	340	360	800	3,420	390	180	117	200	318
19	103	170	427	320	*360	750	2,410	382	313	104	203	248
20	63	160	326	300	380	650	2,630	386	679	100	236	203
21	69	170	242	280	360	550	2,250	427	456	96	214	137
22	67	240	270	280	340	500	1,640	480	319	89	208	110
23	96	464	260	320	340	500	1,510	462	251	88	208	*231
24	218	523	300	400	340	440	1,460	398	214	98	200	*200
25	380	431	360	440	340	380	1,380	356	165	121	206	*160
26	318	406	340	400	320	380	1,180	326	164	115	190	*140
27	226	467	320	380	280	700	1,040	312	158	233	157	*140
28	222	471	300	340	180	1,300	940	296	148	402	153	*150
29	236	467	300	320	-	1,300	882	276	158	395	146	163
30	195	1,100	280	360	-	1,500	714	261	129	285	126	341
31	187	-	*280	340	-	1,400	-	236	-	260	109	-
Month					Second-foot-days	Maximum	Minimum	Mean	Per square mile		Run-off in inches	
October.....					3,853	380	59	124				
November.....					8,625	1,100	90	288				
December.....					15,279	1,690	242	493				
Calendar year 1933.....					172,666	3,750	46	473	1.60		21.76	
January.....					14,445	850	280	466				
February.....					10,900	500	180	389				
March.....					21,650	1,500	130	698				
April.....					64,316	4,530	714	2,144				
May.....					14,068	686	236	454				
June.....					7,159	679	129	239				
July.....					5,324	402	88	172				
August.....					6,253	286	109	202				
September.....					5,020	341	46	167				
Water year 1933-34.....					176,892	4,530	46	485	1.64		22.30	

*Estimated.

Note.- Records of daily and monthly discharge for the year ending Sept. 30, 1934 supersede those previously published in Water-Supply Paper 759.

Black River near Boonville, N. Y.

(Continued)

Rating tables, water years 1933-34, 1934-35, except periods of ice effect,
(gage height, in feet, and discharge, in second-feet)

Table for Oct. 1, 1933 to Apr. 30, 1935

3.2	39	4.2	192	6.5	1,420
3.4	56	4.6	312	7.0	1,900
3.6	81	5.0	471	8.0	3,180
3.8	110	5.5	730	9.0	5,100
4.0	146	6.0	1,040	10.0	7,860

Table for May 1 to Sept. 30, 1935

3.2	48	4.2	219	6.5	1,470
3.4	69	4.6	348	7.0	1,910
3.6	96	5.0	518	8.0	3,180
3.8	127	5.5	790	9.0	5,100
4.0	168	6.0	1,100	10.0	7,860

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	356	431	1,110	240	*320	260	1,070	2,920	445	368	402	270
2	281	436	1,790	220	*300	230	1,080	2,080	402	299	352	251
3	205	471	1,400	240	300	320	1,030	1,550	371	257	319	236
4	206	*580	1,110	240	280	320	998	1,540	367	236	286	296
5	197	*1,060	992	220	260	300	981	1,440	398	222	257	605
6	245	*1,000	880	240	260	360	940	1,240	352	232	260	507
7	508	*780	750	*280	240	500	950	1,620	352	506	251	359
8	475	*620	600	*500	220	550	970	2,430	440	1,460	239	296
9	392	*560	500	*1,400	*220	480	1,020	1,760	427	2,100	225	349
10	341	*471	420	*2,600	*200	420	1,110	1,510	367	1,560	251	467
11	266	480	380	*2,800	*190	420	1,140	1,150	323	*940	374	415
12	155	471	340	*2,600	*180	600	1,380	1,030	299	*886	431	337
13	187	427	320	2,140	*190	700	1,450	925	270	*548	286	305
14	344	400	300	1,610	*200	600	1,340	862	248	497	254	512
15	443	380	280	1,300	*220	550	1,500	820	302	427	203	736
16	605	380	300	1,110	*300	550	1,260	736	398	550	182	933
17	469	431	300	970	*460	650	1,120	664	572	472	148	620
18	362	485	280	860	*460	850	1,040	604	2,860	375	136	480
19	483	641	300	760	*440	900	1,080	523	2,290	371	124	419
20	313	804	340	700	*440	860	1,250	419	1,480	640	120	390
21	*300	724	360	700	400	800	1,420	371	957	726	126	394
22	*410	636	360	850	360	*800	1,670	334	997	1,170	276	382
23	*640	642	340	910	340	*800	1,620	323	1,060	1,050	264	359
24	*580	908	340	880	300	*1,000	1,630	309	753	866	211	523
25	*470	850	320	790	320	1,200	1,690	305	955	633	190	512
26	*360	695	300	700	300	900	1,570	302	1,030	454	190	305
27	*367	575	280	600	280	900	1,590	276	812	375	220	299
28	378	528	280	500	260	950	2,110	273	754	461	467	363
29	348	568	260	440	-	1,500	2,120	354	606	664	350	427
30	348	746	260	400	-	1,420	2,320	462	454	723	270	419
31	386	-	240	*360	-	1,140	-	449	-	499	279	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	11,321	605	155	365		
November.....	18,180	1,060	390	606		
December.....	16,022	1,790	240	517		
Calendar year 1934.....	194,658	4,530	46	533	1.81	24.55
January.....	28,150	2,800	220	908		
February.....	8,240	460	180	294		
March.....	21,870	1,500	260	705		
April.....	40,249	2,320	940	1,342		
May.....	29,581	2,920	273	948		
June.....	21,359	2,850	248	712		
July.....	20,297	2,100	222	654		
August.....	7,513	467	120	255		
September.....	12,166	933	236	406		
Water year 1934-35.....	235,138	2,920	120	644	2.18	29.66

*Estimated.

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 1935.

Average discharge.— 15 years, 3,923 second-feet.

Extremes.— Maximum discharge during year, 17,000 second-feet Jan. 12 (gage height, 7.12 feet); minimum, 40 second-feet Aug. 16 (gage height, 0.01 foot); minimum daily discharge, 720 second-feet Aug. 18.

1920-35: 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 periods of ice effect, Jan. 1-7, 30, 31, Feb. 27 to Mar. 1, and those estimated, 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.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

0.0	37	.4	187	1.0	592	1.6	1,200	3.0	3,490	5.5	10,580
.1	66	.6	300	1.2	775	2.0	1,720	3.5	4,620	6.5	14,340
.2	101	.8	435	1.4	980	2.5	2,520	4.5	7,370	7.5	18,820

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	1,320	1,540	3,650	1,300	2,180	2,800	5,180	10,900	2,300	2,600	2,220	860
2	1,560	1,720	5,700	*1,300	2,030	2,320	4,950	11,700	1,980	2,140	1,680	740
3	1,540	1,760	6,700	*1,500	2,030	2,350	4,990	11,600	1,860	2,040	1,740	970
4	1,480	1,500	7,370	*1,400	2,380	2,550	4,620	10,600	1,920	1,640	1,440	1,380
5	1,260	2,120	6,920	*1,400	2,750	2,700	4,130	9,020	2,020	1,400	1,360	1,360
6	1,100	3,100	6,060	*1,700	2,900	4,450	3,700	7,500	2,140	1,640	1,720	1,320
7	800	3,400	4,870	*2,400	2,460	5,500	3,110	7,520	1,960	1,860	1,580	1,700
8	1,220	2,850	3,250	3,800	2,040	5,200	2,910	8,560	1,680	4,200	1,680	1,520
9	1,760	2,500	2,280	8,700	1,860	4,850	3,030	9,260	2,380	5,820	1,640	1,320
10	1,540	2,420	2,000	11,300	1,860	3,050	3,280	9,580	2,280	6,450	1,720	1,420
11	1,660	2,020	1,860	13,900	2,100	3,000	3,600	8,900	2,460	6,770	1,440	1,640
12	1,560	2,160	1,800	16,000	2,420	4,150	4,150	7,440	1,950	6,580	1,280	1,620
13	1,500	2,140	2,000	14,800	1,940	4,800	4,620	6,200	1,880	5,380	1,300	1,800
14	1,200	1,900	2,040	11,300	1,900	4,400	5,210	5,380	1,800	3,500	1,650	1,540
15	1,680	1,860	1,960	8,940	2,360	3,550	5,780	4,620	1,660	2,950	1,500	1,400
16	2,120	1,760	1,720	7,680	2,750	3,050	6,010	4,150	1,740	2,600	1,760	2,360
17	2,600	1,560	1,860	6,200	2,900	4,750	5,920	3,700	2,460	2,300	1,580	3,400
18	2,460	1,840	1,940	5,100	3,000	6,000	6,060	3,250	6,000	2,380	720	2,900
19	2,040	2,550	1,820	4,700	2,900	5,650	6,620	2,650	7,530	2,540	896	2,160
20	1,840	2,850	*1,820	4,050	2,700	5,580	6,920	2,400	9,260	2,180	980	2,020
21	1,840	3,550	2,280	3,900	2,800	5,520	6,300	2,420	9,900	2,600	1,140	1,700
22	1,120	3,200	2,850	3,850	2,700	5,650	6,200	2,300	9,140	2,440	1,140	1,380
23	1,680	2,700	2,800	4,150	2,700	5,970	6,600	2,000	7,840	2,750	1,140	1,280
24	1,860	2,950	2,160	4,050	2,200	6,480	6,840	1,880	6,480	3,000	1,220	1,520
25	1,900	3,550	2,360	4,050	2,280	7,070	6,920	1,860	5,650	2,600	1,240	1,500
26	1,600	3,450	1,980	3,650	2,340	8,080	7,140	1,380	4,970	2,550	1,000	1,540
27	1,400	3,200	2,200	3,150	2,600	8,100	7,330	1,420	4,740	2,200	980	1,480
28	1,260	2,800	2,750	2,850	2,600	7,170	6,880	1,700	4,280	1,700	1,180	1,620
29	1,400	2,300	1,920	2,650	-	6,570	7,070	1,920	3,750	1,540	1,200	1,380
30	1,540	2,550	1,720	2,400	-	6,380	9,080	2,340	3,300	2,320	1,400	1,560
31	1,540	-	1,340	2,200	-	5,880	-	2,120	-	2,060	1,580	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	48,840	2,600	800	1,675	0.840	0.97
November.....	75,800	3,550	1,600	2,460	1.31	1.46
December.....	91,960	7,370	1,540	2,960	1.58	1.82
Calendar year 1934.....	1,005,483	14,400	436	2,749	1.47	19.89
January.....	164,370	16,000	1,300	5,302	2.83	3.26
February.....	67,780	3,000	1,980	2,421	1.29	1.34
March.....	153,970	8,100	2,320	4,967	2.65	3.06
April.....	165,150	9,080	2,910	5,505	2.93	3.27
May.....	166,270	11,700	1,380	5,364	2.86	3.30
June.....	117,300	9,900	1,660	3,910	2.08	2.32
July.....	92,560	6,770	1,400	2,986	1.59	1.83
August.....	45,316	2,220	720	1,597	.745	.86
September.....	48,590	3,400	740	1,613	.960	.96
Water year 1934-35.....	1,233,706	16,000	720	3,380	1.80	24.45

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 1935.

Extremes.- Maximum discharge during year, 146 second-feet Oct. 3 (gage height, 1.36 feet); no flow during periods of no diversion.

1933-35: Maximum discharge, that of 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 discharges below 1 second-foot, which are fair. Discharge corrected for ice effect Dec. 6 to Jan. 21 and Jan. 28 to Feb. 10. 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 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.0	0.3	9.9	0	0	*0	0.7	0.1	25	16	16	5.9
2	3.7	.2	3.1	0	0	*0	.7	.1	25	19	17	5.9
3	9.1	.2	.7	0	0	*0	.4	.1	25	14	11	21
4	.7	1.7	.3	0	0	*.1	.4	.4	25	5.9	2.6	20
5	.3	1.1	.2	0	0	*.4	.4	.1	24	14	16	19
6	.2	.7	.1	0	0	*.5	.3	.2	17	9.3	15	21
7	.6	0	0	0	0	*.1	.2	.4	5.4	6.1	18	7.2
8	.3	1.9	0	.1	0	*0	.2	1.1	.4	19	22	0
9	.1	1.4	0	.1	0	*0	.5	.2	.4	18	5.0	0
10	.1	.4	0	6.5	0	*0	.6	.2	.3	13	2.3	*0
11	.2	.1	0	1.4	0	*.3	.4	.1	11	6.5	4.6	*4.0
12	.2	0	0	.4	0	*.2	.5	.1	4.5	21	16	*11
13	.1	0	0	.1	0	*0	.7	.1	6.4	17	19	*14
14	.1	0	0	0	*0	*0	.8	.1	7.6	13	21	*12
15	.2	0	0	0	*.1	*.1	.7	.1	4.6	17	19	4.8
16	.1	.1	0	0	*.1	*.5	.5	.1	1.5	17	19	16
17	.1	.1	0	0	*0	*.6	.6	.1	19	19	11	18
18	.1	.1	0	0	*0	*.2	1.0	.1	18	17	5.0	29
19	.1	.1	0	0	*0	*.2	.5	.1	6.2	20	21	38
20	.1	.1	.1	0	*0	*.4	.4	.1	3.1	14	19	40
21	.4	.1	.1	.6	*0	*.7	.3	.2	6.4	13	16	40
22	.2	.1	0	1.2	*0.2	*1.2	.3	.6	5.4	18	13	22
23	.1	.4	0	.2	*0	*1.8	.3	1.3	.5	22	13	12
24	.1	1.7	*0	0	*0	1.2	.2	1.2	11	27	13	9.3
25	.1	.2	*0	0	*0	.7	.2	7.4	12	27	6.3	11
26	*.1	0	*0	0	*0	.4	.2	20	12	22	21	10
27	.1	.1	*0	0	*0	.5	.2	21	12	13	20	9.5
28	.1	.1	*0	0	*0	1.5	.3	21	14	5.5	19	8.8
29	.1	1.0	0	0	-	1.0	.2	23	12	15	20	5.9
30	.2	1.8	0	0	-	1.0	.3	25	7.1	13	21	11
31	.2	-	0	0	-	.7	-	25	-	16	13	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	21.7	9.1	0.1	0.70		
November.....	14.6	1.9	0	.49		
December.....	14.5	9.9	0	.47		
Calendar year 1934.....	2,157.27	33	0	5.91		
January.....	10.6	6.5	0	.34		
February.....	10.2	.1	0	.01		
March.....	14.1	1.8	0	.45		
April.....	12.8	1.0	.2	.43		
May.....	153.7	25	.1	4.96		
June.....	316.8	25	.3	10.6		
July.....	496.3	27	5.5	15.7		
August.....	454.8	22	2.3	14.7		
September.....	426.3	40	0	14.2		
Water year 1934-35.....	1,926.4	40	0	5.28		

*Estimated.

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 on Lansingkill spillway 100 feet downstream from head gates in summit level of canal, 600 feet upstream from Lock 70, lat. 43°27'20", long. 75°19'25", and 2 miles south of Boonville, Oneida County.

Records available.- September 1915 to September 1935 during canal seasons.

Remarks.- Records excellent. 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 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*42							-	2	26	31	96
2	*13							-	2	20	28	95
3	3							-	2	22	32	80
4	-							-	3	31	39	84
5	-							-	7	25	28	50
6	-							-	4	24	26	78
7	-							-	1	36	26	91
8	-							-	20	67	23	98
9	-							-	37	32	27	89
10	-							-	28	20	37	92
11	-							-	21	18	36	90
12	-							-	13	35	22	86
13	-							-	18	34	37	86
14	-							-	18	36	44	94
15	-							-	28	30	46	92
16	-							-	29	33	46	34
17	-							-	31	33	63	32
18	-							-	28	28	79	23
19	-							-	22	26	65	8
20	-							-	22	35	66	3
21	-							-	32	44	68	3
22	-							-	50	31	45	28
23	-							-	36	31	65	30
24	-							-	34	33	72	38
25	-							-	34	25	80	48
26	-							4	31	28	67	50
27	-							2	32	32	68	50
28	-							2	31	39	59	54
29	-							4	29	31	70	60
30	-							4	36	26	78	53
31	-							3	-	34	88	-
Month					Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches		
October												
November												
December												
Calendar year												
January												
February												
March												
April												
May 26-31					19	4	2	3.2				
June					681	50	1	22.7				
July					963	67	18	31.1				
August					1,563	88	22	50.4				
September					1,816	98	3	60.5				
Water year												

*Estimated.

Moose River at McKeever, N. Y.

Location.- Water-stage recorder, lat. 43°36'40", long. 77°6'35", half a mile west of McKeever, Herkimer County, and 2 miles below mouth of South Branch of Moose River.

Drainage area.- 365 square miles.

Records available.- May 1922 to September 1935.

Average discharge.- 13 years, 841 second-feet.

Extremes.- Maximum discharge during year, 5,670 second-feet Apr. 30; maximum gage height, 9.42 feet Jan. 10; minimum discharge, 101 second-feet Aug. 30 (gage height, 1.57 feet).

1922-35: 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 periods of ice effect, Nov. 14-17 and Dec. 8 to Mar. 21, and those estimated, which are fair. Flow regulated to some extent by storage in Fulton Chain of Lakes. Occasional slight diurnal fluctuation during medium and low stages caused by operation of paper mill in McKeever.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

1.5	86	2.1	242	3.5	835	8.0	4,470
1.6	107	2.2	275	4.0	1,120	9.0	5,600
1.7	130	2.4	345	4.5	1,430	10.0	6,830
1.8	155	2.6	420	5.0	1,780		
1.9	182	2.8	500	5.0	2,660		
2.0	211	3.0	590	7.0	3,450		

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	496	320	*1,230	*360	360	550	881	4,430	416	590	451	211
2	456	348	*3,460	*340	340	550	726	3,110	370	488	392	214
3	416	354	*2,040	*380	340	600	719	2,520	331	432	345	202
4	376	392	*1,350	*400	320	600	640	2,210	320	360	306	214
5	356	1,180	*1,070	400	320	600	577	2,020	342	331	314	273
6	366	1,090	*890	420	300	650	563	1,950	348	328	400	365
7	420	759	685	500	360	700	390	2,320	373	348	378	348
8	469	612	500	650	500	750	629	3,810	493	665	314	303
9	464	563	400	1,600	480	700	813	2,870	542	1,540	278	273
10	416	532	*360	3,400	480	650	572	2,320	472	1,520	262	334
11	396	*472	*320	3,000	460	550	735	2,120	496	1,560	278	416
12	522	*416	*300	1,900	460	500	966	1,710	512	1,010	292	384
13	611	*360	*320	1,400	460	500	1,010	*1,550	447	817	289	359
14	486	*340	*340	1,200	460	500	936	*1,400	362	620	265	356
15	550	*340	*340	1,000	500	440	949	1,230	424	484	223	775
16	754	*320	340	850	650	440	992	1,060	559	511	194	1,170
17	683	340	*340	700	750	650	1,040	921	797	548	171	752
18	516	412	340	650	750	1,000	968	810	3,980	444	160	536
19	384	*680	*360	600	750	1,100	673	*700	2,720	396	158	440
20	334	*936	*380	550	700	1,000	1,160	769	1,960	472	203	404
21	300	834	*400	550	700	950	1,630	562	1,660	511	199	392
22	317	*695	*400	650	650	874	2,400	433	1,690	531	309	370
23	392	*635	390	700	650	662	1,370	421	1,680	548	347	348
24	460	*789	390	700	600	1,210	2,340	395	1,460	482	278	354
25	412	906	390	700	600	1,560	2,690	389	1,840	485	236	320
26	362	712	380	650	600	1,380	2,510	228	1,750	412	206	310
27	356	590	360	550	550	1,170	2,670	409	1,200	384	206	356
28	370	*527	390	460	550	1,040	4,140	400	1,020	338	217	416
29	345	*522	390	420	-	1,180	3,910	313	854	404	190	464
30	329	*635	*360	400	-	1,090	4,110	464	708	675	172	492
31	310	-	*360	380	-	739	-	470	-	535	166	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	13,424	754	300	433	1.19	1.37
November.....	17,593	1,180	320	586	1.61	1.80
December.....	19,505	3,460	300	629	1.72	1.98
Calendar year 1934.....	219,293	4,900	116	601	1.65	22.35
January.....	26,460	3,400	340	854	2.34	2.70
February.....	14,620	760	300	522	1.45	1.49
March.....	25,025	1,660	440	807	2.21	2.55
April.....	44,199	4,140	390	1,473	4.04	4.61
May.....	44,364	4,430	228	1,431	3.92	4.52
June.....	30,024	3,980	320	1,001	2.74	3.06
July.....	18,689	1,540	328	600	1.64	1.99
August.....	8,180	451	158	284	.723	.83
September.....	12,110	1,170	202	404	1.11	1.24
Water year 1934-35.....	274,093	4,430	158	751	2.06	27.94

*Estimated.

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 1935.

Average discharge.- 23 years, 107 second-feet.

Extremes.- Maximum mean daily discharge during year, 432 second-feet May 6; maximum gage height, 3.7 feet May 2 (backwater from North Branch); minimum mean daily discharge, 0.3 second-foot Mar. 12 to Apr. 22, when gates in dam were closed.
1911-35: Maximum discharge, 862 second-feet Mar. 23, 1921; minimum, that of Mar. 12 to Apr. 22, 1935.

Remarks.- Records good except those for period Mar. 12 to Apr. 22, which are fair. Corrected for backwater Jan. 12-14 and Apr. 26 to May 5. Flow regulated by storage in Fulton Chain of Lakes.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

0.2	1.1	0.7	12	1.6	74	2.6	225
.3	2.3	.8	16	1.8	97	2.8	265
.4	3.9	1.0	25	2.0	124	3.0	307
.5	6.0	1.2	38	2.2	153	3.2	354
.6	8.7	1.4	55	2.4	187	3.6	460
						4.0	580

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	196	1.3	1.3	169	85	275	0.3	240	4.5	37	46	64
2	196	1.6	1.1	169	80	275	.3	340	4.3	37	46	64
3	187	1.3	1.5	184	80	265	.3	380	3.6	36	46	91
4	187	1.3	1.6	225	80	265	.3	380	3.7	35	47	117
5	187	1.3	1.6	216	80	265	.3	400	3.9	37	48	117
6	187	1.3	1.6	216	74	255	.3	432	3.9	38	48	110
7	178	1.6	1.6	216	158	245	.3	405	3.9	40	48	110
8	187	1.6	1.7	109	296	245	.3	403	4.5	46	48	123
9	178	1.6	22	1.1	296	235	.3	296	6	118	48	153
10	178	1.6	91	1.3	285	235	.3	285	71	197	48	153
11	178	1.6	85	2.3	285	94	.3	275	131	187	48	153
12	157	1.6	80	13	285	.3	.3	196	98	187	48	161
13	97	1.6	100	18	275	.3	.3	101	47	118	48	161
14	97	1.6	138	55	275	.3	.3	146	32	50	40	153
15	97	1.6	138	97	291	.3	.3	146	34	50	12	171
16	97	1.3	138	97	330	.3	.3	146	32	50	12	178
17	71	1.3	138	97	330	.3	.3	146	59	50	12	131
18	1.1	1.3	138	97	330	.3	.3	124	250	50	40	131
19	1.1	1.5	138	97	307	.3	.3	124	336	60	69	131
20	1.1	1.5	138	91	307	.3	.3	63	330	50	69	131
21	1.6	1.3	138	91	296	.3	.3	1.5	330	50	69	131
22	1.6	1.3	138	91	285	.3	.3	2.9	307	50	69	131
23	1.6	1.3	138	97	296	.3	1.7	2.9	307	50	69	131
24	1.6	1.2	138	91	296	.3	9	3.3	307	50	69	131
25	1.6	1.1	138	91	285	.3	19	3.9	296	50	69	124
26	1.6	1.1	138	91	285	.3	30	3.9	214	50	64	153
27	1.6	1.1	146	91	275	.3	38	3.9	86	47	64	216
28	1.3	1.1	178	91	275	.3	50	3.9	40	46	64	206
29	1.3	1.1	178	91	-	.3	75	4.3	40	47	64	206
30	1.3	1.1	178	85	-	.3	130	5	40	47	64	206
31	1.3	-	169	85	-	.3	-	4.3	-	46	64	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,674.7	196	1.1	86.3		
November.....	41.1	1.6	1.1	1.37		
December.....	3,033.0	178	1.1	97.8		
Calendar year 1934.....	25,781.8	309	1.1	70.6		
January.....	3,165.7	225	1.1	102		
February.....	6,822	330	74	244		
March.....	2,660.0	275	.3	85.8		
April.....	359.3	130	.3	12.0		
May.....	5,047.8	432	1.6	163		
June.....	3,419.3	330	3.6	114		
July.....	1,986	187	35	64.1		
August.....	1,600	69	12	51.6		
September.....	4,238	216	64	141		
Water year 1934-35.....	35,046.9	432	.3	96.0	1.65	25.04

Note.- Combined storage in Old Forge and Sixth Lake Reservoirs on Sept. 30, 1935, showed net increase of 48,900,000 cubic feet for the water year, equivalent to yearly mean discharge of 1.55 second-foot, 0.050 second-foot per square mile, or 0.41 inch on drainage area.

Combined storage in Old Forge and Sixth Lake Reservoirs on Dec. 31, 1934, showed net increase of 91,850,000 cubic feet for the calendar year, equivalent to yearly mean discharge of 2.91 second-foot, 0.056 second-foot per square mile, or 0.76 inch run-off from drainage area.

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

Location.- Water-stage recorder, lat. 43°37'45", long. 75°41'55", half a mile above confluence of Middle and South Branches of Moose River and 1½ miles northeast of McKeever, Herkimer County.

Drainage area.- 148 square miles.

Records available.- October 1925 to September 1935.

Average discharge.- 10 years, 340 second-feet.

Extremes.- Maximum discharge during year, 1,450 second-feet May 2; maximum gage height, 5.86 feet Dec. 15 (backwater from ice); minimum discharge, 64 second-feet Aug. 18 (gage height, 2.21 feet).

1925-35: Maximum discharge, 2,100 second-feet Apr. 27, 1928 (gage height, 6.6 feet); minimum, about 42 second-feet Aug. 26, 1931 (gage height, 1.98 feet).

Remarks.- Records excellent except those for periods of ice effect, Dec. 7 to Jan. 9 and Jan. 12 to Mar. 12, which are fair. Flow partly regulated by storage in Fulton Chain of Lakes.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

2.2	63	2.9	171	3.6	357	4.6	765
2.3	75	3.0	192	3.7	390	4.8	865
2.4	88	3.1	215	3.8	425	5.0	975
2.5	102	3.2	240	3.9	460	5.5	1,270
2.6	117	3.3	267	4.0	500	6.0	1,620
2.7	133	3.4	295	4.2	580		
2.8	151	3.5	325	4.4	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	278	116	295	*220	170	360	322	1,250	184	310	149	117
2	273	117	406	*230	160	360	307	1,410	165	267	140	112
3	267	114	394	*240	160	360	292	1,410	146	245	133	114
4	259	136	411	*250	150	360	275	1,500	135	214	128	143
5	254	138	408	*260	150	380	262	1,170	146	184	133	184
6	270	194	390	280	140	380	243	1,110	155	192	133	188
7	275	197	260	300	140	380	238	1,120	172	214	151	188
8	284	192	160	280	380	400	235	1,120	210	285	127	184
9	292	197	140	500	360	380	238	1,060	213	355	122	186
10	281	250	170	1,060	340	560	243	1,000	215	469	120	210
11	278	210	160	666	340	320	264	962	292	471	131	220
12	295	190	150	500	340	190	292	915	313	432	128	228
13	250	175	160	440	340	163	315	754	256	390	122	235
14	220	165	190	380	340	160	325	648	204	271	119	232
15	266	158	190	340	360	165	321	610	210	215	107	307
16	278	157	200	320	420	148	344	552	210	208	85	318
17	275	175	200	300	460	198	344	506	264	197	71	274
18	218	171	200	280	460	230	338	442	560	186	65	248
19	149	171	200	260	440	215	343	390	798	182	83	219
20	128	164	220	260	440	228	363	364	918	194	111	220
21	119	197	220	240	440	257	422	262	918	190	119	222
22	125	201	220	260	400	262	442	208	892	182	128	215
23	130	208	200	300	400	297	468	169	840	169	151	218
24	131	240	200	300	320	359	511	142	802	171	123	206
25	130	240	220	280	380	377	552	144	790	161	117	201
26	125	235	220	260	380	370	602	147	751	149	116	197
27	123	222	200	240	360	354	670	144	591	140	117	252
28	116	215	220	220	360	358	748	144	421	137	116	313
29	116	213	*240	200	-	367	844	157	367	160	116	307
30	116	225	*240	190	-	354	1,080	177	347	149	117	310
31	111	-	*220	180	-	355	-	192	-	151	119	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	6,430	295	111	207	1.40	1.61
November.....	5,634	240	114	198	1.27	1.42
December.....	7,306	411	140	236	1.59	1.83
Calendar year 1934.....	86,024	1,030	48	236	1.59	21.61
January.....	10,056	1,080	180	324	2.19	2.52
February.....	9,190	460	140	328	2.22	2.31
March.....	9,427	400	148	304	2.06	2.36
April.....	12,271	1,080	235	403	2.76	3.08
May.....	19,979	1,410	142	644	4.35	5.02
June.....	12,485	918	155	416	2.81	3.14
July.....	7,240	471	137	234	1.58	1.82
August.....	3,657	149	65	118	.797	.92
September.....	6,556	318	112	219	1.48	1.65
Water year 1934-35.....	110,231	1,410	65	302	2.04	27.68

*Estimated.

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 1935.

Extremes.- Maximum discharge during year, 2,230 second-feet June 18 (gage height, 6.4 feet, from graph based on gage readings); minimum, 20 second-feet Aug. 18 (gage height, 1.03 feet).

1927-35: Maximum discharge, 4,700 second-feet Oct. 6, 1932 (gage height, 9.2 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, Dec. 7 to Jan. 9, Jan. 15 to Mar. 16, which are fair.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Jan. 10

1.0	16	2.8	302
1.2	29	5.2	421
1.4	45	3.6	566
1.6	66	4.0	735
1.8	91	5.0	1,270
2.0	122	6.0	1,940
2.4	202	6.5	2,300

Table for Jan. 11 to Sept. 30

1.0	19	2.8	318
1.2	31	3.2	440
1.4	48	3.6	564
1.6	71	4.0	740
1.8	99	5.0	1,270
2.0	132	6.0	1,940
2.4	214	6.5	2,300

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	40	76	509	48	85	55	214	1,210	148	94	90	28
2	37	88	753	50	65	66	214	669	124	76	69	28
3	30	81	614	50	85	70	203	424	99	66	55	25
4	27	117	368	50	85	75	238	362	96	59	44	27
5	24	221	268	48	80	90	171	304	161	52	41	55
6	25	214	225	55	75	110	151	290	142	51	46	64
7	38	170	110	80	70	140	192	377	148	242	52	44
8	50	140	85	160	70	130	132	646	306	508	44	36
9	40	131	70	750	70	120	203	563	279	479	41	35
10	32	109	65	1,760	65	120	238	425	182	341	46	40
11	31	103	60	1,450	65	130	315	347	142	237	46	50
12	65	97	55	925	65	140	424	265	107	157	50	41
13	97	88	55	566	65	160	442	214	87	132	41	37
14	68	78	55	409	65	150	362	203	71	105	36	40
15	130	78	50	340	70	130	362	203	122	87	33	83
16	248	77	55	260	90	130	347	161	151	80	28	122
17	170	71	55	220	90	226	290	142	355	92	22	85
18	103	115	50	180	85	304	263	122	1,730	76	22	61
19	76	216	50	150	80	347	518	112	915	109	24	47
20	64	239	65	140	70	332	468	102	634	235	23	46
21	57	193	80	190	65	304	622	98	427	203	24	46
22	71	150	70	260	60	290	622	88	377	128	30	42
23	128	131	60	240	60	318	584	84	377	102	44	37
24	124	206	60	200	60	409	661	79	318	87	34	34
25	100	225	55	170	60	459	700	76	290	69	30	31
26	81	170	55	150	55	426	622	72	238	53	27	30
27	77	131	55	130	55	347	640	69	192	46	24	33
28	71	122	55	120	55	304	736	71	192	40	24	43
29	68	122	50	110	-	318	669	138	151	71	24	57
30	66	191	50	100	-	304	830	229	122	122	25	66
31	66	-	48	90	-	263	-	192	-	109	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,294	248	24	74.0	0.871	1.00
November.....	4,150	239	71	138	1.62	1.81
December.....	4,055	753	48	151	1.54	1.78
Calendar year 1934.....	47,003	940	14	129	1.52	20.58
January.....	9,451	1,760	48	305	3.59	4.14
February.....	1,985	90	55	70.9	.834	.87
March.....	6,766	459	55	218	2.56	2.95
April.....	12,253	830	132	408	4.80	5.36
May.....	8,335	1,210	69	269	3.16	3.64
June.....	8,684	1,750	71	289	3.40	3.79
July.....	4,315	508	40	139	1.64	1.89
August.....	1,168	90	22	37.7	.444	.51
September.....	1,413	122	25	47.1	.554	.62
Water year 1934-35.....	64,867	1,760	22	178	2.09	28.36

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 1935.

Average discharge.- 27 years, 360 second-feet.

Extremes.- 1908-35: 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. Discharge determined from Stillwater Dam gate and spillway ratings. Record of gate openings and reservoir elevations furnished by Black River Regulating District.

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	385	200	112	580	590	495	12	14	345	485	820	14
2	380	200	11	435	590	495	12	15	340	485	610	14
3	380	200	11	330	580	490	12	15	340	480	465	435
4	380	200	11	330	580	325	12	15	340	174	15	690
5	375	202	12	325	580	242	12	17	340	19	415	680
6	375	202	12	325	570	242	12	17	345	19	610	680
7	375	202	12	325	570	150	12	19	375	146	610	500
8	370	202	12	232	560	10	12	166	420	560	610	14
9	370	202	12	56	560	10	12	415	420	470	610	435
10	370	144	216	11	560	10	12	610	420	365	450	640
11	365	11	360	12	550	10	12	610	420	365	14	550
12	345	140	470	12	550	10	13	610	420	365	405	590
13	335	204	470	12	550	11	13	480	415	365	600	630
14	330	204	465	12	540	11	13	345	415	365	800	460
15	330	204	465	244	540	11	13	345	415	365	600	13
16	330	204	465	410	540	11	13	420	415	365	600	425
17	330	204	460	415	540	11	13	460	720	455	450	540
18	330	204	460	415	540	11	13	420	790	600	14	430
19	236	204	460	415	530	11	13	345	1,020	600	405	430
20	10	206	460	415	530	11	13	345	920	455	590	425
21	10	208	455	415	520	11	13	345	660	18	590	315
22	146	308	455	500	520	11	13	345	530	405	590	13
23	202	126	465	560	520	11	13	345	385	600	590	345
24	202	11	340	560	510	11	13	345	440	600	445	620
25	202	11	11	550	510	11	14	345	650	590	14	620
26	202	61	305	550	510	12	14	340	910	590	395	610
27	202	214	485	550	500	12	14	340	660	590	590	320
28	202	214	590	520	500	12	14	340	490	590	580	13
29	200	214	590	460	-	12	14	340	490	590	580	13
30	200	214	590	465	-	12	14	340	490	590	580	325
31	200	-	580	530	-	12	-	340	-	600	425	-

Month	Observed				Corrected for storage		
	Second-foot-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October.....	8,669	365	10	280	187	1.09	1.28
November.....	5,220	214	11	174	230	1.63	1.92
December.....	9,312	590	11	317	326	1.90	2.19
Calendar year 1934	101,708	620	7	279	278	1.62	21.99
January.....	10,961	580	11	354	531	3.09	3.66
February.....	15,240	590	500	544	193	1.12	1.17
March.....	2,704	495	10	97.2	450	2.62	3.02
April.....	365	14	12	12.8	782	4.55	5.06
May.....	9,448	610	14	305	646	3.76	4.34
June.....	15,340	1,020	340	511	512	2.98	3.32
July.....	13,266	600	18	428	259	1.51	1.74
August.....	14,972	620	14	473	94	.547	.63
September.....	11,769	690	13	393	125	.727	.81
Water year 1934-35	117,506	1,020	10	322	366	2.13	28.94

Note.- Midnight elevation of water surface in Stillwater Reservoir was 1,662.79 feet Dec. 31, 1935, and 1,662.71 feet Dec. 31, 1934.

Midnight elevation of water surface in Stillwater Reservoir was 1,662.36 feet Sept. 30, 1934, and 1,670.40 feet Sept. 30, 1935.

Corrections for storage based on data furnished by Black River Regulating District.

Beaver River at Croghan, N. Y.

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

Drainage area.- 294 square miles.

Records available.- September 1930 to September 1935.

Extremes.- Maximum discharge during year, 2,040 second-feet Jan. 10 (gage height, 4.62 feet); minimum, 24 second-feet July 14 (gage height, 0.95 foot); minimum daily discharge, 53 second-feet Mar. 10.
1930-35: Maximum discharge, 3,390 second-feet Apr. 19, 1933 (gage height, 5.80 feet); minimum, 20 second-feet July 8, 1934 (gage height, 0.91 foot); minimum daily discharge, 35 second-feet May 13, 1934.

Remarks.- Records excellent. The flow of Beaver River was completely regulated during the year at Stillwater Dam. Between Stillwater Dam and this station the flow is further regulated and controlled by the operation of nine power-plant ponds.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

0.9	19	1.5	119	2.1	300	2.7	560	3.6	1,130
1.0	30	1.6	143	2.2	338	2.8	610	4.0	1,460
1.1	43	1.7	170	2.3	378	2.9	660	4.5	1,920
1.2	59	1.8	199	2.4	420	3.0	720	5.0	2,460
1.3	77	1.9	230	2.5	465	3.2	850		
1.4	97	2.0	284	2.6	510	3.4	990		

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	345	375	365	435	730	710	331	1,140	435	470	560	128
2	540	350	244	480	700	670	570	1,300	365	740	620	174
3	530	194	670	640	530	370	480	1,180	485	650	620	850
4	530	80	670	640	650	455	465	970	630	330	315	600
5	365	162	455	410	770	720	370	130	620	680	640	530
6	224	335	470	335	720	920	184	530	550	300	640	570
7	108	335	430	470	730	760	81	830	600	250	660	530
8	370	340	285	880	730	570	146	1,100	495	910	630	238
9	390	345	365	1,260	660	220	232	990	360	1,060	700	520
10	540	184	490	1,580	620	53	270	930	640	970	375	610
11	730	200	620	1,680	820	400	270	640	530	720	325	580
12	600	360	425	1,020	670	520	275	120	520	630	500	660
13	330	365	465	640	710	310	194	390	620	220	480	570
14	218	345	425	650	740	290	110	550	630	79	640	405
15	580	355	320	670	740	270	320	590	540	550	680	305
16	530	370	320	760	750	204	485	530	420	590	660	630
17	540	210	370	540	590	310	650	690	760	670	280	630
18	550	170	400	780	740	380	770	550	1,040	700	64	630
19	510	350	590	800	770	435	670	295	1,320	610	640	640
20	325	405	750	710	660	470	320	490	1,560	830	620	570
21	140	375	590	790	720	600	121	520	1,480	570	640	375
22	410	360	490	640	690	810	325	500	1,500	580	670	116
23	395	385	325	780	740	400	480	510	720	710	620	310
24	370	460	520	720	670	218	520	540	750	670	355	520
25	325	275	380	770	730	410	680	375	740	670	188	630
26	300	420	620	465	680	500	680	118	590	650	435	600
27	188	445	880	470	700	560	500	415	770	690	610	710
28	73	415	700	560	720	640	162	640	810	405	580	560
29	212	204	465	710	-	680	520	660	840	520	485	174
30	355	410	355	730	-	255	980	440	740	670	560	475
31	350	-	405	710	-	104	-	510	-	680	360	-
Month					Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches		
October.....					11,973	730	73	386				
November.....					9,579	460	60	319				
December.....					14,859	580	244	479				
Calendar year 1934.....					156,919	1,060	35	430	1.46	19.87		
January.....					22,705	1,680	335	732				
February.....					19,580	620	520	699				
March.....					14,014	920	53	452				
April.....					12,170	980	81	406				
May.....					19,145	1,300	118	618				
June.....					22,060	1,560	360	735				
July.....					16,554	1,060	79	602				
August.....					16,220	700	84	523				
September.....					14,620	710	116	487				
Water year 1934-35.....					195,579	1,680	53	536	1.82	24.75		

Note.- For effect of Stillwater Reservoir regulation of flow see Beaver River below Stillwater Dam, near Beaver River, N. Y.

Deer River at Copenhagen, N. Y.

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

Drainage area.- 89 square miles.

Records available.- September 1929 to September 1935.

Extremes.- Maximum discharge during the year ending Sept. 30, 1934, 3,600 second-feet Jan. 1; maximum gage height, 9.27 feet Jan. 1 (backwater from ice); minimum discharge, 0.9 second-foot Aug. 15 (gage height, 0.28 foot); minimum daily discharge, 1.0 second-foot Aug. 13-15.

Maximum discharge during the year ending Sept. 30, 1935, 2,270 second-feet Jan. 10; maximum gage height, 5.93 feet Jan. 8 (backwater from ice); minimum discharge, 1.4 second-feet Aug. 19; minimum daily discharge, 2.5 second-feet Aug. 18.

1929-35: 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, Nov. 18-20, Dec. 10-16, 28-31, 1933, Jan. 1-4, 18-25, Jan. 30 to Feb. 3, Feb. 9-11, Feb. 24 to Mar. 4, Dec. 6-31, 1934, Jan. 1-6, Jan. 30 to Feb. 1, Feb. 13-18, Feb. 26 to Mar. 5, 1935, and those estimated, which are fair. Diurnal fluctuation caused by operation of power plant.

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	19	120	890	1,600	75	24	1,530	162	28	7.4	*1.3	1.7
2	23	101	429	400	60	26	1,260	135	26	7.4	*1.3	*1.7
3	25	145	325	300	55	240	1,260	115	19	7.4	*1.3	1.5
4	23	182	487	280	50	500	1,290	98	17	8.4	*1.5	1.5
5	17	114	432	255	44	894	1,060	*85	16	7.0	*1.1	1.4
6	12	80	553	339	41	645	1,020	*75	19	7.4	2.3	2.1
7	12	69	416	339	37	412	905	*70	16	13	1.4	1.7
8	10	67	284	428	35	327	700	*65	15	9.0	1.1	2.6
9	11	63	136	361	34	273	700	*60	16	9.0	1.1	4.4
10	12	71	75	252	32	223	700	*95	64	8.6	3.6	7.8
11	11	47	55	175	30	182	1,280	*130	69	8.6	1.1	9.5
12	12	69	44	153	32	141	1,260	*95	70	8.6	1.1	4.7
13	18	85	40	137	32	131	691	*75	115	7.2	*1.0	3.5
14	24	143	38	119	33	254	602	*80	94	2.6	1.0	2.9
15	21	120	36	108	29	252	612	*85	59	2.0	1.0	4.3
16	20	106	90	96	32	225	693	*85	52	5.1	1.1	4.5
17	20	100	104	85	30	253	719	*90	45	5.4	2.1	7.2
18	141	95	157	75	29	964	503	*55	33	3.6	2.4	20
19	158	90	145	65	29	487	472	*44	58	2.8	*2.6	19
20	112	90	120	55	29	462	460	*38	122	2.7	*3.5	17
21	93	90	90	48	28	357	322	*65	59	3.0	9.4	7.9
22	76	654	76	50	27	242	*247	*90	54	1.4	3.4	1.8
23	150	502	72	180	26	144	261	*170	25	2.1	3.4	1.8
24	122	342	154	300	26	110	604	*120	18	2.2	2.4	3.3
25	142	236	408	360	28	93	513	*80	15	1.8	2.1	4.5
26	106	257	200	309	26	80	356	*65	15	1.9	*2.0	4.8
27	106	408	140	218	24	605	510	*52	14	1.6	2.0	4.6
28	236	304	110	180	24	530	370	50	16	2.1	2.0	6.7
29	152	422	90	137	-	510	279	28	16	*1.6	1.8	8.2
30	113	1,920	75	110	-	458	207	25	7.8	*1.5	1.8	9.5
31	136	-	70	90	-	-	-	30	-	*1.4	1.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,192	236	10	70.7	0.794	0.92
November.....	7,092	1,920	47	256	2.65	2.98
December.....	6,322	890	36	204	2.29	2.64
Calendar year 1933.....	59,475.2	1,920	0.8	165	1.83	24.84
January.....	7,564	1,600	48	244	2.74	3.16
February.....	975	75	24	34.8	.391	.41
March.....	10,502	964	24	339	3.81	4.39
April.....	21,386	1,530	207	713	8.01	9.94
May.....	2,500	170	25	80.6	.906	1.04
June.....	1,174.8	122	7.8	39.2	.440	.49
July.....	153.6	13	1.4	4.95	.056	.06
August.....	64.7	9.4	1.0	2.09	.023	.03
September.....	172.3	20	1.4	5.74	.064	.07
Water year 1933-34.....	60,098.4	1,920	1.0	165	1.85	25.11

Note.- Records of discharge for the year ending Sept. 30, 1934, supersede those published in Water-Supply Paper 759.

Deer River at Copenhagen, N. Y.

(Continued)

Rating tables, water years 1933-34, 1934-35, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Dec. 31, 1933

0.6	8.5	1.4	85	3.0	480
.8	20	1.6	115	4.0	870
1.0	31	2.0	196	5.0	1,370
1.2	46	2.5	320	7.0	2,570

Table for Jan. 1, 1934 to Jan. 9, 1935

0.4	2.6	1.2	46	3.0	490
.6	9.0	1.5	97	4.0	980
.8	20	2.0	196	5.0	1,600
1.0	31	2.5	324		

Table for Jan. 10 to Sept. 30, 1935

0.4	2.5	1.0	34	3.0	524
.6	8.5	1.5	97	4.0	980
.8	19	2.0	206	5.0	1,600

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	10	80	726	55	65	*70	280	869	95	56	16	5.8
2	14	89	720	55	62	*75	329	422	73	42	16	7.1
3	4.1	69	366	65	63	*85	282	306	59	28	13	8.1
4	3.8	148	288	60	57	*95	257	367	140	21	12	7.8
5	4.1	290	234	60	54	*110	222	296	186	18	11	33
6	4.4	202	220	80	52	*140	189	339	115	87	11	36
7	6.7	143	180	247	46	*300	159	768	84	645	12	24
8	12	139	130	931	39	*240	171	666	94	507	12	19
9	9.4	139	85	1,710	42	*200	186	355	78	228	12	19
10	11	128	80	2,010	44	*200	278	293	65	214	12	18
11	11	113	70	1,100	44	*220	320	227	52	184	20	20
12	11	113	60	599	39	*300	361	171	42	95	34	15
13	18	85	55	387	40	*400	374	142	40	78	20	11
14	15	76	50	284	44	*320	400	137	38	55	15	6.9
15	25	68	48	222	85	214	585	110	94	50	13	99
16	50	86	46	176	240	444	408	81	112	68	11	102
17	30	115	46	128	220	1,180	270	61	803	54	7.1	60
18	24	225	44	102	190	721	343	55	1,240	39	2.5	41
19	28	281	44	99	153	530	849	63	721	33	*3.5	30
20	15	292	90	113	119	478	878	62	502	43	*4.7	32
21	*19	211	150	135	97	596	580	56	314	43	6	38
22	*30	155	140	270	81	591	463	56	346	64	8.1	29
23	*48	171	120	302	77	651	430	46	323	44	8.1	22
24	43	345	100	237	*68	771	390	41	240	36	9	18
25	38	230	85	164	*73	544	361	42	156	27	6.5	17
26	33	148	75	121	*75	428	311	41	108	21	5.6	20
27	36	126	70	92	*70	342	284	42	86	17	7.4	17
28	35	139	70	84	*65	490	365	38	84	15	9	30
29	32	155	65	78	-	512	400	164	73	19	7.8	56
30	34	264	60	75	-	401	1,420	230	66	22	6.2	77
31	36	-	60	70	-	303	-	144	-	17	8.2	-
Month				Second-foot-days		Maximum	Minimum	Mean		Per square mile		Run-off in inches
October.....				690.5		50	3.8	22.3		0.251		0.29
November.....				4,825		345	68	161		1.81		2.02
December.....				4,577		726	44	148		1.66		1.91
Calendar year 1934.....				54,584.9		1,600	1.0	150		1.69		22.81
January.....				10,111		2,010	55	386		3.66		4.22
February.....				2,304		240	39	82.3		.925		.96
March.....				11,951		1,180	70	386		4.34		5.00
April.....				12,145		1,420	159	405		4.55		5.08
May.....				6,690		869	38	216		2.43		2.80
June.....				8,429		1,240	38	214		2.40		2.68
July.....				2,855		645	15	92.1		1.03		1.19
August.....				339.7		34	2.5	11.0		.124		.14
September.....				918.7		102	5.8	30.6		.344		.38
Water year 1934-35.....				63,835.9		2,010	2.5	175		1.97		26.67

*Estimated.

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

Location.- Staff gage, lat. 44°13'15", long. 74°51', 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 1935.

Average discharge.- 12 years, 307 second-feet.

Extremes.- Maximum daily discharge during year, 930 second-feet June 21-23; minimum, about 5 second-feet Dec. 2 and 9.

1923-35: Maximum daily discharge, 1,620 second-feet Apr. 17-20, 1933; minimum occurred when gates in dam were closed and there was no discharge over spillway.

Remarks.- Records good except those estimated for periods Dec. 2, 9, 13, and Jan. 17-21, which are fair. Flow completely regulated by operation of gates in Cranberry Lake Dam.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

2.6	0	3.2	24	4.0	88	5.2	332	6.4	785
2.7	3	3.3	30	4.2	113	5.4	393	6.6	860
2.8	6	3.4	36	4.4	144	5.6	460	6.8	980
2.9	10	3.5	43	4.6	181	5.8	530	7.0	1,090
3.0	14	3.6	50	4.8	225	6.0	610		
3.1	19	3.8	57	5.0	276	6.2	695		

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	181	162	72	181	250	276	332	204	153	214	225	214
2	181	162	*5	181	250	276	332	638	153	194	225	214
3	181	162	34	181	250	276	332	824	153	165	225	214
4	181	162	69	181	250	276	332	880	153	153	225	214
5	181	162	81	181	250	276	332	714	153	153	225	214
6	181	162	94	181	250	276	313	554	153	170	225	214
7	181	162	94	181	250	276	263	530	153	214	225	214
8	181	162	53	154	250	276	263	698	174	214	225	222
9	181	162	*5	120	250	276	263	785	228	225	225	225
10	181	158	45	120	250	276	263	851	236	225	225	225
11	181	153	85	120	250	276	263	860	238	225	225	225
12	172	153	96	120	250	276	263	895	238	225	225	225
13	172	153	*128	128	250	270	263	522	238	225	225	225
14	172	153	162	128	250	276	263	391	238	225	225	225
15	172	153	162	128	250	276	263	347	333	225	225	225
16	172	153	162	152	268	276	263	347	513	225	225	225
17	174	153	151	*181	280	276	263	347	644	225	225	225
18	172	153	106	*181	254	276	263	512	850	225	225	225
19	172	153	106	*181	290	276	233	260	830	225	214	225
20	172	153	106	*181	290	276	202	228	866	225	214	225
21	172	148	106	*181	290	290	182	181	930	225	214	225
22	172	144	106	181	290	290	172	181	930	225	214	225
23	172	137	106	181	290	290	172	181	930	225	214	225
24	162	128	134	181	276	290	181	181	605	225	214	225
25	162	128	192	181	276	290	181	181	562	225	214	225
26	162	128	192	181	276	290	181	181	318	225	214	225
27	162	120	192	181	276	315	171	181	318	225	214	225
28	162	106	192	181	276	332	128	181	318	225	214	225
29	162	106	192	181	-	332	128	181	318	225	214	225
30	162	106	192	181	-	332	128	181	258	225	214	225
31	162	-	191	220	-	332	-	168	-	225	214	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	5,353	181	162	173		
November.....	4,397	162	106	147		
December.....	3,609	192	5	116		
Calendar year 1934.....	70,082	325	5	192	1.53	18.11
January.....	5,191	220	120	167		
February.....	7,382	290	250	264		
March.....	8,897	332	270	287		
April.....	7,188	332	128	240		
May.....	12,985	860	168	419		
June.....	11,966	930	153	399		
July.....	6,862	225	152	215		
August.....	6,832	225	214	220		
September.....	6,670	225	214	222		
Water year 1934-35.....	87,122	930	5	239	1.66	22.60

Note.- Elevation of water surface in Cranberry Lake Reservoir on Sept. 30, 1935, was 2.98 feet higher than on Sept. 30, 1934, corresponding to a gain in storage of 913,853,952 cubic feet. This is equivalent to a mean yearly discharge of 29.0 second-feet, 0.201 second-foot per square mile, or 2.73 inches run-off from drainage area.

Elevation of water surface in Cranberry Lake Reservoir on Dec. 31, 1934, was 0.69 foot higher than on Dec. 31, 1933, corresponding to a gain in storage of 211,597,056 cubic feet. This is equivalent to a mean yearly discharge of 6.71 second-feet, 0.047 second-foot per square mile, or 0.64 inch run-off from drainage area.

*Estimated.

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 1935.

Average discharge.— 10 years (1925-35), 538 second-feet.

Extremes.— Maximum discharge during year, 2,290 second-feet May 12 (gage height, 5.60 feet); minimum, 26 second-feet Sept. 4 (gage height, 1.35 feet); minimum daily discharge, 116 second-feet Dec. 19.

1924-35: Maximum discharge, 4,010 second-feet Apr. 6, 1928 (gage height, 7.1 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 except those estimated, which are fair. Large diurnal fluctuation caused by operation of power plant; seasonal flow partly regulated by storage in Cranberry Lake.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Jan. 10

1.5	21	2.2	146	4.0	805
1.4	30	2.4	197	4.5	1,130
1.6	51	2.6	291	5.0	1,540
1.8	75	3.2	457	5.6	2,110
2.0	109	3.6	595		

Table for Jan. 11 to Sept. 30

1.3	21	2.6	239	4.0	840
1.6	51	2.8	297	4.5	1,210
2.0	109	3.0	363	5.0	1,660
2.2	146	3.2	437	5.6	2,290
2.4	189	3.6	613		

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	310	450	242	198	445	355	660	1,180	340	630	490	164
2	*265	280	475	285	275	315	710	1,290	216	530	460	166
3	325	196	455	275	234	325	680	1,040	490	410	224	178
4	178	194	430	275	255	310	670	1,000	345	212	186	320
5	230	176	490	188	320	395	560	1,260	390	310	460	390
6	196	210	315	198	280	670	170	1,260	350	265	610	300
7	194	410	350	208	295	700	198	1,160	355	425	530	320
8	210	435	168	480	470	630	560	1,160	470	1,420	580	252
9	189	440	250	1,060	248	410	490	1,240	250	1,200	420	200
10	275	190	250	1,420	236	255	580	1,100	440	1,060	174	340
11	*310	200	320	1,560	340	500	550	1,000	355	900	180	425
12	*395	275	230	670	395	730	680	1,040	440	550	415	325
13	*190	420	168	415	360	730	500	1,280	540	430	550	256
14	*224	305	146	510	435	780	450	900	570	210	550	168
15	*330	350	142	405	430	495	820	1,040	400	510	580	465
16	*330	270	190	400	480	400	760	530	310	460	510	470
17	*435	150	148	540	395	800	790	630	860	475	680	610
18	*410	172	140	315	355	990	830	290	1,420	510	345	570
19	295	160	116	325	480	1,000	770	194	1,440	510	255	400
20	172	248	158	232	415	910	590	435	1,500	320	370	540
21	199	395	144	375	500	1,040	810	315	1,590	208	375	340
22	*228	315	150	360	630	760	1,240	360	1,580	460	450	212
23	*228	490	146	480	375	530	1,140	510	1,240	560	540	280
24	*415	246	134	430	325	510	1,040	435	1,500	780	280	480
25	*380	208	148	530	345	940	1,020	224	1,080	660	285	355
26	*410	305	242	214	500	960	930	232	940	590	248	255
27	184	430	295	220	360	1,200	690	290	890	275	255	216
28	192	435	360	395	465	670	340	320	*550	216	365	180
29	244	305	202	295	-	980	670	1,000	375	460	395	224
30	270	335	206	470	-	580	1,020	445	204	540	365	340
31	325	-	184	415	-	315	-	600	-	510	260	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	8,566	435	172	276		
November.....	8,955	490	150	300		
December.....	7,400	490	116	239		
Calendar year 1934.....	128,836	1,230	116	353	1.34	18.22
January.....	15,921	1,420	188	449		
February.....	10,675	630	236	381		
March.....	20,315	1,200	255	655		
April.....	20,918	1,240	170	697		
May.....	23,750	1,280	194	766		
June.....	20,800	1,500	204	693		
July.....	16,596	1,420	208	535		
August.....	12,417	680	174	421		
September.....	9,721	610	164	324		
Water year 1934-35.....	174,064	1,500	116	477	1.81	24.59

Note.— For effect of Cranberry Lake Reservoir regulation of flow, see East Branch of Oswegatchie River at Cranberry Lake, N. Y.

*Estimated.

Osewagatchie River near Heuvelton, N. Y.

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

Drainage area.- 973 square miles.

Records available.- June 1916 to September 1935.

Average discharge.- 19 years, 1,721 second-feet.

Extremes.- Maximum discharge during year, 6,690 second-feet Jan. 11; maximum gage height, 5.55 feet Jan. 12 (backwater from ice); minimum discharge, 282 second-feet Oct. 8 (gage height, 0.84 foot).
1916-35: Maximum discharge, 15,600 second-feet Jan. 11, 1930 (gage height, 9.1 feet); minimum, 200 second-feet Aug. 18, 1934 (gage height, 0.65 foot).

Remarks.- Records excellent except those for periods of ice effect, Dec. 13-15, Dec. 30 to Jan. 6, Jan. 11-20, Jan. 24 to Feb. 3, and Feb. 23 to Mar. 1, which are good. Seasonal flow slightly regulated by storage in Cranberry Lake; slight diurnal fluctuation caused by power operations.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

0.7	220	1.6	779	2.8	2,090	4.0	3,950
.8	263	1.8	960	3.0	2,370	4.2	4,290
.9	310	2.0	1,160	3.2	2,660	4.4	4,650
1.0	362	2.2	1,370	3.4	2,960	4.6	5,020
1.2	461	2.4	1,590	3.6	3,280	5.0	5,800
1.4	620	2.6	1,830	3.8	3,610	5.5	6,820

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	406	488	1,230	440	650	800	2,700	4,020	2,010	1,060	960	501
2	362	541	1,540	420	750	886	2,340	4,370	1,920	870	970	462
3	341	662	1,690	400	750	970	2,560	5,170	1,560	927	904	451
4	358	651	2,000	400	754	923	2,660	5,060	1,340	952	832	413
5	404	570	2,020	400	705	932	2,550	4,520	1,350	788	718	419
6	413	562	1,900	480	628	1,290	2,350	3,380	1,180	658	577	425
7	371	570	1,700	685	591	2,260	2,030	3,410	1,070	618	618	494
8	308	606	1,350	2,200	591	2,650	1,610	3,350	1,050	2,040	868	541
9	300	742	998	4,350	584	2,280	1,420	4,200	1,000	3,600	904	535
10	320	779	815	5,720	643	2,110	1,590	4,160	1,060	4,120	841	475
11	325	812	674	6,500	643	2,300	1,670	3,980	1,020	4,230	779	444
12	346	644	577	6,500	548	3,490	1,700	3,570	970	3,890	705	451
13	397	591	550	6,000	555	3,700	1,790	3,050	951	3,260	628	546
14	551	598	500	5,000	613	2,280	2,180	2,880	886	2,460	635	608
15	598	708	480	4,000	722	2,800	2,520	2,570	990	1,820	730	597
16	577	658	494	3,000	1,600	3,180	2,720	2,270	1,160	1,390	746	570
17	601	635	462	2,200	2,020	4,970	3,230	2,060	1,420	1,230	797	901
18	795	591	438	1,600	1,490	5,580	3,760	1,650	1,800	1,150	791	1,330
19	858	555	451	1,300	1,330	5,280	4,540	1,470	2,890	1,010	797	1,320
20	805	535	425	1,200	1,120	4,970	4,930	1,210	3,430	951	705	1,170
21	674	619	408	1,070	1,130	4,610	4,380	996	3,670	941	606	1,000
22	583	784	419	1,300	1,040	4,200	4,700	1,020	3,740	941	508	941
23	508	954	431	1,620	950	3,990	4,670	1,020	3,610	925	541	823
24	475	1,040	438	1,500	1,000	3,860	4,680	941	3,290	940	555	689
25	494	1,120	462	1,200	900	3,640	4,480	975	3,020	1,370	635	606
26	664	1,000	446	1,100	850	3,490	4,110	959	2,760	1,770	570	656
27	689	1,050	459	950	750	3,400	3,710	806	2,350	1,750	469	682
28	705	1,030	481	860	700	3,340	3,330	730	1,970	1,440	425	606
29	592	1,100	501	750	-	3,220	2,940	768	1,860	1,030	413	541
30	508	1,120	480	700	-	3,000	2,970	1,300	1,450	805	462	514
31	488	-	460	650	-	3,100	-	2,090	-	850	541	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	15,796	858	300	510	0.524	0.60
November.....	22,315	1,120	488	744	.765	.85
December.....	25,229	2,020	408	814	.837	.96
Calendar year 1934.....	445,623	8,330	212	1,221	1.25	17.04
January.....	64,485	6,500	400	2,080	2.14	2.47
February.....	24,507	2,020	548	875	.899	.94
March.....	94,981	5,380	800	3,064	3.15	3.63
April.....	91,320	4,930	1,420	3,044	3.13	3.49
May.....	79,605	5,170	730	2,568	2.64	3.04
June.....	56,787	3,740	806	1,892	1.94	2.16
July.....	49,785	4,230	619	1,606	1.65	1.90
August.....	21,230	970	413	685	.704	.81
September.....	19,673	1,330	413	656	.674	.75
Water year 1934-35.....	565,693	6,500	300	1,550	1.69	21.60

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 Corner and 4 miles below Harrisville, Lewis County.

Drainage area.- 258 square miles.

Records available.- July 1916 to September 1935.

Average discharge.- 19 years, 525 second-feet.

Extremes.- Maximum discharge during the year ending Sept. 30, 1934, 2,820 second-feet Apr. 2 (gage height, 5.95 feet); minimum, 25 second-feet Sept. 1 (gage height, 0.86 foot).

Maximum discharge during the year ending Sept. 30, 1935, 4,140 second-feet Jan. 11 (gage height, 7.11 feet); minimum, 50 second-feet Oct. 5 (gage height, 1.19 feet).
1916-35: Maximum discharge, 6,920 second-feet Jan. 9, 1930 (gage height, 9.6 feet); minimum, that of Sept. 1, 1934.

Remarks.- Records good. Discharge corrected for ice effect, Nov. 16-21, Dec. 10-15, 25-31, 1933, Jan. 1, 16-20, Jan. 29 to Feb. 10, Mar. 3-6, Dec. 11-14, Dec. 27-31, 1934, Jan. 1, Jan. 11-20, Jan. 24 to Feb. 2, Feb. 5-15, Feb. 27 to Mar. 1, 1935. Slight diurnal fluctuations, principally during low flows, caused by pondage regulation.

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	100	140	1,470	420	220	109	1,700	625	161	78	44	27
2	100	176	1,580	795	220	112	2,720	750	155	76	43	29
3	100	166	1,460	952	180	150	2,500	668	145	71	44	30
4	108	208	1,180	920	170	340	2,400	600	136	66	42	36
5	108	206	888	795	160	650	2,200	545	126	65	38	40
6	100	176	735	735	150	850	2,100	498	128	65	38	44
7	82	157	765	674	150	898	1,850	486	118	85	36	45
8	71	93	735	664	140	825	1,670	444	105	102	35	45
9	63	126	575	652	140	735	1,540	403	110	90	34	47
10	66	106	*480	625	130	674	1,500	403	125	85	35	51
11	66	106	*380	560	126	535	1,500	458	148	69	36	45
12	67	115	*280	484	123	440	1,860	440	150	66	35	43
13	62	93	*240	427	123	394	2,350	397	200	77	33	46
14	60	140	*200	376	129	411	2,050	395	322	136	36	46
15	58	115	190	343	123	407	1,670	419	299	186	38	46
16	61	110	203	320	121	399	1,500	397	280	168	40	45
17	68	100	226	280	118	399	1,620	350	256	140	44	50
18	100	100	262	*260	117	674	1,600	322	222	128	38	59
19	148	100	281	*240	117	795	1,670	282	194	84	29	67
20	140	100	280	*220	117	655	1,540	274	292	95	34	67
21	123	100	277	204	117	825	1,420	257	319	89	35	61
22	115	108	251	213	118	686	1,260	271	271	67	40	60
23	123	191	220	278	118	545	1,080	322	212	66	34	59
24	166	306	218	372	117	440	985	365	178	59	36	62
25	197	269	200	399	115	376	1,080	340	170	60	33	60
26	289	259	200	423	115	309	1,190	312	116	56	31	60
27	246	246	190	376	115	476	1,160	287	105	54	33	71
28	197	259	180	354	110	742	1,160	233	108	53	34	68
29	232	259	170	340	-	952	1,120	218	100	51	37	67
30	220	661	170	300	-	1,020	985	172	89	48	38	66
31	186	-	170	260	-	1,020	-	174	-	45	40	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,821	289	58	123	0.477	0.55
November.....	5,337	661	93	178	.690	.77
December.....	14,656	1,580	170	473	1.83	2.11
Calendar year 1933.....	138,176	2,480	33	379	1.47	19.91
January.....	14,261	952	204	460	1.78	2.05
February.....	3,801	220	110	136	.527	.55
March.....	16,023	1,020	109	581	2.25	2.59
April.....	49,170	2,720	985	1,639	6.35	7.08
May.....	12,207	825	172	394	1.63	1.76
June.....	5,336	322	89	178	.690	.77
July.....	2,570	166	45	82.9	.321	.37
August.....	1,143	44	29	35.9	.143	.16
September.....	1,642	71	27	51.4	.199	.22
Water year 1933-34.....	131,867	2,720	27	361	1.40	18.98

*Estimated.

Note.- Records of daily and monthly discharge for the year ending Sept. 30, 1934 supersede those previously published in Water-Supply Paper 759.

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

(Continued)

Rating tables, water years 1933-34, 1935, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

Table for Oct. 1, 1933 to Jan. 10, 1935

0.9	27	2.4	259
1.0	34	2.6	322
1.2	51	2.8	395
1.4	73	3.0	480
1.6	100	3.5	735
1.8	131	4.0	1,050
2.0	166	5.0	1,650
2.2	208	6.0	2,880

Table for Jan. 11, 1935 to Sept. 30, 1935

1.4	80	2.8	426
1.6	109	3.0	508
1.8	144	3.5	745
2.0	183	4.0	1,050
2.2	229	5.0	1,850
2.4	286	6.0	2,880
2.6	352	7.0	4,010

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	69	*175	428	160	220	260	812	2,600	722	251	259	114
2	68	*200	742	155	200	274	762	2,650	632	219	219	111
3	65	*220	962	161	217	277	735	1,970	530	178	188	108
4	60	231	968	160	212	286	695	1,420	450	169	177	108
5	55	260	866	142	200	317	651	1,100	438	166	216	137
6	54	341	704	146	190	481	589	938	422	149	286	156
7	60	354	484	239	180	524	548	952	381	484	266	145
8	75	329	342	512	170	548	517	1,250	381	1,440	228	126
9	78	295	*259	1,250	160	570	526	1,540	418	1,740	200	118
10	77	232	*218	3,030	160	534	552	1,420	384	1,470	181	126
11	80	254	*190	3,600	160	577	598	1,200	349	1,340	218	144
12	142	224	*180	2,600	160	685	670	987	302	1,040	262	134
13	269	287	*180	1,800	160	725	776	810	259	751	227	129
14	228	222	*170	1,100	166	715	866	695	234	561	192	110
15	256	186	*168	900	200	632	920	627	328	423	169	361
16	436	193	166	800	310	648	980	561	462	345	152	756
17	444	198	170	700	318	995	950	495	495	308	142	720
18	369	204	166	600	318	1,330	908	442	792	265	137	504
19	296	306	166	550	315	1,480	960	405	1,100	236	119	*376
20	232	437	182	500	299	1,360	1,150	377	1,220	410	*109	323
21	186	498	206	462	277	1,240	1,520	356	1,220	446	*98	321
22	190	489	212	548	262	1,120	1,830	338	1,100	374	*90	290
23	234	448	213	570	251	1,070	1,800	321	935	402	*90	237
24	315	488	210	550	240	1,110	1,720	305	816	743	102	205
25	279	595	206	500	229	1,140	1,610	286	695	951	88	187
26	263	550	201	420	227	1,080	1,500	271	593	701	93	*180
27	223	466	190	340	220	942	1,350	258	500	408	93	*185
28	199	411	180	300	220	860	1,280	245	407	297	106	*195
29	187	365	170	280	-	878	1,350	394	342	291	117	248
30	160	357	160	260	-	980	1,660	698	289	350	99	262
31	175	-	160	240	-	924	-	815	-	312	108	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	5,824	444	54	188	0.729	0.84
November.....	9,755	595	175	325	1.26	1.41
December.....	9,819	968	160	317	1.23	1.42
Calendar year 1934.....	133,451	2,720	54	366	1.42	19.22
January.....	23,575	3,600	142	760	2.95	3.40
February.....	6,240	318	160	223	.864	.90
March.....	24,562	1,480	260	792	3.07	3.54
April.....	30,785	1,830	517	1,026	3.98	4.44
May.....	26,722	2,650	245	862	3.34	3.85
June.....	17,186	1,220	224	573	2.22	2.49
July.....	17,222	1,740	149	566	2.16	2.49
August.....	5,051	286	88	162	.628	.72
September.....	7,136	756	108	238	.922	1.03
Water year 1934-35.....	183,857	3,600	54	504	1.95	26.52

*Estimated.

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 1935.

Average discharge.- 11 years, 597 second-feet.

Extremes.- Maximum discharge during year, 3,510 second-feet May 1; maximum gage height, 9.48 feet Jan. 11 (backwater from ice); minimum discharge, 99 second-feet Oct. 7; minimum gage height, 1.46 feet Aug. 28; minimum daily discharge, 103 second-feet Oct. 6, 7.

1924-35: Maximum discharge, about 8,300 second-feet Nov. 18, 1927 (gage height, 13.0 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 period of ice effect, Dec. 6 to Mar. 26, and those estimated, which are fair. Occasional diurnal fluctuations from power operations.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Jan. 10						Table for Jan. 11 to Sept. 30					
1.4	81	2.4	366	4.0	1,220	1.4	103	2.4	362	4.0	1,140
1.6	116	2.8	570	5.0	1,820	1.6	142	2.8	526	5.0	1,750
1.8	164	3.2	770	6.0	2,470	1.8	185	3.2	720	6.0	2,440
2.0	225	3.6	985	7.0	3,160	2.0	235	3.6	920	7.0	3,140
2.2	300			7.5	3,510	2.2	293			7.5	3,500

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	161	209	569	160	*300	*340	795	3,010	*820	296	222	153
2	148	269	904	160	*280	*380	770	3,020	*740	257	209	152
3	131	269	1,030	170	*500	420	720	2,190	*660	232	214	142
4	118	243	856	160	*280	440	670	1,520	*580	219	209	142
5	106	277	694	160	*260	460	615	1,140	*560	204	195	152
6	103	338	550	180	*260	550	558	970	*500	192	304	183
7	103	308	540	320	*260	750	522	949	*470	329	355	170
8	125	261	220	550	*240	*700	522	*1,530	*470	1,520	297	155
9	129	236	220	1,300	*240	*650	558	*1,550	*480	2,380	232	148
10	120	215	200	2,400	*240	*600	629	*1,450	*460	1,520	199	159
11	136	215	190	2,200	*240	*650	725	*1,240	*480	1,080	225	204
12	328	247	160	1,400	*220	900	640	*1,060	*430	696	340	197
13	389	257	180	1,100	*220	900	979	*900	*360	472	326	174
14	289	236	170	950	*240	*800	1,040	*780	*310	361	266	166
15	304	182	170	850	*280	*750	1,030	*720	*380	351	212	340
16	532	203	170	750	*480	*800	1,110	*680	*480	348	193	711
17	481	193	180	700	550	1,100	1,060	*600	*620	377	187	610
18	338	206	170	650	480	1,500	1,180	*540	*1,080	316	155	441
19	247	338	170	600	420	1,600	1,580	*490	*1,220	266	144	308
20	199	504	200	550	*380	1,600	2,030	*460	*1,250	249	134	249
21	178	580	220	650	*360	1,400	2,440	*420	*1,220	246	132	306
22	173	517	200	800	*340	1,300	2,580	*390	*1,100	278	134	281
23	198	444	190	700	*340	1,200	2,390	*360	*1,000	333	146	235
24	236	505	190	600	*340	1,200	2,310	*330	*920	483	140	204
25	229	576	160	550	*320	1,200	2,090	*320	*780	556	132	190
26	209	494	180	*500	*320	1,100	1,700	*320	*660	416	126	178
27	206	390	180	*440	*300	920	1,380	*280	*520	298	124	176
28	222	338	170	*400	*300	895	1,270	*270	440	241	122	205
29	219	329	170	*380	-	1,030	1,280	*450	396	230	120	272
30	209	377	160	*340	-	1,030	1,920	*700	337	255	122	265
31	199	-	160	*320	-	870	-	*820	-	249	126	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	6,763	532	103	218	0.651	0.75
November.....	9,759	580	182	328	.970	1.08
December.....	9,363	1,030	160	302	.901	1.04
Calendar year 1934.....	158,681	4,180	59	435	1.30	17.63
January.....	21,090	2,400	160	680	2.03	2.34
February.....	8,790	550	220	314	.937	.98
March.....	28,035	1,800	340	904	2.70	3.11
April.....	37,293	2,580	522	1,243	3.71	4.14
May.....	29,559	3,020	270	954	2.85	3.29
June.....	19,723	1,250	310	657	1.96	2.19
July.....	15,180	2,280	192	490	1.46	1.68
August.....	6,012	355	120	194	.579	.67
September.....	7,268	711	142	242	.722	.81
Water year 1934-35.....	198,834	3,020	103	545	1.63	22.08

*Estimated.

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 1935.

Average discharge.- 27 years, 1,290 second-feet.

Extremes.- Maximum discharge during year, 4,460 second-feet May 8 (gage height, 9.47 feet); minimum, 61 second-feet Oct. 14 (gage height, 1.86 feet); minimum daily discharge, 63 second-feet Oct. 14.
1908-35: 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, 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 1934-35 (gage height, in feet, and discharge, in second-feet)

1.8	56	2.6	150	4.0	474	6.5	1,620
1.9	64	2.8	183	4.2	537	7.0	1,980
2.0	73	3.0	220	4.4	604	7.5	2,400
2.1	85	3.2	262	4.6	677	8.0	2,850
2.2	94	3.4	309	5.0	840	8.5	3,350
2.3	107	3.6	360	5.5	1,070	9.0	3,900
2.4	121	3.8	415	6.0	1,320	9.5	4,500

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	258	424	651	656	1,450	*776	1,240	3,680	1,380	1,280	505	280
2	245	*455	994	614	1,410	*776	1,240	4,020	1,540	1,160	554	269
3	273	*437	1,160	650	1,350	*776	1,270	4,260	1,940	1,240	604	413
4	245	168	*1,200	650	1,240	*797	1,270	4,380	1,790	1,180	666	472
5	217	468	*1,500	615	1,200	*755	1,270	4,430	1,270	1,030	725	344
6	207	274	1,560	628	1,180	*715	1,240	4,540	1,270	*908	768	262
7	65	282	1,420	640	1,020	*715	1,240	4,350	1,320	*952	782	280
8	299	431	1,440	656	986	*698	1,240	4,380	1,540	1,160	784	304
9	205	496	1,240	699	952	*715	1,200	4,240	2,290	1,300	784	302
10	176	469	1,500	742	908	*715	1,220	4,260	2,430	1,320	776	304
11	174	286	1,500	818	862	*715	1,240	4,140	2,120	1,300	*797	302
12	90	573	1,270	874	840	715	1,240	4,140	1,980	1,270	834	282
13	278	673	1,500	*975	776	723	1,270	4,020	1,860	1,200	840	255
14	63	584	1,240	1,190	755	725	1,010	3,900	1,760	1,120	818	264
15	276	550	1,190	1,380	*715	*755	723	3,630	1,780	1,100	794	297
16	274	461	1,140	1,500	715	735	892	3,520	1,830	1,070	764	527
17	275	435	1,120	1,560	755	768	1,310	3,460	1,860	1,020	798	706
18	274	343	1,010	1,680	*776	797	1,490	3,250	1,980	930	752	582
19	266	729	745	1,740	*797	818	1,630	*2,490	2,060	921	705	690
20	291	656	735	1,780	*776	958	1,740	2,350	2,190	921	658	706
21	71	515	712	1,800	*776	1,020	1,760	2,540	2,310	952	640	715
22	439	440	704	1,830	*776	1,020	1,880	2,490	2,310	998	622	715
23	358	596	684	1,800	*797	1,040	2,090	2,100	2,330	1,020	399	706
24	251	859	726	1,760	*797	1,070	2,380	1,260	2,330	1,020	347	696
25	259	792	677	1,690	*797	1,040	2,400	1,270	2,340	998	462	682
26	273	973	701	1,620	*797	1,120	2,580	1,320	2,200	908	437	677
27	396	869	664	1,570	*797	1,140	2,760	1,320	2,000	952	472	670
28	241	801	721	1,540	*797	1,200	*2,850	1,350	1,840	952	526	673
29	149	818	697	1,520	-	1,230	3,050	1,380	1,720	956	414	668
30	147	825	670	1,510	-	*1,240	3,350	1,380	1,560	705	459	658
31	210	-	658	1,470	-	*1,240	-	1,380	-	495	330	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	7,196	439	63	232	0.321	0.37
November.....	16,482	973	168	549	.760	.85
December.....	30,909	1,440	658	997	1.38	1.59
Calendar year 1934.....	328,464	4,890	63	900	1.25	16.92
January.....	38,141	1,830	614	1,230	1.70	1.96
February.....	26,787	1,450	715	921	1.28	1.33
March.....	27,483	1,240	696	887	1.23	1.42
April.....	50,075	3,350	723	1,669	2.31	2.58
May.....	95,110	4,430	1,260	3,068	4.25	4.90
June.....	57,130	2,430	1,270	1,904	2.64	2.94
July.....	32,318	1,320	496	1,045	1.44	1.66
August.....	19,816	640	339	639	.885	1.02
September.....	14,811	715	255	494	.684	.76
Water year 1934-35.....	415,268	4,430	63	1,138	1.68	21.38

*Estimated.

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 1935.

Average discharge.- 22 years (1910-13, 1914-17, 1919-35), 1,091 second-feet.

Extremes.- Maximum discharge during year, 5,640 second-feet May 1; maximum gage height, 10.24 feet Mar. 17 (backwater from ice); minimum, not determined.

1910-17, 1919-35: Maximum discharge, about 16,200 second-feet Mar. 27, 1914 (gage height, 9.1 feet, former datum); minimum, about 34 second-feet Aug. 8, 1917 (gage height, 5.25 feet).

Remarks.- Records good except those for periods of ice effect, Dec. 7 and Dec. 12 to Apr. 3, and those estimated, which are fair.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Mar. 16

5.6	86	7.0	1,370
5.8	176	7.2	1,650
6.0	305	7.4	1,950
6.2	467	8.0	2,940
6.4	660	8.5	3,860
6.6	870	9.0	4,900
6.8	1,100	9.5	6,060

Table for Mar. 17 to Sept. 30

5.6	86	7.0	1,440
5.8	176	7.2	1,720
6.0	305	7.4	2,020
6.2	470	8.0	3,020
6.4	671	8.5	3,950
6.6	910	9.0	4,970
6.8	1,170	9.5	6,070

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	*220	*280	*750	220	*500	500	1,600	5,440	1,800	837	694	321
2	*200	*360	1,200	220	*480	550	1,500	4,530	1,740	798	1,180	544
3	*190	*360	1,450	240	*480	600	1,300	3,490	1,590	692	864	270
4	*170	*350	1,190	220	460	650	1,250	2,780	1,470	650	626	313
5	*150	*350	999	220	440	700	1,180	2,240	1,380	537	596	277
6	*140	*460	765	260	420	800	1,090	1,980	1,200	537	798	321
7	*140	*420	460	500	400	1,100	1,030	2,180	1,170	440	910	344
8	*170	*360	313	1,000	400	1,000	1,010	3,180	1,170	1,130	872	528
9	*190	*320	328	1,900	400	900	1,030	2,950	1,090	1,840	717	284
10	*170	*300	291	3,000	380	850	1,130	2,580	1,120	2,790	612	298
11	*190	291	264	3,200	380	900	1,330	2,240	1,310	1,990	665	291
12	*460	*340	260	2,000	360	1,500	1,480	1,930	1,180	1,390	944	352
13	*550	*340	240	1,600	340	1,200	*1,750	1,730	1,000	1,080	1,030	360
14	*400	*320	240	1,400	360	1,100	*2,020	1,540	860	910	923	344
15	*420	*300	240	1,200	420	1,100	2,040	1,470	923	1,080	705	895
16	*750	*280	240	1,100	700	1,200	2,000	1,400	1,030	1,080	751	1,120
17	*650	*260	260	1,000	800	1,700	2,080	1,290	1,620	949	514	1,100
18	*480	*280	260	950	700	2,200	2,350	1,180	3,060	798	399	988
19	*340	*460	240	900	650	2,400	2,710	1,040	2,900	650	368	774
20	*280	*700	300	850	600	2,400	2,630	1,000	2,860	661	334	660
21	*240	*600	320	1,100	550	2,200	2,870	910	2,590	774	335	566
22	*240	*700	300	*1,300	500	2,000	3,100	822	2,330	798	*306	556
23	*280	*600	280	*1,100	500	1,900	3,280	762	2,320	810	*299	537
24	*340	*700	260	*950	500	2,000	3,620	671	2,200	1,580	313	518
25	*320	*776	280	*950	480	2,000	3,450	692	1,900	1,560	336	470
26	*300	*650	240	*800	480	1,900	2,920	682	1,580	1,110	284	418
27	*280	*550	240	*700	480	1,500	2,510	566	1,100	848	257	426
28	*320	*460	240	*650	460	1,700	2,420	556	949	692	236	926
29	*300	*440	220	*600	-	1,900	2,540	957	923	598	224	699
30	*300	*500	220	*550	-	1,900	3,640	1,350	936	618	230	640
31	*280	-	220	*500	-	1,800	-	1,610	-	618	224	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	9,440	750	140	305	0.495	0.57
November.....	13,507	800	260	444	.721	.80
December.....	13,040	1,430	220	421	.683	.79
Calendar year 1934.....	285,003	6,000	110	781	1.27	17.21
January.....	31,080	3,200	220	1,003	1.63	1.88
February.....	15,600	800	340	486	.789	.84
March.....	44,850	2,400	500	1,431	2.32	2.68
April.....	62,860	3,640	1,010	2,095	3.40	3.79
May.....	55,718	5,440	556	1,797	2.92	3.37
June.....	47,301	3,060	860	1,577	2.56	2.86
July.....	30,825	2,790	440	994	1.61	1.86
August.....	17,526	1,160	224	565	.917	1.06
September.....	15,740	1,120	270	525	.862	.95
Water year 1934-35.....	354,787	5,440	140	972	1.58	21.43

*Estimated.

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 1935.

Average discharge.- 10 years, 234 second-feet.

Extremes.- Maximum discharge during year, 858 second-feet May 1 (gage height, 2.84 feet); minimum, 20 second-feet Oct. 25 (gage height, 0.46 foot); minimum daily discharge (estimated), 56 second-feet Nov. 15.
1925-35: Maximum discharge, 2,890 second-feet Apr. 25, 1926 (gage height, 5.0 feet); minimum, that of Oct. 25, 1934; minimum daily discharge, 28 second-feet Sept. 4, 1934.

Remarks.- Records good except those estimated, which are fair. Diurnal fluctuation caused by operation of power plant. A small diversion from a tributary stream above gage is used as water supply for the village of Malone.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

0.4	16	.7	37	1.0	70	1.6	210	2.2	470	2.8	850
.5	22	.8	47	1.2	101	1.8	284	2.4	580	3.0	970
.6	29	.9	58	1.4	147	2.0	370	2.6	700		

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	99	77	126	66	68	108	235	631	224	176	139	89
2	119	109	241	95	93	101	218	742	190	107	137	92
3	110	98	210	83	94	116	202	566	209	132	109	100
4	96	78	153	86	68	99	186	439	159	104	122	60
5	96	109	130	64	98	160	171	352	219	103	175	80
6	94	93	142	89	63	202	170	351	208	103	235	87
7	95	94	63	116	65	220	147	387	193	106	163	89
8	130	96	117	190	84	207	166	636	256	137	138	69
9	172	73	*106	392	85	171	190	549	228	143	136	84
10	108	94	*76	618	86	162	224	429	223	121	110	83
11	136	*71	*99	628	*85	186	264	360	177	119	295	122
12	184	*94	*84	426	*81	204	297	325	168	104	314	91
13	112	*82	*84	307	*83	188	276	301	147	106	224	89
14	122	*74	*99	264	*86	133	262	276	128	122	191	102
15	125	*66	99	228	*89	138	268	269	258	179	148	329
16	161	*62	*97	192	*121	252	308	239	242	139	147	254
17	98	*78	*99	173	124	513	300	228	*296	133	127	201
18	71	*96	*87	163	108	504	309	202	*680	106	117	108
19	92	*156	*99	135	109	436	340	188	*657	138	120	*138
20	73	214	*87	132	101	322	430	181	*610	158	84	*142
21	92	185	*98	143	92	302	591	164	*424	150	130	*183
22	72	89	92	145	95	261	649	153	*395	124	91	139
23	92	73	*98	152	98	250	694	153	360	177	89	128
24	92	90	*86	126	92	286	766	150	*361	563	89	134
25	71	108	*84	133	99	271	*752	148	304	436	69	*106
26	92	71	*92	99	93	239	*628	115	246	279	89	*152
27	94	69	*89	116	117	218	*561	147	214	232	89	*133
28	76	66	*94	99	99	*217	*840	136	*210	210	87	*137
29	80	93	85	99	-	*230	*664	234	*220	192	87	*159
30	92	80	96	98	-	*265	*706	265	140	205	70	*126
31	96	-	76	98	-	228	-	230	-	153	122	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,234	184	71	104	0.788	0.91
November.....	2,806	214	56	93.5	.708	.79
December.....	3,301	241	76	106	.803	.93
Calendar year 1934.....	65,883	1,560	28	181	1.37	18.56
January.....	5,790	628	84	187	1.42	1.64
February.....	2,666	124	81	94.9	.719	.75
March.....	7,189	99	99	232	1.76	2.03
April.....	11,614	766	147	387	2.93	3.27
May.....	9,756	631	115	314	2.58	2.74
June.....	8,285	680	128	276	2.09	2.33
July.....	5,261	563	103	170	1.29	1.49
August.....	4,283	314	70	138	1.06	1.21
September.....	3,826	329	60	128	.970	1.08
Water year 1934-35.....	67,980	631	56	186	1.41	19.17

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 1935.

Extremes.— Maximum discharge during year, 1,080 second-feet Mar. 16 (gage height, 5.22 feet); minimum, 46 second-feet Nov. 15 (gage height, 1.07 feet); minimum daily discharge, 50 second-feet Oct. 13.

1908, 1928-35: 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 except those for periods of ice effect, Dec. 8 to Jan. 7, Jan. 13-20, Jan. 25 to Feb. 15, Feb. 19 to Mar. 7, and those estimated, which are fair. Flow regulated by storage in Upper and Lower Chateaugay Lakes. Large diurnal fluctuation caused by power operations.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 11 to Nov. 10)

Table for Oct. 1 to Mar. 16 (2 p.m.)
and Sept. 15-30

0.7	26	1.4	71	3.0	318
.8	30	1.6	90	4.0	593
.9	35	1.8	115	5.0	975
1.0	41	2.0	140	5.5	1,220
1.2	55	2.5	219		

Table for Mar. 16 (2 p.m.) to Sept. 14

0.7	26	1.4	77	3.0	339
.8	31	1.6	98	3.5	464
.9	37	1.8	123	4.0	610
1.0	44	2.0	161	5.0	980
1.2	59	2.5	235		

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	53	54	74	*65	100	150	248	478	152	144	157	120
2	61	54	69	*60	110	*170	244	506	152	140	152	122
3	61	54	66	*60	110	*180	241	492	152	136	148	122
4	60	56	65	*60	100	*180	235	437	144	134	159	122
5	59	54	64	*65	100	*180	199	411	140	131	218	123
6	61	54	62	*70	100	200	126	374	145	129	317	121
7	60	53	65	*95	100	*220	123	396	157	131	300	118
8	55	54	75	129	120	216	126	472	158	134	201	119
9	55	54	70	138	130	211	129	506	174	132	196	119
10	56	54	70	139	130	212	134	478	164	130	192	120
11	68	54	70	115	120	289	134	411	157	127	292	117
12	52	55	70	140	120	352	124	374	158	120	350	119
13	50	54	70	150	120	318	127	350	164	121	346	119
14	51	52	65	150	120	336	128	317	207	119	330	132
15	56	54	65	140	120	308	136	287	215	122	247	136
16	53	54	70	140	239	584	137	274	212	121	168	114
17	52	55	70	150	216	454	138	247	372	116	150	112
18	52	58	65	140	204	350	145	225	550	110	147	109
19	52	63	70	140	190	359	168	196	658	116	134	114
20	53	66	70	130	180	344	309	181	715	110	130	130
21	53	59	70	146	160	335	279	188	662	108	131	113
22	56	60	65	135	160	308	200	168	610	106	133	111
23	54	60	65	117	160	270	169	157	580	113	130	109
24	54	66	65	114	160	266	130	150	406	136	129	108
25	54	61	65	110	160	258	133	141	194	231	127	109
26	55	62	65	110	180	254	168	133	194	270	122	109
27	54	64	65	110	180	254	161	128	190	314	122	114
28	54	64	65	110	150	262	257	136	169	335	122	113
29	54	65	65	110	-	250	343	148	163	306	123	111
30	54	66	60	110	-	252	423	164	154	241	124	115
31	53	-	60	100	-	248	-	163	-	158	126	-
Month					Second-foot-days	Maximum	Minimum	Mean	Per square mile		Run-off in inches	
October.....					1,724	88	50	55.6				
November.....					1,732	66	52	57.7				
December.....					2,075	75	60	66.9				
Calendar year 1934.....					46,540	685	26	128	1.14		15.45	
January.....					3,548	150	60	114				
February.....					4,049	239	100	145				
March.....					8,560	584	150	276				
April.....					5,608	423	123	187				
May.....					9,086	506	128	293				
June.....					8,278	715	140	276				
July.....					4,841	335	106	156				
August.....					5,713	350	122	184				
September.....					3,520	136	108	117				
Water year 1934-35.....					58,734	715	50	161	1.44		19.46	

Note.— Elevation of water surface of Chateaugay Lakes at end of year was 0.98 foot higher than at beginning of year, corresponding to an approximate increase in storage of 129,774,000 cubic feet. This is equivalent to a mean annual discharge of 4.12 second-feet, 0.037 second-foot per square mile, or a run-off of 0.60 inch from drainage area.

*Estimated.

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.

Drainage area.- 8,277 square miles (revised).

Records available.- 1871 to September 1935. Supplemental records prior to 1870 observed at St. Johns, Quebec. (See Water-Supply Paper 97, p. 340.)

Extremes.- Maximum gage height during year, 5.28 feet May 10; minimum, 0.00 foot Oct. 9. 1871-1935: 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 record furnished by Corps of Engineers, U. S. Army.

Gage height, in feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.25	0.05	0.80	1.06	2.50	2.00	3.41	4.81	3.61	3.76	3.27	1.93
2	.50	.06	.85	.94	2.45	2.05	3.41	4.98	3.71	3.69	3.08	1.88
3	.20	.24	1.03	.96	2.42	1.96	3.43	5.03	3.76	3.76	3.05	1.82
4	.13	.20	1.32	.88	2.40	1.92	3.44	5.01	3.69	3.76	3.05	2.05
5	.70	.05	1.10	1.00	2.35	1.96	3.39	5.11	3.53	3.48	2.95	1.82
6	.45	.02	1.02	.95	2.32	1.92	3.36	4.94	3.51	3.39	3.00	1.77
7	.12	.14	1.13	.95	2.28	2.00	3.34	4.96	3.56	3.36	2.97	1.70
8	.23	.20	1.10	.94	2.25	2.03	3.31	5.14	3.36	3.38	2.95	1.65
9	.00	.22	1.16	1.10	2.24	2.07	3.30	5.24	3.48	3.49	2.93	1.62
10	.12	.40	1.10	1.55	2.22	2.12	3.25	5.28	3.36	3.51	2.97	1.68
11	.32	.22	1.10	2.17	2.17	2.06	3.32	5.21	3.38	3.54	3.15	1.75
12	.08	.25	1.12	2.40	2.19	2.15	3.30	5.16	3.34	3.61	3.06	1.56
13	.06	.48	1.11	2.56	2.12	2.26	3.30	5.11	3.39	3.46	2.83	1.58
14	.04	.22	1.01	2.64	2.16	2.30	3.38	5.03	3.31	3.41	2.75	1.52
15	.12	.50	1.04	2.68	2.11	2.38	3.56	4.88	3.27	3.46	2.72	1.48
16	.15	.26	1.05	2.70	2.08	2.40	3.71	4.96	3.31	3.41	2.87	1.63
17	.35	.50	.96	2.74	2.12	2.42	3.66	4.81	3.20	3.38	2.63	1.75
18	.05	.15	.95	2.70	2.18	2.70	3.91	4.71	3.49	3.34	2.82	1.86
19	.10	.48	.96	2.72	2.15	2.98	4.06	4.68	3.71	3.31	2.58	1.80
20	.07	.30	.94	2.76	2.11	2.98	4.14	4.51	3.61	3.35	2.56	1.45
21	.20	1.10	.90	2.70	2.14	3.08	4.26	4.46	3.69	3.51	2.73	1.82
22	.25	.65	.90	2.60	2.07	3.04	4.34	4.41	3.91	3.46	2.30	1.82
23	.08	.62	1.00	2.64	2.04	3.24	4.43	4.34	3.94	3.31	2.23	1.55
24	.13	.42	.96	2.64	2.07	3.18	4.46	4.28	3.98	3.36	2.12	1.62
25	.20	.52	.95	2.66	2.04	3.28	4.41	4.16	4.01	3.34	2.05	1.68
26	.12	.63	1.05	2.60	2.02	3.31	4.61	4.06	4.01	3.31	2.15	1.72
27	.08	1.05	.86	2.60	2.02	3.32	4.66	4.03	4.16	3.31	2.25	1.35
28	.14	.78	.94	2.63	2.00	3.44	4.68	3.96	3.96	3.56	2.10	1.35
29	.30	.76	1.00	2.58	-	3.38	4.71	3.89	3.91	3.17	2.05	1.62
30	.15	.53	.90	2.51	-	3.36	4.73	3.83	3.88	3.41	1.95	1.38
31	.27	-	.94	2.49	-	3.41	-	3.71	-	3.30	1.93	-

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 1935.

Extremes.- Maximum gage height recorded during year, 5.32 feet May 9; minimum, 0.10 foot Nov. 1.
1907-35: Maximum gage height recorded, 8.47 feet Apr. 21, 1933; minimum, -0.25 foot Dec. 4, 1908.

Remarks.- Gage-height record furnished by D. A. Loomis, General Manager, Champlain Transportation Co.

Gage height, in feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.40	0.10	0.74	0.84	2.54	2.04	3.42	4.92	3.78	3.92	3.24	-
2	.34	.14	-	.84	2.52	2.02	3.44	5.12	-	3.82	3.14	1.94
3	.28	.14	1.14	.84	-	-	3.46	5.10	3.76	3.72	3.12	1.84
4	.28	-	-	.86	2.50	1.98	3.48	5.10	3.82	3.60	-	1.82
5	.26	.16	1.20	.86	2.48	1.96	3.50	-	3.60	3.52	3.12	1.82
6	.22	.22	1.22	-	2.36	1.94	3.52	5.12	3.52	3.50	3.08	1.80
7	-	.24	1.24	.86	2.34	2.04	-	5.20	3.52	-	3.06	1.80
8	.20	.24	1.24	-	2.34	2.10	3.50	5.26	3.50	3.42	3.04	-
9	.20	.32	-	-	2.28	2.12	3.42	5.32	-	3.52	2.94	1.78
10	.18	.32	1.22	-	-	-	3.40	5.30	3.50	3.62	2.94	1.76
11	.14	-	1.20	-	2.26	2.14	3.42	5.30	3.50	3.62	-	1.74
12	.22	.24	1.14	-	2.24	2.18	3.44	-	3.46	3.60	2.74	1.72
13	.22	.28	1.14	-	2.22	2.28	3.52	5.30	3.44	3.58	2.74	1.70
14	-	.30	1.12	.88	2.20	2.30	-	5.28	3.40	-	2.64	1.68
15	.20	.32	1.10	.90	2.18	2.32	3.54	5.24	3.38	3.46	2.54	-
16	.24	.34	-	1.42	2.20	2.34	3.56	5.12	-	3.44	2.54	1.64
17	.22	.32	1.08	1.54	-	-	3.60	5.02	3.42	3.42	2.52	1.64
18	.22	-	1.04	1.56	2.18	2.64	3.62	4.92	3.52	3.36	-	1.64
19	.22	.34	1.04	1.58	2.18	2.78	3.64	-	3.72	3.36	2.44	1.62
20	.20	.40	1.04	-	2.18	2.80	3.92	4.72	3.82	3.30	2.42	1.62
21	-	.42	1.04	2.62	2.20	2.92	-	4.62	3.84	-	2.38	1.62
22	.18	.42	1.02	2.74	2.20	2.94	4.50	4.52	3.92	3.30	2.36	-
23	.20	.44	-	2.76	2.22	3.32	4.52	4.50	-	3.26	2.34	1.60
24	.22	.60	1.02	2.78	-	-	4.62	4.36	4.02	3.42	2.34	1.60
25	.20	-	1.00	2.78	2.22	3.34	4.70	4.30	4.10	3.42	-	1.54
26	.18	.62	1.00	2.66	2.20	3.36	4.70	-	4.10	3.52	2.22	1.52
27	.14	.62	.98	-	2.14	3.38	4.72	4.08	4.02	3.48	2.20	1.50
28	-	.64	.96	2.64	2.12	3.40	-	4.02	4.00	-	2.18	1.50
29	.14	.68	.96	2.62	-	3.42	4.82	3.92	4.00	3.32	2.12	-
30	.12	.72	-	2.60	-	3.44	4.84	3.94	-	3.30	2.10	1.52
31	.12	-	.96	2.58	-	-	-	3.94	-	3.28	2.10	-

Great Chazy River at Perry Mills, N. Y.

Location.- Water-stage recorder, lat. 45°, 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 1935.

Extremes.- Maximum discharge during year, 2,410 second-feet June 18; maximum gage height, 7.28 feet Mar. 17 (backwater from ice jam); minimum discharge, 21 second-feet Oct. 30 (gage height, 1.77 feet); minimum daily discharge, 30 second-feet Nov. 15.

1928-35: 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 periods of ice effect, Dec. 9-12, Dec. 18 to Apr. 6, which are fair. 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 table, water year 1934-35, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

1.8	23	2.2	70	2.6	146	3.6	468	5.5	1,550
1.9	33	2.3	88	2.8	194	4.0	640	6.0	1,810
2.0	44	2.4	104	3.0	252	4.5	910	6.5	2,310
2.1	56	2.5	124	3.2	316	5.0	1,210	7.0	2,740

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	82	34	120	75	150	95	280	880	140	144	168	81
2	78	97	176	*75	140	130	260	740	112	132	158	71
3	75	88	130	*80	150	140	260	480	93	118	160	59
4	84	88	95	*75	140	120	260	370	97	104	132	49
5	83	90	81	*70	140	100	240	306	112	100	300	76
6	87	68	69	75	130	110	240	310	95	98	430	106
7	86	60	50	95	130	180	228	440	142	92	255	74
8	82	63	58	170	130	160	214	1,620	180	90	202	62
9	76	53	75	500	130	140	236	870	168	130	166	68
10	68	44	65	750	120	150	250	500	136	116	150	66
11	87	32	55	900	120	180	265	375	138	97	214	63
12	102	42	46	550	120	320	265	310	132	89	490	64
13	87	36	45	400	120	380	280	270	106	84	275	61
14	*80	32	*49	340	120	200	455	265	86	84	184	64
15	*85	30	*50	300	130	170	530	290	124	108	146	224
16	*110	55	52	280	150	320	920	260	184	132	130	180
17	*60	60	56	240	190	1,500	988	228	575	120	120	112
18	*48	56	*55	200	170	1,500	1,470	208	2,090	85	112	89
19	*70	50	50	180	150	1,000	1,830	200	1,220	82	97	78
20	*46	86	55	170	140	800	1,870	190	1,860	192	96	110
21	*60	136	60	200	120	750	1,910	144	910	158	80	146
22	*46	118	55	260	110	550	1,320	138	700	114	80	108
23	*60	80	48	240	100	460	990	136	670	102	79	87
24	*80	99	80	200	95	500	860	128	510	610	77	124
25	*55	118	75	190	90	600	770	132	390	640	82	126
26	*65	97	70	180	85	460	570	114	290	340	71	94
27	*60	104	65	170	80	320	510	104	240	224	77	75
28	*46	106	75	160	75	320	580	104	220	172	74	89
29	39	106	80	160	-	460	600	142	190	280	68	100
30	36	106	75	150	-	440	495	180	166	320	65	92
31	33	-	75	150	-	300	-	146	-	224	71	-
Month					Second-foot-days	Maximum	Minimum	Mean	Per square mile		Run-off in inches	
October.....					2,166	110	33	69.5	0.281		0.32	
November.....					2,224	136	30	74.1	.300		.33	
December.....					2,188	176	43	70.6	.286		.33	
Calendar year 1934.....					72,935	2,970	17	200	.810		10.98	
January.....					7,585	900	70	245	.992		1.14	
February.....					3,525	190	75	126	.610		.63	
March.....					12,855	1,500	95	415	1.68		1.84	
April.....					18,944	1,910	214	665	2.69		3.00	
May.....					19,579	1,620	104	341	1.38		1.69	
June.....					12,076	2,090	86	403	1.63		1.82	
July.....					5,380	640	82	174	.704		.81	
August.....					4,809	490	65	155	.628		.72	
September.....					2,798	224	49	93.3	.378		.42	
Water year 1934-35.....					86,119	2,090	30	236	.955		12.95	

*Estimated.

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 1935.

Extremes.- Maximum discharge during year, 2,670 second-feet June 17; maximum recorded gage height, 5.78 feet Jan. 10; minimum discharge, 80 second-feet Oct. 29 (gage height, 1.69 feet); minimum daily discharge, 96 second-feet Nov. 10 and 12.
1930-35: Maximum discharge, 5,780 second-feet Apr. 17, 1933; maximum recorded gage height (caused by ice jam), about 12.0 feet Feb. 10, 1933; 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 excellent except those for period of ice effect, Dec. 9 to Mar. 20, and those estimated, 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 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	150	116	*420	*170	*300	*360	580	2,060	970	930	*650	270
2	136	202	*600	*180	*320	*400	680	1,920	930	720	*650	184
3	132	142	290	*220	*320	*400	650	1,760	870	650	*650	320
4	144	180	335	*240	*300	*380	520	1,580	900	540	*550	360
5	224	198	490	*240	*320	*380	470	1,460	900	730	670	426
6	210	148	426	*240	*300	700	495	1,460	970	750	*800	260
7	210	112	430	*220	*300	*750	490	1,620	1,020	710	*600	340
8	164	174	330	*420	*320	*500	510	2,160	1,360	810	*600	184
9	150	130	240	*960	*320	*500	550	1,860	1,380	850	*650	250
10	160	96	280	*1,100	*320	500	640	1,640	1,260	840	*700	356
11	200	118	*320	*950	*320	700	640	1,540	1,180	780	*850	320
12	164	96	*300	*800	*260	700	660	1,380	1,180	*760	*650	280
13	120	146	*540	*650	*280	560	780	1,540	1,060	*700	*750	266
14	102	178	*240	*800	*300	480	520	1,280	1,000	*700	*700	316
15	118	214	*320	*700	500	480	760	1,240	1,320	760	*650	660
16	134	176	*360	*600	1,100	850	720	1,180	1,360	810	*700	360
17	104	190	*300	*600	420	1,500	680	1,180	1,720	780	620	320
18	156	234	*260	*550	340	1,400	370	1,140	2,360	760	466	356
19	176	*170	*280	*550	*340	1,300	1,200	1,040	2,180	640	326	366
20	130	*220	*300	*500	*420	1,200	1,540	1,020	2,220	720	640	490
21	124	*240	*320	*440	*400	1,000	1,420	970	1,880	560	650	366
22	140	*220	*360	*560	*420	900	1,440	700	1,920	560	640	286
23	129	*190	*300	*480	*320	870	1,660	475	1,820	860	600	346
24	208	*180	*180	*400	*440	920	1,640	365	1,700	*1,600	620	396
25	186	166	*160	*460	*480	930	1,600	420	1,700	*1,100	600	350
26	156	128	*180	*400	*420	960	1,490	345	1,540	*750	610	320
27	132	166	*200	*380	*420	820	1,540	320	1,420	*700	540	330
28	122	*170	*200	*420	*400	950	1,700	330	1,340	*600	495	456
29	104	*300	*220	*360	-	1,020	1,740	650	1,180	700	425	320
30	150	*380	*190	*340	-	820	1,260	800	990	*750	300	306
31	166	-	*190	*380	-	580	-	590	-	*700	365	-
Month	Second-foot-days		Maximum		Minimum		Mean		Per square mile		Run-off in inches	
October.....	4,681		224		102		161		0.290		0.33	
November.....	5,370		380		96		179		.344		.38	
December.....	9,360		600		160		302		.580		.67	
Calendar year 1934.....	188,995		2,910		96		518		.994		13.50	
January.....	15,030		1,100		170		465		.931		1.07	
February.....	10,700		1,100		260		382		.753		.76	
March.....	23,700		1,500		360		765		1.47		1.70	
April.....	29,995		1,860		470		1,000		1.92		2.14	
May.....	35,828		2,160		320		1,166		2.22		2.56	
June.....	41,610		2,360		870		1,364		2.66		2.97	
July.....	23,760		1,600		540		766		1.47		1.70	
August.....	18,615		850		300		607		1.17		1.36	
September.....	10,188		660		184		340		.653		.73	
Water year 1934-35.....	228,954		2,360		96		627		1.20		16.36	

West Branch of Ausable River near Newman, N. Y.

Location.— Water-stage recorder, lat. 44°18'40", long. 73°55', 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 1935.

Average discharge.— 16 years (1919-35), 220 second-feet.

Extremes.— Maximum discharge during year, 1,750 second-feet Apr. 30 (gage height, 5.93 feet); minimum, 29 second-feet Nov. 15 (gage height, 2.24 feet); minimum daily discharge, 40 second-feet Jan. 5.
1916-17, 1919-35: Maximum discharge, 6,200 second-feet Oct. 6, 1932 (gage height, 9.61 feet); minimum, practically zero Sept. 13, 1920, caused by closing gates in logging dam (gage height, 1.60 feet); minimum daily discharge, 7.2 second-feet July 29, 1920.

Remarks.— Records good except those for period of ice effect, Dec. 9 to Mar. 17, and those estimated, which are fair. Diurnal fluctuation at low and medium stages caused by power operations.

Rating table, water year 1934-35, except period of ice effect
(gage height, in feet, and discharge, in second-feet)

2.2	26	2.6	65	3.0	135	3.4	245	4.2	580	5.0	1,040
2.3	35	2.7	80	3.1	159	3.6	316	4.4	680	5.5	1,400
2.4	42	2.8	96	3.2	184	3.8	366	4.6	755	6.0	1,810
2.5	52	2.9	114	3.3	213	4.0	434	4.8	905		

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	71	69	640	44	55	50	128	1,080	350	154	154	59
2	56	65	830	42	50	65	134	880	285	130	212	58
3	65	59	410	42	60	60	114	420	248	116	154	53
4	47	130	255	42	60	55	114	330	255	104	126	54
5	43	445	202	40	55	70	106	295	290	97	132	99
6	46	230	172	50	55	170	96	340	305	66	*224	93
7	77	160	158	90	50	240	98	640	400	91	*190	68
8	85	130	110	150	55	130	98	1,040	980	120	160	60
9	70	112	85	600	60	95	102	740	560	440	134	57
10	58	98	70	1,100	55	85	100	850	390	265	112	88
11	66	92	65	650	55	95	120	650	335	190	222	88
12	126	84	65	400	55	120	156	290	146	146	256	69
13	120	71	60	280	60	100	150	415	242	116	180	64
14	62	66	60	200	65	80	142	460	202	118	126	64
15	110	57	60	170	85	80	128	435	520	110	108	510
16	164	62	60	140	100	130	182	315	460	188	100	280
17	114	64	60	110	90	420	174	270	610	112	90	175
18	96	160	55	100	80	485	162	260	1,040	93	79	116
19	92	340	55	90	70	350	152	224	670	110	67	92
20	53	450	65	85	65	240	236	192	580	270	65	106
21	59	265	60	100	60	210	400	184	440	305	63	99
22	59	196	60	110	55	180	455	186	475	192	68	87
23	84	182	55	95	55	178	560	170	465	196	64	80
24	110	345	55	85	55	230	600	180	380	500	59	72
25	110	226	50	90	60	214	560	156	355	355	54	70
26	102	150	50	75	55	180	465	202	295	222	52	64
27	104	130	50	70	50	164	780	250	245	154	52	74
28	104	118	48	65	50	144	1,460	295	255	*120	67	106
29	88	248	46	60	-	162	1,120	630	204	232	59	122
30	78	355	44	55	-	144	1,400	550	168	320	58	128
31	71	-	44	55	-	158	-	390	-	196	62	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,712	186	43	87.5	0.754	0.87
November.....	5,150	450	57	172	1.48	1.65
December.....	4,099	830	44	132	1.14	1.31
Calendar year 1934.....	63,424	1,480	32	174	1.50	20.54
January.....	5,275	1,100	40	170	1.47	1.70
February.....	1,720	100	50	61.4	.529	.55
March.....	5,028	485	50	162	1.40	1.61
April.....	10,452	1,480	96	349	3.01	3.36
May.....	13,104	1,040	156	425	3.65	4.21
June.....	12,297	1,040	169	410	3.53	3.94
July.....	5,758	500	86	187	1.61	1.88
August.....	3,509	236	52	113	.974	1.12
September.....	3,159	510	53	105	.905	1.01
Water year 1934-35.....	72,320	1,480	40	198	1.71	23.19

*Estimated.

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 1935.

Average discharge.- 11 years, 693 second-feet.

Extremes.- Maximum discharge during year, 5,500 second-feet June 18; maximum gage height from flood marks, about 11.9 feet Jan. 9 (backwater from ice); minimum discharge not determined; minimum gage height, 1.20 feet Oct. 5, 7, Nov. 15.
1924-35: Maximum discharge, about 19,100 second-feet Oct. 1, 1924; 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. 14-16, Dec. 8 to Jan. 10, Jan. 13 to Mar. 21, period of backwater from mill waste, Oct. 1 to Nov. 4, and those estimated, which are fair. Flow partly regulated by storage, principally in Taylor Pond and Fern Lake.

Rating tables, water year 1934-35, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

1.0	87	2.0	490	6.0	6,000	1.0	76	2.5	740
1.2	139	2.5	815	7.0	8,420	1.2	122	3.0	1,160
1.4	204	3.0	1,240	9.0	14,800	1.4	181	4.0	2,330
1.6	281	4.0	2,410	11.0	20,700	1.6	252	5.0	3,950
1.8	371	5.0	4,000			2.0	433	6.0	5,980

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	215	200	*1,450	150	180	180	413	3,180	1,210	418	423	212
2	210	210	*2,700	150	170	200	407	1,610	888	368	475	205
3	190	200	1,310	150	180	190	397	1,280	719	314	423	191
4	175	185	840	140	190	180	371	1,030	677	276	322	195
5	155	*1,040	631	140	170	240	352	903	762	259	354	277
6	155	*820	500	150	180	600	358	975	837	241	433	348
7	170	522	334	330	160	900	329	2,250	1,280	245	423	280
8	260	392	280	600	170	600	333	3,360	2,540	344	344	215
9	240	329	260	1,200	170	460	357	2,400	1,670	2,410	318	205
10	200	290	240	3,800	180	320	402	2,330	1,160	1,880	288	219
11	185	265	220	2,710	190	380	429	2,000	1,020	1,060	366	268
12	360	261	200	1,560	200	500	498	1,360	847	669	624	230
13	410	228	200	800	180	440	504	1,180	677	478	428	208
14	300	200	190	600	180	380	522	1,510	583	408	335	210
15	260	180	180	500	220	340	522	1,260	1,000	382	284	1,010
16	400	190	180	440	280	500	698	938	1,200	582	248	866
17	350	211	170	400	260	1,600	657	808	1,980	354	230	512
18	280	272	170	340	220	1,400	689	748	3,940	296	212	358
19	280	640	170	320	200	1,200	887	664	2,400	367	184	280
20	235	1,210	220	300	190	1,000	1,180	593	2,100	666	175	260
21	195	975	200	320	190	800	1,640	545	1,440	740	191	248
22	195	704	200	360	180	670	1,580	539	1,360	577	222	234
23	200	*580	180	360	170	612	1,750	499	1,500	562	222	205
24	250	*740	170	320	170	762	1,810	485	1,140	1,370	212	198
25	260	*800	170	300	200	728	1,750	444	1,120	940	201	308
26	260	*580	170	260	180	805	1,430	486	855	620	184	201
27	260	*400	170	260	170	522	2,190	599	705	438	184	208
28	260	*340	160	240	160	446	4,180	684	733	349	219	284
29	*255	*440	160	220	-	510	3,280	1,350	605	507	222	280
30	*215	1,180	160	200	-	510	3,740	1,710	504	912	206	292
31	195	-	150	190	-	440	-	1,210	-	592	215	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	7,535	410	155	243	0.542	0.62
November.....	14,582	1,210	180	486	1.08	1.20
December.....	12,335	2,700	180	398	.888	1.02
Calendar year 1934.....	200,281	5,170	82	549	1.23	16.59
January.....	17,680	3,800	140	570	1.27	1.46
February.....	5,270	280	180	188	.490	.44
March.....	18,193	1,600	160	587	1.31	1.51
April.....	35,640	4,180	329	1,121	2.50	2.79
May.....	39,390	3,960	444	1,271	2.84	3.27
June.....	37,412	3,940	504	1,247	2.78	3.10
July.....	19,412	2,410	241	626	1.40	1.61
August.....	9,166	624	175	286	.661	.76
September.....	8,667	1,010	181	296	.661	.74
Water year 1934-35.....	223,492	4,160	140	612	1.37	18.52

*Estimated.

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 1935.

Average discharge.- 11 years, 50.4 second-feet.

Extremes.- Maximum discharge during year, 375 second-feet June 18 (gage height, 4.17 feet, from graph based on gage readings); minimum, 3 second-feet, frequently when plant is shut down.
1924-35: Maximum discharge, 720 second-feet Apr. 25, 1928 (gage height, 5.6 feet); minimum, 0.8 second-foot July 2 and Aug. 29, 1931 (plant shut down).

Remarks.- Records fair except those for period of ice effect, Jan. 10-20, and those estimated, which are poor. Flow regulated by storage in Taylor Pond and Fern Lake and by operation of power plant.

Rating table, water year 1934-35, except period of ice effect
(gage height, in feet; and discharge, in second-feet)

1.0	0.9	1.4	5.9	1.8	24	2.4	78	3.5	246
1.1	1.5	1.6	5.9	1.9	30	2.6	102	4.0	341
1.2	2.5	1.6	15	2.0	37	2.8	129	4.5	444
1.3	3.9	1.7	18	2.2	55	3.0	160		

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	30	29	9	8	36	50	87	89	32	21	46
2	32	31	40	9	8	38	50	93	74	29	18	37
3	26	24	35	9	8	34	42	69	60	25	16	34
4	23	20	31	9	8	50	44	66	57	21	18	44
5	24	24	11	9	8	38	57	68	55	17	18	72
6	25	7	18	9	8	26	59	58	45	23	19	60
7	7	4	23	10	10	57	67	68	41	34	18	55
8	29	6	28	16	16	37	63	169	111	35	18	65
9	30	6	7	36	16	52	47	188	131	40	24	55
10	25	6	7	70	28	40	47	113	127	60	27	51
11	18	6	7	75	53	42	53	87	87	51	30	60
12	21	6	7	80	75	56	56	89	60	41	34	55
13	22	6	7	110	38	50	59	82	53	35	34	55
14	7	12	7	110	39	49	50	60	44	30	24	56
15	5	44	4	110	41	49	57	53	42	36	23	89
16	5	6	3	110	32	46	82	50	55	27	19	62
17	6	18	3	75	19	80	97	50	88	23	18	60
18	6	6	4	55	8	114	137	50	294	20	17	60
19	6	8	6	44	17	82	165	50	220	11	15	60
20	17	32	7	38	28	52	168	49	220	29	22	60
21	6	26	7	34	38	45	160	39	157	41	50	37
22	6	27	7	31	37	39	149	42	124	41	60	37
23	6	22	7	31	37	37	110	39	99	37	55	37
24	6	28	7	32	32	45	103	37	98	37	55	37
25	6	6	7	12	37	50	108	36	102	37	53	37
26	19	23	7	14	37	50	98	31	85	37	50	37
27	12	8	8	8	37	45	81	30	71	37	53	37
28	6	21	9	11	35	43	79	41	60	37	55	30
29	6	6	9	12	-	47	85	129	50	37	60	18
30	6	18	9	10	-	50	72	152	40	37	55	19
31	8	-	9	8	-	80	-	122	-	30	51	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	448	32	5	14.5		
November.....	487	40	6	16.2		
December.....	367	40	3	11.8		
Calendar year 1934.....	15,689	362	3	43.0	0.870	11.82
January.....	1,196	110	8	38.6		
February.....	756	73	8	27.0		
March.....	1,472	114	22	47.5		
April.....	2,468	168	42	82.3		
May.....	2,255	188	30	72.7		
June.....	2,846	294	40	94.9		
July.....	1,002	60	9	32.3		
August.....	1,031	60	15	33.3		
September.....	1,451	72	18	48.4		
Water year 1934-35.....	15,779	294	3	45.2	.874	11.89

East Branch of Ausable River at Ausable Forks, N. Y.

Location.- Staff gage, lat. 44°26'20", long. 73°40'30", at lower highway bridge in Ausable Forks, Essex County, 400 feet above confluence with West Branch of Ausable River.

Drainage area.- 198 square miles.

Records available.- September 1924 to September 1935.

Average discharge.- 11 years, 311 second-feet.

Extremes.- Maximum discharge during year, 3,040 second-feet July 9; maximum gage height, 4.6 feet Jan. 9 from flood marks; minimum discharge, 34 second-feet Nov. 15 (gage height, 0.48 foot).

1924-35: 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, Dec. 9 to Jan. 10, Jan. 14 to Mar. 17, which are fair.

Rating tables, water year 1934-35, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Mar. 17				Table for Mar. 18 to Apr. 28				Table for Apr. 29 to Sept. 30			
0.4	20	1.5	535	0.6	81			0.4	24	1.6	617
.6	62	2.0	930	.8	153			.6	70	2.0	930
.8	127	2.5	1,410	1.0	248			.8	140	2.5	1,410
1.0	218	3.0	1,980	1.2	359			1.0	238	3.0	1,980
				1.5	548			1.2	354	4.0	3,340
				2.0	930						

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	86	68	725	55	75	60	153	1,350	528	202	202	67
2	77	68	1,230	55	70	70	145	805	443	136	228	62
3	65	65	648	50	80	80	141	582	342	117	207	60
4	55	87	387	50	75	60	141	450	288	98	158	54
5	52	630	268	48	70	100	122	392	288	86	168	89
6	55	361	189	55	65	300	111	404	424	82	149	163
7	80	257	124	110	60	500	118	673	582	113	145	132
8	110	169	102	200	70	150	111	1,340	1,120	117	120	79
9	80	140	95	1,000	65	130	126	1,260	653	2,360	117	60
10	71	116	90	2,000	60	120	141	1,160	515	1,420	98	73
11	62	110	85	1,160	55	150	176	1,100	450	653	154	92
12	102	110	80	569	55	280	203	653	379	411	255	79
13	156	92	80	354	50	200	203	424	300	277	181	65
14	116	83	75	200	50	170	208	522	255	222	136	65
15	113	34	70	160	75	160	203	653	476	186	101	463
16	161	86	70	140	110	280	218	489	476	207	89	441
17	131	86	65	130	90	1,100	286	392	1,240	168	82	244
18	124	110	65	120	80	727	280	386	1,600	154	79	172
19	106	266	65	110	75	383	389	373	1,110	163	67	120
20	83	500	90	110	65	325	582	306	765	404	60	113
21	74	446	90	140	60	325	805	266	582	386	60	105
22	77	335	80	170	60	291	765	255	653	300	60	95
23	80	268	75	170	55	286	845	217	689	266	70	89
24	96	424	75	150	55	359	845	212	489	689	70	79
25	96	374	70	140	65	302	765	196	482	379	62	76
26	86	246	65	120	60	264	727	233	360	266	60	70
27	92	169	60	110	60	218	975	312	306	196	57	89
28	106	135	60	100	55	223	2,050	354	312	149	65	113
29	89	174	60	95	-	308	1,480	541	312	207	70	117
30	83	610	55	90	-	198	1,840	653	212	462	60	117
31	77	-	55	85	-	166	-	617	-	318	65	-
Month					Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches		
October.....					2,841	161	52	91.6	0.463	0.85		
November.....					6,619	630	34	221	1.12	1.25		
December.....					5,348	1,230	55	173	.874	1.01		
Calendar year 1934.....					85,975	2,310	20	235	1.19	16.12		
January.....					8,046	2,000	48	260	1.31	1.51		
February.....					1,865	110	50	66.6	1.36	1.35		
March.....					8,185	1,100	60	284	1.33	1.53		
April.....					15,154	2,050	111	505	2.86	2.84		
May.....					17,570	1,350	196	567	2.65	3.30		
June.....					16,631	1,600	212	554	2.80	3.12		
July.....					11,194	2,360	82	361	1.82	2.10		
August.....					3,485	255	57	112	.566	.65		
September.....					3,643	463	54	121	.611	.68		
Water year 1934-35.....					100,581	2,360	34	276	1.39	18.87		

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, August to November 1908, July 1923 to September 1935.

Average discharge.- 12 years (1923-35), 306 second-feet.

Extremes.- Maximum discharge during year, 2,170 second-feet May 8; maximum gage height, 8.23 feet Mar. 25 (backwater from ice); minimum discharge, 49 second-feet Oct. 5 (gage height, 2.30 feet).
1923-35: Maximum discharge, about 11,800 second-feet Oct. 1, 1924 (gage height, 10.85 feet); minimum, 27 second-feet Sept. 11, 1932 (gage height, 2.10 feet).

Remarks.- Records good except those for periods of ice effect, Nov. 15, 16, Dec. 8 to Mar. 28, and those estimated, which are fair.

Rating tables, water year 1934-35, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Mar. 24

2.3	49	3.4	492
2.4	87	3.6	620
2.6	114	3.8	755
2.8	185	4.0	910
3.0	273	4.5	1,360
3.2	376	5.0	1,910

Table for Mar. 25 to Sept. 30

2.3	53	3.4	510
2.4	72	3.6	640
2.6	123	3.8	785
2.8	196	4.0	940
3.0	288	4.5	1,390
3.2	393	5.0	1,910
		5.5	2,530

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	62	*74	458	60	*95	50	388	1,250	329	161	200	68
2	56	*70	1,000	60	*80	60	361	710	269	143	169	66
3	53	*68	445	*65	*90	75	350	542	214	130	165	66
4	51	*60	293	*55	*90	65	303	462	200	117	150	66
5	58	*540	227	*50	85	70	274	404	209	115	154	77
6	60	*290	181	*65	95	90	254	410	240	103	154	*150
7	*83	223	106	*95	80	120	245	731	422	98	143	*150
8	67	*180	100	200	95	130	245	1,840	625	130	126	*80
9	62	111	*100	750	90	100	274	961	589	1,050	117	*60
10	60	100	*95	1,400	85	90	371	740	450	912	115	*80
11	62	98	*85	1,500	80	120	404	640	416	665	143	*90
12	76	85	*85	550	90	220	427	516	566	455	209	*90
13	83	79	80	250	75	170	516	456	295	514	188	*70
14	79	71	75	200	75	160	662	433	231	250	147	*70
15	87	70	75	160	100	150	492	450	254	231	123	*380
16	81	75	75	140	130	180	582	382	319	298	106	*360
17	81	79	70	130	110	850	680	350	368	274	95	*240
18	81	100	65	120	95	1,500	774	329	955	205	86	*180
19	83	174	70	110	80	900	755	303	668	516	79	*150
20	75	210	75	100	70	700	858	265	654	516	79	*120
21	69	177	85	130	60	750	1,060	269	510	371	88	*110
22	67	158	80	160	60	650	924	264	422	273	86	*100
23	67	193	75	160	55	650	822	245	468	269	93	*90
24	*75	278	75	150	55	900	860	231	377	758	90	*80
25	73	189	70	140	60	700	845	222	329	461	81	74
26	67	*158	*70	120	55	550	696	205	274	319	*74	81
27	73	140	*65	*120	50	462	750	192	236	250	*64	86
28	63	124	65	*100	50	404	1,110	200	289	205	*70	109
29	67	117	65	*100	-	393	942	227	256	209	79	115
30	87	260	65	*95	-	422	913	329	188	514	79	106
31	*80	-	60	*90	-	433	-	274	-	264	77	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,207	87	51	71.2	0.259	0.30
November.....	4,381	340	68	146	.531	.59
December.....	4,535	1,000	60	146	.531	.61
Calendar year 1934.....	80,210	3,800	31	220	.800	10.84
January.....	7,425	1,500	50	240	.873	1.01
February.....	2,205	130	50	78.8	.287	.30
March.....	12,114	1,500	50	391	1.42	1.64
April.....	18,517	1,110	245	611	2.22	2.48
May.....	14,830	1,840	192	478	1.74	2.01
June.....	11,360	855	166	379	1.36	1.54
July.....	10,141	1,030	98	327	1.19	1.37
August.....	3,629	209	64	117	.425	.47
September.....	3,514	380	66	117	.425	.47
Water year 1934-35.....	94,678	1,840	50	259	.942	12.81

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.

Records available.- July 1913 to September 1935.

Extremes.- Maximum gage height during year, 4.55 feet July 12, 13; minimum, 1.97 Nov. 19, 1913-35; Maximum gage height, 5.07 feet Apr. 18, 1922; minimum, 1.06 feet Dec. 29, 1922.

Remarks.- Records good. Elevation of lake surface regulated by power operations and flood gates at Ticonderoga.

Gage height, in feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.59	2.16	2.27	2.27	2.94	2.33	2.69	3.57	3.51	3.77	3.99	3.37
2	2.65	2.17	2.31	2.31	2.91	2.29	2.73	3.55	3.69	3.77	3.93	3.39
3	2.61	2.18	2.37	2.33	2.87	2.25	2.79	3.59	3.71	3.75	3.86	3.35
4	2.55	2.19	2.41	2.35	2.81	2.23	2.77	3.55	3.69	3.81	3.79	3.31
5	2.55	2.21	2.43	2.33	2.81	2.21	2.79	3.57	3.71	3.73	3.81	3.37
6	2.57	2.23	2.35	2.31	2.80	2.21	2.76	3.59	3.79	3.75	3.75	3.39
7	2.51	2.21	2.31	2.29	2.77	2.15	2.81	3.63	3.77	3.81	3.79	3.31
8	2.55	2.19	2.27	2.29	2.75	2.13	2.83	3.75	3.79	4.19	3.77	3.29
9	2.51	2.17	2.29	2.47	2.71	2.15	2.85	3.65	3.85	4.49	3.73	3.27
10	2.47	2.15	2.27	2.71	2.67	2.07	2.87	3.87	3.83	4.51	3.77	3.31
11	2.51	2.13	2.25	2.81	2.59	2.11	2.91	3.79	3.89	4.53	3.87	3.31
12	2.41	2.11	2.29	2.91	2.61	2.09	2.89	3.77	3.87	4.55	3.77	3.25
13	2.39	2.13	2.25	2.95	2.57	2.11	2.99	3.79	3.91	4.55	3.79	3.23
14	2.35	2.11	2.21	2.97	2.54	2.09	3.09	3.81	3.87	4.47	3.71	3.19
15	2.37	2.09	2.17	3.01	2.59	2.11	3.13	3.77	3.89	4.39	3.69	3.17
16	2.31	2.07	2.15	3.03	2.51	2.13	3.27	3.79	3.91	4.43	3.69	3.15
17	2.35	2.05	2.19	3.05	2.57	2.11	3.37	3.73	3.85	4.39	3.71	3.23
18	2.27	2.01	2.25	3.09	2.53	2.15	3.35	3.75	4.01	4.35	3.67	3.23
19	2.21	1.97	2.21	3.05	2.49	2.17	3.43	3.75	4.11	4.33	3.69	3.21
20	2.23	2.01	2.19	3.03	2.51	2.21	3.53	3.77	4.03	4.45	3.65	3.15
21	2.25	2.07	2.17	3.01	2.45	2.29	3.47	3.75	4.05	4.43	3.63	3.13
22	2.23	2.05	2.15	3.09	2.39	2.27	3.53	3.71	4.05	4.41	3.55	3.11
23	2.21	2.03	2.19	3.11	2.43	2.25	3.57	3.75	4.05	4.37	3.59	3.09
24	2.19	2.07	2.17	3.17	2.39	2.31	3.59	3.69	4.01	4.37	3.49	3.11
25	2.17	2.03	2.15	3.13	2.41	2.33	3.56	3.73	3.99	4.29	3.47	3.07
26	2.19	2.05	2.17	3.11	2.31	2.37	3.59	3.70	3.95	4.23	3.49	3.07
27	2.21	2.07	2.19	3.07	2.33	2.43	3.57	3.73	3.91	4.19	3.45	3.09
28	2.22	2.09	2.21	3.07	2.35	2.44	3.59	3.69	3.90	4.15	3.55	3.09
29	2.23	2.11	2.23	3.01	-	2.57	3.55	3.71	3.85	4.11	3.49	3.07
30	2.21	2.13	2.21	2.99	-	2.63	3.59	3.69	3.81	4.09	3.41	3.05
31	2.17	-	2.25	2.97	-	2.65	-	3.65	-	4.06	3.39	-

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 north-west of Fair Haven, Rutland County.

Drainage area.— 187 square miles.

Records available.— October 1928 to September 1935.

Extremes.— Maximum discharge during year, 3,090 second-feet July 8; maximum gage height, 17.96 feet (ice jam) Jan. 9; minimum (regulated), 3.9 second-feet June 2 (gage height, 1.79 feet).
1928-35: Maximum discharge, 3,870 second-feet Nov. 20, 1932; maximum gage height, 17.96 feet (ice jam) Jan. 9, 1935; minimum discharge, 3.8 second-feet June 1, 1934 (gage height, 1.78 feet).

Remarks.— Records good except those estimated for periods of ice effect, Dec. 27 to Jan. 9, Jan. 22-25, Feb. 1, 2, 28, Mar. 1-16, 11-21, and periods of missing gage-height record, Nov. 14-16, Nov. 21 to Dec. 16, Jan. 10-21, 26-31, Feb. 3-27, Mar. 7-10, Sept. 17, 18, which are fair. Estimates of discharge based on one discharge measurement and hydrographic comparison. Lake Bomoseen may produce seasonal storage. Considerable diurnal regulation at low stages.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Dec. 16

1.7	2.4	2.5	42	3.5	179
1.9	7.3	2.7	61	4.0	282
2.1	15	2.9	83	4.5	390
2.3	27	3.1	110	5.0	505

Table for Dec. 17 to Sept. 30

2.3	28	3.2	154	5.0	564	9.0	1,590
2.4	36	3.4	196	5.5	685	10.0	1,870
2.6	54	3.6	240	6.0	810	12.0	2,450
2.8	78	4.0	329	7.0	1,060	14.0	3,090
3.0	114	4.5	444	8.0	1,320	16.3	3,870

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	59	73	250	100	150	130	444	948	91	261	193	41
2	63	76	450	120	140	120	456	860	99	258	196	85
3	42	91	360	130	100	130	432	588	79	236	180	65
4	59	77	280	120	120	160	359	540	65	202	48	100
5	50	124	230	110	130	140	355	466	85	160	122	76
6	55	107	200	90	120	600	297	410	78	220	129	70
7	36	175	120	130	110	490	275	558	125	523	131	72
8	58	169	150	280	130	280	302	960	96	2,550	118	35
9	63	131	120	900	110	220	296	710	119	1,270	103	99
10	56	105	150	2,500	80	200	295	612	169	855	97	89
11	54	91	150	1,260	100	270	302	504	126	685	38	111
12	72	120	180	800	110	600	292	396	130	600	122	70
13	95	123	190	500	110	450	358	415	72	552	114	67
14	70	160	180	280	100	350	504	413	68	410	110	72
15	53	160	150	200	110	250	564	405	76	369	98	72
16	68	120	130	190	200	280	785	360	73	474	102	98
17	61	80	179	190	150	850	785	332	136	410	34	94
18	75	56	207	180	130	800	985	312	419	344	28	90
19	71	96	197	170	110	700	1,270	232	523	352	74	86
20	58	70	280	150	100	650	1,270	251	514	395	58	87
21	58	110	205	160	120	540	1,090	272	272	275	72	83
22	67	160	110	170	150	492	935	251	356	299	80	34
23	70	160	107	170	120	492	785	242	451	310	97	62
24	68	140	186	160	90	612	685	220	362	320	94	73
25	66	80	58	180	110	760	636	219	439	287	43	72
26	75	130	125	150	130	421	564	140	363	270	71	71
27	108	140	160	120	170	364	480	134	314	254	73	70
28	59	200	140	140	160	390	410	198	378	162	138	75
29	75	190	150	150	-	516	410	196	262	202	101	69
30	89	200	70	180	-	588	746	164	256	232	78	50
31	72	-	140	150	-	444	-	107	-	218	68	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,025	108	36	65.3	0.349	0.40
November.....	3,714	200	56	124	.653	.74
December.....	5,664	450	58	185	.979	1.13
Calendar year 1934.....	72,278	1,940	4.7	196	1.06	14.37
January.....	10,090	2,500	90	325	1.74	2.01
February.....	3,460	200	80	124	.653	.69
March.....	13,129	850	120	424	2.27	2.62
April.....	17,345	1,270	273	578	3.09	3.45
May.....	12,205	960	107	394	2.11	2.43
June.....	6,136	451	36	205	1.10	1.23
July.....	13,970	2,530	160	451	2.41	2.78
August.....	3,010	198	28	97.1	.519	.60
September.....	2,258	111	34	75.3	.403	.45
Water year 1934-35.....	93,006	2,530	28	255	1.36	18.53

Otter Creek at Center Rutland, Vt.

Location.- Water-stage recorder, lat. 43°36'15", long. 73°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 1935.

Extremes.- Maximum discharge during year, 6,350 second-feet Jan. 10 (gage height, 9.02 feet); minimum, 44 second-feet Oct. 6 (gage height, 0.35 foot); minimum mean daily discharge, 102 second-feet Aug. 18.
1928-35: Maximum discharge, 6,470 second-feet Apr. 18, 1933 (gage height, 9.08 feet); minimum mean daily discharge, 61 second-feet Sept. 18, 1934.

Remarks.- Records good except those during period of missing gage-height record, Dec. 18, 19, Feb. 2-4, and those during period of ice effect, Jan. 15 to Feb. 1, which are fair. Diurnal regulation. Seasonal storage on East Creek at Pittsford and Chittenden.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

0.3	40	2.0	320	4.5	1,610	7.0	4,030
.5	54	2.5	468	5.0	2,010	7.5	4,580
.9	93	3.0	668	5.5	2,480	8.0	5,150
1.2	140	3.5	920	6.0	2,980	8.5	5,750
1.5	199	4.0	1,230	6.5	3,480	9.2	6,590

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	281	252	574	216	320	319	625	1,850	330	397	544	199
2	284	302	1,060	214	320	284	628	1,180	236	348	289	186
3	181	257	746	256	270	292	590	863	238	279	264	194
4	212	216	514	218	300	400	538	755	259	204	192	181
5	194	484	472	179	326	353	503	658	264	226	310	218
6	194	429	420	262	318	1,090	412	636	270	231	287	226
7	173	1,070	342	204	312	1,570	366	1,550	267	408	257	183
8	256	859	249	638	256	1,090	446	1,770	200	2,140	246	122
9	212	466	190	2,360	308	594	479	1,200	257	2,140	226	226
10	218	404	282	5,930	193	478	502	996	349	1,160	253	412
11	214	346	221	3,910	251	736	532	646	372	627	204	326
12	428	336	249	1,850	226	1,410	507	696	263	522	446	286
13	309	325	250	1,460	224	1,150	525	882	264	548	278	240
14	199	255	227	780	222	670	656	667	227	454	242	217
15	260	233	221	450	255	552	696	579	234	391	234	336
16	326	270	242	460	521	571	1,100	500	206	736	217	274
17	284	296	215	470	424	1,560	836	390	354	687	191	231
18	216	236	230	480	354	1,970	800	396	838	389	102	212
19	244	358	270	450	304	1,240	1,090	378	736	376	220	204
20	220	394	356	400	256	1,010	1,370	406	742	444	184	196
21	126	309	397	350	266	1,100	1,410	342	624	370	148	177
22	244	321	350	400	257	820	1,450	327	668	459	294	180
23	269	262	298	440	248	841	1,370	370	898	391	319	211
24	214	514	265	330	180	1,090	1,230	324	662	529	204	220
25	255	584	248	380	258	1,070	1,200	266	1,040	394	164	184
26	178	418	245	420	274	746	1,070	216	664	369	192	135
27	559	352	300	350	425	654	1,010	317	477	321	195	180
28	410	353	266	380	382	622	1,200	263	744	211	259	183
29	348	309	241	370	-	656	1,410	305	551	344	278	332
30	270	407	212	350	-	893	1,610	366	451	412	265	360
31	262	-	252	330	-	629	-	274	-	338	192	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	8,007	559	128	258	0.840	0.97
November.....	11,406	1,070	216	380	1.24	1.38
December.....	10,373	1,060	190	335	1.09	1.26
Calendar year 1934.....	182,893	4,920	61	501	1.63	22.16
January.....	25,287	5,930	179	816	2.66	3.06
February.....	8,247	521	180	295	.961	1.00
March.....	26,460	1,970	284	854	2.78	3.20
April.....	26,155	1,610	386	872	2.84	3.17
May.....	20,340	1,850	218	656	2.14	2.47
June.....	13,685	1,040	200	456	1.49	1.66
July.....	16,625	2,140	204	545	1.77	2.04
August.....	7,458	446	102	241	.785	.90
September.....	6,783	412	122	226	.736	.82
Water year 1934-35.....	181,025	5,930	102	496	1.62	21.93

Otter Creek at Middlebury, Vt.

Location.- Water-stage recorder, lat. $44^{\circ}45'$, long. $73^{\circ}10'5''$, 150 feet above highway bridge at Middlebury, Addison County, $3\frac{1}{2}$ 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 1935.

Average discharge.- 19 years (1903-6, 1910-19, 1928-35), 945 second-feet.

Extremes.- Maximum discharge during year, 3,520 second-feet Jan. 15 (gage height, 5.08 feet); minimum, 237 second-feet Oct. 22 (gage height, 1.34 feet).

1903-7, 1910-20, 1928-35: Maximum discharge, 10,100 second-feet Mar. 30, 1913 (gage height, 11.07 feet); minimum, 93 second-feet Mar. 5, 1928.

Maximum known discharge, 13,600 second-feet Nov. 4, 1927 (gage height, 13.3 feet, at site 1,800 feet upstream, present datum).

Remarks.- Records good except those estimated for periods of ice effect, Dec. 27, Dec. 30 to Jan. 6, Jan. 19 to Mar. 4, Mar. 9-11, which are fair. Estimates of discharge based on one discharge measurement and hydrographic comparison. Small seasonal storage in Chittenden Reservoir, on East Creek.

Rating table, water year 1934-35, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

0.9	130	1.9	545	4.0	2,330	6.5	5,130
1.1	170	2.2	755	4.5	2,860	7.0	5,760
1.3	225	2.5	980	5.0	3,410	7.5	6,400
1.5	295	3.0	1,580	5.5	3,960	8.0	7,050
1.7	405	3.5	1,840	6.0	4,530		

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	375	363	800	580	670	740	1,430	2,750	615	965	845	447
2	412	361	1,430	340	650	650	1,380	2,640	573	815	808	330
3	335	399	1,520	320	600	710	1,380	2,640	475	720	734	387
4	295	363	1,500	320	550	800	1,300	2,690	440	615	643	454
5	300	489	1,020	320	680	950	1,180	2,440	496	496	629	496
6	287	699	960	510	680	1,580	1,100	2,130	545	538	792	489
7	271	929	720	484	660	1,690	958	2,030	680	699	727	447
8	279	1,260	517	972	600	1,890	920	2,530	636	1,960	664	363
9	325	1,060	335	2,000	650	1,840	980	2,380	636	2,280	664	351
10	300	785	325	2,470	460	1,490	1,020	2,380	746	2,350	531	546
11	275	643	393	2,540	510	1,560	1,100	2,380	830	2,360	629	405
12	330	559	351	2,750	500	1,660	1,180	2,230	792	2,280	815	692
13	517	545	355	3,080	470	1,700	1,180	1,980	643	2,080	962	594
14	447	482	345	3,190	480	1,700	1,390	1,740	552	1,790	741	553
15	367	412	351	3,410	660	1,610	1,560	1,560	524	1,380	594	643
16	440	393	325	3,300	820	1,480	1,840	1,340	510	1,180	552	838
17	461	405	315	3,190	840	1,610	2,030	1,180	506	1,380	503	699
18	397	447	330	2,750	810	1,740	2,180	1,020	1,136	1,300	381	566
19	325	454	345	2,000	700	1,790	2,280	675	1,460	1,140	375	496
20	330	615	454	1,560	610	1,890	2,380	845	1,480	1,520	369	510
21	300	650	559	920	580	1,940	2,540	890	1,450	1,380	393	475
22	246	559	573	950	560	1,980	2,540	822	1,340	1,180	650	369
23	315	531	496	1,030	530	2,230	2,590	970	1,560	1,140	587	369
24	351	592	405	750	450	2,550	2,590	748	1,560	1,260	608	433
25	295	838	393	760	580	2,440	2,590	720	1,520	1,300	524	510
26	325	652	345	830	660	2,230	2,540	580	1,610	1,060	412	412
27	419	692	440	790	750	1,940	2,490	510	1,380	882	412	393
28	706	580	419	770	790	1,660	2,490	615	1,300	778	503	440
29	622	573	393	750	-	1,520	2,440	629	1,340	762	587	426
30	489	587	380	730	-	1,560	2,590	727	1,140	1,020	567	615
31	393	-	400	690	-	1,610	-	699	-	958	552	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	11,509	706	246	371	0.591	0.68
November.....	18,137	1,260	363	605	.963	1.07
December.....	17,174	1,520	315	584	.882	1.02
Calendar year 1934.....	327,346	4,300	138	897	1.43	19.39
January.....	44,496	3,410	310	1,435	2.29	2.64
February.....	17,600	840	450	629	1.00	1.04
March.....	50,940	2,550	650	1,643	2.62	3.02
April.....	54,168	2,590	920	1,805	2.67	3.20
May.....	47,370	2,750	510	1,528	2.43	2.80
June.....	28,447	1,610	440	948	1.51	1.88
July.....	39,468	2,380	406	1,273	2.03	2.34
August.....	18,693	892	369	603	.960	1.11
September.....	14,745	838	330	492	.793	.87
Water year 1934-35.....	362,738	3,410	246	994	1.58	21.47

Winooksi River at Montpelier, Vt.

Location.- Water-stage recorder, lat. 44°15'25", long. 72°35'35", three-eighths 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 (revised).

Records available.- May 1909 to September 1923, August 1928 to September 1935.

Average discharge.- 16 years (1914-23, 1928-35), 571 second-feet.

Extremes.- Maximum discharge during year, 13,500 second-feet (estimated) Jan. 10; maximum gage height, 14.89 feet Jan. 9 (ice jam); minimum mean daily discharge, 80 second-feet Sept. 2.
1909-23, 1928-35: Maximum discharge, 20,200 second-feet Apr. 7, 1912 (gage height, about 18.7 feet, present datum); minimum, 6 second-feet Sept. 30, 1921 (gage height, 2.58 feet); minimum mean 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 estimated by hydrographic comparison for period of ice effect, Dec. 11 to Mar. 24, for period of missing gage-height record, July 1-12, and for periods Mar. 25 to Apr. 7, Sept. 2-8, 18-30, when the intake pipe was clogged. Complete storage on 24 square miles and considerable diurnal fluctuation caused by several small plants above.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

2.6	17	3.4	146	4.2	490	5.5	1,330	8.0	4,080	12.0	9,700
2.8	31	3.6	209	4.4	596	6.0	1,880	9.0	5,250	13.0	11,600
3.0	57	3.8	290	4.6	704	6.5	2,430	10.0	6,450	14.0	13,800
3.2	96	4.0	388	5.0	928	7.0	2,980	11.0	7,980		

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	120	192	682	280	360	250	1,500	3,200	521	400	268	108
2	183	272	1,360	215	360	230	1,300	2,210	521	330	209	80
3	164	260	736	230	320	260	1,080	1,500	393	300	189	95
4	170	212	596	230	300	280	1,050	1,140	328	270	125	120
5	166	654	574	220	320	260	920	898	338	180	308	125
6	147	504	480	210	320	350	900	857	378	180	443	140
7	144	1,600	382	400	310	600	840	1,380	348	200	385	130
8	136	768	322	1,000	300	640	868	2,980	428	300	264	140
9	205	560	227	6,500	290	500	1,180	1,720	580	390	224	115
10	194	486	240	12,000	250	410	1,350	1,350	758	310	202	230
11	170	402	260	4,000	220	600	1,600	1,170	790	300	255	343
12	196	342	240	2,500	250	780	1,720	940	672	290	428	247
13	192	341	215	1,800	265	940	1,550	823	537	277	348	192
14	166	306	240	1,200	260	700	2,650	801	398	169	324	156
15	216	240	250	560	265	620	2,170	801	348	175	304	728
16	318	264	230	580	350	510	2,400	693	485	199	256	800
17	324	235	200	540	320	1,450	2,150	634	490	220	217	560
18	234	330	230	580	300	2,550	2,160	564	1,420	182	146	310
19	177	518	240	500	340	2,000	2,040	542	1,010	172	182	270
20	159	606	260	400	340	1,600	2,100	532	1,020	192	224	290
21	132	550	330	340	310	1,880	2,320	516	1,110	146	228	295
22	141	429	300	370	260	1,700	2,210	500	949	152	247	300
23	233	396	230	400	250	1,280	2,210	460	965	338	247	210
24	238	980	210	390	225	1,750	2,430	413	857	857	178	225
25	200	776	260	380	250	1,650	2,600	383	747	542	115	230
26	151	499	215	350	270	1,400	2,040	338	639	338	123	230
27	168	406	230	420	290	1,100	1,980	309	553	264	209	220
28	204	392	240	350	270	1,050	2,100	304	942	192	209	210
29	196	422	260	360	-	1,000	1,770	324	785	221	209	240
30	177	454	200	390	-	1,300	2,200	480	560	490	172	300
31	184	-	195	370	-	1,150	-	454	-	388	155	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	5,855	324	120	189	0.436	0.50
November.....	14,286	1,600	192	476	1.10	1.23
December.....	10,614	1,360	195	342	.790	.91
Calendar year 1934.....	183,113	6,780	51	502	*1.16	*15.73
January.....	58,005	12,000	210	1,226	2.83	3.26
February.....	8,145	360	220	291	.872	.70
March.....	30,990	2,550	230	1,000	2.31	2.66
April.....	52,868	2,650	840	1,762	4.07	4.54
May.....	29,235	3,200	304	943	2.18	2.51
June.....	19,931	1,420	328	664	1.53	1.71
July.....	8,997	857	148	290	.870	.77
August.....	7,391	443	115	238	.550	.63
September.....	7,636	800	80	255	.569	.66
Water year 1934-35.....	233,956	12,000	80	641	1.48	20.08

*Computed on basis of revised drainage area.

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 (revised).

Records available.- October 1928 to September 1935.

Extremes.- Maximum discharge during year, 30,900 second-feet Jan. 10 (gage height, 18.96 feet); minimum mean daily discharge, 140 second-feet Aug. 25.

1928-35: Maximum discharge, 34,600 second-feet Apr. 19, 1933 (gage height, 18.60 feet); minimum mean daily discharge, 95 second-feet Sept. 16, 1934.

Maximum discharge known, 116,000 second-feet Nov. 4, 1927 (gage height, 50.4 feet from flood marks).

Remarks.- Records good. Discharge estimated by hydrographic comparison for periods of ice effect, Dec. 16 to Jan. 9, Feb. 1 to Mar. 25, and for periods of missing gage-height record, Dec. 7-15, Jan. 14-31. Considerable diurnal regulation at low stages.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

0.3	95	2.0	980	4.5	4,850	7.0	10,200	12.0	20,000
.5	145	2.5	1,550	5.0	5,950	8.0	12,100	13.0	22,100
.7	205	3.0	2,200	5.5	7,150	9.0	14,000	14.0	24,200
1.0	305	3.5	2,970	6.0	8,250	10.0	16,000	15.0	26,400
1.5	570	4.0	3,850	6.5	9,250	11.0	18,000	16.0	28,600
								17.0	30,900

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	256	440	1,620	460	650	610	2,470	10,000	1,140	1,440	684	181
2	330	428	4,660	470	770	970	2,340	4,820	1,160	734	536	174
3	332	324	2,890	550	870	730	2,420	3,440	1,250	568	268	300
4	356	394	1,890	470	630	790	2,020	2,610	676	426	246	356
5	312	1,220	1,730	520	540	860	1,880	2,420	513	536	1,350	390
6	447	1,430	1,350	530	690	1,150	1,740	2,390	773	576	1,490	380
7	144	2,510	1,000	1,100	590	2,400	1,650	2,940	833	338	982	239
8	392	2,350	660	3,500	550	1,820	1,690	7,810	1,490	696	690	182
9	330	1,420	600	9,500	560	1,150	2,140	4,620	1,540	828	714	340
10	290	1,070	530	26,800	650	1,080	2,640	3,760	1,820	752	570	496
11	407	1,120	440	15,400	490	1,160	3,080	3,310	2,210	724	542	604
12	494	716	620	4,300	420	1,400	3,380	2,650	1,750	702	1,420	610
13	338	773	550	2,420	600	2,800	3,120	2,260	1,260	495	948	590
14	338	760	460	1,620	520	2,200	5,060	2,140	1,060	333	692	282
15	700	670	550	1,680	750	1,200	4,350	2,140	1,480	569	720	3,080
16	855	600	540	1,800	860	1,500	4,960	1,880	2,130	386	505	2,670
17	635	494	550	1,450	1,100	4,330	4,350	1,650	1,730	420	494	1,620
18	616	822	400	1,180	830	5,700	4,250	1,450	4,220	466	220	798
19	582	1,630	490	1,150	740	3,850	4,250	1,550	2,610	500	428	637
20	280	2,160	660	1,150	720	3,100	4,750	1,470	3,100	353	385	646
21	291	1,820	750	850	720	3,420	5,510	1,320	3,000	244	408	829
22	482	1,400	760	1,460	620	2,700	5,070	1,330	2,470	434	392	532
23	361	1,230	530	1,400	620	2,520	4,650	1,140	3,370	1,020	558	544
24	304	1,820	610	1,100	650	3,210	5,290	1,100	2,400	2,650	264	640
25	392	2,500	550	950	630	3,300	5,510	844	1,850	1,520	140	524
26	514	1,470	610	900	570	3,290	4,350	556	1,440	886	405	588
27	261	1,240	450	890	730	2,580	4,450	758	1,370	546	557	568
28	528	1,170	500	800	730	2,470	5,750	828	1,800	370	340	434
29	606	1,100	510	870	-	2,270	4,750	999	1,600	546	382	200
30	590	1,240	500	760	-	2,710	5,700	1,370	1,620	924	314	742
31	493	-	450	760	-	2,340	-	1,030	-	759	256	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	13,366	855	144	431	0.399	0.46
November.....	36,301	2,610	324	1,210	1.12	1.25
December.....	28,360	4,660	400	915	.848	.98
Calendar year 1934.....	503,911	28,000	95	1,381	*1.28	*17.36
January.....	86,570	28,600	460	2,793	2.59	2.99
February.....	18,790	1,100	420	671	.622	.65
March.....	69,400	5,700	610	2,239	2.08	2.40
April.....	113,550	5,730	1,660	3,785	3.51	3.92
May.....	76,783	10,000	556	2,477	2.30	2.65
June.....	53,675	4,220	613	1,789	1.66	1.85
July.....	21,741	2,650	244	701	.650	.76
August.....	17,802	1,490	140	574	.532	.61
September.....	20,156	3,080	174	672	.625	.70
Water year 1934-35.....	556,494	28,600	140	1,625	1.41	19.21

*Computed on basis of revised drainage area.

Dog River at Northfield, Vt.

Location.- Water-stage recorder, lat. 44°8'20", long. 72°40', at highway bridge at Norwich University, Northfield, Washington County, 1 mile above Union Brook.

Drainage area.- 52 square miles.

Records available.- May 1909 to October 1920, October 1928 to November 1934 (discontinued).

Average discharge.- 15 years (1911-20, 1928-34), 79.7 second-feet.

Extremes.- Maximum discharge during period, 100 second-feet Nov. 7 (gage height, 2.75 feet); minimum discharge, 5.1 second-feet, Oct. 5.
1910-20, 1928-34: Maximum discharge, 3,400 second-feet Mar. 25, 1913 (gage height, 8.50 feet); minimum discharge (estimated), 2.0 second-feet several times during August, September 1929.

Maximum known discharge, 8,000 second-feet Nov. 3, 1927 (gage height, 10.9 feet).

Remarks.- Records good.

Discharge, in second-feet, for period October to November 1934

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	9.8										
2	7.6	11										
3	7.0	11										
4	6.7	16										
5	6.4	33										
6	7.0	30										
7	11	72										
8	9.8	33										
9	7.6	25										
10	6.7	22										
11	7.0	21										
12	7.9	19										
13	8.5	17										
14	9.0	17										
15	9.8	14										
16	11	17										
17	9.8	16										
18	9.0	17										
19	7.9	25										
20	7.6	25										
21	7.0	26										
22	8.2	25										
23	9.4	-										
24	9.0	-										
25	7.9	-										
26	7.6	-										
27	13	-										
28	12	-										
29	10	-										
30	9.8	-										
31	9.0	-										
Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches						
October.....	270.0	13	6.4	8.71	0.168	0.19						
November.....	501.8	72	9.8	22.8	.438	.36						
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

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 1935.

Extremes.- Maximum discharge during year, 4,500 second-feet (estimated) Jan. 9; maximum gage height, 11.20 feet Mar. 17 (ice jam); minimum, 7.0 second-feet Aug. 27 (gage height, 3.00 feet).

1928-35: Maximum discharge, 8,720 second-feet Apr. 12, 1934; maximum gage height, that of Mar. 17, 1935; minimum discharge, 1.4 second-feet Oct. 1, 1930.

Maximum known stage, about 20.5 feet on Nov. 3, 4, 1927.

Remarks.- Records good except those for periods of missing gage-height record, Oct. 6, Jan. 28 to Mar. 7, and for periods of ice effect, Dec. 12-14, Dec. 28 to Jan. 3, Jan. 7-9, 14-27, Mar. 8-17, which are fair. Discharge estimated on a basis of two discharge measurements and hydrographic comparison. Considerable diurnal regulation.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

3.0	7.0	3.6	92	4.6	667	6.5	2,850
3.1	14	3.8	169	4.8	835	7.0	3,560
3.2	24	4.0	250	5.0	1,010	8.0	5,100
3.3	36	4.2	367	5.5	1,530		
3.4	52	4.4	508	6.0	2,160		

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	47	59	410	95	100	100	261	1,210	121	120	74	28
2	42	76	636	95	100	95	278	627	112	94	73	33
3	35	61	335	95	95	100	261	464	84	80	58	33
4	36	119	257	92	100	110	216	381	112	74	63	29
5	42	301	225	80	105	100	202	356	123	64	193	50
6	28	199	192	88	105	120	185	374	90	67	110	47
7	39	534	114	220	100	170	172	974	95	70	76	31
8	63	249	105	860	100	270	198	1,290	218	320	61	31
9	56	177	98	2,000	95	180	221	700	208	151	57	34
10	56	136	108	3,630	90	170	361	642	307	110	50	100
11	46	123	99	1,190	95	230	543	508	355	93	152	67
12	65	117	110	570	100	430	549	408	267	82	126	44
13	66	103	120	428	100	280	443	343	221	71	75	36
14	49	93	120	270	110	180	593	324	130	61	74	37
15	49	74	105	220	130	170	528	312	296	59	56	588
16	111	85	110	230	140	240	717	256	227	67	49	162
17	95	80	114	230	130	1,500	508	221	415	60	42	85
18	70	184	95	230	120	261	450	218	590	49	38	68
19	56	321	107	160	110	554	523	256	408	64	41	58
20	39	329	140	140	120	508	659	193	600	119	33	119
21	39	268	155	150	110	415	516	180	428	77	28	92
22	59	204	123	150	100	343	742	168	431	61	58	71
23	61	178	92	110	100	524	700	148	387	498	53	63
24	68	407	98	90	95	591	808	154	269	526	35	50
25	50	293	95	95	100	401	758	123	222	198	31	51
26	49	192	94	120	105	318	659	111	169	127	34	44
27	98	161	101	120	110	261	868	108	171	90	30	38
28	137	163	100	110	105	250	1,040	102	236	74	34	66
29	70	157	110	110	-	300	742	197	194	118	42	101
30	62	179	100	110	-	350	1,510	198	189	154	34	85
31	56	-	90	105	-	267	-	145	-	92	27	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,828	137	28	59.0	0.424	0.49
November.....	5,614	534	59	187	1.35	1.51
December.....	4,734	656	85	153	1.10	1.27
Calendar year 1934.....	76,817.	4,070	7.0	210	1.51	20.55
January.....	12,193	3,630	80	393	2.83	3.26
February.....	2,970	140	90	106	.763	.79
March.....	10,168	1,500	95	328	2.36	2.72
April.....	16,131	1,510	172	538	3.97	4.32
May.....	11,629	1,280	102	375	2.70	3.11
June.....	7,695	600	84	256	1.84	2.05
July.....	3,880	525	49	125	.899	1.04
August.....	1,909	193	27	61.6	.443	.51
September.....	2,351	588	28	78.4	.564	.63
Water year 1934-35.....	81,102	3,630	27	222	1.60	21.70

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 (revised).

Records available.- July 1910 to December 1913, September 1928 to September 1935.

Extremes.- Maximum discharge during year, 5,240 second-feet May 1 (gage height, 10.72 feet); minimum, 11 second-feet Sept. 2; minimum mean daily discharge, 27 second-feet Sept. 8.

1910-13, 1928-35: Maximum discharge recorded, about 11,700 second-feet Apr. 8, 1912; minimum, that of Sept. 2, 1935; minimum mean daily discharge, that of Sept. 8, 1935.

Remarks.- Records good except those estimated on a basis of two discharge measurements and by hydrographic comparison for periods of ice effect, Dec. 10 to Jan. 9, Jan. 14 to Mar. 21, and those above 4,500 second-feet, which are fair. Slight diurnal fluctuation at low stages caused by power plant above.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to June 18						Table for June 19 to Sept. 30					
1.5	68	2.5	338	6.0	2,000	1.4	11	2.4	224	4.0	950
1.7	103	3.0	531	7.0	2,600	1.6	17	2.6	310	4.5	1,200
1.9	150	3.5	741	8.0	3,280	1.8	31	2.8	397	5.0	1,450
2.1	175	4.0	970	9.0	3,880	2.0	70	3.0	455	5.5	1,750
2.3	263	5.0	1,470	10.0	4,680	2.2	139	3.5	711	6.0	2,000

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	151	166	956	130	190	200	1,010	4,220	317	307	220	121
2	154	206	2,320	130	180	180	698	2,070	182	99	248	96
3	198	138	1,200	140	140	180	656	1,370	246	106	181	118
4	150	220	741	140	180	240	593	1,020	286	156	107	141
5	183	482	593	150	170	200	572	630	278	290	229	148
6	168	417	483	120	170	270	593	923	272	268	452	166
7	114	1,170	353	200	170	450	552	1,340	300	244	353	165
8	72	722	278	600	160	360	720	2,800	499	302	232	27
9	160	519	216	1,700	160	320	1,170	1,550	515	298	203	125
10	181	412	170	4,680	130	300	1,410	1,140	635	216	207	207
11	182	342	160	3,150	150	360	1,790	970	698	214	164	232
12	260	367	140	1,420	160	440	1,840	765	519	135	217	151
13	290	314	130	900	170	560	1,470	698	393	130	228	273
14	186	275	130	650	180	500	2,040	656	338	113	216	155
15	254	243	120	500	200	450	1,600	677	1,000	143	145	1,060
16	348	246	120	420	320	480	1,980	593	1,060	149	150	766
17	304	254	120	380	280	750	1,540	523	1,400	112	153	420
18	286	306	110	350	260	1,400	1,520	475	2,920	137	119	302
19	220	598	110	330	240	970	1,520	447	1,440	132	185	263
20	150	923	260	270	220	780	1,780	507	1,960	155	185	307
21	290	698	240	300	200	900	2,180	475	1,390	136	159	112
22	154	487	220	280	190	785	2,000	360	924	361	168	111
23	222	393	190	270	180	677	2,060	331	1,480	1,090	123	201
24	174	878	170	250	160	1,200	2,480	310	990	665	99	212
25	165	890	150	240	180	1,220	2,420	424	642	508	49	160
26	151	491	150	230	190	995	1,680	370	485	329	78	144
27	220	363	160	230	200	876	1,620	296	393	191	129	176
28	171	345	160	220	210	785	1,900	272	1,100	202	177	260
29	254	408	150	210	-	698	1,730	314	664	187	206	215
30	169	475	140	200	-	853	2,280	331	437	236	145	298
31	182	-	130	190	-	884	-	378	-	286	130	-
Month				Second-foot-days		Maximum	Minimum	Mean	Per square mile		Run-off in inches	
October.....				6,135		348	72	198	0.591		0.68	
November.....				15,728		1,170	138	458	1.37		1.53	
December.....				10,560		2,320	110	341	1.02		1.16	
Calendar year 1934.....				162,924		5,840	28	446	*1.33		*18.09	
January.....				18,980		4,680	120	612	1.83		2.11	
February.....				5,340		320	130	191	1.570		.59	
March.....				19,283		1,400	180	621	1.85		2.13	
April.....				46,404		2,490	552	1,513	4.52		5.04	
May.....				27,455		4,220	272	886	2.64		3.04	
June.....				23,763		2,920	162	792	2.36		2.63	
July.....				8,097		1,090	99	261	*.779		.90	
August.....				5,662		452	49	183	.546		.63	
September.....				7,162		1,060	27	239	.713		.80	
Water year 1934-35.....				191,549		4,680	27	525	1.57		21.26	

*Computed on basis of revised drainage area.

Lamolle 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 (revised).

Records available.- August 1929 to September 1935.

Extremes.- Maximum discharge during year, 12,700 second-feet (estimated) Jan. 11; maximum gage height, 9.38 feet Jan. 11 (affected by ice); minimum mean daily discharge, 160 second-feet Sept. 8.

1929-35: Maximum discharge, 16,600 second-feet Apr. 13, 1934 (gage height, 10.27 feet); minimum, 49 second-feet July 30, 1933 (gage height, 0.69 foot); minimum mean daily discharge, 91 second-feet July 30, 1933.

Remarks.- Records good except those estimated for periods of ice effect, Dec. 14-22, Dec. 27 to Jan. 11, Jan. 15-23, 30, Feb. 12-28, Mar. 5-29, and for periods of missing gage-height record, Oct. 1-24, Dec. 8-13, 23-26, Jan. 24-29, Jan. 31 to Feb. 11, Mar. 1-4, Apr. 1-10, Aug. 15 to Sept. 13, which are fair. Estimates of discharge based on two discharge measurements and hydrographic comparison. Diurnal regulation from plants above.

Rating table, water year 1934-35, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

0.6	42	2.0	428	5.0	4,000
.8	62	2.5	760	6.0	5,900
1.0	90	3.0	1,260	7.0	8,000
1.2	128	3.5	1,840	8.0	10,400
1.4	183	4.0	2,490	9.0	15,000
1.6	253	4.5	3,250	10.0	18,700

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	320	376	2,450	310	450	460	1,900	8,960	1,100	769	508	230
2	350	371	5,600	320	440	440	1,700	4,910	796	552	483	200
3	390	381	3,230	330	430	500	1,600	2,930	526	357	483	210
4	360	324	1,780	340	420	600	1,250	2,220	553	229	381	250
5	400	702	1,420	340	410	550	1,100	1,900	594	376	884	280
6	380	880	1,130	350	400	700	1,150	1,900	601	397	1,360	320
7	350	1,600	738	428	390	1,070	1,100	2,380	615	342	1,040	300
8	250	1,820	540	1,780	380	860	1,700	5,500	2,030	357	678	160
9	350	1,160	500	4,000	380	780	1,950	3,800	1,850	412	528	300
10	400	940	400	7,180	370	700	2,700	2,700	1,600	407	434	350
11	450	750	390	9,920	360	740	3,500	2,160	1,720	338	672	400
12	500	730	380	5,280	370	1,300	3,580	1,660	1,480	324	1,030	380
13	610	685	360	2,690	380	1,260	2,780	1,480	1,050	284	678	450
14	500	601	350	1,780	390	1,060	3,780	1,350	769	239	456	352
15	700	526	340	1,150	450	1,010	3,580	1,220	1,400	308	350	1,910
16	900	489	310	970	780	1,100	3,760	1,160	2,780	320	360	2,240
17	780	473	320	880	900	1,500	3,680	1,080	2,340	288	330	1,100
18	660	684	300	800	650	3,000	3,580	1,030	6,950	288	300	722
19	600	1,320	280	750	580	2,100	3,760	970	3,880	288	400	539
20	520	2,490	580	700	530	1,700	3,680	1,110	3,760	376	450	751
21	600	1,970	580	660	490	1,800	4,360	1,140	3,460	333	400	1,090
22	410	1,330	500	620	460	1,650	4,000	930	2,630	536	390	566
23	500	1,000	450	600	450	1,600	4,000	760	3,080	3,770	250	338
24	410	1,520	400	560	430	1,800	4,720	650	2,850	3,160	220	454
25	376	2,100	340	540	400	2,260	5,100	615	1,900	2,040	170	428
26	352	1,320	350	520	450	1,800	3,600	722	1,360	1,140	210	381
27	432	930	380	510	530	1,580	3,380	580	1,090	745	250	337
28	692	796	380	500	500	1,500	4,360	526	1,280	465	300	476
29	520	832	350	480	-	1,660	3,920	1,050	1,540	465	400	622
30	495	1,130	300	460	-	1,780	4,950	1,540	990	419	370	601
31	397	-	300	450	-	1,660	-	1,120	-	545	250	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	14,954	900	250	482	0.687	0.77
November.....	30,245	2,480	324	1,008	1.32	1.55
December.....	25,728	5,600	280	850	1.15	1.33
Calendar year 1934.....	370,365	15,000	107	1,015	*1.40	*19.06
January.....	46,178	9,920	310	1,490	2.06	2.38
February.....	13,070	800	360	467	.646	.67
March.....	40,520	3,000	440	1,307	1.81	2.09
April.....	83,400	5,100	1,100	3,113	4.31	4.81
May.....	60,063	9,960	526	1,838	2.68	3.09
June.....	56,834	6,950	526	1,894	2.62	2.92
July.....	20,916	3,770	229	675	.934	1.08
August.....	14,963	1,360	170	483	.668	.77
September.....	16,717	2,240	160	557	.770	.86
Water year 1934-35.....	433,608	9,920	160	1,188	1.64	22.32

*Computed on basis of revised drainage area.

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 1935.

Extremes.- Maximum discharge during year, 3,830 second-feet Apr. 30 (gage height, 8.70 feet); minimum, 17 second-feet Sept. 4 (gage height, 1.00 foot).

1931-35: Maximum discharge, about 7,200 second-feet Oct. 7, 1932 (gage height, 12.25 feet); minimum, 10 second-feet Aug. 22, 1934 (gage height, 0.81 foot).

Remarks.- Records good except those estimated by hydrographic comparison for periods of ice effect, Jan. 29 to Feb. 14, Mar. 7, 8, 17, 18, and for periods of missing gage-height record, Dec. 12 to Jan. 28, Feb. 15 to Mar. 6, May 27 to June 11, and those above 2,000 second-feet, which are fair. Some diurnal regulation from small power plant above station.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

1.0	17	2.2	130	5.0	1,120
1.2	25	2.5	197	5.5	1,380
1.4	37	3.0	338	6.0	1,700
1.6	53	3.5	512	7.0	2,430
1.8	73	4.0	700	8.0	3,240
2.0	99	4.5	900		

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	50	57	775	75	60	70	360	2,840	230	89	80	30
2	41	62	399	75	65	75	272	1,010	180	76	272	30
3	32	59	452	70	70	110	281	720	130	65	110	26
4	30	95	287	70	70	140	197	530	110	56	71	27
5	29	226	239	75	65	160	182	440	125	73	244	47
6	23	174	174	75	60	210	177	568	120	56	350	53
7	34	367	112	120	60	280	170	936	115	49	134	36
8	51	197	96	240	55	280	231	1,640	400	68	94	30
9	37	148	87	640	55	220	465	700	560	58	73	25
10	34	113	95	1,450	60	159	739	605	450	73	58	68
11	35	112	74	1,080	60	170	879	447	480	68	63	80
12	118	109	70	880	55	307	838	332	278	55	98	51
13	105	95	70	660	50	242	624	275	190	44	82	34
14	82	82	75	540	50	159	618	253	130	42	50	36
15	124	66	70	420	120	130	758	322	471	51	44	523
16	182	76	65	360	190	334	954	236	310	46	41	172
17	109	72	70	300	150	870	778	200	1,040	38	36	94
18	86	284	75	240	120	730	700	182	1,900	34	30	64
19	80	665	80	200	100	645	700	268	703	36	36	69
20	51	818	140	170	90	512	838	226	1,080	37	34	494
21	55	378	105	150	80	512	1,040	182	800	50	30	236
22	63	223	90	130	80	313	922	172	729	136	31	113
23	56	172	80	120	75	267	990	168	700	356	28	105
24	54	505	75	110	75	404	1,350	132	512	791	29	85
25	45	358	75	100	70	401	1,120	120	301	228	30	74
26	42	180	75	90	80	335	858	109	202	109	28	64
27	77	142	75	80	75	278	1,080	100	174	74	24	57
28	98	134	75	75	70	264	1,600	130	192	55	25	102
29	76	170	75	65	-	226	1,110	300	127	71	30	142
30	62	228	80	65	-	316	1,790	450	100	65	31	174
31	58	-	80	60	-	332	-	300	-	64	26	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,022	182	23	65.2	0.498	0.57
November.....	6,364	518	57	212	1.62	1.81
December.....	4,390	775	65	142	1.08	1.24
Calendar year 1934.....	75,446	2,990	13	207	1.58	21.41
January.....	8,785	1,450	60	283	2.16	2.49
February.....	2,210	190	50	78.9	.602	.63
March.....	9,449	870	70	305	2.35	2.69
April.....	22,701	1,790	170	787	5.78	6.45
May.....	14,888	2,840	100	480	3.66	4.22
June.....	12,839	1,900	100	488	3.27	3.65
July.....	3,113	791	34	100	.763	.88
August.....	2,292	350	24	73.9	.564	.65
September.....	3,140	523	25	105	.902	.89
Water year 1934-35.....	92,193	2,840	23	253	1.93	26.17

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 (revised).

Records available.— May 1909 to November 1910, July 1911 to September 1923, October 1928 to September 1935.

Average discharge.— 15 years (1911-19, 1928-35), 911 second-feet.

Extremes.— Maximum discharge during year, 7,160 second-feet May 1; maximum gage height, 15.20 feet Jan. 9 (ice jam); minimum discharge, 49 second-feet Aug. 18 (gage height, 2.28 feet).

1909-10, 1911-23, 1928-35: Maximum discharge, 13,000 second-feet Apr. 7, 1923; maximum gage height, that of Jan. 9, 1935; minimum, 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 periods of ice effect, Dec. 8 to Jan. 11, Jan. 29 to Mar. 16, Mar. 28-31, and those for periods of missing gage-height record, Jan. 12-28, Mar. 17-27, which are fair. Slight diurnal regulation at low stages.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

2.2	37	3.0	222	4.5	925	7.0	3,100	10.0	6,400
2.4	69	3.6	414	5.0	1,260	8.0	4,150	11.0	7,700
2.6	111	4.0	650	6.0	2,100	9.0	5,250		

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	113	194	2,580	280	270	250	1,340	6,530	752	388	294	62
2	118	203	3,420	270	280	250	1,190	5,570	615	330	557	66
3	130	200	2,550	270	250	450	1,080	3,520	473	278	432	60
4	100	219	1,440	280	290	600	1,020	2,150	388	246	256	59
5	98	494	1,120	260	280	550	925	1,570	423	219	499	109
6	89	552	865	250	270	750	865	1,570	423	222	675	121
7	109	990	642	400	270	1,060	810	2,060	392	197	491	109
8	121	929	450	900	260	1,050	868	3,940	1,160	171	292	100
9	113	675	300	2,100	250	750	1,300	3,100	1,310	197	222	85
10	111	557	250	3,500	250	550	2,060	1,880	955	191	176	150
11	116	487	280	5,000	250	580	2,540	1,490	1,190	192	233	168
12	191	450	270	4,000	280	1,150	2,790	1,160	1,080	168	307	143
13	253	414	260	3,000	270	1,080	2,490	955	740	146	232	109
14	229	367	250	2,200	250	550	3,000	865	528	151	176	98
15	246	268	245	1,800	400	450	2,690	955	1,470	140	164	953
16	390	292	240	1,500	600	1,150	3,000	838	1,560	138	135	728
17	356	285	250	1,250	570	1,000	3,000	728	2,090	130	125	355
18	278	554	250	1,000	500	2,600	3,310	650	3,480	118	89	229
19	242	1,300	300	800	410	2,000	2,790	700	2,860	111	81	219
20	216	2,200	500	650	350	1,700	2,590	700	2,740	111	85	942
21	185	1,480	400	570	320	1,700	3,000	625	2,770	121	85	925
22	174	942	350	500	300	1,150	2,890	552	2,540	651	97	510
23	185	728	500	450	290	1,000	2,690	510	2,490	1,070	81	334
24	179	1,120	290	400	280	1,400	3,310	482	1,990	2,580	71	281
25	165	1,340	290	360	250	1,400	3,310	441	1,280	1,420	69	249
26	162	840	280	330	280	1,250	2,590	397	995	543	69	229
27	285	645	280	310	280	1,050	2,440	359	755	315	66	200
28	311	600	270	280	250	950	3,200	371	838	225	66	286
29	278	650	280	280	-	850	3,100	741	650	219	60	355
30	229	985	290	270	-	1,150	3,760	1,060	495	263	59	635
31	213	-	290	270	-	1,260	-	865	-	210	66	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	5,974	380	89	193	0.403	0.46
November.....	20,920	2,200	14	699	1.45	1.63
December.....	19,782	3,420	240	658	1.33	1.53
Calendar year 1934.....	263,484	6,920	38	722	*1.51	*20.45
January.....	33,720	5,000	250	1,088	2.27	2.62
February.....	8,790	600	250	314	.656	.68
March.....	33,970	3,000	250	1,088	2.27	2.62
April.....	70,148	3,760	610	2,338	4.86	5.44
May.....	47,364	6,530	359	1,528	3.19	3.68
June.....	39,603	3,420	388	1,317	2.75	3.07
July.....	11,551	2,580	111	365	.764	.88
August.....	6,290	675	59	203	.424	.49
September.....	8,848	953	59	295	.616	.69
Water year 1934-35.....	306,420	6,530	59	840	1.75	23.79

*Computed on basis of revised drainage area.

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 873.15 feet above mean sea level.

Records available.- May 1931 to September 1935.

Extremes.- Maximum gage height recorded, 10.42 feet Jan. 10; minimum, 6.89 feet Nov. 4. 1931-35: Maximum gage height recorded, 12.92 feet Apr. 20, 1933; minimum, that of Nov. 4, 1935.

Remarks.- No record Jan. 4-6, 11, 12, 18-21, Feb. 17, Sept. 5-9. Most of readings taken from top of ice Dec. 29 to Mar. 28.

Gage height, in feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.36	6.77	7.12	7.84	9.97	9.97	8.99	10.05	9.84	9.87	9.15	8.27
2	7.29	6.74	8.33	7.80	9.97	9.97	8.97	10.14	9.81	9.84	9.13	8.21
3	7.24	6.71	8.38	7.76	9.97	9.97	8.97	10.27	9.79	9.75	9.13	8.13
4	7.17	6.69	8.59	-	9.97	9.97	8.95	10.21	9.81	9.70	9.11	6.11
5	7.17	6.71	8.77	-	9.97	9.97	8.88	10.13	9.82	9.68	9.11	-
6	7.11	6.75	8.79	-	9.97	9.97	8.83	10.04	9.83	9.65	9.12	-
7	7.05	6.80	8.81	7.74	9.97	9.97	8.79	9.98	9.83	9.66	9.10	-
8	7.01	6.85	8.82	8.22	9.97	9.97	8.76	9.98	9.84	9.63	9.06	-
9	6.96	6.88	8.83	9.02	9.97	9.97	8.71	10.00	9.85	9.60	9.05	-
10	6.92	6.93	8.83	10.42	9.97	9.97	8.85	10.01	9.86	9.60	9.01	7.92
11	6.89	6.96	8.83	-	9.97	9.97	8.88	10.03	9.86	9.57	8.98	7.84
12	6.87	7.01	8.81	-	9.97	9.97	8.98	10.03	9.84	9.53	8.97	7.84
13	6.89	7.09	8.80	10.00	9.97	9.97	9.06	10.01	9.82	9.50	8.95	7.83
14	6.93	7.07	8.78	9.97	9.97	9.94	9.17	10.01	9.81	9.47	8.93	7.82
15	6.93	7.04	8.77	9.97	9.97	9.92	9.31	9.99	9.80	9.41	8.93	7.88
16	6.91	7.01	8.77	9.97	9.97	9.90	9.56	9.99	9.78	9.36	8.91	7.91
17	6.88	7.01	8.75	9.97	-	9.88	9.61	9.97	9.78	9.35	8.97	7.93
18	6.86	7.00	8.75	-	9.97	9.88	9.67	9.96	9.87	9.33	8.92	7.86
19	6.83	7.03	8.73	-	9.97	9.86	9.73	9.95	9.86	9.31	8.79	7.85
20	6.82	7.14	8.70	-	9.97	9.42	9.73	9.94	9.89	9.31	8.76	7.97
21	6.81	7.29	8.68	-	9.97	9.42	9.73	9.93	9.92	9.35	8.74	7.94
22	6.79	7.33	8.64	9.97	9.97	9.42	9.73	9.93	9.97	9.36	8.71	7.90
23	6.77	7.57	8.59	9.97	9.97	9.40	9.73	9.91	10.09	9.37	8.67	7.87
24	6.77	7.39	8.53	9.97	9.97	9.40	9.73	9.90	10.20	9.41	8.65	7.81
25	6.76	7.35	8.43	9.97	9.97	9.38	9.75	9.89	10.18	9.43	8.59	7.85
26	6.76	7.31	8.39	9.97	9.97	9.38	9.76	9.88	10.15	9.42	8.55	7.86
27	6.79	7.26	8.33	9.97	9.97	9.38	9.77	9.88	10.09	9.39	8.52	7.87
28	6.87	7.17	8.25	9.97	9.97	9.34	9.81	9.87	10.01	9.35	8.50	7.89
29	6.85	7.15	8.19	9.97	-	9.02	9.83	9.85	9.97	9.31	8.45	7.90
30	6.81	7.13	8.07	9.97	-	9.02	9.89	9.85	9.94	9.27	8.41	7.91
31	6.79	-	8.01	-	-	9.00	-	-	-	9.22	8.32	-

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, 1½ miles above mouth.

Drainage area.- 140 square miles.

Records available.- May 1909 to September 1924, November 1928 to September 1935.

Average discharge.- 16 years (1909-19, 1929-35), 244 second-feet.

Extremes.- Maximum discharge during year, 1,480 second-feet May 1 (gage height, 4.25 feet); minimum mean daily discharge, 79 second-feet Oct. 31.
1909-24, 1928-35: Maximum discharge, 2,780 second-feet Apr. 19, 1933 (gage height, 5.19 feet); minimum mean 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 period of ice effect, Jan. 18-21, and periods of missing gage-height record, Oct. 2-25, Nov. 25 to Dec. 8, Sept. 9-11, which are fair. Some diurnal regulation caused by power plant above station.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

1.2	0	2.6	129	4.0	1,180
1.4	3.0	2.8	200	4.2	1,420
1.6	7.5	3.0	296	4.4	1,870
1.8	15	3.2	410	4.6	1,930
2.0	28	3.4	550	4.8	2,200
2.2	48	3.6	730	5.0	2,480
2.4	80	3.8	945	5.2	2,780

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	91	83	430	107	150	114	275	1,430	295	350	134	85
2	95	80	470	106	149	112	103	1,430	290	317	122	84
3	90	90	530	117	145	118	226	1,300	285	285	130	96
4	88	82	580	101	129	114	219	1,160	275	255	134	103
5	87	88	520	99	132	118	202	1,000	306	231	160	90
6	86	86	400	104	126	194	194	934	226	219	144	98
7	83	158	350	113	116	131	187	912	206	194	142	126
8	85	200	300	121	108	138	198	991	248	180	138	96
9	90	220	270	213	111	138	250	1,030	244	174	129	95
10	85	232	228	605	118	146	325	1,000	274	170	136	105
11	80	256	202	720	112	152	414	956	317	160	122	110
12	100	209	136	901	111	154	498	989	328	160	114	95
13	140	208	178	814	110	148	550	782	339	147	114	94
14	120	178	167	692	110	152	592	702	317	136	114	93
15	125	162	164	610	119	148	635	628	339	126	108	90
16	130	158	160	540	124	149	682	550	317	116	106	90
17	135	145	146	475	126	188	692	514	357	115	119	92
18	120	146	146	420	121	260	673	470	469	110	106	91
19	110	142	132	380	126	409	673	470	534	106	108	95
20	106	243	136	330	127	439	673	410	635	110	110	158
21	90	309	132	300	128	306	682	424	673	88	108	198
22	90	391	130	265	127	320	730	446	702	104	110	188
23	95	450	122	244	127	306	814	352	711	136	110	176
24	100	398	120	222	126	295	923	268	664	226	89	160
25	95	350	110	183	122	285	934	191	592	211	86	164
26	91	430	108	189	128	285	945	259	542	206	112	168
27	95	480	114	173	114	275	934	274	498	195	113	114
28	88	460	111	178	116	270	945	258	462	180	108	122
29	84	420	114	173	-	260	1,030	270	430	156	102	157
30	86	400	113	165	-	250	1,220	275	380	146	112	244
31	79	-	113	158	-	324	-	285	-	128	106	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,036	140	79	98.0	0.700	0.61
November.....	7,284	480	80	243	1.74	1.94
December.....	6,980	580	108	225	1.61	1.86
Calendar year 1934.....	81,968	1,460	50	225	1.61	21.78
January.....	9,818	901	99	317	2.26	2.61
February.....	3,458	150	108	124	.886	.92
March.....	6,698	439	112	216	1.54	1.78
April.....	17,418	1,220	103	581	4.15	4.63
May.....	20,837	1,430	191	672	4.80	5.53
June.....	12,245	711	206	408	2.91	3.25
July.....	5,435	350	88	175	1.25	1.44
August.....	3,636	150	86	117	.836	.96
September.....	3,679	244	84	123	.879	.98
Water year 1934-35.....	100,626	1,430	79	275	1.96	26.71

Discharge measurements of streams in the St. Lawrence River Basin made at points other than regular gaging stations during the year ending September 30, 1935, are listed in the following table:

Miscellaneous discharge measurements in the St. Lawrence River drainage basin during the year ending September 30, 1935

Date	Stream	Tributary to or diverting from-	Locality	Discharge Sec.-Ft.
Aug. 15	White Pigeon River	St. Joseph River	Mottville, Mich.....	141
Aug. 16	Pawn River	do.....	Constantine, Mich.....	92
July 31	Grand River	Lake Michigan	Rives Junction, Mich.....	50
July 31	Portage River	Grand River	Jackson, Mich.....	18
May 31	South Branch of Shiawassee River	Shiawassee River	Howell, Mich.....	33
July 26	Cass River	Saginaw River	Cass City, Mich.....	23
Apr. 25	Miami & Erie Canal	Maumee River	Independence Dam near Defiance, Ohio.....	5.76
Oct. 4	Rocky River	Lake Erie	500 feet above Lorain Ave. Bridge, Cleveland, Ohio.....	16.0
Nov. 22	do.....	do.....	do.....	39.3
Feb. 21	do.....	do.....	do.....	118
Apr. 11	do.....	do.....	do.....	43.4
June 6	do.....	do.....	do.....	10.4
July 31	do.....	do.....	do.....	22.4
Sept. 18	do.....	do.....	do.....	9.05
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