DEPARTMENT OF THE INTERIOR
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UNITED STATES GEOLOGICAL SURVEY
GEORGE OTIS SMITH, Director

Water-Supply Paper 536

SURFACE WATER SUPPLY

OF THE

NEW-KANAWHA RIVER BASIN

WEST VIRGINIA, VIRGINIA, AND NORTH CAROLINA

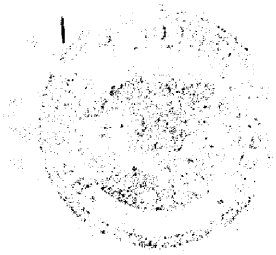
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Prepared in cooperation with the
STATE OF WEST VIRGINIA

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SURFACE-WATER SUPPLY OF THE NEW-KANAWHA RIVER BASIN, WEST VIRGINIA, VIRGINIA, AND NORTH CAROLINA.

By A. H. Horton and G. C. Stevens.

INTRODUCTION.

By N. C. Grover.

The first systematic stream gaging in the New-Kanawha River basin was started by the Geological Survey in 1895, when gaging stations were established on New River at Fayette, W. Va., and on Greenbrier River at Alderson, W. Va. These gaging stations were followed in 1898 by one on New River at Radford, Va., and in 1900 by stations on the New at Oldtown, Va., the North Fork of the New at Weaversford, N. C., and the South Fork of the New at New River, N. C. In 1908 twenty-one gaging stations were established at selected sites in the basin in connection with an intensive study of the water supply of the river and its tributaries. Most of the records for these stations cover an 8-year period, though a few cover longer periods and therefore show the ordinary ranges of stage and discharge as well as the average monthly and annual run-off at the gaging stations.

The complete records for most of the stations in this basin have not been published heretofore. They constitute the best collection of records of discharge of any river system in the Appalachian Mountains, if not in the East. They show not only the fluctuations in New River itself but the yield of its tributaries, whose drainage areas vary in geology, topography, and forest cover. These records are therefore of value not only in the consideration of problems related to the use of water in the New River basin but by comparison with shorter and fewer records in connection with the study of the water supply of other basins in the Appalachian region.

The rapid increase in use of energy has greatly stimulated interest in records of water supply. Both water-power and steam-power plants use great quantities of water—the former for the generation of energy as it falls through a vertical "head," the latter for condensing the steam used in its engines. A plant of either type is limited in its ultimate capacity by the quantity of water available at periods of low stage of the river on which it is situated.

Although a supply of excellent steaming coal is available in the New-Kanawha basin, and energy may be generated at a low cost by steam-power plants, several schemes for the construction of water-power plants have been proposed, and a preliminary permit has been issued by the Federal Power Commission for such a plant on New River near Hinton. For this or for other projects records of discharge of the river to be used must be collected if not already available.

As the data contained in this report will be of value in making plans for developments of all kinds they have been assembled for publication, as otherwise they would be generally unknown and unavailable to those interested in them.

GENERAL FEATURES.

The basin of New-Kanawha River is an irregularly shaped area about 240 miles in length and about 140 miles in width at its widest point and is in about the central part of the eastern United States. The axis of the basin extends northwestward from western North Carolina across western Virginia and West Virginia to Ohio River. The basin includes Allegheny and Ashe counties and part of Watauga County in the extreme northwestern part of North Carolina, part of western Virginia, and about one-third of the State of West Virginia. The area of the drainage basin is 12,200 square miles, 70 per cent of which lies in West Virginia.

Below the mouth of the Gauley in West Virginia the stream is called Kanawha River and above the Gauley it is called New River. The Gauley enters the main stream on the right 95 miles from the mouth of the Kanawha. New River is formed by the union of the North and South forks, a few miles south of the Virginia-North Carolina State line. If the South Fork, the larger of the two, is considered the continuation of the main stream, New River may be said to rise in the central part of Watauga County, in the extreme northwest corner of North Carolina. Thence it flows northeastwardly across the State line into Virginia and continues in the same general direction to a point a short distance below Radford, where it makes a nearly right-angle turn toward the west; thence it flows northwestward across West Virginia and joins Ohio River at Point Pleasant, W. Va., 265 miles below Pittsburgh. The total length of the river is about 430 miles. It crosses the Virginia-West Virginia boundary line at a point about 180 miles from the mouth and the Virginia-North Carolina line at about 335 miles. The lower 90 miles of the river, from a point near Montgomery to the Ohio, has been made navigable by means of ten locks and dams.

The sources of New River lie in the Appalachian Mountains, among the high ridges that form the divide between Peedee and Santee rivers, which drain to the east and empty into the Atlantic Ocean, and the streams which drain to the west and ultimately reach the Gulf of Mexico through Tennessee, Ohio, and Mississippi rivers. As the elevation is 3,700 feet at the sources of the river and about 515 feet at the mouth, the total fall is about 3,200 feet or 7.5 feet to the mile. The following table gives the average fall for different stretches of the river:

Average fall for stretches of New-Kanawha River.

Locality.	Elevation.	Distance.	Fall between points.	Distance between points.	Average fall per mile.
	Feet.	*Miles.*	*Feet.*	*Miles.*	*Feet.*
Sources	3,700	0			
Junction of North and South forks	2,500	86	1,200	86	14.0
Radford, Va	1,760	192	740	106	7.0
Virginia-West Virginia State line	1,500	246	260	54	4.8
Hinton, W. Va.	1,340	270	160	24	6.7
Gauley River	650	331	690	61	11.3
Upper Pool, Lock No. 2	600	343	50	12	4.2
Mouth	510	427	90	84	1.1

The annual precipitation at the sources of New River, which lie in one of the areas of maximum rainfall in the United States, is about 60 inches. The rainfall on the basin in Virginia ranges from 45 to 50 inches, and in West Virginia it is about 45 inches. The large precipitation and the steep gradient make this stream one of the most important water-power streams east of Ohio River. The winters in general are comparatively mild; the snowfall is light and does not last long. Ice forms on the streams during unusually cold winters, and ice jams have caused considerable damage to shipping and to property along the navigable stretch of the river.

An estimate based on the average flow and a plant efficiency of 70 per cent shows that the maximum potential water power of New River from the forks in North Carolina to the head of navigation near Montgomery is 960,000 horsepower and the minimum 280,000 horsepower. The tributaries of New and Kanawha rivers are also important sources of water power. The larger tributaries that enter the main stream on the right are Big Reed Island Creek and Little River in Virginia, and Greenbrier, Gauley, Elk, and Pocatalico rivers in West Virginia; those that enter on the left are Cripple, Reed, Walker, and Wolf creeks in Virginia and West, Bluestone, and Coal rivers in West Virginia.

The abundance of natural gas, oil, and coal in West Virginia has delayed the utilization of the water power of Kanawha River and its tributaries, but the increasing cost of natural fuels and the gradual exhaustion of the resources of gas and oil has turned the attention of

power users to the undeveloped power of this stream. Applications have already been made to the Federal Power Commission for permits to develop about 200,000 horsepower on New and Kanawha rivers. At present the capacity of installed water wheels in water-power plants on New River is not more than 40,000 horsepower.

SCOPE OF REPORT.

In 1908 the Geological Survey started an investigation of the flow of streams in the New-Kanawha River basin and established a number of gaging stations. These stations with those already in operation and since established make a total of 32 gaging stations, for which records of run-off are published in this report. Records of daily and monthly discharge for many of the stations have not been published previously, though records for some of the stations have been published in the Geological Survey's water-supply papers. Data previously published for some of the stations are revised in this report.

DEFINITION OF TERMS.

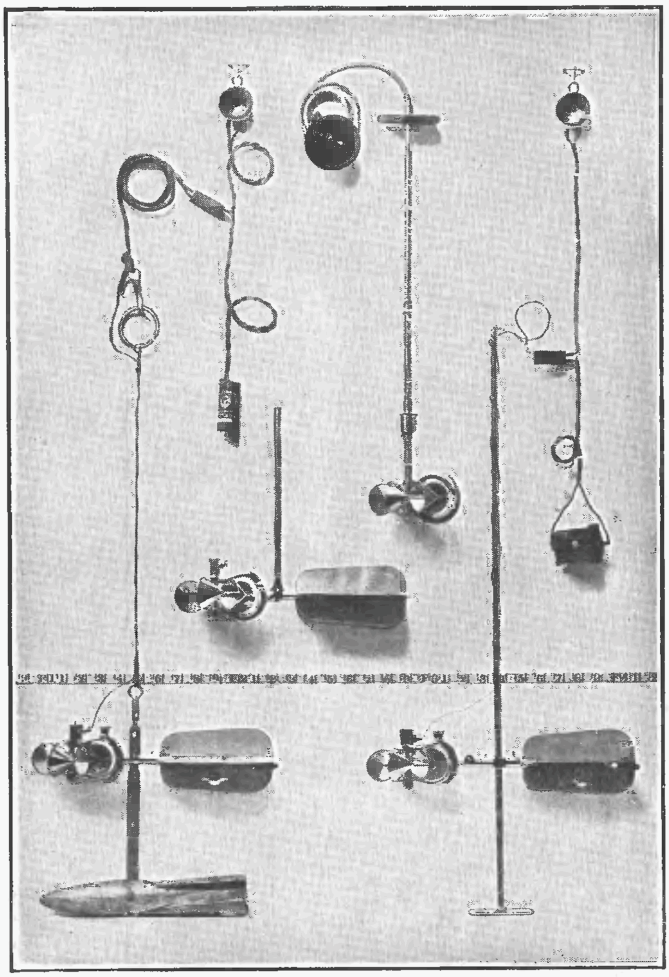
The volume of water flowing in a stream—the "run-off" or "discharge"—is expressed in various terms, each of which has become associated with a certain class of work. These terms may be divided into two groups—(1) those that represent a rate of flow, as second-feet, gallons per minute, miners' inches, and discharge in second-feet per square mile, and (2) those that represent the actual quantity of water, as run-off in inches, acre-feet, and millions of cubic feet. The principal terms used in this series of reports are second-feet, second-feet per square mile, run-off in inches, and acre-feet. They may be 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 of rectangular cross section 1 foot wide and 1 foot deep at an average velocity of 1 foot per second. It is generally used as a fundamental unit from which others are computed.

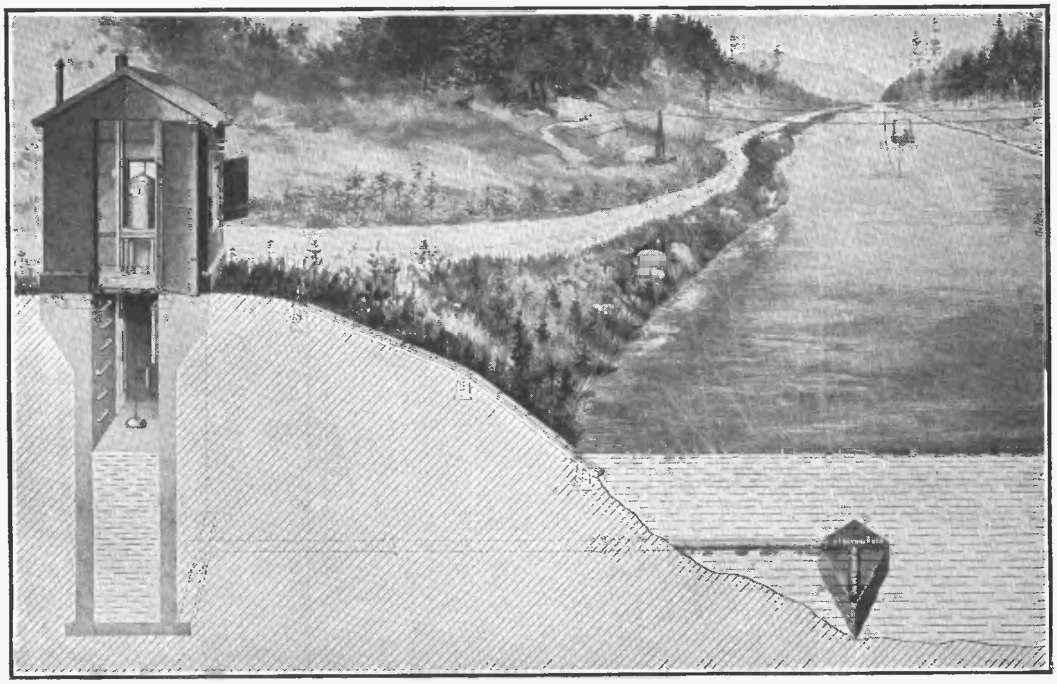
"Second-feet per square mile" is the average number of cubic feet of water flowing per second from each square mile of area drained, on the assumption that the run-off is distributed uniformly both as regards time and area.

"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 depth in inches.

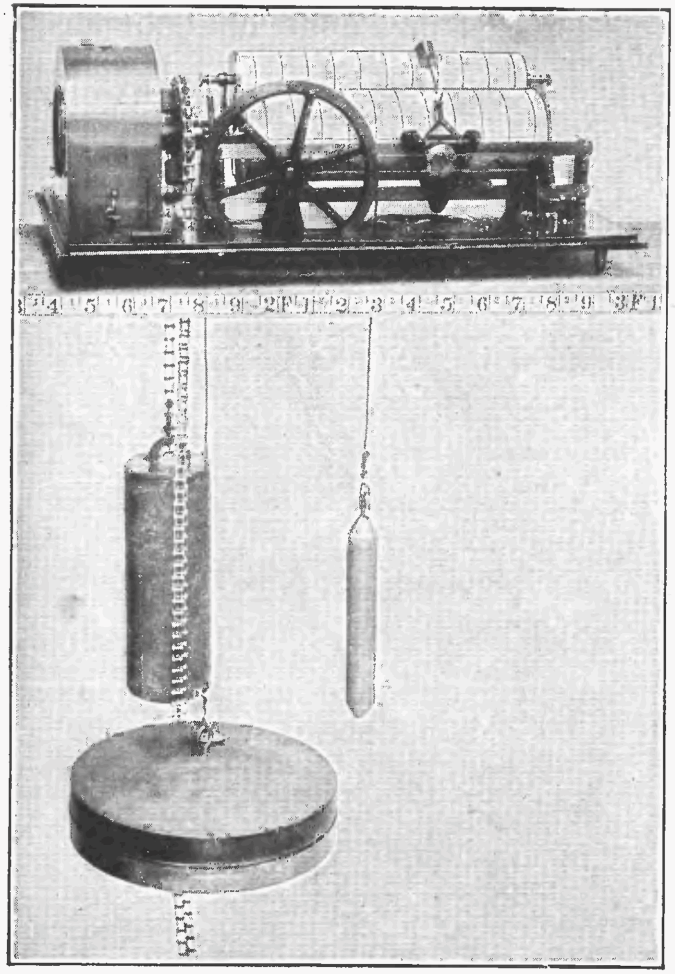
An "acre-foot," equivalent to 43,560 cubic feet, is the quantity required to cover an acre to the depth of 1 foot. The term is commonly used in connection with storage for irrigation.



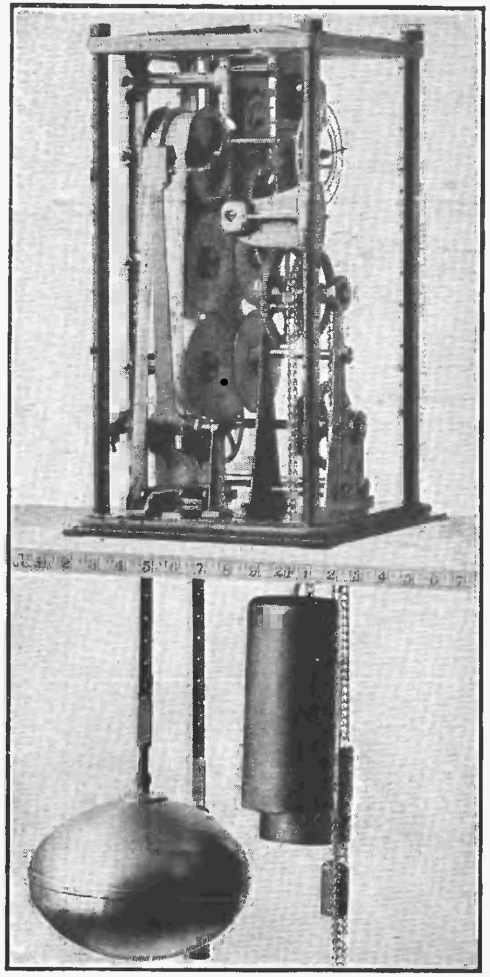
A. PRICE CURRENT METERS.



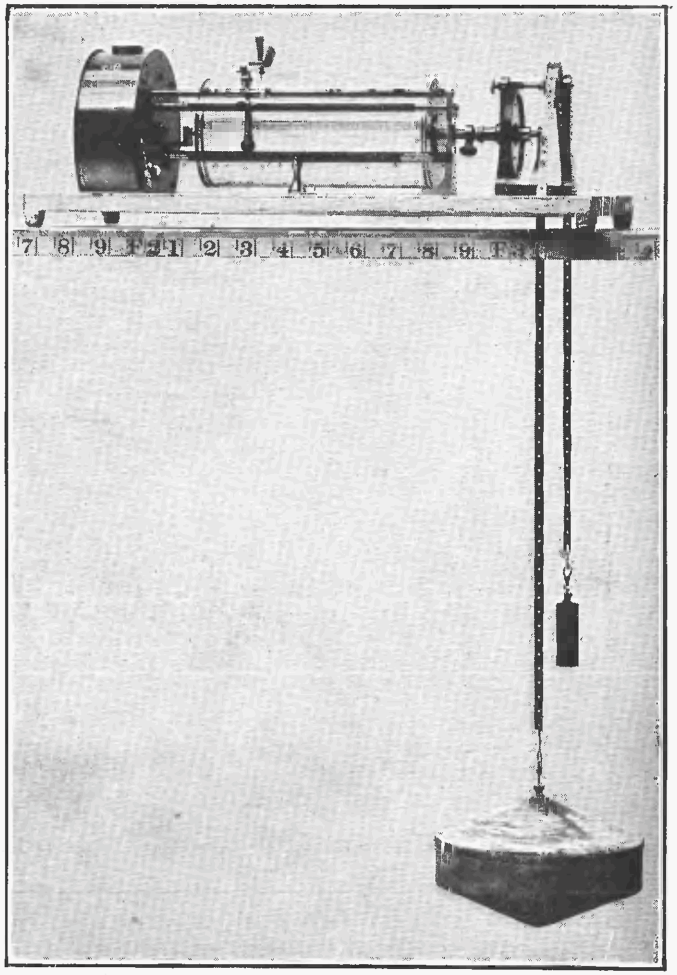
B. TYPICAL GAGING STATION.



A. STEVENS CONTINUOUS.



B. GURLEY PRINTING.



C. FRIEZ.

WATER-STAGE RECORDERS.

The following terms not in common use are here defined:

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

"Control;" a term used to designate the section or sections of the stream below the gage which determine the stage-discharge relation at the gage. It should be noted that the control may not be the same section or sections at all stages.

The "point of zero flow" for a gaging station is that point on the gage—the gage height—at which water ceases to flow over the control.

EXPLANATION OF DATA.

The data presented in this report are assembled for climatic years ending September 30. At the end of a calendar year much of the precipitation that fell during the three months preceding is stored as ground water in the form of snow or ice, or in ponds, lakes, and swamps, and this stored water passes off in the streams during the spring break-up. At the end of September, however, the only stored water available for run-off is possibly a small quantity in the ground; therefore the run-off for the year ending September 30 is practically all derived from precipitation within that year.

The base data collected at gaging stations consits 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 staff or chain gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter. (See Pls. I, II.) The general methods are outlined in standard textbooks on the measurement of river discharge.

From the discharge measurements rating tables are prepared that give the discharge for any stage, and these rating tables, when applied to gage heights, give the discharge from which the daily, monthly, and yearly mean discharge is determined.

The data presented for each gaging station in the area covered by this report comprise a description of the station, a table giving results of discharge measurements, a table showing the daily discharge of the stream, and a table of monthly and yearly discharge and run-off.

If the base data are insufficient to determine the daily discharge, tables giving daily gage heights and results of discharge measurements are published.

The description of the station gives, in addition to statements regarding location and equipment, information in regard to any conditions that may affect the constancy of the stage-discharge relation,

covering such subjects as the occurrence of ice, the use of the stream for log driving, shifting of control, and the cause and effect of backwater; it gives also information as to diversions that decrease the flow at the gage, artificial regulation, maximum and minimum recorded stages, and the accuracy of the records.

The table of daily discharge gives, in general, the discharge in second-feet corresponding to the mean of the gage heights read each day. At stations on streams subject to sudden or rapid diurnal fluctuations the discharge obtained from the rating table and the mean daily gage height may not be the true mean discharge for the day. If such stations are equipped with water-stage recorders the mean daily discharge may be obtained by averaging discharge at regular intervals during the day, or by using the discharge integrator, an instrument operating on the principle of the planimeter and containing as an essential element the rating curve of the station.

In the table of monthly discharge the column headed "Maximum" gives the mean flow for the day when the mean gage height was highest. As the gage height is the mean for the day it does not indicate correctly the stage when the water surface was at crest height, and the corresponding discharge was consequently larger than given in the maximum column. Likewise, in the column headed "Minimum" the quantity given is the mean flow for the day when the mean gage height was lowest. The column headed "Mean" is the average flow in cubic feet for each second during the month. On this average flow computations recorded in the remaining columns, which are defined on pages 4–5, are based.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS.

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

A paragraph in the description of the station or footnotes added to the tables gives information regarding the (1) permanence of the stage-discharge relation, (2) precision with which the discharge rating curve is defined, (3) refinement of gage readings, (4) frequency of gage readings, and (5) methods of applying daily gage heights to the rating table to obtain the daily discharge.[1]

For the rating tables "well defined" indicates, in general, that the rating is probably accurate within 5 per cent; "fairly well defined," within 10 per cent; "poorly defined," within 15 to 25 per cent. These notes are very general and are based on the plotting of the individual measurements with reference to the mean rating curve.

[1] For a more detailed discussion of the accuracy of stream-flow data see Grover, N. C., and Hoyt, J. C., Accuracy of stream-flow data: U. S. Geol. Survey Water-Supply Paper 400, pp. 53–59, 1916.

The monthly means for any station may represent with high accuracy the quantity of water flowing past the gage, but the figures showing discharge per square mile and depth of run-off 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. All figures representing "second-feet per square mile" and "run-off in inches" previously published by the Survey should be used with caution because of possible inherent sources of error not known to the Survey.

The table of monthly discharge gives only a general idea of the flow at the station and should not be used for other than preliminary estimates; the table of daily discharge allow 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.

COOPERATION.

Investigations in West Virginia from 1913 to 1915 and in 1920 were carried on in cooperation with the State Geological Survey, Dr. I. C. White, State geologist. Beginning with 1915 the United States Engineer Corps cooperated in the maintenance of four gaging stations.

DIVISION OF WORK.

The data were collected and prepared for publication under the direction of A. H. Horton, district engineer from 1908 to 1918, and G. C. Stevens, district engineer from 1919 to 1920. Lasley Lee computed the records for most of the stations established in 1908. H. J. Jackson prepared the long-time records of discharge for the stations at Fayette, Kanawha Falls, and Lock No. 2. In addition to these, assistance was rendered in both field and office work by a large number of other engineers, to whom due credit has been given in the Geological Survey's progress reports.

GAGING-STATION RECORDS.

SOUTH FORK OF NEW RIVER NEAR NEW RIVER, N. C.

LOCATION.—2¾ miles above confluence of North and South forks of New River near New River, Ashe County.

DRAINAGE AREA.—324 square miles.

RECORDS AVAILABLE.—July 28, 1900, to May 22, 1901; July 1, 1901, to December 31, 1901.

GAGE.—Wire gage attached to stump of locust tree on left bank; read by F. R. Warden. See "Accuracy."

DISCHARGE MEASUREMENTS.—Made by wading at ford about 1 mile below gage.

CHANNEL AND CONTROL.—Stream is straight; bed, gravel, not subject to change; primary control not determined.

ICE.—Stage-discharge relation probably not seriously affected by ice.

EXTREMES OF STAGE.—The flood of May, 1901, reached a stage of about 15 feet. Flood of September, 1878, probably exceeded all records at this locality.

ACCURACY.—Stage-discharge relation probably changes during extreme floods. No record of ice. Data inadequate for determining rating curve. Gage read in morning to half-tenths. Gage washed out by flood of May 22, 1901, replaced July 1, 1901, as nearly as could be determined at the same datum as the original gage. Records fair.

Discharge measurements of South Fork of New River near New River, N. C., during the years 1900 and 1901.

Date.	Made by—	Gage height.	Discharge.
1900.		*Feet.*	*Sec.-ft.*
July 28	N. C. Curtis and Cleveland Abbe, jr	2.7	751
Oct. 28	do	2.6	1,040
1901.			
June 27	N. C. Curtis	3.9	1,980

Daily gage height, in feet, of South Fork of New River near New River, N. C., for the years 1900 and 1901.

Day.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1900.							1900.						
1	------	2.45	2.3	2.3	2.6	2.7	16	------	2.3	3.7	2.3	2.4	2.6
2	------	2.35	2.25	2.3	2.6	2.7	17	------	2.2	2.8	2.25	2.4	2.6
3	------	2.3	2.2	2.45	3.5	2.7	18	------	2.2	2.4	2.2	2.4	2.6
4	------	2.3	2.2	2.8	3.8	3.95	19	------	2.2	2.4	2.2	2.4	2.6
5	------	2.3	2.2	2.75	3.3	3.7	20	------	2.2	2.3	2.2	2.4	2.6
6	------	2.3	2.2	2.7	2.8	3.2	21	------	2.2	2.3	2.2	2.35	2.6
7	------	2.3	2.2	2.55	2.65	2.85	22	------	2.3	2.3	2.2	2.3	2.6
8	------	2.3	2.2	2.5	2.6	2.8	23	------	2.3	2.3	7.9	2.3	2.7
9	------	2.3	2.2	2.45	2.6	2.8	24	------	2.3	2.3	6.7	2.3	2.6
10	------	2.3	2.2	2.4	2.6	2.75	25	------	2.3	2.3	3.75	2.7	2.6
11	------	2.3	2.2	2.4	2.6	2.7	26	------	2.25	2.3	3.05	5.2	2.6
12	------	2.3	2.15	2.35	2.55	2.7	27	------	2.2	2.3	2.9	3.6	2.6
13	------	2.35	2.1	2.3	2.5	2.6	28	------	2.2	2.3	2.7	3.05	2.6
14	------	2.4	2.55	2.3	2.5	2.6	29	2.65	2.5	2.3	2.6	2.95	2.6
15	------	2.35	2.6	2.3	2.45	2.6	30	2.5	2.45	2.3	2.6	2.8	2.6
							31	2.5	2.35	------	2.6	------	2.8

Daily gage height, in feet, of South Fork of New River near New River, N. C., for the years 1900 and 1901—Continued.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1901.												
1	2.75	2.55	2.6	3.05	3.4	.....	3.95	2.85	4.8	3.8	2.95	2.7
2	2.7	2.5	2.6	4.45	3.3	.....	3.7	2.8	4.3	3.7	2.9	2.7
3	2.7	2.55	2.55	5.65	3.3	.....	3.6	2.75	4.1	3.7	2.9	3.15
4	2.65	2.8	2.5	4.25	3.25	.....	3.7	2.7	4.05	3.5	2.9	3.15
5	2.6	2.7	2.5	3.7	3.3	.....	3.65	3.95	3.85	3.4	3.0	2.95
6	2.55	2.5	2.5	3.6	3.3	.....	4.05	9.47	3.7	3.3	2.95	2.85
7	2.5	2.55	2.5	3.55	3.2	.....	3.65	5.3	3.65	3.25	2.9	2.75
8	2.5	2.7	2.5	3.4	3.2	.....	3.55	4.0	3.6	3.2	2.9	2.7
9	2.5	3.05	2.5	3.1	3.55	.....	3.45	3.55	3.6	3.15	2.9	2.8
10	2.55	2.95	2.6	3.05	3.45	.....	3.3	3.35	3.6	3.1	2.9	3.8
11	3.2	2.8	3.15	3.0	3.65	.....	3.2	3.35	3.55	3.1	2.9	3.4
12	3.55	2.65	2.95	2.95	3.45	.....	3.2	4.65	3.55	3.1	2.9	3.0
13	3.5	2.6	2.7	3.05	3.2	.....	3.15	6.25	3.6	4.9	2.9	2.9
14	2.95	2.6	2.65	3.8	3.0	.....	3.2	5.6	3.6	4.2	2.85	5.9
15	2.9	2.6	2.6	3.4	3.0	.....	3.25	5.6	3.6	3.25	2.8	13.0
16	2.8	2.6	2.6	3.1	3.0	.....	3.4	5.35	3.6	3.1	2.8	5.4
17	2.8	2.6	2.6	3.05	3.0	.....	3.5	7.2	3.6	3.1	2.8	4.3
18	2.7	2.6	2.5	3.0	3.1	.....	3.5	6.15	3.75	3.1	2.8	3.95
19	2.7	2.6	2.5	4.7	3.25	.....	3.45	5.75	3.6	3.0	2.8	3.85
20	2.7	2.6	2.55	13.3	3.3	.....	2.95	4.7	3.55	3.0	2.8	3.55
21	2.7	2.55	3.0	6.65	8.0	.....	3.0	5.05	3.45	3.0	2.8	3.45
22	2.7	2.55	2.9	4.95	15.0	.....	2.9	4.85	3.4	3.0	2.8	3.35
23	2.7	2.5	2.65	4.55	.....	.....	2.9	5.0	3.4	3.0	3.5	3.25
24	2.7	2.55	2.6	4.45	.....	.....	2.85	5.25	3.3	3.0	3.2	3.25
25	2.65	2.75	2.85	4.25	.....	.....	2.8	4.45	3.3	3.0	2.95	3.45
26	2.55	2.7	5.2	4.05	.....	.....	2.8	5.05	3.25	3.0	2.8	3.55
27	2.65	2.6	5.0	3.75	.....	.....	2.8	4.6	3.15	3.0	2.8	3.6
28	2.6	2.55	3.7	3.7	.....	.....	2.8	5.0	3.4	3.0	2.8	3.7
29	2.65	.....	3.2	3.6	.....	.....	2.9	4.8	5.5	3.0	2.8	8.7
30	2.6	.....	3.4	3.55	.....	.....	2.9	4.55	4.2	3.0	2.75	6.2
31	2.6	.....	3.45	.....	.....	.....	2.9	5.0	.....	3.0	.....	4.8

SOUTH FORK OF NEW RIVER NEAR CRUMPLER, N. C.

LOCATION.—1.6 miles above confluence of North and South forks of New River and 4 miles from Crumpler, Ashe County.

DRAINAGE AREA.—325 square miles.

RECORDS AVAILABLE.—August 12, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage attached to trees on left bank; read by J. J. Garvey.

DISCHARGE MEASUREMENTS.—Made from a boat at a section about half a mile below gage or by wading at a section 500 feet below gage.

CHANNEL AND CONTROL.—Practically permanent.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage recorded, previous to flood, July, 1916, 7.00 feet, morning reading October 24, 1908 (discharge, 10,600 second-feet); minimum stage, 0.85 foot, afternoon reading July 27, 1911 (discharge, 205 second-feet). The crest of the flood of July, 1916, occurred about 11 p. m. July 15; stage as determined by leveling July 25 was 21.3 feet (discharge, roughly, 46,000 second-feet). This flood exceeded the flood of 1878 by about 3 feet; a building which had been standing for more than 100 years was carried away by the water.

ICE.—Ice seldom forms in sufficient quantity to affect stage-discharge relation.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined between 200 and 3,500 second-feet; beyond these limits the curve is an extension. Gage read twice daily to hundredths. Daily discharge ascertained by applying mean daily gage height to rating table. See footnote to table of daily discharge. Records excellent, except those for the flood of July, 1916, which may be considerably in error.

Discharge measurements of South Fork of New River near Crumpler, N. C., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
		Feet.	*Sec.-ft.*			*Feet.*	*Sec.-ft.*
1908.				1913.			
Aug. 12	Wm. M. O'Neill	1.48	458	Dec. 16	Peterson and Walters	1.31	387
1909.				1914.			
June 18	H. J. Jackson	2.02	1,060	Oct. 11	Mathers and Morgan	1.00	214
				12	do	.98	217
1910.				1916.			
Nov. 1	C. T. Bailey	1.33	420	July 24	B. E. Jones	3.00	2,450
1911.				26	do	2.65	1,840
July 24	Horton and Bailey	.94	232	27	do	3.26	2,760

Daily discharge, in second-feet, of South Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916.

Day.	Aug.	Sept.	Day.	Aug.	Sept.	Day.	Aug.	Sept.
1908.			1908.			1908.		
1		750	11		602	21	561	485
2		697	12	520	602	22	804	485
3		697	13	485	561	23	804	485
4		650	14	520	520	24	1,040	450
5		697	15	520	520	25	1,800	450
6		804	16	602	520	26	3,900	450
7		862	17	602	520	27	1,800	450
8		980	18	602	520	28	1,340	750
9		750	19	520	485	29	1,160	697
10		650	20	561	485	30	980	561
						31	804	

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug	Sept.
1908–9.												
1	485	1,340	697	1,160	561	920	804	1,660	1,160	1,160	804	391
2	450	1,220	750	980	1,040	862	750	1,160	1,040	1,160	920	391
3	450	1,160	650	862	920	862	804	804	1,280	862	980	36
4	450	1,040	561	804	804	920	750	750	3,900	804	804	391
5	450	980	561	1,530	750	804	697	750	2,230	804	697	450
6	450	862	561	1,660	804	862	650	697	1,800	750	697	450
7	450	804	1,530	1,100	650	1,100	697	650	1,400	1,100	602	391
8	420	804	1,460	980	602	980	697	650	1,220	980	602	391
9	520	804	980	862	650	862	750	650	1,530	862	520	420
10	1,940	750	804	862	1,400	1,100	650	3,360	1,220	862	520	485
11	1,280	862	697	804	1,220	1,100	602	2,230	1,100	750	520	450
12	750	804	862	750	862	920	561	1,460	1,530	697	602	420
13	650	750	804	697	750	862	1,800	1,100	1,100	697	520	391
14	561	750	750	697	697	862	2,850	980	1,040	697	520	366
15	561	750	697	750	804	862	1,530	804	980	650	650	366
16	561	697	650	980	1,600	750	1,160	750	920	602	1,160	485
17	520	697	650	1,340	1,400	697	980	804	1,460	561	862	602
18	450	750	650	1,040	1,040	697	920	750	1,100	520	697	602
19	450	804	650	920	1,040	697	862	697	920	520	602	485
20	450	750	650	804	2,080	650	804	1,530	862	520	520	485
21	450	697	602	750	1,280	804	750	9,200	862	520	485	450
22	520	697	650	750	1,160	920	750	3,900	862	520	485	697
23	3,900	697	862	697	1,100	750	750	2,230	920	520	450	980
24	8,540	650	750	650	1,280	697	750	1,800	920	561	450	697
25	2,530	697	750	650	1,530	1,160	697	1,660	920	485	420	650
26	1,600	697	980	697	1,220	1,220	697	1,600	980	485	420	485
27	1,340	697	862	750	1,100	980	650	2,080	980	697	420	485
28	1,400	650	750	650	980	1,220	650	1,460	862	920	420	420
29	2,380	561	862	650		1,340	697	1,280	1,160	862	391	420
30	2,230	561	862	650		980	804	1,220	1,040	561	420	420
31	1,600		1,220	650		920		1,160		650	391	

Daily discharge, in second-feet, of South Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1909–10.												
1	391	391	340		561	1,160	391	391	340	485	391	3,020
2	391	391	340		420	1,220	391	366	318	450	391	1,400
3	391	391	340	400	520	920	420	340	318	450	391	862
4	391	366	340		485	750	391	391	318	602	485	750
5	391	366	340		561	697	750	340	391	920	391	750
6	420	366	340	485	520	697	340	318	485	750	366	750
7	391	366	561	1,280	391	650	340	366	450	804	391	602
8	391	366	750	980	450	561	340	650	340	697	391	520
9	391	366	561	750	450	520	340	804	366	650	391	520
10	391	520	450	750	391	520	340	561	561	602	391	485
11	1,460	485	391	520	485	520	340	485	450	561	340	450
12	1,800	420	485	561	366	520	366	420	2,380	1,160	318	520
13	750	391	1,040	520	450	485	520	450	1,800	804	340	450
14	602	391	1,530	485	650	520	450	420	1,660	650	340	450
15	650	366	750	450	750	450	420	391	1,940	561	340	450
16	697	366	650	450	650	450	485	391	1,280	485	340	420
17	520	391	697	391	980	450	520	391	920	980	340	391
18	520	391	485	450	2,380	450	520	420	804	804	318	391
19	450	366	450	450	1,100	450	450	391	697	561	340	366
20	450	366	450	420	920	450	420	391	561	485	340	366
21	450	366	420	920	804	485	420	420	602	450	366	366
22	420	340	450	980	750	450	391	561	650	450	420	340
23	420	420	391	650	697	420	391	420	520	420	391	340
24	450	391	391	520	650	391	420	450	602	391	391	340
25	450	366	390	520	602	391	420	602	750	420	340	391
26	420	366	390	450	520	391	485	602	697	391	366	650
27	391	340	391	485	485	391	485	485	561	391	391	520
28	391	340		450	980	391	450	420	520	450	366	650
29	391	340		420	-------	391	420	391	561	485	340	450
30	391	340	350	420	-------	391	391	340	561	450	391	485
31	391	-------		450	-------	391	-------	340	-------	391	1,160	-------
1910–11.												
1	450	420	340	750	450	391	561	697	450	275	318	862
2	420	420	400	1,100	450	391	520	697	450	255	255	485
3	391	420	400	1,660	450	391	520	602	420	255	391	420
4	391	391	400	1,800	450	366	561	602	391	255	485	340
5	391	391	485	1,100	450	366	1,800	561	391	318	450	295
6	697	391	1,100	862	420	520	1,940	520	450	366	485	318
7	2,080	391	1,040	697	450	1,040	1,280	520	450	318	450	318
8	2,080	391	650	602	520	1,040	1,400	485	450	450	366	295
9	1,660	366	561	520	804	1,340	1,160	520	420	366	366	295
10	1,100	366	561	450	862	1,100	980	520	391	340	275	340
11	804	366	420	520	697	862	804	485	391	340	255	340
12	697	366	520	520	561	750	920	485	366	318	238	366
13	602	366	391	450	520	602	1,600	561	340	318	255	318
14	561	391	318	450	520	602	2,230	697	340	295	295	275
15	520	391	420	450	485	561	1,660	602	318	450	318	255
16	520	391	391	420	435	485	1,460	520	295	318	255	255
17	485	340	366	391	450	450	1,160	450	295	650	238	255
18	450	366	450	450	450	450	980	450	295	275	238	255
19	485	340	485	420	420	485	1,040	450	318	255	238	255
20	750	340	420	420	485	520	1,160	450	366	255	238	255
21	697	340	366	420	450	485	980	450	340	275	220	1,400
22	520	340	318	485	450	450	862	450	340	255	205	920
23	485	340	450	520	420	450	750	450	318	238	205	650
24	420	340	697	485	391	420	697	450	340	238	205	520
25	391	391	561	450	391	420	697	420	340	238	205	450
26	420	366	520	450	391	450	650	391	318	220	220	391
27	420	366	450	420	391	980	602	391	391	205	366	366
28	450	391	450	420	391	920	602	391	318	220	340	318
29	450	391	485	420	-------	697	602	391	295	220	420	295
30	420	366	650	561	-------	602	650	391	295	220	602	295
31	420	-------	602	520	-------	602	-------	391	-------	220	980	-------

Daily discharge, in second-feet, of South Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1911-12.												
1	275	340	366	804	520	650	1,040	697	520	450	520	295
2	275	340	391	697	450	602	1,340	650	561	450	450	295
3	295	318	391	561		650	1,220	602	602	561	420	295
4	318	318	340	485		602	980	561	650	520	450	295
5	340	318	340	450		650	862	602	520	602	450	275
6	318	420	340	391		697	804	650	650	862	450	295
7	295	650	366			697	804	602	697	650	420	366
8	295	561	340			804	804	561	602	520	391	520
9	275	520	340	350		862	750	520	520	520	485	450
10	295	520	318		450	750	697	485	485	520	520	366
11	340	450	340			697	650	520	450	561	485	295
12	366	450	366			750	650	1,940	450	1,040	420	295
13	340	561	366			1,040	650	1,660	450	750	391	340
14	295	520	366			1,040	602	1,100	561	697	391	391
15	318	485	391			2,380	602	920	697	697	391	420
16	275	450	561	450		2,530	602	1,280	750	561	391	391
17	561	420	697		561	1,800	602	1,530	561	561	391	391
18	3,540	450	520		520	2,220	697	1,100	485	602	391	340
19	1,400	450	420		450	1,040	561	862	420	920	366	340
20	804	450	391		450	920	561	750	391	1,220	420	366
21	561	420	561		862	804	520	697	391	980	420	340
22	520	391	1,160		2,230	750	750	650	391	804	391	318
23	561	391	1,460	500	980	697	804	602	420	697	366	1,100
24	520	420	1,160		862	1,040	697	602	391	602	340	1,400
25	420	391	980		804	1,160	602	561	980	602	318	697
26	391	391	804	520	920	920	561	561	650	602	318	520
27	391	391	862	485	1,220	804	750	520	561	520	318	697
28	391	391	750	391	1,040	750	697	520	520	485	318	602
29	366	391	650	520	862	1,940	697	804	450	450	318	520
30	366	391	561	750	-------	1,660	750	602	520	862	295	420
31	340	-------	697	650	-------	1,160	-------	561	-------	650	295	-------
1912-13.												
1	420	318	391	520	485	804	1,160	697	804	450	391	340
2	391	340	391	391	450	650	1,040	697	750	520	391	340
3	391	340	391	420	420	520	980	650	862	520	391	340
4	366	318	391	650	520	485	920	602	1,040	804	366	697
5	340	318	391	450	485	450	804	602	804	602	340	1,800
6	340	318	450	450	420	450	804	602	750	520	980	920
7	340	980	485	450	391	391	750	602	697	420	420	520
8	340	1,340	420	450	366	391	750	804	804	391	520	450
9	340	650	391	420	420	420	804	804	1,040	391	485	420
10	318	485	366	391	450	485	697	602	750	391	450	420
11	318	420	340	391	420	561	1,460	602	650	391	450	391
12	318	391	340	391	420	520	2,530	561	750	450	391	391
13	318	391	391	450	450	485	3,360	561	750	420	520	366
14	391	450	391	391	366	3,360	1,800	520	602	391	520	366
15	450	420	340	391	366	3,900	1,600	561	602	391	450	366
16	420	391	420	340	366	2,690	1,600	697	561	391	420	450
17	366	366	366	366	391	1,530	1,340	920	520	366	391	650
18	340	340	340	366	366	1,100	1,160	920	520	366	420	602
19	340	340	340	391	340	980	1,100	697	561	340	450	602
20	366	340	340	391	420	804	980	697	650	340	697	1,100
21	366	340	340	366	561	980	920	750	650	340	697	3,020
22	391	340	340	366	602	1,160	862	1,040	520	340	561	1,660
23	420	340	366	340	520	862	804	1,530	520	340	520	920
24	420	340	366	366	450	804	804	4,080	804	366	485	602
25	366	340	340	420	391	750	804	2,080	520	391	450	561
26	340	340	450	420	391	1,280	750	1,160	561	391	420	520
27	340	318	520	750	602	8,320	862	1,530	485	420	366	485
28	318	366	450	1,040	1,040	3,900	804	1,800	485	450	340	485
29	318	450	450	750	-------	2,080	750	1,220	450	450	340	485
30	318	420	697	561	-------	1,530	697	980	450	450	485	602
31	318	-------	697	520	-------	1,400	-------	920	-------	420	340	-------

Daily discharge, in second-feet, of South Fork of New River near Crumpler, N. C. for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1913–14.												
1	561	485	750	520	1,800	650	980	697	420	275	275	275
2	485	485	920	485	980	650	862	602	391	420	255	275
3	450	450	650	485	750	450	804	561	391	485	255	275
4	420	450	520	520	697	804	697	561	366	366	318	255
5	420	450	485	561	650	804	650	804	391	391	275	255
6	391	450	485	450	920	697	602	920	697	450	275	255
7	391	450	520	450	1,400	650	561	862	804	366	275	238
8	391	450	561	485	1,100	650	804	697	602	340	255	238
9	420	862	561	561	920	561	920	650	485	318	255	275
10	450	697	520	862	750	520	697	650	561	520	295	275
11	420	602	561	750	697	602	697	602	561	391	295	275
12	420	485	520	750	650	804	602	561	420	340	318	340
13	391	450	561	520	650	920	602	561	391	318	366	340
14	391	450	520	520	550	750	697	520	391	318	340	295
15	366	450	420	697	550	697	2,380	520	391	450	340	275
16	366	485	391	520	550	697	1,600	485	366	804	295	255
17	366	485	391	520	602	697	1,280	485	340	602	275	295
18	366	450	391	450	750	804	1,040	485	340	520	255	391
19	391	450	391	450	1,040	862	980	485	391	450	255	450
20	750	450	391	450	1,400	804	1,100	485	450	391	238	366
21	750	420	366	450	1,460	697	980	450	391	340	255	318
22	520	420	366	450	1,100	650	920	450	340	295	295	295
23	485	420	391	485	804	602	804	450	340	275	255	275
24	1,040	420	420	450	920	602	750	450	318	275	220	275
25	2,080	391	450	520	804	561	697	420	318	255	220	275
26	1,220	391	750	602	750	520	697	420	318	255	318	275
27	750	391	650	520	697	602	602	391	318	340	340	275
28	650	391	485	450	697	520	602	391	295	295	862	255
29	602	391	485	450	-------	650	602	391	275	295	804	255
30	561	391	485	450	-------	697	650	450	255	275	485	255
31	520	-------	520	2,380	-------	862	-------	450	-------	275	340	-------
1914–15.												
1	255	340	4,080	920	1,600	920	650	561	920	450	295	980
2	255	340	4,650	862	3,190	862	602	520	1,160	450	391	650
3	255	340	3,020	804	1,940	804	602	561	920	420	420	650
4	255	340	3,540	750	1,530	804	602	697	697	450	450	1,126
5	450	340	5,820	697	1,340	920	602	650	602	650	391	5,640
6	450	340	3,190	1,100	1,340	920	602	520	561	520	366	3,560
7	340	340	2,080	3,020	1,280	920	602	520	520	485	340	1,620
8	295	318	1,660	1,660	1,160	920	602	750	520	420	318	1,280
9	295	366	1,460	1,280	1,100	804	602	650	450	366	318	920
10	275	340	1,220	1,040	1,040	804	561	561	450	420	318	900
11	255	340	1,100	1,040	1,040	750	650	520	450	391	366	804
12	255	318	980	1,660	980	804	804	561	485	391	804	1,040
13	255	318	980	1,460	920	750	697	602	420	391	650	920
14	318	318	920	1,160	920	697	602	520	366	391	520	1,160
15	980	1,530	1,160	1,040	1,040	697	561	485	561	391	485	980
16	5,420	1,460	804	980	1,340	697	561	520	804	366	450	750
17	1,600	1,040	804	1,160	1,100	750	561	485	920	340	561	650
18	804	602	862	1,800	1,040	697	520	485	650	420	485	697
19	650	520	804	2,380	980	697	520	450	602	420	561	804
20	561	450	920	1,800	920	697	520	485	520	602	602	650
21	485	391	1,040	1,400	862	697	520	520	485	920	1,160	650
22	450	485	980	1,280	804	697	520	450	485	602	920	650
23	420	561	862	1,160	804	650	561	485	450	602	602	561
24	561	520	697	1,220	1,460	602	697	750	420	750	485	520
25	520	420	1,400	1,280	1,400	602	650	602	391	485	420	520
26	485	450	1,940	1,220	1,100	602	561	485	391	391	391	485
27	450	391	1,600	1,100	980	602	520	450	391	391	485	485
28	391	420	1,100	1,040	920	602	920	450	391	366	1,040	520
29	366	420	1,100	980	-------	602	697	485	366	340	1,220	804
30	366	1,800	1,280	920	-------	602	650	750	391	340	1,040	920
31	366	-------	1,040	862	-------	602	-------	697	-------	340	980	-------

Daily discharge, in second-feet, of South Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1915–16.												
1	4,650	561	602	1,400	1,220	862	697	520	561	602	1,800	804
2	1,940	561	602	1,220	2,380	804	697	520	520	561	2,690	804
3	1,160	561	561	1,160	2,230	862	650	520	485	697	1,660	804
4	1,040	520	561	980	1,530	920	750	520	450	450	1,530	804
5	1,940	561	520	920	1,340	862	697	602	450	450	1,660	697
6	1,600	520	520	980	1,220	804	804	602	450	420	1,530	750
7	1,220	520	561	1,280	1,100	804	804	520	561	420	1,530	750
8	1,160	520	520	1,400	1,040	862	804	520	520	420	1,660	697
9	980	520	520	1,160	920	862	804	485	520	1,600	1,660	697
10	920	520	520	980	920	804	804	450	485	9,200	1,600	697
11	804	520	520	920	920	804	920	450	450	4,460	1,400	697
12	750	520	520	920	862	750	1,040	450	561	2,080	1,340	697
13	750	520	561	920	862	750	920	450	650	1,530	1,280	697
14	804	561	561	920	862	697	862	602	561	1,220	1,220	980
15	862	750	520	862	804	697	750	450	862	21,100	1,400	1,800
16	750	697	804	750	750	650	697	450	1,800	30,500	1,530	1,280
17	697	561	920	750	750	650	697	450	1,460	10,300	1,280	750
18	697	520	2,850	697	750	650	650	420	1,040	6,100	1,160	697
19	697	2,080	2,080	700	750	650	602	420	750	3,400	1,100	602
20	980	1,340	1,160	700	697	697	602	420	650	5,600	1,040	561
21	862	920	980	804	750	697	602	391	650	5,200	1,040	520
22	750	697	862	1,160	697	862	602	420	602	5,000	1,400	561
23	697	650	750	1,400	697	697	561	1,100	520	3,400	1,600	750
24	650	650	697	1,040	1,040	602	561	1,100	561	2,380	1,160	602
25	650	602	697	920	1,340	602	602	697	561	2,080	980	561
26	650	602	980	1,100	1,100	602	602	561	750	1,940	920	602
27	602	862	1,400	1,460	920	1,340	602	520	561	2,530	920	602
28	602	804	804	1,280	750	1,220	520	520	520	1,940	862	561
29	602	697	4,080	1,160	980	862	520	697	804	1,940	862	1,340
30	602	650	3,190	1,100	-------	804	520	862	520	1,660	862	862
31	561	-------	1,800	1,040	-------	750	-------	650	-------	1,600	862	-------

NOTE.—Daily discharge 1908 to 1916 determined from a well-defined rating curve between 200 and 3,500 second-feet; beyond these limits the curve is an extension. Discharge estimated, because of ice, from gage heights, observer's notes, and climatic records as follows: Dec. 25–26 and 28–31, 1909; Jan. 1–5, Dec. 2–4, 1910; Jan. 7–10, 11–20, 21–25, Feb. 3–16, 1912; Feb. 13–16, 1914; Jan. 19–20, 1916. Braced figures show mean discharge for period included. Gage washed away night of July 15, 1916, replaced July 24. Daily discharge July 15–17 determined from gage-height hydrograph based on crest stage of flood; July 18–23, determined from comparison with flow of North Fork of New River.

Monthly discharge of South Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916.

[Drainage area, 325 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
August 12–31	3,900	485	996	3.06	2.28
September	980	450	604	1.86	2.08
1908–9.					
October	8,540	420	1,250	3.85	4.44
November	1,340	561	799	2.46	2.74
December	1,530	561	799	2.46	2.84
January	1,660	650	875	2.69	3.10
February	2,080	561	1,050	3.23	3.36
March	1,340	650	915	2.82	3.25
April	2,850	561	884	2.72	3.04
May	9,200	650	1,610	4.96	5.72
June	3,900	862	1,240	3.82	4.26
July	1,160	485	721	2.22	2.56
August	1,160	391	598	1.84	2.12
September	980	366	483	1.49	1.66
The year	9,200	366	936	2.88	39.09

Monthly discharge of South Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1909–10.					
October	1,800	391	529	1.63	1.88
November	520	340	381	1.17	1.30
December	1,530	340	500	1.54	1.78
January	1,280	391	555	1.71	1.97
February	2,380	366	677	2.08	2.17
March	1,220	391	546	1.68	1.94
April	750	340	427	1.31	1.46
May	804	318	442	1.36	1.57
June	2,380	318	747	2.30	2.57
July	1,160	391	585	1.80	2.08
August	1,160	318	395	1.22	1.41
September	3,020	340	615	1.89	2.11
The year	3,020	318	532	1.64	22.24
1910–11.					
October	2,080	391	665	2.05	2.36
November	420	340	374	1.15	1.28
December	1,100	318	505	1.55	1.79
January	1,800	391	619	1.90	2.19
February	862	391	488	1.50	1.56
March	1,340	366	619	1.90	2.19
April	2,230	520	1,030	3.17	3.54
May	697	391	498	1.53	1.76
June	450	295	363	1.12	1.25
July	650	205	297	.914	1.05
August	980	205	335	1.03	1.19
September	1,400	255	413	1.27	1.42
The year	2,230	205	517	1.59	21.58
1911–12.					
October	3,540	275	518	1.59	1.83
November	650	318	432	1.33	1.48
December	1,460	318	568	1.75	2.02
January	804	----------	487	1.50	1.73
February	2,230	----------	656	2.02	2.18
March	2,530	602	1,030	3.17	3.66
April	1,340	520	744	2.29	2.56
May	1,940	485	783	2.41	2.78
June	980	391	543	1.67	1.86
July	1,220	450	662	2.04	2.35
August	520	295	396	1.22	1.41
September	1,400	275	454	1.40	1.56
The year	3,540	275	607	1.87	25.42
1912–13.					
October	450	318	359	1.10	1.27
November	1,340	318	428	1.32	1.47
December	697	340	409	1.26	1.45
January	1,040	340	463	1.42	1.64
February	1,040	340	460	1.42	1.48
March	8,320	391	1,420	4.37	5.04
April	3,360	697	1,120	3.45	3.85
May	4,080	520	983	3.02	3.48
June	1,040	450	664	2.04	2.28
July	804	340	426	1.31	1.51
August	980	340	466	1.43	1.65
September	3,020	340	696	2.14	2.39
The year	8,320	318	660	2.03	27.51
1913–14.					
October	2,080	366	574	1.77	2.04
November	862	391	467	1.44	1.61
December	920	366	512	1.58	1.82
January	2,380	450	588	1.81	2.09
February	1,800	----------	880	2.71	2.82
March	920	450	679	2.09	2.41
April	2,380	561	862	2.65	2.96
May	920	391	545	1.68	1.94
June	804	255	411	1.26	1.41
July	804	255	377	1.16	1.34
August	862	220	326	1.00	1.15
September	450	238	288	.886	.99
The year	2,380	220	540	1.66	22.58

Monthly discharge of South Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1914–15.					
October	5,420	255	616	1.90	2.19
November	1,800	318	539	1.66	1.85
December	5,820	697	1,710	5.26	6.06
January	3,020	697	1,260	3.88	4.47
February	3,190	804	1,220	3.75	3.90
March	920	602	735	2.26	2.61
April	920	520	611	1.88	2.10
May	750	450	556	1.71	1.97
June	1,160	366	558	1.72	1.92
July	920	340	460	1.42	1.64
August	1,220	295	575	1.77	2.04
September	5,620	485	1,060	3.26	3.64
The year	5,820	255	824	2.54	34.39
1915–16.					
October	4,650	561	1,020	3.14	3.62
November	2,080	520	686	2.11	2.35
December	4,080	520	1,040	3.20	3.69
January	1,460	697	1,030	3.17	3.66
February	2,380	697	1,040	3.20	3.45
March	1,340	602	790	2.43	2.80
April	1,040	520	698	2.15	2.40
May	1,100	391	559	1.72	1.98
June	1,800	450	661	2.03	2.26
July	30,500	420	4,220	13.0	14.99
August	2,690	862	1,340	4.12	4.75
September	1,800	520	774	2.38	2.66
The year	30,500	391	1,160	3.57	48.61

NEW RIVER NEAR OLDTOWN, VA.

LOCATION.—150 feet above Austin's ferry, 2 miles northwest of Oldtown, Grayson County. Parallel 36° 40′ crosses river at gaging station.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—July 31, 1900, to March 31, 1903.

GAGE.—Wire gage attached to an overhanging tree on left bank about 150 feet above ferry cable; read by Joshua Austin.

DISCHARGE MEASUREMENTS.—Made from ferryboat.

CHANNEL AND CONTROL.—Stream is straight above and below; bed is rocky and probably fairly permanent, left bank is overflowed for a considerable distance during floods. Control not located.

ICE.—Stage-discharge relation affected by ice at times during winter.

EXTREMES OF STAGE.—Flood of May 22, 1901, which reached a stage of 16.7 feet, was the greatest flood since 1878, when the stage was about 3 feet higher. The flood of July, 1916, was about 5 feet higher than the flood of 1878 at Ivanhoe about 18 miles below Oldtown gaging station. Low water of August, 1900, gage reading 0.1 foot, lowest water for years according to gage reader.

ACCURACY.—Stage-discharge relation probably changes during extreme floods. See footnote to tables of daily gage height for days affected by ice during record. Data inadequate for determining rating curve. Gage read in morning to tenths. Records good.

Discharge measurements of New River near Oldtown, Va., during the years 1900–1903.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1900.		*Feet.*	*Sec.-ft.*	1901.		*Feet.*	*Sec.-ft.*
July 31	N. C. Curtis	0.70	1,540	June 29	N. C. Curtis	4.45	6,920
Oct. 29	do	1.00	2,290	1903.			
				Feb. 6	E. W. Meyers	1.70	3,530

Daily gage height, in feet, of New River near Oldtown, Va., for the years ending Sept. 30, 1900–1903.

Day.	Aug.	Sept.	Day.	Aug.	Sept.	Day.	Aug.	Sept.
1900.			1900.			1900.		
1	0.6	0.5	11	0.2	0.1	21	0.4	0.5
2	.6	.4	12	.1	.1	22	.8	.5
3	.5	.3	13	.1	.1	23	.7	.5
4	.5	.2	14	.1	.5	24	.6	.6
5	.4	.2	15	.6	1.6	25	.6	.5
6	.4	.2	16	.5	3.4	26	.4	.8
7	.4	.2	17	.3	1.5	27	.3	.5
8	.3	.2	18	.3	.8	28	.3	.4
9	.3	.1	19	.2	.5	29	.3	.4
10	.2	.1	20	.4	.4	30	1.0	.5
						31	.7	

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1900–1901.												
1	0.4	0.7	1.0	0.9	0.8	0.9	1.6	1.6	2.2	3.2	1.2	4.1
2	.5	.7	.9	.8	.7	.8	3.0	1.4	2.0	4.2	1.1	3.1
3	.6	1.9	.8	.7	1.1	.7	6.1	1.4	1.9	1.9	.9	2.6
4	.7	2.2	1.5	.7	1.1	.8	3.8	1.3	1.8	1.9	.9	2.4
5	.9	1.7	2.7	.6	.8	.7	2.6	1.2	1.7	1.9	.9	2.2
6	.9	1.3	1.8	.6	.8	.7	2.1	1.2	1.6	1.7		2.1
7	.8	1.0	1.5	.7	.8	.6	2.0	1.3	2.5	2.0	4.9	2.0
8	.7	.9	1.4	.5	.5	.6	1.7	1.4	2.2	1.9	2.9	1.9
9	.6	.8	1.4	.8	1.0	.5	1.6	1.5	1.7	1.9	2.0	1.9
10	.6	.8	1.3	.8	2.0	.9	1.4	1.6	1.6	1.5	1.7	1.7
11	.5	.8	1.3	1.0	1.9	1.4	1.3	1.6	1.6	1.5	1.8	1.7
12	.4	.7	1.1	3.0	1.0	1.3	1.2	1.5	1.5	1.4	1.9	1.6
13	.4	.6	1.0	2.4	.9	1.0	1.1	1.2	1.4	1.3	4.3	1.6
14	.5	.7	1.0	1.8	.7	.9	1.9	1.1	2.4	2.6	6.1	1.5
15	.4	.7	.8	1.4	.8	.8	1.8	1.1	4.6	1.4	4.2	1.5
16	.4	.6	.8	1.1	.8	.8	1.5	1.0	3.8	1.6	5.2	1.6
17	.4	.5	.8	1.1	.8	.7	1.4	1.5	4.9	1.6	6.2	1.9
18	.3	.5	.7	.9	.8	.7	1.2	1.2	3.5	2.4	5.2	2.0
19	.3	.5	.7	.8	.7	.6	1.2	1.6	2.9	2.3	4.1	1.9
20	.3	.5	.6	.7	.7	.7		1.4	2.4	2.6	3.6	1.7
21	.3	.5	.6	1.0	.6	1.1	6.1	1.3	3.0	1.9	3.9	1.5
22	.3	.6	.8	1.0	.6	1.0	3.7		3.8	1.3	3.1	1.4
23	.3	.6	.8	.9	.7	.8	2.8	6.1	6.1	1.2	6.1	1.4
24	6.1	.7	.8	.9		.7	2.6	3.9	4.6	1.1	3.8	1.2
25	3.0	.7	.5	.8		1.0	2.4	3.1	3.0	1.0	3.0	1.1
26	1.9	4.9	.6	.8		4.0	2.3	2.7	2.8	1.0	2.8	1.1
27	1.4	2.7	.6	.7		3.0	2.2	4.4	2.6	1.1	3.1	2.2
28	1.2	1.5	.6	.7	1.1	1.9	2.2	3.6	2.3	1.2	5.9	2.0
29	1.0	1.3	.6	.6		1.5	2.0	3.3	2.5	1.0	3.7	5.1
30	1.0	1.1	1.0	.7		2.0	1.8	2.7	2.1	1.0	3.0	2.8
31	.8		.9	.8		2.0		2.4		.9	3.1	

Daily gage height, in feet, of New River near Oldtown, Va., for the years ending Sept. 30, 1900–1903—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1901-2.												
1	2.1	0.8	0.8	3.0	2.3	6.2	2.1	1.0	0.6	1.9	0.5	0.3
2	3.1	.8	.8	2.7	2.5	3.7	1.8	1.0	.7	1.6	.7	.3
3	2.3	.8	1.1	2.0	2.3	2.8	1.7	1.0	.7	1.4	.7	.5
4	1.9	.9	1.5	2.0	1.9	2.9	1.6	.9	.7	1.1	.7	1.0
5	1.7	.9	1.5	1.7	1.9	2.0	1.9	.9	.6	1.0	.6	.8
6	1.5	.9	1.0	1.9	1.7	1.9	1.7	1.0	.6	.8	.6	.8
7	1.5	.8	.9	1.8	1.5	1.9	1.6	1.0	.6	.9	1.4	.4
8	1.5	.8	.8	1.7	1.4	1.8	1.9	1.1	.9	1.1	.8	.4
9	1.4	.8	.8	1.5	1.1	1.8	1.7	1.0	1.0	1.2	.7	1.0
10	1.3	.7	1.5	1.5	.9	2.0	1.6	.9	1.0	.8	1.0	2.0
11	1.3	.7	1.3	1.4	1.0	1.9	1.5	.8	.9	.8	.5	.9
12	1.2	.7	1.1	1.3	1.2	1.7	1.5	.9	.9	.7	.4	6
13	2.4	.7	1.0	1.1	1.2	1.9	1.4	.8	.6	.7	2.0	.5
14	3.3	.6	2.0	1.1	1.1	1.6	1.4	.8	2.1	.8	1.1	.4
15	1.9	.6	-------	1.0	1.0	1.5	1.5	1.0	1.9	1.0	.5	.4
16	1.6	.6	4.1	.4	1.1	1.9	1.5	1.1	3.1	.8	.7	.4
17	1.4	.6	3.0	1.3	1.1	2.6	1.4	1.0	2.8	.8	.9	.4
18	1.2	.5	1.9	1.2	1.2	2.1	1.3	1.0	1.7	.6	.8	.4
19	1.1	.5	1.7	1.2	2.0	1.9	1.2	1.5	1.4	.6	.6	.4
20	1.2	.5	1.5	1.1	1.9	1.7	1.5	1.0	1.2	.6	.5	.4
21	1.1	.4	1.6	1.0	2.2	1.6	1.5	1.1	1.1	.5	.5	.5
22	1.0	.4	1.5	1.2	1.9	1.5	1.4	.9	1.0	.5	.6	.5
23	1.0	1.4	1.4	1.0	1.5	1.4	1.3	.9	.9	.6	.9	.4
24	1.0	1.4	2.5	1.0	1.4	1.4	1.2	1.0	.8	.5	.4	.4
25	1.0	1.2	2.3	1.2	3.6	1.3	1.2	1.0	.8	.5	.4	.5
26	.9	1.1	2.0	1.2	3.9	1.2	1.1	1.2	.9	.4	.4	.8
27	.9	1.0	1.7	1.0	2.6	1.2	1.0	1.0	2.6	.4	.4	.6
28	.9	1.0	1.9	2.0	-------	1.4	1.0	.9	3.9	.4	.4	.5
29	.9	.9	-------	1.7	-------	1.9	1.0	.9	4.1	.5	.4	.5
30	.8	.7	6.0	1.9	-------	3.9	1.0	.7	2.2	.7	.3	.4
31	.8	-------	3.8	3.0	-------	2.5	-------	.7	-------	.6	.3	-------

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1902-3.							1902-3.						
1	0.4	0.4	1.0	1.6	1.2	4.1	16	0.5	0.3	1.0	------	1.5	1.5
2	.4	.4	1.1	2.9	1.1	2.6	17	.5	.3	1.6	0.9	5.4	1.5
3	.6	.4	1.4	3.9	1.2	2.1	18	.4	.3	1.3	.9	3.2	1.4
4	.5	.4	1.5	2.4	1.4	1.8	19	.4	1.2	1.2	.9	2.2	1.2
5	.8	.4	1.5	1.9	3.0	1.6	20	.4	.7	1.0	.9	2.1	1.2
6	1.0	.5	1.4	1.5	1.8	1.5	21	.4	.6	1.0	.9	1.8	1.4
7	.7	.5	1.2	1.3	1.5	1.5	22	.3	.5	1.2	.9	1.5	1.7
8	.6	.7	1.1	1.1	1.9	1.9	23	.3	.5	1.1	.9	1.4	4.7
9	.4	.6	.9	.9	1.9	1.7	24	.3	.5	1.0	.9	1.2	4.8
10	.4	.5	.9	------	1.8	1.8	25	.3	.6	.8	.9	1.1	3.0
11	.6	.5	.9	------	1.7	2.4	26	.3	1.0	.6	1.0	1.1	2.4
12	.9	.4	.8	------	2.8	2.1	27	.4	1.2	1.0	1.1	1.2	2.0
13	1.0	.4	.8	------	2.6	2.0	28	.9	1.0	------	1.3	2.9	1.6
14	.9	.3	.9	------	1.9	1.8	29	1.1	.8	------	1.4	------	1.7
15	.7	.3	.8	------	1.6	1.6	30	.7	.7	------	1.5	------	4.2
							31	.5	------	------	1.3	------	5.1

NOTE.—River frozen over Feb. 24 to 27, 1901, and Jan. 10 to 24, 1903. Water over gage Apr. 20, May 22, Aug. 6, Dec. 15 and 29, 1901. Crest stage May 22, 1901, 16.7 feet.

NEW RIVER NEAR GRAYSON, VA.

LOCATION.—At Norfolk & Western Railway bridge at Fries Junction, 1 mile above Grayson, Carroll County. Chestnut Creek enters on right immediately below station.

RECORDS AVAILABLE.—August 7, 1908, to December 31, 1912, when station was discontinued because of backwater from the Appalachian Power Co.'s dam No. 2, which occurred first on December 31, 1912.

DRAINAGE AREA.—1,160 square miles.

GAGE.—Chain gage attached to bridge; read by Oscar Williams.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge.

CHANNEL AND CONTROL.—The river at the measuring section is wide, with an irregular, rocky bottom; current rough and rapid. Control probably at bridge; practically permanent.

ICE.—Stage-discharge relation little, if any, affected by ice.

EXTREMES OF DISCHARGE.—1908 to 1912: Maximum stage recorded, 10.0 feet, morning reading May 21, 1909 (discharge, roughly 29,000 second-feet); minimum stage, 2.98 feet morning reading August 25, 1911 (discharge, roughly 180 second-feet).

REGULATION.—The operation of a water-power plant about 4 miles above the station affects natural flow at low stages.

ACCURACY.—Stage-discharge relation practically permanent; affected by ice January 8–29, 1912. Rating curve well defined between 730 and 4,000 second-feet; beyond these limits the curve is an extension. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Backwater effect from ice January 8–29, 1912, estimated from run-off relation with other stations to have increased gage readings by 0.2 foot. Records good.

Discharge measurements of New River near Grayson, Va., during the years 1908–1912.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1911.		*Feet.*	*Sec.-ft.*
Aug. 6	Wm. M. O'Neill	4.70	3,170	July 21	C. T. Bailey	3.69	872
19	do	4.11	1,920	1912.			
1909.				Sept. 25	do	4.62	3,070
June 14	H. J. Jackson	4.74	3,110				
21	do	4.45	2,390				
1910.							
Mar. 17	C. T. Bailey	3.96	1,480				
Oct. 22	do	4.00	1,470				

Daily discharge, in second-feet, of New River near Grayson, Va., for the years ending Sept. 30, 1908–1913.

Day.	Aug.	Sept.	Day.	Aug.	Sept.	Day.	Aug.	Sept.
1908.			1908.			1908.		
1	------	1,950	11	2,060	1,500	21	1,330	1,270
2	------	1,840	12	2,060	1,500	22	1,500	1,250
3	------	1,720	13	1,480	1,480	23	2,180	1,250
4	------	1,720	14	2,530	1,460	24	2,060	1,230
5	------	1,720	15	1,500	1,400	25	4,970	1,230
6	4,010	2,300	16	1,610	1,370	26	11,300	1,230
7	1,840	2,180	17	2,060	1,290	27	6,050	1,230
8	1,950	2,900	18	1,726	1,290	28	3,440	1,500
9	1,840	1,950	19	1,720	1,290	29	2,900	1,950
10	1,840	1,720	20	1,610	1,290	30	2,650	1,720
						31	2,300	------

Daily discharge, in second-feet, of New River near Grayson, Va., for the years ending Sept. 30, 1908–1913—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug	Sept.
1908–9.												
1	1,500	4,640	2,180	4,970	1,610	3,040	3,040	4,970	3,040	3,300	2,410	1,090
2	1,460	4,010	2,060	5,670	2,300	2,780	2,900	4,640	2,780	2,900	3,040	1,010
3	1,400	3,300	1,950	3,440	2,780	2,530	2,650	3,440	3,040	2,780	2,900	1,010
4	1,250	3,300	1,950	3,040	2,650	2,650	2,530	3,040	10,400	2,410	2,530	1,050
5	1,090	2,780	1,950	4,970	2,300	2,650	2,410	2,780	9,430	2,180	2,300	1,130
6	1,090	2,650	2,180	8,540	2,530	2,780	2,300	2,650	5,670	2,180	2,060	1,250
7	1,090	2,410	4,640	5,310	2,410	3,580	2,060	2,410	4,320	2,410	4,970	1,250
8	1,090	2,300	8,540	4,010	2,180	3,720	2,060	2,300	3,580	4,010	1,720	1,190
9	1,370	2,300	4,970	3,580	2,060	3,440	2,180	2,060	3,440	3,170	1,610	1,210
10	5,670	2,300	3,580	3,170	4,970	3,300	2,180	4,010	4,010	2,650	1,500	1,190
11	4,970	2,300	3,040	3,040	6,050	3,300	2,060	6,050	3,300	2,410	1,460	1,190
12	2,650	2,300	3,440	2,780	3,720	3,170	1,950	3,720	2,900	2,180	1,500	1,090
13	1,950	2,300	3,580	2,530	3,040	3,170	3,170	2,900	3,040	2,180	1,500	1,050
14	1,610	2,300	3,040	2,410	2,780	3,040	9,890	2,530	3,580	2,180	1,810	1,050
15	1,500	2,300	3,040	2,530	2,530	2,900	5,670	2,410	3,040	2,060	2,180	1,010
16	1,480	2,410	2,650	2,780	3,440	2,650	4,010	2,300	2,780	1,840	3,170	990
17	1,460	2,300	2,300	5,310	4,010	2,530	3,300	2,180	2,410	1,720	3,170	1,610
18	1,270	2,410	2,180	4,640	3,440	2,530	2,900	2,060	2,410	1,720	2,300	1,610
19	1,250	2,530	2,530	4,010	3,170	2,300	2,530	2,060	2,900	1,610	1,840	1,500
20	1,250	2,530	2,300	3,300	4,010	2,300	2,530	2,180	2,650	1,500	1,610	1,190
21	1,250	2,300	2,180	2,900	3,580	2,410	2,530	23,900	2,530	1,460	1,480	1,210
22	1,420	2,300	2,180	2,780	3,720	2,650	2,410	15,400	2,300	1,420	1,370	1,310
23	4,320	2,180	2,530	2,530	4,320	2,530	2,300	7,250	2,180	1,500	1,270	1,950
24	24,500	2,180	2,410	2,530	4,320	2,410	2,180	2,410	2,410	1,610	1,250	2,180
25	9,430	2,060	2,300	2,410	4,970	2,900	2,060	4,640	2,650	1,500	1,230	1,720
26	5,310	2,060	2,900	2,410	4,640	3,720	2,060	4,640	2,650	1,720	1,190	1,500
27	3,720	1,950	3,170	2,410	3,720	3,440	2,060	4,640	2,780	2,650	1,190	1,400
28	3,440	1,950	3,040	2,300	3,300	4,010	2,060	4,010	2,650	2,180	1,130	1,170
29	6,050	1,950	2,900	2,300	-------	6,050	2,060	3,580	2,650	1,950	1,090	1,090
30	9,890	1,950	3,440	2,300	-------	4,320	2,180	3,300	2,900	1,950	1,050	1,090
31	6,440	-------	4,640	1,610	-------	3,580	-------	3,170	-------	1,840	1,110	-------
1909–10.												
1	990	525	1,050	1,460	1,090	3,720	1,090	1,290	1,090	1,720	1,190	6,840
2	970	1,090	1,070	1,720	1,130	4,010	1,070	1,210	1,030	1,500	1,090	4,640
3	890	1,070	1,070	2,780	1,480	3,580	1,170	1,190	1,050	1,500	1,420	3,580
4	970	1,070	970	2,530	1,840	2,900	1,250	1,170	950	762	1,330	3,040
5	1,090	1,070	858	1,950	1,500	2,530	1,170	1,170	1,130	2,180	1,720	2,650
6	1,010	1,070	842	1,720	1,250	2,410	1,070	1,110	1,720	2,900	1,400	2,180
7	1,070	1,050	990	2,780	1,270	2,410	1,070	1,010	1,840	2,650	1,190	1,720
8	1,050	1,070	1,720	3,580	1,210	1,950	950	1,500	1,250	2,780	1,350	1,610
9	990	525	1,840	2,410	1,480	1,840	930	2,410	1,210	4,010	1,330	1,500
10	930	1,190	1,250	1,720	1,420	1,840	826	2,300	1,420	2,410	1,150	1,480
11	2,060	1,290	858	1,480	1,610	1,840	858	1,720	3,440	2,060	1,050	1,480
12	6,050	1,310	1,070	1,330	1,090	1,840	890	1,720	8,100	2,410	1,010	1,330
13	2,780	1,090	2,060	1,720	1,090	1,720	1,500	1,720	9,890	3,300	1,090	1,330
14	1,720	1,070	3,720	1,720	1,310	1,500	1,610	1,610	8,100	2,650	1,230	1,270
15	1,720	1,050	2,900	1,610	1,500	1,460	1,350	1,370	7,250	1,950	1,090	1,230
16	2,060	1,070	1,950	1,460	2,300	1,330	1,250	1,290	5,670	1,840	990	1,130
17	1,950	1,110	1,460	1,330	3,440	1,310	1,460	1,250	4,010	2,300	1,230	1,070
18	1,610	950	1,310	1,460	8,100	1,290	1,720	1,290	3,170	2,410	890	990
19	1,420	890	1,290	1,400	4,970	1,270	1,720	1,400	2,650	2,060	930	950
20	1,330	970	1,350	1,460	3,040	1,290	1,420	1,330	2,410	1,840	1,010	930
21	1,400	930	970	1,720	2,900	1,460	1,350	1,290	2,900	1,500	1,050	950
22	1,330	950	858	3,440	2,780	1,330	1,290	1,290	3,170	1,460	1,250	990
23	1,420	990	858	2,300	2,530	1,310	1,270	1,840	2,780	1,370	1,250	890
24	1,460	1,050	990	2,060	2,180	1,190	1,250	1,840	1,950	1,290	1,090	874
25	1,400	1,130	1,250	1,950	2,060	1,210	1,460	2,180	2,900	1,210	1,010	910
26	1,270	1,070	1,370	1,610	1,950	1,190	1,610	2,530	2,530	1,210	990	990
27	1,250	1,050	1,010	1,400	1,720	1,170	1,720	1,950	2,180	1,170	1,010	1,230
28	1,150	1,010	1,170	1,500	2,180	1,210	1,720	1,610	1,950	1,170	970	1,480
29	1,150	910	1,270	1,480	-------	1,110	1,610	1,420	1,720	1,290	970	1,440
30	1,270	930	1,170	1,500	-------	1,110	1,370	1,290	1,720	1,420	990	1,350
31	1,290	-------	1,330	1,440	-------	1,070	-------	1,190	-------	1,250	2,060	-------

Daily discharge, in second-feet, of New River near Grayson, Va., for the years ending Sept. 30, 1908–1913—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	1,250	1,110	930	2,180	3,170	1,250	2,060	2,650	1,500	810	538	2,410
2	1,110	1,090	890	4,970	2,530	1,250	1,950	2,650	1,270	762	716	1,720
3	1,030	1,130	874	7,250	2,060	1,270	1,840	2,300	1,210	702	660	3,440
4	990	1,090	930	8,540	1,840	1,210	1,950	2,060	1,090	716	970	826
5	930	1,050	1,210	4,640	1,950	1,090	6,440	1,950	1,090	930	1,370	730
6	1,130	1,050	1,950	3,170	1,720	1,230	10,800	1,950	2,060	1,720	1,210	730
7	2,530	1,010	2,650	2,410	1,720	2,530	6,440	1,840	1,720	1,050	1,130	746
8	4,970	990	2,650	2,300	1,720	3,720	6,050	1,840	1,610	1,270	1,090	778
9	4,970	990	2,060	1,950	3,580	5,670	4,970	1,720	1,170	1,130	858	646
10	3,040	970	1,720	1,720	4,970	5,310	4,010	1,720	1,230	1,050	730	730
11	2,060	970	1,500	1,460	3,720	4,640	3,440	1,610	1,130	1,050	762	746
12	1,720	890	1,290	1,720	3,040	2,900	3,440	1,610	1,070	1,070	564	1,170
13	1,500	890	950	1,610	2,530	2,650	4,010	2,060	1,050	1,130	810	1,050
14	1,440	930	778	1,500	2,300	2,530	5,310	3,720	970	1,130	674	842
15	1,350	1,010	810	1,500	2,060	2,410	6,440	2,650	874	1,130	762	660
16	1,270	1,050	1,070	1,610	1,840	2,180	6,050	2,060	858	890	660	674
17	1,230	1,050	890	1,460	1,720	1,840	4,640	1,840	842	826	646	604
18	1,190	910	1,110	1,400	1,610	1,720	3,580	1,720	890	716	604	660
19	1,210	930	1,330	1,330	1,500	1,720	3,300	1,610	950	660	646	646
20	1,440	910	1,270	1,350	1,500	1,950	4,010	1,500	1,170	716	646	590
21	1,720	890	930	1,370	1,720	1,840	3,580	1,480	1,290	730	344	716
22	1,500	890	410	1,500	1,370	1,610	3,040	1,460	1,010	688	538	2,650
23	1,250	858	1,090	1,460	1,230	1,500	2,780	1,420	874	336	352	1,720
24	1,190	874	1,500	1,840	1,420	1,500	2,530	1,370	858	674	344	1,210
25	1,110	930	1,950	2,180	1,370	1,500	2,410	1,370	1,010	646	328	1,050
26	1,090	930	1,720	1,950	1,310	1,460	2,180	1,290	1,050	590	370	874
27	1,090	910	1,610	1,840	1,290	2,300	2,060	1,210	970	646	970	762
28	1,210	990	1,610	1,840	1,270	2,900	1,950	1,150	1,610	646	890	730
29	1,170	1,030	1,840	1,950	-------	2,530	2,060	1,110	1,290	473	970	702
30	1,150	1,330	2,060	2,060	-------	2,300	2,180	1,090	1,030	632	1,840	632
31	1,130	-------	2,300	2,900	-------	2,180	-------	1,230	-------	674	1,840	-------
1911–12.												
1	716	890	1,150	2,650	2,410	2,530	3,720	2,530	1,610	1,950	1,610	826
2	512	858	1,070	2,300	2,060	2,300	4,320	2,410	1,500	1,500	1,420	826
3	730	874	1,070	2,180	1,610	1,950	6,050	2,300	1,950	1,610	1,210	762
4	702	794	1,050	1,840	1,050	2,060	4,970	1,950	1,950	2,010	1,350	730
5	716	826	950	1,270	1,110	2,180	3,440	1,950	1,720	2,410	1,500	778
6	794	970	970	1,030	1,370	2,410	3,040	2,060	1,610	3,720	1,290	826
7	702	1,950	1,050	858	1,720	2,300	2,900	2,060	1,840	2,900	1,150	762
8	660	2,060	950	1,720	1,720	2,780	2,900	2,060	1,610	2,300	1,070	970
9	674	1,720	930	1,950	1,610	3,300	2,530	1,840	1,500	1,720	1,130	1,500
10	702	1,720	890	1,840	1,610	3,440	2,300	1,720	1,350	1,720	1,330	1,090
11	762	1,610	890	1,840	1,610	3,040	2,180	1,720	1,270	1,840	1,460	842
12	930	1,500	930	1,610	1,370	2,900	2,060	5,670	1,210	2,300	1,250	730
13	890	1,610	970	1,840	1,070	3,580	2,060	4,320	1,130	2,410	1,090	1,460
14	778	1,610	930	1,720	1,420	4,010	1,950	3,170	1,290	2,180	1,050	1,050
15	730	1,460	1,070	2,530	1,290	7,670	1,950	2,650	1,720	1,950	1,030	930
16	858	1,290	1,500	2,180	1,230	12,300	1,950	3,720	1,950	1,720	1,010	990
17	1,500	1,210	1,950	1,610	1,460	6,840	2,060	5,310	1,610	1,480	1,050	858
18	13,300	1,130	1,720	1,500	1,460	4,640	2,060	3,720	1,420	1,610	970	990
19	4,970	1,330	1,330	1,610	1,720	3,580	1,950	2,900	1,330	1,950	970	1,460
20	2,410	1,330	1,290	1,840	1,720	3,300	1,720	2,530	1,170	2,410	1,050	1,370
21	2,060	1,290	1,270	2,300	2,410	2,900	1,720	2,300	1,110	2,300	2,780	970
22	1,500	1,190	3,580	1,950	6,840	2,650	1,950	2,180	1,070	1,950	1,720	842
23	1,720	1,130	5,310	1,500	4,010	2,410	2,650	1,950	1,210	1,720	1,370	1,840
24	1,610	1,130	3,720	1,190	2,900	2,900	2,410	1,950	1,170	1,500	1,150	4,970
25	1,330	1,290	3,300	1,290	3,040	4,640	1,950	1,720	2,650	1,460	1,050	3,170
26	1,130	1,250	2,900	1,190	3,440	3,720	1,840	1,720	2,410	1,720	990	1,950
27	1,070	1,130	2,900	1,190	5,310	3,040	1,950	1,610	2,180	1,460	1,170	1,720
28	1,050	1,170	2,780	1,190	4,320	2,900	2,410	1,840	1,500	1,210	970	1,840
29	990	1,170	2,180	1,290	3,170	4,320	2,410	2,060	1,720	1,150	858	1,720
30	950	1,230	2,180	3,720	-------	7,250	2,650	2,180	2,410	2,060	858	1,420
31	930	-------	2,180	3,440	-------	4,640	-------	1,840	-------	1,950	874	-------

Daily discharge, in second-feet, of New River near Grayson, Va., for the years ending Sept. 30, 1908–1913—Continued.

Day.	Oct.	Nov.	Dec.	Day.	Oct.	Nov.	Dec.	Day.	Oct.	Nov.	Dec.
1912.				1912.				1912.			
1	1,130	730	874	11	762	1,210	890	21	1,010	674	810
2	1,090	842	1,130	12	762	1,210	990	22	1,010	890	730
3	930	842	1,050	13	810	1,190	730	23	1,070	858	858
4	990	810	1,190	14	858	1,170	1,050	24	1,050	794	702
5	910	746	1,330	15	1,070	1,250	826	25	990	674	810
6	858	1,050	1,250	16	1,230	1,090	930	26	874	746	810
7	842	1,500	1,290	17	1,010	910	1,150	27	842	1,030	1,170
8	970	2,650	1,210	18	874	1,010	950	28	810	810	1,190
9	810	2,180	1,110	19	930	858	910	29	810	716	990
10	778	1,480	930	20	990	842	1,010	30	794	746	1,500
								31	730	------	1,500

NOTE.—Stage-discharge relation affected by ice Jan. 8–29, 1912; discharge estimated. Discharge interpolated July 4, 1912.

Monthly discharge of New River near Grayson, Va., for the years ending September 30, 1908–1913.

[Drainage area, 1,160 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
August 6–31	11,300	1,330	2,710	2.34	2.26
September	2,900	1,230	1,590	1.37	1.53
1908–9.					
October	24,500	1,090	3,620	3.12	3.60
November	4,640	1,950	2,480	2.14	2.39
December	8,540	1,950	3,030	2.61	3.01
January	8,540	1,610	3,440	2.97	3.42
February	6,050	1,610	3,380	2.91	3.03
March	6,050	2,300	3,110	2.68	3.09
April	9,890	1,950	2,810	2.42	2.70
May	23,900	2,060	4,440	3.83	4.42
June	10,400	2,180	3,480	3.00	3.35
July	4,010	1,420	2,170	1.87	2.16
August	4,970	1,050	1,900	1.64	1.89
September	2,180	990	1,280	1.10	1.23
The year	24,500	990	2,930	2.53	34.29
1909–10.					
October	6,050	890	1,520	1.31	1.51
November	1,310	525	1,020	.879	.98
December	3,720	842	1,350	1.16	1.34
January	3,580	1,330	1,870	1.61	1.86
February	8,100	1,090	2,160	1.86	1.94
March	4,010	1,070	1,790	1.54	1.78
April	1,720	826	1,300	1.12	1.25
May	2,530	1,010	1,530	1.32	1.52
June	9,890	950	3,040	2.62	2.92
July	4,010	762	1,920	1.66	1.91
August	2,060	890	1,170	1.01	1.16
September	6,840	874	1,740	1.50	1.67
The year	9,890	525	1,700	1.47	19.84
1910–11.					
October	4,970	930	1,610	1.39	1.60
November	1,330	858	988	.852	.95
December	2,650	410	1,420	1.22	1.41
January	8,540	1,330	2,420	2.09	2.41
February	4,970	1,230	2,070	1.78	1.85
March	5,670	1,090	2,280	1.97	2.27
April	10,800	1,840	3,850	3.32	3.70
May	3,720	1,090	1,780	1.53	1.76
June	2,060	842	1,160	1.00	1.12
July	1,720	336	845	.728	.84
August	1,840	328	801	.691	.80
September	3,440	590	1,050	.905	1.01
The year	10,800	328	1,690	1.46	19.72

Monthly discharge of New River near Grayson, Va., for the years ending September 30, 1908–1913—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1911–12.					
October	13,300	512	1,560	1.34	1.54
November	2,060	794	1,290	1.11	1.24
December	5,310	890	1,770	1.53	1.76
January	3,720	858	1,810	1.56	1.80
February	6,840	1,050	2,280	1.97	2.12
March	12,300	1,950	3,820	3.29	3.79
April	6,050	1,720	2,600	2.24	2.50
May	5,670	1,610	2,510	2.16	2.49
June	2,650	1,070	1,610	1.39	1.55
July	3,720	1,150	1,940	1.67	1.92
August	2,780	858	1,220	1.05	1.21
September	4,970	730	1,340	1.16	1.29
The year	13,300	512	1,980	1.71	23.21
1912.					
October	1,230	730	922	.795	.92
November	2,650	674	1,050	.905	1.01
December	1,500	702	1,030	.888	1.02

NEW RIVER AT RADFORD, VA.

LOCATION.—At toll highway bridge near Norfolk & Western Railway station at Radford, Montgomery County, 6 miles below mouth of Little River.

DRAINAGE AREA.—2,720 square miles.

RECORDS AVAILABLE.—August 1, 1898, to July 15, 1906; May 6, 1907, to September 30, 1915, when station was discontinued.

GAGE.—United States Weather Bureau staff gage used August 1, 1898, to February 22, 1900. Survey installed a wire gage February 23, 1900, at the same datum as the Weather Bureau gage; wire gage was replaced by a chain gage December 2, 1903, and datum lowered 3.41 feet to avoid negative readings; all gage readings are referred to this datum. The differences between the readings of the Weather Bureau and Survey gages are not always the same as the difference in the datums, as the differences vary to some extent with the stage, owing to difference in location of the two gages. The station at Eggleston, about 24 miles below Radford, was established to replace the Radford station.

DISCHARGE MEASUREMENTS.—Made from upstream and downstream sides of bridge.

CHANNEL AND CONTROL.—Practically permanent.

EXTREMES OF DISCHARGE.—1898–1915: Maximum stage recorded, 30.2 feet at 2 p. m. May 22, 1901 (discharge, roughly, 138,000 second-feet). Flood of September 15, 1878, reached a stage of about 37.4 feet according to United States Weather Bureau, by datum of Survey gage. Minimum stage recorded, August, 1900, but stage and discharge are doubtful because of inaccuracies in gage-height record. The minimum flow at Radford is probably between 500 and 700 second-feet.

ICE.—Stage-discharge relation only occasionally affected by ice.

REGULATION.—Operation of power plants about 50 miles above station built in 1912 may slightly affect flow.

ACCURACY.—Stage-discharge relation fairly permanent. Rating curve used 1898 to March 26, 1913, well defined between 800 and 20,000 second-feet; beyond these limits the curve is an extension. Above 20,000 second-feet the extension is based on studies of flood discharge at other gaging stations in New River basin. March 27, 1913, to September 30, 1913, curve is well defined between 1,750 and 37,000 second-feet, and October 1, 1913, to September

30, 1915, it is well defined between 800 and 37,000 second-feet; beyond these limits curve is an extension. Gage read in morning to tenths August 1, 1898, to April 30, 1910; to tenths twice daily March 1, 1910, to July 22, 1911, after which gage read to hundredths twice daily. Daily discharge ascertained by applying daily gage height and mean daily gage height, when read more than once, to respective rating tables. See footnote to table of daily discharge for special estimates. Daily discharge prior to September 1, 1903, is subject to errors due to inaccuracies of several tenths in gage readings; therefore all daily discharges less than 500 second-feet are probably in error. The minimum flow at Radford is probably between 500 and 700 second-feet. Aside from these the records are good.

Discharge measurements of New River at Radford, Va., during the years 1898–1915.

Date.	Made by—	Gage height.[a]	Discharge.
		Feet.	*Sec.-ft.*
1898.			
July 21	D. C. Humphreys	3.61	1,810
29	do	4.67	4,620
1899.			
June 29	do	4.53	4,980
Aug. 11	do	3.61	2,170
1900.			
Feb. 23	do	5.96	[b] 11,700
24	do	5.51	[b] 8,500
Mar. 30	do	5.19	7,710
June 27	do	5.03	6,900
July 28	do	4.66	5,260
Aug. 22	do	3.41	1,360
Dec. 20	do	4.11	2,980
1901.			
July 20	do	5.56	8,240
Mar. 29	do	5.41	10,100
Aug. 8	do	7.42	17,000
1902.			
July 12	do	3.01	2,820
Aug. 22	do	2.73	2,230
1903.			
Mar. 21	E. C. Murphy	4.86	5,210
Sept. 23	Paul and Sawyer	3.54	2,110
Nov. 30	W. C. Sawyer	3.21	1,210
1904.			
June 18	F. H. Brundage	4.07	3,610
Sept. 16	R. H. Bolster	3.40	1,640
29	do	3.24	1,240
Oct. 18	do	3.14	1,000
1905.			
Mar. 18	A. H. Horton	3.98	3,350
Sept. 11	R. H. Bolster	3.88	2,620
1906.			
June 11	Robert Follansbee	3.60	1,970
1907.			
June 20	R. G. Knight	4.78	5,610
July 22	do	3.88	3,000
1908.			
Apr. 24	Follansbee and Barrows	4.24	3,610
July 27	O'Neill and Chapman	3.99	3,230
Aug. 20	W. M. O'Neill	3.84	2,610
1909.			
June 10	H. J. Jackson	5.15	7,300
22	do	4.36	4,050
Dec. 7	A. H. Horton	3.50	1,830
1910.			
Mar. 15	C T. Bailey	3.85	2,730
Oct. 20	do	3.62	2,120
1911.			
July 17	Horton and Bailey	3.38	1,510
1913.			
Mar. 28	Jackson and Wallace	10.71	30,800
28	do	10.01	27,600
29	do	7.24	15,100
29	do	6.83	13,200
Dec. 11	Peterson and Walters	3.77	2,410
1914.			
Oct. 5	Mathers and Morgan	3.21	1,040
23	do	3.61	1,850

[a] All gage heights refer to datum established December 1, 1903.
[b] Partly measured and partly estimated.

Daily discharge, in second-feet, of New River near Radford, Va., for the years ending Sept. 30, 1898–1915.

Day.	Aug.	Sept.	Day.	Aug.	Sept.	Day.	Aug.	Sept.
1898.			1898.			1898.		
1	4,220	3,290	11	6,000	3,000	21	4,220	2,160
2	3,000	3,000	12	7,940	3,000	22	3,900	2,430
3	2,710	3,000	13	7,550	2,710	23	3,900	27,800
4	3,000	8,340	14	7,550	3,290	24	3,290	25,400
5	14,230	16,400	15	4,550	3,590	25	3,000	7,550
6	7,550	7,550	16	3,590	3,290	26	3,900	4,550
7	6,380	4,550	17	3,000	3,000	27	4,220	4,220
8	4,550	3,900	18	3,290	2,710	28	4,550	3,900
9	4,220	3,590	19	3,000	2,710	29	4,220	3,590
10	4,550	3,290	20	3,900	2,430	30	3,900	3,290
						31	3,290	

Daily discharge, in second-feet, of New River near Radford, Va., for the years ending Sept. 30, 1898–1915—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1898–99.												
1	3,000	4,550	3,900	4,550	3,590	12,470	9,950	6,000	4,900	3,900	2,710	4,550
2	3,290	4,220	3,590	4,900	3,590	10,770	8,340	5,630	4,550	2,710	2,710	4,550
3	3,590	4,550	4,220	4,550	4,550	8,340	7,940	5,630	4,220	2,710	2,430	4,550
4	3,900	4,220	3,900	5,260	8,340	26,400	6,770	6,000	3,900	2,430	1,640	4,900
5	16,400	3,900	10,770	6,380	17,800	49,200	8,340	5,630	3,590	2,430	1,150	4,550
6	16,030	4,220	8,340	7,550	24,900	31,300	7,940	4,550	3,290	2,710	1,640	3,590
7	12,470	3,900	7,940	16,900	21,500	21,500	7,550	4,900	2,710	3,000	1,640	1,900
8	7,550	4,550	7,550	10,770	17,800	16,900	17,400	5,260	2,710	2,710	1,150	1,640
9	4,220	3,590	5,630	7,550	12,900	12,040	16,030	7,940	2,430	2,430	1,640	920
10	3,900	3,290	5,260	7,160	12,470	10,360	12,040	7,550	2,430	2,160	1,390	510
11	4,550	3,290	4,900	6,770	9,950	9,140	8,340	8,340	2,710	2,430	1,390	510
12	4,220	4,220	4,550	5,260	8,340	8,340	7,940	7,940	7,550	2,430	1,640	920
13	3,900	3,900	4,220	6,380	7,160	7,940	7,550	8,340	16,400	2,710	1,640	920
14	3,290	3,590	3,900	6,000	5,630	7,160	7,160	8,740	10,770	2,160	2,430	700
15	3,000	3,290	4,220	6,380	4,220	16,030	7,550	7,550	8,340	1,900	2,710	700
16	3,290	3,000	4,550	6,770	5,260	23,900	6,770	7,160	7,160	1,640	2,710	700
17	3,900	4,220	4,220	7,160	14,680	15,580	6,380	5,630	4,900	1,640	2,430	920
18	4,220	4,550	3,900	5,260	13,340	11,610	6,000	4,900	4,220	1,640	2,430	920
19	29,300	5,260	5,260	4,900	15,130	34,800	6,770	4,550	3,900	1,640	2,160	4,550
20	12,040	5,260	4,550	4,900	11,610	35,800	6,380	4,550	4,220	1,640	2,160	6,770
21	10,360	4,550	5,260	4,220	12,470	17,400	6,000	4,220	3,590	1,900	2,160	4,550
22	46,100	4,900	5,630	3,900	12,470	16,030	5,630	3,900	3,290	1,900	2,160	4,220
23	16,900	4,550	7,160	4,550	12,040	12,470	5,630	4,900	3,000	1,900	1,900	3,900
24	12,040	4,220	7,940	4,550	8,340	11,610	4,900	6,380	3,000	1,640	1,900	3,290
25	8,340	3,900	5,630	4,220	7,940	10,770	4,550	6,000	3,290	1,640	1,640	3,000
26	7,940	4,220	5,260	4,550	8,340	10,360	8,340	4,900	4,220	1,640	1,640	3,000
27	7,550	3,900	4,220	4,550	19,600	8,340	10,360	3,900	5,260	4,550	1,640	2,710
28	6,770	4,220	3,900	4,220	16,900	12,900	8,340	3,900	4,550	4,220	2,430	2,430
29	5,260	3,900	3,590	4,550	-------	12,470	7,550	3,590	4,550	3,900	4,550	2,710
30	6,770	3,590	3,900	3,900	-------	13,340	6,770	3,900	4,220	3,000	4,550	2,430
31	6,380	-------	4,220	3,900	-------	12,040	-------	4,220	-------	2,710	3,590	-------
1899–1900.												
1	1,150	2,710	920	1,150	2,430	25,100	7,940	5,260	3,900	4,550	2,710	920
2	920	4,550	2,160	1,150	3,900	26,400	5,260	4,900	3,590	3,900	2,430	920
3	920	4,550	2,160	1,150	4,220	12,900	5,260	4,550	4,550	3,290	2,160	700
4	700	3,000	1,900	1,150	3,900	8,340	4,900	5,630	4,550	3,590	2,430	920
5	700	2,430	1,390	1,150	3,900	7,940	5,260	5,260	4,220	4,220	2,430	920
6	700	2,160	1,150	1,150	3,590	7,550	4,900	4,550	4,220	3,590	1,640	170
7	700	1,640	920	920	4,550	7,160	4,550	4,550	3,900	3,000	1,640	250
8	510	1,150	700	920	5,260	8,340	4,550	4,220	4,220	2,710	1,150	250
9	1,150	920	700	700	4,220	8,740	4,220	4,550	3,900	2,430	700	360
10	1,640	920	700	510	4,550	7,940	4,550	5,630	3,900	3,000	250	700
11	1,640	920	700	250	4,220	10,770	7,940	4,550	3,590	2,710	120	920
12	1,640	920	1,150	4,550	5,260	10,360	7,550	4,550	3,590	2,710	1,640	510
13	1,390	700	19,200	12,470	12,040	7,940	5,260	4,550	3,900	2,430	510	700
14	1,390	700	8,340	7,940	20,600	7,160	4,550	4,220	4,550	1,900	170	700
15	1,390	700	4,550	6,770	11,610	6,770	4,220	4,220	4,900	2,160	250	4,550
16	1,150	700	4,220	5,260	7,160	5,630	3,900	3,900	5,260	2,430	360	11,825
17	920	700	3,900	4,220	6,380	6,770	3,900	3,900	6,770	2,430	170	9,950
18	920	700	3,900	3,900	6,000	6,380	3,590	3,900	5,260	1,900	170	5,260
19	920	700	3,590	4,550	5,630	5,260	16,900	4,220	8,340	1,640	250	3,000
20	700	510	4,220	10,980	4,220	16,200	10,770	3,900	4,550	1,640	250	2,160
21	700	510	4,550	7,940	4,550	18,700	9,540	4,550	4,900	1,900	360	2,710
22	920	700	4,220	7,550	12,470	13,340	11,190	4,220	4,550	2,160	1,640	3,000
23	1,150	700	3,290	6,770	12,040	9,540	12,040	4,220	5,260	2,160	1,640	3,000
24	1,150	700	3,290	5,630	9,140	8,740	9,540	3,900	4,550	2,710	1,900	2,710
25	1,150	1,150	3,000	5,260	8,740	7,550	7,940	8,340	4,900	3,000	2,160	2,430
26	1,390	1,150	2,710	4,550	7,940	7,940	7,160	7,940	8,340	3,290	2,160	2,160
27	1,390	1,150	2,430	4,220	4,550	10,360	6,770	4,550	6,770	4,220	1,640	1,640
28	1,150	1,640	2,430	2,430	10,770	10,770	6,000	4,900	8,340	8,740	1,640	1,640
29	1,150	1,150	2,160	2,160	-------	8,740	5,630	4,550	6,770	3,900	1,640	920
30	1,390	1,150	1,640	2,160	-------	8,340	5,260	4,220	6,770	4,220	1,150	700
31	1,640	-------	1,150	2,430	-------	7,940	-------	4,220	-------	3,000	1,150	-------

Daily discharge, in second-feet, of New River near Radford, Va., for the years ending Sept. 30, 1898–1915—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1900–1901.												
1	700	4,220	6,770	3,900	3,000	2,710	7,160	7,160	14,230	12,470	4,900	15,130
2	700	3,900	5,260	3,590	2,710	2,430	8,340	6,380	12,040	15,130	4,900	14,230
3	1,640	3,900	4,550	3,900	3,290	2,430	51,800	6,380	10,360	11,610	4,550	12,470
4	1,640	4,550	13,780	3,590	3,590	2,160	26,400	6,000	7,940	9,140	4,220	12,470
5	1,640	6,000	16,900	3,290	4,550	2,160	12,470	5,630	7,160	9,540	4,550	10,770
6	1,900	5,260	12,470	3,000	4,220	1,640	9,140	5,260	6,380	8,740	57,600	9,140
7	1,900	4,550	8,340	2,710	3,900	920	8,340	5,260	7,940	9,540	57,100	7,940
8	2,160	4,220	8,340	3,000	3,590	360	6,770	5,260	12,470	9,540	25,900	7,550
9	2,160	3,900	8,740	2,710	4,550	510	6,380	5,630	7,940	8,340	18,300	6,770
10	2,430	3,900	8,340	2,710	5,630	510	5,260	7,940	7,160	6,770	8,740	6,380
11	2,160	3,590	5,630	3,290	6,380	7,940	4,900	11,190	6,380	6,380	13,340	6,380
12	1,640	3,290	6,000	16,900	5,630	7,550	4,550	8,340	6,000	6,000	16,900	6,380
13	1,640	3,290	4,550	12,470	4,550	5,260	4,550	7,160	6,380	5,630	23,000	6,000
14	2,160	3,000	4,550	8,740	3,900	3,900	4,220	5,630	10,155	19,600	33,800	6,000
15	2,430	3,290	4,220	7,160	3,900	3,900	12,470	5,260	27,300	14,680	26,400	6,000
16	2,430	3,000	4,220	6,000	3,900	3,590	8,340	4,550	21,500	9,540	20,800	6,380
17	2,160	2,710	3,900	4,900	3,590	3,290	6,770	4,900	28,300	8,340	22,200	7,550
18	1,900	2,710	3,900	4,550	3,590	3,000	6,000	5,260	20,600	9,540	29,800	6,380
19	1,640	2,430	3,590	3,590	3,590	3,000	5,260	7,940	14,680	12,470	19,200	6,000
20	1,640	2,430	3,590	2,710	3,290	3,000	92,200	7,160	11,610	9,540	14,230	6,000
21	1,640	2,710	3,290	3,590	3,290	3,000	53,400	7,355	12,040	9,140	12,470	5,260
22	2,430	3,000	3,290	4,900	3,000	4,550	22,500	17,000	11,190	7,940	14,680	5,260
23	9,140	3,000	3,900	4,220	2,710	3,900	19,200	58,200	38,400	5,630	29,800	4,550
24	17,000	2,710	3,590	3,900	2,160	3,590	13,340	26,400	21,100	5,260	21,500	4,550
25	19,600	3,000	4,550	3,590	1,390	3,290	12,040	16,030	16,900	4,900	14,680	4,550
26	9,540	35,300	4,220	3,290	3,290	8,140	11,190	23,000	12,900	4,900	12,900	4,550
27	5,630	18,300	3,590	3,290	3,290	21,500	10,360	28,800	12,470	4,550	12,470	4,220
28	5,260	9,950	3,900	3,290	3,000	14,680	9,540	29,800	9,950	4,550	34,800	4,220
29	4,550	7,940	3,590	3,900	-------	8,740	8,340	23,900	11,190	4,550	31,300	22,700
30	5,630	7,550	3,290	3,590	-------	6,380	7,940	18,300	12,040	4,550	16,900	15,130
31	5,260	-------	3,590	3,590	-------	7,160	-------	15,130	-------	4,550	15,130	-------
1901–2.												
1	12,470	2,430	2,160	16,900	13,340	57,100	7,550	3,590	3,590	9,950	5,630	1,390
2	10,360	2,430	1,900	12,470	13,780	26,400	6,770	3,590	3,290	8,340	5,630	1,150
3	7,940	2,430	2,430	9,140	16,900	17,800	6,380	3,590	3,290	6,770	5,260	1,150
4	6,380	2,710	6,000	8,340	16,030	12,470	6,380	3,590	3,000	6,000	5,260	1,900
5	4,900	2,710	5,260	7,550	10,360	12,470	8,340	3,290	2,710	4,900	5,260	2,430
6	4,550	2,430	4,220	7,550	5,630	10,360	9,140	3,290	2,430	4,900	4,900	2,430
7	4,220	2,430	3,290	6,770	5,260	9,140	8,340	3,290	2,430	4,900	5,260	2,430
8	4,220	2,430	3,000	6,380	4,550	7,550	7,940	3,290	2,430	4,550	5,260	2,160
9	4,220	2,430	2,710	6,380	4,550	7,550	7,940	3,000	2,710	3,900	5,630	1,900
10	4,220	2,430	2,710	6,000	5,260	6,770	7,550	3,000	2,710	3,590	5,260	1,900
11	3,900	2,160	2,430	5,260	4,900	6,770	7,550	2,710	2,710	3,590	4,900	3,290
12	3,900	2,160	2,710	5,260	4,550	6,770	6,770	2,710	3,000	3,590	4,900	3,000
13	4,220	2,160	2,710	4,900	4,220	6,380	6,770	2,430	3,000	3,590	4,550	2,430
14	12,470	2,160	3,590	4,900	4,220	6,380	6,380	2,160	3,000	3,900	4,550	2,430
15	6,770	2,160	98,000	4,900	3,900	6,380	6,380	2,160	3,590	3,900	4,550	2,160
16	6,000	1,900	33,800	4,900	3,900	6,380	6,000	2,160	6,000	4,220	4,900	1,900
17	5,260	1,900	16,900	4,550	4,220	12,470	5,630	2,160	18,300	3,900	4,220	1,900
18	4,550	1,900	12,470	4,550	4,220	10,770	5,630	1,900	14,230	3,590	3,590	1,640
19	4,220	1,900	8,340	4,550	4,550	9,950	5,260	1,900	11,190	3,000	3,000	1,390
20	4,220	1,640	6,380	4,220	4,550	8,340	5,260	1,640	9,540	3,290	2,430	1,390
21	3,900	1,640	4,550	4,220	4,900	6,770	5,260	4,550	7,160	3,590	2,160	1,390
22	3,900	1,640	4,550	4,550	5,260	6,380	4,550	3,900	6,380	3,590	2,430	1,640
23	3,290	1,640	4,220	4,550	4,550	6,000	4,550	3,900	5,630	4,220	2,160	1,640
24	3,290	5,260	3,900	4,550	12,470	6,000	4,550	3,290	5,630	4,220	1,900	1,900
25	3,000	4,550	7,550	4,550	26,400	5,260	4,220	2,430	5,260	4,550	1,900	1,900
26	3,000	3,900	6,380	4,900	28,800	4,900	4,220	2,160	4,900	4,900	1,900	1,900
27	3,000	3,590	6,380	5,260	13,340	4,550	4,220	2,160	4,550	4,900	1,640	1,900
28	3,000	3,000	8,340	6,770	57,100	4,550	3,900	1,900	18,700	4,900	1,640	1,640
29	2,710	2,710	80,100	8,340	-------	10,360	3,900	1,640	13,340	4,900	1,640	1,640
30	2,710	2,160	78,700	12,470	-------	10,360	3,900	1,390	12,040	5,260	1,640	1,640
31	2,710	-------	46,600	14,230	-------	8,340	-------	1,150	-------	5,260	1,640	-------

Daily discharge, in second-feet, of New River near Radford, Va., for the years ending Sept. 30, 1898–1915—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1902–3.												
1	1,900	1,150	3,590	3,000	4,220	27,800	12,900	6,000	6,770	7,550	5,260	3,900
2	1,900	1,640	3,290	3,290	4,220	19,200	9,950	5,260	6,380	6,000	9,950	3,590
3	2,160	1,900	3,290	20,100	4,220	13,340	7,940	5,260	6,380	4,550	7,550	2,710
4	2,160	1,900	3,900	14,230	4,220	9,540	12,020	5,260	6,000	3,900	6,380	2,430
5	2,160	2,160	6,000	11,610	10,360	6,380	16,900	4,900	6,000	3,900	5,630	2,160
6	4,220	2,160	5,260	9,950	8,340	5,630	12,470	4,900	5,630	8,340	4,550	2,430
7	3,900	2,160	4,550	7,940	7,550	5,260	14,680	4,550	8,340	6,770	3,900	1,900
8	3,900	1,900	4,550	6,770	6,770	5,260	13,340	4,550	7,940	5,630	3,590	2,160
9	3,290	1,900	4,220	6,000	6,000	4,550	14,230	4,550	7,940	4,550	3,000	1,900
10	3,290	1,900	3,590	5,260	5,630	6,380	12,470	4,550	7,550	4,550	3,000	3,590
11	3,000	2,160	3,290	4,550	5,260	7,550	9,950	4,550	6,770	3,900	3,000	2,160
12	3,000	2,160	3,000	3,900	11,610	8,340	8,340	4,550	6,770	6,380	2,710	2,160
13	3,000	2,160	2,430	3,900	9,950	7,940	6,380	4,220	6,380	6,000	2,710	1,900
14	2,710	1,900	2,160	3,290	7,940	7,550	9,950	4,220	6,380	6,000	3,900	1,900
15	2,430	1,900	2,160	3,290	6,380	6,770	11,610	3,900	6,000	8,340	4,900	1,640
16	2,160	2,160	2,430	3,000	5,630	6,770	12,040	3,900	5,630	6,000	4,550	1,900
17	1,900	2,160	2,710	3,000	40,400	6,000	8,340	3,900	5,260	5,260	4,220	14,230
18	1,900	2,160	2,710	3,000	18,300	5,260	6,770	3,590	4,550	4,550	4,220	6,000
19	1,900	2,710	4,550	3,000	13,340	4,550	6,770	3,590	4,220	4,550	3,590	3,590
20	1,640	2,430	3,900	2,710	8,340	4,550	6,380	3,290	3,900	3,900	3,900	3,290
21	1,640	2,430	3,900	3,290	6,380	4,220	6,380	3,290	3,290	3,590	3,590	2,160
22	1,640	2,160	3,590	6,000	5,630	8,340	6,000	3,000	3,000	3,290	3,290	2,430
23	1,390	2,160	3,590	5,260	5,630	41,400	6,000	3,000	3,590	3,000	3,290	1,900
24	1,390	2,160	3,290	4,550	5,260	42,000	6,000	3,290	3,290	2,710	3,000	1,900
25	1,390	2,160	3,290	4,550	4,550	17,800	6,380	3,290	3,290	2,710	3,000	1,900
26	1,640	4,220	3,290	4,220	4,550	12,040	6,380	3,900	3,000	2,710	2,710	1,640
27	1,900	5,260	3,000	4,220	4,550	10,360	9,540	4,220	6,000	2,710	2,430	1,640
28	1,900	4,550	3,000	4,220	9,950	7,550	7,940	4,550	18,300	2,430	2,430	1,640
29	2,430	3,900	3,000	4,550		8,340	6,770	4,550	12,470	2,430	2,160	1,640
30	3,000	3,900	2,710	6,000		31,300	6,380	5,260	10,360	2,430	2,430	1,390
31	3,290		2,710	5,260		16,900		6,770		3,290	3,590	
1903–4.												
1	1,150	1,640	1,640	1,900	1,640	3,900	3,590	3,290	6,000	5,630	2,430	1,390
2	1,150	1,900	1,900	2,430	2,160	4,220	3,290	2,710	12,900	4,220	3,290	2,430
3	1,150	1,900	1,640	2,160	1,900	3,900	3,290	2,430	9,540	3,590	4,220	2,710
4	1,150	1,900	1,640	1,640	2,160	3,900	3,290	2,430	510	3,000	4,550	2,710
5	1,640	2,710	1,900	1,640	2,430	3,900	3,000	4,900	510	3,290	4,220	2,160
6	1,390	3,290	1,900	1,390	2,430	3,590	3,000	4,550	1,390	3,590	5,260	1,900
7	1,640	2,430	1,900	1,390	3,290	3,290	3,000	3,590	3,590	3,590	3,290	1,390
8	5,445	2,430	1,640	1,640	6,000	16,900	2,710	3,290	3,900	3,000	3,000	1,390
9	6,000	2,160	1,640	1,640	6,000	8,740	2,710	3,290	4,220	2,710	3,590	1,640
10	3,900	1,900	1,390	1,640	4,900	6,770	3,900	8,740	3,290	3,290	3,900	1,390
11	3,000	2,160	920	1,640	3,900	5,260	3,590	6,000	2,710	4,220	5,630	1,390
12	2,710	1,900	700	1,900	1,900	4,550	3,290	4,550	3,290	3,290	5,260	1,390
13	2,430	1,900	920	1,900	1,900	4,550	3,290	3,590	3,900	2,710	3,900	1,390
14	2,160	2,160	1,150	1,900	1,150	4,220	3,000	3,000	3,290	2,160	3,290	1,390
15	1,640	1,640	920	1,900	1,900	3,900	3,290	3,000	3,000	2,160	3,000	1,390
16	1,390	1,640	700	1,900	2,160	3,290	2,710	3,590	4,220	2,160	3,000	1,390
17	1,640	1,900	700	1,640	2,710	2,710	2,430	3,590	3,290	1,900	3,000	1,390
18	4,220	2,710	700	1,640	2,710	2,710	2,430	3,900	3,290	1,900	2,710	1,390
19	3,590	3,000	510	1,640	2,430	1,390	2,160	12,040	3,290	1,640	2,430	1,390
20	2,430	3,000	700	1,900	1,390	2,430	2,160	7,550	4,900	1,640	2,160	1,390
21	2,160	2,710	1,150	1,900	1,900	2,430	1,900	6,380	3,590	1,390	2,160	1,150
22	1,900	2,160	1,640	2,710	4,900	2,430	1,900	5,630	3,000	1,390	2,160	1,150
23	1,900	2,430	2,430	8,340	7,940	2,160	1,900	4,900	2,710	1,900	2,430	1,150
24	1,640	1,640	2,430	6,000	6,380	3,000	1,900	4,220	2,430	2,160	2,160	1,150
25	1,640	2,160	2,160	4,220	4,550	6,380	1,900	3,000	2,160	2,430	1,900	1,150
26	1,640	1,900	2,160	2,710	3,000	5,630	1,900	3,290	2,430	2,710	1,900	1,150
27	1,390	2,160	2,160	2,160	3,000	5,630	2,430	3,290	3,000	2,710	1,900	1,150
28	1,390	920	1,640	1,640	2,710	5,260	3,000	3,000	2,430	3,000	1,900	1,150
29	1,640	920	1,390	1,150	3,590	4,550	3,290	2,710	10,360	3,290	1,640	1,150
30	1,900	1,150	1,390	510		3,900	3,000	2,160	8,340	4,900	1,640	1,150
31	2,160		1,390	920		3,290		2,160		3,590	1,390	

Daily discharge, in second-feet, of New River near Radford, Va., for the years ending Sept. 30, 1898–1915—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1904–5.												
1	1,150	920	1,150	1,900	1,640	4,900	2,430	1,900	2,710	1,390	3,000	2,160
2	920	920	1,150	1,900	1,640	6,380	2,160	1,900	2,430	1,150	920	2,430
3	920	1,150	1,150	1,900	2,710	6,380	2,430	1,640	2,160	2,430	920	6,770
4	920	1,150	1,640	1,900	2,430	5,630	2,430	1,900	2,160	2,430	2,710	6,380
5	920	1,150	1,640	1,900	2,430	5,630	2,160	1,900	1,390	1,900	1,900	7,550
6	920	1,390	2,430	1,900	3,590	6,380	3,590	2,710	1,150	8,740	1,900	4,900
7	920	2,160	3,590	1,900	2,710	5,260	5,260	3,000	1,150	6,770	5,260	4,550
8	920	1,640	2,430	2,160	2,430	5,260	3,900	3,000	920	3,590	7,940	4,220
9	920	1,390	2,160	1,900	3,290	5,630	3,590	2,710	1,150	3,290	7,550	3,290
10	920	1,150	1,900	1,900	2,710	8,740	3,290	2,430	1,150	2,710	7,550	3,000
11	920	920	1,900	2,160	3,290	9,950	2,710	5,260	920	1,900	10,360	2,710
12	920	920	1,900	3,000	2,710	7,550	3,000	10,770	1,150	12,685	10,770	3,000
13	700	1,900	1,640	7,550	2,710	5,630	3,900	20,100	1,150	90,800	11,190	2,710
14	700	2,430	1,640	9,540	4,900	5,260	3,590	15,580	920	32,300	9,950	2,430
15	700	2,160	1,390	4,550	6,000	4,550	4,220	20,600	1,150	16,030	7,940	2,710
16	700	1,900	1,150	3,900	4,550	3,900	3,590	23,400	1,150	13,780	7,940	2,430
17	700	1,900	1,150	2,710	3,000	3,290	3,290	16,900	1,390	6,000	6,000	2,160
18	700	1,640	1,640	2,710	3,000	3,290	2,710	13,340	1,900	5,630	4,550	2,430
19	700	1,640	1,150	2,430	2,430	2,710	2,160	6,770	1,900	5,260	4,550	2,160
20	700	1,640	920	3,290	3,000	3,000	2,430	6,000	1,900	4,900	4,550	1,900
21	700	1,390	920	2,710	3,900	2,710	2,430	3,900	1,900	4,550	3,900	1,900
22	700	1,390	920	3,290	4,900	3,000	2,160	3,290	1,900	4,550	2,710	1,640
23	700	1,150	920	2,430	18,700	2,710	2,160	3,290	1,390	7,940	2,710	1,640
24	700	1,150	1,390	2,430	7,940	2,710	2,160	2,430	2,430	6,770	2,710	1,640
25	700	1,150	1,900	2,160	7,550	2,430	1,900	2,710	2,430	5,630	2,160	1,640
26	920	1,150	2,160	1,900	7,550	2,710	2,160	2,710	1,640	4,550	3,590	1,640
27	920	1,150	1,900	1,640	8,340	2,430	1,640	3,000	1,640	3,290	2,710	1,640
28	920	1,150	2,160	1,900	6,000	2,710	1,900	3,590	1,640	3,290	2,430	1,640
29	920	1,150	1,900	1,640	-------	2,160	1,900	3,290	1,390	6,380	2,430	1,640
30	920	1,150	1,640	3,000	-------	2,430	1,640	2,430	1,390	6,000	2,430	1,640
31	920	-------	1,390	1,900	-------	2,160	-------	3,290	-------	3,590	2,430	-------
1905–6.												
1	1,900	1,900	1,150	3,290	7,160	3,290	11,600	3,000	2,430	2,160	-------	-------
2	1,900	1,900	1,150	3,000	6,380	3,590	7,940	3,000	2,430	2,160	-------	-------
3	1,900	1,900	1,900	3,590	6,380	3,900	6,380	2,710	2,710	2,160	-------	-------
4	1,900	1,900	9,540	14,700	4,900	6,000	5,630	3,900	2,430	2,160	-------	-------
5	1,640	1,640	6,000	11,200	4,220	6,380	4,550	3,590	2,430	2,160	-------	-------
6	1,640	1,640	3,290	9,540	5,630	5,630	3,590	4,900	2,710	2,160	-------	-------
7	1,390	1,640	2,710	8,340	4,900	4,550	3,590	5,260	2,430	2,160	-------	-------
8	1,390	1,640	2,710	4,900	4,220	4,900	4,550	4,220	2,430	2,710	-------	-------
9	1,390	1,640	2,430	4,220	4,550	4,220	4,220	4,220	2,710	2,710	-------	-------
10	1,390	1,640	2,710	3,900	4,220	3,900	4,550	3,590	2,430	2,430	-------	-------
11	1,390	1,900	3,590	2,430	3,900	3,590	4,220	3,290	2,160	2,430	-------	-------
12	1,390	1,900	3,590	2,160	3,900	3,290	4,220	3,290	2,160	2,430	-------	-------
13	1,390	1,900	3,590	4,220	2,710	3,590	4,220	3,290	3,000	2,430	-------	-------
14	1,390	1,900	2,710	6,380	2,430	3,900	3,590	2,710	10,200	2,160	-------	-------
15	2,430	1,900	2,710	5,630	2,710	3,900	3,900	2,710	10,800	2,160	-------	-------
16	2,430	1,640	2,710	6,000	2,430	8,340	4,220	3,000	7,550	-------	-------	-------
17	1,900	1,640	2,710	5,630	2,430	9,140	7,550	2,430	6,770	-------	-------	-------
18	1,640	1,390	3,000	4,900	2,710	5,630	6,000	2,430	6,380	-------	-------	-------
19	1,640	1,390	3,290	4,900	2,430	4,550	5,260	2,710	6,000	-------	-------	-------
20	1,640	1,390	3,290	3,900	3,290	4,900	4,550	2,430	5,260	-------	-------	-------
21	1,640	1,390	9,140	3,900	3,590	6,770	4,220	2,430	6,380	-------	-------	-------
22	1,640	1,390	11,610	3,900	3,000	4,550	3,900	2,710	4,220	-------	-------	-------
23	1,640	1,390	11,190	20,600	3,900	4,900	3,590	2,430	3,290	-------	-------	-------
24	1,640	1,390	9,540	30,800	4,220	4,550	3,290	2,430	3,290	-------	-------	-------
25	1,640	1,390	6,380	15,600	3,590	4,550	3,590	2,710	3,290	-------	-------	-------
26	1,900	1,390	4,550	13,300	3,290	4,550	2,430	2,430	2,710	-------	-------	-------
27	2,430	1,390	3,900	10,400	3,590	4,550	3,000	2,430	2,710	-------	-------	-------
28	2,710	1,390	3,290	10,800	3,290	6,000	2,710	3,290	2,710	-------	-------	-------
29	2,710	1,390	3,290	8,740	-------	5,630	2,710	3,000	2,710	-------	-------	-------
30	2,160	1,390	3,000	8,340	-------	4,550	2,710	3,000	2,430	-------	-------	-------
31	2,160	-------	3,000	7,550	-------	14,200	-------	2,710	-------	-------	-------	-------

Daily discharge, in second-feet, of New River near Radford, Va., for the years ending Sept. 30, 1898–1915—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1907.												
1									3,000	5,260	2,710	1,900
2									8,340	3,900	3,000	1,640
3									9,140	3,900	2,710	1,640
4									7,160	3,900	2,430	1,640
5									4,900	3,900	2,430	7,550
6								13,800	3,290	3,590	2,160	6,000
7								13,800	2,160	3,590	2,160	3,290
8								2,710	1,640	3,590	2,160	2,710
9								2,430	3,900	2,710	2,160	1,900
10								2,430	3,290	2,710	2,160	1,640
11								3,590	9,140	2,430	2,160	1,900
12								3,290	16,000	3,290	2,430	3,590
13								3,000	52,900	3,900	2,430	3,000
14								3,000	38,400	5,630	2,160	2,430
15								2,710	14,200	5,630	2,160	2,160
16								2,710	8,740	4,900	2,160	1,900
17								2,710	5,630	4,900	1,900	1,900
18								2,710	3,590	5,260	1,900	1,900
19								2,710	3,000	4,550	4,550	1,900
20								3,000	2,430	4,220	3,290	1,900
21								2,710	2,430	3,590	3,000	1,900
22								2,430	2,160	3,590	2,430	1,900
23								2,710	4,550	2,710	3,590	26,800
24								2,710	6,770	2,430	3,000	35,800
25								2,710	6,000	2,430	3,000	12,500
26								2,710	8,340	2,160	2,710	7,160
27								2,710	6,000	2,160	2,710	4,900
28								2,710	5,260	2,160	2,430	3,900
29								2,710	5,260	2,160	1,900	3,900
30								2,710	6,380	2,160	1,900	4,550
31								2,710		2,160	1,900	
1907–8.												
1	3,900	2,430	2,710	9,140	3,900	5,630	4,220	5,630	4,220	3,900	4,220	3,590
2	3,290	2,710	2,160	6,770	3,900	9,140	20,100	5,630	3,740	7,550	3,590	3,000
3	3,000	2,710	2,160	6,000	3,000	9,950	16,900	4,900	3,290	5,260	3,000	3,000
4	2,710	3,290	2,430	5,260	2,710	7,550	12,470	4,900	3,590	4,900	2,710	2,710
5	2,710	3,290	2,430	6,770	3,000	9,950	9,140	4,550	19,600	7,940	2,430	2,710
6	2,430	3,290	2,430	6,770	6,190	14,230	6,770	4,220	11,190	7,550	2,430	3,900
7	2,160	3,000	2,430	6,770	8,340	12,900	7,160	4,220	7,550	7,160	5,630	3,900
8	2,160	2,710	2,710	6,770	6,770	10,360	6,000	10,980	6,380	6,380	3,290	6,380
9	2,160	2,710	2,710	9,540	4,900	8,740	6,000	8,740	5,260	7,550	5,260	5,260
10	2,160	2,710	3,000	9,140	4,550	7,550	5,260	6,770	4,550	6,000	3,900	3,900
11	2,160	2,710	4,060	9,140	4,550	6,770	5,630	6,190	4,060	4,900	3,590	3,290
12	2,160	2,710	4,220	38,400	6,380	6,770	4,900	5,260	4,900	4,220	3,000	2,710
13	1,900	5,260	3,900	27,800	23,400	7,160	4,220	4,900	4,550	3,590	2,710	2,430
14	1,900	3,290	3,900	10,360	24,400	6,380	4,550	4,550	4,060	3,590	2,430	1,640
15	1,900	3,290	4,900	10,360	27,600	6,380	4,550	3,900	6,770	3,590	2,430	1,900
16	1,900	3,000	13,800	9,140	32,800	6,000	4,900	3,900	7,160	3,290	2,160	1,900
17	1,900	2,430	12,900	6,770	25,900	6,380	4,900	3,900	6,770	3,000	2,430	1,900
18	1,900	2,430	8,340	6,380	13,780	6,380	4,900	4,220	4,900	3,000	2,430	1,900
19	1,900	3,000	6,380	6,000	9,540	5,260	5,260	4,550	3,590	3,000	2,430	1,640
20	1,900	3,290	4,220	5,260	7,940	5,630	4,900	5,630	3,900	3,000	2,430	1,640
21	1,900	3,290	3,900	5,260	7,160	5,630	4,550	9,140	3,900	2,710	2,430	1,640
22	1,640	3,290	3,590	4,550	6,770	6,000	3,900	7,940	3,900	2,710	2,430	1,640
23	1,640	6,380	16,900	4,900	6,000	5,630	3,590	6,960	3,440	2,710	7,550	1,900
24	1,640	7,940	16,900	4,900	6,380	7,940	3,900	6,000	4,550	4,900	3,900	1,900
25	2,160	8,340	15,100	4,550	3,590	7,940	4,060	5,630	4,220	3,590	3,290	2,160
26	2,160	8,340	9,140	3,900	3,590	7,160	8,340	4,900	3,900	3,590	19,600	2,160
27	2,160	8,340	6,000	4,550	7,550	6,380	9,140	4,550	3,590	3,000	14,230	2,160
28	2,160	8,340	5,630	6,000	6,380	5,630	7,160	3,900	3,590	3,590	7,550	2,160
29	2,160	5,260	4,900	4,550	5,630	5,630	6,190	4,220	3,290	3,900	5,260	3,590
30	2,160	3,900	4,900	4,220		5,260	5,260	4,900	3,290	4,220	4,900	2,710
31	2,430		4,900	3,900		3,900		4,900		4,550	4,220	

Daily discharge, in second-feet, of New River near Radford, Va., for the years ending Sept. 30, 1898–1915—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	2,710	9,540	3,590	10,800	4,900	6,000	6,380	10,400	5,630	5,630	3,590	1,640
2	2,710	8,740	4,900	9,140	2,710	5,260	5,260	8,740	5,260	5,260	7,550	1,640
3	2,430	7,550	5,260	7,160	3,000	5,260	4,550	8,340	4,900	4,900	6,380	1,390
4	2,430	6,380	4,220	6,000	2,710	4,220	3,900	6,380	6,380	4,550	4,550	1,390
5	2,160	5,630	4,220	6,770	2,160	4,220	3,900	4,900	19,200	3,590	3,290	1,390
6	1,900	4,500	3,900	17,400	2,430	4,220	3,590	4,550	11,200	3,290	3,590	1,150
7	1,900	3,900	4,220	11,600	3,290	3,900	3,590	4,550	9,140	4,220	3,590	1,150
8	1,900	6,770	14,230	9,140	2,710	7,160	3,590	4,220	6,770	4,900	3,590	1,150
9	1,640	6,380	9,540	6,380	2,710	7,550	3,290	3,900	9,540	6,380	3,000	1,900
10	3,590	4,220	6,770	5,630	8,340	6,770	3,900	3,900	7,550	4,900	2,430	3,900
11	14,230	4,220	5,630	4,900	12,000	6,000	3,590	11,200	6,770	3,900	1,900	3,290
12	6,770	4,900	4,900	5,630	7,550	6,380	3,290	9,950	5,630	3,900	1,900	2,710
13	4,220	4,220	8,340	5,260	3,290	6,000	3,290	6,770	5,260	3,290	1,640	1,900
14	3,290	3,900	6,380	4,900	5,260	5,260	20,600	5,260	7,550	3,590	1,640	2,160
15	2,430	3,900	4,900	4,900	4,900	4,550	14,200	4,550	6,380	3,290	1,640	1,900
16	2,160	4,900	4,900	6,380	5,260	3,900	8,340	4,220	5,630	3,290	3,000	1,900
17	2,160	3,590	4,220	8,340	7,940	4,550	7,550	3,900	4,900	3,000	4,220	3,290
18	2,160	3,590	4,220	10,800	6,770	4,550	6,770	3,900	4,220	3,000	3,590	3,000
19	2,430	5,260	3,900	8,340	5,630	3,900	5,630	3,590	6,000	2,430	2,710	2,710
20	2,430	5,630	4,220	8,740	6,380	3,900	4,900	3,290	4,550	2,430	2,160	2,710
21	2,430	5,260	3,900	7,940	5,630	4,220	4,550	23,900	4,220	2,160	2,160	2,160
22	2,160	4,550	3,900	6,000	5,630	4,220	4,550	38,400	4,220	2,160	1,900	1,900
23	2,160	4,220	4,900	5,630	6,000	5,260	4,220	16,900	4,220	2,430	1,640	2,160
24	18,300	3,900	6,380	5,260	8,740	4,900	4,220	11,200	5,260	2,160	920	2,430
25	22,500	3,900	4,220	5,260	9,540	4,220	4,220	8,740	4,900	2,710	3,000	3,290
26	9,950	3,590	7,550	4,550	8,740	7,550	3,590	8,340	4,550	2,710	2,710	2,710
27	6,770	3,290	7,940	4,220	8,340	7,550	3,590	11,200	4,220	2,430	2,710	2,430
28	6,000	3,290	6,380	3,900	7,550	6,770	3,290	9,140	4,220	2,430	2,430	2,160
29	10,360	3,290	5,630	3,900	-------	9,140	3,290	7,160	6,000	4,220	1,900	1,900
30	20,100	3,290	7,160	3,290	-------	8,340	3,290	6,380	5,260	3,590	1,640	1,640
31	18,300	-------	11,190	5,260	-------	7,940	-------	6,000	-------	3,290	1,640	-------
1909–10.												
1	1,640	1,640	1,390	1,580	2,630	3,560	2,080	2,630	1,580	3,240	1,580	7,560
2	1,900	1,640	1,390	1,580	2,930	3,560	2,350	2,350	1,580	3,240	1,470	7,760
3	1,900	1,640	1,390	2,930	2,350	6,400	2,080	2,350	1,820	2,930	1,580	4,060
4	1,640	1,640	1,390	6,020	2,350	9,970	3,080	2,220	1,580	3,720	1,820	4,230
5	1,390	1,640	1,390	3,560	2,630	7,560	2,780	2,080	1,700	3,720	2,350	4,230
6	1,390	1,640	1,390	3,890	2,630	4,930	2,630	1,950	2,080	3,080	2,080	3,890
7	1,390	1,640	1,900	3,890	2,080	4,930	2,080	1,820	3,240	4,400	2,350	3,560
8	1,390	1,900	2,430	4,580	2,630	4,580	1,820	1,950	2,630	5,110	2,080	3,560
9	1,390	1,640	2,710	4,580	2,630	4,230	1,820	2,490	2,630	4,930	2,080	2,630
10	1,900	1,640	2,430	2,080	2,930	3,890	1,580	4,060	3,080	5,290	1,820	2,490
11	1,900	2,160	1,640	1,580	2,930	3,560	1,700	3,080	6,980	4,060	2,080	2,220
12	10,800	2,160	1,900	2,350	2,930	3,560	1,700	2,930	19,200	3,240	1,700	1,820
13	7,160	2,160	2,430	2,630	960	2,630	3,400	2,630	24,900	5,110	1,580	1,820
14	5,260	2,160	8,340	2,930	1,150	2,630	3,890	2,490	27,800	6,210	1,580	1,820
15	2,710	1,900	4,900	2,930	1,820	2,350	3,400	2,350	15,300	4,930	1,820	1,950
16	2,430	1,640	3,590	2,350	5,650	2,630	2,780	2,080	13,100	3,400	1,580	1,950
17	2,160	1,390	2,430	2,080	6,020	2,490	2,930	2,350	10,200	4,230	1,820	1,360
18	2,710	1,390	2,430	2,080	21,500	2,630	5,650	2,350	7,170	6,590	1,580	1,360
19	2,160	1,390	2,430	2,350	16,000	2,490	3,720	2,630	6,590	5,110	1,820	1,360
20	2,160	1,390	2,430	2,630	7,170	2,490	3,070	2,630	5,840	3,240	1,580	1,580
21	2,430	1,390	2,160	3,560	8,350	2,630	2,780	2,080	4,930	3,240	1,820	1,580
22	2,160	1,390	2,160	3,890	6,020	2,630	2,780	2,350	5,110	2,490	1,820	1,260
23	2,160	1,390	1,900	5,290	5,290	2,630	2,490	2,930	5,110	2,490	2,080	1,360
24	2,160	1,390	1,150	4,580	4,930	2,490	2,350	3,890	4,760	2,350	1,820	1,150
25	2,160	1,390	1,640	3,890	4,230	2,350	2,490	4,230	6,980	2,080	1,950	1,150
26	2,160	1,390	2,710	3,560	3,560	2,350	2,930	4,930	5,840	1,950	1,820	1,360
27	2,160	1,390	1,900	2,930	3,560	2,350	3,890	4,760	3,560	1,820	2,350	1,820
28	2,160	1,390	1,640	2,630	3,560	2,080	3,240	3,720	3,560	1,820	2,080	1,820
29	1,900	1,390	1,390	1,580	-------	2,080	3,080	2,630	3,400	1,580	2,080	2,080
30	1,900	1,390	1,390	2,630	-------	2,080	2,630	2,490	2,780	1,580	1,820	1,950
31	1,900	-------	1,390	2,930	-------	1,950	-------	1,820	-------	1,150	1,360	-------

Daily discharge, in second-feet, of New River near Radford, Va., for the years ending Sept. 30, 1898–1915—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	1,820	1,700	1,580	4,930	6,980	2,080	4,060	3,890	2,630	1,820	1,060	5,400
2	1,820	1,820	1,260	7,950	5,290	1,820	3,720	4,230	2,220	1,360	924	4,090
3	1,580	1,820	1,060	12,100	4,230	1,820	3,400	3,890	1,700	1,260	924	2,960
4	1,580	1,580	1,150	15,600	3,400	1,820	5,290	3,720	1,950	1,360	960	2,080
5	1,950	1,580	1,580	8,350	3,240	2,080	10,400	3,240	2,080	1,580	2,320	1,600
6	1,580	1,820	2,080	5,650	3,240	2,350	20,100	3,080	2,220	2,080	4,030	1,280
7	1,950	1,580	5,290	4,930	2,930	3,560	14,400	3,240	3,890	1,820	2,300	780
8	6,400	1,700	4,230	4,580	3,240	5,650	12,700	3,240	3,720	5,110	1,820	960
9	11,000	1,580	2,780	2,930	6,590	7,560	11,600	3,240	3,080	2,490	1,600	870
10	6,780	1,580	2,350	3,080	10,600	10,600	8,950	3,240	2,350	2,080	1,360	1,060
11	3,890	1,580	2,220	2,780	7,560	9,560	7,560	2,780	2,080	2,490	1,150	1,060
12	2,930	1,580	1,470	2,220	5,840	6,780	6,780	2,630	3,400	1,950	924	1,170
13	620	1,360	1,360	2,350	4,760	5,840	6,980	3,080	2,080	1,820	1,540	979
14	700	1,470	1,060	2,220	4,400	4,930	8,150	5,290	2,080	1,950	1,800	1,300
15	780	1,360	700	2,350	2,930	5,290	10,200	6,210	1,470	1,950	1,340	1,090
16	620	1,470	1,360	2,220	3,720	4,400	12,100	4,230	1,470	1,820	1,190	780
17	620	1,700	1,700	1,820	3,080	3,720	8,950	3,400	1,360	1,470	1,090	716
18	1,580	1,820	1,700	2,080	2,930	3,400	7,170	3,400	1,360	1,580	1,060	716
19	1,820	1,580	1,820	2,080	3,240	3,560	6,400	3,240	1,470	1,360	998	870
20	2,080	1,580	1,820	2,220	3,240	2,930	6,590	2,630	1,700	1,260	942	578
21	1,820	1,580	1,470	2,220	3,080	3,240	7,360	2,490	2,080	1,260	870	652
22	2,220	1,470	1,360	3,080	2,350	2,930	6,780	1,470	1,950	1,150	550	3,210
23	2,080	1,580	1,150	6,020	2,080	2,780	5,650	2,350	1,700	960	716	4,060
24	1,820	1,260	1,150	5,470	2,080	2,350	4,930	2,630	1,470	960	732	2,780
25	1,700	1,150	1,360	4,400	2,080	2,630	4,400	2,630	1,700	1,060	592	1,340
26	1,580	1,360	1,820	3,890	2,350	2,780	3,890	2,490	1,950	1,060	700	1,280
27	1,700	1,360	2,350	3,080	2,490	3,240	3,890	1,950	1,820	888	1,360	1,950
28	1,820	1,700	2,350	3,080	2,350	4,400	3,890	1,700	2,780	1,130	1,600	2,000
29	1,580	1,820	2,630	3,400	-------	4,400	3,720	1,700	3,240	979	5,150	1,450
30	1,580	1,700	2,780	4,580	-------	3,890	3,890	1,820	1,950	979	4,440	1,470
31	1,580	-------	3,240	8,350	-------	3,890	-------	1,950	-------	1,110	5,360	-------
1911–12.												
1	1,320	1,260	816	4,930	3,890	6,020	8,750	5,650	3,560	3,720	2,490	1,380
2	1,430	888	960	4,930	4,230	4,760	9,150	5,290	2,930	3,720	2,220	1,210
3	2,490	979	2,160	4,230	3,400	4,600	13,800	4,580	3,240	2,930	1,820	1,600
4	2,660	924	2,110	3,890	2,080	4,200	10,400	4,060	3,890	3,400	3,890	1,300
5	1,850	764	1,900	2,630	1,720	4,200	7,950	3,890	3,240	4,230	3,890	1,210
6	1,650	1,360	1,870	1,340		6,000	6,780	4,060	2,930	6,780	4,580	1,130
7	1,450	1,560	2,130			5,300	6,400	4,230	2,930	4,930	5,290	1,110
8	1,320	2,490	2,160			4,900	6,400	4,230	2,930	3,890	5,650	1,560
9	1,680	2,550	2,080			7,200	5,650	3,890	2,630	3,080	4,060	1,800
10	1,900	1,820	1,980		1,890	7,950	5,290	3,560	2,490	3,080	2,780	1,950
11	2,160	1,340	2,080			7,170	4,930	3,460	2,490	3,240	2,220	1,630
12	2,190	2,220	2,050			6,400	4,580	25,400	2,350	3,720	2,490	1,430
13	1,900	2,490	2,080	1,500		10,800	4,230	14,200	2,220	3,720	1,700	1,340
14	1,650	2,000	2,130		2,630	10,400	4,060	8,350	2,220	3,400	1,700	1,510
15	1,680	1,900	3,240		2,490	17,800	4,060	6,780	2,780	3,080	1,820	1,560
16	1,950	2,460	5,110		2,220	27,300	4,060	12,100	3,080	2,780	2,080	1,380
17	1,600	2,490	5,040		2,220	14,200	4,060	14,700	3,240	2,350	2,350	1,700
18	20,200	2,000	3,790		2,780	10,400	4,400	9,150	2,630	2,350	1,950	2,220
19	11,100	1,680	3,020		2,930	7,950	4,060	7,560	2,780	3,080	1,770	2,490
20	4,970	2,630	2,780		3,400	6,780	3,720	6,020	2,350	2,930	1,630	2,780
21	3,120	2,430	2,720	4,400	3,890	6,400	3,560	5,290	2,080	3,080	1,650	2,080
22	3,120	2,160	3,050	4,400	16,400	5,650	4,760	4,760	1,950	3,080	2,350	1,560
23	3,590	2,160	9,270	3,400	9,560	5,290	4,760	4,400	2,220	2,490	2,220	3,720
24	1,850	2,430	8,670	3,240	6,400	6,020	4,580	4,060	2,930	2,220	1,820	11,200
25	1,650	2,160	7,640	3,080	7,170	9,560	4,230	3,720	3,560	2,220	1,560	7,950
26	1,770	2,490	7,720	3,080	7,560	8,750	3,560	3,560	4,930	2,080	1,510	6,020
27	1,380	2,410	7,790	3,080	12,900	7,170	3,560	3,400	4,060	2,350	1,510	3,400
28	1,150	2,220	7,480	2,930	9,560	6,020	3,720	3,400	4,930	2,080	1,680	3,080
29	1,400	852	6,550	3,080	7,170	22,000	4,400	3,890	2,930	1,680	1,360	3,080
30	1,360	1,060	4,230	6,020	-------	17,400	6,020	4,060	3,080	1,630	1,510	2,490
31	1,190	-------	4,340	7,950	-------	11,200	-------	3,890	-------	1,680	1,540	-------

Daily discharge, in second-feet, of New River near Radford, Va., for the years ending Sept. 30, 1898–1915—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912–13.												
1	2,080	1,450	1,450	3,890	3,720	8,350	6,640	3,060	5,610	2,370	1,660	2,120
2	1,950	1,450	1,150	3,080	3,400	7,950	5,610	2,920	4,610	2,240	1,590	1,750
3	1,950	1,540	2,220	2,930	3,240	4,230	4,940	2,780	3,970	4,940	1,590	1,870
4	1,950	998	2,080	2,930	3,400	3,400	4,610	2,780	7,000	5,610	1,160	2,780
5	1,580	1,700	2,080	3,080	3,720	3,080	4,280	2,780	4,610	5,950	1,180	3,360
6	1,540	1,510	2,780	2,930	3,890	2,930	3,820	2,780	4,130	3,970	1,260	3,360
7	1,540	1,820	2,350	3,240	2,930	2,350	3,660	2,780	3,660	2,920	1,240	3,060
8	1,750	4,930	2,220	2,930	1,820	2,220	3,660	2,640	3,970	2,370	1,870	2,240
9	1,630	4,400	2,080	2,630	1,820	2,350	3,510	2,780	4,280	2,240	1,660	2,240
10	1,490	3,400	1,950	2,220	2,080	2,350	3,360	2,640	4,280	1,990	1,610	1,990
11	1,320	2,350	1,720	2,350	2,780	3,240	3,660	2,500	3,660	2,120	2,120	1,870
12	1,340	2,220	1,630	2,490	2,490	3,240	9,230	2,500	3,970	3,060	2,240	1,750
13	1,320	2,080	1,820	2,630	2,490	3,240	21,000	2,370	3,510	2,240	3,060	1,640
14	1,600	1,950	1,950	2,630	1,820	19,200	14,800	2,370	3,360	1,990	2,240	1,570
15	2,080	2,220	1,950	2,350	1,950	28,300	9,620	2,240	2,920	2,240	2,240	1,240
16	2,080	2,350	1,280	2,350	1,820	24,400	8,100	2,640	2,780	2,120	1,990	1,870
17	1,630	1,950	1,950	2,080	2,080	13,400	7,720	3,510	2,640	1,990	1,870	1,870
18	1,630	1,320	1,950	2,080	1,800	7,560	6,640	4,280	2,500	1,990	1,340	1,870
19	1,820	2,080	1,800	1,950	2,220	6,780	5,610	3,660	2,370	1,870	2,500	1,730
20	1,630	2,080	1,490	1,820	2,930	6,020	4,940	3,060	2,500	1,570	2,500	1,990
21	1,110	1,770	1,630	1,950	2,490	4,930	3,970	3,060	2,370	1,730	3,060	9,620
22	1,820	1,360	1,750	1,950	2,930	5,650	4,280	3,970	2,370	1,870	2,640	10,000
23	1,800	1,400	1,320	2,220	2,930	5,290	3,970	14,400	3,210	1,750	2,240	5,610
24	1,540	1,540	1,950	1,800	2,780	4,580	3,820	27,500	3,360	1,590	2,120	3,660
25	1,800	1,540	1,320	1,820	2,630	4,230	3,510	15,300	3,510	1,870	2,370	3,510
26	1,700	1,540	1,150	2,080	2,220	4,760	3,360	8,470	4,450	1,390	1,990	2,500
27	1,700	1,950	1,150	3,080	3,080	38,400	3,510	8,470	3,360	1,100	1,870	1,750
28	1,490	1,580	1,380	7,170	7,170	33,600	3,820	13,200	3,060	1,180	1,750	1,750
29	1,540	1,400	2,080	8,750	-------	14,800	3,510	10,000	2,500	1,390	1,660	1,280
30	1,630	1,680	1,560	7,170	-------	10,000	3,060	7,360	2,500	1,410	2,120	1,750
31	1,600	-------	2,630	5,290	-------	8,470	-------	7,000	-------	1,640	2,240	-------
1913–14.												
1	1,780	1,780	1,780	2,280	9,230	4,600	8,470	3,000	1,900	1,430	1,220	2,280
2	1,900	1,660	4,480	2,280	8,470	4,270	8,470	3,000	1,900	1,180	1,020	1,900
3	1,780	1,610	4,110	2,150	5,610	3,310	7,000	2,850	1,900	1,060	944	1,900
4	1,780	2,150	3,160	1,900	4,110	3,630	5,950	2,700	1,900	1,180	1,120	1,900
5	1,640	2,020	2,560	2,700	3,950	3,950	5,610	3,000	1,780	1,020	1,060	1,540
6	1,350	1,900	2,280	2,700	4,440	4,600	4,440	3,630	1,660	982	1,020	1,480
7	1,540	1,780	2,560	2,850	9,620	4,110	4,600	3,950	1,780	1,060	1,180	694
8	1,780	1,610	2,280	2,560	9,620	3,950	3,950	3,950	2,150	2,020	868	830
9	1,900	4,110	2,280	3,160	7,360	3,790	5,270	3,310	2,280	1,660	868	1,020
10	2,020	3,950	2,420	5,270	5,610	3,310	4,600	3,000	1,900	1,780	868	982
11	1,900	3,000	2,280	6,300	4,600	3,950	3,950	3,000	1,780	1,450	1,390	1,220
12	1,660	2,560	1,900	4,930	4,600	7,360	3,630	3,000	1,780	1,660	1,200	1,390
13	1,320	2,280	2,020	3,470	4,270	7,720	3,470	2,700	1,780	1,390	1,060	1,660
14	1,780	2,280	2,020	2,560	3,790	7,000	3,470	2,560	1,660	2,700	982	1,060
15	1,780	2,280	2,150	2,560	3,310	5,950	4,930	2,020	1,390	3,310	1,040	982
16	1,900	1,900	2,150	3,000	3,000	5,610	9,230	2,150	1,540	2,850	1,180	830
17	1,780	2,020	2,020	3,000	3,000	5,610	7,720	2,280	1,610	3,630	982	796
18	1,610	2,700	1,780	3,000	3,630	6,300	6,640	2,280	1,540	2,700	1,060	982
19	1,660	2,420	1,900	3,000	6,300	6,300	5,610	2,420	1,780	2,150	1,220	1,430
20	2,850	2,280	2,020	3,000	12,000	5,950	5,610	2,280	1,660	1,900	944	1,220
21	3,000	1,900	1,780	5,610	13,600	5,270	6,300	2,150	1,660	1,780	1,020	1,540
22	2,850	1,900	1,480	4,110	10,000	4,930	5,610	2,150	982	1,480	1,260	1,660
23	2,280	2,020	2,150	3,310	8,100	4,930	4,930	2,280	1,570	1,260	925	1,660
24	2,280	1,640	2,020	3,310	6,640	4,600	4,440	1,900	1,220	1,390	925	1,660
25	4,270	2,150	1,900	4,270	5,950	4,600	4,110	1,900	1,020	1,390	925	1,660
26	5,270	2,020	2,150	4,930	5,610	4,440	3,790	1,780	868	1,320	1,780	1,180
27	3,630	2,020	3,310	3,950	5,610	4,270	3,790	1,900	745	906	3,000	1,180
28	2,850	1,640	2,850	3,000	4,930	4,110	3,630	1,900	745	1,220	3,310	982
29	2,150	1,780	2,700	3,000	-------	4,270	3,310	1,900	982	1,020	5,610	1,080
30	2,280	2,020	2,420	2,700	-------	4,930	3,160	2,020	1,260	1,060	3,470	1,180
31	2,020	-------	2,700	4,930	-------	7,360	-------	1,900	-------	1,060	2,420	-------

Daily discharge, in second-feet, of New River near Radford, Va., for the years ending Sept. 30, 1898–1915—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	868	1,780	10,400	8,170	6,300	5,270	3,470	3,310	3,630	2,150	1,900	5,270
2	925	1,100	14,000	6,720	21,000	4,930	3,630	2,850	6,300	2,150	1,660	4,270
3	868	1,480	13,600	5,270	16,100	4,930	3,630	2,850	6,640	2,150	1,540	4,470
4	982	1,780	11,600	4,930	11,200	4,600	3,630	2,850	5,270	2,420	1,610	3,790
5	1,300	1,570	38,400	4,270	9,230	4,600	3,950	2,850	4,270	2,280	1,900	10,800
6	2,280	1,640	20,100	4,270	8,850	5,270	3,790	3,160	3,790	2,700	1,900	14,000
7	1,900	1,450	12,000	33,200	8,100	5,950	3,470	3,160	3,470	2,150	1,780	12,400
8	2,020	1,140	8,850	16,500	7,360	5,950	3,470	3,310	3,160	1,900	1,780	6,640
9	2,150	1,060	7,000	10,000	6,640	5,270	3,470	3,000	2,700	1,780	1,900	5,270
10	1,540	1,780	6,300	7,720	6,300	4,930	3,630	3,000	2,560	1,900	1,780	4,440
11	868	1,540	5,270	7,000	5,950	4,930	3,470	2,700	2,420	1,900	1,900	3,950
12	982	1,780	4,930	9,230	5,610	5,270	4,440	3,000	2,420	1,640	3,310	4,440
13	1,260	1,660	4,270	11,200	5,610	4,930	4,270	3,310	2,280	1,780	3,310	4,270
14	1,020	1,660	4,440	8,850	5,270	4,600	4,110	3,630	2,420	1,780	2,280	4,930
15	1,140	1,780	3,630	7,720	5,270	4,600	3,790	3,470	2,700	2,020	2,150	4,600
16	7,360	6,640	2,560	7,360	6,640	4,440	3,630	2,850	3,790	1,780	2,700	4,600
17	11,200	4,600	2,850	7,000	6,300	4,600	3,470	2,560	4,270	1,900	4,930	4,930
18	4,930	3,470	3,000	9,620	5,610	4,930	3,160	2,420	3,470	2,020	3,950	4,270
19	3,160	2,700	3,310	12,000	5,270	4,600	3,310	2,280	2,850	1,660	2,560	3,790
20	2,700	2,280	4,600	11,200	4,930	4,600	3,310	2,280	2,280	1,660	2,420	2,700
21	2,150	1,900	6,300	9,230	4,930	4,440	3,000	2,560	2,280	1,900	2,850	3,000
22	2,020	1,900	8,470	7,000	4,600	4,440	3,000	2,560	2,280	1,900	3,160	2,420
23	1,900	1,900	7,000	6,640	4,600	3,630	3,000	2,700	2,150	1,900	2,700	2,150
24	2,020	2,020	5,610	6,640	6,300	4,110	3,310	5,270	2,150	2,700	2,700	2,420
25	2,150	2,150	5,610	7,360	10,000	4,110	3,160	4,110	2,150	2,280	2,420	2,420
26	2,150	2,150	10,000	8,100	7,720	3,950	3,310	3,310	2,020	2,020	2,150	2,150
27	2,020	2,150	8,850	7,360	6,300	3,950	3,000	2,850	1,610	2,020	2,280	2,150
28	1,780	2,150	6,300	6,640	5,950	3,950	3,000	2,700	1,200	1,900	3,000	2,150
29	1,780	1,780	6,300	6,300	-------	3,950	3,000	2,700	2,020	1,900	4,110	2,280
30	1,660	2,020	8,470	5,950	-------	3,630	3,160	3,630	2,150	1,660	5,270	2,150
31	1,780	-------	9,620	5,610	-------	3,470	-------	3,310	-------	1,900	5,270	-------

NOTE.—Discharge estimates above 16,000 second-feet previous to 1910 have been revised, and as published herewith supersede those published in Bulletin III, Virginia Geological Survey, Hydrography of Virginia, and in the United States Geological Survey water supply papers. Ice present Jan. 1–9, 1900, and Jan. 26–29, 1905, but no correction was made in daily discharge for ice effect. Discharge estimated, because of ice, from climatologic records as follows: Jan. 5 and 6, 1905; Jan. 7–20, Feb. 6–13, 1912. Braced figures show mean discharge for periods included.

Comparison with records for other stations on New River indicate that the mean daily gage heights for Apr. 29, 30, May 6 and 7, are 0.5 feet low, and May 6 and 7, 1915, 1.0 foot low, and have been corrected by these amounts.

Monthly discharge of New River at Radford, Va., for the years ending Sept. 30, 1898–1915.

[Drainage area, 2,720 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1898.					
August	14,230	2,710	4,747	1.74	2.01
September	27,800	2,160	5,720	2.10	2.34
1898–99.					
October	46,100	3,000	9,050	3.33	3.84
November	5,260	3,000	4,117	1.51	1.68
December	10,770	3,590	5,228	1.92	2.21
January	16,900	3,900	5,890	2.17	2.50
February	24,900	3,590	11,500	4.23	4.40
March	49,200	7,160	16,400	6.03	6.95
April	17,400	4,550	8,041	2.95	3.29
May	8,740	3,590	5,697	2.09	2.41
June	16,400	2,430	4,800	1.76	1.96
July	4,550	1,640	2,452	.900	1.04
August	4,550	1,150	2,192	.804	.93
September	6,770	510	2,717	.997	1.11
The year	49,200	510	6,480	2.38	32.32

Monthly discharge of New River at Radford, Va., for the years ending Sept. 30, 1898–1915—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1899–1900.					
October	1,640	510	1,107	0.406	0.47
November	4,550	510	1,376	.505	.56
December	19,200	700	3,140	1.15	1.33
January	12,470	250	3,933	1.44	1.66
February	20,600	2,430	6,920	2.54	2.64
March	26,400	5,260	10,200	3.75	4.32
April	16,900	3,590	6,700	2.46	2.74
May	8,340	3,900	4,730	1.74	2.01
June	8,340	3,590	5,094	1.87	2.09
July	8,740	1,640	3,082	1.13	1.30
August	2,710	120	1,242	.456	.53
September	11,820	170	2,220	.815	.91
The year	26,400	120	4,120	1.52	20.56
1900–1901.					
October	117,000	700	7,170	2.64	3.04
November	35,300	2,430	5,590	2.06	2.30
December	16,900	3,290	5,760	2.12	2.44
January	16,900	2,710	4,640	1.71	1.97
February	6,380	1,390	3,696	1.36	1.42
March	21,500	360	4,680	1.72	1.98
April	92,200	4,220	15,300	5.62	6.27
May	117,000	4,550	15,900	5.85	6.74
June	38,400	6,000	13,500	4.96	5.53
July	19,600	4,550	8,490	3.12	3.60
August	57,600	4,220	20,200	7.43	8.57
September	22,700	4,220	8,030	2.95	3.29
The year	117,000	360	9,450	3.47	47.15
1901–2.					
October	12,470	2,710	4,952	1.82	2.10
November	5,260	1,640	2,500	.917	1.02
December	98,000	1,900	15,200	5.59	6.44
January	16,900	4,220	6,770	2.49	2.87
February	57,100	3,900	10,400	3.82	3.98
March	57,100	4,550	10,400	3.82	4.40
April	9,140	3,900	6,041	2.22	2.48
May	4,550	1,150	2,707	.993	1.14
June	18,700	2,430	6,220	2.29	2.56
July	9,950	3,000	4,666	1.71	1.97
August	5,630	1,640	3,729	1.37	1.58
September	3,290	1,150	1,919	.704	.78
The year	98,000	1,150	6,280	2.31	31.32
1902–3.					
October	4,220	1,390	2,391	.877	1.01
November	5,260	1,150	2,452	.900	1.00
December	6,000	2,160	3,450	1.27	1.46
January	20,100	2,710	5,610	2.06	2.38
February	40,400	4,220	8,400	3.09	3.22
March	42,000	4,220	11,900	4.38	5.05
April	16,900	6,000	9,374	3.45	3.85
May	6,770	3,000	4,342	1.59	1.83
June	18,300	3,000	6,380	2.35	2.62
July	8,340	2,430	4,578	1.68	1.94
August	9,950	2,160	3,949	1.45	1.67
September	14,230	1,390	2,793	1.02	1.14
The year	42,000	1,150	5,450	2.00	27.17
1903–4.					
October	6,000	1,150	2,232	.819	.94
November	3,290	920	2,081	.764	.85
December	2,430	510	1,453	.533	.62
January	8,340	510	2,184	.801	.92
February	7,940	1,150	3,208	1.18	1.27
March	16,900	1,390	4,480	1.65	1.90
April	3,900	1,900	2,775	1.02	1.14
May	12,040	2,160	4,218	1.55	1.79
June	12,900	510	4,049	1.49	1.66
July	5,630	1,390	2,876	1.06	1.22
August	5,630	1,390	3,010	1.10	1.27
September	2,710	1,150	1,484	.545	.61
The year	16,900	510	2,840	1.04	14.19

Monthly discharge of New River at Radford, Va., for the years ending Sept. 30, 1898–1915—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1904–5.					
October	1,150	700	835	0.306	0.35
November	2,430	920	1,402	.514	.57
December	3,590	920	1,643	.603	.70
January	9,540	1,640	2,777	1.02	1.18
February	18,700	1,640	4,500	1.65	1.72
March	9,950	2,160	4,435	1.63	1.88
April	5,260	1,640	2,763	1.01	1.13
May	23,400	1,640	6,314	2.32	2.68
June	2,710	920	1,588	.583	.65
July	90,800	1,150	9,040	3.32	3.83
August	11,190	920	4,763	1.75	2.02
September	7,550	1,640	2,885	1.06	1.18
The year	90,800	700	3,590	1.32	17.89
1905–6.					
October	2,710	1,390	1,805	.662	.76
November	1,900	1,390	1,610	.591	.66
December	11,610	1,150	4,312	1.58	1.82
January	30,800	2,160	7,960	2.93	3.38
February	7,160	2,430	3,930	1.44	1.50
March	14,200	3,290	5,230	1.92	2.21
April	11,600	2,430	4,550	1.67	1.86
May	5,260	2,430	3,100	1.14	1.31
June	10,800	2,160	3,970	1.46	1.63
July	2,710	2,160	2,310	.849	.47
1907.					
May	13,800	2,430	3,620	1.33	1.29
June	52,900	1,640	8,470	3.11	3.47
July	5,630	2,160	3,530	1.30	1.50
August	4,550	1,900	2,510	.923	1.06
September	35,800	1,640	5,190	1.91	2.13
1907–8.					
October	3,900	1,640	2,210	.812	.94
November	8,340	2,430	4,120	1.51	1.68
December	16,900	2,160	5,920	2.18	2.51
January	38,400	3,900	8,190	3.01	3.47
February	32,800	2,710	9,540	3.51	3.79
March	14,200	3,900	7,300	2.68	3.09
April	20,100	3,590	6,630	2.44	2.72
May	11,000	3,900	5,500	2.02	2.33
June	19,600	3,290	5,260	1.93	2.15
July	7,940	2,710	4,480	1.65	1.90
August	19,600	2,160	4,450	1.64	1.89
September	6,380	1,640	2,710	.996	1.11
The year	38,400	1,640	5,510	2.02	27.58
1908–9.					
October	22,500	1,640	5,960	2.19	2.52
November	9,540	3,290	4,880	1.79	2.00
December	14,200	3,590	5,860	2.15	2.48
January	17,400	3,290	6,880	2.53	2.92
February	12,000	2,160	5,720	2.10	2.19
March	9,140	3,900	5,600	2.06	2.38
April	20,600	3,290	5,300	1.95	2.18
May	38,400	3,290	8,510	3.13	3.61
June	19,200	4,220	6,320	2.32	2.59
July	6,380	2,160	3,550	1.31	1.51
August	7,550	920	2,860	1.05	1.21
September	3,900	1,150	2,170	.798	.89
The year	38,400	920	5,300	1.95	26.48
1909–10.					
October	10,800	1,390	2,540	.934	1.08
November	2,160	1,390	1,610	.592	.66
December	8,340	1,150	2,250	.827	.95
January	6,020	1,580	3,100	1.14	1.31
February	21,500	960	4,690	1.72	1.79
March	9,970	1,950	3,440	1.26	1.45
April	5,650	1,580	2,770	1.02	1.14
May	4,930	1,820	2,750	1.01	1.16
June	27,800	1,580	6,830	2.51	2.80
July	6,590	1,150	3,490	1.23	1.48
August	2,350	1,360	1,850	.680	.78
September	7,760	1,150	2,560	.941	1.05
The year	27,800	960	3,140	1.15	15.65

Monthly discharge of New River at Radford, Va., for the years ending Sept. 30, 1898–1915—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1910–11.					
October	11,000	620	2,310	0.849	0.98
November	1,820	1,150	1,570	.577	.64
December	5,290	700	1,940	.713	.82
January	15,600	1,820	4,520	1.66	1.91
February	10,600	2,080	3,940	1.45	1.51
March	10,600	1,820	4,070	1.50	1.73
April	20,100	3,400	7,460	2.74	3.06
May	6,210	1,470	3,070	1.13	1.30
June	3,890	1,360	2,160	.794	.89
July	5,110	888	1,620	.596	.69
August	5,360	550	1,660	.610	.70
September	5,400	578	1,680	.618	.69
The year	20,100	550	2,990	1.10	14.92
1911–12.					
October	20,200	1,150	2,860	1.05	1.21
November	2,630	764	1,870	.688	.77
December	9,270	816	3,840	1.41	1.63
January	7,950	----------	2,830	1.04	1.20
February	16,400	----------	4,450	1.64	1.77
March	27,300	4,200	9,030	3.32	3.83
April	13,800	3,560	5,530	2.03	2.26
May	25,400	3,400	6,310	2.32	2.68
June	4,930	1,950	2,990	1.10	1.23
July	6,780	1,630	3,060	1.12	1.29
August	5,650	1,360	2,420	.890	1.03
September	11,200	1,110	2,560	.941	1.05
The year	27,300	764	3,980	1.46	19.95
1912–13.					
October	2,080	1,110	1,670	.614	.71
November	4,930	998	1,990	.732	.82
December	2,780	1,150	1,800	.662	.76
January	8,750	1,800	3,090	1.14	1.31
February	7,170	1,800	2,810	1.03	1.07
March	38,400	2,220	9,330	3.43	3.95
April	21,000	3,060	5,740	2.11	2.35
May	27,500	2,240	5,670	2.08	2.40
June	7,000	2,370	3,570	1.31	1.46
July	5,950	1,100	2,350	.864	1.00
August	3,060	1,160	1,970	.724	.83
September	10,000	1,280	2,700	1.03	1.15
The year	38,400	998	3,570	1.31	17.81
1913–14.					
October	5,270	1,320	2,210	.812	.94
November	4,110	1,610	2,180	.801	.89
December	4,440	1,480	2,370	.871	1.00
January	6,300	1,900	3,410	1.25	1.44
February	13,600	3,000	6,320	2.32	2.42
March	7,720	3,310	5,000	1.84	2.12
April	9,230	3,160	5,190	1.91	2.13
May	3,950	1,780	2,540	.934	1.08
June	2,280	745	1,560	.574	.64
July	3,630	906	1,650	.607	.70
August	5,610	868	1,480	.544	.63
September	2,280	694	1,330	.489	.55
The year	13,600	694	2,910	1.07	14.54
1914–15.					
October	11,200	868	2,290	.842	.97
November	6,640	1,060	2,100	.772	.86
December	38,400	2,560	8,500	3.12	3.60
January	33,200	4,270	8,680	3.19	3.68
February	21,000	4,600	7,430	2.73	2.84
March	5,950	3,470	4,610	1.69	1.95
April	4,440	3,000	3,400	1.25	1.40
May	5,270	2,280	3,050	1.12	1.29
June	6,640	1,200	3,020	1.11	1.24
July	2,700	1,640	1,990	.732	.84
August	5,270	1,540	2,680	.985	1.14
September	14,000	2,150	4,570	1.68	1.87
The year	38,400	868	4,350	1.60	21.68

NEW RIVER AT EGGLESTON, VA.

LOCATION.—At highway bridge at Eggleston, Giles County.

DRAINAGE AREA.—2,920 square miles.

RECORDS AVAILABLE.—October 1, 1914, to September 30, 1920.

GAGE.—Chain gage attached to downstream side of bridge; read by J. A. Bishop.

DISCHARGE MEASUREMENTS.—Made from upstream side of bridge.

CHANNEL AND CONTROL.—Stream bed composed of rock covered with silt. Primary control is rock ledge about 1¼ miles below gage; permanent.

EXTREMES OF DISCHARGE.—1914–1920: Maximum stage recorded, 39.5 feet July 16, 1916 (discharge, about 150,000 second-feet); minimum stage recorded, 2.37 feet August 29, 1917 (discharge, 652 second-feet).

The flood of 1878 reached a stage of about 40 feet on present gage.

ICE.—Stage-discharge relation affected by ice during severe winters.

ACCURACY.—Stage-discharge relation practically permanent; affected by ice, December 15–30, 1914; December 14–18, 1915; January 19–20, and December 10–31, 1916; February 2–16 and December 11–31, 1917; January 1–29 and February 5–8, 1918; December 15–31, 1919; January 1–22 and January 27 to March 9, 1920. Rating curve well defined between 1,200 and 45,000 second-feet; extended beyond these limits. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good for open water and fair for periods affected by ice.

Discharge measurements of New River at Eggleston, Va., during the years 1911–1920.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
		Feet.	*Sec.-ft.*			*Feet.*	*Sec.-ft.*
1911.				1917.			
July 17	Horton and Bailey	3.30	1,560	June 26	B. E. Jones	3.19	1,370
1914.				1918.			
Oct. 22	Mathers and Morgan	3.76	2,250	Jan. 22	B. L. Hopkins	[a] 3.20	1,160
				May 27	Hopkins and Fiedler	4.62	3,810
1916.				1920.			
Feb. 26	B. J. Peterson	7.31	11,200	May 24	Peterson and Bigwood	3.70	2,140
28	do	5.68	6,260	June 25	B. L. Bigwood	4.38	3,340
July 18	B. E. Jones	12.97	32,600				
Aug. 4	do	5.74	5,610				
5	do	6.19	7,190				
Dec. 9	Lee and Walters	3.84	2,310				

[a] Stage-discharge relation affected by ice.

Daily discharge, in second-feet, of New River at Eggleston, Va., for the years ending Sept. 30, 1915–1920.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	911	1,670	7,120	7,750	5,690	5,220	3,510	3,120	3,310	2,120	1,970	4,990
2	971	1,280	12,700	6,430	25,400	4,990	3,510	2,940	5,690	1,970	1,460	4,330
3	911	1,400	14,000	5,450	17,400	4,990	3,510	2,770	6,690	1,530	1,530	3,510
4	1,030	1,400	9,750	4,770	12,000	4,990	3,310	2,940	5,450	1,530	1,530	3,910
5	1,360	1,670	33,000	4,550	9,160	4,990	3,310	2,940	4,550	2,120	2,120	10,700
6	2,390	1,600	22,100	4,550	8,580	4,990	3,510	2,940	3,710	2,940	2,280	25,400
7	1,990	1,400	13,000	30,100	8,300	5,450	3,510	2,940	3,310	2,940	1,970	13,000
8	2,120	1,400	10,000	20,500	7,480	5,690	3,310	2,770	3,120	2,940	1,670	5,930
9	2,250	1,220	7,120	11,000	6,690	4,990	3,310	3,120	2,940	2,600	1,400	5,450
10	1,610	1,280	6,180	4,770	5,930	4,770	3,310	3,120	3,120	2,120	1,530	4,550
11	911	1,460	5,450	6,690	5,690	4,990	3,310	2,940	2,770	1,970	1,970	3,910
12	1,030	1,670	5,220	8,020	5,450	4,990	3,710	2,770	2,600	1,530	2,280	3,910
13	1,320	1,460	4,990	12,000	5,220	5,220	4,120	2,940	2,600	1,820	3,710	4,330
14	1,070	1,400	4,330	9,160	4,990	4,550	3,910	3,310	2,120	1,970	3,310	4,990
15	1,190	1,740	3,810	7,750	4,990	4,330	3,710	3,310	3,120	1,670	3,120	4,330
16	7,720	4,770	2,690	7,750	5,690	4,330	3,510	2,770	3,310	1,670	2,120	3,910
17	11,700	4,990	2,990	8,300	6,180	5,220	3,310	2,600	4,120	1,970	4,120	3,510
18	5,170	3,710	3,150	8,580	5,690	4,990	3,120	3,310	3,510	1,970	4,330	3,510
19	3,310	2,940	3,480	11,300	5,220	4,990	2,940	2,940	3,120	1,530	2,770	3,120
20	2,830	2,770	4,830	11,300	4,770	4,330	3,120	2,280	2,600	1,820	2,440	2,940
21	2,600	2,120	6,620	9,160	5,220	4,330	2,940	2,440	2,280	1,970	2,440	3,120
22	2,120	1,740	8,890	7,120	4,550	4,120	2,940	2,600	2,440	2,280	6,430	2,940
23	1,970	1,820	7,350	6,430	4,550	4,120	2,940	3,310	2,600	2,440	3,710	2,600
24	1,820	1,970	5,900	6,430	5,450	3,910	2,940	3,510	1,970	2,940	2,940	2,440
25	1,970	1,970	5,900	6,690	9,750	3,910	2,940	4,120	1,970	2,120	2,600	2,280
26	1,970	1,970	10,500	7,480	8,020	3,710	2,940	3,710	1,970	1,820	2,280	2,120
27	2,280	1,820	9,290	7,480	6,430	3,710	3,120	2,940	1,820	2,120	2,120	1,670
28	1,970	2,120	6,620	6,430	5,690	3,710	2,770	2,940	1,400	1,820	2,940	2,440
29	1,820	1,820	6,620	5,930	-------	3,510	2,940	2,770	1,400	1,530	3,310	2,280
30	1,670	1,670	8,890	5,450	-------	4,550	3,120	3,310	1,970	1,400	5,220	2,280
31	1,670	-------	9,160	5,220	-------	3,710	-------	3,310	-------	1,400	5,220	-------
1915–16.												
1	5,450	2,360	3,120	9,750	6,430	5,220	4,330	2,770	2,200	2,520	5,450	4,550
2	20,500	2,940	2,770	7,480	11,000	4,990	3,910	3,510	2,600	2,600	7,120	3,710
3	8,300	2,360	3,120	7,480	20,100	5,450	3,910	2,600	2,520	1,970	9,750	3,710
4	5,930	2,040	3,120	6,180	13,000	6,950	3,910	2,600	2,280	2,940	6,690	3,510
5	4,990	2,230	2,200	5,690	9,750	6,430	4,120	2,600	1,740	2,200	8,580	4,120
6	5,690	2,770	2,200	5,220	7,480	5,690	4,120	3,310	2,770	2,360	7,120	3,710
7	6,430	2,360	3,120	5,450	6,950	5,690	4,550	3,710	2,200	2,040	8,870	3,310
8	5,690	2,360	2,360	18,100	5,930	5,930	5,220	1,900	3,120	1,740	9,750	3,310
9	4,990	2,520	2,440	13,000	5,450	6,430	5,930	2,940	2,600	1,740	10,700	4,550
10	4,990	2,280	2,200	7,480	5,450	5,930	4,770	2,440	2,440	2,440	6,180	2,940
11	3,910	2,770	2,120	7,480	5,220	5,220	4,550	2,440	2,440	19,700	7,120	2,940
12	3,710	2,600	2,940	6,690	4,990	5,450	4,990	2,440	1,900	11,600	6,430	3,710
13	3,510	2,280	2,770	7,120	4,770	5,690	4,120	2,200	2,520	5,930	6,180	2,940
14	3,510	2,120	2,860	5,690	4,770	5,220	5,690	2,600	2,200	4,770	4,990	2,770
15	3,510	1,900	2,800	5,450	4,330	4,990	5,220	2,280	2,360	5,220	5,220	3,310
16	3,710	2,940	2,800	4,990	4,330	4,550	4,550	3,120	2,940	108,000	13,000	8,300
17	3,510	2,600	3,100	4,770	4,120	3,910	4,120	2,360	4,990	72,500	11,000	4,120
18	3,120	2,520	3,400	4,330	4,330	3,910	4,120	2,280	5,930	34,700	9,160	3,310
19	3,120	2,770	25,000	4,300	4,330	3,910	3,710	2,200	3,910	20,900	6,180	3,310
20	3,310	7,120	13,000	4,200	4,330	3,710	3,510	2,040	3,710	14,000	5,450	3,120
21	2,940	5,450	6,430	3,910	3,910	4,120	3,510	1,820	3,120	13,000	4,990	2,770
22	3,910	4,770	5,930	4,770	4,120	4,120	3,510	1,670	3,120	12,700	4,990	2,940
23	3,510	3,310	4,990	5,690	3,910	3,910	3,510	1,970	2,360	12,700	6,950	2,940
24	3,310	3,510	4,550	5,690	4,550	3,910	3,120	3,310	2,280	11,000	7,750	2,770
25	3,120	3,120	4,120	5,690	13,700	3,710	3,310	4,770	2,770	9,160	5,220	2,440
26	3,120	2,770	5,690	4,550	10,000	3,510	3,310	4,120	1,900	8,300	4,550	2,940
27	2,940	3,120	5,930	6,950	7,750	3,710	3,310	3,120	3,120	8,020	4,120	2,940
28	2,940	3,310	5,450	5,690	6,180	4,990	3,510	4,120	2,940	7,480	4,550	2,600
29	3,120	3,310	6,950	6,430	5,450	5,930	3,310	2,440	2,440	7,120	6,430	3,510
30	2,520	3,310	22,500	6,180	-------	4,990	2,940	3,310	2,520	7,480	5,220	7,120
31	3,710	-------	14,400	5,930	-------	4,550	-------	2,600	-------	6,180	4,120	-------

Daily discharge, in second-feet, of New River at Eggleston, Va., for the years ending Sept. 30, 1915–1920—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1916–17.												
1	4,330	3,120	2,440	3,710	4,990	4,770	4,330	3,910	1,970	1,530	1,530	1,400
2	3,310	3,120	2,600	3,310		7,480	4,120	4,120	1,900	1,530	1,530	1,970
3	3,310	2,940	2,600	3,710		12,000	3,510	3,910	2,600	1,120	1,460	1,970
4	2,770	2,770	2,600	4,550		15,500	3,120	3,710	2,280	1,400	1,530	2,600
5	2,770	2,600	2,280	10,400		27,100	3,910	3,310	2,600	1,460	2,280	2,200
6	2,600	1,900	2,360	11,000		17,400	6,690	3,120	2,040	1,530	1,900	1,900
7	2,940	2,200	2,360	8,580		11,000	7,210	3,120	1,740	1,530	1,820	1,820
8	2,770	2,200	2,120	6,950		8,870	5,690	3,910	1,820	1,600	1,530	1,900
9	2,280	2,520	2,280	5,690		7,480	5,220	3,710	1,820	1,340	1,460	1,670
10	3,120	2,600		4,770	3,500	6,690	5,220	3,910	1,970	1,400	1,530	1,600
11	3,120	2,360		3,310		6,180	4,990	3,910	2,040	1,820	1,740	1,340
12	2,440	2,200		4,120		5,450	4,770	3,910	2,280	1,530	1,970	1,280
13	2,200	1,740		3,310		6,180	4,770	3,710	1,740	1,740	2,040	1,340
14	2,360	2,520		2,940		6,950	4,770	2,600	1,670	1,820	1,900	1,460
15	2,600	2,520		3,120		6,950	4,330	3,510	1,740	1,530	1,530	1,340
16	1,900	2,120		4,770		6,430	3,910	3,120	1,670	1,400	1,340	1,400
17	2,600	2,360		3,710	7,480	6,950	4,120	2,600	1,740	2,040	1,530	1,400
18	3,510	2,440		4,120	7,750	10,000	4,120	2,520	1,900	3,310	1,340	1,400
19	3,910	2,360		4,120	6,690	8,870	3,710	2,360	1,600	3,310	1,670	1,400
20	13,000	1,970	2,600	4,330	4,990	7,210	3,510	2,120	1,460	3,120	1,600	1,340
21	5,930	2,520		4,120	6,180	6,430	3,310	1,900	1,530	2,040	1,280	1,340
22	4,770	2,440		3,910	5,930	5,930	3,120	1,900	1,600	2,360	1,340	1,280
23	3,910	2,440		4,990	4,990	5,930	3,120	2,360	1,600	3,310	1,530	1,220
24	2,520	2,600		6,180	6,430	6,950	3,710	2,360	1,670	4,990	1,600	1,170
25	2,770	3,120		5,220	7,210	8,300	3,310	2,040	1,900	6,430	1,400	1,280
26	3,120	2,770		4,770	5,930	8,580	3,120	1,970	1,400	6,180	1,400	1,340
27	2,940	1,900		4,330	4,990	6,950	3,120	2,040	1,530	4,770	1,020	1,280
28	2,940	2,360		3,910	4,550	5,930	2,200	2,120	1,820	3,510	684	1,280
29	2,440	2,440		3,710	-------	5,450	3,120	2,600	1,460	2,600	670	1,340
30	2,280	2,200		4,550	-------	4,990	3,510	2,940	1,460	2,120	1,460	1,460
31	3,120	-------		7,210	-------	4,550	-------	2,280	-------	1,970	1,170	-------
1917–18.												
1	980	2,120	1,400		8,580	4,120	2,940	5,690	3,710	4,120	7,480	1,970
2	980	1,740	1,340		8,020	3,310	3,510	5,930	3,310	4,550	7,210	1,970
3	1,340	1,740	1,340		5,450	2,440	3,310	4,990	1,970	3,710	4,330	1,400
4	1,220	1,600	1,600		3,120	2,120	3,310	4,770	1,970	3,510	3,710	1,900
5	1,170	1,220	1,530			2,600	2,940	4,550	2,600	2,600	2,280	1,900
6	1,220	1,170	1,460		2,800	3,510	2,770	2,770	1,970	3,310	1,970	2,600
7	1,120	1,400	1,400			3,910	2,280	3,310	2,120	2,600	2,280	3,710
8	980	1,400	1,400			3,510	2,440	3,510	2,440	1,820	1,820	3,910
9	1,070	1,400	815		8,300	3,510	3,710	3,310	1,820	1,600	1,970	5,930
10	1,340	1,460	815		10,000	3,510	10,000	4,120	1,740	1,670	2,120	5,450
11	3,120	1,460			11,600	2,770	8,300	4,550	1,970	1,970	2,280	3,310
12	1,340	1,170			10,400	2,770	7,750	3,910	1,970	2,440	1,820	2,600
13	1,280	937			9,160	2,940	7,750	3,310	1,970	2,280	1,900	2,600
14	1,340	1,400			8,300	3,910	5,450	3,310	1,970	2,280	1,970	1,970
15	1,280	1,400		1,100	7,750	3,120	4,330	5,220	1,820	1,740	1,970	1,900
16	1,400	1,460			6,430	2,600	5,690	4,990	1,400	1,970	2,280	1,820
17	1,400	1,460			4,990	2,770	4,770	5,220	1,400	1,900	2,600	2,120
18	1,400	1,280			4,550	1,970	3,510	4,550	3,120	2,280	2,940	2,280
19	1,280	1,280			5,450	1,740	3,710	4,120	7,750	2,600	3,910	3,310
20	1,340	1,340			4,550	2,440	4,770	4,120	5,690	2,770	4,550	2,600
21	1,340	1,400	1,400		3,510	3,710	6,180	4,770	4,550	2,280	3,510	2,280
22	3,510	1,400			2,770	7,750	10,400	5,690	3,510	1,740	2,770	2,600
23	2,940	1,670			4,770	6,180	7,750	5,930	4,550	2,120	1,900	2,440
24	1,900	1,530			3,710	5,450	5,690	5,450	3,510	2,120	2,770	2,280
25	1,400	1,530			2,600	5,450	5,450	5,220	4,330	2,120	2,280	1,900
26	1,400	1,070			2,440	7,210	4,770	4,550	15,900	4,120	2,120	2,120
27	1,280	1,400			3,120	6,430	4,770	4,120	8,300	3,910	2,440	1,970
28	1,280	1,280			3,510	5,930	4,330	4,330	6,430	3,120	2,120	1,600
29	1,400	1,400			-------	5,690	3,510	4,120	4,770	3,120	2,120	1,900
30	1,970	1,400		13,700	-------	4,550	4,770	3,510	4,550	3,510	1,900	1,600
31	4,550	-------		10,400	-------	4,120	-------	3,710	-------	4,120	1,670	-------

Daily discharge, in second-feet, of New River at Eggleston, Va., for the years ending Sept. 30, 1915–1920—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1918–19.												
1	1,740	18,100	4,770	7,750	5,930	7,210	6,430	8,020	5,690	3,710	3,120	1,740
2	1,670	11,300	3,120	13,700	4,990	6,950	5,220	9,450	4,990	3,310	3,510	1,670
3	1,600	8,020	3,510	26,300	4,120	6,690	4,770	8,020	4,990	3,120	3,310	1,670
4	1,600	6,950	3,510	21,700	4,770	6,690	4,990	6,180	4,990	2,940	2,940	1,740
5	1,600	5,930	4,120	12,000	5,930	6,950	5,450	5,690	4,990	2,940	3,910	1,740
6	1,670	4,990	3,310	9,160	5,450	6,690	4,990	5,930	4,770	2,770	2,770	1,400
7	1,400	4,770	2,600	8,020	5,220	6,950	4,120	4,770	4,330	2,940	2,440	1,340
8	1,220	4,550	2,600	7,480	4,990	6,690	4,330	6,180	3,120	3,710	2,280	1,400
9	1,460	4,120	2,600	7,210	4,990	7,210	4,550	6,690	3,120	3,710	2,120	1,530
10	1,460	3,710	3,120	6,950	3,310	8,870	4,550	6,430	4,550	3,510	1,970	1,530
11	1,340	3,510	3,120	6,430	3,310	9,160	4,770	6,180	3,910	3,310	1,970	1,460
12	1,340	4,120	3,120	5,690	4,120	8,020	7,480	5,690	4,120	2,940	2,120	1,400
13	1,400	4,120	3,310	5,690	4,120	6,690	4,770	6,180	4,770	2,600	2,440	1,530
14	1,170	3,510	3,310	6,430	5,450	6,430	3,910	6,690	4,990	2,770	2,770	1,530
15	1,200	2,940	6,950	5,930	8,020	6,180	4,770	8,020	4,330	3,120	2,770	1,340
16	1,340	3,120	8,580	5,450	6,690	5,450	5,450	6,950	3,310	3,310	3,510	1,340
17	1,600	3,910	14,40	5,220	5,450	3,120	6,180	6,690	3,310	3,310	3,120	1,460
18	1,460	8,870	15,500	5,690	5,690	3,510	6,180	6,690	3,710	3,510	2,600	1,340
19	1,530	8,020	10,700	6,180	5,450	5,220	5,930	6,430	4,330	4,550	2,280	1,400
20	1,670	6,430	11,000	7,480	5,450	5,690	5,450	6,950	3,910	9,160	2,120	1,600
21	1,670	5,450	7,480	5,690	5,220	5,930	5,450	12,300	3,910	9,160	2,120	1,400
22	2,120	4,990	12,300	6,180	5,930	5,690	5,450	13,000	4,330	6,690	1,900	1,460
23	2,120	4,330	31,300	5,930	5,930	4,990	5,450	11,000	4,550	6,690	1,740	1,530
24	1,970	3,910	14,800	6,180	6,690	4,330	5,450	7,750	4,990	6,690	1,670	1,530
25	4,770	3,510	9,750	6,430	7,480	4,550	5,450	6,690	7,210	6,430	1,600	1,600
26	43,900	3,310	8,300	7,210	10,000	4,550	5,450	8,300	11,600	5,690	1,670	1,600
27	69,500	3,510	7,750	8,020	10,400	4,990	4,330	11,030	10,400	5,930	1,460	1,600
28	17,000	4,330	6,950	7,480	8,300	6,430	3,310	9,160	8,870	5,450	1,400	1,600
29	8,020	5,450	6,430	7,210	-------	7,480	5,690	8,300	8,020	3,910	1,400	1,530
30	13,700	5,220	5,690	6,950	-------	5,450	5,690	7,480	4,990	3,120	1,600	1,340
31	27,100	-------	7,210	6,690	-------	5,450	-------	5,930	-------	3,120	1,740	-------
1919–20.												
1	1,280	1,600	1,670		3,250		6,180	2,940	1,600	1,530	1,280	3,710
2	1,280	1,670	2,120				7,480	2,770	1,900	1,740	1,400	3,310
3	1,400	1,600	2,280			2,440	21,700	3,310	2,440	1,900	1,400	2,940
4	1,400	1,740	2,280	1,380			13,000	3,910	3,510	2,280	1,340	2,440
5	1,530	1,900	2,120		6,020		12,700	3,310	6,690	2,770	1,340	2,280
6	1,460	1,670	1,970				11,300	2,440	10,700	2,940	1,460	2,280
7	1,400	1,460	1,820				8,580	1,970	7,210	1,600	1,460	1,820
8	1,400	1,530	2,280			5,300	7,750	2,440	5,220	1,740	1,820	2,440
9	1,460	1,460	5,930				6,950	2,940	4,120	1,670	1,970	1,600
10	1,670	1,340	6,180			3,510	6,180	2,600	3,510	1,740	2,600	1,530
11	1,600	1,340	9,450	1,980		3,510	5,930	3,510	2,940	1,820	6,180	1,670
12	1,740	1,530	8,580			3,310	3,310	2,120	2,770	1,970	6,690	2,600
13	1,740	1,900	7,480			4,120	4,990	2,120	2,120	3,710	6,180	2,770
14	2,770	3,710	5,930			7,750	5,220	3,120	1,670	5,450	5,930	2,770
15	3,120	1,740				7,480	3,910	3,710	1,530	2,940	8,300	2,440
16	3,710	1,820				6,180	3,910	2,280	1,530	2,620	7,480	2,600
17	3,510	1,600	3,420			5,930	4,120	2,280	1,530	2,300	6,950	2,770
18	3,310	1,740				5,690	4,120	1,970	1,600	1,970	6,950	2,280
19	3,120	1,740		1,650	2,440	6,430	3,120	1,900	1,670	1,900	7,750	1,970
20	2,600	1,670				9,450	3,300	2,940	1,670	1,820	7,750	2,600
21	1,900	1,460				10,000	3,500	3,910	3,310	1,600	8,300	2,440
22	1,530	1,400				10,000	3,100	3,510	7,480	1,900	7,750	1,900
23	1,740	1,400		3,310		8,870	2,940	3,310	5,450	1,820	7,750	1,460
24	1,970	1,400		9,160		5,930	2,770	2,600	4,550	1,900	7,480	2,770
25	2,440	1,460		8,020		3,910	2,600	1,970	3,510	1,900	6,950	6,950
26	3,710	1,460	1,380	5,930		3,510	2,940	3,120	3,120	1,670	5,930	5,450
27	3,510	1,600				3,710	2,280	3,710	2,600	1,530	3,510	5,450
28	2,600	1,740				3,510	2,940	2,940	1,970	1,530	4,120	4,990
29	1,740	1,670		3,250		3,310	2,940	2,280	2,940	1,400	6,180	3,310
30	1,670	1,600			-------	4,990	3,120	1,740	1,460	1,170	5,690	3,120
31	1,600	-------			-------	5,690	-------	1,600	-------	1,120	4,120	-------

NOTE.—Stage-discharge relation affected by ice Dec. 15–30, 1914, Dec. 14–18, 1915; Jan. 19–20, Dec. 10–31; 1916; Feb. 2–16, Dec. 11–31, 1917; Jan. 1–29, Feb. 5–8, 1918; Dec. 15–31, 1919; Jan. 1–22 and Jan. 27 to Mar. 9, 1920; gage heights considered in error Oct. 15, 1918, and Aug. 19, 20, 21, 1919; no gage readings Oct. 1–20, 1914, and Apr. 20 to 22, 1920; discharge estimated from study of observer's notes, weather records, and comparison with New River at Radford. Discharge interpolated July 16 and 17, 1920.

Monthly discharge of New River at Eggleston, Va., for the years ending Sept. 30, 1915–1920.

[Discharge area, 2,920 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1914–15.					
October	11,700	911	2,380	0.815	0.94
November	4,990	1,220	2,010	.688	.77
December	33,000	2,690	8,440	2.89	3.33
January	30,100	4,550	8,530	2.92	3.37
February	25,400	4,550	7,510	2.57	2.68
March	5,690	3,510	4,590	1.57	1.81
April	4,120	2,770	3,280	1.12	1.25
May	4,120	2,280	3,020	1.03	1.19
June	6,690	1,400	3,050	1.04	1.16
July	2,940	1,400	2,020	.692	.80
August	6,430	1,400	2,800	.959	1.10
September	25,400	1,670	4,810	1.65	1.84
The year	33,000	911	4,360	1.49	20.24
1915–16.					
October	20,500	2,520	4,610	1.58	1.82
November	7,120	1,900	3,000	1.03	1.15
December	25,000	2,120	5,630	1.93	2.22
January	18,100	3,910	6,530	2.24	2.58
February	20,100	3,910	6,780	2.32	2.50
March	6,950	3,510	4,930	1.69	1.95
April	5,930	2,940	4,090	1.40	1.56
May	4,770	1,670	2,760	.945	1.09
June	5,930	1,740	2,800	.959	1.07
July	108,000	1,740	13,600	4.66	5.37
August	13,000	4,120	6,900	2.36	2.72
September	8,300	2,440	3,610	1.24	1.38
The year	108,000	1,670	5,450	1.87	25.41
1916–17.					
October	13,000	1,900	3,370	1.16	1.34
November	3,120	1,740	2,440	.836	.93
December	------	------	2,540	.87	1.00
January	11,000	2,940	4,950	1.70	1.96
February	------	------	4,660	1.60	1.67
March	27,100	4,550	8,370	2.87	3.31
April	7,210	2,200	4,120	1.41	1.57
May	4,120	1,900	2,950	1.01	1.16
June	2,600	1,400	1,820	.623	.70
July	6,430	1,120	2,460	.843	.97
August	2,280	670	1,510	.517	.60
September	2,600	1,170	1,520	.521	.60
The year	27,100	670	3,400	1.16	15.81
1917–18.					
October	4,550	980	1,600	.548	.63
November	2,120	937	1,420	.486	.54
December	------	------	1,370	.469	.54
January	13,700	------	1,810	.62	.72
February	11,600	2,440	5,510	1.89	1.97
March	7,750	1,740	3,940	1.35	1.56
April	10,400	2,280	5,030	1.72	1.92
May	5,930	2,770	4,440	1.52	1.75
June	15,900	1,400	3,770	1.29	1.44
July	4,550	1,680	2,710	.928	1.07
August	7,480	1,670	2,810	.962	1.11
September	5,930	1,400	2,530	.866	.97
The year	15,900	------	3,060	1.05	14.22

Monthly discharge of New River at Eggleston, Va., for the years ending Sept. 30, 1915–1920—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1918–19.					
October	69,500	1,170	7,140	2.45	2.82
November	18,100	2,940	5,500	1.88	2.10
December	31,300	2,600	7,460	2.55	2.94
January	26,300	5,220	8,210	2.81	3.24
February	10,400	3,310	5,840	2.00	2.08
March	9,160	3,120	6,130	2.10	2.42
April	7,480	3,310	5,200	1.78	1.99
May	13,000	4,770	7,580	2.60	3.00
June	11,600	3,120	5,170	1.77	1.98
July	9,160	2,600	4,330	1.48	1.71
August	3,910	1,400	2,340	.801	.92
September	1,740	1,340	1,510	.517	.58
The year	69,500	1,170	5,540	1.90	25.78
1919–20.					
October	3,710	1,280	2,130	.729	.84
November	3,710	1,340	1,660	.568	.63
December	9,450		3,090	1.06	1.22
January	9,160		2,570	.88	1.01
February			3,330	1.14	1.23
March	10,000		5,170	1.77	2.04
April	21,700	2,280	5,760	1.97	2.20
May	3,910	1,600	2,750	.942	1.09
June	10,700	1,460	3,410	1.17	1.30
July	5,450	1,120	2,060	.705	.81
August	8,300	1,280	4,970	1.70	1.96
September	6,950	1,460	2,890	.99	1.10
The year	21,700	1,120	3,310	1.13	15.43

DRAINAGE AREA AND DISCHARGE RATIOS AT GAGING STATIONS ON NEW RIVER.

The following table shows the mean annual discharge from 1909 to 1916 at stations on New River from the junction of the forks in North Carolina to the mouth:

Mean annual discharge of New River from the forks to the mouth, 1909–1916.

Station.	Distance from mouth (miles).	Drainage area.		Mean annual discharge.		
		Square miles.	Per cent of total.	Second-feet.	Per cent of flow at mouth.	Per square mile.
Forks	340	604	4.9	1,220	7.0	2.02
Radford	234	2,720	22.3	3,960	22.6	1.46
Fayette	109	6,800	55.7	9,370	53.5	1.38
Kanawha Falls	90	8,300	68.0	12,000	68.6	1.45
Lock No. 2	84	8,470	69.4	12,010	68.6	1.42
Mouth	0	12,200	100.0	17,500	100.0	1.43

Under normal conditions the ratio of the discharge at any station to the discharge at the mouth of the stream is greater than the corresponding drainage-area ratio, because the run-off per square mile usually decreases from the source to the mouth of the stream. The noticeable decrease in the discharge ratio at Fayette, as com-

pared with the drainage-area ratio, and in the run-off per square mile is probably due to the fact that in the stretch of New River below the Greenbrier, which enters 50 miles above Fayette, the tributaries are small and there are none that rise in the region of maximum rainfall. The discharge ratios at the other stations from Radford to the mouth of the Kanawha, inclusive, are about the same as the drainage-area ratios. This is, of course, due to those conditions in the basin that affect the run-off, and it affords a good illustration of the fact that, so far as run-off is concerned, every stream is a law unto itself.

The following table of ratios of monthly and yearly mean discharge at Fayette, Kanawha Falls, and Lock No. 2, with the drainage-area ratios, affords a convenient means of comparing the published records of discharge for these three stations. These stations lie within a 25-mile stretch of the river. The Gauley, which is the only tributary in this stretch, joins the main stream above the gage at Kanawha Falls.

An examination of the monthly and yearly ratios of discharge for Fayette and Kanawha Falls and for Fayette and Lock No. 2 shows that the yearly discharge ratios are less than the drainage-area ratios and that the monthly ratios vary considerably. The discharge ratios for Kanawha Falls and Lock No. 2 are of practically no significance so far as comparisons with the drainage-area ratios are concerned, as the run-off at these two stations is almost the same, but they indicate the consistencies or inconsistencies of the records of discharge at the two stations. The monthly discharge ratios for Fayette and Kanawha Falls and for Fayette and Lock No. 2 indicate the probable accuracy of the published discharge record. The published figures for discharge in those months whose discharge ratios vary widely from the yearly mean should be used with caution, and many of them should probably be adjusted after careful study of the discharge record as published for the different stations. The discrepancies that cause the apparently inconsistent ratios are probably due mostly to inaccurate gage readings and to variations in the run-off of Gauley River. In order not to have the published figures appear more accurate than the base data warrant, no attempt was made to adjust these apparent inconsistencies. The rating curves for the stations at Kanawha Falls and Lock No. 2 are based on measurements beginning in 1908. The rating curve for Fayette is based on measurements made throughout the period of record.

Ratios of discharge of New River at Fayette and of Kanawha River at Kanawha Falls and Lock No. 2, W. Va., for the years ending Sept. 30, 1888–1916.

[Drainage-area ratios: $\frac{\text{Fayette}}{\text{Kanawha Falls}}=\frac{6800}{8300}=0.82$; $\frac{\text{Fayette}}{\text{Lock No. 2}}=\frac{6800}{8740}=0.80$; $\frac{\text{Kanawha Falls}}{\text{Lock No. 2}}=\frac{8300}{8470}=0.98$.]

Month.	Fayette / Kanawha Falls	Fayette / Lock No. 2	Kanawha Falls / Lock No. 2
1888.			
January			0.93
February			.96
March			.93
April			.92
May			.96
June			.94
July			.94
August			1.01
September			1.00
1888–89.			
October			.99
November			.98
December			.98
January			.99
February			.98
March			.99
April			.96
May			1.01
June			.98
July			1.02
August			1.03
September			.93
The year			.98
1889–90.			
October			.89
November			1.00
December			.94
January			.95
February			1.02
March			1.02
April			1.00
May			.99
June			.90
July			.85
August			.92
September			.95
The year			.98
1890–91.			
October			.97
November			.92
December			.93
January			1.01
February			1.01
March			1.00
April			1.01
May			.95
June			1.00
July			.96
August			1.03
September			.96
The year			1.00
1891–92.			
October			.95
November			.94
December			.93
January			1.02
February			1.01
March			1.03
April			1.02
May			1.04
June			1.02
July			.97
August			.97
September			1.02
The year			1.00
1892–93.			
October			1.02
November			1.04
December			1.02
January			1.08
February			1.02
March			1.02
April			1.02
May			1.03
June			1.04
July			1.00
August			1.01
September			1.07
The year			1.03
1893–94.			
October			1.04
November			1.02
December			1.02
January			1.04
February			1.06
March			1.04
April			.95
May			.96
June			.97
July			.99
August			.97
September			.98
The year			1.01
1894–95.			
October			.96
November			.98
December			1.08
January			1.02
February			.91
March			1.05
April			1.06
May			1.04
June			1.02
July			1.03
August	0.82	0.84	1.02
September	.73	.74	1.01
The year			1.03
1895–96.			
October	.86	.84	.98
November	.85	.82	.96
December	.67	.70	1.04
January	.61	.65	1.05
February	.60	.66	1.09
March	.73	.77	1.05
April	.84	.87	1.03
May	.61	.64	1.05
June	.63	.63	1.01
July	.84	.88	1.05
August	.52	.54	1.04
September	.66	.68	1.04
The year	.70	.73	1.05
1896–97.			
October	.51	.53	1.03
November	.68	.71	1.04
December	.65	.69	1.07
January	.57	.59	1.02
February	.66	.69	1.05
March	.75	.82	1.09

Ratios of discharge of New River at Fayette and of Kanawha River at Kanawha Falls and Lock No. 2, W. Va., for the years ending Sept. 30, 1888–1916—Continued.

[Drainage-area ratios: $\frac{\text{Fayette}}{\text{Kanawha Falls}}=\frac{6800}{8300}=0.82$; $\frac{\text{Fayette}}{\text{Lock No. 2}}=\frac{6800}{8740}=0.80$; $\frac{\text{Kanawha Falls}}{\text{Lock No. 2}}=\frac{8300}{8470}=0.98$.]

Month.	Fayette / Kanawha Falls	Fayette / Lock No. 2	Kanawha Falls / Lock No. 2
1897.			
April	0.71	0.78	1.09
May	.70	.73	1.05
June	.60	.63	1.06
July	.55	.63	1.14
August	.70	.72	1.03
September	.80	.80	1.01
The year	.66	.70	1.06
1897–98.			
October	.70	.74	1.05
November	.76	.79	1.04
December	.45	.47	1.05
January	.54	.60	1.10
February	.51	.53	1.04
March	.63	.68	1.07
April	.65	.71	1.10
May	.67	.74	1.10
June	.68	.72	1.06
July	.64	.69	1.08
August	.63	.68	1.08
September	.73	.77	1.06
The year	.62	.67	1.08
1898–99.			
October	.71	.77	1.08
November	.47	.50	1.05
December	.55	.60	1.08
January	.44	.48	1.09
February	.73	.74	1.03
March	.69	.73	1.05
April	.65	.71	1.09
May	.66	.68	1.03
June	.78	.76	.98
July	.81	.78	.96
August	.87	.83	.95
September	.77	.76	.99
The year	.65	.68	1.05
1899–1900.			
October	1.15	1.20	1.05
November	.89	.88	.98
December	.77	.76	.98
January	.62	.61	.98
February	.42	.43	1.02
March	.43	.44	1.01
April	.73	.74	1.02
May	.68	.66	.97
June	.82	.81	.99
July	.69	.68	1.00
August	.70	.67	.95
September	1.19	1.22	1.03
The year	.63	.63	1.00
1900–1901.			
October	1.25	1.29	1.03
November	.80	.81	1.01
December	.86	.85	.99
January	.67	.67	1.00
February	.59	.58	.99
March	.65	.67	1.03
April	1.01	1.02	1.03
May	.86	.87	1.01
1901.			
June			1.04
July			1.05
August			1.09
September			1.01
The year			1.02
1901–2.			
October			.96
November			.97
December			.96
January			.95
February			.98
March			.99
April			.98
May			.95
June			.94
July			.94
August	0.75	0.70	.94
September	.89	.88	.99
The year			.97
1902–3.			
October	.75	.75	1.00
November	.65	.65	.99
December	.63	.64	1.01
January	.72	.69	.96
February	.70	.71	1.02
March	.77	.76	.98
April	.49	.52	1.06
May	1.31	1.21	.93
June	.91	.91	1.00
July	1.10	1.08	.98
August	1.10	1.11	1.01
September	.70	.74	1.06
The year	.74	.74	1.00
1903–4.			
October	.87	.90	1.03
November	.82	.87	1.06
December	.75	.84	1.11
January	.56	.60	1.07
February	.71	.70	.99
March	.69	.70	1.01
April	.65	.62	.97
May	.72	.71	.99
June	.82	.81	.99
July	.79	.81	1.03
August	.84	.91	1.08
September	.89	.91	1.02
The year	.72	.73	1.01
1904–5.			
October	1.00	.90	.90
November	.94	.86	.92
December	.74	.74	1.00
January			1.01
February			1.02
March			1.00
April			.93
May			.97
June			.88
July			.96

Ratios of discharge of New River at Fayette and of Kanawha River at Kanawha Falls and Lock No. 2, W. Va., for the years ending Sept. 30, 1888–1916—Continued.

[Drainage-area ratios: $\frac{\text{Fayette}}{\text{Kanawha Falls}}=\frac{6800}{8300}=0.82$; $\frac{\text{Fayette}}{\text{Lock No. 2}}=\frac{6800}{8740}=0.80$; $\frac{\text{Kanawha Falls}}{\text{Lock No. 2}}=\frac{8300}{8470}=0.98$.]

Month.	Fayette / Kanawha Falls	Fayette / Lock No. 2	Kanawha Falls / Lock No. 2
1905.			
August			0.93
September			.93
The year			.97
1905–6.			
October			.96
November			.99
December			.98
January			1.03
February			.96
March			1.00
April			1.02
May			1.00
June			1.01
July			1.05
August			1.05
September			1.02
The year			1.01
1906–7.			
October			1.03
November			1.03
December			1.01
January			1.01
February			1.03
March			1.10
April			1.03
May			.96
June			.99
July			.88
August			.94
September			.95
The year			1.01
1907–8.			
October			.94
November			.99
December			1.00
January			.97
February			.97
March			.98
April			.99
May			.97
June			.91
July			.95
August	1.02	0.91	.89
September	1.05	.97	.93
The year			.97
1908–9.			
October	1.14	1.07	.94
November	1.05	.92	.87
December	.91	.87	.95
January	.84	.80	.98
February	.74	.75	1.00
March	.81	.79	.98
April	.77	.73	.95
May	.84	.82	.98
June	.87	.82	.94
July	.87	.82	.94
August	.92	.88	.95
September	.91	.95	1.04
The year	.84	.81	.96
1909–10.			
October	0.85	0.88	1.03
November	.72	.73	1.01
December	.81	.84	1.03
January	.68	.70	1.03
February	.73	.74	1.01
March	.79	.80	1.02
April	.72	.74	1.03
May	.67	.66	.99
June	.81	.82	1.01
July	.75	.77	1.03
August	.86	.92	1.07
September	.74	.80	1.09
The year	.75	.77	1.02
1910–11.			
October	.84	.89	1.06
November	.72	.75	1.04
December	.62	.65	1.05
January	.70	.69	.99
February	.78	.78	1.00
March	.77	.80	1.04
April	.82	.83	1.02
May	.82	.78	.95
June	.82	.86	1.05
July	.80	.84	1.05
August	.92	.95	1.04
September	.67	.75	1.12
The year	.76	.78	1.02
1911–12.			
October	.71	.71	1.00
November	.74	.72	.96
December	.81	.79	.97
January	.78	.78	1.00
February	.74	.73	.99
March	.89	.86	.97
April	.83	.80	.97
May	.80	.78	.97
June	.94	.84	.90
July	.66	.64	.97
August	.59	.58	.98
September	.81	.81	1.00
The year	.79	.77	.97
1912–13.			
October	.74	.73	.99
November	.62	.60	.97
December	.56	.54	.96
January	.73	.71	.99
February	.71	.70	.98
March	.78	.77	.99
April	.79	.76	.96
May	.78	.75	.97
June	.75	.74	.98
July	.73	.70	.96
August	.81	.84	1.04
September	.86	.90	1.04
The year	.75	.74	.98
1913–14.			
October	.64	.66	1.03
November	.61	.58	.95
December	.69	.67	.98
January	.74	.73	.99

Ratios of discharge of New River at Fayette and of Kanawha River at Kanawha Falls and Lock No. 2, W. Va., for the years ending Sept. 30, 1888–1916—Continued.

[Drainage-area ratios: $\frac{\text{Fayette}}{\text{Kanawha Falls}}=\frac{6800}{8300}=0.82$; $\frac{\text{Fayette}}{\text{Lock No. 2}}=\frac{6800}{8740}=0.80$; $\frac{\text{Kanawha Falls}}{\text{Lock No. 2}}=\frac{8300}{8470}=0.98$.]

Month.	Fayette / Kanawha Falls	Fayette / Lock No. 2	Kanawha Falls / Lock No. 2	Month.	Fayette / Kanawha Falls	Fayette / Lock No. 2	Kanawha Falls / Lock No. 2
1914.				1915.			
February	0.79	0.78	0.98	July	0.62	0.72	1.15
March	.75	.74	.99	August	.77	.93	1.20
April	.70	.69	.99	September	.80	.91	1.14
May	.73	.73	1.00				
June	.91	.97	1.06	The year	.83	.87	1.04
July	.93	1.03	1.11				
August	.87	.96	1.10	1915–16.			
September	.90	1.01	1.13	October	.80	.78	.98
				November	.68	.68	1.00
The year	.73	.73	1.00	December	.78	.81	1.04
				January	.75	.77	1.03
1914–15.				February	.76	.77	1.01
October	.88	.98	1.11	March	.70	.70	.99
November	.88	.93	1.07	April	.72	.74	1.03
December	.87	.91	1.06	May	.67	.71	1.06
January	.96	.96	1.01	June	.69	.75	1.08
February	.79	.80	1.02	July	.93	.90	.96
March	.78	.80	1.02	August	.84	.85	1.01
April	.76	.75	1.00	September	.85	.87	1.03
May	.80	.83	1.04				
June	.70	.70	1.01	The year	.77	.78	1.01

NEW RIVER AT FAYETTE, W. VA.

LOCATION.—At highway bridge connecting Fayette and South Fayette, Fayette County, 850 feet above mouth of Wolf Creek.

DRAINAGE AREA.—6,800 square miles.

RECORDS AVAILABLE.—July 26, 1895, to May 31, 1901; August 11, 1902, to December 31, 1904; July 20, 1908, to September 30, 1916.

GAGE.—Chain gage attached to bridge. Elevation of the zero of gage, 838.44 feet above sea level. The original gage installed in 1895 was of the wire type and was used until November 20, 1903, when it was replaced by a chain gage.

DISCHARGE MEASUREMENTS.—Made from upstream side of bridge. Rough section; accurate determination of discharge difficult.

CHANNEL AND CONTROL.—Bed composed of rock strewn with large boulders which cause boils and eddies, probably permanent.

EXTREMES OF DISCHARGE.—The flood of 1878 reached a stage of about 53 feet, (discharge, about 280,000 second-feet). Minimum stage recorded, −0.6 foot October 9, 1904 (discharge, about 1,330 second-feet).

ICE.—Discharge relation seldom affected by ice.

DIVERSIONS.—None.

REGULATION.—There may be some regulation due to operation of power plants at or below Fries, Va.

ACCURACY.—Stage-discharge relation is considered permanent during entire record. Rating curve is based principally on 31 discharge measurements made during 1908 to 1915 and is well defined between 1,600 and 150,000 second-feet. Measurements made in some years, as 1908, differ from the rating curve but it was deemed best to use only one rating curve because of the probable permanency of the control and the difficulty of making accurate discharge measurements. Gage read twice daily to hundredths for the most

part. Daily discharge ascertained by applying mean daily gage height to tenths to the rating table except as noted. Gage height used to tenths although gage was read to hundredths, as the resulting daily discharge was within the assumed limiting error of 2 per cent. Allowance for errors in the recorded gage height has been made in applying the rating table. The following adjustments, based on studies of records at other gaging stations in the New-Kanawha basin, particularly at Radford, Alderson, Hinton, Belva, Kanawha Falls, and Lock No. 2, were made:

Discharge July 26–28, 1895, estimated from roughly approximate gage reading July 26. The week of October 19, 1895, gage observer noted, "Water very clear, can see bottom. Center of river full of large rocks." January 1 to August 13, 1896, original gage heights reduced 0.4 foot.

December 10–17, 1896, discharge estimated. August 1 to September 18, 1897, original gage heights reduced 0.1 foot. September 19–30, 1897, gage heights reduced 0.2 foot.

October 1 to November 5, 1897, gage heights reduced 0.2 foot. November 11 and 12, 1897, gage heights increased 1.0 foot. June 1 to August 31, 1898, gage heights reduced 0.1 foot. September 1–30, 1898, gage heights reduced 0.2 foot.

October 1 to December 22, 1898, original gage heights reduced 0.2 foot.

September 28–30, 1899, gage heights interpolated from records at Hinton.

Discharge November 25, 27–30, December 1–20, 22, 23, 1900, April 21–30, May 1–4, and 23–31, 1901, estimated from records for Hinton and Kanawha Falls. Gage was carried away by high water in November. Discharge during the latter half of September, 1900, appears high as compared with that at Hinton, Kanawha Falls, and Lock No. 2, but no adjustment was made.

Discharge during low water in September and October, 1908, appears large as compared with that at Kanawha Falls but this may be due to the fact that the discharge measurements made in 1908 plot small of the rating curve used. The ratios of monthly discharge August to December, 1908, appear discordant but there is no basis for adjustments because records at Fayette are backed by discharge measurements while records at Kanawha Falls and Lock No. 2 are consistent with each other. Considering the discharge at Fayette plus the discharge at Belva as compared with that at Kanawha Falls and Lock No. 2, the apparent disagreement is not serious.

Discharge, December 10–12, 1908, February 22–27, and July 8–10, 1909, estimated from discharges at Kanawha Falls and Belva.

Discharge, November 8–13, 1909, estimated from that at Kanawha Falls and Belva.

Mean discharge January 8–18, 1911, estimated 3,000 second-feet and February 7–17, 1911, estimated 4,200 second-feet because of ice, from weather records and discharge at Belva, Kanawha Falls, and Lock No. 2.

Daily discharge, July, 1913, to September, 1914, is not published because the daily discharge as computed from the recorded gage readings is in error as compared with that obtained from the records at Kanawha Falls, Belva, Radford, and Alderson. The daily gage heights were published in Water-Supply Papers 353 and 383. Monthly discharges from July, 1913, to September, 1914, were estimated. Discharge December 6, 1914, Janaury 7, 8, 9, 18, February 3, 4, 5, June 13, August 8 and 15, 1915, estimated from records of other stations. Discharge October 30, 31, December 12, 1915, January 9, July 9, and September 24, 1916, estimated.

Records at Fayette are good; those from 1908 to 1916 better than those from 1895 to 1905. From 1895 to November 19, 1903, the wire gage was frequently in error but the adjustments noted under "Daily discharge" have materially reduced the effects of such errors. The ratios of monthly discharge are a rough index of the accuracy of the results. This is one of the most reliable long-time records in the drainage basin.

RATIOS.—The table on pages 44–47 contains ratios of monthly and yearly discharge at Fayette, Kanawha Falls, and Lock No. 2. Reference is made to ratios for 1908 under "Daily discharge." See discussion which accompanies table.

Discharge measurements of New River at Fayette, W. Va., from 1895 to 1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1895.		*Feet.*	*Sec.-ft.*	1908.		*Feet.*	*Sec.-ft.*
July 29	C. C. Babb	4.07	7,130	Aug. 13	W. G. Hoyt	3.24	4,780
Sept. 4	D. C. Humphreys	1.71	3,030	14	do	3.09	4,270
				Sept. 19	Wm. M. O'Neill	1.32	2,540
1896.				21	do	1.5	2,730
June 10	do	4.05	5,310	21	do	1.24	2,530
July 23	do	4.25	5,080				
Aug. 13	do	2.32	3,450	1909.			
Dec. 18	do	7.48	13,700	Apr. 2	H. J. Jackson	6.94	13,000
				14	do	8.11	17,100
1897.				June 26	do	4.24	6,820
Mar. 31	do	5.50	9,590	Nov. 20	A. H. Horton	1.30	2,660
May 5	F. H. Anschutz	8.50	15,900	20	do	1.30	2,680
15	do	13.98	35,200	Dec. 1	G. L. Parker	1.10	2,390
31	A. P. Davis	3.29	5,140				
Oct. 12	F. H. Anschutz	−.18	1,140	1910.			
Nov. 5	D. C. Humphreys	1.72	2,620	Mar. 7	Horton and Bailey	6.88	13,000
				7	do	6.90	12,900
1898.				28	C. T. Bailey	2.68	4,340
June 25	do	2.60	3,490	June 18	H. J. Jackson	16.02	46,700
Aug. 5	do	9.15	19,000	18	do	14.68	40,900
5	do	10.06	21,100	19	do	11.17	26,800
6	do	13.02	31,500	19	do	10.72	25,200
6	do	12.95	32,100	20	do	9.62	21,500
Dec. 22	do	5.94	10,900	20	do	9.05	19,300
				Oct. 12	C. T. Bailey	3.72	5,420
1899.							
June 22	do	3.65	5,100	1912.			
Aug. 14	do	1.80	2,980	Mar. 26	do	13.15	35,100
				Sept. 10	do	.48	2,070
1900.							
Mar. 31	do	8.49	17,400	1913.			
June 29	do	5.58	11,400	Mar. 28	A. H. Horton	33.20	147,000
July 25	do	2.47	4,620	June 19	H. J. Jackson	3.10	4,690
Aug. 20	do	.61	2,280	Nov. 15	Peterson and Walters	6.05	10,400
Dec. 21	do	3.40	5,920				
				1914.			
1901.				Oct. 26	Mathers and Morgan	1.17	2,510
Mar. 27	do	7.54	16,800	Nov. 9	do	.15	1,710
July 30	do	3.55	6,710	10	do	.31	1,780
1902.				1915.			
July 17	do	2.26	4,030	June 17	Ellsworth and Conklin	3.78	6,210
Aug. 14	do	1.10	2,020	Dec. 9	Frosch and Conklin	1.89	3,130
1903.							
Sept. 21	Paul and Sawyer	3.51	3,970	1916.			
Nov. 20	W. C. Sawyer	1.62	3,180	Aug. 19	B. E. Jones	7.47	13,800

Daily discharge, in second-feet, of New River at Fayette, W. Va., for the period ending Sept. 30, 1895–1905 and 1908–1916.

Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.
1895.				1895.				1895.			
1	-------	4,360	3,220	11	-------	3,330	2,900	21	-------	6,310	2,140
2	-------	3,810	3,110	12	-------	3,330	2,900	22	-------	6,490	1,990
3	-------	3,560	3,220	13	-------	3,560	2,900	23	-------	6,310	1,920
4	-------	3,330	3,000	14	-------	3,440	2,700	24	-------	10,000	1,850
5	-------	3,000	2,900	15	-------	3,440	2,500	25	-------	6,680	1,850
6	-------	2,700	2,900	16	-------	3,330	2,310	26	13,000	5,280	1,850
7	-------	2,800	3,000	17	-------	3,110	2,310	27	11,000	4,660	1,850
8	-------	2,900	5,280	18	-------	2,900	2,400	28	9,000	4,960	1,850
9	-------	3,330	4,660	19	-------	12,000	2,310	29	6,490	4,080	1,850
10	-------	3,220	3,330	20	-------	11,500	2,220	30	5,280	4,080	1,850
								31	4,660	5,120	-------

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1895–96.												
1	1,790	1,920	3,110	4,220	5,120	5,280	76,300	10,000	3,810	10,300	6,680	2,400
2	1,730	1,920	3,000	4,960	7,260	4,510	84,000	10,700	3,560	7,460	7,660	2,310
3	1,730	1,990	3,110	7,060	30,600	4,080	70,900	11,200	3,810	5,780	7,060	2,220
4	1,730	2,060	2,400	5,120	27,900	3,440	52,400	12,000	4,080	3,810	6,680	2,140
5	1,730	2,500	2,500	4,080	20,100	3,110	42,400	12,900	4,960	4,080	5,950	2,140
6	1,730	2,700	2,700	3,110	14,400	3,940	25,300	12,000	4,960	4,360	5,610	2,310
7	1,790	2,400	3,110	2,400	13,800	4,660	22,400	10,000	4,660	4,660	4,960	2,500
8	1,850	2,140	2,310	2,310	27,200	5,120	18,100	7,860	4,960	5,440	5,440	3,940
9	1,790	2,060	1,920	2,310	24,600	6,490	15,600	6,870	5,280	51,000	5,280	3,680
10	1,790	2,220	2,140	3,110	16,800	5,610	12,300	6,680	5,610	86,800	4,960	3,330
11	1,850	2,140	2,500	4,080	8,710	4,660	10,000	6,130	4,660	38,400	4,360	2,800
12	1,850	2,700	2,700	3,810	5,950	5,120	9,590	5,610	4,080	36,400	4,080	2,500
13	1,990	2,700	2,800	3,940	6,130	5,950	9,150	4,960	4,960	33,200	3,680	2,500
14	1,990	3,330	3,110	3,330	14,700	7,460	8,490	4,510	4,080	28,700	3,560	2,500
15	1,920	3,220	2,400	3,560	23,800	9,590	7,860	4,510	3,680	15,900	3,940	2,220
16	1,850	2,800	2,140	3,220	18,100	25,000	7,460	4,660	3,440	12,000	3,810	2,700
17	1,920	2,600	1,990	3,000	13,500	40,200	7,060	4,360	3,330	7,460	3,680	2,600
18	1,850	2,500	1,990	2,900	7,460	44,100	6,870	4,080	3,560	5,280	3,560	2,500
19	1,850	2,310	1,850	2,900	6,870	40,600	6,310	4,360	4,080	5,780	3,110	2,310
20	1,790	2,400	2,600	3,220	5,950	32,500	5,950	4,360	4,360	6,310	2,700	2,220
21	1,670	2,400	2,400	3,440	3,940	26,800	6,130	4,810	4,660	8,270	2,500	2,220
22	1,610	2,220	2,600	3,000	3,110	25,000	6,490	5,280	5,280	8,930	2,700	2,220
23	1,510	2,400	22,100	3,330	4,510	22,100	6,870	4,960	5,610	7,460	3,110	2,140
24	1,410	2,500	20,700	3,560	5,780	19,400	7,460	9,150	6,310	5,780	2,800	2,310
25	1,730	2,310	10,000	13,800	6,680	17,500	7,660	8,270	7,860	6,310	3,440	2,400
26	1,730	2,310	6,130	21,700	7,060	15,600	7,460	7,460	10,300	6,490	3,810	2,400
27	1,790	2,140	6,680	15,300	6,130	13,500	8,060	5,780	17,800	5,950	4,220	2,310
28	1,850	2,220	4,660	13,800	6,130	11,000	8,270	5,610	15,000	6,130	3,810	2,060
29	1,850	3,940	4,360	11,200	5,610	13,200	9,150	4,960	13,800	6,490	3,560	2,140
30	1,730	3,330	4,080	7,260	-------	56,300	9,590	4,360	12,000	6,310	3,110	4,960
31	1,850	-------	3,810	5,610	-------	82,900	-------	4,080	-------	7,060	2,600	-------
1896–97.												
1	41,900	2,500	33,200	4,360	3,220	13,800	10,500	6,870	4,960	3,560	6,310	2,310
2	20,700	2,310	28,300	3,680	3,330	12,000	9,370	6,870	5,610	4,960	4,810	2,220
3	10,500	2,600	16,500	3,330	3,560	11,500	8,270	15,600	5,610	5,610	4,220	2,140
4	7,260	3,560	14,400	5,120	4,660	10,500	10,300	21,100	5,440	7,260	3,680	2,140
5	5,280	13,200	10,000	5,610	6,870	11,000	13,200	20,100	5,120	7,360	3,810	2,140
6	4,810	51,900	8,930	4,960	11,800	11,800	13,500	14,700	5,120	6,490	4,360	1,990
7	4,080	34,800	8,270	5,440	50,000	13,800	22,100	11,800	7,660	5,780	4,220	1,850
8	3,330	11,800	7,460	6,310	38,400	14,400	26,800	11,000	8,270	7,860	4,220	1,850
9	2,700	15,000	7,060	5,440	18,100	15,300	15,600	8,710	10,500	5,950	7,260	1,790
10	3,220	11,200		5,280	10,500	30,200	16,500	8,710	12,000	5,440	6,130	1,730
11	2,900	7,860		4,660	11,500	46,800	22,100	7,860	11,000	5,280	4,510	1,730
12	3,000	4,660		4,510	20,100	29,000	17,800	10,500	8,710	5,950	3,810	1,670
13	3,440	4,960	12,000	3,810	36,800	38,000	16,200	10,700	8,270	5,440	3,440	1,560
14	4,360	5,440		3,330	41,000	43,200	13,800	69,900	7,460	4,660	3,330	2,140
15	5,120	5,610		3,680	38,000	53,400	11,500	47,300	5,610	3,810	3,220	2,060
16	4,660	5,610		3,440	34,800	50,500	10,700	26,400	5,280	3,220	2,800	1,990
17	4,360	4,960		3,810	23,100	45,500	11,200	16,800	5,950	3,330	2,500	2,140
18	3,330	4,510	14,700	4,360	22,400	34,000	10,500	14,700	5,440	3,560	2,500	2,140
19	2,400	3,810	11,200	4,660	19,400	38,400	10,000	12,000	4,810	3,560	2,500	2,060
20	2,140	3,810	9,590	5,280	20,100	31,300	9,150	9,810	7,060	3,810	2,600	1,790
21	1,920	4,080	8,270	6,310	67,200	27,900	8,710	9,150	7,860	4,510	3,000	1,790
22	1,850	4,510	7,460	7,260	101,000	23,800	7,860	8,270	8,710	9,370	3,110	1,790
23	1,920	4,660	6,310	7,660	110,000	21,400	7,260	7,460	9,150	16,500	3,110	1,510
24	2,700	4,660	5,780	6,310	84,000	20,100	6,680	6,490	6,310	28,300	2,900	1,790
25	2,600	4,220	4,660	5,950	57,800	18,400	6,490	6,310	5,280	22,800	2,900	1,790
26	2,500	4,220	4,360	4,510	28,700	16,800	6,310	5,950	4,960	21,100	3,110	1,850
27	2,310	4,220	4,080	3,680	16,800	13,200	5,950	5,120	4,810	16,800	3,000	1,990
28	2,060	4,810	4,360	3,330	15,600	12,300	5,780	5,120	4,080	15,600	3,110	1,990
29	2,700	14,400	4,510	2,900	-------	12,000	5,610	6,130	3,810	12,300	2,800	1,850
30	1,990	17,200	3,940	2,700	-------	11,500	5,440	5,950	3,810	8,930	2,500	1,670
31	2,600	-------	4,220	2,900	-------	11,200	-------	5,780	-------	6,680	2,500	-------

Daily discharge, in second-feet, of New River at Fayette, W. Va., for the period ending Sept. 30, 1895–1905 and 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1897–98.												
1	1,560	2,500	1,850	3,810	6,310	4,660	44,100	6,490	6,490	2,500	7,060	3,560
2	1,510	2,700	1,850	3,560	5,120	4,360	29,000	5,950	5,280	2,400	7,060	3,330
3	1,510	2,900	2,500	3,560	4,220	4,080	19,100	5,280	4,660	2,310	6,310	3,110
4	1,560	3,000	2,500	3,560	3,330	4,080	16,200	4,660	3,940	2,310	6,490	2,900
5	1,510	3,110	2,310	3,440	2,900	4,080	14,400	4,360	3,330	2,600	21,100	3,220
6	1,510	3,330	2,400	3,560	2,800	4,220	14,100	4,660	3,330	2,500	32,800	16,200
7	1,510	3,810	5,950	3,810	2,900	4,360	12,600	33,200	3,110	2,500	21,100	7,860
8	1,560	2,800	4,660	4,220	2,800	4,360	15,000	42,400	2,700	2,600	13,200	5,950
9	1,560	2,600	4,660	4,360	2,800	4,660	10,700	25,700	2,500	2,900	12,900	5,280
10	1,510	2,500	3,110	5,610	2,700	4,510	10,500	14,400	2,310	2,800	33,600	3,330
11	1,510	2,500	2,700	7,460	4,810	4,360	12,600	10,700	2,310	2,700	61,900	3,330
12	1,510	2,310	2,500	11,500	6,680	4,220	25,700	9,590	2,700	2,700	46,800	3,560
13	1,510	2,140	2,500	12,600	9,150	4,080	22,100	8,270	2,700	2,600	25,300	3,330
14	9,150	2,060	2,600	10,000	7,860	4,080	17,500	7,460	2,600	2,500	19,100	3,110
15	4,360	2,060	3,110	9,590	7,860	4,360	17,500	6,680	2,500	2,500	15,900	2,700
16	2,900	2,060	3,000	14,400	5,780	4,660	23,800	6,870	2,500	2,400	12,300	2,700
17	2,140	1,990	3,110	22,800	4,960	5,610	16,800	7,460	2,700	2,310	9,370	2,400
18	2,060	1,990	5,440	13,200	4,660	6,310	12,600	7,260	3,810	2,220	7,660	2,400
19	1,920	1,850	5,280	12,600	4,360	18,100	10,500	7,060	8,930	4,510	6,870	2,400
20	1,850	1,850	4,960	10,700	4,810	17,200	9,810	6,870	16,200	4,810	6,490	2,310
21	1,730	1,850	4,660	6,680	9,150	12,300	8,930	6,310	11,000	5,120	6,130	2,310
22	1,790	1,850	5,280	10,000	11,000	10,500	8,270	5,950	10,300	3,440	6,130	2,310
23	5,950	1,730	8,710	10,700	9,810	12,600	6,870	27,900	7,660	3,220	5,120	2,310
24	3,560	1,670	6,680	12,300	8,490	14,400	7,260	37,600	4,960	3,220	4,810	4,660
25	2,600	1,730	5,950	16,500	7,060	18,100	7,460	27,200	3,940	3,810	4,510	20,100
26	2,220	1,730	4,810	14,400	5,610	23,500	8,490	19,700	3,440	8,490	3,940	15,900
27	2,140	1,610	3,810	19,100	5,280	22,800	8,710	13,200	3,110	7,660	3,680	12,600
28	2,140	1,610	3,810	18,100	4,810	13,800	8,270	10,500	2,800	6,870	3,810	8,490
29	2,060	1,730	3,220	13,200	-------	22,800	7,460	9,150	2,700	7,260	4,810	7,060
30	1,990	1,730	3,440	9,150	-------	37,600	7,060	9,150	2,600	7,260	4,960	3,940
31	2,220	-------	3,330	8,270	-------	55,300	-------	7,860	-------	7,260	4,810	-------
1898–99.												
1	3,330	6,310	7,860	7,060	7,060	40,600	17,500	12,600	11,200	5,440	3,810	4,220
2	3,220	6,310	6,870	6,870	8,270	19,400	17,500	11,000	11,500	4,660	3,680	2,900
3	3,110	6,310	6,310	6,490	11,500	28,300	11,800	10,500	10,500	4,960	3,560	2,800
4	2,900	6,490	6,310	6,490	13,800	63,500	10,700	10,000	9,370	4,660	3,810	3,220
5	2,900	3,680	5,950	6,310	38,900	124,000	9,370	9,810	8,270	3,810	3,560	3,560
6	10,500	3,810	13,800	10,300	69,900	90,800	10,000	10,000	7,460	3,810	3,560	3,440
7	16,200	5,950	10,500	34,000	81,800	60,400	14,700	9,590	4,960	3,560	3,330	3,330
8	11,500	5,780	11,000	23,100	51,900	38,000	16,500	15,000	4,960	3,560	3,110	2,700
9	6,310	5,950	7,860	11,800	39,700	35,200	13,500	31,700	4,960	3,440	2,700	2,600
10	5,280	6,130	5,950	8,710	22,800	23,100	13,200	30,600	4,660	3,330	2,700	2,700
11	5,120	5,950	4,810	16,500	17,200	21,100	13,800	16,500	4,660	3,330	2,700	2,700
12	4,960	5,950	4,960	14,700	11,800	19,400	22,100	22,800	4,660	3,220	2,600	2,700
13	4,510	5,610	4,960	14,400	10,700	16,800	16,200	16,800	12,600	3,330	2,700	2,600
14	4,360	5,780	4,960	11,500	8,930	16,500	15,000	19,100	28,700	3,110	2,700	2,600
15	3,810	5,780	4,960	11,000	7,260	17,500	13,200	25,300	29,400	2,700	2,800	2,500
16	3,810	5,280	4,960	10,000	6,870	16,800	12,600	21,100	23,800	2,700	3,440	2,500
17	3,560	5,120	4,960	9,370	7,060	24,600	12,000	16,200	13,200	2,600	4,220	2,500
18	3,440	4,960	4,810	8,270	11,800	23,100	12,000	12,000	10,500	2,700	3,560	2,500
19	3,330	4,960	6,680	7,860	12,600	42,400	10,500	10,500	8,930	2,700	2,700	2,500
20	29,400	9,590	11,200	7,060	11,000	66,700	9,590	9,590	8,270	2,700	2,700	2,500
21	28,300	15,900	15,900	6,490	20,700	54,400	9,370	8,710	7,060	3,110	2,600	2,400
22	37,600	13,800	13,200	6,680	27,200	27,900	9,150	8,270	6,490	3,220	2,500	2,500
23	72,000	8,930	14,400	9,590	23,100	17,200	9,150	8,270	5,440	3,110	2,500	2,400
24	38,900	9,150	19,400	9,150	21,100	16,200	8,930	7,860	4,960	2,800	2,400	2,310
25	18,800	9,150	12,000	8,060	18,100	15,000	8,710	7,460	4,810	2,700	2,310	2,500
26	11,500	10,300	10,700	7,860	14,400	11,500	9,150	7,260	4,660	2,700	2,310	2,600
27	8,060	7,460	8,710	7,860	19,400	26,800	17,800	6,490	5,120	2,700	2,220	2,500
28	6,310	7,060	6,490	7,460	66,700	42,400	18,400	6,130	6,680	2,600	2,220	2,500
29	4,960	7,060	6,310	7,260	-------	59,900	15,600	5,950	6,310	5,950	2,140	2,500
30	4,810	6,680	5,610	7,460	-------	38,400	13,500	5,950	5,950	4,660	2,140	2,500
31	4,810	-------	8,490	7,260	-------	19,400	-------	6,870	-------	4,080	4,080	-------

Daily discharge, in second-feet, of New River at Fayette, W. Va., for the period ending Sept. 30, 1895–1905 and 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1899–1900.												
1	2,310	3,110	2,140	4,660	6,310	15,600	16,800	6,870	6,490	12,000	4,660	2,310
2	2,140	3,330	2,140	4,960	5,610	32,100	14,400	6,680	5,280	11,000	3,560	2,310
3	2,140	3,330	2,140	5,280	5,610	16,800	12,600	6,130	4,810	8,930	2,700	2,310
4	2,060	3,110	2,060	4,810	5,440	11,500	11,500	5,950	4,360	6,310	2,310	2,140
5	1,990	3,110	1,990	4,810	5,280	9,590	10,700	5,950	5,950	4,810	2,140	2,140
6	1,990	3,110	1,920	4,660	5,280	6,310	9,590	5,950	5,120	4,220	1,990	2,140
7	1,920	3,110	1,920	4,660	5,120	6,490	8,930	5,610	4,810	4,510	1,790	2,140
8	1,920	3,810	1,850	4,810	4,660	5,950	8,060	5,610	4,360	3,440	1,730	2,140
9	3,330	2,900	1,850	5,280	4,660	5,440	7,660	5,780	3,810	3,110	1,730	1,990
10	3,810	2,700	2,140	5,610	4,960	5,280	8,060	5,950	3,680	2,800	1,610	2,140
11	3,810	2,500	2,310	6,490	5,280	6,130	7,660	6,870	3,560	2,500	2,310	2,140
12	4,080	2,500	2,310	7,060	6,310	6,310	6,870	7,060	3,330	2,310	1,990	2,220
13	4,080	2,500	3,000	11,000	6,680	6,310	6,490	6,310	4,960	2,140	1,850	2,140
14	4,080	2,400	21,100	9,150	27,200	6,310	6,680	5,610	5,280	2,140	1,730	2,310
15	3,810	2,400	17,200	8,930	21,400	8,490	6,490	5,280	5,120	1,990	1,730	2,140
16	3,810	2,310	7,460	8,270	13,200	10,000	5,780	4,660	16,200	1,990	1,730	2,310
17	3,680	2,310	4,960	7,660	5,280	10,000	5,440	4,660	23,500	1,990	1,730	11,000
18	3,560	2,310	4,660	7,060	5,610	11,000	5,120	4,220	25,700	1,990	1,730	15,600
19	3,440	2,310	4,360	6,870	6,490	15,600	5,780	6,870	23,800	2,140	1,730	10,500
20	3,440	2,310	4,360	9,150	6,310	24,200	23,100	6,680	17,200	2,310	1,850	9,150
21	3,330	2,220	4,660	18,800	8,490	36,400	17,500	6,130	12,000	2,310	1,730	8,270
22	3,330	2,220	4,810	11,500	9,150	31,300	15,900	7,060	10,700	2,140	1,850	7,460
23	3,330	2,220	4,960	7,060	14,100	22,400	21,700	6,130	10,000	1,990	1,850	6,870
24	3,110	2,310	4,660	4,960	12,000	14,400	20,100	5,120	9,590	3,440	1,990	4,360
25	3,110	2,310	5,280	5,610	9,590	10,500	15,300	5,950	9,150	4,220	2,140	3,940
26	3,000	2,400	5,950	5,280	10,700	8,710	12,300	11,500	8,270	4,510	2,310	3,330
27	3,000	2,400	6,490	5,440	8,930	8,060	10,500	10,000	7,860	8,270	2,500	2,700
28	2,900	2,310	7,060	5,610	6,680	14,700	9,150	8,490	7,260	11,000	2,700	2,500
29	2,900	2,310	4,660	5,950	-------	21,400	8,060	7,060	8,930	11,800	2,900	2,500
30	3,000	2,140	4,510	6,680	-------	18,100	7,260	6,310	12,600	8,270	3,330	3,220
31	2,900	-------	4,360	6,310	-------	17,800	-------	7,660	-------	5,950	2,700	-------
1900–1901.												
1	2,400	5,440	15,000	5,610	7,660	7,260	19,100	19,000	-------	-------	-------	-------
2	2,310	5,780	12,000	5,120	7,060	8,270	26,800	18,000	-------	-------	-------	-------
3	2,140	4,660	10,000	5,280	6,680	8,710	40,200	16,000	-------	-------	-------	-------
4	2,140	4,360	11,000	5,610	6,490	8,930	71,500	14,000	-------	-------	-------	-------
5	2,140	4,080	50,000	5,950	5,950	8,490	47,700	11,500	-------	-------	-------	-------
6	2,400	4,510	40,000	5,610	5,440	8,270	44,100	10,500	-------	-------	-------	-------
7	2,400	4,960	30,000	5,440	5,780	7,860	38,900	9,810	-------	-------	-------	-------
8	2,700	5,280	22,000	7,860	6,680	7,660	32,100	11,000	-------	-------	-------	-------
9	3,000	5,950	20,000	11,000	7,860	8,270	29,400	13,500	-------	-------	-------	-------
10	3,110	6,310	18,000	19,100	8,490	9,370	22,800	17,800	-------	-------	-------	-------
11	2,900	5,950	16,000	21,100	9,590	12,300	20,100	19,400	-------	-------	-------	-------
12	2,700	5,610	14,000	29,800	10,500	29,000	14,400	21,400	-------	-------	-------	-------
13	2,700	5,280	13,000	26,400	9,590	33,200	13,800	19,400	-------	-------	-------	-------
14	3,330	5,280	12,000	20,400	9,150	26,100	14,400	17,200	-------	-------	-------	-------
15	3,560	4,810	11,000	16,800	8,270	16,500	36,000	14,700	-------	-------	-------	-------
16	3,330	4,660	10,000	14,400	5,950	7,660	41,000	13,800	-------	-------	-------	-------
17	3,110	4,220	9,000	12,000	5,610	7,060	61,400	11,500	-------	-------	-------	-------
18	4,660	3,940	8,000	9,810	5,440	5,950	74,200	9,810	-------	-------	-------	-------
19	4,960	3,810	7,000	8,060	5,120	5,440	96,000	10,500	-------	-------	-------	-------
20	4,660	3,680	6,000	6,130	4,660	4,960	105,000	12,600	-------	-------	-------	-------
21	4,960	4,810	5,280	5,120	4,360	4,810	146,000	15,900	-------	-------	-------	-------
22	4,960	7,060	4,600	4,660	4,510	4,360	97,000	69,900	-------	-------	-------	-------
23	4,510	10,000	4,200	4,510	4,660	4,220	70,000	150,000	-------	-------	-------	-------
24	46,800	12,000	3,940	4,510	4,960	4,660	53,000	75,000	-------	-------	-------	-------
25	56,800	20,000	4,360	5,280	5,120	6,310	45,000	40,000	-------	-------	-------	-------
26	35,200	94,200	4,660	5,780	5,610	7,660	37,000	35,000	-------	-------	-------	-------
27	22,800	120,000	4,960	6,680	5,950	19,100	40,000	70,000	-------	-------	-------	-------
28	11,800	45,000	5,440	8,060	6,680	19,400	33,000	90,000	-------	-------	-------	-------
29	8,270	25,000	6,130	8,490	-------	18,400	28,000	70,000	-------	-------	-------	-------
30	7,860	18,000	6,130	9,370	-------	16,500	25,000	50,000	-------	-------	-------	-------
31	6,310	-------	6,490	8,490	-------	14,400	-------	35,000	-------	-------	-------	-------

Daily discharge, in second-feet, of New River at Fayette, W. Va., for the period ending Sept. 30, 1895–1905 and 1908–1916—Continued.

Day.	Aug.	Sept.	Day.	Aug.	Sept.	Day.	Aug.	Sept.
1902.			1902.			1902.		
1		1,670	11	2,500	1,730	21	2,700	1,610
2		1,670	12	2,500	2,310	22	2,310	1,670
3		1,610	13	2,400	3,000	23	1,730	1,730
4		1,610	14	2,400	2,310	24	2,140	1,730
5		1,670	15	2,310	2,400	25	2,060	1,850
6		1,920	16	2,310	2,600	26	2,060	1,730
7		2,500	17	2,140	1,920	27	1,920	1,790
8		2,220	18	1,990	1,790	28	1,790	1,610
9		2,400	19	2,140	1,670	29	1,730	2,400
10		1,790	20	2,500	1,610	30	1,920	2,500
						31	1,790	

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1902–3.												
1	2,140	2,600	6,490	10,700	16,200	75,200	8,060	21,100	6,310	10,500	8,270	2,220
2	1,990	2,220	6,310	17,500	13,200	51,500	10,300	16,800	7,060	7,660	10,500	2,220
3	1,990	2,060	11,200	52,400	14,400	30,600	9,150	16,500	6,310	5,950	9,810	2,310
4	2,310	1,990	12,000	42,800	28,700	19,400	8,270	14,400	5,610	6,310	6,680	2,310
5	2,400	1,790	13,200	15,000	54,800	16,200	7,460	14,400	6,490	6,310	7,460	2,310
6	2,220	2,060	10,500	6,870	26,800	12,300	6,490	15,000	7,260	5,610	7,860	2,220
7	6,870	2,060	11,000	7,860	20,400	11,200	9,150	14,400	15,600	5,280	8,490	2,310
8	4,220	2,060	9,370	6,490	16,200	16,500	17,500	14,700	14,100	5,120	8,060	2,400
9	3,110	2,600	7,660	6,310	13,800	19,400	27,200	16,500	11,000	4,810	6,490	2,600
10	2,500	2,600	6,680	5,950	11,500	27,500	16,500	16,800	10,500	4,810	5,950	2,500
11	2,140	2,400	5,440	5,610	9,150	26,400	13,200	16,200	8,490	4,960	3,810	2,400
12	2,140	2,310	5,120	4,810	17,200	25,700	8,060	14,700	7,860	7,260	3,560	2,310
13	2,140	2,140	6,490	4,960	26,400	23,800	5,950	14,400	7,460	13,200	3,440	2,600
14	2,310	2,060	16,200	4,510	20,100	21,100	15,900	13,200	8,270	16,800	3,330	2,500
15	3,560	1,990	19,100	4,360	23,500	20,400	21,100	11,200	8,270	19,400	3,440	2,400
16	3,330	1,990	19,100	4,360	27,900	16,200	17,500	11,000	6,680	17,200	2,800	2,310
17	2,800	1,990	19,400	5,280	78,500	15,000	13,200	10,500	6,680	15,000	2,600	2,500
18	2,400	1,990	22,400	5,610	52,400	14,700	11,500	8,710	5,950	9,150	2,500	2,700
19	1,850	2,060	17,500	5,950	25,000	10,500	10,300	8,270	4,810	6,310	2,500	2,600
20	1,990	2,600	12,900	7,060	19,700	8,710	9,370	6,680	4,960	5,780	2,500	2,500
21	1,990	4,360	9,370	8,270	18,400	7,860	9,150	6,490	4,960	5,440	2,400	2,400
22	1,920	3,560	7,860	6,680	18,100	8,270	10,500	6,490	4,660	5,280	2,310	3,000
23	1,730	2,900	7,660	7,060	13,200	79,600	8,930	6,490	5,120	4,960	2,400	2,140
24	1,730	2,700	9,370	9,150	11,800	137,000	8,270	6,310	6,310	3,330	2,310	2,060
25	1,790	2,800	8,270	7,460	8,930	56,300	10,700	5,120	5,780	3,330	2,400	1,990
26	1,730	3,940	7,060	10,500	7,460	22,800	16,800	4,660	6,130	3,330	2,500	1,990
27	1,730	4,660	6,310	17,500	13,200	16,200	48,200	3,810	6,310	2,800	2,600	2,060
28	1,730	8,930	4,510	20,400	21,400	13,500	27,200	3,440	9,150	2,800	2,500	1,990
29	1,790	8,490	3,940	22,800		12,600	23,500	3,330	21,700	3,440	2,500	1,920
30	1,990	6,130	3,810	34,000		10,500	24,200	3,440	12,000	5,120	2,310	1,850
31	2,900		3,680	30,200		8,710		5,610		7,460	2,310	
1903–4.												
1	1,920	1,850	1,730	2,900	2,600	16,200	6,680	13,800	5,950	17,200	4,080	1,990
2	1,850	1,990	1,670	3,220	2,500	21,400	7,860	10,700	8,270	13,800	3,110	2,140
3	1,850	2,060	1,610	3,330	2,900	16,800	8,930	8,710	20,700	7,460	2,900	2,140
4	1,920	1,990	2,220	3,220	2,800	15,000	7,660	7,660	21,400	6,310	4,810	2,900
5	1,850	2,060	2,310	3,110	3,440	13,500	6,490	8,270	14,400	5,280	4,220	3,560
6	1,850	1,990	2,310	3,220	3,940	11,000	5,780	7,260	10,300	4,660	5,280	3,110
7	1,920	2,310	2,220	3,330	4,080	10,500	5,440	8,490	8,060	5,610	4,080	2,800
8	1,990	3,000	2,310	2,900	7,260	23,100	5,120	7,260	6,870	4,810	5,280	2,400
9	2,060	2,500	2,400	2,700	16,200	31,300	5,280	6,310	6,310	5,120	3,680	1,990
0	4,360	1,990	2,220	2,310	13,200	20,400	5,120	6,130	6,490	4,510	3,560	1,990
11	3,560	1,850	2,140	2,600	8,710	14,400	6,490	7,860	6,870	5,780	3,680	1,990
12	3,220	2,060	1,990	2,700	5,950	11,800	5,780	8,710	6,130	6,310	3,810	1,850
13	3,110	1,990	1,790	2,700	4,360	10,500	5,780	6,870	5,950	5,120	5,610	1,920
14	2,900	1,990	1,730	2,500	3,560	9,810	5,440	5,780	7,060	4,080	4,960	1,850
15	2,500	2,140	1,670	2,400	3,680	9,150	5,440	5,440	5,280	3,560	4,080	1,790
16	2,220	2,060	1,670	2,220	3,110	8,930	5,610	5,120	4,220	2,900	3,440	1,850
17	2,060	2,060	1,610	2,140	3,000	8,270	5,440	5,280	4,810	2,800	3,330	1,850
18	1,850	2,060	1,610	2,140	3,000	7,260	5,280	5,950	4,810	2,700	2,900	1,850
19	1,990	2,060	1,610	2,060	3,000	6,490	5,120	17,200	4,660	2,600	3,810	1,850
20	2,500	2,700	1,610	2,310	3,000	6,310	4,810	35,200	4,810	2,310	3,330	1,730
21	1,990	3,560	1,730	3,110	3,810	6,130	4,510	23,100	5,780	2,220	3,330	1,730
22	2,800	2,900	2,500	3,330	8,710	5,950	4,220	16,200	5,440	2,140	3,110	1,610
23	2,140	2,500	2,500	9,150	25,000	8,270	3,940	12,000	4,810	1,990	2,900	1,610
24	1,670	2,310	2,600	22,800	20,100	14,400	3,940	10,700	4,360	2,600	2,900	1,610
25	1,510	2,310	2,600	14,400	15,900	14,400	3,940	12,600	3,940	2,310	2,700	1,610
26	1,850	2,140	2,500	9,590	11,800	15,300	4,360	11,000	3,330	2,700	2,500	1,610
27	1,990	2,140	2,500	6,310	8,710	13,200	8,930	10,000	3,330	3,000	2,310	1,610
28	1,990	1,990	2,600	4,360	7,860	11,500	23,800	9,150	5,610	3,220	2,140	1,510
19	1,920	1,920	2,700	3,680	10,700	10,300	23,800	7,260	10,700	3,560	2,140	1,560
20	1,790	1,730	2,900	3,000		8,710	18,100	6,310	11,000	3,680	1,990	1,610
31	1,920		2,900	2,700		7,460		6,130		5,280	1,920	

Daily discharge, in second-feet, of New River at Fayette, W. Va., for the period ending Sept. 30, 1895–1905 and 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Day.	Oct.	Nov.	Dec.	Day.	Oct.	Nov.	Dec.
1904.				1904.				1904.			
1	1,560	1,460	1,610	11	1,410	1,790	3,110	21	1,510	1,850	2,310
2	1,560	1,510	1,610	12	1,410	1,670	3,000	22	1,410	1,920	2,140
3	1,510	1,510	1,670	13	1,410	1,670	2,700	23	1,410	1,920	2,060
4	1,510	1,610	1,730	14	1,460	1,730	2,140	24	1,510	1,850	2,140
5	1,410	1,610	1,730	15	1,410	1,790	2,060	25	1,410	1,850	2,400
6	1,410	1,610	2,310	16	1,460	1,990	2,060	26	1,410	1,850	2,500
7	1,410	1,610	3,220	17	1,410	2,500	2,310	27	1,410	1,730	3,560
8	1,370	2,060	4,220	18	1,410	2,310	2,400	28	1,510	1,790	4,960
9	1,330	2,220	4,220	19	1,410	2,140	1,990	29	1,410	1,730	4,660
10	1,410	1,990	3,330	20	1,410	1,990	2,220	30	1,510	1,670	4,220
								31	1,460		3,810

Day.	July.	Aug.	Sept.	Day	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.
1908.				1908.				1908.			
1		5,950	4,960	11		7,460	4,510	21	3,810	3,330	2,500
2		5,780	4,510	12		6,130	3,810	22	3,560	3,220	2,500
3		5,440	4,080	13		5,280	3,330	23	3,680	3,000	2,400
4		4,360	3,680	14		4,360	3,110	24	4,080	3,000	2,400
5		3,680	3,440	15		3,680	2,900	25	6,310	5,610	2,400
6		3,560	3,810	16		3,440	2,900	26	6,130	4,510	2,310
7		3,440	4,810	17		3,440	2,800	27	5,780	22,100	2,310
7		4,080	5,610	18		3,440	2,700	28	9,370	15,600	2,220
9		7,060	5,610	19		3,440	2,700	29	10,000	11,500	2,310
10		8,060	5,780	20	3,680	3,440	2,600	30	8,060	8,270	2,500
								31	6,490	5,780	

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	3,560	23,800	4,360	31,300	6,870	14,400	15,000	35,200	11,500	9,150	5,780	1,990
2	3,220	15,000	4,360	22,400	4,960	12,600	13,200	36,400	11,000	10,500	5,780	2,060
3	2,800	11,500	4,360	16,800	4,660	14,100	14,700	26,400	9,150	10,300	8,710	2,140
4	2,500	11,000	4,660	13,500	5,440	16,800	10,700	20,100	8,270	9,150	8,930	2,310
5	2,400	9,370	5,280	12,900	7,260	17,800	10,000	14,100	18,400	6,490	6,490	2,400
6	2,310	6,680	5,120	33,200	7,460	17,500	9,590	12,000	21,400	25,000	6,130	2,400
7	2,220	6,130	4,960	33,200	7,460	23,800	10,000	10,700	14,400	34,000	5,440	2,400
8	2,310	6,680	5,280	22,100	6,680	26,400	8,710	9,810	11,000	20,000	4,810	2,500
9	2,220	7,260	7,260	16,600	7,660	31,700	7,260	9,150	12,000	14,000	5,280	2,700
10	2,310	7,260	15,000	12,600	11,800	30,900	7,660	13,200	15,000	11,000	4,960	4,660
11	2,600	5,440	9,500	10,500	28,700	27,200	7,060	22,800	15,000	8,270	3,680	5,120
12	13,800	3,680	9,500	8,710	28,700	24,200	6,680	24,200	14,100	6,680	3,330	4,510
13	7,660	3,440	15,900	8,490	18,100	18,100	6,490	18,800	10,700	6,310	3,220	3,810
14	4,810	4,080	14,700	10,300	14,700	15,900	12,600	13,800	10,300	6,130	3,110	3,440
15	3,000	4,810	12,600	10,700	13,800	15,000	49,600	10,700	10,300	5,610	3,680	2,600
16	2,700	4,220	10,300	12,300	13,200	13,500	29,000	9,150	9,370	5,440	4,810	2,800
17	2,700	3,810	8,490	30,900	16,500	12,000	18,800	8,270	8,490	5,120	5,440	3,110
18	2,600	4,080	7,660	26,100	20,400	10,700	15,000	7,460	8,930	4,810	6,310	4,960
19	2,600	4,660	7,060	23,500	18,800	9,370	12,300	6,490	8,710	4,360	6,310	8,710
20	2,700	4,360	7,460	20,400	15,300	8,710	10,700	6,310	8,710	4,220	5,120	10,000
21	2,700	4,080	7,260	17,800	16,500	9,590	10,300	6,490	7,860	3,810	3,810	8,930
22	2,600	3,940	7,060	16,200	19,000	11,500	12,000	24,200	6,680	3,440	3,220	8,270
23	2,600	5,440	7,060	15,600	20,000	12,000	14,700	30,600	5,950	3,330	3,110	4,810
24	2,700	5,610	6,870	14,400	22,000	13,200	17,800	17,800	5,610	3,440	3,000	3,330
25	31,700	5,280	8,490	13,800	24,000	17,200	19,100	16,200	7,460	3,560	2,900	4,660
26	19,700	4,960	16,200	13,500	27,000	30,900	15,300	15,600	6,870	3,440	2,800	4,510
27	12,900	4,660	16,500	12,000	21,000	27,200	11,500	29,000	6,310	3,330	2,700	4,360
28	9,150	4,510	15,600	10,700	17,200	25,700	10,700	26,800	7,860	3,560	2,600	3,560
29	7,660	4,360	14,700	9,810		26,100	15,300	19,100	7,860	3,560	2,400	3,220
30	13,800	4,360	16,200	8,710		25,700	11,000	13,800	8,930	4,360	2,400	2,800
31	27,900		26,400	8,060		20,100		12,300		5,120	2,310	

Daily discharge, in second-feet, of New River at Fayette, W. Va., for the period ending Sept. 30, 1895–1905 and 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1909–10.												
1	2,700	2,700	2,400	1,850	5,950	16,200	3,810	9,150	5,610	5,780	3,440	2,700
2	2,500	2,600	2,400	3,000	5,280	31,300	3,560	8,060	4,660	5,280	3,330	3,810
3	2,400	2,500	2,310	5,120	5,280	27,900	3,560	7,060	4,360	4,810	3,220	10,000
4	2,400	2,500	2,310	8,930	7,460	21,700	4,360	6,310	3,940	7,060	3,110	8,060
5	2,220	2,400	2,310	13,200	9,590	16,800	5,950	5,610	4,220	9,810	3,110	7,260
6	2,220	2,400	2,310	10,500	9,150	13,500	6,870	5,120	14,400	9,810	3,220	6,870
7	2,310	2,400	2,500	17,500	8,270	12,600	5,610	4,960	16,800	10,000	3,440	6,490
8	2,220	2,400	2,400	23,500	5,440	12,600	4,960	4,960	13,200	10,300	3,330	5,440
9	2,310	2,300	2,700	20,100	5,610	11,500	4,360	5,780	9,590	9,810	3,110	4,660
10	2,310	2,200	3,110	13,200	6,680	10,000	4,080	6,680	7,860	10,500	3,000	4,080
11	3,330	2,200	3,680	8,270	6,870	9,370	3,810	7,860	9,810	10,000	3,110	3,560
12	6,870	3,000	3,330	6,490	6,490	8,710	3,940	8,270	20,700	7,460	2,800	3,330
13	15,600	5,000	3,330	5,610	4,960	8,710	5,610	7,660	38,900	6,680	2,700	3,220
14	9,590	3,110	5,610	5,950	4,810	9,150	9,150	7,460	61,400	8,490	2,500	3,220
15	6,490	3,110	21,700	6,310	5,120	8,930	10,700	7,860	48,600	11,200	2,500	3,110
16	6,130	3,000	13,800	5,610	6,870	8,270	9,150	7,060	42,400	9,810	2,500	3,110
17	4,810	3,000	9,370	4,960	14,100	7,660	7,460	6,130	77,400	8,270	2,700	2,900
18	4,810	2,900	6,680	4,960	27,200	6,490	8,270	5,610	46,400	15,600	2,600	2,700
19	4,360	2,800	4,960	13,800	43,700	5,950	11,000	5,780	27,200	21,100	2,500	2,500
20	3,940	2,500	4,080	15,600	26,100	5,610	11,200	5,950	20,100	15,300	2,400	2,400
21	3,560	2,500	3,330	17,200	17,500	5,280	11,500	5,950	19,100	10,000	2,220	2,220
22	3,440	2,500	3,110	35,200	14,700	5,120	13,500	5,950	15,000	7,460	2,220	2,220
23	3,440	2,700	2,500	29,000	15,900	4,960	11,800	5,950	14,400	6,130	2,600	2,220
24	3,680	2,700	2,140	18,100	16,200	4,960	13,800	6,310	13,500	5,280	2,500	2,140
25	3,560	2,800	2,400	12,900	13,200	4,660	13,500	6,870	13,200	4,960	2,600	2,060
26	3,330	2,600	3,110	10,500	10,500	4,360	12,600	7,860	11,000	4,510	2,900	2,140
27	3,220	2,700	2,600	9,370	9,150	4,360	11,500	8,710	10,500	3,940	2,700	2,060
28	3,000	2,700	2,700	9,370	8,490	4,220	12,000	8,060	8,270	3,680	3,110	2,800
29	3,000	2,900	2,700	8,710	-------	4,080	11,800	6,680	7,060	3,560	2,700	3,330
30	2,900	2,500	2,600	7,260	-------	3,940	11,000	6,310	6,490	3,330	2,700	3,680
31	2,800	-------	2,060	6,490	-------	3,810	-------	6,490	-------	3,330	2,500	-------
1910–11.												
1	3,440	2,400	3,810	16,800	36,400	5,950	12,900	9,150	3,810	3,110	1,670	4,660
2	3,000	2,500	3,330	32,100	27,200	6,130	12,600	9,810	3,810	2,800	1,670	7,460
3	2,800	2,500	3,110	41,500	20,700	5,950	16,200	9,590	4,080	2,500	1,610	7,060
4	2,500	2,400	2,600	56,800	15,900	5,780	30,900	8,930	3,810	2,400	1,610	5,610
5	2,400	2,400	2,400	39,700	15,600	5,440	38,900	7,860	3,680	2,500	1,610	3,560
6	2,220	2,310	3,220	25,300	15,300	20,400	54,400	7,060	3,940	3,330	1,670	3,000
7	2,140	2,310	4,510	15,000	12,300	37,200	48,600	6,680	4,220	3,000	2,800	2,800
8	2,310	2,310	5,950	11,000	9,370	26,100	40,600	6,310	4,080	3,330	4,080	2,600
9	4,510	2,220	6,310	9,150	12,900	23,100	40,200	5,780	4,960	3,940	3,330	2,220
10	10,000	2,140	4,660	9,150	17,800	27,900	39,300	5,610	4,960	5,120	2,800	2,140
11	8,060	2,060	3,940	8,710	29,400	36,400	26,400	5,440	4,220	4,510	2,600	2,700
12	5,610	2,140	3,560	7,060	20,400	29,400	20,100	5,280	3,560	4,220	2,310	3,000
13	4,220	2,140	3,560	5,440	16,500	23,500	16,800	5,120	3,440	3,560	2,140	3,110
14	3,560	2,060	3,110	5,610	12,300	18,100	16,200	4,960	3,560	3,330	3,810	2,900
15	3,220	2,060	2,600	12,000	10,500	17,800	17,500	6,490	2,900	3,000	3,330	2,500
16	2,900	1,990	2,310	9,590	8,930	15,300	32,500	7,860	2,800	2,900	2,900	2,310
17	2,700	2,060	1,990	9,150	7,860	12,900	31,700	6,490	2,600	2,900	2,700	2,310
18	2,600	2,140	1,790	8,710	7,060	11,200	22,400	5,280	2,500	2,700	2,500	4,960
19	2,400	2,220	2,900	8,060	6,680	12,000	17,800	4,660	2,600	2,500	2,220	3,940
20	2,400	2,140	3,110	7,660	10,000	14,700	17,500	4,360	2,700	2,310	1,990	3,110
21	2,400	2,220	2,800	7,860	10,500	14,400	22,800	4,080	2,900	2,060	1,850	2,500
22	2,700	2,140	2,500	9,810	9,590	12,900	22,400	3,810	3,110	1,990	1,730	2,310
23	3,110	1,990	2,060	12,000	8,490	12,000	19,100	3,680	3,110	1,920	1,610	2,220
24	3,110	2,060	3,330	18,400	7,460	10,500	16,200	3,560	3,000	1,850	1,670	2,310
25	2,800	2,060	3,330	15,000	6,680	9,150	14,400	3,680	3,000	1,850	1,730	2,900
26	2,600	1,990	4,080	12,000	6,490	8,060	11,500	3,560	2,900	1,790	1,850	2,900
27	2,500	1,990	4,220	12,000	6,310	7,260	10,500	3,440	3,110	1,730	1,850	2,500
28	2,500	2,600	5,610	13,200	6,130	11,800	9,370	3,330	3,440	1,730	1,730	2,310
29	2,500	3,220	5,610	18,100	-------	14,400	9,150	3,110	3,330	1,610	1,790	2,220
30	2,400	3,560	8,270	48,600	-------	13,500	9,150	3,440	3,940	1,670	2,900	1,990
31	2,500	-------	21,400	64,600	-------	12,900	-------	3,560	-------	1,610	3,110	-------

Daily discharge, in second-feet, of New River at Fayette, W. Va., for the period ending Sept. 30, 1895–1905 and 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1911–12.												
1	1,990	3,440	5,280	15,000	19,100	18,100	30,900	17,500	5,780	13,200	3,440	2,700
2	2,140	3,110	5,120	18,100	14,400	15,600	42,400	15,600	5,440	8,710	3,220	2,700
2	9,590	3,000	4,660	16,200	10,300	16,200	55,300	12,300	4,810	8,710	3,560	2,800
4	8,060	2,700	4,360	12,000	5,610	19,400	41,900	10,500	4,510	7,860	3,330	2,800
5	5,440	2,500	4,080	8,930	4,660	16,800	27,200	9,150	4,810	7,660	3,220	2,800
6	4,080	4,660	3,810	6,490	4,080	7,660	20,400	8,710	4,810	11,200	3,220	2,700
7	3,330	11,000	3,560	4,080		8,270	16,800	10,000	4,510	11,800	3,560	2,600
8	3,560	21,700	3,560			10,000	15,300	11,500	4,080	8,710	3,330	2,400
9	3,560	17,800	3,560			16,500	13,800	11,000	4,080	8,270	2,900	2,220
10	5,950	10,000	3,330			25,000	12,300	9,810	4,080	7,060	2,700	2,140
11	5,280	8,060	3,330			21,100	11,000	8,710	3,810	6,310	2,800	1,920
12	5,440	7,460	3,330		4,200	20,100	10,000	23,500	3,330	6,310	2,800	2,060
13	4,810	7,460	3,220	3,000		52,900	8,930	61,900	3,220	6,490	2,800	1,990
14	4,360	7,260	3,330			45,000	8,710	38,900	3,110	6,490	2,700	1,850
15	3,810	7,260	3,330			43,200	8,270	24,200	3,110	6,870	2,700	1,790
16	3,810	7,060	3,560			92,500	8,270	31,300	3,220	6,310	2,500	1,790
17	6,310	7,860	4,220			62,500	8,270	55,300	3,680	5,610	2,310	1,920
18	26,400	6,680	5,950		4,510	38,000	9,590	40,600	4,080	5,440	2,400	2,140
19	56,300	7,460	7,860	5,440	4,810	28,700	10,700	23,500	4,510	4,510	2,600	2,310
20	25,000	10,500	7,060	21,700	5,950	22,100	11,200	18,400	4,510	3,940	2,800	2,800
21	14,700	8,710	5,280	11,800	8,490	18,800	9,810	14,700	4,360	3,940	2,800	3,220
22	12,000	7,460	4,660	10,000	27,500	17,500	8,490	12,000	3,680	4,660	3,560	3,110
23	7,860	6,130	5,610	9,810	43,200	21,400	8,270	10,000	3,440	4,960	3,560	3,560
24	7,460	5,440	23,500	9,590	24,600	22,100	8,710	8,710	3,810	4,360	3,330	5,950
25	7,060	5,950	22,400	9,370	18,100	34,000	9,150	7,860	5,950	5,950	2,900	16,200
26	5,950	5,610	20,700	8,710	17,800	34,800	8,270	7,260	10,000	5,780	2,800	13,200
27	5,120	5,950	22,100	8,710	25,000	26,400	9,810	6,870	9,590	9,590	2,700	9,370
28	5,280	5,610	21,100	8,930	39,700	20,100	21,400	6,310	17,200	7,460	2,700	8,060
29	5,610	5,610	20,100	9,590	25,700	38,000	18,100	6,130	15,300	6,680	2,700	4,660
30	3,560	5,610	16,800	24,200		84,000	18,100	5,610	10,500	5,280	2,500	4,220
31	3,680		14,100	24,200		47,300		5,780		3,330	2,600	
1912–13.												
1	3,940	2,060	2,140	4,660	19,100	17,500	19,100	7,260	21,400			
2	3,560	1,920	2,220	20,700	20,700	18,400	11,200	5,950	15,000			
3	2,900	1,920	2,310	14,400	20,400	15,000	10,000	6,310	11,500			
4	2,800	1,920	2,310	12,900	19,400	10,300	8,270	6,130	11,000			
5	2,700	1,990	3,000	16,800	18,800	10,500	7,860	5,780	19,400			
6	2,600	1,990	3,330	15,900	17,200	10,300	8,060	5,440	12,600			
7	2,700	2,600	4,220	27,900	16,800	8,490	7,660	5,780	10,700			
8	2,700	5,280	4,960	55,800	15,900	7,660	7,460	5,610	11,800			
9	2,600	16,200	5,610	29,400	14,700	7,860	7,060	5,440	15,300			
10	2,500	9,590	4,810	22,100	6,130	8,060	5,780	4,660	12,600			
11	2,400	7,260	4,510	19,700	4,960	6,680	6,680	5,780	10,300			
12	2,310	6,310	3,560	22,100	4,810	10,500	6,680	4,080	9,370			
13	2,220	4,360	3,330	12,600	4,810	12,300	34,000	4,360	7,460			
14	1,920	4,960	3,220	12,000	4,660	14,700	53,400	4,220	7,460			
15	1,850	3,810	2,900	10,700	4,660	42,400	38,900	4,080	7,260			
16	1,920	3,220	2,800	8,930	4,220	52,400	36,400	4,220	5,120			
17	1,920	3,220	2,500	7,460	4,360	25,300	28,700	4,220	6,680			
18	1,920	3,000	2,500	6,490	4,220	18,100	21,700	5,280	5,440			
19	1,990	2,700	2,700	6,870	3,810	14,400	16,500	6,490	4,810			
20	2,140	2,700	2,700	6,490	3,560	13,200	12,600	6,130	4,510			
21	2,140	2,700	2,600	5,780	3,940	14,100	11,800	6,680	4,510			
22	2,400	2,700	2,500	5,120	4,360	14,700	9,810	7,860	4,510			
23	2,700	2,500	2,600	4,360	4,510	14,400	8,930	8,490	4,080			
24	2,900	2,500	2,500	8,270	4,810	8,490	8,270	29,400	3,940			
25	2,800	2,220	2,500	7,860	4,510	7,660	7,660	48,200	4,660			
26	2,600	2,220	2,600	6,680	4,510	8,060	7,260	28,300	5,780			
27	2,310	2,310	2,600	9,150	3,810	65,100	7,460	23,100	5,440			
28	2,140	2,310	2,800	15,800	9,150	132,000	7,660	36,800	5,950			
29	2,140	2,220	3,330	21,400		69,400	7,660	39,300	5,120			
30	2,140	2,220	3,560	20,700		28,700	7,660	26,100	4,660			
31	2,140		4,000	19,700		23,500		19,700				

Daily discharge, in second-feet, of New River at Fayette, W. Va., for the period ending Sept. 30, 1895–1905 and 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	1,610	2,310	2,500	23,500	20,400	12,900	6,490	8,490	5,440	1,920	1,850	6,130
2	1,610	2,600	7,060	20,700	57,300	11,200	6,490	10,300	5,950	2,220	1,790	5,610
3	1,610	2,310	18,400	18,800	90,000	9,150	6,490	10,300	7,460	2,500	1,990	5,280
4	1,460	1,850	19,400	13,800	55,000	8,930	6,130	10,500	12,300	2,310	1,920	4,660
5	1,460	1,920	21,400	9,590	36,000	9,590	5,780	9,590	14,400	2,060	1,850	4,080
6	1,460	1,730	60,000	16,200	27,500	9,810	5,440	9,150	11,000	2,220	2,700	15,300
7	1,410	1,790	30,900	60,000	25,000	10,500	5,610	9,810	7,860	2,700	2,900	29,000
8	2,310	1,850	21,100	90,000	21,400	11,500	5,950	11,000	6,310	3,940	3,000	15,600
9	2,220	1,730	17,200	50,000	19,700	11,500	5,950	9,590	5,440	3,220	2,600	9,370
10	2,140	1,730	15,000	34,800	14,700	10,500	5,610	8,710	4,810	3,000	1,990	7,060
11	2,140	1,670	10,500	30,200	13,500	11,000	6,310	8,270	4,080	2,800	1,850	5,780
12	2,060	1,730	8,710	27,900	12,600	11,000	6,130	4,960	3,810	2,700	1,990	5,120
13	1,920	1,850	8,270	34,800	10,500	11,500	6,310	4,360	3,500	2,400	2,600	4,660
14	1,850	1,730	8,270	25,700	10,000	9,590	6,680	4,660	3,220	1,990	4,960	5,610
15	1,850	1,920	6,310	28,300	9,810	9,150	7,060	4,960	3,940	2,400	5,000	5,120
16	1,990	1,920	5,610	29,400	16,200	10,500	6,680	4,960	5,280	2,600	4,220	5,120
17	2,400	2,140	3,330	32,500	18,800	10,300	6,310	4,220	5,780	2,400	3,220	4,660
18	15,600	6,130	3,330	35,000	15,300	10,500	5,440	3,810	6,680	2,220	4,080	3,940
19	8,930	4,810	4,360	36,000	12,600	10,000	5,120	3,680	6,870	2,140	5,950	3,330
20	4,660	3,810	6,680	35,600	11,200	9,150	4,960	3,440	5,120	2,310	3,810	3,680
21	4,360	3,110	14,400	33,200	9,150	8,710	4,660	3,220	4,510	2,310	3,440	3,440
22	3,560	2,900	19,400	31,700	8,710	8,270	4,510	3,330	3,560	2,600	3,330	3,330
23	3,220	2,500	16,200	37,600	9,590	8,060	4,360	3,560	3,220	2,700	7,460	3,680
24	3,000	2,310	10,500	35,200	10,000	8,710	3,810	3,560	3,220	2,900	4,660	3,440
25	2,800	2,220	10,700	25,700	25,000	8,270	4,220	3,560	2,800	3,110	3,810	3,330
26	2,600	2,500	13,200	24,200	30,200	7,060	6,130	5,440	2,800	2,900	3,000	3,000
27	2,700	2,500	11,000	22,100	20,100	7,060	6,680	5,120	2,310	2,400	2,800	3,000
28	2,700	2,500	12,000	20,700	15,600	6,680	8,270	4,220	2,140	2,220	2,800	2,800
29	2,600	2,500	21,100	21,400	-------	7,060	12,600	3,940	2,060	2,500	2,700	2,500
30	2,310	2,500	28,300	17,200	-------	6,870	8,710	5,120	1,790	2,140	4,080	3,000
31	2,310	-------	27,200	16,800	-------	6,680	-------	5,120	-------	1,990	6,130	-------
1915–16.												
1	9,590	2,900	4,810	28,700	22,100	13,800	13,200	7,460	5,280	3,560	8,930	5,950
2	52,900	2,800	4,220	21,100	28,700	13,200	11,000	6,680	4,660	3,680	13,500	4,660
3	35,600	2,800	3,940	17,800	43,700	16,200	9,810	6,870	4,660	3,560	23,100	6,310
4	18,800	2,800	3,680	16,500	30,900	20,100	8,930	5,950	4,660	3,810	16,800	4,360
5	12,000	2,700	3,440	13,800	21,100	18,800	10,700	5,440	5,610	3,680	12,600	3,940
6	8,930	2,800	3,330	12,000	19,100	17,500	8,930	5,280	4,810	3,680	16,800	4,510
7	10,000	2,800	3,330	12,600	18,400	18,800	8,060	5,610	4,960	3,220	14,400	4,220
8	9,150	2,700	3,220	26,400	18,100	36,000	10,300	5,950	5,120	3,220	18,100	3,810
9	7,860	2,700	3,110	37,000	16,500	30,200	10,700	4,960	6,310	3,000	22,100	3,560
10	6,870	2,500	3,110	22,100	18,800	22,100	11,000	4,660	6,680	2,700	17,800	3,680
11	5,780	2,800	3,000	23,100	17,500	16,800	18,100	4,660	6,680	3,000	12,000	4,810
12	4,960	2,800	3,000	34,800	14,700	13,800	23,500	4,510	6,130	22,100	13,500	3,560
13	4,810	2,700	2,900	34,000	13,500	11,500	23,100	4,220	5,440	13,200	11,000	3,810
14	4,360	2,800	2,800	27,900	12,900	10,700	20,700	4,220	4,510	8,710	11,500	3,440
15	4,080	3,440	2,500	21,700	13,200	10,300	17,200	3,940	4,360	6,310	10,000	5,780
16	4,080	3,810	2,700	16,200	11,500	13,500	12,900	4,220	8,930	11,000	25,000	5,280
17	4,360	3,440	5,120	13,200	10,300	12,000	11,000	3,940	14,400	156,000	35,600	9,810
18	4,080	4,080	25,300	10,500	9,810	9,590	9,370	3,810	23,500	78,000	22,100	6,680
19	3,810	4,510	55,300	8,270	9,150	8,710	8,490	3,680	15,300	38,900	14,700	4,960
20	3,810	5,280	41,000	7,060	8,490	8,060	7,660	3,680	9,810	28,700	10,000	3,940
21	3,680	11,800	23,500	7,860	8,270	7,860	6,870	3,440	7,460	24,600	9,150	4,080
22	3,810	10,000	15,000	8,270	7,860	9,150	6,680	3,220	6,310	21,700	8,270	3,440
23	4,510	7,460	12,000	10,500	7,860	9,810	6,490	3,000	5,780	25,300	9,150	3,330
24	4,220	6,310	9,370	12,600	7,860	12,900	6,490	5,440	4,660	21,700	11,800	3,300
25	3,940	5,440	8,270	11,800	33,600	13,200	6,310	8,930	4,510	16,800	11,200	3,220
26	3,680	4,960	8,060	10,000	43,200	10,000	7,060	9,590	7,060	13,800	8,060	3,110
27	3,330	4,810	10,500	9,150	28,700	13,800	8,930	7,660	6,130	12,000	6,130	3,110
28	3,220	4,510	12,000	11,000	20,100	22,800	9,810	8,270	5,780	13,200	6,490	2,900
29	3,000	4,510	23,800	13,800	15,600	22,400	10,000	5,780	4,810	13,800	5,280	10,000
30	3,000	4,960	61,900	17,500	-------	18,800	8,710	5,780	3,810	11,000	6,680	9,590
31	2,900	-------	49,100	21,400	-------	16,800	-------	5,950	-------	10,300	5,950	-------

NOTE.—Daily discharge July, 1913, to September, 1914, estimated, only monthly means published; see ccuracy paragraph under station description, p. 48.

Monthly discharge of New River at Fayette, W. Va., for the years ending Sept. 30, 1895–1905 and 1908–1916.

[Drainage area, 6,800 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1895.					
July 26–31	13,000	4,660	8,240	1.21	0.27
August	12,000	2,700	4,740	.697	.80
September	5,280	1,850	2,640	.388	.43
The period	13,000	1,850	4,110	.604	1.50
1895–96.					
October	1,990	1,410	1,780	.262	.30
November	3,940	1,920	2,480	.365	.41
December	22,100	1,850	4,450	.654	.75
January	21,700	2,310	5,630	.828	.95
February	30,600	3,110	12,000	1.76	1.90
March	82,900	3,110	18,200	2.68	3.09
April	84,000	5,950	19,200	2.82	3.15
May	12,900	4,080	6,850	1.01	1.16
June	17,800	3,330	6,150	.904	1.01
July	86,800	3,810	14,500	2.13	2.46
August	7,660	2,500	4,270	.628	.72
September	4,960	2,060	2,570	.378	.42
The year	84,000	1,410	8,160	1.20	16.32
1896–97.					
October	41,900	1,850	5,310	.781	.90
November	51,900	2,310	8,900	1.31	1.46
December	33,200	3,940	10,400	1.53	1.76
January	7,660	2,700	4,660	.685	.79
February	110,000	3,220	32,100	4.72	4.92
March	53,400	10,500	24,000	3.53	4.07
April	26,800	5,440	11,500	1.69	1.89
May	69,900	5,120	13,700	2.01	2.32
June	12,000	3,810	6,620	.974	1.09
July	28,300	3,220	8,570	1.26	1.45
August	7,260	2,500	3,620	.532	.61
September	2,310	1,510	1,920	.282	.31
The year	110,000	1,510	10,800	1.59	21.57
1897–98.					
October	9,150	1,510	2,340	.344	.40
November	3,810	1,610	2,240	3.29	.37
December	8,710	1,850	3,890	.572	.66
January	22,800	3,440	9,770	1.44	1.66
February	11,000	2,700	5,640	.829	.86
March	55,300	4,080	11,600	1.71	1.97
April	44,100	6,870	14,400	2.12	2.36
May	42,400	4,360	12,900	1.90	2.19
June	16,200	2,310	4,570	.672	.75
July	8,490	2,220	3,820	.562	.65
August	61,900	3,680	13,700	2.01	2.32
September	20,100	2,310	5,420	.797	.89
The year	55,300	1,510	7,560	1.11	15.08
1898–99.					
October	72,000	2,900	11,900	1.75	2.02
November	15,900	3,680	7,040	1.04	1.16
December	19,400	4,810	8,420	1.24	1.43
January	34,000	6,310	10,200	1.50	1.73
February	81,800	6,870	23,600	3.47	3.61
March	124,000	11,500	36,000	5.29	6.10
April	22,100	8,710	13,100	1.93	2.15
May	31,700	5,950	12,900	1.90	2.19
June	29,400	4,660	9,330	1.37	1.53
July	5,950	2,600	3,480	.512	.59
August	4,220	2,140	2,950	.434	.50
September	4,220	2,310	2,730	.401	.45
The year	124,000	2,140	11,700	1.72	23.46

Monthly discharge of New River at Fayette, W. Va., for the years ending Sept. 30, 1895–1905 and 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1899–1900.					
October	4,080	1,920	3,070	0.451	0.52
November	3,810	2,140	2,610	.384	.43
December	21,100	1,850	4,820	.709	.82
January	18,800	4,660	6,920	1.02	1.18
February	27,200	4,660	8,440	1.24	1.29
March	36,400	5,280	13,700	2.01	2.32
April	23,100	5,120	10,800	1.59	1.77
May	11,500	4,220	6,460	.950	1.10
June	25,700	3,330	9,120	1.34	1.50
July	12,000	1,990	4,730	.696	.80
August	4,660	1,610	2,210	.325	.37
September	15,600	1,990	4,210	.619	.69
The year	36,400	1,610	6,400	.941	12.79
1900–1901.					
October	56,800	2,140	8,740	1.29	1.49
November	120,000	3,680	15,200	2.24	2.50
December	50,000	3,940	12,600	1.85	2.13
January	29,800	4,510	10,100	1.49	1.72
February	10,500	4,360	6,560	.965	1.00
March	33,200	4,220	11,300	1.66	1.91
April	146,000	13,800	47,400	6.97	7.78
May	150,000	9,810	32,000	4.71	5.43
The period	150,000	2,140	18,000	2.65	23.96
1902.					
August 11–31	2,500	1,730	2,160	.318	.25
September	3,000	1,610	1,970	.290	.32
The period	3,000	1,610	2,050	.301	.57
1902–3.					
October	6,870	1,730	2,430	.357	.41
November	8,930	1,790	3,070	.451	.50
December	22,400	3,680	10,000	1.47	1.70
January	52,400	4,360	12,900	1.90	2.19
February	78,500	7,460	22,400	3.29	3.43
March	137,000	7,860	27,000	3.97	4.58
April	48,200	6,490	14,500	2.13	2.38
May	21,100	3,330	10,700	1.57	1.81
June	21,700	4,660	8,060	1.19	1.33
July	19,400	2,800	7,250	1.07	1.23
August	10,500	2,310	4,410	.649	.75
September	3,000	1,850	2,320	.341	.38
The year	137,000	1,730	10,300	1.51	20.69
1903–4.					
October	4,360	1,510	2,230	.328	.38
November	3,560	1,730	2,210	.325	.36
December	2,900	1,610	2,140	.315	.36
January	22,800	2,060	4,400	.647	.75
February	25,000	2,500	7,340	1.08	1.16
March	31,300	5,950	12,500	1.84	2.12
April	23,800	3,940	7,300	1.07	1.19
May	35,200	5,120	10,100	1.49	1.72
June	20,700	3,330	7,390	1.09	1.22
July	17,200	1,990	4,700	.691	.80
August	5,610	1,920	3,480	.512	.59
September	3,560	1,510	1,990	.293	.33
The year	35,200	1,510	5,480	.806	10.98
1904.					
October	1,560	1,330	1,440	.212	.24
November	2,500	1,460	1,830	.269	.30
December	4,960	1,610	2,720	.400	.46
The period	4,960	1,330	2,000	.294	1.00
1908.					
July 20–31	10,000	3,560	5,910	.869	.39
August	22,100	3,000	5,850	.860	.99
September	5,780	2,220	3,380	.497	.55
The period	22,100	2,220	4,850	.713	1.93

Monthly discharge of New River at Fayette, W. Va., for the years ending Sept. 30, 1895–1905 and 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908–9.					
October	31,700	2,220	6,590	0.969	1.12
November	23,800	3,440	6,480	.953	1.06
December	26,400	4,360	9,880	1.45	1.67
January	33,200	8,060	16,700	2.46	2.84
February	28,700	4.660	15,200	2.24	2.33
March	31,700	8,710	18,700	2.75	3.17
April	49,600	6,490	13,800	2.03	2.26
May	36,400	6,310	17,000	2.50	2.88
June	21,400	5,610	10,300	1.51	1.68
July	34,000	3,300	7,980	1.17	1.35
August	8,930	2,310	4,470	.657	.76
September	10,000	1,990	4,100	.603	.67
The year	49,600	1,990	10,900	1.60	21,79
1909–10.					
October	15,600	2,220	4,050	.596	.69
November	3,110	2,200	2,720	.400	.45
December	21,700	2,060	4,210	.619	.71
January	35,200	1,850	11,600	1.71	1.97
February	43.700	4,810	11,400	1.68	1.75
March	31,300	3,810	9,760	1.44	1.66
April	13,800	3,560	8,350	1.23	1.37
May	9,150	4,960	6,720	.988	1.14
June	77,400	3,940	19,900	2.93	3.27
July	21,100	3,330	8,170	1.20	1.38
August	3,440	2,220	2,820	.415	.48
September	10,000	2,060	3,810	.560	.62
The year	77,400	1,850	7,750	1.14	15.49
1910–11.					
October	10,000	2,140	3,290	.484	.56
November	3,560	1,990	2,280	.335	.37
December	21,400	1,790	4,260	.626	.72
January	64,600	5,440	18,400	2.71	3.12
February	36,400	6,130	13,400	1.97	2.05
March	37,200	5,440	15,600	2.29	2.64
April	54,400	9,150	23,300	3.43	3.83
May	9,810	3,110	5,550	.816	.94
June	4,960	2,500	3,470	.510	.57
July	5,120	1,610	2,700	.397	.46
August	4,080	1,610	2,300	.338	.39
September	7,460	1,990	3,200	.471	.53
The year	64,600	1,610	8,090	1.19	16.18
1911–12.					
October	56,300	1,990	8,630	1.27	1.46
November	21,700	2,500	7,300	1.07	1.19
December	23,500	3,220	8,480	1.25	1.44
January	24,200	----------	8,900	1.31	1.51
February	43,200	----------	12,100	1.78	1.92
March	92,500	7,660	30,400	4.47	5.15
April	55,300	8,270	16,400	2.41	2.69
May	61,900	5,610	17,200	2.53	2.92
June	17,200	3,110	5,580	.821	.92
July	13,200	3,330	6.890	1.01	1.16
August	3,560	2,310	2,940	.432	.50
September	16,200	1,790	3,930	.578	.64
The year	92,500	1,790	10,700	1.57	21.50
1912–13.					
October	3,940	1,850	2,450	.360	.42
November	16,200	1,920	3,700	.544	.61
December	5,610	2,140	3,140	.462	.53
January	55,800	4,360	14,800	2.18	2.51
February	20,700	3,560	9,030	1.33	1.38
March	132,000	6,680	22,900	3.37	3.88
April	53,400	5,780	14,400	2.12	2.36
May	48,200	4,080	12,300	1.81	2.09
June	21,400	3,940	8,610	1.27	1.42
July	----------	----------	5,000	.735	.85
August	----------	----------	3,200	.471	.54
September	----------	----------	3,700	.544	.61
The year	132,000	1,850	8,610	1.27	17.20

Monthly discharge of New River at Fayette, W. Va., for the years ending Sept. 30, 1895–1905 and 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1913–14.					
October			4,500	0.662	0.76
November			7,600	1.12	1.25
December			7,200	1.06	1.22
January			12,500	1.84	2.12
February			18,000	2.65	2.76
March			17,000	2.50	2.88
April			17,000	2.50	2.79
May			5,800	.853	.98
June			2,400	.353	.39
July			2,700	.397	.46
August			2,200	.324	.37
September			2,100	.309	.34
The year			8,180	1.20	16.32
1914–15.					
October	15,600	1,410	3,000	.441	.51
November	6,130	1,670	2,440	.359	.40
December	60,000	2,500	14,900	2.19	2.52
January	90,000	9,590	30,300	4.46	5.14
February	90,000	8,710	22,400	3.29	3.43
March	12,900	6,680	9,410	1.38	1.59
April	12,600	3,810	6,160	.906	1.01
May	11,000	3,220	6,160	.906	1.04
June	14,400	1,790	5,260	.774	.86
July	3,940	1,920	2,510	.369	.43
August	7,460	1,790	3,370	.496	.57
September	29,000	2,500	6,020	.885	.97
The year	90,000	1,410	9,260	1.36	18.49
1915–16.					
October	52,900	2,900	8,230	1.21	1.40
November	11,800	2,500	4,260	.626	.70
December	61,900	2,500	13,300	1.96	2.26
January	37,000	7,060	17,400	2.56	2.95
February	43,700	7,860	18,300	2.69	2.90
March	36,000	7,860	15,500	2.28	2.63
April	23,500	6,310	11,100	1.63	1.82
May	9,590	3,000	5,380	.791	.91
June	23,500	3,810	6,940	1.02	1.14
July	156,000	2,700	18,800	2.76	3.18
August	35,600	5,280	13,500	1.99	2.29
September	10,000	2,900	4,770	.701	.78
The year	156,000	2,500	11,500	1.69	22.96

KANAWHA RIVER AT KANAWHA FALLS, W. VA.

LOCATION.—At Kanawha Falls, Fayette County, half a mile below the point at which falls intersect right bank and 1¾ miles below mouth of Gauley River.

DRAINAGE AREA.—8,300 square miles.

RECORDS AVAILABLE.—March 28, 1877, to September 30, 1916.

GAGE.—Staff gage on right bank opposite Fall Branch at Farley's Ferry about half a mile below the point at which the falls intersect the right bank; lowest section on crib reading about 7.4 feet, two short sections attached to tree reading from 5.7 to 11 feet, high-water section attached to large maple tree reading to 32.7 feet. The high-water section is believed to have been permanent from its installation about 1890 up to the time it was destroyed in the fall of 1910. The two short sections are believed to have been temporary in character and frequently disturbed and replaced.

Two gages were originally erected near Kanawha Falls in March, 1877, by J. R. Davenport, at present lockmaster at dam No. 3. The gage above

the falls was near the left bank on a crib about 700 feet above the point where the crest of the falls intersects the left bank. Readings on this gage have not been used in this report except to determine corresponding readings on the gage below the falls from February 1 to September 15, 1881. The original gage below the falls was bolted to Van Bibber rock or ledge on the left side of the river about 1,000 feet below the point where the crest of the falls intersects the left bank and about one-third of the length of the rock ledge above the lower end of the ledge. Parts of this gage, in poor condition, were still in position in 1916. Owing to the fact that this gage was poorly situated and difficult of access, an auxiliary gage was installed almost opposite the present Farley gage and upstream from it probably soon after readings were begun in 1877. The gage was moved to the right bank of the river immediately below the falls about August or September, 1886, and the water surface was used to transfer the elevation. The gage was again moved probably in 1888 to its present location on the right bank at Farley's Ferry. The water surface was again used to transfer the elevation.

The zero of the gage is said to be the elevation of low water of 1872 or 1874. The elevation of the zero of the gage is reported by the United States Engineer Corps as 618.73 feet above mean sea level at Richmond, Va.

BENCH MARK.—United States Geological Survey bronze tablet stamped "667 Knwa" set in the face of rock at base of cliff on right bank 180 feet south of flag station, Glen Ferris, of Kanawha & Michigan Railway, 200 feet north of highway crossing, west of track, and nearly opposite house of T. W. Farley. Elevation above sea level, 666.540 feet as reported by United States Geological Survey. The United States Engineer Corps reports the elevations of this bench mark 662.49 feet above sea level and 43.76 feet above the zero of the gage.

DISCHARGE MEASUREMENTS.—Made 5 or 6 miles below the gage and at Montgomery and Lock No. 2 as noted in detail in the table of discharge measurements.

CHANNEL AND CONTROL.—All gages except the one above the falls have been located in a large pool which has a maximum depth of over 50 feet at extremely low stage, a width of about 1,700 feet immediately below the falls, and a length to the point of control of about 6,500 feet. The average width of the pool from the lower end of Van Bibber Rock to the lower end of the pool is about 650 feet. Ordinary stages of the pool are controlled by the head of Long Shoal which is composed of large boulders and is probably permanent. The elevation of the point of zero flow as determined from a profile prepared by the United States Engineer Corps is 614.2 feet above sea level at Richmond, Va., or 4.5 feet below the zero of gage.

Van Bibber Rock is said to have been named after a Dutch pioneer who, to escape a party of pursuing Indians, leaped from the cliff to the pool below and swam the river.

EXTREMES OF DISCHARGE.—Maximum stage recorded, March 28, 1877, to September 30, 1916, 37.8 feet at 3 a. m. September 14, 1878 (discharge, about 270,000 second-feet). This is the highest flood of which there is record.

The absolute minimum at Kanawha Falls is probably between 1,000 and 1,100 second-feet (see "Extremes of discharge," Lock 2, page 93).

ICE.—The current in the pools above and below the falls is sluggish at low and medium stages and hence ice usually forms and sometimes attains considerable thickness. Discharge relation is probably not materially affected except when ice gorges form. Corrections for the effect of these are noted under "Accuracy."

DIVERSIONS.—None.

REGULATION.—Slight regulation at low water due to operation of the power plant of the Electro Metallurgical Co. at the falls.

ACCURACY.—The stage-discharge relation has been considered permanent. The rating curve which is well defined is based on 11 discharge measurements made during 1910–1917 and comparisons with the discharge at Fayette and Belva. The gage was read to tenths once daily, usually in the morning. Daily discharge was obtained by applying the daily gage readings to the rating table except as noted. Numerous corrections were made in the recorded gage readings in determining the daily discharge but none of the corrections is sufficient to make an appreciable change in the mean annual discharge and such corrections seldom made a material change in the monthly discharge except as herein noted. The corrections and adjustments are based on detailed studies and comparisons of gage height and discharge at Kanawha Falls with those at Hinton, Fayette, Belva, Lock 2, Charleston, Clendenin, and other gaging stations in the basin. It is believed that the conditions governing the flow at the control of the Kanawha Falls gages have remained practically permanent since the gage was established and the corrections and adjustments were made necessary by the changes in the location of the gage and because the gage at times was allowed to get out of repair.

The following are the more important changes and adjustments:

January 3–9, 1879, discharge estimated because of ice gorge below the falls reported by gage observer.

A change in the gage used by observer was made about September 15, 1881. Gage heights used in determining discharge February 1 to September 15, 1881, were obtained from a curve of relation between the gages above and below the falls. The discharge rating curve is referred to the gage below the falls.

Discharge September, October, and November, 1884, August, September, and October, 1885, appears large as compared with records at Charleston but there is not sufficient basis for an adjustment of the record at Kanawha Falls.

Discharge December 26–30, 1892, and January 8–25, 1893, estimated from records at Lock No. 2 and Charleston. Discharge as computed from gage heights too great, probably due to effect of ice. At Lock No. 2, the river was reported closed with ice December 25 and snow up to 10 inches deep was reported during January.

Gage readings below 11.0 feet, 1888 to 1901, were corrected as follows:

September 7, 1888, to July 8, 1892, 0.3 foot added; July 9, 1892, to December 27, 1898, 0.2 foot; December 28, 1898, to November 26, 1901, 0.3 foot added.

January 3–9, 1879, discharge estimated because of ice gorge below the falls reported by gage observer.

January 1 to June 30, 1899, a number of corrections to gage heights at Kanawha Falls as reported in the book kept at Charleston were made on the basis of gage heights at Kanawha Falls in the book kept at Lock No. 2 and comparisons with gage heights at Locks 2 and 3.

Discharge at low water during the year ending September 30, 1900, is small as compared with that at Fayette and Lock No. 2. Observed gage heights July 1 to November 2, 1900, were increased 0.05 foot because of error in gage found by wye levels.

Low-water records in October and November, 1904, and October and November, 1908, do not agree well with records at Lock No. 2, but no further adjustment seems advisable. Records at Fayette, Belva, and other stations upstream afford additional means of determining the extreme low-water flow.

Wye levels April 22, 1917, showed intermediate gage, reading from 5.7 to 11.0 feet, reads 0.2 foot too low. Gage attached to the crib, reading to 7 feet was correct.

Gage heights October 1, 1910, to April 22, 1911, between 7.1 and 11 feet (discharge, 26,200 to 51,000 second-feet) increased 0.2 foot before entering rating table. River reported frozen over at Lock No. 2 December 13–28, 1910. Discharge relation possibly affected by ice December 19–24 but no correction made.

Note by observer states, "Gorge in Lock No. 2 pool, just below falls, causes rise at falls on January 9, 1912." Discharge January 8–18 and February 7–17, 1912, estimated, because of ice, from weather records and discharge at Fayette, Belva, and Lock No. 2. Mean discharge January 8–18, 1912, estimated 4,000 second-feet; February 7–17, 5,200 second-feet.

Discharge estimated March 30, 1913.

Discharge, July to September, 1915, appears somewhat large as compared with that at Lock No. 2 and Fayette plus that at Belva but no adjustment has been made.

Discharge June 30, 1916, estimated.

Mean monthly discharge estimated August and September, 1916. The lower two sections of the gage were washed out by the flood of July, 1916, and were replaced by the observer but from the condition in which the gage was found in October, 1917, it is believed that records obtained from it are unreliable and the discharge was estimated to agree more closely with results at Lock No. 2.

The ratios of monthly discharge (see table, page 44) are a rough index of the accuracy of the records. In general, the records at this station are good.

RATIOS.—The table on pages 44–47 contains ratios of monthly and yearly discharge at Fayette, Kanawha Falls, and Lock No. 2. See discussion which accompanies table.

COOPERATION.—Gage heights were furnished and assistance in making discharge measurements was rendered by the United States Engineer Corps.

Discharge measurements of Kanawha River at Kanawha Falls, W. Va., during the years 1910–1917.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1910.		*Feet*	*Sec.-ft.*	1913.		*Feet*	*Sec.-ft.*
Nov. 12	Bolster and Horton	0.72	2,630	Mar. 28	A. H. Horton	24.2	157,000
1911.				1915.			
Feb. 8	Jackson and Bailey	4.21	12,800	June 19	Ellsworth and Conklin	3.6	9,310
13	H. J. Jackson	5.63	17,700	July 27	C. E. Ellsworth	1.1	2,310
Mar. 7	C. T. Bailey	11.31	53,100	Dec. 31	Frank Conklin	13.0	62,900
10	do	8.09	31,900	1917.			
1912.				Sept. 17	Peterson and Hopkins	.3	1,980
Mar. 17	Horton and Bailey	15.5	86,700	Oct. 11	do	−.18	1,450

NOTE.—Measurement made Nov. 12, 1910, at Boomer ferry, 6 miles below Kanawha Falls gage. Measurements made July 27, 1915, on top of dam No. 2 about 2 feet up from crest; result includes lock leakage of 166 second-feet but does not include leakage through the dam. Gage height of measurements made Nov. 12, 1910, Feb. 8, 13, Mar. 7 and 10, 1911, Mar. 17, 1912, and Mar. 28 1913, obtained from special readings on Kanawha Falls gage; measurements made June 19 and July 27, 1915, and Dec. 31, 1915, from regular readings of gage observer; allowance for time interval made in all measurements. All other measurements except those made Nov. 12, 1910, July 27, 1915, Sept. 17, 1917, and Oct. 11, 1917, were made from highway bridge at Montgomery, about 9 miles below Kanawha Falls gage. Measurement of Sept. 17, 1917, made 900 feet below dam No. 2, 10 miles below Kanawha Falls gage. Measurement of Oct. 11, 1917, made 5 miles below Kanawha Falls gage. (Measurement made Sept. 18, 1917, on top of dam No. 2 to determine leakage, not included in this list.) Gage height Sept. 17, 1917, is roughly approximate; obtained from comparative readings on tailrace gage at power plant at Kanawha Falls.

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1877.												
1							13,600	17,500	6,170	5,630	3,530	2,160
2							12,800	15,700	5,900	5,120	3,130	2,160
3							14,800	13,600	5,370	4,870	2,940	2,160
4							18,400	14,000	5,120	4,630	2,940	1,900
5							17,000	24,000	5,120	6,740	2,760	1,900
6							15,700	39,500	5,370	5,900	2,760	1,900
7							14,800	35,700	5,630	8,880	2,600	1,900
8							13,600	32,600	7,030	7,630	2,450	1,900
9							13,600	38,900	7,330	6,450	2,300	1,900
10							64,300	49,600	7,940	5,120	2,300	2,450
11							42,200	35,700	12,000	4,630	2,160	2,760
12							28,500	26,200	14,000	4,400	2,450	2,450
13							21,900	20,900	12,000	3,950	2,940	2,450
14							18,000	16,600	9,200	3,740	2,940	2,760
15							16,100	15,300	7,330	3,130	2,760	9,870
16							17,500	13,600	7,030	2,940	2,760	7,940
17							18,000	12,400	12,800	3,130	2,600	7,030
18							15,700	11,300	10,200	3,130	2,450	5,370
19							14,400	10,200	9,200	3,530	2,450	4,170
20							18,000	9,530	15,300	5,630	2,300	3,740
21							46,200	11,300	9,200	7,030	2,160	3,530
22							37,000	14,400	9,200	9,870	2,160	3,130
23							27,300	15,700	8,880	9,530	2,300	2,940
24							20,900	12,000	8,560	7,630	2,450	2,940
25							17,500	11,300	6,740	6,740	2,450	2,760
26							16,100	9,200	5,900	6,170	2,760	2,450
27							16,100	8,560	6,170	6,170	3,330	2,300
28						51,000	18,000	7,940	9,200	5,120	3,330	2,160
29						30,200	23,000	7,030	6,740	4,630	2,760	2,160
30						16,600	20,900	6,740	6,170	4,400	2,450	2,160
31						14,000		6,450		3,950	2,300	
1877–78.												
1	2,160	3,130	15,700	25,600	21,400	17,500	15,700	40,200	10,900	7,630	37,600	7,630
2	2,160	3,130	13,200	18,000	18,400	15,700	14,400	29,600	10,600	7,940	20,400	28,500
3	2,160	3,950	10,200	14,400	17,000	15,700	13,600	23,000	9,200	7,030	18,400	15,700
4	2,160	15,300	9,870	13,200	14,800	22,400	12,000	18,000	8,560	5,900	13,200	10,200
5	2,600	15,300	9,530	11,300	13,600	25,600	12,800	17,000	7,630	5,370	10,200	8,250
6	29,600	9,530	18,400	9,870	12,400	23,000	16,600	31,400	7,630	4,870	8,880	6,740
7	15,700	9,530	29,600	8,880	12,000	19,900	15,700	31,400	7,630	4,630	10,200	5,630
8	9,530	8,880	24,600	7,330	12,000	18,000	13,600	23,500	7,030	4,170	10,600	4,870
9	6,740	8,560	18,000	6,170	32,600	17,000	11,600	21,900	7,330	4,170	7,940	4,170
10	9,200	57,200	14,000	8,880	61,400	15,700	10,600	26,800	11,300	4,400	6,170	3,950
11	10,200	28,500	12,000	95,200	48,200	15,300	10,900	22,400	11,300	4,870	7,330	3,530
12	7,630	18,000	10,600	66,500	37,600	14,400	22,400	18,000	14,000	4,630	12,800	4,170
13	6,170	12,800	9,530	42,200	28,500	18,900	26,800	18,900	11,300	4,630	7,940	5,630
14	5,120	10,200	8,880	33,200	23,000	68,700	20,400	21,900	9,530	21,900	6,450	230,000
15	4,400	8,560	8,250	44,200	19,900	45,500	16,600	55,100	8,250	15,700	5,900	68,700
16	3,950	7,630	7,630	37,600	17,000	30,800	14,800	45,500	7,030	9,200	5,900	31,400
17	3,530	7,030	7,030	28,500	16,600	24,000	13,200	35,100	6,450	7,030	5,370	21,900
18	3,530	6,740	7,030	23,000	16,100	20,400	12,800	42,800	7,940	5,370	7,030	15,700
19	3,130	6,170	7,030	18,900	17,000	18,000	10,900	38,200	16,100	4,630	9,870	13,200
20	3,130	5,630	7,030	17,000	17,000	15,700	10,200	28,500	12,800	4,400	73,300	10,200
21	2,940	5,120	7,030	20,400	16,100	14,400	9,870	23,000	12,800	4,870	47,500	9,200
22	2,760	4,870	6,740	51,000	17,000	12,800	10,200	21,400	13,600	6,170	25,600	7,940
23	3,330	4,870	6,740	46,200	61,400	12,000	11,600	17,000	14,800	7,030	15,300	7,330
24	5,120	84,900	6,450	35,700	60,700	11,600	10,600	13,600	17,000	5,370	10,600	7,030
25	4,870	175,000	5,900	28,500	40,800	10,900	17,500	12,400	13,600	4,170	8,250	7,030
26	3,950	72,500	6,740	22,400	29,600	10,900	48,200	17,500	10,200	3,530	13,600	7,030
27	3,740	40,800	7,030	19,900	23,500	9,870	35,700	18,900	8,250	3,330	10,900	7,940
28	3,740	28,500	13,600	19,400	19,400	9,530	25,600	18,900	6,740	6,170	10,900	6,740
29	3,330	23,000	18,900	29,600		9,870	23,000	15,300	6,170	8,250	9,870	5,900
30	3,330	18,400	14,000	29,600		11,300	48,200	12,800	7,330	8,250	7,630	5,370
31	3,330		14,400	24,600		12,400		11,600		34,400	8,560	

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1878–79.												
1	5,120	12,800	28,500	9,530	34,400	27,900	24,600	7,630	12,400	3,130	3,950	3,530
2	4,870	11,600	21,900	9,200	28,500	21,400	20,900	7,330	10,200	2,940	4,630	2,940
3	4,630	10,200	40,200	9,200	19,900	18,400	17,000	7,030	8,250	2,940	4,400	2,760
4	4,400	8,880	41,500	9,000	15,300	19,400	14,400	6,170	7,940	2,760	3,950	3,740
5	4,400	8,250	32,000	8,800	14,000	18,400	12,400	6,170	7,630	2,760	3,950	2,940
6	3,950	7,330	27,900	8,600	30,800	17,500	10,200	6,450	7,330	2,450	3,130	6,450
7	3,950	7,030	21,900	8,500	32,000	18,400	9,530	6,450	6,450	2,600	3,530	4,870
8	3,950	7,030	18,400	8,500	26,200	19,400	9,200	6,740	5,630	2,450	4,170	3,740
9	3,950	9,200	16,600	10,000	21,400	26,800	10,600	7,030	5,120	2,450	6,170	3,130
10	4,630	7,940	21,400	73,300	18,000	26,200	10,900	6,450	5,120	3,130	5,120	2,760
11	4,870	7,940	114,000	42,200	14,800	25,100	10,600	5,370	4,870	3,530	4,170	2,600
12	4,630	8,880	74,000	27,900	14,800	26,800	10,900	5,120	6,170	3,950	3,530	2,450
13	4,400	17,000	42,800	122,000	17,000	22,400	10,600	4,870	5,630	2,940	3,130	2,450
14	4,400	14,000	31,400	68,000	18,900	18,000	9,870	4,630	5,900	3,740	2,760	2,450
15	4,400	11,600	27,900	43,500	14,800	15,300	9,200	4,870	5,900	3,130	2,600	2,300
16	4,400	9,870	33,200	31,400	12,000	13,600	10,200	5,630	4,870	2,600	2,300	2,760
17	3,740	8,560	31,400	29,600	10,900	12,400	11,600	8,250	4,400	3,130	2,450	2,450
18	3,740	7,630	26,200	31,400	11,600	11,600	12,800	15,700	3,950	2,940	3,330	2,450
19	3,740	7,940	21,400	35,100	10,600	10,600	25,100	24,600	3,950	2,600	5,370	2,300
20	3,950	10,200	17,000	29,000	10,600	9,870	26,200	27,300	3,530	2,450	7,030	2,030
21	5,120	10,200	14,400	21,900	10,200	9,200	19,900	21,900	3,330	2,160	5,370	2,030
22	5,370	9,530	18,400	18,000	9,200	14,400	17,000	18,900	3,130	2,160	4,170	2,030
23	5,370	24,600	20,400	16,600	10,200	18,900	13,600	15,700	2,940	2,160	3,740	1,900
24	7,330	27,300	18,000	18,400	18,000	20,400	11,600	12,400	2,760	1,900	3,530	1,780
25	10,200	24,600	15,300	21,900	21,400	18,000	11,600	9,200	2,760	1,900	4,400	1,780
26	12,800	40,800	10,900	24,000	31,400	15,700	9,870	9,870	2,600	1,900	10,200	1,900
27	10,200	37,600	8,560	30,800	40,200	18,400	8,880	29,000	2,600	1,900	9,200	1,900
28	8,250	68,700	8,880	25,100	35,700	37,600	8,560	25,600	3,530	2,160	8,560	1,780
29	7,940	76,400	8,880	37,600	-------	29,000	8,560	17,000	2,940	2,760	5,630	1,780
30	7,630	43,500	9,200	52,300	-------	31,400	7,940	14,400	3,130	3,330	4,870	1,540
31	9,200	-------	9,530	42,800	-------	29,000	-------	17,000	-------	3,130	4,170	-------
1879–80.												
1	1,540	2,940	6,740	12,000	5,900	10,600	18,000	62,800	8,250	4,630	2,600	3,530
2	1,900	2,600	7,630	10,600	5,900	10,600	15,300	40,800	7,630	4,170	2,450	3,130
3	1,900	2,600	6,450	9,530	6,170	9,870	13,600	27,900	7,940	3,950	2,450	2,600
4	1,900	2,450	5,370	8,880	5,900	9,200	13,200	20,900	7,330	4,870	5,630	2,450
5	1,780	2,300	4,630	8,250	5,370	10,600	16,600	16,600	7,330	5,630	8,560	2,450
6	1,900	2,300	4,170	7,940	5,120	15,700	22,400	13,600	6,170	4,400	7,030	2,760
7	1,900	2,300	4,170	7,630	4,870	18,400	20,900	11,600	5,370	4,400	9,200	3,530
8	2,160	2,160	5,120	8,250	5,370	76,400	16,100	8,250	4,870	4,170	7,030	3,530
9	3,950	2,160	6,740	8,880	5,630	62,800	14,400	9,200	4,400	3,530	5,630	6,170
10	1,900	2,450	7,030	10,600	5,900	53,700	12,400	8,250	4,170	3,130	4,400	15,700
11	1,780	2,450	7,030	9,870	6,450	45,500	10,900	7,940	4,630	3,740	3,950	13,600
12	1,900	2,450	26,200	10,200	7,940	32,600	9,870	7,330	5,900	4,870	3,740	11,600
13	2,160	2,450	20,400	9,530	59,300	34,400	9,200	9,870	5,900	4,170	3,740	8,560
14	2,450	2,450	18,000	9,200	100,000	35,700	8,250	8,250	7,330	3,530	3,130	6,450
15	2,160	2,450	28,500	9,870	68,700	37,000	7,630	6,740	8,250	3,330	3,130	5,120
16	1,900	2,450	55,100	8,250	46,800	38,200	7,330	5,900	40,200	2,940	2,940	3,950
17	1,780	2,450	34,400	8,250	29,600	84,100	7,330	5,370	33,200	2,940	2,940	3,740
18	1,780	3,530	21,900	7,330	20,900	62,100	7,940	4,630	19,900	3,950	2,760	3,330
19	2,030	3,530	16,100	7,630	18,000	40,800	8,250	4,400	14,800	3,530	2,600	2,940
20	20,900	4,170	12,800	7,630	16,600	34,400	7,330	4,400	9,530	3,130	2,450	2,600
21	12,800	4,400	13,600	7,330	14,800	31,400	7,630	4,400	7,940	2,600	2,600	2,450
22	8,250	4,170	14,800	7,330	14,800	25,600	7,940	4,170	6,170	2,760	4,870	2,300
23	6,740	3,530	14,400	4,400	12,400	21,400	8,250	5,120	5,370	4,170	4,630	2,160
24	9,530	3,130	34,400	7,940	11,300	18,000	8,250	6,740	4,630	4,170	3,740	2,030
25	7,330	2,600	71,700	7,330	9,870	14,800	12,800	8,880	3,950	8,250	3,740	2,030
26	5,630	2,760	65,700	7,330	9,200	12,800	76,400	6,450	3,530	6,740	4,400	1,900
27	4,400	2,760	42,200	6,740	9,200	12,800	75,600	6,170	3,530	4,870	3,530	1,900
28	3,950	2,760	26,800	6,740	9,530	28,500	42,800	5,900	3,740	3,740	3,130	2,760
29	3,530	3,330	19,400	5,900	10,600	30,200	28,500	5,120	4,170	3,530	2,760	7,030
30	3,130	9,530	16,100	5,900	-------	27,900	28,500	5,370	4,400	3,330	3,130	4,400
31	3,130	-------	13,600	5,900	-------	21,900	-------	6,740	-------	2,760	3,330	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1880–81.												
1	4,870	9,200	18,000	2,450	9,530	18,000	14,000	8,880	3,130	4,170	1,900	1,780
2	3,740	7,330	37,600	4,170	35,100	22,400	13,200	8,880	3,580	5,120	1,780	1,660
3	3,130	7,330	32,600	3,950	26,800	18,900	12,000	8,880	5,120	3,530	2,450	1,780
4	2,760	5,900	22,400	3,950	20,400	17,000	11,300	7,630	5,630	3,130	1,780	1,900
5	2,600	4,870	14,800	4,630	13,200	17,000	9,530	8,880	10,600	3,130	1,900	1,900
6	2,300	4,400	13,600	22,400	12,000	14,800	10,600	9,530	8,880	2,760	1,780	1,660
7	2,450	4,170	14,000	31,400	10,600	13,200	18,900	9,530	13,200	1,900	2,760	1,660
8	2,450	6,450	15,700	23,500	8,880	13,200	13,200	10,600	10,600	1,900	2,450	1,430
9	2,760	5,630	12,800	17,500	9,530	14,800	35,100	9,530	8,250	1,900	4,630	1,430
10	2,760	5,900	10,600	18,400	26,800	18,000	38,200	9,530	7,630	1,900	3,130	1,430
11	2,450	5,900	7,330	25,600	96,800	18,000	33,800	8,250	7,630	1,900	2,760	1,430
12	2,160	6,450	6,740	25,600	57,900	20,400	32,000	7,630	7,030	2,450	3,530	1,430
13	2,160	10,200	6,740	20,400	81,800	29,000	41,500	7,030	6,450	2,160	2,450	1,170
14	1,900	8,880	7,630	17,000	48,200	25,100	42,800	7,030	5,630	1,900	2,450	1,100
15	1,900	7,030	9,200	20,900	30,800	20,400	33,800	6,450	4,170	2,450	1,900	1,250
16	1,900	5,630	13,200	16,100	22,400	17,000	27,900	6,450	3,530	2,160	1,780	1,250
17	2,030	5,120	10,600	13,600	18,900	14,800	25,100	6,450	3,130	4,170	1,780	1,540
18	1,900	4,630	9,870	13,200	15,700	15,700	21,400	6,450	3,130	3,530	1,660	2,030
19	2,300	4,170	8,880	13,200	57,900	17,000	21,400	5,630	4,170	2,760	1,660	40,200
20	2,160	3,950	8,250	24,000	57,900	32,000	18,000	5,630	3,530	2,760	1,660	23,500
21	2,160	3,740	8,250	47,500	38,200	29,000	21,400	5,120	3,530	2,760	1,660	12,800
22	2,160	3,330	7,330	76,400	26,800	25,100	18,000	4,630	4,170	2,450	1,660	8,560
23	2,160	2,760	6,740	47,500	21,400	20,400	15,700	4,170	3,530	2,450	1,660	6,170
24	2,160	2,600	6,450	31,400	18,000	15,700	13,200	4,170	3,130	3,130	1,660	4,870
25	2,160	2,300	6,450	21,400	14,800	14,000	12,000	4,170	3,130	8,250	1,540	3,950
26	2,160	2,600	6,170	16,100	13,200	12,000	13,200	4,170	3,130	4,630	1,430	3,330
27	2,160	2,600	5,900	12,000	10,600	10,600	13,200	4,170	2,760	3,130	1,430	3,330
28	2,160	2,940	5,900	10,200	11,300	10,600	13,200	4,170	3,130	3,130	1,430	2,760
29	2,600	4,630	5,370	8,250	-------	11,300	10,600	3,530	3,530	2,450	1,430	2,760
30	3,130	15,700	4,870	8,250	-------	11,300	10,600	3,130	9,530	2,160	1,660	2,600
31	5,370	-------	2,760	7,630	-------	14,000	-------	3,130	-------	2,160	1,660	-------
1881–82.												
1	3,530	14,000	5,900	29,000	26,200	12,000	15,300	12,800	10,900	18,000	5,630	14,400
2	2,760	24,000	8,560	21,400	20,400	15,700	12,800	11,300	13,600	24,600	5,630	14,800
3	2,450	12,000	11,600	16,600	17,000	28,500	13,600	9,870	16,600	18,000	17,000	9,870
4	2,450	9,530	10,600	12,400	16,100	20,400	12,800	8,560	13,600	14,400	10,900	10,600
5	2,160	6,170	9,200	10,900	15,700	18,000	12,400	8,250	12,400	14,800	36,300	9,530
6	1,900	5,370	7,330	10,200	14,800	20,900	13,200	19,900	10,900	8,560	24,000	8,250
7	1,900	4,870	6,740	19,900	16,100	32,600	11,600	30,800	9,530	8,560	19,900	6,740
8	1,900	4,400	7,330	33,200	23,000	29,600	10,200	29,000	8,560	7,630	16,600	5,900
9	1,900	4,870	7,330	48,200	36,300	23,000	10,200	24,000	7,330	6,170	12,800	5,630
10	2,300	8,250	6,450	47,500	88,000	22,400	14,400	19,400	6,740	5,370	10,600	7,030
11	1,900	12,000	6,170	44,800	74,000	27,900	14,400	19,400	5,900	4,870	8,250	16,600
12	1,900	10,200	5,370	46,800	48,200	25,100	14,000	30,800	5,630	4,630	7,030	73,300
13	1,780	7,940	5,900	44,200	36,300	18,400	12,800	33,200	5,630	54,400	5,900	40,800
14	1,780	6,740	9,870	71,000	62,100	17,500	11,600	59,300	7,630	19,400	5,120	23,000
15	1,780	5,900	46,800	62,100	61,400	14,800	10,200	48,200	10,200	19,400	4,630	15,700
16	1,780	5,630	42,200	39,500	41,500	14,400	9,200	31,400	13,600	13,600	4,400	11,600
17	1,780	4,870	25,100	32,000	86,400	14,400	8,560	20,400	12,000	8,560	4,170	8,880
18	1,780	4,400	17,000	32,600	69,400	16,600	8,250	18,000	14,400	7,630	3,950	8,880
19	1,780	3,950	12,800	39,500	44,200	32,600	7,630	14,400	11,600	7,030	3,740	15,700
20	1,660	3,740	9,870	40,200	34,400	62,100	7,030	12,400	9,530	7,030	3,740	15,700
21	1,660	3,740	8,560	46,200	31,400	65,700	6,450	10,900	8,250	7,030	3,740	10,200
22	1,660	3,530	10,200	99,200	32,600	54,400	6,450	9,870	6,740	6,170	3,530	8,880
23	1,660	3,530	54,400	58,600	29,600	37,000	6,740	21,400	5,900	5,120	3,130	8,250
24	1,780	4,870	61,400	35,100	23,500	26,800	13,200	21,900	4,870	4,630	2,940	6,740
25	1,900	14,400	35,100	25,100	18,000	20,400	23,000	19,900	4,870	4,870	2,940	5,900
26	1,900	17,500	23,500	23,500	15,300	17,000	18,400	15,700	10,600	3,950	2,760	5,370
27	1,900	12,400	29,600	42,200	13,600	14,800	18,000	12,800	10,600	3,530	3,530	7,030
28	2,450	9,200	61,400	44,200	12,400	21,400	20,400	11,300	9,870	3,130	4,400	10,900
29	2,450	7,330	42,800	40,800	-------	25,600	20,400	10,600	21,900	3,740	7,940	9,200
30	2,300	6,450	42,200	53,700	-------	21,400	15,700	12,400	14,400	3,740	8,560	8,560
31	2,450	-------	39,500	35,100	-------	18,000	-------	12,000	-------	4,630	8,250	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1882–83.												
1	7,940	2,940	4,170	5,900	16,600	12,400	99,200	13,200	7,630	7,940	2,450	2,600
2	7,030	3,330	3,950	5,370	13,200	10,600	72,500	11,600	6,450	6,450	2,450	2,450
3	6,170	3,530	4,400	4,870	11,600	10,200	46,200	10,600	5,900	5,370	2,160	2,030
4	5,630	3,740	4,630	4,870	10,900	9,870	33,200	9,530	5,630	4,630	2,030	1,900
5	5,370	3,530	5,370	5,370	21,400	8,880	26,200	8,560	5,370	4,170	1,900	1,660
6	5,120	3,330	5,630	6,740	66,500	8,880	48,900	8,880	5,900	4,400	1,900	1,660
7	4,870	3,130	7,630	12,800	71,000	15,700	77,900	8,250	8,250	3,740	1,900	1,660
8	4,400	2,940	7,080	28,500	68,700	20,900	53,000	8,250	7,330	3,740	1,660	1,430
9	4,170	2,940	5,370	26,200	48,200	20,400	35,700	7,940	6,740	6,450	1,660	1,430
10	3,950	3,130	6,450	20,900	30,200	16,100	27,900	7,330	5,900	7,940	1,540	1,330
11	3,740	3,330	8,880	16,100	26,800	14,800	27,900	7,630	7,940	6,170	1,430	1,330
12	3,530	4,630	10,600	12,000	62,800	13,200	30,800	6,450	18,400	5,370	1,430	1,250
13	3,530	4,400	9,530	9,200	51,600	12,000	29,000	8,560	18,000	4,630	1,430	1,250
14	3,530	4,630	9,530	9,870	26,800	13,200	27,300	6,450	16,100	4,400	1,430	1,250
15	3,740	5,370	8,560	14,400	24,600	18,000	24,000	7,940	12,400	4,170	1,430	2,030
16	3,330	4,870	7,630	18,900	33,800	17,500	21,900	7,940	9,530	5,120	1,660	2,160
17	3,330	4,630	5,900	15,700	34,400	15,700	38,900	9,530	7,940	5,370	2,300	1,660
18	3,330	4,400	4,870	25,100	26,200	14,400	40,800	8,560	7,630	4,170	5,120	1,660
19	3,330	4,170	4,170	30,800	21,400	13,600	30,200	8,250	8,250	3,530	5,370	1,660
20	3,530	3,950	4,170	29,600	18,400	13,600	24,000	7,630	11,300	2,940	3,740	1,660
21	3,530	3,740	4,170	74,000	17,000	14,000	23,000	6,740	8,560	2,600	2,760	3,130
22	4,170	3,740	5,630	70,200	14,800	14,000	20,900	7,030	7,030	2,450	2,450	6,450
23	5,630	3,740	8,250	44,800	13,200	12,400	49,600	7,330	5,370	2,300	2,160	3,950
24	4,630	3,740	24,600	25,600	12,000	10,600	74,000	8,880	4,400	2,160	1,900	3,330
25	3,740	3,530	20,900	18,900	11,600	9,870	59,300	8,250	3,530	11,300	1,660	12,400
26	3,530	3,330	15,700	17,000	12,400	9,530	37,000	7,630	3,950	8,250	1,780	17,500
27	3,530	3,530	11,600	14,000	11,600	10,900	26,800	6,740	5,900	4,170	1,780	11,300
28	3,330	4,630	9,870	13,200	13,600	11,300	21,400	6,450	18,900	3,950	2,760	7,330
29	3,130	4,870	8,250	17,500	-------	14,800	18,400	5,900	12,800	3,740	2,450	5,370
30	3,130	4,400	7,330	21,900	-------	62,800	15,300	5,370	10,900	3,130	2,450	3,950
31	3,130	-------	6,740	17,500	-------	88,000	-------	5,630	-------	5,370	2,300	-------
1883–84.												
1	3,330	7,030	9,200	28,500	75,600	12,400	18,400	13,600	9,200	15,700	8,880	3,740
2	3,130	6,740	7,630	47,500	60,000	11,300	18,000	12,800	8,560	14,000	8,880	3,950
3	4,400	5,900	6,740	40,800	44,800	10,900	24,000	12,800	7,630	23,500	7,630	3,530
4	6,170	4,870	6,170	25,600	31,400	10,600	20,400	10,900	7,330	18,000	6,740	3,330
5	6,450	4,870	5,370	16,600	65,700	8,880	21,900	9,530	6,450	25,600	5,370	2,940
6	12,800	3,950	4,870	8,880	69,400	25,600	19,400	9,530	5,900	23,500	4,870	2,760
7	14,400	3,740	4,630	8,560	57,900	62,100	17,500	10,200	5,370	25,600	4,630	2,600
8	11,600	3,740	4,400	8,250	62,800	92,000	15,300	11,600	5,370	18,400	4,400	2,600
9	11,600	3,740	4,400	8,250	93,600	104,000	13,600	12,400	5,630	12,800	4,400	2,600
10	9,200	3,740	5,370	7,630	104,000	72,500	12,800	11,600	5,900	9,870	4,400	2,450
11	6,740	7,630	5,900	7,940	84,900	52,300	12,800	14,000	7,630	8,250	7,030	2,300
12	5,370	12,400	6,170	16,600	79,400	38,200	10,200	11,600	7,630	8,250	7,940	2,300
13	4,400	11,600	5,630	17,500	51,600	38,200	10,200	11,600	12,800	7,630	7,630	2,300
14	3,950	9,530	5,120	15,700	53,000	39,500	11,600	12,000	11,600	7,630	7,030	2,300
15	3,530	7,630	5,120	16,100	60,000	37,000	14,000	15,700	11,300	7,030	5,370	2,300
16	3,330	6,170	5,120	14,800	46,800	34,400	15,700	13,200	15,300	6,450	4,400	2,300
17	3,130	5,120	4,870	12,800	46,800	32,000	23,500	11,600	9,530	6,170	3,950	2,760
18	2,940	4,400	4,400	11,600	87,200	27,900	20,400	10,200	10,600	5,630	3,530	2,030
19	2,760	3,950	4,630	12,800	64,300	27,900	15,700	9,200	8,560	4,870	3,530	2,300
20	2,760	3,530	6,740	13,200	47,500	84,900	14,400	8,560	7,940	4,870	3,330	2,160
21	3,530	3,530	11,300	15,700	52,300	93,600	13,600	12,400	7,030	3,950	3,130	2,160
22	5,120	3,530	10,900	12,800	47,500	53,700	28,500	10,200	6,450	4,170	3,950	2,030
23	5,120	3,530	10,200	11,600	33,200	38,900	37,600	10,200	6,170	4,170	5,900	2,030
24	5,630	8,880	21,900	12,000	26,200	33,800	32,000	8,880	9,200	4,170	5,120	2,030
25	5,630	13,200	62,100	12,400	23,000	33,800	28,500	8,250	9,200	3,950	4,870	1,900
26	5,900	15,300	61,400	12,800	18,400	65,000	32,600	11,600	41,500	3,950	4,170	1,900
27	5,630	13,600	37,600	12,400	16,600	56,500	27,300	11,600	62,100	3,740	3,740	1,900
28	5,370	14,800	28,500	11,600	15,300	38,900	21,900	17,000	45,500	3,740	3,330	1,780
29	4,870	12,400	19,400	10,600	14,400	30,200	18,900	14,400	28,500	6,740	3,330	1,780
30	4,870	10,600	16,600	11,600	-------	25,600	15,700	13,600	20,400	5,120	3,330	1,780
31	7,030	-------	15,300	46,800	-------	22,400	-------	10,900	-------	7,940	4,170	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1884–85.												
1	1,780	2,160	2,940	7,330	8,250	19,400	14,800	7,030	42,200	8,250	7,330	2,600
2	1,780	2,450	2,940	7,940	9,530	30,800	17,500	8,250	30,800	6,740	6,450	2,760
3	1,780	2,600	2,940	7,030	10,200	25,600	17,000	9,530	20,400	5,370	5,900	3,130
4	1,780	2,450	2,760	5,370	9,530	20,400	28,500	8,560	16,600	4,870	5,370	3,130
5	1,660	2,450	2,600	4,870	9,530	19,400	20,900	8,560	13,600	4,870	5,370	2,940
6	1,660	2,450	2,600	4,870	11,300	18,900	19,900	7,940	11,300	4,630	6,740	2,600
7	1,660	2,160	2,600	9,200	9,870	18,400	16,100	7,330	10,200	4,170	5,370	2,450
8	1,660	2,160	17,030	15,700	10,600	15,700	14,000	12,400	9,530	4,170	5,370	2,450
9	1,660	2,160	11,600	14,000	11,300	13,600	13,200	12,800	9,530	4,400	7,630	2,450
10	1,660	2,160	8,250	11,300	29,000	11,600	11,600	13,200	10,600	4,400	7,630	2,300
11	1,660	2,160	6,740	9,870	27,900	10,900	11,300	10,600	9,870	4,170	7,630	2,160
12	1,660	2,160	5,120	9,870	20,400	10,900	10,600	8,880	8,880	3,950	7,630	2,160
13	1,780	2,030	4,870	20,400	14,000	18,000	10,600	8,250	7,940	3,740	7,630	2,160
14	1,780	2,030	6,450	29,600	12,400	26,800	10,600	8,250	7,330	3,740	10,200	2,160
15	1,780	2,030	7,330	22,400	10,200	25,100	10,200	7,940	6,450	11,600	8,250	2,030
16	1,780	2,030	10,900	45,500	9,530	24,600	11,600	7,630	6,450	6,740	7,630	2,030
17	1,780	2,030	12,000	65,000	8,250	23,000	19,900	7,330	7,030	7,630	7,030	2,030
18	1,660	2,030	9,870	55,100	8,250	15,700	37,600	7,030	8,880	6,740	5,370	2,030
19	1,660	2,160	8,880	36,300	7,630	13,600	42,800	6,450	8,560	4,630	4,870	2,030
20	1,660	2,160	6,170	23,000	7,330	12,400	35,700	6,170	7,630	4,630	3,950	2,030
21	1,660	2,160	4,630	16,600	7,330	9,530	25,100	5,900	6,740	3,950	3,950	1,900
22	1,660	2,160	12,400	11,600	5,370	8,880	20,400	5,900	6,170	4,870	3,530	1,900
23	1,660	2,160	26,200	8,250	5,370	7,940	15,300	7,630	5,900	4,630	3,130	1,900
24	1,780	2,600	28,500	7,630	6,170	7,630	12,800	14,400	5,370	4,400	3,130	1,780
25	1,780	4,170	19,400	8,250	6,170	7,630	11,300	40,800	4,870	5,120	3,130	1,780
26	1,900	8,250	13,200	11,600	6,450	7,330	9,870	30,200	5,370	7,940	2,600	3,130
27	1,900	5,900	9,200	15,700	8,560	7,030	9,530	24,000	5,370	7,630	2,940	3,130
28	1,900	4,870	8,250	12,800	12,400	7,030	8,560	31,400	5,900	9,530	2,940	3,130
29	2,030	3,950	7,030	10,900	-------	7,030	7,940	47,500	8,560	9,530	2,760	2,160
30	2,160	3,130	6,450	8,250	-------	15,300	7,630	59,300	10,600	8,250	2,600	2,030
31	2,160	-------	6,170	8,250	-------	15,300	-------	50,300	-------	7,940	2,600	-------
1885–86.												
1	1,900	35,100	9,530	10,600	23,500	19,900	204,000	13,600	23,500	57,900	6,740	6,170
2	1,900	19,400	10,900	14,800	18,400	15,700	146,000	29,000	19,400	40,800	10,200	5,900
3	1,780	14,000	10,200	14,400	15,700	14,000	62,100	25,600	17,000	29,000	11,600	5,370
4	1,900	11,600	9,870	20,400	14,800	11,600	55,100	18,000	15,700	34,400	9,870	4,870
5	1,900	9,870	9,200	159,000	11,300	10,900	104,000	14,400	13,200	37,000	8,250	3,950
6	2,030	8,880	8,880	104,000	8,250	10,200	156,000	10,900	10,600	57,900	7,330	3,746
7	2,450	8,880	8,250	44,200	8,250	10,200	146,000	10,900	8,880	34,400	7,330	3,530
8	2,600	11,600	7,630	27,900	8,250	9,870	72,500	72,500	10,200	23,500	7,330	3,530
9	2,600	52,300	7,330	22,400	11,600	9,530	46,200	71,000	10,600	27,300	7,630	3,330
10	2,600	38,900	21,400	15,700	14,800	8,880	35,700	44,200	10,900	25,600	8,250	3,330
11	2,300	26,200	28,500	9,870	27,900	8,250	29,000	36,300	15,700	20,400	7,330	3,330
12	2,030	18,900	22,400	8,560	46,800	7,630	30,200	23,000	14,800	16,100	7,030	3,330
13	3,130	13,600	16,600	8,250	54,400	7,630	25,600	37,600	13,200	14,000	8,880	3,130
14	3,130	12,000	42,200	7,630	62,800	8,250	20,400	34,400	11,600	16,100	7,940	3,130
15	18,400	10,600	51,000	7,940	42,800	8,250	18,400	27,300	12,400	19,900	7,030	3,130
16	11,300	9,530	39,500	9,870	25,600	8,880	14,800	25,600	10,200	16,600	7,030	3,330
17	8,250	8,880	25,600	10,200	23,500	9,530	13,600	24,000	18,400	15,700	7,330	3,130
18	6,450	8,250	16,600	10,600	20,400	9,870	12,400	18,900	49,600	15,700	8,880	3,130
19	5,900	7,330	15,700	11,300	19,400	9,870	11,600	15,700	34,400	12,000	8,880	3,330
20	4,870	7,030	15,700	13,600	14,800	10,600	10,900	18,400	21,900	9,200	9,200	3,530
21	3,130	8,250	11,600	18,000	14,800	21,400	10,200	28,500	14,800	8,250	12,800	3,130
22	2,760	7,940	9,870	18,000	14,800	40,200	9,200	24,600	13,200	7,630	10,200	3,530
23	10,900	7,630	9,200	17,500	11,600	37,600	8,250	20,400	11,600	7,630	8,250	3,330
24	8,250	7,940	8,250	17,500	11,600	25,600	7,940	17,000	9,530	7,940	7,030	3,130
25	7,630	8,880	8,250	17,000	11,300	20,400	7,630	15,700	14,000	7,940	5,900	2,940
26	5,630	9,200	7,630	14,400	28,500	18,000	7,030	14,800	14,800	7,030	4,870	2,760
27	4,870	8,880	7,030	13,600	27,300	19,400	7,030	11,600	14,000	6,450	4,630	2,600
28	4,170	8,560	4,630	18,000	24,000	75,600	6,740	10,600	14,400	6,450	4,630	2,600
29	3,740	7,630	4,630	33,800	-------	70,200	6,450	15,700	20,900	6,450	5,370	2,940
30	8,250	7,630	4,400	37,600	-------	46,800	7,940	15,700	25,600	5,630	5,370	2,760
31	57,900	-------	5,370	30,800	-------	112,000	-------	14,000	-------	5,630	5,900	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1886–87.												
1	2,760	3,330	15,300	33,800	24,600	33,800	11,300	46,800	5,900	3,130	3,330	2,940
2	2,760	3,130	15,300	40,800	23,000	30,200	10,200	35,700	5,900	3,330	2,940	2,760
3	2,760	3,130	11,300	32,000	53,000	25,600	12,400	22,400	9,530	2,940	2,940	2,760
4	2,600	3,130	8,250	19,900	77,100	24,000	19,400	20,400	16,600	2,760	3,330	2,450
5	2,450	2,940	7,940	15,300	55,100	22,400	22,400	15,700	9,530	2,760	7,940	2,160
6	2,450	2,760	5,370	11,600	36,300	22,400	24,000	11,600	8,880	2,760	5,900	2,030
7	2,450	2,600	4,870	11,300	28,500	25,100	23,500	13,200	8,560	2,760	4,400	2,300
8	2,450	2,600	5,370	9,870	23,000	49,600	13,200	16,600	9,530	2,760	3,740	2,160
9	2,450	2,600	7,330	9,200	20,900	44,800	12,000	23,500	16,600	3,740	3,330	2,030
10	2,450	2,600	6,170	9,530	18,000	37,600	10,900	25,100	20,900	5,370	3,530	2,030
11	2,450	2,600	6,450	8,880	19,900	31,400	8,560	20,400	16,600	7,630	3,330	1,900
12	2,300	3,130	7,330	7,630	23,000	31,400	9,530	24,000	12,800	5,370	2,940	1,900
13	2,300	3,740	8,880	7,330	19,400	26,200	8,560	23,500	10,900	4,870	2,760	1,900
14	2,300	7,330	20,400	7,330	17,000	20,900	8,560	23,000	9,870	4,400	2,600	1,780
15	2,300	7,940	25,600	7,630	15,300	17,000	8,560	18,000	7,330	3,740	2,760	1,780
16	2,160	7,030	20,400	8,880	25,600	14,400	8,880	15,700	6,450	2,760	3,130	1,900
17	2,160	5,900	15,700	9,200	27,900	12,800	8,880	14,800	5,630	2,600	4,170	1,900
18	2,160	4,870	13,600	8,250	40,200	11,300	8,880	11,600	5,370	2,450	5,120	1,900
19	2,160	12,400	19,900	7,940	37,000	9,200	17,000	9,530	4,870	2,450	3,950	2,300
20	2,160	10,200	21,900	7,630	33,800	8,880	31,400	9,200	4,400	2,300	3,530	2,160
21	2,160	12,800	19,900	8,250	28,500	8,880	23,500	9,530	4,400	2,300	3,330	1,900
22	2,160	9,200	13,200	18,900	31,400	8,560	25,600	9,200	4,170	2,300	3,330	2,030
23	2,160	7,630	12,000	22,400	27,900	8,560	53,000	8,560	4,170	2,600	3,330	2,300
24	2,160	10,900	13,600	40,800	80,200	8,560	77,900	7,940	4,870	2,940	2,940	2,160
25	2,450	18,900	38,900	96,800	84,100	8,250	48,200	7,030	5,370	3,330	2,760	1,900
26	2,450	37,600	38,900	61,400	53,700	8,250	40,800	7,630	5,370	4,400	2,940	1,900
27	2,450	44,200	30,200	40,800	53,000	8,250	37,000	9,200	5,120	4,170	3,130	1,900
28	2,450	23,500	21,900	27,900	51,600	8,560	32,600	8,560	4,630	3,950	2,760	1,900
29	2,450	15,700	15,700	23,000	-------	9,200	48,900	7,330	4,400	3,530	2,760	2,300
30	3,530	13,200	15,300	28,500	-------	10,900	66,500	6,740	4,170	3,740	2,600	2,600
31	3,530	-------	16,600	35,100	-------	11,300	-------	6,170	-------	3,530	3,130	-------
1887–88.												
1	12,800	2,940	2,300	2,760	8,880	10,600	35,100	7,330	30,200	11,600	2,160	2,760
2	10,200	3,330	2,300	4,400	12,400	9,530	20,400	7,030	29,600	8,880	2,030	3,740
3	7,030	3,530	2,300	14,800	11,600	9,200	19,400	6,450	21,400	7,030	1,900	5,900
4	5,120	3,330	2,300	16,600	10,900	10,600	16,100	5,900	15,700	5,900	2,600	5,900
5	3,950	3,330	2,300	13,600	25,600	9,870	13,600	5,900	12,800	4,870	2,450	32,600
6	3,130	3,130	2,300	11,300	44,200	9,530	12,000	5,900	10,200	4,630	2,300	15,700
7	2,940	3,130	2,300	10,200	35,100	9,530	11,300	5,900	7,940	4,400	2,300	10,200
8	2,760	2,940	2,450	18,400	29,600	9,200	11,300	5,630	7,030	5,630	3,130	18,400
9	2,600	2,760	2,600	23,500	24,600	8,880	10,600	5,630	6,450	9,870	2,760	28,500
10	2,160	2,600	2,760	19,900	20,400	7,330	10,200	6,170	5,900	6,740	2,600	35,700
11	2,300	2,600	2,940	21,400	18,000	7,630	10,900	8,560	5,630	14,400	5,900	35,100
12	2,300	2,600	3,950	18,000	34,400	13,600	22,400	9,870	5,370	9,200	5,900	59,300
12	2,160	2,600	10,600	13,600	45,500	16,100	19,900	17,000	5,630	7,630	4,630	33,200
14	2,160	2,760	7,940	12,000	37,600	15,700	16,100	20,900	5,370	7,630	3,740	19,400
15	2,030	2,760	5,900	13,200	30,200	12,800	10,600	17,500	4,870	6,170	3,740	14,000
16	2,030	2,600	5,630	19,400	25,600	9,870	10,900	13,200	4,630	5,120	4,170	11,600
17	2,030	2,600	5,370	20,400	23,500	9,530	10,200	11,600	4,400	4,870	3,330	44,200
18	2,030	2,600	5,900	18,900	15,700	10,200	9,200	11,300	4,400	4,630	2,940	62,800
19	2,030	2,600	5,900	15,700	15,700	12,400	8,250	12,800	4,170	4,400	2,600	46,200
20	2,160	2,600	5,120	13,600	14,400	12,800	7,940	14,400	3,950	3,530	2,300	31,400
21	2,300	2,450	4,870	12,400	14,400	13,200	7,630	14,800	3,950	4,400	3,330	19,400
22	2,300	2,450	4,630	9,870	18,900	42,200	7,630	11,600	3,740	3,530	4,170	17,000
23	3,130	2,300	4,170	9,200	18,000	42,800	7,940	11,300	4,870	3,130	4,870	14,400
24	3,740	2,300	4,170	8,250	14,400	26,800	14,000	19,400	6,740	2,940	6,450	12,000
25	2,940	2,300	3,950	7,940	17,000	19,400	14,800	25,600	10,600	3,130	5,900	10,600
26	2,600	2,300	3,950	7,940	18,000	20,400	13,600	19,900	5,630	2,760	4,400	9,870
27	3,130	2,450	3,950	6,740	15,300	26,800	10,600	18,000	4,630	2,450	3,740	8,880
28	7,940	2,450	4,170	6,170	14,400	38,900	9,530	15,700	4,630	2,300	3,130	8,560
29	7,330	2,300	4,170	4,870	12,400	41,500	8,560	13,200	4,630	2,300	2,760	7,630
30	5,370	2,300	3,950	3,740	-------	55,800	7,940	11,600	15,700	2,160	2,760	7,030
31	4,630	-------	2,940	5,900	-------	45,500	-------	17,000	-------	2,160	2,600	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1888–89.												
1	6,170	19,400	9,870	18,000	23,000	13,200	11,600	16,600	161,000	14,800	39,500	8,560
2	6,450	16,600	9,530	19,400	18,400	13,600	10,600	28,500	72,500	13,600	51,000	7,030
3	6,740	14,800	9,200	16,600	17,000	18,400	12,400	36,300	37,000	24,600	35,700	7,630
4	7,030	12,800	8,880	14,800	15,300	25,600	12,000	27,300	27,300	30,800	29,000	6,450
5	7,030	12,400	7,330	12,000	14,800	25,100	11,300	20,900	21,900	47,500	25,100	6,170
6	7,330	11,300	7,030	25,600	13,600	22,400	10,200	17,000	19,400	33,200	29,000	5,900
7	6,740	10,200	7,630	68,000	12,800	18,900	9,530	14,400	14,800	22,400	25,100	6,170
8	8,880	9,530	6,740	42,200	10,200	16,600	8,880	12,400	12,800	18,000	21,400	6,170
9	8,250	9,200	7,630	30,200	8,880	14,800	8,880	12,000	10,900	13,600	18,900	8,250
10	8,560	9,200	7,330	30,800	8,560	13,200	8,560	9,530	9,200	10,900	16,600	10,200
11	9,200	16,100	7,330	29,000	9,870	12,000	8,250	9,200	9,200	9,200	14,400	7,940
12	13,200	18,000	7,630	27,300	9,870	10,900	8,880	8,560	10,900	9,200	12,400	7,330
13	32,000	16,600	7,330	19,900	9,530	10,600	8,880	8,250	20,900	9,530	11,600	7,330
14	30,800	13,600	7,630	18,000	8,880	10,600	8,880	9,870	35,100	10,900	10,200	6,170
15	30,800	14,400	7,030	15,700	8,560	10,600	9,200	11,300	46,200	9,200	10,200	5,630
16	24,000	30,200	6,450	13,600	9,870	11,300	12,800	12,400	44,200	11,300	14,800	5,630
17	19,900	40,800	6,170	13,200	32,000	11,600	14,000	14,000	39,500	9,530	14,800	5,370
18	19,900	38,200	13,600	12,400	55,100	12,000	12,800	13,200	32,600	9,530	12,800	7,630
19	17,000	25,100	44,800	12,800	102,000	11,600	12,800	9,870	29,000	8,880	10,900	14,000
20	16,100	23,500	33,200	13,600	62,100	12,800	12,400	9,200	32,600	27,300	9,200	14,400
21	35,100	24,600	23,000	14,400	37,600	18,900	10,600	8,560	28,500	18,400	8,560	10,900
22	24,000	21,900	16,600	12,800	23,500	21,400	9,200	8,250	23,000	21,900	7,940	9,530
23	19,400	20,400	15,300	12,400	21,900	14,400	8,880	7,940	14,800	14,400	7,940	7,940
24	27,900	15,700	13,600	11,300	18,000	13,600	8,250	7,630	12,800	12,800	7,330	6,740
25	51,600	14,400	12,000	14,400	15,700	14,400	8,560	7,940	12,800	10,200	7,940	24,600
26	37,000	13,200	11,300	32,000	14,000	15,700	12,000	11,600	12,800	9,200	9,200	52,300
27	80,200	12,400	12,000	48,200	12,400	16,100	16,600	19,900	14,800	19,900	8,250	25,600
28	57,900	11,600	28,500	55,100	12,800	15,300	26,200	17,000	21,900	25,600	7,630	19,400
29	49,600	10,200	32,000	53,700	-------	14,000	24,000	16,100	17,000	25,600	7,330	14,800
30	32,000	10,600	25,100	37,600	-------	12,800	18,000	17,000	12,800	21,900	6,170	10,200
31	25,100	-------	18,900	27,300	-------	11,600	-------	88,000	-------	20,400	10,200	-------
1889–90.												
1	9,200	14,800	20,900	9,870	15,300	50,300	22,400	15,700	13,600	4,170	4,630	7,030
2	9,200	12,000	17,000	9,530	54,400	42,800	24,000	13,600	10,200	4,170	4,630	5,630
3	8,880	10,900	16,100	9,200	43,500	29,600	26,200	13,600	9,200	3,740	4,170	4,870
4	9,200	12,800	12,800	8,880	36,300	26,200	27,300	14,800	8,880	5,120	4,170	4,400
5	8,880	14,000	13,600	8,560	32,600	21,400	57,200	19,900	8,250	5,630	4,400	3,950
6	7,630	13,200	13,200	8,560	29,600	19,400	57,900	35,700	7,940	4,870	6,450	3,530
7	6,450	12,800	12,400	9,200	22,400	16,600	40,800	49,600	7,630	4,400	7,940	3,330
8	6,170	10,900	11,300	25,100	19,400	15,300	31,400	37,600	7,330	3,950	9,200	3,330
9	5,900	11,600	10,900	24,600	20,900	14,400	25,100	27,300	7,330	3,740	10,200	3,740
10	5,900	27,300	10,600	21,900	27,900	13,600	21,400	21,400	6,740	5,120	11,600	6,450
11	5,630	44,800	10,900	16,100	24,600	14,000	20,900	17,000	6,170	4,400	10,200	11,600
12	5,900	29,000	10,200	12,800	21,400	29,000	21,900	15,300	5,900	3,950	9,200	7,630
13	5,630	20,400	12,000	11,300	17,500	29,600	19,400	13,600	5,630	3,740	7,630	6,170
14	5,630	39,500	11,600	9,870	17,000	29,000	18,400	13,600	5,630	3,330	6,170	6,450
15	10,200	49,600	11,300	9,200	30,200	48,900	17,500	12,800	5,370	3,130	5,120	6,170
16	9,870	29,000	10,600	10,200	51,000	42,800	20,400	18,000	5,370	3,330	4,870	12,800
17	9,870	24,000	9,530	15,300	36,300	33,800	33,800	18,900	8,560	5,630	4,170	14,000
18	9,200	18,900	9,200	14,800	26,800	27,300	37,000	16,100	6,450	4,870	3,740	11,300
19	8,560	19,900	8,880	14,000	20,900	26,200	33,200	14,800	7,330	4,870	3,530	9,200
20	7,940	30,800	8,560	14,000	21,400	65,700	27,300	37,000	7,940	5,630	3,330	6,740
21	7,330	25,600	8,560	14,800	30,200	51,000	25,100	53,000	7,940	4,170	3,130	6,170
22	6,740	23,500	8,560	21,400	27,900	60,700	21,400	46,200	7,330	3,530	4,870	5,630
23	6,740	36,300	8,560	21,400	27,300	77,100	17,000	31,400	6,170	3,130	6,170	5,370
24	6,170	27,300	8,250	17,500	21,900	66,500	15,300	23,000	5,120	3,530	5,630	5,630
25	7,940	23,500	7,940	14,800	65,000	46,200	14,000	18,000	5,630	3,740	4,870	5,370
26	8,880	19,400	9,200	13,200	121,000	33,800	21,900	17,000	5,630	3,950	4,630	5,370
27	11,300	18,000	14,800	12,400	89,600	27,300	19,400	18,000	5,630	3,950	5,630	6,170
28	14,800	20,900	14,000	12,400	57,200	25,100	19,400	21,900	4,870	6,170	14,800	7,940
29	42,800	25,600	12,800	12,000	-------	24,000	18,000	21,900	4,630	6,170	9,200	8,250
30	25,600	24,000	11,600	12,800	-------	21,400	17,000	17,000	4,400	4,630	6,450	9,200
31	18,000	-------	10,600	14,000	-------	21,400	-------	12,800	-------	4,170	6,450	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1890–91.												
1	7,630	15,300	5,120	27,900	57,900	33,200	64,300	9,580	26,200	6,450	6,450	12,000
2	7,940	11,300	4,630	84,100	84,100	20,900	65,000	9,200	23,000	7,330	5,630	9,870
3	9,530	12,400	4,630	96,000	65,000	22,400	57,200	8,580	19,400	9,530	5,630	10,600
4	12,000	12,000	4,630	56,500	68,700	29,000	68,700	9,200	18,900	7,940	7,630	9,200
5	9,530	11,300	4,630	36,300	55,100	51,000	51,000	9,200	26,200	6,740	10,600	8,560
6	14,000	10,200	4,630	22,400	36,300	44,200	39,500	8,880	27,300	5,900	10,600	7,630
7	12,400	9,870	4,870	19,400	30,800	33,200	33,200	8,250	27,300	5,630	10,200	11,300
8	12,400	9,200	10,900	15,300	27,300	51,000	29,000	8,250	51,000	6,170	8,560	14,800
9	10,900	9,200	11,300	12,000	30,200	95,200	27,300	7,940	36,300	6,170	7,630	10,900
10	9,200	9,200	11,600	11,300	55,800	88,000	28,500	7,630	27,300	8,560	6,170	8,880
11	7,940	8,560	10,900	11,300	96,000	64,300	33,200	7,630	20,900	9,530	6,170	7,630
12	7,330	7,630	9,200	51,000	63,500	46,200	103,000	7,330	17,000	7,630	5,370	7,030
13	9,870	7,630	7,940	57,200	44,800	59,300	74,000	7,330	16,600	6,170	5,370	6,450
14	8,560	7,940	7,630	36,300	44,800	71,700	48,900	7,630	17,000	5,900	5,120	6,170
15	7,940	7,630	6,450	26,200	35,100	51,000	34,400	8,880	13,600	5,370	6,740	6,740
16	7,630	7,630	5,900	19,400	30,800	37,000	27,300	10,900	12,400	4,870	5,900	6,740
17	7,630	7,630	6,170	17,000	26,800	29,600	23,500	12,000	10,900	4,870	5,370	5,900
18	10,600	8,250	5,630	16,100	28,500	24,600	19,900	13,200	12,000	4,870	5,120	5,630
19	8,560	9,530	4,870	15,300	27,900	21,900	19,400	10,600	12,400	6,740	5,370	5,630
20	9,870	9,870	4,870	13,600	24,000	21,400	19,400	9,530	12,800	6,170	6,450	5,120
21	8,880	9,870	5,120	12,800	21,400	22,400	17,000	8,560	13,600	7,630	6,450	4,630
22	8,880	9,530	7,940	13,600	53,700	35,100	14,800	8,250	17,000	7,940	17,500	4,630
23	7,940	7,630	12,000	25,600	65,000	29,000	14,400	8,560	17,000	7,330	12,800	4,630
24	26,800	8,250	16,600	43,500	49,600	26,200	14,400	7,940	14,800	8,560	22,400	4,630
25	49,600	6,450	17,000	30,200	35,100	24,600	13,600	7,630	12,000	9,870	30,200	4,630
26	32,000	7,330	17,000	23,500	68,000	21,900	12,800	7,630	10,600	12,400	30,800	4,400
27	26,200	5,630	15,300	21,400	68,000	20,400	12,800	7,630	8,880	12,000	24,000	4,400
28	27,300	5,120	14,400	18,400	46,800	23,500	10,900	10,600	7,630	9,870	32,000	3,950
29	21,400	5,120	10,900	21,900	-------	25,100	10,600	51,000	7,030	8,560	26,800	4,170
30	23,000	4,870	10,900	36,300	-------	27,300	10,200	48,900	6,170	7,630	18,900	3,950
31	19,400	-------	10,900	46,800	-------	33,200	-------	32,000	-------	7,030	14,800	-------
1891–92.												
1	3,740	3,740	8,560	14,000	10,900	11,300	20,900	18,900	25,100	7,940	4,630	2,760
2	4,170	3,530	7,330	12,800	10,600	13,200	18,900	17,500	19,400	8,250	7,030	3,530
3	4,170	3,330	6,450	17,000	10,200	14,400	18,000	17,000	16,600	8,560	6,450	3,330
4	3,740	3,330	6,450	24,600	9,200	14,400	17,000	14,400	14,800	7,330	6,450	2,940
5	3,740	3,330	23,000	21,400	9,200	13,600	16,600	12,800	14,400	6,740	5,900	2,600
6	3,950	3,330	46,800	17,000	9,870	18,900	15,300	12,000	14,400	6,170	5,630	2,450
7	4,170	3,330	27,900	17,000	9,200	27,900	14,400	11,600	21,900	6,170	5,120	2,450
8	4,400	3,330	30,200	15,300	12,800	24,000	19,400	13,600	22,400	6,170	4,400	2,450
9	4,170	3,330	34,400	12,800	23,000	45,500	59,300	11,600	19,900	5,900	3,950	2,450
10	4,630	3,330	25,600	10,600	24,600	54,400	46,200	10,200	19,900	5,370	3,740	2,450
11	4,630	3,950	17,500	10,200	20,900	36,300	32,000	9,530	17,500	5,370	3,740	2,450
12	4,170	4,630	14,800	10,900	17,000	26,200	24,000	10,600	14,400	4,870	4,170	2,450
13	4,170	7,940	12,400	21,900	14,800	23,000	19,900	9,870	12,000	4,870	3,950	2,300
14	4,170	12,400	10,900	74,000	12,800	20,900	18,900	9,870	10,600	6,170	4,170	2,450
15	4,400	8,250	9,870	137,000	12,800	18,900	18,900	8,880	9,200	6,170	3,950	2,300
16	3,950	6,450	9,530	75,600	20,400	16,600	24,000	8,560	7,940	5,900	3,740	6,450
17	3,950	5,630	9,200	42,200	19,400	14,800	24,000	7,940	7,630	5,370	3,530	7,030
18	3,950	5,120	9,870	29,000	17,000	14,400	21,900	7,940	7,630	5,370	3,130	5,120
19	3,740	5,120	9,200	24,600	14,800	13,200	57,900	7,330	7,630	4,870	3,130	3,740
20	4,170	4,630	8,250	33,200	13,200	12,800	48,900	14,800	9,530	4,400	2,940	3,330
21	3,950	4,630	7,940	43,500	14,000	13,200	40,800	27,900	15,300	4,400	2,600	2,760
22	3,740	4,630	7,940	33,200	15,700	13,600	40,200	47,500	16,100	5,630	2,450	2,760
23	4,170	4,630	7,630	25,100	16,100	17,000	105,000	44,800	12,000	5,120	2,450	2,760
24	4,630	17,000	7,630	21,900	14,400	51,600	60,700	30,200	10,900	4,400	2,450	11,600
25	4,170	27,300	7,630	17,000	13,200	51,000	42,800	22,400	10,600	4,630	2,450	8,250
26	4,400	23,000	9,870	14,400	12,400	40,800	30,200	18,900	8,880	4,630	3,330	6,450
27	3,950	14,800	15,300	14,400	11,300	49,600	24,000	28,500	7,630	4,400	3,530	5,370
28	3,950	11,600	17,000	12,000	10,900	59,300	19,400	29,600	7,330	3,950	4,870	4,870
29	3,740	10,200	16,600	10,600	10,200	44,800	18,900	24,600	7,630	4,400	4,170	3,950
30	3,740	8,880	14,400	10,900	-------	32,000	19,900	21,900	7,940	3,740	3,740	3,950
31	3,740	-------	14,800	10,900	-------	25,100	-------	24,600	-------	5,370	3,330	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1892–93.												
1	3,740	2,760	8,560	4,630	27,900	15,300	9,200	37,000	21,400	10,900	3,740	17,000
2	3,330	2,760	7,330	7,330	32,000	19,400	9,200	27,300	15,700	11,300	3,740	13,600
3	3,330	2,760	6,170	12,800	36,300	20,900	9,530	28,500	13,600	10,900	3,950	27,300
4	3,130	2,760	5,900	12,400	37,600	22,400	9,530	108,000	10,900	11,300	4,170	18,000
5	2,940	2,760	5,630	12,800	27,300	27,300	20,900	103,000	19,400	10,600	5,120	12,400
6	2,940	2,760	5,120	10,600	19,400	25,600	22,400	55,100	26,800	8,560	4,630	9,870
7	2,760	2,760	5,120	7,330	17,500	20,900	19,400	39,500	27,300	7,330	4,400	7,940
8	2,760	3,130	4,630	5,500	20,400	18,900	14,800	38,200	27,900	6,740	4,170	6,740
9	2,600	2,940	4,630	5,500	19,400	18,900	13,600	25,100	22,400	6,170	3,740	6,170
10	2,760	2,940	5,120	5,500	15,300	27,300	10,900	27,300	18,000	5,900	3,530	5,630
11	2,600	4,630	5,120	5,000	21,400	34,400	10,600	27,300	13,200	5,120	3,330	6,170
12	2,600	5,900	5,120	5,000	42,800	30,200	9,870	24,000	10,900	3,950	3,330	5,630
13	2,760	6,740	4,630	4,500	32,600	27,300	8,880	19,900	10,200	4,400	2,940	12,800
14	2,600	5,900	6,170	4,500	33,200	24,000	9,200	18,900	9,200	4,630	2,600	44,800
15	2,600	5,120	16,100	4,500	33,200	19,400	9,870	18,900	9,530	4,170	2,940	32,000
16	2,600	4,630	20,400	4,000	71,000	17,500	10,900	14,400	28,500	4,170	2,450	20,900
17	2,600	4,870	15,300	4,000	65,700	14,400	12,000	15,300	17,000	4,170	2,300	14,800
18	2,600	9,530	15,300	3,800	116,000	12,800	11,300	23,000	13,200	4,170	2,300	12,800
19	2,600	8,560	15,300	3,800	84,100	11,600	10,600	34,400	10,900	3,950	2,300	9,870
20	2,600	10,600	13,600	3,600	48,200	10,600	9,530	24,600	10,200	3,740	2,450	8,560
21	2,600	11,300	11,300	3,600	32,000	9,530	10,600	18,900	10,200	3,950	2,760	7,940
22	2,600	8,560	9,200	3,800	24,000	9,200	12,000	21,400	8,250	3,740	2,940	7,330
23	2,600	7,330	9,200	4,500	19,400	9,200	14,400	15,700	8,880	5,900	2,760	6,740
24	2,600	6,740	7,630	5,000	16,600	8,880	14,400	13,600	14,400	5,120	2,600	6,740
25	2,600	5,630	6,170	5,500	16,100	9,870	12,000	14,400	12,400	5,120	2,450	5,900
26	2,600	5,630	4,400	6,170	15,700	9,870	27,900	14,000	8,880	4,170	2,450	6,170
27	2,600	5,120	4,000	7,330	15,300	9,870	37,600	10,200	7,630	3,950	2,300	6,170
28	2,600	4,170	3,600	9,200	14,400	9,870	51,000	9,530	7,630	3,740	2,300	7,030
29	2,600	4,900	3,000	15,700	-------	9,530	38,200	10,900	7,330	4,170	2,940	7,630
30	2,760	8,560	3,200	38,200	-------	9,530	38,900	24,600	10,900	3,740	59,300	7,030
31	2,760	-------	4,630	31,400	-------	9,530	-------	24,600	-------	3,740	27,300	-------
1893–94.												
1	6,450	13,200	19,400	20,400	11,300	15,700	9,530	10,200	7,330	5,900	3,530	2,940
2	8,880	13,200	16,600	20,400	15,300	22,400	9,870	9,870	8,250	5,370	3,740	3,950
3	12,000	10,900	14,400	15,700	19,400	33,200	11,600	9,870	7,030	6,450	4,400	3,130
4	10,600	10,200	14,000	14,000	63,500	33,800	10,900	9,530	5,630	5,900	4,630	2,760
5	17,000	10,900	16,100	12,000	66,500	33,200	10,900	7,940	5,370	5,900	5,370	2,760
6	21,900	12,800	16,100	10,200	51,000	32,600	10,200	7,940	5,370	4,870	4,400	2,450
7	14,400	12,400	14,400	10,200	32,600	35,100	9,530	7,630	9,530	4,170	4,400	2,300
8	12,400	12,800	13,200	10,200	26,800	35,700	9,530	8,560	11,600	3,530	4,170	2,450
9	9,530	10,600	12,400	10,600	26,800	31,400	8,880	8,560	10,900	3,530	3,530	2,450
10	7,940	10,200	10,600	10,600	32,600	24,000	8,560	8,250	9,530	3,330	3,130	2,160
11	7,330	9,870	10,200	10,200	34,400	20,400	10,200	7,940	7,330	3,530	2,600	2,450
12	6,740	10,200	8,880	10,600	26,800	18,000	14,000	7,630	7,030	3,530	3,130	2,160
13	6,450	8,880	8,880	10,900	21,900	15,700	15,300	7,030	5,370	3,330	5,370	2,160
14	7,330	8,560	8,250	12,400	18,900	14,000	14,400	5,900	4,870	2,760	4,170	2,450
15	73,300	7,940	7,630	12,400	18,900	14,000	13,200	5,630	4,630	2,600	4,400	2,450
16	42,200	7,030	7,630	11,600	17,500	12,400	13,200	5,630	4,400	2,600	4,870	2,160
17	24,000	7,030	7,330	13,200	14,400	14,000	12,400	5,370	3,950	2,450	4,400	2,450
18	18,000	7,940	7,940	14,400	13,200	14,400	10,600	5,370	3,530	2,450	3,530	2,450
19	14,000	7,330	8,250	14,000	14,400	15,700	9,870	5,900	3,530	2,300	3,530	2,450
20	11,600	7,030	7,940	12,400	18,400	17,000	9,200	10,900	3,530	2,450	3,330	2,450
21	14,000	7,030	7,330	11,600	19,400	15,700	8,880	16,600	3,950	2,600	3,130	2,450
22	28,500	7,330	6,740	10,900	18,400	14,800	8,560	18,900	4,170	2,450	2,600	2,450
23	28,500	7,330	6,740	10,600	17,500	14,400	8,560	16,600	4,400	2,760	2,600	2,600
24	32,000	7,630	7,030	10,600	16,600	14,800	9,530	14,800	4,400	4,400	2,600	2,450
25	37,000	8,250	7,030	10,600	14,400	16,600	9,530	13,200	4,400	4,630	2,600	2,450
26	26,200	7,330	7,030	10,900	13,200	14,400	9,530	12,400	4,170	7,330	2,450	2,450
27	18,900	7,030	7,330	10,200	12,400	13,600	8,880	10,200	3,950	5,370	2,450	2,160
28	17,500	7,030	7,330	10,200	10,900	12,400	8,250	10,600	5,630	4,630	2,450	1,900
29	18,400	10,600	7,030	10,200	-------	10,900	7,630	9,870	6,740	3,950	2,450	1,900
30	17,500	21,400	10,900	10,200	-------	10,600	8,560	8,560	6,450	3,530	3,130	2,160
31	14,000	-------	15,300	11,300	-------	9,870	-------	7,630	-------	3,130	2,760	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1894–95.												
1	2,450	3,130	3,130	4,400	8,880	30,800	16,600	10,900	9,200	4,400	6,450	6,450
2	2,760	3,530	3,130	3,950	8,880	59,300	15,700	12,000	7,940	5,900	5,630	5,370
3	3,330	7,330	9,200	3,530	8,250	77,900	18,400	12,400	7,030	18,400	5,370	4,870
4	3,530	5,900	7,630	3,950	7,630	57,900	18,400	11,600	7,030	14,400	5,120	4,400
5	3,530	4,630	5,900	3,950	7,030	40,200	17,000	10,900	6,170	10,200	4,630	3,530
6	2,600	4,630	4,400	4,170	6,170	31,400	14,800	10,200	6,450	9,530	3,950	3,740
7	2,450	4,630	4,400	10,200	5,370	23,500	13,200	10,900	7,330	6,450	3,950	3,740
8	2,450	4,400	4,400	24,000	4,870	20,400	35,700	10,900	7,630	5,630	3,950	5,370
9	2,450	4,400	5,630	36,300	3,950	21,140	150,000	11,600	7,330	5,370	4,400	6,450
10	2,450	4,400	9,530	45,500	3,130	23,500	81,800	12,800	6,450	8,250	4,400	4,870
11	2,450	4,400	7,030	55,800	3,130	22,400	51,000	12,800	5,120	8,250	4,630	4,400
12	2,450	3,950	6,450	68,000	3,130	20,900	36,300	13,200	5,120	6,740	4,400	3,530
13	4,400	3,950	12,400	40,200	2,940	21,400	27,900	14,800	4,870	5,630	4,400	3,950
14	3,950	3,530	24,000	25,600	2,940	27,900	31,400	18,900	4,870	4,630	4,400	3,950
15	3,330	3,330	21,400	15,700	3,130	36,300	35,700	16,600	6,450	4,630	4,170	3,530
16	3,130	3,130	14,800	14,400	3,530	51,600	29,000	15,700	5,900	4,400	4,170	3,130
17	2,600	3,130	10,900	26,800	3,740	51,600	24,600	39,500	5,900	4,170	4,400	3,130
18	2,600	3,740	8,880	27,900	3,740	36,300	21,400	36,300	5,370	3,950	3,950	2,940
19	2,450	7,030	7,940	26,800	4,170	27,900	20,400	28,500	5,370	3,950	10,200	3,130
20	2,450	5,370	7,030	35,100	4,170	22,400	19,900	22,400	4,870	3,740	10,200	2,760
21	2,450	4,400	6,170	33,200	4,400	20,900	17,000	18,400	4,400	3,950	8,250	2,760
22	2,160	4,630	5,630	59,300	4,630	19,400	14,800	19,400	3,950	3,950	5,900	2,600
23	2,160	4,870	4,870	57,900	4,870	20,400	13,600	21,900	3,950	3,530	5,370	2,600
24	2,160	3,740	4,400	36,300	5,900	22,400	12,800	18,900	3,740	4,400	11,300	2,450
25	2,160	3,950	4,400	25,100	6,170	23,000	10,900	14,000	4,170	5,900	8,250	2,450
26	2,160	3,950	4,630	18,400	9,530	24,000	10,200	13,200	3,740	22,400	7,030	2,300
27	2,160	3,950	7,330	16,600	13,200	27,900	9,200	12,000	4,400	18,400	5,900	2,450
28	2,160	3,530	6,450	14,000	17,000	24,000	8,880	11,600	3,740	15,700	6,450	2,450
29	2,160	3,330	5,370	12,000	-------	20,900	10,200	11,600	3,530	10,600	5,370	2,450
30	2,160	3,130	4,400	10,200	-------	18,900	11,600	10,600	4,400	7,630	5,370	2,160
31	2,300	-------	4,400	9,870	-------	18,400	-------	10,600	-------	7,030	6,170	-------
1895–96.												
1	2,160	2,160	4,170	10,900	8,250	10,200	89,600	13,600	5,370	14,800	17,000	3,530
2	2,160	2,300	3,740	11,600	8,880	11,160	100,000	17,500	4,870	10,200	20,900	3,530
3	2,030	2,450	3,530	11,300	20,400	12,000	81,800	21,400	4,870	7,630	23,500	3,330
4	1,900	2,450	3,530	10,200	42,200	11,300	48,200	22,400	4,400	7,030	19,400	3,130
5	1,900	2,760	3,740	9,200	45,500	9,530	33,800	24,600	5,120	5,900	13,600	3,130
6	1,780	2,760	3,330	7,450	32,600	8,880	25,600	20,400	5,900	7,330	10,200	3,130
7	1,900	2,600	3,330	4,440	32,000	8,880	21,400	16,600	7,330	8,880	8,250	3,530
8	1,900	2,600	3,130	4,400	35,700	10,600	18,400	12,800	5,900	8,880	9,870	5,370
9	1,900	2,450	2,940	5,370	29,000	12,000	15,700	10,900	6,170	27,900	8,560	5,900
10	1,900	2,450	3,530	5,900	24,000	12,000	14,400	9,530	7,630	103,000	7,330	4,630
11	1,900	2,450	4,170	6,450	23,500	11,600	14,800	8,560	8,560	48,200	6,170	3,740
12	2,030	2,600	4,400	7,030	19,400	10,900	16,100	7,630	8,880	34,400	5,630	3,530
13	2,160	3,130	4,400	6,450	15,700	12,400	15,700	7,030	8,250	22,400	5,630	3,530
14	2,160	3,950	4,170	5,630	20,400	12,400	14,400	7,030	7,030	18,400	5,370	4,630
15	2,160	3,530	3,530	4,170	39,500	11,600	14,400	6,740	5,900	14,400	5,900	4,400
16	2,300	3,530	3,130	4,170	29,000	16,100	12,800	7,030	5,370	13,600	5,370	3,950
17	2,300	3,130	3,130	3,740	23,500	57,900	11,600	7,330	5,370	18,400	5,370	4,400
18	2,160	2,940	2,940	4,400	17,500	51,000	10,900	7,030	5,900	17,500	5,630	4,400
19	2,160	2,600	2,940	4,170	14,000	35,700	9,870	5,900	5,900	13,200	5,120	3,740
20	2,160	2,600	2,940	4,630	12,400	42,200	9,530	5,370	5,900	10,600	4,400	3,530
21	2,160	2,600	3,130	7,030	11,600	40,800	8,560	5,900	5,900	5,900	4,630	3,530
22	2,160	2,760	3,530	7,330	8,250	31,400	8,880	8,880	5,900	8,560	3,530	3,950
23	2,160	2,940	31,400	7,030	7,330	25,600	8,880	8,880	7,030	10,200	5,370	3,950
24	2,160	2,940	19,400	6,450	8,250	24,000	8,250	15,300	7,030	12,800	6,740	3,950
25	2,030	2,940	13,200	18,400	10,900	23,500	10,200	15,700	19,400	11,600	7,030	3,950
26	2,030	3,130	9,530	32,600	11,600	22,400	15,700	11,600	21,400	14,800	7,630	3,950
27	2,030	3,330	8,250	24,600	10,200	21,400	13,200	10,200	29,000	19,400	7,330	3,740
28	2,160	3,330	11,600	17,000	10,200	19,400	12,400	9,530	29,000	12,400	7,330	3,330
29	2,160	3,130	11,600	13,600	9,530	17,500	11,600	7,630	26,200	10,200	5,370	3,130
30	2,160	4,870	11,600	10,900	-------	64,300	10,200	7,330	17,000	8,880	4,630	4,630
31	2,160	-------	10,900	9,530	-------	116,000	-------	5,900	-------	10,200	3,950	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1896–97.												
1	56,500	4,400	48,900	7,030	3,530	23,500	14,800	7,030	7,030	10,200	8,880	3,530
2	37,600	4,400	38,900	7,030	7,030	19,400	14,400	8,560	7,330	30,800	6,450	2,940
3	21,400	4,400	26,800	6,450	7,630	17,500	14,000	18,900	7,330	24,600	6,740	2,760
4	14,400	4,630	17,500	7,030	9,200	16,600	13,200	33,200	7,330	16,600	6,450	2,760
5	10,900	4,870	15,700	7,030	8,880	16,600	13,600	27,900	7,330	12,000	5,900	2,760
6	8,880	60,700	14,000	9,870	10,900	17,500	20,900	27,900	7,630	14,000	6,450	2,760
7	7,630	48,200	11,600	9,530	48,200	19,400	29,600	22,400	11,600	13,200	5,900	2,600
8	6,740	28,500	11,600	10,200	78,700	24,000	24,600	18,400	10,200	12,800	5,900	2,600
9	6,450	19,400	14,400	8,880	48,900	25,600	20,900	14,000	13,200	10,900	5,900	2,450
10	4,870	14,000	23,500	7,940	35,700	23,200	27,900	12,800	16,600	11,600	8,250	2,450
11	4,400	12,000	18,400	7,330	30,200	52,300	32,000	12,800	14,800	8,880	7,030	2,450
12	4,400	10,200	14,400	7,030	26,200	53,700	26,800	12,400	12,400	13,600	5,900	2,030
13	4,170	10,200	13,600	7,030	46,800	54,400	21,400	15,700	10,900	12,400	4,870	2,450
14	10,200	10,900	12,400	7,030	54,400	57,200	18,400	97,600	10,900	10,200	5,120	2,300
15	18,400	10,900	10,900	7,030	41,500	57,200	16,600	62,100	9,870	8,560	4,630	2,160
16	13,200	9,870	21,400	7,330	39,500	53,700	16,100	37,600	8,880	7,630	4,630	2,160
17	10,200	8,250	25,600	8,560	37,600	39,500	15,700	26,800	8,880	6,740	4,400	2,030
18	8,250	7,330	24,600	8,880	33,800	32,600	15,300	20,900	8,880	6,450	3,950	2,030
19	7,030	7,030	20,400	10,200	27,900	35,700	14,800	16,600	8,880	5,900	3,740	2,030
20	6,450	7,030	16,600	10,600	26,800	51,600	13,200	14,800	26,800	5,900	3,530	2,030
21	5,900	6,740	14,000	10,600	46,200	52,000	12,800	12,800	25,600	6,170	4,630	1,900
22	5,120	6,450	11,600	10,900	150,000	39,500	11,600	12,000	19,400	18,900	3,950	1,900
23	4,630	7,330	10,200	10,900	189,000	31,400	10,200	10,900	14,000	25,600	3,530	1,900
24	4,870	7,630	10,200	11,600	166,000	29,600	9,530	10,200	11,600	35,000	3,530	1,900
25	6,170	7,330	9,530	11,600	77,100	27,900	9,530	9,530	9,530	33,200	3,530	1,900
26	6,450	7,030	8,880	8,880	48,200	25,100	9,530	8,880	8,880	23,500	4,630	2,160
27	5,900	7,030	8,250	7,330	38,200	20,400	8,880	8,250	8,250	23,500	4,870	3,130
28	5,630	7,030	6,740	5,900	29,000	18,900	8,880	7,030	6,450	23,000	4,630	3,130
29	5,370	18,900	5,900	4,630	-------	17,500	8,560	6,740	5,900	21,400	4,400	2,600
30	4,870	27,900	5,370	3,530	-------	15,700	8,250	6,740	7,630	16,600	3,950	2,450
31	4,630	-------	6,450	3,530	-------	15,700	-------	6,740	-------	12,400	3,530	-------
1897–98.												
1	2,300	2,450	4,170	6,450	10,900	7,940	55,100	10,900	9,530	3,950	9,200	5,900
2	2,160	2,450	4,400	8,880	10,200	7,330	40,200	9,530	8,250	3,950	8,250	5,900
3	1,900	2,450	4,170	7,330	5,900	7,330	30,800	8,880	7,630	3,530	7,940	4,870
4	2,030	2,450	4,400	7,030	6,170	7,330	24,000	7,630	7,030	3,130	9,530	4,630
5	2,030	3,950	4,400	5,630	4,630	7,330	18,900	7,330	5,900	3,530	35,100	4,400
6	1,900	3,950	13,600	5,900	4,400	7,330	18,400	7,630	5,120	5,370	42,800	20,900
7	1,900	3,740	10,200	6,450	4,400	7,330	18,400	34,400	4,630	4,400	30,800	15,300
8	1,900	3,130	10,200	9,530	6,170	7,330	18,400	59,300	4,400	4,170	18,400	12,400
9	1,900	3,130	7,940	9,530	8,880	7,330	16,600	41,500	3,740	3,950	18,900	10,200
10	1,900	3,130	6,740	15,700	9,530	7,630	14,800	27,300	3,740	3,950	93,600	7,630
11	2,030	3,130	5,370	33,800	13,200	7,630	15,700	19,900	3,740	3,950	102,000	7,030
12	1,900	2,940	5,120	32,600	15,700	7,630	22,400	16,600	3,530	3,530	76,400	5,900
13	1,900	2,940	4,630	23,500	17,500	8,250	33,800	14,000	4,870	3,130	37,600	5,370
14	13,200	2,760	4,400	18,900	16,600	8,880	26,800	12,800	4,400	2,760	25,600	4,400
15	6,740	3,130	4,400	16,100	13,200	8,560	32,000	11,300	5,120	2,760	18,900	4,400
16	4,630	2,940	9,530	34,400	11,600	7,940	43,500	10,600	7,030	3,330	15,300	3,950
17	3,740	2,760	6,450	41,500	10,200	8,250	38,200	18,000	5,900	3,530	12,400	3,950
18	3,130	2,760	10,600	26,200	8,250	21,900	27,900	20,400	5,900	6,740	10,200	3,740
19	2,600	2,760	10,900	18,900	8,880	34,400	21,900	16,600	12,400	10,200	8,880	3,530
20	2,450	2,760	8,880	14,800	10,900	32,600	18,400	13,600	16,100	7,630	11,600	3,530
21	2,450	2,600	12,400	12,800	17,500	24,000	14,800	11,600	14,800	6,450	10,900	3,330
22	2,450	2,600	22,400	14,000	18,900	18,400	13,200	10,200	12,400	6,170	8,880	2,760
23	6,740	2,600	19,400	23,500	18,400	14,400	11,600	26,800	8,880	5,630	7,630	3,330
24	6,170	2,600	16,100	23,500	14,400	14,400	10,900	46,200	7,030	7,330	7,030	3,530
25	4,400	2,600	13,200	21,400	12,400	37,000	11,600	36,300	5,900	5,900	5,900	27,300
26	3,950	2,600	9,530	22,400	10,600	38,900	14,000	29,000	4,870	13,200	5,630	14,400
27	3,530	2,600	7,940	27,300	10,200	30,200	15,700	19,900	4,870	8,880	7,030	10,200
28	3,130	2,600	7,030	25,600	8,800	21,400	14,400	15,300	4,400	7,630	6,740	8,250
29	2,760	4,400	5,900	19,400	-------	20,400	13,600	12,400	4,870	10,600	6,740	7,030
30	2,760	3,580	7,330	15,300	-------	55,100	12,400	10,600	4,400	14,000	7,630	5,900
31	2,450	-------	7,330	11,600	-------	71,700	-------	10,200	-------	12,400	7,330	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1898–99.												
1	5,370	10,900	10,600	11,600	9,530	52,300	36,300	14,400	13,600	6,450	4,870	4,400
2	4,870	10,900	10,900	13,200	8,880	37,600	30,800	14,000	19,400	5,900	3,950	2,760
3	4,400	10,600	10,200	14,400	8,560	35,100	23,500	14,800	17,500	5,120	5,370	2,760
4	4,170	9,870	10,200	15,300	18,400	49,600	19,400	13,200	16,600	4,870	4,870	3,950
5	4,630	9,200	12,800	18,900	47,500	209,000	18,400	13,200	11,600	4,400	3,950	5,370
6	5,370	8,880	24,000	33,200	77,100	164,000	18,000	14,800	9,870	3,950	3,950	4,170
7	20,400	8,880	25,600	60,000	88,000	84,100	16,600	14,800	9,200	3,950	4,870	3,950
8	14,800	9,530	14,800	64,300	68,000	48,900	18,400	23,500	8,880	4,170	3,950	3,530
9	12,400	10,200	15,700	42,800	49,600	38,200	36,300	52,300	7,330	4,400	3,950	2,760
10	9,530	8,880	11,600	27,300	31,400	35,700	37,600	51,600	6,170	4,400	3,530	2,760
11	8,250	8,880	10,200	22,400	20,400	33,800	31,400	38,900	7,630	4,170	3,130	2,760
12	7,330	14,000	8,250	20,400	14,800	30,200	24,600	32,600	7,630	3,950	2,940	2,760
13	7,030	16,100	8,250	18,400	10,900	26,800	21,900	32,600	14,800	3,950	2,760	2,760
14	6,450	13,600	8,880	24,000	8,560	23,500	20,400	45,500	30,200	3,950	2,760	2,760
15	6,170	12,400	8,880	31,400	8,560	21,400	19,400	38,200	36,300	3,740	2,760	3,130
16	5,900	11,600	8,250	35,100	8,250	29,000	17,500	27,300	27,300	3,530	3,950	2,760
17	5,630	10,600	7,630	31,400	10,900	48,200	16,100	21,400	18,000	3,330	4,400	2,760
18	5,630	10,900	8,880	24,600	13,600	35,100	15,300	16,600	14,400	4,170	4,170	2,600
19	7,030	14,400	10,900	23,000	24,600	35,100	14,800	14,000	11,600	3,530	3,740	2,450
20	38,900	42,800	17,500	20,400	30,200	82,500	12,800	12,800	8,560	4,400	3,330	2,450
21	23,500	38,900	23,500	17,000	39,500	68,700	13,200	12,400	7,940	4,400	2,940	2,760
22	45,500	27,900	22,400	14,800	52,300	47,500	13,200	10,900	7,630	4,400	2,600	7,630
23	95,200	23,500	22,400	14,800	57,200	36,300	12,400	10,200	6,170	4,170	2,160	6,170
24	45,500	21,400	36,300	13,600	46,800	30,800	11,600	9,870	5,900	3,530	2,450	4,870
25	32,600	19,400	32,600	18,400	29,600	26,800	10,900	10,200	5,900	3,740	2,160	4,400
26	21,900	17,000	24,000	19,400	25,100	23,500	11,300	9,200	5,370	3,530	2,600	3,130
27	18,000	14,000	18,400	19,400	27,900	21,400	17,500	7,630	5,120	3,330	2,160	3,530
28	15,700	12,000	15,300	15,700	74,800	29,000	25,100	7,330	7,630	3,330	2,030	3,530
29	14,000	10,200	13,600	12,800	-------	87,200	21,400	7,330	7,630	6,450	2,160	3,130
30	12,000	10,200	11,300	12,400	-------	65,700	18,000	7,630	6,170	5,900	2,600	3,530
31	10,900	-------	11,300	10,900	-------	48,200	-------	8,880	-------	4,870	3,950	-------
1899–1900.												
1	3,330	2,300	2,940	2,300	3,330	16,100	24,000	9,200	8,880	17,500	6,170	2,300
2	3,330	2,450	3,330	2,030	2,760	62,100	19,400	8,250	7,330	12,000	5,900	2,600
3	3,330	2,940	3,130	1,900	2,600	62,100	17,500	7,940	6,740	10,600	4,630	3,130
4	2,940	5,120	3,130	2,940	3,130	39,500	16,100	7,940	6,170	7,940	4,170	2,760
5	2,940	4,400	2,760	3,130	3,950	28,500	15,700	7,940	8,560	6,740	3,740	2,300
6	2,760	4,400	2,940	2,940	7,940	24,000	14,400	7,330	7,330	6,450	3,330	2,160
7	2,760	3,950	2,600	3,740	9,530	30,200	12,800	7,330	6,450	6,170	3,130	2,030
8	2,940	3,740	2,600	3,740	12,800	30,800	12,400	7,330	6,170	6,170	2,760	2,030
9	2,940	3,130	2,450	3,740	22,400	28,500	12,800	7,330	5,370	5,370	2,600	2,160
10	2,940	2,940	2,600	4,870	24,000	25,100	12,000	7,630	5,370	5,120	2,600	2,030
11	2,940	2,760	2,600	5,900	21,900	24,000	11,300	9,870	4,870	4,400	2,300	1,900
12	3,330	2,760	2,760	7,630	17,000	24,000	10,600	9,870	4,630	3,950	2,450	1,780
13	3,130	2,600	13,200	17,000	15,300	23,000	9,200	9,200	5,120	3,950	2,600	1,780
14	2,940	2,600	26,200	27,900	65,000	18,900	9,200	8,560	6,450	3,530	2,300	1,780
15	2,940	2,600	16,100	16,600	52,300	17,000	9,200	7,630	6,450	3,130	2,030	1,780
16	2,760	2,600	10,900	13,600	33,200	15,700	8,250	7,330	9,200	3,130	2,030	1,780
17	2,760	2,600	8,250	10,600	24,000	14,400	7,940	7,030	33,200	2,940	2,160	10,200
18	2,600	2,600	6,170	10,600	17,500	13,600	7,630	7,030	30,200	2,940	2,300	14,400
19	2,300	2,600	5,370	9,870	14,000	16,100	9,870	6,740	29,600	2,760	2,300	7,940
20	2,300	2,600	5,120	12,800	10,200	52,300	26,200	19,900	23,500	2,940	2,300	5,630
21	2,300	2,600	7,940	44,200	9,530	87,200	23,000	14,800	19,400	2,940	2,600	3,950
22	2,160	2,450	5,900	36,300	14,000	64,300	19,400	12,800	12,000	3,740	5,120	3,130
23	2,160	2,300	7,330	25,100	43,500	40,800	25,600	10,600	9,200	4,170	3,740	2,940
24	2,160	2,300	8,560	17,000	40,200	30,200	24,000	9,200	8,250	4,870	2,940	3,330
25	2,030	2,600	9,870	13,600	30,200	27,900	19,400	8,880	8,250	7,030	3,130	3,740
26	2,300	2,600	8,560	12,800	23,500	27,300	18,900	14,800	8,880	6,450	2,940	3,740
27	2,300	2,600	6,170	10,600	18,400	27,300	12,800	12,400	10,900	19,400	3,330	3,740
28	2,300	2,940	5,120	8,560	14,800	30,200	12,000	10,900	10,900	14,800	3,330	3,530
29	2,300	2,760	3,330	6,740	-------	29,600	11,300	9,200	10,600	14,400	3,130	2,940
30	2,300	2,760	2,760	5,900	-------	25,100	9,870	9,200	13,200	10,600	2,600	2,760
31	2,300	-------	2,450	3,950	-------	24,000	-------	9,870	-------	7,630	2,600	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1900–1901.												
1	2,760	5,370	17,000	9,870	9,200	6,450	15,700	19,400	33,200	27,300	4,400	19,400
2	2,600	5,120	14,000	10,200	7,940	5,900	15,300	17,500	26,800	24,600	4,400	24,600
3	2,600	4,870	11,600	9,870	8,250	6,170	27,300	14,800	23,000	23,500	5,630	21,900
4	2,600	8,250	10,900	8,880	10,900	6,450	110,000	14,800	20,900	23,500	5,370	17,500
5	2,600	13,600	54,400	7,630	21,400	33,800	66,500	13,200	17,500	23,500	5,370	14,800
6	2,600	14,400	55,100	7,030	18,400	27,900	47,500	12,000	15,300	21,400	6,450	12,800
7	2,600	10,900	35,100	6,740	14,000	22,400	51,000	10,600	21,900	20,400	27,300	11,600
8	3,330	8,880	27,300	6,450	12,400	16,600	46,200	10,600	41,500	19,400	51,000	9,870
9	3,330	7,330	23,500	6,450	12,400	13,200	34,400	14,000	30,200	19,400	25,100	10,200
10	3,530	6,450	20,400	5,900	16,100	12,400	27,300	17,000	24,000	14,800	16,600	9,530
11	2,760	6,170	17,500	6,450	19,400	18,400	22,400	22,400	17,500	13,200	12,400	8,880
12	3,330	5,900	14,800	44,800	18,900	27,900	21,400	24,600	14,800	12,400	12,400	7,940
13	3,330	5,630	12,800	68,700	15,700	33,800	18,900	24,000	14,000	10,200	24,600	10,900
14	2,760	5,900	10,900	45,500	13,200	22,400	18,000	19,400	13,200	9,530	32,600	10,900
15	2,760	5,630	10,200	30,200	12,400	19,400	42,200	16,600	11,600	21,400	50,300	9,870
16	2,760	5,370	9,200	21,900	9,530	14,800	51,000	14,400	35,100	27,900	35,100	10,200
17	3,950	5,120	8,250	16,600	9,200	13,200	35,700	14,400	60,000	18,400	35,100	9,530
18	3,530	4,870	7,630	14,400	9,200	10,900	27,900	10,900	71,700	18,400	25,600	13,200
19	2,760	4,870	7,630	12,400	9,200	10,200	25,100	10,900	49,600	17,500	35,100	14,800
20	2,600	4,630	7,030	9,530	9,200	10,200	51,000	12,800	35,100	21,400	27,300	14,000
21	2,600	5,120	7,030	8,560	9,200	10,900	201,000	14,000	30,800	15,300	24,600	13,200
22	2,450	14,800	7,030	7,940	9,200	14,000	96,000	29,000	25,100	12,800	20,400	9,870
23	2,450	10,900	7,030	10,200	7,940	14,800	59,300	232,000	104,000	10,900	15,700	8,250
24	2,600	10,900	7,030	12,000	6,740	14,800	50,300	91,200	107,000	8,880	18,900	7,940
25	71,700	25,600	7,030	11,300	6,450	13,200	62,100	49,600	65,000	7,630	27,900	7,630
26	28,500	108,000	7,330	14,400	5,120	12,000	54,400	41,500	42,800	6,450	22,400	7,330
27	14,800	142,000	7,330	12,800	6,170	17,000	44,800	74,800	33,200	4,870	18,400	7,030
28	10,900	55,800	7,030	13,600	7,030	41,500	34,400	107,000	32,000	4,170	22,400	5,900
29	7,940	32,600	7,030	11,600	-------	30,200	27,900	88,000	30,200	4,400	20,900	5,370
30	7,030	22,400	8,250	10,600	-------	22,400	23,000	61,400	29,000	3,950	38,900	5,630
31	6,450	-------	8,250	10,200	-------	17,000	-------	45,500	-------	3,950	23,000	-------
1901–2.												
1	18,900	4,400	3,950	55,100	55,100	197,000	35,100	7,940	7,030	18,400	3,530	1,900
2	12,800	4,170	3,950	37,000	47,500	102,000	25,600	7,630	6,450	14,000	4,630	1,900
3	9,530	4,630	4,400	27,300	51,000	57,900	21,400	7,630	5,900	12,400	3,950	1,780
4	7,330	4,870	9,870	24,600	41,500	42,200	18,000	7,030	5,370	10,200	3,740	1,900
5	8,880	4,630	11,600	17,500	26,800	31,400	21,400	7,630	5,120	7,940	3,530	1,900
6	6,170	4,630	13,200	13,600	18,400	25,600	25,600	7,030	4,630	6,450	3,530	1,900
7	6,740	4,630	9,870	13,200	15,300	23,000	29,000	6,740	4,400	6,450	3,530	1,900
8	7,330	4,630	7,630	13,200	18,900	25,600	30,200	6,450	3,950	5,370	3,530	2,940
9	6,740	4,630	6,740	13,200	14,000	39,500	32,600	5,370	3,950	7,330	3,330	2,760
10	6,170	4,630	6,450	12,000	13,200	46,200	36,300	7,030	4,400	6,740	3,950	2,300
11	6,170	4,630	10,900	11,600	12,000	42,800	44,200	6,450	5,120	8,880	3,950	1,900
12	6,170	4,170	10,200	10,900	10,200	36,300	37,600	6,450	5,120	7,030	3,330	2,160
13	5,900	4,400	11,600	9,530	9,530	40,800	31,400	5,900	4,170	5,900	2,940	3,530
14	6,170	4,400	9,530	8,250	8,880	51,000	25,100	5,900	3,950	5,120	2,760	2,760
15	14,000	4,630	112,000	6,170	8,880	41,500	20,400	5,630	3,740	4,630	2,600	2,760
16	10,600	4,400	167,000	6,740	8,560	29,000	17,500	5,900	4,870	3,950	2,450	2,300
17	7,940	4,400	62,100	7,330	8,250	49,600	16,100	6,170	6,450	3,950	2,160	2,160
18	7,330	4,400	32,000	8,250	7,940	53,700	14,800	5,900	17,500	3,950	2,450	1,900
19	6,740	4,400	20,400	8,250	7,630	36,300	13,600	5,900	12,400	3,530	2,450	1,900
20	6,170	4,170	13,200	7,940	7,630	25,600	13,200	5,900	8,250	3,130	2,940	1,900
21	5,900	4,170	9,870	8,250	7,630	21,400	13,200	5,630	7,330	3,530	2,760	1,900
22	5,630	4,170	7,630	7,940	7,630	18,000	13,200	7,030	7,030	3,740	2,760	1,900
23	5,370	4,170	7,940	7,630	8,880	15,700	13,200	6,450	7,030	3,530	2,450	1,900
24	5,370	4,630	8,560	7,330	14,400	14,800	13,200	6,170	6,450	2,940	2,300	2,160
25	5,120	5,120	9,530	8,250	22,400	13,200	11,600	13,200	5,900	2,940	2,160	2,160
26	5,120	9,200	12,000	7,630	99,200	13,200	9,870	27,300	11,600	2,940	2,160	2,160
27	4,870	5,900	47,500	29,000	72,500	13,200	9,530	18,400	16,600	2,760	2,160	2,160
28	4,630	5,630	46,800	69,400	76,400	12,400	9,530	20,400	13,600	2,760	2,160	2,160
29	4,630	4,870	63,500	45,500	-------	14,800	8,560	18,400	9,530	2,760	2,030	2,030
30	4,630	4,400	206,000	62,100	-------	61,400	8,250	12,000	16,600	2,760	1,900	3,330
31	4,630	-------	109,000	72,500	-------	51,000	-------	9,200	-------	2,760	1,900	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1902–3.												
1	3,240	3,740	12,000	8,880	31,100	90,100	47,900	18,400	7,330	16,400	3,530	2,600
2	3,530	2,520	13,800	8,100	24,600	72,100	30,500	15,500	12,000	10,700	4,170	3,330
3	3,530	2,680	16,100	30,200	21,900	41,800	25,600	13,680	10,700	8,100	10,200	4,630
4	3,330	2,430	16,100	72,800	24,800	30,500	21,700	12,000	7,630	6,740	7,940	3,950
5	3,330	2,350	18,400	50,300	65,000	22,400	25,900	13,400	6,740	5,900	6,450	3,530
6	3,330	2,350	14,800	33,800	47,500	18,200	29,600	13,200	6,740	5,630	5,900	2,760
7	2,950	2,350	14,000	26,200	30,800	16,100	23,500	11,300	7,180	7,030	4,870	2,600
8	6,740	2,350	13,600	18,700	22,700	15,300	22,700	10,200	14,000	10,200	4,400	2,450
9	4,280	2,270	13,000	14,000	16,500	22,200	38,600	9,040	20,400	8,250	3,950	2,450
10	3,530	3,140	11,600	11,300	15,700	29,900	43,500	8,880	13,600	6,310	3,530	2,450
11	2,860	3,240	9,040	10,000	15,700	31,400	32,000	8,560	10,700	5,370	3,330	2,940
12	2,950	3,040	10,200	11,500	18,000	35,700	25,400	7,940	9,700	5,000	3,130	3,530
13	2,680	2,860	33,800	13,400	32,600	38,900	21,400	7,330	13,000	5,370	2,940	3,130
14	4,630	2,520	32,000	10,200	30,800	32,900	21,700	7,030	9,870	8,250	3,130	2,760
15	5,120	2,270	30,500	8,880	25,600	25,900	32,900	6,450	8,250	16,100	3,530	2,760
16	5,230	2,110	21,900	9,200	40,800	21,400	40,800	6,740	7,180	13,400	3,530	2,450
17	4,400	2,110	30,800	9,870	86,500	17,700	39,200	6,600	6,600	9,040	4,870	2,300
18	3,140	2,110	28,800	9,040	93,000	15,300	30,800	6,740	6,450	6,880	4,400	2,300
19	2,950	2,110	25,100	8,250	56,500	13,200	25,100	6,170	5,900	5,900	3,530	10,900
20	3,330	2,270	18,000	6,880	32,600	12,000	20,600	6,040	5,370	5,240	3,950	6,170
21	2,600	5,370	13,200	6,600	24,000	13,400	19,700	5,900	4,870	4,870	3,530	4,630
22	2,430	4,750	10,900	9,040	21,700	15,700	21,400	5,370	4,630	4,400	3,740	4,170
23	2,350	3,530	10,900	13,600	18,000	52,400	19,900	5,370	4,870	4,170	3,950	3,330
24	2,270	3,140	12,600	13,600	17,000	158,000	18,000	5,120	4,630	3,740	3,330	3,130
25	2,270	4,400	10,600	12,800	15,500	85,400	18,000	4,870	5,630	3,530	2,940	2,760
26	2,430	18,200	9,700	10,900	15,300	47,200	18,700	4,870	5,630	3,330	2,760	2,600
27	2,190	12,400	8,720	9,870	14,800	30,200	31,400	4,630	6,310	3,130	2,450	2,450
28	2,190	15,300	7,030	10,400	37,000	24,600	42,200	4,630	6,880	2,940	2,450	2,300
29	2,160	12,600	6,170	21,400	-------	20,400	28,500	4,630	9,360	2,760	2,300	2,300
30	2,040	10,900	7,030	37,600	-------	17,500	23,000	6,170	22,400	2,760	2,600	2,300
31	2,770	-------	9,870	41,500	-------	18,000	-------	7,330	-------	2,940	2,760	-------
1903–4.												
1	2,160	2,160	2,160	3,950	3,950	18,400	9,870	22,400	8,880	20,400	5,370	2,160
2	2,300	2,160	1,900	3,950	3,950	30,200	10,900	17,500	9,870	17,500	4,400	2,450
3	2,300	2,160	1,900	4,400	3,330	26,200	13,600	13,600	19,400	12,000	3,530	2,160
4	2,160	2,160	2,300	7,330	4,170	25,600	12,400	11,600	23,500	8,560	5,370	2,760
5	2,160	2,300	2,450	4,870	3,530	22,400	10,200	11,600	17,500	7,030	4,870	3,530
6	2,030	2,300	2,450	4,870	3,130	18,000	9,200	10,200	12,800	6,450	5,370	3,740
7	2,030	2,450	2,300	4,870	3,950	14,000	8,250	10,900	11,600	7,630	5,370	3,130
8	2,160	3,530	2,300	4,870	20,400	26,200	8,250	9,530	9,530	6,170	6,450	3,130
9	2,160	3,130	2,300	4,170	23,500	44,800	7,940	8,560	8,880	7,030	4,400	2,760
10	2,160	2,760	2,600	3,950	19,400	30,800	8,250	7,630	8,250	6,450	3,950	2,300
11	3,130	2,760	2,450	3,530	13,600	21,400	9,200	8,880	8,880	6,170	4,400	2,160
12	4,170	2,450	2,450	3,950	9,870	16,600	9,530	10,600	8,250	7,940	4,400	2,160
13	3,740	2,450	1,900	3,950	7,630	14,400	8,250	8,880	7,940	7,030	6,450	2,160
14	3,130	2,450	2,300	3,950	7,030	13,200	8,880	7,330	9,200	5,370	5,900	2,160
15	2,940	2,450	2,030	3,950	6,740	12,000	8,250	6,740	7,030	4,630	4,870	2,030
16	2,600	2,300	1,780	3,740	3,950	11,600	8,250	6,740	5,630	4,170	4,170	2,030
17	2,760	2,450	1,900	3,740	4,170	11,600	8,560	6,740	5,370	3,740	3,740	2,030
18	2,600	2,450	1,900	4,870	3,130	10,600	9,530	7,030	5,900	3,330	3,530	2,030
19	2,450	2,450	2,300	5,370	3,740	9,870	8,880	14,000	5,900	3,130	3,530	1,900
20	3,130	3,740	2,160	5,630	4,400	9,870	7,940	42,800	5,370	3,130	3,950	2,030
21	3,740	4,170	2,760	4,870	5,630	9,870	7,030	36,300	6,450	2,760	3,950	1,900
22	3,130	3,950	2,300	4,870	9,530	9,530	6,740	28,500	6,740	2,760	3,740	1,900
23	2,450	3,330	3,130	34,400	24,000	11,600	5,900	21,400	6,740	2,760	3,130	1,900
24	2,450	3,130	4,630	32,600	30,200	24,600	5,900	16,100	6,740	2,600	3,530	1,780
25	2,160	2,760	4,870	24,600	23,500	23,500	5,370	16,100	5,370	2,450	3,530	1,900
26	2,160	2,760	4,870	16,100	18,400	19,400	7,030	16,600	4,630	2,760	3,330	1,900
27	2,160	2,760	5,120	11,600	13,600	19,900	21,900	15,300	4,400	4,400	2,760	1,780
28	2,160	2,600	4,170	7,940	11,600	17,500	31,400	13,600	5,960	3,950	2,450	1,660
29	2,160	2,160	4,400	6,450	12,400	14,800	32,600	10,600	11,600	3,530	2,450	1,660
30	2,160	2,160	4,170	4,870	-------	12,800	29,000	9,530	11,600	4,170	2,450	1,660
31	2,160	-------	4,170	3,740	-------	10,600	-------	8,560	-------	4,630	2,300	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1904–5.												
1	1,600	1,660	2,030	5,120	3,530	15,300	9,200	8,560	8,720	4,170	9,530	4,400
2	1,660	1,540	2,030	4,170	3,530	14,200	9,200	7,940	8,880	3,950	7,630	4,280
3	1,660	1,480	1,840	3,950	3,530	19,400	7,940	7,030	7,030	3,840	6,600	5,000
4	1,540	1,480	1,900	4,870	3,130	18,000	7,180	6,740	5,900	8,250	5,900	15,000
5	1,250	1,480	2,030	4,400	3,330	23,000	7,030	5,900	5,120	7,330	4,870	10,200
6	1,480	1,540	2,030	4,630	3,530	25,600	11,400	12,800	4,400	8,250	4,870	13,200
7	1,250	1,540	3,130	5,370	3,740	24,600	22,200	18,000	4,280	10,800	6,880	9,040
8	1,540	1,660	4,280	5,370	3,530	34,400	25,600	18,200	4,170	15,500	8,720	6,740
9	1,330	2,300	4,870	4,630	3,530	57,900	21,600	16,800	3,640	13,200	9,870	5,900
10	1,330	2,300	4,630	3,950	6,740	102,000	18,000	14,800	3,530	8,560	10,900	5,000
11	1,430	2,160	4,060	5,760	8,250	77,500	14,400	18,000	3,330	7,030	11,600	4,520
12	1,480	1,900	3,640	9,040	7,330	52,600	13,600	47,500	2,940	6,040	12,400	4,630
13	1,660	1,660	3,430	40,800	8,720	35,700	13,000	110,000	2,760	34,400	13,800	4,400
14	1,430	1,780	3,130	33,800	9,870	27,600	11,600	69,000	2,600	97,600	14,400	5,240
15	1,540	1,900	2,940	25,600	9,200	22,700	10,900	49,200	3,130	54,400	13,200	4,870
16	1,380	2,100	2,230	17,500	7,940	19,400	9,870	48,200	2,940	30,500	13,800	4,400
17	1,430	2,300	2,160	10,000	9,040	18,000	9,870	54,400	2,940	19,400	14,200	4,170
18	1,430	2,100	2,030	7,630	9,040	18,400	8,560	42,500	3,530	13,600	12,400	3,740
19	1,430	2,300	2,160	6,880	6,450	18,400	7,330	29,000	3,740	10,900	9,700	3,740
20	1,380	2,300	2,100	7,030	6,310	22,700	6,740	21,900	3,950	8,250	8,250	3,640
21	1,380	2,230	2,160	6,740	5,900	24,300	6,740	16,600	4,630	9,360	7,330	3,640
22	1,330	2,100	2,230	7,030	6,740	32,300	6,740	13,200	5,630	10,800	6,740	3,530
23	1,540	1,900	1,960	6,600	31,400	32,900	6,740	10,600	6,600	16,600	5,900	3,230
24	1,330	1,900	2,030	6,310	28,500	21,400	6,740	10,000	8,820	28,500	5,370	3,040
25	1,330	2,300	2,300	5,370	23,000	18,400	6,600	10,200	8,560	21,600	5,120	2,940
26	1,330	2,030	8,100	3,330	20,400	18,000	6,600	6,740	11,600	14,400	6,170	2,940
27	1,430	2,230	6,170	3,130	20,400	15,700	6,740	6,450	9,530	10,900	9,040	2,760
28	1,330	2,160	9,530	2,760	18,000	14,000	15,000	6,450	9,530	8,720	8,880	2,520
29	1,330	2,160	8,880	2,450	-------	12,000	11,800	6,040	7,630	7,030	6,600	2,450
30	1,540	2,030	7,630	2,230	-------	10,600	11,100	7,330	6,170	7,940	5,760	2,380
31	1,540	-------	6,450	3,130	-------	9,530	-------	8,250	-------	11,800	5,000	-------
1905–6.												
1	2,300	4,400	4,630	8,250	20,400	8,560	46,800	9,530	6,170	5,370	11,300	26,800
2	2,300	3,950	4,870	7,940	18,900	8,250	35,100	9,870	5,370	4,630	9,200	20,400
3	2,450	3,530	5,900	7,030	15,700	8,560	25,600	9,530	5,370	4,170	7,940	16,100
4	2,450	3,130	36,300	10,200	13,200	10,900	20,400	10,900	5,370	3,950	8,880	20,900
5	2,450	3,130	33,800	48,900	12,000	14,800	17,500	13,200	5,120	3,950	8,880	19,900
6	2,450	3,130	20,900	34,400	10,200	21,400	16,600	15,700	4,870	4,170	10,200	15,300
7	2,600	3,130	13,600	23,000	9,870	16,100	25,100	17,500	5,370	5,370	12,400	14,800
8	2,600	2,760	9,530	16,600	9,530	13,600	23,500	19,400	10,900	4,870	9,530	12,800
9	2,450	3,330	8,250	13,600	8,880	12,000	20,400	17,500	9,530	4,870	7,940	10,900
10	2,300	3,530	7,940	10,200	8,250	10,900	18,400	15,300	7,630	5,370	10,200	10,600
11	2,450	3,330	7,030	8,880	7,630	10,200	20,400	13,200	6,450	4,870	9,870	8,880
12	2,600	3,130	7,630	8,250	7,630	9,530	20,400	11,300	5,370	4,400	8,880	8,250
13	2,760	3,130	7,630	12,400	7,330	8,250	17,000	10,200	6,170	4,870	9,530	8,560
14	5,630	3,130	6,740	20,900	7,030	13,200	14,400	8,880	5,630	5,630	10,200	13,200
15	4,630	2,760	6,740	25,100	6,450	25,600	36,300	8,560	7,940	4,400	14,000	10,200
16	3,740	2,760	15,700	23,000	6,740	40,800	46,200	8,250	14,400	4,400	19,900	9,530
17	3,530	2,760	10,900	21,400	7,030	44,200	40,800	7,630	11,300	6,450	29,600	7,630
18	3,330	2,760	9,870	18,400	7,030	28,500	27,900	7,630	10,600	13,200	31,400	6,740
19	3,130	3,130	8,560	16,600	7,030	21,400	20,400	7,330	10,600	10,900	21,900	6,450
20	3,130	3,330	8,250	14,000	6,740	26,200	17,500	7,030	9,530	9,200	20,400	6 450
21	3,130	3,950	8,250	12,800	6,740	28,500	14,400	6,170	16,100	7,630	16,600	8,560
22	3,130	5,120	10,900	10,900	7,030	23,500	12,400	5,900	16,600	8,250	15,300	10,200
23	3,530	5,120	29,600	127,000	11,600	20,900	12,400	5,370	12,400	9,530	15,700	9,530
24	3,330	4,870	22,400	144,000	12,000	18,400	11,600	5,120	9,200	9,530	16,100	9,870
25	3,130	4,400	18,900	66,500	11,300	16,100	10,900	4,870	8,250	8,880	16,600	12,800
26	3,530	4,170	16,600	40,200	10,200	15,700	9,870	4,400	6,740	8,560	15,700	10,900
27	5,370	4,170	13,600	27,900	9,530	21,400	10,900	4,400	7,030	8,880	14,000	9,530
28	5,370	3,950	10,900	27,900	9,530	35,100	10,600	4,630	8,250	9,530	16,600	21,400
29	5,900	3,740	9,870	29,000	-------	42,800	11,600	4,870	7,630	8,560	17,500	14,400
30	5,900	3,740	8,880	25,100	-------	37,600	10,200	8,250	6,170	9,530	34,400	15,700
31	4,870	-------	8,560	22,400	-------	37,600	-------	6,740	-------	9,200	40,200	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1906–7.												
1	17,500	9,870	9,870	30,200	10,200	29,600	10,200	14,800	4,630	10,200	7,330	4,170
2	19,400	9,200	9,200	38,900	22,400	29,000	16,600	12,400	21,400	9,530	6,170	3,740
3	17,500	8,880	9,200	27,900	25,600	44,200	18,400	10,600	38,200	7,940	5,370	3,330
4	16,600	8,560	8,880	21,400	21,900	38,900	16,100	10,200	40,200	7,030	4,400	3,130
5	30,200	8,250	8,560	18,900	21,900	27,900	14,800	10,900	28,500	6,170	3,740	3,530
6	31,400	8,250	8,250	16,600	17,500	22,400	23,500	10,900	20,400	5,900	3,740	3,530
7	24,600	7,940	7,940	14,800	13,200	22,400	53,700	11,600	16,100	5,630	6,740	5,900
8	26,200	7,630	8,560	14,000	11,600	21,400	51,600	24,600	13,600	5,370	5,370	4,400
9	20,900	7,330	8,560	14,000	10,900	26,800	40,800	24,000	25,100	5,630	5,120	9,200
10	17,000	7,330	8,560	19,400	10,900	28,500	47,500	20,400	34,400	4,870	5,630	5,900
11	14,000	7,330	9,530	20,400	14,000	36,300	37,600	20,400	29,600	6,450	7,940	4,870
12	12,400	7,330	21,400	16,600	15,700	44,200	30,200	20,400	37,000	9,870	5,370	14,400
13	11,300	8,250	18,400	24,000	14,000	40,800	27,900	18,000	53,000	15,700	5,120	8,880
14	10,600	9,530	15,700	29,000	12,400	55,800	25,600	15,300	152,000	13,200	4,630	9,530
15	9,870	8,880	13,200	55,100	12,400	65,000	22,400	12,800	121,000	10,200	4,170	7,330
16	9,200	8,250	11,600	68,700	12,400	48,200	21,400	10,900	60,000	9,870	3,740	5,630
17	8,250	7,940	13,600	95,200	11,600	32,600	27,900	8,880	34,400	9,530	3,530	4,400
18	8,250	7,940	51,600	85,700	11,600	24,600	29,000	7,940	23,000	14,400	4,170	3,740
19	8,880	30,800	46,800	71,000	11,300	20,400	24,600	7,330	18,400	10,900	4,870	3,530
20	80,201	121,000	28,500	48,900	11,300	21,900	26,200	6,740	16,100	15,300	4,170	4,630
21	85,700	93,600	23,000	31,400	11,600	32,600	22,400	6,450	12,000	10,900	5,630	4,170
22	48,200	44,200	20,400	22,400	11,300	28,500	18,900	6,170	10,900	8,250	4,630	4,170
23	33,800	29,000	19,400	21,900	10,200	20,900	17,500	5,370	10,200	6,740	4,400	3,950
24	25,100	21,400	17,500	16,100	8,880	16,600	24,000	5,120	13,200	5,900	18,400	5,630
25	20,400	18,000	13,600	14,000	9,870	14,000	33,800	4,870	14,800	5,370	27,300	37,600
26	18,400	15,700	10,200	12,800	14,000	12,000	30,200	4,870	12,400	4,870	20,900	18,000
27	14,000	13,600	8,880	11,600	18,400	10,900	23,000	4,870	11,600	5,120	12,800	11,600
28	13,200	12,400	12,400	10,200	25,600	10,200	19,400	4,870	11,300	4,400	8,250	8,250
29	11,600	11,600	28,500	8,880	-------	9,870	15,700	5,370	9,530	4,870	6,740	6,740
30	11,300	10,600	32,600	8,880	-------	9,200	14,000	5,120	9,530	11,600	5,900	5,900
31	10,600	-------	29,600	8,560	-------	8,250	-------	4,630	-------	9,200	4,400	-------
1907–8.												
1	5,900	5,900	8,250	31,400	10,900	11,600	109,000	12,400	16,600	4,630	7,330	5,370
2	6,170	5,370	7,940	28,500	10,900	28,500	103,000	12,000	12,000	5,370	6,450	4,630
3	5,370	10,900	7,330	23,000	8,250	51,000	73,300	13,600	9,200	5,900	5,630	4,400
4	4,630	17,000	7,030	17,500	7,630	46,200	48,200	13,200	7,940	7,940	4,630	3,740
5	4,170	15,700	6,740	14,800	8,250	31,400	33,800	14,400	12,800	7,940	3,950	3,530
6	7,940	12,800	6,450	18,400	8,880	44,800	26,200	13,600	35,700	14,400	3,530	3,130
7	6,740	10,900	5,630	17,000	10,900	74,000	20,900	12,400	21,900	20,600	3,950	3,530
8	8,250	11,600	5,370	17,000	12,400	68,700	18,000	53,000	15,300	17,500	4,630	4,870
9	23,000	12,000	5,370	14,800	8,250	51,000	21,400	45,500	12,000	13,600	6,450	4,630
10	18,000	16,600	5,900	14,000	11,300	40,800	26,800	33,200	10,200	11,600	9,870	5,900
11	11,600	37,600	35,100	12,400	10,900	27,900	44,800	31,400	8,880	9,200	9,200	4,870
12	8,250	27,300	42,200	15,700	11,600	25,600	46,200	27,300	8,250	7,330	7,940	3,530
13	7,030	18,900	23,500	116,000	34,400	20,900	32,000	20,400	7,330	6,450	6,170	3,330
14	5,900	14,400	18,400	71,000	65,000	20,900	24,600	15,300	7,940	5,630	5,370	3,130
15	5,370	11,300	24,600	39,500	80,200	20,900	18,400	13,200	8,880	5,370	4,400	2,940
16	4,630	8,250	26,800	28,500	137,000	20,400	25,600	11,600	9,870	5,370	3,950	2,760
17	4,170	7,630	24,000	20,400	86,400	20,400	29,000	9,870	12,000	5,120	3,530	2,760
18	4,170	6,450	18,400	19,400	44,200	37,600	26,200	9,870	10,600	4,400	3,330	2,600
19	3,950	8,560	15,700	16,100	26,800	28,500	25,600	9,530	8,250	5,630	3,330	2,300
20	3,740	11,300	13,600	14,000	23,000	52,300	28,500	17,000	7,030	5,630	3,530	2,300
21	3,530	13,600	10,900	12,800	21,400	40,800	23,500	25,600	8,250	4,870	3,330	2,300
22	3,130	11,600	8,250	10,900	16,600	27,300	18,400	27,900	6,740	4,170	3,330	2,300
23	3,130	11,300	9,200	10,900	15,700	25,600	14,800	26,800	7,330	4,170	2,760	2,300
24	2,940	32,600	31,400	11,600	14,000	23,500	12,400	28,500	7,030	5,630	2,760	2,160
25	2,940	40,800	54,400	11,600	13,600	24,600	11,300	23,500	6,740	8,250	6,170	2,160
26	2,760	33,800	31,400	11,600	12,800	23,500	11,600	21,400	8,560	8,250	4,630	2,160
27	2,760	23,500	23,000	14,800	12,800	19,900	19,400	17,500	6,740	9,870	5,120	2,160
28	3,130	15,700	15,700	24,600	13,200	17,000	19,400	11,600	5,900	16,600	17,000	2,160
29	6,450	13,200	14,000	22,400	12,400	16,100	16,100	10,200	5,630	14,800	11,600	2,160
30	6,740	11,300	18,000	17,500	-------	18,900	14,000	14,400	5,370	12,400	7,940	2,160
31	6,170	-------	27,300	11,600	-------	24,000	-------	14,400	-------	8,560	6,170	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	3,330	19,400	4,630	38,900	10,600	18,900	20,900	31,400	11,600	10,900	5,370	2,300
2	3,330	14,000	4,400	25,600	7,630	15,700	16,600	51,000	10,200	14,800	5,900	2,300
3	2,760	10,200	4,400	20,400	5,370	13,600	15,300	40,200	9,200	13,600	6,740	2,230
4	2,450	8,250	5,120	15,700	7,940	17,500	12,400	27,900	9,200	13,200	10,600	2,160
5	2,300	7,030	5,630	13,600	8,250	22,400	12,800	20,900	9,530	9,200	7,630	2,600
6	2,160	6,450	5,370	30,200	8,880	19,900	12,800	17,000	25,600	7,940	6,450	2,600
7	2,030	5,900	5,370	44,200	10,900	19,900	13,200	14,000	17,500	40,200	5,630	2,600
8	2,160	5,120	5,630	27,300	11,300	34,400	12,800	12,800	13,200	25,600	5,370	2,850
9	2,160	4,630	16,100	23,500	10,900	37,600	10,900	13,200	10,900	17,500	5,370	2,760
10	2,160	4,630	15,300	16,600	14,800	40,200	9,870	11,600	15,300	14,000	5,120	4,170
11	2,300	4,630	10,200	14,000	32,000	40,200	9,200	25,100	16,600	10,200	4,170	8,880
12	16,600	4,170	10,200	12,400	37,600	31,400	8,880	32,600	18,000	8,250	3,950	7,630
13	9,200	3,950	20,400	10,900	26,200	22,400	7,940	25,100	13,200	7,330	3,740	5,370
14	5,900	3,950	17,000	9,870	19,400	20,900	8,250	17,500	11,600	7,330	3,530	4,170
15	4,170	3,950	14,000	11,600	18,000	20,900	60,000	14,000	14,000	7,330	3,530	3,530
16	3,530	3,950	10,600	26,200	21,400	18,400	40,800	12,000	12,400	7,030	4,630	3,130
17	3,130	4,630	9,530	40,200	32,000	15,700	26,800	10,200	11,600	6,170	5,900	6,170
18	2,760	4,630	7,630	34,400	29,000	14,000	18,900	8,880	10,900	5,370	6,450	6,740
19	2,760	4,400	8,560	29,600	23,500	12,000	15,300	7,940	13,200	5,370	7,330	9,870
20	2,600	5,630	10,200	25,100	19,400	10,900	13,200	7,030	12,000	5,120	6,740	7,330
21	2,600	6,450	9,870	22,400	21,400	10,200	13,600	6,740	9,870	4,400	5,370	5,630
22	2,300	6,740	7,940	17,500	27,300	14,000	17,000	7,330	7,940	4,400	4,400	4,630
23	2,450	6,740	8,250	18,000	27,900	16,600	26,200	44,800	7,630	4,170	3,740	3,740
24	2,450	5,900	8,250	15,700	25,100	15,700	29,000	26,200	7,030	4,400	3,330	3,530
25	2,450	5,900	7,940	15,700	29,600	15,700	27,300	17,500	7,940	4,400	3,130	4,870
26	25,600	5,120	12,400	15,700	33,800	33,800	20,400	14,400	9,200	4,630	2,940	7,030
27	12,400	4,630	20,400	14,000	28,500	37,600	16,100	21,900	7,630	4,170	2,760	5,370
28	8,250	5,120	17,000	13,200	23,000	32,000	14,400	33,800	8,250	3,740	2,600	4,400
29	6,450	4,630	14,800	12,400	-------	33,800	14,800	24,600	10,600	3,950	2,600	3,740
30	8,560	4,170	15,700	10,900	-------	33,800	13,600	17,500	11,300	4,870	2,600	3,330
31	27,900	-------	23,500	10,600	-------	27,300	-------	13,600	-------	5,120	2,450	-------
1909–10.												
1	3,130	3,740	3,130	2,160	9,530	15,300	4,870	12,800	7,630	8,250	4,170	2,760
2	2,940	3,530	3,040	2,940	8,560	37,000	4,870	10,900	6,740	7,330	4,170	3,950
3	2,760	3,430	3,040	4,630	8,250	38,200	4,630	9,200	7,030	7,030	4,170	9,530
4	2,680	3,330	2,940	23,000	10,400	30,800	4,870	8,400	5,900	7,030	3,950	9,870
5	2,600	3,130	2,850	21,900	14,000	20,900	6,740	7,630	5,900	14,000	3,740	9,870
6	2,450	2,940	2,760	15,700	13,600	18,400	8,250	6,880	18,400	14,800	3,740	9,670
7	2,450	2,940	2,760	18,000	10,600	16,100	7,630	6,450	20,900	13,600	3,530	9,530
8	2,450	2,760	2,850	37,000	8,880	15,700	6,740	6,310	21,400	14,000	3,740	7,630
9	2,450	2,850	3,040	29,600	8,560	14,400	5,900	7,330	14,800	14,800	3,950	6,170
10	2,450	3,330	3,530	18,000	8,250	12,400	5,370	10,900	12,000	13,200	3,530	5,370
11	2,380	6,740	4,400	13,600	10,200	11,600	5,370	11,100	12,400	13,600	3,530	4,870
12	3,040	5,900	4,060	10,200	10,200	10,900	4,870	13,200	18,000	10,200	3,330	4,520
13	11,800	6,740	3,530	8,250	8,560	10,900	5,900	21,900	35,100	12,800	3,130	4,170
14	13,600	5,900	5,120	7,940	6,170	10,900	11,300	15,300	58,600	14,000	2,940	4,400
15	8,880	5,000	23,800	9,870	5,630	11,600	14,000	13,200	57,900	16,100	2,940	5,900
16	6,450	4,400	18,400	8,880	8,880	10,200	12,800	11,100	48,900	14,400	3,130	4,520
17	5,900	3,950	12,800	7,630	16,600	9,530	10,600	9,530	97,600	12,000	2,940	4,400
18	5,370	3,740	9,530	7,330	31,400	8,560	10,200	8,560	68,700	10,200	3,130	3,740
19	5,370	3,530	7,030	22,400	57,900	7,940	13,200	8,250	37,600	24,600	2,760	3,130
20	4,870	3,330	5,630	25,600	35,700	7,330	15,700	8,560	27,300	20,400	2,760	3,040
21	4,630	3,040	4,870	20,400	22,400	7,030	15,700	8,560	22,400	13,200	2,680	2,850
22	4,170	2,940	3,330	44,200	19,400	6,740	21,900	8,560	19,400	9,870	2,600	2,760
23	3,950	2,940	3,130	44,800	22,400	6,740	20,400	8,880	17,500	7,940	2,600	2,760
24	3,950	3,040	3,130	25,600	22,400	6,170	21,900	8,880	17,500	6,740	2,940	2,760
25	6,450	3,130	2,230	18,000	18,900	6,170	22,400	10,600	15,700	6,450	2,760	2,760
26	6,170	3,530	4,060	14,800	14,800	5,630	20,400	11,300	13,200	5,630	3,330	2,760
27	5,370	3,530	3,330	12,800	12,400	5,370	16,600	11,600	12,400	5,120	3,330	6,170
28	5,120	3,430	3,130	14,400	11,300	5,630	16,100	11,300	15,300	5,370	2,850	3,950
29	4,870	3,330	3,330	14,200	-------	5,370	15,700	9,530	11,600	5,370	3,130	5,900
30	4,400	3,230	3,130	12,000	-------	5,120	14,400	7,940	9,870	4,870	2,940	5,000
31	3,950	-------	2,300	10,400	-------	4,870	-------	7,630	-------	4,400	2,760	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	5,120	3,130	7,330	27,300	51,000	7,940	17,000	11,300	4,170	5,370	1,780	4,170
2	4,400	2,760	6,450	38,900	32,600	8,250	16,600	12,400	4,870	4,170	1,780	8,560
3	3,740	3,130	5,370	52,300	30,200	8,250	15,300	11,600	5,630	3,130	1,660	8,880
4	3,130	3,330	4,630	68,700	22,400	7,630	36,300	11,600	5,120	2,760	1,900	6,450
5	3,130	3,330	4,170	54,400	19,400	7,330	46,800	10,200	4,170	2,760	1,540	5,900
6	2,600	2,940	4,870	32,000	16,600	7,940	63,500	9,200	4,630	3,950	2,160	3,950
7	2,450	3,130	7,630	20,400	14,400	62,100	60,700	8,250	5,120	3,950	2,450	3,530
8	2,760	2,940	7,940	15,300	12,800	42,200	44,200	7,940	4,630	3,950	4,630	3,130
9	2,940	2,940	9,870	13,200	13,200	32,000	43,500	7,940	5,900	5,370	3,950	2,940
10	9,530	2,940	7,630	10,900	29,000	29,600	47,500	7,030	5,900	7,030	3,530	2,600
11	9,530	2,940	6,170	8,880	32,600	40,200	35,700	6,740	5,370	4,400	3,130	3,740
12	7,630	2,600	5,630	7,940	24,000	38,200	23,500	6,740	4,400	4,870	2,760	4,400
13	5,630	2,600	4,630	7,940	19,400	27,900	21,400	6,450	3,740	5,900	2,450	5,120
14	4,400	2,600	3,950	24,000	15,700	23,500	19,400	5,900	4,870	4,400	2,940	3,950
15	3,950	2,600	2,600	24,000	13,200	21,400	20,400	5,370	3,950	3,950	3,530	4,630
16	3,330	2,760	2,940	27,300	11,600	20,400	38,900	9,530	3,530	3,530	3,530	4,400
17	3,130	2,450	2,760	18,900	9,870	17,500	37,000	7,630	3,330	3,530	3,130	7,630
18	2,940	2,600	2,600	14,800	8,880	14,400	28,500	6,170	3,530	3,330	2,600	8,560
19	2,760	2,600	2,940	11,600	8,250	13,200	20,400	5,630	3,130	2,760	2,760	6,450
20	2,760	2,600	4,170	9,870	10,600	16,100	19,900	5,370	3,130	2,450	2,450	4,870
21	2,760	2,600	5,120	9,200	14,000	24,000	27,900	4,870	3,530	2,760	2,160	3,950
22	2,760	2,450	4,170	16,600	12,900	20,900	30,200	4,630	3,950	2,160	1,900	4,870
23	3,330	2,450	3,740	21,400	11,300	18,400	29,000	4,400	3,530	2,160	1,900	3,740
24	3,950	2,450	4,400	25,100	10,200	16,100	24,000	4,170	3,530	2,160	1,780	4,170
25	3,740	2,450	8,880	20,400	8,880	13,600	21,400	4,170	3,330	2,030	1,780	6,170
26	3,130	2,450	7,630	16,600	8,560	11,600	17,500	4,400	3,130	1,900	1,660	4,400
27	2,940	3,330	10,200	24,600	8,560	10,900	14,800	4,170	3,330	2,160	1,660	3,740
28	2,940	3,330	8,880	21,400	7,940	14,000	10,200	3,950	4,400	1,780	1,660	3,130
29	2,760	6,740	7,940	23,000	-------	16,600	11,600	3,740	3,950	1,900	1,780	2,940
30	3,330	9,200	17,500	65,000	-------	16,600	10,900	3,530	4,870	1,780	3,130	2,760
31	3,330	-------	30,200	88,000	-------	17,000	-------	4,400	-------	1,780	3,530	-------
1911–12.												
1	2,760	4,400	9,530	17,500	27,300	24,600	40,200	21,400	6,740	11,300	7,030	5,120
2	2,760	3,950	8,250	25,100	19,900	18,400	30,200	20,900	6,170	11,300	8,880	4,400
3	10,200	3,740	7,330	20,400	15,300	14,800	62,800	17,000	5,630	10,200	7,030	3,330
4	13,200	3,530	6,740	16,100	11,300	12,400	49,600	14,400	5,370	9,530	5,630	3,330
5	8,250	3,330	6,170	13,600	8,880	10,900	35,700	12,000	5,120	8,880	4,870	3,130
6	7,030	3,330	5,370	10,200	5,630	10,200	26,200	11,300	5,630	14,800	4,400	3,130
7	5,370	10,200	5,120	6,450		10,200	20,900	12,000	5,120	15,700	4,400	2,760
8	5,370	26,200	4,630			10,900	18,900	15,700	4,870	12,800	4,400	2,600
9	8,880	18,400	4,170			14,800	18,900	17,500	4,400	10,200	3,950	2,600
10	7,630	14,000	3,950			26,200	17,500	14,800	4,400	8,250	3,530	2,450
11	8,560	10,900	3,950			23,500	14,400	12,800	4,170	8,250	3,130	2,450
12	10,200	9,870	3,950			20,400	12,000	17,000	3,740	9,200	3,330	3,130
13	9,200	9,200	3,950	4,000	5,200	51,000	12,900	77,900	3,530	9,200	4,170	2,450
14	8,250	10,900	3,950			56,500	10,900	55,100	3,330	8,250	4,630	2,450
15	7,330	11,300	3,950			47,500	10,200	28,500	3,330	8,880	3,740	2,310
16	12,400	10,200	3,950			92,000	10,200	29,000	3,330	8,250	3,130	1,780
17	9,530	8,880	5,900			84,900	11,300	83,300	3,530	8,250	2,940	2,450
18	26,800	8,250	7,940		5,630	49,600	11,600	40,800	4,170	13,600	2,940	2,300
19	71,000	12,400	10,200	5,370	5,900	30,800	15,700	24,000	4,630	14,000	2,940	2,300
20	37,600	14,800	9,200	17,000	7,030	26,800	15,700	19,900	5,630	10,900	3,530	2,760
21	21,400	13,600	8,880	23,500	9,530	27,300	14,000	24,000	6,450	8,250	5,120	3,530
22	14,000	10,900	7,330	14,000	25,600	26,200	12,000	16,600	5,370	7,030	7,030	3,530
23	10,900	9,200	7,630	13,200	57,200	24,600	11,300	13,200	4,400	8,250	6,450	4,170
24	10,200	7,940	23,500	12,400	33,800	21,900	12,000	11,300	4,170	7,030	6,450	4,870
25	10,600	8,880	28,500	11,600	22,400	44,800	12,400	10,200	5,630	8,250	5,120	18,400
26	9,200	9,530	24,600	11,300	18,000	44,800	11,600	9,530	13,200	18,000	4,400	19,400
27	7,630	9,200	23,500	10,900	51,000	34,400	10,600	8,250	10,200	18,900	4,400	11,600
28	6,740	8,880	27,300	10,900	56,500	26,200	23,500	7,630	19,900	11,300	3,950	9,200
29	5,900	8,880	24,000	10,900	35,700	25,100	21,900	7,030	19,400	8,250	4,170	7,030
30	5,370	9,870	18,400	25,100	-------	86,400	20,900	6,740	14,400	7,030	12,000	5,900
31	4,870	-------	14,000	33,200	-------	56,500	-------	6,740	-------	7,030	7,030	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912-13.												
1	5,370	3,130	2,940	32,600	18,000	23,500	23,000	12,400	30,200	5,370	3,130	2,760
2	4,630	2,940	2,760	19,400	18,400	23,500	19,400	10,900	21,400	4,870	2,940	3,130
3	4,400	2,940	2,760	15,700	16,600	19,400	16,600	9,870	16,600	4,630	3,330	3,130
4	3,950	2,760	3,130	14,800	25,600	14,800	14,000	8,880	14,800	5,630	3,130	2,940
5	3,330	2,760	4,870	15,700	31,400	12,400	12,400	7,940	20,400	11,300	2,940	2,760
6	3,130	2,940	9,870	16,100	23,000	10,600	11,600	7,330	16,600	14,000	2,760	2,600
7	2,940	2,600	10,900	24,000	18,000	9,530	10,200	7,030	13,200	15,300	2,160	4,170
8	2,760	20,400	12,400	52,300	14,000	8,250	8,880	7,330	13,200	10,200	2,600	3,130
9	2,600	25,600	10,900	61,400	10,900	7,630	8,560	7,330	23,500	7,030	3,130	4,170
10	2,300	16,100	8,560	39,500	9,530	7,030	8,250	6,740	19,400	5,630	2,600	3,950
11	2,450	12,400	7,030	21,400	8,250	7,630	7,630	6,450	14,800	7,030	2,760	3,530
12	2,450	9,530	6,740	15,700	12,400	19,900	8,250	6,170	11,600	14,000	2,940	3,330
13	2,300	7,330	5,370	19,900	16,600	20,400	12,400	5,630	9,870	8,880	2,760	2,940
14	2,300	6,170	5,120	20,900	12,800	18,000	55,800	5,370	8,880	7,630	3,950	2,760
15	2,160	6,170	4,630	16,600	11,300	51,600	55,800	5,120	7,940	5,900	4,870	2,300
16	2,300	5,120	3,740	14,400	8,880	76,400	53,700	5,370	6,740	5,370	7,630	2,300
17	2,760	4,870	3,740	11,600	8,250	61,400	37,600	5,630	10,200	6,450	4,870	2,160
18	2,760	4,630	3,950	10,200	7,940	35,700	25,600	8,560	8,250	5,630	4,400	2,030
19	2,760	4,630	3,950	9,200	7,030	23,000	22,400	9,530	6,450	4,870	3,330	2,450
20	2,940	4,170	4,170	8,880	7,030	18,900	18,400	9,530	5,630	7,630	3,330	2,760
21	3,530	3,740	4,400	10,200	6,740	16,600	15,300	10,200	5,370	9,530	4,630	2,940
22	3,530	3,950	3,530	10,200	6,450	14,800	13,600	9,530	5,370	6,740	4,630	7,630
23	3,530	3,130	3,130	11,600	7,940	13,600	12,000	10,600	5,120	5,120	4,870	17,500
24	3,130	3,330	2,940	11,300	8,880	12,000	11,300	23,000	5,120	4,400	8,250	11,300
25	3,530	2,760	2,760	19,400	9,200	10,600	10,200	61,400	5,630	4,630	6,170	7,630
26	5,120	2,760	2,760	20,900	8,250	9,530	8,880	38,200	7,030	5,630	5,900	5,370
27	4,630	3,130	3,130	18,400	7,940	29,000	8,880	23,000	9,530	4,870	5,120	5,120
28	4,170	2,760	3,130	20,400	13,600	73,000	10,600	45,500	8,560	4,170	4,400	4,400
29	3,950	3,330	3,530	26,200	-------	87,200	12,000	55,800	7,030	3,530	3,130	3,950
30	3,530	3,130	4,400	23,500	-------	47,000	12,400	34,400	6,170	3,130	3,130	3,530
31	3,130	-------	23,000	18,900	-------	29,000	-------	24,600	-------	3,130	2,940	-------
1913-14.												
1	2,940	6,740	10,200	10,200	21,400	15,700	29,000	12,800	2,760	2,160	1,780	5,900
2	3,130	5,900	23,000	9,870	31,400	15,300	35,100	11,300	3,130	1,900	1,780	5,370
3	3,740	4,870	25,100	9,870	25,100	12,800	40,200	9,200	2,760	1,900	1,660	3,950
4	3,950	4,400	20,400	9,870	18,900	10,900	33,800	8,250	3,130	2,030	1,780	3,740
5	5,630	3,950	15,300	9,200	15,300	11,300	25,600	8,250	2,940	2,160	1,780	2,760
6	5,120	4,170	12,400	7,940	13,200	9,530	21,400	12,800	3,740	2,030	1,900	2,760
7	3,950	3,950	10,600	8,880	16,100	14,400	16,600	17,500	2,760	2,030	1,780	2,600
8	3,330	3,530	12,400	8,880	33,200	14,400	14,400	17,500	3,130	2,030	1,900	2,450
9	2,940	4,870	13,600	11,600	32,000	12,800	33,200	15,700	2,760	1,660	1,660	2,030
10	3,130	8,560	13,200	18,900	23,500	12,000	25,600	14,000	3,130	2,030	1,900	1,900
11	3,530	15,700	10,900	27,900	18,400	11,600	22,400	12,000	3,530	2,760	1,900	1,660
12	4,170	13,200	9,870	25,100	15,700	24,600	17,500	10,600	3,330	2,760	2,030	1,900
13	3,530	11,300	8,880	18,400	11,600	27,300	15,300	9,530	2,760	2,600	2,450	1,900
14	3,740	16,600	7,630	13,600	11,300	23,500	12,400	8,250	2,600	2,450	2,450	2,160
15	3,530	26,200	7,030	11,300	9,530	23,000	12,000	7,940	2,600	4,400	3,130	2,030
16	2,940	37,600	6,450	10,600	8,880	25,600	20,400	6,740	2,600	5,370	2,450	2,160
17	3,130	52,300	5,900	10,200	8,880	37,600	45,500	6,450	2,450	5,900	2,160	2,160
18	2,940	34,400	6,740	11,300	8,250	46,200	33,200	5,900	2,300	5,370	2,160	1,780
19	2,940	21,900	5,630	10,900	14,400	44,800	25,600	5,120	2,300	5,370	2,160	1,660
20	3,740	16,600	5,630	9,870	57,900	32,000	26,800	4,870	2,300	4,630	1,780	1,780
21	6,600	12,000	5,370	25,600	58,600	24,600	35,100	4,630	2,300	3,530	1,780	1,660
22	7,630	9,200	4,870	39,500	41,500	22,400	29,000	4,630	2,300	3,130	2,030	1,660
23	9,700	7,940	4,870	25,600	31,400	23,000	24,600	4,400	2,300	3,130	1,780	1,900
24	8,880	6,740	4,630	20,400	29,000	17,500	19,400	4,170	2,300	3,130	1,900	1,660
25	9,870	6,170	4,400	23,500	25,600	18,900	14,800	4,170	1,900	2,300	2,300	2,030
26	26,200	5,370	5,900	38,900	20,400	22,400	14,400	3,950	2,300	2,300	2,030	2,030
27	27,300	4,170	12,000	29,000	18,900	31,400	25,600	3,530	2,030	1,900	2,450	1,660
28	19,400	5,120	15,700	21,900	16,100	34,400	23,500	3,530	2,600	2,160	4,170	1,660
29	13,200	9,870	13,200	17,500	-------	32,600	18,400	3,530	2,030	2,600	5,630	1,780
30	9,530	10,600	11,600	15,700	-------	27,900	15,700	3,330	2,030	2,030	5,900	1,660
31	7,630	-------	10,600	15,700	-------	27,900	-------	3,130	-------	2,030	7,630	-------

Daily discharge, in second-feet, of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914-15.												
1	1,660	2,760	2,940	28,500	18,900	16,600	8,250	14,000	11,300	2,160	2,760	7,030
2	1,660	2,600	2,760	21,400	74,000	14,400	7,630	12,400	8,880	2,600	3,130	6,450
3	1,660	2,030	17,000	17,000	128,000	12,800	7,630	9,870	9,200	2,940	2,760	6,450
4	1,430	1,900	21,400	13,200	76,400	11,600	7,330	14,000	13,200	3,330	4,170	5,630
5	1,430	1,900	19,400	10,900	46,800	10,600	7,030	14,800	20,400	3,130	3,330	7,030
6	1,430	1,780	67,200	9,530	33,800	12,000	7,030	11,600	14,800	2,760	3,330	18,000
7	1,330	1,780	45,500	51,000	29,600	13,200	6,740	9,530	10,900	4,630	3,530	32,600
8	1,330	2,160	24,600	129,000	27,900	14,800	8,250	8,880	8,880	5,630	3,740	20,400
9	2,450	2,160	18,000	59,300	23,000	14,400	8,250	7,940	7,630	4,870	3,330	12,400
10	2,450	1,900	15,700	32,000	18,900	13,200	8,250	7,030	6,450	5,120	2,940	9,200
11	2,300	1,660	13,200	19,400	15,700	13,200	8,880	6,450	5,900	3,950	2,600	7,330
12	2,160	1,900	11,600	32,600	14,000	14,000	8,880	6,450	5,370	3,740	2,300	5,900
13	2,030	1,900	10,600	26,800	12,400	14,400	8,880	5,900	4,870	3,740	2,940	5,370
14	1,660	2,160	9,870	29,000	12,800	13,200	9,870	5,630	4,170	3,530	3,130	5,370
15	1,780	2,160	9,200	25,600	12,800	12,000	9,200	6,170	9,870	2,760	5,370	5,630
16	1,900	2,300	7,630	29,600	23,000	11,600	8,250	6,170	10,200	3,530	5,630	6,450
17	2,600	2,450	6,740	30,200	26,200	12,800	7,630	5,630	9,200	3,330	5,120	5,370
18	18,400	7,630	4,630	45,500	21,400	13,600	7,330	4,870	8,560	3,130	3,950	4,400
19	11,300	6,170	4,400	66,500	17,500	13,200	6,740	4,630	9,870	5,900	10,900	4,400
20	6,740	4,870	9,200	66,500	14,000	12,400	6,450	4,400	7,630	4,870	6,740	4,630
21	5,370	4,170	16,100	38,900	12,400	11,600	6,170	4,400	6,740	6,450	5,120	4,870
22	3,530	3,740	29,000	26,200	11,300	11,300	5,900	4,170	5,370	7,030	4,400	4,630
23	3,530	3,330	25,100	19,900	10,200	10,600	5,630	4,630	4,400	6,170	4,630	5,900
24	3,330	3,130	23,500	18,400	9,200	10,200	5,900	5,370	4,400	4,870	7,030	5,120
25	3,130	2,300	17,000	20,900	21,400	9,200	6,740	5,370	3,950	4,870	5,630	5,120
26	2,760	2,600	14,000	23,000	35,700	8,560	7,030	7,030	3,130	4,400	4,870	4,400
27	3,330	1,900	11,600	22,400	26,200	8,880	6,740	7,630	2,940	3,530	3,950	4,870
28	3,330	2,600	14,000	19,900	20,400	9,200	7,330	7,630	2,760	3,130	3,330	3,530
29	3,130	2,600	10,200	17,000	-------	9,530	16,600	6,450	2,600	2,940	3,330	3,950
30	2,940	2,760	17,000	14,400	-------	9,200	18,000	6,740	2,450	3,130	4,870	4,400
31	2,940	-------	33,800	13,600	-------	8,880	-------	13,600	-------	2,760	7,030	-------
1915-16.												
1	9,200	3,530	7,330	37,600	29,000	18,000	19,900	12,400	8,880	5,370	-------	-------
2	49,600	3,740	6,450	25,600	36,300	15,300	17,000	10,600	7,630	4,870	-------	-------
3	53,700	3,330	6,450	24,600	46,200	19,900	17,500	9,870	7,330	5,630	-------	-------
4	25,600	3,130	6,170	23,000	44,200	26,800	12,800	9,530	7,630	4,870	-------	-------
5	17,500	3,130	5,370	19,900	30,800	21,900	12,000	9,870	9,200	4,870	-------	-------
6	13,200	2,940	5,120	16,600	23,000	22,400	10,900	9,870	7,630	5,630	-------	-------
7	12,400	2,760	4,870	17,000	22,400	28,500	11,600	8,880	7,940	4,630	-------	-------
8	11,600	2,940	4,630	25,600	25,600	61,400	12,400	9,870	8,880	4,400	-------	-------
9	10,200	2,760	4,630	37,600	23,000	44,800	13,600	8,880	9,530	4,170	-------	-------
10	8,560	2,760	3,950	25,600	24,000	28,500	14,000	7,630	10,200	4,170	-------	-------
11	7,330	3,130	4,630	25,600	23,500	20,400	20,400	8,250	10,900	3,130	-------	-------
12	6,450	3,130	4,170	53,700	20,400	18,000	30,200	7,630	10,200	24,000	-------	-------
13	5,900	2,760	4,400	51,600	18,900	13,600	35,100	6,740	8,880	18,000	-------	-------
14	5,370	3,130	4,400	40,800	20,400	12,800	29,000	6,450	6,450	11,300	-------	-------
15	5,120	3,530	4,170	30,200	18,400	16,600	23,500	5,900	6,740	6,740	-------	-------
16	4,870	13,600	3,530	23,000	17,000	19,400	18,400	4,870	7,030	6,740	-------	-------
17	5,120	8,880	7,030	20,400	14,400	18,400	15,300	5,120	14,400	146,000	-------	-------
18	4,870	8,250	25,600	15,300	13,200	14,000	14,000	6,170	27,300	94,400	-------	-------
19	4,870	7,630	65,000	12,800	12,000	12,800	12,000	5,370	21,400	44,200	-------	-------
20	4,630	10,200	57,900	11,300	11,300	11,600	10,600	5,120	14,000	25,600	-------	-------
21	5,900	16,100	31,400	9,530	11,600	11,600	10,200	4,630	10,200	20,400	-------	-------
22	5,630	15,300	22,400	11,600	12,400	13,200	9,530	4,170	8,880	20,400	-------	-------
23	6,450	11,600	15,700	18,000	12,000	18,400	9,530	4,170	7,940	28,500	-------	-------
24	5,370	9,530	12,800	20,900	12,400	18,900	8,880	5,900	7,030	23,000	-------	-------
25	5,120	7,940	10,600	18,400	30,200	19,400	8,560	12,800	7,030	20,400	-------	-------
26	4,870	7,030	10,900	15,700	56,500	14,800	9,870	12,800	13,200	16,600	-------	-------
27	4,630	6,450	14,000	13,600	37,600	13,600	13,200	10,200	11,600	14,000	-------	-------
28	4,170	6,450	16,100	13,200	26,800	40,800	15,300	11,600	7,940	13,200	-------	-------
29	4,400	7,030	21,900	17,500	21,900	35,700	14,400	8,250	7,630	14,800	-------	-------
30	4,170	6,740	72,500	21,900	-------	30,200	13,200	7,330	6,500	14,000	-------	-------
31	3,950	-------	65,000	25,600	-------	24,600	-------	7,630	-------	12,400	-------	-------

NOTE.—See accuracy paragraph under station description, page 63.

Monthly discharge of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916.

[Drainage area, 8,300 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1877.					
March 28–31	51,000	14,000	28,000	3.37	0.50
April	64,300	12,800	21,700	2.61	2.91
May	49,600	6,450	18,200	2.19	2.52
June	15,300	5,120	8,230	.992	1.11
July	9.870	2,940	5,500	.663	.76
August	3,530	2,160	2,640	.318	.37
September	9.870	1,900	3,180	.383	.43
The period	64,300	1,900	10,300	1.24	8.60
1877–78.					
October	29,600	2,160	5,590	.673	.78
November	175,000	3,130	23,500	2.83	3.16
December	29,600	5,900	11,500	1.39	1.60
January	95,200	6,170	27,700	3.34	3.85
February	61,400	12,000	25,900	3.12	3.25
March	68,700	9,530	19,000	2.24	2.64
April	48,200	9,870	17,900	2.16	2.41
May	55,100	11,600	24,900	3.00	3.46
June	17,000	6,170	10,100	1.22	1.36
July	34,400	3,330	7,420	.894	1.03
August	73,300	5,370	14,700	1.77	2.04
September	230,000	3,530	19,100	2.30	2.57
The year	230,000	2,160	17,200	2.07	28.15
1878–79.					
October	12,800	3,740	5,660	.682	.79
November	76,400	7,030	18,600	2.24	2.50
December	114,000	8,560	26,800	3.23	3.72
January	122,000	8,500	29,800	3.59	4.14
February	40,200	9,200	19,800	2.39	2.49
March	37,600	9,200	20,000	2.41	2.78
April	26,200	7,940	13,100	1.58	1.76
May	29,000	4.630	11,800	1.42	1.64
June	12,400	2,600	5,170	.623	.70
July	3,950	1,900	2,710	.327	.38
August	10,200	2,300	4,630	.558	.64
September	6.450	1.540	2,650	.319	.36
The year	122,000	1,540	13,400	1.61	21.90
1879–80.					
November	20,900	1,540	4,130	.498	.57
December	9,530	2,160	3,050	.367	.41
January	71,700	4,170	20,400	2.46	2.84
February	12,000	4.400	8,170	.984	1.13
March	100,000	4,870	18,300	2.20	2.37
April	84,100	9.200	31,200	3.76	4.34
May	76,400	7,330	18,100	2.18	2.43
June	62,800	4,170	11,300	1.36	1.57
July	40,200	3,530	8,680	1.05	1.17
August	8,250	2,600	4,060	.489	.56
September	9,200	2,450	4,070	.490	.56
The year	15,700	1,900	4,560	.549	.61
1880–81.	100,000	1,540	11,300	1.36	18.56
October	5,370	1,900	2,550	.307	.35
November	15,700	2,300	5,540	.667	.74
December	37,600	2,760	11,200	1.35	1.56
January	76,400	2,450	19,600	2.36	2.72
February	96,800	8.880	29,100	3.51	3.66
March	32,000	10,600	17,800	2.14	2.47
April	42,800	9,530	20,500	2.47	2.76
May	10,600	3,130	6,560	.790	.91
June	13,200	2,760	5,480	.660	.74
July	8,250	1,900	2,980	.359	.41
August	4,630	1,430	2,050	.247	.28
September	40,200	1,100	4,760	.573	.64
The year	96,800	1,100	10,500	1.27	17.24

Monthly discharge of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1881–82.					
October	3,530	1,660	2,040	0.246	0.28
November	24,000	3,530	8,060	.971	1.08
December	61,400	5,370	21,600	2.60	3.00
January	99,200	10,200	38,900	4.69	5.41
February	88,000	12,400	36,000	4.34	4.52
March	65,700	12,000	25,500	3.07	3.54
April	23,000	6,450	12,600	1.52	1.70
May	59,300	8,250	20,000	2.41	2.78
June	21,900	4,870	10,100	1.22	1.36
July	54,400	3,130	10,400	1.25	1.44
August	36,300	2,760	8,450	1.02	1.18
September	73,300	5,370	13,500	1.63	1.82
The year	99,200	1,660	17,200	2.07	28.11
1882–83.					
October	7,940	3,130	4,230	.510	.59
November	5,370	2,940	3,870	.466	.52
December	24,600	3,950	8,110	.977	1.13
January	74,000	4,870	20,600	2.48	2.86
February	71,000	10,900	28,300	3.41	3.55
March	88,000	8,880	17,400	2.10	2.42
April	99,000	15,300	38,700	4.66	5.20
May	13,200	5,370	8,030	.967	1.11
June	18,900	3,530	8,800	1.06	1.18
July	11,300	2,160	4,840	.583	.67
August	5,370	1,430	2,240	.270	.31
September	17,500	1,250	3,630	.437	.49
The year	99,000	1,250	12,200	1.47	20.03
1883–84.					
October	14,400	2,760	5,830	.702	.81
November	15,300	3,530	7,320	.882	.98
December	62,100	4,400	13,200	1.59	1.83
January	47,500	7,630	16,400	1.98	2.28
February	104,000	14,400	52,900	6.37	6.87
March	104,000	8,880	42,400	5.11	5.89
April	37,600	10,200	19,500	2.35	2.62
May	17,000	8,250	11,700	1.41	1.63
June	62,100	5,370	13,500	1.63	1.82
July	25,600	3,740	9,850	1.19	1.37
August	8,880	3,130	5,130	.618	.71
September	3,950	1,780	2,430	.293	.33
The year	104,000	1,780	16,500	1.99	27.14
1884–85.					
October	2,160	1,660	1,770	.213	.25
November	8,250	2,030	2,780	.335	.37
December	28,500	2,600	8,580	1.03	1.19
January	65,000	4,870	16,900	2.04	2.35
February	29,000	5,370	10,800	1.30	1.35
March	30,800	7,030	15,300	1.84	2.12
April	42,800	7,630	16,800	2.02	2.25
May	59,300	5,900	15,900	1.92	2.21
June	42,200	4,870	10,600	1.28	1.43
July	11,600	3,740	5,910	.712	.82
August	10,200	2,600	5,380	.648	.75
September	3,130	1,780	2,350	.283	.32
The year	65,000	1,660	9,430	1.14	15.41
1885–86.					
October	57,900	1,780	6,600	.795	.92
November	52,300	7,030	13,800	1.66	1.85
December	51,000	4,400	14,800	1.78	2.05
January	159,000	7,630	24,800	2.99	3.45
February	62,800	8,250	22,000	2.65	2.76
March	112,000	7,630	22,500	2.71	3.12
April	204,000	6,450	43,100	5.19	5.79
May	72,500	10,600	23,800	2.87	3.31
June	49,600	8,880	16,500	1.99	2.22
July	57,900	5,630	19,400	2.34	2.70
August	12,800	4,630	7,710	.929	1.07
September	6,170	2,600	3,530	.425	.47
The year	204,000	1,780	18,200	2.19	29.71

Monthly discharge of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1886–87.					
October	3,530	2,160	2,450	0.295	0.34
November	44,200	2,600	9,590	1.16	1.29
December	38,900	4,870	15,600	1.88	2.17
January	96,800	7,330	21,900	2.64	3.04
February	84,100	15,300	36,800	4.43	4.61
March	49,600	8,250	19,300	2.33	2.69
April	77,900	8,560	24,400	2.94	3.28
May	46,800	6,170	15,800	1.90	2.19
June	20,900	4,170	8,090	.975	1.09
July	7,630	2,300	3,470	.418	.48
August	7,940	2,600	3,510	.423	.49
September	2,940	1,780	2,130	.257	.29
The year	96,800	1,780	13,400	1.61	21.96
1887–88.					
October	12,800	2,030	3,850	.464	.53
November	3,530	2,300	2,700	.325	.36
December	10,600	2,300	4,130	.498	.57
January	23,500	2,760	12,400	1.49	1.72
February	45,500	8,880	21,600	2.60	2.80
March	55,800	7,330	19,000	2.29	2.64
April	35,100	7,630	13,000	1.57	1.75
May	25,600	5,630	12,200	1.47	1.70
June	30,200	3,740	8,690	1.05	1.17
July	14,400	2,160	5,430	.654	.75
August	6,450	1,900	3,470	.418	.48
September	62,800	2,760	21,100	2.54	2.83
The year	62,800	1,900	10,600	1.28	17.30
1888–89.					
October	80,200	6,170	23,400	2.82	3.25
November	40,800	9,200	17,200	2.07	2.31
December	44,800	6,170	13,900	1.67	1.92
January	68,000	11,300	24,900	3.00	3.46
February	102,000	8,560	21,600	2.60	2.71
March	25,600	10,600	15,000	1.81	2.09
April	26,200	8,250	11,800	1.42	1.58
May	88,000	7,630	16,500	1.99	2.29
June	161,000	9,200	28,600	3.45	3.85
July	47,500	8,880	17,600	2.12	2.44
August	51,000	6,170	16,200	1.95	2.25
September	52,300	5,370	11,200	1.35	1.51
The year	161,000	5,370	18,100	2.18	29.66
1889–90.					
October	42,800	5,630	10,100	1.22	1.41
November	49,600	10,900	23,000	2.77	3.09
December	20,900	7,940	11,500	1.39	1.60
January	25,100	8,560	13,900	1.67	1.92
February	121,000	15,300	36,100	4.35	4.53
March	65,700	13,600	33,900	4.08	4.70
April	57,900	14,000	25,700	3.10	3.46
May	53,000	12,800	22,800	2.75	3.17
June	13,600	4,400	6,960	.839	.94
July	6,170	3,130	4,350	.524	.60
August	14,800	3,130	6,360	.766	.88
September	14,000	3,330	6,950	.787	.91
The year	121,000	3,130	16,600	2.00	27.21
1890–91.					
October	49,600	7,330	14,300	1.72	1.98
November	15,300	4,870	8,740	1.05	1.17
December	17,000	4,630	8,860	1.07	1.23
January	96,000	11,300	30,300	3.65	4.21
February	96,000	21,400	47,900	5.77	6.01
March	95,200	20,400	38,200	4.60	5.30
April	103,000	10,200	33,300	4.01	4.47
May	51,000	7,330	12,300	1.48	1.71
June	51,000	6,170	18,100	2.18	2.43
July	12,400	4,870	7,460	.899	1.04
August	32,000	5,120	12,000	1.45	1.67
September	14,800	3,950	7,030	.847	.94
The year	103,000	3,950	19,700	2.37	32.16

Monthly discharge of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1891–92.					
October	4,630	3,740	4,080	0.492	0.57
November	27,300	3,330	7,490	.902	1.01
December	46,800	6,450	14,700	1.77	2.04
January	137,000	10,200	26,900	3.24	3.74
February	24,600	9,200	14,200	1.71	1.84
March	59,300	11,300	26,900	3.24	3.74
April	105,000	14,400	31,300	3.77	4.21
May	47,500	7,330	17,900	2.16	2.49
June	25,100	7,330	13,200	1.59	1.77
July	8,560	3,740	5,570	.670	.77
August	7,030	2,450	4,040	.487	.56
September	11,600	2,300	3,920	.472	.53
The year	137,000	2,300	14,200	1.71	23.27
1892–93.					
October	3,740	2,600	2,750	.331	.38
November	11,300	2,760	5,460	.658	.73
December	20,400	3,000	7,790	.939	1.08
January	38,200	3,600	8,310	1.00	1.15
February	116,000	14,400	34,100	4.11	4.28
March	34,400	8,880	16,900	2.04	2.35
April	51,000	8,880	16,600	2.00	2.23
May	108,000	9,530	28,600	3.45	3.98
June	28,500	7,330	14,400	1.73	1.93
July	11,300	3,740	5,790	.698	.80
August	59,300	2,300	5,750	.693	.80
September	44,800	5,630	12,100	1.46	1.63
The year	116,000	2,300	13,100	1.58	21.34
1893–94.					
October	73,300	6,450	18,900	2.28	2.63
November	21,400	7,030	9,670	1.17	1.30
December	19,400	7,330	10,300	1.24	1.43
January	20,400	10,200	12,100	1.46	1.68
February	66,500	10,900	23,800	2.87	2.99
March	35,700	9,870	19,400	2.34	2.70
April	15,300	7,630	10,300	1.24	1.38
May	18,900	5,370	9,520	1.15	1.33
June	11,600	3,530	5,900	.711	.79
July	7,330	2,300	3,930	.473	.55
August	5,370	2,450	3,540	.427	.49
September	3,950	1,900	2,380	.287	.32
The year	66,500	1,900	10,700	1.29	17.59
1894–95.					
October	3,530	2,160	2,650	.319	.37
November	7,330	3,130	4,270	.514	.57
December	24,000	3,130	7,620	.918	1.06
January	68,000	3,530	24,800	2.99	3.45
February	17,000	2,940	5,870	.707	.74
March	77,900	18,400	30,500	3.67	4.23
April	150,000	8,880	26,600	3.20	3.57
May	39,500	10,200	16,000	1.93	2.22
June	9,200	3,530	5,550	.669	.75
July	22,400	3,530	7,810	.941	1.08
August	11,300	3,950	5,750	.693	.80
September	6,450	2,160	3,600	.434	.48
The year	150,000	2,160	11,800	1.42	19.32
1895–96.					
October	2,300	1,780	2,080	.251	.29
November	4,870	2,160	2,910	.351	.39
December	31,400	2,940	6,610	.796	.92
January	32,600	3,740	9,190	1.11	1.28
February	45,500	7,330	20,000	2.41	2.60
March	116,000	8,880	25,000	3.01	3.47
April	100,000	8,250	22,900	2.76	3.08
May	24,600	5,370	11,200	1.35	1.56
June	29,000	4,400	9,750	1.17	1.30
July	103,000	5,900	17,300	2.08	2.40
August	23,500	3,530	8,280	.998	1.15
September	5,900	3,130	3,910	.471	.53
The year	116,000	1,780	11,600	1.40	18.97

Monthly discharge of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1896–97.					
October	56,500	4,170	10,400	1.25	1.44
November	60,700	4,400	13,000	1.57	1.75
December	48,900	5,370	16,100	1.94	2.24
January	11,600	3,530	8,110	.977	1.13
February	189,000	3,530	48,800	5.88	6.12
March	57,200	15,700	32,100	3.87	4.46
April	32,000	8,250	16,100	1.94	2.16
May	97,600	6,740	19,600	2.36	2.72
June	26,800	5,900	11,100	1.34	1.50
July	35,000	5,900	15,600	1.88	2.17
August	8,880	3,530	5,150	.620	.71
September	3,530	1,900	2,410	.290	.32
The year	189,000	1,900	16,300	1.96	26.72
1897–98.					
October	13,200	1,900	3,320	.400	.46
November	4,400	2,450	2,950	.355	.40
December	22,400	4,170	8,680	1.05	1.21
January	41,500	5,630	18,100	2.18	2.51
February	18,900	4,400	11,000	1.33	1.38
March	71,700	7,330	18,300	2.20	2.54
April	55,100	10,900	22,300	2.69	3.00
May	59,300	7,330	19,200	2.31	2.66
June	16,100	3,530	6,710	.808	.90
July	14,000	2,760	5,990	.722	.83
August	102,000	5,630	21,800	2.63	3.03
September	27,300	2,760	7,470	.900	1.00
The year	102,000	1,900	12,200	1.47	19.92
1898–99.					
October	95,200	4,170	16,700	2.01	2.32
November	42,800	8,880	14,900	1.80	2.01
December	36,300	7,630	15,300	1.84	2.12
January	64,300	10,900	23,300	2.81	3.24
February	88,000	8,250	32,500	3.92	4.08
March	209,000	21,400	51,800	6.24	7.19
April	37,600	10,900	20,100	2.42	2.70
May	52,300	7,330	19,600	2.36	2.72
June	36,300	5,120	12,000	1.45	1.62
July	6,450	3,330	4,320	.520	.60
August	5,370	2,030	3,390	.408	.47
September	7,630	2,450	3,540	.427	.48
The year	209,000	2,030	18,100	2.18	29.55
1899–1900.					
October	3,330	2,030	2,670	.322	.37
November	5,120	2,300	2,920	.352	.39
December	26,200	2,450	6,230	.751	.87
January	44,200	1,900	11,200	1.35	1.56
February	65,000	2,600	19,900	2.40	2.50
March	87,200	13,600	31,600	3.81	4.39
April	26,200	7,630	14,800	1.78	1.99
May	19,900	6,740	9,480	1.14	1.31
June	33,200	4,630	11,100	1.34	1.50
July	19,400	2,760	6,900	.831	.96
August	6,170	2,030	3,140	.378	.44
September	14,400	1,780	3,540	.427	.48
The year	87,200	1,780	10,200	1.23	16.76
1900–1901.					
October	71,700	2,450	6,980	.841	.97
November	142,000	4,630	18,900	2.28	2.54
December	55,100	7,030	14,700	1.77	2.04
January	68,700	5,900	15,200	1.83	2.11
February	21,400	5,120	11,200	1.35	1.41
March	41,500	5,900	17,400	2.10	2.42
April	201,000	15,300	46,900	5.65	6.30
May	232,000	10,600	37,000	4.46	5.14
June	107,000	11,600	35,900	4.33	4.83
July	27,900	3,950	15,200	1.83	2.11
August	51,000	4,400	22,400	2.70	3.11
September	24,600	5,370	11,400	1.37	1.53
The year	232,000	2,450	21,100	2.54	34.51

Monthly discharge of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1901–2.					
October	18,900	4,630	7,220	0.870	1.00
November	9,200	4,170	4,740	.571	.64
December	206,000	3,950	34,000	4.10	4.73
January	72,500	6,170	20,600	2.48	2.86
February	99,200	7,630	25,000	3.01	3.13
March	197,000	12,400	40,200	4.84	5.58
April	44,200	8,250	20,600	2.48	2.77
May	27,300	5,370	8,860	1.07	1.23
June	17,500	3,740	7,480	.901	1.01
July	18,400	2,760	5,770	.695	.80
August	4,630	1,900	2,900	.349	.40
September	3,530	1,780	2,210	.266	.30
The year	206,000	1,780	15,000	1.81	24.45
1902–3.					
October	6,740	2,040	3,250	.392	.45
November	18,200	2,110	4,710	.567	.63
December	33,800	6,170	15,800	1.90	2.19
January	72,800	6,600	18,000	2.17	2.50
February	93,000	14,800	32,000	3.86	4.02
March	158,000	12,000	35,000	4.22	4.86
April	47,900	18,000	28,000	3.39	3.78
May	18,400	4,630	8,190	.987	1.14
June	22,400	4,630	8,820	1.06	1.18
July	16,400	2,760	6,590	.794	.92
August	10,200	2,300	4,000	.482	.56
September	10,900	2,300	3,330	.401	.45
The year	158,000	2,040	13,900	1.67	22.68
1903–4.					
October	4,170	2,030	2,550	.307	.35
November	4,170	2,160	2,690	.324	.36
December	5,120	1,780	2,850	.343	.40
January	34,400	3,530	7,800	.940	1.08
February	30,200	3,130	10,400	1.25	1.35
March	44,800	9,530	18,100	2.18	2.51
April	32,600	5,370	11,300	1.36	1.52
May	42,800	6,740	14,100	1.70	1.96
June	23,500	4,400	9,000	1.08	1.20
July	20,400	2,450	5,960	.718	.83
August	6,450	2,300	4,120	.496	.57
September	3,740	1,660	2,230	.269	.30
The year	44,800	1,660	7,590	.914	12.43
1904–5.					
October	1,660	1,250	1,440	.173	.20
November	2,300	1,480	1,950	.235	.26
December	9,530	1,840	3,680	.443	.51
January	40,800	2,230	8,370	1.01	1.16
February	31,400	3,130	9,810	1.18	1.23
March	102,000	9,530	27,600	3.33	3.84
April	25,600	6,600	11,000	1.33	1.48
May	110,000	5,900	22,800	2.75	3.17
June	11,600	2,600	5,540	.667	.74
July	97,600	3,840	16,600	2.00	2.31
August	14,400	4,870	8,760	1.06	1.22
September	15,000	2,380	5,050	.608	.68
The year	110,000	1,250	10,300	1.24	16.80
1905–6.					
October	5,900	2,300	3,430	.413	.48
November	5,120	2,760	3,580	.431	.48
December	36,300	4,630	12,700	1.53	1.76
January	144,000	7,030	28,500	3.43	3.95
February	20,400	6,450	9,840	1.19	1.24
March	44,200	8,250	21,000	2.53	2.92
April	46,800	9,870	20,900	2.52	2.81
May	19,400	4,400	9,330	1.12	1.29
June	16,600	4,870	8,400	1.01	1.13
July	13,200	3,950	6,870	.828	.95
August	40,200	7,940	15,800	1.90	2.19
September	26,800	6,450	12,600	1.52	1.70
The year	144,000	2,300	12,800	1.54	20.90

Monthly discharge of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1906–7.					
October	85,700	8,250	22,100	2.66	3.07
November	121,000	7,330	19,000	2.29	2.56
December	51,600	7,940	17,200	2.07	2.39
January	95,200	8,560	28,900	3.48	4.01
February	25,600	8,880	14,400	1.73	1.80
March	65,000	8,250	27,500	3.31	3.82
April	53,700	10,200	26,200	3.16	3.53
May	24,600	4,630	10,900	1.31	1.51
June	152,000	4,630	30,100	3.63	4.05
July	15,700	4,400	8,420	1.01	1.16
August	27,300	3,530	7,120	.858	.99
September	37,600	3,130	7,330	.883	.99
The year	152,000	3,130	18,300	2.20	29.88
1907–8.					
October	23,000	2,760	6,210	.748	.86
November	40,800	5,370	15,900	1.92	2.14
December	54,400	5,370	17,800	2.14	2.47
January	116,000	10,900	22,900	2.76	3.18
February	137,000	7,630	25,900	3.12	3.36
March	74,000	11,600	31,800	3.83	4.42
April	109,000	11,300	31,400	3.78	4.22
May	53,000	9,530	19,700	2.37	2.73
June	35,700	5,370	10,400	1.25	1.40
July	20,600	4,170	8,620	1.04	1.20
August	17,000	2,760	5,740	.692	.80
September	5,900	2,160	3,210	.387	.43
The year	137,000	2,160	16,600	2.00	27.21
1908–9.					
October	27,900	2,030	5,780	.696	.80
November	19,400	3,950	6,160	.742	.83
December	23,500	4,400	10,800	1.30	1.50
January	44,200	9,870	20,500	2.47	2.85
February	37,600	5,370	20,400	2.46	2.56
March	40,200	10,200	23,100	2.78	3.20
April	60,000	7,940	18,000	2.17	2.42
May	51,000	6,740	20,300	2.45	2.82
June	25,600	7,030	11,800	1.42	1.58
July	40,200	3,740	9,180	1.11	1.28
August	10,600	2,450	4,840	.583	.67
September	9,870	2,160	4,530	.545	.61
The year	60,000	2,030	12,900	1.55	21.12
1909–10.					
October	13,600	2,380	4,740	.571	.66
November	6,740	2,760	3,780	.455	.51
December	23,800	2,230	5,170	.623	.72
January	44,800	2,160	17,000	2.05	2.36
February	57,900	5,630	15,600	1.88	1.96
March	38,200	4,870	12,400	1.49	1.72
April	22,400	4,630	11,600	1.40	1.56
May	21,900	6,310	10,100	1.22	1.41
June	97,600	5,900	24,600	2.96	3.30
July	24,600	4,400	10,900	1.31	1.51
August	4,170	2,600	3,260	.393	.45
September	9,870	2,760	5,160	.622	.69
The year	97,600	2,160	10,300	1.24	16.85
1910–11.					
October	9,530	2,450	3,900	.470	.54
November	9,200	2,450	3,150	.380	.42
December	30,200	2,600	6,870	.828	.95
January	88,000	7,940	26,400	3.18	3.67
February	51,000	7,940	17,100	2.06	2.14
March	62,100	7,330	20,200	2.43	2.80
April	63,500	10,200	28,500	3.43	3.83
May	12,400	3,530	6,760	.814	.94
June	5,900	3,130	4,220	.508	.57
July	7,030	1,780	3,360	.405	.47
August	4,630	1,540	2,500	.301	.35
September	8,880	2,600	4,790	.577	.64
The year	88,000	1,540	10,600	1.28	17.32

Monthly discharge of Kanawha River at Kanawha Falls, W. Va., for the years ending Sept. 30, 1877–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1911–12.					
October	71,000	2,760	12,200	1.47	1.70
November	26,200	3,330	9,820	1.18	1.32
December	28,500	3,950	10,500	1.27	1.46
January	33,200	----------	11,400	1.37	1.58
February	57,200	----------	16,300	1.96	2.11
March	92,000	10,200	34,000	4.10	4.73
April	62,800	10,200	19,800	2.39	2.67
May	83,300	6,740	21,500	2.59	2.99
June	19,900	3,330	6,530	.787	.88
July	18,900	7,030	10,400	1.25	1.44
August	12,000	2,940	4,990	.601	.69
September	19,400	1,780	4,830	.582	.65
The year	92,000	----------	13,500	1.63	22.22
1912–13.					
October	5,370	2,160	3,300	.398	.46
November	25,600	2,600	5,970	.719	.80
December	23,000	2,760	5,620	.677	.78
January	61,400	8,880	20,400	2.46	2.84
February	31,400	6,450	12,700	1.53	1.59
March	173,000	7,030	29,400	3.54	4.08
April	55,800	7,630	18,200	2.19	2.44
May	61,400	5,120	15,800	1.90	2.19
June	30,200	5,120	11,500	1.39	1.55
July	15,300	3,130	6,850	.825	.95
August	8,250	2,160	3,960	.477	.55
September	17,500	2,030	4,290	.517	.58
The year	173,000	2,030	11,500	1.39	18.81
1913–14.					
October	27,300	2,940	7,030	.847	.98
November	52,300	3,530	12,500	1.51	1.68
December	25,100	4,400	10,500	1.27	1.46
January	39,500	7,940	17,000	2.05	2.36
February	58,600	8,250	22,700	2.73	2.84
March	46,200	9,530	22,800	2.75	3.17
April	45,500	12,000	24,200	2.92	3.26
May	17,500	3,130	7,990	.963	1.11
June	3,740	1,900	2,640	.318	.36
July	5,900	1,660	2,900	.349	.40
August	7,630	1,660	2,520	.304	.35
September	5,900	1,660	2,340	.282	.32
The year	58,600	1,660	11,200	1.35	18.29
1914–15.					
October	18,400	1,330	3,390	.408	.47
November	7,630	1,660	2,780	.335	.37
December	67,200	2,760	17,200	2.07	2.39
January	129,000	9,530	31,600	3.81	4.39
February	128,000	9,200	28,400	3.42	3.56
March	16,600	8,560	12,000	1.45	1.67
April	18,000	5,630	8,150	.982	1.10
May	14,800	4,170	7,720	.930	1.07
June	20,400	2,450	7,530	.907	1.01
July	7,030	2,160	4,030	.486	.56
August	10,900	2,300	4,380	.528	.61
September	32,600	3,530	7,560	.911	1.02
The year	129,000	1,330	11,100	1.34	18.22
1915–16.					
October	53,700	3,950	10,300	1.24	1.43
November	16,100	2,760	6,310	.760	.85
December	72,500	3,530	17,100	2.06	2.38
January	53,700	9,530	23,300	2.81	3.24
February	56,500	11,300	24,000	2.89	3.12
March	61,400	11,600	22,100	2.66	3.07
April	35,100	8,560	15,400	1.86	2.08
May	12,800	4,170	8,020	.966	1.11
June	27,300	6,450	10,000	1.20	1.34
July	146,000	3,130	20,200	2.43	2.80
August	----------	----------	16,000	1.93	2.22
September	----------	----------	5,600	.675	.75
The year	146,000	----------	14,900	1.80	24.39

KANAWHA RIVER AT LOCK NO. 2, MONTGOMERY, W. VA.

LOCATION.—At Lock No. 2, three-fourths mile below Chesapeake & Ohio Railway station at Montgomery, Fayette County. Morris Creek enters on left 300 feet below gage.

DRAINAGE AREA.—8,470 square miles.

RECORDS AVAILABLE.—January 1, 1888, to September 30, 1920. December 8, 1883, to December 9, 1887, daily gage readings were made from a "construction" gage; December 10, 1887, to January 2, 1888, from a "channel" gage; and January 3 to 7, 1888, from the "foot" gage. Records prior to 1888 have not been interpreted in terms of discharge.

GAGE.—Upper gage at lock, vertical and inclined staff on right bank, short distance above the upper gates of lock. Vertical section fastened to right lock wall; inclined section is at upstream end of paved slope; read by George Meyers, lockmaster. The zero of the upper gage is 582.82 feet above sea level. A chain gage fastened on the downstream handrail near the center of toll bridge at Montgomery is used as a reference for the water surface at bridge for determining depths when it is not possible to sound section. The zero of the chain gage is 600.65 feet above sea level. Present upper gage at lock was installed July 28, 1915. Upper gage previously in use consisted of 2-inch by 8-inch plank graduated to feet and tenths and fastened vertically to lock wall for readings below 31 feet and, for higher readings, vertical sections attached to fence a short distance above upper end of lock wall.

BENCH MARK.—Bench mark No. 1 is a standard United States Geological Survey bronze tablet set in face of masonry at upper end of lock wall, stamped "614 Knwa." Elevation 613.485 feet above sea level, 30.66 feet above the zero of both upper and lower gage, and 12.83 feet above zero of chain gage on Montgomery Bridge.

DISCHARGE MEASUREMENTS.—Made from highway bridge at Montgomery or by wading on crest of dam. Some measurements made at other sections as stated in footnotes to table of discharge measurements.

CHANNEL AND CONTROL.—One channel at all stages; straight for 300 feet above and 800 feet below bridge. At bridge both banks high and are not overflowed; at dam right bank is never overflowed, but left bank is low and flooded at high stages. Bed of river composed of rock, sand, and mud. The dam at Lock No. 2 is the control for all stages, as there is a fall of about 2 feet at the dam at the maximum stage. Except for leakage through dam and lock, point of zero flow is at lowest point in crest of dam, which is 17.9 feet above the zero of the upper gage.

EXTREMES OF DISCHARGE.—The extreme high water of September, 1878, reached a height equivalent to about 52.2 feet, upper gage; corresponding discharge, about 275,000 second-feet.

The absolute minimum at Lock No. 2 is probably between 1,000 and 1,100 second-feet. In 1838, Mr. Gill, at the instance of Charles Ellett, jr., gaged the Kanawha at Buffalo about 64 miles below Lock No. 2 and reported a discharge of 1,100 second-feet. On September 15, 1881, Mr. A. M. Scott gaged Kanawha River at Elk Shoal in the chute just below the mouth of Elk River, 27 miles below Lock No. 2, and reported a discharge of 1,130 second-feet. On August 27, 1881, a distinctly cut mark on solid rock ledge at the foot of Knob Shoal about a mile above Buffalo was found lettered, "September 21, 1838, Sam Burk;" the mark was 1¼ inches under water. The gage at Charleston August 27, 1881, read 0.27 foot higher than when Scott's measurements were made September 15, 1881. The relatively small inflow between Lock No. 2 and the places where these low-water measurements were made is largely compensated by evaporation and errors of observation.

Maximum stage recorded January 8, 1888, to September 30, 1920, 49.65 feet 6 a. m. May 23, 1901 (discharge, about 250,000 second-feet); minimum flow about 1,000 second-feet at 5 p. m. October 12, 1917.

ICE.—Discharge relation seldom affected by ice.

DIVERSION.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation is controlled by Dam No. 2 and is permanent except as affected by change in leakage through dam and lock gates and valves. Rating table used from August 5, 1909, to September 30, 1918, based on 12 discharge measurements made from 1910 to 1917 and point of zero flow (low point in crest of dam). Leakage through the dam of 500 second-feet and through the lock of 200 second-feet is allowed for in rating table. The table is well defined between 1,000 and 200,000 second-feet and fairly well defined at other stages. Rating table used from January 8, 1888, to August 4, 1909, obtained by subtracting 500 second-feet from quantities in table used August 5, 1909, to September 30, 1918. This reduction was made to adjust a discrepancy indicated by comparisons of the flow at Lock No. 2 with flow at Kanawha Falls and Fayette plus that at Belva by means of ratios of discharge for selected periods. The discrepancy is due to some change in condition of flow or in the gage, and the studies indicated that the discrepancy was best adjusted by the reduction of 500 second-feet. Strictly speaking, the rating tables are applicable only when the lower gates are open, but since the lower gates are open about 80 per cent of the time no attention was paid in the computations of daily discharge as to which set of gates was open.

Prior to June 22, 1915, gage read in the morning to tenths; since then gage is read to hundredths twice daily. Daily discharge ascertained by applying daily gage height or mean daily gage height to rating table except as follows: January 1–7, 1888, daily discharge estimated from records for Kanawha Falls.

October 6, 1891, observer notes "drawing off pool."

July 19, 1893, discharge estimated.

January 6, 1894, observer notes, "First reading after gage reset." No change made in application of rating table. July 19, 20, and August 19, 1894, "drawing off pool," probably, also, September 14 and 15. Discharge estimated July 19, 20, September 14 and 15, from Kanawha Falls.

February 1–26, 1895, ice reported up to 7½ inches thick, but no correction made for effect of ice. September 27–30, 1895, "drawing off pool No. 2." Discharge estimated from records for Fayette and Kanawha Falls. October 1–9, 1895, discharge estimated from records for Fayette and Lock No. 2; recorded gage heights indicate too small discharge, as a result probably of drawing off pool No. 2, September 27–30.

August 1, 1897, discharge estimated.

Low-water records in October and November, 1904, and in October and November, 1908, do not agree well with those for Kanawha Falls, but no further adjustment seems advisable. Comparisons with records for Fayette, Belva, and other stations upstream afford a means of making reasonably accurate determination of extreme low-water flow.

August 5, 1909, change made in application of rating table as noted in first paragraph of this section.

August, September, and October, 1910, discharge at Lock No. 2, appears about 10 per cent too low as compared with that at Kanawha Falls; there is no other basis for change and no adjustment has been made. December 10, 1910, discharge interpolated. December 13–28, 1910, observer notes, "River frozen over, ice 1 to 3 inches thick."

From April 7, 1911, to April 30, 1914, an addition of 0.1 foot to observed gage readings was made before entering the discharge rating table to compensate for an error in the gage found by wye levels on April 11, 1913. The selection of the period covered by the error, though somewhat arbitrary, is based on comparisons of the flow at Lock No. 2 with the flow at Kanawha Falls, Fayette, and Belva, and is limited by the following considerations:

Discharge measurements at Lock No. 2 are more consistent when plotted to observed gage readings than when an addition of 0.1 foot is made to the gage height of measurements made prior to April 11, 1913, which indicates that the error started subsequent to March 10, 1911. A new gage was installed before June 21, 1915, so that the error ends prior to that date.

December 9–16, 1911, mean discharge reduced from 4,800 to 4,000 second-feet because not consistent with that at Kanawha Falls and Fayette plus that at Belva. Too warm for ice. January 8–18 and February 7–17, 1912, discharge estimated, because of ice, from weather records and flow at Fayette, Belva, and Kanawha Falls. Mean discharge January 8–18, 4,100 second-feet; February 7–17, 5,300 second-feet.

July 1, 1916, discharge estimated.

The ratios of monthly discharge are a rough index of the accuracy of the records. Prior to the making of discharge measurements in 1911, the reliability of the record may be judged by comparison with records at Kanawha Falls, Fayette, and Fayette plus those at Belva. Records, on the whole, are good.

RATIOS.—The table on pages 44–47 contains ratios of monthly and yearly discharge at Fayette, Kanawha Falls, and Lock No. 2. See discussion which accompanies table.

COOPERATION.—Gage heights were furnished and assistance in making discharge measurements was rendered by the United States Engineer Corps.

Discharge measurements of Kanawha River at Lock No. 2, Montgomery, W. Va., during the years 1910–1917.

Date.	Made by—	Gage height.	Discharge.
1910.		*Feet.*	*Sec.-ft*
Nov 12	Bolster and Horton	19.35	2,630
1911.			
Feb. 8	Jackson and Bailey	21.60	12,800
13	H. J. Jackson	22.60	17,700
Mar. 7	C. T. Bailey	27.24	53,100
10	do	24.75	31,900
1912.			
Mar. 17	Horton and Bailey	31.00	86,700
1913.			
Mar. 28	A. H. Horton	39.00	157,000
1915.			
June 19	Ellsworth and Conklin	20.91	9,310
July 27	C. E. Ellsworth	19.43	2,310
Dec. 31	Frank Conklin	28.35	62,900
1917.			
Sept. 17	Peterson and Hopkins	18.96	1,980
18	do	18.93	1,490
Oct. 11	do	18.55	1,450
	Leakage through lower gates.		
1915.		*Feet.*	*Sec.-ft.*
June 22	Ellsworth and Conklin	20.00	110
Oct. 11	B. J. Peterson	20.53	75
1917.			
Sept. 18	Peterson and Hopkins	19.04	106
	Leakage through upper gates.		
1915.			
June 22	Ellsworth and Conklin	19.95	192
July 28	C. E. Ellsworth	19.36	166
Oct. 11	B. J. Peterson	20.52	197
1917.			
Sept. 18	Peterson and Hopkins	18.91	263

NOTE.—Measurement of Nov. 12, 1910, made at Boomer Ferry, Boomer, W. Va., 4 miles above Lock No. 2. Measurement of July 27, 1915, was made on top of dam. Discharge includes leakage through upper gates, 166 second-feet, but does not include leakage through the dam. Measurement of Sept. 17, 1917, was made from boat at section about 900 feet below dam and includes leakage through the lower gates, and through the dam. Measurement of Sept. 18, 1917, was made on crest of dam with upper gates and wickets closed. Discharge includes 263 second-feet leakage through upper gates but does not include leakage through the dam which accounts for its lack of agreement with measurement made September 17, 1917. Measurement of Oct. 11, 1917, made from boat about 5 miles above Lock No. 2.

Leakage through a given set of gates was determined by opening one gate of the other set and measuring the flow through the open gateway. One new valve in a set of eight in the upper gates was placed Sept. 11, 1915, in the old valve box, but the leakage was not materially reduced. Lower gates are open about 80 per cent of the time as a boat seldom remains above the lock more than a few hours. There were 221 lockages June 22 to Sept. 30, 1915.

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar	Apr.	May.	June.	July.	Aug.	Sept.
1888.												
1	-------	-------	-------	3,000	10,300	12,300	32,600	8,300	31,100	13,300	2,030	2,770
2	-------	-------	-------	4,500	13,300	11,300	24,500	8,300	30,300	10,300	2,240	3,850
3	-------	-------	-------	15,000	13,300	11,300	20,000	7,300	21,900	8,300	2,240	6,300
4	-------	-------	-------	16,500	12,300	11,800	16,800	7,300	17,300	6,300	2,490	6,300
5	-------	-------	-------	13,500	24,500	11,300	14,300	6,800	13,800	5,800	2,240	31,800
6	-------	-------	-------	11,500	48,800	11,800	13,300	6,800	11,300	5,300	2,240	17,300
7	-------	-------	-------	10,500	36,800	11,300	12,800	6,800	9,300	6,300	2,930	12,300
8	-------	-------	-------	14,300	27,400	10,300	12,800	6,300	8,300	6,300	3,090	17,800
9	-------	-------	-------	24,500	24,500	9,800	12,300	6,300	7,300	7,800	2,630	25,200
10	-------	-------	-------	21,200	21,200	9,300	11,800	7,300	6,300	7,800	2,360	34,300
11	-------	-------	-------	21,900	18,300	8,800	12,300	9,300	6,300	15,300	4,300	33,400
12	-------	-------	-------	17,300	33,400	14,300	21,200	10,300	6,300	10,800	6,300	59,300
13	-------	-------	-------	15,300	48,800	16,800	20,000	16,300	6,300	8,300	5,300	31,100
14	-------	-------	-------	13,300	38,500	16,800	17,300	20,600	6,300	8,300	3,650	19,400
15	-------	-------	-------	14,300	31,100	14,300	14,300	17,800	5,800	7,300	3,450	14,800
16	-------	-------	-------	20,000	28,800	11,800	12,800	14,300	5,300	5,800	4,300	12,300
17	-------	-------	-------	21,900	24,500	11,300	11,800	12,800	5,300	5,300	3,090	36,800
18	-------	-------	-------	20,000	19,400	11,800	10,300	12,300	4,800	4,300	2,490	66,400
19	-------	-------	-------	17,300	16,800	13,800	9,800	13,800	4,300	3,650	2,240	46,200
20	-------	-------	-------	15,300	15,300	14,300	9,300	15,300	4,300	3,450	2,140	30,300
21	-------	-------	-------	13,800	15,300	14,300	8,800	15,300	4,080	3,450	2,930	20,600
22	-------	-------	-------	12,000	19,400	43,600	8,800	12,800	4,300	3,850	3,850	17,300
23	-------	-------	-------	10,300	18,900	43,600	8,800	12,300	5,800	3,090	5,300	14,800
24	-------	-------	-------	10,300	15,300	28,800	14,800	18,300	6,800	3,450	6,800	12,800
25	-------	-------	-------	9,300	14,300	21,900	16,300	25,900	6,800	2,930	6,300	11,300
26	-------	-------	-------	9,300	14,300	20,600	13,800	20,600	6,300	2,630	4,800	10,300
27	-------	-------	-------	8,300	17,300	27,400	12,300	17,300	5,300	2,360	3,450	9,800
28	-------	-------	-------	9,800	16,300	40,200	10,800	16,300	5,300	2,240	3,090	9,300
29	-------	-------	-------	7,800	13,800	41,900	9,800	14,300	5,300	2,140	2,770	8,300
30	-------	-------	-------	4,080	-------	59,300	9,000	12,800	16,300	2,030	2,630	7,800
31	-------	-------	-------	6,300	-------	47,100	-------	14,300	-------	2,030	2,490	-------
1888–89.												
1	7,300	19,400	10,300	17,800	20,600	14,300	11,800	16,800	158,000	14,300	38,500	8,800
2	7,300	16,800	10,300	19,400	18,300	14,300	11,800	28,100	72,600	16,300	50,500	7,800
3	7,300	14,300	9,800	17,300	16,800	17,300	13,300	34,300	37,600	22,500	35,100	6,800
4	7,300	13,800	9,300	15,300	15,300	24,500	11,300	25,900	25,900	28,100	28,800	6,300
5	7,800	12,800	8,800	13,800	14,300	23,200	11,800	20,600	21,200	48,800	23,200	6,300
6	7,800	12,300	8,300	29,600	14,300	21,900	11,300	16,800	18,900	33,400	30,300	6,300
7	7,300	11,300	8,300	68,200	12,800	18,900	10,300	14,300	15,800	23,200	23,200	6,800
8	9,800	10,800	8,300	45,300	10,800	16,800	10,300	13,300	13,800	17,300	18,900	6,300
9	9,300	10,800	8,300	30,300	10,300	15,300	9,300	11,800	11,800	14,300	16,800	8,300
10	9,300	10,800	8,300	27,400	9,300	14,300	9,300	11,300	10,800	11,800	13,800	10,300
11	8,300	16,300	8,300	28,800	10,800	12,800	9,300	9,800	10,300	11,800	12,300	8,800
12	13,300	18,900	8,300	25,200	11,300	12,300	9,300	8,800	19,400	10,300	11,300	7,800
13	28,800	16,300	8,300	20,600	10,800	11,300	9,800	8,300	35,100	11,800	11,300	7,300
14	28,800	13,800	8,300	17,800	10,300	11,300	9,800	10,800	35,100	12,300	10,300	6,300
15	30,300	15,300	7,300	15,800	9,800	11,800	10,300	11,300	43,600	10,800	10,300	6,300
16	23,200	28,800	7,300	14,800	10,800	12,300	13,300	12,300	35,900	11,300	14,300	6,300
17	20,600	42,800	7,300	13,800	26,600	12,300	14,300	13,800	38,500	10,800	14,300	6,300
18	17,300	31,800	11,300	13,300	55,800	12,800	14,800	12,300	29,600	9,300	12,300	8,300
19	15,300	24,500	42,800	13,800	103,000	12,300	13,300	10,300	27,400	8,800	10,800	12,300
20	16,300	23,200	33,400	13,800	63,800	13,300	12,300	9,300	30,300	23,800	9,300	15,300
21	35,100	24,500	23,200	13,300	37,600	17,800	11,300	8,800	28,100	18,300	8,800	11,800
22	25,900	21,900	16,800	13,300	25,900	20,600	10,300	8,800	21,200	19,400	8,300	10,300
23	19,400	18,900	13,800	13,300	21,200	14,300	9,800	8,300	19,400	14,300	7,300	8,300
24	25,900	16,800	13,300	12,300	18,300	14,300	8,300	8,300	16,300	12,300	7,300	8,300
25	50,500	14,800	12,800	14,800	15,800	14,300	8,800	8,300	14,800	10,300	8,800	39,300
26	38,500	13,800	12,300	31,100	14,300	15,300	11,300	10,300	14,300	9,300	9,300	51,400
27	82,400	13,300	12,800	45,300	13,300	16,300	14,800	19,400	14,800	15,800	8,300	28,100
28	69,100	12,300	28,800	55,800	13,800	14,800	24,500	16,300	21,900	23,200	7,800	19,400
29	46,200	11,800	31,100	55,800	-------	14,300	23,200	16,300	16,800	24,500	7,300	15,300
30	32,600	11,300	23,800	37,600	-------	13,300	18,300	15,300	13,800	20,600	7,300	12,800
31	24,500	-------	18,900	25,900	-------	12,300	-------	86,000	-------	18,300	11,300	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1889-90.												
1	11,300	15,300	20,600	10,800	16,300	48,800	22,500	14,800	12,800	4,800	5,300	6,300
2	11,300	13,300	17,300	10,300	50,500	43,600	23,800	14,300	11,300	4,800	5,300	5,800
3	11,300	11,800	15,300	10,300	47,900	27,400	25,900	14,300	10,300	5,300	4,800	4,800
4	10,300	13,300	14,300	10,300	34,300	25,900	27,400	13,300	9,800	6,300	5,300	4,300
5	9,300	14,300	14,300	10,300	31,100	21,200	59,300	20,000	9,800	6,800	5,300	4,080
6	8,300	14,300	13,300	9,800	28,800	19,400	62,000	33,400	8,800	6,300	7,800	3,450
7	8,300	13,300	13,300	10,300	22,500	17,800	41,000	50,500	9,300	5,300	9,800	3,270
8	7,300	11,800	12,300	24,500	19,400	16,300	30,300	36,800	8,800	4,800	9,300	3,090
9	7,300	12,300	12,300	23,800	20,600	16,300	24,500	27,400	8,300	4,300	9,800	3,850
10	7,300	23,800	12,300	19,400	27,400	15,800	21,200	21,200	7,800	5,300	11,800	6,800
11	7,300	43,600	12,300	16,300	24,500	16,300	21,900	18,300	7,300	4,300	11,300	12,800
12	7,300	27,400	12,800	14,300	20,600	27,400	21,200	16,300	6,800	4,300	9,300	9,300
13	6,800	21,200	13,300	12,800	18,300	28,800	20,000	14,800	6,800	3,850	8,800	7,800
14	7,300	36,800	12,800	12,300	17,300	28,800	18,300	13,800	6,800	3,650	6,800	8,300
15	12,300	48,800	12,300	11,300	28,100	47,900	17,300	15,300	6,300	3,650	5,300	7,300
16	11,300	31,800	11,300	11,800	48,800	48,800	19,400	17,800	6,300	4,080	5,300	13,300
17	11,300	22,500	10,800	16,300	37,600	34,300	33,400	18,900	7,800	7,300	4,300	13,300
18	9,800	18,300	10,300	15,800	25,900	25,900	36,800	17,300	7,300	5,300	4,300	12,300
19	9,300	20,600	10,300	14,800	21,900	24,500	32,600	15,300	8,300	5,800	4,300	9,300
20	8,300	31,800	10,300	13,800	19,400	28,800	30,300	35,900	8,800	6,800	3,850	7,800
21	8,300	25,200	9,800	14,300	30,300	52,300	24,500	56,700	8,300	5,300	3,850	6,800
22	7,800	21,900	9,300	20,600	29,600	63,800	20,000	47,100	7,300	5,300	4,300	6,300
23	7,300	35,100	9,300	21,200	25,900	80,700	17,300	29,600	6,300	4,300	6,800	5,800
24	7,800	28,100	9,300	17,800	20,600	69,100	15,800	21,900	5,800	4,080	6,300	6,300
25	9,800	22,500	9,300	15,800	66,400	47,100	15,800	17,800	6,300	3,850	5,800	6,300
26	9,800	20,000	10,300	13,800	110,000	33,400	20,600	16,800	6,800	3,850	5,300	6,300
27	11,800	17,800	10,300	13,300	86,900	26,600	19,400	19,400	6,300	4,300	6,300	6,800
28	14,800	19,400	14,300	13,300	57,500	23,800	19,400	21,200	5,300	6,800	15,300	8,300
29	42,800	25,900	13,800	14,300	-------	23,200	16,300	21,200	5,300	7,300	9,300	9,300
30	25,900	24,500	12,800	13,800	-------	22,500	17,300	17,800	4,800	5,300	6,800	9,800
31	24,500	-------	11,800	16,300	-------	21,900	-------	14,300	-------	6,300	6,800	-------
1890-91.												
1	8,300	16,300	5,300	27,400	58,400	31,800	65,500	10,300	25,900	6,800	6,800	12,300
2	9,300	14,300	5,300	85,100	85,100	25,200	67,300	10,300	22,500	7,300	5,800	10,800
3	10,300	13,300	4,800	97,600	67,300	21,900	58,400	9,800	18,900	9,800	5,800	11,300
4	11,300	12,800	5,300	59,300	70,000	28,100	69,100	9,800	18,300	8,300	6,800	9,300
5	10,300	12,300	5,300	35,100	56,700	49,700	51,400	9,800	25,200	7,300	10,300	8,300
6	14,800	11,300	5,300	24,500	36,800	42,800	38,500	9,300	27,400	6,300	11,300	8,300
7	13,300	10,300	5,800	18,300	26,600	33,400	30,300	9,300	27,400	5,800	10,800	9,300
8	13,300	9,300	11,300	15,800	25,200	51,400	26,600	8,800	50,500	5,800	8,300	14,300
9	11,300	10,300	11,800	12,800	28,800	93,100	26,600	8,300	37,600	6,300	7,300	11,300
10	10,300	10,300	12,300	12,300	54,000	87,800	28,800	8,300	26,600	9,300	6,300	9,300
11	9,300	9,300	12,300	12,300	95,800	66,400	31,800	8,300	20,600	9,800	6,300	8,300
12	7,800	8,800	10,300	48,800	65,500	45,300	97,600	8,300	17,300	8,800	5,300	7,300
13	10,800	8,300	9,300	57,500	43,600	61,100	74,400	7,800	16,800	7,300	5,300	6,800
14	9,300	8,300	8,300	35,900	43,600	71,800	43,600	8,300	17,300	6,300	4,800	6,300
15	8,800	8,800	7,300	25,200	39,300	53,200	34,300	10,800	13,800	5,300	7,300	6,800
16	8,300	8,300	6,800	19,400	31,100	37,600	28,100	11,800	12,800	5,300	5,800	6,800
17	8,300	8,300	6,300	16,800	25,900	29,600	23,200	13,300	11,800	5,300	5,300	6,300
18	10,300	9,300	6,300	16,300	27,400	24,500	20,000	13,300	12,300	5,300	5,300	5,800
19	10,800	10,300	5,300	15,300	26,600	21,900	19,400	11,300	12,800	7,300	5,300	4,300
20	11,300	10,800	5,300	14,300	23,200	20,600	18,300	10,300	13,300	6,300	6,300	4,800
21	11,300	10,800	6,300	13,300	20,600	25,900	16,800	9,800	13,800	8,300	6,800	4,800
22	9,800	9,800	9,300	14,300	52,300	35,100	15,800	9,300	16,300	7,800	13,800	4,800
23	8,300	8,300	12,300	24,500	65,500	29,600	14,300	9,300	16,300	7,300	12,300	4,300
24	23,200	7,300	16,300	41,900	48,800	25,900	13,800	8,800	15,300	8,800	20,600	9,800
25	50,500	7,300	16,800	28,800	33,400	23,200	13,800	8,300	12,800	9,300	30,300	4,800
26	31,800	6,800	16,800	22,500	65,500	21,200	13,300	8,300	10,800	12,300	31,800	4,300
27	26,600	6,300	15,300	18,300	67,300	20,000	12,800	8,800	9,300	11,800	22,500	4,300
28	25,900	6,300	14,300	17,300	45,300	21,900	11,800	10,800	8,300	10,300	28,800	4,300
29	20,600	5,800	12,300	20,600	-------	24,500	11,300	48,800	7,300	8,800	25,200	4,300
30	21,200	5,300	11,800	34,300	-------	27,400	10,300	47,100	6,800	8,300	18,300	4,300
31	18,300	-------	12,300	45,300	-------	34,300	-------	31,800	-------	7,300	14,800	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1891-92.												
1	4,300	3,650	8,800	13,300	11,300	11,300	20,600	18,300	23,800	8,300	4,800	3,090
2	4,300	3,650	7,800	12,800	10,300	12,800	17,800	16,800	18,900	8,300	7,300	3,850
3	4,300	3,450	7,300	15,800	9,800	14,300	17,300	15,300	16,300	8,800	6,800	3,090
4	4,080	3,450	7,300	24,500	9,300	13,800	16,300	13,800	14,300	7,800	6,300	2,770
5	4,300	3,450	18,900	20,600	9,300	13,300	16,300	12,800	14,300	6,800	6,300	2,630
6	3,270	3,450	44,500	16,800	10,300	17,300	15,300	12,300	14,300	6,300	6,300	2,490
7	3,450	3,450	27,400	16,800	9,300	26,600	14,300	11,800	20,600	6,300	5,300	2,490
8	4,300	3,450	29,600	15,300	12,800	23,200	16,800	12,300	20,600	6,300	4,300	2,490
9	4,300	3,450	34,300	13,300	23,800	42,800	61,100	11,800	18,900	5,800	3,850	2,490
10	4,800	3,450	24,500	11,300	23,200	56,700	45,300	10,300	18,900	5,300	3,850	2,490
11	5,300	3,850	18,300	10,800	20,600	35,100	31,100	9,800	16,300	5,300	4,300	2,490
12	5,300	5,300	52,300	11,300	17,300	25,900	24,500	10,300	14,300	5,300	4,300	2,360
13	4,800	7,800	12,800	18,900	14,800	21,200	21,200	10,300	12,300	5,300	4,300	2,360
14	4,800	12,300	11,300	72,600	12,800	18,900	17,300	9,300	10,800	6,300	4,300	2,490
15	4,800	8,800	10,300	136,000	13,300	17,300	17,300	8,800	9,300	6,300	4,080	2,360
16	4,300	7,300	9,800	73,500	18,900	15,800	22,500	8,300	8,300	5,800	3,650	3,450
17	4,300	6,300	9,800	42,800	18,300	14,300	21,900	8,300	7,800	5,300	3,450	7,300
18	4,300	5,300	10,300	28,100	16,300	13,800	20,000	7,800	7,800	5,300	3,090	5,300
19	4,080	5,300	9,300	23,200	14,800	13,300	59,300	8,300	7,800	5,300	2,930	3,850
20	4,080	5,300	8,800	32,600	13,300	12,300	47,100	7,800	9,300	5,300	2,770	3,270
21	3,850	5,300	8,300	41,900	13,800	12,800	40,200	26,600	14,800	4,800	2,770	2,930
22	4,080	5,300	7,800	31,800	14,800	13,300	38,500	44,500	15,300	4,800	2,770	2,930
23	4,300	16,300	7,800	24,500	15,300	16,800	105,000	43,600	12,800	5,300	2,770	2,770
24	4,300	17,800	8,300	20,600	14,300	49,700	68,200	28,800	11,300	5,300	2,770	11,300
25	4,300	23,800	8,300	18,300	13,300	51,400	40,200	21,900	10,300	5,300	2,770	8,800
26	4,800	21,900	10,300	16,300	12,300	38,500	28,800	17,800	9,300	4,800	3,450	6,300
27	4,300	14,800	15,300	14,300	11,800	50,500	22,500	28,800	8,300	4,300	3,850	5,300
28	4,300	12,300	16,800	12,300	11,300	61,100	19,400	28,800	7,300	4,300	4,800	4,080
29	3,850	10,300	15,800	11,300	10,800	44,500	17,800	25,200	8,300	4,300	4,300	4,080
30	3,850	9,300	14,300	10,800	-------	30,300	19,400	20,000	8,300	4,300	3,650	3,850
31	3,850	-------	14,300	11,300	-------	23,800	-------	23,800	-------	5,800	3,450	-------
1892-93.												
1	3,450	2,630	8,300	4,800	25,900	14,300	9,300	38,500	19,400	11,300	3,650	16,300
2	3,270	2,630	7,300	6,800	30,300	18,900	9,300	28,100	15,300	10,800	3,850	12,800
3	3,090	2,630	6,300	11,300	34,300	20,000	9,300	25,900	13,300	10,800	4,300	23,800
4	3,090	2,630	5,300	10,800	35,100	20,600	9,300	104,000	11,300	12,300	4,800	16,800
5	2,930	2,630	5,300	11,300	25,900	25,200	19,400	106,000	14,800	10,300	5,300	12,300
6	2,770	2,630	5,300	8,800	18,900	25,200	21,900	54,900	24,500	8,800	5,300	9,300
7	2,770	2,630	4,800	5,800	16,300	20,000	18,300	37,600	24,500	7,300	4,300	7,800
8	2,770	3,090	4,300	5,300	19,400	18,300	15,300	37,600	28,100	6,300	4,080	6,800
9	2,770	2,770	4,300	5,300	17,300	19,400	13,300	29,600	21,200	5,800	4,080	5,800
10	2,770	3,090	5,300	5,300	15,800	25,200	11,800	25,900	16,300	5,300	3,650	5,300
1	2,630	4,300	5,300	4,300	23,800	33,400	11,300	25,900	13,300	5,300	3,270	5,300
12	2,630	5,800	5,300	4,080	41,000	28,800	9,800	22,500	11,300	4,800	3,090	5,300
13	2,630	6,300	4,300	4,300	31,100	25,900	9,800	19,400	9,300	4,300	2,930	12,300
14	2,630	6,300	6,300	3,850	31,800	23,200	9,300	16,800	8,800	4,300	2,770	41,000
15	2,630	5,300	15,300	4,300	31,100	19,400	9,800	15,300	9,300	4,080	2,770	30,300
16	2,630	4,300	19,400	3,450	70,000	16,800	11,300	14,300	27,400	4,080	2,770	19,400
17	2,630	4,300	14,300	3,270	65,500	14,300	12,300	15,300	16,300	4,080	2,770	14,300
18	2,630	8,800	14,800	3,450	119,000	13,300	11,800	20,600	13,300	4,080	2,770	11,800
19	2,630	8,300	14,800	3,650	83,300	11,800	10,300	32,600	11,300	3,900	2,770	9,800
20	2,630	10,300	13,300	3,650	48,800	11,300	9,800	23,200	9,800	3,850	2,770	8,300
21	2,490	11,300	11,300	3,450	31,100	10,300	10,800	18,300	8,800	4,080	2,770	7,800
22	2,490	8,800	9,800	3,650	22,500	9,800	12,300	19,400	8,300	3,650	2,770	7,300
23	2,490	7,300	9,300	4,300	18,300	9,300	13,300	14,300	8,800	6,300	2,490	6,300
24	2,490	6,300	7,800	4,800	16,800	9,300	14,300	14,300	13,800	5,300	2,490	6,300
25	2,490	5,300	5,800	5,300	16,300	10,300	12,300	12,800	11,300	5,300	2,360	5,800
26	2,490	5,300	3,850	5,800	15,800	10,300	23,200	11,800	9,300	4,300	2,360	5,800
27	2,490	4,300	4,080	6,800	14,800	10,300	35,900	10,080	8,300	3,850	2,360	5,800
28	2,490	4,080	3,650	8,300	13,300	9,800	50,500	10,300	8,300	3,650	2,360	6,300
29	2,490	5,300	2,930	13,800	-------	9,300	36,800	11,300	7,800	4,080	3,650	7,300
30	2,630	8,300	3,270	38,500	-------	9,300	36,800	23,200	10,300	4,080	55,800	6,300
31	2,630	-------	4,300	31,100	-------	9,800	-------	23,200	-------	3,650	25,200	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1893–94.												
1	6,300	12,800	18,300	17,800	11,300	15,300	10,300	10,800	7,800	6,300	3,450	2,930
2	10,300	11,800	15,800	17,800	14,300	20,000	10,300	9,800	7,300	5,300	3,850	3,650
3	10,800	10,800	14,300	15,300	17,300	31,100	11,800	10,300	7,300	6,300	4,800	3,090
4	10,800	10,300	14,300	13,300	61,100	35,100	10,800	9,300	6,300	5,800	5,300	2,770
5	16,300	11,300	15,300	11,800	66,400	31,800	11,300	8,300	6,300	5,300	6,300	2,770
6	20,600	12,300	15,300	11,300	46,200	31,100	11,300	8,300	6,300	4,800	4,300	2,630
7	14,800	11,800	14,300	10,300	31,100	33,400	10,300	8,300	9,800	4,300	4,300	2,490
8	11,800	12,300	12,300	10,300	23,200	35,100	9,800	11,800	11,800	3,650	4,080	2,490
9	9,300	11,300	11,300	10,300	24,500	28,800	9,800	9,300	11,300	3,450	3,450	2,490
10	8,300	10,300	10,300	10,300	30,300	21,900	9,300	8,800	9,800	3,450	3,090	2,360
11	7,300	9,800	9,800	10,300	30,300	19,400	11,300	8,300	8,300	3,450	2,930	2,240
12	6,300	9,300	9,300	10,300	23,800	16,800	13,800	7,300	6,800	3,450	3,090	2,240
13	6,300	8,300	8,800	11,300	20,000	15,300	15,300	6,800	5,800	3,090	5,300	2,030
14	7,800	8,300	8,300	12,300	17,800	14,300	14,800	6,300	5,300	2,930	4,080	2,000
15	70,000	7,800	7,800	11,300	18,300	12,800	13,300	6,300	4,800	2,630	4,800	2,100
16	41,000	7,300	7,300	11,300	16,300	12,300	12,800	6,300	4,300	2,630	5,800	2,240
17	22,500	7,800	7,300	12,300	14,300	13,300	12,300	6,300	4,080	2,490	4,080	2,490
18	16,800	8,300	8,300	13,800	12,800	14,300	10,800	6,300	3,850	2,770	3,850	2,630
19	13,800	7,300	8,800	13,300	14,300	15,300	10,300	6,300	3,850	2,600	3,450	2,490
20	12,300	7,300	8,300	12,300	17,300	16,300	9,800	11,800	3,650	2,600	3,090	2,240
21	14,300	7,300	7,300	11,300	18,300	15,300	9,800	16,300	3,850	2,770	2,930	2,240
22	25,900	7,300	6,800	10,800	17,300	14,300	9,300	18,300	4,300	2,770	2,770	2,490
23	28,800	7,800	6,300	10,300	16,300	14,300	9,800	16,300	4,300	3,270	2,770	2,360
24	28,800	8,300	6,300	10,300	15,800	14,800	10,300	14,800	4,300	3,850	2,930	2,360
25	36,800	8,300	7,300	10,300	14,300	16,300	10,300	13,300	4,080	4,300	2,770	2,360
26	24,500	7,300	7,300	10,300	13,300	15,300	10,300	12,300	3,850	7,300	2,630	2,240
27	18,300	6,300	7,300	9,800	11,800	13,300	9,800	11,800	3,850	5,800	2,490	2,140
28	16,300	6,300	7,300	9,800	11,300	12,300	8,800	11,300	5,800	5,300	2,490	2,030
29	17,300	10,300	7,300	9,300	-------	11,300	8,300	10,300	6,300	4,300	2,630	2,030
30	16,300	18,900	10,300	9,800	-------	10,800	8,800	9,300	6,800	3,850	3,090	2,240
31	14,300	-------	14,800	11,300	-------	10,300	-------	8,300	-------	2,630	2,930	-------
1894–95.												
1	2,360	3,090	3,090	4,080	9,300	28,100	15,800	11,300	8,800	5,300	6,300	6,300
2	2,770	3,090	3,090	3,650	9,300	59,300	15,300	12,300	8,300	5,800	6,300	5,300
3	3,270	8,300	6,800	4,300	8,800	76,200	17,300	12,300	6,800	14,800	5,300	4,800
4	3,450	6,300	8,300	4,800	8,300	59,300	17,300	11,800	6,300	14,300	5,300	4,080
5	3,450	4,800	6,300	4,300	6,300	39,300	15,800	10,300	6,300	10,300	4,800	3,850
6	3,090	4,800	5,300	5,300	5,300	28,800	14,300	9,800	6,300	8,300	4,080	3,850
7	2,770	4,800	4,800	10,800	5,300	21,900	12,300	11,300	7,300	6,300	3,650	4,080
8	2,630	4,800	4,300	23,200	4,300	19,400	21,200	10,800	7,300	5,800	3,850	5,300
9	2,360	4,300	5,800	33,400	2,930	19,400	148,000	11,800	7,300	5,800	4,080	6,800
10	2,360	4,300	9,800	43,600	2,930	21,200	82,400	12,800	6,300	7,800	4,300	5,300
11	2,630	4,080	7,300	54,900	2,490	20,600	48,800	12,300	5,800	8,300	4,300	4,300
12	2,490	4,080	6,300	68,200	3,650	19,400	32,600	12,800	5,300	6,800	3,850	3,850
13	4,300	3,850	10,300	40,200	3,650	20,000	25,200	14,300	5,300	5,800	4,080	3,650
14	4,300	3,650	19,400	23,200	5,300	24,500	28,100	17,300	5,300	4,800	4,080	3,450
15	3,650	3,450	20,600	15,800	5,300	36,800	31,100	15,800	5,300	4,300	4,080	3,270
16	3,090	3,450	14,300	13,800	5,300	50,500	28,100	15,300	6,300	4,300	4,080	3,090
17	2,930	3,450	10,800	24,500	5,300	50,500	23,200	37,600	6,300	4,300	4,080	3,090
18	2,930	3,650	9,300	27,400	5,300	35,900	20,000	33,400	5,300	3,850	3,650	3,090
19	2,770	7,300	7,800	24,500	5,300	25,900	19,400	25,900	4,800	4,300	9,800	2,930
20	2,630	5,800	6,300	33,400	5,300	20,600	18,900	20,600	4,300	3,650	12,300	2,770
21	2,490	4,300	6,300	35,100	5,300	19,400	16,300	17,300	4,300	3,650	8,300	2,770
22	2,360	4,300	5,800	57,500	6,300	18,300	14,800	18,900	4,080	3,650	5,800	2,490
23	2,240	4,080	5,300	57,500	6,800	19,400	13,300	20,000	3,850	3,650	4,300	2,490
24	2,240	4,080	5,300	36,800	6,300	20,600	12,300	17,800	3,450	4,300	9,800	2,490
25	2,240	4,080	4,300	23,800	7,300	20,600	11,300	15,300	3,850	7,300	8,800	2,360
26	2,240	4,080	4,800	17,800	8,800	21,900	10,300	13,300	3,650	19,400	6,800	2,360
27	2,360	3,650	7,300	15,800	13,800	25,900	9,800	12,300	3,850	17,300	5,800	2,300
28	2,360	3,650	6,800	13,300	15,800	23,200	9,300	12,300	3,650	15,300	6,300	2,200
29	2,360	3,450	5,300	11,300	-------	19,400	10,300	11,300	3,650	11,300	5,300	2,100
30	2,360	3,270	3,850	10,300	-------	17,800	11,800	10,800	3,850	8,300	5,300	2,000
31	2,490	-------	4,300	9,300	-------	16,800	-------	9,800	-------	7,300	6,300	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1895–96.												
1	2,000	2,240	4,080	10,800	8,300	10,300	86,000	11,300	5,800	11,800	15,800	3,650
2	2,000	2,240	3,850	11,300	8,800	11,300	97,600	16,300	5,300	10,800	19,400	3,450
3	2,000	2,360	3,850	11,300	18,900	11,800	79,800	19,400	4,800	8,300	21,200	3,270
4	1,900	2,490	3,450	9,300	37,600	10,800	48,800	20,600	4,300	6,300	18,300	3,090
5	1,800	2,630	3,850	5,800	44,500	9,800	31,100	22,500	4,800	4,300	13,300	2,930
6	1,700	2,630	3,450	4,300	28,800	8,800	23,200	18,300	6,300	7,300	10,300	2,930
7	1,800	2,770	3,450	4,800	28,800	8,800	19,400	15,300	7,300	8,800	8,300	3,090
8	1,900	2,490	2,930	6,300	33,400	10,300	16,800	12,800	6,800	8,800	9,800	3,850
9	2,000	2,490	3,090	6,300	25,200	12,300	14,800	10,800	6,300	17,300	8,800	5,300
10	2,240	2,630	3,090	6,300	21,200	11,300	14,300	9,300	7,300	101,000	7,300	5,300
11	2,240	2,490	4,300	6,300	20,600	11,300	14,800	8,800	8,300	47,100	6,300	3,850
12	2,240	2,930	4,300	6,300	17,300	11,300	15,300	7,800	9,300	28,800	5,300	3,450
13	2,360	3,090	4,080	6,300	15,300	12,300	15,300	7,300	8,300	20,000	5,800	3,650
14	2,240	4,080	4,080	5,300	18,300	11,800	14,300	6,800	5,800	16,800	5,300	4,800
15	2,240	3,850	3,850	3,850	35,100	11,300	13,300	6,800	5,800	14,300	5,800	4,080
16	2,240	3,450	3,270	4,080	26,600	17,300	12,300	6,800	5,300	13,300	5,300	3,850
17	2,240	3,090	3,090	3,850	21,200	57,500	11,800	6,800	5,300	16,800	5,300	4,080
18	2,240	3,090	2,930	4,300	16,300	48,800	10,300	6,300	6,300	15,300	5,300	4,300
19	2,240	2,770	2,770	4,300	13,800	34,300	10,300	5,800	6,300	14,800	5,300	3,850
20	2,240	2,930	2,770	5,300	11,300	41,000	9,300	5,800	6,300	10,300	4,300	3,650
21	2,140	2,770	3,090	7,300	9,300	41,000	8,800	5,800	7,300	9,300	3,850	3,450
22	2,140	2,930	3,450	7,300	6,300	28,800	9,300	8,300	6,300	8,300	3,650	4,300
23	2,140	3,270	26,600	6,300	5,300	23,800	8,800	9,300	6,800	9,800	4,300	3,850
24	2,140	3,270	18,800	6,300	7,800	21,900	8,800	14,300	9,800	12,800	6,300	3,450
25	2,140	3,090	12,800	16,300	10,300	20,600	10,300	14,800	17,300	11,300	7,300	3,450
26	2,140	3,090	9,800	28,800	10,800	20,000	15,300	11,300	20,000	13,800	7,300	3,450
27	2,140	3,450	8,300	21,900	10,300	19,400	12,800	10,300	29,600	18,300	7,300	3,450
28	2,240	3,450	11,300	16,300	9,800	18,300	12,300	9,300	27,400	12,300	7,300	3,450
29	2,240	3,450	10,800	13,300	9,300	16,300	11,300	8,300	23,800	10,300	5,300	3,090
30	2,240	5,300	11,300	10,800	-------	52,300	10,300	7,300	16,800	9,300	4,300	4,300
31	2,240	-------	10,300	9,300	-------	114,000	-------	6,300	-------	10,300	4,080	-------
1896–97.												
1	53,200	4,300	47,100	6,300	5,300	20,000	14,300	7,300	6,800	7,800	9,000	3,090
2	33,400	4,300	35,100	7,300	6,800	17,800	13,800	8,300	7,300	23,800	7,300	2,930
3	19,400	4,300	23,800	7,300	8,300	16,300	13,300	18,300	7,300	18,900	7,800	2,770
4	14,300	4,300	18,300	6,800	8,800	15,300	12,300	28,800	7,300	14,300	6,800	2,770
5	10,800	4,800	14,800	7,300	9,300	15,800	12,300	25,200	7,300	11,300	6,300	2,930
6	8,800	59,300	12,800	9,300	10,800	15,300	18,300	24,500	8,300	13,300	6,300	2,770
7	7,300	45,300	11,300	9,300	51,400	18,300	26,600	20,000	9,800	12,300	5,800	2,630
8	6,300	25,200	11,300	9,800	78,900	21,900	21,900	16,800	10,300	11,300	5,800	2,490
9	6,300	17,300	14,300	8,800	47,900	23,200	18,900	14,800	12,300	10,300	5,800	2,360
10	5,300	13,800	21,900	7,800	34,300	28,100	24,500	12,800	15,300	10,300	8,300	2,360
11	4,800	11,300	17,300	7,300	27,400	50,500	28,100	12,300	14,300	8,300	7,300	2,240
12	4,300	10,300	15,300	7,300	23,800	52,300	23,800	11,800	11,800	12,300	5,800	2,030
13	4,300	9,800	13,300	7,300	41,000	54,000	19,400	14,300	10,300	11,800	4,800	2,240
14	9,800	10,300	11,300	6,300	50,500	41,000	16,800	94,900	10,300	10,300	4,300	2,140
15	16,800	10,300	10,800	6,300	40,200	55,800	15,300	62,900	9,300	8,300	3,850	2,140
16	13,300	9,300	18,900	6,800	35,100	52,300	15,300	35,100	8,300	7,300	3,850	2,140
17	10,300	8,300	23,200	8,300	33,400	36,800	15,300	23,800	9,300	6,300	3,450	2,140
18	8,300	7,800	21,900	9,300	25,900	29,600	14,800	18,900	8,800	5,300	3,270	2,140
19	7,300	7,300	17,300	9,800	24,500	33,400	13,800	15,800	8,300	5,300	3,450	2,030
20	6,300	6,800	14,800	10,300	24,500	49,700	12,300	13,800	23,200	6,300	3,450	2,030
21	5,800	6,300	13,300	10,300	41,900	50,500	11,300	12,300	23,200	6,300	3,850	2,030
22	5,300	6,300	12,300	10,800	151,000	36,800	10,800	11,300	17,800	12,800	3,450	2,030
23	4,800	7,300	10,800	10,800	201,000	28,100	9,800	10,300	13,300	22,500	3,090	2,030
24	4,800	8,300	9,800	11,800	144,000	23,200	9,300	9,300	10,800	28,800	3,270	2,030
25	6,300	8,300	8,800	10,800	78,000	23,800	9,300	9,300	9,300	28,800	4,300	2,030
26	6,800	7,300	7,300	8,800	45,300	20,600	9,300	8,300	8,300	21,200	4,800	2,240
27	6,300	7,300	6,800	6,300	30,300	18,900	8,800	8,300	7,800	20,600	4,300	3,090
28	5,800	7,300	5,300	4,800	24,500	17,300	8,300	7,800	6,800	20,000	4,300	2,770
29	5,300	18,300	5,300	4,800	-------	15,800	8,300	7,300	6,300	20,000	4,080	2,630
30	5,300	24,500	5,300	4,300	-------	15,300	7,800	6,800	5,300	15,300	3,850	2,360
31	4,800	-------	6,300	4,080	-------	14,300	-------	6,800	-------	11,300	3,450	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1897–98.												
1	2,240	2,490	3,850	7,800	10,800	8,300	54,000	10,300	8,800	3,650	8,800	5,800
2	2,140	2,490	3,850	8,300	8,300	7,800	36,800	9,300	7,800	3,270	7,300	5,300
3	2,030	2,490	4,080	6,300	5,300	7,300	27,400	8,300	7,300	3,090	7,300	4,800
4	2,140	2,490	3,850	5,300	3,450	7,300	20,600	7,800	6,300	2,930	9,800	3,850
5	2,030	3,450	4,300	5,300	4,300	7,300	17,800	7,300	5,300	3,270	28,800	4,080
6	2,030	3,650	12,800	6,300	5,300	7,300	17,300	7,300	5,800	4,800	39,300	18,300
7	2,030	3,270	10,300	6,300	6,300	7,300	16,800	28,800	4,300	3,850	28,100	13,800
8	2,030	3,270	10,300	8,800	6,800	7,300	16,300	57,500	4,080	3,850	16,800	11,300
9	1,850	2,930	7,800	8,800	7,300	7,300	15,300	36,800	3,850	3,850	17,800	9,300
10	1,940	2,770	6,300	14,300	9,300	7,300	14,300	23,800	3,450	3,450	86,000	7,800
11	2,030	2,630	5,300	30,300	12,300	7,300	14,800	18,300	3,450	3,650	102,000	6,300
12	2,030	2,770	4,800	28,800	14,800	7,300	19,400	15,300	3,270	3,270	70,000	5,300
13	2,030	2,770	4,300	20,600	15,800	8,300	31,100	12,800	4,300	2,930	33,400	4,800
14	11,800	2,630	3,850	16,800	15,300	8,300	23,200	11,800	4,080	2,630	21,900	4,300
15	6,300	2,930	3,850	15,300	13,300	8,300	27,400	10,300	6,300	2,490	17,300	4,300
16	4,300	2,700	9,300	29,600	11,300	7,800	40,200	10,300	6,300	2,930	14,300	3,850
17	3,090	2,770	8,300	38,500	9,800	8,300	31,800	16,800	6,300	3,270	11,300	3,650
18	2,930	2,770	10,300	23,800	8,300	19,400	25,200	18,300	5,300	6,300	10,800	3,650
19	2,630	2,770	10,300	16,800	8,800	29,600	19,400	15,300	11,300	9,300	8,300	3,650
20	2,630	2,770	8,800	13,800	10,300	30,300	15,800	12,800	14,800	7,300	9,800	3,650
21	2,490	2,630	11,300	12,300	16,300	21,200	14,300	10,800	13,300	6,300	10,300	3,270
22	2,490	2,630	19,400	12,300	17,300	15,800	12,300	9,800	11,300	5,800	8,300	3,270
23	6,300	2,630	17,800	19,400	16,800	14,300	11,300	21,200	8,300	4,300	7,300	3,270
24	5,800	2,630	15,300	21,900	14,300	13,800	10,300	41,900	6,800	6,800	6,300	3,650
25	3,850	2,630	12,300	20,000	12,300	33,400	10,300	33,400	5,300	5,800	5,300	23,200
26	3,270	2,630	9,300	19,400	10,300	35,900	13,300	24,500	5,800	12,300	5,300	18,300
27	2,930	2,630	7,800	23,200	9,300	25,900	14,800	17,800	4,300	8,800	6,300	9,800
28	2,770	2,630	6,800	23,200	13,300	19,400	13,800	14,300	4,080	7,300	6,300	7,800
29	2,630	3,850	6,300	17,800	-------	19,400	12,800	11,300	4,300	10,300	6,300	6,300
30	2,630	3,850	6,800	14,300	-------	54,000	11,800	10,300	3,850	12,800	7,800	5,300
31	2,490	-------	6,300	12,300	-------	68,200	-------	9,300	-------	11,300	7,300	-------
1898–99.												
1	4,800	10,800	10,300	11,800	10,300	50,500	31,800	14,800	13,800	7,300	4,800	4,300
2	4,300	10,300	10,300	12,300	9,300	36,800	26,600	13,800	18,900	6,300	4,300	3,270
3	4,300	9,800	9,800	13,300	9,300	30,300	21,900	14,800	17,300	5,300	6,300	3,450
4	4,080	9,300	9,300	13,800	15,300	54,900	18,900	13,800	13,800	5,300	5,300	3,850
5	4,300	9,300	12,300	17,300	45,300	204,000	17,300	13,300	11,300	4,300	3,850	5,300
6	5,300	8,800	21,200	30,300	78,000	171,000	16,800	15,300	10,300	4,300	4,080	4,300
7	18,300	8,800	23,200	59,300	84,200	82,400	15,300	15,300	9,800	4,080	5,300	4,080
8	13,300	10,300	17,300	62,900	66,400	48,800	16,800	22,500	10,300	5,300	4,300	3,450
9	10,800	9,300	14,300	37,600	45,300	34,300	31,800	52,300	7,800	4,300	3,650	3,090
10	9,300	8,800	12,300	26,600	28,800	29,600	33,400	52,300	7,300	4,800	3,650	2,770
11	8,300	13,300	9,300	20,600	18,300	29,600	27,400	35,100	7,300	4,800	3,450	3,090
12	7,300	14,800	8,300	17,800	14,800	27,400	23,200	29,600	8,300	4,300	3,450	3,270
13	6,300	13,300	8,800	16,300	13,300	24,500	20,600	28,800	15,800	4,080	3,450	3,090
14	6,300	12,800	8,800	21,200	10,300	20,600	18,900	41,000	31,800	3,850	3,450	2,930
15	5,800	11,800	7,800	28,800	10,300	19,400	17,800	33,400	31,800	3,450	3,850	3,270
16	5,300	11,300	6,300	29,600	10,800	25,900	16,300	25,200	25,900	3,450	4,300	3,090
17	5,300	10,300	6,300	25,900	11,800	48,800	15,800	19,400	18,900	3,270	4,300	2,770
18	5,300	10,300	7,800	23,200	15,300	31,800	14,300	16,300	14,300	3,850	4,300	2,490
19	6,300	12,800	11,300	19,400	21,900	31,800	13,800	14,800	11,800	3,650	3,450	2,360
20	35,100	39,300	15,300	17,300	27,400	73,500	12,800	13,300	9,800	4,300	3,270	2,360
21	21,200	35,100	20,600	15,800	36,800	66,400	12,300	12,800	8,800	4,300	2,930	2,930
22	41,000	27,400	19,400	13,800	53,200	44,500	11,800	11,300	7,800	4,080	2,630	7,300
23	88,700	20,600	19,400	13,300	56,700	32,600	11,300	10,800	7,300	4,080	2,490	6,300
24	44,500	18,300	31,800	12,300	44,500	27,400	10,800	10,800	6,300	3,850	2,490	4,300
25	26,600	17,300	28,100	16,300	27,400	24,500	10,300	10,800	6,300	3,650	2,490	3,850
26	19,400	15,300	20,600	18,300	23,200	21,200	11,300	9,800	6,300	3,650	2,360	3,270
27	15,800	13,300	17,300	16,300	25,200	20,000	16,300	8,300	6,300	3,450	2,240	3,090
28	14,300	11,800	14,800	14,800	73,500	21,900	21,900	8,300	8,800	3,450	2,140	2,930
29	12,800	10,300	12,300	12,300	-------	84,200	18,300	7,800	8,300	6,800	2,140	3,090
30	11,300	10,300	11,300	11,300	-------	62,000	15,800	8,300	7,300	6,300	2,490	3,650
31	10,300	-------	10,800	10,800	-------	44,500	-------	8,300	-------	5,300	3,450	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1899–1900.												
1	3,650	2,490	2,770	2,490	3,850	17,300	21,200	9,800	9,300	16,800	6,800	2,360
2	2,930	2,490	3,270	2,490	3,270	65,500	18,900	9,300	7,800	11,800	6,800	2,360
3	2,770	3,099	3,270	3,650	3,270	62,900	17,300	8,300	7,300	10,800	4,800	3,090
4	2,490	5,300	2,930	3,090	5,300	38,500	16,300	8,300	6,800	8,300	4,800	2,770
5	2,490	4,300	2,930	3,450	5,300	25,900	15,800	8,300	9,300	7,800	3,450	2,490
6	2,360	4,800	2,930	3,850	8,800	23,200	14,300	8,300	6,800	7,300	3,270	2,360
7	2,360	3,850	2,930	4,080	10,300	27,400	13,300	7,800	6,800	7,300	2,930	2,030
8	2,360	3,650	2,630	4,080	13,300	31,100	13,300	7,800	6,300	6,300	2,930	2,030
9	2,360	3,090	2,490	4,300	20,600	27,400	13,300	8,300	5,800	6,300	2,770	2,140
10	2,630	3,090	2,360	5,300	23,200	23,800	12,800	8,300	5,300	5,800	2,630	2,030
11	3,090	2,930	2,490	6,800	20,000	22,500	11,800	10,300	5,300	4,800	2,490	1,940
12	3,090	2,770	2,770	8,300	16,300	21,900	11,300	11,300	5,300	4,300	2,490	1,940
13	3,090	2,770	13,300	16,300	16,800	20,600	10,300	9,800	5,300	3,850	2,490	1,850
14	2,770	2,630	24,500	23,200	64,600	18,300	10,300	8,300	7,300	3,650	2,490	1,770
15	2,630	2,630	16,300	16,300	54,000	16,300	9,800	7,800	6,800	3,270	2,360	1,770
16	2,630	2,630	11,300	13,300	31,800	15,800	8,800	7,800	9,300	3,270	2,240	1,850
17	2,490	2,630	8,300	11,800	21,900	14,800	8,300	6,800	33,400	3,090	2,240	9,800
18	2,490	2,490	7,300	11,300	17,800	13,300	8,300	6,300	29,600	3,090	2,490	13,300
19	2,490	2,490	5,800	10,800	13,800	17,300	10,800	6,300	28,800	2,930	2,490	7,800
20	2,490	2,490	6,300	13,300	11,300	57,500	22,500	19,400	21,900	3,090	2,490	5,300
21	2,490	2,490	8,800	43,600	9,800	87,800	18,900	15,300	16,300	3,270	3,090	3,650
22	2,360	2,360	8,300	35,900	14,300	64,600	23,800	12,800	12,800	3,450	5,800	3,090
23	2,360	2,490	6,300	22,500	40,200	41,900	23,200	11,300	10,300	3,850	4,080	2,770
24	2,360	2,490	6,800	17,800	40,200	28,800	18,300	9,300	8,800	4,800	3,270	3,090
25	2,360	2,630	10,300	17,300	25,200	27,400	16,300	9,300	8,800	7,800	2,930	3,450
26	2,240	3,450	9,300	11,800	21,900	27,400	16,300	12,800	9,300	7,300	3,090	3,650
27	2,240	2,930	6,800	10,300	16,800	27,400	14,300	13,300	11,300	18,300	3,450	3,650
28	2,240	2,630	5,300	8,800	13,800	29,600	12,800	11,800	11,300	14,800	3,270	3,450
29	2,240	2,630	3,090	7,300	-------	28,800	11,300	9,800	10,800	11,300	3,090	2,930
30	2,240	2,770	3,090	5,300	-------	23,800	10,300	9,300	13,300	8,300	2,630	2,770
31	2,360	-------	2,490	4,800	-------	23,200	-------	10,300	-------	7,800	2,490	-------
1900–1901.												
1	2,630	5,800	16,300	10,300	9,800	6,300	15,300	18,300	31,100	25,200	6,300	18,300
2	2,490	5,300	13,800	10,300	8,300	6,300	14,800	16,800	25,200	23,200	6,300	21,900
3	2,360	5,300	11,800	9,800	8,300	6,300	24,500	15,300	20,600	21,900	6,800	20,600
4	2,630	7,800	11,300	9,300	11,800	7,300	111,000	13,800	18,300	20,600	6,300	16,300
5	2,490	13,300	57,500	8,300	20,000	29,600	68,200	12,800	16,300	20,600	5,800	14,300
6	2,490	13,800	57,500	7,300	17,300	27,400	47,100	11,800	15,300	19,400	5,800	13,300
7	2,770	11,300	33,400	7,300	14,300	19,400	52,300	11,300	20,000	17,300	11,800	11,800
8	3,270	9,300	24,500	6,800	12,800	15,800	45,300	10,800	39,300	17,300	50,500	10,300
9	3,270	7,800	22,500	6,800	12,800	13,300	33,400	13,300	28,800	17,800	21,900	10,300
10	3,090	7,300	19,400	6,300	16,300	12,800	25,900	15,800	21,200	14,800	15,300	9,800
11	3,090	6,800	16,800	6,800	18,900	17,300	21,900	20,600	16,800	12,300	12,300	9,300
12	3,090	6,300	14,300	43,600	18,300	26,600	18,900	23,200	15,300	11,300	11,800	9,300
13	2,770	6,300	12,300	70,000	15,800	31,800	17,300	22,500	14,300	10,300	20,600	10,800
14	2,630	6,300	11,300	42,800	13,300	21,900	17,300	19,400	12,800	10,300	25,200	10,800
15	2,490	6,300	10,300	28,100	11,300	17,800	40,200	15,300	12,800	17,300	48,800	10,300
16	2,630	5,800	9,800	20,000	10,300	14,800	50,500	13,800	32,600	25,900	31,800	10,300
17	3,650	5,300	8,800	16,300	9,800	13,300	34,300	12,300	59,300	17,300	32,600	10,300
18	3,450	5,300	8,300	14,300	9,800	11,300	27,400	11,300	71,800	16,300	23,200	12,800
19	2,930	4,800	7,800	12,300	9,800	11,300	23,800	11,300	47,900	16,300	33,400	14,300
20	2,630	4,300	7,300	9,800	9,800	10,300	52,300	12,300	32,600	19,400	24,500	13,800
21	2,360	4,800	7,300	8,300	9,800	11,300	195,000	13,300	28,100	15,300	22,500	11,800
22	2,240	13,800	7,300	8,300	9,300	14,300	100,000	26,600	22,500	12,300	18,300	9,800
23	2,240	11,300	7,300	10,300	7,800	14,800	61,100	233,000	94,900	10,300	18,900	8,800
24	2,630	11,300	7,300	12,300	6,800	15,300	51,400	94,900	118,000	9,300	17,800	8,300
25	70,900	23,200	7,300	12,300	6,300	13,300	64,600	47,100	64,600	8,300	25,900	7,800
26	25,200	98,500	8,300	14,300	4,300	12,300	57,500	39,300	41,900	7,300	20,600	7,300
27	14,800	144,000	8,300	13,800	6,300	16,300	43,600	74,400	32,600	7,300	16,800	7,300
28	10,800	58,400	7,300	12,800	6,800	38,500	33,400	107,000	27,400	6,800	20,000	6,800
29	8,800	31,100	7,300	11,800	-------	28,800	25,900	88,700	27,400	6,300	19,400	6,300
30	7,300	21,200	9,300	10,800	-------	20,600	21,200	62,900	26,600	6,300	37,600	6,800
31	6,300	-------	9,300	10,300	-------	16,800	-------	45,300	-------	6,300	20,600	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1901–2.												
1	18,300	5,300	4,300	57,500	57,500	194,000	35,100	9,300	8,300	18,900	3,850	2,030
2	12,800	4,800	4,080	37,600	48,800	105,000	25,200	8,800	6,800	15,300	5,300	2,030
3	9,800	4,800	5,300	28,100	51,400	59,300	20,600	8,800	6,300	12,800	4,800	2,030
4	8,800	4,800	9,300	23,200	41,000	41,900	18,300	8,300	6,300	10,800	3,850	2,030
5	9,300	4,800	12,300	18,900	25,900	31,800	23,200	8,300	5,300	8,300	3,450	2,030
6	8,300	4,800	14,300	16,300	19,400	26,600	25,200	8,300	5,300	7,300	3,450	2,030
7	7,300	4,800	11,300	14,800	17,300	23,200	27,400	7,800	4,800	7,300	3,850	2,360
8	7,300	4,800	9,300	14,300	16,300	25,900	28,800	7,300	4,300	5,800	3,850	2,770
9	6,800	4,800	7,800	14,300	16,300	40,200	31,800	7,300	4,300	8,300	3,450	2,630
10	6,800	4,300	7,300	13,300	14,300	48,800	37,600	8,300	4,800	7,300	4,080	2,360
11	6,300	4,300	12,300	12,800	9,800	41,900	46,200	7,300	5,300	9,300	3,850	2,140
12	6,300	4,300	10,800	11,300	8,800	36,800	36,800	7,300	5,300	7,800	3,450	2,140
13	6,300	4,300	12,300	11,300	9,300	40,200	30,300	6,300	4,800	6,300	3,270	3,850
14	6,300	4,300	10,800	9,300	10,300	52,300	25,200	6,300	4,300	5,300	2,770	2,770
15	12,800	4,300	113,000	7,300	8,300	41,900	20,600	6,300	4,080	4,800	2,770	2,490
16	10,300	4,300	162,000	7,800	8,300	28,100	18,300	6,300	4,800	4,300	2,490	2,240
17	8,300	4,300	63,800	9,300	8,800	47,900	16,300	6,800	7,300	4,300	2,490	2,140
18	7,300	4,300	31,800	9,300	8,300	54,900	15,300	6,300	16,300	4,300	2,490	2,030
19	6,300	4,300	20,600	9,300	8,300	36,800	14,800	6,300	13,300	3,650	2,490	2,030
20	6,300	4,080	15,300	9,800	7,300	25,900	14,300	6,300	9,300	3,450	3,090	1,940
21	6,300	4,080	12,800	9,300	8,300	21,200	14,300	6,300	8,300	3,650	2,770	1,540
22	5,800	4,080	11,300	8,800	8,300	18,300	14,300	7,800	8,300	4,080	2,490	1,540
23	5,300	4,300	8,300	8,300	10,300	16,300	14,300	6,800	7,300	3,450	2,490	1,540
24	5,300	4,300	9,300	8,800	14,800	15,300	13,300	6,300	6,300	3,270	2,770	2,030
25	5,300	5,300	10,300	8,800	21,900	14,800	12,800	13,300	5,800	3,090	2,770	2,140
26	5,300	9,300	12,800	8,800	99,400	14,300	10,800	27,400	12,800	2,930	2,770	2,240
27	5,300	7,300	45,300	28,100	75,300	13,300	10,300	17,800	17,300	2,770	2,360	2,140
28	5,300	6,300	48,800	71,800	77,100	12,800	10,300	18,900	14,300	2,770	2,140	2,030
29	5,300	5,300	60,200	47,100	-------	15,300	9,300	14,800	10,800	2,930	2,140	2,240
30	5,300	5,300	211,000	64,600	-------	60,200	9,300	11,800	17,300	2,930	2,030	3,450
31	5,300	-------	126,000	73,500	-------	50,500	-------	9.800	-------	2,930	2,140	-------
1902–3.												
1	3,090	3,450	11,300	9,800	30,300	92,200	47,100	18,900	7,800	16,300	3,270	2,490
2	3,450	2,930	14,800	9,300	22,500	74,400	31,800	16,300	11,800	11,300	4,300	3,090
3	3,270	2,770	16,300	26,600	21,200	41,900	24,500	14,300	10,300	8,300	10,800	4,300
4	3,090	2,490	16,300	78,900	23,200	27,400	21,900	13,300	8,300	7,300	8,300	3,850
5	2,930	2,490	18,300	51,400	64,600	21,200	25,200	13,300	7,300	6,300	6,800	3,270
6	3,090	2,360	15,300	32,600	48,800	17,800	28,800	12,300	7,300	6,300	6,300	2,770
7	2,930	2,360	14,300	23,800	31,800	16,800	23,200	11,800	7,800	6,800	4,800	2,490
8	6,300	2,360	14,300	18,900	21,900	16,300	21,900	10,800	14,800	10,300	4,300	2,360
9	4,300	2,360	12,300	15,800	17,800	21,900	38,500	10,300	18,300	8,800	4,080	2,360
10	3,270	2,930	10,300	12,300	16,300	32,600	43,600	9,800	12,800	6,800	3,450	2,360
11	2,770	2,930	8,300	9,800	15,300	31,800	33,400	9,300	11,300	6,300	3,090	2,490
12	2,770	2,630	9,300	12,300	17,800	35,900	25,200	8,800	10,300	4,800	2,930	2,930
13	2,770	2,490	30,300	17,300	32,600	38,500	21,200	8,300	12,800	5,300	2,770	2,930
14	4,300	2,360	30,300	12,800	30,300	31,800	22,500	8,300	10,300	8,300	2,930	2,490
15	5,300	2,360	29,600	10,300	23,200	25,900	34,300	7,800	8,800	15,300	3,270	2,770
16	5,300	2,140	21,200	10,800	40,200	21,200	41,000	7,300	7,800	13,300	3,270	2,240
17	4,300	2,140	28,800	10,300	83,300	17,800	38,500	7,300	6,800	9,800	4,300	2,240
18	3,650	2,240	28,800	10,300	96,700	15,800	31,800	7,300	6,300	7,300	4,300	2,240
19	3,090	2,360	24,500	10,300	49,700	14,300	24,500	6,800	5,800	5,800	3,450	10,800
20	2,930	2,490	17,300	10,300	31,800	12,800	20,000	6,300	5,800	5,300	4,300	6,300
21	2,770	5,300	13,800	8,300	23,200	14,300	19,400	6,300	5,300	4,800	2,850	4,300
22	2,630	4,300	11,800	9,800	20,600	15,800	20,600	5,800	4,300	4,300	3,450	3,450
23	2,490	3,650	11,800	13,800	19,400	52,300	19,400	5,800	4,300	4,080	3,850	3,090
24	2,490	3,270	13,300	14,300	17,300	165,000	18,900	5,800	4,300	3,450	3,270	2,770
25	2,360	4,800	12,300	12,300	16,300	88,700	17,800	5,800	6,300	3,450	2,770	2,490
26	2,240	17,300	10,300	11,300	15,300	47,100	18,900	5,300	5,800	3,090	2,490	2,360
27	2,240	13,300	8,800	10,300	15,300	31,800	31,100	5,300	5,300	3,090	2,360	2,240
28	2,240	15,300	7,300	11,300	36,800	23,800	41,900	5,300	7,300	2,770	2,360	2,240
29	2,240	13,800	5,300	19,400	-------	19,400	29,600	5,300	9,800	2,770	2,240	2,140
30	2,360	10,800	7,800	36,800	-------	17,800	22,500	6,300	20,600	2,770	2,490	2,140
31	3,650	-------	10,300	41,900	-------	18,300	-------	8,300	-------	2,930	2,490	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1903–4.												
1	2,140	2,030	2,030	2,930	3,850	17,300	10,300	21,900	8,800	19,400	5,300	2,140
2	2,240	2,030	1,770	2,930	4,080	28,800	11,800	17,300	10,300	17,300	3,450	2,140
3	2,030	2,140	2,030	2,450	2,770	24,500	13,800	14,300	18,300	12,300	3,270	2,140
4	2,030	2,030	2,030	7,300	3,850	23,200	12,800	12,300	22,500	9,300	4,300	2,240
5	2,030	2,140	2,240	4,800	3,270	21,900	11,300	12,300	17,300	7,300	4,800	2,770
6	2,030	2,240	2,490	4,300	3,450	17,300	9,360	11,300	13,300	6,300	5,300	3,450
7	2,030	2,360	2,140	4,800	3,850	14,300	8,800	11,800	12,300	8,300	5,300	3,450
8	2,030	3,270	2,140	4,800	20,000	25,900	8,300	10,300	10,300	6,300	6,800	3,270
9	2,140	2,930	2,240	3,650	21,900	44,500	8,300	9,300	9,300	7,300	4,300	2,770
10	2,140	2,770	2,240	3,090	18,900	30,300	8,800	8,300	8,300	6,300	3,450	2,240
11	5,800	2,490	2,240	3,090	14,300	20,600	9,300	9,800	9,300	6,300	4,080	2,490
12	3,850	2,490	2,140	3,450	10,300	16,300	9,300	11,300	8,800	7,800	4,080	2,030
13	3,090	2,240	1,850	3,850	7,300	14,300	8,300	9,300	8,300	6,800	6,300	2,030
14	2,770	2,240	2,240	3,850	6,800	13,300	9,300	8,300	9,800	5,300	6,300	2,030
15	2,490	2,240	1,770	3,450	6,300	12,800	8,800	7,300	7,300	4,300	4,300	2,030
16	2,360	2,240	1,850	2,930	8,800	12,300	8,800	7,300	6,300	3,850	3,650	1,940
17	2,240	2,240	2,030	3,090	3,450	12,300	9,300	7,300	5,300	3,090	3,270	1,850
18	2,240	2,240	2,030	4,800	3,090	10,800	9,300	7,300	6,300	3,090	2,770	1,850
19	2,240	2,490	2,140	3,450	3,850	10,300	9,300	12,300	6,300	2,930	3,270	1,940
20	2,490	3,450	2,140	4,800	4,800	10,300	8,300	41,000	5,800	2,770	3,650	2,030
21	3,270	4,300	2,490	4,300	5,300	10,300	7,800	34,300	6,300	2,770	3,090	1,850
22	2,770	3,850	2,240	5,300	8,800	9,800	7,300	27,400	7,300	2,490	3,090	2,140
23	2,630	2,930	2,490	31,100	23,200	11,800	6,300	20,600	6,800	2,490	2,930	2,030
24	2,490	2,770	4,300	33,400	30,300	23,200	6,300	16,300	7,300	2,490	3,450	2,030
25	2,360	2,490	4,080	21,900	23,200	23,200	5,800	15,300	5,800	2,490	3,090	1,940
26	2,240	2,490	4,300	16,300	18,300	18,300	7,800	16,800	4,300	2,630	2,770	1,940
27	2,140	2,490	3,850	11,800	14,300	19,400	22,500	15,300	4,300	3,450	2,490	1,850
28	2,140	2,490	3,450	8,300	12,300	17,300	33,400	13,300	5,800	3,450	2,490	1,770
29	2,140	2,140	4,300	6,800	12,800	14,800	34,300	10,800	10,300	3,270	2,490	1,690
30	2,030	2,030	2,770	4,800	-------	13,300	25,900	9,800	11,800	3,650	2,360	1,690
31	2,030	-------	3,450	3,650	-------	11,300	-------	8,800	-------	4,300	2,240	-------
1904–5.												
1	1,850	1,540	2,030	5,300	3,270	15,300	10,300	10,300	9,800	5,300	10,300	5,300
2	1,770	1,690	2,030	4,300	3,090	14,300	9,800	8,800	9,800	4,300	8,300	4,300
3	1,690	1,690	2,030	4,300	3,090	19,400	9,300	7,800	8,300	4,300	7,800	5,300
4	1,690	1,850	1,940	4,800	3,090	19,400	8,800	7,300	6,800	8,300	6,300	16,300
5	1,470	1,690	2,030	4,300	2,770	22,500	8,300	6,300	6,300	8,300	5,300	11,300
6	1,690	1,690	2,140	4,080	3,090	25,200	12,300	14,300	5,300	11,300	5,300	14,300
7	1,470	1,690	3,090	5,300	3,090	24,500	22,500	18,300	4,300	11,300	7,800	9,800
8	1,690	1,850	4,080	4,800	3,090	33,400	24,500	18,300	4,300	15,300	9,300	7,800
9	1,470	2,360	5,300	4,080	3,450	55,800	21,200	16,800	3,850	13,300	11,300	6,300
10	1,540	2,360	4,300	3,850	7,300	104,000	18,300	15,300	4,080	9,800	11,800	5,300
11	1,620	2,140	3,650	5,300	8,300	78,000	15,800	17,300	3,650	7,800	12,300	5,300
12	1,540	2,030	3,450	8,300	7,800	54,000	14,300	50,500	3,450	6,800	12,800	4,800
13	1,690	1,940	3,450	38,500	8,800	36,800	13,300	112,000	3,450	32,600	14,300	4,800
14	1,690	1,940	3,090	33,400	9,800	27,400	12,800	69,100	3,850	106,000	15,300	5,800
15	1,690	2,030	2,360	25,900	9,800	22,500	12,300	48,800	3,650	53,200	13,800	5,300
16	1,470	2,140	2,240	17,300	7,300	19,400	11,300	48,800	3,450	28,800	14,300	4,800
17	1,540	2,770	2,140	10,300	8,300	18,300	10,300	55,800	3,450	24,500	14,800	4,300
18	1,620	2,770	2,030	8,300	6,800	18,300	9,300	41,900	3,850	12,300	13,300	4,300
19	1,620	2,490	2,360	7,300	6,800	18,300	8,300	28,800	3,850	8,300	10,300	4,080
20	1,620	2,240	2,030	8,300	5,300	20,000	7,800	21,200	4,300	10,300	9,300	3,850
21	1,540	2,240	2,240	7,300	5,800	24,500	7,300	15,300	5,300	10,300	8,300	3,850
22	1,690	2,240	2,030	7,800	7,300	31,800	7,300	13,300	6,800	12,300	7,300	3,850
23	1,540	2,240	2,030	7,300	32,600	31,800	7,300	11,300	7,300	16,300	6,800	3,450
24	1,690	2,240	2,030	6,300	28,100	21,900	7,300	10,300	9,800	28,100	6,300	3,270
25	1,690	2,360	2,360	5,300	20,600	18,900	7,300	9,300	9,300	21,200	5,800	3,090
26	1,540	2,360	8,300	3,270	20,600	17,300	7,300	8,300	12,300	15,300	6,800	2,930
27	1,540	2,360	6,800	2,360	20,600	16,300	7,800	7,300	11,300	11,800	8,800	2,630
28	1,540	2,360	9,300	2,360	18,300	14,800	15,800	7,300	10,800	9,300	9,800	2,490
29	1,690	2,240	8,800	2,490	-------	13,300	13,300	8,300	8,300	8,300	7,300	2,490
30	1,400	2,140	8,300	2,930	-------	11,300	12,300	8,300	6,800	8,800	6,300	2,490
31	1,690	-------	6,300	2,930	-------	11,300	-------	9,300	-------	12,800	5,300	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1905–6.												
1	2,770	4,300	4,300	9,300	20,000	8,800	46,200	9,800	6,300	5,300	11,300	25,200
2	2,630	3,850	4,800	8,300	18,300	9,300	34,300	10,300	5,300	4,300	8,800	19,400
3	2,630	3,450	6,300	7,300	15,800	9,300	25,200	9,800	5,300	3,850	7,800	15,800
4	2,770	3,270	35,100	8,800	13,300	11,300	20,000	10,300	5,300	3,650	8,300	19,400
5	2,770	3,090	33,400	47,900	12,300	15,300	16,800	13,300	5,300	3,450	8,800	18,900
6	2,770	3,090	20,000	33,400	11,300	20,600	16,300	15,300	4,800	3,850	9,800	15,300
7	2,930	3,090	14,300	21,900	10,800	16,300	25,200	16,800	5,300	4,800	12,300	14,300
8	2,930	3,090	11,300	16,800	10,300	13,800	23,100	18,300	11,300	4,300	9,300	13,300
9	2,630	3,090	9,300	13,800	9,300	12,300	19,400	17,300	9,300	4,300	7,300	11,300
10	2,630	3,270	8,300	11,300	8,800	11,300	18,300	15,300	8,300	5,300	10,300	10,300
11	2,770	3,270	7,800	9,300	8,300	10,800	20,000	13,300	6,300	4,300	9,800	9,300
12	2,930	3,270	8,300	9,300	7,800	9,800	19,400	11,800	5,300	4,080	8,800	8,800
13	2,930	3,090	8,300	13,300	7,300	9,300	16,800	10,300	5,800	4,800	9,800	8,300
14	6,300	2,930	7,300	20,600	7,300	13,800	14,300	9,300	5,300	5,300	10,800	14,300
15	5,300	2,930	7,300	23,800	7,800	25,900	31,800	8,800	7,800	4,300	13,300	10,300
16	4,300	2,930	15,800	21,900	7,800	41,000	46,200	8,300	14,300	4,080	18,300	9,800
17	3,450	2,930	12,300	20,600	7,800	43,600	39,300	7,800	11,300	6,300	28,100	7,800
18	3,270	2,930	10,300	18,300	7,800	29,600	27,400	7,800	10,300	12,300	30,300	6,800
19	3,090	3,270	9,300	16,300	7,300	21,200	20,600	7,800	10,300	10,300	21,200	6,300
20	3,090	3,270	8,800	14,300	7,300	25,900	16,800	7,300	9,800	9,300	20,000	6,300
21	2,930	3,850	8,800	13,300	7,300	28,800	14,300	6,300	14,800	7,300	16,300	8,800
22	2,930	5,300	11,300	11,800	7,800	24,500	13,300	6,300	15,300	7,800	14,300	10,300
23	3,450	5,300	28,100	111,000	11,800	20,600	12,300	5,800	12,300	9,300	15,300	9,300
24	3,270	5,300	21,200	143,000	12,300	17,800	11,300	5,300	9,300	9,300	15,800	9,800
25	3,090	4,300	18,300	68,200	11,300	16,800	10,300	4,800	8,300	8,300	15,800	13,300
26	3,270	4,300	16,300	38,500	10,300	16,300	10,300	4,300	6,800	8,300	15,300	10,800
27	4,300	4,080	13,800	27,400	9,800	20,000	11,300	4,300	6,800	8,800	14,300	9,800
28	5,300	3,850	11,800	26,600	9,300	35,100	10,800	4,300	8,300	9,300	12,300	19,400
29	6,300	3,650	10,300	28,100	-------	42,800	12,300	4,800	7,300	8,300	16,300	13,800
30	6,300	3,650	9,300	25,200	-------	36,800	10,800	7,800	6,300	9,300	27,400	15,300
31	4,800	-------	9,300	21,900	-------	36,800	-------	6,800	-------	8,800	39,300	-------
1906–7.												
1	16,300	10,300	9,800	28,800	10,300	27,400	11,300	13,800	5,300	11,300	8,800	4,300
2	18,300	9,800	9,300	38,500	20,600	27,400	17,300	12,800	21,200	11,300	7,300	3,850
3	16,800	9,300	9,300	27,400	25,200	41,900	16,800	11,800	35,900	9,300	6,300	3,450
4	16,300	8,800	9,300	20,600	23,100	36,800	15,300	12,300	39,300	8,300	5,300	3,450
5	28,100	8,300	8,800	18,300	20,000	25,900	14,300	12,800	26,600	7,300	4,300	3,450
6	28,100	8,300	8,300	16,300	16,800	21,200	21,900	12,800	21,200	7,300	4,300	3,650
7	23,100	8,300	8,300	14,800	13,300	20,600	53,200	13,300	17,300	6,800	5,800	6,300
8	24,500	7,800	8,800	13,300	11,800	19,400	52,300	23,100	15,300	6,300	6,300	4,300
9	19,400	7,800	8,800	13,800	10,800	24,500	38,500	21,900	24,500	6,800	5,800	9,300
10	16,300	7,800	8,800	18,300	10,800	26,600	47,100	20,600	32,600	6,300	6,300	6,800
11	14,300	7,300	9,800	19,400	13,300	33,400	36,800	20,600	28,800	7,300	9,300	5,300
12	12,800	7,800	20,000	16,300	15,300	42,800	28,800	18,900	35,900	11,300	6,300	14,800
13	11,300	8,300	17,300	23,100	13,300	39,300	25,900	16,300	53,200	16,300	5,800	10,300
14	10,300	9,300	15,300	28,800	12,300	64,600	24,500	14,300	150,000	12,800	5,300	10,800
15	10,300	9,300	13,300	57,500	12,300	48,800	20,600	12,300	124,000	11,300	5,300	7,800
16	9,300	8,300	12,300	70,900	12,300	25,900	20,600	11,300	61,100	11,300	4,080	6,300
17	8,800	8,300	14,300	91,300	11,300	23,100	25,200	10,300	35,900	11,300	4,080	4,800
18	8,300	8,300	52,300	86,900	11,300	18,900	27,400	9,300	24,500	14,300	4,800	4,080
19	9,300	25,200	47,100	71,800	11,300	18,900	23,100	8,800	18,900	12,800	5,300	3,650
20	80,700	118,000	28,100	48,800	11,300	19,400	23,100	8,300	15,300	16,300	4,300	4,800
21	79,800	82,400	21,200	31,800	11,300	30,300	21,200	7,800	13,300	12,300	5,300	4,300
22	48,800	44,500	20,000	23,100	11,300	27,400	18,300	7,300	11,800	9,300	4,800	4,300
23	31,800	27,400	19,400	18,300	10,300	19,400	16,800	6,800	11,300	7,800	4,800	3,850
24	23,800	23,100	16,300	15,300	8,800	16,300	21,900	6,300	12,800	7,300	14,800	5,300
25	19,400	17,300	13,300	13,300	10,300	13,800	32,600	5,800	15,300	6,800	26,600	39,300
26	16,300	15,300	10,800	12,300	13,300	12,300	28,800	5,800	13,800	5,800	19,400	18,300
27	14,800	13,300	8,300	11,300	17,300	10,800	23,800	5,800	13,300	5,800	14,300	12,300
28	13,300	12,300	12,300	10,300	23,100	10,300	20,600	5,800	12,300	5,300	10,300	9,300
29	12,300	11,300	27,400	8,800	-------	10,300	17,300	6,300	11,300	5,800	8,300	7,300
30	11,300	10,800	31,800	8,800	-------	9,300	15,800	6,300	10,800	12,300	6,300	6,300
31	10,300	-------	28,800	8,800	-------	8,300	-------	5,300	-------	10,800	5,300	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1907–8.												
1	6,300	6,300	10,800	35,100	12,800	12,800	110,000	13,300	18,300	5,300	8,300	5,800
2	6,300	6,300	9,300	28,100	11,300	36,800	106,000	14,300	13,300	5,800	7,300	5,300
3	5,800	8,300	8,300	21,200	7,800	47,900	74,400	15,300	10,800	6,300	6,800	4,300
4	5,300	15,300	7,800	17,300	6,300	46,200	47,900	15,300	9,300	9,300	6,300	4,080
5	4,800	15,800	7,300	17,300	7,800	35,100	33,400	15,300	13,300	9,800	4,300	3,650
6	8,800	12,300	6,300	18,300	10,300	42,800	24,500	14,300	35,100	14,800	4,300	3,450
7	7,300	12,300	6,300	18,300	12,300	72,600	20,600	12,800	21,900	20,000	4,300	3,650
8	8,300	12,300	5,800	17,300	12,800	70,900	17,800	50,500	16,300	17,800	5,300	5,300
9	23,100	11,300	5,300	16,300	13,800	52,300	21,900	45,300	13,300	14,300	7,300	4,800
10	18,300	16,300	6,300	12,800	11,800	40,200	26,600	32,600	11,300	12,300	11,300	6,800
11	12,800	35,900	35,100	11,800	10,800	31,100	44,500	30,300	10,300	10,300	10,300	5,300
12	9,300	28,800	40,200	15,300	14,300	23,800	46,200	27,400	9,300	8,300	8,800	4,080
13	7,800	19,400	24,500	110,000	34,300	21,200	32,600	20,600	8,300	7,300	7,300	3,450
14	6,300	15,300	18,300	70,000	62,900	20,600	23,100	16,300	9,300	6,300	6,300	3,090
15	5,800	12,300	25,900	41,900	82,400	20,600	18,900	14,300	10,300	6,300	4,800	2,930
16	5,300	10,300	23,100	28,100	138,000	20,600	25,900	12,300	11,300	6,300	4,300	2,930
17	4,300	8,800	18,900	22,500	86,900	19,400	30,300	11,300	13,800	6,300	3,850	2,770
18	4,300	7,800	15,800	19,400	45,300	33,400	25,900	10,800	11,800	5,300	3,850	2,770
19	4,300	9,300	15,800	17,300	30,300	34,300	25,200	10,300	9,800	6,300	3,850	2,770
20	3,850	12,300	13,300	14,800	24,500	52,300	28,100	17,300	8,300	6,300	3,850	2,630
21	3,650	13,800	11,300	13,300	20,600	40,200	22,500	23,800	8,300	5,300	3,850	2,490
22	3,650	12,800	10,300	12,800	17,800	28,100	18,300	26,600	8,300	4,800	3,650	2,490
23	3,450	11,800	9,300	14,300	16,300	24,500	15,300	25,900	8,300	4,300	2,930	2,490
24	3,270	31,800	27,400	14,800	15,300	22,500	13,300	27,400	8,300	5,800	2,770	2,490
25	3,090	36,800	54,000	13,800	13,800	25,900	12,300	23,100	8,800	8,800	7,300	2,490
26	3,090	31,800	32,600	12,800	13,300	23,100	12,300	20,000	9,800	9,300	4,800	2,490
27	3,090	22,500	22,500	14,800	13,300	20,600	18,900	18,900	7,800	10,800	5,300	2,360
28	3,270	17,300	17,800	24,500	13,300	17,800	21,200	15,300	6,800	16,300	17,800	2,360
29	6,300	14,300	16,300	21,900	13,300	16,300	16,800	14,300	6,300	13,300	12,300	2,360
30	6,800	12,300	17,800	17,300	-------	18,900	14,800	14,800	6,300	9,800	8,800	2,360
31	6,300	-------	28,800	15,300	-------	27,400	-------	18,300	-------	9,300	7,300	-------
1908–9.												
1	3,450	19,400	4,800	37,600	10,300	19,400	21,200	31,800	12,800	11,800	5,300	2,440
2	3,450	14,300	4,800	28,100	8,300	16,300	17,300	50,500	11,300	15,300	6,300	2,440
3	2,930	11,300	4,800	20,600	6,300	14,800	16,300	40,200	10,300	14,300	7,800	2,440
4	2,630	9,300	5,300	16,300	8,800	17,300	15,300	28,100	10,300	13,300	11,300	2,350
5	2,490	8,300	6,300	14,300	9,300	22,500	15,300	20,600	10,300	9,800	8,800	2,740
6	2,360	7,800	5,300	28,800	10,300	20,000	15,300	17,800	23,800	8,800	7,800	2,530
7	2,490	7,300	5,800	43,600	11,300	20,600	15,800	15,300	17,800	40,200	6,800	2,440
8	2,360	6,300	6,300	30,300	12,300	33,400	14,800	13,800	13,800	25,200	6,300	2,740
9	2,360	5,300	16,300	21,200	11,300	38,500	12,800	14,300	11,800	17,800	6,300	2,740
10	2,360	5,300	16,300	17,300	15,300	40,200	11,300	12,800	16,300	15,300	5,800	3,590
11	2,770	5,300	12,300	14,800	31,800	40,200	10,800	23,100	17,300	11,300	4,580	8,800
12	16,300	4,800	10,800	13,300	36,800	31,100	9,800	31,100	18,300	9,300	3,950	7,800
13	10,800	4,800	20,600	12,300	24,500	24,500	9,300	24,500	14,800	8,300	3,430	7,300
14	6,800	5,300	17,800	11,300	19,400	21,200	9,300	18,300	12,300	8,300	3,270	3,590
15	4,300	5,300	14,300	13,300	18,300	21,200	57,500	15,300	14,800	8,300	3,430	3,270
16	3,850	5,300	11,300	21,900	21,900	19,400	40,200	13,300	13,300	7,800	4,150	2,990
17	3,450	5,300	9,800	39,300	31,800	16,800	26,600	11,300	12,800	7,300	5,800	5,800
18	3,270	5,300	8,800	35,900	28,100	15,300	19,400	10,300	12,300	6,300	6,800	5,800
19	3,090	5,300	9,800	28,800	22,500	13,300	16,300	9,300	13,300	6,300	7,800	9,300
20	2,930	6,300	11,800	23,800	19,400	12,300	14,300	8,300	13,300	5,300	6,800	7,300
21	2,770	8,800	10,800	20,600	21,900	11,300	14,800	8,300	10,800	4,800	4,800	4,800
22	2,770	8,300	9,800	19,400	25,900	14,300	18,300	8,300	9,300	4,300	3,950	3,950
23	2,770	7,800	9,300	18,300	26,600	17,300	25,900	44,500	8,300	4,300	3,430	3,270
24	2,770	6,800	9,300	17,300	24,500	16,300	28,800	25,200	8,300	4,800	3,130	3,130
25	2,770	6,300	8,800	17,300	28,800	16,300	27,400	18,300	8,800	4,800	2,990	4,350
26	23,800	5,800	13,300	16,300	33,400	31,800	20,600	15,300	10,300	5,300	2,860	6,800
27	13,800	5,300	20,000	15,300	27,400	37,600	17,300	21,200	8,800	4,300	2,860	4,800
28	9,800	5,300	17,300	14,300	22,500	31,800	15,300	33,400	9,300	4,300	2,860	3,950
29	8,300	5,300	15,300	12,800	-------	35,900	15,300	23,800	11,300	4,080	2,640	3,430
30	9,800	4,800	16,300	12,300	-------	32,600	14,300	18,300	10,300	5,300	2,530	3,130
31	26,600	-------	21,200	11,800	-------	27,400	-------	14,800	-------	5,800	2,530	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1909–10.												
1	2,860	3,590	2,990	2,530	9,800	14,300	4,580	12,800	7,800	8,300	3,770	2,740
2	2,740	3,430	2,990	2,990	8,800	35,600	4,580	11,300	6,800	7,300	3,950	3,270
3	2,530	3,270	2,990	4,800	8,300	34,800	4,350	9,800	6,800	6,800	3,590	7,800
4	2,530	3,270	2,990	20,500	10,800	26,400	4,350	8,800	5,800	6,800	3,270	9,800
5	2,530	3,270	2,990	19,900	13,800	21,100	6,300	7,800	5,800	14,300	3,270	9,800
6	2,440	2,990	2,860	16,800	12,800	17,300	8,300	7,300	14,800	14,800	3,270	9,800
7	2,440	2,990	2,860	17,800	10,800	15,800	6,800	6,300	23,000	13,800	3,270	8,800
8	2,440	2,990	2,860	33,900	9,300	15,800	5,800	6,300	19,900	13,300	3,770	7,300
9	2,350	2,990	2,990	27,800	8,800	13,800	5,800	7,300	14,800	14,800	3,590	5,800
10	2,350	3,270	3,430	18,300	8,800	12,800	5,300	10,800	12,300	13,300	3,430	4,800
11	2,440	6,800	4,150	15,300	10,800	11,800	4,800	11,300	11,800	12,800	3,430	4,580
12	2,740	5,800	3,950	10,300	9,800	11,300	4,580	13,800	21,700	10,300	3,430	3,590
13	12,800	6,800	3,270	8,800	8,300	11,300	5,300	19,900	35,600	11,300	3,130	3,950
14	13,800	5,800	4,800	8,300	6,800	11,300	11,300	15,300	56,300	13,800	2,740	3,950
15	9,300	4,800	21,100	9,800	5,300	11,800	13,300	13,300	61,600	15,800	2,740	5,800
16	6,300	4,150	17,800	9,800	8,800	10,800	12,800	11,300	47,600	14,300	2,740	4,150
17	5,800	3,770	12,800	7,800	18,800	9,800	10,800	9,800	95,400	11,800	2,740	3,770
18	5,300	3,590	9,800	7,800	29,300	8,800	10,300	8,800	68,700	10,800	2,740	3,430
19	5,300	3,430	7,300	21,100	55,400	8,300	13,300	8,300	36,400	23,000	2,740	3,130
20	4,350	3,270	5,800	24,300	35,600	7,800	15,300	8,800	26,400	19,400	2,740	2,990
21	4,150	3,270	4,800	19,900	23,000	6,800	15,300	8,800	23,600	13,300	2,640	2,860
22	3,950	3,270	3,430	40,700	17,800	6,800	21,100	8,800	18,300	9,800	2,640	2,640
23	3,950	3,130	2,990	41,500	20,500	6,800	19,400	8,800	16,800	7,800	2,640	2,440
24	3,770	3,130	2,530	23,600	21,100	6,800	21,700	8,800	16,800	6,800	2,740	2,440
25	5,800	3,270	2,530	17,800	17,800	6,300	22,400	10,800	15,300	5,800	2,640	2,440
26	5,800	3,430	3,950	14,800	14,800	6,300	18,800	11,800	13,300	5,300	3,270	2,440
27	5,300	3,430	3,270	13,800	12,800	5,800	16,300	11,800	12,800	4,800	2,860	4,800
28	4,800	3,270	2,990	13,800	11,800	5,800	15,800	11,300	13,800	4,800	2,740	3,430
29	4,350	3,130	3,130	13,800	-------	5,300	15,300	9,300	11,800	4,800	2,860	5,300
30	3,950	2,990	2,990	12,300	-------	4,800	14,300	7,800	9,800	4,350	2,740	4,580
31	3,770	-------	2,640	10,800	-------	4,800	-------	8,300	-------	3,950	2,640	-------
1910–11.												
1	4,350	2,990	6,800	25,000	51,000	8,300	16,300	11,800	3,950	4,800	1,970	3,270
2	3,770	2,990	6,300	43,300	39,000	8,300	15,800	13,300	4,350	3,430	1,970	7,800
3	3,270	2,990	4,800	52,800	27,800	8,300	15,300	12,800	5,800	2,990	1,970	8,800
4	2,990	2,990	4,150	69,600	22,400	7,300	33,900	11,800	4,800	2,640	2,040	5,800
5	2,740	2,990	4,150	54,500	18,300	7,800	45,800	10,800	4,150	2,530	1,900	4,800
6	2,530	2,990	4,580	30,100	15,800	7,800	64,200	9,800	4,350	2,740	2,120	3,430
7	2,440	2,990	7,300	19,900	14,300	57,200	60,700	8,800	4,800	3,590	2,350	3,130
8	2,530	2,860	7,800	15,300	12,800	42,400	43,300	8,300	4,580	3,590	3,950	2,740
9	2,530	2,860	9,800	12,800	13,300	30,100	43,300	7,800	5,800	4,800	3,590	2,530
10	9,800	2,860	8,800	11,300	26,400	27,800	47,600	7,800	5,800	7,800	3,270	2,440
11	10,300	2,640	7,800	9,800	30,800	39,000	35,600	7,300	5,300	4,150	2,740	3,270
12	7,300	2,640	5,800	8,300	23,600	36,400	26,400	7,300	4,580	4,800	2,640	3,770
13	5,300	2,640	5,300	7,800	18,300	26,400	21,100	6,800	3,590	5,300	2,440	4,350
14	4,150	2,640	4,350	23,600	15,300	22,400	18,800	6,300	4,800	3,950	2,350	3,430
15	3,590	2,530	3,270	22,400	13,300	21,100	20,500	5,800	3,770	3,270	3,270	3,950
16	3,270	2,440	2,440	25,000	11,800	18,800	37,300	10,800	3,270	3,130	3,270	3,590
17	2,990	2,440	2,440	17,800	10,300	16,800	36,400	8,300	3,270	3,130	2,740	7,800
18	2,740	2,530	2,640	9,800	8,800	14,800	27,800	6,800	3,130	2,990	2,440	7,800
19	2,740	2,640	2,740	11,800	8,800	13,300	21,100	5,800	2,990	2,860	2,530	5,800
20	2,640	2,640	2,990	10,300	10,800	15,300	18,800	5,800	2,990	2,440	2,350	4,350
21	2,530	2,640	3,590	9,800	13,800	23,600	26,400	4,800	3,430	2,440	2,190	3,430
22	2,740	2,530	3,430	16,300	13,300	20,500	29,300	4,800	3,590	2,440	2,120	4,350
23	3,130	2,440	3,270	19,900	11,800	17,300	24,300	4,580	3,270	2,350	2,040	3,270
24	3,270	2,440	3,770	23,600	10,800	15,800	20,500	4,150	3,270	2,350	1,900	3,270
25	3,270	2,440	8,300	19,900	9,300	13,800	20,500	4,150	3,270	2,350	1,900	5,800
26	2,990	2,440	7,300	16,800	8,800	11,800	17,800	4,350	2,990	2,270	1,770	3,770
27	2,740	3,130	9,800	23,000	8,800	10,800	15,300	3,950	3,130	2,270	1,840	3,270
28	2,740	3,130	8,800	19,900	8,300	13,800	13,800	3,770	3,770	2,120	1,840	2,740
29	2,740	5,800	7,800	22,400	-------	15,800	12,300	3,590	3,770	2,040	1,840	2,530
30	3,270	8,300	14,800	80,300	-------	16,300	11,300	3,590	4,350	2,040	2,530	2,530
31	2,990	-------	28,600	91,000	-------	16,300	-------	4,350	-------	1,970	2,660	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1911–12.												
1	2,440	4,800	9,800	16,800	27,800	24,300	40,700	21,700	7,300	11,800	7,800	5,300
2	2,530	4,800	9,300	25,000	19,400	18,300	30,800	19,900	6,800	11,300	9,300	4,350
3	7,800	4,150	8,800	19,400	16,300	15,300	69,600	17,800	6,300	10,800	7,800	3,590
4	12,800	3,590	6,800	16,800	14,300	13,300	53,600	15,800	5,800	9,800	5,800	3,270
5	8,300	3,590	6,800	13,800	9,800	11,800	35,600	13,300	5,300	9,800	4,800	2,990
6	6,800	3,590	5,800	10,800	5,800	10,800	26,400	12,300	5,800	14,800	4,350	3,270
7	4,800	9,800	5,800	7,300		10,800	21,100	12,800	5,300	15,800	4,150	2,640
8	4,800	25,000	5,300			11,800	18,800	15,800	4,800	13,800	4,350	2,740
9	8,800	17,800				15,800	18,300	17,300	4,580	10,300	4,150	2,740
10	6,300	14,800				25,700	17,300	15,300	4,350	8,800	3,270	2,640
11	8,800	11,800				26,400	15,300	13,800	4,150	8,800	3,130	2,740
12	9,800	9,800			5,300	21,100	14,300	17,300	3,770	9,800	3,270	2,990
13	9,800	9,800	4,000	4,100		48,400	12,800	74,000	3,590	9,800	3,590	2,740
14	8,300	11,800				54,500	11,800	54,500	3,270	8,800	4,350	2,530
15	6,800	11,800				47,600	10,800	33,100	3,270	9,300	3,770	2,350
16	11,800	10,800				101,000	10,800	25,000	3,270	8,800	3,430	2,190
17	9,800	9,300	6,800			93,600	11,800	67,800	3,430	8,800	2,990	2,440
18	22,400	8,800	7,800		5,800	51,000	12,300	57,200	4,150	11,800	2,990	2,350
19	70,500	12,800	10,800	5,800	5,800	33,100	15,800	35,600	4,580	14,800	2,990	2,350
20	37,300	15,300	9,800	16,800	7,300	27,100	15,800	25,000	5,800	11,800	3,590	2,740
21	21,700	13,800	8,300	17,800	9,800	27,800	13,800	18,800	6,800	8,800	7,300	3,590
22	14,800	11,800	7,800	14,800	25,000	25,700	12,300	15,800	5,800	7,800	7,300	3,430
23	11,800	9,800	8,800	14,300	56,300	23,600	11,800	13,800	4,150	8,800	6,300	4,350
24	10,800	8,800	23,000	13,300	33,100	22,400	11,800	11,800	3,590	7,800	6,800	4,800
25	11,300	8,800	27,800	12,800	21,100	45,800	12,800	10,300	4,800	9,300	4,800	16,800
26	9,800	9,800	24,300	11,800	18,800	45,800	12,300	9,800	13,800	17,300	3,950	18,800
27	8,300	9,800	24,300	11,800	52,800	34,800	11,800	8,800	10,800	18,300	3,950	11,800
28	7,300	9,800	26,400	11,800	56,300	26,400	23,000	8,300	18,800	11,800	3,950	9,300
29	6,300	9,800	23,600	11,800	35,600	24,300	21,700	7,800	19,400	8,800	4,150	7,800
30	5,800	10,300	18,300	23,600	-------	91,800	20,500	6,800	14,800	7,300	12,300	5,800
31	5,300	-------	16,300	33,100	-------	62,500	-------	7,300	-------	7,300	7,800	-------
1912–13.												
1	5,300	3,270	3,130	31,600	17,800	23,600	23,600	12,800	28,600	5,300	2,990	2,740
2	4,580	3,130	2,990	19,400	18,300	23,600	19,400	11,300	21,100	4,800	2,990	3,770
3	4,350	3,130	3,270	16,800	16,300	18,800	16,800	10,300	15,800	4,800	3,130	2,990
4	3,590	3,130	3,590	15,800	26,400	15,300	14,300	9,300	13,800	5,800	2,860	2,860
5	3,270	3,130	4,800	16,300	30,800	13,300	12,800	8,300	19,900	11,800	2,740	2,530
6	3,130	2,990	10,300	16,800	23,600	11,800	11,800	7,800	16,300	14,800	2,640	2,530
7	2,990	2,740	11,800	23,600	18,300	10,300	13,800	7,300	13,300	15,800	2,350	3,950
8	2,530	17,800	12,800	51,900	14,800	8,800	9,800	7,800	15,800	10,300	2,640	2,990
9	2,530	26,400	12,800	61,600	11,800	7,800	9,300	7,800	23,000	7,800	2,740	3,950
10	2,640	16,800	9,300	39,000	10,300	7,800	8,800	7,300	19,400	6,800	2,740	3,270
11	2,640	12,800	7,800	23,600	9,800	8,300	8,300	6,800	15,300	7,800	2,740	2,990
12	2,440	9,800	7,300	17,800	12,800	18,300	8,800	6,800	11,800	13,800	2,990	2,530
13	2,530	7,800	5,800	19,400	16,300	19,900	12,800	6,800	10,300	9,300	2,740	2,530
14	2,530	6,800	4,580	19,900	13,300	17,800	56,300	5,800	9,800	7,800	3,590	2,530
15	2,440	6,300	3,770	16,800	11,300	50,200	58,900	5,800	8,800	6,300	4,800	2,350
16	2,530	5,300	3,770	14,300	9,800	74,000	55,400	5,800	7,800	5,800	7,800	2,350
17	2,860	4,800	3,950	12,300	8,800	58,000	39,000	5,800	8,800	6,800	4,800	2,270
18	2,740	4,800	4,150	11,300	8,300	34,800	27,800	8,800	9,300	5,800	3,950	2,190
19	2,740	4,350	3,770	10,300	7,800	25,000	22,400	10,800	5,300	4,800	3,270	2,530
20	2,740	3,950	3,950	9,800	7,300	18,300	17,800	10,300	6,800	8,800	2,990	2,530
21	3,270	3,770	3,950	9,800	6,800	15,800	15,800	11,800	5,300	10,300	3,770	2,740
22	3,590	3,950	3,590	11,300	6,800	14,800	13,300	10,300	6,300	6,800	4,350	6,300
23	3,590	3,770	3,590	12,300	8,300	12,800	12,800	11,300	5,800	5,300	4,800	16,800
24	3,270	3,590	3,590	11,800	9,800	11,800	11,300	23,600	5,300	4,800	8,800	12,800
25	5,800	3,430	3,590	18,800	9,300	10,800	10,800	62,500	6,800	4,580	5,800	7,800
26	4,350	3,590	2,990	19,900	8,800	10,800	9,800	39,000	7,300	5,300	5,800	5,800
27	4,150	3,430	3,270	18,800	8,300	29,300	9,800	25,000	10,300	4,350	4,580	4,800
28	3,950	3,430	3,590	22,400	13,300	180,000	10,800	45,000	9,300	3,950	3,950	3,950
29	3,770	3,590	3,270	26,400	-------	91,800	12,800	51,900	7,300	3,590	3,130	2,990
30	3,430	3,430	4,350	23,600	-------	46,700	12,800	37,300	6,300	3,270	2,990	2,860
31	3,130	-------	22,400	18,800	-------	31,600	-------	25,000	-------	3,130	2,740	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1913–14.												
1	2,860	7,300	10,800	10,800	21,700	15,800	29,300	12,300	2,740	2,120	1,840	4,800
2	2,990	6,800	21,100	10,300	37,300	15,300	31,600	10,800	2,860	2,190	1,840	3,430
3	3,270	4,800	23,600	9,800	24,300	13,300	40,700	9,800	2,740	2,120	1,840	2,990
4	3,430	4,350	19,400	9,800	18,800	11,800	34,800	8,800	2,740	2,040	1,840	2,530
5	5,300	3,770	16,300	9,800	15,800	12,300	25,700	8,800	2,740	2,270	1,840	2,350
6	4,350	4,150	12,800	8,800	13,800	12,300	20,500	11,800	2,860	2,190	2,190	2,270
7	3,950	3,950	10,800	9,300	15,800	14,300	16,800	17,300	2,740	2,190	1,770	2,270
8	3,130	3,590	12,800	9,800	33,100	14,800	15,300	16,800	2,740	2,040	1,840	2,120
9	2,860	3,950	14,800	12,300	32,300	13,300	32,300	15,800	2,640	1,840	1,900	1,970
10	2,990	8,300	13,800	20,500	23,600	11,800	27,800	13,800	2,640	2,190	1,900	1,840
11	3,270	14,800	11,800	27,800	18,800	12,300	22,400	11,800	2,860	2,350	2,040	1,640
12	3,270	13,800	10,300	25,000	15,800	24,300	17,800	10,300	2,740	2,350	2,270	1,770
13	3,270	11,800	9,300	19,900	12,800	28,600	15,300	9,800	2,640	2,190	2,190	1,900
14	3,430	15,800	8,300	15,300	11,800	25,000	13,300	8,800	2,440	2,190	2,190	1,900
15	3,130	30,800	6,800	11,800	9,800	23,600	12,800	7,800	2,440	3,270	2,350	1,900
16	2,860	41,500	7,800	10,800	8,800	26,400	18,800	7,800	2,440	4,580	2,040	1,900
17	2,990	55,400	6,300	10,800	8,800	39,000	45,800	6,300	2,350	4,800	1,900	1,900
18	3,130	36,400	6,800	11,800	8,800	46,700	34,800	5,300	2,190	4,350	1,900	1,770
19	2,860	21,100	5,800	11,300	15,300	45,800	25,000	6,300	2,350	4,800	1,900	1,770
20	3,430	16,300	5,800	10,800	65,100	31,600	27,800	5,300	2,350	4,350	1,770	1,700
21	4,800	12,800	5,300	15,300	58,900	24,300	34,800	5,300	2,190	2,990	1,510	1,640
22	7,800	10,800	4,800	37,300	43,300	19,900	31,600	4,350	2,190	2,530	1,770	1,640
23	9,800	8,800	4,800	29,300	31,600	18,300	24,300	4,350	2,270	2,440	1,640	1,700
24	8,800	7,800	4,800	19,900	29,300	17,800	19,400	3,950	2,350	2,190	1,770	1,770
25	10,800	6,800	4,580	22,400	18,800	18,800	15,800	3,770	2,120	2,120	2,040	1,840
26	24,300	5,300	5,800	39,000	19,900	22,400	14,800	3,770	2,190	2,040	1,970	1,840
27	27,100	5,800	12,300	29,300	18,300	30,100	25,700	3,270	2,270	1,970	2,040	1,770
28	18,800	5,300	15,800	21,100	16,800	34,800	26,400	3,270	2,440	2,120	3,270	1,640
29	13,300	8,800	13,800	17,300	-------	33,100	19,400	3,270	2,120	2,350	4,350	1,640
30	10,300	10,800	11,800	15,800	-------	27,100	15,300	2,990	2,120	1,900	4,580	1,770
31	8,300	-------	11,300	15,800	-------	28,600	-------	2,860	-------	1,900	6,800	-------
1914–15.												
1	1,640	2,350	2,530	27,800	22,400	16,300	8,300	14,300	11,300	2,190	2,350	6,300
2	1,510	2,270	2,530	19,900	73,200	13,800	7,800	12,300	8,800	2,350	2,530	5,800
3	1,390	2,270	14,800	16,300	131,000	11,800	7,800	9,800	9,300	2,740	2,350	5,800
4	1,510	2,350	19,900	13,300	77,600	11,300	6,800	13,800	12,800	2,860	2,990	4,800
5	1,330	2,040	17,800	11,800	45,800	9,800	6,800	14,300	18,800	2,640	2,530	5,800
6	1,450	2,040	68,700	10,300	32,300	11,800	6,800	11,800	14,300	2,740	2,640	14,300
7	1,390	1,970	38,100	45,800	29,300	12,800	6,800	9,800	10,800	3,770	2,860	28,600
8	1,580	2,270	23,600	127,000	26,400	14,800	8,800	8,800	8,800	4,150	2,860	17,800
9	2,190	2,120	17,800	59,800	21,100	14,300	8,800	7,800	7,300	4,150	2,640	11,800
10	2,040	2,040	14,800	33,900	18,300	13,300	8,800	6,800	6,800	4,150	2,440	8,800
11	2,040	1,970	12,800	22,400	15,300	12,800	8,800	6,300	5,800	3,430	2,190	6,800
12	2,040	1,900	11,800	34,800	13,800	13,800	8,800	6,300	4,800	3,270	2,040	5,800
13	1,840	1,770	9,800	28,600	12,800	14,300	8,800	5,800	8,800	3,130	2,440	4,800
14	1,840	2,040	9,800	29,300	12,300	12,800	9,800	5,800	8,300	2,860	3,590	5,300
15	1,770	2,120	8,300	25,700	13,300	11,800	9,800	5,800	9,800	2,440	4,150	5,300
16	1,770	2,120	6,800	30,100	21,100	11,800	8,800	5,800	8,800	2,990	4,150	5,800
17	2,120	2,190	5,300	30,100	24,300	12,800	7,800	5,300	8,800	2,740	3,950	4,800
18	16,300	6,800	3,590	45,800	19,900	13,800	7,300	4,580	8,800	4,800	4,150	3,950
19	10,800	5,300	3,770	66,900	16,800	12,800	6,800	3,950	9,300	4,830	9,800	3,770
20	6,300	4,350	9,800	63,400	14,300	12,800	6,800	3,950	7,300	4,150	5,800	3,950
21	4,350	3,590	15,800	40,700	12,800	12,300	5,800	3,770	6,800	6,300	3,950	3,950
22	3,590	2,990	26,400	27,100	11,300	10,800	5,800	3,590	4,580	6,800	3,430	4,350
23	2,990	2,640	27,100	19,400	10,300	10,300	5,800	3,950	3,950	5,300	5,800	4,800
24	2,740	2,530	20,500	17,300	9,800	9,800	5,800	3,770	3,590	4,150	5,800	4,350
25	2,530	2,350	15,800	19,900	18,300	9,300	6,800	4,800	3,270	3,770	4,350	3,950
26	2,440	2,350	12,800	21,700	34,800	8,800	6,800	6,800	2,740	3,590	3,590	3,590
27	2,740	2,350	9,800	21,100	24,300	8,800	6,800	7,300	2,640	2,860	2,990	3,270
28	2,640	2,350	13,800	19,400	18,800	9,300	6,800	7,800	2,530	2,640	2,740	3,270
29	2,740	2,350	10,800	16,800	-------	9,800	15,800	5,800	2,440	2,640	2,640	3,270
30	2,530	2,440	16,800	14,300	-------	8,800	17,800	6,800	2,270	2,350	3,430	3,590
31	2,350	-------	32,300	12,800	-------	8,800	-------	12,800	-------	2,120	5,800	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1915–16.												
1	17,800	3,430	7,300	35,600	30,800	16,800	18,800	11,800	8,300	4,800	6,800	5,300
2	58,000	3,270	6,300	27,100	37,300	16,800	15,800	10,300	6,800	4,350	5,800	4,800
3	47,600	3,130	5,800	25,000	47,600	19,900	13,800	9,800	6,300	3,270	25,000	4,580
4	24,300	3,270	5,800	21,700	42,400	23,000	12,300	9,300	7,800	4,150	19,400	4,350
5	17,800	2,990	5,300	17,800	29,300	21,100	11,800	9,800	8,300	3,950	15,300	4,350
6	12,800	2,990	4,580	15,300	23,000	21,100	11,300	9,300	6,800	4,350	17,800	4,150
7	11,800	2,860	4,580	16,800	22,400	37,300	11,800	8,800	7,800	3,770	15,800	4,580
8	11,300	2,990	4,150	28,600	27,800	58,000	12,300	9,300	8,300	3,270	16,800	4,150
9	9,800	2,990	4,580	34,800	21,100	41,500	13,800	8,800	9,800	2,740	25,700	4,150
10	8,300	2,860	4,150	24,300	22,400	28,600	14,300	7,800	10,300	2,740	27,800	3,770
11	7,300	3,130	4,150	30,800	22,400	21,100	20,500	7,800	9,800	2,530	17,800	4,800
12	6,300	2,990	3,770	54,500	18,800	17,800	31,600	7,300	9,300	19,400	16,800	3,950
13	5,800	2,990	3,950	47,600	17,800	15,300	33,900	6,300	8,300	14,800	16,300	3,130
14	4,800	2,990	3,590	39,000	18,300	14,300	27,100	5,800	5,800	9,800	15,800	3,770
15	4,800	4,350	3,590	27,800	17,300	17,800	21,100	5,300	5,800	6,300	13,800	6,800
16	4,580	12,300	3,590	21,100	15,800	18,800	17,800	5,300	8,800	6,800	18,800	12,300
17	4,800	9,300	7,800	16,800	14,300	17,800	14,800	4,800	14,800	174,000	42,400	12,800
18	4,800	7,800	35,600	12,800	13,300	14,800	13,300	5,300	23,000	106,000	25,700	9,300
19	4,800	7,800	70,500	11,300	12,300	13,800	11,800	4,580	17,800	54,500	18,300	6,800
20	5,300	10,800	42,400	9,800	11,300	12,300	10,800	4,350	12,800	28,600	13,800	4,800
21	5,800	15,800	19,400	10,800	11,800	11,800	9,800	3,950	9,800	21,100	11,800	4,150
22	5,800	14,800	15,300	12,800	12,300	13,800	9,300	3,770	8,300	20,500	12,800	4,150
23	6,300	11,800	15,300	17,800	12,300	18,800	9,300	3,590	7,800	27,100	14,800	3,590
24	5,300	9,300	12,800	19,400	12,300	19,900	9,300	5,800	6,300	23,000	14,300	3,430
25	4,800	7,800	10,800	17,300	37,300	17,800	8,800	11,300	7,300	18,800	13,300	3,430
26	4,800	6,800	11,800	14,800	54,500	14,800	10,800	11,800	11,800	14,800	10,300	3,270
27	4,350	6,300	14,300	13,300	35,600	16,800	13,800	9,800	10,800	13,300	7,800	3,130
28	4,150	6,800	15,800	13,800	25,000	42,400	12,800	10,300	7,800	13,300	7,300	3,430
29	3,950	7,300	29,300	16,300	19,400	35,600	14,800	7,800	6,800	13,300	5,800	7,800
30	3,950	7,300	74,900	21,700	-------	29,300	12,800	7,300	5,300	13,300	9,800	14,800
31	3,770	-------	61,600	26,400	-------	23,000	-------	7,800	-------	11,300	6,800	-------
1916–17.												
1	16,300	4,150	4,350	16,800	20,500	43,300	13,300	11,300	14,300	2,860	2,990	1,390
2	11,300	4,580	4,800	13,800	34,800	58,000	12,300	13,300	13,800	2,860	2,860	1,770
3	7,800	4,580	4,800	12,300	23,600	74,800	11,300	13,300	18,800	2,740	2,530	1,770
4	5,800	3,950	5,300	14,800	17,800	111,000	10,800	11,300	14,800	2,740	2,530	1,900
5	4,800	3,950	4,800	33,900	12,800	134,000	9,800	10,300	12,300	2,350	2,990	2,350
6	4,350	3,770	4,150	58,000	9,300	81,200	12,800	11,800	9,800	2,530	2,530	2,640
7	3,950	3,430	4,580	49,300	7,800	48,400	24,300	8,800	8,800	2,530	2,860	2,440
8	3,770	3,130	4,150	32,300	9,300	41,500	27,800	8,300	7,300	2,350	2,640	2,640
9	3,590	3,130	4,150	22,400	10,800	40,700	23,600	12,300	6,300	2,350	2,120	3,270
10	3,590	3,430	4,150	17,800	9,300	35,600	19,900	15,300	6,800	2,350	2,350	3,950
11	3,430	3,590	4,150	14,800	7,800	25,000	16,800	15,300	7,800	2,190	2,530	3,770
12	3,950	3,430	4,580	12,300	8,300	39,000	15,300	13,800	6,800	1,900	2,440	2,860
13	3,430	3,430	4,150	9,800	7,800	62,500	14,300	12,800	5,300	2,530	2,350	2,350
14	3,130	3,430	4,150	8,800	5,800	63,400	13,300	11,800	5,800	2,270	2,270	2,040
15	3,130	3,270	4,350	10,300	7,300	56,300	12,800	10,300	4,800	2,190	2,190	1,970
16	3,130	3,590	3,950	11,800	9,800	39,000	11,800	9,300	4,150	2,740	2,040	1,970
17	3,130	3,590	3,430	12,300	10,300	33,100	10,800	8,300	3,590	2,640	2,040	1,970
18	3,430	3,770	3,590	11,300	10,800	49,300	9,800	7,300	3,270	2,990	1,770	1,970
19	6,800	3,430	3,430	10,300	13,300	40,700	8,800	6,800	3,430	3,950	1,900	1,770
20	9,800	3,590	2,990	10,300	21,100	29,300	8,300	6,300	3,130	5,300	1,900	1,640
21	19,400	3,430	3,130	9,800	45,800	22,400	7,800	5,800	3,590	5,300	1,840	1,510
22	14,300	2,990	10,300	29,300	34,800	30,100	6,800	4,800	4,150	4,580	1,840	1,640
23	10,300	2,860	18,800	44,100	23,600	28,600	7,300	4,150	3,590	5,800	1,840	1,640
24	8,300	3,590	17,800	32,300	45,000	46,700	6,300	4,350	2,990	8,300	1,970	1,640
25	6,800	4,580	14,300	23,600	61,600	66,900	6,300	4,800	2,990	9,800	1,770	1,640
26	5,800	5,800	12,300	17,800	40,700	44,100	6,800	4,580	2,860	10,800	1,840	1,510
27	4,800	5,800	10,800	14,800	26,400	30,100	6,800	12,300	2,640	11,800	1,840	1,510
28	4,800	5,800	19,900	12,800	27,100	23,600	6,800	39,000	2,440	9,800	1,770	1,450
29	4,580	4,150	56,300	11,800	-------	19,900	7,300	41,500	2,740	6,800	1,700	2,040
30	4,150	4,580	37,300	11,800	-------	17,300	8,800	28,600	2,740	5,300	1,580	1,900
31	4,150	-------	23,000	15,800	-------	14,800	-------	18,800	-------	4,350	1,510	-------

Daily discharge, in second-feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1917–18.												
1	1,970	12,800	5,800	3,270	30,800	20,500	10,300	16,800	8,800	20,500	7,300	3,430
2	1,970	9,800	5,800	3,950	23,000	18,800	9,300	15,300	7,300	16,800	9,300	5,300
3	1,900	5,800	4,800	3,270	18,800	18,300	7,800	14,800	6,300	14,300	11,300	5,800
4	1,640	5,300	4,580	2,860	16,800	14,800	8,800	13,300	5,800	11,300	7,300	3,950
5	1,640	4,350	4,150	2,860	14,300	18,300	8,800	12,300	4,150	9,300	5,300	2,860
6	1,770	3,950	3,590	2,740	11,800	28,600	8,800	10,800	4,800	7,300	4,350	2,990
7	1,770	3,270	3,430	5,800	12,300	45,800	7,800	9,800	4,800	4,800	3,590	2,990
8	1,580	2,740	3,430	5,800	17,800	48,400	11,800	9,300	4,800	5,800	2,740	4,800
9	1,580	2,740	3,590	4,800	23,600	30,100	39,000	10,800	5,300	4,800	2,740	5,300
10	1,510	2,990	2,990	4,580	55,400	22,400	51,000	9,800	4,800	3,590	2,640	7,800
11	1,450	2,740	2,530	3,590	59,800	19,900	41,500	10,800	4,150	3,270	3,270	8,800
12	1,270	2,640	2,270	5,300	51,900	16,800	37,300	10,800	3,270	3,950	2,990	5,800
13	1,900	2,530	2,120	11,300	45,800	75,800	33,100	10,800	3,590	3,770	3,130	4,580
14	2,270	2,530	2,190	10,800	47,600	120,000	27,800	19,900	2,990	4,150	4,800	3,770
15	1,970	2,350	2,270	8,800	44,100	82,900	32,300	21,700	2,530	3,770	4,350	3,590
16	2,190	2,530	2,530	8,300	45,000	40,700	30,800	19,400	2,640	3,770	4,350	3,270
17	2,190	2,530	2,530	7,800	37,300	25,700	29,300	16,300	2,740	3,270	4,150	3,270
18	1,640	2,440	2,350	7,300	23,600	18,800	25,000	13,300	3,130	3,270	5,300	2,860
19	1,510	2,530	2,120	4,800	16,800	14,800	21,100	11,300	3,950	3,950	4,580	8,300
20	2,040	2,350	2,270	4,580	17,800	12,300	17,800	10,800	10,300	6,800	9,300	12,800
21	5,300	2,350	2,350	3,770	39,800	11,300	27,100	10,300	11,800	7,800	7,800	10,300
22	4,150	2,120	2,860	3,590	31,600	15,800	37,300	12,800	7,800	6,300	6,300	9,800
23	4,350	2,040	2,740	3,590	20,500	27,800	35,600	14,800	6,300	4,800	4,150	8,300
24	3,590	2,440	2,440	3,130	17,800	20,500	26,400	14,300	8,800	3,590	3,950	6,800
25	5,300	2,440	3,270	3,270	16,300	20,500	21,700	12,800	7,800	3,590	3,270	4,800
26	4,350	2,350	7,800	3,590	21,100	21,700	19,400	15,800	23,600	5,300	3,270	4,580
27	4,580	2,190	8,300	4,800	43,300	19,900	18,800	16,800	64,200	4,350	3,430	3,770
28	6,800	2,190	6,300	50,200	30,100	17,800	24,300	16,300	27,100	6,300	3,270	3,590
29	6,300	3,590	6,300	85,600	.....	15,800	22,400	14,300	18,300	6,800	3,590	3,430
30	5,800	5,800	3,950	59,800	.....	12,800	17,300	12,300	19,900	5,800	3,770	3,130
31	8,300	.....	3,590	42,400	.....	11,300	.....	9,800	.....	6,300	3,590	.....

NOTE.—See accuracy paragraph under station description, page 94.

Daily gage height, in feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1919–20.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1918–19.												
1	19.38	30.10	22.15	27.05	21.40	23.40	22.55	21.45	21.45	21.80	20.22	20.48
2	19.18	25.95	21.80	37.20	21.30	23.60	22.35	22.30	21.25	21.30	21.30	20.12
3	19.25	23.85	21.25	34.60	21.00	23.45	21.70	24.50	21.20	20.85	21.70	19.85
4	19.50	22.75	20.95	29.70	20.85	22.80	21.40	23.40	21.10	20.58	20.78	19.68
5	19.10	22.10	20.80	26.40	21.20	22.35	21.30	22.60	20.82	20.42	20.48	19.68
6	19.25	21.80	20.65	24.50	21.10	22.60	21.30	22.00	20.50	20.35	20.28	19.65
7	19.25	21.15	20.48	23.40	20.95	23.00	21.40	21.70	20.30	20.40	20.22	19.38
8	19.22	21.05	20.42	22.90	20.85	22.90	21.10	21.70	20.45	20.95	20.15	19.22
9	19.18	20.65	20.45	22.70	20.72	22.60	20.85	21.80	20.35	20.90	20.02	19.12
10	19.05	20.55	20.80	22.15	20.75	23.20	20.75	24.70	20.12	20.62	19.88	19.15
11	18.92	20.55	21.95	21.80	20.60	24.10	21.00	25.65	19.92	20.38	19.72	19.52
12	18.80	20.48	22.25	21.55	20.48	23.30	22.20	24.20	20.05	20.35	19.88	19.58
13	19.10	20.28	22.20	21.45	20.20	22.60	24.40	23.00	20.18	22.30	19.85	19.48
14	19.10	20.25	21.90	21.35	20.60	22.10	23.40	22.50	20.82	23.50	20.30	19.38
15	19.02	20.15	23.70	21.50	21.20	21.85	24.60	22.35	20.32	23.10	20.28	19.25
16	19.00	20 08	26.10	21.70	21.90	21.60	22.15	23.20	20.28	23.70	20.20	19.18
17	18.98	20.05	24.40	21.70	21.85	21.30	22.20	22.75	20.32	27.30	20.20	19.10
18	18.78	19.98	24.85	22.50	21.50	21.30	22.65	23.00	20.95	24.60	20.05	19.10
19	18.85	20.58	23.90	25.90	21.50	21.60	22.60	22.90	21.35	23.20	20.18	19.08
20	19.10	22.10	22.95	25.20	21.20	21.40	22.10	22.60	21.05	25.30	19.90	19.12
21	19.20	22.20	21.85	23.90	21.10	21.55	21.70	23.50	20.65	26.00	19.82	19.10
22	19.55	21.90	22.50	23.10	21.20	21.50	21.20	24.70	20.65	25.30	19.70	19.10
23	19.52	21.50	28.25	22.55	22.10	21.25	21.30	24.65	20.90	23.60	19.95	19.18
24	19.60	21.10	28.50	25.45	22.85	21.15	21.30	23.60	20.78	22.90	19.88	19.55
25	19.48	20.85	25.60	26.30	23.00	20.92	21.30	25.00	21.75	22.45	19.65	19.55
26	22.75	20.75	24.40	24.60	24.40	20.95	21.80	25.35	27.70	21.90	19.48	19.45
27	31.45	20.42	23.55	23.60	25.60	20.98	21.30	24.20	28.35	21.20	19.35	19.35
28	26.00	20.42	22.80	22.90	24.40	25.00	21.05	23.80	27.40	20.75	19.42	19.28
29	23.80	21.00	22.30	22.50	.....	25.35	20.85	23.30	24.60	20.45	19.42	19.25
30	23.95	22.55	22.00	22.00	.....	23.85	21.10	22.50	23.00	20.20	19.28	19.12
31	29.55	.....	21.50	21.60	.....	23.00	.....	21.90	.....	20.22	19.50	.....

Daily gage height, in feet, of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1919–20—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1919–20.												
1	19.18	20.25	21.20	20.15	21.25	21.25	21.20	21.05	20.45	19.85	19.20	20.62
2	19.10	28.40	20.90	20.58	20.82	21.00	22.20	20.95	20.05	19.70	19.08	20.25
3	19.02	25.65	20.72	20.35	20.78	20.95	25.60	20.82	20.42	20.28	19.05	19.98
4	18.92	23.25	20.48	19.80	21.30	21.00	25.95	20.72	20.55	22.85	19.05	20.00
5	19.18	21.90	20.40	19.80	23.85	21.60	24.70	20.65	23.95	23.10	19.02	19.70
6	19.18	21.30	20.22	19.80	23.70	23.40	24.90	20.58	26.10	22.00	19.10	19.58
7	19.20	20.90	31.95	20.00	22.75	23.80	24.40	20.40	25.80	21.40	19.08	19.68
8	19.22	20.45	30.25	20.15	22.10	22.55	24.50	20.55	23.30	21.60	19.08	19.50
9	19.22	20.25	25.90	22.50	21.55	21.70	23.85	21.20	22.20	21.20	19.25	19.48
10	19.15	19.98	24.30	23.20	21.40	21.65	23.50	21.30	21.35	20.88	19.40	19.52
11	19.22	19.90	24.30	23.05	22.35	21.30	23.10	21.00	21.00	20.45	19.32	19.45
12	20.25	19.82	24.10	22.10	22.25	21.25	22.50	20.85	20.60	20.28	20.05	19.70
13	22.00	19.85	23.40	21.40	22.00	26.40	22.10	22.05	20.40	20.58	20.65	19.75
14	21.05	19.85	23.40	20.98	21.70	26.90	22.40	23.30	20.18	20.55	20.05	19.65
15	21.00	19.92	24.20	20.52	21.60	25.50	22.25	22.80	20.08	20.80	20.30	19.35
16	21.95	20.12	23.25	20.28	21.60	24.10	21.60	21.95	20.10	20.38	21.20	19.62
17	22.40	19.98	22.50	20.30	21.15	25.00	21.55	21.40	20.25	20.15	21.50	19.55
18	21.90	19.75	22.00	20.32	20.88	25.05	21.20	21.05	20.38	20.02	21.00	19.78
19	21.20	19.68	21.40	20.05	20.90	26.40	21.20	20.72	20.40	19.82	20.72	19.52
20	20.78	19.60	21.10	20.00	20.88	31.10	21.70	20.62	20.22	19.78	21.75	19.32
21	20.50	19.60	20.78	20.75	20.82	28.00	23.20	20.65	20.80	19.70	22.90	19.25
22	20.10	19.68	20.75	27.70	21.30	25.35	24.30	21.00	22.40	19.95	22.70	19.42
23	19.78	19.65	20.65	31.80	23.30	23.85	23.80	20.88	22.80	19.85	22.20	19.35
24	21.30	19.72	20.38	30.25	24.00	23.15	22.70	20.88	21.95	19.62	21.85	19.10
25	23.10	19.95	20.45	29.30	24.15	22.30	21.85	22.50	21.05	19.65	21.30	19.08
26	22.45	20.80	20.30	26.55	23.40	21.98	21.40	22.40	20.85	19.78	21.00	19.85
27	21.85	22.50	20.12	24.40	22.45	21.70	21.40	21.80	20.38	19.65	20.50	20.32
28	21.20	22.30	20.15	23.30	21.90	21.45	21.35	21.50	20.05	19.58	20.62	20.32
29	20.65	22.05	20.25	22.30	21.40	21.45	21.35	21.05	20.02	19.45	21.15	20.40
30	20.48	21.50	20.08	21.80	-------	21.20	21.10	20.72	19.78	19.40	21.00	20.28
31	20.18	-------	19.92	21.50	-------	20.98	-------	20.60	-------	19.32	20.65	-------

NOTE.—Discharge not computed on account of no measurements since 1917.

Monthly discharge of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918.

[Drainage area, 8,470 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1888.					
January	24,500	3,000	13,300	1.57	1.81
February	48,800	10,300	22,500	2.66	2.87
March	59,300	8,800	20,400	2.41	2.78
April	32,600	8,800	14,100	1.66	1.85
May	25,900	6,300	12,700	1.50	1.73
June	31,100	4,080	9,270	1.09	1.22
July	15,300	2,030	5,810	.686	.79
August	6,800	2,030	3,420	.404	.47
September	66,400	2,770	21,000	2.48	2.77
The period	66,400	2,030	13,500	1.59	16.29
1888–89.					
October	82,400	7,300	23,600	2.79	3.22
November	42,800	10,800	17,500	2.07	2.31
December	42,800	7,300	14,200	1.68	1.94
January	68,200	12,300	25,200	2.98	3.44
February	103,000	9,300	22,000	2.60	2.71
March	24,500	11,300	15,200	1.79	2.06
April	24,500	8,300	12,300	1.45	1.62
May	86,000	8,300	16,300	1.92	2.21
June	158,000	10,300	29,100	3.44	3.84
July	48,800	8,800	17,300	2.04	2.35
August	50,500	7,300	15,700	1.85	2.13
September	51,400	6,300	12,100	1.43	1.60
The year	158,000	6,300	18,400	2.17	29.43

Monthly discharge of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1889–90.					
October	42,800	6,800	11,400	1.35	1.56
November	48,800	11,800	22,900	2.70	3.01
December	20,600	9,300	12,300	1.45	1.67
January	24,500	9,800	14,600	1.72	1.98
February	110,000	16,300	35,300	4.17	4.34
March	80,700	15,800	33,200	3.92	4.52
April	62,000	15,800	25,800	3.05	3.40
May	56,700	13,300	23,000	2.72	3.14
June	12,800	4,800	7,730	.913	1.02
July	7,300	3,650	5,150	.608	.70
August	15,300	3,850	6,930	.818	.94
September	13,300	3,090	7,310	.863	.96
The year	110,000	3,090	17,000	2.01	27.24
1890–91.					
October	50,500	7,800	14,700	1.74	2.01
November	16,300	5,300	9,500	1.12	1.25
December	16,800	4,800	9,480	1.12	1.29
January	97,600	12,300	30,000	3.54	4.08
February	95,800	20,600	47,500	5.61	5.84
March	93,100	20,000	38,300	4.52	5.21
April	97,600	10,300	32,900	3.88	4.33
May	48,800	7,800	12,900	1.52	1.75
June	50,500	6,800	18,200	2.15	2.40
July	12,300	5,300	7,750	.915	1.04
August	31,800	4,800	11,700	1.38	1.59
September	14,300	4,300	7,270	.858	.96
The year	97,600	4,300	19,800	2.34	31.75
1891–92.					
October	5,300	3,270	4,300	.508	.59
November	23,800	3,450	7,980	.942	1.05
December	52,300	7,300	15,800	1.87	2.16
January	136,000	10,800	26,500	3.13	3.61
February	23,800	9,300	14,100	1.66	1.79
March	61,100	11,300	26,200	3.09	3.56
April	105,000	14,300	30,800	3.64	4.06
May	44,500	7,800	17,200	2.03	2.34
June	23,800	7,300	13,000	1.53	1.71
July	8,800	4,300	5,770	.681	.79
August	7,300	2,770	4,180	.494	.57
September	11,300	2,360	3,840	.453	.51
The year	136,000	2,360	14,200	1.68	22.74
1892–93.					
October	3,450	2,490	2,700	.319	.37
November	11,300	2,630	5,250	.620	.69
December	19,400	2,930	7,600	.897	1.03
January	38,500	3,270	7,730	.913	1.05
February	119,000	13,300	33,300	3.93	4.09
March	33,400	9,300	16,600	1.96	2.26
April	50,500	9,300	16,300	1.93	2.15
May	106,000	10,300	27,900	3.29	3.79
June	28,100	7,800	13,800	1.63	1.82
July	12,300	3,650	5,810	.686	.79
August	55,800	2,360	5,700	.673	.78
September	41,000	5,300	11,300	1.33	1.48
The year	119,000	2,360	12,700	1.50	20.30
1893–94.					
October	70,000	6,300	18,200	2.15	2.48
November	18,900	6,300	9,480	1.12	1.25
December	18,300	6,300	10,100	1.19	1.36
January	17,800	9,300	11,600	1.37	1.58
February	66,400	11,300	22,500	2.66	2.77
March	35,100	10,300	18,700	2.21	2.55
April	15,300	8,300	10,800	1.28	1.43
May	18,300	6,300	9,900	1.17	1.35
June	11,800	3,650	6,070	.717	.80
July	7,300	2,490	3,980	.470	.54
August	6,300	2,490	3,670	.433	.50
September	3,650	2,000	2,430	.287	.32
The year	70,000	2,000	10,600	1.25	16.93

Monthly discharge of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1894–95.					
October	4,300	2,240	2,770	0.327	0.38
November	8,300	3,090	4,340	.512	.57
December	20,600	3,090	7,400	.874	1.01
January	68,200	3,650	24,300	2.87	3.31
February	15,800	2,490	6,430	.759	.79
March	76,200	16,800	29,100	3.44	3.97
April	148,000	9,300	25,200	2.98	3.32
May	37,600	9,800	15,400	1.82	2.10
June	8,800	3,450	5,440	.642	.72
July	19,400	3,650	7,620	.900	1.04
August	12,300	3,650	5,650	.667	.77
September	6,800	2,000	3,560	.420	.47
The year	148,000	2,000	11,500	1.36	18.45
1895–96.					
October	2,360	1,700	2,120	.250	.29
November	5,300	2,240	3,030	.358	.40
December	26,600	2,770	6,340	.749	.86
January	28,800	3,850	8,720	1.03	1.19
February	44,500	5,300	18,300	2.16	2.33
March	114,000	8,800	23,800	2.81	3.24
April	97,600	8,800	22,200	2.62	2.92
May	22,500	5,800	10,700	1.26	1.45
June	29,600	4,300	9,700	1.15	1.28
July	101,000	4,300	16,400	1.94	2.24
August	21,200	3,650	7,980	.942	1.09
September	5,300	2,930	3,760	.444	.50
The year	114,000	1,700	11,100	1.31	17.79
1896–97.					
October	53,200	4,300	10,100	1.19	1.37
November	59,300	4,300	12,500	1.48	1.65
December	47,100	5,300	15,000	1.77	2.04
January	11,800	4,080	7,950	.939	1.08
February	201,000	5,300	46,600	4.50	4.69
March	55,800	14,300	29,400	3.47	4.00
April	28,100	7,800	14,800	1.75	1.95
May	94,900	6,800	18,700	2.21	2.55
June	23,200	5,300	10,500	1.24	1.38
July	28,800	5,300	13,600	1.61	1.86
August	9,000	3,090	5,010	.591	.68
September	3,090	2,030	2,390	.282	.31
The year	201,000	2,030	15,400	1.82	23.56
1897–98.					
October	11,800	1,850	3,160	.373	.43
November	3,850	2,490	2,850	.336	.37
December	19,400	3,850	8,260	.975	1.12
January	38,500	5,300	16,400	1.94	2.24
February	17,300	3,450	10,600	1.25	1.30
March	68,200	7,300	17,100	2.02	2.33
April	54,000	10,300	20,300	2.40	2.68
May	57,500	7,300	17,500	2.07	2.39
June	14,800	3,270	6,320	.746	.83
July	12,800	2,490	5,540	.654	.75
August	102,000	5,300	20,200	2.38	2.74
September	23,200	3,270	7,060	.834	.93
The year	102,000	1,850	11,300	1.33	18.11
1898–99.					
October	88,700	4,080	15,400	1.82	2.10
November	39,300	8,800	14,200	1.68	1.87
December	31,800	6,300	14,100	1.66	1.91
January	62,900	10,800	21,300	2.51	2.89
February	84,200	9,300	31,700	3.74	3.90
March	204,000	19,400	49,200	5.81	6.70
April	33,400	10,300	18,400	2.17	2.42
May	52,300	7,800	19,100	2.26	2.61
June	31,800	6,300	12,300	1.45	1.62
July	7,300	3,270	4,490	.530	.61
August	6,300	2,140	3,570	.421	.49
September	7,300	2,360	3,580	.423	.47
The year	204,000	2,140	17,200	2.03	27.59

Monthly discharge of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1899–1900.					
October	3,650	2,240	2,550	0.298	0.34
November	5,300	2,360	2,980	.352	.39
December	24,500	2,360	6,370	.752	.87
January	43,600	2,490	11,400	1.35	1.56
February	64,600	3,270	19,600	2.31	2.40
March	87,800	13,300	31,400	3.71	4.28
April	23,800	8,300	14,500	1.71	1.91
May	19,400	6,300	9,800	1.16	1.34
June	33,400	5,300	11,200	1.32	1.47
July	18,300	2,930	6,930	.818	.94
August	6,800	2,240	3,310	.391	.45
September	13,300	1,770	3,450	.407	.45
The year	87,800	1,770	10,200	1.20	16.40
1900–1901.					
October	70,900	2,240	6,790	.802	.92
November	144,000	4,300	18,700	2.21	2.47
December	57,500	7,300	14,900	1.76	2.03
January	70,000	6,300	15,200	1.79	2.06
February	20,000	4,300	11,300	1.33	1.38
March	38,500	6,300	16,900	2.00	2.31
April	195,000	14,800	46,500	5.49	6.12
May	233,000	10,800	36,600	4.32	4.98
June	118,000	12,800	34,500	4.07	4.54
July	25,900	6,300	14,500	1.71	1.97
August	50,500	5,800	20,600	2.43	2.80
September	21,900	6,300	11,300	1.33	1.48
The year	233,000	2,240	20,700	2.44	33.06
1901–2.					
October	18,300	5,300	7,480	.883	1.02
November	9,300	4,080	4,880	.576	.64
December	211,000	4,080	35,300	4.17	4.81
January	73,500	7,300	21,700	2.56	2.95
February	99,400	7,300	25,400	3.00	3.12
March	194,000	12,800	40,500	4.78	5.51
April	46,200	9,300	21,000	2.48	2.77
May	27,400	6,300	9,320	1.10	1.27
June	17,300	4,080	7,990	.943	1.05
July	18,900	2,770	6,140	.725	.84
August	5,300	2,030	3,100	.366	.42
September	3,850	1,540	2,230	.263	.29
The year	211,000	1,540	15,400	1.82	24.69
1902–3.					
October	6,300	2,240	3,250	.384	.44
November	17,300	2,140	4,750	.561	.63
December	30,300	5,300	15,600	1.84	2.12
January	78,900	8,300	18,800	2.22	2.56
February	96,700	5,300	31,500	3.72	3.87
March	165,000	12,800	35,600	4.20	4.84
April	47,100	17,800	28,000	3.31	3.69
May	18,900	5,300	8,840	1.04	1.20
June	20,600	4,300	8,860	1.05	1.17
July	16,300	2,770	6,690	.790	.91
August	10,800	2,240	3,960	.468	.54
September	10,800	2,140	3,130	.370	.41
The year	165,000	2,140	14,000	1.65	22.38
1903–4.					
October	5,800	2,030	2,470	.292	.34
November	4,300	2,030	2,540	.300	.34
December	4,300	1,770	2,560	.302	.35
January	33,400	2,930	7,310	.863	.99
February	30,300	2,770	10,500	1.24	1.34
March	44,500	9,800	17,900	2.11	2.43
April	34,300	5,800	11,700	1.38	1.54
May	41,000	7,300	14,200	1.68	1.94
June	22,500	4,300	9,140	1.08	1.20
July	19,400	2,490	5,800	.685	.79
August	6,800	2,240	3,820	.451	.52
September	3,450	1,690	2,190	.259	.29
The year	44,500	1,690	7,500	.885	12.07

Monthly discharge of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1904–5.					
October	1,850	1,400	1,610	0.190	0.22
November	2,770	1,540	2,120	.250	.28
December	9,300	1,940	3,690	.436	.50
January	38,500	2,360	8,330	.983	1.13
February	32,600	2,770	9,580	1.13	1.18
March	104,000	11,300	27,700	3.27	3.77
April	24,500	7,300	11,800	1.39	1.55
May	112,000	6,300	23,400	2.76	3.18
June	12,300	3,450	6,260	.739	.82
July	106,000	4,300	17,300	2.04	2.35
August	15,300	5,300	9,450	1.12	1.29
September	16,300	2,490	5,460	.645	.72
The year	112,000	1,400	10,600	1.25	16.99
1905–6.					
October	6,300	2,630	3,580	.423	.49
November	5,300	2,930	3,600	.425	.47
December	35,100	4,300	12,900	1.52	1.75
January	143,000	7,300	27,800	3.28	3.78
February	20,000	7,300	10,200	1.20	1.25
March	43,600	8,800	21,100	2.49	2.87
April	46,200	10,300	20,500	2.42	2.70
May	18,300	4,300	9,350	1.10	1.27
June	15,300	4,800	8,280	.978	1.09
July	12,300	3,450	6,550	.773	.89
August	39,300	7,300	15,100	1.78	2.05
September	25,200	6,300	12,400	1.46	1.63
The year	143,000	2,630	12,700	1.50	20.24
1906–7.					
October	80,700	8,300	21,400	2.53	2.92
November	118,000	7,300	18,500	2.18	2.43
December	52,300	8,300	17,100	2.02	2.33
January	91,300	8,800	28,600	3.38	3.90
February	25,200	8,800	14,000	1.65	1.72
March	64,600	8,300	25,000	2.95	3.40
April	52,200	11,300	25,400	3.00	3.35
May	23,100	5,300	11,400	1.35	1.56
June	150,000	5,300	30,400	3.59	4.00
July	16,300	5,300	9,530	1.13	1.30
August	26,600	4,080	7,590	.896	1.03
September	39,300	3,450	7,730	.913	1.02
The year	150,000	3,450	18,100	2.14	28.96
1907–8.					
October	23,100	3,090	6,590	.778	.90
November	36,800	6,300	16,100	1.90	2.12
December	54,000	5,300	17,800	2.10	2.42
January	111,000	11,800	23,500	2.77	3.19
February	138,000	6,300	26,700	3.15	3.40
March	72,600	12,800	32,300	3.81	4.39
April	110,000	12,300	31,600	3.73	4.16
May	50,500	10,300	20,300	2.40	2.77
June	35,100	6,300	11,500	1.36	1.52
July	20,000	4,300	9,110	1.08	1.24
August	17,800	2,770	6,440	.760	.88
September	6,800	2,360	3,470	.410	.46
The year	138,000	2,360	17,100	2.02	27.45
1908–9.					
October	26,600	2,360	6,140	.725	.84
November	19,400	4,800	7,070	.835	.93
December	21,200	4,800	11,400	1.35	1.56
January	43,600	11,300	20,900	2.47	2.85
February	36,800	6,300	20,300	2.40	2.50
March	40,200	11,300	23,600	2.79	3.22
April	57,500	9,300	18,900	2.23	2.49
May	50,500	8,300	20,700	2.44	2.81
June	23,800	8,300	12,600	1.49	1.66
July	40,200	4,080	9,750	1.15	1.33
August	11,300	2,530	5,070	.599	.69
September	9,360	2,350	4,330	.511	.57
The year	57,500	2,350	13,400	1.58	21.45

Monthly discharge of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1909–10.					
October	13,800	2,350	4,610	0.544	0.63
November	6,800	2,990	3,750	.443	.49
December	21,100	2,530	5,030	.594	.68
January	41,500	2,530	16,500	1.95	2.25
February	55,400	5,300	15,400	1.82	1.90
March	35,600	4,800	12,200	1.44	1.66
April	22,400	4,350	11,300	1.33	1.48
May	19,900	6,300	10,200	1.20	1.38
June	95,400	5,800	24,400	2.88	3.21
July	23,000	3,950	10,600	1.25	1.44
August	3,950	2,640	3,060	.361	.42
September	9,800	2,440	4,750	.561	.63
The year	95,400	2,350	10,100	1.19	16.17
1910–11.					
October	10,300	2,440	3,690	.436	.50
November	8,300	2,440	3,020	.357	.40
December	28,600	2,440	6,570	.776	.89
January	91,000	7,800	26,600	3.14	3.62
February	51,000	8,300	17,100	2.02	2.10
March	57,200	7,300	19,500	2.30	2.65
April	64,200	11,300	28,000	3.31	3.69
May	13,300	3,590	7,100	.838	.97
June	5,800	2,990	4,030	.476	.53
July	7,800	1,970	3,210	.379	.44
August	3,950	1,770	2,410	.285	.33
September	8,800	2,440	4,260	.503	.56
The year	91,000	1,770	10,400	1.23	16.68
1911–12.					
October	70,500	2,440	12,100	1.43	1.65
November	25,000	3,590	10,200	1.20	1.34
December	27,800	----------	10,800	1.28	1.48
January	33,100	----------	11,400	1.35	1.56
February	56,300	----------	16,500	1.95	2.10
March	101,000	10,800	35,200	4.16	4.80
April	69,600	10,800	20,500	2.42	2.70
May	74,000	6,800	22,100	2.61	3.01
June	19,400	3,270	6,610	.780	.87
July	18,300	7,300	10,700	1.26	1.45
August	12,300	2,990	5,110	.603	.70
September	18,800	2,190	4,850	.573	.64
The year	101,000	----------	13,900	1.64	22.30
1912–13.					
October	5,800	2,440	3,340	.394	.45
November	26,400	2,740	6,170	.728	.81
December	22,400	2,990	5,860	.692	.80
January	61,600	9,800	20,700	2.44	2.81
February	30,800	6,800	13,000	1.53	1.59
March	180,000	7,800	29,700	3.51	4.05
April	58,900	8,300	18,900	2.23	2.49
May	62,500	5,800	16,300	1.92	2.21
June	28,600	5,300	11,700	1.38	1.54
July	15,800	3,130	7,110	.839	.97
August	8,800	2,350	3,810	.450	.52
September	16,800	2,190	4,110	.485	.54
The year	180,000	2,190	11,700	1.38	18.78
1913–14.					
October	27,100	2,860	6,800	.803	.93
November	55,400	3,590	13,100	1.55	1.73
December	23,600	4,580	10,700	1.26	1.45
January	39,000	8,800	17,100	2.02	2.33
February	65,100	8,800	23,200	2.74	2.85
March	46,700	11,800	23,000	2.72	3.14
April	45,800	12,800	24,500	2.89	3.22
May	17,300	2,860	7,960	.940	1.08
June	2,860	2,120	2,480	.293	.33
July	4,800	1,840	2,610	.308	.36
August	6,800	1,510	2,290	.270	.31
September	4,800	1,640	2,070	.244	.27
The year	65,100	1,510	11,200	1.32	18.00

Monthly discharge of Kanawha River at Lock No. 2, Montgomery, W. Va., for the years ending Sept. 30, 1888–1918—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1914–15.					
October	16,300	1,330	3,050	0.360	0.42
November	6,800	1,770	2,610	.308	.34
December	68,700	2,530	16,300	1.92	2.21
January	127,000	10,300	31,400	3.71	4.28
February	131,000	9,800	27,900	3.29	3.43
March	16,300	8,800	11,800	1.39	1.60
April	17,800	5,800	8,170	.965	1.08
May	14,300	3,590	7,430	.877	1.01
June	18,800	2,270	7,480	.883	.99
July	6,800	2,120	3,510	.414	.48
August	9,800	2,040	3,640	.430	.50
September	28,600	3,270	6,620	.782	.87
The year	131,000	1,330	10,700	1.26	17.21
1915–16.					
October	58,000	3,770	10,500	1.24	1.43
November	15,800	2,860	6,310	.745	.83
December	74,900	3,590	16,500	1.95	2.25
January	54,500	9,800	22,700	2.68	3.09
February	54,500	11,300	23,700	2.80	3.02
March	58,000	11,800	22,300	2.63	3.03
April	33,900	8,800	15,000	1.77	1.98
May	11,800	3,590	7,580	.895	1.03
June	23,000	5,300	9,290	1.10	1.23
July	174,000	2,530	21,000	2.48	2.86
August	42,400	5,800	15,800	1.87	2.16
September	14,800	3,130	5,460	.645	.72
The year	174,000	2,530	14,700	1.74	23.63
1916–17.					
October	19,400	3,130	6,320	.746	.86
November	5,800	2,860	3,890	.459	.51
December	56,300	2,990	9,930	1.17	1.35
January	58,000	8,800	19,600	2.31	2.66
February	61,600	5,800	20,100	2.37	2.47
March	134,000	14,800	46,800	5.53	6.38
April	27,800	6,300	12,000	1.42	1.58
May	41,500	4,150	12,500	1.48	1.71
June	18,800	2,440	6,390	.754	.84
July	11,800	1,900	4,420	.522	.60
August	2,990	1,510	2,170	.256	.30
September	3,950	1,390	2,100	.248	.28
The year	134,000	1,390	12,200	1.44	19.54
1917–18.					
October	8,300	1,270	3,050	.360	.42
November	12,800	2,040	3,550	.419	.47
December	8,300	2,120	3,720	.439	.51
January	85,600	2,740	12,100	1.43	1.65
February	59,800	11,800	29,800	3.52	3.66
March	120,000	11,300	28,700	3.39	3.91
April	51,000	7,800	23,700	2.80	3.12
May	21,700	9,300	13,500	1.59	1.83
June	64,200	2,530	9,720	1.15	1.28
July	20,500	3,270	6,430	.759	.88
August	11,300	2,640	4,810	.568	.65
September	12,800	2,860	5,260	.621	.69
The year	120,000	1,270	11,900	1.40	19.07

NORTH FORK OF NEW RIVER NEAR WEAVERSFORD, N. C.

LOCATION.—At Dixon's mill at Weaversford, Ashe County, 3 miles above confluence of North and South forks.

DRAINAGE AREA.—273 square miles.

RECORDS AVAILABLE.—August 1, 1900, to December 31, 1900; June 27, 1901, to December 31, 1901.

GAGE.—Staff gage attached to forebay of Dixon's mill. See "Accuracy." Read by C. L. Nelson and J. F. Blevins.

DISCHARGE MEASUREMENTS.—Made by wading at a private ford a short distance below gage.

CHANNEL AND CONTROL.—Bed of stream smooth gravel, not shifting; primary control not located.

ICE.—Stage-discharge relation probably not much affected by ice.

EXTREMES OF STAGE.—See description of North Fork of New River near Crumpler.

ACCURACY.—Stage-discharge relation probably changes during extreme floods. No record of ice. Data inadequate for determining rating curve. Gage read in morning to tenths. Gage was destroyed in April, 1900, and replaced June 27, 1901; datum of second gage 0.4 foot below datum of original gage. Records probably referred to one gage. Records fair.

Discharge measurements of North Fork of New River near Weaversford, N. C., during the years 1900–1901.

Date.	Made by—	Gage height.	Discharge.
1900.		*Feet.*	*Sec.-ft.*
July 28	N. C. Curtis and Cleveland Abbe, jr	0.60	536
Oct. 27	do	.90	708
1901.			
June 27	N. C. Curtis	1.40	1,380

Daily gage height, in feet, of North Fork of New River near Weaversford, N. C., for the years 1900–1901.

Day.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	------	0.1	0.1	0.7	0.7	0.8	16	------	0.2	0.65	0.9	0.8	0.7
2	------	.1	.9	.8	.6	.9	17	------	.1	.55	.9	.9	.7
3	------	.1	.9	.75	2.1	.9	18	------	.1	.65	.9	.9	.7
4	------	.1	.9	.45	1.0	1.8	19	------	.1	.75	1.0	.9	.7
5	------	------	.9	.3	.85	1.2	20	------	.1	.8	1.0	.9	.8
6	------	------	.9	.7	.8	.5	21	------	.2	.8	1.0	.9	.8
7	------	------	.9	------	.7	.5	22	------	.4	.9	1.1	1.0	.8
8	------	------	.9	------	.7	.7	23	------	.6	1.0	7.3	1.0	.9
9	------	------	1.0	------	.6	.7	24	------	.4	.1	5.5	1.0	.9
10	------	------	1.0	------	.6	.7	25	------	.1	.3	1.7	1.0	.9
11	------	------	1.0	------	.6	.7	26	------	.1	.4	1.0	3.0	.9
12	------	.1	1.0	------	.6	.8	27	1.0	.1	.6	.9	1.0	1.0
13	------	.1	.65	------	.7	.8	28	.5	.1	.8	1.0	2.0	1.0
14	------	.3	.9	.9	.7	.9	29	.3	4.1	.9	.9	.5	1.0
15	------	.2	.75	.9	.8	.9	30	.2	.1	.65	.9	.6	------
							31	.2	.1	------	.8	------	------

Daily gage height, in feet, of North Fork of New River near Weaversford, N. C., for the years 1900–1901—Continued.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1901.												
1							1.7	0.4	1.8	0.6	0.2	0.2
2							.9	.2	1.7	.5	.2	.2
3							.6	.1	1.3	.4	.2	.6
4							.8	.1	1.0	.4	.2	.4
5							.7	2.35	.8	.6	.2	.3
6							.6	5.75	.7	2.3	.2	.3
7							2.0	2.15	.6	1.0	.2	.3
8							.7	9.0	.5	.8	.2	.2
9							.5	7.0	.5	.6	.2	.3
10							.4	7.5	.7	.4	.2	.7
11							.4	5.9	.7	.4	.2	.4
12							.3	3.75	.6	.4	.2	.3
13							.4	3.0	.6	.5	.3	.3
14							.3	3.7	.6	.4	.3	2.0
15							.3	3.0	.6	.4	.2	7.6
16							.4	3.15	.5	.6	.2	1.5
17							1.2	3.4	.5	1.0	.2	1.0
18							1.5	3.6	.8	.7	.3	.8
19							.7	2.0	.5	.6	.3	.6
20							.6	2.6	.4	.3	.3	.6
21							.3	3.0	.6	.2	.3	.4
22							.2	2.6	.4	.2	.2	.4
23							.2	1.25	.6	.2	.2	.4
24							.2	3.0	.4	.2	.4	.3
25							.2	1.0	.4	.2	.4	.3
26							.7	1.5	.3	.2	.3	.6
27						1.0	.7	1.6	.3	.2	.3	1.5
28						1.0	.1	1.8	.7	.2	.3	1.6
29						.9	.1	1.8	.4	.2	.3	10.5
30						1.0	.1	1.2	1.2	.2	.3	4.4
31							.2	1.9		.2		3.4

NORTH FORK OF NEW RIVER NEAR CRUMPLER, N. C.

LOCATION.—Half a mile above confluence of North and South forks of New River and 2½ miles north of Crumpler, Ashe County.

DRAINAGE AREA.—279 square miles.

RECORDS AVAILABLE.—August 13, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage attached to posts on right bank until July 24, 1911, when a staff gage was installed at the same place and at the same datum as the chain gage; read by J. J. Garvey.

DISCHARGE MEASUREMENTS.—Made from a boat at a section one-eighth mile below gage or by wading. The boat cable section was formerly at a ford one-fourth mile above gage, but was moved July 23, 1911, to a point one-eighth mile below gage.

CHANNEL AND CONTROL.—Practically permanent.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage recorded, 22.4 feet about 11 p. m. July 15, 1916 (discharge, roughly, 24,000 second-feet, allowing for about 3.5 feet of backwater from the South Fork). Observer stated flood of September 12, 1878, was about 3 feet lower than the flood of July, 1916, at his reisdence which is near the gage. Farther up the river, however, the flood of 1878 was about half a foot higher than the flood of July, 1916. The floods of April 20 and May 20, 1901, reached a stage of about 16.4 feet by the present gage. Minimum stage recorded, 1.10 feet afternoon reading July 2, 1914 (discharge, 108 second-feet).

ICE.—Stage-discharge relation affected by ice for short periods during severe winters.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined between 150 to 2,000 second-feet; beyond these limits the curve is an extension. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Daily discharge for July 15 and 16, 1916, derived from mean daily gage-height determined from a gage-height hydrograph based on the crest stage of the flood reduced 3.5 feet for backwater and the gage readings of July 14 and 17. Records excellent except for the period of the flood of July, 1916, which may be considerably in error.

Discharge measurements of North Fork of New River near Crumpler, N. C., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1913.		*Feet.*	*Sec.-ft.*
Aug. 10	Wm. M. O'Neill	2.24	415	Dec. 17	Walters and Peterson	1.65	212
1909.				1914.			
June 18	H. J. Jackson	2.88	786	Oct. 11	Mathers and Morgan	1.18	96.9
1910.				1916.			
Nov. 1	C. T. Bailey	1.64	216	July 24	B. E. Jones	3.61	1,420
				26	do	3.03	910
1911.							
July 23	Horton and Bailey	1.42	159				

Daily discharge, in second-feet, of North Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916.

Day.	Aug.	Sept.	Day.	Aug.	Sept.	Day.	Aug.	Sept.
1908.			1908.			1908.		
1		360	11		286	21	286	226
2		341	12	304	270	22	360	226
3		322	13	286	270	23	360	226
4		322	14	270	254	24	360	226
5		322	15	270	254	25	1,290	213
6		422	16	322	254	26	1,470	226
7		675	17	360	254	27	740	213
8		400	18	341	254	28	610	322
9		304	19	304	254	29	470	341
10		286	20	304	240	30	422	254
						31	380	

Daily discharge, in second-feet, of North Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	226	1,040	810	1,470	422	740	810	1,660	580	580	422	213
2	226	880	810	1,040	580	675	708	1,200	550	675	642	200
3	200	708	610	880	580	708	708	845	1,200	470	495	188
4	200	642	550	810	550	775	675	708	3,930	580	400	213
5	200	522	580	2,590	550	642	580	610	2,050	400	422	304
6	200	495	522	2,050	610	810	522	580	1,380	380	360	226
7	200	470	3,180	1,380	495	1,200	522	522	1,040	1,120	341	213
8	200	445	2,150	1,040	445	1,120	550	495	810	880	286	226
9	270	400	1,120	880	495	955	610	445	1,040	810	270	226
10	955	380	880	775	2,590	1,200	522	1,290	810	642	286	360
11	360	422	810	708	1,380	1,040	495	775	642	550	322	270
12	304	522	1,200	675	1,040	955	470	610	775	495	286	226
13	254	400	955	610	845	845	1,040	522	810	495	254	213
14	254	445	810	550	708	880	1,290	495	675	522	270	188
15	254	445	675	550	675	1,660	880	470	642	445	775	188
16	254	400	642	880	1,290	1,560	740	445	550	400	580	226
17	240	422	610	1,380	880	675	675	422	810	400	522	422
18	226	470	580	1,120	810	610	610	380	810	360	380	286
19	226	580	675	955	880	580	550	400	610	322	341	213
20	213	550	610	845	955	580	522	740	580	304	304	213
21	213	522	580	740	775	675	495	3,540	522	304	286	226
22	226	495	642	675	1,200	675	495	2,050	470	286	254	304
23	1,660	445	550	610	1,120	550	495	1,290	550	341	254	304
24	4,320	445	550	580	1,200	550	522	955	550	360	240	341
25	1,380	422	550	550	1,380	1,120	445	845	522	286	226	270
26	810	400	1,120	610	1,200	955	445	810	445	270	226	240
27	610	380	775	610	955	845	422	880	470	360	213	213
28	740	360	775	522	880	2,370	445	775	675	495	213	200
29	2,150	360	955	522	-------	1,850	400	740	550	322	213	200
30	1,950	360	1,290	495	-------	1,290	610	580	675	286	213	200
31	1,560	-------	1,950	286	-------	955	-------	775	-------	286	200	-------
1909–10.												
1	176	226	188			304	1,040	213	304	240	286	254	845
2	176	226	188	}	450	322	880	213	286	240	270	304	495
3	176	213	188			422	740	226	270	226	322	254	740
4	176	200	188		550	610	610	226	286	226	360	470	610
5	188	200	188		380	360	550	213	286	360	380	400	675
6	200	200	176		360	400	550	200	254	550	845	304	445
7	200	200	226		1,560	304	495	200	254	322	708	286	360
8	188	213	422		675	445	422	188	675	286	1,560	304	322
9	176	213	213		580	360	380	188	675	270	880	304	341
10	176	286	270		422	400	380	176	522	470	642	254	360
11	1,380	240	341		380	304	445	176	445	775	550	240	304
12	675	213	270		400	188	380	188	400	1,380	708	213	380
13	341	213	580		341	955	341	400	470	1,750	580	270	254
14	304	200	610		322	1,120	322	270	360	1,470	470	254	254
15	675	200	360		304	740	304	226	341	1,380	380	226	240
16	470	200	270		226	580	270	304	322	1,200	341	226	226
17	360	188	226		322	1,040	286	286	322	955	610	213	213
18	322	200	304		322	2,150	270	380	360	740	445	188	200
19	286	188	213		580	955	254	304	341	580	360	240	200
20	286	188	213		380	740	286	286	304	495	322	270	213
21	254	188	166		880	642	270	304	322	1,040	304	341	226
22	254	176	322		708	675	254	304	445	880	304	270	213
23	254	213	240		550	580	254	286	400	708	286	254	188
24	400	270			495	495	254	400	360	880	270	226	200
25	286	213			400	470	240	380	580	610	254	200	200
26	254	200			360	445	226	470	470	445	240	200	240
27	254	188	}	350	380	445	226	1,120	400	380	254	226	226
28	240	188			380	495	226	400	341	360	422	200	254
29	226	188			360	-------	226	360	304	341	360	176	226
30	226	188			304	-------	226	322	286	341	270	213	213
31	226	-------			422	-------	226	-------	270	-------	270	955	-------

Daily discharge, in second-feet, of North Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	240	213		610	1,040	304	610	810	322	200	166	360
2	213	226		1,950	708	322	550	642	270	188	166	226
3	188	226	350	2,590	550	304	522	550	240	188	226	188
4	188	213		2,370	610	304	675	522	226	254	380	176
5	200	200	380	1,040	522	270	3,180	495	708	675	226	166
6	213	200	1,850	775	470	880	2,820	445	642	240	254	166
7	322	200	740	610	470	1,200	1,660	400	341	213	226	213
8	422	188	445	522	708	2,700	1,560	380	341	240	226	166
9	470	188	400	445	1,560	2,370	1,470	380	304	240	176	156
10	286	188	360	304	1,750	1,750	1,290	380	270	286	156	156
11	240	188	380	341	1,120	1,290	1,040	360	270	360	147	240
12	226	176	254	360	880	955	1,040	341	254	286	138	304
13	213	200	226	360	708	775	1,040	610	240	270	240	200
14	213	188	240	341	580	775	1,120	1,120	240	304	176	176
15	200	254	254	341	522	610	1,380	580	226	213	156	166
16	200	200	254	304	470	522	1,380	470	213	200	176	176
17	188	176	213	286	422	495	1,040	422	213	188	166	176
18	188	188	286	304	400	470	845	380	213	188	156	188
19	200	176	304	304	400	495	1,660	400	226	176	166	166
20	341	176	286	286	445	610	1,200	360	322	176	156	166
21	254	176	138	341	400	445	880	341	240	188	147	322
22	226	176	213	400	341	400	845	322	213	188	138	322
23	226	176	360	880	400	470	708	322	200	166	130	226
24	188	176	642	642	360	400	610	360	240	156	138	176
25	188	254	380	522	322	400	550	304	226	176	138	176
26	188	254	380	522	322	400	522	286	213	166	147	176
27	176	200	360	522	322	1,040	470	270	445	156	188	176
28	254	240	341	610	304	675	445	270	445	147	166	166
29	240	400	422	642	-------	642	470	254	304	147	213	166
30	226	286	580	1,750	-------	740	522	240	226	147	304	166
31	226	-------	522	1,470	-------	642	-------	270	-------	147	955	-----
1911–12.												
1	156	200	226	580	810	550	880	642	286	270	360	213
2	166	188	270	495	610	470	2,050	550	550	341	254	188
3	200	176	240	470	522	495	1,850	522	550	522	226	188
4	286	176	226	422	360	445	1,200	470	322	580	360	188
5	213	188	200	341	304	522	955	495	304	1,040	304	188
6	166	254	213	270	360	495	775	495	286	1,290	240	176
7	156	610	200		341	580	708	580	341	675	226	176
8	166	322	200	300	380	810	675	522	286	470	226	470
9	176	400	200		322	495	550	495	254	422	240	213
10	176	380	200		322	1,040	495	422	226	380	341	176
11	304	322	213		270	775	470	400	226	360	254	166
12	226	322	213		286	740	445	550	226	422	240	166
13	188	422	200		286	1,120	422	445	213	322	226	188
14	176	322	200		286	1,040	400	380	240	322	226	188
15	240	304	240		270	2,940	400	445	322	341	213	188
16	213	286	380		270	2,820	400	1,040	400	270	200	176
17	1,200	254	360		304	1,560	422	775	254	270	200	166
18	1,470	286	270	400	341	1,120	400	610	254	270	213	200
19	580	341	240		445	880	360	522	254	380	226	445
20	380	304	226		495	775	341	445	240	360	1,120	286
21	322	304	322		955	708	380	400	213	380	642	176
22	322	270	522		1,380	642	470	380	200	286	445	176
23	400	270	1,120		740	580	580	360	240	286	360	1,380
24	270	304	740		708	1,040	422	322	322	254	286	1,040
25	254	286	810		775	1,040	400	322	775	422	254	380
26	240	270	708	400	845	955	360	322	322	322	254	304
27	226	286	880	445	1,470	845	522	286	270	254	240	341
28	226	286	675	341	1,040	740	610	286	286	240	226	286
29	213	286	550	675	708	2,370	580	470	286	226	200	240
30	213	240	495	1,470	-------	1,560	845	400	341	400	213	240
31	200	-------	642	1,040	-------	1,120	-------	322	-------	270	270	-------

Daily discharge, in second-feet, of North Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912–13.												
1	213	166	213	422	522	810	675	322	550	254	156	188
2	200	188	200	286	360	580	580	304	495	270	341	188
3	200	166	226	322	422	445	522	286	445	845	200	188
4	200	156	200	341	550	400	470	286	445	610	166	270
5	188	166	254	422	550	400	445	286	400	422	156	775
6	188	166	254	522	445	341	400	270	360	286	422	322
7	176	380	240	522	322	270	380	286	341	240	188	254
8	176	445	213	445	341	341	380	341	470	213	341	213
9	176	270	200	445	360	286	445	304	400	213	213	213
10	166	226	188	360	380	360	380	270	360	200	226	213
11	166	213	188	341	341	470	550	254	304	213	188	188
12	166	200	176	360	400	400	1,040	254	360	254	166	176
13	166	200	147	495	254	400	2,820	240	360	226	304	176
14	213	254	200	400	270	3,670	1,290	254	286	200	341	166
15	270	213	188	360	254	3,540	1,200	254	270	200	270	176
16	200	200	213	322	254	2,370	1,040	400	254	188	188	240
17	176	188	166	304	254	1,290	880	360	254	176	176	304
18	176	176	200	304	254	880	740	360	240	176	176	254
19	200	176	188	322	240	708	610	270	470	166	286	422
20	240	176	156	270	286	610	580	286	270	200	955	270
21	188	176	166	254	495	675	495	642	254	176	304	1,200
22	188	176	166	304	400	708	445	550	226	166	254	642
23	200	176	176	270	360	495	422	1,750	270	156	550	400
24	213	176	176	286	322	470	400	2,700	286	156	341	304
25	188	176	213	470	304	610	380	1,200	226	156	254	270
26	176	166	254	470	286	580	360	775	675	176	213	254
27	176	176	322	810	550	7,110	445	1,750	270	176	200	226
28	176	200	322	1,290	1,200	3,420	360	1,950	240	240	188	226
29	176	304	322	810	-------	1,560	360	1,200	226	304	166	226
30	166	226	380	580	-------	1,120	380	880	240	213	580	322
31	166	-------	775	495	-------	880	-------	675	-------	176	226	-------
1913–14.												
1	240	226	322	304	880	495	1,560	360	213	122	122	156
2	213	213	445	286	610	495	1,470	341	200	122	122	147
3	200	213	304	322	495	495	1,120	341	200	286	115	138
4	200	200	270	286	445	522	880	341	188	176	176	138
5	188	200	254	286	422	445	708	445	200	200	147	130
6	188	200	240	286	955	422	610	955	422	166	130	122
7	176	200	270	270	1,380	422	550	675	286	156	122	122
8	176	200	322	270	955	400	550	550	254	156	122	122
9	200	422	226	445	675	380	495	550	213	147	122	156
10	226	286	240	1,040	580	380	400	495	254	270	138	138
11	200	254	341	610	522	550	400	422	213	176	147	138
12	188	240	254	400	445	1,950	380	400	176	166	138	254
13	188	270	270	286	445	1,120	360	360	200	138	130	166
14	176	270	270	300	360	810	422	380	188	380	156	138
15	176	270	240	300	300	708	1,660	341	200	470	156	130
16	176	254	226	300	300	708	1,290	322	176	322	147	122
17	176	495	226	380	254	810	1,200	322	166	226	122	130
18	176	380	226	270	610	1,040	955	304	156	322	122	240
19	188	322	213	322	880	1,560	740	286	188	213	115	176
20	341	286	200	304	2,150	740	1,040	286	176	176	108	188
21	270	270	200	422	1,560	580	810	270	176	156	130	156
22	226	254	200	341	955	580	675	254	176	147	147	138
23	240	240	200	304	810	495	610	254	156	147	130	130
24	400	240	226	360	955	495	550	254	156	138	115	122
25	708	213	226	775	740	470	522	240	156	130	115	138
26	380	213	495	495	675	495	550	226	156	122	176	138
27	322	213	254	422	580	550	495	226	147	156	341	130
28	286	213	322	380	522	610	422	226	138	156	1,290	122
29	254	213	270	360	-------	675	400	226	130	176	341	122
30	240	213	322	341	-------	1,660	400	254	122	156	213	122
31	226	-------	304	1,120	-------	1,750	-------	213	-------	130	176	-------

Daily discharge, in second-feet, of North Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	122	156	2,050	740	1,040	445	341	304	610	226	286	495
2	122	156	2,590	610	2,050	400	322	286	642	200	286	360
3	122	156	1,660	522	1,660	400	304	322	495	188	200	341
4	138	156	2,700	470	1,120	380	304	400	495	270	341	400
5	176	156	3,930	422	955	422	322	341	380	341	200	4,840
6	147	147	1,950	550	955	445	286	286	380	304	166	2,370
7	138	147	1,200	2,480	810	470	322	304	322	213	156	1,470
8	130	147	955	1,120	675	400	400	445	304	200	156	675
9	138	176	708	810	610	322	360	322	286	226	156	522
10	122	176	610	642	550	400	380	304	254	213	166	495
11	122	156	522	580	522	380	400	286	240	200	166	360
12	122	147	470	1,290	470	380	642	322	304	213	322	470
13	122	147	580	775	445	360	495	445	254	445	495	445
14	156	156	470	642	445	360	422	341	286	270	213	740
15	380	708	322	740	495	341	380	322	522	226	188	422
16	1,660	550	254	708	610	360	360	322	495	200	176	341
17	400	380	341	845	470	380	341	286	304	200	322	341
18	341	286	360	1,290	470	341	322	270	254	286	400	360
19	304	270	422	1,560	422	360	304	254	226	213	522	322
20	254	254	880	1,120	400	341	286	286	226	240	341	286
21	226	166	845	880	380	341	286	254	240	400	522	304
22	200	304	955	675	400	322	286	226	240	240	322	322
23	188	240	642	675	380	304	286	270	200	270	240	254
24	226	188	550	955	775	322	341	880	188	254	213	254
25	226	200	2,370	1,200	708	304	322	400	188	200	200	240
26	200	226	1,950	1,040	610	360	270	322	188	188	176	226
27	188	213	1,040	810	550	360	254	360	176	176	254	213
28	176	200	810	708	495	341	470	304	176	156	1,120	270
29	176	200	810	580	-------	322	470	360	176	156	708	522
30	166	1,380	1,200	550	-------	322	380	360	188	156	580	740
31	156	-------	880	522	-------	341	-------	610	-------	147	470	-------
1915–16.												
1	3,670	240	304	955	610	495	550	304	226	240	845	380
2	1,560	240	322	880	1,470	495	522	286	226	270	1,040	360
3	880	226	286	810	1,560	1,040	550	286	213	226	740	422
4	675	213	286	642	1,040	775	580	286	240	213	675	380
5	880	226	270	610	810	775	470	322	213	188	880	360
6	708	226	254	675	708	810	642	286	213	176	845	360
7	642	226	240	1,750	675	1,120	495	270	341	166	2,480	341
8	550	226	304	2,590	522	1,290	580	254	286	176	2,480	380
9	495	226	254	1,470	495	955	610	254	270	422	1,200	380
10	445	226	226	1,040	610	775	580	254	240	3,060	955	341
11	400	213	270	955	470	675	955	240	226	1,040	810	304
12	360	200	226	775	470	580	1,200	240	270	580	1,040	286
13	360	226	322	810	422	522	1,040	226	341	422	845	304
14	360	254	226	675	380	522	880	286	240	360	775	360
15	341	341	380	610	360	495	708	240	642	8,010	1,380	740
16	322	322	610	580	400	470	610	240	955	17,700	1,660	400
17	304	254	1,040	580	380	422	550	240	880	8,460	1,200	304
18	286	254	4,980	495	360	422	470	240	495	3,420	955	286
19	341	1,660	2,260	500	360	550	445	226	380	1,950	810	304
20	470	775	1,200		400	422	422	226	341	3,180	708	286
21	422	550	810	522	380	470	400	213	322	2,940	550	322
22	341	445	610	642	341	495	400	226	270	2,820	1,260	270
23	322	400	522	708	322	495	360	740	240	1,950	880	270
24	304	360	470	580	522	445	360	522	286	1,380	610	270
25	286	341	445	522	1,120	422	400	341	400	1,120	550	254
26	286	322	642	580	708	400	380	286	286	880	470	254
27	270	445	470	610	642	1,200	380	254	240	1,040	445	240
28	270	360	880	580	550	880	360	270	226	845	470	240
29	254	341	3,300	610	550	810	341	270	254	1,040	445	400
30	254	322	1,950	522	-------	675	322	304	213	810	422	341
31	254	-------	1,200	495	-------	610	-------	286	-------	642	400	-------

NOTE.—Discharge estimated, because of ice, from observer's notes and climate data for the following periods: Dec. 24–31, 1909; Jan. 1–3, Dec. 1–4, 1910; Jan. 7–25, 1912; Jan. 14–16, Feb. 15–16, 1914; Jan. 19–20, 1916. Braced figures show mean discharge for period included.

Monthly discharge of North Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
August 12–31	1,470	270	475	1.70	1.26
September	675	213	294	1.05	1.17
1908–9.					
October	4,320	200	680	2.44	2.81
November	1,040	360	494	1.77	1.98
December	3,180	522	920	3.30	3.80
January	2,590	286	883	3.16	3.64
February	2,590	422	910	3.26	3.40
March	2,370	550	969	3.47	4.00
April	1,290	400	608	2.18	2.43
May	3,540	380	866	3.10	3.57
June	3,930	445	857	3.07	3.42
July	1,120	270	465	1.67	1.92
August	775	200	339	1.22	1.41
September	422	188	244	.875	.98
The year	4,320	188	686	2.46	33.36
1909–10.					
October	1,380	176	316	1.13	1.30
November	286	176	207	.742	.83
December	610	166	296	1.06	1.22
January	1,560	226	474	1.70	1.96
February	2,150	188	605	2.17	2.26
March	1,040	226	382	1.37	1.58
April	1,120	176	307	1.10	1.23
May	675	254	376	1.35	1.56
June	1,750	226	663	2.38	2.66
July	1,560	240	460	1.65	1.90
August	955	176	282	1.01	1.16
September	845	188	329	1.18	1.32
The year	2,150	166	390	1.40	18.98
1910—11.					
October	470	176	237	.849	.98
November	400	176	210	.753	.84
December	1,850	138	407	1.46	1.68
January	2,590	286	734	2.63	3.03
February	1,750	304	611	2.19	2.28
March	2,700	270	763	2.73	3.15
April	3,180	445	1,070	3.84	4.28
May	1,120	240	429	1.54	1.78
June	708	200	294	1.05	1.17
July	675	147	222	.796	.92
August	955	130	211	.756	.87
September	360	156	200	.717	.80
The year	3,180	130	448	1.61	21.78
1911–12.					
October	1,470	156	314	1.13	1.30
November	610	176	295	1.06	1.18
December	1,120	200	393	1.41	1.63
January	1,470	270	456	1.63	1.88
February	1,470	270	559	2.00	2.16
March	2,940	445	1,010	3.62	4.17
April	2,050	341	646	2.32	2.59
May	1,040	286	473	1.70	1.96
June	775	200	310	1.11	1.24
July	1,290	226	408	1.46	1.68
August	1,120	200	300	1.08	1.24
September	1,380	166	297	1.06	1.18
The year	2,940	156	455	1.63	22.21

Monthly discharge of North Fork of New River near Crumpler, N. C., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1912–13.					
October	270	166	189	0.677	0.78
November	445	156	209	.749	.84
December	775	147	235	.842	.97
January	1,290	254	439	1.57	1.81
February	1,200	240	392	1.41	1.47
March	7,110	270	1,170	4.19	4.83
April	2,820	360	649	2.33	2.60
May	2,700	240	644	2.31	2.66
June	675	226	342	1.23	1.37
July	845	156	247	.885	1.02
August	955	156	282	1.01	1.16
September	1,200	166	309	1.11	1.24
The year	7,110	147	426	1.53	20.75
1913–14.					
October	708	176	243	.871	1.00
November	495	200	256	.918	1.02
December	495	200	270	.968	1.12
January	1,120	270	406	1.46	1.68
February	2,150	254	730	2.62	2.73
March	1,950	380	736	2.64	3.04
April	1,660	360	741	2.66	2.97
May	955	213	359	1.29	1.49
June	422	122	193	.692	.77
July	470	122	194	.695	.80
August	1,290	108	188	.674	.78
September	254	122	146	.523	.58
The year	2,150	108	369	1.32	17.98
1914–15.					
October	1,660	122	237	.849	.98
November	1,380	147	265	.950	1.06
December	3,930	254	1,130	4.05	4.67
January	2,480	422	855	3.06	3.53
February	2,050	380	696	2.49	2.59
March	470	304	365	1.31	1.51
April	642	254	355	1.27	1.42
May	880	226	348	1.25	1.44
June	642	176	308	1.10	1.23
July	445	147	233	.835	.96
August	1,120	156	325	1.16	1.34
September	4,840	213	647	2.32	2.59
The year	4,840	122	479	1.72	23.32
1915–16.					
October	3,670	254	558	2.00	2.31
November	1,660	200	355	1.27	1.42
December	4,980	226	824	2.95	3.40
January	2,590	495	783	2.81	3.24
February	1,560	322	608	2.18	2.35
March	1,290	400	662	2.37	2.73
April	1,200	322	552	1.98	2.21
May	740	213	288	1.03	1.19
June	955	213	332	1.19	1.33
July	17,700	166	2,120	7.60	8.76
August	2,480	400	928	3.33	3.84
September	740	240	338	1.21	1.35
The year	17,700	166	700	2.51	34.13

REED CREEK AT GRAHAMS FORGE, VA.

LOCATION.—At highway bridge at Grahams Forge, Wythe County. Glade Creek enters on right 2½ miles above station.

DRAINAGE AREA.—247 square miles.

RECORDS AVAILABLE.—July 29, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage attached to bridge; read by Robert Runion and J. T. Black.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge or by wading.

CHANNEL AND CONTROL.—Permanent; bottom solid rock.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage recorded, 12.1 feet at noon July 16, 1916; minimum stage, 1.17 feet morning reading December 22, 1911 (discharge, roughly 5 second-feet). This extremely low discharge was probably caused by freezing weather or by regulation of flow by power plants above the station, or by both.

ICE.—Stage-discharge relation affected by ice for short periods.

REGULATION.—Dam and gristmill just above station; storage is small, and miller states water flows over dam at all times. Water-power plant at Wytheville may affect natural flow at times.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined between 75 and 1,400 second-feet; beyond these limits the curve is an extension. Gage read twice daily to hundredths. Daily discharge ascertained by applying mean daily gage height to rating table. Records excellent.

Discharge measurements of Reed Creek at Grahams Forge, Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1912.		*Feet.*	*Sec.-ft.*
July 30	Wm. M. O'Neill	2.46	243	Sept. 24	C. T. Bailey	3.80	1,330
Aug. 15	do	2.29	158	1913.			
1909.				Dec. 13	Peterson and Walters	2.13	99
June 16	H. J. Jackson	2.80	383	1914.			
Dec. 9	A. H. Horton	2.34	152	Oct. 8	Mathers and Morgan	2.10	67.0
1910.				8	do	2.08	59.7
Mar. 18	C. T. Bailey	2.41	192	1916.			
Oct. 21	do	2.09	95.1	July 21	B. E. Jones and B. S. Bottomley	3.77	1,120
1911.				21	do	3.58	923
July 20	Horton and Bailey	2.16	106	30	do	2.60	259

Daily discharge, in second-feet, of Reed Creek at Grahams Forge, Va., for the years ending Sept. 30, 1908–1916.

Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.
1908.				1908.				1908.			
1		179	162	11		214	172	21		133	121
2		154	158	12		179	151	22		139	118
3		142	139	13		151	148	23		127	121
4		139	127	14		133	145	24		139	121
5		133	158	15		136	130	25		194	108
6		133	179	16		136	133	26		311	121
7		130	186	17		176	133	27		244	121
8		133	640	18		158	127	28		218	121
9		218	218	19		142	127	29		190	154
10		226	194	20		136	133	30	218	182	136
								31	194	158	

Daily discharge, in second-feet, of Reed Creek at Grahams Forge, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	133	481	262	954	266	376	436	1,840	206	301	145	118
2	121	436	424	677	276	354	388	913	235	311	311	104
3	116	354	365	714	301	354	354	640	276	281	244	111
4	118	321	321	832	258	412	326	468	714	332	194	108
5	106	281	291	1,950	253	365	311	394	604	311	190	116
6	116	253	271	1,420	913	365	296	360	406	222	179	111
7	114	240	640	832	258	677	271	286	343	321	145	116
8	116	226	954	640	258	792	266	248	286	474	145	118
9	127	218	604	568	276	714	262	258	568	354	139	154
10	210	218	424	494	714	677	244	753	430	281	124	179
11	388	235	365	455	753	640	226	677	343	240	127	136
12	226	230	474	418	568	534	235	500	306	218	133	121
13	190	218	677	382	406	487	354	406	1,080	206	130	111
14	162	226	500	354	370	500	792	338	604	226	145	118
15	158	230	412	360	332	436	462	296	442	182	165	121
16	145	222	360	604	400	400	406	266	388	172	266	500
17	142	230	316	1,220	436	360	370	253	500	158	291	276
18	127	306	306	997	365	332	301	244	412	158	235	301
19	139	640	306	792	365	301	296	230	332	158	176	222
20	121	568	296	714	412	301	291	258	286	151	151	172
21	145	388	271	604	400	354	306	913	271	145	139	172
22	145	343	296	534	462	640	306	1,040	306	139	136	151
23	124	291	296	481	753	500	316	604	262	139	111	139
24	604	276	296	442	604	424	306	442	240	136	108	248
25	332	262	332	418	604	753	291	400	248	124	121	186
26	235	244	1,220	406	568	753	281	406	248	133	121	158
27	218	218	677	388	487	568	258	406	271	136	116	139
28	262	218	604	360	424	1,220	244	343	262	148	111	121
29	1,220	218	792	348	-------	1,040	235	296	332	165	118	121
30	1,950	218	1,040	321	-------	604	872	266	301	136	111	111
31	872	-------	1,420	258	-------	534	-------	235	-------	145	116	-------
1909–10.												
1	114	116	96	} 75	194	281	133	244	130	151	127	92
2	121	118	88		186	424	133	218	127	165	136	114
3	98	118	92	} 175	194	400	133	194	121	172	139	121
4	106	121	98		218	365	179	190	124	172	194	106
5	118	121	108	186	210	338	165	172	145	179	182	96
6	114	121	94	186	262	348	158	165	311	222	154	106
7	106	124	121	640	235	442	154	162	253	253	139	106
8	106	101	186	500	210	354	121	186	194	230	130	108
9	116	121	168	281	202	301	127	202	172	214	145	111
10	108	124	76	226	186	271	111	186	186	210	139	127
11	388	130	121	240	172	271	154	179	832	179	142	133
12	568	106	139	210	154	248	154	165	832	172	124	104
13	253	121	186	186	158	210	640	158	2,180	179	121	106
14	218	133	262	172	179	190	436	154	1,730	168	121	111
15	244	98	194	165	218	190	291	158	1,080	162	106	106
16	266	101	168	154	291	168	262	168	714	151	114	96
17	210	121	165	145	568	182	296	168	792	194	84	96
18	186	116	145	151	1,520	165	376	168	604	291	92	96
19	202	114	139	158	604	162	354	210	400	248	116	84
20	172	111	118	206	442	151	291	222	468	214	106	96
21	154	118	108	262	412	230	291	230	365	165	94	92
22	158	60	35	248	376	218	316	222	316	165	111	96
23	172	98	34	424	332	158	306	244	286	139	80	98
24	165	108		343	271	148	301	214	271	148	94	98
25	158	108		266	253	154	348	291	262	145	96	90
26	145	76		230	226	145	400	343	244	154	80	86
27	139	101	75	214	226	145	412	244	210	145	96	101
28	136	98		218	226	145	343	218	190	145	108	158
29	121	88		214	-------	151	291	179	186	139	92	88
30	121	88		202	-------	139	244	145	165	121	96	88
31	136	-------		218	-------	139	-------	136	-------	139	94	-------

Daily discharge, in second-feet, of Reed Creek at Grahams Forge, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	92	84	92	194	640	198	332	296	158	101	84	296
2	90	76	86	792	1,270	194	332	271	139	104	84	154
3	88	80	88	1,040	400	186	343	248	133	92	76	139
4	92	80	90	792	343	186	954	235	124	94	92	111
5	88	82	88	394	332	179	1,420	230	121	92	172	101
6	88	84	235	281	291	182	1,420	218	133	108	121	116
7	92	80	218	235	262	677	997	210	121	101	111	111
8	118	76	136	218	271	640	832	202	145	106	121	106
9	124	76	118	190	1,220	714	913	202	121	116	121	111
10	94	84	96	151	1,520	1,130	872	194	124	116	111	101
11	94	84	111	151	792	913	714	202	116	111	92	116
12	90	84	101	151	714	640	568	182	111	194	80	111
13	92	80	92	151	462	500	500	179	116	133	235	111
14	92	84	106	151	400	412	534	266	116	127	158	104
15	86	88	96	145	354	400	753	226	108	114	127	88
16	78	84	101	145	316	376	913	210	111	106	111	76
17	80	84	96	139	276	332	677	198	111	106	116	106
18	78	88	92	139	258	311	534	194	116	96	121	82
19	86	84	86	139	266	311	487	179	118	96	101	74
20	98	82	76	101	301	332	604	165	158	98	96	106
21	218	76	76	139	321	321	640	158	145	57	88	84
22	96	80	88	281	296	301	534	154	116	84	86	139
23	96	80	106	913	301	291	462	145	121	84	76	145
24	86	82	98	677	262	262	394	145	111	80	86	111
25	90	82	114	376	244	248	354	139	106	80	106	101
26	84	86	121	311	226	226	332	139	111	82	121	101
27	88	84	114	271	218	354	301	139	111	80	194	84
28	90	84	124	266	210	412	281	133	116	82	133	82
29	88	96	118	306	-------	360	271	121	111	80	116	84
30	80	104	145	1,840	-------	360	276	130	111	86	151	74
31	80	-------	179	954	-------	343	-------	127	-------	76	271	-------
1911–12.												
1	76	151	118	225	449	436	714	462	202	332	376	116
2	130	130	111		365	376	1,420	382	194	430	266	108
3	474	136	121	185	248	370	1,840	343	210	316	210	108
4	198	116	127		235	332	997	311	198	266	218	104
5	145	104	116	158		321	714	271	202	449	202	111
6	111	168	96		225	343	640	306	179	474	179	111
7	106	291	136			376	568	365	186	332	158	106
8	106	226	106	185	226	640	534	394	172	301	151	127
9	101	258	101		194	1,220	449	376	148	253	151	118
10	118	326	96		194	954	412	321	151	226	176	101
11	139	271	133		202	677	388	332	145	253	165	106
12	145	253	98	175	186	604	400	442	142	276	145	104
13	133	235	121		179	1,620	343	832	136	271	139	106
14	127	226	114		176	1,520	332	534	145	210	130	106
15	106	206	145	158	194	2,650	311	462	136	186	130	106
16	106	186	127	194	186	2,180	365	1,520	151	165	127	101
17	158	179	158	121	172	1,130	338	1,220	158	151	121	106
18	2,060	182	158	165	186	832	370	714	145	145	142	172
19	568	186	151	218	235	677	343	534	139	202	142	412
20	354	186	154	534	286	604	321	436	136	151	142	176
21	271	176	162	449	714	500	301	370	124	139	151	139
22	235	172	179	343	1,220	481	326	332	133	158	139	121
23	226	165	913	291	604	424	442	301	130	151	158	604
24	210	165	534	281	487	534	394	281	179	139	172	1,040
25	198	162	568	235	677	913	343	271	792	158	145	436
26	179	148	494	226	792	714	306	248	354	202	142	291
27	172	148	500	271	1,220	568	418	240	321	154	145	235
28	151	139	449	276	758	494	792	253	640	133	133	214
29	158	154	332	296	568	3,270	534	230	326	145	121	179
30	148	127	311	321	-------	1,420	568	235	370	291	124	168
31	151	-------	321	640	-------	872	-------	218	-------	262	121	-------

Daily discharge, in second-feet, of Reed Creek at Grahams Forge, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912-13.												
1	154	111	101	354	382	604	534	230	388	148	114	116
2	142	108	106	262	321	442	474	218	343	151	111	108
3	145	106	114	271	321	348	424	210	311	388	111	106
4	139	106	121	311	382	301	382	202	281	186	106	133
5	124	92	172	281	406	271	354	202	271	291	106	111
6	127	108	186	281	354	240	321	194	253	172	872	118
7	124	142	179	291	311	226	301	202	235	151	202	101
8	121	316	176	281	281	218	301	186	248	130	151	101
9	118	206	154	253	253	202	291	186	253	133	133	104
10	114	165	139	226	253	210	271	182	230	124	133	104
11	116	148	133	194	235	262	271	172	194	142	118	106
12	111	145	127	210	244	271	436	158	235	165	182	104
13	114	133	106	388	222	248	2,060	194	244	158	210	94
14	139	127	127	311	218	1,730	1,040	158	198	127	154	94
15	158	127	111	253	218	1,950	832	84	179	127	206	96
16	145	121	116	226	218	1,520	792	194	186	121	139	104
17	121	114	116	218	202	792	677	179	176	121	127	111
18	114	116	121	206	194	568	568	179	165	124	116	108
19	121	116	118	186	179	474	474	158	235	114	534	124
20	133	116	106	190	186	430	412	154	210	124	301	111
21	127	111	92	172	202	388	365	230	179	121	206	165
22	121	111	94	179	210	365	332	343	172	118	176	182
23	121	106	101	186	202	296	321	1,520	226	121	202	133
24	116	114	106	190	210	291	291	1,730	424	158	165	116
25	111	108	111	218	202	281	281	753	262	108	151	104
26	121	101	101	301	186	370	271	500	210	76	139	101
27	111	92	124	677	214	6,470	286	1,180	194	111	127	101
28	106	108	116	1,220	954	1,950	271	1,520	176	139	116	96
29	111	94	121	677	-------	1,040	266	832	165	253	116	101
30	108	106	172	481	-------	832	244	604	151	151	136	124
31	111	-------	677	400	-------	677	-------	487	-------	127	139	-------
1913-14.												
1	106	96	162	210	462	449	954	202	116	88	86	111
2	111	96	253	186	343	348	954	198	116	101	101	104
3	106	98	210	179	301	365	753	186	116	106	84	101
4	96	106	165	202	258	360	568	194	118	96	101	106
5	101	104	148	202	253	343	462	218	116	90	63	92
6	96	101	133	182	424	338	406	291	116	92	84	101
7	104	98	148	186	1,220	338	365	291	121	101	92	80
8	106	88	158	198	832	338	354	281	118	94	96	106
9	106	139	158	286	534	321	332	262	151	106	96	108
10	101	194	142	832	412	301	291	244	92	116	92	133
11	101	127	145	568	354	568	271	218	92	165	101	96
12	101	118	133	388	301	1,520	266	210	111	111	104	62
13	96	111	124	291	286	832	253	198	104	94	104	114
14	96	111	121	291	244	640	253	186	111	172	101	86
15	96	114	98	244		568	376	172	106	226	94	104
16	108	116	92	218	185	568	462	165	106	124	101	101
17	101	121	106	226		568	474	151	66	210	71	106
18	96	158	98	214	225	568	418	165	88	165	101	106
19	106	133	92	194	753	468	388	148	96	111	76	111
20	145	127	101	235	1,730	418	481	145	108	111	92	106
21	133	116	96	332	1,180	376	487	139	111	108	92	96
22	116	114	96	286	832	365	412	133	106	101	111	111
23	106	111	88	226	753	370	348	139	111	101	92	84
24	114	106	101	226	677	388	321	133	96	106	74	106
25	145	88	108	354	568	394	296	127	98	101	94	101
26	124	101	158	338	534	388	276	127	101	101	291	96
27	121	96	154	276	487	376	271	121	92	84	253	106
28	111	101	133	244	468	348	244	116	96	111	500	80
29	106	80	154	210	-------	332	226	114	84	106	253	104
30	98	92	151	206	-------	604	226	121	101	84	162	96
31	106	-------	179	321	-------	1,180	-------	124	-------	92	127	-------

Daily discharge, in second-feet, of Reed Creek at Grahams Forge, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	98	92	388	604	640	321	210	151	218	106	101	145
2	92	101	568	474	1,950	291	194	145	388	96	172	127
3	96	111	753	400	1,220	281	194	142	418	101	116	114
4	96	116	753	370	832	271	186	158	376	114	106	179
5	84	114	2,300	332	677	291	179	158	311	158	101	534
6	108	111	954	436	640	311	186	151	240	139	92	640
7	106	106	604	2,650	534	400	172	148	202	111	90	316
8	101	111	449	1,270	487	388	179	142	179	106	94	222
9	96	88	370	832	406	332	172	133	165	104	76	172
10	96	111	321	604	388	394	179	130	148	101	94	151
11	92	111	271	534	376	424	179	130	145	90	101	136
12	76	111	235	832	354	412	226	145	133	106	139	151
13	101	111	226	753	332	365	244	311	116	116	114	139
14	98	106	218	604	306	343	226	296	127	114	108	133
15	118	145	133	640	321	321	218	218	179	106	80	124
16	218	165	210	677	343	343	198	186	226	101	73	111
17	179	158	186	677	321	316	194	165	179	101	133	106
18	139	130	172	997	306	291	179	165	145	101	111	92
19	121	121	179	872	296	291	179	145	127	101	106	116
20	111	121	271	677	271	286	176	151	121	101	106	101
21	106	86	487	568	266	271	165	145	121	101	96	116
22	116	118	753	436	253	271	165	127	121	96	88	106
23	111	106	481	436	262	291	162	133	106	114	80	111
24	101	108	376	500	449	253	168	202	106	104	104	111
25	111	114	468	714	753	244	168	179	106	101	78	104
26	106	111	500	753	534	235	158	149	106	88	96	96
27	108	106	388	640	412	244	158	158	104	96	98	86
28	108	101	534	534	365	240	151	218	96	84	179	101
29	111	116	455	462	-------	226	151	176	101	96	194	106
30	104	194	832	430	-------	214	151	179	108	76	158	165
31	104	-------	832	424	-------	218	-------	176	-------	80	145	-------
1915–16.												
1	1,520	116	121	568	714	462	321	210	121	111	244	218
2	753	104	127	568	2,060	406	301	226	124	127	291	210
3	406	104	121	640	1,620	640	291	202	127	133	253	226
4	301	101	114	494	913	714	271	190	133	145	296	206
5	281	96	114	424	753	568	244	190	130	133	296	202
6	258	98	114	406	604	534	301	179	124	116	262	186
7	235	94	106	2,410	534	534	286	168	139	116	997	179
8	210	108	114	2,300	455	714	311	179	133	88	1,130	172
9	186	104	98	1,130	430	534	326	168	139	92	568	176
10	168	90	84	832	487	455	343	158	127	210	412	168
11	158	101	98	714	436	400	604	151	121	262	365	176
12	154	106	96	640	400	354	997	151	121	172	326	162
13	148	101	130	604	370	332	677	145	121	136	792	165
14	151	108	88	568	338	321	500	139	118	139	424	186
15	145	114	82	494	316	301	412	139	88	179	792	244
16	142	101	158	455	306	271	354	130	244	7,110	1,950	186
17	133	111	753	430	296	253	321	136	311	4,780	1,320	158
18	127	108	3,270	296	286	253	311	133	210	1,420	714	158
19	145	248	1,320	370	266	244	271	136	165	1,130	534	151
20	172	348	677	348	258	226	253	121	142	753	462	151
21	165	240	494	306	258	235	258	130	127	1,080	382	145
22	151	190	382	338	240	253	258	133	139	832	354	182
23	139	168	332	382	240	244	244	194	133	714	568	145
24	133	148	296	370	568	226	226	230	127	500	400	136
25	127	139	286	343	1,520	218	248	179	162	424	338	139
26	121	130	468	338	832	202	244	158	218	370	301	139
27	118	136	394	382	604	412	244	158	158	424	271	133
28	111	130	418	326	481	568	244	139	139	343	262	133
29	106	136	1,420	388	468	462	244	133	127	301	258	248
30	106	130	1,320	568	-------	400	194	142	133	266	244	218
31	104	-------	753	534	-------	354	-------	127	-------	253	226	-------

NOTE.—Daily discharge estimated, because of ice, from observer's notes and climatic data as follows: Dec. 24–31, 1909; Jan. 1–4, 1910; Jan. 1–4, 6–14, and Feb. 5–7, 1912; and Feb. 15–18, 1914. Braced figures show mean discharge for period included.

Monthly discharge of Reed Creek at Grahams Forge, Va., for the years ending September 30, 1908–1916.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
July 30–31	218	194	206	0.834	0.06
August	311	127	167	.676	.78
September	640	108	160	.648	.72
1908–9.					
October	1,950	106	296	1.20	1.38
November	640	218	294	1.19	1.33
December	1,420	262	510	2.06	2.38
January	1,950	258	643	2.60	3.00
February	913	253	446	1.81	1.88
March	1,220	301	541	2.19	2.52
April	872	226	343	1.39	1.55
May	1,840	230	483	1.96	2.26
June	1,080	206	383	1.55	1.73
July	474	124	213	.862	.99
August	311	108	127	.514	.59
September	500	104	162	.656	.73
The year	1,950	104	373	1.51	20.34
1909–10.					
October	568	98	175	.708	.82
November	133	60	109	.441	.49
December	262	34	114	.462	.53
January	640	----------	230	.931	1.07
February	1,520	154	312	1.26	1.31
March	442	139	233	.943	1.09
April	640	111	264	1.07	1.19
May	343	136	198	.802	.92
June	2,180	121	463	1.87	2.09
July	291	121	178	.721	.83
August	194	80	118	.478	.55
September	158	84	104	.421	.47
The year	2,180	34	207	.838	11.36
1910–11.					
October	218	78	94.7	.383	.44
November	104	76	83.3	.337	.38
December	235	76	112	.453	.52
January	1,840	101	388	1.57	1.81
February	1,520	210	456	1.85	1.93
March	1,130	179	396	1.60	1.84
April	1,420	271	618	2.50	2.79
May	296	121	188	.761	.88
June	158	106	122	.494	.55
July	194	57	99.4	.402	.46
August	271	76	121	.490	.56
September	296	74	111	.449	.50
The year	1,840	57	231	.935	12.66
1911–12.					
October	2,060	76	244	.988	1.14
November	326	104	186	.753	.84
December	913	96	234	.947	1.09
January	640	121	246	.996	1.15
February	1,220	172	401	1.62	1.75
March	3,270	321	905	3.66	4.22
April	1,840	301	541	2.19	2.44
May	1,520	218	437	1.77	2.04
June	792	124	221	.895	1.00
July	474	133	236	.955	1.10
August	376	121	162	.656	.76
September	1,040	101	201	.814	.91
The year	3,270	76	334	1.35	18.44

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Monthly discharge of Reed Creek at Grahams Forge, Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1912–13.					
October	158	106	124	0.502	0.58
November	316	92	126	.510	.57
December	677	92	143	.579	.67
January	1,220	172	319	1.29	1.49
February	954	179	277	1.12	1.17
March	6,470	202	783	3.17	3.66
April	2,060	244	471	1.91	2.13
May	1,730	84	430	1.74	2.01
June	424	151	233	.943	1.05
July	388	76	151	.611	.70
August	872	106	187	.757	.87
September	182	94	113	.457	.51
The year	6,470	76	280	1.13	15.41
1913–14.					
October	145	96	108	.437	.50
November	194	80	112	.453	.51
December	253	88	136	.551	.64
January	832	179	276	1.12	1.29
February	1,730	----------	535	2.17	2.26
March	1,520	301	495	2.00	2.31
April	954	226	406	1.64	1.83
May	291	114	178	.721	.83
June	151	66	105	.425	.47
July	226	84	115	.466	.54
August	500	63	125	.506	.58
September	133	62	100	.405	.45
The year	1,730	62	222	.899	12.21
1914–15.					
October	218	76	110	.445	.51
November	194	86	117	.474	.53
December	2,300	133	505	2.04	2.35
January	2,650	332	682	2.76	3.18
February	1,950	253	510	2.06	2.14
March	424	214	303	1.23	1.42
April	244	151	182	.737	.82
May	311	127	168	.680	.78
June	418	96	174	.704	.79
July	158	76	104	.421	.49
August	194	73	111	.449	.52
September	640	86	164	.664	.74
The year	2,650	73	260	1.05	14.27
1915–16.					
October	1,520	104	231	.935	1.08
November	348	90	134	.543	.61
December	3,270	82	463	1.87	2.16
January	2,410	296	612	2.48	2.86
February	2,060	240	609	2.47	2.66
March	714	202	390	1.58	1.82
April	997	194	337	1.36	1.52
May	230	121	160	.648	.75
June	311	88	147	.595	.66
July	7,110	88	737	2.98	3.44
August	1,950	226	517	2.09	2.41
September	248	133	177	.717	.80
The year	7,110	82	375	1.52	20.77

BIG REED ISLAND CREEK NEAR ALLISONIA, VA.

LOCATION.—1,200 feet above suspension footbridge at J. P. Thomas's farm, 1½ miles from Allisonia, Pulaski County, and half a mile above mouth of Little Reed Island Creek.

DRAINAGE AREA.—291 square miles.

RECORDS AVAILABLE.—August 2, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Vertical staff fastened to a tree on right bank; read by J. P. Thomas, Arie Lilly, K. M. Thomas, and Jackson Lilly.

DISCHARGE MEASUREMENTS.—Made from downstream side of suspension footbridge, 1,200 feet below gage, or by wading.

CHANNEL AND CONTROL.—Channel subject to change due to deposits of silt from ore washing. Control probably permanent.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage recorded 14.8 feet about noon July 16, 1916, caused partly by backwater from New River. The next highest stage was 5.60 feet morning reading May 12, 1912 (discharge, 6,060 second-feet). Minimum stage recorded, 0.28 foot afternoon reading August 20, 1914 (discharge, 123 second-feet).

ICE.—Stage-discharge relation sometimes affected by ice.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve used from July 31, 1908, to April 30, 1911, well defined between 165 and 2,000 second-feet; curve used May 1, 1911, to September 30, 1916, well defined between 190 and 2,000 second-feet; beyond these limits both curves are extensions, above 2,000 second-feet curves are the same. Change in stage-discharge relation probably caused by deposits of silt from ore washing above station. Gage read twice daily to tenths to November 11, 1911, then to hundredths until May 21, 1912, after which gage was read once daily to hundredths and twice when stage was fluctuating. Daily discharge ascertained by applying mean daily gage height when read twice a day or daily gage height when read once a day to the respective rating tables; see footnotes to table of daily dicharge for exceptions. Records good.

Discharge measurements of Big Reed Island Creek near Allisonia, Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1913.		*Feet.*	*Sec.-ft.*
Aug. 1	Wm. M. O'Neill	0.72	384	Dec. 12	Peterson and Walters	0.60	252
18	do	.63	323	12	do	.68	323
1909.				1914.			
June 12	H. J. Jackson	1.05	588	Oct. 7	Mathers and Morgan	.44	182
1910.				7	do	.44	179
Mar. 16	C. T. Bailey	.69	344	1916.			
Oct. 24	C. T. Bailey	.52	254	July 19	B. E. Jones	1.63	1,090
1911.				20	do	1.30	735
July 19	Horton and Bailey	.40	172	29	do	1.01	486

Daily discharge, in second-feet, of Big Reed Island Creek near Allisonia, Va., for the years ending Sept. 30, 1908–1916.

Day.	Aug.	Sept.	Day.	Aug.	Sept.	Day.	Aug.	Sept.
1908.			1908.			1908.		
1	------	295	11	381	295	21	295	240
2	319	295	12	355	295	22	325	240
3	307	295	13	343	295	23	388	240
4	295	295	14	325	295	24	355	240
5	319	325	15	325	295	25	555	240
6	1,220	592	16	295	295	26	1,160	240
7	710	420	17	325	295	27	795	240
8	485	795	18	240	240	28	420	452
9	485	388	19	295	240	29	420	485
10	433	355	20	295	240	30	355	325
						31	355	------

Daily discharge, in second-feet, of Big Reed Island Creek near Allisonia, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	295	388	355	420	420	485	420	1,460	555	670	670	295
2	295	420	355		670	485	420	930	520	630	1,460	240
3	295	420	355	420	710	485	420	630	520	485	670	240
4	268	420	355	420	520	520	420	520	1,670	485	555	355
5	240	420	355	975	485	452	420	485	840	420	485	325
6	240	420	355	885	420	452	355	485	592	485	555	325
7	240	420	795	592	420	592	355	485	555	630	485	325
8	240	388	710	520	355	555	388	420	485	670	420	295
9	240	355	520	485	355	555	452	420	930	485	420	420
10	1,360	355	420	452	592	555	420	1,120	710	485	420	555
11	840	388	420	420	670	520	355	710	885	420	355	420
12	452	420	485	420	485	485	355	555	630	420	355	355
13	388	420	420	420	420	485	420	485	1,020	485	420	295
14	355	420	420	420	452	485	3,070	420	885	485	485	295
15	325	420	420	420	452	485	1,160	420	975	420	452	295
16	295	420	355	420	630	420	840	420	670	420	485	295
17	295	420	355	630	555	420	670	420	1,320	420	452	485
18	295	420	388	710	485	420	555	420	1,220	420	355	485
19	295	670	420	555	485	420	555	420	670	355	355	295
20	295	452	420	485	752	420	520	630	555	355	355	325
21	295	420	420	485	520	420	485	2,110	555	355	295	420
22	295	420	420	485	630	485	485	1,260	555	355	295	355
23	295	420	452	452	710	420	485	752	555	520	295	295
24	295	420	485	420	1,220	420	452	630	795	420	295	325
25	670	420	592	420	1,220	752	420	630	592	355	295	295
26	420	420	670	420	752	630	420	840	555	355	295	295
27	420	388	485	420	592	520	420	975	752	485	295	295
28	520	355	420	420	555	500	420	710	555	592	295	240
29	1,420	355	420	355	-------	480	420	592	670	485	295	240
30	975	355	420	355	-------	460	485	555	840	420	295	240
31	555	-------	452	355	-------	440	-------	485	-------	420	295	-------
1909–10.												
1	240	295	240	300	325	1,570	295	295	295	355	295	555
2	240	295	240	400	388	840	240	295	295	295	295	520
3	295	295	240	400	452	452	325	295	295	388	240	452
4	295	295	240	420	355	388	520	295	295	420	240	710
5	295	240	240	325	388	355	388	295	355	325	295	452
6	295	240	240	325	520	420	355	295	485	295	295	325
7	295	240	268	1,460	520	420	295	295	388	630	295	295
8	240	240	555	555	520	420	295	295	325	630	240	325
9	240	240	295	452	452	420	295	295	325	520	240	355
10	295	240	295	325	420	420	295	295	592	388	240	268
11	1,360	295	268	325	452	420	295	295	840	295	240	240
12	1,070	295	388	295	325	355	295	325	2,350	795	240	240
13	485	295	795	325	300	355	520	295	3,070	795	240	240
14	420	240	885	325		355	388	295	2,110	752	240	240
15	355	240	452	295		355	355	295	1,320	520	240	240
16	355	240	325	295	520	355	295	295	1,020	420	240	240
17	295	268	355	295	930	355	485	295	752	710	240	240
18	295	240	355	295	2,110	355	630	355	670	630	240	240
19	295	240	355	325	795	355	420	295	630	520	240	190
20	295	240	295	295	520	355	420	295	630	388	240	190
21	295	240	295	1,160	630	355	420	355	710	355	240	190
22	295	240		795	520	355	388	355	520	355	240	190
23	295	295	295	452	520	295	355	710	520	355	240	190
24	355	240	295	388	520	295	295	555	592	325	240	190
25	295	240	420	355	555	295	355	670	520	295	420	190
26	295	240	325	355	452	295	420	710	452	268	420	190
27	295	240		325	452	295	355	452	420	295	452	190
28	295	240		325	795	295	355	420	420	295	295	240
29	295	240	300	325	-------	295	295	355	355	295	240	215
30	295	240		325	-------	295	295	355	355	295	325	190
31	295	-------		295	-------	295	-------	355	-------	325	388	-------

Daily discharge, in second-feet, of Big Reed Island Creek near Allisonia, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	190	240	240	240	388	295	325	445	320	210	130	320
2	190	240	240	975	325	295	295	412	260	165	130	235
3	190	240	240	1,070	295	295	295	320	210	165	130	235
4	190	240	295	1,070	295	295	325	320	210	165	130	165
5	190	240	295	520	295	295	1,320	290	260	478	210	165
6	190	240	752	420	355	325	1,220	260	290	235	545	148
7	1,680	240	420	420	355	420	630	260	350	210	235	130
8	885	240	295	355	420	420	1,120	260	545	545	165	130
9	1,120	240	295	355	710	670	752	260	290	290	165	165
10	452	240	295	355	710	555	592	260	235	235	148	235
11	355	215	240	355	520	555	485	260	210	210	130	210
12	355	190	240	355	420	452	520	260	210	210	165	210
13	295	190	240	295	355	388	555	350	210	260	260	165
14	240	215	240	295	355	420	752	1,130	210	290	235	130
15	240	240		295	355	420	930	478	210	235	165	130
16	240	240		295	355	355	885	380	210	165	165	130
17	240	190		295	355	295	592	320	210	165	148	130
18	240	190		295	355	325	485	320	210	165	130	148
19	268	240	240	295	355	355	520	260	210	165	130	130
20	388	240		295	355	388	592	260	210	165	130	130
21	295	240		295	355	325	485	260	210	165	130	148
22	295	240		388	355	295	420	260	165	165	130	445
23	295	240		520	295	295	420	290	165	165	130	290
24	240	240		388	295	295	420	260	165	130	130	210
25	240	240		355	295	295	420	260	210	148	130	265
26	240	240		355	295	295	355	260	210	148	290	165
27	240	240	400	355	295	452	355	235	260	130	785	165
28	295	268		295	295	388	355	260	580	130	210	165
29	240	268		295	-------	355	355	235	320	130	235	165
30	240	240		555	-------	355	420	210	235	130	620	148
31	240	-------		555	-------	355	-------	350	-------	130	445	-------
1911–12.												
1	130	210	240	445	344	393	700	478	386	545	296	174
2	165	210	230	296	362	326	830	432	380	419	255	148
3	260	165	230	272	296	380	785	393	412	320	210	130
4	210	165	220	250	320	356	620	386	400	510	338	148
5	165	165	180	235		393	545	368	386	362	332	148
6	165	235	183			380	504	380	374	545	230	154
7	165	478	190		300	380	510	380	362	350	210	140
8	210	260				471	620	393	344	380	206	165
9	210	260	192			660	545	344	326	350	235	188
10	165	290	196			545	504	308	326	438	240	154
11	210	260	201		284	471	445	374	320	356	260	148
12	210	240	210	220	240	545	432	4,940	314	374	201	137
13	165	545	201		215	1,020	406	2,110	308	338	260	144
14	165	296	201		215	660	419	830	260	393	220	180
15	165	225	240		220	1,890	419	839	432	338	196	188
16	165	250	660		250	1,560	406	1,890	368	272	290	272
17	210	230	580		225	830	432	1,450	326	320	210	148
18	1,890	230	356		250	620	458	878	308	356	201	225
19	412	240	296		278	510	406	700	545	380	188	225
20	290	260	260	740	260	484	374	620	308	308	210	290
21	260	230	296	580	326	452	380	580	290	272	201	235
22	235	215	471	545	1,670	419	432	510	278	332	196	158
23	412	210	1,020	510	497	419	510	510	362	260	225	1,240
24	260	230	497	484	445	700	393	484	458	235	170	1,340
25	210	272	660	432	700	740	368	464	344	290	158	700
26	210	210	471	380	660	580	362	458	320	272	165	332
27	210	210	510	374	1,130	497	452	484	308	220	201	296
28	210	220	412	368	580	445	471	432	302	210	165	272
29	210	332	380	308	471	2,230	432	432	320	206	165	230
30	210	296	332	740	-------	1,130	700	471	332	201	206	220
31	210	-------	388	458	-------	700	-------	426	-------	220	183	-------

Daily discharge, in second-feet, of Big Reed Island Creek near Allisonia, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912–13.												
1	210	196	245	350	386	471	478	412	510	296	240	210
2	196	350	250	290	320	386	464	393	484	320	206	188
3	201	215	260	290	386	314	445	380	1,130	326	196	188
4	201	192	230	426	452	290	419	368	478	386	183	1,130
5	196	201	438	362	344	284	426	350	438	374	180	620
6	192	192	458	308	296	260	400	332	412	284	170	320
7	196	1,450	432	284	255	250	380	344	400	250	180	240
8	188	975	320	296	278	245	386	368	445	245	210	230
9	180	412	272	278	275	240	380	332	484	235	272	284
10	174	320	250	250		296	380	338	412	225	245	220
11	180	284	245	245	272	426	484	350	386	925	250	201
12	180	278	235	255	284	320	2,590	320	464	432	400	201
13	183	296	210	314	220	278	1,450	320	545	380	320	196
14	230	356	206	260	201	3,850	925	320	458	266	260	188
15	350	302	215	225	220	2,350	700	314	332	260	215	183
16	210	250	260	235	255	1,340	700	426	350	260	210	206
17	230	183	188	230	245	785	580	620	350	210	196	201
18	196	206	210	240	235	580	510	510	344	235	230	406
19	210	245	260	260	215	510	545	386	332	225	260	380
20	320	235	255	245	260	497	497	344	320	266	380	1,340
21	210	210	230	240	380	510	406	510	302	225	235	3,850
22	201	215	206	230	344	700	393	510	302	215	230	1,240
23	188	215	210	220	308	497	380	2,830	484	201	260	580
24	210	220	250	245	266	458	432	2,590	478	196	235	356
25	206	210	302	240	255	438	412	1,020	510	210	206	350
26	196	206	332	296	250	580	393	700	545	210	192	350
27	188	210	380	510	452	2,710	580	925	386	245	201	266
28	188	210	445	975	785	1,180	464	925	338	220	393	260
29	188	230	438	490	-------	740	452	660	302	210	201	278
30	192	210	332	393	-------	580	432	580	296	215	740	260
31	196	-------	580	362	-------	545	-------	700	-------	278	393	-------
1913–14.												
1	290	296	432	320	925	471	660	338	245	148	151	201
2	255	290	700	308	620	471	700	338	235	362	144	250
3	250	284	452	250	484	464	497	332	225	188	140	215
4	240	284	380	432	452	464	458	326	215	188	158	183
5	230	272	374	400	445	438	426	497	220	188	151	154
6	230	272	326	374	1,080	445	406	510	272	215	154	151
7	225	278	368	350	1,080	484	393	386	260	406	148	151
8	296	314	356	356	700	478	740	374	278	206	140	320
9	308	1,450	344	432	545	380	580	356	260	196	137	302
10	308	660	332	510	504	386	471	350	284	255	290	196
11	266	419	330	497	490	545	432	320	302	192	393	183
12	419	386		393	458	740	406	314	478	158	380	230
13	266	368	332	338		580	400	332	240	154	220	192
14	240	356	308			510	426	320	230	785	196	174
15	235	338	290		275	510	545	296	210	356	165	165
16	225	332	290	300		545	660	296	192	426	158	151
17	220	458	284			545	510	290	188	358	148	154
18	235	362	284			878	464	290	183	284	144	174
19	278	344	266	356	700	580	432	278	201	210	134	174
20	1,450	320	278	510	1,290	545	925	272	206	183	124	165
21	620	308	278	700	830	490	580	260	206	165	130	174
22	400	302	272	510	660	497	490	260	183	154	272	154
23	344	302	278	445	660	471	452	250	170	154	148	158
24	925	284	344	458	545	452	426	250	154	148	134	201
25	878	278	344	1,020	497	445	412	245	144	144	162	158
26	458	266	545	620	484	432	393	240	154	154	510	151
27	380	240	356	471	478	426	368	235	215	260	504	140
28	380	272	362	426	471	458	362	230	272	183	660	137
29	338	278	344	406	-------	438	362	245	183	165	419	137
30	314	284	338	386	-------	510	356	368	154	140	250	134
31	290	-------	314	2,000	-------	484	-------	260	-------	140	215	-------

Daily discharge, in second-feet, of Big Reed Island Creek near Allisonia, Va., for the years ending Sept. 30, 1908–1916.—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	134	170	878	484	1,780	545	412	314	235	344	174	545
2	130	174	740	438	2,350	510	432	308	740	220	215	432
3	134	174	464	406	1,290	510	452	320	545	215	245	393
4	162	170	471	380	878	510	426	326	438	393	260	2,000
5	426	170	2,350	356	740	580	504	290	374	660	332	1,340
6	215	162	740	925	878	620	478	290	332	326	359	1,020
7	180	158	545	3,330	700	700	432	314	314	245	386	620
8	158	154	458	1,080	620	580	426	386	320	220	165	510
9	183	225	393	740	580	545	400	458	284	250	220	452
10	162	210	400	620	545	620	400	314	260	225	183	412
11	140	183	386	510	510	580	510	296	245	210	320	406
12	134	165	350	2,230	545	545	445	278	272	210	1,130	580
13	201	158	368	975	545	510	432	406	250	201	660	490
14	201	180		740	510	510	412	356	260	196	419	406
15	183	925		700	580	497	406	320	484	192	278	368
16	1,890	620	250	580	785	484	380	296	432	188	320	356
17	393	266		620	620	545	380	266	290	192	1,890	332
18	284	225		1,400	545	484	362	260	255	192	660	320
19	188	215		1,290	510	545	362	284	250	250	432	338
20	215	266		830	504	504	362	320	230	245	632	314
21	206	180	620	580	497	484	356	296	230	260	1,290	362
22	196	320	660	620	490	497	356	302	210	220	510	308
23	192	320	478	580	484	471	412	380	206	210	380	296
24	250	240	452	620	2,350	497	406	660	201	196	320	302
25	240	266	975	545	1,290	471	356	338	196	165	272	290
26	215	255	660	545	925	464	350	296	192	162	266	278
27	192	245	426	510	620	458	338	326	192	154	350	278
28	180	210	406	510	580	445	338	290	192	158	740	308
29	174	196	510	478	-------	432	332	332	183	148	545	332
30	174	1,130	975	478	-------	426	338	438	180	140	925	362
31	170	-------	620	504	-------	432	-------	326	-------	137	830	-------
1915–16.												
1	1,670	314	302	640	925	620	368	290	338	406	660	412
2	785	314	308	620	2,590	545	368	284	338	830	1,450	406
3	471	302	302	545	1,340	545	419	296	344	368	700	400
4	362	296	302	497	785	545	393	308	308	296	580	380
5	1,080	302	296	490	700	510	380	620	230	225	975	374
6	545	302	296	504	580	545	490	368	344	225	660	368
7	580	302	272	1,080	545	545	400	338	545	215	545	362
8	510	296	280	700	510	497	471	308	406	206	545	380
9	438	296	290	580	545	464	458	296	374	368	545	580
10	400	290	296	545	580	445	458	260	380	1,780	545	400
11	386	290	308	545	504	432	445	278	344	785	785	374
12	332	290	510	510	497	320	438	266	326	510	620	362
13	368	308	452	545	504	445	426	260	326	426	510	362
14	393	314	362	478	452	438	374	925	260	362	620	386
15	380	362	419	432	452	432	296	380	580	2,590	975	830
16	393	332	510	406	478	338	296	332	740	8,000	620	445
17	386	302	620	332	471	338	350	278	510	3,070	497	386
18	368	296	3,850	320	464	406	338	272	478	1,450	484	374
19	380	580	1,130	320	452	412	320	272	426	925	445	344
20	1,020	510	660	400	380	393	332	266	284	660	419	326
21	504	393	510	510	438	432	338	220	510	620	400	326
22	471	356	490	660	419	419	380	260	302	660	419	320
23	393	338	438	580	445	386	332	1,340	290	545	830	344
24	362	320	406	484	925	380	320	580	278	545	620	320
25	350	320	510	445	1,560	368	344	426	400	700	445	302
26	344	302	545	620	785	368	332	344	344	545	400	290
27	344	438	545	975	580	368	320	320	290	660	393	278
28	338	368	545	740	545	580	308	510	230	620	975	266
29	338	332	4,110	620	545	438	290	478	380	510	700	1,400
30	320	314	1,240	580	-------	426	308	368	400	490	504	545
31	308	-------	660	545	-------	386	-------	344	-------	478	445	-------

NOTE.—Discharge estimated or interpolated because of ice, or lack of gage readings, from observer's notes, climatic data, or by comparison with the flow of other stations as follows: Jan. 1–2, Mar. 28–31, Dec. 21–22, 27–31, 1909; Jan 1–3, Feb. 13–15, Dec. 15–23, 24–31, 1910; Jan. 1, Dec. 7–8, 31, 1911; Jan. 6–20, Feb. 5–10, 1912; Feb. 9–10, Dec. 11–12, 1913; Jan. 14–18, Feb. 13–18, Mar. 2–3, Dec. 14–20, 1914; Dec. 8, 1915; Jan. 1, 19–20, July 16, 1916. Braced figures show mean for period included.

Monthly discharge of Big Reed Island Creek near Allisonia, Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 291 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
August 2-31	1,220	240	439	1.51	1.68
September	795	240	326	1.12	1.25
1908–9.					
October	1,420	240	442	1.52	1.75
November	670	355	414	1.42	1.58
December	795	355	449	1.54	1.78
January	975	355	486	1.67	1.92
February	1,220	355	590	2.03	2.11
March	752	420	491	1.69	1.95
April	3,070	355	569	1.96	2.19
May	2,110	420	690	2.37	2.73
June	1,670	485	754	2.59	2.89
July	670	355	465	1.60	1.84
August	1,460	295	434	1.49	1.72
September	555	240	331	1.14	1.27
The year	3,070	240	509	1.75	23.73
1909–10.					
October	1,360	240	363	1.25	1.44
November	295	240	256	.880	.98
December	885	240	347	1.19	1.37
January	1,460	295	424	1.46	1.68
February	2,110	----------	548	1.88	1.96
March	1,570	295	409	1.41	1.63
April	630	240	365	1.25	1.40
May	710	295	364	1.25	1.44
June	3,070	295	730	2.51	2.80
July	795	268	436	1.50	1.73
August	452	240	277	.952	1.10
September	710	190	284	.976	1.09
The year	3,070	190	399	1.37	18.62
1910–11.					
October	1,680	190	355	1.22	1.41
November	268	190	234	.804	.90
December	752	----------	312	1.07	1.23
January	1,070	240	426	1.46	1.68
February	710	295	372	1.28	1.33
March	670	295	372	1.28	1.48
April	1,320	295	573	1.97	2.20
May	1,130	210	322	1.11	1.28
June	580	165	253	.869	.97
July	545	130	203	.698	.80
August	785	130	222	.763	.88
September	320	130	184	.632	.71
The year	1,680	130	319	1.10	14.87
1911–12.					
October	1,890	130	270	.928	1.07
November	545	165	255	.876	.98
December	1,020	180	345	1.19	1.37
January	740	----------	339	1.16	1.34
February	1,670	215	415	1.43	1.54
March	2,230	326	683	2.35	2.71
April	830	362	495	1.70	1.90
May	4,940	308	766	2.63	3.03
June	545	260	350	1.20	1.34
July	580	201	341	1.17	1.35
August	338	158	220	.756	.87
September	1,340	130	284	.976	1.09
The year	4,940	130	396	1.36	18.59

Monthly discharge of Big Reed Island Creek near Allisonia, Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1912–13.					
October	350	174	206	0.708	0.82
November	1,450	183	309	1.06	1.18
December	580	188	295	1.01	1.16
January	975	220	318	1.09	1.26
February	785	201	311	1.07	1.11
March	3,850	240	739	2.54	2.93
April	2,590	380	583	2.00	2.23
May	2,830	314	628	2.16	2.49
June	1,130	296	434	1.49	1.66
July	925	196	285	.979	1.13
August	740	170	261	.897	1.03
September	3,850	183	497	1.71	1.91
The year	3,850	170	406	1.40	18.91
1913–14.					
October	1,450	220	380	1.31	1.51
November	1,450	240	363	1.25	1.40
December	700	266	349	1.20	1.38
January	2,000	250	476	1.64	1.89
February	1,290	----------	573	1.97	2.05
March	878	380	502	1.73	1.99
April	925	356	491	1.69	1.89
May	510	230	312	1.07	1.23
June	478	144	225	.773	.86
July	785	140	234	.804	.93
August	660	124	228	.784	.90
September	320	134	181	.622	.69
The year	2,000	124	358	1.23	16.72
1914–15.					
October	1,890	130	255	.876	1.01
November	1,130	154	278	.955	1.07
December	2,350	----------	551	1.89	2.18
January	3,330	356	794	2.73	3.15
February	2,350	484	830	2.85	2.97
March	700	426	516	1.77	2.04
April	510	332	400	1.37	1.53
May	660	260	335	1.15	1.33
June	740	180	293	1.01	1.13
July	660	137	230	.790	.91
August	1,890	165	497	1.71	1.97
September	2,000	278	492	1.69	1.89
The year	3,330	130	454	1.56	21.18
1915–16.					
October	1,670	308	494	1.70	1.96
November	580	290	336	1.15	1.28
December	4,110	272	702	2.41	2.78
January	1,080	320	556	1.91	2.20
February	2,590	380	689	2.37	2.56
March	620	320	444	1.53	1.76
April	490	290	370	1.27	1.42
May	1,340	220	390	1.34	1.54
June	740	230	377	1.30	1.45
July	[a] 8,000	206	970	3.33	3.84
August	1,450	393	623	2.14	2.47
September	1,400	266	421	1.45	1.62
The year	[a] 8,000	206	532	1.83	24.88

[a] Estimated.

LITTLE RIVER NEAR COPPER VALLEY, VA.

LOCATION.—At highway bridge, 600 feet above mouth of Indian Creek, half a mile north of Copper Valley, Floyd County, and 5 miles south of Childress.

DRAINAGE AREA.—195 square miles.

RECORDS AVAILABLE.—July 25, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Standard chain gage attached to bridge; read by T. A. DeHart.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge or by wading.

CHANNEL AND CONTROL.—Channel at section practically permanent; control changes during floods.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage recorded, 9.07 feet at night July 15, 1916 (discharge, 4,500 second-feet). A flood about 1900 reached a stage of about 13 feet on the present gage. Minimum stage recorded, 3.05 feet August, 1911, and July, 1914 (discharge, about 88 second-feet).

ICE.—Stage-discharge relation affected by ice for short periods.

ACCURACY.—Stage-discharge relation changes during floods. Two rating curves were used; the first one is well defined between 138 and 1,000 second-feet, the second one is well defined between 114 and 1,000 second-feet; both curves are extensions beyond the limits given and are the same above 1,200 second-feet. The first curve was used as follows: July 28, 1908, to August 1, 1909, and May 12, 1912, to September 30, 1914. The other curve was used for the remaining periods between August 2, 1909, and September 30, 1916. The limits of the periods of application of the two curves, which are somewhat indefinite, were fixed by studying the discharge measurements, gage-height records, and by comparison with the flow of Big Reed Island Creek, an adjacent drainage area. The second curve is about 15 per cent, for a maximum, smaller than the first curve, at about 225 second-feet discharge; both curves are practically the same at about 100 second-feet and 1,000 second-feet discharge. Gage read twice daily to hundredths. Daily discharge ascertained by applying mean daily gage height to rating tables (see footnote to table of daily discharge for exceptions).

Records good.

Discharge measurements of Little River near Copper Valley, Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1912.		*Feet.*	*Sec.-ft.*
July 28	Wm. M. O'Neill	3.74	337	Sept. 21	C. T. Bailey	3.30	152
Aug. 21	do	3.39	182	1913.			
1909.				Dec. 10	Walters and Peterson	3.31	138
June 11	H. J. Jackson	4.17	538	1914.			
Dec. 8	A. H. Horton	3.82	337	Oct. 6	Mathers and Morgan	3.47	178
1910.				1916.			
Mar. 14	C. T. Bailey	3.58	228	July 18	Jones and Bottomley	4.74	811
Oct. 19	do	3.37	155	31	do	3.70	256
1911.							
July 18	Horton and Bailey	3.25	125				

Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.
1908.				1908.				1908.			
1		204	200	11		159	215	21		159	178
2		186	189	12		185	215	22		159	182
3		168	182	13		178	192	23		185	182
4		165	182	14		168	192	24		192	172
5		165	200	15		165	185	25		306	165
6		480	630	16		178	182	26		1,070	165
7		455	605	17		192	172	27		380	162
8		200	655	18		165	178	28	332	274	380
9		340	292	19		172	172	29	765	292	380
10		480	226	20		159	178	30	820	207	215
								31	455	218	

Daily discharge, in second-feet, of Little River near Copper Valley, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908-9.												
1	196	480	310	580	310	355	278	765	430	480	630	168
2	185	430	310	580	380	380	270	555	430	455	1,340	157
3	175	405	270	430	355	355	270	430	430	332	575	137
4	172	380	261	455	405	405	270	355	940	288	413	168
5	172	355	310	765	355	332	256	355	605	301	313	190
6	165	310	296	765	380	355	256	332	480	380	465	165
7	162	310	765	530	332	455	252	310	455	505	388	165
8	162	310	580	455	301	430	244	310	430	480	252	196
9	175	310	430	430	332	405	256	301	505	355	228	236
10	1,560	310	355	405	605	380	244	530	480	332	210	520
11	820	332	355	380	430	355	235	405	480	310	207	268
12	430	355	405	355	355	332	235	332	455	301	221	114
13	332	310	380	310	355	332	310	310	480	310	210	193
14	296	332	332	332	332	355	2,550	310	430	355	214	181
15	274	355	310	380	310	292	880	296	405	301	268	181
16	252	380	310	430	405	292	630	283	405	283	363	190
17	231	380	301	605	380	288	505	278	455	292	260	268
18	235	430	301	630	332	278	455	274	555	265	210	210
19	231	655	310	580	310	274	405	256	405	261	210	210
20	235	480	310	555	505	278	405	332	380	231	190	190
21	222	430	292	480	355	278	380	2,640	355	226	178	178
22	222	380	310	455	405	310	380	1,270	355	231	178	228
23	380	355	355	430	480	265	380	765	355	265	165	221
24	2,120	332	355	430	530	265	430	580	405	256	174	193
25	710	332	380	405	655	430	332	555	380	231	162	178
26	505	310	580	405	505	355	355	765	355	218	178	162
27	430	310	455	380	430	306	332	880	355	283	181	160
28	530	292	430	355	405	405	332	605	332	332	174	152
29	1,200	296	430	332	-------	355	332	530	405	301	165	152
30	940	310	555	332	-------	310	332	455	455	355	181	150
31	580	-------	940	222	-------	292	-------	455	-------	292	168	-------
1909-10.												
1	147	150	150		184	870	160	174	132	200	168	492
2	140	150	150		282	720	190	171	132	184	165	304
3	142	174	157	175	286	465	207	181	126	178	171	210
4	135	157	150		388	363	313	181	119	256	171	413
5	140	150	147		313	313	224	168	154	252	181	295
6	147	142	137	200	286	388	193	157	264	248	168	207
7	150	160	157	750	187	413	174	162	178	264	157	168
8	142	160	228	272		308	154	224	142	338	160	168
9	142	162	168	174		277	152	286	137	313	165	157
10	137	165	162			264	137	224	196	236	154	162
11	720	174	162	175		264	147	190	363	210	154	152
12	660	165	196		200	260	168	165	1,130	204	152	157
13	221	160	221			236	338	171	1,560	313	142	165
14	178	152	690	210		207	252	165	1,560	465	150	152
15	200	157	260	200		190	187	165	870	439	154	157
16	190	162	193	210		184	184	154	750	264	178	152
17	187	160	152	193	810	190	439	152	548	810	171	142
18	174	150	187	190	1,720	187	492	165	413	870	171	137
19	174	150	157	196	465	184	313	210	338	465	171	132
20	168	142	193	162	413	187	264	168	282	313	165	140
21	162	142	210	750	492	187	244	165	338	248	157	137
22	168	150	157	548	465	187	224	184	338	224	160	140
23	162	168	150	313	388	181	214	171	363	218	165	128
24	178	162	178	252	308	174	207	224	363	290	152	128
25	165	150	200	193	252	171	200	272	660	210	178	126
26	162	150	187	282	260	160	256	248	313	190	204	144
27	162	150	190	181	252	162	228	204	264	178	200	187
28	152	150	204	187	388	160	228	154	224	184	184	142
29	150	152	178	171	-------	168	204	144	218	181	157	137
30	162	150	178	240	-------	168	187	154	210	178	157	152
31	165	-------	178	492	-------	162	-------	152	-------	184	602	-------

Daily discharge, in second-feet, of Little River near Copper Valley, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	174	150	119	218	268	160	174	313	413	123	106	388
2	150	154	119	290	240	165	160	244	174	126	106	178
3	137	162	147	750	218	162	207	207	150	123	106	140
4	130	157	142	602	207	150	338	200	142	135	99	126
5	126	150	178	338	210	147	1,560	200	152	300	137	126
6	132	132	272	310	178	196	930	200	224	181	363	126
7	575	142	244	338	184	248	520	181	260	160	157	128
8	575	150	252	256	171	228	810	187	413	630	142	114
9	870	142	252	204	439	240	660	193	214	214	157	114
10	295	147	244	210	492	602	439	187	162	181	111	174
11	214	142	221	264	300	520	363	178	150	152	94	162
12	207	140	152	210	268	338	363	174	152	147	99	142
13	174	130	126	190	248	290	520	214	144	137	187	132
14	168	137	140	178	210	338	575	413	135	268	157	114
15	168	174	171	171	207	313	660	200	132	152	126	116
16	157	165	193	154	204	228	630	178	123	128	106	114
17	157	142	147	154	190	184	439	174	94	114	104	114
18	157	142	150	160	181	224	363	178	112	119	106	114
19	147	150	162	178	204	218	363	162	190	114	111	114
20	338	132	140	174	248	290	439	160	200	111	107	111
21	214	132	144	178	228	204	575	152	157	114	97	119
22	184	140	140	240	268	181	286	144	142	112	97	268
23	174	150	135	413	214	171	252	168	126	114	94	236
24	154	137	224	248	196	154	260	160	132	111	94	135
25	152	137	248	204	174	150	244	152	388	107	96	116
26	157	142	268	210	162	154	244	132	388	107	137	126
27	157	137	240	204	152	240	228	142	214	106	193	116
28	168	147	184	204	162	204	224	147	264	104	152	107
29	162	200	204	181	-------	171	252	144	193	107	137	111
30	152	165	282	602	-------	290	308	135	142	106	388	106
31	154	-------	363	413	-------	196	-------	157	-------	104	413	-------
1911–12.												
1	106	135	135	260	200	256	439	268	239	530	256	120
2	150	135	178	200	272	187	548	240	256	332	189	116
3	268	116	200	196	221	193	520	236	296	244	172	113
4	150	126	137	190		204	388	200	239	244	270	106
5	132	126	137	119		264	338	190	252	405	252	110
6	114	184	200			193	313	207	256	555	192	120
7	107	308	157			236	338	207	306	288	175	149
8	123	187	200			313	413	193	235	261	172	211
9	140	181	137			750	313	174	226	231	192	162
10	140	228	135		183	492	264	162	215	310	211	138
11	140	168	132			388	244	214	211	256	189	113
12	147	165	135			575	252	2,820	204	310	172	96
13	116	232	132			870	260	1,000	207	270	182	110
14	114	181	126			630	260	580	226	332	168	106
15	112	160	147			1,560	260	555	288	231	168	140
16	111	152	575			1,200	252	1,270	261	211	162	113
17	132	150	465		168	338	268	1,000	226	175	159	113
18	1,480	165	313	218	236	439	295	605	235	182	138	149
19	465	157	181		232	388	221	455	288	555	155	332
20	210	157	160		204	338	204	380	256	261	168	235
21	168	152	168		295	363	207	380	244	196	168	129
22	157	142	228		1,060	313	224	355	292	182	168	120
23	236	140	750		388	304	277	332	288	175	143	306
24	181	152	413		295	548	200	310	530	168	168	765
25	157	157	575		660	602	200	306	270	196	120	405
26	147	142	388		575	465	193	306	310	204	138	239
27	147	142	363		1,060	363	268	283	278	211	143	355
28	132	150	248		465	313	338	283	218	155	138	226
29	126	178	157		363	1,960	282	301	207	143	126	185
30	119	150	260	575	-------	750	338	332	207	146	129	159
31	119	-------	290	363	-------	520	-------	265	-------	155	126	-------

Daily discharge, in second-feet, of Little River near Copper Valley, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912–13.												
1	146	140	178	310	256	332	292	215	248	204	126	118
2	140	178	165	204	192	239	274	200	231	192	129	120
3	138	159	165	405	192	192	261	185	239	765	126	110
4	138	140	172	380	204	185	248	189	261	430	118	480
5	146	129	274	256	204	182	215	182	256	405	110	405
6	138	178	301	231	200	168	192	182	215	215	110	207
7	123	880	256	215	159	138	185	189	256	192	118	182
8	123	555	192	200	}	146	182	192	283	165	140	155
9	123	283	165	182	} 175	172	185	185	288	159	126	256
10	123	200	155	165	}	178	207	189	231	149	168	192
11	123	192	152	152	192	332	265	178	215	256	218	152
12	118	172	152	159	182	222	765	168	283	355	185	138
13	123	178	155	165	159	185	630	165	380	200	192	135
14	168	215	168	159	}	3,540	430	155	231	165	159	126
15	274	192	231	152	} 160	1,200	355	159	430	182	149	118
16	178	159	178	152	}	820	405	292	189	172	146	138
17	138	155	178	165	168	480	332	355	185	149	123	149
18	129	152	168	159	138	355	310	430	182	152	116	215
19	146	149	172	172	135	332	274	207	182	152	288	239
20	178	146	172	155	146	332	256	172	168	149	204	239
21	159	149	172	152	274	355	222	89	165	152	178	2,550
22	140	152	159	152	248	355	215	480	155	146	159	940
23	185	149	159	149	192	283	207	2,120	332	140	182	332
24	172	129	192	155	165	265	204	1,880	288	138	178	215
25	140	135	239	168	152	288	204	710	265	140	135	192
26	146	146	222	178	152	380	204	455	605	138	123	178
27	135	146	274	310	332	1,340	274	430	455	140	110	165
28	126	149	274	655	580	605	244	480	239	138	129	159
29	129	172	274	380	-------	405	226	405	480	138	146	155
30	129	185	288	288	-------	355	231	301	288	146	159	168
31	123	-------	455	274	-------	332	-------	265	-------	138	152	-------
1913–14.												
1	178	189	310	215	765	355	505	288	182	110	118	138
2	152	178	580	207	480	265	505	270	172	248	100	123
3	152	178	332	178	405	332	455	261	159	159	185	123
4	152	172	274	218	380	530	380	261	152	138	178	123
5	146	178	248	310	355	380	355	310	155	146	129	110
6	138	172	222	310	630	332	355	332	172	146	123	110
7	140	165	274	355	880	332	332	310	182	129	110	110
8	149	207	301	355	580	310	380	310	172	189	118	103
9	222	1,000	215	430	455	292	380	283	165	155	100	118
10	355	505	204	682	405	261	355	270	256	155	108	135
11	256	332	256	505	405	455	332	265	159	185	118	123
12	274	256	222	355	380	765	310	256	178	129	146	138
13	222	301	239	355	274	555	310	244	135	110	123	149
14	178	265	239	}	189	480	310	231	152	630	204	138
15	159	274	189	}	}	505	605	222	138	430	138	135
16	149	244	185	} 325	} 175	505	605	204	135	355	123	126
17	152	310	178	}	}	455	430	204	123	265	120	123
18	152	274	185	}	}	655	405	215	123	215	108	178
19	178	244	165	332	765	555	355	207	126	159	98	192
20	580	222	165	405	1,270	530	480	207	140	126	103	159
21	530	207	168	655	820	430	455	204	138	118	120	135
22	278	200	168	405	630	455	380	192	135	110	113	123
23	231	204	178	301	555	430	355	192	123	103	118	120
24	222	189	265	310	480	405	332	189	123	98	113	108
25	555	185	222	682	455	380	332	185	113	89	152	110
26	332	178	530	455	455	355	310	182	110	98	332	108
27	256	192	283	355	405	355	310	178	108	146	355	118
28	207	185	256	332	405	355	306	168	152	152	1,000	100
29	185	189	204	301	-------	355	292	172	129	120	765	100
30	189	189	222	301	-------	405	288	168	110	110	231	98
31	185	-------	218	1,070	-------	455	-------	178	-------	100	159	-------

Daily discharge, in second-feet, of Little River near Copper Valley, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	97	114	660	388	690	363	248	200	413	187	157	388
2	99	116	575	363	1,720	313	248	193	870	204	144	268
3	97	116	363	413	870	313	277	196	690	207	162	338
4	104	116	295	388	690	308	277	260	413	218	214	870
5	190	119	2,550	313	575	363	388	228	313	439	282	1,270
6	196	119	810	363	630	439	304	200	277	338	181	1,410
7	135	116	575	2,640	520	492	272	232	236	200	135	602
8	286	119	439	720	439	439	248	268	232	187	132	413
9	268	123	363	660	388	363	248	290	214	187	137	338
10	150	150	338	492	413	413	236	228	196	171	162	304
11	128	128	313	413	388	465	260	207	190	162	152	260
12	112	116	308	1,200	363	439	413	210	190	157	1,060	810
13	112	119	304	750	363	388	304	338	207	152	363	313
14	119	119	304	602	363	388	264	221	196	144	193	492
15	137	575	187	575	388	363	236	193	388	144	171	304
16	1,410	492	187	492	520	363	244	181	286	142	181	260
17	439	214	313	492	363	413	244	168	313	184	363	240
18	210	157	308	660	363	413	224	160	244	168	520	236
19	181	157	313	690	313	363	221	162	224	157	240	264
20	160	157	465	548	313	363	210	174	210	162	200	240
21	152	162	575	439	308	313	221	193	200	184	690	338
22	135	178	602	413	308	313	210	187	193	168	295	252
23	135	236	413	413	363	313	236	200	187	465	193	207
24	137	210	465	439	750	308	264	465	174	256	168	214
25	162	168	413	413	720	295	244	363	162	171	157	200
26	157	178	492	492	520	290	221	221	157	142	157	187
27	135	174	388	388	413	277	207	214	248	132	187	187
28	126	142	413	388	363	268	200	224	152	132	810	224
29	126	132	439	338	-------	268	228	210	152	121	492	240
30	123	290	630	338	-------	252	221	363	174	114	413	252
31	119	-------	575	363	-------	260	-------	338	-------	132	548	-------
1915–16.												
1	1,640	218	236	492	690	388	248	214	187	313	338	221
2	720	224	224	439	1,720	388	252	214	174	207	520	207
3	413	210	214	413	995	492	260	214	313	244	492	214
4	338	210	204	338	575	413	286	232	252	174	338	207
5	465	214	200	338	520	413	295	465	181	147	602	187
6	548	221		413	492	439	286	295	165	140	465	187
7	575	218		630	439	413	272	221	492	128	520	187
8	520	218		630	388	388	304	214	260	128	363	286
9	465	218		465	388	304	338	207	232	165	388	388
10	363	218	200	413	439	300	338	196	244	1,270	363	244
11	304	218		465	388	313	439	181	286	750	338	196
12	300	218		439	338	304	388	181	221	492	630	187
13	282	218		439	338	295	338	174	196	252	413	181
14	268	218		388	313	286	286	174	157	244	313	221
15	304	256		363	282	272	272	181	207	2,120	304	363
16	282	236	413	363	290	260	252	196	602	2,380	388	232
17	260	218	660	338	308	248	244	232	295	1,200	363	207
18	268	204	2,380	218	300	286	221	214	221	870	295	187
19	260	810	870	316	300	277	214	181	196	660	252	181
20	465	465	465	413	300	260	221	174	181	439	244	181
21	439	300	388	388	295	286	232	165	870	388	214	165
22	304	260	313	413	272	304	252	165	252	338	232	174
23	277	240	308	413	290	272	244	338	207	575	750	165
24	264	232	439	308	413	260	214	439	187	388	272	165
25	260	221	520	277	1,200	252	244	272	207	575	244	165
26	244	218	660	277	630	248	252	207	260	413	232	165
27	240	264	492	295	520	286	252	174	214	660	221	157
28	236	256	439	388	439	338	244	174	174	413	413	152
29	228	240	810	338	413	304	232	304	252	338	313	930
30	224	248	930	363	-------	277	232	272	221	313	244	413
31	221	-------	465	388	-------	268	-------	232	-------	272	232	-------

NOTE.—Daily discharge estimated, because of ice, from observer's notes, climatic records, and comparison with the flow at other stations as follows: Jan. 1–5, 10–13, Feb. 8–16, Dec. 22, 1910; Jan. 6–29, Feb. 4–16, 1912; Feb. 8–10, 14–16, 1913; Jan. 14–18, Feb. 15–18, 1914; Dec. 6–15, 1915. Braced figures show mean discharge for the period included. Discharge interpolated, because of missing gage readings, as follows: Aug. 2, 9, and 16, 1908; Jan. 19, 1916.

Monthly discharge of Little River near Copper Valley, Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 195 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
July 28–31	820	332	593	3.04	0.45
August	1,070	159	258	1.32	1.52
September	655	162	247	1.27	1.42
1908–9.					
October	2,120	162	461	2.36	2.72
November	655	292	365	1.87	2.09
December	940	261	396	2.03	2.34
January	765	222	457	2.34	2.70
February	655	301	401	2.06	2.14
March	455	265	339	1.74	2.01
April	2,550	235	426	2.18	2.43
May	2,640	256	543	2.78	3.20
June	940	332	446	2.29	2.56
July	505	218	316	1.62	1.87
August	1,340	162	293	1.50	1.73
September	520	137	199	1.02	1.14
The year	2,640	137	387	1.98	26.93
1909–10.					
October	720	135	196	1.01	1.16
November	174	142	156	.800	.89
December	690	137	194	.995	1.15
January	750	----------	256	1.31	1.51
February	1,720	----------	355	1.82	1.90
March	870	160	269	1.38	1.59
April	492	137	229	1.17	1.30
May	286	144	184	.944	1.09
June	1,560	119	423	2.17	2.42
July	870	178	294	1.51	1.74
August	602	142	180	.923	1.06
September	492	126	183	.938	1.05
The year	1,720	119	242	1.24	16.86
1910–11.					
October	870	126	222	1.14	1.31
November	200	130	148	.759	.85
December	363	119	194	.995	1.15
January	750	154	269	1.38	1.59
February	492	152	229	1.17	1.22
March	602	147	237	1.22	1.41
April	1,560	160	446	2.29	2.56
May	413	132	186	.954	1.10
June	413	94	196	1.01	1.13
July	630	104	155	.795	.92
August	413	94	148	.759	.88
September	388	106	143	.733	.82
The year	1,560	94	214	1.10	14.94
1911–12.					
October	1,480	106	198	1.02	1.18
November	308	116	164	.841	.94
December	750	126	252	1.29	1.49
January	----------	----------	230	1.18	1.36
February	1,060	----------	313	1.61	1.74
March	1,960	187	526	2.70	3.11
April	548	193	297	1.52	1.70
May	2,820	162	465	2.38	2.74
June	530	204	259	1.33	1.48
July	555	143	262	1.34	1.54
August	270	120	171	.877	1.01
September	765	96	191	.979	1.09
The year	2,820	96	278	1.43	19.38

Monthly discharge of Little River near Copper Valley, Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches
	Maximum.	Minimum.	Mean.	Per square mile.	
1912–13.					
October	274	118	145	0.744	0.86
November	880	129	202	1.04	1.16
December	455	152	208	1.07	1.23
January	655	149	226	1.16	1.34
February	580	----------	201	1.03	1.07
March	3,540	138	474	2.43	2.80
April	765	182	283	1.45	1.62
May	2,120	89	381	1.95	2.25
June	605	155	274	1.41	1.57
July	765	138	205	1.05	1.21
August	288	110	152	.779	.90
September	2,550	110	298	1.53	1.71
The year	3,540	89	254	1.30	17.72
1913–14.					
October	580	138	234	1.20	1.38
November	1,000	165	253	1.30	1.45
December	580	165	248	1.27	1.46
January	1,070	178	387	1.98	2.28
February	1,270	----------	483	2.48	2.58
March	765	261	427	2.19	2.52
April	605	288	383	1.96	2.19
May	332	168	231	1.18	1.36
June	256	108	149	.764	.85
July	630	89	175	.897	1.03
August	1,000	98	194	.995	1.15
September	192	98	126	.646	.72
The year	1,270	89	273	1.40	18.97
1914–15.					
October	1,410	97	198	1.02	1.18
November	575	114	177	.908	1.01
December	2,550	187	496	2.54	2.93
January	2,640	313	567	2.91	3.36
February	1,720	308	515	2.64	2.75
March	492	252	352	1.81	2.09
April	413	200	254	1.30	1.45
May	465	160	235	1.21	1.40
June	870	152	270	1.38	1.54
July	465	114	191	.979	1.13
August	1,060	132	299	1.53	1.76
September	1,410	187	397	2.04	2.28
The year	2,640	97	328	1.68	22.88
1915–16.					
October	1,640	221	386	1.98	2.28
November	810	204	257	1.32	1.47
December	2,380	----------	440	2.26	2.61
January	630	218	392	2.01	2.32
February	1,720	272	492	2.52	2.72
March	492	248	317	1.63	1.88
April	439	214	272	1.39	1.55
May	465	165	229	1.17	1.35
June	870	157	264	1.35	1.51
July	2,380	128	548	2.81	3.24
August	750	214	364	1.87	2.16
September	930	152	237	1.22	1.36
The year	2,380	128	350	1.80	24.45

WALKER CREEK AT STAFFORDSVILLE, VA.

LOCATION.—At highway bridge at Staffordsville, Giles County, 500 feet below mouth of Whitley Creek.

DRAINAGE AREA.—277 square miles.

RECORDS AVAILABLE.—July 24, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage attached to bridge; read by J. F. Durham and C. A. Deck.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge or by wading.

CHANNEL AND CONTROL.—Practically permanent.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage recorded, 15.8 feet at noon March 27, 1913 (discharge, about 12,100 second-feet); minimum stage, 2.64 feet afternoon reading August 5, 1914 (discharge, 24 second-feet).

ICE.—Discharge relation probably not affected by ice.

REGULATION.—A dam and power plant 300 feet above station may affect flow at low water.

ACCURACY.—Stage-discharge relation practically permanent; not affected by ice to an appreciable extent during the record. Rating curve well defined between 50 and 2,500 second-feet; beyond these limits the curve is an extension. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records excellent.

Discharge measurements of Walker Creek at Staffordsville, Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1912.		*Feet.*	*Sec.-ft.*
July 24	Wm. M. O'Neill	3.24	113	Apr. 3	J. G. Mathers	6.41	1,860
Aug. 22	do	3.02	59	4	do	5.88	1,460
1909.				Sept. 20	C. T. Bailey	3.42	151
June 9	H. J. Jackson	5.75	1,480	1913.			
23	do	3.66	256	Dec. 9	Peterson and Walters	3.48	165
Dec. 6	A. H. Horton	2.94	72	1914.			
1910.				Oct. 19	Mathers and Morgan	3.11	75.4
Mar. 12	C. T. Bailey	4.10	358	19	do	3.11	76.8
Apr. 29	do	4.30	476				
Oct. 18	do	2.96	56.6	1916.			
				Feb. 26	B. J. Peterson	5.69	1,260
1911.				Aug. 2	B. E. Jones	6.47	1,870
July 16	Horton and Bailey	3.34	136	3	do	5.12	835

Daily discharge, in second-feet, of Walker Creek at Staffordsville, Va., for the years ending Sept. 30, 1908–1916.

Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.
1		86	97	11		122	122	21		58	58
2		66	75	12		86	122	22		60	58
3		66	75	13		75	97	23		86	58
4		58	75	14		58	110	24	102	66	58
5		75	86	15		86	97	25	125	86	58
6		75	258	16		86	97	26	148	208	66
7		66	241	17		86	86	27	110	224	66
8		66	177	18		97	75	28	135	162	110
9		148	148	19		97	75	29	122	122	86
10		162	122	20		66	66	30	110	110	58
								31	97	86	

Daily discharge, in second-feet, of Walker Creek at Staffordsville, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	58	575	192	1,600	258	457	535	2,280	420	241	160	45
2	58	438	275	1,050	275	383	476	1,440	346	346	275	44
3	58	328	310	785	275	346	457	910	364	241	171	45
4	58	293	258	670	275	420	383	670	725	154	138	40
5	58	241	258	2,190	258	402	346	575	785	138	122	65
6	58	208	258	1,840	258	457	310	457	575	162	117	58
7	58	162	420	2,010	241	670	275	383	457	364	125	55
8	58	162	1,200	785	224	1,120	241	346	383	620	127	48
9	66	148	670	670	241	1,120	224	310	785	438	117	84
10	328	135	535	575	1,600	1,050	208	980	910	328	102	364
11	420	135	438	495	1,280	910	192	1,280	535	241	84	258
12	241	135	980	457	785	162	162	725	420	208	63	154
13	177	148	1,050	383	620	620	162	535	438	202	66	97
14	122	162	670	364	535	575	2,100	457	535	196	88	84
15	122	162	535	383	457	457	1,280	383	535	174	112	75
16	110	148	438	620	495	420	785	346	402	148	165	576
17	97	162	420	1,200	535	383	620	258	670	148	165	1,050
18	86	208	364	1,050	495	346	495	241	495	130	132	2,370
19	86	575	310	910	495	310	457	224	364	114	104	785
20	86	535	476	845	725	241	402	241	310	102	88	457
21	86	420	258	785	620	241	402	910	258	97	72	364
22	75	310	275	725	575	383	420	1,520	224	84	65	293
23	75	293	293	670	495	476	438	910	202	95	65	241
24	310	258	258	575	515	438	420	620	192	127	54	910
25	383	241	293	515	670	1,120	346	495	192	107	50	535
26	241	241	1,760	495	575	1,280	346	910	171	88	51	383
27	192	192	910	438	535	910	310	3,300	192	84	68	293
28	208	171	785	383	476	1,200	310	1,280	162	97	49	241
29	910	162	910	364	-------	1,200	275	845	241	112	75	208
30	1,920	171	1,200	364	-------	845	725	670	258	102	49	183
31	910	-------	2,370	241	-------	670	-------	515	-------	86	46	-------
1909–10.												
1	154	125	61	93	224	575	122	346	138	160	72	72
2	143	117	61	120	241	670	125	293	130	143	72	79
3	132	110	73	224	293	620	140	258	114	145	61	148
4	132	104	73	275	457	515	177	258	112	165	86	148
5	122	97	68	208	438	476	183	241	151	189	88	138
6	122	100	58	241	402	346	154	208	346	196	75	102
7	117	110	84	1,200	241	725	132	208	346	224	79	88
8	107	104	140	845	328	575	122	275	258	293	77	65
9	97	104	138	515	210	535	122	275	208	202	88	65
10	97	120	102	364	275	476	122	258	275	180	75	58
11	785	110	102	293	241	402	107	241	980	148	58	57
12	1,440	100	100	310	183	364	138	241	1,120	241	58	58
13	620	104	162	275	258	328	785	241	3,500	258	49	60
14	438	97	112	241	208	293	535	224	3,000	208	47	57
15	420	100	364	224	241	275	420	208	1,840	177	48	54
16	364	90	275	183	310	258	364	192	1,360	154	49	58
17	310	88	224	196	980	241	420	183	1,360	189	47	49
18	275	82	196	208	1,920	224	575	189	980	258	45	43
19	258	77	174	346	980	208	535	208	670	241	37	49
20	224	77	122	364	670	208	476	205	575	224	43	54
21	224	77	79	1,600	620	208	420	208	495	165	60	52
22	199	79	88	1,680	575	196	383	199	438	143	54	41
23	192	93	88	845	457	180	346	177	364	127	51	30
24	196	86	100	575	402	171	364	171	328	112	46	49
25	180	77	143	476	364	165	364	258	293	107	46	42
26	168	70	107	402	346	148	457	275	275	97	56	47
27	151	79	90	364	328	138	457	258	241	93	58	51
28	127	73	112	346	328	145	457	208	208	84	68	52
29	130	70	84	346	-------	148	420	177	196	84	61	47
30	125	70	54	258	-------	143	402	177	180	77	58	57
31	125	-------	70	310	-------	132	-------	165	-------	75	79	-------

Daily discharge, in second-feet, of Walker Creek at Staffordsville, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910-11.												
1	51	49	68	310	785	180	402	310	189	102	47	189
2	50	57	51	1,360	575	183	364	293	154	82	43	143
3	49	49	47	2,010	476	171	402	241	117	70	45	102
4	47	54	57	1,360	420	160	1,200	241	95	102	46	75
5	49	49	61	620	364	148	1,680	208	97	112	95	61
6	43	43	84	438	310	310	1,600	208	88	102	90	75
7	49	42	145	328	293	1,050	1,120	189	88	97	61	72
8	65	43	102	310	328	785	1,280	189	93	196	75	68
9	88	52	82	241	1,200	980	1,360	192	97	102	56	58
10	79	47	75	183	1,840	2,280	1,120	186	79	79	51	54
11	63	45	75	165	910	1,840	845	177	66	132	45	58
12	58	51	66	174	670	1,050	725	177	65	122	45	61
13	52	47	56	148	495	785	670	160	58	143	79	70
14	51	39	46	154	457	1,050	845	154	58	171	183	57
15	45	47	54	143	383	845	1,050	148	58	171	97	54
16	47	48	57	122	328	620	1,200	138	56	122	72	56
17	41	51	47	127	275	495	910	132	51	107	52	51
18	45	51	61	132	258	438	670	127	63	84	51	54
19	47	45	66	122	258	420	575	127	75	75	49	52
20	56	48	66	112	310	457	670	122	202	65	42	50
21	55	43	48	127	346	420	670	110	241	58	47	47
22	58	46	47	196	275	383	620	112	117	68	42	54
23	55	49	84	725	310	346	535	102	93	52	35	75
24	46	40	120	515	258	310	457	102	95	47	41	75
25	54	44	151	402	241	275	402	97	88	41	43	57
26	56	47	138	346	241	258	364	88	112	41	47	51
27	55	55	132	346	224	620	328	88	95	39	44	49
28	51	58	125	328	202	620	310	93	114	39	112	45
29	54	66	127	310	-------	535	293	82	208	49	72	47
30	47	75	208	1,600	-------	535	293	73	138	39	97	48
31	50	-------	275	1,360	-------	457	-------	84	-------	35	196	-------
1911-12.												
1	37	122	107	364	535	495	980	725	174	620	183	88
2	68	102	107	346	476	402	1,840	575	168	575	177	79
3	438	97	112	346	310	402	2,190	495	157	438	135	93
4	241	97	100	328	328	364	1,280	438	151	438	132	86
5	157	97	97	208	224	346	980	383	160	845	122	65
6	117	135	86	140	275	346	785	364	148	980	117	61
7	97	310	93	208	224	364	670	364	130	575	112	51
8	97	293	88	183	258	620	575	364	120	420	93	105
9	93	328	88	205	224	1,280	476	310	114	346	97	160
10	112	364	90	189	160	1,050	438	275	100	420	107	112
11	196	328	95	171	171	785	402	275	95	910	112	72
12	199	275	82	177	160	785	364	910	90	515	102	66
13	160	275	93	148	160	3,200	346	1,200	90	476	93	60
14	127	275	84	114	154	2,280	328	670	90	346	93	58
15	107	275	93	143	165	4,100	310	575	95	293	100	60
16	97	241	127	114	160	3,000	310	2,460	95	241	90	58
17	346	224	154	122	168	1,680	328	1,920	97	202	86	68
18	3,300	205	148	138	186	1,200	310	1,050	104	183	75	86
19	1,050	241	127	208	208	910	310	785	145	189	180	208
20	535	224	122	575	258	725	293	575	122	168	122	138
21	383	208	122	495	670	620	293	495	112	157	125	100
22	328	202	162	420	2,010	535	293	438	86	148	143	79
23	310	180	1,440	364	910	476	346	364	86	157	132	620
24	258	177	785	328	670	575	310	328	93	145	160	1,360
25	208	165	785	310	670	980	293	293	535	165	127	785
26	192	154	620	293	785	845	293	310	476	208	112	438
27	177	148	620	457	1,600	670	670	258	785	148	122	620
28	168	145	535	457	845	575	1,280	241	1,680	127	127	346
29	148	122	438	438	620	4,500	910	224	1,440	104	104	258
30	138	120	383	1,200	-------	2,190	910	224	670	107	97	208
31	130	-------	383	785	-------	1,360	-------	199	-------	140	102	-------

Daily discharge, in second-feet, of Walker Creek at Staffordsville, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912–13.												
1	174	65	84	535	515	785	670	208	670	143	60	63
2	154	65	88	383	457	620	575	202	495	154	117	52
3	132	57	88	402	457	438	476	192	420	151	61	49
4	127	66	102	457	495	383	438	177	438	364	52	51
5	112	61	135	402	457	346	383	177	383	1,050	48	51
6	104	65	177	364	438	328	346	160	310	420	47	52
7	97	275	224	364	346	258	293	177	275	258	54	49
8	88	725	208	364	275	258	293	171	438	183	60	49
9	84	438	189	346	275	241	275	160	438	154	61	46
10	84	328	165	328	670	258	258	148	364	132	63	43
11	75	241	154	310	275	293	293	132	293	127	54	44
12	72	202	138	328	275	310	620	122	310	224	66	39
13	77	177	72	575	224	310	3,100	127	310	224	122	42
14	79	177	97	476	196	2,010	1,680	127	258	138	127	37
15	102	160	97	383	208	2,910	1,120	127	208	148	88	35
16	107	127	114	346	241	2,190	910	143	177	127	65	39
17	84	122	107	310	224	1,120	785	165	165	117	55	43
18	75	112	107	275	202	785	670	168	199	102	56	47
19	93	102	102	258	177	575	575	145	189	97	61	56
20	97	100	97	241	183	535	476	127	160	84	346	61
21	102	95	84	208	205	476	420	346	143	93	127	84
22	100	97	84	208	205	457	364	293	127	77	97	177
23	88	93	65	208	177	364	346	1,200	224	72	88	130
24	86	88	77	224	196	346	310	2,550	346	73	90	86
25	82	86	61	258	202	346	293	1,120	328	79	68	65
26	72	77	58	293	186	457	275	670	241	61	58	57
27	66	79	120	575	476	9,180	293	1,200	241	60	51	51
28	68	84	72	1,440	1,200	3,100	275	1,600	275	61	49	45
29	61	72	97	845	-------	1,600	275	910	202	72	49	47
30	68	72	224	620	-------	1,120	258	670	165	61	56	52
31	66	-------	910	535	-------	910	-------	1,200	-------	65	86	-------
1913–14.												
1	54	68	122	241	1,280	575	1,840	224	58	34	28	61
2	50	61	383	224	725	457	1,680	208	65	42	27	48
3	55	58	328	202	575	457	1,200	205	56	40	26	45
4	51	57	241	177	476	438	845	208	51	36	27	39
5	44	54	202	293	457	438	670	224	52	41	26	37
6	42	48	192	258	575	457	575	241	58	37	26	36
7	43	48	177	258	2,010	438	495	224	58	37	26	35
8	43	61	202	275	1,440	420	495	208	61	33	32	39
9	47	383	168	438	845	383	457	208	58	45	32	31
10	45	293	154	1,520	670	310	402	189	58	39	38	35
11	48	224	154	910	575	1,050	383	171	48	32	32	37
12	39	157	138	670	476	1,920	364	160	51	42	39	41
13	37	143	122	346	402	1,200	328	148	52	43	40	48
14	39	132	107	346	346	910	310	143	61	86	42	45
15	39	148	102	383	383	910	457	130	51	127	40	39
16	33	160	97	346	328	1,050	980	127	45	86	33	39
17	42	168	100	383	241	1,280	785	122	43	58	30	35
18	45	241	93	383	364	1,280	575	107	41	51	32	35
19	48	208	84	346	1,050	910	515	102	42	50	29	39
20	162	174	88	402	2,550	725	670	102	41	42	30	37
21	162	148	77	1,360	1,600	515	785	97	48	37	30	33
22	102	122	75	910	1,120	515	670	93	54	33	30	35
23	72	117	77	575	1,050	535	535	90	51	31	32	35
24	86	97	84	495	910	535	476	88	42	32	30	37
25	208	84	104	1,050	670	535	438	77	50	31	52	39
26	208	79	258	785	575	575	402	75	47	30	66	37
27	165	79	241	575	575	575	346	75	32	29	143	39
28	132	84	224	457	575	535	328	75	37	28	310	37
29	110	75	208	402	-------	495	293	66	32	29	224	36
30	77	75	208	364	-------	620	258	65	32	32	138	37
31	72	-------	224	535	-------	1,360	-------	61	-------	30	82	-------

Daily discharge, in second-feet, of Walker Creek at Staffordsville, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	30	36	535	670	910	457	275	258	180	43	45	130
2	34	36	845	575	3,800	402	241	208	258	50	50	114
3	28	38	845	476	2,010	364	241	208	293	48	104	102
4	35	37	620	438	1,280	328	224	224	293	49	68	402
5	35	35	4,000	364	910	364	205	192	241	72	54	1,600
6	41	34	1,520	495	845	346	205	180	205	72	46	1,120
7	37	34	910	4,900	670	364	196	171	180	73	40	575
8	51	37	620	2,100	575	364	174	171	151	55	33	364
9	39	34	476	1,360	515	328	186	151	130	47	35	293
10	38	37	383	910	438	420	186	135	104	45	37	241
11	39	36	328	670	402	620	208	122	104	43	36	202
12	32	33	275	1,050	364	620	241	132	77	43	165	258
13	33	40	258	910	346	575	293	157	75	41	117	192
14	52	36	241	670	328	515	275	293	75	39	65	224
15	39	65	114	910	328	476	258	224	90	40	46	171
16	293	160	140	1,050	420	457	241	192	168	37	48	135
17	241	125	145	1,200	438	575	224	160	160	39	148	117
18	135	84	138	1,760	402	515	205	145	117	38	171	102
19	93	66	168	1,520	364	476	192	125	95	35	104	97
20	66	60	293	1,050	328	476	186	120	73	44	75	93
21	61	44	725	725	310	438	177	120	72	46	75	84
22	52	52	1,200	575	293	420	162	104	70	56	88	88
23	50	50	725	515	275	383	162	104	56	50	68	79
24	49	50	515	495	910	346	180	117	52	61	55	68
25	52	44	460	575	1,200	328	174	114	48	54	49	61
26	46	48	410	670	785	328	162	107	45	45	45	58
27	45	47	360	575	620	346	157	104	44	43	50	58
28	42	48	310	476	515	346	186	120	41	35	122	58
29	45	51	438	438	-------	328	785	120	44	35	258	58
30	43	114	1,200	402	-------	328	328	162	45	32	196	65
31	40	-------	1,050	420	-------	293	-------	192	-------	32	145	-------
1915–16.												
1	2,910	68	120	845	1,200	535	438	224	97	100	293	120
2	1,200	65	114	725	2,910	515	383	208	77	90	2,730	110
3	575	61	104	620	2,190	785	383	202	202	151	845	104
4	420	58	100	535	1,360	910	346	202	495	107	910	114
5	346	58	102	476	980	725	310	202	241	84	725	100
6	310	60	84	476	785	725	328	180	174	60	476	86
7	275	58	72	2,010	670	910	346	180	165	57	2,460	82
8	224	57	75	2,550	535	1,200	364	171	157	55	1,360	90
9	192	58	79	1,440	515	845	383	174	140	73	785	75
10	165	51	75	980	515	670	402	157	117	457	535	82
11	148	56	75	845	457	575	980	157	107	402	438	79
12	140	51	82	725	438	476	1,360	140	112	241	383	73
13	130	54	88	670	420	438	980	132	93	174	328	75
14	122	55	82	620	364	420	785	120	79	151	275	73
15	122	73	275	535	310	383	575	117	90	725	258	130
16	117	73	143	535	275	328	515	110	438	6,070	476	125
17	107	79	1,120	476	293	293	457	100	910	4,900	420	90
18	102	72	4,500	293	293	293	383	86	457	2,460	346	86
19	93	258	2,010	346	275	258	328	86	310	2,010	293	75
20	122	420	980	364	258	241	310	95	224	2,010	224	73
21	117	310	620	310	241	275	293	93	205	1,200	205	70
22	112	224	515	346	224	364	328	95	168	1,920	199	73
23	97	189	438	364	224	346	293	160	130	1,120	457	60
24	93	165	364	310	670	310	258	241	110	845	310	63
25	84	138	328	328	3,100	293	258	186	192	620	241	60
26	79	127	535	364	1,280	275	275	151	383	476	183	54
27	75	135	476	785	910	980	275	125	258	420	162	51
28	72	130	476	575	670	1,280	275	112	199	364	145	50
29	72	138	2,730	575	620	785	258	114	151	457	154	168
30	70	122	2,280	910	-------	575	241	114	117	383	143	132
31	70	-------	1,200	785	-------	515	-------	104	-------	310	120	-------

Monthly discharge of Walker Creek at Staffordsville, Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 277 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
July 24-31	148	97	119	0.430	0.13
August	224	58	96.6	.349	.40
September	258	58	99.2	.358	.40
1908-9.					
October	1,920	58	249	.899	1.04
November	575	135	251	.906	1.01
December	2,370	192	625	2.26	2.61
January	2,190	241	788	2.84	3.27
February	1,600	224	528	1.91	1.99
March	1,280	241	651	2.35	2.71
April	2,100	162	470	1.70	1.90
May	3,300	224	807	2.91	3.36
June	910	162	418	1.51	1.68
July	620	84	186	.671	.77
August	275	46	102	.368	.42
September	2,370	40	347	1.25	1.40
The year	3,300	40	452	1.63	22.16
1909-10.					
October	1,440	97	264	.953	1.10
November	125	70	93.0	.336	.37
December	364	54	119	.430	.50
January	1,680	93	449	1.62	1.87
February	1,920	183	451	1.63	1.70
March	725	132	325	1.17	1.35
April	785	107	327	1.18	1.32
May	346	165	227	.819	.94
June	3,500	112	683	2.47	2.76
July	293	75	166	.599	.69
August	38	37	61.0	.220	.25
September	148	30	65.7	.237	.26
The year	3,500	30	268	.968	13.11
1910-11.					
October	88	41	53.4	.193	.22
November	75	39	49.3	.178	.20
December	275	46	91.0	.329	.38
January	2,010	112	478	1.73	1.99
February	1,840	202	465	1.68	1.75
March	2,280	148	613	2.21	2.55
April	1,680	293	765	2.76	3.08
May	310	73	153	.552	.64
June	241	51	105	.379	.42
July	196	35	88.5	.319	.37
August	196	35	67.7	.244	.28
September	189	45	66.9	.242	.27
The year	2,280	35	248	.895	12.15
1911-12.					
October	3,300	37	323	1.17	1.35
November	364	97	204	.736	.82
December	1,440	82	270	.975	1.12
January	1,200	114	322	1.16	1.34
February	2,010	154	468	1.69	1.82
March	4,500	346	1,210	4.37	5.04
April	2,190	293	637	2.30	2.57
May	2,460	199	583	2.10	2.42
June	1,680	86	280	1.01	1.13
July	980	104	348	1.26	1.45
August	183	75	119	.430	.50
September	1,360	51	220	.794	.89
The year	4,500	37	416	1.50	20.45

Monthly discharge of Walker Creek at Staffordsville, Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1912–13.					
October	174	61	92.8	0.335	0.39
November	725	57	150	.542	.60
December	910	58	142	.513	.59
January	1,440	208	415	1.50	1.73
February	1,200	177	337	1.22	1.27
March	9,180	241	1,070	3.86	4.45
April	3,100	258	578	2.09	2.33
May	2,550	122	481	1.74	2.01
June	670	127	293	1.06	1.18
July	1,050	60	167	.603	.70
August	346	47	80.1	.289	.33
September	177	35	58.1	.210	.23
The year	9,180	35	323	1.17	15.81
1913–14.					
October	208	33	77.4	.279	.32
November	383	48	128	.462	.52
December	383	75	162	.585	.67
January	1,520	177	513	1.85	2.13
February	2,550	241	816	2.95	3.07
March	1,920	310	723	2.61	3.01
April	1,840	258	619	2.23	2.49
May	241	61	139	.502	.58
June	65	32	49.2	.178	.20
July	127	28	43.3	.156	.18
August	310	26	57.2	.206	.24
September	61	31	38.9	.140	.16
The year	2,550	26	277	1.00	13.57
1914–15.					
October	293	28	61.8	.223	.26
November	160	33	53.7	.194	.22
December	4,000	114	653	2.36	2.72
January	4,900	364	934	3.37	3.88
February	3,800	275	735	2.65	2.76
March	620	293	417	1.51	1.74
April	785	157	231	.834	.93
May	293	104	159	.574	.66
June	293	41	120	.433	.48
July	73	32	46.5	.168	.19
August	258	33	85.1	.307	.35
September	1,600	58	240	.866	.97
The year	4,900	28	309	1.12	15.16
1915–16.					
October	2,910	70	283	1.02	1.18
November	420	51	115	.415	.46
December	4,500	72	653	2.36	2.72
January	2,550	293	701	2.53	2.92
February	3,100	224	792	2.86	3.08
March	1,280	241	565	2.04	2.35
April	1,360	241	437	1.58	1.76
May	241	86	146	.527	.61
June	910	77	220	.794	.89
July	6,070	55	919	3.32	3.83
August	2,730	120	544	1.96	2.26
September	168	50	87.4	.316	.35
The year	6,070	50	456	1.65	22.41

WOLF CREEK NEAR NARROWS, VA.

LOCATION.—At highway bridge 3 miles above Narrows, Giles County, 1,500 feet below New River, Holston & Western Railroad bridge, and 2½ miles above mouth of Mill Creek.

DRAINAGE AREA.—223 square miles.

RECORDS AVAILABLE.—July 22, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage attached to bridge; read by J. A Hale.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge or by wading.

CHANNEL AND CONTROL.—Bed of stream is small boulders and gravel. Control practically permanent.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage recorded, 13.0 feet about noon, July 16, 1916; minimum stage 2.20 feet morning and evening reading October 3 and 13, 1914, respectively (discharge, 20 second-feet).

A stage of approximately 15.5 feet, referred to the gage datum, has been reached at this station; date unknown.

ICE.—Stage-discharge relation little, if any, affected by ice. Observer states there are springs above the station. These may tend to prevent formation of ice.

ACCURACY.—Stage-discharge relation practically permanent; not materially affected by ice during the entire record. Rating curve well defined between 30 and 2,660 second-feet; beyond these limits the curve is an extension. Gage read twice daily to hundredths. Daily discharge ascertained by applying mean daily gage height to rating table. Records excellent.

Discharge measurements of Wolf Creek near Narrows, Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge
1908.		*Feet.*	*Sec.-ft.*	1912.		*Feet.*	*Sec.-ft.*
July 22	Wm. M. O'Neill	2.72	92	Sept. 19	C. T. Bailey	2.76	88
Aug. 24	do	2.66	64	1913.			
1909.				Dec. 8	Walters and Peterson	3.10	159
June 8	H. J. Jackson	3.33	230	1914.			
24	do	3.12	160	Oct. 24	Mathers and Morgan	2.52	51.9
1910.				24	do	2.53	50.9
Mar. 11	C. T. Bailey	3.71	345	1916.			
21	do	3.22	194	Feb. 27	B. J. Peterson	4.46	790
Apr. 28	do	4.00	508	Aug. 1	B. E. Jones	3.52	305
Oct. 18	do	2.42	36.3	1	do	3.56	312
1911.				2	do	5.86	1,760
July 15	Horton and Bailey	2.69	71				

Daily discharge, in second-feet, of Wolf Creek near Narrows, Va., for the years ending Sept. 30, 1908–1916.

Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.
1908.				1908.				1908.			
1		66	66	11		97	103	21		57	57
2		63	66	12		79	97	22	79	60	55
3		57	59	13		69	95	23	79	64	56
4		55	52	14		59	79	24	79	63	55
5		55	64	15		56	82	25	79	66	52
6		63	720	16		55	69	26	72	133	50
7		63	268	17		52	66	27	66	164	48
8		60	183	18		54	63	28	82	113	54
9		111	144	19		63	59	29	97	88	52
10		131	117	20		60	59	30	82	77	57
								31	77	80	

Daily discharge, in second-feet, of Wolf Creek near Narrows, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	57	442	156	1,420	210	467	602	2,900	307	192	180	66
2	56	307	327	935	230	442	520	1,720	257	169	210	63
3	55	243	276	720	210	417	467	1,130	247	151	180	60
4	48	210	243	575	201	575	417	810	370	131	153	68
5	47	180	223	935	210	520	348	660	394	117	137	97
6	44	156	223	1,060	257	548	307	548	348	135	122	79
7	45	144	442	750	280	1,000	287	442	287	548	257	75
8	46	133	935	602	265	1,130	265	370	243	690	265	79
9	50	122	630	494	272	1,130	240	348	630	442	175	93
10	79	115	467	417	1,200	1,340	230	1,060	417	327	140	327
11	210	122	348	370	1,060	1,200	213	1,130	348	247	122	172
12	124	137	1,200	327	720	935	198	810	287	204	109	124
13	97	140	1,000	287	575	750	265	630	327	189	105	97
14	79	135	690	257	494	690	780	494	575	250	120	86
15	69	144	520	287	417	575	575	417	348	186	204	75
16	64	133	394	660	630	520	442	370	394	158	233	250
17	60	140	327	1,200	750	467	370	307	575	172	327	417
18	59	172	287	935	602	394	327	272	370	144	327	287
19	57	370	327	810	520	348	287	247	280	126	223	201
20	55	327	287	780	630	327	287	236	230	117	175	153
21	56	287	254	690	575	417	327	370	198	107	149	135
22	55	243	257	630	548	660	348	575	180	101	124	122
23	57	223	272	548	520	575	467	467	169	101	109	122
24	140	195	240	520	575	520	417	370	164	164	91	146
25	198	169	287	442	780	1,130	370	327	175	117	86	137
26	126	149	1,420	394	750	1,270	370	442	153	101	86	109
27	101	135	810	370	660	1,000	327	1,060	144	99	79	97
28	97	122	720	348	575	1,420	327	780	153	105	79	89
29	442	131	1,000	327	-------	1,340	280	602	192	117	79	86
30	1,200	135	1,130	307	-------	1,000	780	467	198	101	75	80
31	690	-------	2,260	210	-------	780	-------	370	-------	111	69	-------
1909–10.												
1	79	75	60	82	243	548	126	348	201	183	84	66
2	74	75	57	103	180	602	122	307	180	161	77	75
3	74	75	57	370	287	548	135	272	164	164	79	89
4	69	72	56	348	548	467	164	280	149	149	77	93
5	66	72	55	272	467	417	175	257	236	161	131	75
6	66	69	55	236	417	494	153	233	750	243	105	79
7	59	69	63	1,130	265	602	144	223	575	223	86	80
8	63	69	117	720	307	520	140	287	417	223	86	70
9	63	69	124	442	283	442	131	272	327	233	122	74
10	60	79	75	327	307	394	126	280	327	198	86	75
11	178	69	101	250	257	370	117	265	467	180	82	80
12	327	69	89	230	219	327	126	257	750	169	75	80
13	175	68	103	216	230	327	243	307	1,200	142	72	77
14	131	69	307	210	210	307	327	307	1,420	158	69	64
15	131	66	223	189	226	280	287	280	1,000	144	66	59
16	146	60	198	164	287	250	257	250	870	135	66	60
17	135	66	144	164	750	223	287	236	1,420	142	69	55
18	113	63	135	233	1,130	216	417	261	1,000	257	60	48
19	109	63	126	720	750	210	394	272	690	287	68	52
20	105	62	101	520	575	204	370	243	548	223	70	51
21	101	62	93	1,420	494	204	370	236	467	180	69	51
22	93	62	99	1,270	467	192	417	216	630	151	60	48
23	89	57	86	780	417	180	394	198	660	135	60	48
24	97	72	80	548	370	161	548	186	494	140	57	47
25	95	66	93	442	307	153	630	548	520	113	57	46
26	89	63	93	370	280	149	630	630	442	103	64	54
27	86	60	86	327	257	146	575	417	327	95	63	51
28	86	60	97	348	265	140	520	348	280	93	63	56
29	82	60	82	327	-------	137	467	287	236	89	63	64
30	80	57	75	265	-------	135	417	257	210	86	60	56
31	77	-------	86	287	-------	131	-------	210	-------	93	60	-------

Daily discharge, in second-feet, of Wolf Creek near Narrows, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	54	44	89	417	870	183	370	280	109	82	40	66
2	51	44	69	1,420	690	178	348	250	101	63	42	63
3	48	43	66	1,560	520	166	370	219	84	63	42	55
4	48	43	77	1,130	494	153	1,200	201	75	72	45	50
5	44	40	77	660	442	142	1,640	192	75	74	66	52
6	42	40	131	467	370	417	1,560	186	75	68	69	59
7	54	40	223	327	327	1,130	1,130	180	79	63	52	64
8	64	39	131	287	394	1,060	1,130	172	74	66	57	64
9	64	39	117	254	1,420	935	1,200	166	66	72	55	57
10	59	38	111	210	1,790	2,260	1,060	164	63	117	47	50
11	54	40	113	172	1,130	1,340	810	156	60	105	43	48
12	48	40	109	158	750	935	690	149	60	99	40	69
13	47	40	107	156	548	690	602	137	60	105	60	72
14	44	40	79	144	467	690	520	135	60	84	91	60
15	44	38	82	137	370	575	690	131	55	77	66	55
16	45	43	86	124	307	494	870	126	59	69	57	52
17	45	42	69	124	257	417	750	120	57	63	52	62
18	39	40	60	133	236	370	602	117	62	59	55	60
19	40	40	86	126	240	348	548	115	69	55	69	55
20	47	43	93	122	327	417	690	111	175	48	54	52
21	45	45	69	133	348	394	810	105	95	51	52	52
22	52	43	60	219	287	370	750	97	75	48	47	60
23	52	42	89	417	287	370	602	93	63	47	40	128
24	52	40	169	370	257	307	494	99	57	45	42	89
25	47	43	257	307	243	265	417	91	82	44	40	72
26	50	40	192	283	230	254	370	82	79	43	47	63
27	44	45	164	327	213	520	327	86	69	43	45	59
28	40	60	149	327	195	520	283	77	175	42	52	57
29	43	180	140	370	-------	467	261	74	149	40	47	52
30	50	135	370	1,720	-------	442	254	66	103	43	57	48
31	46	-------	575	1,420	-------	394	-------	75	-------	43	66	-------
1911–12.												
1	45	111	144	348	720	494	935	870	133	750	198	137
2	180	101	140	327	548	370	1,940	690	124	548	175	122
3	1,060	93	135	307	370	370	2,500	575	122	370	149	109
4	370	91	135	283	327	307	1,420	467	117	417	149	109
5	236	89	122	207	257	307	1,000	394	126	1,130	135	101
6	153	105	113	198	250	287	750	348	113	935	120	93
7	144	213	113	210	216	268	660	370	105	520	105	99
8	142	210	109	164	233	442	575	327	97	417	99	95
9	135	192	105	175	192	1,270	467	287	89	370	101	86
10	126	186	95	156	180	1,130	417	257	86	370	97	77
11	230	180	93	158	169	810	370	243	80	307	101	72
12	243	175	93	164	144	870	327	370	77	307	93	72
13	192	243	91	156	161	2,900	307	348	75	219	97	68
14	164	240	93	142	153	2,180	287	307	74	186	109	66
15	142	230	93	144	158	3,060	257	307	79	186	101	63
16	135	204	105	149	149	2,980	276	1,490	88	156	88	63
17	164	180	117	140	153	1,720	280	1,560	88	135	79	63
18	2,580	223	115	131	180	1,130	287	935	89	126	82	75
19	935	417	107	198	192	870	280	660	120	140	128	75
20	548	348	101	690	233	720	257	520	105	131	175	75
21	370	287	101	467	1,000	602	257	394	89	120	370	69
22	287	243	117	370	2,180	575	257	327	79	117	307	74
23	272	210	935	327	1,000	494	327	280	84	158	280	122
24	226	186	630	307	750	630	287	247	153	149	243	247
25	192	210	690	287	690	1,000	280	257	2,020	216	198	161
26	166	186	602	287	690	935	261	223	602	307	180	126
27	153	175	630	575	1,000	780	870	186	780	198	272	198
28	144	180	548	494	810	660	1,340	175	690	158	204	146
29	133	175	417	520	630	3,300	1,000	178	810	140	175	122
30	126	164	370	1,000	-------	2,180	1,060	164	494	240	153	101
31	117	-------	370	1,000	-------	1,130	-------	149	-------	216	153	-------

Daily discharge, in second-feet, of Wolf Creek near Narrows, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912–13.												
1	97	72	84	494	575	750	575	183	467	113	54	62
2	80	72	75	327	494	575	467	169	348	109	52	50
3	74	72	74	327	467	467	394	158	268	105	48	47
4	72	69	93	348	548	370	327	156	280	111	46	45
5	69	62	140	307	520	327	287	137	233	265	45	43
6	66	63	201	169	467	283	257	135	192	153	52	42
7	66	131	236	442	370	247	230	135	183	117	69	40
8	62	394	219	442	327	210	216	140	370	93	57	43
9	60	268	186	720	280	201	204	135	370	82	57	43
10	60	198	161	548	250	201	186	131	280	77	52	43
11	82	164	149	467	257	243	207	122	236	79	57	38
12	57	137	137	602	327	265	630	113	268	213	75	36
13	57	135	113	1,000	268	257	1,270	109	243	124	70	39
14	70	135	101	690	233	870	935	109	213	103	69	34
15	101	126	99	520	210	1,720	720	140	169	91	69	31
16	86	111	109	417	210	1,720	690	113	144	93	64	36
17	75	105	99	348	223	1,000	370	122	161	79	55	43
18	69	97	101	327	207	690	520	133	153	82	48	52
19	74	89	101	280	183	575	467	113	201	97	45	63
20	91	86	91	243	186	467	394	101	172	89	66	50
21	105	79	89	247	201	417	307	120	135	75	66	86
22	79	79	86	370	198	394	272	135	115	68	60	151
23	86	75	79	327	186	307	250	223	172	59	63	105
24	91	82	82	394	192	280	236	1,270	233	63	79	82
25	93	75	69	548	192	272	213	690	216	75	64	63
26	89	74	89	602	180	287	201	467	164	69	55	56
27	82	74	113	720	442	5,220	233	870	144	66	47	50
28	75	79	105	1,000	1,000	2,660	213	1,420	210	62	43	45
29	74	75	113	720	-------	1,420	216	870	144	69	40	45
30	72	72	153	575	-------	1,000	207	602	122	63	82	46
31	70	-------	870	520	-------	750	-------	780	-------	57	86	-------
1913–14.												
1	48	72	89	198	660	467	1,860	204	56	32	31	63
2	47	63	417	192	467	467	1,790	183	52	36	30	55
3	47	57	280	494	417	370	1,270	172	45	36	31	44
4	44	55	230	370	370	370	870	164	44	36	29	36
5	42	57	186	186	348	370	690	178	47	35	31	34
6	43	59	164	183	370	417	548	186	51	35	31	33
7	43	57	153	175	1,130	370	442	180	57	34	31	31
8	40	60	158	175	1,000	348	442	164	56	31	30	29
9	45	195	140	370	720	327	417	169	47	31	38	29
10	43	254	117	1,270	575	272	370	166	50	32	38	28
11	43	166	140	810	494	935	327	153	44	43	43	31
12	40	135	113	548	370	1,560	307	144	43	43	45	42
13	37	135	117	327	327	1,130	287	140	60	38	38	45
14	37	204	109	287	250	870	254	135	82	164	27	38
15	36	236	105	280	283	810	327	131	55	164	29	32
16	36	219	105	250	257	1,000	750	122	46	72	27	28
17	34	467	93	240	219	1,340	780	109	45	63	26	26
18	36	442	89	219	327	1,420	630	103	40	66	24	25
19	40	287	86	201	1,060	1,200	520	101	40	60	23	24
20	86	223	80	213	2,260	720	690	99	42	57	21	23
21	113	180	77	660	1,420	520	750	95	75	45	19	24
22	86	151	75	548	1,000	494	630	91	70	37	20	23
23	72	140	77	394	690	394	548	84	52	34	22	23
24	72	128	75	327	935	417	467	77	45	31	21	26
25	204	117	79	1,200	750	467	394	72	45	29	28	32
26	192	101	156	870	602	548	370	68	44	34	68	34
27	144	89	175	630	548	690	327	66	40	38	105	36
28	128	82	146	467	494	609	280	60	37	43	417	29
29	113	75	164	417	-------	548	243	59	36	40	243	26
30	95	74	161	327	-------	1,060	226	60	34	35	117	26
31	84	-------	175	467	-------	1,720	-------	60	-------	32	80	-------

Daily discharge, in second-feet, of Wolf Creek near Narrows, Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	24	34	126	720	1,640	307	230	161	146	43	38	105
2	21	32	442	548	3,460	272	207	149	192	55	39	82
3	20	32	720	394	2,100	243	198	151	226	48	52	74
4	23	32	467	327	1,340	216	178	172	240	50	55	97
5	28	32	2,020	283	1,000	216	166	156	204	82	47	348
6	29	31	1,000	442	870	230	158	149	175	101	42	467
7	27	32	660	4,100	690	254	156	149	144	69	36	287
8	28	32	494	1,790	575	250	161	146	135	57	34	216
9	24	33	370	1,060	467	210	161	135	126	50	32	149
10	24	30	287	750	394	280	156	124	109	48	34	126
11	21	31	250	575	348	370	164	113	91	47	36	113
12	21	32	213	720	287	370	307	113	80	50	60	95
13	21	32	189	602	287	327	307	575	77	45	50	93
14	29	32	180	494	257	327	272	327	72	57	43	103
15	45	38	117	810	272	287	243	230	72	55	38	86
16	122	64	103	1,000	370	280	216	183	75	50	55	70
17	146	80	146	935	348	327	198	151	79	45	57	70
18	89	77	135	1,200	327	287	178	133	79	50	80	79
19	86	70	124	1,060	287	307	161	117	75	50	86	75
20	75	63	233	810	257	287	153	105	63	89	66	68
21	63	38	548	602	236	283	149	109	59	140	62	74
22	52	52	870	417	233	272	137	97	52	122	55	109
23	46	55	575	394	210	261	140	97	52	99	50	84
24	47	42	442	467	370	250	169	219	50	75	43	72
25	40	46	520	548	602	243	153	151	47	63	38	63
26	34	47	417	548	467	280	140	124	45	55	32	59
27	36	45	250	467	417	327	137	140	42	47	40	57
28	45	48	254	417	348	327	142	153	40	43	135	57
29	42	47	307	327	-------	307	230	135	39	39	272	59
30	42	55	1,200	272	-------	520	183	158	42	40	180	62
31	38	-------	1,060	327	-------	243	-------	140	-------	40	131	-------
1915–16.												
1	1,490	54	128	810	870	467	467	230	101	86	287	113
2	810	51	124	750	1,940	467	417	216	89	82	1,340	109
3	442	47	109	690	1,790	1,060	370	201	107	88	660	109
4	287	47	99	575	1,130	870	327	210	230	91	442	107
5	101	50	93	494	870	780	287	213	146	72	467	99
6	169	50	86	780	1,060	810	348	192	135	66	394	101
7	166	46	79	2,020	602	1,420	327	183	156	59	935	99
8	146	46	84	2,500	494	1,790	370	192	135	55	1,560	89
9	131	46	82	1,340	467	1,130	348	175	117	69	935	84
10	117	45	77	870	575	870	327	161	109	77	630	79
11	107	48	75	810	520	690	690	153	109	156	520	74
12	97	47	72	720	467	520	1,270	144	103	113	417	68
13	91	46	79	720	417	467	1,130	140	93	95	467	69
14	88	47	79	690	370	417	810	137	86	103	417	69
15	84	64	55	602	307	394	630	133	82	124	417	91
16	79	86	109	548	287	348	494	124	243	5,320	1,490	105
17	75	86	1,200	467	272	287	417	122	216	3,860	870	88
18	70	72	3,540	287	268	272	348	117	175	1,860	602	74
19	66	124	1,860	287	261	265	287	111	146	1,790	467	68
20	75	240	1,000	287	230	247	272	109	135	1,420	370	66
21	75	186	690	280	233	307	257	103	126	1,560	283	62
22	70	156	467	327	223	327	250	95	105	3,380	250	62
23	63	135	370	467	216	327	230	149	91	1,640	348	59
24	62	126	327	442	575	307	204	192	120	870	240	57
25	60	111	280	417	2,100	287	243	164	192	630	198	55
26	57	103	370	370	1,200	272	257	144	233	494	175	51
27	60	105	307	348	870	750	254	131	164	442	153	52
28	60	140	370	327	690	935	250	113	133	520	151	52
29	57	135	1,940	327	575	442	243	113	115	630	135	109
30	55	135	2,020	520	-------	602	240	109	101	442	128	140
31	54	-------	1,060	494	-------	520	-------	243	-------	327	120	-------

Monthly discharge of Wolf Creek near Narrows, Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 223 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
July 22–31	97	66	79.2	0.355	0.13
August	164	52	75.3	.338	.39
September	720	48	102	.457	.51
1908–9.					
October	1,200	44	147	.659	.76
November	442	115	189	.848	.95
December	2,260	156	579	2.60	3.00
January	1,420	210	600	2.69	3.10
February	1,200	201	526	2.36	2.46
March	1,420	327	771	3.46	3.99
April	780	198	381	1.71	1.91
May	2,900	236	669	3.00	3.46
June	630	144	299	1.34	1.50
July	690	99	191	.857	.99
August	327	69	155	.695	.80
September	417	60	133	.596	.66
The year	2,900	44	387	1.74	23.58
1909–10.					
October	327	59	103	.462	.53
November	79	57	66.6	.299	.33
December	307	55	104	.466	.54
January	1,420	82	429	1.92	2.21
February	1,130	180	386	1.73	1.80
March	602	131	306	1.37	1.58
April	630	117	307	1.38	1.54
May	630	186	289	1.30	1.50
June	1,420	149	565	2.53	2.82
July	287	86	163	.731	.84
August	131	57	74.4	.334	.39
September	93	46	64.1	.287	.32
The year	1,420	46	237	1.06	14.40
1910–11.					
October	64	39	48.5	.217	.25
November	180	38	49.6	.222	.25
December	575	60	136	.610	.70
January	1,720	122	452	2.03	2.34
February	1,790	195	500	2.24	2.33
March	2,260	142	555	2.49	2.87
April	1,640	254	712	3.19	3.56
May	286	66	137	.614	.71
June	175	55	82.2	.369	.41
July	117	40	64.3	.288	.33
August	91	40	52.8	.237	.27
September	128	48	61.5	.276	.31
The year	2,260	38	236	1.06	14.33
1911–12.					
October	2,580	45	326	1.46	1.68
November	417	89	195	.874	.98
December	935	91	246	1.10	1.27
January	1,000	131	325	1.46	1.68
February	2,180	144	474	2.13	2.30
March	3,300	268	1,120	5.02	5.79
April	2,500	257	651	2.92	3.26
May	1,560	149	449	2.01	2.32
June	2,020	74	260	1.17	1.30
July	1,130	117	314	1.41	1.63
August	370	79	159	.713	.82
September	247	63	103	.462	.52
The year	3,300	45	386	1.73	23.55

Monthly discharge of Wolf Creek near Narrows, Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1912–13.					
October	105	57	76.9	0.345	0.40
November	394	62	112	.502	.56
December	870	69	142	.637	.73
January	1,000	169	485	2.17	2.50
February	1,000	180	328	1.47	1.53
March	5,220	201	789	3.54	4.08
April	1,270	186	390	1.75	1.95
May	1,420	101	326	1.46	1.68
June	467	115	220	.987	1.10
July	265	57	96.8	.434	.50
August	86	49	59.2	.265	.31
September	151	31	53.6	.240	.27
The year	5,220	31	257	1.15	15.61
1913–14.					
October	204	34	70.0	.314	.36
November	467	55	153	.686	.77
December	417	75	140	.628	.72
January	1,270	175	429	1.92	2.21
February	2,260	219	655	2.94	3.06
March	1,720	272	717	3.22	3.71
April	1,860	226	594	2.66	2.97
May	204	59	122	.547	.63
June	82	34	49.3	.221	.25
July	164	29	48.6	.218	.25
August	417	19	56.9	.255	.29
September	63	23	32.5	.146	.16
The year	2,260	19	253	1.13	15.38
1914–15.					
October	146	20	44.8	.201	.23
November	80	30	43.8	.196	.22
December	2,020	193	475	2.13	2.46
January	4,100	272	755	3.39	3.91
February	3,460	210	659	2.96	3.08
March	520	210	289	1.30	1.50
April	307	137	185	.830	.93
May	575	97	163	.731	.84
June	240	39	97.6	.438	.49
July	140	39	61.4	.275	.32
August	272	32	65.1	.292	.34
September	467	57	117	.525	.59
The year	4,100	20	244	1.09	14.91
1915–16.					
October	1,490	54	173	.776	.89
November	240	45	89.1	.400	.45
December	3,540	55	556	2.49	2.87
January	2,500	280	663	2.97	3.42
February	2,100	216	685	3.07	3.31
March	1,790	247	602	2.70	3.11
April	1,270	204	412	1.85	2.06
May	243	95	155	.695	.80
June	243	82	136	.610	.68
July	5,320	55	856	3.84	4.43
August	1,560	120	512	2.30	2.65
September	140	51	82.0	.368	.41
The year	5,320	45	411	1.84	25.08

BLUESTONE RIVER AT LILLY, W. VA.

LOCATION.—At Lilly, Summers County, 2,000 feet below mouth of Little Bluestone River.

DRAINAGE AREA.—454 square miles.

RECORDS AVAILABLE.—August 22, 1908, to September 30, 1916, when station was discontinued. See "Accuracy."

GAGE.— Vertical staff gage in two sections; read by W. H. Lilly.

DISCHARGE MEASUREMENTS.—Made from a boat at sections near gage or by wading.

CHANNEL AND CONTROL.—Practically permanent.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage recorded, 8.5 feet morning reading March 27, 1913 (discharge, about 9,300 second-feet); minimum stage, about 0.0 foot on gage, evening reading August 10, 1915 (discharge, probably no flow). The river gradually fell from 0.80 foot on August 5 to about 0 gage height on August 10, and by the evening of August 11, the stage was again 0.80 foot. The flow of the river was probably affected by some artificial control. The next lowest stage outside of this period was 0.65 foot, evening reading August 24, 1914 (discharge, 14 second-feet).

ICE.—Stage-discharge relation may be affected by ice during parts of December, January, and February.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined between 39 and 6,000 second-feet; beyond these limits the curve is an extension. Daily discharge January 1 to July 31, November 1 to December 31, 1912, from a gaging station located at True, about 3½ miles down the river from Lilly. The daily discharge at Lilly for this period has been considered the same as that for True, as the difference in drainage area is less than 1 per cent. The rating curve for True is fairly well defined between 64 and 4,400 second-feet; beyond these limits the curve is an extension. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Bluestone River at Lilly, W. Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
		Feet.	*Sec.-ft.*			*Feet.*	*Sec.-ft.*
1908.				1912.			
Aug. 22	W. G. Hoyt	1.10	53	Sept. 7	C. T. Bailey	[a] 1.64	68.9
1909.				1913.			
Apr. 16	H. J. Jackson	2.12	340	Nov. 13	Peterson and Walters	2.09	323
1910.				1914.			
Mar. 9	Horton and Bailey	2.66	570	Dec. 2	J. G. Mathers	1.09	49.5
Aug. 24	Bailey and Dort	1.23	71.9	1916.			
1911.				Aug. 18	B. E. Jones	3.57	1,330
July 13	Horton and Bailey	1.88	218				
Oct. 18	Bailey and Perwien	5.86	4,460				
19	do	[a] 4.45	2,240				
20	do	2.94	786				
20	do	[a] 2.90	693				

[a] Gage at True.

Daily discharge, in second-feet, of Bluestone River at Lilly, W. Va., for the years ending Sept. 30, 1908–1916.

Day.	Aug.	Sept.	Day.	Aug.	Sept.	Day.	Aug.	Sept.
1908.			1908.			1908.		
1		55	11		139	21		23
2		46	12		39	22		22
3		39	13		21	23	52	22
4		35	14		31	24	56	21
5		32	15		29	25	72	20
6		51	16		29	26	101	20
7		146	17		25	27	95	20
8		101	18		25	28	109	17
9		93	19		23	29	81	21
10		54	20		23	30	71	22
						31	56	

Daily discharge, in second-feet, of Bluestone River at Lilly, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	20	718	137	2,600	206	620	685	4,360	270	750	292	43
2	21	270	183	1,220	352	530	652	2,740	235	1,050	252	42
3	20	149	177	932	311	473	560	1,310	219	500	352	37
4	20	95	177	895	292	1,720	500	932	292	332	259	39
5	22	81	151	970	332	2,060	446	750	397	206	161	46
6	21	71	120	1,500	332	1,180	352	590	332	2,740	123	81
7	18	64	332	895	397	3,040	332	473	446	3,850	105	83
8	18	64	1,720	620	374	2,740	311	1,090	252	3,040	172	67
9	20	67	1,090	473	397	3,200	273	374	311	1,140	137	311
10	40	61	352	500	332	2,190	266	820	397	620	103	1,500
11	116	61	1,400	397	1,610	2,320	256	1,400	422	397	83	620
12	120	62	2,190	311	1,050	1,310	225	1,310	374	332	71	352
13	85	78	1,720	311	718	970	225	685	560	292	67	194
14	67	101	500	273	560	1,010	422	500	397	292	71	139
15	78	89	500	422	500	970	422	422	473	248	93	95
16	76	78	352	2,190	1,090	858	311	311	259	232	161	146
17	37	89	311	3,040	1,500	750	292	311	252	219	311	620
18	34	194	311	1,610	970	560	262	266	311	200	560	500
19	34	238	332	1,310	1,140	500	238	242	232	172	266	248
20	31	238	352	1,180	895	446	238	222	192	146	177	164
21	33	235	311	970	1,220	620	273	245	156	109	139	123
22	30	189	332	1,010	1,310	1,090	446	252	146	97	103	89
23	28	167	311	750	1,400	1,010	652	242	118	105	89	105
24	36	127	374	590	1,400	750	620	197	141	101	64	248
25	37	109	473	473	2,320	2,190	500	212	151	109	71	374
26	61	101	3,040	500	1,830	2,740	446	750	177	89	66	206
27	64	93	1,720	473	1,180	1,720	397	1,090	151	78	55	127
28	47	85	500	473	820	2,060	352	785	2,890	85	52	118
29	161	74	1,500	473	-------	2,060	332	530	1,050	85	49	97
30	718	149	1,830	446	-------	1,400	970	374	685	194	44	85
31	560	-------	4,720	238	-------	1,050	-------	332	-------	311	44	-------
1909–10.												
1	81	85	55	20	473	2,600	146	500	273	186	107	139
2	71	76	52	100	750	2,190	137	397	245	146	118	159
3	66	76	58	895	620	1,310	149	352	245	116	109	206
4	58	89	54	620	1,090	970	352	332	219	332	105	235
5	56	78	55	473	1,140	685	530	292	620	1,090	97	238
6	64	71	55	446	785	652	397	266	2,190	858	85	200
7	64	67	58	1,720	718	1,050	311	245	1,180	590	95	109
8	58	81	62	1,310	530	750	266	332	685	858	83	89
9	51	83	61	620	473	560	232	473	500	750	67	89
10	76	85	39	530	473	500	212	590	473	560	67	74
11	105	85	54	473	500	500	189	473	685	473	61	74
12	183	80	69	397	397	500	183	446	1,180	374	54	67
13	245	78	172	273	352	620	530	530	1,720	374	58	58
14	156	81	397	292	397	620	718	620	1,400	500	52	69
15	192	69	352	256	397	560	560	473	1,400	620	48	55
16	332	64	273	311	1,090	446	473	397	3,360	397	58	46
17	200	67	189	212	1,940	397	422	352	4,900	560	39	52
18	167	66	151	590	1,720	352	473	422	1,940	6,180	39	46
19	146	69	139	2,740	1,010	273	560	685	1,050	2,460	42	36
20	120	64	105	1,400	652	270	560	500	785	2,190	48	36
21	112	62	95	2,190	620	245	718	530	785	895	54	35
22	103	58	76	2,460	652	245	1,090	446	620	397	78	29
23	156	64	67	1,180	685	225	970	374	652	832	74	34
24	266	66	67	785	620	212	1,310	332	620	270	61	33
25	232	71	60	590	500	172	1,720	352	718	232	49	35
26	212	74	67	500	422	172	1,180	374	446	194	58	37
27	232	58	71	560	397	177	895	352	397	177	62	91
28	172	55	76	750	530	172	785	292	500	123	64	64
29	123	56	60	685	-------	156	685	245	232	105	61	56
30	103	52	64	500	-------	154	620	352	203	114	49	71
31	87	-------	20	473	-------	151	-------	590	-------	107	44	-------

Daily discharge, in second-feet, of Bluestone River at Lilly, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	55	48	159	932	2,460	273	560	685	83	101	34	64
2	49	42	112	3,850	1,940	273	590	590	99	99	29	58
3	49	44	91	2,890	895	352	1,720	590	107	95	26	54
4	42	39	109	1,940	685	374	3,850	560	91	105	28	48
5	36	42	97	1,400	590	397	3,040	590	109	311	33	44
6	33	39	397	620	560	446	2,890	446	95	242	34	37
7	35	39	652	446	530	5,260	2,320	374	112	332	31	28
8	39	37	332	374	718	5,080	1,940	262	125	500	32	30
9	44	35	232	311	2,190	4,020	3,040	259	112	311	29	42
10	39	31	232	248	3,850	2,740	2,740	248	103	311	31	47
11	39	35	194	206	1,610	2,320	1,310	235	83	273	37	42
12	42	35	206	238	858	1,500	750	194	60	222	36	37
13	42	28	159	225	685	932	685	149	44	212	46	31
14	39	36	123	282	560	750	858	144	43	134	37	26
15	31	33	112	216	473	685	1,610	154	37	101	31	26
16	33	33	97	206	352	530	2,060	125	37	97	29	37
17	35	29	101	238	332	446	1,830	107	39	81	26	31
18	31	29	91	219	397	500	1,500	99	46	64	29	37
19	23	36	97	194	785	970	1,400	99	58	60	30	64
20	23	31	105	206	895	1,610	1,610	103	46	49	31	64
21	25	26	97	248	820	1,140	1,940	107	55	54	28	49
22	35	26	85	473	785	970	1,400	118	61	52	28	58
23	36	20	56	685	718	750	820	129	71	46	31	40
24	35	20	112	590	352	620	785	125	69	35	34	37
25	42	21	151	446	397	590	652	103	154	31	30	28
26	42	24	266	397	397	530	560	118	209	32	28	31
27	39	35	259	446	374	446	473	128	139	32	26	27
28	37	43	248	422	446	500	446	108	123	31	28	28
29	39	292	273	500	-------	500	397	71	132	29	47	31
30	42	266	652	5,630	-------	590	685	80	116	31	69	29
31	42	-------	820	3,040	-------	560	-------	109	-------	31	81	-------
1911–12.												
1	32	132	332	620	1,100	522	1,060	1,290	139	885	270	172
2	530	116	352	620	805	318	9,500	845	122	1,490	222	151
3	3,360	95	256	522	522	318	6,170	655	135	925	146	109
4	1,940	81	256	460	430	318	2,160	522	128	555	118	107
5	422	64	192	318	372	293	1,100	430	128	1,490	101	78
6	1,220	473	177	293	318	293	885	522	102	1,390	74	64
7	718	1,400	164	293	245	318	728	1,390	75	1,060	80	61
8	352	858	169	293		765	655	1,100	67	490	78	52
9	446	473	149	293		2,540	522	765	67	345	74	46
10	500	397	141			2,040	430	522	63	401	62	42
11	374	397	139	280	290	1,700	401	655	60	345	67	46
12	652	311	139			6,000	372	2,800	56	293	71	47
13	685	332	151			5,510	318	1,490	53	318	81	43
14	530	352	149	372		4,100	430	1,200	53	728	71	42
15	332	292	146		201	2,670	372	728	53	293	78	40
16	266	292	216			3,500	318	1,060	69	157	69	37
17	422	332	216		265	1,700	293	1,390	91	154	62	29
18	4,190	311	209			1,490	522	925	128	150	58	40
19	1,610	1,310	206	525	293	1,100	460	555	157	169	74	60
20	652	750	192		401	690	401	460	201	222	91	67
21	473	352	192		620	293	345	430	142	150	292	60
22	374	397	197		885	460	345	372	86	127	446	58
23	352	374	2,320		1,010	522	460	345	94	154	311	61
24	311	397	1,310		765	3,220	430	293	555	167	292	500
25	292	397	1,310	620	555	2,940	345	201	2,670	332	216	292
26	273	500	1,140	588	765	1,590	318	201	1,390	620	177	194
27	259	374	1,090	845	1,290	1,200	2,540	222	2,940	446	490	129
28	212	332	785	1,010	968	1,390	2,940	180	1,490	225	270	225
29	192	352	652	1,700	655	4,100	2,410	165	655	167	192	189
30	172	352	785	4,100	-------	4,400	1,810	172	490	141	149	129
31	129	-------	718	2,160	-------	1,700	-------	180	-------	374	159	-------

Daily discharge, in second-feet, of Bluestone River at Lilly, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912–13.												
1	93	61	57		970	1,940	652	225	620	91	85	109
2	80	55	58		820	895	530	206	446	103	76	97
3	67	54	56		750	652	446	183	422	259	76	87
4	61	52	50		1,050	500	397	183	1,220	352	69	87
5	58	61	58		1,050	397	332	180	1,940	397	66	85
6	49	72	108		785	397	292	180	970	332	69	80
7	47	81	180		560	311	273	161	590	332	62	72
8	44	67	201	1,050	446	292	256	156	2,060	311	71	69
9	37	80	180		560	245	266	164	2,320	270	67	80
10	35	97	161		374	292	252	154	1,140	238	69	69
11	34	142	142		397	1,090	232	161	590	228	66	67
12	31	135	128		718	1,180	228	144	473	194	69	67
13	36	135	122		652	820	473	109	397	149	76	74
14	42	128	108		560	2,460	1,010	114	311	129	67	71
15	52	115	97	718	620	2,600	1,050	109	273	72	72	60
16	61	100	80	530	422	2,460	970	123	161	89	69	48
17	64	80	74	446	352	1,310	750	132	132	99	56	40
18	76	74	70	422	311	820	718	156	137	107	54	38
19	87	64	66	422	270	590	530	169	197	112	56	32
20	95	63	66	397	245	652	422	137	180	154	60	26
21	97	63	64	422	292	590	311	114	149	159	72	95
22	107	61	64	685	397	422	252	156	134	149	91	159
23	116	56	64	785	311	352	245	238	141	129	107	134
24	116	50	64	2,460	273	311	238	1,310	125	120	107	120
25	109	50	67	2,190	273	292	232	895	134	112	116	97
26	101	50		1,720	245	352	219	473	151	105	107	87
27	87	50		1,610	1,610	8,780	232	858	174	95	91	80
28	78	50	92	1,720	2,890	5,820	242	1,830	141	87	83	67
29	87	50		1,220	-------	1,940	273	1,500	125	85	56	51
30	76	50		970	-------	1,220	245	1,090	95	78	87	38
31	64	-------	900	895	-------	858	-------	718	-------	85	112	-------
1913–14.												
1	30	83	560	422	560	685	2,190	232	85	39	38	311
2	26	72	785	352	560	560	1,720	212	87	29	29	352
3	32	71	685	473	500	500	1,310	206	83	33	22	352
4	43	69	473	332	446	446	1,180	203	76	31	22	60
5	69	66	292	446	397	446	1,140	203	85	42	29	55
6	69	54	238	446	590	446	1,140	232	114	42	67	52
7	60	52	245	446	1,400	560	718	232	103	31	69	52
8	43	46	206	397	1,310	785	750	311	97	29	74	49
9	40	248	192	1,180	1,050	750	1,310	273	89	35	67	49
10	30	473	177	3,850	750	750	895	252	78	39	66	55
11	30	332	177	2,190	652	620	858	238	61	31	55	54
12	23	311	177	1,050	620	530	718	212	52	26	51	52
13	26	311	174	820	422	1,720	500	206	43	22	52	49
14	30	352	154	750	352	1,500	530	183	39	22	51	52
15	28	422	154	718	352	1,400	718	156	38	28	55	34
16	29	446	146	652	350	1,720	1,610	141	35	74	51	26
17	32	397	132	446	350	2,600	1,830	127	33	232	47	29
18	35	352	137	422	685	3,200	1,500	127	28	180	40	23
19	35	332	123	311	3,040	3,360	970	123	35	123	35	21
20	55	273	118	374	5,630	1,720	785	120	31	52	28	18
21	56	259	116	1,310	3,680	1,050	685	109	35	36	23	20
22	66	238	114	932	1,830	1,500	590	103	38	28	19	22
23	56	206	125	530	1,610	1,310	718	97	31	23	16	26
24	54	203	105	685	1,830	970	685	95	34	28	15	29
25	55	203	97	2,740	1,500	1,050	560	85	47	30	16	26
26	52	192	212	2,600	1.203	970	500	83	51	28	29	25
27	66	200	266	1,220	970	1,010	397	81	42	42	93	23
28	235	192	332	750	858	1,050	397	85	35	69	292	23
29	159	200	311	473	-------	970	352	81	29	51	397	23
30	125	232	311	530	-------	2,060	273	89	35	42	397	24
31	118	-------	311	500	-------	3,200	-------	93	-------	42	397	-------

***Daily discharge, in second-feet, of Bluestone River at Lilly, W. Va., for the years ending Sept. 30, 1908–1916*—Continued.**

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	18	26	40	970	2,890	374	273	500	151	47	51	54
2	18	29	46	560	7,110	352	252	530	174	42	47	55
3	23	29	85	374	4,020	311	232	446	219	42	35	61
4	23	26	473	352	2,060	292	219	292	212	43	28	69
5	23	21	1,310	311	1,500	266	212	374	192	44	23	192
6	22	21	932	530	1,400	235	186	560	174	48	9	200
7	23	21	352	6,180	1,310	292	180	718	161	46	5	174
8	22	22	212	5,080	1,310	352	174	820	161	44	4	183
9	23	24	101	3,200	1,310	311	156	560	132	83	3	197
10	28	28	66	1,180	1,140	273	151	397	105	91	2	174
11	29	30	66	785	785	259	161	374	93	83	7	174
12	31	26	67	895	718	245	156	256	97	76	28	114
13	30	25	76	1,720	750	259	149	203	105	76	25	67
14	37	26	78	1,310	620	273	151	189	107	66	22	48
15	42	27	87	1,180	560	332	154	172	123	58	25	38
16	89	26	85	1,720	500	397	159	132	156	52	26	36
17	125	26	107	1,830	446	446	151	118	149	40	30	35
18	127	26	112	2,060	397	422	151	101	132	43	28	35
19	149	28	161	1,310	374	473	154	87	118	51	24	40
20	101	27	397	1,140	352	473	141	69	103	85	26	37
21	81	29	397	895	311	473	129	66	89	177	137	35
22	44	28	256	858	273	560	127	55	83	192	109	30
23	37	26	183	932	273	500	169	54	87	109	93	22
24	32	27	164	970	252	473	252	78	87	103	87	22
25	29	29		970	374	473	256	95	91	76	74	22
26	28	31	85	970	560	530	311	105	83	60	85	26
27	28	37		970	473	560	266	118	74	49	89	25
28	26	36	109	1,010	422	560	262	105	71	39	87	27
29	28	33	238	1,220	-------	560	352	81	64	37	78	28
30	29	34	590	1,010	-------	422	473	62	54	40	66	36
31	29	-------	1,940	1,310	-------	332	-------	60	-------	44	55	-------
1915–16.												
1	2,460	37	103	1,400	820	1,140	530	352	161	129	245	89
2	1,720	35	101	1,500	750	1,090	473	311	180	139	2,890	89
3	895	37	87	1,140	685	1,050	500	311	266	141	1,830	87
4	750	38	80	1,010	895	1,310	560	273	292	118	1,090	89
5	446	37	67	785	1,310	1,310	530	266	266	103	560	81
6	311	34	62	652	1,140	1,830	500	259	245	89	374	74
7	232	29	66	1,610	1,090	4,020	473	242	225	91	560	69
8	177	29	60	4,900	1,310	6,560	530	238	209	81	1,010	60
9	144	32	52	3,040	1,500	3,200	970	273	194	78	750	52
10	87	30	42	1,940	1,610	1,500	1,500	311	169	95	652	49
11	69	29	36	1,720	1,500	858	2,320	266	154	132	500	54
12	64	31	38	1,400	1,180	620	3,200	245	146	164	422	56
13	60	29	52	1,720	895	590	2,190	228	156	189	422	55
14	54	97	54	1,720	785	560	1,500	197	180	219	685	49
15	56	200	56	1,500	685	530	1,050	149	192	374	895	44
16	54	212	80	820	560	530	820	149	209	1,090	4,720	74
17	51	238	1,310	785	422	500	718	139	189	3,680	2,600	83
18	43	262	6,560	652	352	560	685	134	164	1,610	1,220	78
19	39	245	3,520	530	422	560	560	127	151	932	785	69
20	37	232	1,940	560	446	500	422	123	159	620	718	69
21	35	222	1,310	473	446	500	374	127	154	1,940	685	62
22	37	192	820	560	422	473	332	129	141	1,310	685	60
23	36	151	858	620	446	473	352	228	149	1,500	652	52
24	37	144	785	652	932	500	352	273	169	1,180	590	47
25	36	129	895	560	4,720	500	352	252	446	718	473	40
26	37	139	895	500	3,040	473	397	219	1,610	374	219	43
27	46	118	785	446	1,500	530	446	189	750	311	132	42
28	43	116	2,890	446	1,140	2,890	397	159	212	590	134	47
29	36	109	6,920	446	1,050	1,720	397	156	137	652	120	80
30	37	101	4,540	530	-------	1,090	374	154	132	473	101	114
31	37	-------	2,060	620	-------	750	-------	149	-------	311	99	-------

NOTE.—Stage-discharge relation affected by ice Jan. 1–2, 1910; Dec. 26, 1912, to Jan. 14, 1913; Feb. 16–17, 1914; Dec. 25–27, 1914; discharge estimated by comparison with discharge of Wolf Creek at Narrows. Daily discharge taken from True for Jan. 1 to July 31 and Nov. 1 to Dec. 31, 1912; see "Accuracy" paragraph, p. 163.

Monthly discharge of Bluestone River at Lilly, W. Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 454 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
August 23–31	109	52	77	0.170	0.06
September	146	17	41.5	.091	.10
1908–9.					
October	718	18	86.2	.190	.22
November	718	61	140	.308	.34
December	4,720	120	888	1.96	2.26
January	3,040	238	905	1.99	2.29
February	2,320	206	887	1.95	2.03
March	3,200	446	1,420	3.13	3.61
April	970	225	409	.901	1.00
May	4,360	197	780	1.72	1.98
June	2,890	118	410	.903	1.01
July	3,850	78	585	1.29	1.49
August	560	44	148	.326	.38
September	1,500	37	230	.507	.57
The year	4,720	18	574	1.26	17.18
1909–10.					
October	332	51	138	.304	.35
November	89	52	71	.156	.17
December	397	20	102	.225	.26
January	2,740	20	786	1.73	1.99
February	1,940	352	712	1.57	1.64
March	2,600	151	577	1.27	1.46
April	1,720	137	579	1.28	1.43
May	685	245	417	.919	1.06
June	4,900	203	1,010	2.22	2.48
July	6,180	105	728	1.60	1.84
August	118	39	67.3	.148	.17
September	238	29	85.4	.188	.21
The year	6,180	20	437	.963	13.66
1910–11.					
October	55	23	37.8	.083	.10
November	292	20	49.8	.110	.12
December	820	56	217	.478	.55
January	5,630	194	905	1.99	2.29
February	3,850	332	916	2.02	2.10
March	5,260	273	1,180	2.60	3.00
April	3,850	397	1,480	3.26	3.64
May	685	71	232	.511	.59
June	209	37	88.6	.195	.22
July	500	29	132	.291	.34
August	81	26	34.5	.076	.09
September	64	26	40.2	.088	.10
The year	5,630	20	440	.969	13.14
1911–12.					
October	4,190	32	718	1.58	1.82
November	1,400	64	420	.925	1.03
December	2,320	139	466	1.03	1.19
January	4,100	----------	693	1.53	1.76
February	1,290	----------	518	1.14	1.23
March	6,000	293	1,870	4.12	4.75
April	9,500	293	1,300	2.86	3.19
May	2,800	165	712	1.57	1.81
June	2,940	53	415	.914	1.02
July	1,490	127	476	1.05	1.21
August	490	58	159	.350	.40
September	500	29	106	.233	.26
The year	9,500	29	656	1.44	19.67

Monthly discharge of Bluestone River at Lilly, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1912–13.					
October	116	31	70.5	0.155	0.18
November	142	50	74.9	.165	.18
December		50	121	.267	.31
January	2,460	397	1,040	2.29	2.64
February	2,890	245	650	1.43	1.49
March	8,780	245	1,320	2.91	3.36
April	1,050	219	419	.923	1.03
May	1,830	109	398	.877	1.01
June	2,320	95	532	1.17	1.30
July	397	72	168	.370	.43
August	116	54	76.9	.169	.19
September	159	26	76.2	.168	.19
The year	8,780	26	412	.907	12.31
1913–14.					
October	235	23	58.3	.128	.15
November	473	46	230	.507	.57
December	785	97	247	.544	.63
January	3,850	311	914	2.01	2.32
February	5,630		1,200	2.64	2.75
March	3,360	446	1,270	2.80	3.23
April	2,190	273	918	2.02	2.25
May	311	81	161	.355	.41
June	114	28	55.6	.122	.14
July	232	22	50.3	.111	.13
August	397	15	85.2	.188	.22
September	352	18	66.2	.146	.16
The year	5,630	15	433	.954	12.96
1914–15.					
October	149	18	44.3	.098	.11
November	37	21	27.5	.061	.07
December	1,940	40	290	.639	.74
January	6,180	311	1,410	3.11	3.58
February	7,110	252	1,160	2.56	2.67
March	560	235	390	.859	.99
April	473	127	205	.452	.50
May	820	54	251	.553	.64
June	219	54	122	.269	.30
July	192	37	67.3	.148	.17
August	137	2	45.4	.100	.12
September	200	22	75.2	.166	.19
The year	7,110	2	337	.742	10.08
1915–16.					
October	2,460	35	263	.579	.67
November	262	29	111	.244	.27
December	6,920	36	1,200	2.64	3.04
January	4,900	446	1,140	2.51	2.89
February	4,720	352	1,110	2.44	2.63
March	6,560	473	1,250	2.75	3.17
April	3,200	332	793	1.75	1.95
May	352	123	214	.471	.54
June	1,610	132	260	.573	.64
July	3,680	78	627	1.38	1.59
August	4,720	99	865	1.91	2.20
September	114	40	65.2	.144	.16
The year	6,920	29	659	1.45	19.75

GREENBRIER RIVER AT MARLINTON, W. VA.

LOCATION.—At Chesapeake & Ohio Railway bridge on spur that runs to Campbell's lumber mill, 1½ miles above Marlinton, Pocahontas County, and immediately below mouth of Stoney Creek.

DRAINAGE AREA.—408 square miles.

RECORDS AVAILABLE.—July 9, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage attached to bridge; read by P. G. Johnston and C. H. McCoy.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge or by wading.

CHANNEL AND CONTROL.—Bed at measuring section composed of coarse gravel. Control probably permanent.

EXTREME OF DISCHARGE.—1908–1916: Maximum stage recorded, 14.2 feet at noon March 27, 1913 (discharge, about 21,700 second-feet); minimum stage, 3.05 feet September 25 to October 8, 1914 (discharge, 12 second-feet).

ICE.—Stage-discharge relation may be affected by ice during December, January, and February.

ACCURACY.—Stage-discharge relation permanent during record. Rating curve well defined between 28 and 6,000 second-feet; beyond these limits the curve is an extension. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Greenbrier River at Marlinton, W. Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1912.		*Feet.*	*Sec.-ft.*
July 9	Wm. M. O'Neill	4.01	435	Mar. 23	C. T. Bailey	5.44	1,790
Aug. 3	W. G. Hoyt	3.59	143	25	do	6.84	4,090
1909.				Sept. 16	do	3.27	35.1
Apr. 17	H. J. Jackson	5.02	1,300	1913.			
19	do	4.54	788	Nov. 11	Peterson and Walters	4.84	982
Nov. 18	A. H. Horton	3.73	291	12	do	4.60	816
Dec. 2	G. L. Parker	3.55	136	1914			
1910.				Nov. 29	J. G. Mathers	3.27	46.6
Aug. 22	J. C. Dort	3.88	264	1916			
Oct. 10	C. T. Bailey	3.77	233	Aug. 16	B. E. Jones	4.24	571
1911.							
Nov. 3	Bailey and Perwien	3.75	210				

Daily discharge, in second-feet, of Greenbrier River at Marlinton, W. Va., for the years ending Sept. 30, 1908–1916.

Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.
1908.				1908.				1908.			
1		243	106	11	238	96	46	21	114	68	28
2		180	88	12	189	74	39	22	114	81	27
3		144	68	13	161	54	35	23	110	63	26
4		123	52	14	144	81	33	24	398	127	26
5		208	44	15	152	96	32	25	722	135	23
6		270	42	16	135	92	28	26	834	110	22
7		228	39	17	110	96	39	27	934	96	57
8		175	35	18	96	81	35	28	934	74	52
9	354	144	68	19	135	63	32	29	603	63	44
10	291	123	57	20	135	63	28	30	438	131	39
								31	314	127	

Daily discharge, in second-feet, of Greenbrier River at Marlinton, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	35	68	33	314	619	884	705	1,500	308	740	987	57
2	35	63	33	348	578	740	1,040	1,320	302	611	562	52
3	30	63	32	438	547	627	934	1,150	360	466	360	42
4	30	60	30	834	502	934	884	987	398	259	259	39
5	28	57	30	2,170	459	884	834	787	595	166	189	63
6	27	54	28	1,820	424	834	884	687	524	208	148	103
7	26	52	41	1,260	405	787	884	586	424	233	131	74
8	24	49	63	934	1,150	714	652	502	373	198	118	54
9	33	46	60	636	2,930	740	787	452	424	152	106	52
10	37	46	54	555	3,100	1,150	627	1,150	392	114	92	60
11	35	42	71	540	2,770	1,820	487	1,200	348	96	81	54
12	33	42	99	509	2,610	2,170	445	1,040	286	96	71	54
13	32	39	99	524	2,170	2,770	2,170	834	253	135	63	63
14	30	39	92	834	2,030	2,460	7,170	687	238	127	57	52
15	30	37	110	2,170	2,310	1,890	3,450	555	286	131	85	42
16	28	35	139	2,460	3,270	1,440	1,890	473	595	110	348	44
17	28	35	213	2,310	3,630	1,040	1,260	411	424	88	348	66
18	27	33	275	2,170	3,270	787	987	343	834	68	228	60
19	27	32	291	2,170	2,610	678	787	291	740	74	180	54
20	24	32	286	2,030	2,170	562	619	291	555	63	152	49
21	24	30	280	1,890	1,890	459	884	696	438	57	135	49
22	23	28	275	1,760	1,820	386	1,500	2,310	325	54	123	44
23	22	39	275	1,560	1,630	308	2,770	1,440	297	57	106	42
24	33	46	264	1,500	1,500	253	2,770	934	291	52	92	41
25	37	46	259	1,380	1,380	198	1,890	705	238	44	74	41
26	33	42	248	1,260	1,260	157	1,380	740	208	68	68	37
27	33	42	238	1,150	1,100	106	1,100	787	198	74	63	44
28	30	37	238	1,100	1,040	2,460	884	603	184	68	57	52
29	44	37	228	934	-------	3,100	1,150	480	180	52	49	44
30	71	35	248	740	-------	2,610	1,760	398	480	110	68	41
31	68	-------	280	661	-------	987	-------	337	-------	1,700	63	-------
1909–10.												
1	41	106	144		438	4,800	228	687	373	264	88	189
2	39	99	161		424	3,100	228	540	373	243	81	438
3	37	99	161		418	1,440	218	438	398	264	74	337
4	33	81	157		405	1,700	228	398	411	280	63	509
5	33	66	152	1,380	392	1,320	253	348	1,890	302	88	884
6	30	81	144		392	1,260	259	275	2,930	337	78	740
7	30	71	139		386	1,200	248	259	2,310	354	68	480
8	28	74	135		386	1,040	248	291	1,500	386	66	280
9	27	331	131	934	438	731	228	314	636	366	63	213
10	26	1,150	123	834	424	652	208	302	1,150	348	60	184
11	148	934	106	570	424	696	198	280	3,100	314	63	152
12	787	636	92	532	418	652	218	270	3,450	280	81	118
13	418	509	1,200	494	411	619	424	438	4,010	253	127	114
14	275	431	4,010	392	459	603	502	884	4,010	308	103	152
15	223	286	1,700	386	487	578	438	834	2,930	466	88	135
16	193	233	644	373	570	555	392	636	11,900	636	68	110
17	175	223	652	360	2,610	502	424	532	7,860	787	68	96
18	166	213	570	438	6,280	445	524	473	3,270	670	103	74
19	152	184	502	2,030	2,170	360	636	424	2,310	570	96	78
20	135	161	431	1,200	1,760	337	705	411	1,820	480	81	81
21	123	161	360	2,930	1,500	314	722	570	1,560	386	92	63
22	118	166	325	3,100	1,890	308	696	570	1,320	314	280	57
23	114	175	297	1,890	2,030	302	687	524	1,100	280	218	52
24	286	238	259	1,100	1,380	302	884	487	934	259	131	46
25	314	238	223	787	987	302	1,040	636	714	213	96	144
26	233	198		570	740	302	1,040	619	562	170	78	302
27	208	184		603	540	291	987	524	466	144	66	386
28	180	175	220	562	1,440	280	1,100	459	392	135	57	302
29	152	161		494	-------	270	987	452	337	123	52	238
30	123	148		473	-------	259	834	411	291	110	46	189
31	114	-------	197	459	-------	248	-------	398	-------	96	52	-------

Daily discharge, in second-feet, of Greenbrier River at Marlinton, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	148	68	270	1,630	4,400	578	1,040	524	494	110	28	1,150
2	106	88	337	4,010	3,270	644	884	466	314	96	27	696
3	66	96	280	9,020	2,310	586	740	424	189	85	35	431
4	46	81		6,280	1,630	509	2,770	386	139	71	35	259
5	57	74		3,270	1,260	452	5,630	343	259	63	68	180
6	74	68		1,890	1,100	398	4,400	314	517	189	99	135
7	63	63		1,150	934	619	2,610	291	466	348	81	110
8	103	60		787	834	1,040	1,890	275	934	325	57	88
9	280	57		603	787	987	1,500	253	595	308	46	66
10	243	57		494	884	2,030	1,260	238	424	291	39	85
11	203	52		2,170	834	2,460	1,040	208	343	264	35	81
12	161	49		4,200	740	2,170	884	180	392	213	33	68
13	118	46		5,210	687	2,170	1,630	152	424	157	32	54
14	96	46	180	4,200	619	2,030	3,630	144	343	114	30	39
15	81	42		2,610	562	1,890	3,450	139	253	88	28	161
16	68	42		2,030	509	2,030	2,930	135	208	63	28	2,310
17	68	41		1,500	459	2,310	2,610	135	166	66	27	2,170
18	63	39		1,150	424	2,460	2,310	127	152	68	26	2,030
19	60	39		834	386	2,770	2,030	123	280	68	24	1,890
20	57	35		627	331	2,610	1,700	118	228	66	24	1,760
21	52	35		586	360	2,030	1,500	110	280	66	23	1,630
22	52	33		1,760	555	1,500	1,320	103	259	63	23	1,500
23	46	37		2,610	705	1,320	1,200	103	228	60	22	1,320
24	81	233		2,460	670	1,200	1,100	99	213	57	22	1,200
25	96	314		2,030	619	1,040	987	96	193	63	21	1,100
26	71	259		2,170	586	987	834	144	180	60	21	987
27	57	218	1,120	3,820	517	1,500	740	740	170	52	39	934
28	52	148		4,200	466	1,760	687	740	152	42	348	884
29	96	238		3,450	-------	1,500	644	1,150	131	37	1,150	834
30	96	319		15,200	-------	1,320	578	884	118	32	1,760	787
31	81	-------		9,020	-------	1,200	-------	687	-------	28	1,820	-------
1911–12.												
1	934	259				1,100	2,310	502	118	652	540	
2	884	213				987	1,890	466	103	595	373	
3	884	170				884	1,560	438	96	555	259	85
4	834	127				787	1,380	405	88	524	208	
5	787	96				740	1,040	373	81	480	180	
6	740	248				687	740	337	81	445	148	49
7	1,100	1,380				627	555	308	74	392	135	49
8	1,560	1,440				570	687	291	71	337	118	49
9	1,700	1,200				540	934	280	68	297	152	46
10	1,500	987				502	834	264	60	264	152	46
11	1,260	834	450		460	466	722	787	52	243	131	44
12	1,150					517	586	3,450	42	218	106	37
13	834					787	509	8,090	39	189	96	35
14	603					1,260	452	3,820	32	161	88	37
15	619	825				8,090	411	2,030	27	135	81	37
16	1,320			780		7,860	834	5,420	44	118	81	39
17	2,610					4,400	1,380	4,400	148	96	78	39
18	6,720					2,770	1,700	2,610	366	74		52
19	4,200	1,100				1,040	1,760	1,890	411	54		71
20	2,030	987				1,820	1,320	1,630	360	41		68
21	1,500	934			4,400	2,610	1,150	1,260	302	35		74
22	1,320	834	2,170		3,450	1,760	1,040	2,030	264	32		68
23	1,100	731	2,460		2,930	1,150	934	1,440	228	26		259
24	884	661	2,310		2,310	2,310	834	934	198	166	85	1,150
25	722	603	2,030		2,030	3,100	787	611	144	4,800		934
26	636		1,820		1,760	2,460	706	405	103	5,630		411
27	547		1,630		1,500	1,890	644	291	166	3,270		360
28	473	450	1,440		1,380	1,380	603	218	291	2,170		275
29	411		1,630		1,200	4,800	570	180	731	1,380		238
30	360		2,170		-------	4,200	540	152	987	1,040		250
31	308	-------	3,820		-------	2,930	-------	135	-------	740		-------

Daily discharge, in second-feet, of Greenbrier River at Marlinton, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912–13.												
1	238	103	161	1,760	1,260	1,200	1,200	586	1,500	189	228	32
2	161	92	135	934	1,260	1,040	987	547	1,200	152	291	54
3	170	92	170	1,630	1,260	696	834	532	1,150	110	198	42
4	110	81	291	2,030	2,310	740	740	509	1,150	180	152	74
5	106	74	373	1,500	1,890	611	670	360	1,150	264	123	74
6	92	74	934	1,380	1,380	555	611	314	834	297	81	63
7	74	1,820	1,040	5,630	884	438	555	348	619	248	66	39
8	88	2,460	740	6,280	670	331	494	392	696	218	52	63
9	81	1,380	532	4,800	636	411	494	337	652	189	42	68
10	74	834	480	2,460	555	438	459	270	627	8,550	42	63
11	74	619	459	1,700	555	1,630	459	238	459	6,720	63	54
12	74	459	411	1,440	586	1,630	2,460	213	386	3,450	166	41
13	74	360	379	1,890	532	1,380	5,840	170	348	1,040	2,030	33
14	74	331	360	1,500	532	5,420	3,100	189	286	687	1,760	26
15	68	302	424	1,150	532	4,400	6,280	189	259	586	517	24
16	68	259		884	459	3,100	5,000	238	228	547	238	20
17	63	198		787	360	1,890	2,930	259	198	517	161	26
18	68	198		696	302	1,260	2,030	578	189	452	238	46
19	68	166		611	302	1,040	1,440	1,040	170	480	459	144
20	92	164		570	302	884	1,260	934	166	540	319	280
21	103	161		509	348	740	1,100	1,040	161	379	248	379
22	103	157	210	494	509	652	834	934	161	280	248	418
23	110	152		494	722	509	740	1,320	189	248	652	337
24	152	135		722	586	494	740	4,600	208	270	705	286
25	198	123		1,260	509	480	670	3,630	228	259	595	248
26	189	110		1,150	459	570	586	3,270	314	218	480	180
27	161	110		1,150	570	15,700	611	5,210	424	208	348	110
28	152	144		1,150	1,260	6,720	652	5,630	360	180	238	81
29	131	110		987	-------	2,930	740	4,600	302	131	161	66
30	118	110	248	740	-------	1,890	636	2,930	280	103	96	57
31	110	-------	3,100	1,000	-------	1,500	-------	1,760	-------	123	39	-------
1913–14.												
1	74	445	1,150	678	5,630	687	1,890	636	42	81	39	78
2	123	360	1,260	636	3,270	652	3,270	494	68	71	41	63
3	114	314	696	603	1,500	619	3,100	424	46	41	39	63
4	85	248	652	661	1,100		2,030	319	46	41	39	39
5	74	233	595	619	934		1,320	595	46	41	39	39
6	54	213	555	562	884	450	934	1,320	218	99	39	37
7	52	203	987	466	1,040		787	1,320	193	81	39	37
8	42	198	1,040	424	1,200		2,610	987	157	66	39	37
9	135	934	987	459	1,380	275	2,930	787	103	66	39	37
10	198	705	934	1,500	1,380	248	2,030	687	68	41	63	37
11	379	1,040	834	1,440	1,040	238	1,380	524	42	41	63	37
12	337	834	740	934	934	238	987	480	68	41	63	37
13	286	934	705	834	1,100	392	696	424	57	41	78	37
14	248	4,400	644	940	1,380	480	532	325	42	44	114	37
15	226	5,840	603	1,040	1,380	787	636	270	41	123	139	37
16	208	7,400	562	987	1,260	1,380	1,440	218	41	213	66	37
17	184	5,630	547	934	1,150	1,700	2,030	198	41	189	39	22
18	213	2,770	524	740	1,100	2,770	1,500	152	24	118	39	22
19	337	1,700	480	524	2,030	1,760	722	135	24	99	39	22
20	987	834	418	494	4,800	1,200	1,380	110	24	66	39	22
21	1,320	670	354	4,600	2,310	834	1,760	96	24	42	23	22
22	1,260	619	337	4,200	1,760	787	1,440	74	24	41	23	22
23	834	570	343	2,930	1,440	696	1,100	57	41	41	23	16
24	1,200	540	386	2,460	1,320	670	884	42	41	41	23	16
25	2,310	480	480	2,460	1,200	1,100	555	42	118	39	23	12
26	2,930	386	3,270	2,310	1,150	2,610	7,400	42	547	39	114	12
27	2,170	325	1,760	2,310	934	4,800	4,400	42	343	114	337	12
28	1,320	459	884	2,170	787	4,800	2,030	42	259	157	280	12
29	934	603	934	2,030	-------	4,010	1,260	49	161	114	180	12
30	740	834	834	2,030	-------	3,820	934	28	99	78	96	12
31	603	-------	731	5,840	-------	2,770	-------	26	-------	39	96	-------

Daily discharge, in second-feet, of Greenbrier River at Marlinton, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	12	35	354	1,100	1,260	787	337	652	1,040	39	63	238
2	12	35	480	1,100	12,700	619	302	603	1,040	92	424	180
3	12	35	524	934	7,400	570	275	424	3,270	78	987	161
4	12	35	740	452	6,060	509	259	366	2,770	74	578	184
5	12	35	934	438	5,840	445	248	325	2,310	103	438	348
6	12	35	1,040	834	3,270	373	243	291	1,700	152	175	264
7	12	35	1,320	15,200	740	411	238	253	705	148	238	213
8	12	35	1,040	5,000	1,500	366	398	223	586	96	180	180
9	22	35	934	2,310	1,040	373	619	218	509	131	131	152
10	22	32	884	2,030	586	366	603	180	331	110	110	118
11	22	32	578	1,890	705	348	619	157	259	81	106	103
12	22	30	386	1,100	722	360	661	157	238	68	934	81
13	37	30	348	1,100	722	386	619	193	208	63	834	74
14	37	30	302	834	1,100	445	524	193	233	54	570	78
15	184	81	218	740	3,450	502	452	189	373	46	438	57
16	175	88	170	722	3,630	509	392	184	502	46	424	46
17	175	81	152	1,560	2,170	517	354	170	603	46	325	37
18	170	74	152	9,020	1,500	459	325	135	1,040	92	834	41
19	170	71	248	10,200	1,040	424	302	114	834	96	494	161
20	135	71	502	4,200	787	431	280	127	424	74	348	540
21	110	66	1,150	2,030	652	405	243	218	259	152	325	555
22	44	57	1,560	1,560	619	360	223	203	203	228	360	687
23	35	49	1,100	1,100	603	325	203	218	208	135	325	431
24	35	42	1,040	1,500	2,930	275	198	253	144	110	264	280
25	57	39	740	1,320	3,450	238	248	238	110	106	208	228
26	57	39	722	1,260	2,170	238	248	233	88	88	166	135
27	44	39	619	1,260	1,380	238	259	208	68	74	110	42
28	38	41	603	884	1,100	302	308	161	63	54	152	74
29	35	35	603	586	-------	386	722	152	60	46	325	127
30	35	175	1,150	480	-------	386	740	198	41	46	291	106
31	35	-------	1,150	627	-------	354	-------	1,200	-------	46	259	-------
1915–16.												
1	10,200	85	291	1,560	2,460	578	1,200	740	424	144	110	42
2	5,210	85	270	2,460	2,310	517	884	714	360	161	834	42
3	3,180	78	228	2,170	2,030	466	787	636	787	314	354	42
4	1,150	74	208	1,630	1,150	424	705	480	445	360	259	42
5	934	71		1,150	934	424	644	452	418	291	1,260	42
6	644	68	175	1,150	1,040	731	1,150	386	411	233	570	42
7	619	66		934	1,200	787	987	343	787	213	524	35
8	466	63		555	934	3,450	987	337	834	189	487	41
9	270	63		480	884	2,170	987	314	1,040	228	438	42
10	228	63	144	540	884	1,560	787	297	1,150	314	379	39
11	198	63	103	2,030	740	1,150	1,820	291	987	325	291	35
12	189	63		4,600	740	884	1,820	286	787	213	270	32
13	180	60		3,630	2,170	787	1,630	270	595	144	238	28
14	175	68		2,460	2,030	1,380	1,320	228	480	144	238	24
15	170	88	175	1,500	1,320	3,630	1,200	208	487	161	243	139
16	161	670		1,260	1,040	2,170	1,100	189	2,460	213	400	392
17	127	494		1,150	884	1,500	834	184	4,400	555	555	161
18	110	438	4,600	1,040	740	1,260	636	175	1,630	524	325	103
19	127	524	3,270	934	619	1,040	524	161	1,260	411	264	71
20	180	740	1,320	830	547	705	466	148	987	348	223	54
21	248	834	1,100	722	555	627	411	144	884	480	180	44
22	238	787	934	740	480	1,200	348	135	722	1,560	148	42
23	152	636	705	787	494	3,630	348	627	466	678	144	49
24	139	487	627	524	619	2,610	343	884	360	570	144	60
25	127	466	611	452	1,440	1,630	502	834	348	452	99	52
26	114	398	722	424	1,500	1,200	1,560	1,630	337	331	88	44
27	110	360	722	595	987	1,150	1,500	1,500	270	264	85	35
28	103	348	834	595	834	1,890	1,200	987	213	291	63	28
29	103	343	5,420	987	687	2,460	987	636	152	540	63	360
30	92	319	4,800	3,630	-------	1,890	834	636	144	319	57	884
31	85	-------	1,890	3,270	-------	1,440	-------	570	-------	280	54	-------

NOTE.—Daily discharge estimated or interpolated, because of ice or missing gage readings, from observer's notes, climatic data, or by comparison with the flow at Alderson, as follows: Dec. 26–30, 1909; Jan. 1–8, Dec. 4–31, 1910; Nov. 12–18, Nov. 26–Dec. 21, 1911; Jan. 1–Feb. 20, Aug. 18–Sept. 5, Dec. 16–29, 1912; Jan. 31, Feb. 2 and 3, Feb. 14, 1913; Jan. 14, Mar. 3–8, 1914; Oct. 3, Dec. 5–9, 12–17, 1915; Jan. 18, 20, Aug. 16, 1916. Braced figures show mean discharge for period included. Gage heights Jan. 31–Feb 8, 1909, were increased 1 foot, as they appear to have been read 1 foot low.

Monthly discharge of Greenbrier River at Marlinton, W. Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 408 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
July 9–31	934	96	333	0.816	0.70
August	270	54	120	.294	.34
September	106	22	43.0	.105	.12
1908–9.					
October	71	22	32.8	.080	.09
November	68	28	43.5	.107	.12
December	291	28	158	.387	.45
January	2,460	314	1,260	3.09	3.56
February	3,630	405	1,760	4.31	4.49
March	3,100	106	1,130	2.77	3.19
April	7,170	445	1,450	3.55	3.96
May	2,310	291	796	1.95	2.25
June	834	180	383	.939	1.05
July	1,700	44	209	.512	.59
August	987	49	176	.431	.50
September	103	37	52.3	.128	.14
The year	7,170	22	613	1.50	20.39
1909–10.					
October	787	26	160	.392	.45
November	1,150	66	260	.637	.71
December	4,010	92	459	1.12	1.29
January	3,100	360	1,050	2.57	2.96
February	6,280	386	1,080	2.65	2.76
March	4,800	248	831	2.04	2.35
April	1,100	198	526	1.29	1.44
May	884	259	474	1.16	1.34
June	11,900	291	2,140	5.25	5.86
July	787	96	327	.801	.92
August	280	46	89.5	.219	.25
September	884	46	238	.583	.65
The year	11,900	26	631	1.55	20.98
1910–11.					
October	280	46	94.9	.233	.27
November	319	33	99.2	.243	.27
December			434	1.06	1.22
January	15,200	494	3,260	7.99	9.21
February	4,400	331	980	2.40	2.50
March	2,770	398	1,490	3.65	4.21
April	5,630	578	1,820	4.46	4.98
May	1,150	96	317	.777	.90
June	934	118	301	.738	.82
July	348	28	117	.287	.33
August	1,820	21	195	.478	.55
September	2,310	39	831	2.04	2.28
The year	15,200	21	826	2.02	27.54
1911–12.					
October	6,720	308	1,310	3.21	3.70
November	1,440	96	694	1.70	1.90
December	3,820		998	2.45	2.82
January			780	1.91	2.20
February	4,400		1,040	2.55	2.75
March	8,090	466	2,100	5.15	5.94
April	2,310	411	980	2.40	2.68
May	8,090	135	1,470	3.60	4.15
June	987	27	192	.471	.53
July	5,630	26	812	1.99	2.29
August	540		133	.326	.38
September	1,150	35	172	.422	.47
The year	8,090	26	894	2.19	29.81

Monthly discharge of Greenbrier River at Marlinton, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum	Mean.	Per square mile.	
1912–13.					
October	238	63	111	0.272	0.31
November	2,460	74	379	.929	1.04
December	3,100		425	1.04	1.20
January	6,280	494	1,590	3.90	4.50
February	2,310	302	769	1.88	1.96
March	15,700	331	1,980	4.85	5.59
April	6,280	459	1,510	3.70	4.13
May	5,630	170	1,390	3.41	3.93
June	1,500	161	496	1.22	1.36
July	8,550	103	897	2.20	2.54
August	2,030	39	356	.873	1.01
September	418	20	114	.279	.31
The year	15,700	20	837	2.05	27.88
1913–14.					
October	2,930	42	644	1.58	1.82
November	7,400	198	1,360	3.33	3.72
December	3,270	337	814	2.00	2.31
January	5,840	424	1,570	3.85	4.44
February	5,630	787	1,620	3.97	4.13
March	4,800	238	1,370	3.36	3.87
April	7,400	532	1,800	4.41	4.92
May	1,320	26	353	.865	1.00
June	547	24	102	.250	.28
July	213	39	75.7	.186	.21
August	337	23	74.6	.183	.21
September	78	12	30.8	.076	.08
The year	7,400	12	812	1.99	26.99
1914–15.					
October	184	12	57.7	.141	.16
November	175	30	50.6	.124	.14
December	1,560	152	701	1.72	1.98
January	15,200	438	2,370	5.81	6.70
February	12,700	586	2,470	6.05	6.30
March	787	238	410	1.00	1.15
April	740	198	381	.934	1.04
May	1,200	114	272	.667	.77
June	3,270	41	674	1.65	1.84
July	228	39	89.5	.219	.25
August	987	63	368	.902	1.04
September	687	37	197	.483	.54
The year	15,200	12	659	1.62	21.91
1915–16.					
October	10,200	85	840	2.06	2.38
November	834	60	297	.728	.81
December	5,420	103	991	2.43	2.80
January	4,600	424	1,440	3.53	4.07
February	2,460	480	1,110	2.72	2.93
March	3,630	424	1,460	3.58	4.13
April	1,820	343	950	2.33	2.60
May	1,630	135	497	1.22	1.41
June	4,400	144	821	2.01	2.24
July	1,560	144	363	.890	1.03
August	1,260	54	308	.743	.86
September	884	24	102	.250	.28
The year	10,200	24	766	1.88	25.54

GREENBRIER RIVER AT ALDERSON, W. VA.

LOCATION.—At highway bridge at Alderson, Monroe County, half a mile above mouth of Muddy Creek.

DRAINAGE AREA.—1,340 square miles.

RECORDS AVAILABLE.—July 30, 1895, to July 15, 1906; May 10, 1907, to September 30, 1920.

GAGE.—Original gage was a wire gage attached to lower side of bridge; wire gage was replaced by chain gage on November 20, 1903. Read by W. J. Hancock.

DISCHARGE MEASURENEMTS.—Made from downstream side of bridge; since building of new concrete bridge in 1914 measurements are made from the upstream side of bridge at certain stages.

CHANNEL AND CONTROL.—The channel has remained practically permanent since establishment of the station. The construction of a new bridge at the site of the old one the latter part of 1914 caused a change in stage-discharge relation.

EXTREMES OF DISCHARGE.—Maximum stage since establishment of station, 22.0 feet during night March 13–14, 1918 (discharge, roughly, 60,000 second-feet); minimum stage recorded, 1.4 feet several days in October and November, 1904 (discharge, 46 second-feet).

ICE.—Stage-discharge relation occasionally affected by ice for short periods during severe winters.

ACCURACY.—Stage-discharge relation has changed three or four times since establishment of the station. One of these changes was caused by reconstruction of the bridge. Previous to 1898 ice conditions were not recorded by the observer and open-water ratings have been used for winter months. The station is located at rapids and the formation of ice is generally prevented by the rapid current. It was concluded, therefore, that there was little or no error introduced into the mean monthly discharges by the lack of information in regard to ice. (See footnote to tables of daily discharge for effect of ice subsequent to 1898.)

Three rating tables have been used at this station covering the following periods: July 30, 1895, to September 27, 1902; September 28, 1902, to September 30, 1914; October 1, 1914, to September 30, 1917; a fourth rating table for use after March 14, 1918, was prepared too late for insertion in this report and gage readings only for 1918 to 1920 are published. Daily and monthly discharge for these years will be published in Water-Supply Paper 543. All the rating tables may be considered as well defined from 46 second-feet to 38,000 second-feet; beyond these limits tables are extensions. Gage read to half-tenths once daily, to April 1, 1910, then twice daily. Beginning January 1, 1912, gage read to hundredths twice daily. Daily discharge ascertained by applying daily gage readings, or mean daily gage readings when gage was read twice daily, to the respective rating tables. Records are considered excellent since the installation of the chain gage in November, 1903. Previous to this date, a wire gage was used. Owing to stretch and kinks of the wire, the gage readings obtained with the wire gage are not considered as accurate as those obtained with the chain gage. Estimates of daily discharge previous to 1910 published in water supply papers differ from those published in this paper owing to revision of rating tables. The differences vary for different stages and for different years. In general the differences are greater for the lower stages.

Discharge measurements of Grienbrier River at Alderson, W. Va., during the years 1895–1920.

Date.	Made by—	Gage height.	Discharge.
1895.		*Feet.*	*Sec.-ft.*
July 30	C. C. Babb	1.89	457
Sept. 4	D. C. Humphreys	1.36	106
1896.			
June 10	do	2.30	714
July 22	do	2.07	665
Aug. 13	do	1.95	529
Dec. 18	do	2.80	1,480
1897.			
Mar. 30	do	2.75	1,640
May 3	F. H. Anschutz	4.88	6,180
4	do	4.38	5,450
4	do	4.29	4,960
6	do	3.56	3,160
13	do	12.30	32,600
14	do	12.32	33,000
14	do	9.52	20,700
31	do	2.26	681
Oct. 12	do	1.42	71
1898.			
June 25	D. C. Humphreys	2.02	403
Aug. 3	do	2.20	665
Aug. 6	do	4.43	5,120
Dec. 22	do	3.45	2,820
1899.			
June 22	do	1.94	456
Aug. 12	do	1.36	104
1900.			
Mar. 31	do	4.07	5,130
June 29	do	1.99	564
July 24	do	1.97	493
Aug. 20	do	1.38	148
Dec. 21	do	2.24	334
1901.			
Mar. 27	do	3.45	3,140
July 30	do	1.73	276
1902.			
July 17	do	1.63	211
Aug. 12	do	1.46	156
12	do	1.46	154
1903.			
Sept. 21	Paul and Sawyer	2.03	373
Nov. 16	W. C. Sawyer	1.73	130
1904.			
June 15	F. H. Brundage	2.20	490
Aug. 9	N. C. Grover	1.72	146
Sept. 20	R. H. Bolster	1.63	114
Oct. 1	do	1.44	51
20	do	1.51	76
1905.			
Mar. 22	A. H. Horton	7.90	16,500
22	do	7.17	13,700
23	do	5.24	7,240
23	do	5.69	8,840
Sept. 15	R. H. Bolster	2.01	350
1906.			
June 13	Robert Follansbee	2.30	602
1907.			
May 10	R. J. Taylor	4.74	6,440
June 25	R. G. Knight	3.46	2,760
July 17	do	2.65	1,260
1908.			
Apr. 21	Follansbee and Barrows	3.94	3,880
Aug. 4	W. G. Hoyt	2.15	425
Aug. 8	do	2.20	456
10	do	2.88	1,460
Sept. 18	W. M. O'Neill	1.70	175
1909.			
Nov. 19	A. H. Horton	2.12	413
Dec. 1	G. L. Parker	2.00	334
1910.			
Aug. 23	J. C. Dort	1.78	163
Oct. 11	C. T. Bailey	2.30	572
1911.			
Nov. 4	Bailey and Perwien	2.22	513
1912.			
Mar. 24	C. T. Bailey	5.88	9,200
1913.			
June 20	H. J. Jackson	2.17	459
1914.			
Dec. 1	J. G. Mathers	1.84	152
1915.			
Feb. 6	W. Kessler	4.76	6,040
1916.			
Mar. 23	A. H. Horton	4.40	4,700
Mar. 24	do	4.65	5,660
Aug. 15	B. E. Jones	2.65	1,000
1917.			
May 29	do	5.55	8,060
30	do	4.66	5,470
31	do	3.94	3,560
1918.			
Feb. 15	B. L. Hopkins	6.95	11,800
15	do	7.15	12,400
16	do	8.49	16,400
18	do	4.64	5,330
Apr. 15	do	6.16	8,840
May 15	do	3.97	2,750
June 23	do	3.64	2,060
1920.			
May 21	Peterson and Bigwood	3.36	1,660
June 23	B. L. Bigwood	3.77	2,400
Nov. 21	Bigwood and Lamoureux	2.89	931

Daily discharge, in second-feet, of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917.

Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.
1895											
1		390	220	11		238	755	21		280	125
2		301	165	12		280	301	22		250	116
3		250	145	13		280	250	23		250	110
4		220	125	14		262	220	24		280	110
5		192	125	15		350	182	25		220	95
6		165	165	16		280	125	26		165	95
7		125	157	17		280	145	27		250	90
8		182	157	18		280	137	28		315	82
9		238	145	19		250	125	29		280	82
10		220	165	20		250	125	30	430	250	82
								31	350	250	

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1895–96.												
1	82	101	280	1,000	755	1,070	12,900	2,000	573	1,000	5,420	238
2	70	107	262	2,090	755	1,550	11,600	2,610	486	755	3,610	220
3	70	110	220	1,300	6,800	1,380	8,230	2,000	430	700	5,150	192
4	70	125	204	755	10,600	1,070	5,150	4,620	414	600	3,150	220
5	70	125	204	1,000	5,690	870	3,610	5,690	390	870	2,000	192
6	82	137	165	930	3,150	870	2,290	3,380	510	810	1,380	220
7	75	145	137	430	6,240	810	2,090	2,390	555	1,140	1,070	220
8	85	157	157	454	4,620	930	1,810	1,810	700	2,090	870	220
9	88	145	182	470	3,150	1,220	1,900	1,640	700	12,900	755	238
10	70	153	182	600	2,710	1,380	2,000	1,300	700	10,900	600	244
11	70	153	209	555	2,190	1,220	2,090	1,000	1,380	4,880	600	220
12	82	153	209	555	1,640	1,720	2,190	870	1,070	2,820	600	204
13	82	145	192	555	700	1,900	2,000	755	700	2,000	510	192
14	78	137	165	810	9,100	1,460	1,900	755	600	1,640	430	182
15	78	145	137	700	8,230	1,640	1,900	1,300	510	1,220	470	192
16	78	133	137	280	4,620	1,810	1,810	1,140	555	1,070	600	470
17	82	137	165	280	3,150	12,300	1,460	810	582	930	510	315
18	82	137	157	294	2,000	8,520	1,220	600	600	930	390	238
19	82	137	165	301	1,640	5,420	1,140	555	555	870	390	204
20	82	137	165	301	1,220	10,900	1,070	555	582	810	350	315
21	82	145	192	366	930	7,360	930	810	555	650	315	280
22	82	161	238	390	930	5,420	870	930	486	600	250	280
23	82	176	3,150	430	930	5,150	870	1,070	470	573	301	244
24	90	182	1,300	1,300	755	4,620	930	1,070	430	1,220	454	274
25	101	182	930	4,620	1,000	4,620	2,090	1,220	470	1,300	470	220
26	95	182	700	3,850	870	3,610	2,000	1,300	2,290	7,940	478	182
27	95	165	600	2,390	810	3,610	1,900	1,140	3,610	3,610	454	182
28	95	182	755	1,640	700	3,380	1,550	1,000	2,290	2,090	406	192
29	95	209	1,380	1,220	810	2,190	1,380	930	2,090	1,550	280	232
30	95	238	930	930		25,600	1,300	810	1,550	1,140	280	6,520
31	95		810	810		19,600		670		3,610	262	
1896–97.												
1	11,600	262	6,240	510	700	2,000	1,460	680	1,140	537	870	232
2	4,100	301	3,610	470	700	1,720	1,460	2,820	1,300	2,710	755	209
3	2,290	280	2,710	494	700	1,550	1,300	6,240	1,000	4,880	1,000	209
4	1,550	350	2,000	510	555	1,460	1,300	5,150	870	2,710	1,000	192
5	1,140	15,400	1,550	600	528	2,190	1,550	3,850	1,070	1,640	870	165
6	930	21,800	1,300	1,640	4,100	2,190	6,240	3,150	1,000	2,710	810	165
7	700	16,200	1,220	1,550	11,600	2,710	4,620	2,930	930	2,610	680	182
8	600	3,150	1,070	1,000	7,360	3,610	3,150	2,390	810	2,390	650	165
9	510	2,190	1,000	870	4,620	2,930	2,930	2,000	755	1,810	555	157
10	470	1,640	1,300	870	3,150	3,150	6,240	1,720	810	1,460	510	165
11	430	1,220	2,090	870	2,820	6,240	5,420	1,640	755	1,000	510	161
12	390	1,070	1,810	700	4,360	5,420	4,100	2,190	670	1,380	486	157
13	700	930	1,550	555	7,940	5,690	2,930	17,500	700	1,220	438	141
14	650	810	1,220	510	7,080	5,150	2,290	32,300	755	930	390	141
15	630	755	1,220	470	6,800	10,000	2,000	9,700	700	810	374	137
16	600	650	1,900	700	7,080	7,080	1,900	6,240	1,900	670	374	133
17	510	600	1,900	700	7,080	4,360	1,810	4,100	1,300	582	350	125
18	470	555	1,640	700	5,150	3,610	1,810	3,150	1,140	510	336	125
19	430	537	1,300	1,220	5,420	9,700	1,550	2,390	1,000	600	315	119
20	390	510	1,140	1,300	5,150	12,300	1,460	2,000	1,720	650	294	119
21	336	510	1,000	1,140	5,150	10,300	1,380	1,720	1,810	870	280	125
22	315	591	870	1,140	24,100	4,620	1,220	1,550	1,550	6,240	262	125
23	301	700	755	1,220	51,500	4,100	1,070	1,380	1,300	5,690	262	116
24	280	700	700	1,220	20,700	3,150	1,000	1,220	1,070	4,100	350	116
25	280	700	430	1,000	9,100	2,820	870	1,070	1,000	4,100	301	119
26	301	680	280	1,070	5,690	2,390	870	1,070	1,070	2,500	329	125
27	280	650	165	930	3,610	2,000	870	930	700	2,820	268	110
28	350	650	125	870	2,610	1,810	810	870	630	2,710	268	125
29	301	1,000	350	755		1,720	755	810	555	1,300	280	125
30	280	8,520	470	700		1,550	700	755	510	1,140	256	125
31	280		555	700		1,550		755		1,070	244	

Daily discharge, in second-feet, of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1897-98.												
1	137	125	510	810	1,550	1,220	7,940	1,640	1,300	470	700	390
2	119	176	430	870	930	1,220	5,420	1,380	1,070	406	1,300	390
3	125	157	390	1,460	755	1,140	4,360	1,220	930	358	755	238
4	125	209	390	700	930	1,070	3,380	1,140	810	336	700	315
5	145	192	810	620	1,550	1,070	2,930	1,070	700	510	10,300	268
6	141	220	2,390	650	930	1,140	2,930	2,000	650	870	7,940	315
7	129	220	2,190	680	930	1,140	2,710	16,400	573	600	7,940	350
8	125	256	1,380	670	1,070	1,140	2,500	14,000	528	564	3,380	510
9	125	232	1,000	690	930	1,220	2,500	7,360	494	470	2,090	430
10	119	220	755	3,150	1,070	1,300	2,390	4,620	470	406	14,600	390
11	113	220	555	12,900	1,640	1,220	4,100	2,290	430	366	42,900	350
12	125	220	555	6,520	2,190	1,300	13,300	2,820	870	280	12,900	315
13	129	430	494	4,620	3,150	1,380	7,650	2,190	630	238	7,360	280
14	133	238	470	4,100	2,820	1,460	5,690	1,900	528	301	4,880	250
15	137	315	486	3,150	2,290	1,460	5,690	1,640	1,140	280	3,150	250
16	137	294	870	15,700	2,000	1,380	5,420	1,720	1,000	343	2,190	238
17	137	308	2,000	7,940	1,640	1,300	6,800	1,810	930	414	1,640	238
18	116	268	1,460	4,620	1,380	7,360	4,880	2,610	930	430	1,300	209
19	176	250	1,220	3,150	1,550	9,400	3,610	2,290	870	1,000	1,070	209
20	165	262	1,140	2,390	3,150	7,360	2,710	2,090	1,140	870	1,140	209
21	176	250	1,380	2,390	4,100	4,620	2,290	1,810	1,220	700	1,300	209
22	182	262	4,880	2,610	5,690	3,380	1,900	1,550	1,000	537	1,070	220
23	165	262	3,610	3,380	3,850	2,710	1,720	6,800	930	462	870	250
24	165	220	2,290	5,690	2,820	2,390	1,550	8,230	650	555	700	280
25	165	220	1,640	4,100	2,290	7,650	2,610	5,690	537	755	755	350
26	187	204	1,070	4,100	1,900	7,650	2,710	3,610	478	555	650	366
27	176	192	870	4,100	1,640	5,150	2,820	2,710	446	582	555	322
28	176	192	1,000	3,150	1,380	3,610	2,500	2,000	454	2,930	555	301
29	176	336	755	2,500	-------	4,620	2,190	1,720	600	2,710	510	280
30	157	573	650	2,190	-------	16,400	1,900	1,460	528	1,550	470	268
31	145	-------	650	1,720	-------	10,900	-------	1,460	-------	1,000	430	-------
1898-99.												
1	232	1,220	1,300	1,550	1,300	9,100	4,360	930	1,460	336	157	95
2	232	1,220	1,300	1,460	1,720	6,800	3,380	930	2,190	315	137	125
3	204	1,140	1,000	1,460	930	10,000	2,610	1,460	2,290	301	137	119
4	204	930	870	1,460	755	35,500	2,190	1,220	1,720	294	104	110
5	209	930	2,390	2,930	5,690	45,300	1,720	1,140	1,300	262	157	145
6	220	870	4,100	7,940	10,300	27,600	1,640	1,070	1,000	226	110	133
7	398	870	2,610	18,600	9,100	10,900	1,460	1,300	870	209	75	116
8	336	930	2,000	9,700	5,420	6,520	1,900	7,940	755	226	110	153
9	280	870	1,550	5,690	3,380	4,620	6,240	14,000	1,000	238	110	192
10	280	810	1,380	3,850	2,090	3,850	4,360	10,600	755	232	197	153
11	280	930	1,900	2,930	1,380	3,610	3,150	5,690	755	244	107	165
12	294	3,850	870	2,290	1,300	3,610	2,710	4,880	1,380	220	113	165
13	280	2,710	1,070	2,000		3,150	2,390	5,690	2,500	209	119	153
14	280	2,000	1,140	1,900		2,820	2,190	6,240	1,720	220	101	133
15	280	1,720	1,300	3,850	1,250	3,150	2,000	5,150	1,640	209	810	119
16	250	1,380	1,070	2,500		4,100	1,810	3,610	1,460	198	510	125
17	250	1,220	630	4,100	1,220	4,360	1,640	2,820	1,070	176	294	119
18	250	1,380	755	3,380	1,380	3,610	1,550	2,190	870	176	220	101
19	755	5,690	755	2,930	1,550	6,800	1,460	2,000	755	192	119	125
20	1,220	10,300	930	2,390	2,090	10,900	1,380	1,720	700	209	125	153
21	1,810	7,360	1,460	1,900	5,150	6,800	1,220	1,720	650	192	110	157
22	23,000	4,620	2,820	1,720	12,300	4,620	1,070	1,380	537	238	133	133
23	11,600	3,610	8,810	1,720	11,600	3,610	1,000	1,220	422	220	113	250
24	4,880	3,850	8,810	1,550	7,360	3,380	930	1,070	600	187	116	280
25	2,820	3,150	5,150	1,640	4,880	2,930	870	930	470	192	95	220
26	2,000	2,390	3,380	2,500	3,610	2,610	1,220	870	446	165	95	209
27	1,900	2,090	2,500	2,190	18,600	2,290	1,720	755	406	187	90	192
28	1,220	1,720	2,000	2,000	15,000	2,190	1,380	700	430	165	82	182
29	1,220	1,380	1,720	1,810	-------	10,900	1,140	670	446	209	116	165
30	1,070	1,380	1,460	1,380	-------	9,700	1,070	650	390	176	101	165
31	1,220	-------	1,380	1,460	-------	5,690	-------	810	-------	165	101	-------

Daily discharge, in second-feet, of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1899–1900.												
1	157	116	176		650	4,100	3,850	810	755	1,460	1,000	192
2	133	157	165		390	12,300	2,930	755	650	1,900	650	182
3	133	209	145		470	7,080	2,500	680	600	1,000	510	157
4	133	209	145	390	470	4,100	2,290	650	700	930	430	145
5	125	220	145		470	3,150	2,090	600	630	582	350	125
6	125	268	145		600	3,150	1,900	555	555	510	280	119
7	125	232	145	390	930	5,420	1,720	528	494	430	133	110
8	125	209	133	390	1,220	6,520	1,550	510	430	494	220	95
9	104	182	125	390	3,610	4,620	1,900	470	430	454	204	90
10	119	157	125	555	4,620	3,380	1,900	600	414	336	192	88
11	110	157	125	555	2,820	2,820	1,640	510	366	301	176	82
12	107	157	157	670	2,090	2,190	1,300	470	315	250	157	78
13	107	145	700	4,620	13,600	1,900	1,140	486	268	238	145	70
14	116	137	930	2,190	16,000	1,720	1,070	446	280	220	125	70
15	113	137	1,000	1,550	6,800	1,810	870	390	555	192	125	98
16	110	137	700	1,140	4,100	1,640	810	374	810	176	125	414
17	110	125	510	930	2,930	1,640	700	350	2,290	145	110	250
18	85	125	315	930	2,090	1,220	930	329	7,360	145	116	165
19	85	119	301	1,300	1,300	1,720	1,070	301	5,150	145	125	145
20	95	119	322	9,700	1,070	16,800	2,710	350	2,930	133	116	125
21	95	133	390	3,520	1,140	17,100	3,150	1,720	1,900	133	125	119
22	88	119	315	4,880	4,100	8,230	3,150	1,070	1,300	157	125	137
23	75	119	301	2,820	7,940	5,420	3,380	810	1,000	600	165	165
24	101	119	336	2,000	5,150	2,710	2,820	700	755	700	125	238
25	90	125	301	1,460	3,610	6,240	2,190	700	650	755	145	165
26	82	125	630	1,140	2,930	5,690	1,720	1,070	573	1,000	125	182
27	82	113	528	1,000	2,290	6,240	1,460	1,000	555	4,100	165	145
28	82	125	350	755	1,640	4,360	700	700	470	3,850	165	125
29	82	182	350	582	-------	4,100	1,000	700	470	1,720	192	145
30	75	198	350	1,000	-------	3,610	930	930	510	1,070	220	125
31	101	-------	350	555	-------	4,360	-------	930	-------	1,070	165	-------
1900–1.												
1	125	145	1,900	870	810	600	1,550	1,810	3,610	2,930	329	1,300
2	165	209	1,460	1,140	700	600	1,640	1,640	2,820	2,390	294	1,810
3	145	220	1,220	1,140	755	600	6,240	1,550	2,190	1,900	268	1,140
4	137	2,290	2,930	870	1,220	600	12,900	1,300	1,810	2,610	238	870
5	125	1,460	12,900	755	1,300	1,640	7,650	1,070	1,550	3,150	244	680
6	119	755	7,360	680	1,000	5,150	7,360	1,000	1,300	2,610	280	537
7	116	555	4,100	755	755	2,710	11,600	870	1,720	4,100	930	494
8	110	454	3,150	755	930	2,000	7,940	870	1,900	2,820	1,070	446
9	119	430	2,710	680	1,070	1,900	5,420	870	2,610	1,810	755	430
10	116	350	2,710	620	2,000	1,900	4,100	1,070	1,900	1,300	546	390
11	110	294	2,190	755	2,390	9,100	2,710	2,820	1,460	1,000	430	390
12	110	315	1,720	21,100	2,000	12,300	2,610	2,190	1,070	810	470	374
13	104	315	1,460	11,600	1,640	5,690	2,500	1,900	930	700	370	1,220
14	145	390	1,300	5,690	1,220	3,850	2,820	1,720	1,000	630	555	810
15	280	350	1,140	3,610	1,000	3,150	11,600	1,460	1,220	670	2,000	660
16	280	336	1,000	2,710	1,000	2,610	7,940	1,300	6,240	930	1,380	494
17	220	315	810	2,000	1,070	2,000	5,690	1,070	20,000	1,000	930	430
18	192	268	755	1,720	1,070	1,640	5,150	1,000	9,700	930	810	600
19	165	250	755	1,140	1,140	1,380	4,360	1,070	6,800	1,000	700	2,090
20	145	232	700	1,070	755	1,300	13,300	1,070	4,360	870	582	1,220
21	145	220	755	755	1,300	1,300	20,400	1,070	3,150	810	1,140	810
22	137	294	700	870	810	2,190	11,300	17,800	2,390	700	1,140	650
23	1,000	1,000	582	1,140	930	2,500	7,650	17,800	2,710	582	930	546
24	3,380	2,710	555	1,140	1,000	2,000	6,520	8,810	12,300	494	755	446
25	1,220	3,380	680	1,380	1,070	1,720	5,150	4,620	6,240	430	755	414
26	1,000	56,800	755	1,720	870	1,640	4,620	3,150	3,610	454	700	390
27	755	21,100	680	1,640	755	2,710	3,850	14,300	3,150	430	2,500	329
28	510	6,800	630	1,640	600	2,500	3,150	19,300	3,850	315	2,000	315
29	315	4,100	620	1,640	-------	2,500	2,610	10,900	2,930	322	1,140	280
30	280	2,610	930	1,140	-------	1,900	2,090	7,940	4,620	301	810	280
31	238	-------	870	1,070	-------	1,640	-------	5,150	-------	280	755	-------

Daily discharge, in second-feet, of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1901–2.												
1	315	145	238	6,240	7,360	30,700	5,150	700	810	870	165	113
2	301	119	238	4,100	6,240	12,900	3,610	700	680	810	165	104
3	244	145	256	3,150	6,800	8,620	2,930	755	600	870	280	101
4	238	145	650	2,500	4,100	5,420	2,500	755	555	930	220	110
5	232	165	2,610	1,900	3,850	3,850	4,100	755	510	810	192	104
6	220	165	1,640	1,220	1,900	2,820	3,850	755	446	510	182	101
7	220	149	1,070	1,070	1,900	2,820	5,150	755	430	510	165	110
8	220	145	810	1,140	1,720	2,820	7,940	755	390	555	165	101
9	220	153	700	1,300	1,720	4,360	7,940	700	350	600	165	90
10	209	149	700	1,140	2,190	9,100	6,240	650	336	650	165	82
11	192	145	1,220	1,070	810	7,940	6,800	600	315	510	165	75
12	182	145	2,290	870	870	9,700	5,960	555	301	454	165	75
13	192	220	1,550	755	810	15,000	5,420	510	315	366	149	75
14	209	176	1,220	650	870	15,700	2,190	494	336	350	133	82
15	220	165	36,700	510	810	7,360	3,150	494	350	350	125	82
16	226	165	14,300	650	650	7,940	2,710	430	374	329	125	90
17	232	165	6,240	620	700	15,000	2,500	430	382	315	125	82
18	232	165	3,380	600	650	9,700	2,000	446	390	315	125	82
19	238	165	2,390	510	650	5,690	1,810	390	398	308	122	82
20	244	165	1,810	470	600	3,850	1,720	390	486	308	119	70
21	250	157	1,380	582	650	2,930	1,640	573	470	280	119	70
22	250	153	810	510	650	2,390	1,460	555	510	268	113	70
23	256	145	810	670	1,000	1,900	1,380	810	600	220	110	70
24	256	165	810	555	2,090	1,810	1,300	650	660	192	110	70
25	256	220	870	470	15,700	1,810	1,220	630	650	165	95	75
26	262	350	1,000	600	17,800	2,000	1,070	1,640	582	165	95	70
27	238	422	1,000	10,300	10,900	1,810	1,000	2,930	4,100	165	88	82
28	209	350	1,000	12,900	29,600	1,640	810	2,090	1,640	165	82	164
29	182	250	23,000	6,240	-------	10,000	810	1,550	1,550	165	66	120
30	153	262	28,000	6,520	-------	15,700	755	1,220	930	165	82	140
31	165	-------	11,600	11,600	-------	9,400	-------	1,000	-------	165	104	-------
1902–3.												
1	140	86	1,160	576	6,520	23,800	2,980	2,620	855	2,500	280	267
2	101	86	4,100	708	4,360	9,400	2,380	2,040	1,920	1,520	544	164
3	246	86	3,220	23,100	5,420	5,420	2,040	1,620	1,160	1,080	788	154
4	315	101	4,620	13,600	14,300	3,850	2,040	1,330	855	814	635	154
5	246	86	2,860	8,520	19,600	2,860	2,500	1,240	696	598	356	154
6	140	79	2,500	5,150	7,650	2,260	2,500	1,080	598	855	301	132
7	120	63	2,040	3,600	5,150	1,920	2,140	928	2,380	1,080	260	113
8	86	63	1,820	2,860	3,220	2,620	3,600	928	8,810	1,330	229	95
9	76	51	1,420	2,040	2,860	7,080	8,520	855	4,620	928	200	205
10	76	53	1,330	1,720	2,260	7,940	6,800	788	2,860	696	188	132
11	76	58	1,240	928	1,720	5,420	4,620	720	2,740	490	154	113
12	86	58	788	1,420	4,360	6,240	3,100	659	4,100	443	58	113
13	164	58	1,920	1,620	6,240	5,690	2,620	598	2,860	1,240	576	95
14	415	58	7,360	1,720	4,360	4,620	2,500	544	1,920	2,260	424	95
15	396	53	5,690	928	3,600	3,600	2,860	544	1,520	1,920	267	79
16	280	53	5,420	788	20,700	2,740	2,980	490	1,240	1,160	154	95
17	205	53	6,800	1,080	24,900	2,140	2,860	462	1,160	788	154	145
18	188	56	7,080	1,080	9,400	1,720	2,380	443	855	598	120	267
19	188	56	4,880	1,160	5,690	1,520	2,380	372	720	490	113	301
20	164	58	2,860	884	3,850	1,240	2,040	396	598	396	154	287
21	120	58	2,380	855	2,860	1,160	2,040	356	512	356	132	267
22	86	58	1,720	1,160	2,620	2,620	2,380	356	415	188	120	246
23	86	86	2,500	1,330	2,140	28,000	2,260	331	396	280	132	217
24	86	101	2,140	1,240	2,140	31,100	2,040	315	396	246	132	188
25	86	117	1,720	1,080	2,140	10,600	1,920	331	396	217	120	140
26	86	2,260	1,330	1,000	2,040	5,690	3,850	396	544	188	120	132
27	86	3,100	971	971	1,920	4,100	10,000	396	471	169	65	120
28	86	2,740	598	2,620	20,700	2,980	6,520	2,380	659	164	58	120
29	86	2,620	598	11,300	-------	2,380	4,360	1,520	2,260	128	58	120
30	86	1,240	788	12,600	-------	1,820	3,220	1,080	4,100	164	234	120
31	86	-------	659	11,300	-------	2,740	-------	855	-------	280	267	-------

Daily discharge, in second-feet, of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1903–4.												
1	120	140	101	234	659	5,690	2,380	3,850	1,720	1,160	164	86
2	140	120	120	246	747	8,520	4,620	3,100	3,100	855	140	101
3	120	120	140	566	490	5,960	4,360	2,620	5,150	659	101	86
4	120	120	132	1,080	301	5,150	3,350	3,100	7,360	544	101	86
5	101	120	120	1,620	396	2,740	2,500	3,600	3,600	544	140	86
6	101	140	132	1,000	246	3,220	1,920	1,920	2,040	544	164	86
7	120	140	120	622	490	2,620	1,720	1,720	1,720	490	188	86
8	120	140	101	490	7,360	10,000	1,620	1,520	1,420	490	188	86
9	120	140	120	512	5,420	7,650	1,620	1,330	1,240	490	140	86
10	120	120	120	490	3,100	5,150	1,720	1,240	1,080	443	140	86
11	120	120	132	396	2,140	3,350	1,720	1,080	1,000	396	140	86
12	140	120	140	339	1,330	2,860	1,720	1,080	855	490	164	86
13	246	120	101	315	1,080	2,860	1,620	928	788	315	120	101
14	188	164	132	294	788	2,380	1,620	788	659	315	164	101
15	188	120	132	246	622	2,260	1,520	788	544	280	140	86
16	188	120	101	443	855	2,620	1,330	855	490	246	120	70
17	140	140	132	415	1,520	1,920	1,330	928	544	217	120	70
18	164	164	140	380	396	1,720	1,240	1,080	490	188	140	86
19	164	188	120	260	315	1,520	1,080	15,700	443	188	140	70
20	164	188	101	217	720	1,520	1,080	9,100	443	188	140	120
21	188	246	140	246	788	1,420	1,060	6,240	396	188	164	188
22	188	217	188	490	7,080	1,420	928	5,150	396	140	188	70
23	164	217	234	15,400	9,400	3,600	788	3,220	544	140	140	70
24	164	188	234	7,940	5,690	7,650	720	2,740	443	164	188	86
25	164	188	229	4,100	5,150	5,150	659	2,740	490	140	188	70
26	164	178	315	2,260	3,600	3,600	788	2,500	396	188	140	70
27	164	164	396	1,820	2,260	2,980	2,740	2,140	490	188	120	70
28	140	164	372	1,920	1,620	2,740	8,810	1,820	720	217	101	101
29	140	120	315	2,040	2,980	2,140	6,800	1,420	855	188	101	70
30	120	70	315	1,520	-------	1,620	5,150	1,240	1,420	164	86	46
31	140	-------	490	1,080	-------	1,420	-------	1,330	-------	164	86	-------
1904–5.												
1	46	101	101	490	720	1,000	1,920	1,720	1,000	544	659	315
2	46	86	101	544	720	2,140	1,620	1,520	855	1,720	544	396
3	46	58	101	659	720	2,500	1,520	1,330	720	1,420	490	490
4	46	70	101	490	720	2,620	1,330	1,160	598	1,080	396	928
5	46	86	120	460	598	4,620	1,160	1,000	490	2,380	490	720
6	46	70	140	430	490	4,620	2,380	855	490	1,720	598	544
7	58	46	246	396	396	5,150	3,600	1,520	396	1,330	720	443
8	70	70	280	370	246	7,940	3,220	2,140	396	1,520	720	315
9	101	58	217	340	315	1,600	2,860	2,040	315	1,080	544	280
10	86	46	164	315	315	25,600	2,380	1,520	315	855	443	246
11	101	46	140	443	246	18,600	2,140	1,420	315	720	855	246
12	70	70	120	1,240	315	10,900	2,140	28,400	315	598	1,000	246
13	70	70	120	5,420	490	8,230	1,920	21,100	315	8,230	855	396
14	70	70	140	5,690	659	6,240	1,720	10,600	280	12,900	720	315
15	58	101	164	3,350	855	6,240	1,520	7,940	280	8,230	788	315
16	58	101	164	2,380	1,000	5,960	1,330	7,080	356	4,360	928	280
17	46	101	101	1,920	788	5,690	1,240	6,240	315	2,380	1,080	246
18	70	101	101	1,330	598	6,800	1,080	5,150	246	1,720	1,000	217
19	70	101	101	855	598	6,800	1,000	3,850	246	1,240	855	188
20	70	70	140	855	490	7,940	855	2,860	246	928	659	188
21	70	86	120	855	396	10,300	855	2,040	246	855	544	164
22	70	101	120	855	396	15,000	928	1,620	1,330	659	490	140
23	58	101	70	788	855	9,100	1,080	1,420	1,920	3,600	396	140
24	46	101	101	720	855	5,690	1,000	1,160	2,040	6,800	356	140
25	70	101	164	720	1,160	4,360	855	1,000	5,960	3,600	315	140
26	58	101	720	720	1,520	4,100	855	855	3,600	2,260	396	101
27	46	101	2,380	720	1,520	3,600	855	855	2,860	1,520	315	140
28	46	101	2,140	720	1,420	3,100	1,000	788	2,040	1,080	598	120
29	46	101	1,920	720	-------	2,620	2,140	720	1,330	1,000	490	101
30	46	86	1,420	720	-------	2,380	1,920	855	855	788	443	101
31	46	-------	855	720	-------	2,140	-------	855	-------	788	396	-------

Daily discharge, in second-feet, of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1905–6.												
1	101	396	598	1,520	2,140	598	7,080	1,520	1,000			
2	70	280	720	1,330	1,720	544	6,240	1,330	1,000			
3	140	280	4,620	5,150	1,330	544	4,620	1,240	928			
4	101	246	11,300	14,600	1,080	4,620	3,350	1,720	928			
5	101	246	5,420	11,300	928	6,240	2,860	2,500	928			
6	101	246	3,100	6,240	1,000	3,600	2,860	2,380	928			
7	101	246	2,040	3,850	928	2,380	2,140	2,140	928			
8	101	246	1,620	2,860	788	1,920	4,100	2,140	1,720			
9	101	315	1,240	2,380	720	1,820	3,600	2,140	1,720			
10	101	356	1,080	1,820	788	1,720	1,920	1,920	1,000			
11	140	315	855	1,080	720	1,000	5,690	1,720	928			
12	188	280	788	1,720	659	1,000	4,360	1,520	928			
13	315	246	720	1,520	598	928	3,350	1,160	855			
14	246	246	598	4,360	598	1,000	2,620	1,000	855			
15	356	188	720	4,360	598	6,520	7,650	855	855			
16	246	188	598	4,100	598	13,300	7,940	1,000	855			
17	188	188	544	3,600	396	8,230	6,520	1,160	855			
18	188	188	544	3,100	315	4,620	3,350	1,330	928			
19	164	217	490	2,740	315	3,350	2,980	1,330	1,000			
20	140	246	720	2,380	396	4,360	2,620	1,240	1,240			
21	140	396	1,000	2,040	443	4,620	2,140	1,160	2,860			
22	140	598	9,700	1,720	544	4,100	1,920	1,160	2,260			
23	140	544	6,240	21,100	1,420	4,360	1,820	1,080	1,720			
24	140	490	4,620	19,300	1,160	4,100	1,520	1,080	1,240			
25	164	443	3,600	8,230	1,000	4,100	1,330	1,000	855			
26	246	396	2,980	5,420	855	5,420	1,240	855	855			
27	720	396	2,140	3,600	788	7,080	1,240	855	598			
28	1,620	356	1,720	3,850	720	12,900	3,600	855	490			
29	788	356	1,520	3,850		11,600	2,260	928	490			
30	598	490	1,520	3,100		9,700	1,820	928	396			
31	598		1,520	2,620		10,900		1,000				
1907.												
1									7,360	1,000	855	490
2									8,230	855	598	396
3									6,800	788	490	396
4									4,360	720	396	490
5									3,350	855	356	490
6									2,860	720	356	443
7									2,740	598	315	443
8									2,260	544	788	396
9									14,300	598	598	396
10								5,960	6,800	544	490	315
11								4,620	6,240	2,620	396	598
12								3,600	7,650	1,720	598	1,920
13								2,860	11,300	1,420	598	2,620
14								2,260	41,200	1,920	490	1,420
15								1,920	14,300	1,420	356	1,000
16								1,720	7,360	1,160	315	720
17								1,520	5,690	1,080	246	598
18								1,330	3,350	6,240	280	1,000
19								1,160	2,500	6,240	246	855
20								1,000	1,920	3,100	246	855
21								1,000	1,720	2,140	217	720
22								855	1,330	1,330	164	598
23								788	1,330	1,080	246	659
24								720	4,100	855	315	2,620
25								720	2,860	855	4,880	3,350
26								720	2,860	659	3,600	1,720
27								855	2,380	544	2,140	1,160
28								855	1,720	490	1,330	855
29								855	1,330	490	1,000	720
30								788	1,160	598	720	659
31								928		1,160	598	

Daily discharge, in second-feet, of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1907–8.												
1	720	396	1,520	7,650	1,330	1,520	26,000	2,380	3,100	396	855	443
2	598	576	1,330	5,420	1,330	5,690	15,700	3,100	2,140	315	659	396
3	490	6,800	1,240	5,150	1,720	11,600	10,300	2,740	1,520	490	544	315
4	443	4,880	1,080	3,100	2,860	9,700	6,800	2,860	1,520	1,620	443	280
5	396	2,860	855	2,860	1,330	8,520	4,880	2,620	5,150	4,360	396	246
6	490	2,140	720	2,620	1,000	15,000	3,600	2,620	4,100	2,860	396	246
7	855	1,720	720	2,260	1,080	25,300	3,100	19,300	2,620	3,100	246	246
8	855	1,920	598	1,720	1,160	22,200	2,620	21,500	1,920	2,380	396	217
9	7,940	1,920	855	1,920	1,160	12,300	2,380	9,100	1,520	1,420	1,000	217
10	4,100	4,100	2,860	1,520	1,160	10,300	3,100	6,520	1,330	1,000	1,520	188
11	2,380	9,400	15,700	1,420	1,000	6,800	5,150	10,300	1,160	788	1,520	188
12	1,720	5,960	8,520	21,800	1,520	5,150	7,940	6,240	1,000	598	1,000	164
13	1,160	3,850	4,880	21,500	4,100	4,620	5,690	4,360	855	490	720	164
14	1,000	2,740	3,600	10,900	13,600	4,620	4,360	3,350	720	443	544	164
15	788	1,920	4,100	6,240	35,500	4,620	3,350	2,620	855	396	490	164
16	720	1,520	3,850	4,620	39,600	4,620	4,100	2,140	855	396	396	140
17	598	1,330	3,100	3,850	10,600	5,150	6,240	1,720	855	396	396	140
18	490	1,160	2,380	2,860	6,800	8,520	5,150	1,720	720	315	356	140
19	490	2,260	2,140	2,620	4,620	8,520	4,880	2,140	598	315	315	140
20	396	4,100	1,720	2,140	4,100	10,900	5,150	3,850	490	315	280	140
21	396	3,600	1,520	1,920	2,860	7,360	4,100	5,690	598	188	246	120
22	396	2,860	1,330	2,140	2,380	5,420	3,600	4,880	720	396	246	140
23	315	3,100	2,260	2,860	2,140	4,360	2,620	8,230	490	396	246	140
24	315	7,360	19,600	3,350	1,920	4,620	2,140	4,880	490	544	217	120
25	315	8,810	10,600	2,380	1,720	4,100	2,040	4,360	1,000	598	246	120
26	315	5,690	6,240	1,520	1,720	3,350	4,100	5,690	720	1,240	1,330	120
27	315	4,100	4,360	3,100	1,720	2,860	5,420	3,850	598	3,600	2,140	101
28	280	2,860	3,350	4,100	1,520	2,140	3,850	2,860	598	4,620	1,520	101
29	315	2,380	3,350	3,600	1,420	2,500	2,860	2,620	490	3,600	1,000	101
30	315	1,920	7,360	3,100	-------	3,100	2,260	4,100	396	1,720	720	101
31	356	-------	10,300	2,620	-------	13,300	-------	5,420	-------	1,160	544	-------
1908–9.												
1	140	598	246	5,150	1,160	3,100	2,860	6,800	1,420	1,000	2,380	140
2	140	443	217	3,100	788	2,620	2,380	6,800	1,240	1,330	1,160	101
3	140	315	188	2,140	788	2,260	2,140	5,150	1,160	3,100	788	101
4	140	280	188	1,720	1,160	4,880	2,140	3,850	1,160	1,520	598	188
5	120	217	188	2,860	1,160	4,620	2,040	3,100	1,520	1,000	490	164
6	140	188	164	11,300	1,160	3,600	3,100	2,500	1,720	855	396	140
7	140	188	246	7,360	1,160	3,600	3,100	1,920	1,330	3,600	396	140
8	140	188	598	4,620	1,160	6,240	2,620	1,820	1,080	2,140	315	188
9	140	188	659	2,860	1,000	7,080	2,140	1,720	1,240	1,330	315	188
10	140	140	490	2,140	6,800	6,800	1,720	2,500	1,520	855	188	188
11	164	188	490	1,720	12,300	8,230	1,520	5,690	2,140	720	246	217
12	140	164	1,920	1,520	7,080	5,690	1,330	4,620	1,520	598	246	188
13	140	164	2,620	1,330	4,360	4,100	1,160	3,220	1,160	490	217	188
14	140	164	1,720	1,240	4,360	4,100	9,700	2,380	1,000	396	188	188
15	140	188	1,160	1,520	5,150	3,600	15,000	1,920	855	396	246	188
16	140	140	855	8,520	5,690	2,860	7,080	1,720	720	396	396	246
17	140	140	720	10,300	7,940	2,380	4,620	1,420	720	356	598	544
18	140	140	720	6,520	5,690	2,040	3,350	1,160	1,000	315	720	315
19	101	217	1,000	4,360	4,100	1,720	2,620	1,080	1,160	315	544	246
20	140	315	1,520	3,600	3,600	1,520	2,140	928	1,330	246	396	246
21	120	396	1,330	3,600	4,100	1,520	1,920	855	1,000	246	356	188
22	120	443	1,000	4,100	4,620	1,720	2,140	5,150	855	217	246	188
23	120	396	855	4,100	4,880	2,040	4,880	5,420	650	246	246	164
24	140	396	720	4,620	4,880	2,860	8,520	3,350	659	246	188	188
25	140	315	720	4,880	6,240	3,850	6,520	2,380	788	188	217	164
26	188	315	1,720	4,100	5,960	10,600	4,620	4,100	720	188	188	164
27	217	280	1,520	3,100	4,620	6,520	3,600	7,080	598	188	188	188
28	246	246	1,330	2,380	3,850	5,150	2,860	5,420	490	188	188	164
29	246	246	1,330	1,920	-------	3,350	2,860	3,600	720	188	164	140
30	659	246	1,920	1,920	-------	4,620	3,100	2,380	1,000	246	140	140
31	720	-------	5,150	1,520	-------	3,850	-------	1,720	-------	246	140	-------

Daily discharge, in second-feet, of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1909–10.												
1	140	315	315	490	1,000	5,420	659	2,380	855	884	315	246
2	140	280	280	490	855	11,300	598	1,820	828	747	301	246
3	140	246	246	788	1,000	6,240	2,400	1,480	788	696	280	544
4	120	246	246	5,560	1,330	5,690	884	1,300	747	659	246	1,240
5	101	217	246	4,100	1,720	4,360	1,240	1,190	928	788	331	1,820
6	101	188	246	2,620	1,520	3,600	1,160	971	3,850	884	380	1,720
7	101	188	246	5,150	1,160	3,350	1,160	855	5,820	1,080	315	1,330
8	101	188	315	8,380	855	3,100	971	928	3,480	1,030	301	928
9	86	217	396	4,620	855	2,620	884	1,190	2,380	1,240	246	659
10	86	246	490	3,350	1,160	2,140	828	1,240	2,420	1,190	246	512
11	315	720	246	2,860	1,160	1,920	720	1,190	6,520	928	217	443
12	855	1,720	396	1,330	720	1,720	788	1,160	8,960	747	200	380
13	1,520	1,240	396	1,160	855	1,720	1,880	1,520	10,900	1,620	217	396
14	1,080	855	9,700	1,330	855	1,920	2,140	2,260	13,900	2,620	178	512
15	659	720	6,240	1,160	1,000	2,100	1,970	1,920	8,810	2,100	246	490
16	490	598	3,600	1,000	1,330	1,920	1,620	1,620	14,000	1,920	280	380
17	396	490	2,260	855	4,100	1,680	1,520	1,300	34,500	1,560	246	315
18	396	443	1,520	855	14,300	1,420	1,880	1,240	11,600	2,900	178	260
19	396	396	1,160	3,100	10,900	1,300	2,140	1,190	6,240	4,880	188	246
20	315	396	1,520	5,420	5,420	1,130	2,260	1,160	7,710	2,570	188	200
21	246	396	1,000	4,100	3,850	1,000	2,380	1,160	5,150	1,620	178	188
22	246	315	1,000	14,500	3,850	1,000	2,380	1,620	3,980	1,190	217	188
23	217	315	720	7,080	5,960	928	2,260	1,540	3,900	928	178	178
24	598	315	598	4,360	4,620	928	2,500	1,480	4,490	788	696	178
25	598	396	544	3,100	3,600	855	3,480	1,480	2,860	598	443	164
26	490	396	490	2,140	2,860	855	3,150	1,480	1,920	490	396	260
27	598	396	490	1,920	2,860	855	2,860	1,330	1,420	490	301	1,420
28	490	356	443	1,720	3,100	855	3,220	1,190	1,330	490	246	788
29	396	315	396	1,720	-------	696	3,220	971	1,190	415	200	1,330
30	396	315	396	1,330	-------	720	2,810	884	1,030	396	178	747
31	315	-------	598	1,160	-------	720	-------	855	-------	380	188	-------
1910–11.												
1	512	260	720	5,690	9,100	2,140	3,850	1,720	828	260	101	3,220
2	380	260	576	11,600	7,080	1,920	3,480	1,720	696	234	86	2,140
3	356	246	443	23,000	5,420	1,720	4,100	1,480	598	380	86	1,030
4	315	246	396	23,100	4,620	1,480	7,360	1,300	512	380	95	747
5	246	200	443	10,300	3,980	1,240	17,800	1,130	512	301	380	622
6	200	188	443	4,620	3,220	5,690	16,400	1,000	855	280	164	512
7	246	188	396	3,350	2,860	8,520	9,100	855	622	246	140	380
8	246	188	331	2,380	2,620	5,690	6,800	855	659	415	188	315
9	200	188	315	1,820	4,100	4,360	9,100	855	971	315	331	246
10	622	188	415	1,420	5,690	6,800	8,230	855	928	280	315	928
11	622	178	396	1,160	4,360	9,400	5,690	828	659	471	188	828
12	471	150	356	1,370	3,220	7,360	4,360	788	544	396	188	720
13	356	164	356	1,620	2,740	5,150	3,600	720	490	315	415	1,560
14	301	164	380	8,520	2,140	5,690	3,350	622	443	301	443	928
15	234	164	200	5,960	1,920	5,150	9,700	576	576	260	396	659
16	217	164	315	4,620	1,620	4,100	8,520	544	471	234	356	855
17	217	164	315	3,600	1,370	3,600	5,960	512	443	234	280	3,850
18	188	188	260	2,740	1,300	3,100	4,360	380	396	188	217	2,620
19	188	188	356	2,140	1,160	2,980	3,480	471	396	164	188	1,520
20	200	164	315	1,720	1,680	6,240	4,880	471	315	150	140	1,030
21	178	164	443	1,920	1,720	6,800	5,690	396	356	140	140	788
22	178	150	490	3,100	1,420	4,880	5,420	396	356	140	120	622
23	188	150	396	8,520	1,240	3,720	4,360	443	490	140	101	576
24	246	178	544	5,960	1,130	3,220	3,850	490	396	150	109	490
25	234	150	1,370	3,980	1,240	2,620	3,220	396	315	140	109	443
26	246	164	1,420	3,220	1,330	2,140	2,860	331	315	109	109	331
27	260	331	1,240	3,850	1,520	2,740	2,380	356	356	101	132	280
28	246	396	1,030	5,690	1,720	5,150	2,040	315	443	101	101	315
29	217	598	1,160	6,800	-------	4,100	1,720	512	396	120	120	315
30	246	788	6,940	35,100	-------	3,850	1,720	855	315	120	132	380
31	246	-------	8,660	19,300	-------	4,100	-------	1,000	-------	101	217	-------

Daily discharge, in second-feet, of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1911–12.												
1	315	696	1,480	10,000	3,720	4,100	5,960	2,740	501	1,330	490	183
2	598	598	1,330	6,520	2,980	2,860	7,940	2,260	481	942	396	178
3	598	544	1,230	4,620	2,380	2,500	9,700	1,920	443	696	347	154
4	1,130	490	1,160	3,480	1,560	2,040	6,800	1,600	415	587	415	145
5	1,160	415	928	2,620	1,480	1,720	4,880	1,390	380	1,060	380	120
6	928	720	842	1,620	1,190	1,560	3,600	1,300	364	1,720	301	117
7	747	10,300	801	1,160	1,330	1,400	3,100	1,030	331	1,050	287	117
8	598	6,800	774		1,080	1,640	2,860	2,980	287	913	253	128
9	3,850	3,720	774		1,300	3,220	2,380	2,620	240	683	229	109
10	2,380	2,740	720		928	3,980	2,140	2,260	246	555	211	101
11	1,680	2,040	720		942	3,100	1,920	1,920	188	587	188	109
12	1,680	1,680	720		788	2,860	1,640	10,600	188	842	205	95
13	1,680	2,140	708	700	801	6,520	1,480	17,500	205	708	200	76
14	1,420	2,140	720		720	7,940	1,310	9,700	188	533	217	73
15	1,190	1,920	734		683	10,900	1,230	5,960	211	671	188	76
16	4,100	1,700	814		659	31,100	1,140	10,000	194	696	159	73
17	3,720	1,480	1,190		671	11,900	1,230	18,200	194	471	140	68
18	18,200	1,480	1,820		720	6,800	2,140	8,230	217	443	150	79
19	10,300	3,600	1,720	1,330	956	5,150	3,480	4,880	331	471	174	260
20	5,150	3,850	1,520	2,380	1,370	4,620	2,980	3,600	415	396	164	164
21	2,860	2,620	1,310	2,140	3,350	5,690	2,260	2,620	405	696	140	109
22	1,920	2,140	1,300	2,040	16,800	5,960	1,920	2,040	356	544	164	95
23	2,380	1,620	5,420	1,720	9,100	5,150	1,820	1,620	490	481	159	178
24	3,100	1,500	4,620	1,720	5,150	7,940	1,920	1,370	396	1,700	140	2,980
25	2,140	1,520	5,690	2,040	3,600	12,600	1,820	1,180	555	555	136	2,260
26	1,720	1,680	4,880	1,920	3,350	8,810	1,680	1,020	544	6,800	145	1,400
27	1,420	1,520	5,690	1,820	17,800	5,960	1,820	913	544	2,620	140	942
28	1,190	1,480	6,800	1,620	10,300	4,360	2,500	788	2,040	1,420	117	598
29	971	1,440	4,620	2,140	5,960	17,500	2,380	720	1,920	913	105	471
30	828	1,520	3,480	5,420	-------	16,800	2,740	696	1,680	671	113	405
31	720	-------	3,720	5,150	-------	8,810	-------	587	-------	533	136	-------
1912–13.												
1	347	223	183	9,700	3,350	4,880	3,350	1,190	5,150	533	415	246
2	301	217	217	4,620	3,480	3,850	2,620	1,080	3,480	622	356	246
3	246	200	246	2,740	3,220	2,860	2,140	971	2,620	434	512	178
4	240	194	356	4,620	7,360	2,140	1,820	913	5,690	1,000	364	183
5	205	188	490	4,100	7,080	1,920	1,620	855	5,150	1,420	301	159
6	183	188	1,160	3,480	4,620	1,720	1,400	801	3,100	1,230	253	178
7	188	315	2,620	7,360	3,220	1,400	1,190	1,100	2,140	1,330	223	140
8	178	5,690	2,140	14,300	2,140	1,130	1,060	1,180	3,100	986	188	150
9	169	3,980	1,520	13,600	1,680	870	986	1,020	2,980	696	178	140
10	164	2,140	1,130	10,300	1,540	1,030	913	884	2,260	598	164	140
11	159	1,440	884	4,620	1,540	3,100	913	774	1,700	8,230	217	124
12	150	1,060	747	3,600	1,820	5,690	2,500	671	1,300	3,350	260	124
13	145	828	610	3,850	1,460	4,100	19,300	610	1,140	2,140	308	140
14	154	696	415	3,850	1,160	10,000	11,900	598	971	1,420	2,860	113
15	200	598	331	2,980	1,030	17,100	17,100	576	828	1,080	2,740	117
16	188	533	452	2,380	1,000	12,300	12,900	544	696	928	1,260	136
17	178	481	555	1,920	1,130	7,080	7,940	622	622	884	788	120
18	159	415	501	1,820	971	4,360	5,150	747	555	734	555	136
19	183	388	471	1,600	842	3,220	3,850	1,260	490	610	576	145
20	234	356	452	1,480	774	2,620	3,100	1,370	443	855	490	132
21	434	331	315	1,350	801	2,140	2,500	3,350	396	1,130	481	183
22	331	308	234	1,260	884	1,920	1,920	2,260	380	788	471	294
23	331	280	178	1,240	1,080	1,620	1,700	2,260	356	622	576	331
24	388	274	217	1,370	1,400	1,330	1,500	6,800	364	587	1,400	443
25	490	260	280	2,860	1,310	1,230	1,330	7,360	364	512	1,240	347
26	443	267	253	3,600	1,140	1,500	1,160	4,360	659	747	788	260
27	405	246	280	3,600	1,370	42,500	1,230	4,880	913	622	576	217
28	331	246	452	4,620	3,980	34,700	1,330	15,700	828	490	452	188
29	301	234	347	3,850	-------	10,300	1,370	9,400	622	434	388	183
30	287	194	1,480	3,100	-------	6,240	1,310	5,420	512	380	323	164
31	246	-------	12,900	2,740	-------	4,360	-------	6,240	-------	396	280	-------

Daily discharge, in second-feet, of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1913–14.												
1	183	828	2,620	1,820	12,300	2,860	4,880	2,380	287	280	260	512
2	164	696	6,520	1,620	6,800	2,500	5,690	2,040	294	246	200	405
3	178	598	5,150	1,620	4,100	1,920	8,520	1,720	274	234	200	315
4	169	533	3,480	1,440	3,220	1,720	6,240	1,500	246	223	188	287
5	211	481	2,500	1,370	2,620	2,140	4,360	1,480	301	188	164	246
6	194	434	2,040	1,300	2,620	2,140	3,350	2,040	287	183	140	223
7	287	380	2,040	1,230	6,800	1,920	2,740	3,220	260	164	159	200
8	246	415	3,850	1,230	8,520	1,720	2,380	2,860	246	188	260	211
9	234	884	3,480	1,920	5,420	1,680	6,520	2,620	280	234	194	188
10	217	3,980	2,620	4,100	3,850	1,480	5,690	2,140	287	246	260	169
11	331	3,350	2,260	4,100	3,100	2,380	3,850	1,820	240	223	246	217
12	671	2,380	1,820	3,480	2,380	1,920	3,100	1,560	217	178	331	356
13	576	2,140	1,480	2,860	1,920	3,480	2,500	1,370	200	200	380	471
14	490	3,480	1,230	2,380	1,240	2,860	1,920	1,210	183	1,000	347	452
15	396	9,700	1,160	2,140	1,190	3,350	2,140	1,080	194	720	315	380
16	364	11,900	1,030	1,820	1,230	6,240	6,800	971	169	544	331	260
17	323	14,300	942	1,480	1,130	11,300	7,080	842	164	533	301	200
18	308	8,230	842	1,300	1,190	13,300	5,150	774	188	610	240	150
19	280	4,880	814	1,300	3,100	9,100	3,980	720	169	443	211	95
20	364	3,350	747	1,240	14,000	5,960	4,880	622	169	347	194	101
21	1,720	2,500	708	5,690	8,810	4,100	7,360	587	159	301	159	101
22	2,140	1,820	696	9,700	5,420	3,480	5,420	544	164	301	150	101
23	1,480	1,480	720	5,150	5,420	3,220	4,100	512	140	260	140	105
24	1,240	1,190	708	3,850	4,880	3,220	3,220	490	140	211	124	101
25	5,150	971	801	9,100	3,600	3,350	2,620	452	159	183	132	101
26	7,080	855	2,860	8,230	3,100	5,690	2,740	424	183	183	164	120
27	4,880	760	6,240	5,420	2,980	10,900	12,600	405	234	211	274	124
28	2,860	828	3,720	3,980	2,860	9,400	6,240	364	659	178	396	109
29	1,920	2,040	2,860	3,350	-------	9,100	4,360	364	415	169	1,130	113
30	1,390	2,380	2,620	3,480	-------	6,800	3,100	323	315	211	659	109
31	1,030	-------	1,920	4,100	-------	5,420	-------	308	-------	253	659	-------
1914–15.												
1	64	218	169	4,490	4,490	2,500	804	1,250	204	185	137	463
2	66	185	547	3,710	27,800	2,090	777	1,080	516	169	133	394
3	66	169	1,250	2,810	24,800	1,700	725	1,000	626	185	126	345
4	69	158	1,420	1,510	15,200	1,420	686	1,160	7,500	204	536	394
5	72	164	1,990	1,080	6,120	1,420	649	1,160	5,300	268	916	725
6	90	153	5,300	1,510	5,850	1,340	637	1,000	2,810	336	637	1,000
7	92	142	3,030	26,300	7,500	1,420	592	832	1,990	336	536	818
8	92	126	2,190	16,700	6,680	1,510	686	777	1,420	355	394	637
9	97	133	1,790	11,600	5,580	1,340	930	699	1,160	374	311	526
10	92	115	1,700	9,800	3,960	1,340	1,080	649	902	302	302	432
11	100	118	1,700	7,500	3,250	1,600	1,000	581	712	239	253	336
12	118	111	1,890	6,400	2,600	1,790	1,160	526	592	211	246	277
13	111	115	1,890	6,400	2,190	1,790	1,080	526	526	197	260	260
14	122	115	1,890	5,580	1,600	1,510	1,250	484	615	190	364	253
15	239	122	1,890	3,480	3,480	1,420	1,080	484	1,600	185	790	294
16	403	122	1,890	4,220	7,780	1,420	930	463	1,700	197	604	232
17	1,080	218	1,890	5,300	5,300	1,600	874	442	1,510	153	818	190
18	860	311	1,790	11,600	3,480	1,510	777	413	2,090	137	637	174
19	637	253	1,990	14,900	2,600	1,420	725	345	1,990	122	526	158
20	581	286	4,490	13,400	1,990	1,160	673	355	1,340	197	818	164
21	432	253	8,600	9,500	1,700	1,160	660	355	874	260	604	345
22	374	185	8,900	6,680	1,510	1,080	712	336	660	204	463	669
23	311	185	8,050	5,850	1,340	930	764	403	484	185	526	930
24	239	158	7,220	5,300	3,250	860	558	463	452	355	570	738
25	239	118	6,400	5,850	12,800	818	526	442	384	268	442	526
26	268	137	5,580	6,120	6,950	790	604	474	294	204	345	384
27	286	153	4,760	5,850	4,220	832	581	484	246	174	302	374
28	345	142	5,300	5,030	3,030	874	592	463	211	211	277	336
29	320	164	5,850	3,710	-------	860	712	452	190	190	294	294
30	294	190	6,120	3,030	-------	888	1,250	452	179	169	423	268
31	225	-------	6,120	2,810	-------	902	-------	239	-------	158	547	-------

Daily discharge, in second-feet, of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1915–16.												
1	9,800	253	649	5,030	5,850	2,190	3,030	1,890	1,250	516	790	294
2	18,500	253	581	3,710	8,050	2,090	2,290	1,600	1,000	581	7,220	268
3	6,400	239	570	4,490	6,400	2,810	2,090	1,340	1,000	777	3,480	253
4	3,250	211	526	3,710	4,220	2,810	1,890	1,250	1,000	699	1,890	232
5	2,090	197	474	2,600	3,250	2,500	1,700	1,160	1,160	1,000	1,510	204
6	1,600	185	403	2,290	3,030	3,250	1,700	1,080	930	818	1,700	190
7	1,160	190	423	2,090	2,810	5,300	2,090	930	1,000	452	1,700	190
8	1,000	204	328	1,990	3,710	2,390	2,190	860	526	452	2,290	190
9	804	185	294	1,510	3,250	7,500	2,190	790	1,990	423	2,090	204
10	673	190	442	1,340	3,960	4,760	2,190	846	2,810	463	1,890	204
11	626	190	384	4,220	3,480	3,250	5,300	764	2,500	673	1,510	232
12	547	190	328	13,400	3,030	2,600	6,680	712	2,090	790	1,420	185
13	494	179	311	11,000	3,250	2,190	5,850	660	1,600	615	1,340	169
14	442	185	336	8,600	4,220	2,190	4,220	592	1,250	484	1,250	164
15	423	218	403	5,300	3,710	3,710	3,250	581	3,710	452	902	232
16	384	364	328	3,710	2,810	3,030	2,500	547	6,680	526	1,600	1,250
17	364	738	403	2,810	2,500	3,480	2,090	536	12,200	2,390	2,390	860
18	336	916	902	2,190	2,090	2,600	1,700	558	8,050	3,480	1,990	660
19	364	874	12,500	1,600	1,790	2,090	3,710	558	4,220	2,290	1,340	463
20	403	1,890	5,850	1,160	1,420	1,890	1,340	526	2,810	1,420	1,340	355
21	413	2,090	3,480	1,340	1,340	1,510	1,160	484	1,990	1,080	1,000	277
22	432	1,700	2,290	1,510	1,340	1,600	1,250	452	1,510	1,160	790	225
23	474	1,340	1,790	1,790	1,250	3,710	1,160	686	3,250	3,030	2,810	232
24	432	1,160	1,510	1,890	1,340	5,030	1,160	2,600	1,080	1,890	1,890	232
25	384	1,000	1,160	1,510	6,400	3,480	1,250	2,500	1,080	1,420	1,080	197
26	345	846	1,420	1,600	7,500	2,600	2,390	1,790	1,340	1,080	804	225
27	336	790	1,790	1,990	4,490	2,190	3,250	5,580	930	846	592	232
28	302	764	1,890	2,810	3,250	2,290	3,250	2,500	860	1,160	505	190
29	302	764	7,500	3,030	2,500	6,120	2,810	1,600	686	1,600	452	860
30	294	712	18,500	6,120	-------	5,580	2,290	1,340	592	1,160	394	2,810
31	253	-------	8,320	6,950	-------	3,960	-------	1,420	-------	874	328	-------
1916–17.												
1	2,190	328	558	2,500	6,120	12,800	1,700	3,710	2,600	179	345	82
2	1,250	311	615	1,990	6,400	11,300	1,510	4,490	2,090	218	302	87
3	860	286	649	1,790	4,220	12,500	1,420	3,250	2,090	211	846	82
4	637	277	592	2,390	2,390	27,200	1,340	2,290	2,390	239	374	79
5	536	260	547	5,580	1,790	24,800	1,340	1,990	2,390	225	277	84
6	463	260	547	10,400	1,510	9,800	5,580	1,790	2,090	218	302	90
7	394	246	536	8,600	1,420	6,120	6,950	1,420	1,700	197	277	92
8	345	232	494	5,030	1,420	5,580	5,030	1,420	1,420	174	246	169
9	320	225	526	3,480	1,420	11,600	5,030	1,990	1,160	158	286	218
10	294	218	494	2,600	1,080	7,500	3,480	3,030	930	137	311	336
11	277	232	494	2,090	916	4,760	2,810	2,810	930	137	336	649
12	260	225	479	1,600	888	9,800	2,390	2,390	902	133	345	423
13	260	239	463	1,080	902	20,600	2,390	2,090	764	137	268	311
14	239	253	448	1,890	738	17,600	2,390	1,790	649	122	218	225
15	260	260	432	3,030	777	14,300	2,090	1,510	581	118	185	185
16	225	239	526	2,810	846	8,900	1,790	1,250	526	153	174	158
17	260	204	277	2,190	790	10,100	1,510	1,080	474	246	148	133
18	345	225	442	1,790	930	11,600	1,340	1,000	452	260	133	122
19	505	218	442	1,600	1,420	7,500	1,160	874	413	302	133	118
20	1,420	185	442	1,420	3,710	5,030	1,080	790	384	516	122	104
21	1,420	179	442	1,340	7,500	3,960	1,000	725	442	432	115	100
22	1,080	190	725	6,400	5,300	6,120	930	673	505	374	115	95
23	860	204	2,190	13,700	4,220	6,400	902	686	463	463	107	97
24	712	225	2,190	6,680	12,200	14,600	804	673	364	604	100	92
25	604	328	1,890	4,220	12,800	13,700	777	649	311	874	97	90
26	558	902	1,420	3,030	6,950	7,220	790	615	277	3,030	97	90
27	463	673	1,340	2,390	4,490	4,760	874	1,250	253	1,700	100	95
28	432	526	2,810	1,890	4,220	3,480	818	12,500	232	1,080	97	130
29	394	494	15,200	1,790	-------	2,810	902	8,050	218	738	90	164
30	355	526	8,050	2,290	-------	2,500	2,600	5,580	204	526	84	225
31	355	-------	3,480	3,250	-------	1,990	-------	3,480	-------	423	74	-------

Daily gage height, in feet, of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1918–1920.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1917–18.												
1	1.96	3.48	2.16	2.77	3.78	4.70	3.35	4.15	3.21	5.16	3.58	4.36
2	1.90	2.96	2.15	2.66	3.38	5.05	3.26	3.90	3.06	4.72	3.34	3.52
3	1.85	2.70	2.18	2.53	3.25	4.48	3.28	3.72	2.94	4.14	3.03	3.21
4	1.84	2.55	2.15	2.65	3.18	3.90	3.46	3.58	2.85	3.70	2.83	2.96
5	1.82	2.42	2.14	2.58	3.08	4.75	3.41	3.48	2.75	3.39	2.69	2.79
6	1.77	2.34	2.15	2.55	2.98	5.49	3.31	3.38	2.76	3.18	2.57	2.88
7	1.75	2.27	2.13	2.52	2.99	6.40	3.24	3.30	2.84	3.03	2.52	3.16
8	1.72	2.22	2.09	2.49	3.93	6.05	3.36	3.29	2.98	2.90	2.43	3.22
9	1.72	2.18	2.06	2.41	4.10	4.70	7.40	3.34	2.89	2.80	2.37	3.11
10	1.71	2.14	1.92	2.39	6.53	4.28	6.75	3.85	2.79	2.74	2.33	2.96
11	1.70	2.10	1.87	2.44	7.08	4.12	5.85	3.64	2.68	2.68	2.32	2.83
12	1.73	2.06	1.83	2.53	6.70	3.82	5.68	3.50	2.54	2.64	2.37	2.72
13	1.74	2.04	2.06	2.68	7.00	8.02	5.24	3.42	2.45	2.70	2.42	2.64
14	1.74	2.02	2.04	2.70	8.00	18.62	5.00	3.52	2.44	2.72	2.64	2.58
15	1.74	1.99	2.06	2.88	7.12	8.52	6.18	3.80	2.41	2.66	3.13	2.56
16	1.74	1.98	2.10	2.82	8.14	6.56	6.28	3.90	2.38	2.58	2.91	2.65
17	1.74	1.96	2.09	2.81	5.78	5.35	5.58	3.68	2.62	2.63	2.65	2.58
18	1.74	1.94	2.08	2.74	4.58	4.58	5.02	3.50	2.86	2.69	2.64	2.71
19	1.74	1.92	2.03	2.68	4.02	4.18	4.64	3.64	4.00	2.93	2.87	5.73
20	2.04	1.91	2.08	2.61	6.08	3.91	4.35	3.52	4.00	3.60	3.15	4.25
21	2.67	1.90	2.06	2.65	8.30	3.85	6.45	3.62	3.43	3.39	3.16	3.77
22	2.56	1.90	2.05	2.57	5.45	5.88	7.05	3.65	3.25	3.03	2.89	3.73
23	2.34	1.88	2.17	2.54	4.42	5.30	5.55	4.00	3.62	2.82	2.73	3.56
24	2.25	1.87	2.25	2.49	3.98	4.58	4.82	3.95	3.36	2.68	2.64	3.33
25	2.22	1.84	2.40	2.48	3.88	4.46	4.55	3.76	3.15	2.59	2.89	3.14
26	2.16	1.84	2.56	2.47	7.28	4.38	4.55	5.20	9.00	2.52	3.03	3.00
27	2.18	1.84	2.83	2.62	7.92	4.15	5.44	5.22	6.50	2.99	2.81	2.88
28	2.27	1.83	3.01	5.36	5.26	3.92	5.66	4.34	4.68	2.76	2.68	2.79
29	2.40	1.82	2.94	6.63	-------	3.72	4.86	3.90	4.76	2.61	2.64	2.71
30	3.68	1.95	2.86	5.18	-------	3.56	4.38	3.70	6.33	2.58	2.62	2.64
31	4.40	-------	2.81	4.26	-------	3.42	-------	3.45	-------	3.10	2.59	-----
1918–19.												
1	2.59	6.82	4.14	8.48	3.42	4.50	3.97	3.36	3.16	3.58	2.73	2.53
2	2.54	5.07	3.81	15.90	3.22	5.25	3.74	5.72	3.42	3.30	3.38	2.77
3	2.48	4.12	3.64	10.38	3.14	4.65	3.55	5.12	3.16	3.11	3.26	2.64
4	2.45	3.65	3.41	6.66	3.16	4.25	3.43	4.39	3.00	3.08	2.98	2.48
5	2.41	3.45	3.32	5.08	3.22	4.00	3.40	3.99	2.88	2.88	2.81	2.39
6	2.38	3.35	3.20	4.56	3.14	4.09	3.35	3.73	2.84	2.80	2.84	2.31
7	2.37	3.23	3.09	4.26	2.98	4.27	3.27	3.58	2.77	3.99	3.00	2.24
8	2.34	3.16	3.05	4.06	2.96	4.13	3.19	3.62	2.74	4.09	2.84	2.22
9	2.33	3.06	3.01	3.81	2.93	4.23	3.13	5.20	2.70	3.53	2.73	2.17
10	2.33	2.97	3.08	3.64	2.91	5.17	3.08	8.12	2.64	3.10	2.64	2.21
11	2.34	2.91	3.64	3.41	2.80	4.80	3.12	7.04	2.65	2.89	2.54	2.23
12	2.33	2.86	4.56	3.44	2.75	4.33	5.70	5.32	2.77	2.80	2.53	2.21
13	2.30	2.80	4.57	3.40	2.86	4.00	5.10	4.52	2.82	3.24	2.53	2.25
14	2.26	2.75	4.20	3.36	3.26	3.79	4.40	4.29	2.84	4.04	2.97	2.17
15	2.27	2.69	7.14	3.42	3.67	3.63	4.03	4.66	2.83	4.65	2.88	2.19
16	2.32	2.72	6.44	3.41	3.67	3.47	3.70	4.59	3.05	5.81	2.71	2.18
17	2.34	2.73	4.89	3.40	3.50	3.37	4.55	4.24	3.26	6.88	2.62	2.14
18	2.34	3.15	4.46	4.61	3.37	3.45	4.76	4.42	3.82	5.17	2.61	2.12
19	2.29	3.72	4.01	6.38	3.27	3.65	4.27	4.18	3.76	4.61	2.58	2.08
20	2.34	3.72	3.76	5.28	3.21	3.71	3.95	3.96	3.34	7.83	2.51	2.12
21	2.36	3.53	3.58	4.58	3.17	3.60	3.73	4.49	3.56	5.93	2.51	2.13
22	2.46	3.42	5.91	4.21	3.31	3.47	3.57	4.82	3.74	5.13	2.47	2.16
23	2.50	3.25	8.99	4.14	4.00	3.37	3.45	4.42	3.30	4.85	2.41	2.20
24	2.63	3.14	5.97	7.41	4.43	3.33	3.43	4.12	3.15	4.79	2.37	2.22
25	2.79	3.02	5.18	6.26	4.25	3.23	3.39	5.76	4.62	4.02	2.35	2.23
26	5.26	2.94	4.86	4.98	5.93	3.16	3.35	5.59	5.79	3.67	2.36	2.22
27	5.13	2.92	4.48	4.44	5.55	3.42	3.26	4.48	7.84	3.33	2.45	2.36
28	4.22	2.99	4.11	4.06	4.55	7.73	3.21	4.10	6.09	3.15	2.32	2.25
29	3.82	5.16	3.86	3.86	-------	5.61	3.16	3.79	4.79	3.03	2.25	2.21
30	4.17	4.76	3.61	3.64	-------	4.67	3.14	3.53	3.99	2.91	2.24	2.14
31	11.15	-------	3.64	3.46	-------	4.27	-------	3.34	-------	2.81	2.31	-------

Daily gage height, in feet, of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1918–1920—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1919–20.												
1	2.10	2.86	3.70	2.91	3.46	3.42	3.28	3.42	2.88	2.50	2.23	2.55
2	2.05	6.30	3.50	2.83	3.31	3.35	5.18	3.38	2.81	2.56	2.25	2.49
3	2.06	5.54	3.36	2.83	3.27	3.29	5.98	3.44	2.78	2.71	2.23	2.42
4	2.13	4.32	3.24	3.01	3.89	3.27	4.85	3.38	2.84	3.85	2.19	2.38
5	2.05	3.80	3.07	2.96	4.09	3.50	5.70	3.28	4.45	4.02	2.18	2.33
6	2.08	3.50	3.27	2.79	4.01	5.32	6.10	3.15	6.58	3.38	2.16	2.27
7	2.10	3.27	10.32	2.84	3.75	4.40	5.48	3.09	4.72	3.09	2.25	2.26
8	2.17	3.08	10.52	2.94	3.56	3.94	5.18	3.15	4.04	2.99	2.21	2.24
9	2.08	2.94	6.20	3.51	3.43	3.70	5.06	3.22	3.61	2.96	2.15	2.24
10	2.08	2.86	5.64	5.03	3.39	3.60	4.95	3.22	3.38	2.82	2.27	2.21
11	2.08	2.80	5.40	4.76	3.69	3.44	4.70	3.15	3.18	2.73	2.38	2.21
12	2.32	2.77	4.72	4.11	3.83	3.52	4.32	3.08	2.95	3.16	2.43	2.22
13	2.77	2.75	4.44	3.73	3.73	6.20	4.18	3.10	2.82	3.48	2.44	2.22
14	2.85	2.75	5.80	3.63	3.75	7.08	4.68	4.95	2.76	3.23	2.51	2.22
15	2.76	2.73	5.14	3.25	3.76	5.25	4.26	4.30	2.72	2.98	3.13	2.19
16	2.81	2.70	4.60	3.09	3.69	4.56	3.95	3.89	2.78	2.85	2.93	2.16
17	2.78	2.69	4.18	3.26	3.59	5.25	3.76	3.61	2.70	2.76	2.70	2.15
18	2.83	2.61	3.86	3.02	3.53	6.02	3.58	3.41	2.60	2.69	2.67	2.12
19	2.73	2.56	3.61	3.21	3.49	8.18	3.45	3.30	2.68	2.80	3.24	2.09
20	2.68	2.55	3.46	2.83	3.31	10.41	3.92	3.25	3.42	2.65	3.52	2.06
21	2.56	2.52	3.20	3.15	3.21	6.65	5.00	3.38	4.58	2.56	5.08	2.05
22	2.50	2.49	3.13	7.41	3.41	5.18	6.45	3.55	4.28	2.52	4.03	2.03
23	2.59	2.51	2.98	8.31	4.31	4.55	5.22	3.42	3.78	2.47	3.60	2.02
24	3.50	2.57	3.01	8.49	5.26	4.20	4.50	3.32	3.36	2.37	3.32	2.02
25	4.38	2.62	3.11	9.49	5.23	3.96	4.05	3.33	3.13	2.39	3.15	2.13
26	3.87	2.66	3.09	6.26	4.51	3.82	3.82	3.42	2.92	2.69	2.96	2.15
27	3.44	4.27	2.98	4.93	4.01	3.78	3.78	3.48	2.76	2.57	2.80	2.18
28	3.22	4.67	3.03	4.39	3.73	3.68	3.72	3.34	2.71	2.53	2.70	2.30
29	3.05	4.04	3.06	4.03	3.59	3.58	3.66	3.20	2.62	2.47	2.60	2.24
30	2.85	3.80	2.98	3.76	-------	3.44	3.55	3.08	2.56	2.35	2.58	2.31
31	2.75	-------	2.88	3.63	-------	3.32	-------	2.97	-------	2.27	2.66	-------

NOTE.—Daily discharge interpolated or estimated because of ice from observer's notes, climatic data or by comparison with records for other stations as follows: Jan. 3, Feb. 13–16, Dec. 31, 1899; Jan. 1–6 1900; Jan. 5–6, 8–9, 1905; Jan. 8–18, 1912; and Dec. 12–14, 1916.

Monthly discharge of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917.

[Drainage area, 1,340 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1895.					
August	390	125	252	0.188	0.22
September	755	82	164	.122	.14
1895–96.					
October	101	70	82.8	.062	.07
November	238	101	151	.113	.13
December	3,150	137	474	.354	.41
January	4,620	280	1,020	.761	.88
February	10,600	700	2,990	2.23	2.40
March	25,600	810	4,620	3.45	3.98
April	12,900	870	2,740	2.04	2.28
May	5,690	555	1,510	1.13	1.30
June	3,610	390	894	.667	.74
July	12,900	573	2,360	1.76	2.03
August	5,420	250	1,060	.791	.91
September	6,520	182	445	.332	.37
The year	25,600	70	1,530	1.14	15.51

Monthly discharge of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1896–97.					
October	11,600	280	1,040	0.776	0.89
November	21,800	262	2,800	2.09	2.33
December	6,240	125	1,400	1.04	1.20
January	1,640	470	870	.649	.75
February	51,500	528	7,690	5.74	5.98
March	12,300	1,460	4,160	3.10	3.57
April	6,240	700	2,170	1.62	1.81
May	32,300	680	4,010	2.99	3.45
June	1,900	510	1,020	.761	.85
July	6,240	510	2,080	1.55	1.79
August	1,000	244	473	.353	.41
September	232	110	147	.110	.12
The year	51,500	110	2,290	1.71	23.15
1897–98.					
October	187	113	146	.109	.13
November	573	125	251	.187	.21
December	4,880	390	1,240	.925	1.07
January	15,700	620	3,590	2.68	3.09
February	5,690	755	2,000	1.49	1.55
March	16,400	1,070	3,690	2.75	3.17
April	13,300	1,550	3,970	2.96	3.30
May	16,400	1,070	3,520	2.63	3.03
June	1,300	430	761	.568	.63
July	2,930	238	705	.526	.61
August	42,900	430	4,390	3.28	3.78
September	510	209	300	.224	.25
The year	42,900	113	2,060	1.54	20.82
1898–99.					
October	23,000	204	1,920	1.43	1.65
November	10,300	810	2,420	1.81	2.02
December	8,810	630	2,210	1.65	1.90
January	18,600	1,380	3,320	2.48	2.86
February	18,600	755	4,750	3.54	3.69
March	45,300	2,190	8,420	6.28	7.24
April	6,240	870	2,060	1.54	1.72
May	14,000	650	2,950	2.20	2.54
June	2,500	390	1,030	.769	.86
July	336	165	219	.163	.19
August	810	75	157	.117	.13
September	280	95	155	.116	.13
The year	45,300	75	2,460	1.84	24.93
1899–1900.					
October	157	75	105	.078	.09
November	268	113	156	.116	.13
December	1,000	125	345	.257	.30
January	9,700	----------	1,690	1.26	1.45
February	16,000	390	3,390	2.53	2.64
March	17,100	1,220	5,010	3.74	4.31
April	3,850	700	1,850	1.38	1.54
May	1,720	301	661	.493	.57
June	7,360	268	1,140	.851	.95
July	4,100	133	813	.607	.70
August	1,000	110	226	.169	.19
September	414	70	145	.108	.12
The year	17,100	70	1,280	.955	12.99
1900–1.					
October	3,380	104	387	.289	.33
November	56,800	145	3,630	2.71	3.02
December	12,900	555	1,940	1.45	1.67
January	21,100	620	2,380	1.78	2.05
February	2,390	600	1,110	.828	.86
March	12,300	600	2,690	2.01	2.32
April	20,400	1,550	6,410	4.78	5.33
May	19,300	870	4,470	3.34	3.85
June	20,000	930	3,970	2.96	3.30
July	4,100	280	1,270	.948	1.09
August	2,500	238	849	.634	.73
September	2,090	280	693	.517	.58
The year	56,800	104	2,480	1.85	25.13

Monthly discharge of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1901–2.					
October	315	153	228	0.170	0.20
November	422	119	188	.140	.16
December	36,700	238	4,850	3.62	4.17
January	12,900	470	2,630	1.96	2.26
February	29,600	600	4,410	3.29	3.43
March	30,700	1,640	7,500	5.60	6.46
April	7,940	755	3,170	2.37	2.64
May	2,930	390	828	.618	.71
June	4,100	301	682	.509	.57
July	930	165	414	.309	.36
August	280	66	138	.103	.12
September	164	70	91.4	.068	.08
The year	36,700	66	2,090	1.56	21.16
1902–3.					
October	415	76	151	.113	.13
November	3,100	51	456	.340	.38
December	7,360	598	2,730	2.04	2.35
January	23,100	576	3,840	2.87	3.31
February	24,900	1,720	6,880	5.13	5.34
March	31,100	1,160	6,300	4.70	5.42
April	10,000	1,920	3,410	2.54	2.83
May	2,620	315	870	.649	.75
June	8,810	396	1,750	1.31	1.46
July	2,500	128	760	.567	.65
August	788	58	238	.178	.21
September	301	79	161	.120	.13
The year	31,100	51	2,270	1.69	22.96
1903–4.					
October	246	101	149	.111	.13
November	246	70	150	.112	.12
December	490	101	183	.137	.16
January	15,400	217	1,580	1.18	1.36
February	9,400	246	2,330	1.74	1.88
March	10,000	1,420	3,660	2.73	3.15
April	8,810	659	2,280	1.70	1.90
May	15,700	788	2,800	2.09	2.41
June	7,360	396	1,360	1.01	1.13
July	1,160	140	352	.263	.30
August	188	86	141	.105	.12
September	188	46	86.4	.064	.07
The year	15,700	46	1,250	.933	12.73
1904–5.					
October	101	46	60.5	.045	.05
November	101	46	83.4	.062	.07
December	2,380	70	415	.310	.36
January	5,690	315	1,170	.873	1.01
February	1,520	246	693	.517	.54
March	25,600	1,000	7,030	5.25	6.05
April	3,600	855	1,610	1.20	1.34
May	28,400	720	3,920	2.93	3.38
June	5,960	246	1,020	.761	.85
July	12,900	544	2,510	1.87	2.16
August	1,080	315	616	.460	.53
September	928	101	287	.214	.24
The year	28,400	46	1,640	1.22	16.58
1905–6.					
October	1,620	70	274	.204	.24
November	598	188	321	.240	.27
December	11,300	490	2,420	1.81	2.09
January	21,100	1,080	4,990	3.72	4.29
February	2,140	315	841	.628	.65
March	13,300	544	4,750	3.54	4.08
April	7,940	1,240	3,490	2.60	2.90
May	2,500	855	1,360	1.01	1.16
June	2,860	396	1,070	.799	.89

Monthly discharge of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1907.					
May 10–31	5,960	720	1,680	1.25	1.02
June	41,200	1,160	6,050	4.51	5.03
July	6,240	490	1,430	1.07	1.23
August	4,880	164	781	.583	.67
September	3,350	315	963	.719	.80
1907–8.					
October	7,940	280	976	.728	.84
November	9,400	396	3,470	2.59	2.89
December	19,600	598	4,260	3.18	3.67
January	21,800	1,420	4,610	3.44	3.97
February	39,600	1,000	5,270	3.93	4.24
March	25,300	1,520	7,700	5.75	6.63
April	26,000	2,040	5,450	4.07	4.54
May	21,500	1,720	5,280	3.94	4.54
June	5,150	396	1,300	.970	1.08
July	4,620	188	1,310	.978	1.13
August	2,140	217	675	.504	.58
September	443	101	183	.137	.15
The year	39,600	101	3,370	2.51	34.26
1908–9.					
October	720	101	183	.137	.16
November	598	140	261	.195	.22
December	5,150	164	1,080	.806	.93
January	11,300	1,240	3,870	2.89	3.33
February	12,300	788	4,130	3.08	3.21
March	10,600	1,520	4,100	3.06	3.53
April	15,000	1,160	3,790	2.83	3.16
May	7,080	855	3,280	2.45	2.82
June	2,140	490	1,080	.806	.90
July	3,600	188	753	.562	.65
August	2,380	140	422	.315	.36
September	544	101	193	.144	.16
The year	15,000	101	1,920	1.43	19.43
1909–10.					
October	1,520	86	391	.292	.34
November	1,720	188	447	.334	.37
December	9,700	246	1,190	.888	1.02
January	14,500	490	3,150	2.35	2.71
February	14,300	720	2,960	2.21	2.30
March	11,300	696	2,390	1.78	2.05
April	3,480	598	1,870	1.40	1.56
May	2,380	855	1,350	1.01	1.16
June	34,500	747	5,750	4.29	4.79
July	4,880	380	1,250	.933	1.08
August	696	178	268	.200	.23
September	1,820	164	610	.455	.51
The year	34,500	86	1,790	1.34	18.12
1910–11.					
October	622	178	284	.212	.24
November	788	150	230	.172	.19
December	8,660	200	1,010	.754	.87
January	35,100	1,160	7,040	5.25	6.05
February	9,100	1,130	2,910	2.17	2.26
March	9,400	1,240	4,380	3.27	3.77
April	17,800	1,720	5,780	4.31	4.81
May	1,720	315	747	.557	.64
June	971	315	522	.390	.44
July	471	101	231	.172	.20
August	443	86	196	.146	.17
September	3,850	246	975	.728	.81
The year	35,100	86	2,020	1.51	20.45

Monthly discharge of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1911–12.					
October	18,200	315	2,600	1.94	2.24
November	10,300	415	2,206	1.64	1.83
December	6,800	708	2,200	1.64	1.89
January	10,000	----------	2,230	1.66	1.91
February	17,800	659	3,510	2.62	2.83
March	31,100	1,400	6,950	5.19	5.98
April	9,700	1,140	2,960	2.21	2.47
May	18,200	587	4,010	2.99	3.45
June	2,040	188	498	.372	.42
July	6,800	396	1,040	.776	.89
August	490	105	213	.159	.18
September	2,980	68	395	.295	.33
The year	31,100	68	2,400	1.79	24.42
1912–13.					
October	490	145	257	.192	.22
November	5,690	188	759	.566	.63
December	12,900	178	1,050	.784	.90
January	14,300	1,240	4,270	3.19	3.68
February	7,360	774	2,190	1.63	1.70
March	42,500	870	6,430	4.80	5.53
April	19,300	913	3,900	2.91	3.25
May	15,700	544	2,770	2.07	2.39
June	5,690	356	1,660	1.24	1.38
July	8,230	380	1,150	.858	.99
August	2,860	164	645	.481	.55
September	443	113	189	.141	.16
The year	42,500	113	2,110	1.57	21.38
1913–14.					
October	7,080	164	1,200	.896	1.03
November	14,300	380	2,930	2.19	2.44
December	6,520	696	2,270	1.69	1.95
January	9,700	1,230	3,280	2.45	2.82
February	14,000	1,130	4,420	3.30	3.44
March	13,300	1,480	4,670	3.49	4.02
April	12,600	1,920	4,780	3.57	3.98
May	3,220	308	1,220	.910	1.05
June	659	140	241	.180	.20
July	1,000	164	305	.228	.26
August	1,130	124	287	.214	.25
September	512	95	217	.162	.18
The year	14,300	95	2,130	1.59	21.62
1914–15.					
October	1,080	64	270	.201	.23
November	311	111	167	.125	.14
December	8,900	169	3,660	2.73	3.15
January	26,300	1,080	7,030	5.25	6.05
February	27,800	1,340	6,320	4.72	4.92
March	2,500	790	1,330	.993	1.14
April	1,250	526	802	.599	.67
May	1,250	239	606	.452	.52
June	7,500	179	1,300	.970	1.08
July	374	122	223	.166	.19
August	916	126	456	.340	.39
September	1,000	158	431	.322	.36
The year	27,800	64	1,860	1.39	18.84
1915–16.					
October	18,500	253	1,730	1.29	1.49
November	2,090	179	634	.473	.53
December	18,500	294	2,450	1.83	2.11
January	13,400	1,160	3,650	2.72	3.14
February	8,050	1,250	3,530	2.63	2.84
March	7,500	1,510	3,250	2.43	2.80
April	6,680	1,160	2,600	1.94	2.16
May	5,580	452	1,250	.933	1.08
June	12,200	526	2,370	1.77	1.98
July	3,480	423	1,120	.836	.96
August	7,220	328	1,620	1.21	1.40
September	2,810	164	409	.305	.34
The year	18,500	164	2,050	1.53	20.83

Monthly discharge of Greenbrier River at Alderson, W. Va., for the years ending Sept. 30, 1895–1917—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1916–17.					
October	2,190	225	599	0.447	0.52
November	902	179	306	.228	.25
December	15,200	277	1,600	1.19	1.37
January	13,700	1,080	3,580	2.67	3.08
February	12,800	738	3,480	2.60	2.71
March	27,200	1,990	9,900	7.39	8.52
April	6,950	777	2,090	1.56	1.74
May	12,500	615	2,450	1.83	2.11
June	2,600	204	940	.701	.78
July	3,030	118	462	.345	.40
August	846	74	216	.161	.19
September	649	79	164	.122	.14
The year	27,200	74	2,150	1.60	21.81

GAULEY RIVER AT ALLINGDALE, W. VA.

LOCATION.—At Baltimore & Ohio Railroad bridge one-fourth mile south of station at Allingdale, Nicholas County, and immediately below mouth of Rock Creek.

DRAINAGE AREA.—248 square miles.

RECORDS AVAILABLE.—July 3, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage attached to bridge.

DISCHARGE MEASUREMENTS.—Made from upstream side of bridge, from wooden bridge near depot, or by wading. The bottom of the stream is rough and irregular, but with care accurate measurements can be made. Measuring section at railroad bridge is poor, and measurements are made at wooden bridge near railroad depot whenever possible.

CHANNEL AND CONTROL.—Bed consists of small boulders; control practically permanent.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage recorded, 16.1 feet January 30, 1911 (discharge, about 15,000 second-feet); minimum stage, 3.97 feet September 25, 1908 (discharge, 4.4 second-feet).

ICE.—Ice seldom affects stage-discharge relation; warm water from steam sawmill at railroad station has tendency to prevent formation of ice.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined between 5 and 3,500 second-feet; beyond these limits the curve is an extension. Gage read to hundredths once daily. Daily discharge ascertained by applying daily gage height to rating table. Records excellent except for periods of high water. Such periods are short and have comparatively little effect on the monthly mean.

Discharge measurements of Gauley River at Allingdale, W. Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1912.		*Feet.*	*Sec.-ft.*
July 4	Wm. M. O'Neill	6.20	698	Mar. 21	C. T. Bailey	7.65	2,060
31	W. G. Hoyt	5.62	478				
31	do	5.62	458	1913.			
Sept. 26	Wm. M. O'Neill	4.07	6	Dec. 1	Walters and Peterson	5.97	701
1909.				1914			
Mar. 27	H. J. Jackson	6.75	1,220	Nov. 21	J. G. Mathers	4.74	90.4
Nov. 12	A. H. Horton	5.96	663	21	do	4.72	87.5
1910.				1916.			
Mar. 12	do	5.48	371	Sept. 4	B. E. Jones	4.48	48.4
12	do	5.47	406				
Aug. 15	Bailey and Dort	4.43	77.7				
1911.							
Oct. 24	Bailey and Perwien	5.82	599				
24	do	5.80	586				
27	do	5.40	380				

Daily discharge, in second-feet, of Gauley River at Allingdale, W. Va., for the years ending Sept. 30, 1908–1916.

Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.
1908.				1908.				1908.			
1	-------	350	84	11	630	455	34	21	188	71	4.8
2	-------	234	68	12	123	330	23	22	455	82	6.6
3	161	208	60	13	137	281	20	23	400	102	5.0
4	600	148	46	14	154	212	15	24	1,190	109	4.6
5	1,440	180	49	15	271	208	11	25	660	112	4.4
6	1,110	455	52	16	271	137	9.6	26	755	360	5.0
7	925	570	49	17	248	120	9.0	27	2,030	428	5.8
8	510	365	40	18	226	106	7.8	28	2,490	252	6.6
9	350	570	37	19	208	120	5.8	29	1,110	196	8.2
10	234	690	36	20	252	93	5.0	30	660	114	9.0
								31	455	95	-------

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908-9.												
1	9.0	188	86	820	276	690	722	1,620	165	660	151	10
2	25	128	120	600	325	630	755	1,530	144	385	104	7.8
3	15	97	106	482	315	600	755	1,110	188	290	97	7.8
4	13	70	75	385	320	960	855	995	172	180	64	7.4
5	9.0	64	50	400	395	820	1,030	820	385	168	49	19
6	11	56	53	1,440	755	755	1,620	690	335	154	42	25
7	8.2	42	120	1,110	960	755	1,350	540	340	385	32	53
8	7.8	39	510	722	755	1,720	925	1,440	365	243	28	32
9	9.0	36	230	570	660	1,270	690	820	428	168	42	22
10	15	36	161	482	1,530	3,250	600	788	455	114	32	31
11	16	42	510	428	1,620	2,030	428	1,620	630	102	26	141
12	15	43	540	455	995	1,190	400	1,110	510	80	22	134
13	15	42	690	482	855	925	400	820	482	102	20	70
14	20	40	315	375	1,350	1,270	6,280	630	350	188	13	47
15	24	39	276	3,250	1,530	1,110	2,370	510	350	276	39	35
16	25	36	400	2,370	3,120	855	1,350	400	995	184	455	2,250
17	26	36	200	1,820	2,030	755	960	400	600	134	257	630
18	34	47	630	1,110	1,350	570	722	400	690	120	196	281
19	42	60	1,440	820	995	540	600	252	630	91	126	172
20	39	58	660	755	1,720	482	570	217	455	93	88	123
21	46	106	455	660	1,270	482	1,270	208	340	80	64	77
22	47	134	375	630	1,820	1,190	2,370	660	266	55	47	73
23	52	106	320	630	1,350	855	2,140	375	226	99	44	60
24	56	95	234	755	1,110	855	2,250	286	230	112	32	400
25	84	84	262	660	1,720	890	1,270	217	630	196	26	370
26	144	75	482	570	1,110	1,530	995	230	196	131	21	390
27	151	60	428	455	995	1,350	855	385	184	82	20	148
28	131	75	276	455	995	1,820	1,440	400	168	75	17	109
29	104	73	300	400	-------	1,440	1,190	390	180	79	14	86
30	131	75	300	395	-------	1,110	960	290	230	82	13	80
31	208	-------	960	390	-------	855	-------	200	-------	70	8.6	-------

Daily discharge, in second-feet, of Gauley River at Allingdale, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1909–10.												
1	60	212	188	120	400	3,790	180	400	375	252	75	73
2	50	196	188	660	570	2,030	168	355	890	188	70	36
3	46	200	184	3,510	400	1,530	165	300	660	148	64	158
4	37	212	188	3,250	570	1,190	180	300	660	141	58	230
5	31	172	180	1,440	570	890	428	276	630	1,030	84	330
6	30	158	168	1,030	510	855	325	230	3,380	960	75	788
7	22	154	154	5,830	455	855	330	212	1,620	455	50	335
8	20	154	188	1,720	276	690	300	204	960	1,270	43	252
9	16	510	230	1,530	325	540	266	455	820	690	37	217
10	14	1,530	188	755	455	455	252	570	1,110	482	36	208
11	22	1,110	134	820	482	400	243	482	1,530	300	35	141
12	1,110	722	208	570	400	395	230	2,990	1,620	252	36	120
13	290	540	230	455	252	320	690	1,920	1,820	1,270	37	93
14	890	300	2,030	630	300	310	630	1,110	1,620	1,110	34	1,110
15	239	330	960	722	310	300	455	690	1,440	855	43	540
16	234	300	660	400	400	325	400	660	7,180	755	26	510
17	200	281	600	482	2,140	350	455	428	4,490	600	29	243
18	172	252	820	455	3,120	276	482	455	2,610	630	25	184
19	200	168	252	3,510	1,530	252	510	570	1,920	510	23	134
20	375	134	161	1,530	1,110	252	690	510	1,440	375	25	123
21	276	120	141	1,110	855	257	1,030	482	925	295	9.0	131
22	257	106	134	1,820	1,270	330	1,110	455	755	212	15	84
23	234	188	172	1,110	1,110	320	1,440	510	570	168	95	82
24	1,110	395	151	820	1,030	300	1,620	400	510	176	84	68
25	755	325	134	600	722	300	1,440	455	400	128	50	370
26	600	276	106	482	630	290	1,110	510	330	123	37	2,250
27	510	230	117	690	540	252	820	455	276	208	30	540
28	428	221	123	755	855	243	690	375	252	134	26	722
29	355	239	106	660	------	208	570	360	455	106	24	510
30	305	230	112	510	------	188	510	350	350	88	17	330
31	281	------	106	455	------	184	------	390	------	84	16	------
1910–11.												
1	252	180	510	1,820	2,030	510	570	660	71	355	7.0	290
2	208	196	455	4,210	1,820	482	600	855	75	184	7.0	243
3	176	208	375	4,630	1,440	365	630	690	71	68	7.8	22
4	151	276	365	2,610	1,270	400	1,270	660	68	55	7.4	20
5	106	252	375	1,350	855	428	1,350	540	66	53	6.2	20
6	91	217	455	1,110	755	960	2,990	510	66	50	6.2	18
7	84	188	400	890	690	2,490	1,530	370	63	925	7.8	16
8	95	168	390	820	660	1,440	1,190	276	52	690	221	19
9	350	134	428	540	788	1,110	925	217	43	290	114	1,110
10	315	131	262	400	660	995	690	212	36	221	52	315
11	208	134	252	428	600	1,190	660	200	34	355	40	221
12	151	128	262	455	540	1,270	630	180	144	365	29	212
13	120	120	208	6,130	510	1,270	855	176	212	290	22	221
14	95	95	120	4,350	482	1,440	1,270	144	217	128	19	239
15	88	86	151	3,790	428	1,110	2,140	120	428	91	16	243
16	79	120	188	2,990	375	855	855	47	63	71	43	2,030
17	75	99	151	1,620	266	788	290	30	55	55	47	1,270
18	70	93	212	1,030	243	755	271	22	64	42	40	890
19	64	84	239	788	295	1,110	722	22	71	40	29	820
20	55	68	510	630	428	2,860	1,350	24	64	40	14	428
21	50	50	482	600	360	1,820	1,530	40	46	37	14	266
22	73	84	300	1,920	345	925	1,350	55	36	40	13	200
23	91	80	325	1,620	360	960	1,350	63	34	40	11	184
24	151	84	755	995	482	925	1,350	63	30	39	11	172
25	134	120	722	855	428	855	925	60	47	36	9.6	22
26	86	400	510	1,190	400	788	820	56	200	30	8.6	19
27	84	385	510	2,030	400	690	690	55	290	28	7.8	18
28	134	350	350	2,730	540	630	455	55	428	25	7.8	17
29	300	1,270	660	4,070	------	630	455	50	355	24	11	22
30	230	600	5,380	15,000	------	660	540	47	290	14	266	29
31	188	------	2,490	2,990	------	722	------	46	------	8.2	755	------

Daily discharge, in second-feet, of Gauley River at Allingdale, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1911–12.												
1	35	176	482	1,620	2,030	855	1,190	630	86	276	1,620	230
2	42	161	428	1,110	1,620	660	1,110	600	75	230	820	168
3	52	141	375	1,110	1,440	630	2,030	570	56	230	540	161
4	221	134	380	788	1,440	455	1,440	455	102	375	400	154
5	200	120	400	455	1,190	375	1,110	400	99	960	300	208
6	180	134	400	252	1,110	325	855	375	61	722	230	134
7	455	2,140	395	252	960	276	722	455	61	455	168	148
8	4,070	1,110	380	300	570	276	1,110	722	56	276	134	112
9	2,990	925	340	325	455	455	890	925	39	208	120	161
10	2,490	820	325	300	325	570	690	690	32	350	102	77
11	2,250	660	320	300	208	510	570	540	31	1,110	126	80
12	1,720	428	320	252	188	570	482	6,880	15	722	276	56
13	995	400	325	230	168	722	428	3,250	15	375	400	50
14	890	365	300	168	161	1,190	375	2,610	17	300	188	46
15	1,270	315	310	168	95	1,110	300	1,270	14	570	128	44
16	1,190	355	350	168	158	6,130	276	2,140	10	1,530	102	39
17	1,720	400	755	188	168	2,250	660	3,510	17	722	84	42
18	4,070	570	722	208	188	1,440	820	2,030	230	570	70	80
19	2,030	1,270	690	300	230	1,350	890	1,270	722	3,380	106	84
20	1,530	890	630	995	252	1,720	660	925	755	1,190	510	97
21	788	630	630	690	722	2,250	510	690	375	690	400	80
22	755	570	690	722	2,030	2,490	428	540	208	1,920	300	53
23	722	482	690	788	1,270	1,350	690	428	161	1,110	300	56
24	660	455	755	855	1,110	1,530	660	325	230	690	300	1,270
25	570	428	995	788	660	3,510	540	252	208	4,780	154	890
26	570	428	1,110	722	925	1,820	455	230	455	2,490	123	482
27	570	570	1,270	510	7,970	1,190	400	188	755	1,190	208	428
28	305	510	1,190	276	1,620	855	510	154	1,030	722	168	400
29	248	510	1,110	1,350	1,190	2,860	400	144	570	510	660	300
30	230	510	660	5,530	-------	3,250	570	141	375	630	570	300
31	204	-------	890	2,140	-------	1,820	-------	114	-------	540	325	-------
1912–13.												
1	230	168	106	820	1,110	960	755	855	2,030	188	68	42
2	188	230	131	890	788	820	630	660	1,110	151	70	30
3	168	230	252	1,190	890	570	510	540	660	99	46	24
4	134	188	400	1,110	3,120	600	455	428	570	855	32	20
5	117	168	630	820	1,620	510	428	350	482	350	30	19
6	102	161	960	1,620	820	455	400	325	350	690	25	11
7	95	188	1,030	3,930	722	325	325	300	325	660	22	17
8	84	3,790	855	5,380	690	252	300	252	1,110	400	20	104
9	80	1,440	630	3,930	630	350	276	230	1,110	276	20	97
10	73	820	482	1,820	690	375	252	188	690	325	21	60
11	66	630	455	1,190	600	690	252	151	455	788	20	40
12	66	482	455	1,030	1,720	1,440	690	141	375	300	123	31
13	66	400	350	1,820	960	1,110	690	126	276	375	325	29
14	66	400	188	1,190	855	1,620	890	120	208	300	208	21
15	66	350	230	820	690	2,140	2,610	120	168	252	97	11
16	70	300	350	690	630	1,720	2,610	131	126	400	60	12
17	70	276	350	570	455	1,110	1,530	276	126	325	64	20
18	70	252	208	510	600	820	960	690	95	230	68	165
19	93	230	208	510	510	660	755	455	70	230	80	93
20	325	230	230	482	300	570	690	375	64	660	208	86
21	230	230	208	400	375	482	510	300	64	325	97	375
22	151	230	630	690	570	482	428	428	56	230	114	350
23	188	230	84	1,270	788	300	428	482	82	188	1,030	276
24	755	161	168	755	570	325	350	3,650	120	375	570	252
25	510	161	120	1,530	482	325	400	1,530	88	325	230	154
26	375	134	123	1,270	400	482	276	960	1,820	276	154	13
27	375	120	168	995	455	6,730	400	4,350	400	230	120	60
28	300	95	252	788	855	3,380	890	5,680	350	168	84	61
29	252	168	252	630	-------	1,620	820	2,610	188	123	95	75
30	208	80	350	540	-------	1,190	1,190	1,400	158	97	60	80
31	208	-------	3,120	570	-------	890	-------	7,030	-------	80	50	-------

Daily discharge, in second-feet, of Gauley River at Allingdale, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1913–14.												
1	126	375	630	455	1,920	400	1,720	570	28	44	12	161
2	79	325	2,030	400	1,110	208	5,380		325	23	11	109
3	690	276	1,270	375	820	168	3,250		325	25	7.8	102
4	252	276	960	325	660	350	1,720		300	13	7.0	43
5	350	230	755	350	600	300	1,110		300	18	6.2	58
6	168	208	540	300	600	300	855		325	14	8.6	44
7	137	168	690	300	890	300	660		28	25	14	40
8	97	168	1,350	300	1,030	276	1,440		25	20	276	40
9	188	510	925	510	690	208	2,990		22	24	350	34
10	510	755	722	482	722	428	1,350		22	9.6	117	43
11	428	630	630	820	570	300	960		16	7.8	114	40
12	300	570	510	630	722	428	788		14	7.4	106	47
13	300	722	455		350	482	660	420	6.6	6.2	375	46
14	188	3,380	400		300	510	510		8.2	18	151	47
15	141	5,830	350	460	276	428	455		14	25	109	47
16	131	7,490	325		208	1,110	1,920		13	114	71	34
17	128	5,230	300		325	2,610	2,140		8.2	86	55	25
18	123	3,380	300		252	1,620	660		8.2	63	40	19
19	428	1,270	400	300	890	755	960		5.8	47	28	13
20	400	855	276	375	4,350	890	2,140		4.6	31	22	46
21	1,440	660	300	4,780	1,720	690	2,250		3.6	20	18	24
22	820	510	276	3,120	1,110	855	1,350		8.2	12	79	14
23	855	428	252	1,030	855	510	995		23	9.6	71	11
24	855	375	325	890	660	482	755	86	208	9.6	49	13
25	2,370	276	325	4,210	630	755	630	79	168	18	34	22
26	5,830	276	1,440	1,720	540	1,820	1,620	63	482	20	80	42
27	2,370	252	890	1,110	540	3,790	2,730	40	208	18	510	28
28	2,030	325	690	925	400	4,070	1,440	28	97	64	230	28
29	1,110	960	600	540	-------	2,990	960	55	58	20	482	20
30	788	168	540	1,530	-------	2,250	690	114	55	19	400	18
31	600	-------	455	1,820	-------	2,730	-------	34	-------	12	230	-------
1914–15.												
1	13	114	102	820	2,140	540	276	788	820	161	325	144
2	11	84	400	660	8,610	455	252	570	660	151	428	123
3	10	86	482	570	5,980	455	276	482	3,510	128	400	200
4	9.6	84	510	570	2,250	350	252	428	1,920	117	300	350
5	12	80	2,250	690	1,530	375	208	375	890	106	208	722
6	13	77	1,190	925	1,270	455	252	325	890	400	106	600
7	12	68	660	9,410	995	455	960	276	570	252	109	365
8	40	7.8	540	2,610	755	428	1,270	276	455	188	106	266
9	37	63	400	1,270	600	325	1,110	325	375	400	106	208
10	63	63	325	820	690	350	960	188	252	252	95	161
11	79	60	400	660	820	375	925	154	188	208	88	128
12	75	55	350	1,190	540	375	1,110	137	188	208	91	102
13	68	43	276	995	428	570	788	151	168	600	510	510
14	64	34	252	660	630	350	630	151	4,210	137	208	243
15	252	7.8	144	820	925	350	510	128	1,190	151	168	128
16	208	510	84	925	2,370	375	455	91	820	134	276	102
17	428	428	144	788	1,190	455	428	102	820	1,110	350	80
18	230	276	188	4,070	855	375	325	84	540	2,140	788	77
19	161	208	252	6,130	660	455	325	84	540	540	350	63
20	123	144	2,250	2,250	510	350	300	80	300	510	276	4.6
21	95	86	1,190	1,190	455	350	276	120	208	855	252	243
22	80	106	2,490	890	230	276	123	151	325	630	375	390
23	66	75	995	722	350	252	230	208	208	428	300	221
24	12	50	1,110	1,440	428	230	300	375	134	325	325	161
25	144	84	1,270	995	1,440	208	276	300	102	276	325	114
26	300	95	510	890	925	230	230	570	80	168	300	114
27	208	84	400	722	722	455	208	660	75	208	188	221
28	151	84	325	570	600	400	660	400	61	120	188	180
29	126	80	350	570	-------	375	1,530	350	44	95	482	144
30	128	55	1,820	482	-------	350	1,110	855	53	168	276	8.2
31	134	-------	1,270	400	-------	300	-------	1,820	-------	570	208	-------

Daily discharge, in second-feet, of Gauley River at Allingdale, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1915–16.												
1	7,030	106	252	855	1,820	570	820	600	375	134	61	58
2	2,730	134	325	3,510	2,030	570	722	482	305	134	1,440	355
3	1,720	47	300	1,720	820	570	570	380	510	134	350	35
4	960	80	300	1,030	690	540	510	455	1,110	82	180	40
5	630	66	230	788	820	482	428	660	660	230	925	31
6	600	50	252	722	540	570	340	570	1,190	134	350	20
7	230	71	300	690	1,270	2,610	325	455	788	95	355	14
8	325	63	230	755	890	3,790	325	400	960	102	428	93
9	276	66	161	660	995	1,440	310	4,350	995	64	995	70
10	230	71	144	600	820	1,030	350	630	855	75	1,920	55
11	208	68	102	2,730	690	788	428	510	600	276	855	32
12	306	80	200	5,230	755	630	428	455	375	134	1,530	22
13	148	91	161	2,370	1,110	630	1,440	345	350	75	855	18
14	95	161	144	2,140	960	820	1,190	305	315	68	1,440	13
15	43	788	128	1,110	820	2,990	925	300	400	63	820	1,920
16	99	1,440	161	960	722	1,530	690	208	855	44	600	890
17	84	820	1,030	1,030	660	1,190	1,110	257	1,720	99	1,620	310
18	1,030	540	5,980	960	482	855	1,270	300	690	395	540	428
19	995	600	3,250	455	482	820	428	226	400	208	428	58
20	630	455	1,620	428	375	600	400	200	325	168	400	43
21	482	925	925	660	482	660	345	165	325	134	330	88
22	355	755	690	995	540	788	428	151	375	1,720	200	75
23	320	630	600	2,030	540	3,250	482	188	257	540	570	66
24	257	510	455	1,190	660	1,720	428	925	188	660	276	44
25	230	455	570	820	855	1,110	540	428	820	325	196	53
26	196	350	925	630	1,110	1,190	1,350	350	960	180	144	46
27	180	375	690	600	890	1,190	1,190	660	455	151	106	39
28	168	570	755	540	660	1,270	995	355	375	120	34	32
29	148	482	2,490	630	660	1,620	890	300	252	221	97	350
30	134	375	3,510	1,620	-------	1,190	722	350	168	141	73	960
31	106	-------	1,620	1,110	-------	1,030	-------	755	-------	91	61	-------

NOTE.—Daily discharge estimated, because of ice or missing records, from observer's notes, climatic data, or by comparison with records for other stations as follows; Jan. 13–18 and May 2–23, 1914. Braced figures show mean discharge for period included.

Monthly discharge of Gauley River at Allingdale, W. Va., for the years ending Sept. 30, 1908–1916.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
July 3–31	2,490	123	629	2.54	2.74
August	690	71	250	1.01	1.16
September	84	4.4	24.0	.097	.11
1908–9.					
October	208	7.8	49.4	.199	.23
November	188	36	69.4	.280	.31
December	1,440	50	373	1.50	1.73
January	3,250	375	802	3.23	3.72
February	3,120	276	1,150	4.64	4.83
March	3,250	482	1,080	4.35	5.02
April	6,280	400	1,270	5.12	5.71
May	1,620	200	657	2.65	3.06
June	995	144	377	1.52	1.70
July	660	55	167	.673	.78
August	455	8.6	70.6	.285	.33
September	2,250	7.4	196	.790	.88
The year	6,280	7.4	517	2.08	28.39

Monthly discharge of Gauley River at Allingdale, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1909–10.					
October	1,110	14	296	1.19	1.37
November	1,530	106	332	1.34	1.50
December	2,080	106	300	1.21	1.40
January	5,830	120	1,240	5.00	5.76
February	3,120	252	771	3.11	3.24
March	3,790	184	609	2.46	2.84
April	1,620	165	591	2.38	2.66
May	2,990	204	576	2.32	2.68
June	7,180	252	1,390	5.60	6.25
July	1,270	84	451	1.82	2.10
August	95	9.0	42.2	.170	.20
September	2,550	36	364	1.47	1.64
The year	7,180	9.0	577	2.33	31.64
1910–11.					
October	350	50	140	.565	.65
November	1,270	50	213	.859	.96
December	5,380	120	606	2.44	2.81
January	15,000	400	2,410	9.72	11.21
February	2,030	243	659	2.66	2.77
March	2,860	365	1,010	4.07	4.69
April	2,990	271	1,010	4.07	4.54
May	855	22	211	.851	.98
June	428	30	124	.500	.56
July	925	8.2	151	.609	.70
August	755	6.2	59.7	.241	.28
September	2,030	16	320	1.29	1.44
The year	15,000	6.2	577	2.33	31.59
1911–12.					
October	4,070	35	1,100	4.44	5.12
November	2,140	120	554	2.23	2.49
December	1,270	300	601	2.42	2.79
January	5,530	168	770	3.10	3.57
February	7,970	95	1,050	4.23	4.56
March	6,130	276	1,440	5.81	6.70
April	2,030	276	726	2.93	3.27
May	6,880	114	1,080	4.35	5.02
June	1,030	10	229	.923	1.03
July	4,780	208	962	3.88	4.47
August	1,620	70	320	1.29	1.49
September	1,270	39	214	.863	.96
The year	7,970	10	756	3.05	41.47
1912–13.					
October	755	66	186	.750	.86
November	3,790	80	418	1.69	1.89
December	3,120	84	451	1.82	2.10
January	5,380	400	1,280	5.16	5.95
February	3,120	300	818	3.30	3.44
March	6,730	252	1,070	4.31	4.97
April	2,610	252	723	2.92	3.26
May	7,030	120	1,130	4.56	5.26
June	2,030	56	458	1.85	2.06
July	855	80	331	1.33	1.53
August	1,030	20	136	.548	.63
September	375	11	87.6	.353	.39
The year	7,030	11	592	2.39	32.34
1913–14.					
October	5,830	79	782	3.15	3.63
November	7,490	168	1,230	4.96	5.53
December	2,030	252	642	2.59	2.99
January	4,780	300	979	3.95	4.55
February	4,350	208	848	3.42	3.56
March	4,070	168	1,060	4.27	4.92
April	5,380	455	1,500	6.05	6.75
May		28	333	1.34	1.54
June	482	3.6	104	.419	.47
July	114	6.2	27.2	.110	.13
August	510	6.2	131	.528	.61
September	161	11	41.9	.169	.19
The year	7,490	3.6	638	2.57	34.87

Monthly discharge of Gauley River at Allingdale, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1914–15.					
October	428	9.6	108	0.435	0.50
November	510	7.8	110	.444	.50
December	2,490	84	740	2.98	3.44
January	9,410	400	1,470	5.93	6.84
February	8,610	230	1,390	5.60	5.83
March	570	208	376	1.52	1.75
April	1,530	123	552	2.23	2.49
May	1,820	80	355	1.43	1.65
June	4,210	44	687	2.77	3.09
July	2,140	95	379	1.53	1.76
August	788	88	274	1.10	1.27
September	722	4.6	212	.855	.95
The year	9,410	4.6	550	2.22	30.07
1915–16.					
November	7,030	43	675	2.72	3.14
December	1,440	47	374	1.51	1.68
January	5,980	102	919	3.71	4.28
February	5,230	428	1,280	5.16	5.95
March	2,030	375	833	3.36	3.62
April	3,790	482	1,230	4.96	5.72
May	1,440	310	679	2.74	3.06
June	4,350	151	539	2.17	2.50
July	1,720	168	598	2.41	2.69
August	1,720	44	226	.911	1.05
September	1,920	34	586	2.36	2.72
The year	1,920	13	209	.843	.94
	7,030	13	680	2.74	37.35

GAULEY RIVER NEAR SUMMERSVILLE, W. VA.

LOCATION.—At highway bridge known as Brock's Bridge, 2½ miles southeast of Summersville, Nicholas County, and one-eighth mile below mouth of Muddlety Creek.

DRAINAGE AREA.—686 square miles.

RECORDS AVAILABLE.—July 6, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage attached to downstream side of bridge.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of gravel and scattered boulders with a riffle about 500 feet below gage. Control may shift at extremely high stages. One shift occurred during period of record.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage recorded, 18.3 feet evening reading January 30, 1912 (discharge, about 25,000 second-feet); minimum stage, 2.12 feet evening reading June 10, 1912 (discharge, about 4 second-feet).

ICE.—Stage-discharge relation affected by ice for short periods during some winters.

ACCURACY.—Stage-discharge relation changed once during record. Rating curve used from July 6, 1908, to January 30, 1911, well defined between 90 and 12,000 second-feet, that used from January 31, 1911, to September 30, 1916, well defined between 200 and 12,000 second-feet; beyond these limits both curves are extensions. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating tables. Records excellent.

Discharge measurements of Gauley River near Summersville, W. Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1911.		*Feet.*	*Sec.-ft.*
July 6	Wm. M. O'Neill	6.99	1,640	July 28	C. T. Bailey	4.10	114
30	W. G. Hoyt	7.30	2,059	1912.			
1909.				Mar. 29	do	11.96	9,460
Apr. 6	H. J. Jackson	9.04	4,120	1913.			
7	do	8.55	3,380	Nov. 19	Peterson and Walters	8.83	3,500
8	do	7.63	2,260	1914.			
9	do	7.06	1,730	Nov. 1	Mathers and Morgan	5.06	376
10	do	6.71	1,440	1916.			
11	do	6.27	1,120	Aug. 22	B. E. Jones	8.38	2,710
12	do	6.11	990	23	do	7.55	1,920
1910.				23	do	7.08	1,560
Mar. 25	C. T. Bailey	5.68	702				
Oct. 14	do	4.88	337				

Daily discharge, in second-feet, of Gauley River near Summersville, W. Va., for the years ending Sept. 30, 1908–1916.

Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.
1908.								21	540	157	31
1	------	885	157	11	595	1,150	72	22	1,290	139	28
2	------	622	124	12	415	795	66	23	1,360	157	26
3	------	490	211	13	345	595	60	24	2,150	226	25
4	------	650	97	14	300	415	52	25	1,520	187	25
5	------	280	89	15	795	322	51	26	2,580	345	27
6	1,680	515	89	16	678	260	47	27	5,010	825	29
7	3,200	1,220	84	17	390	260	43	28	6,240	490	31
8	1,680	705	81	18	345	226	38	29	3,610	300	34
9	918	1,220	76	19	825	187	35	30	1,950	243	32
10	735	1,950	74	20	795	175	33	31	1,150	211	------

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	48	368	108	2,250	918	1,860	1,860	5,010	540	2,470	280	59
2	51	300	113	1,440	950	1,680	2,150	5,180	440	3,470	300	54
3	52	243	106	1,150	950	1,680	1,860	3,610	440	1,680	243	52
4	49	183	103	1,080	855	2,360	2,150	2,580	490	1,080	161	55
5	44	137	103	1,770	950	2,150	3,070	2,050	705	735	130	175
6	40	191	113	4,360	1,770	2,700	3,750	1,680	855	1,020	106	243
7	34	130	183	3,330	3,070	2,700	3,200	1,360	735	1,860	96	159
8	32	90	622	2,050	2,050	5,180	2,250	1,860	540	1,360	79	124
9	31	79	735	1,520	1,680	5,700	1,680	1,950	705	918	69	99
10	31	72	650	1,290	5,010	7,000	1,440	2,940	1,360	678	99	155
11	38	66	825	1,150	4,360	4,200	1,150	4,520	2,150	490	99	440
12	84	60	2,050	1,220	2,940	2,820	1,080	3,070	1,680	368	81	440
13	76	84	2,050	1,220	2,360	3,200	950	2,150	1,150	440	71	226
14	70	76	1,220	1,080	3,200	3,750	12,400	1,680	1,020	678	69	161
15	62	70	795	7,200	4,360	3,200	5,880	1,290	1,150	622	87	117
16	53	70	622	7,000	7,200	2,360	3,610	1,080	2,250	540	540	918
17	51	59	678	5,350	6,810	1,950	2,360	885	1,440	465	678	1,150
18	50	73	1,220	3,470	4,050	1,860	1,770	705	2,250	300	540	650
19	48	86	3,610	2,250	2,820	1,290	1,440	595	1,770	243	390	390
20	43	127	2,250	1,860	3,900	1,150	1,520	540	1,220	196	260	260
21	40	159	1,290	2,250	3,750	1,360	2,700	540	918	170	196	186
22	37	144	1,080	1,600	4,360	3,470	5,880	1,150	825	141	134	144
23	34	128	885	1,600	3,610	2,470	7,400	825	795	191	101	119
24	31	120	765	1,860	3,200	1,950	6,060	622	1,150	415	89	260
25	31	157	885	1,600	4,840	3,070	3,750	515	1,290	622	67	825
26	40	124	1,290	1,440	3,330	5,010	2,700	795	885	390	62	490
27	84	120	1,020	1,220	2,940	3,750	2,150	1,600	650	243	66	300
28	97	116	825	1,080	2,360	5,350	2,940	1,290	950	180	71	226
29	89	107	825	1,020	------	5,010	2,820	1,080	825	226	64	163
30	175	101	1,080	1,290	------	3,330	2,700	855	1,860	226	62	146
31	515	------	2,820	918	------	2,360	------	678	------	260	60	------

Daily discharge, in second-feet, of Gauley River near Summersville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1909–10.												
1	130	490	515	595	950	7,400		918	678	322	188	39
2	117	415	440	705	885	5,180		765	1,150	322	163	141
3	100	515	440	8,210	1,150	3,900	350	650	1,150	540	89	825
4	92	465	440	7,800	1,680	2,940		540	918	650	152	1,440
5	79	368	390	4,050	1,440	2,360		595	1,150	2,360	36	1,080
6	78	345	345	2,940	1,360	2,150	440	440	6,810	1,360	152	1,680
7	76	300	345	10,600	705	2,050	490	300	4,050	1,770	48	918
8	73	322	465	6,240	825	1,680	622	440	2,150	3,200	55	490
9	60	950	515	3,070	1,020	1,290	540	1,360	1,290	1,770	33	368
10	58	3,330	440	2,150	1,360	1,150	465	1,680	1,860	1,150	55	622
11	1,360	2,820	390	1,220	1,600	1,020	368	1,020	2,580	918	70	345
12	2,700	1,860	490	1,220	1,680	950	540	4,360	2,700	415	36	465
13	950	1,360	540	1,150	1,600	950	1,080	5,520	3,900	2,820	33	280
14	515	1,080	5,010	1,950	1,520	885	1,080	3,470	3,750	3,070	47	2,250
15	390	885	2,360	1,770	1,290	855	1,290	1,520	3,610	2,150	81	795
16	465	735	1,520	1,520	1,600	825	795	1,290	7,000	1,220	75	705
17	465	650	1,150	1,290	5,180	795	950	885	7,600	1,020	60	540
18	415	622	1,020	2,470	8,420	705	1,080	918	4,840	1,020	30	390
19	490	540	622	8,000	5,010	595	1,360	1,360	3,610	795	24	260
20	705	510	1,150	4,360	3,330	568	1,520	950	3,330	678	55	280
21	595	480	855	4,200	2,360	568	2,470	1,150	2,700	465	60	260
22	515	500	735	5,350	3,070	825	3,470	1,220	2,580	226	22	196
23	490	650	765	3,330	4,200	650	4,840	1,020	1,680	188	36	139
24	1,770	795	705	2,360	2,940	650	4,840	1,080	950	226	101	150
25	1,770	735	765	1,770	2,050	705	3,750	1,360	950	152	108	1,080
26	1,360	622	735	1,440	1,440	678	2,820	1,080	650	440	161	1,680
27	1,150	540	678	1,860	1,440	622	2,050	1,150	765	795	55	1,220
28	1,020	490	678	2,250	2,470	568	1,860	950	1,360	260	33	1,080
29	795	490	705	1,770	-------	300	1,520	705	1,290	465	20	1,020
30	650	515	568	1,440	-------	260	1,290	622	918	243	65	735
31	568	-------	540	1,290	-------	260	-------	705	-------	465	30	-------
1910–11.												
1	465	465	1,220	5,010	4,110	880	1,480	665	520	117	52	690
2	568	540	765	12,000	4,110	542	1,330	880	390	56	52	452
3	440	678	918	13,100	3,110	475	1,400	690	205	92	52	205
4	159	678	540	6,620	2,620	690	3,660	742	117	146	28	78
5	148	622	855	3,900	1,810	410	6,870	565	108	100	40	232
6	226	515	1,220	2,050	1,640	3,110	5,280	565	452	40	78	350
7	130	465	1,150	1,770	1,190	6,040	3,240	296	332	78	108	350
8	280	415	950	1,440	940	4,270	2,860	262	232	475	232	146
9	650	440	705	1,080	1,560	2,400	4,590	278	157	410	180	314
10	795	390	825	735	1,330	2,620	3,960	246	108	78	108	715
11	622	300	490	855	1,260	2,740	2,510	278	44	108	61	690
12	390	280	368	795	1,120	2,190	1,810	262	136	370	78	1,640
13	415	139	515	11,000	940	2,860	1,810	205	498	370	48	940
14	322	211	465	9,930	825	2,980	1,720	262	332	205	31	798
15	260	260	568	8,000	742	2,400	5,460	232	168	168	85	475
16	159	280	650	7,000	475	1,640	3,380	218	205	78	56	4,590
17	183	243	568	4,200	370	1,480	1,900	168	66	78	218	2,090
18	183	196	825	2,470	332	1,480	1,640	146	85	72	117	1,260
19	148	196	1,080	1,860	498	1,400	1,260	157	278	85	66	825
20	130	139	1,680	1,520	690	5,280	3,380	136	314	52	56	640
21	139	196	1,680	1,440	665	3,380	4,270	108	146	31	100	498
22	170	170	1,520	5,350	390	2,400	3,660	61	157	117	61	475
23	595	183	1,360	4,360	565	2,510	3,960	117	100	37	61	520
24	465	211	1,860	2,700	498	1,990	3,380	180	117	52	44	332
25	322	211	2,580	1,860	565	1,640	2,290	278	26	85	26	262
26	170	678	1,770	2,580	410	1,330	1,810	157	126	100	44	218
27	196	950	1,360	7,200	1,720	1,640	1,480	157	205	108	100	232
28	465	1,440	1,150	6,060	665	1,640	1,060	108	590	40	126	192
29	825	3,330	2,470	4,680	-------	1,060	1,060	100	542	48	100	262
30	515	2,050	14,300	20,700	-------	1,480	825	78	314	126	92	410
31	415	-------	6,620	6,870	-------	1,400	-------	157	-------	56	370	-------

Daily discharge, in second-feet, of Gauley River near Summersville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1911–12.												
1	410	332	1,480	2,860	2,090	1,810	2,860	1,810	95	113	1,810	1,000
2	1,190	314	1,120	2,290	1,640	1,060	3,520	1,400	92	54	640	430
3	3,520	296	798	1,810	825	1,990	5,460	1,190	18	218	565	278
4	1,560	232	742	1,640	1,120	940	3,810	880	36	92	615	940
5	1,120	168	565	1,190		1,640	2,740	1,120	58	1,480	332	770
6	940	390	475			2,400	1,990	880	23	1,000	542	218
7	542	5,280	475			520	1,640	1,900	117	350	168	1,060
8	4,930	2,860	390			615	2,510	2,290	48	332	798	218
9	2,510	1,990	542			1,810	1,810	2,400	76	102	314	153
10	1,640	1,400	498			1,260	1,560	1,640	6.1	940	132	430
11	1,990	1,060	475		650	1,990	1,190	1,260	60	262	498	218
12	2,400	770	690	800		4,760	1,000	13,300	17	1,330	665	28
13	1,990	1,560	615			3,110	940	9,090	15	430	1,000	48
14	1,330	1,480	590			3,660	1,190	4,430	15	390	690	113
15	1,560	1,330	410			9,090	565	3,380	9.2	640	665	26
16	4,110	1,060	940			12,300	1,120	8,400	13	1,810	410	82
17	2,620	880	1,330		590	5,650	1,990	7,740	36	940	590	192
18	11,900	1,260	1,480		542	3,380	1,640	4,760	146	2,190	205	48
19	4,930	2,860	1,120	2,860	590	3,110	1,810	2,980	1,190	4,270	332	278
20	3,380	1,640	940	4,110	825	4,930	1,190	2,190	1,330	1,990	1,260	314
21	1,990	1,480	798	2,290	1,640	4,930	940	1,560	615	1,260	825	126
22	1,190	1,060	690	1,720	5,460	5,280	1,000	1,060	520	1,990	825	108
23	1,640	825	1,640	1,330	2,980	3,110	1,260	880	350	1,120	825	278
24	1,330	715	2,400	1,060	2,190	6,450	1,120	615	112	825	430	2,290
25	1,000	880	1,990	880	1,400	7,960	1,120	590	1,060	11,400	278	1,560
26	825	1,190	1,720	665	3,960	3,960	940	350	520	6,450	542	770
27	715	1,060	2,190	1,060	11,900	2,620	825	314	825	2,290	690	880
28	615	1,190	1,990	940	6,240	1,330	1,260	296	1,720	475	278	825
29	565	1,640	1,810	1,190	2,860	5,650	1,120	262	2,740	640	2,290	798
30	475	1,720	1,640	5,280	-------	7,520	1,480	246	232	715	2,980	475
31	475	-------	1,990	4,270	-------	4,760	-------	164	-------	940	1,190	-------
1912–13.												
1	520	332	218	3,660	1,900	2,290	1,720	2,090	3,960	590	110	157
2	665	173	232	2,090	1,720	1,640	1,400	1,560	2,510	498	232	117
3	665	370	770	1,810	2,090	1,330	1,190	1,330	1,640	314	296	85
4	615	430	940	2,620	6,240	1,000	1,060	1,120	1,000	1,260	218	105
5	182	205	1,640	1,810	4,270	1,060	742	770	1,060	825	44	70
6	159	74	2,190	4,110	2,190	940	640	715	798	4,110	105	42
7	153	1,720	2,980	10,500	1,480	880	590	665	770	2,190	79	76
8	192	8,180	1,810	14,000	825	940	880	565	2,620	940	82	565
9	105	3,960	1,330	12,600	880	715	690	498	2,860	715	70	430
10	70	2,190	1,060	4,760	665	690	590	452	1,900	1,480	46	314
11	168	1,720	940	3,240	1,060	2,860	1,060	370	1,330	1,900	110	170
12	146	1,000	640	2,740	2,090	3,810	1,120	350	1,000	1,060	82	157
13	54	565	430	4,430	2,510	2,190	1,480	314	742	880	590	205
14	95	690	278	2,860	1,900	5,840	1,720	314	615	715	940	98
15	105	565	161	1,900	1,190	5,280	9,550	278	475	690	565	92
16	67	520	95	1,560	1,000	4,430	5,100	370	390	1,260	187	88
17	42	332	246	1,330	825	3,380	3,810	880	430	825	170	108
18	91	430	430	1,120	825	1,810	2,620	1,900	314	825	105	205
19	96	370	370	1,000	1,060	1,640	1,720	1,330	246	770	205	350
20	690	296	278	1,000	770	1,190	1,480	1,000	205	1,480	1,060	161
21	262	370	350	1,260	1,000	1,060	1,330	940	192	1,810	615	1,120
22	192	370	370	1,640	1,120	940	1,060	1,330	232	1,000	205	2,620
23	350	185	350	1,560	1,560	880	940	1,330	390	825	296	1,810
24	1,640	332	430	2,190	940	1,060	798	7,300	350	690	1,810	1,640
25	1,260	296	390	4,270	1,000	742	742	4,270	390	1,720	940	1,120
26	880	205	475	3,380	880	825	615	2,510	1,190	1,190	690	410
27	742	159	565	2,740	940	5,650	1,120	5,840	1,260	690	565	296
28	452	192	665	2,190	1,190	8,400	2,190	10,900	770	615	390	140
29	475	136	615	1,480	-------	4,270	2,090	5,100	520	498	218	168
30	262	185	1,400	1,330	-------	2,740	2,740	3,520	452	410	142	192
31	350	-------	7,300	1,190	-------	2,190	-------	7,960	-------	296	164	-------

Daily discharge, in second-feet, of Gauley River near Summersville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1913–14.												
1	332	940	1,990	1,190	5,100	1,000	4,270	1,480	124	79	59	430
2	370	825	5,840	1,060	2,980	615	8,630	1,190	103	76	52	278
3	390	742	3,960	1,000	2,090	742	7,080	1,060	103	67	50	262
4	1,900	640	2,620	940	1,720	750	4,110	940	95	62	44	232
5	940	565	1,990	940	1,480		2,740	1,060	95	79	37	180
6	565	542	1,480	880	1,560	880	1,900	4,930	110	89	50	146
7	520	475	1,640	825	2,290	940	1,480	3,660	102	71	52	121
8	370	475	3,380	825	2,620	825	4,430	2,400	86	60	85	132
9	452	2,290	2,510	1,480	1,810	742	7,080	1,900	76	62	278	146
10	1,480	2,090	1,990	2,740	1,480	640	3,960	1,480	76	71	278	121
11	880	1,720	1,640	2,620	1,400	1,000	2,510	1,190	62	79	192	121
12	742	1,640	1,330	1,640	940	940	1,900	1,060	62	76	232	136
13	690	2,090	1,120			825	1,480	880	43	64	665	173
14	565	8,630	1,060			880	1,260	825	73	73	452	150
15	475	14,500	825			1,640	1,260	742	62	296	232	124
16	410	17,700	798	950	600	3,660	7,300	615	53	370	296	98
17	390	12,800	770			6,870	6,240	542	53	314	121	91
18	332	6,040	770			6,450	3,660	498	51	232	103	73
19	542	3,240	825		5,100	3,810	2,620	430	49	170	78	65
20	1,330	2,290	742	1,260	11,600	2,620	6,040	370	51	134	72	65
21	3,520	1,720	715	10,700	4,930	1,640	6,450	332	46	94	72	60
22	2,510	1,260	715	5,840	2,860	1,640	3,660	278	45	67	278	55
23	1,990	1,120	665	3,240	2,400	1,400	2,510	218	46	62	205	51
24	1,720	940	665	2,510	1,900	1,400	1,810	232	49	62	157	60
25	12,100	825	825	8,400	1,260	2,190	1,480	218	314	53	246	60
26	13,100	742	2,510	5,100	1,330	5,460	7,300	218	410	56	798	60
27	5,840	665	2,510	3,110	1,060	9,090	6,870	185	350	78	1,400	71
28	3,240	1,060	1,810	2,510	1,060	10,200	3,660	161	205	153	770	62
29	2,090	2,980	1,560	2,860	-------	7,300	2,400	130	138	108	742	60
30	1,560	2,090	1,480	3,110	-------	5,840	1,900	103	98	92	825	51
31	1,120	-------	1,190	5,650	-------	6,870	-------	136	-------	72	640	-------
1914–15.												
1	51	350	410	2,190	8,400	1,330	798	2,190	2,620	296	742	475
2	51	314	940	1,640	17,200	1,120	742	1,480	1,640	565	770	370
3	47	246	1,190	940	13,100	1,120	742	1,330	2,510	498	1,120	332
4	47	246	1,060	940	6,450	880	770	1,400	3,520	390	1,060	690
5	51	218	7,740	770	4,590	1,060	640	1,120	2,400	742	690	2,290
6	55	192	3,810	940	3,960	1,480	690	940	1,560	1,330	498	1,560
7	81	168	1,990	18,900	3,110	1,480	1,810	880	1,260	690	410	1,190
8	77	168	1,560	7,080	2,190	1,330	2,400	825	1,060	615	332	880
9	71	180	1,330	3,810	1,720	1,060	2,190	715	880	1,060	314	640
10	71	168	1,330	2,190	1,260	1,060	2,400	565	665	825	296	498
11	98	168	1,190	1,640	1,120	1,120	2,290	520	520	690	296	410
12	102	146	1,000	3,960	1,190	1,120	2,090	452	520	770	332	332
13	91	146	880	3,240	1,120	940	1,720	520	498	590	940	296
14	88	126	825	1,990	1,810	940	1,400	475	1,810	475	665	232
15	166	130	715	2,860	4,930	940	1,120	370	3,380	370	565	498
16	825	314	565	3,380	5,460	1,060	1,060	370	1,990	410	640	296
17	1,120	880	770	4,590	3,240	1,190	940	314	1,330	1,480	520	218
18	640	615	825	11,400	2,290	1,060	940	278	1,060	4,430	2,400	180
19	498	475	940	12,300	1,720	1,060	798	262	1,000	1,480	1,480	430
20	390	390	5,650	6,040	1,330	940	690	278	640	2,190	880	615
21	278	278	3,960	3,380	1,120	880	715	350	520	3,380	715	742
22	218	278	6,450	2,090	1,000	798	615	370	498	2,620	880	1,640
23	218	246	3,240	1,720	940	770	542	475	498	1,480	1,120	880
24	218	187	1,900	2,620	1,900	665	615	770	390	1,060	880	590
25	430	173	1,480	2,510	3,810	590	640	690	287	742	742	475
26	690	218	940	2,190	2,400	798	590	825	218	542	590	370
27	475	218	825	1,810	1,720	1,000	498	1,640	218	475	475	410
28	430	218	1,000	1,330	1,480	1,060	742	1,260	157	350	410	690
29	350	218	1,190	1,060	-------	1,120	4,270	1,000	142	314	798	590
30	314	187	5,100	880	-------	940	3,110	3,110	140	278	770	542
31	350	-------	3,960	1,260	-------	880	-------	4,270	-------	742	565	-------

Daily discharge, in second-feet, of Gauley River near Summersville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1915–16.												
1	13,800	296	940	3,110	5,840	1,260	2,400	1,480	1,190	475	296	168
2	10,500	278	940	6,660	5,460	1,560	1,900	1,190	940	565	1,330	164
3	4,760	262	825	4,930	3,660	2,190	1,640	1,120	1,190	542	880	155
4	2,740	218	715	3,110	2,190	1,640	1,480	1,480	2,190	1,000	940	142
5	1,810	205	640	1,990	1,810	1,480	1,190	1,810	1,480	565	1,400	122
6	1,480	205	590	1,990	1,640	1,810	1,060	1,480	1,720	430	1,060	100
7	1,000	205	498	2,090	3,380	10,200	940	1,330	1,560	314	1,190	108
8	880	205	542	1,640	2,860	9,090	742	1,330	1,720	246	1,900	108
9	742	205	542	1,260	2,400	4,590	1,000	1,720	1,720	232	7,520	168
10	665	180	498	1,900	2,190	2,980	1,000	1,640	1,560	410	5,460	192
11	542	180	452	7,300	1,900	2,190	1,990	1,330	1,480	565	2,400	136
12	498	192	498	10,900	1,810	1,560	3,660	1,060	1,060	498	3,380	105
13	430	246	520	7,300	2,860	1,480	4,760	880	880	296	2,400	85
14	370	332	498	5,650	3,380	2,620	3,380	798	715	278	3,110	136
15	350	3,110	498	3,240	2,190	6,660	2,620	590	742	390	1,810	7,740
16	296	4,270	715	2,090	1,810	4,110	1,900	542	1,810	232	1,640	2,860
17	262	2,400	3,660	1,480	1,560	2,860	1,640	590	2,860	1,810	3,380	1,330
18	262	1,640	16,400	1,060	1,330	2,290	1,640	665	1,640	1,400	1,810	880
19	690	1,810	8,630	940	1,190	2,090	1,400	565	1,260	1,000	1,330	565
20	1,400	3,240	4,270	1,060	1,060	1,640	1,190	498	1,060	715	1,190	430
21	1,060	2,290	2,620	1,640	1,560	1,990	1,120	430	940	715	880	350
22	880	1,990	1,810	2,980	1,640	2,740	1,190	370	880	4,270	2,740	314
23	715	1,560	1,400	5,280	1,810	7,520	1,190	452	715	1,640	1,810	262
24	640	1,330	1,190	3,240	2,620	4,270	1,060	1,480	615	2,190	1,060	232
25	565	1,060	1,000	2,290	6,040	2,980	1,120	1,000	2,860	1,120	690	218
26	475	880	1,990	1,810	3,810	2,620	3,110	825	3,380	742	475	187
27	452	940	1,720	1,560	2,740	3,110	2,980	1,120	1,640	640	430	157
28	410	1,480	2,090	1,480	2,190	5,280	2,620	798	1,000	565	350	122
29	370	1,060	10,500	1,400	1,640	6,040	2,290	665	798	742	296	2,860
30	350	1,120	9,320	4,430	-------	3,960	1,810	940	520	475	246	3,380
31	296	-------	4,760	3,380	-------	3,110	-------	1,560	-------	370	205	-------

NOTE.—Discharge estimated, because of ice or missing gage readings, from observer's notes, climatic records, or by comparison with the flow at other stations as follows: Mar. 31, Apr. 1–5, 1910; Jan. 6–18, Feb. 5–16, 1912; Jan. 13–19, Feb. 13–18, Mar. 4, 5, 1914. Braced figures show mean discharge for the period.

Monthly discharge of Gauley River near Summersville, W. Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 686 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
July 6–31	6,240	300	1,580	2.30	2.22
August	1,950	139	523	.762	.88
September	211	25	62.2	.091	.10
1908–9.					
October	515	31	69.6	.101	.12
November	368	59	128	.187	.21
December	3,610	103	997	1.45	1.67
January	7,200	918	2,190	3.19	3.68
February	7,200	855	3,160	4.61	4.80
March	7,000	1,150	3,090	4.50	5.19
April	12,400	950	3,160	4.61	5.14
May	5,180	515	1,760	2.57	2.96
June	2,250	440	1,100	1.60	1.78
July	3,470	141	732	1.07	1.23
August	678	60	173	.252	.29
September	1,150	52	293	.427	.48
The year	12,400	31	1,390	2.03	27.55

Monthly discharge of Gauley River near Summersville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1909–10.					
October	2,700	58	645	0.940	1.08
November	3,330	300	813	1.19	1.33
December	5,010	345	849	1.24	1.43
January	10,600	595	3,170	4.62	5.33
February	8,420	705	2,230	3.25	3.38
March	7,400	260	1,430	2.08	2.40
April	4,840	----------	1,440	2.10	2.34
May	5,520	300	1,290	1.88	2.17
June	7,600	650	2,600	3.79	4.23
July	3,200	152	1,020	1.49	1.72
August	188	20	70.1	.102	.12
September	2,250	39	716	1.04	1.16
The year	10,600	20	1,350	1.97	26.69
1910–11.					
October	825	130	353	.515	.59
November	3,330	139	562	.819	.91
December	14,300	368	1,710	2.49	2.87
January	20,700	735	5,130	7.49	8.62
February	4,110	332	1,260	1.84	1.92
March	6,040	410	2,140	3.12	3.60
April	6,870	825	2,780	4.05	4.52
May	880	61	282	.411	.47
June	590	26	236	.344	.38
July	475	31	128	.187	.22
August	370	26	92.6	.135	.16
September	4,590	78	696	1.01	1.13
The year	20,700	26	1,280	1.87	25.39
1911–12.					
October	11,900	410	2,110	3.08	3.55
November	5,280	168	1,300	1.90	2.12
December	2,400	390	1,110	1.62	1.87
January	5,280	665	1,540	2.24	2.58
February	11,900	----------	1,880	2.74	2.96
March	12,300	520	3,860	5.63	6.49
April	5,460	565	1,720	2.51	2.80
May	13,300	164	2,560	3.73	4.30
June	2,740	6.1	403	.587	.65
July	11,400	54	1,520	2.22	2.56
August	2,980	132	754	1.10	1.27
September	2,290	26	498	.726	.81
The year	13,300	6.1	1,610	2.35	31.96
1912–13.					
October	1,640	42	379	.552	.64
November	8,180	74	885	1.29	1.44
December	7,300	95	966	1.41	1.63
January	14,000	1,000	3,300	4.81	5.54
February	6,240	665	1,580	2.30	2.40
March	8,400	690	2,340	3.41	3.93
April	9,550	590	1,760	2.57	2.87
May	10,900	278	2,190	3.19	3.68
June	3,960	192	1,020	1.49	1.66
July	4,110	296	1,070	1.56	1.80
August	1,810	44	366	.534	.62
September	2,620	42	437	.637	.71
The year	14,000	42	1,360	1.98	26.92
1913–14.					
October	13,100	332	2,020	2.94	3.39
November	17,700	475	3,120	4.55	5.08
December	5,840	665	1,680	2.45	2.82
January	10,700	825	2,490	3.63	4.18
February	11,600	----------	2,230	3.25	3.38
March	10,200	615	2,890	4.21	4.85
April	8,630	1,260	3,930	5.73	6.39
May	4,930	103	950	1.38	1.59
June	410	43	108	.157	.18
July	370	53	110	.160	.18
August	1,400	37	308	.449	.52
September	430	51	124	.181	.20
The year	17,700	37	1,660	2.42	32.76

Monthly discharge of Gauley River near Summersville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1914–15.					
October	1,120	47	277	0.404	0.47
November	880	126	262	.382	.43
December	7,740	410	2,090	3.05	3.52
January	18,900	770	3,600	5.25	6.05
February	17,200	940	3,590	5.23	5.45
March	1,480	590	1,030	1.50	1.73
April	4,270	498	1,290	1.88	2.10
May	4,270	262	969	1.41	1.63
June	3,520	140	1,130	1.65	1.84
July	4,430	278	1,030	1.50	1.73
August	2,400	296	739	1.08	1.24
September	2,290	180	645	.940	1.05
The year	18,900	47	1,380	2.01	27.24
1915–16.					
October	13,800	262	1,600	2.33	2.69
November	4,270	180	1,110	1.62	1.81
December	16,400	452	2,620	3.82	4.40
January	19,900	940	3,200	4.66	5.37
February	6,040	1,060	2,570	3.75	4.04
March	10,200	1,260	3,480	5.07	5.84
April	4,760	742	1,870	2.73	3.05
May	1,810	370	1,020	1.49	1.72
June	3,380	520	1,400	2.04	2.28
July	4,270	232	820	1.20	1.38
August	7,520	205	1,730	2.52	2.90
September	7,740	85	793	1.16	1.29
The year	16,400	85	1,850	2.70	36.77

GAULEY RIVER AT BELVA, W. VA.

LOCATION.—Three-fourths mile below Chesapeake & Ohio Railway bridge at Belva, one-fourth mile below mouth of Twentymile Creek, and 5½ miles above mouth of Gauley River.

DRAINAGE AREA.—1,420 square miles (measured on topographic maps). Area of Gauley River at mouth is 1,440 square miles.

RECORDS AVAILABLE.—August 26, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage on timber cantilever on right bank about three-fourths mile below Chesapeake & Ohio Railway bridge; installed February 9, 1915. Original gage was vertical staff at same site as chain gage; on September 22, 1908, staff gage was lowered 1.40 feet in order to avoid negative readings; gage heights August 27 to September 21, 1908, were corrected to agree with new datum so that all records refer to the same datum. The tree to which was attached the low-water section of gage was blown down July 13, 1914; temporary gage placed by observer August 2 and used until November 4; new vertical-staff low-water gage installed November 5, 1914, about 50 feet upstream from site of original gage and at same datum, and used until December 19, 1914, when it was washed out; replaced by chain gage. Gage read by C. L. Davis, L. L. Davis, and Stephen Elliott. Sea-level elevation of zero of gage as obtained by levels from United States Geological Survey permanent bench mark is 663.53 feet.

DISCHARGE MEASUREMENTS.—Made from boat and cable about 1,000 feet upstream from gage, by wading, or from Kanawha & Michigan Railroad bridge which is at mouth of river about 5½ miles below gage.

CHANNEL AND CONTROL.—Stream bed of gravel; channel straight about 3,000 feet above and below gage; control practically permanent.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage not known; water over top of gage (12 feet) June 17, 1910, and January 30, 1911; gage out of commission December 20, 1914, to February 18, 1915, in which period high water occurred (see footnote to table of daily discharge for estimated maximum gage height and discharge during high-water periods); minimum stage recorded, 0.72 foot September 30, 1908 (discharge, 30 second-feet).

ICE.—River freezes over; ice forms along shores and jams below gage.

ACCURACY.—Stage-discharge relation practically permanent; affected by ice for short periods in some years. Rating curve fairly well defined between 40 and 200 second-feet, well defined between 200 and 10,000 second-feet; beyond these limits the curve is an extension. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage readings to rating table. Records good, except possibly for periods of extremely high and low water; such periods, however, are short and errors in them have comparatively little effect upon the monthly or yearly mean discharge.

Discharge measurements of Gauley River near Belva, W. Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.				1912.			
Aug. 26	W. G. Hoyt	2.05	340	Apr. 2	C. T. Bailey	6.16	6,460
Sept. 22	Wm. M. O'Neill	.94	50	Sept. 11	....do	2.12	342
1909.				1913.			
Apr. 1	H. J. Jackson	4.98	3,990	Nov. 21	Peterson and Walters	4.69	3,540
1910.				1914.			
Mar. 8	Horton and Bailey	4.40	3,350	Nov. 5	Mathers and Morgan	2.06	316
Aug. 26	C. T. Bailey	1.95	328	11	....do	1.83	206
1911.				1916.			
Oct. 15	Bailey and Perwien	4.37	2,830	Aug. 25	B. E. Jones	3.53	1,530
16	....do	6.50	6,730				

Daily discharge, in second-feet, of Gauley River at Belva, W. Va., for the years ending Sept. 30, 1908–1916.

Day.	Aug	Sept.	Day.	Aug.	Sept.	Day.	Aug.	Sept.
1908.								
1		410	11		141	21		59
2		282	12		141	22		52
3		246	13		126	23		47
4		215	14		116	24		40
5		200	15		106	25		38
6		187	16		97	26	340	36
7		174	17		88	27	300	34
8		174	18		80	28	860	33
9		162	19		73	29	585	31
10		162	20		66	30	435	30
						31	362	

Daily discharge, in second-feet, of Gauley River at Belva, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept
1908–9.												
1	31	520	200	4,900	1,520	3,820	4,180	9,060	1,000	2,780	435	101
2	33	435	200	3,290	1,810	3,120	3,460	9,990	815	5,090	462	92
3	32	340	200	2,440	1,520	2,780	3,460	7,420	690	3,290	435	88
4	33	263	230	1,960	1,460	4,540	3,820	5,470	690	1,960	410	82
5	34	246	230	1,660	1,520	4,900	4,540	4,360	770	1,260	362	150
6	60	215	230	6,420	2,120	4,360	5,280	3,640	1,150	1,260	300	118
7	68	200	230	6,230	4,000	6,230	4,900	2,780	1,260	4,180	263	340
8	57	162	282	4,540	3,640	9,060	3,820	2,440	950	3,460	230	263
9	47	150	950	4,180	3,120	7,820	2,950	3,460	770	2,280	200	263
10	55	141	815	2,280	6,820	10,500	2,440	3,120	2,610	1,520	187	300
11	60	128	690	1,960	8,220	9,900	1,960	7,420	3,460	1,050	200	435
12	54	124	815	1,660	5,850	6,620	1,520	5,850	3,290	770	215	770
13	47	128	4,540	1,810	4,540	5,090	1,520	4,360	2,280	730	200	620
14	47	132	2,440	1,520	4,720	5,660	7,820	3,290	1,810	1,260	187	435
15	51	150	1,460	6,820	4,900	5,850	10,100	2,440	1,960	1,390	174	340
16	116	174	1,000	11,000	9,060	4,720	6,620	1,960	2,950	1,050	187	282
17	110	174	815	9,060	10,800	3,820	4,720	1,520	2,610	815	620	1,810
18	101	162	770	6,620	7,420	2,610	3,460	1,150	2,610	655	1,050	860
19	87	162	4,000	4,720	6,620	2,280	2,780	950	3,120	655	730	550
20	74	162	3,640	3,640	5,470	2,120	2,780	860	1,960	585	520	435
21	67	150	2,280	3,120	6,230	1,810	4,000	770	1,390	520	410	340
22	63	215	1,660	2,950	6,820	5,280	8,430	770	1,150	462	340	300
23	57	320	1,520	2,780	6,620	4,720	11,200	1,460	1,050	550	282	263
24	50	300	1,390	3,120	5,850	3,820	9,900	1,050	1,460	690	246	230
25	47	300	1,390	2,950	7,620	4,360	7,220	860	1,960	815	215	490
26	40	282	2,610	2,610	6,420	9,060	5,280	860	1,660	770	200	690
27	38	263	2,610	2,440	5,470	7,820	4,180	2,280	1,050	585	174	490
28	37	246	1,960	2,120	4,540	9,480	4,360	2,610	1,390	490	150	385
29	148	230	1,660	1,960	-------	9,270	4,900	2,280	1,260	462	139	320
30	141	215	1,520	2,120	-------	6,820	4,900	1,810	1,520	490	124	282
31	137	-------	3,120	1,960	-------	5,280	-------	1,320	-------	462	110	-------
1909–10.												
1	246	620	585	620	2,120	7,420	690	2,440	1,260	1,660	585	187
2	230	550	550	815	1,660	8,220	620	1,960	1,320	1,150	490	215
3	200	520	550	5,090	1,960	7,020	620	1,660	1,810	1,050	410	490
4	174	520	520	11,200	3,640	5,470	620	1,390	1,520	2,440	462	1,100
5	162	490	520	7,020	3,640	4,360	815	1,260	1,660	4,360	385	1,660
6	150	435	490	4,900	3,120	3,640	1,390	1,100	8,220	3,290	340	2,440
7	137	410	490	11,400	1,960	3,290	1,150	1,000	8,430	2,780	320	1,810
8	126	385	490	9,480	1,660	2,950	1,050	1,000	5,660	4,540	300	1,150
9	112	462	620	5,850	1,660	2,280	950	1,660	4,000	4,000	282	1,960
10	106	2,610	690	4,360	2,120	1,960	860	3,820	3,640	2,610	282	1,260
11	124	3,640	520	2,950	2,610	1,810	815	3,290	4,540	1,810	263	770
12	120	2,780	550	2,280	2,440	1,810	860	6,420	5,280	1,390	263	620
13	1,660	1,810	690	1,810	2,120	1,660	1,390	9,480	7,020	5,660	230	690
14	815	1,390	3,120	2,120	1,810	1,810	3,290	6,230	7,020	5,850	115	2,280
15	550	1,100	4,540	3,120	1,660	2,120	2,780	4,360	6,620	5,090	300	2,280
16	462	905	3,120	2,610	2,610	1,810	2,280	3,120	13,200	3,120	300	1,320
17	490	770	2,280	2,120	6,620	1,520	1,960	2,280	20,000	2,610	263	860
18	520	690	1,660	3,120	10,500	1,520	2,780	2,120	10,300	2,120	230	655
19	435	620	1,200	11,600	8,220	1,260	3,640	2,280	6,820	2,440	215	550
20	410	550	860	8,020	6,040	1,050	4,000	2,120	6,230	2,280	200	490
21	585	520	950	7,420	4,720	1,050	5,850	1,960	4,360	1,660	200	435
22	490	490	1,050	10,300	3,820	1,100	8,220	2,440	4,540	1,200	187	410
23	462	490	1,660	6,620	6,820	1,150	7,820	2,440	3,640	905	174	385
24	520	585	1,320	5,090	5,660	950	9,060	2,280	2,780	730	174	340
25	2,280	860	1,260	3,820	4,360	1,000	8,020	3,640	2,120	585	320	300
26	1,660	770	1,260	2,950	3,290	950	6,040	3,290	1,520	550	300	1,960
27	1,390	690	1,100	3,290	2,610	950	4,720	2,610	2,440	1,200	230	2,280
28	1,200	620	950	4,540	2,440	860	4,000	1,960	4,360	1,050	200	2,120
29	1,000	550	860	4,180	-------	815	3,460	1,520	3,640	1,050	187	2,120
30	815	550	690	2,950	-------	770	3,120	1,260	2,280	815	174	1,260
31	690	-------	620	2,610	-------	730	-------	1,260	-------	620	174	-------

Daily discharge, in second-feet, of Gauley River of Belva, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	950	620	2,950	8,220	10,300	1,960	3,820	1,960	340	462	146	655
2	860	585	2,120	14,400	9,480	1,810	3,640	1,810	860	340	124	860
3	730	620	1,520	16,600	7,420	1,660	3,640	1,810	690	282	110	550
4	550	770	1,390	12,300	5,850	1,320	7,020	1,660	490	263	94	410
5	462	620	1,320	8,020	4,720	1,320	12,100	1,460	410	340	87	620
6	385	690	2,440	5,280	4,000	6,040	12,700	1,150	490	300	73	490
7	362	655	2,950	4,000	3,290	14,400	8,640	1,050	620	263	66	490
8	340	620	2,120	3,120	2,950	10,800	6,620	950	490	263	77	435
9	620	585	1,520	2,440	3,290	7,220	8,020	950	410	860	215	385
10	1,520	550	1,260	1,960	4,360	5,850	7,820	860	340	490	320	1,260
11	1,050	490	1,200	1,660	4,000	5,850	6,230	815	300	435	300	1,050
12	860	462	1,200	1,660	3,290	5,280	4,900	770	263	620	215	1,660
13	585	435	950	8,430	2,950	4,720	4,180	690	263	690	187	1,390
14	490	410	860	13,700	2,280	5,850	3,820	620	690	620	174	1,050
15	410	410	815	9,480	1,810	5,470	7,820	550	550	435	150	770
16	385	385	770	11,200	1,660	4,180	7,020	490	462	340	150	3,290
17	340	410	750	7,820	1,390	3,290	5,470	462	385	282	200	3,640
18	340	385	750	5,470	1,260	2,280	4,720	462	385	230	246	2,280
19	300	385	770	4,000	1,320	2,780	3,460	435	385	200	263	1,320
20	282	340	1,390	3,290	2,120	6,420	4,720	410	462	200	230	1,000
21	263	320	2,440	3,120	2,780	5,470	7,420	385	490	200	187	860
22	263	300	2,120	8,430	2,440	5,470	7,220	362	435	200	162	1,050
23	300	320	1,520	8,430	2,120	4,900	8,430	340	340	174	139	1,050
24	620	320	2,780	6,040	1,810	4,360	7,020	300	300	200	116	860
25	520	340	4,720	4,720	1,520	3,290	5,280	362	263	200	104	620
26	410	550	3,290	4,720	1,520	2,950	4,360	410	320	187	87	490
27	385	1,050	2,610	11,000	1,520	2,610	3,460	340	410	230	80	435
28	435	1,150	1,960	9,270	1,660	3,460	2,610	300	435	230	76	385
29	620	4,720	2,280	9,480	-------	2,950	2,280	300	655	200	71	410
30	770	4,540	14,600	27,000	-------	2,950	1,960	385	585	174	87	550
31	655	-------	11,200	15,700	-------	3,820	-------	362	-------	162	174	-------
1911–12.												
1	520	655	2,780	6,420	5,470	4,720	6,620	5,090	490	1,520	3,290	2,280
2	690	585	2,280	5,090	4,360	3,290	7,020	4,360	490	1,050	2,780	1,390
3	4,720	550	1,960	4,000	3,290	2,780	10,500	3,640	435	770	1,810	1,050
4	3,290	462	1,660	3,290	2,280	2,280	8,220	2,950	410	1,260	1,260	815
5	2,120	435	1,150	2,440	1,660	1,960	6,230	2,280	385	2,280	905	950
6	1,390	815	}	1,660	}	1,660	4,720	2,120	385	2,610	730	770
7	1,050	6,230	950	}	}	1,520	3,820	3,120	340	1,960	585	655
8	3,820	6,230	}	}	}	1,460	4,360	5,090	300	1,200	520	550
9	2,780	4,180	905	}	}	2,280	4,180	4,900	263	905	490	490
10	1,260	2,950	860	}	}	4,000	3,640	4,000	246	950	462	385
11	2,950	2,280	950	}	}	4,180	2,950	3,120	230	1,390	435	340
12	4,000	1,660	1,000	}	1,000	4,360	2,440	12,100	200	2,280	490	320
13	3,460	2,440	}	1,200	}	8,850	1,960	13,000	174	1,520	1,390	300
14	2,610	2,950	1,050	}	}	9,270	1,810	8,640	174	950	1,100	263
15	2,610	2,610	1,000	}	}	15,000	1,520	7,020	162	815	690	246
16	6,620	2,280	1,260	}	}	23,500	1,660	12,100	146	2,280	520	230
17	4,540	1,810	2,440	}	}	12,300	2,780	14,800	139	1,960	435	215
18	13,400	1,960	2,950	}	690	8,020	3,290	9,480	162	8,640	385	215
19	9,690	4,720	2,280	}	860	6,230	4,360	6,820	435	8,430	520	263
20	5,850	4,360	1,960	7,420	1,260	6,420	3,640	4,900	1,390	4,900	1,200	282
21	4,000	3,290	1,660	4,900	2,950	8,220	2,950	3,640	1,390	2,610	2,280	263
22	2,610	2,440	1,520	3,640	9,480	8,220	2,440	2,780	860	1,520	3,290	263
23	2,280	1,960	2,120	2,610	7,420	6,620	2,950	1,960	585	2,780	2,280	730
24	2,780	1,660	4,720	2,280	5,850	7,420	3,120	1,520	620	1,810	1,390	1,810
25	2,120	2,280	4,720	1,960	4,360	12,100	2,780	1,150	860	7,420	950	2,440
26	1,660	2,610	4,360	1,660	6,620	8,640	2,280	1,050	950	9,060	860	1,960
27	1,320	2,610	5,470	1,660	19,500	6,420	2,610	950	1,520	5,660	1,520	1,520
28	1,100	2,610	6,620	1,520	10,800	4,720	3,640	770	5,090	4,360	1,200	1,660
29	905	3,120	5,280	1,660	7,020	8,640	3,640	690	4,000	2,610	2,120	1,260
30	815	3,460	3,820	7,820	-------	11,600	4,180	620	2,120	2,950	6,820	1,050
31	730	-------	3,460	7,820	-------	9,480	-------	550	-------	3,290	3,640	-------

Daily discharge, in second-feet, of Gauley River at Belva, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912–13.												
1	905	585	385	7,620	4,360	4,720	3,820	4,000	6,620	585	435	300
2	770	585	462	5,090	4,720	4,180	2,950	3,290	4,720	655	410	263
3	655	620	550	4,540	4,720	3,460	2,440	2,610	3,120	585	362	230
4	550	550	1,390	5,660	11,600	2,780	1,810	2,120	2,610	1,150	362	215
5	490	490	2,950	4,720	9,060	2,440	1,810	1,660	2,950	1,660	320	200
6	435	490	4,720	6,420	6,040	2,120	1,520	1,460	2,280	3,460	282	174
7	385	1,520	5,090	13,400	4,540	1,810	1,390	1,320	1,960	4,540	246	174
8	340	12,300	4,360	25,200	2,950	1,460	1,200	1,320	5,470	2,280	230	263
9	320	7,420	3,290	18,300	2,610	1,390	1,050	1,150	6,620	1,200	200	620
10	300	4,540	2,610	9,480	2,120	1,320	1,000	950	4,720	1,000	187	550
11	282	2,950	1,960	6,820	2,280	2,780	1,000	860	3,120	3,290	200	385
12	263	2,440	1,660	5,660	6,620	6,040	1,200	770	2,280	1,960	246	300
13	246	2,120	1,150	7,420	5,850	5,660	2,780	690	1,660	1,200	230	263
14	230	1,660	730	6,040	4,360	9,060	3,120	655	1,260	1,050	655	230
15	230	1,660	1,050	4,540	3,460	10,800	16,000	620	950	905	815	215
16	200	1,390	1,000	3,640	2,950	9,060	12,300	655	770	1,320	520	200
17	215	1,050	950	2,780	2,280	6,620	7,820	950	3,640	1,660	385	187
18	230	950	860	2,610	1,960	4,720	5,280	3,820	1,320	1,150	320	187
19	230	905	860	2,440	1,660	3,640	4,000	2,950	730	1,320	435	200
20	200	860	860	2,120	1,460	2,950	3,290	2,120	550	6,620	655	410
21	950	815	690	2,440	1,520	2,440	2,610	2,280	462	4,360	950	385
22	690	770	585	3,820	1,960	2,120	2,120	2,950	435	2,280	690	4,540
23	585	690	490	3,640	2,780	1,810	1,810	3,820	655	1,460	1,660	2,440
24	1,520	655	620	4,000	2,610	1,520	1,520	12,300	730	1,050	3,290	1,260
25	2,950	620	550	6,230	2,280	1,390	1,460	8,640	730	1,960	1,660	860
26	1,810	620	1,100	7,020	1,810	1,520	1,200	5,470	1,000	1,960	1,050	620
27	1,390	620	655	6,230	1,810	17,400	1,460	7,620	2,610	1,200	690	490
28	1,100	550	950	5,660	2,610	14,600	3,290	15,700	1,460	905	550	410
29	905	490	1,390	4,540	-------	7,820	3,820	10,100	905	815	435	362
30	730	435	3,120	3,640	-------	6,420	4,360	7,020	690	620	362	362
31	620	-------	12,500	3,460	-------	4,900	-------	8,430	-------	490	320	-------
1913–14.												
1	462	1,390	4,540	2,610	8,640	2,280	7,020	3,120	230	174	150	690
2	730	1,150	9,060	2,280	5,850	1,960	9,900	2,440	230	148	122	585
3	770	1,000	8,220	2,280	4,540	1,390	10,300	1,960	230	126	104	520
4	2,440	905	5,660	1,960	3,640	1,520	7,420	1,660	215	114	90	490
5	2,280	770	4,360	1,960	3,120	1,960	5,280	1,960	230	99	80	410
6	1,390	655	3,290	1,960	3,120	1,960	4,180	6,040	230	82	66	282
7	950	620	3,290	1,810	4,360	2,610	3,290	7,220	215	67	60	263
8	690	620	5,850	1,960	5,470	2,280	4,000	5,660	215	85	52	230
9	585	905	5,090	3,460	4,360	1,960	12,100	4,720	215	122	48	230
10	730	3,640	4,180	6,620	3,640	1,660	7,820	3,820	187	80	80	230
11	1,050	3,290	3,460	6,230	2,950	2,120	5,660	3,290	174	59	246	230
12	905	2,950	2,780	4,720	2,280	4,000	4,180	2,610	162	51	340	230
13	770	3,820	2,280	3,120		3,640	3,290	2,280	139	50	300	246
14	730	9,900	1,960	2,780		3,640	2,780	1,960	130		520	263
15	620	17,400	1,660	2,610		4,180	2,610	1,660	120		462	246
16	550	22,000	1,520	2,440	1,300	7,020	8,640	1,320	139		340	246
17	490	20,200	1,390	2,610		11,200	12,100	1,100	126		263	215
18	462	11,000	1,260	2,610		12,100	8,020	950	106		230	187
19	490	6,820	1,260	2,280	8,020	8,430	5,660	815	94		187	162
20	1,200	4,720	1,260	2,610	18,600	6,420	11,400	730	82		174	150
21	4,720	3,460	1,150	12,300	9,900	4,540	11,000	655	64		174	135
22	4,000	2,780	1,100	11,000	7,420	4,000	9,270	585	55	200	162	122
23	2,950	1,960	1,050	6,620	5,280	3,460	5,280	550	48		282	106
24	2,950	1,660	1,000	5,280	4,540	3,460	4,180	520	46		300	99
25	7,820	1,390	1,100	11,200	3,290	3,820	3,290	462	46		263	90
26	16,600	1,200	2,280	9,900	2,950	7,820	7,420	410	64		263	80
27	9,270	1,050	5,090	7,020	2,610	12,500	11,200	362	410		1,200	79
28	5,850	1,390	4,000	5,280	2,280	12,300	7,020	340	362		1,390	79
29	4,000	5,280	3,290	4,900	-------	11,200	5,090	300	263		950	79
30	2,950	4,900	2,950	5,470	-------	9,690	4,000	282	200		1,150	99
31	1,960	-------	2,780	6,230	-------	8,430	-------	246	-------		815	---

Daily discharge, in second-feet, of Gauley River at Belva, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	101	410	300			2,780	1,520	5,090	4,180	230	655	520
2	88	410	585			2,280	1,260	3,640	2,950	282	655	462
3	76	362	1,200			1,960	1,200	2,950	2,780	550	905	385
4	68	362	1,660			1,660	1,150	3,460	4,900	520	1,390	585
5	61	320	5,470		12,000	1,660	1,100	3,290	3,820	490	950	2,610
6	59	300	7,620			2,780	950	2,780	2,610	1,050	655	2,950
7	52	282	4,720			3,120	1,050	2,280	1,810	1,200	520	2,120
8	48	263	2,780			2,950	3,120	1,810	1,460	815	410	1,320
9	51	246	2,610		3,820	2,780	2,950	1,520	1,260	730	385	950
10	85	230	2,280		2,950	2,280	2,780	1,200	1,000	1,200	340	730
11	114	230	2,120		2,440	2,280	2,950	1,080	770	905	340	620
12	99	246	1,810		2,280	2,440	2,950	860	655	815	362	435
13	108	230	1,520		2,120	2,280	2,610	815	585	860	340	385
14	150	215	1,260		2,440	1,960	2,280	815	1,050	690	1,050	385
15	148	215	1,100		4,540	1,810	1,810	730	5,660	520	620	340
16	162	215	1,100	7,000	8,850	2,120	1,660	620	4,180	462	620	462
17	905	410	1,100		6,230	2,610	1,460	585	2,780	520	730	340
18	1,050	815	1,100		4,720	2,780	1,260	550	1,960	4,180	1,520	300
19	690	620	1,200		3,640	2,610	1,150	462	1,660	2,610	2,610	282
20	520	550			2,780	2,280	1,000	435	1,100	2,950	1,390	462
21	490	462			2,280	1,960	950	462	815	4,000	905	655
22	362	385			1,810	1,660	860	520	655	4,180	730	1,390
23	320	320			1,660	1,460	815	620	585	2,780	905	1,390
24	320	362			1,660	1,320	815	730	550	1,520	1,100	905
25	320	300		4,000	6,420	1,200	1,000	950	462	1,050	815	620
26	490	282			4,720	1,100	1,150	1,100	362	770	690	490
27	690	300			3,820	1,660	1,000	2,440	320	620	585	462
28	585	300			3,120	1,960	1,660	2,440	282	520	490	620
29	462	300			-------	1,960	7,020	1,660	246	435	435	950
30	410	300			-------	1,810	7,020	3,290	230	385	770	770
31	385	-------			-------	1,660	-------	6,620	-------	340	655	-------
1915–16.												
1	15,000	385	1,520	6,620	9,480	3,290	4,900	2,950	2,280	690	585	340
2	14,100	340	1,390	7,620	11,400	3,460	4,000	2,280	1,520	550	490	300
3	8,430	320	1,200	7,220	7,420	4,900	3,290	1,960	1,460	620	2,950	282
4	6,040	300	1,150	5,090	3,460	4,720	2,610	2,120	2,610	770	1,660	263
5	3,640	320	1,050	4,000	3,290	3,640	2,280	2,950	2,280	905	2,780	263
6	2,610	300	860	3,820	3,640	4,360	1,960	2,950	1,520	585	3,640	230
7	1,960	282	770	3,820	4,900	13,000	1,810	2,610	1,810	435	2,610	230
8	1,520	263	520	3,820	5,850	17,600	1,960	2,610	2,950	362	2,610	200
9	1,050	246	690	2,950	5,280	9,690	2,440	2,280	2,780	320	7,020	200
10	905	246	585	2,950	5,090	6,420	2,780	2,950	2,950	282	9,690	200
11	770	230	520	9,480	4,720	4,720	4,720	2,280	2,780	300	5,470	263
12	655	246	520	16,400	4,000	3,820	6,420	1,960	2,280	620	4,720	246
13	585	282	520	12,300	4,360	3,290	8,430	1,390	1,660	550	4,720	200
14	520	340	690	10,100	5,850	3,290	7,220	1,150	1,150	410	4,720	263
15	462	860	585	7,020	4,360	7,620	5,470	1,000	1,000	362	3,460	4,360
16	410	7,420	655	4,900	4,000	6,820	4,000	905	2,280	362	2,610	5,850
17	410	4,900	3,640	4,000	3,290	5,090	3,290	806	4,180	860	4,720	2,950
18	385	3,460	17,600	2,610	2,780	4,180	2,950	905	3,640	2,440	4,720	1,660
19	410	2,610	14,800	1,660	2,440	3,640	2,440	860	2,440	2,440	3,290	1,000
20	1,100	4,900	8,020	1,660	4,000	3,290	2,280	730	1,960	1,460	2,280	690
21	1,390	4,180	5,280	2,610	2,780	3,290	1,960	655	1,520	1,000	2,120	550
22	1,100	3,640	3,820	4,180	3,460	4,540	1,960	585	1,150	2,780	3,290	435
23	905	3,120	2,780	7,820	3,290	9,900	1,960	585	1,150	3,820	4,180	385
24	730	2,280	2,120	6,820	3,640	7,420	1,810	1,000	950	1,960	2,780	340
25	620	1,960	1,810	4,900	10,800	5,850	1,660	2,280	2,120	2,280	1,660	340
26	520	1,660	2,950	2,950	10,100	4,540	3,640	1,660	5,470	1,200	1,100	320
27	490	1,520	3,820	2,950	7,220	5,660	4,720	1,660	3,640	860	770	282
28	490	1,810	3,820	2,610	4,900	12,700	4,720	1,520	1,810	730	585	246
29	435	1,960	10,300	2,610	4,000	11,400	4,360	1,050	1,150	1,320	490	1,810
30	385	1,660	17,100	5,660	-------	7,420	3,640	1,200	860	1,000	435	6,040
31	385	-------	9,900	6,420	-------	6,230	-------	2,440	-------	730	385	-------

NOTE.—Discharge estimated, because of ice or missing gage readings, from observer's notes, climatic data, or from records for other gaging stations in the Gauley drainage basin as follows: Sept. 13–22, 1908; Dec. 17–18, 1910; Jan. 7–19, Feb. 6–17, 1912; Feb. 13–18, July 14 to Aug. 1, 1914; Dec. 20, 1914, to Feb. 8, 1915. Braced figures show mean daily discharge for the period.

Mean daily discharge, June 17, 1910, determined from morning and evening gage readings and flood height as reported by observer, who stated water rose 36 inches above top of gage (12 feet). Maximum discharge about 26,000 second-feet. Jan. 30, 1911, observer noted at time of regular morning reading, "Water above gage, rising;" in the evening he noted, "Water above gage, falling." Top of gage, 12 feet. Mean daily discharge estimated to be about 27,000 second-feet. Maximum discharge estimated to be about 37,000 second-feet, corresponding to a gage height of 19 feet. Estimates are from extrapolation of hydrograph from gage readings Jan. 29 and 31 and by comparison with the flow of New River at Fayette and Kanawha Falls.

Monthly discharge of Gauley River at Belva, W. Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 1,420 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
August 26–31	860	300	480	0.338	0.08
September	410	30	122	.086	.10
1908–9.					
October	148	31	65.2	.046	.05
November	520	124	223	.157	.18
December	4,540	200	1,470	1.04	1.20
January	11,000	1,520	3,700	2.61	3.01
February	10,800	1,460	5,170	3.64	3.79
March	10,500	1,810	5,600	3.94	4.54
April	11,200	1,520	4,880	3.44	3.84
May	9,900	770	3,150	2.22	2.56
June	3,460	690	1,690	1.19	1.33
July	5,090	462	1,370	.965	1.11
August	1,050	110	315	.222	.26
September	1,810	82	404	.285	.32
The year	11,200	31	2,320	1.63	22.19
1909–10.					
October	2,280	106	591	.416	.48
November	3,640	385	913	.643	.72
December	4,540	490	1,150	.810	.93
January	11,600	620	4,980	3.51	4.05
February	10,500	1,660	3,640	2.56	2.67
March	8,220	730	2,360	1.66	1.91
April	9,060	620	3,030	2.13	2.38
May	9,480	1,000	2,700	1.90	2.19
June	20,000	1,260	5,210	3.67	4.10
July	5,850	550	2,280	1.61	1.86
August	585	174	279	.196	.23
September	2,440	187	1,150	.810	.90
The year	20,000	106	2,340	1.65	22.42
1910–11.					
October	1,520	263	550	.387	.45
November	4,720	300	801	.564	.63
December	14,600	750	2,530	1.78	2.05
January	27,000	1,660	8,100	5.70	6.57
February	10,300	1,260	3,330	2.35	2.45
March	14,400	1,320	4,540	3.20	3.69
April	12,700	1,960	5,880	4.14	4.62
May	1,960	300	749	.527	.61
June	860	263	451	.318	.35
July	860	162	325	.229	.26
August	320	66	152	.107	.12
September	3,640	385	1,010	.711	.79
The year	27,000	66	2,360	1.66	22.59
1911–12.					
October	13,400	520	3,150	2.22	2.56
November	6,230	435	2,540	1.79	2.00
December	6,620	860	2,390	1.68	1.94
January	7,820	----------	2,690	1.89	2.18
February	19,500	----------	3,650	2.57	2.77
March	23,500	1,460	6,970	4.91	5.66
April	10,500	1,520	3,880	2.73	3.05
May	14,800	550	4,680	3.30	3.80
June	5,090	139	832	.586	.65
July	9,060	770	2,960	2.08	2.40
August	6,820	385	1,500	1.06	1.22
September	2,440	215	832	.586	.65
The year	23,500	139	3,010	2.12	28.88

Monthly discharge of Gauley River at Belva, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1912–13.					
October	2,950	200	669	0.471	0.54
November	12,300	435	1,710	1.20	1.34
December	12,500	385	1,920	1.35	1.56
January	25,200	2,120	6,300	4.44	5.12
February	11,600	1,460	3,680	2.59	2.70
March	17,400	1,320	4,800	3.38	3.90
April	16,000	1,000	3,310	2.33	2.60
May	15,700	620	3,820	2.69	3.10
June	6,620	435	2,230	1.57	1.75
July	6,620	490	1,760	1.24	1.43
August	3,290	187	618	.435	.50
September	4,540	174	576	.406	.45
The year	25,200	174	2,620	1.85	24.99
1913–14.					
October	16,600	462	2,620	1.85	2.13
November	22,000	620	4,630	3.26	3.64
December	9,060	1,000	3,170	2.23	2.57
January	12,300	1,810	4,650	3.27	3.77
February	18,600	----------	4,450	3.13	3.26
March	12,500	1,390	5,280	3.72	4.29
April	12,100	2,610	6,780	4.77	5.32
May	7,220	246	1,940	1.37	1.58
June	410	46	168	.118	.13
July	----------	----------	157	.111	.13
August	1,390	48	350	.246	.28
September	690	79	236	.166	.19
The year	22,000	----------	2,850	2.01	27.29
1914–15.					
October	1,050	48	305	.215	.25
November	815	215	341	.240	.27
December	----------	----------	2,890	2.04	2.35
January	----------	----------	7,000	4.93	5.68
February	----------	1,660	6,010	4.23	4.40
March	3,120	1,100	2,100	1.48	1.71
April	7,020	815	1,950	1.37	1.53
May	6,620	435	1,800	1.27	1.46
June	5,660	230	1,720	1.21	1.35
July	4,180	230	1,230	.866	1.00
August	2,610	340	791	.557	.64
September	2,950	282	830	.585	.65
The year	----------	48	2,230	1.57	21.29
1915–16.					
October	15,000	385	2,210	1.56	1.80
November	7,420	230	1,730	1.22	1.36
December	17,600	520	3,900	2.75	3.17
January	16,400	1,660	5,410	3.81	4.39
February	11,400	2,440	5,170	3.64	3.93
March	17,600	3,290	6,320	4.45	5.13
April	8,430	1,660	3,520	2.48	2.77
May	2,950	585	1,690	1.19	1.37
June	5,470	860	2,180	1.54	1.72
July	3,820	282	1,060	.746	.86
August	9,690	385	2,990	2.11	2.43
September	6,040	200	1,020	.718	.80
The year	17,600	200	3,100	2.18	29.73

CHERRY RIVER AT RICHWOOD, W. VA.

LOCATION.—At highway bridge at Richwood, Nicholas County, half a mile below junction of North and South forks.

DRAINAGE AREA.—90 square miles.

RECORDS AVAILABLE.—July 3, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage on bridge; read by Floyd Artrip.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Channel straight above and below gage. Right bank subject to overflow and water passes around station at extremely high stages. Bed composed of gravel and boulders. Control practically permanent. The removal of stones from the control in 1909 and 1911 for building purposes changed the stage-discharge relation.

ICE.—Stage-discharge relation affected by ice for short periods in severe winters.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage recorded, 9.0 feet October 1, 1915 (discharge, about 6,600 second-feet); minimum stage recorded, 1.66 feet July 1, 1914 (discharge, 5.2 second-feet); minimum discharge recorded, 4.8 second-feet October 8, 9, 1908 (gage height, 2.12 feet; before change in control).

ACCURACY.—Stage-discharge relation practically permanent. Removal of stones for building purposes from primary control in July and August, 1909, and May to August, 1911, changed stage-discharge relation. Date of changes in stage-discharge relation not definitely known but are assumed to have occurred August 15, 1909, and June 30, 1911. Rating curve used July 3, 1908, to August 15, 1909, and curve used August 16, 1909, to June 30, 1911, are both based on only a few measurements and the form of all the rating curves; they are considered only fairly well defined. Rating curve used July 1, 1911, to September 30, 1916, is well defined to 2,400 second-feet and is an extension above that point. Gage read twice daily to half-tenths. Daily discharge ascertained by applying mean daily gage height to rating table except as noted in footnote to table of daily discharge. Records fair, July 3, 1908, to August, 1911, except for July and August, 1909, and May to August, 1911, which are probably poor. Beginning with September, 1911, records good.

Discharge measurements of Cherry River at Richwood, W. Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1912.		*Feet.*	*Sec.-ft.*
July 2	Wm. M. O'Neill	2.54	54	Mar. 20	C. T. Bailey	4.35	1,270
28	W. G. Hoyt	4.24	970				
Sept. 26	Wm. M. O'Neill	2.25	8	1913.			
				Dec. 2	Peterson and Walters	3.89	916
1909.				2	do	3.85	894
Mar. 28	H. J. Jackson	4.04	744				
29	do	3.69	509	1914.			
Nov. 13	A. H. Horton	3.00	225	Nov. 22	J. G. Mathers	2.29	65.6
				22	do	2.27	63.5
1910.							
Mar. 12	do	2.67	138	1916.			
Aug. 16	J. C. Dort	2.27	41.4	Sept. 5	B. E. Jones	1.84	13.6
				5	do	1.84	13.7
1911.							
Oct. 25	Bailey and Perwien	2.74	205				

Daily discharge, in second-feet, of Cherry River at Richwood, W. Va., for the years ending Sept. 30, 1908–1916.

Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept	Day.	July.	Aug.	Sept.
1908.				1908.				1908.			
1	58	120	46	11	120	80	15	21	109	37	6.0
2	54	106	46	12	92	85	15	22	308	37	12
3	46	92	28	13	98	87	15	23	356	37	15
4	57	80	28	14	57	92	15	24	525	28	15
5	184	92	37	15	57	68	12	25	419	80	8.0
6	436	150	37	16	80	68	8.0	26	273	264	9.4
7	299	120	28	17	73	46	8.0	27	1,390	120	8.7
8	222	92	22	18	123	57	8.0	28	970	92	9.4
9	192	382	15	19	177	46	8.0	29	465	68	18
10	150	203	15	20	126	46	8.0	30	286	57	18
								31	203	46	

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908-9.												
1	15	120	42	308		327	226	525	109	308	28	20
2	12	100	32	222		408	308	465	106	590	32	20
3	8.7	82	28	184		625	286	337	98	299	22	16
4	8.0	46	35	150		625	251	273	132	203	15	16
5	8.0	39	32	1,140		558	436	230	132	138	14	210
6	8.0	35	30	970	340	525	525	184	214	408	12	75
7	8.0	30	39	890		525	387	157	123	465	22	39
8	4.8	28	286	890		495	290	308	103	286	14	32
9	4.8	25	264	300		660	247	203	126	203	9.4	35
10	6.8	24	243	268		810	199	590	247	157	8.0	142
11	92	25	222	235		1,220	170	558	299	114	8.0	173
12	37	46	203	286			157	372	214	92	6.0	91
13	23	30	184	222	377		203	281	170	126	6.0	60
14	15	20	167	184	495		1,740	222	150	126	6.0	46
15	14	15	144	590	850		735	181	222	87	106	43
16	12	22	132	890	1,220		366	150	188	68	223	39
17	11	22	222	590	590		286	126	170	64	123	75
18	11	27	735	525	436		230	103	356	55	91	55
19	10	55	660	525	495		192	82	211	46	82	46
20	9.4	82	525	408	772	480	184	78	153	32	64	39
21	9.4	82	398	380	495		256	150	123	28	50	32
22	9.4	57	299	351	465		590	243	100	27	46	32
23	11	55	214	351	398		660	123	95	28	49	39
24	64	48	150	328	398		525	98	273	73	39	290
25	68	42	150	305	398		436	98	273	64	32	131
26	53	39	184	282	366		290	308	222	46	32	98
27	23	37	184	233	327		243	356	157	42	26	64
28	23	37	184	184	337	810	346	268	144	80	22	64
29	98	33	120			495	268	207	157	57	20	55
30	192	42	184	340		398	337	157	273	42	20	46
31	132		465			264		126		57	20	
1909-10.												
1	39	91	86	250	115	1,360	86	160	110	115	43	82
2	35	86	82	455	115	875	86	131	115	91	42	136
3	32	82	75	1,360	110	620	86	123	123	86	39	202
4	32	68	75	950	131	455	136	110	115	195	42	351
5	30	64	64	425	115	351	136	98	407	210	42	520
6	26	64	64	315	110	330	123	86	875	136	31	351
7	26	64	68	1,360	90	300	123	86	443	160	28	244
8	26	64	151	655		223	123	123	290	290	35	160
9	20	315	75	340	110	184	110	131	223	173	40	202
10	20	655	75	223	151	160	110	136	290	110	42	173
11	281	488	75	202	136	136	98	123	425	105	39	131
12	340	315	75	166		115	115	443	585	86	28	105
13	136	236	407	136	140	110	281	395	655	210	151	195
14	110	173	838	151		123	195	267	552	173	45	223
15	98	160	340	136		123	166	195	585	123	35	142
16	110	136	223	136	184	110	160	160	2,290	91	42	110
17	105	115	195	123	620	110	236	136	1,280	91	32	86
18	86	105	160	195	1,030	98	368	184	585	123	26	75
19	110	98	82	725	585	86	267	160	520	136	26	64
20	110	86		368	315	86	244	136	340	91	35	64
21	91	86		1,190	267	123	290	210	330	75	26	55
22	86	86	125	585	520	110	330	195	443	68	86	46
23	123	98		368	395	110	725	166	267	50	43	43
24	281	115		267	267	110	655	151	184	46	32	35
25	195	91	128	195	267	110	468	166	131	35	26	875
26	184	86		160	202	110	368	142	105	166	26	455
27	173	86		184	184	98	290	115	131	105	26	223
28	160	82		166	875	98	267	105	351	86	26	340
29	142	82	100	142		98	223	91	223	64	20	195
30	123	98		142		86	184	86	151	64	18	166
31	110			131		86		86		60	16	

Daily discharge, in second-feet, of Cherry River at Richwood, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	136	110	267	762	655	110	145	123	315	54	24	112
2	142	123	223	1,890	585	110	142	123	115	43	18	55
3	105	136	166	1,710	395	98	340	110	68	106	14	43
4	91	131	142	875	330	110	725	91	46	43	13	50
5	75	110	131	488	253	86	1,620	75	202	36	43	152
6	64	110	136	368	195	875	838	64	151	50	68	120
7	75	91	123	244	166	690	520	64	105	98	32	92
8	223	86	110	202	184	407	455	64	86	126	85	59
9	368	86	105	166	244	290	585	64	51	55	40	845
10	202	75	86	151	223	300	378	51	39	43	34	288
11	142	75	86	136	195	395	290	42	43	106	24	246
12	131	64	86	620	166	340	300	46	136	87	20	232
13	105	64	86	2,610	142	455	407	43	98	55	28	179
14	86	64	90	1,360	123	395	585	39	71	40	30	152
15	75	64		1,620	115	300	762	32	59	30	36	415
16	64	60		1,030	105	244	395	28	55	34	190	810
17	64	55	100	520	86	202	315	32	46	47	59	415
18	60	55	100	368	98	184	244	32	64	46	36	232
19	50	46	160	267	136	390	223	32	64	32	28	190
20	46	46	142	202	115	620	620	26	64	24	24	171
21	46	43	145	267	86	368	500	20	46	26	24	130
22	142	39		585	110	290	520	20	35	36	18	142
23	123	32		468	110	368	533	20	32	30	16	92
24	86	46	151	340	86	236	368	184	28	36	13	59
25	64	290	290	253	86	195	325	64	42	68	16	64
26	64	160	166	520	86	151	244	42	46	50	24	55
27	68	131	160	655	123	356	210	43	64	36	18	46
28	184	425	160	762	151	236	173	32	115	28	14	142
29	131	520	875	875	-------	202	166	30	51	24	32	146
30	115	315	2,090	2,720	-------	244	128	28	36	20	59	114
31	110	-------	762	762	-------	177	-------	136	-------	24	171	-------
1911–12.												
1	80	80	232	505	304	330	445	385	47	64	160	152
2	705	68	198	358	211	255	775	320	43	54	120	120
3	602	64	160	288	198	211	775	278	47	50	98	100
4	385	59	126	232	152	160	538	224	39	87	80	152
5	255	59	106	146	171	146	445	190	36	120	64	92
5	179	304	106		190	120	330	171	30	73	54	82
7	304	570	98		190	120	385	570	36	54	50	64
8	538	330	98			120	415	538	26	47	43	50
9	358	241	98	125		211	330	415	22	59	43	44
10	255	198	120			190	304	330	20	120	68	40
11	415	160	126		130	171	224	304	16	445	68	34
12	475	190	152	114		190	190	1,870	16	224	98	31
13	358	320	126	87		570	160	995	16	136	87	24
14	278	232	120	80		385	152	670	16	152	59	22
15	775	224	126	68	59	3,150	146	538	15	505	39	22
16	602	190	241	80	59	1,490	241	2,930	18	415	34	34
17	670	152	278		54	775	190	1,400	50	211	30	36
18	1,670	445	224	92	73	635	320	670	92	232	30	34
19	775	415	171	255	87	705	255	505	224	330	106	50
20	505	304	152	358	182	1,310	224	358	171	211	136	36
21	314	269	152	211	775	995	190	269	80	152	106	31
22	288	211	160	190	920	882	211	224	59	152	171	22
23	330	160	505	152	505	538	269	182	198	120	114	358
24	269	190	385	152	385	995	232	146	87	92	68	570
25	179	224	385	120	288	845	198	120	171	1,070	61	358
26	160	171	385	120	1,490	602	182	114	160	670	64	215
27	126	160	635	106	1,310	415	255	87	126	385	92	215
28	114	198	505	106	670	330	570	73	171	232	64	163
29	106	358	358	190	475	1,670	255	68	98	232	740	130
30	92	269	278	635	-------	920	445	59	73	269	385	114
31	87	-------	538	385	-------	602	-------	50	-------	182	215	-------

Daily discharge, in second-feet, of Cherry River at Richwood, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912–13.												
1	92	87	54	358	358	445	299	314	602	215	49	39
2	82	100	73	288	320	358	250	278	415	90	90	29
3	75	82	241	358	415	260	194	219	278	385	61	29
4	64	68	228	358	705	215	182	171	278	250	44	29
5	55	64	358	304	475	207	156	142	190	117	39	23
6	55	64	475	740	330	182	156	136	152	845	31	19
7	50	1,490	445	1,970	269	123	139	136	264	309	29	21
8	47	1,070	358	1,970	283	123	123	106	358	175	29	31
9	44	570	241	995	237	133	109	92	304	126	28	49
10	40	358	198	635	175	175	109	80	219	505	28	29
11	34	273	179	538	299	810	114	68	179	260	21	19
12	34	211	126	635	538	570	330	68	142	198	54	19
13	31	179	112	505	330	475	330	59	112	149	215	19
14	36	198	126	385	283	1,670	309	59	92	117	126	19
15	34	171	112	304	215	920	1,490	63	80	330	61	19
16	34	136	98	255	175	670	705	100	68	241	54	15
17	28	126	85	211	156	445	475	358	59	149	42	52
18	28	112	85	198	123	320	358	294	50	126	29	106
19	163	112	90	179	114	250	304	211	43	1,490	186	52
20	175	106	66	160	175	215	246	163	40	810	241	40
21	109	98	63	228	283	207	190	179	43	358	117	845
22	87	85	66	219	445	182	171	171	50	215	475	385
23	385	85	80	211	415	146	142	602	106	167	740	182
24	190	73	63	505	320	139	136	958	63	167	273	114
25	175	73	73	538	215	139	120	505	59	385	175	75
26	163	63	98	445	207	250	112	358	358	198	133	59
27	163	63	85	385	269	2,600	358	1,490	142	139	90	55
28	146	59	85	283	635	920	358	1,400	106	103	66	64
29	130	49	90	224	-------	602	385	705	75	66	57	40
30	114	54	475	182	-------	445	475	538	59	66	49	52
31	92	-------	570	224	-------	358	-------	1,310	-------	57	42	-------
1913–14.												
1	55	156	538	171	705	171	740	219	25	5.2	8.0	39
2	55	130	920	146	445		1,070	179	25	8.4	8.0	29
3	320	106	538	160	330	150	775	142	21	19	8.0	29
4	246	100	415	152	269		475	142	21	12	7.2	21
5	146	87	304	120	269		358	219	25	14	8.0	19
6	106	75	211	114	255	114	269	570	29	11	8.0	15
7	95	75	358	106	385	109	232	385	21	8.4	7.2	15
8	75	80	385	106	330	100	882	314	21	7.6	14	15
9	64	294	320	211	241	87	670	264	17	61	16	12
10	100	203	232	304	232	100	445	219	15	21	43	12
11	95	182	211	232	190	114	330	186	14	14	24	14
12	130	182	182	198	190	92	278	160	14	11	85	31
13	100	294	152	232	152	100	215	149	17	8.0	63	26
14	80	1,230	136	190	152	92	182	136	14	80	32	19
15	75	1,970	126	190	160	203	330	112	12	63	20	14
16	70	1,870	120	152	146	538	1,400	98	9.2	40	16	12
17	59	670	120	126	146	845	740	85	8.4	30	13	11
18	87	505	136	114	152	740	475	80	7.6	32	10	9.6
19	100	445	126	120	920	475	358	73	6.4	20	8.0	7.6
20	505	320	120	330	920	330	775	63	9.2	14	8.0	7.6
21	415	255	120	1,310	475	278	635	63	11	13	59	7.6
22	294	194	120	635	330	215	445	54	11	10	36	7.6
23	385	163	120	415	330	182	330	54	11	8.0	20	7.6
24	1,070	130	152	385	278	190	264	46	15	8.0	22	7.6
25	1,230	123	152	995	211	445	219	43	15	8.0	63	9.6
26	1,490	100	505	570	190	1,310	1,150	39	17	13	309	12
27	740	100	330	445	190	1,310	670	32	12	55	133	9.6
28	445	385	255	385	160	1,580	445	30	9.2	24	66	7.6
29	320	445	224	602	-------	1,070	330	25	8.4	16	103	7.6
30	237	320	198	775	-------	1,070	264	37	6.4	13	66	7.6
31	194	-------	182	1,490	-------	995	-------	31	-------	12	54	-------

Daily discharge, in second-feet, of Cherry River at Richwood, W. Va., for the year ending Sept. 30, 1908–1915—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	5.8	73	304	288	1,150	182	120	255	146	26	40	63
2	5.8	68	330	224	2,380	182	120	198	130	87	75	46
3	5.8	64	330	190	1,310	126	120	255	163	40	309	54
4	4.8	50	269	152	670	106	106	224	260	36	130	98
5	7.6	50	1,670	126	505	106	114	198	190	224	68	314
6	29	47	602	635	505	120	224	152	139	139	47	207
7	19	43	385	2,380	358	114	475	146	109	64	40	142
8	14	36	304	810	269	92	445	120	114	92	34	112
9	18	43	255	570	198	92	445	106	87	152	25	85
10	20	36	232	320	182	87	385	87	75	82	24	63
11	18	36	171	255	160	120	330	68	64	64	87	54
12	13	36	152	445	152	92	320	73	47	55	120	46
13	15	30	136	278	182	106	255	87	36	44	64	39
14	55	30	126	224	538	80	211	64	215	36	47	43
15	64	68	123	330	1,580	126	152	50	152	28	100	30
16	358	241	120	320	845	152	120	50	109	28	64	22
17	156	190	136	775	505	160	114	43	82	146	152	15
18	114	120	126	1,870	330	87	106	36	114	215	635	23
19	70	106	120	1,670	255	106	92	36	82	92	232	98
20	55	92	445	705	190	106	87	39	50	415	139	63
21	43	87	538	445	160	87	80	54	40	475	163	288
22	44	68	570	278	152	73	68	39	34	278	215	198
23	43	50	330	255	152	68	73	39	28	163	182	98
24	59	36	255	288	1,070	68	73	43	22	139	130	80
25	190	50	198	241	635	68	68	39	18	75	109	59
26	114	43	152	211	385	160	64	59	15	55	75	46
27	87	43	182	171	278	120	54	106	15	44	61	66
28	68	39	190	126	255	136	445	64	12	34	109	136
29	64	36	190	92	-------	146	705	59	9	28	175	90
30	68	92	705	98	-------	152	385	232	10	28	100	66
31	92	-------	415	98	-------	136	-------	211	-------	34	82	-------
1915–16.												
1	4,330	26	123	635	845	203	358	171	133	49	61	15
2	1,310	26	109	920	570	211	294	142	98	117	325	18
3	635	22	95	570	385	171	246	130	241	167	149	19
4	415	22	82	330	299	130	203	219	186	68	167	14
5	314	22	70	269	224	136	171	171	133	44	241	11
6	219	22	61	260	215	142	171	142	133	35	167	16
7	142	22	61	237	358	1,310	142	142	273	29	241	11
8	117	22	61	182	283	958	142	130	260	21	273	15
9	90	22	47	215	269	602	136	278	288	23	958	34
10	85	22	44	194	283	415	120	179	250	24	570	18
11	66	14	44	1,150	250	219	278	142	186	109	325	10
12	59	22	44	1,150	260	203	995	112	133	44	475	9.2
13	49	40	44	1,070	570	190	810	100	103	31	358	8.0
14	46	35	31	670	445	882	538	80	68	29	309	10
15	46	505	34	475	445	958	385	68	299	29	215	2,070
16	39	358	47	330	283	538	294	75	445	385	288	505
17	32	241	123	207	182	358	264	75	602	775	273	241
18	32	198	2,710	156	167	304	203	68	309	358	186	146
19	136	635	810	175	146	264	163	55	215	207	139	80
20	112	505	538	167	123	211	142	43	215	260	198	68
21	85	330	283	224	175	255	136	43	175	330	109	59
22	66	264	215	445	175	1,070	179	37	139	845	149	39
23	59	211	175	538	224	882	136	130	98	995	198	36
24	46	171	139	358	475	538	120	190	90	505	109	34
25	46	136	194	269	882	415	330	112	309	241	68	24
26	43	112	237	215	505	358	415	171	207	167	54	20
27	43	273	194	224	358	475	415	106	133	139	42	16
28	35	241	237	194	260	670	358	92	98	288	31	16
29	32	198	2,600	260	207	635	264	68	73	139	29	810
30	32	149	1,070	670	-------	475	219	255	49	98	23	278
31	32	-------	570	475	-------	445	-------	232	-------	66	19	-------

NOTE.—Daily discharge estimated or interpolated, because of ice or missing gage readings, from observer's notes, climatic data, or by comparison with the flow at other stations as follows: July 1, Aug. 2, 12, 13, Nov. 6, Dec. 9–14, 20–23, 1908; Jan. 9, 21, 24, 25, 27, 29–31, Feb. 1–12, Mar. 12–27, July 18, Dec. 20–24, 26–31, 1909; Jan. 1, Feb. 7, 8, 12–15, Dec. 14–16, 21–23, 1910; Jan. 6–11, 16–17, Feb. 8–14, 1912; Feb. 7–8, Mar. 2–5, Dec. 15, 1914. Braced figures show the mean for the period.

Monthly discharge of Cherry River at Richwood, W. Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 90 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
July	1,390	46	258	2.87	3.31
August	382	28	96.1	1.07	1.23
September	46	6	17.8	.198	.22
1908–9.					
October	192	4.8	32.3	.359	.41
November	120	15	44.8	.498	.56
December	735	28	218	2.42	2.79
January	1,140	150	426	4.73	5.45
February	1,220	327	446	4.96	5.16
March	1,220	264	530	5.89	6.79
April	1,740	157	379	4.21	4.70
May	590	78	244	2.71	3.12
June	356	95	178	1.98	2.21
July	590	27	142	1.58	1.82
August	223	6.0	40.2	.447	.52
September	290	16	70.8	.787	.88
The year	1,740	4.8	228	2.53	34.41
1909–10.					
October	340	20	111	1.23	1.42
November	655	64	146	1.62	1.81
December	838	64	147	1.63	1.88
January	1,360	123	394	4.38	5.05
February	1,030	----------	269	2.99	3.11
March	1,360	86	229	2.54	2.93
April	725	86	235	2.61	2.91
May	443	86	158	1.76	2.03
June	2,290	105	437	4.86	5.42
July	290	35	117	1.30	1.50
August	151	16	38.3	.426	.49
September	875	35	202	2.24	2.50
The year	2,290	16	206	2.29	31.05
1910–11.					
October	368	46	111	1.23	1.42
November	520	32	122	1.36	1.52
December	2,090	86	245	2.72	3.14
January	2,720	136	768	8.53	9.83
February	655	86	191	2.12	2.21
March	875	86	301	3.34	3.85
April	1,620	128	435	4.83	5.39
May	184	20	58.1	.646	.74
June	315	28	79.1	.879	.98
July	126	20	49.5	.550	.63
August	190	13	40.4	.449	.52
September	845	43	195	2.17	2.42
The year	2,720	13	217	2.41	32.65
1911–12.					
October	1,670	80	395	4.39	5.06
November	570	59	227	2.52	2.81
December	635	98	237	2.63	3.03
January	635	68	189	2.10	2.42
February	1,490	54	333	3.70	3.99
March	3,150	120	646	7.18	8.28
April	775	146	322	3.58	3.99
May	2,930	50	486	5.40	6.23
June	224	15	73.4	.816	.91
July	1,070	47	230	2.56	2.95
August	740	30	114	1.27	1.46
September	570	22	113	1.26	1.41
The year	3,150	15	281	3.12	42.54

Monthly discharge of Cherry River at Richwood, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1912–13.					
October	385	28	95.3	1.06	1.22
November	1,490	49	209	2.32	2.59
December	570	54	177	1.97	2.27
January	1,970	160	477	5.30	6.11
February	705	114	313	3.48	3.62
March	2,600	123	469	5.21	6.01
April	1,490	109	294	3.27	3.65
May	1,490	59	366	4.07	4.69
June	602	40	166	1.84	2.05
July	1,490	57	284	3.16	3.64
August	740	21	118	1.31	1.51
September	845	15	84.3	.937	1.04
The year	2,600	15	255	2.83	38.40
1913–14.					
October	1,490	55	303	3.37	3.88
November	1,970	75	373	4.14	4.62
December	920	120	258	2.87	3.31
January	1,490	106	370	4.11	4.74
February	920	146	313	3.48	3.62
March	1,580	87	434	4.82	5.56
April	1,400	182	525	5.83	6.50
May	570	25	137	1.52	1.75
June	29	6.4	14.9	.166	.18
July	80	5.2	21.3	.237	.27
August	309	7.2	43.1	.479	.55
September	39	7.6	14.7	.163	.18
The year	1,970	5.2	233	2.59	35.16
1914–15.					
October	358	4.8	61.9	.688	.79
November	241	30	66.8	.742	.83
December	1,670	120	325	3.61	4.16
January	2,380	92	480	5.33	6.14
February	2,380	152	548	6.09	6.34
March	182	68	115	1.28	1.48
April	705	54	212	2.36	2.63
May	255	36	104	1.16	1.34
June	260	9	85.6	.951	1.06
July	475	26	110	1.22	1.41
August	635	24	124	1.38	1.59
September	314	15	91.5	1.02	1.14
The year	2,380	4.8	192	2.13	28.91
1915–16.					
October	4,330	32	284	3.16	3.64
November	635	14	162	1.80	2.01
December	2,710	31	358	3.98	4.59
January	1,150	156	427	4.74	5.46
February	882	123	340	3.78	4.08
March	1,310	130	472	5.24	6.04
April	995	120	288	3.20	3.56
May	278	37	128	1.42	1.64
June	602	49	198	2.20	2.45
July	995	21	213	2.37	2.73
August	958	19	218	2.42	2.79
September	2,070	8	155	1.72	1.93
The year	4,330	8	271	3.01	40.92

MEADOW RIVER NEAR RUSSELLVILLE, W. VA.

LOCATION.—At Bays Ferry, one-fourth mile below mouth of Youngs Creek and 3 miles below Russellville, Fayette County.

DRAINAGE AREA.—297 square miles.

RECORDS AVAILABLE.—July 17, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage attached to trees on left bank 25 feet above bridge, near former ferry crossing, read by J. R. Bays.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading. Prior to completion of concrete bridge in 1913 high-water measurements were made from boat.

CHANNEL AND CONTROL.—Channel straight above and slightly curved for 200 feet below gage. Left bank subject to overflow at extremely high stages. Bed rocky and clean. Control permanent.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage recorded, 13.25 feet morning reading February 3, 1915 (discharge, about 7,300 second-feet); minimum stage recorded, 2.57 feet August 7, 8, 1914 (discharge, 6.7 second-feet).

ICE.—Stage-discharge relation affected by ice for short periods in severe winters.

ACCURACY.—Stage-discharge relation practically permanent, occasionally affected by ice. Rating curve well defined between 12 and 4,800 second-feet; beyond these limits the curve is an extension. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. See footnote to table of daily discharge for special estimates. Records good.

Discharge measurements of Meadow River near Russellville, W. Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1912.		*Feet.*	*Sec.-ft.*
July 18	Wm. M. O'Neill	4.07	154	Mar. 27	C. T. Bailey	7.02	1,370
Aug. 7	W. G. Hoyt	3.75	68	30	do	9.44	3,230
1909.				1913.			
Apr. 5	H. J. Jackson	5.82	686	Nov. 18	Peterson and Walters	9.04	2,830
13	do	4.55	260	20	M. I. Walters	6.50	1,050
1910.				1914.			
Mar. 24	C. T. Bailey	4.46	233	Oct. 30	Mathers and Morgan	3.39	49.0
26	do	4.30	216	30	do	3.36	44.7
Oct. 14	do	3.54	62.9	1916.			
15	do	3.39	47.1	Aug. 21	B. E. Jones	5.01	376
1911.				24	do	5.70	632
July 29	do	2.93	15.2				

Daily discharge, in second-feet, of Meadow River near Russellville, W. Va., for the years ending Sept. 30, 1908–1916.

Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.
1908.				1908.				1908.			
1		202	47	11		324	22	21	138	48	13
2		148	41	12		226	20	22	134	45	13
3		118	34	13		148	20	23	191	45	12
4		97	30	14		116	19	24	148	44	12
5		83	28	15		96	19	25	133	45	12
6		92	28	16		86	17	26	138	60	12
7		86	28	17		82	16	27	406	238	11
8		78	27	18		75	15	28	765	158	11
9		169	25	19	158	62	15	29	580	106	11
10		470	24	20	148	56	14	30	364	75	11
								31	274	59	

Daily discharge, in second-feet, of Meadow River near Russellville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	10	127	47	1,200	920	670	765	2,070	311	202	54	14
2	11	91	58	975	715	540	625	2,070	250	505	64	13
3	11	62	48	625	580	505	625	1,640	226	378	115	12
4	12	47	47	470	505	920	580	1,140	226	298	68	14
5	12	39	45	765	505	920	715	865	286	202	58	26
6	12	34	44	2,150	580	865	715	625	311	337	44	25
7	12	30	70	1,710	580	1,260	625	505	311	975	36	37
8	12	28	180	1,200	540	2,150	505	470	250	765	31	33
9	12	28	250	815	505	2,390	406	470	226	540	29	33
10	13	26	238	540	1,140	3,060	378	670	274	406	33	68
11	15	25	202	438	1,570	2,470	324	1,570	364	250	32	250
12	16	26	715	406	1,200	1,570	286	1,260	438	191	28	238
13	17	28	920	364	1,030	1,140	262	975	378	169	23	158
14	20	32	580	324	920	1,260	2,550	670	505	286	22	88
15	34	32	438	1,200	865	1,200	2,550	470	580	238	29	59
16	37	30	337	1,990	1,640	920	1,640	378	505	169	214	46
17	28	30	250	1,780	1,850	715	1,080	324	378	125	505	42
18	28	35	298	1,440	1,320	540	715	274	406	97	337	46
19	26	34	580	1,080	1,030	438	505	226	350	115	202	71
20	24	44	580	815	1,080	406	438	202	262	100	129	54
21	23	129	438	765	1,080	378	406	202	214	88	80	38
22	22	138	364	815	1,440	505	865	274	191	73	56	32
23	20	111	337	815	1,380	540	1,570	324	158	73	40	29
24	20	91	286	865	1,260	580	1,710	286	180	97	35	33
25	19	73	274	715	1,380	1,140	1,320	238	202	127	28	148
26	19	62	438	625	1,200	1,990	975	364	180	44	23	86
27	19	57	438	580	1,030	1,920	715	765	136	73	22	62
28	19	53	406	505	865	2,550	625	815	118	70	21	48
29	37	51	406	470	-------	2,150	580	765	102	59	19	43
30	47	47	470	438	-------	1,500	765	540	131	61	17	23
31	158	-------	1,260	920	-------	1,030	-------	406	-------	54	16	-------
1909–10.												
1	25	89	85	106	600	2,150	133	580	262	214	67	29
2	24	83	82	143	600	2,150	125	438	262	169	52	73
3	22	75	80	2,200	865	1,710	133	364	238	158	50	180
4	19	72	78	2,150	865	1,260	148	337	226	202	48	138
5	17	62	75	1,500	625	920	337	298	286	180	46	350
6	16	56	67	1,080	700	670	324	274	2,630	250	42	337
7	16	50	67	2,470	700	580	286	238	2,710	350	38	226
8	16	47	86	1,920	765	470	250	274	1,570	438	37	148
9	16	58	109	1,320	670	406	214	470	1,500	262	36	115
10	18	78	94	1,080	625	378	180	670	715	286	33	106
11	27	364	96	1,250	580	350	169	625	1,080	226	27	89
12	88	337	124	1,250	505	324	214	765	1,380	180	28	72
13	214	250	202	1,440	470	324	670	1,140	1,920	226	41	109
14	158	214	815	1,200	438	540	865	865	1,710	286	45	180
15	122	169	815	1,030	406	625	670	625	1,640	274	37	262
16	89	148	715	765	505	505	540	470	2,790	226	79	169
17	75		438	765	2,470	438	470	406	3,510	214	64	106
18	72		470	765	2,630	378	1,030	378	2,390	262	37	65
19	76		505	1,990	2,150	311	1,200	406	1,640	505	35	53
20	58		378	1,570	1,570	262	1,140	378	920	540	40	51
21	52		274	1,780	1,080	274	1,570	438	580	406	31	47
22	50		214	2,470	1,140	262	1,920	505	470	274	42	45
23	57		180	1,640	1,440	250	1,990	580	406	202	57	41
24	99	85	148	1,260	1,200	226	1,990	505	378	180	45	36
25	226		138	765	920	214	1,570	505	350	120	33	40
26	226		129	580	670	191	1,140	505	274	109	30	51
27	214		113	580	540	180	920	438	262	88	28	79
28	191		111	765	715	169	920	378	311	180	23	148
29	148		106	715	-------	158	865	311	337	180	20	138
30	133		100	580	-------	148	715	274	274	127	20	202
31	104	-------	97	505	-------	148	-------	286	-------	88	22	-------

Daily discharge, in second-feet, of Meadow River near Russellville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	202	66	470	2,310	2,880	350	670	378	202	33	10	80
2	158	73	540	2,690	3,390	350	625	406	238	25	9.4	127
3	106	78	920	4,700	1,640	311	865	470	138	20	8.8	75
4	61	86	540	3,420	1,200	298	2,150	470	94	25	8.0	45
5	48	94	406	1,920	975	274	3,600	406	82	58	7.5	28
6	38	96	337	1,200	715	2,070	3,150	337	76	41	7.2	25
7	37	91	286	815	625	2,970	2,230	298	102	116	12	24
8	51	85	286	625	540	2,390	1,710	274	68	75	43	22
9	158	76	286	438	975	1,440	1,920	250	52	58	41	15
10	202	75	262	400	1,200	1,440	1,850	238	40	37	23	13
11	131	73	238	364	1,080	1,710	1,440	214	37	37	28	15
12	92	71	191	337	865	1,440	1,080	169	37	138	28	30
13	71	68	191	670	670	1,140	975	169	66	116	20	36
14	54	66	169	1,380	505	920	920	148	120	71	14	34
15	47	66	158	1,380	438	715	1,570	131	92	44	12	33
16	41	66	148	1,570	337	625	1,710	125	70	28	12	40
17	36	68	131	1,260	298	505	1,380	111	57	24	10	111
18	33	60	129	815	274	470	975	107	57	23	10	83
19	30	53	158	625	311	470	715	100	59	18	14	56
20	28	44	202	505	470	1,380	1,200	89	76	16	14	40
21	26	44	191	540	540	1,320	1,570	80	68	15	13	33
22	33	49	191	1,440	540	975	1,500	70	59	19	10	92
23	48	51	226	1,380	438	815	1,640	64	44	17	8.8	99
24	71	50	364	1,140	410	580	1,260	58	35	19	8.4	89
25	54	88	670	920	378	470	920	59	30	20	7.8	64
26	46	214	580	815	364	406	670	71	28	18	7.6	47
27	40	214	505	1,320	350	470	505	64	54	16	7.4	32
28	57	470	438	1,380	350	670	438	57	56	15	7.2	30
29	67	920	715	1,990	-------	625	378	238	44	15	10	27
30	97	670	3,890	6,880	-------	670	364	180	40	14	14	23
31	79	-------	3,060	4,700	-------	670	-------	100	-------	12	19	-------
1911–12.												
1	22	115	438	920	1,200	975	1,640	1,260	104	262	100	169
2	33	99	378	920	975	715	1,850	920	91	148	85	158
3	80	86	337	765	670	505	2,550	765	79	111	68	118
4	180	76	274	625	580	378	2,070	580	68	148	48	91
5	158	70	262	600	540	364	1,320	438	60	250	44	88
6	158	107	250	580	438	324	920	438	51	324	38	82
7	109	1,440	202	540	406	298	670	815	46	350	33	71
8	191	1,260	180	470	378	298	505	920	38	298	30	59
9	214	865	191	406	311	715	670	815	36	169	28	44
10	180	670	180	337	238	920	540	625	32	226	27	37
11	250	470	180		226	865	470	505	23	202	26	33
12	378	337	191	215	214	975	378	3,060	20	119	25	30
13	298	406	202		214	2,230	350	3,150	18	158	23	29
14	238	438	202		202	2,150	324	2,390	16	109	23	21
15	378	438	191	214	180	4,590	298	1,440	14	169	22	16
16	470	378	226		180	6,040	350	2,880	14	158	21	16
17	378	324	262	225	180	3,330	406	4,810	13	158	19	16
18	2,710	540	364		191	1,850	540	2,880	21	364	17	17
19	1,710	865	350	1,420	238	1,380	625	1,440	47	262	23	18
20	1,030	670	337	870	337	1,200	540	920	89	118	50	17
21	670	505	286	650	1,380	1,500	470	580	102	80	148	16
22	406	406	286	505	1,800	1,500	406	406	62	68	324	16
23	378	350	406		2,230	1,320	540	337	43	52	262	27
24	406	350	865	360	1,380	1,920	580	286	35	44	191	158
25	337	470	920		975	2,630	505	238	28	148	109	262
26	274	470	1,030		1,500	2,230	438	214	50	438	71	238
27	226	438	1,440	215	3,690	1,380	540	180	107	298	53	180
28	191	470	1,440		2,310	1,030	1,200	148	365	202	46	158
29	169	580	1,080	214	1,440	2,550	1,030	148	625	133	104	138
30	148	505	815	1,640	-------	3,240	1,320	138	438	118	214	118
31	124	-------	765	1,500	-------	2,390	-------	118	-------	107	180	-------

Daily discharge, in second-feet, of Meadow River near Russellville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912–13.												
1	107	113	67	1,320	975	1,030	670	470	815	51	30	20
2	88	106	92	975	865	865	505	378	580	41	26	19
3	72	99	134	920	975	505	406	337	438	37	25	16
4	61	88	286	1,200	2,390	580	350	298	580	337	20	14
5	51	72	765	1,200	1,990	470	324	274	1,080	274	18	13
6	42	67	975	1,200	1,320	438	298	238	815	406	19	12
7	37	226	1,080	2,630	865	378	250	337	920	378	16	14
8	34	1,920	865	5,900	865	311	226	311	1,440	202	15	17
9	30	1,260	580	2,710	1,080	286	202	274	1,440	122	14	22
10	28	715	438	1,640	1,080	350	191	238	1,030	106	12	24
11	25	505	350	1,440	1,030	1,080	180	214	625	106	38	28
12	24	378	298	1,200	1,200	1,780	274	191	438	124	52	24
13	24	311	262	1,080	1,640	1,380	580	180	350	102	88	21
14	25	286	214	975	1,640	2,230	580	158	274	76	49	17
15	28	262	214	765	1,500	3,790	3,510	148	214	91	33	15
16	31	226	202	580	1,140	2,710	2,540	148	180	124	33	14
17	37	202	191	505	470	1,640	1,570	378	169	158	30	14
18	34	180	169	438	324	1,080	1,030	580	191	131	28	16
19	53	169	169	406	298	765	715	438	104	118	33	33
20	238	148	148	378	286	540	470	364	82	765	36	46
21	226	138	133	438	311	470	406	1,200	71	580	25	88
22	180	131	107	505	406	406	350	1,080	71	406	65	540
23	226	125	102	505	470	337	311	1,200	76	202	202	298
24	406	120	96	765	505	311	274	3,400	75	148	238	180
25	438	118	98	1,260	438	298	250	1,710	71	134	124	88
26	337	115	100	1,200	378	438	238	1,140	120	102	72	73
27	298	106	122	1,080	378	2,390	298	1,990	115	83	49	52
28	191	86	134	1,030	765	4,090	438	3,900	115	64	39	44
29	180	56	131	920	------	2,470	505	2,230	78	51	30	35
30	148	47	378	815	------	1,570	505	1,500	64	44	24	49
31	127	------	1,990	765	------	1,030	------	1,080	------	36	20	------
1913–14.												
1	104	226	1,200	438	1,780	765	1,380	470	33	7.1	9.6	67
2	202	214	2,470	438	1,440	765	1,710	378	30	6.9	9.6	61
3	286	180	1,850	438	1,140	815	1,710	324	28	7.1	8.6	54
4	670	158	1,320	1,080	865	815	1,320	298	25	7.1	8.0	45
5	438	136	975	920	670	815	1,030	324	23	12	7.6	35
6	286	122	715	765	540	765	815	540	37	12	7.2	30
7	202	113	580	625	975	625	625	1,080	35	10	6.8	26
8	148	106	1,080	580	1,260	505	1,030	1,030	33	9.6	6.8	21
9	125	238	920	670	1,030	438	2,310	975	30	9.0	17	18
10	94	406	765	920	865	337	1,710	865	27	12	27	15
11	80	470	670	1,080	670	715	1,140	715	23	9.8	22	14
12	71	438	505	920	505	1,440	865	580	19	8.8	28	17
13	65	765	438		505	1,080	715	505	16	8.0	34	19
14	76	1,140	364		470	1,030	580	438	14	11	31	18
15	61	2,150	337	650	500	1,260	505	337	12	29	26	18
16	54	2,970	324		500	1,920	2,150	274	10	88	23	19
17	52	3,990	298		505	3,330	2,550	250	9.0	82	17	18
18	50	2,310	274	625	670	3,600	1,850	226	8.6	62	14	16
19	51	1,500	262	625	1,140	1,850	1,570	214	9.0	50	12	14
20	113	975	250	670	1,990	1,260	1,710	191	7.9	45	9.0	12
21	286	670	250	3,790	2,070	920	1,570	180	8.2	40	58	10
22	350	505	238	2,710	1,380	765	1,380	148	7.9	33	32	9.6
23	311	364	238	1,710	1,320	975	1,140	129	9.8	27	14	10
24	378	311	226	1,260	1,140	670	865	116	9.8	20	12	14
25	1,200	262	274	3,240	1,030	1,030	625	102	8.6	15	39	12
26	2,390	238	670	2,150	865	2,150	540	89	7.9	12	61	9.9
27	1,710	214	670	1,570	815	3,240	920	80	7.6	12	138	8.9
28	1,080	298	670	1,500	765	2,790	975	70	7.3	9.8	148	7.7
29	625	1,320	540	1,380	------	2,470	765	57	7.3	9.2	111	7.4
30	337	1,030	505	1,320	------	1,850	580	46	7.1	8.8	86	7.2
31	262	------	470	1,780	------	1,440	------	38	------	9.6	75	------

Daily discharge, in second-feet, of Meadow River near Russellville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	7.0	37	57	1,080	1,640	580	214	1,570	274	21	19	25
2	6.8	37	180	865	6,040	505	214	1,140	324	37	22	22
3	6.6	34	406	670	6,880	406	202	920	337	56	27	20
4	6.5	33	625	505	3,790	350	202	815	324	73		25
5	6.8	31	1,850	378	2,150	337	202	975	274	66		337
6	7.5	30	2,310	364	1,710	324	202	865	226	59		337
7	7.4	28	1,780	6,760	1,500	364	202	765	191	52		298
8	7.2	27	1,030	5,580	1,320	378	202	540	288	56		214
9	7.1	25	765	2,470	1,080	364	226	438	202	202	18	134
10	7.4	24	765	1,440	865	350	226	406	158	180		97
11	8.4	23	765	1,140	765	470	226	364	120	148		51
12	8.4	22	715	1,030	580	505	286	337	113	118		40
13	8.8	20	650	920	470	470	311	311	116	83		34
14	11	20	580	670	406	438	311	298	109	64		30
15	20	23	540	865	1,320	438	286	262	540	49	42	24
16	43	25	350	865	1,990	470	274	238	470	64	35	23
17	138	61	238	2,150	1,570	505	262	226	406	57	25	22
18	169	102	169	3,890	1,320	505	250	202	324	61	48	21
19	148	92	214	5,580	1,030	470	250	180	250	56	46	20
20	102	75	505	4,490	765	470	238	158	191	66	42	23
21	72	66	975	2,070	540	505	214	148	148	125	37	40
22	60	58	1,380	1,260	378	406	202	122	109	109	31	80
23	51	52	1,140	1,030	337	350	191	109	80	68	26	102
24	45	49	865	765	350	311	324	106	70	54	22	70
25	41	48	715	765	670	274	438	99	58	46	22	53
26	41	47	505	670	1,080	262	438	99	49	43	20	49
27	58	45	505	580	865	274	406	106	41	39	18	72
28	71	44	438	540	625	274	815	99	35	35	17	133
29	54	41	406	580	-------	250	2,390	92	29	30	17	120
30	46	41	1,320	670	-------	226	1,990	180	24	26	18	99
31	39	-------	1,500	1,160	-------	214	-------	214	-------	22	28	-------
1915–16.												
1	1,780	50	311	1,500	1,780	865	1,380	438	580		238	78
2	3,150	48	298	1,440	1,990	670	1,180	406	540		670	70
3	1,780	46	274	1,080	1,710	580	975	378	540		1,320	67
4	1,260	44	262	765	1,380	505	670	406	580	125	1,200	60
5	625	42	250	670	1,140	505	505	438	540		1,920	56
6	470	40	226	580	975	1,140	438	406	540		1,640	49
7	365	39	202	670	815	3,690	378	378	540	60	1,260	45
8	214	38	180	715	670	3,330	378	324	540	57	1,140	45
9	148	37	158	670	865	2,550	378	274	540	54	2,470	62
10	120	35	148	625	975	1,640	438	226	580	79	1,990	70
11	102	35	136	1,500	920	1,200	1,380	202	580	75	1,640	61
12	92	33	134	2,970	920	975	2,880	169	540	274	1,440	58
13	85	39	125	2,880	865	715	3,060	158	470	262	1,200	56
14	72	42	122	2,390	865	580	2,470	148	438	238	975	59
15	61	286	118	1,380	815	815	1,320	148	580	226	865	298
16	56	540	120	1,030	715	975	920	138	1,140	250	625	286
17	54	540	505	815	625	815	765	148	1,260	765	2,150	262
18	51	540	3,330	1,200	580	715	670	148	1,140	715	1,380	238
19	58	815	2,710	920	540	625	470	138	1,030	580	1,080	169
20	125	975	1,440	840	540	540	378	136	865	470	920	109
21	113	865	1,200	765	540	505	324	124	715	438	580	78
22	94	670	975	952	540	975	311	113	580	865	438	61
23	80	540	715	1,140	625	1,320	298	214	409	1,380	815	59
24	75	470	540	975	1,030	1,200	262	670	324	1,200	580	56
25	71	406	505	765	3,330	975	350	670	298	580	378	53
26	67	378	865	625	3,150	815	580	580	438	378	262	47
27	64	350	765	505	2,230	865	625	540	324	324	214	39
28	58	337	765	438	1,570	2,630	625	505	262	378	158	39
29	54	324	2,550	406	1,030	2,710	580	470	214	350	131	54
30	53	311	4,920	1,030	-------	2,310	505	540	148	311	109	49
31	51	-------	2,880	1,030	-------	1,780	-------	670	-------	286		-------

NOTE.—Daily discharge estimated, because of ice or missing gage readings, from observer's notes, climatic data, or by comparison with flow at other stations as follows: Nov. 17–30, Dec. 26–31, 1909; Jan. 3, 11–12, Feb. 1–2, 6–7, Dec. 8, 1910; Jan. 10, Feb. 24, Dec. 5, 1911; Jan. 5, 11–14, 16–21, 23–28, Feb. 22, Dec. 25, 1912; Jan. 8, Feb. 8, 9, Apr. 16, May 24, 28, Aug. 11, 12, Sept. 28, Nov. 15–17, 1913; Jan. 13–17, Feb. 15–16, Mar. 2, Dec. 13–18, 26, 1914; Jan. 31, Apr. 1, Aug. 4–14, 1915; Jan. 9, 18–20, 22, Apr. 2, July 1–6, 1916. Braced figures show mean discharge for period.

Monthly discharge of Meadow River near Russellville, W. Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 297 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
July 19–31	765	133	275	0.926	0.45
August	470	44	121	.407	.47
September	47	11	20.2	.068	.08
1908–9.					
October	158	10	24.7	.083	.10
November	138	25	54.7	.184	.21
December	1,260	44	356	1.20	1.38
January	2,150	324	897	3.02	3.48
February	1,850	505	1,030	3.47	3.61
March	3,060	378	1,230	4.14	4.77
April	2,550	262	861	2.90	3.24
May	2,070	202	705	2.37	2.73
June	580	102	282	.949	1.06
July	975	44	231	.778	.90
August	505	16	77.7	.262	.30
September	250	12	62.3	.210	.23
The year	3,060	10	482	1.62	22.01
1909–10.					
October	226	16	86.1	.290	.33
November	364	47	111	.374	.42
December	815	67	226	.761	.88
January	2,470	106	1,210	4.07	4.69
February	2,630	406	944	3.18	3.31
March	2,150	148	547	1.84	2.12
April	1,990	125	757	2.55	2.84
May	1,140	238	475	1.60	1.84
June	3,510	226	1,100	3.70	4.13
July	540	88	239	.805	.93
August	79	20	39.8	.134	.15
September	350	29	123	.414	.46
The year	3,510	16	484	1.63	22.10
1910–11.					
October	202	26	72.3	.243	.28
November	920	44	141	.475	.53
December	3,890	129	544	1.83	2.11
January	6,880	337	1,640	5.52	6.36
February	2,880	274	777	2.62	2.73
March	2,970	274	934	3.14	3.62
April	3,600	364	1,330	4.48	5.00
May	470	57	191	.643	.74
June	238	28	74.0	.249	.28
July	138	12	38.2	.129	.15
August	43	7.2	14.4	.048	.06
September	127	13	48.9	.165	.18
The year	6,880	7.2	483	1.63	22.04
1911–12.					
October	2,710	22	403	1.36	1.57
November	1,440	70	473	1.59	1.77
December	1,440	180	469	1.58	1.82
January	1,640	----------	530	1.78	2.05
February	3,690	180	848	2.86	3.08
March	6,040	298	1,670	5.62	6.48
April	2,550	298	802	2.70	3.01
May	4,810	118	1,090	3.67	4.23
June	865	13	108	.364	.41
July	438	44	189	.636	.73
August	324	17	79.1	.266	.31
September	262	16	81.4	.274	.31
The year	6,040	13	563	1.90	25.77

Monthly discharge of Meadow River near Russellville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1912–13.					
October	438	24	123	0.414	0.48
November	1,920	47	279	.939	1.05
December	1,990	67	351	1.18	1.36
January	5,900	378	1,190	4.01	4.62
February	2,390	286	914	3.08	3.21
March	4,090	286	1,160	3.91	4.51
April	3,510	180	615	2.07	2.31
May	3,900	148	851	2.87	3.31
June	1,440	64	421	1.42	1.58
July	765	36	181	.609	.70
August	238	12	48.5	.163	.19
September	540	12	61.5	.207	.23
The year	5,900	12	515	1.73	23.55
1913–14.					
October	2,390	50	392	1.32	1.52
November	3,990	106	794	2.67	2.98
December	2,470	226	656	2.21	2.55
January	3,790	438	1,180	3.97	4.58
February	2,070	470	979	3.30	3.44
March	3,600	337	1,370	4.61	5.32
April	2,550	505	1,220	4.11	4.59
May	1,080	38	357	1.20	1.38
June	37	7.1	17.0	.057	.06
July	88	6.9	22.0	.074	.09
August	148	6.8	35.4	.119	.14
September	67	7.2	21.1	.071	.08
The year	3,990	6.8	584	1.97	26.73
1914–15.					
October	169	6.5	42.1	.142	.16
November	102	20	42.0	.141	.16
December	2,310	57	782	2.63	3.03
January	6,760	364	1,670	5.62	6.48
February	6,880	337	1,500	5.05	5.26
March	580	214	389	1.31	1.51
April	2,390	191	406	1.37	1.53
May	1,570	92	399	1.34	1.54
June	540	24	194	.653	.73
July	202	21	69.8	.235	.27
August	48	17	24.5	.082	.09
September	337	20	87.2	.294	.33
The year	6,880	6.5	462	1.56	21.09
1915–16					
October	3,150	51	369	1.24	1.43
November	975	33	297	1.00	1.12
December	4,920	118	894	3.01	3.47
January	2,970	406	1,070	3.60	4.15
February	3,330	540	1,160	3.91	4.22
March	3,690	505	1,270	4.28	4.93
April	3,060	262	850	2.86	3.19
May	670	113	332	1.12	1.29
June	1,260	148	576	1.94	2.16
July	1,380	54	366	1.23	1.42
August	2,470	89	964	3.25	3.75
September	298	39	91.1	.307	.34
The year	4,920	33	688	2.32	31.47

ELK RIVER AT WEBSTER SPRINGS, W. VA.

LOCATION.—At suspension bridge on grounds of Webster Springs Hotel at Webster Springs, Webster County, one-fourth mile above mouth of Back Fork Creek.

DRAINAGE AREA.—168 square miles.

RECORDS AVAILABLE.—July 1, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Vertical staff attached to right abutment of bridge; read by Cherry Woodzell.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of gravel and small boulders with a riffle about 400 feet below gage. There is one channel at the gage but a wooded island divides the stream about 200 feet below the gage at medium and high stages. Control practically permanent.

EXTREMES OF STAGE.—1908–1916: Maximum stage recorded, 11.00 feet at midnight January 29, 1911 (discharge, about 17,300 second-feet); minimum stage, 1.30 feet afternoon reading August 25, 1911 (discharge, 4 second-feet).

ICE.—Stage-discharge relation sometimes affected by ice.

ACCURACY.—Stage-discharge relation practically permanent; see footnote to table of daily discharge for effect of ice. Rating curve well defined between 17 and 2,000 second-feet, fairly well defined between 2,000 and 5,000 second-feet, and an extension above and below those limits. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. See footnote to table of daily discharge for special estimates. Records excellent.

Discharge measurements of Elk River at Webster Springs, W. Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1911.		*Feet.*	*Sec.-ft.*
July 27	W. G. Hoyt	3.90	1,227	Oct. 26,	C. T. Bailey	2.62	218
1909.				1913.			
Mar. 25	H. J. Jackson	3.72	957	Dec. 3	Peterson and Walters	3.26	610
25	do	3.82	1,150	3	do	3.24	604
26	do	3.44	743				
26	do	3.52	830	1914.			
Nov. 11	A. H. Horton	3.52	800	Nov. 19	Mathers and Morgan	2.05	62.9
11	do	3.50	767	19	do	2.05	64.5
				1916.			
1910.				Sept. 6	B. E. Jones	1.71	22.3
Aug. 13	Bailey and Dort	2.00	65.8	6	do	1.69	23.8

Daily discharge, in second-feet, of Elk River at Webster Springs, W. Va., for the years ending Sept. 30, 1908–1916.

Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.	Day.	July.	Aug	Sept.
1908.				1908.				1908.			
1	53	160	30	11	94	169	12	21	53	24	26
2	196	120	28	12	75	130	11	22	620	25	24
3	71	90	23	13	94	98	8.0	23	327	44	17
4	1,110	71	20	14	82	64	8.0	24	2,950	43	12
5	585	61	20	15	138	60	10	25	945	33	12
6	585	160	18	16	94	46	9.6	26	840	78	8.4
7	420	203	17	17	64	39	7.6	27	1,230	175	8.0
8	280	116	16	18	58	35	7.2	28	1,540	120	8.4
8	181	148	17	19	71	34	6.4	29	660	70	8.8
10	130	305	17	20	53	29	6.0	30	349	47	8.8
								31	232	34	

Daily discharge, in second-feet, of Elk River at Webster Springs, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	18	32	14	485		485	372	1,110	64	232	332	18
2	14	23	17	295	200	420	462	1,000	61	160	360	15
3	12	17	24	210		550	518	660	120	109	116	13
4	10	23	24	145		700	620	585	109	75	86	16
5	8.8	14	20	485	255	550	1,110	485	246	61	61	20
6	8.0	14	17	1,000	420	518	1,170	390	172	60	55	23
7	7.6	12	24	660	518	660	790	300	140	78	44	20
8	6.4	10	130	390	390	1,230	550	295	102	61	42	17
9	6.0	8.0	98	316	332	1,110	390	265	98	46	35	15
10	6.0	8.0	61	255	1,170	1,890	316	485	120	37	28	16
11	8.0	10	61	232	1,110	1,110	255	745	172	26	23	18
12	10	10	390	232	620	700	255	518	132	26	18	23
13	8.8	10	332	210	620	585	280	372	98	120	18	21
14	8.4	10	175	255	1,060	840	4,190	265	109	145	17	17
15	8.4	12	109	2,380	1,230	660	1,470	227	332	118	34	14
16	8.0	12	78	1,470	1,670	485	890	188	620	94	518	109
17	8.0	11	78	1,000	1,230	390	550	163	295	75	390	125
18	8.0	10	332	660	840	305	390	145	452	61	192	70
19	8.0	10	550	452	620	255	316	120	332	78	44	50
20	8.0	10	332	372	1,290	246	280	109	232	61	26	38
21	7.6	24	210	390	945	246	745	116	160	44	26	23
22	7.2	20	145	420	1,170	349	1,740	360	120	29	18	19
23	7.2	17	140	360	840	305	1,600	181	151	34	60	21
24	7.2	17	120	360	745	305	1,410	157	255	265	50	255
25	7.2	17	132	349	1,000	700	790	125	295	132	39	120
26	16	16	160	316	700	790	620	120	192	88	33	70
27	23	16	145	265	620	660	518	145	151	58	28	50
28	17	16	142	210	550	1,060	1,000	130	118	55	24	39
29	20	14	130	192		790	790	116	98	61	23	33
30	16	14	142	210		620	745	102	332	452	21	28
31	32		620	175		485		82		485	20	
1909–10.												
1	23	116	122	192	219	1,820	111	265	332	145	125	24
2	19	116	120	945	210	1,290	107	219	840	125	88	175
3	16	120	116	3,560	255	1,000	107	181	700	116	64	125
4	15	111	109	1,970	420	745	113	169	620	280	145	175
5	14	96	98	1,230	372	585	160	151	1,290	485	169	219
6	13	88	98	745	316	550	175	130	2,560	349	120	275
7	13	98	94	3,150	305	585	181	120	2,050	349	82	280
8	12	82	98	1,170	265	485	188	107	700	485	64	219
9	12	390	98	660	295	349	178	210	485	354	58	175
10	11	1,110	98	620	420	255	172	219	790	280	50	169
11	16	790	98	550		219	157	203	1,230	192	46	132
12	840	518	98	485		210	160	1,540	1,230	140	37	102
13	332	390	125	390	250	203	485	1,170	1,230	485	70	305
14	132	265	1,600	452		192	408	620	1,230	420	51	295
15	109	219	745	332		175	360	420	1,000	360	37	192
16	175	160	550	246	550	160	280	360	5,780	316	28	132
17	142	145	390	210	1,820	160	255	280	3,350	265	23	118
18	132	142	192	620	2,560	145	360	265	1,350	210	21	88
19	210	132	116	2,210	1,290	145	420	280	1,670	178	21	60
20	206	118	109	1,470	945	145	408	237	1,000	163	24	58
21	169	116	109	1,740	660	151	518	237	1,110	125	23	57
22	140	109	109	1,600	1,410	175	620	305	1,110	102	23	50
23	145	232	109	790	1,110	157	890	316	700	82	23	37
24	585	332	109	585	745	145	1,470	255	408	109	33	32
25	452	265	175	390	585	142	1,170	255	349	109	32	55
26	349	219	182	620	452	135	790	305	265	50	26	188
27	255	182	175	305	332	122	585	265	210	78	21	246
28	219	151	175	408	550	120	485	219	349	160	20	192
29	181	145	175	360		120	420	181	280	132	18	140
30	169	135	175	316		120	332	203	203	192	23	122
31	140		175	265		116		255		160	19	

Daily discharge, in second-feet, of Elk River at Webster Springs, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	102	94	372	1,470	1,350	420	372	210	68	71	16	232
2	82	107	316	3,350	1,230	372	344	265	57	58	18	132
3	64	135	265	3,350	840	295	452	219	42	50	16	78
4	53	130	219	1,890	745	255	1,060	203	32	48	14	50
5	44	109	182	1,060	550	232	3,350	175	54	44	12	37
6	34	94	210	620	420	1,410	1,740	163	75	37	12	33
7	34	82	182	452	372	1,670	1,230	151	71	44	34	30
8	44	86	175	349	349	1,060	890	135	75	39	30	28
9	86	71	169	305	295	700	1,670	120	64	47	78	25
10	116	64	145	232	232	1,000	1,000	120	50	37	47	160
11	98	61	145	175	414	1,110	660	113	37	34	26	280
12	70	61	135	452	372	745	518	102	125	37	18	452
13	54	61	94	4,630	316	1,230	408	90	255	42	13	390
14	42	58	75	2,560	246	1,170	660	80	145	35	12	132
15	37	61	61	2,750	203	945	1,600	71	109	26	12	98
16	31	61	70	2,210	189	790	1,000	63	75	18	12	700
17	30	61	58	660	175	585	660	61	60	17	12	620
18	28	57	70	700	169	485	518	61	82	16	12	390
19	25	54	175	485	182	660	420	60	255	16	12	203
20	24	53	360	360	203	1,740	1,970	61	210	15	11	151
21	23	50	360	420	182	1,000	1,230	55	132	13	8.8	109
22	47	47	360	1,410	172	700	1,000	48	88	20	8.0	175
23	125	44	360	1,000	160	1,110	1,060	47	64	24	7.2	160
24	94	58	890	700	169	745	790	46	102	26	6.4	109
25	64	109	790	518	175	550	660	44	120	23	4.4	102
26	60	255	332	2,210	203	408	550	39	100	20	7.2	116
27	70	250	452	2,210	349	790	452	33	116	18	29	94
28	151	316	109	2,560	485	550	390	28	203	14	34	88
29	151	660	890	2,050	-------	420	316	25	140	12	32	280
30	116	452	3,980	8,360	-------	485	246	24	102	12	169	372
31	98	-------	1,600	1,890	-------	420	-------	24	-------	12	305	-------
1911–12.												
1	210	120	408	1,350	585	360	790	255	61	166	485	88
2	485	102	332	790	452	305	1,000	246	53	145	402	73
3	790	90	265	550	372	285	1,230	242	55	120	280	73
4	550	86	246	452	360	246	1,000	210	58	246	181	73
5	620	80	203			210	745	196	57	620	148	63
6	360	160	189			186	585	172	50	378	118	60
7	890	1,670	175			175	518	518	50	224	96	60
8	2,210	890	157			175	660	790	43	140	70	46
9	1,000	518	175			349	518	700	34	120	64	35
10	585	390	196			414	408	485	31	140	63	30
11	660	280	210	225		322	322	349	24	338	70	23
12	745	280	210		270	295	255	4,190	17	305	118	22
13	518	420	210			745	210	2,210	16	196	92	19
14	420	420	210			790	175	1,230	16	378	66	18
15	1,350	372	210			4,410	169	890	16	408	57	16
16	1,110	305	332			3,770	790	3,770	107	378	55	18
17	790	305	518			1,470	700	2,050	270	305	46	31
18	3,770	390	420			1,000	745	1,350	169	1,540	50	33
19	1,600	890	396	1,350		840	585	890	295	1,600	125	33
20	790	585	349	945		1,600	452	620	378	745	265	33
21	518	408	316	620	790	1,820	338	452	246	452	206	35
22	372	332	265	485	1,670	1,470	295	322	169	1,820	151	31
23	390	265	790	295	840	1,110	790	224	151	945	118	57
24	332	295	790	265	550	1,820	518	154	128	550	96	452
25	295	420	700	228	390	2,210	408	111	120	2,560	73	452
26	246	420	700	203	2,560	1,230	344	102	140	1,350	57	316
27	196	420	1,170	192	3,770	840	295	96	237	745	70	219
28	178	420	945	182	1,410	550	295	94	378	452	82	172
29	163	485	585	585	745	1,470	265	92	270	372	60	138
30	140	485	485	1,820	-------	2,210	275	86	186	452	154	160
31	120	-------	485	890	-------	1,230	-------	71	-------	402	122	-------

Daily discharge, in second-feet, of Elk River at Webster Springs, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912–13.												
1	125	71	55	1,060	620	700	452	420	1,350	64	42	37
2	96	82	71	660	485	550	402	344	745	53	68	30
3	76	73	178	745	585	420	344	280	485	39	55	27
4	63	64	214	890	1,670	354	290	224	354	50	37	23
5	57	55	366	840	1,000	290	280	178	250	53	29	20
6	54	55	518	1,410	660	260	260	157	206	660	23	18
7	51	1,170	585	3,560	485	224	237	145	420	316	20	20
8	42	1,890	452	4,630	360	186	206	138	840	151	20	29
9	38	890	366	2,560	280	172	178	113	700	96	19	75
10	32	518	275	1,290	224	224	166	100	485	5,780	18	44
11	29	327	242	890	585	840	163	96	316	1,000	23	29
12	27	246	203	1,060	1,000	1,060	452	86	219	485	68	24
13	25	203	148	1,170	620	790	890	76	172	316	354	26
14	26	196	135	790	452	2,380	745	68	135	196	300	23
15	23	169	132	585	360	1,670	3,150	71	111	188	157	20
16	22	140	116	452	270	1,170	1,600	96	90	227	86	17
17	22	132	107	332	232	745	1,000	157	71	196	64	29
18	20	120	102	327	200	518	660	354	58	172	50	148
19	25	111	111	310	178	402	518	250	54	157	102	75
20	113	109	109	295	186	322	420	172	47	154	227	54
21	82	100	102	408	224	280	344	135	42	135	151	485
22	50	90	100	452	154	242	290	142	32	107	111	585
23	64	90	90	396	186	200	224	338	46	82	1,110	332
24	280	90	82	518	332	192	186	2,050	53	82	518	154
25	219	90	68	1,060	305	160	166	945	53	130	295	100
26	172	88	55	790	232	390	166	550	68	130	154	80
27	140	86	178	620	332	5,090	305	2,950	68	86	107	58
28	116	68	196	518	700	2,210	402	3,770	55	71	88	50
29	98	55	214	384	-------	1,170	518	1,670	86	58	70	43
30	88	55	1,230	327	-------	745	550	945	71	54	54	38
31	78	-------	1,820	518	-------	585	-------	3,560	-------	53	43	-------
1913–14.												
1	44	250	745	265	1,350		1,170	372	22	50	21	50
2	51	178	660	242	790		3,770	316	21	37	18	37
3	169	157	550	228	585	220	2,050	265	18	89	13	34
4	203	132	485	203	452		1,110	219	17	35	12	26
5	169	118	390	182	408		745	390	40	109	12	18
6	116	100	305	169	452	210	550	1,740	50	102	12	16
7	84	100	485	160	620	196	390	890	37	54	16	15
8	76	270	840	163	620	145	1,350	660	28	37	15	14
9	105	660	620	408	518	145	1,110	485	23	26	14	12
10	420	620	452	1,060	390	145	945	390	18	21	26	12
11	332	485	366	700	316	175	660	305	16	19	26	12
12	280	485	310	485	255	175	485	203	109	17	47	16
13	203	890	265	420	206	172	372	203	88	14	116	17
14	160	3,770	210	370		160	316	169	42	29	88	23
15	132	5,320	196	320		219	485	152	30	96	46	20
16	109	6,700	182	270	210	1,000	1,670	125	23	140	37	18
17	92	3,150	175	210		1,890	1,410	118	18	109	26	14
18	116	1,410	175	214		1,540	890	107	16	82	20	13
19	246	790	175	206	2,560	890	585	96	14	76	16	12
20	585	585	175	550	2,750	620	1,290	84	14	54	13	13
21	1,060	420	169	3,350	620	414	1,350	73	23	37	13	13
22	660	310	186	1,410	700	378	790	64	34	34	14	10
23	88	242	196	790	585	316	585	61	169	26	14	8.8
24	620	224	196	700	452	354	420	58	316	20	12	9.6
25	1,670	186	322	2,210	349	790	349	53	1,740	23	15	12
26	2,560	154	1,410	1,110	295	1,820	660	44	452	34	29	12
27	1,230	169	790	790	246	2,950	2,210	37	219	88	78	12
28	700	280	518	620	232	3,350	890	34	132	68	82	11
29	485	550	390	790	-------	2,210	620	32	88	37	75	11
30	332	408	349	1,000	-------	1,600	452	28	64	37	80	10
31	280	-------	316	1,970	-------	1,470	-------	24	-------	26	68	-------

Daily discharge, in second-feet, of Elk River at Webster Springs, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	8.8	60	32	585	1,820	295	203	420	660	54	98	94
2	8.4	53	255	485	5,550	265	196	280	518	75	70	71
3	7.6	47	316	316	3,770	219	182	227	1,600	66	61	61
4	8.0	44	280	210	1,740	182	182	203	1,540	58	88	82
5	8.0	35	660	175	1,110	192	178	172	945	94	68	132
6	8.0	30	700	169	890	265	210	151	550	160	50	169
7	8.0	28	390	6,470	745	265	790	145	390	116	37	169
8	8.8	24	310	1,890	550	203	700	128	305	98	34	132
9	12	24	290	945	408	175	620	120	246	120	37	88
10	12	24	255	585	338	203	585	102	163	98	47	68
11	17	24	228	452	285	219	550	82	130	75	35	61
12	18	23	189	550	255	228	550	78	116	64	37	55
13	16	20	154	452	316	203	485	76	102	71	518	50
14	17	18	130	372	585	203	390	68	2,560	64	255	50
15	20	18	98	485	1,540	246	316	60	1,060	50	518	61
16	70	21	78	550	1,350	316	265	58	550	44	360	50
17	175	169	78	1,290	790	349	219	58	452	60	265	37
18	109	140	71	4,190	550	295	189	55	840	550	232	44
19	71	68	82	3,770	390	228	163	54	390	265	192	485
20	55	61	1,110	1,740	300	203	169	58	255	210	135	255
21	42	61	945	890	250	182	169	109	169	890	109	360
22	32	53	1,410	550	219	163	142	160	148	420	151	145
23	26	47	700	420	206	148	128	255	130	255	219	196
24	31	40	452	550	420	140	120	232	96	169	169	125
25	70	35	332	585	890	140	116	182	80	132	151	86
26	116	28	232	485	620	280	107	182	64	102	120	64
27	94	24	210	408	420	349	100	305	58	80	82	63
28	70	24	203	332	384	295	219	232	51	64	75	64
29	50	24	332	265	-------	285	1,000	182	39	53	120	61
30	47	28	1,740	255	-------	255	620	790	34	55	145	58
31	58	-------	1,060	305	-------	219	-------	1,170	-------	109	125	-------
1915–16.												
1	242	57	206	890	1,410	290	485	420	390	76	43	31
2	1,740	57	172	2,560	1,170	344	390	332	265	70	745	33
3	945	57	160	1,230	840	390	332	265	372	265	344	37
4	518	57	138	745	402	305	285	354	420	316	166	43
5	332	55	118	518	390	142	260	390	402	182	219	31
6	250	55	113	585	344	344	242	316	485	113	219	26
7	172	54	113	485	1,000	3,150	206	290	414	82	265	31
8	148	51	109	402	660	2,560	200	275	452	73	232	57
9	128	51	113	280	550	1,110	200	420	402	64	344	57
10	116	43	113	300	485	700	192	402	390	70	660	50
11	105	43	113	3,980	402	485	354	316	332	102	452	31
12	88	43	113	2,560	402	372	890	237	265	70	1,350	18
13	73	96	113	2,210	1,820	344	1,060	192	166	70	585	16
14	63	125	113	1,470	790	1,290	745	163	138	73	660	26
15	57	1,350	113	840	620	2,560	620	148	182	60	945	4,410
16	57	890	109	550	420	1,350	485	138	242	43	890	1,470
17	57	485	1,230	518	354	585	420	316	1,000	113	945	890
18	54	354	6,700	390	300	585	420	265	452	265	485	485
19	890	402	2,050	402	250	485	354	214	290	182	316	57
20	585	151	945	420	232	372	300	186	265	102	219	57
21	390	585	585	518	372	344	250	148	332	242	151	57
22	232	518	420	700	402	1,060	316	125	265	166	125	50
23	178	402	316	1,170	408	1,970	414	128	182	344	151	57
24	160	316	237	790	452	1,060	354	660	142	219	166	57
25	132	232	232	585	1,410	745	790	372	485	151	82	50
26	113	172	550	420	945	620	1,230	890	485	113	70	26
27	102	265	420	344	660	585	1,110	790	316	92	57	16
28	94	280	518	300	452	790	890	452	192	125	70	16
29	84	242	2,950	344	372	1,000	700	316	138	92	57	485
30	75	232	2,210	890	-------	790	550	518	102	64	43	840
31	63	-------	1,110	1,060	-------	550	-------	550	-------	57	37	-------

NOTE.—Daily discharge estimated because of ice or missing gage readings from observer's notes, climatic data, or by comparison with flow at other stations as follows: Feb. 1–4, 1909; Feb. 11–15, Dec. 13–22, 1910; Jan. 5–18, Feb. 5–20, 1912; Jan. 14–16, Feb. 14–18, Mar. 1–5, Dec. 15–19, 26–28, 1914; Jan. 18–21, 1916. Braced figures show mean for the period.

Monthly discharge of Elk River at Webster Springs, W. Va., for the years ending Sept. 30, 1908–1916.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
July	2,950	53	457	2.72	3.14
August	305	24	91.3	.543	.63
September	30	6.0	14.2	.084	.09
1908–9.					
October	32	6.0	11.0	.066	.08
November	32	8.0	14.6	.087	.10
December	620	14	160	.952	1.10
January	2,380	145	476	2.83	3.26
February	1,670	255	741	4.41	4.59
March	1,890	246	645	3.84	4.43
April	4,190	255	837	4.98	5.56
May	1,110	82	325	1.93	2.22
June	620	61	196	1.17	1.30
July	485	26	111	.661	.76
August	518	17	89.7	.534	.62
September	255	13	43.7	.260	.29
The year	4,190	6.0	301	1.79	24.31
1909–10.					
October	840	11	169	1.01	1.16
November	1,110	82	236	1.40	1.56
December	1,600	94	217	1.29	1.49
January	3,560	192	922	5.49	6.33
February	2,560	210	619	3.68	3.83
March	1,820	116	352	2.10	2.42
April	1,470	107	402	2.39	2.67
May	1,540	107	321	1.91	2.20
June	5,780	203	1,150	6.85	7.64
July	485	50	226	1.35	1.56
August	169	18	51.1	.304	.35
September	305	24	148	.881	.98
The year	5,780	11	398	2.37	32.19
1910–11.					
October	151	23	67.6	.402	.46
November	660	44	127	.756	.84
December	3,980	58	439	2.61	3.01
January	8,360	175	1,660	9.88	11.39
February	1,350	160	384	2.29	2.38
March	1,740	232	776	4.62	5.33
April	3,350	246	907	5.40	6.02
May	265	24	94.7	.564	.65
June	255	32	104	.619	.69
July	71	12	29.8	.177	.20
August	305	4.4	33.2	.198	.23
September	700	25	194	1.15	1.28
The year	8,360	4.4	402	2.39	32.48
1911–12.					
October	3,770	120	723	4.30	4.96
November	1,670	80	410	2.44	2.72
December	1,170	157	408	2.43	2.80
January	1,820	----------	463	2.76	3.18
February	3,770	----------	649	3.86	4.16
March	4,410	175	1,090	6.49	7.48
April	1,230	169	523	3.11	3.47
May	4,190	71	747	4.45	5.13
June	378	16	128	.762	.85
July	2,560	120	600	3.57	4.12
August	485	46	130	.774	.89
September	452	16	96.0	.571	.64
The year	4,410	16	499	2.97	40.40

Monthly discharge of Elk River at Webster Springs, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1912–13.					
October	280	20	75.9	0.452	0.52
November	1,890	55	248	1.48	1.65
December	1,820	55	278	1.65	1.90
January	4,630	295	963	5.73	6.61
February	1,670	154	461	2.74	2.85
March	5,090	160	792	4.71	5.43
April	3,150	163	519	3.09	3.45
May	3,770	68	664	3.95	4.55
June	1,350	32	256	1.52	1.70
July	5,780	39	366	2.18	2.51
August	1,110	18	144	.857	.99
September	585	17	89.8	.535	.60
The year	5,780	17	406	2.42	32.76
1913–14.					
October	2,560	44	432	2.57	2.96
November	6,700	100	970	5.77	6.44
December	1,410	169	407	2.42	2.79
January	3,350	160	696	4.14	4.77
February	2,750	206	600	3.57	3.72
March	3,350	145	788	4.69	5.41
April	3,770	316	989	5.89	6.57
May	1,740	24	252	1.50	1.73
June	1,740	14	129	.768	.86
July	140	14	50.8	.302	.35
August	116	12	34.6	.206	.24
September	50	8.8	16.7	.099	.11
The year	6,700	8.8	445	2.65	35.95
1914–15.					
October	175	7.6	41.7	.248	.29
November	169	18	43.2	.257	.29
December	1,740	32	430	2.56	2.95
January	6,470	169	991	5.90	6.80
February	5,550	206	953	5.67	5.90
March	349	140	233	1.39	1.60
April	1,000	100	329	1.96	2.19
May	1,170	54	206	1.23	1.42
June	2,560	34	475	2.83	3.16
July	890	44	152	.905	1.04
August	518	34	148	.881	1.02
September	485	37	114	.679	.76
The year	6,470	7.6	339	2.02	27.42
1915–16.					
October	1,740	54	266	1.58	1.82
November	1,350	43	257	1.53	1.71
December	6,700	109	726	4.32	4.98
January	3,980	280	918	5.46	6.30
February	1,820	232	632	3.76	4.06
March	3,150	142	880	5.24	6.04
April	1,230	192	501	2.98	3.32
May	890	125	342	2.04	2.35
June	1,000	102	332	1.98	2.21
July	344	43	131	.780	.90
August	1,350	37	358	2.13	2.46
September	4,410	16	317	1.89	2.11
The year	6,700	16	472	2.81	38.26

ELK RIVER AT GASSAWAY, W. VA.

LOCATION.—At highway bridge 300 feet above Coal & Coke Railroad bridge in northeastern part of Gassaway, Braxton County, just above mouth of Little Otter Creek.

DRAINAGE AREA.—578 square miles (includes drainage area of Otter Creek).

RECORDS AVAILABLE.—July 1, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage attached to bridge; read by H. A. Hays. From July 1, 1908, to May 5, 1913, gage was at the Coal & Coke Railroad bridge. Sea-level elevation of zero of gage, 796.31 feet.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Probably permanent.

EXTREMES OF STAGE.—1908–1916: Maximum stage recorded, 30.4 feet 11 a. m. January 30, 1911 (discharge, about 28,700 second-feet); minimum stage, 1.04 feet August 24, 25, 1911 (discharge, 11 second-feet).

ICE.—Stage-discharge relation is apparently but little affected by ice. Gage reader made practically no notes during entire record in regard to ice.

ACCURACY.—Stage-discharge relation probably permanent. Discharge measurements at this station plot inconsistently, some of them because they were made during rapidly changing stages and others for no apparent reason. The primary control is apparently permanent as the gage height at which zero flow would occur as determined in 1910, 1912, and 1914 is practically the same. After considerable study of the data, a mean curve was drawn among the measurements after eliminating all but the last measurement made on July 24, 1908, and the one made November 10, 1909. The resulting curve for 1908–1915 is fairly well defined between 25 and 4,500 second-feet and is an extension beyond these limits. For 1916 it is fairly well defined between 1,000 and 4,500 second-feet, an extension above 4,500 second-feet, and poorly defined for less than 1,000 second-feet. Gage read twice daily to hundredths. Daily discharge ascertained by applying mean daily gage height to rating table. See footnote to table of daily discharge for special estimates. Records fair.

Discharge measurements of Elk River at Gassaway, W. Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1910		*Feet.*	*Sec.-ft.*
June 29	O'Neill and Chapman	1.98	176	Aug. 12	J. C. Dort	1.82	101
July 24	W. G. Hoyt	3.62	1,127				
24	do	4.55	2,071	1911.			
24	do	5.11	2,100	Oct. 6	C. T. Bailey	3.42	888
24	do	4.88	1,760				
25	do	7.00	3,449	1912.			
25	do	6.73	3,237	Mar. 19	do	5.48	2,170
27	do	7.05	3,430	Sept. 13	do	1.98	169
Sept. 23	W. M. O'Neill	1.92	112				
24	do	1.74	73	1913.			
24	do	1.74	74	Apr. 1	A. H. Horton	4.51	1,350
25	do	1.65	53	June 18	H. J. Jackson	2.14	232
28	do	1.51	30	Nov. 29	Walters and Peterson	4.57	1,420
28	do	1.51	31	29	do	4.66	1,480
1909.				1914.			
Mar. 24	H. J. Jackson	3.31	744	Nov. 17	Mathers and Morgan	1.65	60.3
30	do	5.58	2,406				
Nov. 10	A. H. Horton	4.80	2,134	1916.			
				Sept. 2	Jones and Bottomley	1.91	87
1910.							
Mar. 11	do	3.01	698				

Daily discharge, in second-feet, of Elk River at Gassaway, W. Va., for the years ending Sept. 30, 1908–1916.

Day.	June.	July.	Aug.	Sept.	Day.	June.	July.	Aug.	Sept.
1908.					1908.				
1		163	372	75	16		246	120	28
2		174	270	52	17		198	90	27
3		185	226	41	18		262	102	24
4		196	186	38	19		226	96	24
5		206	169	36	20		190	85	22
6		310	183	32	21		162	75	20
7		530	270	29	22		169	65	18
8		555	330	27	23		508	68	37
9		485	242	27	24		1,400	65	82
10		310	330	33	25		3,330	65	58
11		172	485	31	26		1,530	70	37
12		169	262	30	27		3,420	65	31
13		169	238	30	28		2,640	198	30
14		198	198	30	29	148	1,670	172	29
15		290	162	31	30	152	960	152	26
					31		580	117	

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	23	20	31	960	508	1,400	1,740	6,550	222	1,340	2,100	485
2	22	19	29	740	395	1,140	1,670	5,220	176	1,200	1,880	440
3	22	19	27	658	418	1,400	1,530	4,140	144	1,200	1,460	418
4	22	18	27	485	440	2,480	1,460	2,720	155	1,140	1,080	395
5	21	17	26	350	605	2,020	1,400	2,020	176	1,080	795	330
6	24	20	37	1,400	905	1,740	1,340	1,460	218	740	530	310
7	23	31	63	1,270	1,400	2,400	1,200	1,140	262	508	440	290
8	22	28	72	1,200	1,340	3,660	1,140	960	270	462	395	250
9	22	26	88	1,020	1,400	2,970	1,140	850	290	440	330	166
10	22	26	202	685	3,060	3,690	1,140	850	310	395	108	99
11	23	24	218	605	3,510	3,150	960	1,670	330	350	85	58
12	22	24	246	440	2,480	2,720	795	1,460	330	270	65	82
13	20	23	740	685	1,950	2,560	658	1,140	310	310	56	41
14	20	25	508	2,020	1,460	2,800	8,740	1,020	555	230	47	30
15	20	27	290	4,860	1,460	2,020	5,220	850	740	254	41	30
16	20	29	234	4,320	4,140	1,740	2,480	685	1,080	270	155	32
17	20	31	218	3,690	3,330	1,530	1,400	555	1,200	290	242	555
18	20	30	180	3,150	2,880	1,080	1,200	372	1,400	330	270	350
19	22	29	440	1,740	2,720	740	1,140	290	1,270	310	250	202
20	21	29	508	850	2,560	630	1,460	262	1,020	290	485	166
21	24	29	580	850	2,400	580	2,100	238	1,020	270	1,200	108
22	23	30	658	795	2,560	508	7,040	218	960	270	1,020	99
23	22	31	685	795	2,720	485	6,460	186	905	310	1,020	88
24	22	56	685	795	2,800	508	5,320	266	1,020	372	905	82
25	22	56	658	740	3,870	795	4,140	290	1,080	418	850	290
26	22	52	630	740	2,720	1,340	2,970	395	1,200	440	658	418
27	22	50	440	605	2,250	2,320	2,250	440	1,270	440	290	462
28	22	42	254	530	1,670	2,970	1,950	440	1,340	395	250	418
29	21	39	508	530		2,480	1,880	418	1,400	350	144	372
30	20	37	330	555		2,250	4,590	395	1,400	330	462	206
31	20		418	555		1,880		330		2,250	508	

Daily discharge, in second-feet, of Elk River at Gassaway, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1909–10.												
1	105	740	242	508	850	2,880	214	795	795	850	290	47
2	78	658	230	580	685	1,950	194	740	795	850	270	35
3	54	530	202	7,540	1,020	1,600	183	685	795	905	262	38
4	45	485	254	6,460	1,530	1,600	180	605	1,400	960	242	418
5	42	462	290	3,510	1,880	1,530	190	440	4,050	1,080	230	418
6	37	395	310	5,220	1,400	1,400	226	372	7,940	1,140	214	310
7	30	350	310	8,740	850	1,400	270	395	5,130	1,020	198	360
8	28	330	290	5,600	795	1,270	310	372	2,640	960	183	310
9	27	555	270	2,560	795	1,020	310	350	2,320	795	169	176
10	26	1,400	254	1,670	740	840	290	330	2,250	795	198	148
11	27	1,460	270	1,080	850	660	290	795	2,250	740	144	141
12	72	1,080	310	795	850	485	290	2,720	2,320	685	90	134
13	508	960	350	605	905	485	1,020	5,600	2,400	685	68	169
14	440	555	508	1,460	1,020	440	1,140	4,320	2,180	658	78	1,080
15	418	440	960	2,020	1,020	418	1,200	2,970	3,780	795	85	555
16	440	440	905	2,400	1,140	418	1,200	2,400	8,240	960	70	350
17	418	395	795	2,320	4,680	395	1,270	1,810	16,200	960	61	234
18	418	372	685	3,870	5,980	372	1,270	1,740	9,640	905	47	190
19	395	310	630	8,040	3,690	330	1,270	1,670	6,940	905	41	141
20	418	290	605	4,410	2,100	310	1,140	1,670	4,410	850	33	127
21	658	262	580	4,140	1,810	350	1,740	1,740	2,020	740	31	111
22	1,270	230	580	3,060	2,970	350	2,800	1,740	1,670	605	29	114
23	1,670	372	555	1,950	2,880	350	2,970	1,810	1,270	530	28	105
24	2,020	440	555	1,740	2,560	330	2,970	1,810	1,140	372	27	85
25	1,880	440	530	1,400	2,480	330	2,970	1,530	1,020	226	29	82
26	1,810	395	508	1,200	2,400	310	2,480	1,200	960	214	31	99
27	1,670	350	485	1,140	2,320	310	1,810	1,080	960	206	30	134
28	1,400	330	462	1,080	2,250	310	1,200	905	905	198	30	310
29	1,080	310	440	960	-------	290	960	850	905	169	29	310
30	905	266	395	960	-------	262	850	795	905	290	28	266
31	795	-------	462	905	-------	230	-------	795	-------	310	36	-------
1910–11.												
1	226	169	1,140	3,870	5,220	1,400	1,340	685	41	180	20	658
2	172	169	580	5,700	3,330	1,080	1,140	740	45	124	18	440
3	148	190	395	5,790	2,640	905	1,140	658	70	93	18	330
4	127	226	395	3,960	2,020	740	1,530	580	65	105	16	127
5	102	242	395	1,950	1,740	630	5,040	530	58	120	18	99
6	75	218	530	1,810	1,340	1,080	4,950	485	68	68	22	85
7	78	190	795	1,200	1,200	4,230	3,600	440	120	58	18	70
8	35	169	530	1,020	1,020	5,220	2,800	395	169	54	22	56
9	75	152	440	740	1,140	2,970	2,970	350	214	78	27	56
10	80	134	418	630	1,080	2,480	3,870	330	194	72	19	70
11	155	120	372	418	1,020	2,400	2,560	310	172	72	17	960
12	105	130	310	440	960	2,100	1,810	290	134	180	17	1,880
13	90	127	290	3,060	905	1,810	1,270	262	198	117	20	795
14	85	120	270	8,340	850	2,480	1,200	230	418	72	19	740
15	72	102	270	6,170	850	2,250	2,180	180	270	43	22	530
16	56	96	262	4,590	795	1,950	2,100	169	176	42	18	1,020
17	54	117	246	3,510	795	1,460	1,880	162	141	37	16	3,150
18	47	114	246	2,100	795	1,340	1,400	155	226	27	17	1,670
19	45	93	290	1,340	795	1,810	1,200	144	258	22	16	580
20	42	85	462	1,080	905	2,400	1,670	127	508	20	16	485
21	26	80	440	1,020	960	2,880	3,690	120	418	22	14	395
22	50	75	395	5,040	905	2,100	3,060	120	258	22	12	508
23	65	70	395	3,690	905	1,810	2,970	102	180	20	11	850
24	56	70	960	2,480	1,270	1,810	2,800	96	158	18	11	795
25	124	93	960	1,810	1,600	1,460	2,250	138	144	18	11	630
26	111	88	905	2,640	1,080	1,270	1,810	102	226	20	13	270
27	96	148	795	8,040	1,020	1,080	1,340	82	222	32	12	290
28	108	330	580	5,220	1,270	1,270	1,020	65	440	32	12	462
29	117	1,140	630	7,140	-------	960	905	52	218	33	15	605
30	144	1,400	5,130	23,800	-------	1,020	795	41	202	27	61	960
31	198	-------	5,320	14,500	-------	1,270	-------	38	-------	24	1,340	-------

Daily discharge, in second-feet, of Elk River at Gassaway, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1911–12.												
1	1,200	230	1,080	3,330	2,320	1,880	3,150	685	108	418	1,400	485
2	1,810	218	1,020	2,100	1,880	1,670	3,150	685	61	605	1,740	462
3	3,600	198	1,020	1,740	1,200	1,080	3,780	658	90	485	1,200	350
4	1,950	350	795	1,600	1,080	960	2,970	630	24	1,600	905	310
5	1,200	270	508	1,400	960	658	2,250	850	29	850	530	254
6	795	795	418	1,200	1,200	508	1,740	685	90	1,530	350	238
7	905	4,140	372	1,080	1,020	395	1,530	1,270	85	1,020	290	222
8	7,940	2,720	330	1,080	960	462	1,460	3,330	42	418	238	270
9	3,240	1,740	310	1,020	905	905	1,400	2,800	47	440	242	63
10	2,250	1,140	270	960	740	630	1,200	1,810	52	440	418	65
11	1,880	850	310	905	685	1,020	1,020	1,140	23	372	605	88
12	2,800	795	330	905	605	1,530	850	4,860	30	485	254	17
13	1,880	1,020	330	795	485	3,420	795	5,980	29	440	372	36
14	1,340	1,400	372	795	330	4,500	685	3,690	24	440	395	114
15	3,870	1,270	530	795	266	5,220	658	2,560	20	418	310	111
16	3,780	1,020	630	740	254	12,100	530	4,950	26	418	124	108
17	2,560	850	580	740	238	5,410	580	7,940	186	485	80	102
18	7,540	960	508	960	226	2,970	1,530	3,780	440	1,270	47	130
19	4,680	1,880	395	1,670	290	2,180	2,020	2,800	418	4,770	114	155
20	2,480	1,810	350	1,810	905	2,400	2,100	2,100	440	5,130	310	148
21	1,670	1,400	395	1,530	1,340	3,960	1,400	1,270	418	3,510	960	134
22	1,270	1,020	530	1,460	2,320	4,860	1,270	960	485	4,860	960	262
23	960	795	960	1,460	1,670	3,780	1,270	685	462	3,780	508	740
24	905	795	1,020	1,270	1,400	3,240	1,340	555	250	3,600	350	905
25	795	1,020	960	795	1,400	6,170	1,140	508	310	12,900	310	850
26	605	1,080	960	740	4,140	4,140	960	310	795	8,840	310	795
27	530	960	905	795	11,700	2,640	795	266	795	5,980	395	795
28	440	1,140	850	905	4,950	1,880	905	206	685	5,410	310	740
29	372	1,460	850	2,020	2,800	3,420	850	372	905	5,130	850	685
30	310	1,340	1,400	5,320	-------	5,220	658	222	795	1,270	1,460	630
31	266	-------	2,180	4,140	-------	3,510	-------	190	-------	1,530	1,080	-------
1912–13.												
1	605	141	108	3,870	905	1,080	1,670	1,810		148	155	210
2	580	169	102	2,640	850	1,020	1,140	1,600		134	155	186
3	485	270	102	2,880	960	960	1,020	1,200		114	148	169
4	330	258	114	2,970	4,680	960	850	905		105	138	90
5	190	242	162	2,720	3,960	905	850			120	108	75
6	162	226	1,020	2,880	3,150	960	795			148	85	47
7	141	198	1,080	7,740	2,100	1,020	795			266	65	50
8	134	1,810	1,020	13,800	1,740	1,020	685			330	58	226
9	114	2,560	658	9,240	1,080	960	605		1,340	395	56	685
10	102	2,020	580	4,590	905	905	440			6,080	52	530
11	88	1,080	630	2,880	1,340	1,530	485			4,140	65	372
12	78	795	555	2,320	5,220	2,970	630			4,050	350	186
13	70	605	555	1,400	2,720	3,690	1,400			4,410	1,600	183
14	68	580	440	1,020	2,320	4,410	1,600			3,600	1,530	270
15	65	555	310	795	2,100	4,320	2,320			1,400	850	310
16	65	530	350	1,020	1,740	3,960	3,690			1,080	440	198
17	63	530	310	1,340	1,140	3,690	2,560	1,990	242	960	418	134
18	61	508	330	1,270	795	2,720	2,020		230	740	310	310
19	65	485	960	1,080	795	1,460	1,880		172	605	372	740
20	75	350	310	1,020	740	1,020	1,740		148	555	1,600	960
21	127	258	230	1,140	740	1,020	1,340		134	395	1,810	1,400
22	270	254	172	1,670	795	960	960		148	372	1,950	3,240
23	350	246	148	2,250	795	905	850		190	350	2,800	2,480
24	238	242	141	2,480	795	685	795		162	330	2,320	1,670
25	190	238	141	2,720	795	485	795		148	310	1,600	905
26	176	230	152	3,600	685	2,020	795		198	290	1,020	350
27	169	222	198	3,330	630	10,000	850		238	262	485	350
28	162	172	418	3,060	795	7,640	1,530		206	238	330	330
29	155	114	905	2,720	-------	3,870	2,250		183	190	310	310
30	190	108	1,880	1,880	-------	2,250	2,250		162	180	270	270
31	162	-------	7,040	960	-------	1,950	-------		-------	169	226	-------

Daily discharge, in second-feet, of Elk River at Gassaway, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1913–14.												
1	158	795	1,600	605	1,600	1,080	2,480	2,970	52	418	75	242
2	214	1,400	1,950	580	1,530	850	3,870	2,800	47	169	61	202
3	262	1,740	2,020	605	1,460	740	6,740	2,720	42	102	42	183
4	218	1,740	1,950	658	1,460	630	3,780	2,400	41	96	39	166
5	198	1,400	1,950	685	1,460	685	2,720	2,640	54	108	35	134
6	176	1,020	1,880	795	1,460	960	2,180	5,130	61	114	30	108
7	218	905	1,810	795	1,460	1,670	1,460	3,870	88	102	28	75
8	266	795	1,810	905	1,400	1,740	2,400	2,480	80	88	27	65
9	242	795	1,740	960	1,670	1,530	5,700	1,810	70	56	27	52
10	226	850	1,950	1,020	1,400	1,400	3,240	1,400	47	50	28	47
11	214	1,020	1,880	1,140	1,460	1,080	2,320	1,020	39	50	68	52
12	206	1,530	1,810	1,460	1,530	960	2,020	795	33	75	218	43
13	198	2,800	1,740	1,460	1,530	960	1,670	685	33	68	198	41
14	183	9,540	1,140	1,340	1,400	905	1,530	605	61	58	222	37
15	254	12,200	740	1,140	1,400	1,020	1,670	530	105	440	183	38
16	290	15,300	658	1,080	1,270	1,340	2,880	440	68	1,140	114	37
17	266	12,400	630	1,020	1,140	4,860	4,770	418	47	580	93	36
18	270	4,950	605	905	960	3,870	3,330	395	41	440	65	36
19	395	2,800	630	850	9,540	2,250	3,870	372	36	310	50	32
20	630	1,880	605	1,020	14,800	1,810	7,840	310	45	270	41	29
21	1,950	1,400	580	8,940	10,500	1,140	6,360	254	43	246	37	27
22	2,400	1,270	630	6,260	5,600	1,140	3,870	202	43	210	32	26
23	1,670	1,140	658	5,130	2,560	1,270	3,510	180	246	148	30	25
24	1,670	1,080	685	4,140	1,810	1,400	3,330	166	960	102	31	24
25	3,870	1,080	685	2,800	1,200	1,810	5,500	148	1,140	152	127	23
26	9,540	1,080	795	2,100	1,080	3,510	12,000	141	2,400	290	206	22
27	4,050	1,140	795	1,740	1,020	5,410	6,740	102	2,480	330	350	22
28	2,800	1,400	685	1,740	1,140	4,320	3,780	96	2,100	258	238	22
29	1,600	1,600	685	1,670	-------	2,880	3,150	80	1,140	183	270	21
30	1,200	1,530	630	1,670	-------	1,880	3,060	72	605	152	290	20
31	795	-------	630	1,600	-------	2,180	-------	61	-------	99	270	-------
1914–15.												
1			61	2,180	4,230	850	850	1,340	3,420	120	218	290
2			96	1,740	11,000	850	850	1,140	1,740	130	206	262
3			108	1,270	12,100	795	795	1,080	3,240	144	258	238
4			162	795	7,140	685	685	795	5,410	130	169	258
5			2,250	485	3,600	630	485	580	2,970	120	148	310
6			2,560	4,230	2,480	685	485	555	2,400	111	141	485
7			2,480	11,400	1,950	795	462	530	2,100	102	120	418
8			2,400	7,140	1,810	960	462	440	2,250	99	111	372
9			2,250	3,420	1,740	960	440	350	1,880	246	108	350
10		66	1,950	2,250	1,670	905	418	270	850	238	90	310
11			1,740	2,880	1,670	905	555	266	418	230	96	262
12			1,200	7,940	1,670	850	1,200	238	395	222	90	214
13			1,080	5,700	1,600	850	1,340	206	330	206	102	162
14			1,080	2,880	1,600	795	1,140	190	658	190	290	85
15			1,020	2,250	1,530	740	960	176	2,180	186	330	80
16		65	960	1,950	1,810	740	905	169	1,530	172	350	75
17			1,140	2,180	1,810	685	795	155	1,400	114	485	169
18		222	2,320	8,640	1,740	795	685	148	1,200	372	440	246
19		206	5,500	12,200	1,670	850	530	141	905	795	350	290
20		183	8,940	7,040	1,670	850	395	155	580	440	310	418
21		169	12,700	3,600	1,600	795	395	190	485	395	310	795
22		141	9,440	2,640	1,600	685	372	270	418	960	270	905
23		105	5,220	2,180	1,530	605	350	350	395	795	246	795
24		85	3,780	1,880	1,530	555	330	440	372	418	418	555
25		65	2,880	2,400	1,460	508	330	485	310	372	350	350
26		61	2,180	2,250	1,400	508	310	580	250	238	290	330
27		58	1,600	1,880	1,200	485	310	905	198	183	258	310
28		56	1,200	1,670	1,020	485	395	905	134	155	238	254
29		54	2,250	1,400	-------	530	1,740	1,140	127	148	270	190
30		52	3,420	1,140	-------	905	1,530	2,320	120	162	330	162
31		-------	2,880	1,740	-------	850	-------	5,410	-------	186	330	-------

Daily discharge, in second-feet, of Elk River at Gassaway, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1915–16.												
1	5,500	230	530	2,800	1,810	2,320	1,950	2,180	850	485	166	130
2	6,080	206	485	2,320	1,530	2,180	1,880	1,400	685	462	508	127
3	4,590	176	462	1,950	1,340	2,100	1,810	1,400	605	685	960	120
4	3,960	155	372	1,600	1,600	1,880	1,670	1,460	580	960	905	114
5	3,150	148	350	1,400	1,740	1,810	1,270	1,530	530	740	740	108
6	2,560	141	330	1,670	2,020	2,250	1,140	1,600	485	630	630	102
7	1,810	138	330	1,810	2,250	7,940	960	3,240	395	350	462	96
8	1,200	134	310	1,740	2,100	10,800	905	2,020	685	290	330	102
9	905	130	310	1,600	2,020	4,950	905	1,530	960	270	270	246
10	630	124	310	1,950	1,950	3,060	850	1,460	905	262	1,080	330
11	310	120	290	4,950	1,880	2,480	850	1,530	850	254	1,810	226
12	270	127	270	10,900	1,810	2,480	795	1,530	740	242	3,600	190
13	238	148	270	5,980	1,810	2,400	1,020	1,460	530	206	3,330	114
14	210	372	330	3,960	1,670	2,250	1,020	1,400	508	183	2,480	155
15	186	4,320	350	2,800	1,810	2,100	1,810	1,270	658	176	1,530	3,240
16	183	4,140	418	2,400	1,950	1,950	1,740	905	1,270	210	1,460	3,060
17	176	2,560	1,400	2,020	1,740	1,880	1,880	508	1,460	330	1,400	2,560
18	169	2,180	11,100	1,530	1,530	1,740	1,530	508	1,530	850	1,340	2,400
19	530	1,810	9,640	1,400	1,340	1,530	1,400	462	1,460	1,080	1,020	2,320
20	1,600	1,670	5,500	1,340	1,200	1,340	1,270	440	1,270	630	658	2,180
21	1,140	1,530	3,870	1,270	1,140	1,270	1,200	418	1,020	462	580	2,100
22	960	1,270	2,880	1,740	1,020	5,980	1,020	372	960	440	462	1,950
23	605	1,080	2,400	1,810	905	4,680	960	372	905	418	330	1,810
24	530	960	1,950	1,740	1,200	3,960	905	350	850	740	290	1,670
25	440	960	1,670	1,670	2,020	2,720	1,340	350	795	530	266	1,600
26	372	740	1,400	1,600	3,060	2,560	3,150	605	795	418	246	1,530
27	372	630	1,670	1,530	3,060	2,480	2,880	555	740	290	206	1,400
28	310	658	3,150	1,600	2,880	3,060	2,560	530	685	262	183	3,600
29	262	580	8,540	1,670	2,560	3,780	2,250	580	630	218	169	2,250
30	254	555	7,140	2,320	-------	3,060	2,020	530	530	190	155	1,740
31	246	-------	4,320	2,020	-------	2,400	-------	1,020	-------	176	141	-------

NOTE.—Daily discharge estimated because of missing gage readings from observer's notes, climatic data, or by comparison with the flow of other stations as follows: July 1–4, 1908; Mar. 10–11, Aug. 11, 1910; Jan. 31, 1911; May 5–June 16, 1913; Oct. 1 to Nov. 17, 1914. The braced figures show the mean for the period.

Monthly discharge of Elk River at Gassaway, W. Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 578 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
June 29–30	152	148	150	0.260	0.02
July	3,420	162	697	1.21	1.40
August	485	63	178	.308	.36
September	82	18	34.5	.060	.07
1908–9.					
October	24	20	21.7	.038	.04
November	56	17	30.6	.053	.06
December	740	26	324	.561	.65
January	4,860	350	1,250	2.16	2.49
February	4,140	395	2,070	3.58	3.73
March	3,690	486	1,870	3.24	3.74
April	8,740	658	2,550	4.41	4.92
May	6,550	186	1,220	2.11	2.43
June	1,400	144	735	1.27	1.42
July	2,250	230	557	.964	1.11
August	2,100	41	585	1.01	1.16
September	555	30	242	.419	.47
The year	8,740	17	946	1.64	22.22

Monthly discharge of Elk River at Gassaway, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1909–10.					
October	2,020	26	619	1.07	1.23
November	1,460	230	520	.900	1.00
December	960	202	459	.794	.91
January	8,740	508	2,840	4.91	5.66
February	5,960	685	1,870	3.24	3.37
March	2,880	230	749	1.30	1.50
April	2,970	180	1,110	1.92	2.14
May	5,600	330	1,450	2.51	2.89
June	16,200	795	3,270	5.66	6.32
July	1,140	169	689	1.19	1.37
August	290	27	106	.183	.21
September	1,080	35	232	.401	.45
The year	16,200	26	1,150	1.99	27.05
1910–11.					
October	226	26	95.6	.165	.19
November	1,400	70	215	.372	.42
December	5,320	246	811	1.40	1.61
January	23,800	418	4,290	7.42	8.55
February	5,220	795	1,370	2.37	2.47
March	5,220	630	1,860	3.22	3.71
April	5,040	795	2,210	3.82	4.26
May	740	38	264	.457	.53
June	508	41	200	.346	.39
July	180	18	59.7	.103	.12
August	1,340	11	60.9	.105	.12
September	3,150	56	652	1.13	1.26
The year	23,800	11	1,010	1.75	23.63
1911–12.					
October	7,940	266	2,120	3.67	4.23
November	4,140	198	1,160	2.01	2.24
December	2,180	270	693	1.20	1.38
January	5,320	740	1,490	2.58	2.97
February	11,700	226	1,660	2.87	3.10
March	12,100	395	2,990	5.17	5.96
April	3,780	530	1,470	2.54	2.83
May	7,940	190	1,890	3.27	3.77
June	905	20	272	.471	.53
July	12,900	372	2,540	4.39	5.06
August	1,740	47	562	.972	1.12
September	905	17	342	.592	.66
The year	12,900	17	1,440	2.49	33.85
1912–13.					
October	605	61	185	.320	.37
November	2,560	108	533	.922	1.03
December	7,040	102	681	1.18	1.36
January	13,800	795	3,010	5.21	6.01
February	5,220	630	1,620	2.80	2.92
March	16,000	485	2,300	3.98	4.59
April	3,690	440	1,320	2.28	2.54
May			1,910	3.30	3.80
June		134	800	1.38	1.54
July	6,080	105	1,050	1.82	2.10
August	2,800	52	699	1.21	1.40
September	3,240	47	574	.993	1.11
The year	13,800	47	1,220	2.11	28.77
1913–14.					
October	9,540	158	1,180	2.04	2.35
November	15,300	795	2,950	5.10	5.69
December	2,020	580	1,180	2.04	2.35
January	8,940	580	1,830	3.17	3.66
February	14,800	960	2,670	4.62	4.81
March	5,410	630	1,850	3.20	3.69
April	12,000	1,460	3,930	6.80	7.59
May	5,130	61	1,140	1.97	2.27
June	2,480	33	408	.706	.79
July	1,140	50	223	.386	.44
August	350	27	114	.198	.23
September	242	20	62.9	.109	.12
The year	15,300	20	1,450	2.51	33.99

Monthly discharge of Elk River at Gassaway, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1914–15.					
October			65	0.112	0.13
November			86.0	.149	.17
December	12,700	61	2,800	4.84	5.58
January	12,200	485	3,590	6.21	7.16
February	12,100	1,020	2,710	4.69	4.88
March	960	485	745	1.29	1.49
April	1,740	310	683	1.18	1.32
May	5,410	141	707	1.22	1.41
June	5,410	120	1,290	2.23	2.49
July	960	99	270	.467	.54
August	485	90	249	.431	.50
September	905	75	331	.573	.64
The year	12,700		1,120	1.94	26.31
1915–16.					
October	6,080	169	1,280	2.21	2.55
November	4,320	120	933	1.61	1.80
December	11,100	270	2,330	4.03	4.65
January	10,900	1,270	2,420	4.19	4.83
February	3,060	905	1,830	3.17	3.42
March	10,800	1,270	3,080	5.33	6.14
April	3,150	795	1,500	2.60	2.90
May	3,240	350	1,080	1.87	2.16
June	1,530	395	829	1.43	1.60
July	1,080	176	434	.751	.87
August	3,600	141	894	1.55	1.79
September	3,600	96	1,250	2.16	2.41
The year	11,100	96	1,490	2.58	35.12

ELK RIVER AT CLENDENIN, W. VA.

LOCATION.—At highway bridge at Clendenin, Kanawha County, immediately above mouth of Big Sandy Creek; 22 miles above mouth of Elk River at Charleston.

DRAINAGE AREA.—1,290 square miles; includes area of Big Sandy Creek, which is 133 square miles. Drainage area of Elk River at mouth is 1,530 square miles. Areas measured on topographic maps.

RECORDS AVAILABLE.—June 27, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage on upstream side of highway bridge; read by E. C. Riley and J. W. Riley. Sea-level elevation of zero of gage, 588.7 feet.

DISCHARGE MEASUREMENTS.—Made from highway bridge or by wading.

CHANNEL AND CONTROL.—Practically permanent; primary control is below mouth of Big Sandy Creek.

EXTREMES OF DISCHARGE.—1908–1916: Maximum stage recorded, 23.5 feet, afternoon reading January 30, 1911 (discharge, about 39,300 second-feet); minimum stage, 1.65 feet, afternoon reading August 27, 1911 (discharge, 14 second-feet).

The high water of 1888 or 1889 reported 2 inches over floor of bridge across Big Sandy Creek at its mouth; gage height, about 32 feet by present gage.

ICE.—Some ice during short periods; gage observer made practically no reports regarding ice.

ACCURACY.—Stage-discharge relation practically permanent; one rating curve used 1908–1916; stage-discharge relation not seriously affected by ice, open-channel rating assumed applicable. Stage-discharge relation probably affected for short periods by backwater from Kanawha River when the Kanawha is at extremely high stage at Charleston; fall of water surface of Elk River from Clendenin to Charleston at low water is about 30 feet; no correction for backwater from the Kanawha made in computing discharge of the Elk at Clendenin.

Since gage is only about 100 feet above mouth of Big Sandy Creek and principal control is below mouth of creek, gage heights at Clendenin are an index of the discharge of Elk River just below mouth of the Big Sandy. The flow of the creek and its effect on the stage of the river are probably negligible the greater part of the time, particularly when the creek is low; but at times the flow of the Big Sandy is a large percentage of the combined flow of creek and river; on November 16, 1914, and September 1, 1916, river practically stationary, the measured flow of the Big Sandy was 5 per cent and 2½ per cent, respectively, of the combined flow, but on November 28, 1913, river rising 0.05 foot an hour, the measured flow of the creek was 23 per cent of the combined flow. Drainage area of Big Sandy Creek is 10 per cent of combined drainage area of creek and river. In obtaining the rating curve allowance was made in the two discharge measurements above 10,000 second-feet for the flow of Big Sandy Creek from a study of rainfall records, flow of Pocatalico River at Sissonville, and run-off from Elk River basin above mouth of the Big Sandy, as follows: March 8, 1911, river falling 0.14 foot an hour, 16 per cent of combined flow; March 16, 1912, river rising 0.18 foot an hour, 5 per cent of combined flow; in the discharge measurements below 10,000 second-feet made during 1908–1912 no allowance was made for discharge of the creek and the flow appears negligible from the consistent manner in which measurements below 10,000 second-feet plot. Rating curve well defined between 20 and 3,000 second-feet, fairly well defined between 3,000 and 10,000 second-feet, depends between 10,000 and 28,000 second-feet upon two discharge measurements for which flow of Big Sandy Creek was estimated, and rating curve is an extension below 20 and above 28,000 second-feet. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Elk River at Clendenin, W. Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1911.		*Feet.*	*Sec.-ft.*
June 27	O'Neill and Chapman	3.00	577	Mar. 8	C. T. Bailey	11.98	11,200
July 23	W. G. Hoyt	2.94	437	Aug. 4	do	1.98	49
Sept. 23	W. M. O'Neill	1.86	27	1912.			
29	do	2.11	69	Mar. 16	do	16.46	22,000
1909.				Sept. 14	do	2.46	193
Mar. 23	H. J. Jackson	4.78	1,940	1913.			
31	do	6.14	4,170	Nov. 28	Peterson and Walters	4.02	1,240
Nov. 6	A. H. Horton	2.77	319	28	do	4.16	1,330
29	G. L. Parker	3.21	637	1914.			
1910.				Nov. 16	Mathers and Morgan	2.20	96
Mar. 6	C. T. Bailey	4.81	2,200	1916.			
Aug. 11	J. C. Dort	2.49	188	Sept. 1	B. E. Jones	2.46	157
				1	do	2.41	150

NOTE.—Measurements made June 27, 1908, to Sept. 14, 1912, do not include the flow of Big Sandy Creek. Others include measured flow of the creek as follows: Nov. 28, 1913, 297 second-feet; Nov. 16, 1914, 5 second-feet; and Sept. 1, 1916, 4 second-feet. See "Determination of discharge."

Daily discharge, in second-feet, of Elk River at Clendenin, W. Va., for the years ending Sept. 30, 1908–1916.

Day.	June.	July.	Aug.	Sept.	Day.	June.	July.	Aug.	Sept.
1908.					1908.				
1		237	886	191	16		585	260	53
2		208	656	159	17		452	220	47
3		191	484	133	18		551	246	44
4		173	384	111	19		1,130	195	38
5		390	324	108	20		807	159	29
6		1,310	314	102	21		517	142	30
7		1,220	314	79	22		452	136	28
8		1,090	255	74	23		415	152	28
9		846	656	68	24		693	156	26
10		693	427	58	25		1,310	139	21
11		517	356	46	26		2,970	126	20
12		402	452	42	27		4,760	146	22
13		329	452	41	28	368	4,340	139	21
14		345	345	40	29	283	3,360	139	66
15		620	269	44	30	246	1,910	133	71
					31		1,310	246	

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	60	20	68	585	926	2,600	2,970	17,900	329	1,700	1,130	114
2	49	21	58	1,010	807	2,240	2,480	13,900	288	1,220	1,050	99
3	38	22	51	1,050	730	2,130	2,360	7,200	251	807	768	90
4	31	22	47	807	807	3,230	2,720	4,480	265	656	693	105
5	26	22	51	693	1,090	3,920	3,230	3,500	269	551	484	105
6	23	22	47	656	1,310	3,230	3,640	2,720	303	484	340	105
7	21	22	60	1,500	1,800	3,780	3,640	2,130	288	421	260	102
8	20	22	76	1,800	2,480	4,760	2,840	1,800	373	340	229	90
9	19	31	74	1,310	2,720	5,350	2,240	1,500	421	303	191	90
10	23	53	82	1,090	6,100	4,900	1,800	1,400	1,220	251	170	90
11	30	68	133	926	7,040	5,650	1,600	1,310	1,310	265	152	79
12	26	60	319	768	4,480	4,060	1,310	1,800	1,010	229	142	105
13	30	55	379	730	2,970	3,100	1,220	1,800	730	212	123	133
14	32	55	730	1,050	2,720	2,840	1,500	1,500	693	220	123	105
15	30	60	926	6,250	2,720	3,100	11,400	1,310	585	265	156	90
16	26	64	585	1,910	11,800	2,970	5,800	1,090	620	517	184	76
17	23	60	484	8,850	10,400	2,360	3,640	886	1,220	620	517	74
18	24	55	303	5,200	6,400	2,130	2,480	730	1,910	484	1,010	68
19	24	55	195	3,230	4,060	1,700	1,910	620	2,020	396	967	379
20	21	49	195	2,240	3,640	1,400	3,500	585	1,700	324	730	373
21	20	41	551	1,700	4,620	1,400	5,650	585	1,220	314	484	260
22	20	32	656	1,400	4,480	1,910	14,900	585	1,050	237	656	203
23	21	36	551	1,220	4,760	2,020	14,900	551	886	288	452	181
24	21	46	452	1,090	5,050	1,800	11,300	551	1,010	314	345	146
25	20	47	446	967	7,520	2,130	7,680	585	1,310	308	274	120
26	21	47	484	1,050	5,800	3,360	4,760	585	1,400	517	216	126
27	21	47	656	1,050	4,060	3,780	3,780	846	1,400	967	184	203
28	22	46	693	1,010	3,360	5,500	5,200	585	1,130	585	163	368
29	21	49	656	926		6,100	5,050	452	1,310	421	156	260
30	20	68	585	926		4,900	8,680	421	1,400	396	133	212
31	19		551	1,010		4,340		362		345	123	

Daily discharge, in second-feet, of Elk River at Clendenin, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1909–10.												
1	195	452	421	440	1,910	1,910	427	1,600	1,090	1,400	421	79
2	146	409	396	585	1,700	3,780	415	1,400	1,180	926	551	68
3	120	373	362	3,640	1,400	3,230	390	1,130	1,010	768	427	152
4	111	329	356	9,870	3,640	2,840	409	730	1,800	2,240	334	220
5	102	308	324	6,100	4,340	2,360	768	1,050	2,480	3,230	283	967
6	82	293	308	5,350	3,230	2,020	656	886	8,340	2,600	220	1,600
7	76	255	303	10,600	2,130	1,700	656	807	9,190	2,360	212	768
8	74	246	356	10,400	1,500	1,500	620	656	4,760	2,720	334	517
9	71	334	427	4,760	1,400	1,400	620	1,910	2,970	2,480	265	585
10	53	452	452	3,230	1,600	1,220	585	2,720	3,360	2,020	199	484
11	58	3,360	415	2,130	1,700	1,130	551	2,600	3,100	1,600	188	345
12	58	2,720	308	1,800	2,240	1,090	620	12,000	3,230	1,220	159	260
13	53	1,800	402	1,310	2,020	1,010	1,220	11,600	3,230	5,500	142	220
14	53	1,400	551	3,100	1,700	926	1,500	6,250	3,920	5,500	149	656
15	329	967	1,800	4,200	1,800	926	1,910	3,640	3,500	3,640	117	846
16	362	807	3,360	3,360	5,560	807	1,700	2,600	6,400	3,780	102	967
17	269	620	2,240	2,840	6,560	846	1,500	2,020	20,200	2,240	90	620
18	216	517	1,180	5,050	9,700	768	1,400	1,910	11,100	2,130	74	484
19	212	440	807	10,400	7,360	730	1,600	1,700	5,200	2,020	99	345
20	278	373	807	7,840	4,480	693	2,360	1,400	7,360	1,400	74	274
21	345	308	656	11,400	3,500	656	4,620	1,600	4,060	1,050	74	265
22	656	368	693	9,870	5,200	620	5,200	1,500	2,600	926	71	216
23	620	308	768	5,800	6,400	585	5,350	1,310	3,640	620	60	173
24	693	293	730	3,500	5,050	620	1,400	1,310	2,840	517	51	159
25	1,800	730	585	3,100	3,640	620	1,500	2,600	1,800	390	44	170
26	2,130	967	484	2,840	2,720	585	1,600	4,060	1,400	319	30	181
27	1,500	807	484	2,970	2,020	551	3,780	2,840	5,950	274	28	152
28	1,090	656	585	3,780	1,800	517	2,970	2,020	3,500	324	27	146
29	886	585	585	3,640	------	452	2,240	1,600	1,800	345	38	278
30	768	484	551	2,720	------	427	1,800	1,400	1,500	427	31	494
31	585	------	440	2,130	------	452	------	1,130	------	551	30	------
1910–11.												
1	551	368	1,910	5,500	8,340	2,130	2,020	1,500	220	216	42	1,800
2	368	319	1,400	7,040	6,400	2,020	2,020	1,400	166	329	105	1,130
3	274	283	1,010	8,850	5,200	1,800	2,020	1,400	126	242	133	730
4	220	274	846	10,600	4,480	1,400	2,240	1,220	99	199	40	730
5	208	246	730	5,950	3,640	1,220	4,760	1,050	246	163	35	452
6	184	329	1,130	3,500	2,970	3,230	8,340	1,010	368	237	35	356
7	166	356	1,800	2,600	2,480	6,720	6,400	967	288	269	38	329
8	126	324	1,700	2,020	2,720	12,900	5,650	846	159	177	32	229
9	166	260	1,310	1,800	2,480	7,360	6,560	768	152	146	24	170
10	133	242	926	1,500	2,360	4,760	7,200	807	203	136	24	181
11	111	220	926	1,600	2,360	3,920	5,200	730	237	123	25	807
12	108	195	967	1,130	2,020	3,230	4,200	693	246	278	28	4,620
13	152	170	926	6,880	1,800	2,720	2,970	585	216	656	32	2,130
14	195	173	886	14,300	1,600	3,500	2,970	517	203	324	22	1,310
15	166	166	807	9,530	1,400	4,060	3,920	656	340	208	20	1,010
16	111	166	768	8,000	1,220	3,230	4,620	409	452	170	17	1,500
17	117	139	656	8,340	1,090	2,600	3,640	368	334	152	14	2,360
18	114	139	446	5,200	1,010	2,240	2,840	345	402	136	35	3,230
19	96	156	433	2,970	846	2,020	2,480	283	807	123	85	1,800
20	85	152	551	2,360	3,230	2,720	2,970	288	551	76	35	1,600
21	64	146	1,180	2,970	4,060	4,900	4,060	265	656	224	30	1,050
22	85	133	1,500	9,360	2,970	3,640	5,200	246	656	293	28	1,760
23	90	114	1,130	9,530	2,720	3,100	5,350	224	484	149	22	1,310
24	90	126	2,240	5,650	2,020	2,840	5,050	208	319	203	15	1,760
25	105	120	3,640	4,060	1,910	2,600	4,060	181	260	149	15	1,050
26	108	105	3,100	6,100	1,910	2,130	3,230	142	203	40	20	730
27	159	105	2,020	15,300	1,800	1,910	2,600	152	208	34	17	656
28	114	170	1,500	9,530	2,360	1,800	2,130	152	293	27	18	967
29	184	170	1,130	9,020	------	1,800	1,700	146	278	25	17	1,090
30	173	2,360	3,100	34,900	------	1,760	1,600	181	251	27	324	1,460
31	203	------	9,870	27,100	------	1,800	------	166	------	23	807	------

Daily discharge, in second-feet, of Elk River at Clendenin, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1911–12.												
1	1,400	517	2,240	3,230	4,900	3,640	5,800	1,500	334	1,400	2,360	2,020
2	2,970	440	2,020	4,340	3,360	2,600	6,880	1,500	265	1,090	2,240	1,400
3	5,050	396	1,600	3,230	2,480	2,020	9,360	1,500	255	1,010	1,910	1,050
4	4,060	334	1,400	2,600	1,910	1,700	6,560	1,310	265	886	1,400	807
5	2,360	303	1,310	1,910	1,700	1,500	4,620	2,240	229	2,240	1,130	693
6	1,700	1,500	1,050	1,400	2,020	1,310	3,500	1,910	208	2,720	846	693
7	1,700	5,500	886	1,220	2,240	1,220	2,720	2,480	181	1,800	656	585
8	6,880	6,100	807	1,800	1,800	1,220	2,720	7,360	188	1,220	517	484
9	7,200	3,500	768	2,030	1,800	2,130	2,600	6,400	146	967	409	390
10	3,230	2,480	730	2,260	2,130	2,720	2,240	3,920	136	768	351	340
11	3,780	1,800	886	2,480	1,500	2,970	2,130	2,840	126	551	396	269
12	3,920	1,600	807	2,360	1,400	3,360	1,800	4,340	111	768	2,840	220
13	3,500	2,600	807	1,800	1,220	11,400	1,600	11,300	108	730	2,020	195
14	2,480	2,840	846	1,600	967	10,200	1,500	7,520	88	693	1,310	173
15	2,020	2,600	967	1,500	886	12,900	1,310	4,620	60	484	967	149
16	4,480	2,130	2,020	1,800	730	21,800	1,600	3,920	60	345	768	173
17	4,480	1,700	3,920	1,800	768	12,500	1,400	9,700	76	693	551	149
18	9,360	2,020	3,360	2,240	886	7,360	3,360	7,840	421	2,360	409	195
19	10,700	3,230	2,720	10,700	1,220	4,060	2,720	5,200	886	3,360	926	191
20	5,200	3,640	2,020	8,170	2,130	4,760	2,720	3,780	768	4,340	4,900	265
21	2,840	2,720	1,700	5,800	2,360	5,800	2,240	2,480	967	2,130	2,720	220
22	2,130	2,130	1,500	4,340	6,560	7,360	1,910	1,910	1,180	5,950	2,480	195
23	1,910	1,700	2,360	2,600	6,560	7,040	1,700	1,500	926	7,520	1,910	265
24	1,500	1,500	3,230	2,240	4,060	9,020	1,600	1,130	551	3,640	1,400	3,500
25	1,400	1,600	4,060	1,910	2,970	10,400	1,800	886	846	8,850	1,010	1,800
26	1,180	2,020	3,920	1,600	7,520	8,510	1,600	693	1,130	13,900	967	1,800
27	967	2,020	6,560	1,500	18,100	5,350	1,700	620	1,800	5,950	1,600	1,400
28	846	2,020	4,900	1,310	12,200	3,780	1,800	484	2,240	3,100	1,500	1,010
29	730	1,800	3,640	2,840	5,650	4,760	1,700	452	2,020	2,020	11,600	846
30	620	2,480	2,840	7,520	-------	8,000	1,600	452	1,400	2,130	4,900	730
31	551	-------	3,230	8,170	-------	9,530	-------	390	-------	2,240	3,100	-------
1912–13.												
1	585	283	191	7,680	2,240	1,310	2,600	3,230	8,850	334	396	255
2	517	246	224	3,920	2,480	1,700	2,130	2,720	4,200	283	452	216
3	484	229	203	3,230	3,360	1,800	1,800	2,130	2,600	246	345	188
4	433	255	212	4,480	8,340	1,500	1,600	1,700	2,130	278	269	166
5	303	283	314	4,060	9,190	1,400	1,400	1,400	1,400	274	188	152
6	237	255	1,220	6,100	5,350	1,400	1,220	1,130	1,130	886	203	133
7	242	269	1,910	15,100	3,500	1,220	1,050	1,010	926	1,180	166	108
8	212	6,400	2,130	28,700	2,360	1,090	967	886	2,130	1,500	146	173
9	184	6,560	1,910	26,600	1,800	1,010	967	807	3,500	926	126	246
10	173	3,360	1,500	9,700	1,700	1,050	926	693	2,840	693	114	967
11	159	1,910	1,130	5,200	2,130	1,400	967	551	1,910	10,400	123	620
12	152	1,400	926	9,700	7,200	2,480	1,220	517	1,500	3,500	136	409
13	133	1,050	768	9,360	7,200	3,640	1,310	452	1,090	1,910	117	303
14	117	926	585	6,400	4,060	8,170	1,600	396	886	1,050	1,010	237
15	133	846	452	2,720	2,970	8,510	4,900	390	693	1,130	1,310	195
16	108	730	484	2,970	2,720	6,100	6,560	427	551	1,310	967	184
17	111	620	484	2,480	1,910	4,340	5,800	585	967	1,910	620	181
18	102	585	517	2,600	1,600	2,840	3,780	1,400	926	1,400	452	188
19	85	517	452	2,720	1,400	2,240	2,970	1,310	656	1,180	402	255
20	74	396	452	2,360	1,220	1,910	2,720	1,130	415	1,180	452	517
21	74	402	484	3,360	1,180	1,700	2,240	926	303	967	926	730
22	90	379	452	4,900	1,180	1,600	1,800	807	274	807	1,220	517
23	93	356	379	4,340	1,310	1,310	1,600	5,050	283	656	1,090	2,600
24	177	314	390	5,500	1,500	1,090	1,400	14,700	362	585	2,840	1,400
25	255	303	452	8,170	1,400	967	1,220	9,360	334	1,220	2,020	1,050
26	396	283	356	7,040	1,180	3,920	1,090	4,900	1,090	886	1,310	807
27	656	265	452	5,350	1,130	26,100	1,220	3,920	1,180	620	926	517
28	484	314	1,310	5,350	1,130	22,200	1,800	15,100	768	585	656	390
29	433	251	1,800	3,920	-------	8,850	2,840	12,500	551	452	484	334
30	356	216	3,100	2,970	-------	4,900	2,720	6,250	409	356	373	288
31	303	-------	10,900	2,480	-------	3,500	-------	4,900	-------	269	324	-------

Daily discharge, in second-feet, of Elk River at Clendenin, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1913–14.												
1	293	1,090	3,230	2,020	4,480	2,130	4,200	2,600	120	293	136	283
2	229	886	5,800	1,800	4,200	2,020	5,500	2,020	111	208	99	229
3	195	730	4,620	1,910	3,230	1,890	10,200	1,600	90	163	88	340
4	229	656	3,500	2,360	2,480	1,600	8,170	1,400	82	163	71	265
5	229	551	2,720	2,480	2,240	1,800	4,900	2,240	88	142	66	229
6	926	517	2,130	2,240	2,720	2,480	3,500	7,680	105	96	58	203
7	693	452	2,720	2,240	3,500	4,340	2,720	5,950	99	71	58	159
8	517	409	5,650	2,480	3,780	4,060	3,360	5,350	93	79	46	133
9	402	620	5,350	5,800	3,360	3,100	5,950	4,060	99	79	46	114
10	308	2,480	4,200	11,400	2,720	2,480	7,040	2,720	139	123	53	96
11	265	3,500	3,100	8,340	2,240	2,240	4,340	2,020	96	120	47	96
12	693	2,970	2,480	5,350	1,800	2,240	8,230	1,800	88	71	298	96
13	730	4,060	1,800	8,100	1,500	2,360	2,480	1,500	79	60	926	111
14	693	10,400	1,600	2,360	1,400	2,840	2,020	1,310	51	93	585	93
15	620	19,900	1,400	2,130	1,400	8,500	1,910	1,090	44	551	368	82
16	517	29,600	1,220	2,130	1,310	4,760	6,250	967	41	967	324	71
17	427	32,100	1,130	2,360	1,130	6,230	8,170	807	114	1,500	255	66
18	384	11,600	1,050	2,600	2,130	7,520	6,400	693	126	1,010	203	62
19	345	5,350	1,050	2,240	17,000	6,400	4,200	585	102	656	152	58
20	1,310	3,500	1,010	2,240	28,700	4,200	9,530	517	64	452	120	49
21	2,130	2,480	967	5,950	11,800	3,500	14,700	421	55	351	102	51
22	3,640	1,910	967	10,600	5,500	2,840	7,840	384	44	314	90	49
23	2,720	1,600	926	5,350	3,640	2,970	4,620	340	38	208	79	41
24	2,130	1,180	926	3,780	2,360	3,100	3,230	298	51	184	82	31
25	2,970	1,050	1,050	6,720	2,130	3,100	2,480	260	334	170	85	30
26	6,880	926	5,200	8,850	2,020	3,500	10,000	251	1,010	142	133	27
27	8,510	886	6,720	5,350	2,130	5,050	17,400	224	1,700	368	120	29
28	4,200	1,600	4,480	3,780	2,020	6,400	8,170	195	967	373	345	21
29	2,720	2,130	3,230	2,840	-------	6,560	4,760	170	693	216	415	20
30	1,910	2,480	2,600	2,480	-------	5,200	3,360	149	373	199	345	23
31	1,400	-------	2,240	3,100	-------	4,060	-------	129	-------	195	314	-------
1914–15.												
1	26	195	166	4,060	14,700	1,400	1,220	2,600	4,760	173	1,220	188
2	27	166	402	2,720	16,100	1,310	1,090	1,910	3,230	1,130	693	255
3	21	149	421	1,910	31,700	1,220	967	1,500	14,900	1,310	1,090	274
4	22	146	585	1,500	16,600	1,090	807	1,310	9,870	768	1,180	390
5	21	149	5,200	1,130	8,680	1,220	768	1,090	5,950	517	693	2,970
6	20	133	3,230	1,050	6,880	2,240	730	926	3,640	427	409	1,500
7	20	114	2,240	5,800	5,350	2,480	620	807	2,240	334	293	1,310
8	20	102	1,500	12,700	3,920	2,480	730	730	2,130	379	237	967
9	21	90	1,600	5,650	2,970	2,240	1,500	551	1,600	807	212	807
10	21	85	1,500	3,360	2,130	2,020	1,310	452	1,180	585	188	517
11	21	74	1,400	2,240	1,800	1,800	1,400	390	846	452	199	402
12	23	68	1,310	20,400	1,600	1,800	2,020	362	1,180	452	170	293
13	23	79	1,180	12,900	1,600	1,700	1,910	368	1,130	409	146	246
14	29	85	1,050	5,800	1,500	1,400	1,700	308	886	324	146	203
15	30	85	807	5,500	1,800	1,310	1,600	274	4,620	255	152	173
16	47	90	768	7,200	3,230	1,310	1,400	274	4,900	224	415	152
17	74	85	1,010	5,200	4,060	1,400	1,220	242	3,230	203	452	139
18	293	79	846	9,360	2,970	1,400	1,130	203	2,360	216	191	133
19	246	74	1,400	16,600	2,240	1,400	886	184	1,800	255	484	345
20	212	85	8,170	11,600	1,800	1,400	807	173	1,500	551	585	585
21	242	229	12,900	5,650	1,400	1,400	807	195	1,050	693	440	1,400
22	212	191	10,600	3,360	1,220	1,220	730	246	768	373	356	1,220
23	170	163	5,800	2,600	1,090	1,180	693	551	620	1,130	293	1,130
24	159	152	2,970	2,720	926	1,090	620	1,090	585	807	233	967
25	177	133	2,130	4,340	967	1,050	585	1,400	446	551	237	693
26	220	120	1,600	5,200	2,020	967	585	1,400	265	390	390	517
27	203	108	926	3,920	1,800	967	585	2,020	265	293	314	517
28	152	90	807	3,100	1,600	1,400	551	1,800	212	269	274	585
29	177	82	1,600	2,360	-------	1,400	967	1,700	177	229	237	440
30	274	93	7,040	1,800	-------	1,310	2,970	2,360	149	208	246	334
31	212	-------	6,100	2,720	-------	1,220	-------	5,050	-------	229	195	-------

Daily discharge, in second-feet, of Elk River at Clendenin, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1915–16.												
1	15,700	255	1,050	5,200	12,200	2,840	3,780	2,720	1,010	693	199	184
2	12,900	220	967	6,880	11,800	4,620	2,840	2,240	1,010	551	173	184
3	5,650	229	926	11,100	7,360	8,000	3,360	1,910	1,090	484	149	159
4	3,580	199	926	5,650	4,999	6,100	4,488	2,970	926	384	433	146
5	2,600	195	886	3,920	3,920	4,480	3,100	3,230	1,050	730	886	152
6	2,360	181	807	3,920	4,060	4,620	2,360	3,230	1,180	768	551	152
7	1,600	173	693	4,480	8,510	8,850	2,020	2,970	1,800	551	967	139
8	1,180	159	693	8,640	7,529	20,200	2,720	3,100	1,800	409	620	255
9	926	146	656	2,970	5,950	9,700	5,350	2,486	1,310	329	1,220	846
10	656	152	620	3,100	5,800	5,500	5,200	3,640	1,220	251	2,130	402
11	585	146	551	12,200	4,200	4,200	5,959	2,840	1,130	216	2,600	324
12	484	133	484	24,800	3,640	3,100	4,620	2,130	967	212	4,760	212
13	402	173	452	18,400	13,900	2,720	4,060	1,700	768	233	5,350	188
14	356	334	656	10,200	14,300	2,480	3,780	1,400	656	298	3,230	200
15	314	9,360	807	6,400	6,720	5,050	2,970	1,180	656	269	2,840	886
16	283	11,100	807	4,060	4,340	9,020	2,480	1,050	2,020	308	1,910	5,200
17	246	5,350	3,920	3,230	3,360	6,100	2,360	967	1,310	396	1,800	2,600
18	242	2,970	20,600	2,240	2,480	4,480	2,600	846	1,130	452	2,360	1,800
19	274	2,020	22,700	1,600	2,020	3,640	2,360	926	4,060	484	1,800	926
20	452	2,130	8,510	1,800	2,130	2,970	2,130	846	4,060	1,800	1,220	686
21	1,800	2,480	5,350	3,500	2,130	3,230	1,910	730	2,240	1,130	926	484
22	1,310	2,130	2,240	4,620	2,130	6,100	2,020	620	1,600	1,010	730	379
23	1,050	1,800	1,700	6,880	2,240	8,510	1,800	585	1,180	886	551	324
24	807	1,600	1,800	6,100	2,480	7,680	1,800	551	967	1,180	452	293
25	656	1,310	1,600	4,480	15,100	4,620	2,240	446	2,240	807	362	246
26	551	1,130	2,020	3,230	10,400	3,360	2,970	886	5,800	620	324	229
27	494	1,090	2,600	2,480	6,400	5,200	5,500	693	3,230	484	319	195
28	427	1,090	4,060	2,020	4,060	21,100	5,500	1,500	1,910	351	288	177
29	415	1,050	12,900	2,020	3,360	11,800	4,340	1,050	1,310	269	274	161
30	345	1,130	18,300	4,340	.....	7,520	3,500	807	967	220	251	2,600
31	293	.....	9,020	5,650	.....	4,900	.....	768	.....	199	224	.....

Monthly discharge of Elk River at Clendenin, W. Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 1,290 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
June 28–30	368	246	299	0.232	0.03
July	4,760	173	1,100	.853	.98
August	886	126	300	.233	.27
September	191	20	61.3	.048	.05
1908–9.					
October	60	19	25.9	.020	.02
November	68	20	43.2	.034	.04
December	926	47	359	.278	.32
January	8,850	585	1,740	1.35	1.56
February	11,800	730	4,090	3.17	3.30
March	6,100	1,400	3,310	2.57	2.96
April	14,900	1,220	4,810	3.73	4.16
May	17,900	362	2,400	1.86	2.14
June	2,020	251	931	.722	.81
July	1,700	212	482	.374	.43
August	1,130	123	407	.316	.36
September	379	68	152	.118	.13
The year	17,900	19	1,540	1.19	16.23

Monthly discharge of Elk River at Clendenin, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum	Mean.	Per square mile.	
1909–10.					
October	2,130	53	451	0.350	0.40
November	3,360	246	732	.567	.63
December	3,360	303	712	.552	.64
January	11,400	440	4,800	3.72	4.29
February	9,700	1,400	3,480	2.70	2.81
March	3,780	427	1,190	.922	1.06
April	5,350	390	1,680	1.30	1.45
May	12,000	656	2,580	2.00	2.31
June	20,200	1,010	4,420	3.43	3.83
July	5,500	274	1,790	1.39	1.60
August	551	27	159	.123	.14
September	1,600	68	423	.328	.37
The year	20,200	27	1,850	1.43	19.53
1910–11.					
October	551	64	162	.126	.15
November	2,360	105	274	.212	.24
December	9,870	433	1,630	1.26	1.45
January	34,900	1,130	7,840	6.08	7.01
February	8,340	846	2,760	2.14	2.23
March	12,900	1,220	3,290	2.55	2.94
April	8,340	1,600	3,930	3.05	3.40
May	1,500	142	578	.448	.52
June	807	99	314	.243	.27
July	656	23	179	.139	.16
August	807	14	68.8	.053	.06
September	4,620	170	1,270	.984	1.10
The year	34,900	14	1,860	1.44	19.53
1911–12.					
October	10,700	551	3,260	2.53	2.92
November	6,100	303	2,170	1.68	1.87
December	6,560	730	2,230	1.73	1.99
January	10,700	1,220	3,170	2.46	2.84
February	18,100	730	3,520	2.73	2.94
March	21,800	1,220	6,160	4.78	5.51
April	9,360	1,310	2,830	2.19	2.44
May	11,300	390	3,300	2.56	2.95
June	2,240	60	599	.464	.52
July	13,900	345	2,770	2.15	2.48
August	11,600	351	1,940	1.50	1.73
September	3,500	149	740	.574	.64
The year	21,800	60	2,730	2.12	28.83
1912–13.					
October	656	74	254	.197	.23
November	6,560	216	1,010	.783	.87
December	10,900	191	1,170	.907	1.05
January	28,700	2,360	6,760	5.24	6.04
February	9,190	1,130	2,960	2.29	2.38
March	26,100	967	4,230	3.28	3.78
April	6,560	926	2,150	1.67	1.86
May	15,100	390	3,270	2.53	2.92
June	8,850	274	1,500	1.16	1.29
July	10,400	246	1,260	.977	1.13
August	2,840	114	650	.504	.58
September	2,600	108	478	.371	.41
The year	28,700	74	2,140	1.66	22.54
1913–14.					
October	8,510	195	1,590	1.23	1.42
November	32,100	409	4,920	3.81	4.25
December	6,720	926	2,740	2.12	2.44
January	11,400	1,800	4,080	3.16	3.64
February	28,700	1,130	4,390	3.40	3.54
March	7,520	1,600	3,690	2.86	3.30
April	17,400	1,910	6,020	4.67	5.21
May	7,680	129	1,600	1.24	1.43
June	1,700	38	237	.184	.21
July	1,500	60	310	.240	.28
August	926	46	197	.153	.18
September	340	20	105	.081	.09
The year	32,100	20	2,470	1.91	25.99

Monthly discharge of Elk River at Clendenin, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1914–15.					
October	293	20	110	0.085	0.09
November	229	68	116	.090	.10
December	12,900	166	2,810	2.18	2.51
January	20,400	1,050	5,630	4.36	5.03
February	31,700	926	5,090	3.95	4.11
March	2,480	967	1,480	1.15	1.33
April	2,970	551	1,100	.853	.95
May	5,050	173	1,050	.814	.94
June	14,900	149	2,550	1.98	2.21
July	1,310	173	482	.374	.43
August	1,220	146	399	.309	.36
September	2,970	133	655	.508	.57
The year	31,700	20	1,770	1.37	18.63
1915–16.					
October	15,700	242	1,900	1.47	1.70
November	11,100	133	1,680	1.30	1.45
December	22,700	452	4,170	3.23	3.72
January	24,800	1,600	5,780	4.48	5.16
February	15,100	2,020	6,120	4.74	5.11
March	21,100	2,480	6,540	5.07	5.84
April	5,950	1,800	3,340	2.59	2.89
May	3,640	446	1,650	1.28	1.48
June	5,800	656	1,690	1.31	1.46
July	1,800	199	548	.425	.49
August	5,350	149	1,290	1.00	1.15
September	5,200	139	682	.529	.59
The year	24,800	133	2,940	2.28	31.04

COAL RIVER AT BRUSHTON, W. VA.

LOCATION.—At Chesapeake & Ohio Railway bridge at Brushton, Boone County, 500 feet above mouth of Brush Creek.

DRAINAGE AREA.—379 square miles.

RECORDS AVAILABLE.—June 23, 1908, to August 5, 1916, when station was discontinued.

GAGE.—Standard chain gage attached to bridge; read by G. W. Fitzpatrick The flood of August 9, 1916, destroyed the gage. Sea-level elevation of the zero of the gage 633.83 feet.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge or by wading.

CHANNEL AND CONTROL.—Bed of stream is of gravel and small boulders, practically permanent. There was one shift between the establishment of the station and the flood of August 9, 1916.

EXTREMES OF DISCHARGE.—Maximum stage recorded during the period June 23, 1908, to August 5, 1916; 13.3 feet at 1.30 p. m. March 27, 1913 (discharge, 12,000 second-feet); minimum stage recorded, 0.80 foot July 8 (discharge, 3.0 second-feet). The maximum of the flood of August 9, 1916, was 36.3 feet (discharge, about 40,700 second-feet).

ICE.—Stage-discharge relation affected by ice for short periods during severe winters.

ACCURACY.—Stage-discharge relation practically permanent; changed once in 1912. Rating curves well defined between 17 and 4,500 second-feet; beyond these limits the curves are extensions. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records excellent.

Discharge measurements of Coal River near Brushton, W. Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1914.		*Feet.*	*Sec.-ft.*
June 23	A. H. Horton	2.60	392	Apr. 3	C. T Bailey	6.39	3,680
July 26	W G. Hoyt	1.60	70	Sept. 17	do	1.29	22.7
1909.				1918.			
Mar. 19	H. J. Jackson	2.68	423	Nov. 23	Walters and Peterson	2.10	166
Nov. 7	A. H. Horton	1.20	23	1914.			
1910				Nov. 14	Mathers and Morgan	1.25	22.0
Mar. 4	C. T. Bailey	3.12	666	14	do	1.25	20.3
4	do	3.12	668	1916.			
Aug. 9	Bailey and Dort	1.37	40.1	Aug. 30	B. E. Jones	1.79	75.8
1911.							
Oct. 4	C. T. Bailey	2.75	468				
4	do	2.54	356				

Daily discharge, in second-feet, of Coal River at Brushton, W. Va., for the years ending Sept. 30, 1908–1916.

Day.	June.	July.	Aug.	Sept	Day.	June.	July.	Aug.	Sept.
1908.					1908.				
1		88	55	23	16		49	38	7.0
2		88	45	16	17		38	32	7.0
3		120	38	16	18		55	43	7.0
4		157	32	16	19		67	55	7.0
5		132	32	16	20		70	43	7.0
6		109	28	16	21		55	38	7.0
7		88	28	16	22		55	43	7.0
8		88	32	11	23	390	55	88	6.0
9		88	38	11	24	238	43	55	5.0
10		88	49	11	25	186	88	43	5.0
11		70	144	11	26	490	105	38	5.0
12		58	79	11	27	275	120	32	5.0
13		49	62	9.0	28	204	172	28	6.0
14		55	49	7.0	29	132	132	23	7.0
15		62	43	7.0	30	98	98	23	7.0
					31		70	23	

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908–9.												
1	7	11	16	465	203	572	812	4,170	88	750	186	11
2	7	11	16	275	203	750	690	3,480	70	545	220	11
3	7	11	11	203	186	465	690	1,870	79	415	172	11
4	7	11	11	157	186	750	660	1,270	98	238	120	11
5	5	11	11	157	172	980	600	980	109	172	88	16
6	5	11	16	203	220	1,120	545	845	98	415	70	20
7	5	11	23	295	255	2,810	490	660	109	7,390	70	23
8	5	11	32	255	318	2,370	415	720	88	2,590	62	23
9	5	11	32	220	390	2,920	390	660	572	1,270	49	157
10	5	11	32	186	1,270	4,170	340	572	1,120	630	43	465
11	16	16	43	157	1,510	2,810	295	518	1,120	390	43	690
12	11	20	98	157	845	1,430	275	490	845	275	32	390
13	11	16	238	132	660	980	275	440	660	318	32	220
14	11	16	186	157	465	980	415	390	572	440	38	144
15	7	23	120	1,120	365	910	518	318	720	290	157	98
16	11	23	88	1,780	1,780	780	490	295	545	340	144	88
17	11	23	62	1,600	2,370	690	440	238	390	238	132	70
18	11	23	55	1,270	1,430	518	390	186	490	186	79	70
19	11	23	70	660	910	600	340	157	440	157	70	55
20	11	14	62	440	845	365	812	157	275	132	55	49
21	11	16	55	318	980	390	1,050	157	220	98	49	43
22	11	11	49	238	1,600	465	3,250	144	203	79	38	43
23	11	11	98	220	1,430	660	2,810	120	186	157	32	43
24	11	11	132	172	1,190	518	2,480	98	220	157	32	43
25	11	11	186	157	1,960	690	1,600	109	220	132	23	32
26	11	16	1,120	203	1,430	1,960	1,120	157	172	109	23	32
27	11	16	660	220	1,050	1,960	780	157	132	109	20	32
28	14	16	340	220	750	2,590	720	172	109	157	16	28
29	16	16	255	238		2,590	630	144	203	144	16	23
30	11	16	238	255		1,600	1,120	132	318	238	14	23
31	11		275	186		1,050		109		172	11	

Daily discharge, in second-feet, of Coal River at Brushton, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1909–10.												
1	23	32	32	62	440	490	132	365	440	172	88	79
2	23	32	32	98	390	845	109	318	318	132	70	62
3	23	32	32	600	415	812	120	255	255	238	62	220
4	16	28	32	660	812	660	157	238	203	2,160	55	295
5	16	23	32	440	1,050	545	132	220	220	3,030	49	440
6	16	23	32	545	812	465	186	186	2,370	1,690	43	318
7	16	23	38	2,370	518	415	172	186	1,690	1,600	43	203
8	16	23	43	1,430	465	365	144	238	780	1,430	43	157
9	11	28	38	690	440	318	132	490	572	980	43	120
10	11	32	43	365	490	275	109	1,270	690	630	43	132
11	14	32	43	238	720	415	98	980	630	465	38	172
12	16	32	55	255	660	600	144	2,920	630	318	32	132
13	16	32	55	186	545	780	318	2,160	600	318	32	98
14	23	32	55	390	440	812	720	1,270	660	295	32	79
15	23	32	172	600	490	660	630	910	845	255	23	62
16	32	32	172	545	1,120	518	490	660	1,510	220	23	55
17	23	32	120	440	1,780	465	440	545	2,370	275	32	55
18	32	28	98	630	2,370	365	415	465	1,600	465	28	43
19	32	23	79	3,360	1,510	318	390	415	812	750	23	43
20	32	23	70	1,600	1,050	295	390	340	845	545	23	43
21	23	23	55	2,260	812	255	1,120	295	845	365	16	32
22	23	23	55	2,700	812	238	2,370	295	490	275	16	32
23	28	38	43	1,270	980	220	1,430	275	440	203	16	32
24	32	43	43	845	980	186	1,120	295	440	220	16	23
25	55	32	43	690	780	186	910	845	465	157	16	23
26	70	32		630	600	186	845	1,350	238	203	11	23
27	70	38		630	490	157	690	845	390	172	11	23
28	55	38	43	750	440	157	572	572	318	157	11	23
29	49	38		750	-------	132	465	415	238	132	7	28
30	43	32		545	-------	132	390	340	203	109	11	28
31	38	-------		465	-------	132	-------	572	-------	109	32	-------
1910–11.												
1	23	55	255	812	2,700	275	545	720	88	38	9	28
2	20	43	172	2,160	2,260	255	600	980	79	28	9	16
3	16	43	132	2,700	1,430	238	1,120	980	55	20	9	11
4	16	43	109	1,960	1,430	238	4,060	780	49	20	9	11
5	16	43	120	980	1,350	220	5,710	600	55	20	9	20
6	16	43	318	630	1,120	4,400	4,060	490	55	14	11	109
7	16	32	720	465	845	5,350	2,700	390	62	14	11	70
8	20	32	415	365	750	4,750	1,600	365	55	98	7	43
9	23	32	275	275	690	2,370	2,810	318	49	109	6	32
10	23	32	203	238	812	1,510	2,370	295	38	43	55	38
11	23	32	172	220	750	980	1,430	255	32	49	38	49
12	23	32	157	220	690	780	980	220	28	109	28	32
13	23	32	132	220	545	690	780	203	28	157	16	28
14	23	32	109	203	465	660	630	172	28	98	16	23
15	23	23	98	220	390	600	720	144	20	62	14	38
16	20	23	88	295	318	518	910	132	20	43	16	55
17	16	23	88	415	295	465	845	120	20	55	28	32
18	16	23	70	415	295	415	750	109	32	70	14	28
19	16	23	98	365	275	415	630	98	49	62	11	32
20	16	20	88	365	1,190	572	440	88	38	49	7	43
21	11	16	70	750	1,870	812	910	79	32	38	11	43
22	16	16	70	3,250	1,190	750	1,270	79	28	28	11	98
23	16	16	79	2,160	845	660	1,780	70	20	28	5	79
24	16	16	144	1,120	660	545	1,270	62	20	38	5	62
25	16	32	415	812	545	465	980	49	20	32	5	62
26	16	32	318	750	440	415	720	43	20	20	7	43
27	23	32	255	1,050	390	415	600	38	23	14	7	28
28	32	70	203	980	340	365	518	32	28	11	28	23
29	32	340	186	1,190	-------	390	415	28	49	9	11	23
30	49	340	660	9,670	-------	390	440	28	55	9	16	23
31	55	-------	1,120	3,360	-------	440	-------	38	-------	9	43	-------

Daily discharge, in second-feet, of Coal River at Brushton, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1911–12.												
1	19	70	340	980	1,120	845	1,350	1,270	86	188	152	132
2	107	61	295	845	845	600	3,820	970	39	405	139	99
3	1,190	58	248	690	572	518	4,630	765	93	355	112	74
4	415	58	230	572	415	440	2,060	575	71	306	91	60
5	210	54	193	365	365	415	1,270	1,510	73	765	76	66
6	130	116	154	340	390	390	900	1,600	63	380	62	59
7	118	390	142	318	340	390	700	3,710	9.4	252	59	41
8	295	572	132	275	340	518	575	2,160	23	162	57	99
9	152	390	127	295	175	1,510	460	1,350	41	267	52	99
10	174	275	118	275	255	1,960	405	900	36	332	56	60
11	545	213	116	275	220	1,430	355	668	30	267	42	45
12	518	203	114	238		1,600	310	1,600	22	1,870	46	36
13	295	340	114	224	217	6,670	310	2,260	19	668	73	29
14	210	440	116		186	3,600	293	1,510	16	332	62	21
15	206	390	123	215	193	4,990	259	970	16	194	49	23
16	255	295	234		177	4,870	267	970	29	182	36	22
17	390	234	318	227	203	2,160	276	1,350	28	226	32	20
18	2,810	255	390	255	234	1,270	432	1,120	30	700	27	52
19	1,120	1,120	255	1,780	275	980	515	830	80	970	52	22
20	545	440	230	2,370	365	845	460	605	164	605	46	22
21	318	465	234	1,350	630	910	405	460	121	332	60	22
22	227	340	234	845	3,360	980	380	332	52	229	76	23
23	193	275	365	660	1,600	980	405	259	68	176	93	78
24	186	295	600	572	1,050	2,060	380	212	50	142	91	460
25	163	440	780	518	780	2,810	355	173	49	900	66	306
26	142	518	845	440	1,270	1,780	293	167	44	1,120	60	164
27	118	490	2,920	440	3,830	1,190	1,120	144	52	515	134	237
28	107	465	2,370	390	2,370	910	3,140	125	108	310	134	218
29	90	440	1,120	600	1,270	2,160	1,780	95	144	229	149	164
30	81	415	812	3,250		3,480	1,350	125	112	188	208	125
31	72		720	2,160		2,060		106		144	176	
1912–13.												
1	95	34	30	1,350	798	765	635	244	355	47	15	16
2	74	34	30	635	732	635	488	240	259	40	13	13
3	65	32	40	515	970	460	405	229	201	32	11	10
4	54	32	66	635	4,870	380	332	204	310	46	11	7.0
5	47	29	405	605	2,480	380	301	182	215	68	13	6.0
6	41	28	970	970	1,350	332	244	170	164	116	11	4.0
7	121	35	765	3,360	830	293	208	159	185	74	11	5.4
8	112	332	515	7,510	605	244	194	208	1,600	54	13	31
9	99	515	332	3,825	460	244	182	259	1,870	38	9.4	49
10	54	276	237	1,690	355	293	167	194	970	46	7.8	34
11	29	182	176	970	405	355	194	154	545	29	7.0	25
12	25	144	156	1,040	1,190	798	188	130	355	30	10	19
13	23	116	114	1,600	1,190	830	194	116	267	41	13	17
14	21	103	80	1,270	900	1,960	204	110	194	39	16	17
15	21	97	91	865	668	2,590	3,710	99	159	41	27	15
16	20	84	97	635	545	1,780	1,690	89	134	60	29	15
17	19	70	87	460	432	1,190	1,120	201	125	49	26	15
18	23	60	80	515	355	798	798	276	575	73	20	16
19	20	54	80	515	301	605	668	267	355	149	19	16
20	22	50	84	515	267	515	545	194	201	152	27	15
21	20	44	86	970	240	332	380	179	144	116	23	14
22	20	39	60	1,350	233	380	332	244	284	87	20	13
23	49	38	40	1,120	208	310	293	635	118	65	27	15
24	62	36	46	1,190	198	267	276	2,700	101	52	25	16
25	91	38	52	2,260	208	252	244	1,430	91	41	57	25
26	91	41	49	1,960	188	605	229	830	76	34	49	22
27	71	39	78	1,510	218	10,200	244	605	76	30	38	22
28	62	36	103	2,160	732	4,400	244	865	89	28	33	16
29	54	32	176	1,510		1,870	259	970	76	25	30	17
30	44	32	460	1,120		1,120	248	668	62	20	24	31
31	39		3,250	830		865		488		18	19	

Daily discharge, in second-feet, of Coal River at Brushton, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1913-14.												
1	57	70	668	575	970	605	900	355	29	6.4	21	53
2	59	63	1,870	488	798	460	1,270	293	26	6.4	18	36
3	46	54	1,120	545	668	405	1,430	259	23	6.0	15	1,350
4	44	53	700	575	575	432	1,120	233	20	5.2	13	297
5	39	49	488	545	515	432	830	293	45	4.8	8.6	149
6	35	44	355	515	545	605	635	432	101	4.6	8.2	99
7	33	41	732	545	970	1,040	515	1,120	57	3.6	7.4	80
8	30	41	865	575	1,190	1,120	798	970	35	3.0	6.8	70
9	28	99	970	1,780	900	900	2,260	900	30	13	7.0	57
10	26	222	668	3,480	700	765	1,780	798	27	9.8	7.4	41
11	25	229	545	1,960	575	1,780	1,200	668	20	10	13	70
12	29	218	405	1,190	432	3,250	865	635	19	9.8	23	121
13	29	310	310	765	380	2,260	700	515	14	7.4	23	103
14	27	970	267	605	355	1,600	605	380	11	62	27	73
15	27	830	226	488	301	1,270	668	310	10	146	31	60
16	27	2,370	191	405	293	1,510	3,140	263	6.6	1,190	19	46
17	25	2,060	176	380	240	1,780	3,940	222	8.2	605	19	39
18	25	1,040	167	355	605	1,510	1,780	191	6.6	380	14	34
19	32	515	149	355	3,940	1,270	1,270	164	10	545	12	29
20	116	355	139	355	4,990	1,120	3,600	139	10	218	9.8	23
21	149	259	137	700	2,260	765	2,810	121	8.6	114	13	21
22	149	204	134	970	1,350	732	1,690	108	8.2	84	10	19
23	114	167	114	635	1,120	830	1,120	95	11	57	7.4	17
24	99	142	112	488	1,870	1,120	830	86	15	42	7.0	16
25	545	121	108	970	1,350	1,350	668	80	15	35	18	19
26	765	103	970	1,510	970	1,350	1,120	70	13	39	110	17
27	332	112	1,270	1,270	732	1,190	830	60	23	71	167	15
28	194	176	900	765	635	970	635	53	12	59	162	13
29	149	301	700	575	-------	765	515	46	6.4	42	118	12
30	121	332	605	515	-------	732	432	39	6.6	35	93	12
31	84	-------	575	765	-------	765	-------	34	-------	23	38	-------
1914-15.												
1	11	38	28	1,190	4,400	271	284	635	575	27	80	19
2	8.6	32	73	765	4,630	244	218	460	460	41	76	19
3	7.8	33	82	515	5,950	233	201	1,270	1,430	63	139	27
4	10	33	405	380	2,700	212	204	2,590	970	57	288	52
5	8.6	30	2,060	306	1,780	332	185	1,780	575	73	121	830
6	8.6	25	970	293	1,690	1,120	167	1,120	355	87	73	332
7	7.0	23	545	4,400	1,510	1,270	162	1,510	252	95	59	288
8	6.8	23	355	2,370	1,120	1,040	149	575	244	152	44	194
9	16	23	267	1,190	830	798	139	432	310	194	41	134
10	15	23	229	732	605	732	301	301	212	139	39	103
11	11	20	215	545	515	765	137	229	164	112	32	76
12	11	19	212	6,910	432	700	173	201	248	95	60	63
13	9.4	17	212	3,140	276	575	159	156	194	99	164	60
14	10	18	215	1,690	332	460	144	167	164	103	112	54
15	15	18	170	2,920	355	405	139	144	164	84	80	70
16	27	21	114	2,810	380	545	139	123	229	130	164	82
17	106	19	112	2,160	460	1,350	116	101	194	212	125	59
18	259	19	116	4,060	432	1,120	139	93	164	152	93	49
19	208	19	248	4,400	380	1,040	125	84	134	103	65	41
20	144	26	2,920	2,160	310	732	123	80	108	134	53	38
21	103	25	2,480	1,040	284	605	118	70	84	1,600	49	46
22	80	28	2,370	798	263	545	116	82	38	970	41	60
23	63	25	1,270	668	237	488	215	108	60	405	34	78
24	63	22	732	970	244	460	765	108	52	229	30	76
25	59	20	515	1,690	259	380	830	99	41	152	30	59
26	57	19	405	1,780	276	380	605	93	31	114	23	44
27	60	19	233	1,270	288	405	460	182	29	50	22	46
28	52	22	293	970	267	405	432	188	25	70	25	53
29	52	19	488	700	-------	432	798	182	24	59	22	57
30	47	20	4,170	545	-------	380	865	405	24	50	20	54
31	45	-------	2,370	1,270	-------	332	-------	765	-------	65	20	-------

Daily discharge, in second-feet, of Coal River at Brushton, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1915–16.												
1	3,600	34	244	1,430	2,920	1,430	1,040	798	222	132	71	
2	2,480	30	212	1,270	2,260	1,430	830	668	154	123	87	
3	970	29	201	1,190	1,690	2,370	798	575	162	132	71	
4	545	27	188	1,120	1,510	1,960	700	635	244	108	63	
5	355	26	173	1,040	1,780	1,870	605	605	208	87	146	
6	259	24	159	1,190	1,510	1,870	545	575	170	76		
7	194	26	144	1,430	1,960	3,600	488	545	570	62	345	
8	152	24	144	1,350	1,690	2,810	732	635	835	54		
9	123	23	128	1,350	1,690	2,060	1,510	635	510	52	11,000	
10	103	23	121	1,600	1,600	1,780	1,270	545	385	49		
11	89	23	125	3,360	1,430	1,510	3,250	460	350	46		
12	84	29	123	2,700	1,430	1,430	3,710	380	265	39		
13	70	35	123	2,370	1,350	1,350	2,260	332	203	34		
14	63	44	154	1,960	1,270	1,350	1,430	276	178	41		
15	57	970	126	1,510	1,190	1,270	1,040	229	163	121		
16	52	1,430	144	1,350	1,190	1,270	798	215	22	110	2,350	70
17	49	865	1,690	1,190	1,510	1,190	700	208	262	355		
18	46	380	7,510	1,120	1,120	1,270	545	182	257	310		
19	66	365	4,520	1,040	1,120	1,270	488	156	252	229		
20	70	515	1,780	1,040	1,120	1,270	405	137	319	252		
21	63	575	1,040	1,040	1,600	1,040	380	121	0	276		
22	56	432	765	1,190	1,600	1,430	488	121	276	310		
23	46	332	575	1,510	1,270	1,350	432	125	212	229		
24	46	280	488	1,510	1,270	1,350	380	125	170	154		
25	39	293	405	1,350	2,590	1,270	460	123	142	116		
26	38	185	668	1,190	2,480	970	515	110	575	93		
27	36	204	798	1,120	1,960	1,960	700	222	798	76	155	
28	32	288	1,120	1,040	1,690	3,030	1,040	82	432	63		
29	31	301	5,350	1,120	1,600	2,370	1,120	80	276	54		
30	30	293	4,280	1,690	-------	1,960	970	159	201	188		
31	36	-------	2,060	1,510	-------	1,690	-------	244	159	132		
										97		

NOTE.—Stage-discharge relation affected by ice Dec. 26–31, 1909; Jan. 14–16 and Feb. 11–12, 1912; discharge estimated by comparison with records for Coal River at Fuqua and by study of weather records. Discharge for August and September also estimated from records for Coal River at Fuqua.

Monthly discharge of Coal River at Brushton, W. Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 379 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
June 23–30	490	98	252	0.665	0.20
July	172	38	84.3	.222	.26
August	144	23	45.1	.119	.14
September	23	5	9.73	.026	.03
1908–9.					
October	16	5	9.61	.025	.03
November	23	11	14.9	.039	.04
December	1,120	11	150	.396	.46
January	1,780	132	397	1.05	1.21
February	2,370	172	891	2.35	2.45
March	4,170	365	1,340	3.54	4.08
April	3,250	275	848	2.24	2.50
May	4,170	98	642	1.69	1.95
June	1,120	70	349	.921	1.03
July	7,390	79	608	1.60	1.84
August	220	11	68.9	.182	.21
September	690	11	98.8	.261	.29
The year	7,390	5	449	1.18	16.09

Monthly discharge of Coal River at Brushton, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1909–10.					
October	70	11	29.0	0.076	0.09
November	43	23	30.4	.080	.09
December	172	32	57.1	.151	.17
January	3,360	62	872	2.30	2.65
February	2,370	390	800	2.11	2.20
March	845	132	400	1.06	1.22
April	2,370	98	511	1.35	1.51
May	2,920	186	662	1.75	2.02
June	2,370	203	737	1.94	2.16
July	3,030	109	583	1.54	1.78
August	88	7	31.9	.084	.10
September	440	23	102	.269	.30
The year	3,360	7	399	1.05	14.29
1910–11.					
October	55	11	21.6	.057	.07
November	340	16	52.4	.138	.15
December	1,120	70	237	.625	.72
January	9,670	203	1,250	3.30	3.80
February	2,700	275	889	2.35	2.45
March	5,350	220	1,010	2.66	3.07
April	5,710	415	1,420	3.75	4.18
May	980	28	258	.681	.78
June	88	20	39.2	.103	.11
July	157	9	45.0	.119	.14
August	55	5	15.2	.040	.05
September	109	11	40.7	.107	.12
The year	9,670	5	436	1.15	15.64
1911–12.					
October	2,810	19	368	.971	1.12
November	1,120	54	337	.889	.99
December	2,920	114	484	1.28	1.48
January	3,250	------	716	1.89	2.18
February	5,830	177	875	2.31	2.49
March	6,670	390	1,780	4.70	5.42
April	4,630	259	975	2.57	2.87
May	3,710	95	932	2.46	2.84
June	164	9.4	58.9	.155	.17
July	1,870	142	442	1.17	1.35
August	208	27	82.8	.218	.25
September	460	20	95.0	.251	.28
The year	6,670	9.4	597	1.58	21.44
1912–13.					
October	121	19	51.2	.135	.16
November	515	28	89.4	.236	.26
December	3,250	30	285	.752	.87
January	7,510	460	1,470	3.88	4.47
February	4,870	188	783	2.07	2.16
March	10,200	244	1,160	3.06	3.53
April	3,710	167	507	1.34	1.50
May	2,700	89	430	1.13	1.30
June	1,870	62	338	.892	1.00
July	152	18	56.1	.148	.17
August	57	7.0	21.1	.056	.06
September	49	4.0	17.9	.047	.05
The year	10,200	4.0	433	1.14	15.53
1913–14.					
October	765	25	112	.296	.34
November	2,370	41	385	1.02	1.14
December	1,870	108	537	1.42	1.64
January	3,480	355	827	2.18	2.51
February	4,990	240	1,080	2.85	2.97
March	3,250	405	1,120	2.96	3.41
April	3,940	432	1,330	3.51	3.92
May	1,120	34	320	.844	.97
June	101	6.4	20.9	.055	.06
July	1,190	3.0	124	.327	.38
August	167	6.8	33.8	.089	.10
September	1,350	12	99.7	.263	.29
The year	4,990	3.0	495	1.31	17.73

Monthly discharge of Coal River at Brushton, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1914–15.					
October	259	6.8	51.0	0.135	0.16
November	38	17	23.3	.061	.07
December	4,170	28	802	2.12	2.44
January	6,910	293	1,760	4.64	5.35
February	5,950	237	1,110	2.93	3.05
March	1,350	212	605	1.60	1.84
April	865	116	287	.757	.84
May	2,590	70	462	1.22	1.41
June	1,430	24	252	.665	.74
July	1,600	27	191	.504	.58
August	288	20	71.7	.189	.22
September	830	19	105	.277	.31
The year	6,910	6.8	475	1.25	17.01
1915–16.					
October	3,600	30	319	.842	.97
November	1,430	23	268	.707	.79
December	7,510	121	1,150	3.03	3.49
January	3,360	1,040	1,450	3.83	4.42
February	2,920	1,120	1,630	4.30	4.64
March	3,600	970	1,700	4.49	5.18
April	3,710	380	988	2.61	2.91
May	798	80	332	.876	1.01
June	830	142	306	.807	.90
July	355	34	126	.332	.38
August	----------	63	1,570	4.14	4.77
September	----------	----------	70	.185	.21
The year	----------	23	826	2.18	29.67

NOTE.—Monthly means estimated by comparison with records for Coal River at Fuqua for August and September, 1916.

COAL RIVER AT FUQUA, W. VA.

LOCATION.—At W. C. Hoy's passenger ferry, half a mile below Fuqua railroad station, Kanawha County, and 1 mile below mouth of Fuqua Creek.

DRAINAGE AREA.—849 square miles.

RECORDS AVAILABLE.—October 12, 1911, to September 30, 1916, when station was discontinued.

GAGE.—Staff gage in two sections on right bank; read by W. C. Hoy.

DISCHARGE MEASUREMENTS.—Made from boat 300 feet above gage or by wading.

CHANNEL AND CONTROL.—Channel is sandy, but control is practically permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during the period October 12, 1911, to September 30, 1916, 36.6 feet August 9, 1916 (discharge, estimated about 47,300 second-feet); minimum stage, 0.48 foot September 6 and a. m. reading September 7, 1913 (discharge, 13 second-feet).

ICE.—Stage-discharge relation probably affected by ice for short periods.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined between 38 and 745 second-feet, and fairly well defined between 745 and 15,000 second-feet. Above and below these limits, curve is an extension. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Coal River at Fuqua, W. Va., during the years 1911–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1911.		*Feet.*	*Sec.-ft.*	1914.		*Feet.*	*Sec.-ft.*
Oct. 13	C. T. Bailey	2.85	700	Nov. 13	Mathers and Morgan	0.92	44.6
1912.				13	do	.92	45.1
Sept. 16	do	.89	50.7	1916.			
1913.				Aug. 29	B. E. Jones	1.67	180
Nov. 22	B. J. Peterson	2.38	444				
22	do	2.36	432				

Daily discharge, in second-feet, of Coal River at Fuqua, W. Va., for the years ending Sept. 30, 1912–1916.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1911–12.												
1	47	123	745	1,680	2,520	1,920	2,880	2,700	180	428	407	291
2	570	104	640	1,680	1,800	1,380	6,210	2,160	156	1,680	310	192
3	2,650	104	540	1,440	1,320	1,200	11,500	1,680	167	1,080	238	144
4	990	88	495	1,200		1,080	4,630	1,320	180	640	180	123
5	482	88	407	1,200		1,020	2,820	3,080	156	690	156	98
6	260	565	328			965	2,100	3,010	140	640	131	98
7	240	1,020	291			965	1,680	12,900	127	450	115	82
8	644	1,080	273			1,200	1,500	6,850	104	291	104	101
9	409	800	255			2,400	1,200	3,400	101	291	104	131
10	860	565	238			3,950	1,080	2,160	96	450	125	98
11	1,270	428	221			3,010	855	1,620	79	428	112	76
12	1,080	450	221	550	540	2,940	855	2,160	69	1,680	140	63
13	640	640	221			14,000	800	3,600	58	1,320	144	53
14	407	965	221			8,870	855	2,460	64	640	138	48
15	328	855	273			8,730	745	1,860	53	348	115	53
16	407	690	855			11,600	745	1,860	54	255	93	47
17	1,260	518	1,140			4,930	690	2,460	55	255	78	44
18	4,830	640	910			2,880	1,200	2,400	78	615	72	48
19	2,580	2,100	745	1,920		2,160	1,320	1,920	91	2,100	91	54
20	1,200	1,500	640	5,490		2,220	1,200	1,500	273	1,200	156	52
21	745	1,020	590	2,940	2,280	2,160	1,020	1,080	255	690	140	45
22	495	745	540	1,920	7,110	2,280	955	855	180	450	144	44
23	387	590	1,020	1,440	3,810	2,280	965	640	156	310	140	53
24	328	590	1,260	1,260	2,340	3,880	965	518	127	221	144	565
25	273	1,020	1,560	1,080	1,740	6,720	855	387	85	2,880	123	495
26	238	1,020	1,680	965	4,830	3,740	745	367	73	2,760	144	310
27	192	1,020	3,600	910	11,000	2,640	2,220	291	86	1,320	238	206
28	167	965	5,490	855	5,150	1,980	7,760	255	136	745	273	348
29	156	910	2,640	1,320	2,760	2,700	3,880	238	156	495	273	273
30	144	800	1,740	4,270	-------	6,460	2,940	255	310	428	518	238
31	123	-------	1,680	4,360	-------	4,270	-------	221	-------	450	450	-------
1912–13.												
1	180	53	53	2,460	1,620	1,200	1,740	615	745	76	38	23
2	140	53	60	1,320	1,380	1,140	1,380	615	540	66	38	20
3	108	49	65	965	1,800	910	1,200	590	428	63	34	17
4	91	50	73	1,080	9,430	745	1,020	540	690	68	31	15
5	79	48	206	1,200	5,490	745	910	495	518	134	27	14
6	73	46	1,440	1,500	2,880	690	800	472	328	140	24	13
7	65	58	1,320	4,630	1,860	615	690	407	367	117	24	13
8	60	78	910	17,300	1,320	518	640	367	1,680	91	23	15
9	54	565	640	10,800	1,080	472	590	495	2,820	76	21	27
10	49	450	450	3,600	855	450	565	387	1,740	131	21	40
11	48	273	348	2,160	965	565	540	328	1,020	84	21	33
12	43	206	291	2,640	1,860	1,080	640	273	640	70	20	32
13	41	167	273	3,080	2,280	1,320	690	238	495	65	22	31
14	40	144	255	2,640	1,740	5,610	690	221	348	74	20	25
15	38	138	238	1,800	1,440	5,850	5,150	206	273	73	23	23
16	38	123	180	1,380	1,200	3,530	5,040	206	221	76	31	21
17	37	112	156	1,080	965	2,340	2,940	328	192	99	33	21
18	36	98	144	1,080	855	1,560	2,160	745	540	82	29	23
19	34	88	144	1,200	690	1,200	1,680	590	518	273	26	26
20	38	82	134	1,200	590	1,080	1,380	450	273	387	23	23
21	38	76	123	1,860	540	965	1,080	407	180	192	21	21
22	37	73	119	2,880	495	910	910	450	156	138	29	21
23	59	69	104	2,460	450	745	855	1,980	156	102	27	20
24	65	66	98	2,640	428	640	745	4,930	144	119	24	20
25	76	68	114	4,450	407	590	640	3,270	123	88	34	20
26	91	68	85	4,190	367	2,880	615	1,920	115	74	58	23
27	96	68	129	3,080	387	18,300	640	1,320	101	63	45	22
28	80	65	167	4,030	745	12,600	640	1,080	98	58	38	20
29	76	70	273	3,140	-------	4,630	690	1,620	98	52	34	23
30	73	60	1,080	2,160	-------	2,820	690	1,320	85	46	29	24
31	60	-------	4,830	1,620	-------	2,160	-------	965	-------	42	26	-------

Daily discharge, in second-feet, of Coal River at Fuqua, W. Va., for the years ending Sept. 30, 1912–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1913–14.												
1	26	134	1,200	1,140	2,880	1,200	1,920	910	73	24	60	131
2	46	108	3,530	1,020	2,040	1,080	2,820	745	68	23	48	104
3	45	94	2,460	1,080	1,620	1,020	2,880	640	60	21	46	5,730
4	39	84	1,560	1,320	1,320	1,080	2,280	590	55	21	40	1,080
5	36	76	1,320	1,320	1,200	965	1,800	1,200	63	20	38	450
6	33	70	800	1,200	1,080	1,260	1,380	1,560	112	18	31	221
7	31	65	1,080	1,200	1,500	2,040	1,140	2,820	123	17	31	180
8	29	65	2,700	1,260	2,160	2,280	1,680	2,280	86	15	28	167
9	26	110	2,040	2,580	1,800	1,980	4,110	2,100	70	15	27	167
10	23	273	1,500	5,370	1,440	1,620	3,810	1,860	61	15	26	129
11	23	450	1,200	4,190	1,260	1,920	2,520	1,680	53	18	36	131
12	21	428	910	2,460	1,020	7,630	1,920	1,380	44	20	54	310
13	20	590	690	1,560	855	4,630	1,500	1,260	39	17	65	310
14	19	1,440	615	1,260	1,080	3,400	1,320	1,020	40	39	53	221
15	19	1,560	495	1,080	910	2,820	1,320	855	34	238	68	167
16	19	3,600	428	910	855	2,640	3,600	690	31	855	84	131
17	18	4,830	387	800	800	3,010	8,310	565	29	2,580	79	108
18	20	2,220	348	745	1,680	2,760	3,880	472	27	965	60	93
19	33	1,260	310	690	7,630	2,400	2,640	387	26	1,080	46	82
20	69	800	273	640	12,400	2,100	8,590	328	27	495	39	74
21	167	565	255	800	5,490	1,620	7,760	273	39	273	35	68
22	180	428	238	1,440	2,880	1,500	3,810	238	42	180	48	60
23	156	348	238	1,080	2,160	1,740	2,580	221	39	127	34	53
24	123	310	221	855	2,280	2,340	1,920	192	36	98	31	52
25	291	255	192	1,440	2,220	2,520	1,560	167	39	82	86	55
26	2,100	221	1,500	2,460	1,800	2,580	2,580	142	38	125	221	55
27	910	206	2,580	2,040	1,440	2,340	2,280	125	38	117	472	48
28	615	450	1,800	1,560	1,320	1,920	1,680	110	48	192	407	46
29	387	615	1,380	1,200	-------	1,620	1,380	98	34	119	450	39
30	206	640	1,200	1,020	-------	1,500	1,140	90	28	85	255	36
31	156	-------	1,140	1,980	-------	1,740	-------	79	-------	70	180	-------
1914–15.												
1	34	88	55	2,820	10,400	495	640	1,260	910	47	144	27
2	31	82	115	1,620	12,000	495	540	910	800	63	108	23
3	30	74	291	1,140	15,300	450	495	1,620	2,100	101	104	33
4	30	69	640	965	7,760	407	450	4,540	2,100	94	690	115
5	30	64	3,270	745	3,950	690	407	3,600	1,260	112	367	518
6	29	60	2,220	690	3,400	1,800	348	2,220	800	144	180	565
7	29	56	1,260	2,940	3,270	2,340	328	1,560	518	144	115	310
8	33	53	800	4,360	2,520	1,980	291	1,200	450	167	86	238
9	41	55	640	2,280	2,040	1,560	255	855	495	540	66	156
10	50	56	540	1,500	1,380	1,380	255	640	328	367	65	112
11	42	55	518	1,140	1,200	1,380	255	472	238	238	60	82
12	36	55	495	10,200	1,020	1,320	367	387	518	156	63	66
13	34	50	495	8,590	910	1,080	387	367	428	192	98	58
14	32	48		3,740	800	910	328	310	291	144	125	50
15	34	48		4,630	800	800	328	238	238	125	90	44
16	52	48	350	5,260	800	910	291	206	565	108	84	58
17	106	49		3,670	800	2,280	291	180	518	255	273	49
18	328	49		6,460	800	2,400	255	144	328	167	156	47
19	367	48	1,260	10,800	745	1,920	238	134	255	136	88	41
20	310	55	5,260	4,830	690	1,560	221	127	192	140	65	33
21	206	56	5,610	2,820	590	1,320	221	123	156	2,340	58	50
22	156	56	4,830	1,800	540	1,200	206	129	119	1,800	50	46
23	123	55	2,520	1,200	518	1,080	565	167	101	800	45	58
24	114	52	1,500	1,500	495	965	2,580	156	82	428	40	73
25	112	53	1,260	2,760	540	855	2,100	156	70	255	35	55
26	114	54	965	3,460	565	800	1,560	144	61	167	31	44
27	108	49	600	2,700	540	855	1,140	328	53	123	28	48
28	104	50		2,040	518	855	965	387	46	98	28	52
29	104	50	2,280	1,500	-------	910	1,080	291	44	82	28	50
30	104	53	7,110	1,260	-------	800	1,800	428	38	70	36	44
31	94	-------	5,370	2,400	-------	745	-------	1,260	-------	70	31	-----

Daily discharge, in second-feet, of Coal River at Fuqua, W. Va., for the years ending Sept. 30, 1912–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1915–16.												
1	3,740	52	387	2,400	8,030	1,440	1,680	1,500	192	85	29	119
2	4,190	50	328	2,040	8,030	1,620	1,380	1,200	119	70	22	119
3	1,680	44	291	1,680	3,950	3,340	1,440	965	84	76	24	127
4	855	42	273	1,320	2,760	3,460	1,200	1,320	192	65	20	119
5	565	40	238	1,140	2,400	2,760	1,020	1,080	156	48	22	115
6	428	38	206	1,440	2,640	2,520	910	965	125	39	206	102
7	328	38	192	2,040	4,730	3,740	800	965	238	31	1,200	94
8	238	37	180	2,040	3,950	9,290	1,620	1,080	1,080	26	855	88
9	180	36	167	1,740	3,010	3,810	3,400	1,020	640	23	16,900	82
10	156	36	156	2,280	3,400	2,340	2,700	855	450	23	20,400	85
11	131	36	144	8,730	2,880	1,860	3,740	745	328	20	3,010	72
12	115	41	144	12,700	2,220	1,380	4,830	590	273	23	2,400	63
13	102	47	180	7,240	2,700	1,200	3,600	450	180	14	4,110	59
14	91	99	192	5,150	2,100	1,140	2,340	348	136	17	3,530	55
15	80	2,640	192	3,010	1,680	1,060	1,680	291	144	23	2,220	690
16	79	3,140	192	2,160	1,560	965	1,260	238	142	76	3,600	495
17	73	1,500	2,580	1,740	1,440	910	1,140	238	273	88	15,400	495
18	70	855	15,300	1,680	1,260	910	910	192	206	291	3,670	255
19	115	640	10,300		1,380	965	745	156	518	180	1,920	167
20	106	800	3,530	1,680	1,260	965	640	123	590	495	1,200	123
21	110	855	2,040		1,320	1,080	590	108	328	291	745	101
22	96	745	1,440	1,440	1,500	1,200	745	94	221	180	590	88
23	85	590	1,140	2,700	1,440	1,320	640	104	140	121	495	85
24	76	472	1,080	2,880	1,440	1,080	565	102	106	85	387	84
25	70	387	800	2,100	3,140	1,020	745	96	91	60	328	73
26	63	310	1,200	1,620	4,930	910	855	80	1,560	44	255	63
27	64	291	1,380	1,260	3,200	1,860	1,140	66	640	38	221	58
28	60	348	1,920	1,020	2,160	5,040	1,800	72	310	30	206	53
29	58	387	8,170	1,200	1,740	4,630	2,400	73	180	42	180	60
30	53	407	10,900	2,760	-------	3,140	1,920	119	123	55	156	387
31	52	-------	3,880	2,820	-------	2,220	-------	167	-------	41	136	-------

NOTE.—Stage-discharge relation affected by ice Jan. 6–18, Feb. 4–20, 1912; Feb. 17, Dec. 14–18, 27–28, 1914; and Jan. 19–21, 1916; discharge estimated by comparison with records for other stations in Coal River basin and study of weather records. Gage height Jan. 19, 1912, estimated by observer; discharge Oct. 1–11, 1911, assumed same as that for Coal River at Tornado.

Monthly discharge of Coal River at Fuqua, W. Va., for the years ending Sept. 30, 1912–1916.

[Drainage area, 849 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1911–12.					
October	4,830	----------	787	0.927	1.07
November	2,100	88	733	.863	.96
December	5,490	221	1,010	1.19	1.37
January	5,490	----------	1,390	1.64	1.89
February	11,000	----------	1,930	2.27	2.45
March	14,000	965	3,760	4.43	5.11
April	11,500	690	2,240	2.64	2.94
May	12,900	221	2,140	2.52	2.90
June	310	53	128	.151	.17
July	2,880	221	846	.996	1.15
August	518	72	181	.213	.24
September	565	44	149	.176	.20
The year	14,000	44	1,280	1.51	20.45

Monthly discharge of Coal River at Fuqua, W. Va., for the years ending Sept. 30, 1912–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1912–13.					
October	180	34	65.9	0.078	0.09
November	565	46	119	.140	.6
December	4,830	53	468	.551	64
January	17,300	965	3,080	3.63	4.18
February	9,430	367	1,580	1.86	1.94
March	18,300	450	2,540	2.99	3.45
April	5,150	540	1,260	1.48	1.65
May	4,930	206	898	1.06	1.22
June	2,820	85	521	.614	.68
July	387	42	104	.122	.14
August	58	20	28.8	.034	.04
September	40	13	22.3	.026	.03
The year	18,300	13	890	1.05	14.23
1913–14.					
October	2,100	18	190	.224	.26
November	4,830	65	743	.875	.98
December	3,530	192	1,120	1.32	1.52
January	5,370	640	1,540	1.81	2.09
February	12,400	----------	2,330	2.74	2.85
March	7,630	965	2,230	2.63	3.03
April	8,590	1,140	2,870	3.38	3.77
May	2,820	79	809	.953	1.10
June	123	26	50.1	.059	.07
July	2,580	15	257	.303	.35
August	472	26	102	.120	.14
September	5,730	36	350	.412	.46
The year	12,400	15	1,040	1.22	16.62
1914–15.					
October	367	29	97.3	.115	.13
November	88	48	56.3	.066	.07
December	7,110	55	1,690	1.99	2.29
January	10,800	690	3,280	3.86	4.45
February	15,300	495	2,670	3.14	3.27
March	2,400	407	1,180	1.39	1.60
April	2,580	206	640	.754	.84
May	4,540	123	792	.933	1.08
June	2,100	38	470	.554	.62
July	2,340	47	312	.367	.42
August	690	28	111	.131	.15
September	565	23	105	.124	.14
The year	15,300	23	943	1.11	15.06
1915–16.					
October	4,190	52	455	.536	.62
November	3,140	36	500	.589	.66
December	15,300	144	2,230	2.63	3.03
January	12,700	1,020	2,750	3.24	3.74
February	8,030	1,260	2,840	3.34	3.60
March	9,290	910	2,230	2.63	3.03
April	4,830	565	1,610	1.90	2.12
May	1,500	66	497	.585	.67
June	1,560	84	326	.384	.43
July	495	14	87.1	.103	.12
August	20,400	20	2,720	3.20	3.69
September	690	53	153	.180	.20
The year	20,400	14	1,370	1.61	21.91

COAL RIVER AT TORNADO, W. VA.

LOCATION.—At highway bridge at Upper Falls railroad station, one-fourth mile above Tornado, W. Va., and 1 mile above mouth of Smith Creek.

RECORDS AVAILABLE.—June 24, 1908, to June 3, 1912. Station discontinued June 3, 1912, in favor of station at Fuqua. See "Accuracy" paragraph.

DRAINAGE AREA.—857 square miles measured on topographic map.

GAGE.—Standard chain gage attached to bridge; datum unchanged.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge or by wading.

CHANNEL AND CONTROL.—Practically permanent; strewn with large boulders. When the station was established control was a solid rock ledge extending across stream about 100 or more feet in width. A diversion dam was later constructed on this level rock ledge by bolting one course of logs to it.

EXTREMES OF DISCHARGE.—Maximum stage recorded during the period June 24, 1908, to September 30, 1911, 15.20 feet at 5 p. m. January 30, 1911 (discharge, estimated about 20,600 second-feet); minimum stage, 1.32 feet at 5 p. m. August 22, 1911 (discharge, 14 second-feet).

ICE.—Stage-discharge relation affected by ice during parts of December, January, and February.

ARTIFICAL CONTROL.—There is a low dam and water-power plant about 1,000 feet below the station.

ACCURACY.—Stage-discharge relation practically permanent at medium and high stages, but at low water the stage-discharge relation shifts owing to rough log dam which is torn out by floods and replaced during low water. This station was discontinued June 23, 1912, for the above reason, and a new station at Fuqua was established October 12, 1911; records for Tornado are published to September 30, 1911, and from then until 1916 the records are published for station at Fuqua. Four rating curves used as follows: June 22, 1908, to November 5, 1909; November 6, 1909, to February 24, 1910; February 25, 1910, to August 10, 1910, August 11, 1910, to December 24, 1910, and December 25, 1910, to September 30, 1911. Rating curves well defined between 1,500 and 15,000 second-feet and fairly well defined between 20 and 1,500 second-feet; above and below these limits the curves are extensions. Gage read twice daily to hundredths. Daily discharge ascertained by applying mean daily gage height to rating table. Records fair.

Discharge measurements of Coal River near Tornado, W. Va., during the years 1908–1912.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1910.		*Feet.*	*Sec.-ft.*
June 22	A. H. Horton	2.76	353	Aug. 8	Bailey and Dort	2.26	115
24	Wm. M. O'Neill	2.89	503				
July 20	W. G. Hoyt	2.66	131	1911.			
20	do	2.55	145	Mar. 9	C. T. Bailey	6.09	5,730
				Oct. 3	do	4.46	3,010
1909.							
Mar. 19	H. J. Jackson	3.08	904	1912.			
Nov. 6	A. H. Horton	2.50	20	Apr. 3	do	9.90	11,900
1910.							
Mar. 3	C. T. Bailey	3.42	1,460				
3	do	3.43	1,450				

Daily discharge, in second-feet, of Coal River near Tornado, W. Va., for the years ending Sept. 30, 1908–1911.

Day.	June.	July.	Aug.	Sept.	Day.	June.	July.	Aug.	Sept.
1908.					16		92	102	39
1			75		17		55	34	25
2			75		18		442	42	18
3			49		19		650	68	16
4			45		20		119	68	20
5			86						
				33	21		97	68	18
6			42		22	410	72	68	18
7		200	39		23	714	62	86	20
8			42		24	538	65	156	21
9			49		25	320	260	119	21
10			45						
					26	410	538	49	21
11			86	14	27	538	538	37	20
12			182	19	28		762	42	20
13			119	30	29	320	474	49	24
14			119	28	30		195	24	22
15		102	86	32	31		130	23	

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908-9.												
1	20	24	62		570	1,210	1,610	10,400		1,450		37
2	20	24	58		570	970	1,370	8,810	175	1,210		45
3	20	24	68		650	970	1,210	4,260		1,370		40
4	18	24	68	550	730	1,290	1,210	2,650	234	778		49
5	20	23	68		570	1,930	1,130	2,010	826	458		442
6	20	23	68		730	2,330	1,020	1,770	410	1,210		380
7	18	23	55		890	5,880	954	1,290	108	17,000	550	275
8	16	39	55	730	1,290	3,620	826	1,210	208	7,180		234
9	16	40	119	650	1,770	5,240	698	1,210	1,050	2,810		602
10	18	28	97	490	2,810	9,460	714	1,210	2,170	1,690		1,850
11	23	24	143	570	3,300	4,910	602	1,210	2,170	730		1,370
12	23	23	290	410	2,170	2,810	506	890	2,170	538		
13	32	40	442	490	1,770	2,170	490	858	1,690	458	68	
14	22	40	698	810	1,290	3,620	1,050	762	1,530	410	458	
15	21	20	538	2,490	2,650	3,620	1,850	922	1,610	730	221	
16	24	40	365	3,940	5,240	3,300	1,370	290	1,530	522	395	
17	20	49	260	2,970	5,560	1,450	1,290	234	1,370	410	350	
18	20	45	221	2,330	2,970	970	1,020	262	1,450	221	234	
19	23	45	221	3,300	2,170	858	922	290	1,370		350	
20	20	62		1,210	1,850	730	2,010	260	1,210		365	
21	20	45		890	1,850	730	3,140	275	1,020		182	175
22	23	97		650	2,650	730	7,180	195	890		45	
23	28	55		650	2,330	1,130	7,830	130	826		40	
24	22	45		490	2,970	858	7,020	165	938		72	
25	34	45	635	335	3,940	1,370	4,100	200	858	310	32	
26	55	52		410	2,650	2,970	2,330	234	682		102	
27	65	80		490	2,330	2,970	1,850	260	506		114	
28	65	80		730	1,690	3,620	1,690	260	350		80	
29	65	108		730	-------	4,260	1,290	260	260		102	
30	65	75		810	-------	2,650	2,010	265	538		108	
31	40	-------		570	-------	2,010	-------		-------		28	-------

Daily discharge, in second-feet, of Coal River near Tornado, W. Va., for the years ending Sept. 30, 1908–1911—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1909–10.												
1		143	70	176	762	1,130	242	644	728	430	268	380
2		80	60	474	682	1,270	191	554	576	276	166	506
3		65	30	1,020	714	1,410	225	400	440	174	174	890
4		58	40	1,610	1,130	1,340	276	400	302	716	250	1,530
5		58	100	1,530	1,690	1,130	330	380	276	9,950	140	1,690
6		40	80	2,010	1,610	990	350	259	2,490	3,940	70	1,020
7	295	100	110	3,940	1,130	860	340	124	2,810	2,810	73	538
8		20	100	2,970	986	776	268	410	1,780	2,650	70	570
9		335	100	1,690	826	656	225	1,130	1,640	1,860	107	490
10		120		730	794	565	191	2,330	2,170	1,200	112	410
11		100		1,290	970	764	112	1,860	2,170	860		380
12		80		474	1,050	1,060	259	6,530	2,170	521		
13		60		474	1,030	1,480	920	6,370	1,560	576		
14	45	100		1,450	1,130	1,560	1,340	2,970	1,410	620		
15	24	100		1,610	1,450	1,340	1,410	1,860	1,640	400		
16	34	110		1,370	2,490	1,060	1,270	1,410	2,170	225		
17	58	100		1,130	4,260	920	1,130	1,130	3,140	920		
18	62	60		1,850	5,240	764	1,200	990	2,810	1,480		
19	40	30		4,590	3,460	656	1,270	812	1,780	2,170		
20	58	30	146	3,780	2,170	480	1,340	692	1,860	1,410		
21	68	30		3,300	1,770	460	2,650	716	1,710	848	45	100
22	58	40		5,880	2,170	410	5,240	598	1,130	500		
23	39	40		2,650	2,010	330	2,970	450	920	268		
24	39	60		1,850	2,010	320	2,010	609	2,170	140		
25	45	60		1,450	1,780	259	1,710	1,200	1,270	112		
26	49	80		1,290	1,340	242	1,480	2,490	860	302		
27	39	100		1,210	1,130	191	1,130	1,640	11,900	587		
28	62	120		1,290	990	157	1,060	1,200	2,170	565		
29	92	100		1,370	-------	268	860	824	1,130	565		
30	124	80		1,130	-------	320	764	632	716	360		
31	119	-------		874	-------	293	-------	788	-------	268		
1910–11.												
1				2,330	4,910	498	740	1,340	580	56	22	195
2				3,140	4,260	452	752	2,010	240	52	22	139
3				3,620	3,460	427	1,270	1,860	154	43	22	70
4				3,940	2,650	374	8,650	1,480	139	41	24	58
5				2,010	3,140	352	9,790	1,200	106	39	24	43
6				1,340	2,490	4,750	9,460	920	93	32	22	50
7				990	1,860	11,100	5,070	764	112	30	22	134
8				740	1,410	12,200	3,300	668	109	32	22	120
9				692	1,340	5,720	5,240	530	90	168	45	95
10				550	1,480	2,970	4,590	452	80	160	32	90
11				460	1,410	1,940	2,970	445	65	88	85	106
12				505	1,340	1,560	2,010	380	68	68	56	131
13			385	580	1,060	1,270	1,560	305	90	198	41	123
14				505	860	1,130	1,200	272	65	222	39	104
15				570	644	990	1,480	233	61	120	32	139
16	50	130		580	415	990	1,560	174	47	95	32	330
17				680	468	740	1,780	174	43	78	35	145
18				812	452	680	1,410	157	90	68	26	117
19				740	439	668	1,270	139	162	123	26	104
20				728	1,780	800	1,340	134	123	112	22	112
21				1,340	3,620	1,060	1,710	112	90	85	19	95
22				6,530	2,490	1,130	2,170	95	68	61	15	131
23				4,260	922	1,060	3,140	117	65	47	20	139
24				2,490	1,340	860	2,490	88	63	43	20	120
25			990	1,710	1,130	692	1,850	78	52	43	20	106
26			1,410	1,940	920	644	1,480	85	43	45	21	95
27			1,270	1,560	728	610	1,130	68	43	43	19	85
28			990	1,710	570	520	860	61	47	26	19	65
29			990	2,970	-------	520	788	50	54	22	260	56
30			2,010	17,100	-------	644	764	75	61	24	860	54
31		-------	2,970	8,810	-------	728	-------	204	-------	22	490	-------

NOTE.—Discharge estimated by comparison with records for Coal River at Brushton and Fuqua for ice effect and on account of a small power plant which diverts water from Coal River above the diversion dam which formed the control during a part of the time that the station was maintained. Above low water this diversion had little effect. There were also some changes in the dam itself that occurred at uncertain dates. Discharge estimated for the following: June 28–30, July 1–14, Sept. 1–10, Dec. 20–31, 1908; Jan. 1–7, May 18, 24, 25, 30, 31, June 1–3, July 19–31, Aug. 1–12, Sept. 12–30, Oct. 1–13, Nov. 11–12, Dec. 1, 10–31, 1909; Aug. 11–31, Sept. 12–30, Oct. 1–31, Nov. 1–30, and Dec. 1–24, 1910. For daily discharge from Oct. 1, 1911, to June 3, 1912, see discharge at Fuqua.

Monthly discharge of Coal River near Tornado, W. Va., for the years ending Sept. 30, 1908–1911.

[Drainage area, 857 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
June 22–30	714		432	0.504	0.02
July	762		240	.280	.32
August	182	23	70.1	.082	.09
September			25.9	.030	.03
1908–9.					
October	65	16	28.9	.034	.04
November	108	23	44.7	.052	.06
December			371.0	.433	.50
January	3,940		1,000	1.17	1.35
February	5,560	570	2,140	2.50	2.60
March	9,460	730	2,600	3.03	3.49
April	7,830	490	2,010	2.35	2.62
May	10,400	130	1,400	1.63	1.88
June	2,170		950	1.11	1.24
July	17,000		1,390	1.62	1.87
August		28	321	.375	.43
September	1,850		288	.336	.37
The year	17,000	16	1,040	1.21	16.45
1909–10.					
October			158	.184	.21
November	143	20	83.3	.097	.11
December			126	.147	.17
January	5,880	176	1,820	2.12	2.44
February	5,240	682	1,670	1.95	2.03
March	1,560	157	757	.883	1.02
April	5,240	112	1,090	1.27	1.42
May	6,530	124	1,370	1.60	1.84
June	11,900	276	1,930	2.25	2.51
July	9,950	112	1,220	1.42	1.64
August	268		76.6	.089	.10
September	1,690		343	.400	.45
The year	11,900		881	1.03	13.94
1910–11.					
October			50.0	.058	.07
November			130.0	.152	.17
December	2,970		641	.748	.86
January	17,100	460	2,450	2.86	3.30
February	4,910	415	1,700	1.98	2.06
March	12,200	352	1,870	2.18	2.51
April	9,790	740	2,730	3.19	3.56
May	2,010	50	473	.552	.64
June	580	43	103	.120	.13
July	222	22	73.7	.086	.10
August	860	15	77.9	.091	.10
September	330	43	112	.131	.15
The year	17,100	15	862	1.01	13.65

LITTLE COAL RIVER AT McCORKLE, W. VA.

LOCATION.—At McCorkle, Lincoln County, on Coal River branch of Chesapeake & Ohio Railway; Cobb Creek enters river on left 400 feet below station.

DRAINAGE AREA.—375 square miles (measured on topographic maps; includes Cobb Creek).

RECORDS AVAILABLE.—July 23, 1915, to September 30, 1920.

GAGE.—Vertical and inclined staff on left bank just below McCorkle Hotel; read by F. M. Priestly.

DISCHARGE MEASUREMENTS.—Made from cable 40 feet above inclined section of gage or by wading.

CHANNEL AND CONTROL.—One channel at all stages; slightly curved above and below cable section. Bed of stream composed of loose sand, but control is probably fairly permanent. Flow of Cobb Creek affects stage at gage and its flow is included in records.

EXTREMES OF DISCHARGE.—Maximum stage recorded during the period July 23, 1915, to September 30, 1917, 28.57 feet August 9, 1916 (discharge, estimated about 24,000 second-feet); minimum stage, 1.50 feet October 6, 7, 8, 1916, and September 7, 1917 (discharge, 3 second-feet).

ICE.—Stage-discharge relation not affected by ice to any extent during record.

ACCURACY.—Stage-discharge relation practically permanent, changed by record flood of August, 1916. Rating curve used to August 10, 1916, well defined between 43 and 4,000 second-feet; curve used after this date well defined between 43 and 5,500 second-feet, both curves extended beyond limits noted. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Little Coal River at McCorkle, W. Va., during the years 1915–1917.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1915.		*Feet.*	*Sec.-ft.*	1916.		*Feet.*	*Sec.-ft.*
July 21	Ellsworth and Conklin	6.33	2,170	Aug. 28	B. E. Jones	2.46	59
24	do	2.93	210				
24	C. E. Ellsworth	2.91	199	1917.			
Oct. 9	B. J. Peterson	2.53	84	Mar. 14	F. Conklin	8.95	4,610
Dec. 8	Frosch and Conklin	2.48	93	15	do	6.22	2,440
19	F. Conklin	7.29	2,820	June 7	do	3.42	520

NOTE.—Discharge includes that of Cobb Creek.

Daily discharge, in second-feet, of Little Coal River at McCorkle, W. Va., for the years ending Sept. 30, 1915–1917.

Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.	Day.	July.	Aug.	Sept.
1915.				1915.				1915.			
1		84	5	11		28	17	21		9	8
2		90	4	12		24	12	22		8	12
3		178	6	13		36	8	23	272	7	26
4		492	60	14		29	7	24	191	6	13
5		235	181	15		19	6	25	135	5	8
6		126	178	16		16	5	26	96	5	6
7		96	132	17		43	4	27	78	4	6
8		58	78	18		55	5	28	40	5	34
9		40	46	19		11	5	29	26	5	7
10		29	26	20		10	4	30	22	8	7
								31	58	5	

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1915–16.												
1	2,320	7	138	750	3,930	470	538	515	63	58	5	22
2	750	6	132	605	2,780	700	492	450	40	43	4	31
3	390	6	120	492	1,330	1,460	515	370	38	43	4	58
4	350	6	111	430	900	1,140	410	450	117	34	5	40
5	228	6	102	390	800	900	370	390	81	25	6	31
6	181	5	87	515	1,530	800	330	370	58	16	43	23
7	138	5	72	750	2,090	2,090	310	370	291	11	164	17
8	102	5	72	605	1,200	3,020	560	410	310	8	132	14
9	78	6	72	650	1,460	1,200	1,740	370	224	8	4,440	29
10	58	6	58	850	1,460	750	1,080	330	191	8	8,150	15
11	40	5	43	4,100	1,080	560	1,460	310	164	7	1,370	10
12	28	6	60	3,420	750	430	1,600	254	142	7	702	8
13	22	15	96	2,860	900	390	1,020	224	102	6	1,510	7
14	19	49	102	1,740	650	390	700	181	78	14	1,370	6
15	13	1,740	58	850	605	370	515	154	81	8	702	330
16	12	900	126	650	560	350	410	148	87	87	2,620	182
17	9	470	1,810	560	515	330	390	142	126	102	5,000	107
18	15	310	6,690	350	450	350	310	126	117	123	1,510	58
19	58	272	2,620	390	470	370	272	93	228	117	620	20
20	72	310	1,020	430	430	350	254	72	254	22	430	15
21	66	310	560	430	430	410	235	66	174	142	330	14
22	43	272	410	515	430	450	272	63	123	81	255	11
23	29	235	330	1,200	430	470	254	72	87	96	220	9
24	22	195	272	1,020	450	390	235	72	55	52	174	7
25	17	167	235	650	960	370	330	52	87	31	129	6
26	16	145	450	515	1,460	350	370	34	55	17	85	5
27	16	132	470	430	960	960	450	34	224	11	72	5
28	11	161	650	390	650	1,880	850	24	164	8	69	5
29	10	164	4,270	430	560	1,400	1,080	58	111	6	60	5
30	9	164	3,100	850		900	700	117	72	6	43	4
31	8		1,260	850		650		117		6	31	

Daily discharge, in second-feet, of Little Coal River at McCorkle, W. Va., for the years ending Sept. 30, 1915–1917—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1916–17.												
1	4.3	14	160	538	850	4,150	455	702	850	38	12.0	8.6
2	3.8	17	147	455	1,160	3,180	430	565	2,540	29	9.8	5.5
3	3.8	14	129	510	790	7,040	405	455	4,740	103	8.6	4.5
4	3.5	13	116	730	850	5,340	315	405	1,650	125	147	3.8
5	3.4	10	220	2,390	1,370	3,980	355	405	850	57	49	3.8
6	3.2	8	192	4,580	1,370	2,240	2,320	340	620	29	23	3.5
7	3.0	8	174	2,090	1,370	2,860	2,240	310	482	38	18	3.2
8	3.2	7	160	1,100	1,300	5,850	1,790	330	380	205	19	1,230
9	4	6.6	160	760	1,230	3,260	1,300	790	335	148	94	3,500
10	11	11	160	592	675	1,650	850	910	482	103	63	1,650
11	15	63	147	510	850	1,040	648	702	592	49	29	538
12	23	14	116	355	482	4,150	538	790	565	29	15	355
13	15	36	138	355	405	5,170	510	730	430	15	9.5	205
14	10	17	43	510	510	4,660	482	648	380	23	7.0	147
15	8	23	52	1,040	620	2,320	405	538	330	76	13	72
16	10	26	52	970	1,440	1,370	355	455	240	72	9.5	58
17	10	23	116	790	970	1,510	315	380	192	160	6.4	34
18	26	22	72	592	850	1,940	290	315	147	205	5.2	26
19	160	22	43	565	850	1,230	280	280	129	169	4.4	23
20	240	8	94	538	1,370	850	255	215	151	125	3.8	26
21	220	10	420	702	2,940	1,230	235	182	98	72	3.6	26
22	147	11	1,940	5,000	1,440	1,440	230	160	81	63	3.4	38
23	103	14	1,300	2,700	970	1,440	205	169	66	192	3.8	29
24	72	52	675	1,230	5,170	5,340	192	147	43	245	4.5	17
25	63	116	510	910	3,100	3,020	182	103	116	235	4.2	14
26	58	116	380	675	1,580	1,510	265	81	76	125	4.0	10
27	43	94	380	648	970	1,040	240	2,390	43	60	3.6	11
28	26	94	1,790	510	3,420	790	205	6,700	43	43	3.4	43
29	26	138	3,020	538	-------	675	675	4,660	125	38	5.7	355
30	23	160	1,100	760	-------	620	850	2,020	94	24	10	220
31	17	-------	648	760	-------	510	-------	970	-------	17	8.0	-------

Daily gage height, in feet, of Little Coal River at McCorkle, W. Va., for the years ending Sept. 30, 1918–1920.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1917–18.												
1	2.70	3.02	3.28	3.15	5.54	3.72	3.26	3.39	2.62	2.72	2.74	2.74
2	2.52	2.92	3.38	3.10	4.54	3.52	3.22	3.29	2.54	2.62	2.54	2.69
3	2.35	2.88	3.30	3.00	3.96	3.36	3.24	3.14	3.06	2.54	2.36	2.56
4	2.40	2.80	3.15	3.00	3.66	3.32	3.49	3.09	2.76	2.44	2.29	2.52
5	2.42	2.72	3.02	3.00	3.56	3.94	3.44	3.06	2.62	2.42	2.24	2.34
6	2.38	2.65	2.95	3.12	5.74	4.84	3.36	3.00	2.59	2.26	2.19	2.34
7	2.30	2.60	2.85	5.80	5.19	5.94	3.42	2.99	3.66	2.22	2.14	2.36
8	2.31	2.56	2.85	5.30	3.39	5.36	7.53	3.06	3.64	2.19	2.16	2.49
9	2.22	2.52	2.85	4.25	3.92	4.49	9.20	3.49	3.06	2.16	2.06	2.42
10	2.15	2.49	2.68	3.65	4.86	4.06	6.02	3.29	2.86	2.14	2.24	2.32
11	2.20	2.45	2.68	3.42	4.49	3.69	4.86	3.22	2.69	2.16	2.64	2.22
12	2.42	2.45	2.70	3.55	4.14	3.56	5.69	3.22	2.62	2.24	2.59	2.17
13	2.35	2.45	2.78	4.90	3.82	9.57	5.86	3.24	2.44	2.29	2.44	2.16
14	2.40	2.41	2.78	5.25	3.59	8.45	4.96	3.82	2.36	2.14	2.34	2.10
15	2.34	2.39	2.72	6.02	3.64	6.42	4.42	3.86	2.34	2.06	2.39	2.09
16	2.28	2.32	2.68	5.62	3.64	4.72	4.06	3.62	2.29	1.99	2.42	2.04
17	2.22	2.30	2.65	6.05	3.59	4.12	3.86	3.38	2.24	2.09	2.36	2.09
18	2.20	2.30	2.65	5.00	3.44	3.84	3.74	3.19	2.46	2.09	2.34	2.14
19	3.62	2.28	2.60	4.45	3.36	3.59	3.56	3.12	2.32	2.16	2.34	2.26
20	3.95	2.25	2.60	4.00	5.52	3.46	3.52	3.34	2.24	2.29	2.29	2.46
21	3.35	2.24	2.62	3.70	5.44	3.39	3.64	5.09	2.16	2.14	2.26	2.46
22	3.05	2.20	2.70	3.60	4.42	3.39	4.09	4.02	2.14	2.12	2.22	2.42
23	2.92	2.20	2.68	3.60	3.99	3.34	3.96	3.59	2.12	2.02	2.19	2.39
24	3.05	2.20	2.78	3.55	3.74	3.32	4.16	3.32	2.06	1.89	2.14	2.34
25	3.25	2.25	3.02	3.58	3.62	4.86	3.99	3.12	2.09	1.84	2.14	2.26
26	3.38	2.25	2.88	3.52	3.99	4.92	3.86	3.09	3.89	1.82	2.06	2.22
27	3.35	2.28	3.15	4.90	4.19	4.26	3.79	3.04	3.29	1.76	1.94	2.16
28	3.18	2.45	3.50	20.27	3.96	3.86	3.62	2.94	2.96	1.74	2.02	2.14
29	3.02	2.72	3.32	9.00	-------	3.64	3.54	2.94	2.76	1.69	2.00	2.14
30	3.15	3.20	3.30	6.95	-------	3.46	3.46	2.82	2.69	1.92	1.96	2.14
31	3.18	-------	3.28	6.40	-------	3.36	-------	2.74	-------	2.79	1.99	-------

Daily gage height, in feet, of Little Coal River at McCorkle, W. Va., for the years ended Sept. 30, 1918–1920—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1918–19.												
1	2.09	3.39	2.59	10.70	3.02	3.84	3.62	4.54	2.99	2.99	2.99	2.44
2	2.09	3.02	2.59	14.70	2.94	3.76	3.46	6.59	2.82	2.86	3.26	2.35
3	2.09	2.84	2.59	7.46	2.94	3.69	3.32	4.84	2.76	2.49	3.29	2.22
4	2.04	2.72	2.54	4.99	2.92	3.64	3.29	4.09	2.66	2.39	2.84	2.09
5	2.04	2.66	2.54	4.49	2.86	3.84	3.26	3.59	2.62	2.19	2.49	1.79
6	2.04	2.52	2.49	4.14	2.84	4.79	3.19	3.42	2.56	2.04	2.24	1.64
7	2.02	2.42	2.49	4.69	2.84	4.79	3.14	3.34	2.52	2.86	1.99	1.49
8	1.99	2.36	2.44	3.56	2.76	4.16	3.04	3.54	2.54	3.29	1.94	1.36
9	1.99	2.34	2.46	3.56	2.74	4.12	3.04	4.36	2.49	2.54	1.94	1.39
10	1.96	2.34	2.56	3.39	2.69	3.96	2.99	6.63	2.49	2.36	1.94	1.94
11	1.94	2.26	2.84	3.26	2.62	3.79	3.39	5.12	2.49	2.26	1.96	2.34
12	1.94	2.19	3.59	3.24	2.56	3.66	5.74	4.24	2.52	2.26	1.99	2.62
13	1.94	2.12	3.16	3.16	2.64	3.59	4.39	3.86	2.56	3.02	2.04	2.39
14	1.94	2.04	3.62	3.14	2.72	3.39	3.92	3.64	2.52	5.12	2.12	2.09
15	1.89	2.04	5.82	3.54	2.82	3.29	3.79	3.52	2.59	4.44	2.06	2.04
16	1.89	2.09	3.94	3.89	2.84	3.19	3.69	3.36	2.59	4.04	2.04	1.94
17	1.84	2.26	3.49	3.76	2.86	3.14	3.64	3.36	2.66	4.14	2.12	1.86
18	1.84	2.44	3.19	3.94	2.86	3.19	3.52	3.42	2.56	4.12	2.34	1.82
19	1.92	2.49	3.09	5.24	2.84	3.16	3.42	3.39	2.54	3.59	2.69	1.76
20	1.84	2.59	3.06	4.29	2.92	3.14	3.32	6.19	2.49	3.46	2.79	1.72
21	1.96	2.64	2.94	3.86	2.96	3.14	3.22	8.25	2.69	3.49	2.49	1.72
22	1.99	2.64	2.92	3.56	3.02	3.09	3.19	5.16	2.56	3.19	2.29	1.94
23	2.16	2.64	3.64	3.76	3.19	3.04	3.49	4.19	2.59	3.09	2.16	2.19
24	2.14	2.59	3.62	6.54	3.24	3.04	3.64	4.12	2.96	2.56	2.04	2.14
25	2.14	2.47	3.59	5.22	3.34	2.99	3.54	6.39	3.16	2.26	2.04	2.06
26	2.14	2.49	3.46	4.14	3.94	2.94	3.46	4.94	6.39	2.19	2.09	2.04
27	2.06	2.54	3.39	3.59	4.22	3.89	3.36	4.09	5.19	2.09	2.12	1.96
28	2.09	2.54	3.09	3.42	3.89	5.96	3.29	3.74	4.09	2.12	2.16	1.86
29	2.22	2.54	2.94	3.32	-------	4.59	3.29	3.39	3.49	2.39	2.26	1.82
30	2.89	2.52	2.86	3.14	-------	3.96	3.29	3.26	3.22	2.24	2.44	1.76
31	3.94	-------	2.99	3.12	-------	3.82	-------	3.09	-------	1.99	2.62	-------
1919–20.												
1	1.69	7.20	4.49	3.56	3.86	4.39	3.54	3.69	3.09	2.76	1.04	1.04
2	1.64	14.40	4.14	3.56	3.69	4.26	5.69	3.54	2.89	2.76	.92	-------
3	1.64	7.30	3.92	3.52	3.59	4.29	5.92	3.54	2.82	2.86	.72	-------
4	1.59	5.44	3.74	3.49	3.56	4.46	5.22	3.54	2.89	2.86	.59	-------
5	1.66	4.62	3.59	3.44	3.54	5.64	4.82	3.49	9.40	2.59	.44	-------
6	2.36	4.04	5.66	3.42	3.49	5.59	4.59	3.44	6.49	2.19	.34	-------
7	2.36	3.82	19.84	3.39	3.49	5.44	5.29	3.46	5.09	2.14	.19	-------
8	2.42	3.62	7.90	4.32	3.49	5.42	5.06	3.59	4.39	3.06	-------	-------
9	2.36	3.49	6.09	10.25	3.46	4.34	4.82	3.76	4.09	3.29	-------	1.09
10	2.16	3.29	5.89	7.05	3.62	4.19	4.59	3.99	3.79	3.09	-------	1.04
11	2.19	3.22	5.74	4.59	4.54	4.06	4.24	3.94	3.44	2.94	-------	1.09
12	5.54	3.32	5.42	5.39	4.74	4.09	4.06	4.02	3.16	2.99	-------	2.59
13	4.04	3.42	6.19	5.14	4.64	7.30	4.52	4.24	3.22	2.79	-------	3.69
14	3.99	3.52	8.45	4.44	4.56	6.82	4.46	4.34	2.99	2.72	-------	3.14
15	4.26	3.50	6.95	3.94	4.45	6.02	4.29	4.39	2.94	2.64	-------	2.89
16	7.20	3.42	5.54	3.96	4.36	5.59	4.09	4.39	3.14	2.54	-------	2.54
17	6.83	3.36	5.19	3.94	4.26	7.20	4.04	3.94	3.02	2.42	-------	2.19
18	5.19	3.22	4.59	3.89	4.16	6.54	3.94	3.84	2.69	2.29	-------	2.09
19	4.19	3.12	4.44	3.86	4.04	10.72	3.62	3.79	2.54	2.04	-------	1.89
20	5.69	3.02	4.14	3.84	3.96	8.80	6.02	3.89	2.66	1.89	-------	1.69
21	4.64	2.96	3.94	5.64	3.99	6.19	5.49	3.96	3.54	1.69	-------	1.54
22	3.19	2.96	3.86	9.20	5.02	5.56	5.29	4.16	4.32	1.44	-------	1.39
23	3.12	3.16	3.74	11.90	5.66	5.04	5.12	4.04	4.16	1.26	1.04	1.29
24	6.24	3.19	3.66	12.25	5.72	4.69	5.02	3.86	3.84	1.12	1.04	1.24
25	5.52	3.26	3.64	8.30	5.54	4.34	4.49	4.04	3.56	2.24	1.04	1.04
26	4.64	4.99	3.64	6.64	5.14	4.16	4.36	3.99	3.24	2.54	1.04	2.94
27	4.44	6.32	3.49	5.64	4.89	4.02	4.19	3.74	2.96	2.34	1.04	2.69
28	4.32	5.74	3.46	4.92	4.69	3.69	4.06	3.59	2.84	1.99	1.04	2.39
29	4.09	5.09	3.49	4.66	4.54	3.56	3.94	3.42	2.72	1.82	1.12	2.26
30	3.49	4.74	3.49	4.34	-------	3.42	3.86	3.36	2.72	1.66	1.04	2.09
31	3.34	-------	3.49	4.02	-------	3.32	-------	3.24	-------	1.49	1.04	-------

Monthly discharge of Little Coal River at McCorkle, W. Va., for the years ending Sept. 30, 1915–1917.

[Drainage area, 375 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1915.					
July 23–31	272	22	102	0.272	0.09
August	492	4	57	.152	.18
September	181	4	30.5	.081	.09
1915–16.					
October	2,320	8	165	.44	.51
November	1,740	5	203	.541	.60
December	6,690	43	826	2.20	2.54
January	4,100	350	925	2.47	2.85
February	3,930	430	1,040	2.77	2.99
March	3,020	330	795	2.12	2.44
April	1,740	235	602	1.61	1.80
May	515	24	208	.555	.64
June	310	38	131	.349	.39
July	142	6	38.8	.103	.12
August	8,150	4	976	2.60	3.00
September	330	4	36.5	.097	.11
The year	8,150	4	495	1.32	17.99
1916–17.					
October	240	3	43.8	.117	.13
November	160	6.6	38.9	.104	.12
December	3,020	43	473	1.26	1.45
January	5,000	355	1,110	2.96	3.41
February	5,170	405	1,390	3.71	3.86
March	7,040	510	2,630	7.01	8.08
April	2,320	182	594	1.58	1.76
May	6,700	81	898	2.39	2.76
June	4,740	43	562	1.50	1.67
July	245	15	93.9	.250	.29
August	147	3.4	19.4	.052	.06
September	3,500	3.2	289	.771	.86
The year	7,040	3	676	1.80	24.45

POCATALICO RIVER AT SISSONVILLE, W. VA.

LOCATION.—At highway bridge at Sissonville, Kanawha County, one-fourth mile below mouth of Grapevine Creek.

DRAINAGE AREA.—238 square miles.

RECORDS AVAILABLE.—June 26, 1908, to September 30, 1916, when station was discontinued.

GAGE.—Chain gage attached to bridge; read by B. N. Sisson.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge or by wading.

CHANNEL AND CONTROL.—Sand and gravel; straight above and below. Shifts during floods.

EXTREMES OF DISCHARGE.—Maximum stage recorded 1908–1916, 33.0 feet at noon June 27, 1910 (discharge, roughly 17,000 second-feet); minimum, July 12, 13, 1914 (discharge, 0.2 second-feet). This low discharge probably caused by storage at mill dam a short distance above the station.

ICE.—Stage-discharge relation may be affected by ice for short periods in December, January, and February.

REGULATION.—A dam and small power plant above the station modify the low-water flow for medium and low discharges.

ACCURACY.—Stage-discharge relation changed by floods. Rating curves used at this station as follows: June 26 to July 19, 1908; July 20, 1908, to March 28, 1913; March 29, 1913, to February 21, 1914; February 22, 1914, to September 30, 1916, above discharge 618 second-feet all the curves are the same and are based on two measurements made in 1912 at discharge about 1,000 and 4,100 second-feet, respectively. From a study of the records it has been assumed that the changes in the stage-discharge relation affect only the medium and low-water discharge. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to the respective rating tables. Records good, except at extremely low stages when the operation of the power plant affects them.

Discharge measurements of Pocatalico River at Sissonville, W. Va., during the years 1908–1916.

Date.	Made by—	Gage height.	Discharge.	Date.	Made by—	Gage height.	Discharge.
1908.		*Feet.*	*Sec.-ft.*	1912.		*Feet.*	*Sec.-ft.*
June 26	Wm. M. O'Neill	2.16	65	Mar. 14	C. T. Bailey	6.09	961
July 22	W. G. Hoyt	2.32	68	15	do	13.38	4,130
1909.				1913.			
Mar. 21	H. J. Jackson	2.55	99	Nov. 25	Peterson and Walters	2.37	68
22	do	2.72	117	25	do	2.42	70
Nov. 8	A. H. Horton	1.76	3.5	1914.			
1910.				Nov. 7	Mathers and Morgan	2.15	5.58
Aug. 10	Bailey and Dort	1.87	15.0	7	do	2.15	5.72
1911.				1916.			
Aug. 1	C. T. Bailey	1.43	1.1	Aug. 31	B. E. Jones	2.58	55.8

Daily discharge, in second-feet, of Pocatalico River at Sissonville, W. Va., for the years ending Sept 30, 1908–1916.

Day.	June.	July	Aug.	Sept.	Day.	June.	July.	Aug	Sept.
1908.					1908.				
1		2.2	9.7	1.0	16		150	1.1	0.8
2		2.1	2.3	1.0	17		90	.6	.8
3		3.1	1.9	1.0	18		468	1.3	.8
4		158	3.5	1.3	19		1,780	48	.8
5		126	12	1.8	20		370	56	.8
6		80	1.5	1.2	21		87	3.0	.8
7		46	1.8	.9	22		79	5.6	.8
8		91	1.9	1.0	23		45	1.5	.8
9		68	1.6	.9	24		38	1.2	.8
10		12	1.3	.9	25		24	2.3	.9
11		26	1.0	.9	26	66	66	2.3	1.1
12		6.0	1.5	.6	27	1.4	170	2.1	1.1
13		22	2.1	.8	28	1.7	170	2.9	1.3
14		105	1.3	1.0	29	1.5	97	27	1.1
15		592	1.2	.9	30	1.6	38	33	1.1
					31		2.4	20	

Daily discharge, in second-feet, of Pocatalico River at Sissonville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1908-9.												
1	0.9	0.7	1.0	26	89	215	104	7,930	25	90	97	6.6
2	.9	.7	.9	34	72	144	82	1,320	25	28	62	.7
3	1.0	.7	.9	50	62	188	104	392	73	1.9	16	.6
4	1.0	.7	1.0	62	104	179	104	234	75	3.0	3.0	.8
5	.9	.7	.9	62	348	136	112	244	215	7.0	16	.7
6	.9	.7	.9	39	89	75	90	206	234	7.0	4.2	.7
7	1.0	.7	.9	30	128	62	66	97	120	16	1.7	.9
8	.9	.7	.9	38	136	84	76	76	284	3.0	1.3	.8
9	.9	.7	1.0	26	284	97	70	90	264	3.0	1.3	.8
10	.9	.7	1.1	27	244	75	33	79	370	2.7	1.1	1.0
11	.8	.7	1.1	3.5	97	566	56	97	790	1.0	.9	1.0
12	.9	.7	1.8	4.2	152	514	38	90	880	1.5	.9	1.2
13	.8	.7	12	6.6	234	566	32	60	161	62	.9	1.2
14	.9	.7	45	9.7	224	197	90	50	188	76	.6	1.1
15	.8	.7	50	120	206	152	83	65	179	36	21	.9
16	.8	.7	1.9	1,220	326	120	76	24	161	83	97	.9
17	.8	.7	2.9	1,460	3,830	79	62	24	97	136	284	1.0
18	.9	.8	3.3	264	880	104	77	50	128	90	197	.9
19	.9	.7	2.9	30	440	128	79	50	244	62	120	.8
20	.8	.7	2.5	34	284	90	2,180	61	254	32	38	.8
21	.8	.9	2.1	39	170	97	1,460	57	188	40	3.5	.8
22	.8	.9	1.9	50	188	136	1,620	57	75	7.0	6.3	.7
23	.8	.9	2.9	62	170	69	1,940	57	28	16	4.9	.6
24	.7	.9	3.5	32	2,630	83	970	188	28	50	1.8	.6
25	.8	1.0	3.0	26	1,040	120	730	170	23	26	1.3	.7
26	.7	.9	70	27	592	112	592	112	23	5.2	1.7	.7
27	.7	.0	77	44	206	488	566	75	28	90	1.8	.6
28	.7	.9	57	77	234	850	416	52	25	97	.9	.6
29	.7	.9	60	72	-------	540	488	44	28	90	.9	.6
30	.7	.9	48	61	-------	215	3,580	44	60	120	1.0	.6
31	.8	-------	49	66	-------	87	-------	43	-------	83	1.3	-------
1909-10.												
1	.6	2.9	16	56	152	566	1.1	104	86	224	30	161
2	.5	3.2	3.1	224	120	416	1.6	75	66	179	15	79
3	.5	3.2	4.6	790	161	284	1.3	63	73	136	18	215
4	.5	2.9	3.4	592	488	206	1.2	56	56	540	46	284
5	.5	2.9	4.6	284	370	161	14	30	1,080	592	7.9	566
6	.5	3.0	4.2	2,140	234	136	30	48	2,830	348	30	392
7	.5	2.4	3.3	2,260	188	136	2.4	24	514	592	6.0	170
8	.6	3.1	60	370	128	104	6.3	170	244	1,900	16	90
9	.6	48	44	304	112	90	2.1	1,390	304	464	6.6	120
10	.6	90	58	224	120	104	2.1	464	970	264	6.0	112
11	.6	104	25	244	136	97	2.8	244	618	234	24	60
12	.6	76	21	128	136	69	19	3,330	674	197	18	76
13	.6	87	68	112	120	65	104	880	326	910	56	370
14	.6	65	128	4,130	120	56	73	326	215	370	7.0	179
15	.5	57	197	850	188	32	76	206	152	224	12	136
16	.6	30	161	348	3,030	2.5	65	152	326	179	8.8	89
17	.6	27	112	284	1,860	1.9	76	197	464	161	5.6	70
18	.6	14	90	3,830	1,110	12	128	144	224	128	8.8	48
19	.6	18	60	2,630	370	6.3	514	152	416	112	4.9	21
20	.6	7.0	50	514	392	11	674	112	224	90	4.2	14
21	6	8.8	33	1,110	820	8.8	1,700	1,460	161	46	4.2	32
22	.6	3.5	26	1,320	3,030	11	592	1,080	89	56	5.6	28
23	1.4	3.5	16	464	1,110	21	304	326	63	28	4.2	5.6
24	3.4	21	3.3	348	392	3.0	206	370	34	34	4.2	44
25	3.0	8.8	5.2	326	244	4.6	170	1,660	20	37	3.5	8.8
26	2.9	11	25	326	197	2.2	254	646	9.7	18	3.0	6.3
27	2.2	12	25	730	170	1.6	284	284	11,500	28	3.1	5.6
28	2.1	8.8	25	416	264	1.6	206	188	3,130	8.8	3.1	3.8
29	2.2	8.8	25	304	-------	1.7	348	128	514	13	4.2	3.5
30	2.6	11	56	188	-------	2.2	128	120	304	32	4.6	4.2
31	3.2	-------	51	152	-------	1.5	-------	90	-------	77	3.2	-------

Daily discharge, in second-feet, of Pocatalico River at Sissonville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1910–11.												
1	4.6	9.7	90	440	674	179	215	136	2.4	6.6	1.7	514
2	4.2	8.8	62	940	566	161	161	304	3.0	4.2	1.7	206
3	3.5	8.8	48	910	326	144	161	179	4.2	3.4	1.7	284
4	3.4	8.8	46	540	970	136	348	136	2.4	6.6	1.7	144
5	3.5	6.3	50	264	592	97	1,180	128	348	2.4	1.5	26
6	3.5	4.9	120	234	464	1,700	910	97	136	2.8	1.5	7.0
7	4.2	5.6	188	224	488	2,020	618	75	65	2.7	1.4	32
8	4.2	7.0	170	244	370	1,900	702	57	28	2.4	1.1	57
9	3.5	6.3	104	304	370	592	1,180	50	12	2.1	1.3	8.8
10	3.3	5.6	97	206	284	370	592	46	15	2.4	1.5	65
11	3.1	4.2	97	152	215	244	326	37	3.2	2.7	1.6	702
12	3.3	5.6	89	152	188	197	304	18	6.0	2.4	1.7	790
13	3.1	7.0	112	2,180	161	416	370	13	2.7	4.2	2.3	254
14	2.7	6.0	90	970	152	540	702	15	2.6	3.0	1.9	144
15	3.5	5.6	83	1,180	136	348	1,900	13	13	2.8	1.8	104
16	3.3	5.6	62	880	120	234	592	2.7	2.4	3.0	1.8	850
17	5.6	3.5	48	370	97	188	348	3.4	2.0	4.6	1.8	674
18	3.5	4.2	39	264	90	179	234	2.7	49	2.6	1.8	304
19	4.9	3.8	45	224	224	144	197	2.6	97	3.0	1.7	179
20	7.0	4.2	51	254	1,820	264	392	2.4	244	4.6	1.6	464
21	6.3	4.2	43	790	850	234	304	2.3	136	2.6	1.6	284
22	8.8	3.5	44	2,430	440	188	326	2.2	69	2.3	1.6	514
23	6.0	3.8	55	674	304	170	370	1.8	32	1.6	1.5	284
24	6.3	3.5	646	370	326	144	254	3.0	18	1.9	1.5	161
25	4.9	4.2	392	284	348	112	206	2.7	1.9	1.9	1.5	104
26	5.6	4.2	234	760	304	112	161	2.6	13	1.8	1.5	83
27	6.3	3.5	152	940	234	120	136	2.5	12	1.7	1.5	49
28	8.8	7.9	144	566	215	104	120	2.0	12	1.9	1.5	50
29	8.8	97	188	910	-------	104	112	2.1	6.0	1.9	1.5	284
30	6.3	70	1,620	6,670	-------	152	112	1.9	19	1.8	2,340	170
31	11	-------	592	790	-------	244	-------	2.1	-------	1.8	5,230	-------
1911–12.												
1	56	48	206	910	284	215	326	254	14	136	234	136
2	618	16	179	416	244	152	1,980	197	15	197	104	66
3	790	21	161	284	188	144	1,700	152	12	66	46	39
4	348	11	136	215	161	128	514	128	6.6	39	28	25
5	161	15	104	152	161	136	304	179	2.8	21	7.0	2.8
6	90	1,000	90	112	56	136	244	215	2.6	39	18	3.1
7	464	1,860	79	97		152	224	566	3.4	15	2.3	3.4
8	1,320	416	73	97		244	264	1,180	2.1	8.8	2.3	25
9	416	234	65	112		1,000	206	392	1.3	2.4	1.8	3.5
10	674	188	57	97	50	646	215	215	1.5	6.0	1.8	2.3
11	1,500	144	60	90		392	215	170	1.5	21	5.6	2.4
12	514	348	63	61	45	1,000	128	304	1.7	304	2,730	1.0
13	284	674	65		44	3,880	120	264	1.8	188	348	1.7
14	206	326	79		51	1,220	244	188	2.8	70	136	2.1
15	170	244	179	40	44	3,880	264	144	1.4	20	79	2.2
16	136	206	2,020		62	1,360	264	254	1.4	11	34	2.1
17	370	161	970	32	75	488	234	674	2.2	3.5	23	2.6
18	3,630	566	370	326	120	304	2,220	566	1.5	66	20	2.0
19	730	566	244	4,530	254	1,000	592	284	3.3	304	27	2.2
20	440	284	197	1,110	464	1,390	284	206	1.6	144	13	3.4
21	224	206	179	416	1,660	1,000	215	144	1.8	90	392	3.8
22	188	161	161	284	1,980	1,320	197	97	1.7	2,060	170	2.1
23	170	120	488	326	392	646	161	70	2.2	464	144	4.6
24	144	348	514	370	264	2,630	120	55	4.6	197	104	3.8
25	97	514	566	284	206	1,280	97	22	1.2	1,900	79	7.0
26	65	370	646	224	3,130	540	83	33	4.2	910	674	9.7
27	62	304	3,030	179	2,980	304	284	12	3.5	215	215	43
28	48	284	760	152	540	234	264	4.2	2.6	128	90	12
29	43	304	348	1,180	304	2,140	215	8.8	12	90	2,880	97
30	40	244	264	1,390	-------	880	348	61	206	69	326	57
31	28	-------	1,180	514	-------	440	-------	52	-------	104	244	-------

Daily discharge, in second-feet, of Pocatalico River at Sissonville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1912–13.												
1	15	1.5	1.4	304	254	326	180	74	58	2.2	0.9	0.9
2	9.7	2.9	2.4	188	170	215	136	52	35	.9	1.0	.7
3	3.1	2.2	7.0	144	850	152	120	37	9.5	1.1	.8	.7
4	1.9	1.6	6.0	215	1,860	136	104	36	29	162	.8	.6
5	1.6	1.4	61	264	730	152	78	36	16	280	.5	.4
6	1.6	1.5	514	1,500	392	161	75	20	6.8	324	.5	.4
7	1.5	1.7	348	3,880	234	144	61	11	82	228	.5	.4
8	2.3	1.9	161	4,480	224	112	48	3.3	730	68	.5	.5
9	2.1	7.0	97	1,620	179	112	32	1.7	302	30	.5	46
10	1.8	7.0	68	440	112	128	55	1.9	120	136	.6	2.4
11	1.6	14	34	348	880	304	112	2.5	44	346	.6	2.1
12	1.6	2.2	23	6,910	1,740	416	346	1.9	30	82	.6	1.5
13	1.6	2.5	9.7	1,620	392	284	416	1.8	12	37	7.2	1.2
14	1.5	12	2.9	464	254	2,140	302	1.9	5.8	15	1.0	.9
15	1.3	25	3.5	284	234	1,110	910	1.6	2.9	3.3	1.1	.9
16	1.3	7.0	2.7	244	188	416	970	2.1	3.0	6.3	.9	.7
17	1.3	1.6	4.9	284	152	234	392	30	1.7	674	.6	.6
18	1.4	2.7	3.2	940	128	161	238	31	1.3	760	1.1	.8
19	1.7	2.9	6.6	514	136	128	302	7.2	1.3	208	.6	1.8
20	1.5	2.3	15	304	120	120	324	4.5	1.2	136	.6	8.1
21	1.5	3.3	4.6	1,110	128	97	189	3.6	1.2	32	.6	1.9
22	1.5	1.9	4.9	850	136	97	144	238	1.2	15	6.3	2.0
23	3.0	2.1	4.9	540	62	83	120	2,340	2.4	3.9	41	.9
24	2.1	1.7	3.4	1,140	104	65	96	1,460	2.3	5.4	2.4	.8
25	1.8	1.9	3.1	1,040	97	58	61	392	82	60	1.5	.8
26	1.6	2.1	2.4	304	73	4,330	65	189	30	13	1.1	1.0
27	1.7	2.0	34	566	79	8,170	76	228	5.8	2.2	.9	.8
28	1.5	1.5	120	674	86	1,700	82	346	7.6	1.4	1.1	.5
29	1.5	1.5	170	370	-------	514	96	248	2.8	2.4	1.1	.7
30	1.4	1.5	1,280	254	-------	346	96	128	2.0	2.4	.9	.7
31	1.5	-------	1,220	215	-------	248	-------	96	-------	1.4	.8	-------
1913–14.												
1	1.8	16	970	136	1,110	646	191	96	.4	.4	.4	16
2	2.4	13	1,250	112	416	346	1,390	80	.5	.3	.4	18
3	3.2	2.7	280	180	228	296	674	58	.5	.3	.4	65
4	1.8	7.6	280	464	198	272	320	44	.5	.3	.4	58
5	1.4	2.2	180	514	208	424	202	1,580	.4	.4	.4	12
6	.9	.8	153	464	258	820	122	2,880	.5	.4	.4	12
7	.8	1.4	1,180	464	238	1,080	202	850	.5	.3	.4	5.2
8	.8	.7	970	540	171	562	910	478	.4	.4	.4	24
9	.7	78	540	1,580	104	424	1,420	398	.4	.3	.4	12
10	.7	514	280	1,580	96	296	450	248	.4	.3	.4	15
11	.7	464	218	566	96	320	248	150	.4	.2	96	2.2
12	.6	392	162	302	82	248	180	113	.4	.2	424	3.2
13	.6	1,040	112	189	75	296	131	113	.3	.2	478	2.9
14	.6	1,580	112	180	112	506	96	88	.4	.5	88	3.6
15	.5	1,500	96	136	144	702	131	44	.3	160	51	3.6
16	.5	6,970	53	128	136	562	2,260	33	.4	26	58	2.8
17	.5	2,530	61	128	144	320	850	15	.4	3.2	44	2.8
18	.6	514	61	136	514	272	372	9.4	.4	1.3	32	1.8
19	.8	280	49	96	6,550	224	296	2.1	.4	1.1	32	1.5
20	440	180	40	96	3,980	191	3,480	2.3	.4	.7	10	1.8
21	280	136	41	144	674	160	1,180	1.4	.4	1.0	3.1	1.4
22	198	104	32	189	372	191	618	1.7	.4	.6	10	5.2
23	82	89	40	120	296	296	248	1.1	.4	.4	44	2.6
24	128	64	104	104	202	398	160	1.3	.4	.4	646	2.3
25	1,000	52	198	820	180	248	131	1.4	.4	.5	272	1.6
26	1,250	30	2,830	440	160	191	3,680	.9	.3	.6	113	1.4
27	302	28	850	238	346	150	1,280	.4	.5	.5	72	1.6
28	153	238	368	171	424	248	424	1.0	.4	.5	40	1.5
29	120	566	248	136	-------	320	248	.7	.4	.4	72	.7
30	58	280	198	128	-------	320	160	.6	.4	.4	44	1.3
31	72	-------	162	1,250	-------	202	-------	.6	-------	.4	34	-------

Daily discharge, in second-feet, of Pocatalico River at Sissonville, W. Va., for the years ending Sept. 30, 1908–1916—Continued.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1914–15.												
1	1.2	10	12	248	4,130	72	18	9.4	131	1.8	1.9	1.5
2	.8	15	20	88	4,380	58	26	10	65	1.2	2.3	1.6
3	.8	16	42	104	4,380	58	26	10	248	1.3	450	1.6
4	.8	15	346	88	1,390	38	30	9.4	202	1.9	562	2.1
5	.7	10	1,940	72	1,250	248	11	3.7	88	3.2	150	191
6	.7	13	618	170	1,540	850	12	2.1	58	3.7	42	236
7	.7	15	296	2,300	674	398	5.2	20	26	3.8	36	118
8	.6	14	170	618	398	296	7.0	1.6	34	58	10	18
9	1.1	18	180	272	272	224	15	2.2	7.0	58	7.6	30
10	1.2	3.7	272	160	180	180	4.0	2.4	44	58	3.4	30
11	1.1	2.2	296	122	160	150	10	2.1	10	34	2.5	4.0
12	1.2	4.0	191	2,730	160	122	15	2.0	160	10	3.4	7.6
13	1.5	3.1	131	1,320	140	88	7.0	2.2	202	5.2	3.4	2.5
14	2.3	3.1	140	618	122	72	14	1.5	44	5.2	2.4	2.3
15	3.1	3.7	104	618	150	58	8.2	2.0	424	3.7	13	3.0
16	20	3.2	72	346	160	72	15	2.2	398	2.4	3.1	2.1
17	96	4.0	42	272	104	72	8.8	2.4	180	2.4	10	1.8
18	72	5.2	32	1,320	88	58	12	1.8	88	1.9	8.8	2.1
19	51	3.4	478	2,020	88	58	10	2.0	38	2.0	2.3	13
20	36	3.4	2,530	702	88	104	3.7	2.0	26	2.3	2.4	24
21	28	3.7	4,530	372	72	122	2.4	1.8	58	3.0	2.3	646
22	26	3.4	2,180	191	65	104	2.5	2.4	14	2.3	2.1	506
23	20	6.4	398	506	58	88	26	58	18	2.3	2.1	115
24	19	3.4	248	730	65	88	12	27	3.2	1.9	2.0	36
25	38	3.7	160	2,060	72	58	22	26	2.8	1.9	1.9	24
26	31	3.7	122	910	88	58	18	122	2.0	1.9	1.9	16
27	28	3.7	104	618	88	58	12	372	1.9	1.8	1.8	236
28	21	3.8	65	372	72	44	16	104	2.0	1.8	1.9	450
29	17	3.8	646	224	-------	44	15	72	1.6	1.7	1.6	170
30	17	7.0	2,340	202	-------	38	15	88	1.7	1.7	1.6	82
31	10	-------	618	1,540	-------	32	-------	65	-------	1.4	1.6	-------
1915–16.												
1	8,590	5.8	91	398	2,930	260	296	160	14	1.8	1.9	1.7
2	4,380	8.8	131	1,040	1,110	850	224	140	14	2.0	1.4	6.4
3	534	4.0	191	562	674	910	702	118	1,250	2.4	1.4	2.2
4	284	3.7	191	1,040	562	398	970	1,110	320	2.3	18	1.6
5	880	3.0	140	236	562	562	478	506	213	1.7	140	6.4
6	702	2.5	108	506	1,040	702	308	296	213	1.7	122	1.5
7	272	3.1	86	618	2,020	1,740	333	646	1,500	1.4	180	1.5
8	160	2.4	66	372	674	1,220	1,040	506	478	1.5	64	2.0
9	109	1.7	68	333	850	506	2,380	260	224	1.3	69	618
10	66	1.3	68	850	1,110	346	1,580	180	372	1.4	8.8	180
11	52	1.9	45	4,230	562	346	850	131	296	1.6	236	88
12	18	2.5	40	5,890	790	534	478	74	160	1.4	910	65
13	8.8	88	68	3,430	6,370	224	308	55	78	1.4	646	26
14	13	284	140	1,110	1,180	236	236	55	59	4.6	506	12
15	30	7,210	122	424	562	1,080	140	44	372	1.3	160	248
16	3.4	2,220	102	372	450	850	140	42	534	82	101	118
17	4.0	478	2,430	308	424	646	140	27	346	50	111	108
18	4.0	248	8,170	213	450	398	111	27	191	55	85	58
19	1,040	730	2,530	170	346	296	90	90	1,110	150	66	32
20	1,110	760	618	790	333	424	82	7.6	820	122	236	15
21	506	506	284	970	284	1,180	78	6.4	296	55	78	20
22	236	260	260	1,580	213	2,580	160	18	160	224	8.8	30
23	150	170	191	1,660	202	646	131	25	170	180	6.4	7.6
24	104	122	160	562	202	424	115	8.8	59	85	42	8.8
25	72	102	140	372	1,980	284	202	3.4	61	37	3.4	7.6
26	58	88	534	450	1,110	213	236	3.7	39	27	2.0	4.0
27	42	104	562	202	590	1,220	424	3.4	37	3.1	2.1	4.0
28	32	202	1,500	202	372	7,690	506	2.0	7.0	2.6	74	4.0
29	27	140	4,830	534	320	3,330	296	2.1	3.4	1.7	33	26
30	5.8	122	2,140	2,220	-------	760	236	27	3.1	1.7	2.6	5.2
31	181	-------	590	820	-------	424	-------	106	-------	1.7	9.4	-------

NOTE.—Stage-discharge relation affected by ice Dec. 26–29, 1909; Jan. 13–16 and Feb. 7–11, 1912; discharge estimated by comparison with flow at other stations in the basin and by study of weather records.

Monthly discharge of Pocatalico River at Sissonville, W. Va., for the years ending Sept. 30, 1908–1916.

[Drainage area, 238 square miles.]

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1908.					
June 26–30	66	1.4	14.4	0.060	0.01
July	1,780	2.1	162	.681	.78
August	56	.6	8.15	.034	.04
September	1.8	.6	.967	.0041	.004
1908–9.					
October	1.0	.7	.836	.0035	.003
November	1.0	.7	.773	.0032	.003
December	77	.9	16.4	.069	.08
January	1,460	3.5	132	.555	.64
February	3,830	62	481	2.02	2.10
March	850	62	212	.891	1.03
April	3,580	32	532	2.24	2.50
May	7,930	24	392	1.65	1.90
June	880	23	176	.739	.82
July	136	1.0	44.0	.185	.21
August	284	.6	31.9	.134	.15
September	1.2	.6	.797	.0034	.003
The year	7,930	.6	166	.697	9.44
1909–10.					
October	3.4	0.5	1.15	.0048	.006
November	104	2.4	24.8	.104	.12
December	197	3.1	45.3	.190	.22
January	4,130	56	839	3.53	4.07
February	3,030	112	563	2.37	2.47
March	566	1.5	84.4	.355	.41
April	1,700	1.1	200	.840	.94
May	3,330	24	468	1.97	2.27
June	11,500	9.7	856	3.60	4.02
July	1,900	8.8	265	1.11	1.28
August	56	3.0	12.1	.051	.06
September	566	3.5	113	.475	.53
The year	11,500	.5	287	1.21	16.40
1910–11.					
October	11	2.7	5.06	.0213	.02
November	97	3.5	10.8	.0454	.05
December	1,620	39	187	.786	.91
January	6,670	152	842	3.54	4.08
February	1,820	90	405	1.70	1.77
March	2,020	97	379	1.59	1.83
April	1,900	112	451	1.89	2.11
May	304	1.8	43.3	.182	.21
June	348	1.9	45.2	1.90	.21
July	6.6	1.6	2.89	.0122	.01
August	5,230	1.1	246	1.03	1.19
September	850	7.0	260	1.09	1.22
The year	6,670	1.1	239	1.00	13.61
1911–12.					
October	3,630	28	452	1.90	2.19
November	1,860	11	339	1.42	1.58
December	3,030	57	437	1.84	2.12
January	4,530	32	455	1.91	2.20
February	3,130	44	481	2.02	2.18
March	3,880	128	945	3.97	4.58
April	2,220	83	418	1.76	1.96
May	1,180	4.2	229	.962	1.11
June	206	1.2	10.7	.045	.05
July	2,060	2.4	254	1.07	1.23
August	2,880	1.8	296	1,24	1.43
September	136	1.0	18.9	.079	.09
The year	4,530	1.0	362	1.52	20.72

Monthly discharge of Pocatalico River at Sissonville, W. Va., for the year ending Sept. 30, 1908–1916—Continued.

Month.	Discharge in second-feet.				Run-off in inches.
	Maximum.	Minimum.	Mean.	Per square mile.	
1912–13.					
October	15	1.3	2.40	0.010	0.01
November	25	1.4	4.01	.017	.02
December	1,280	1.4	136	.571	.66
January	6,910	144	1,030	4.33	4.99
February	1,860	62	357	1.50	1.56
March	8,170	58	731	3.07	3.54
April	970	32	208	.874	.97
May	2,340	1.6	194	.815	.94
June	730	1.2	54.3	.228	.25
July	760	.9	117	.492	.57
August	41	.5	2.54	.011	.01
September	46	.4	2.72	.011	.01
The year	8,170	.4	238	1.00	13.53
1913–14.					
October	1,250	.5	132	.555	.64
November	6,970	.7	589	2.47	2.76
December	2,830	32	391	1.64	1.89
January	1,580	96	378	1.59	1.83
February	6,550	75	626	2.63	2.74
March	1,080	150	372	1.56	1.80
April	3,680	86	735	3.09	3.45
May	2,880	.4	235	.987	1.14
June	.5	.3	.41	.0017	.002
July	160	.2	6.53	.027	.03
August	646	.4	86.0	.361	.42
September	65	.7	9.40	.039	.04
The year	6,550	.2	294	1.24	16.74
1914–15.					
October	96	.6	17.7	.074	.08
November	18	2.2	6.92	.029	.03
December	4,530	12	623	2.62	3.02
January	2,730	72	707	2.97	3.42
February	4,380	58	730	3.07	3.20
March	850	32	129	.542	.62
April	30	2.4	13.3	.056	.06
May	372	1.5	33.2	.139	.16
June	424	1.6	85.9	.361	.40
July	58	1.2	9.09	.038	.04
August	562	1.6	43.1	.181	.21
September	646	1.5	99.1	.416	.48
The year	4,530	.6	206	.866	11.72
1915–16.					
October	8,590	3.4	619	2.64	3.04
November	7,210	1.3	462	1.94	2.16
December	8,170	40	858	3.61	4.16
January	5,890	170	1,050	4.41	5.08
February	6,370	202	975	4.10	4.42
March	7,690	213	1,010	4.24	4.89
April	2,380	78	442	1.86	2.08
May	1,110	2.0	151	.634	.73
June	1,500	3.1	313	1.32	1.47
July	224	1.3	35.7	.150	.17
August	910	1.4	127	.534	.62
September	618	1.5	56.9	.239	.27
The year	8,590	1.3	508	2.13	29.09

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