

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF FORESTS AND WATERS
DIVISION OF HYDROGRAPHY

Flood Discharge Records

relating to

PENNSYLVANIA STREAMS

Prepared in cooperation with the
United States Department of Interior
Geological Survey

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LETTERS OF TRANSMITTAL

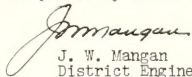
Mr. Charles E. Ryder, Chief Engineer
Pennsylvania Department of Forests & Waters

Dear Sir:

I have the privilege to submit to you a report entitled,
"Flood Discharge Records Relating to Pennsylvania Streams."

This special report has been compiled cooperatively by
the Pennsylvania Department of Forests and Waters, Division of
Hydrography, and the United States Department of Interior, Geological
Survey.

Respectfully submitted,


J. W. Mangan
District Engineer

Honorable James F. Bogardus, Secretary
Pennsylvania Department of Forests & Waters

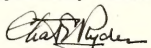
Dear Sir:

I am transmitting a special report entitled, "Flood Discharge
Records Relating to Pennsylvania Streams."

The maximum rates of discharge indicated in the report should
not be interpreted as the requirements of the Water and Power Resources
Board in acting upon applications for dams, bridges, flood-control works,
or other hydraulic structures. For obvious reasons these requirements
may be greater or less than the values shown, depending upon particular
circumstances or local conditions.

It is recommended that the data be published as a special
report of the Department.

Respectfully submitted,


Chas. E. Ryder
Chief Engineer

212487

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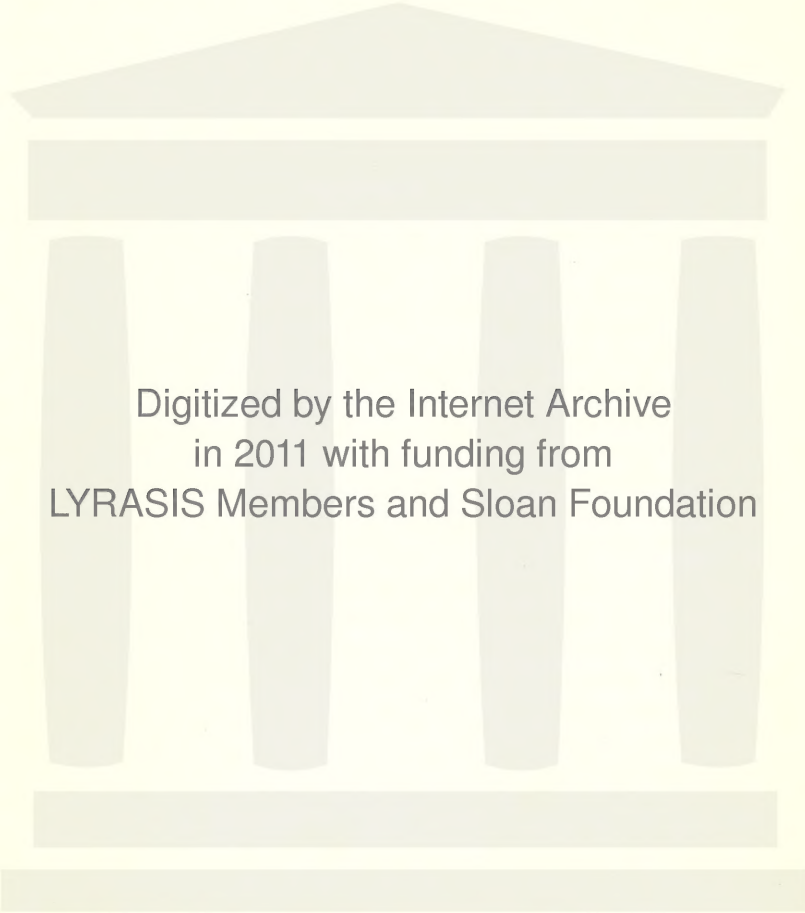
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FLOOD DISCHARGE RECORDS

relating to

Pennsylvania Streams

The Pennsylvania Department of Forests and Waters and the United States Geological Survey, have for many years been collecting records of maximum rates of stream flow, both at regular gaging stations covering the larger drainage areas and at other locations where data became available following local cloudbursts affecting smaller streams. During recent years Pennsylvania and adjoining States have been subjected to unusual storms which have caused unprecedented flows in many streams. The records obtained during these floods have added materially to our knowledge of maximum rates of stream flow. This special report was prepared for the purpose of making available all known authentic records of flood discharges obtained in Pennsylvania and in bordering States for drainage areas tributary to Pennsylvania streams.

Additional information on flood discharges is contained in Geological Survey Water-Supply Papers 771, 799, and 800, and in the special report of the Pennsylvania Department of Forests and Waters entitled, "The Floods of March 1936 in Pennsylvania." It may be noted that a few revisions have been made to the data contained in those special reports as a result of additional information and investigations.

SUMMARY OF FLOOD DISCHARGES

The determinations of maximum known flood discharges are given in the accompanying table and in the diagrams. The compilation is arranged by drainage basins and is tabulated in downstream order. The graphs are shown for each of the three major drainage basins and on a summary graph which includes data for all the drainage basins. The table gives the following information:

1. The number on the map showing the location where the maximum recorded discharge was determined.
2. Name of the stream.
3. Location, city or town, and state.
4. County in which the city or town is located.
5. Drainage area in square miles tributary to the stream at the place of determination of discharge.
6. The date of the earliest information with respect to floods indicates the earliest year in which reliable flood data are available.

7. Maximum recorded. Date when flood occurred; gage height in feet above gage zero at gaging station; elevation above mean sea level (m.s.l.), corresponding to gage height, for stations with gage zeros referenced to mean sea level datum; discharge in terms of cubic feet per second (c.f.s.), and second-feet per square mile (c.s.m.).
8. Method of determination of maximum discharge shown by letters as follows:
 - A - Rating curve from current-meter measurements
 - B - Contracted-opening
 - C - Slope-area
 - D - Flow over spillway

The letter A used with another letter indicates determination from rating curve extended on basis of other method of determination.

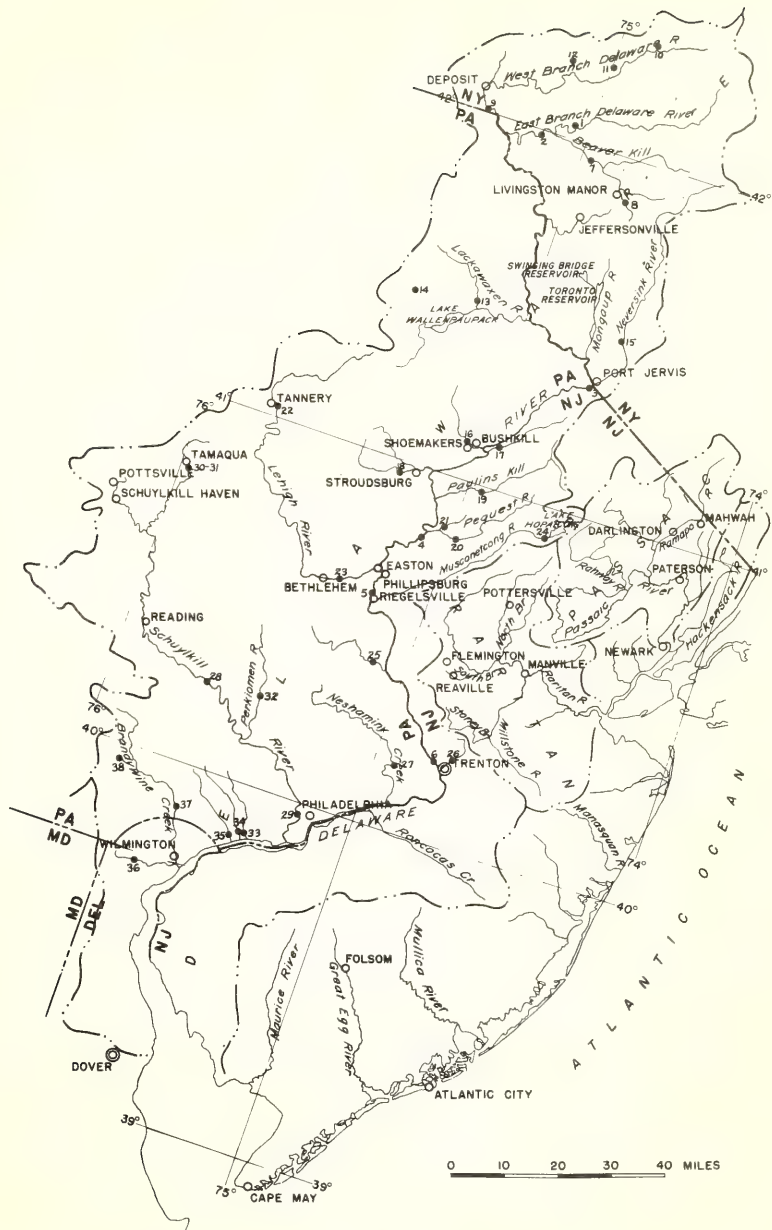
9. Per cent of enveloping curve shows the ratio of determined discharge to that shown by the envelop for an equal drainage area.

The maxima for all gaging stations are listed in the table regardless of the length of record. The records for many of these stations are of short duration and it is probable that higher discharges have occurred at many of them.

At regular gaging stations, where ratings were defined by current-meter measurements, the discharges are shown with their corresponding gage heights, which readily separate them from miscellaneous determinations made by other methods.

All investigations of water resources in Pennsylvania, including the collection of stream-flow data, are carried on under cooperative agreement between the Pennsylvania Department of Forests and Waters and the United States Department of the Interior, Geological Survey. This special report was compiled and prepared jointly by these two organizations.

The flood discharges for streams in New York, New Jersey, West Virginia, Maryland, and Ohio, for the most part, were furnished by the district offices of the Geological Survey in those States. The few other agencies furnishing records are given special acknowledgment in the "Remarks" column of the summary table.



MAP SHOWING LOCATIONS OF FLOOD DETERMINATIONS IN THE DELAWARE RIVER BASIN

Nos. 1 - 38

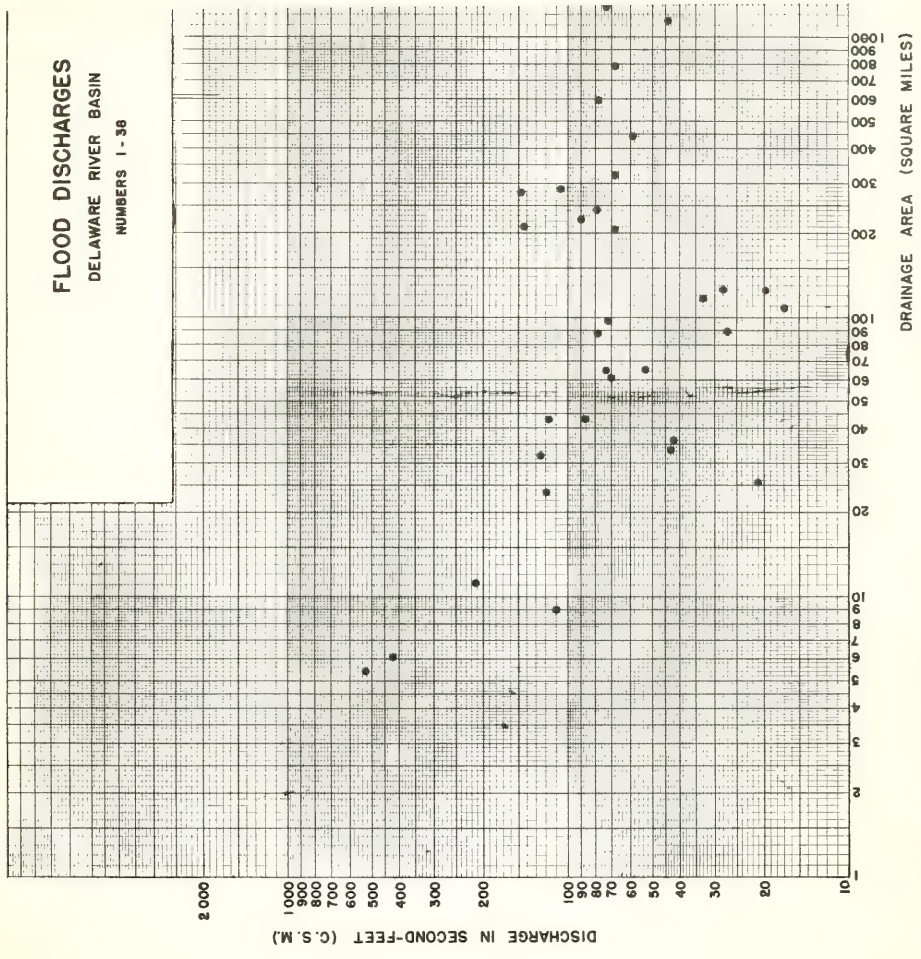
SUMMARY OF FLOOD DISCHARGES
Delaware River Basin

No. on map	Stream	Location	County	Drainage Area (sq. mi.)	Date of Flood	Maximum Recorded				Method of determination	Remarks	
						Date	Gage height (feet)	Elevation (m.s.l.)	Discharge (c.f.s. c.s.m.)			
<u>DELAWARE RIVER BASIN</u>												
1	E. Br. Delaware River	at Harvard, N.Y.	Delaware	443	1934	Mar. 1936	15.68		26,200	59	ABC 30	
2	E. Br. Delaware River	at Fish's Eddy, N.Y.	Delaware	783	1912	Aug. 1933	20.60	971.40	53,300	68	A 45	
3	Delaware River	at Port Jervis, N.Y.	Orange	3,076	1811	Oct. 1903	23.3	438.65	155,000	50	A 63	
4	Delaware River	at Belvidere, N.J.	Warren	4,542	1781	Oct. 1903	28.6	255.03	220,000	48	A 71	
5	Delaware River	at Riegelsville, N.J.	Warren	6,344	1781	Oct. 1903	35.9	161.02	275,000	43	A 73	
6	Delaware River	at Trenton, N.J.	Mercer	6,796	1781	Oct. 1903	20.7	28.5	295,000	43	A 75	Gage height deduced from section at Morrisville.
7	Beaver Kill	at Cook's Falls N.Y.	Delaware	241	1913	Aug. 1933	17.8		19,000	79	AC 31	
8	Little Beaver Kill	nr. Livingston Manor, N.Y.	Sullivan	19.8	1924	Aug. 1928	8.7		2,500	126	A 16	
9	W. Br. Delaware River	at Hale Eddy, N.Y.	Delaware	593	1903	Oct. 1903	20.3	966.64	46,000	78	A 46	
10	Wright Brook	at Elloomsville, N.Y.	Delaware	11.2		July 1935			2,370	212	D 22	
11	Steele Brook	nr. Delhi, N.Y.	Delaware	5.4		July 1935			2,850	528	D 40	
12	East Creek	nr. Walton, N.Y.	Delaware	23.5		July 1935			2,790	119	D 17	Probable flow when dam failed.
13	Leckwaxen River	at West Hawley, Pa.	Wayne	206	1914	Mar. 1936	15.32	900.82	31,000	68	A 25	
14	Jones Creek	at Lake Henry Dam, Pa.	Wayne	9.0		July 1914			990	110	D 10	
15	Neversink River	at Oakland Valley, N.Y.	Orange	222	1928	Aug. 1933	12.61		20,000	90	A 34	
16	Bushkill Creek	at Shoemakers, Pa.	Monroe	117	1908	July 1920	7.2	428.3	3,910	33	A 9	
17	Flat Brook	nr. Flatbrookville, N.J.	Sussex	65.1	1923	Apr. 1924	7.1	354.83	3,470	53	AC 11	Same stage and discharge Feb. 1925.
18	McMichael's Creek	at Stroussburg, Pa.	Monroe	61.4	1911	Mar. 1936	10.5	441.42	4,670	73	A 16	
19	Paulins Kill	at Elkhurst, N.J.	Warren	126	1921	Mar. 1936	6.92		3,480	28	ACD 8	
20	Pequest River	at Pequest, N.J.	Warren	108	1921	Mar. 1936	4.97	403.75	1,810	17	A 5	
21	Beaver Brook	nr. Belvidere, N.J.	Warren	36.2	1922	Mar. 1936	5.76	309.12	1,510	42	ABC 7	

SUMMARY OF FLOOD DISCHARGES
Delaware River Basin. (Continued)

No. on map	Stream	Location	County	Drainage Area (sq. mi.)	Date of Flood	Maximum Recorded				Method of determination	Remarks	
						Date	Gage height (feet)	Elevation (m.s.l.)	Discharge c.f.s.			
<u>DELAWARE RIVER BASIN</u> Continued												
22	Lehigh River	at Tamney, Pa.	Carbon	322	1914	Mar. 1936	13.34	1,055.32	21,800	68	A 30	
23	Lehigh River	at Bethlehem, Pa.	Northampton	1,280	1786	Feb. 1902		232.3	94,000	73	A 60	0.8 mile below New Pottsville at outlet of Lake Hopatcong.
24	Maconetcong River	at Lake Hopatcong, N.J.	Morris	25.6	1928	Mar. 1936	3.17	908.16	534	21	AD 3	
25	Tobicoon Creek	nr. Pipersville, Pa.	Bucks	97.4	1935	June 1932	7.60	266.03	7,020	72	A 19	
26	Assumpink Creek	at Trenton, N.J.	Mercer	89.4	1923	Apr. 1924	7.85	32.61	2,400	27	A 7	
27	Meshamly Creek	nr. Langhorne, Pa.	Bucks	210	1935	Aug. 1933	17.3	57.87	30,000	143	AC 52	
28	Schuylkill River	at Pottstown, Pa.	Montgomery	1,147	1893	Feb. 1902	21.0	138.8	50,000	44	A 34	Probably higher in 1850.
29	Schuylkill River	at Philadelphia, Pa.	Philadelphia	1,893	1869	Oct. 1869	17.0	22.2	127,000	67	A 66	Discharge approximate.
30	Little Schuylkill River	at Tamaqua, Pa.	Schuylkill	42.9	1916	Aug. 1933	7.50	824.36	3,740	87	A 16	Recording 68 gage site.
31	Little Schuylkill River	at Tamaqua, Pa.	Schuylkill	42.9	1916	Sept. 1924	7.50	796.34	5,000	117	A 21	
32	Perkiomen Creek	at Gaters Ford, Pa.	Montgomery	279	1914	July 1935	18.26	130.63	44,200	148	A 62	
33	Crum Creek	at Woodlyn, Pa.	Delaware	33.3	1931	Aug. 1933	7.56	27.14	1,420	43	A 7	
34	Ridley Creek	at Moylan, Pa.	Delaware	31.9	1931	July 1935	7.81	95.17	3,990	125	A 20	
35	Chester Creek	nr. Chester, Pa.	Delaware	61.1	1931	Aug. 1933	11.48	35.02	4,270	70	A 15	
36	White Clay Creek	nr. Newark, Del.	New Castle	87.8	1931	Aug. 1933	16.05	28.0	6,850	78	A 19	
37	Brandywine Creek	at Chadds Ford, Pa.	Delaware	287	1911	Mar. 1920	15.0	165.19	30,500	106	A 45	
38	Beaver Creek	at Bondsville, Pa.	Chester	6.1		July 1916			2,560	420	D 33	

FLOOD DISCHARGES
DELAWARE RIVER BASIN
NUMBERS 1 - 36



FLOOD DISCHARGES

DELAWARE RIVER BASIN

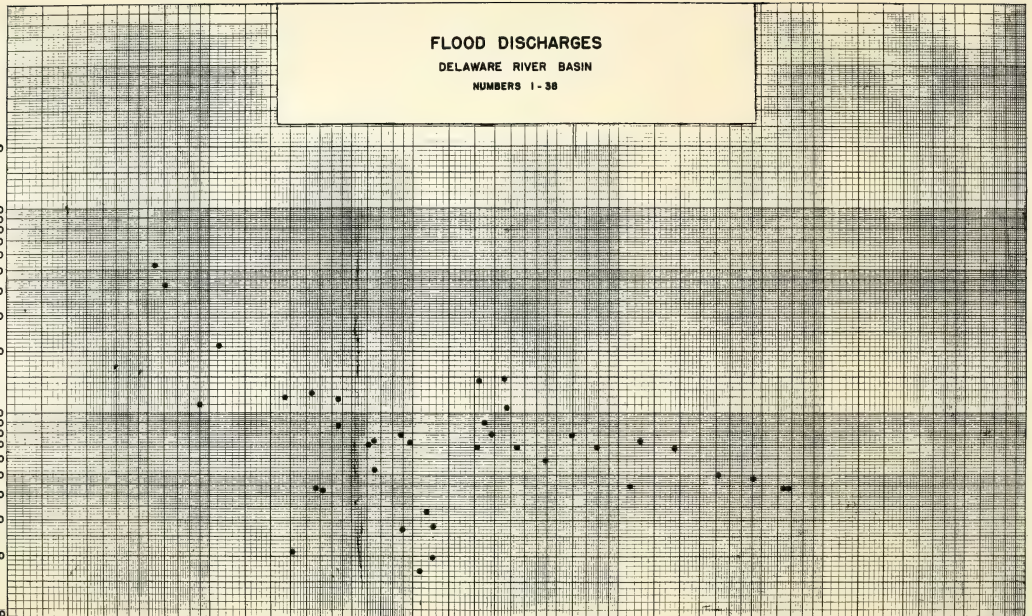
NUMBERS 1-38

DISCHARGE IN SECOND-FOOT (C. S. M.)

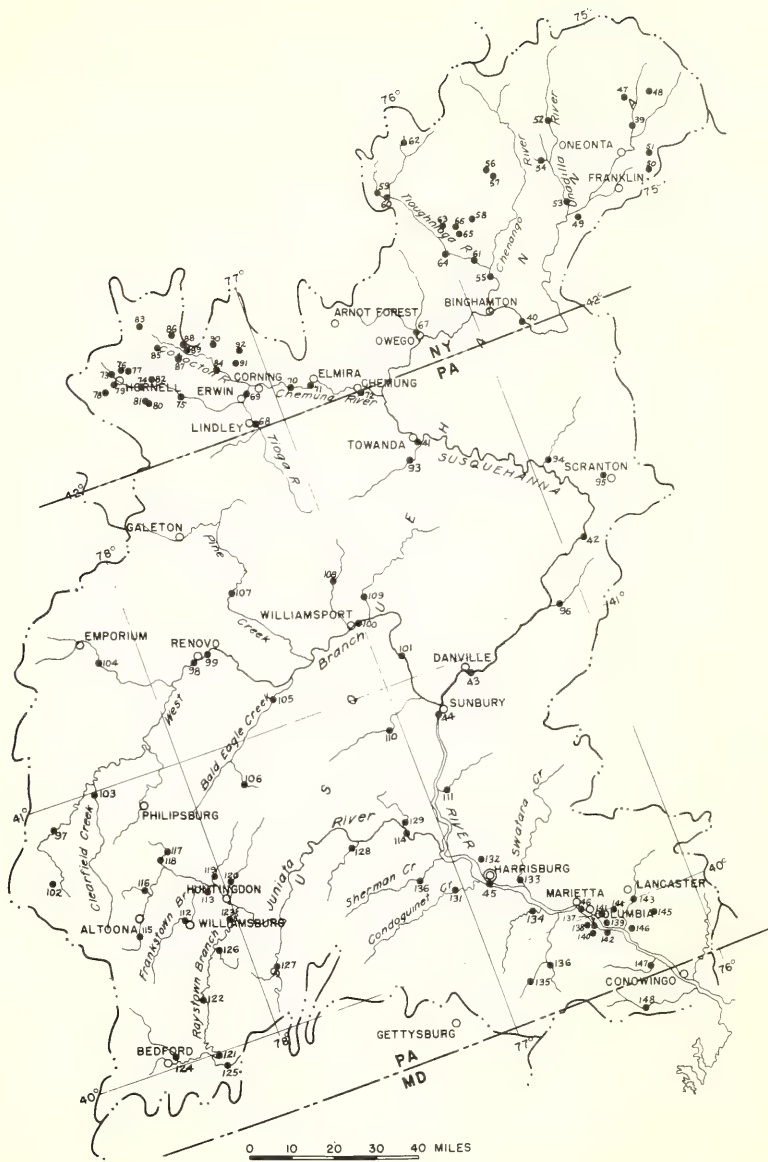
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DRAINAGE AREA (SQUARE MILES)

1 2 3 4 5 6 7 8 9 10 20 30 40 50 60 70 80 90 100 200 300 400 500 600 700 800 900 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 20000 30000 40000 50000 60000 70000 80000 90000 100000







MAP SHOWING LOCATIONS OF FLOOD DETERMINATIONS IN THE SUSQUEHANNA RIVER BASIN
Nos. 39 - 148

SUMMARY OF FLOOD DISCHARGES

Susquehanna River Basin

No. on map	Stream	Location	County	Drainage Area (sq. mi.)	Date of Flood	Maximum Recorded				Method of Determination	Remarks		
						Date	Gage Height (feet)	Elevation (m.s.l.)	Discharge c.f.s.			Discharge c.s.m.	
39	N.Br. Susquehanna River	at Collieraville, N.Y.	Otsego	351	1924	Mar. 1936	8.13	1,118.92	8,740	25	A	12	Affected by storage.
40	N.Br. Susquehanna River	at Conklin, N.Y.	Broome	2,210	1912	Mar. 1936	20.14	861.09	61,600	28	A	31	
41	N.Br. Susquehanna River	at Towanda, Pa.	Bradford	7,797	1784	Mar. 1936	25.0	718.85	188,000	24	A	45	Same stage Mar. 1865
42	N.Br. Susquehanna River	at Wilkes-Barre, Pa.	Luzerne	9,960	1784	Mar. 1936	33.1	545.04	232,000	23	A	49	Same stage Mar. 1865
43	N.Br. Susquehanna River	at Danville, Pa.	Montour	11,220	1784	Mar. 1936	28.00	459.07	250,000	22	A	49	Gage height affected by backwater.
44	Susquehanna River	at Sunbury, Pa.	Northumberland	18,300	1786	Mar. 1936	26.85	445.85	530,000	29	A	81	Walnut Street.
45	Susquehanna River	at Harrisburg, Pa.	Dauphin	24,100	1740	Mar. 1936	30.33	320.37	740,000	31	A	100	
46	Susquehanna River	at Marietta, Pa.	Lancaster	25,930	1740	Mar. 1936	60.73	260.73	787,000	30	A	100	
47	Oaks Creek	at Index, N.Y.	Otsego	103	1929	Sept. 1938	5.8	1,600	16	16	A	4	Natural storage.
48	Cherry Valley Creek	nr. Westville, N.Y.	Otsego	81.3	1930	Sept. 1938	8.63		4,550	56	A	13	
49	Ouleout Creek	at East Sidney, N.Y.	Delaware	101		July 1935			16,700	165	D	44	Discharge when dam failed.
50	Brook	nr. Heridale, N.Y.	Delaware	0.52		July 1935			170	327	D		
51	Brook	nr. Heredith, N.Y.	Delaware	0.44		July 1935			156	355	D		
52	Unadilla River	nr. New Berlin, N.Y.	Chenango	196	1924	Mar. 1936	9.80	1,099.70	6,320	32	A	11	
53	Unadilla River	at Rockdale, N.Y.	Chenango	518	1929	Oct. 1932	11.0	1,003.84	10,400	20	A	11	
54	Sage Brook	nr. So. New Berlin, N.Y.	Chenango	0.69	1932	July 1935	4.71	1,445.23	201	291	A		
55	Chenango River	nr. Chenango Forks, N.Y.	Broome	1,492	1912	July 1935	20.3	892.03	82,800	56	A	50	
56	Galmore Brook	nr. Preston, N.Y.	Chenango	0.62		July 1935			516	835	B		
57	Clear Brook	nr. Smithville Flats N.Y.	Chenango	1.34		July 1935			449	335	D	14	
58	Strong's Brook	at Homer, N.Y.	Cortland	6.41		July 1935			6,650	1040	C	85	
59	W.Br. Toughonioga River	at Cortland, N.Y.	Cortland	71.5		July 1935			1,270	18	D	4	
60	W.Br. Toughonioga River	at Cortland, N.Y.	Cortland	100		July 1935			1,460	15	D	4	

SUMMARY OF FLOOD DISCHARGES
Susquehanna River Basin (Continued)

No. on map	Stream	Location	County	Drainage Area (sq.mi.)	Date of Flood	Maximum Recorded				Method of determination	Remarks	
						Date	Gage height (feet)	Elevation (m.s.l.)	Discharge c.f.s.			
61	Toughmoga River	at Itaska, N.Y.	Broome	735	1929	July 1935	16.61	934.58	44,700	61	A	40
62	Shackham Brook	nr. Truxton, N.Y.	Cortland	3.12	1932	Mar. 1936	3.73	1,285.25	153	49	A	3
63	Willet Creek	at Marathon, N.Y.	Cortland	11.0		July 1935			6,430	585	C	60
64	Dudley Creek	nr. Isle, N.Y.	Broome	29.6		July 1935			16,200	547	C	85
65	Otselic River	nr. Upper Isle, N.Y.	Cortland	214		July 1935			15,400	72	C	26
66	Merrill River	nr. Upper Isle, N.Y.	Broome	20.8		July 1935			15,100	726	C	96
67	Owego Creek	nr. Owego, N.Y.	Tioga	186	1930	July 1935	10.50	836.78	23,500	126	A	43
68	Tioga River	at Lindley, N.Y.	Steuben	770	1930	Mar. 1936	19.2	983.14	41,200	54	A	36
69	Tioga River	nr. Erwins, N.Y.	Steuben	1,370	1918	Mar. 1936	18.66	949.90	60,000	44	A	37
70	Chemung River	below Big Flats, N.Y.	Chemung	2,150		Mar. 1936			87,200	41	C	44
71	Chemung River	at Elmira, N.Y.	Chemung	2,162	1889	June 1889	18.3	853.09	138,300	64	C	69
72	Chemung River	at Chemung, N.Y.	Chemung	2,350	1903	Mar. 1936	19.57	798.20	92,300	36	A	42
73	Canistota River	at Artpport, N.Y.	Steuben	30.4		July 1935			4,820	159	C	25
74	Canistota River	at Canistota, N.Y.	Steuben	185		July 1935			25,000	135	C	47
75	Canistota River	at West Cameron, N.Y.	Steuben	344	1930	July 1935			35,000	102	C	47
76	Carrington Creek	at Fremont Center, N.Y.	Steuben	13.6		July 1935			3,750	276	D	31
77	Big Creek	nr. No.Hornell, N.Y.	Steuben	16.5		July 1935			11,900	721	C	87
78	Canacadea Creek	at Almond, N.Y.	Steuben	49.8		July 1935			22,000	442	C	86
79	Canacadea Creek	at Hornell, N.Y.	Steuben	59.4		July 1935			26,600	448	C	94
80	Bennett Creek	nr. Canistota, N.Y.	Steuben	71.5		July 1935			12,400	173	C	39
81	Purdy Creek	nr. Canistota, N.Y.	Steuben	21.2		July 1935			8,930	424	C	57
82	Stephens Creek	nr. Carson, N.Y.	Steuben	7.04		July 1935			6,700	952	D	80

Furnished by City of Elmira.

SUMMARY OF FLOOD DISCHARGES
Susquehanna River Basin(Continued)

No. on map	Stream	Location	County	Drainage Area (sq.mi.)	Date of earliest Flood stage	Maximum Recorded				Date of discharge	Remarks	
						Date	Gage height (feet)	Elevation (m.s.l.)	Discharge c.f.s.			
83	Cohocton River	nr. Cohocton, N.Y.	Steuben	44.0		July 1935			891	20	D	4
84	Cohocton River	nr. Campbell, N.Y.	Steuben	472	1918	July 1935	11.6	1,028.18	45,400	96	C	50
85	Neil Creek	at Bloomerville, N.Y.	Steuben	20.8		July 1935			5,040	242	C	33
86	Temple Creek	above West Creek, N.Y.	Steuben	5.96		July 1935			1,510	253	C	20
87	Campbell Creek	nr. Kanona, N.Y.	Steuben	35.8		July 1935			14,000	391	C	66
88	Harrisburg Hollow	nr. Hickory Hill, N.Y.	Steuben	2.02		July 1935			2,220	1100	C	55
89	Harrisburg Hollow	nr. Hickory Hill, N.Y.	Steuben	2.49		July 1935			2,810	1190	C	62
90	Brook	at Bradford, N.Y.	Steuben	1.68		July 1935			1,940	1150	C	54
91	Meads Creek	at East Campbell, N.Y.	Steuben	46.1		July 1935			30,300	657	C	123
92	Pine Creek	nr. Monterey, N.Y.	Schuyler	5.00		July 1935			3,270	654	C	48
93	Towanda Creek	nr. Monroeon, Pa.	Bradford	244	1914	Nov. 1926	11.0	785.14	15,800	74	A	27
94	Tunkhannock Creek	at Dixon, Pa.	Wyoming	383	1914	Sept. 1924	13.1	623.60	19,100	50	A	24
95	Roaring Brook	nr. Scranton, Pa.	Lackawanna	58		July 1941			8,000	138	C	29
96	Wapwallopen Creek	nr. Wapwallopen, Pa.	Luzerne	45.8	1919	Sept. 1924	7.9	760.31	2,260	49	A	9
97	W.Br. Susquehanna River	at Bower, Pa.	Clearfield	315	1889	Mar. 1936	19.74	1,226.13	31,500	100	AC	44
98	W.Br. Susquehanna River	nr. Westport, Pa.	Clinton	2,678	1846	Mar. 1936			213,000	80	C	96
99	W.Br. Susquehanna River	at Renovo, Pa.	Clinton	2,975	1846	Mar. 1936	29.39	663.42	236,000	79	AC	99
100	W.Br. Susquehanna River	at Williamsport, Pa.	Lycoming	5,682	1846	Mar. 1936	33.57	928.12	264,000	46	AC	74
101	W.Br. Susquehanna River	at Watsonom, Pa.	Northumberland	6,596	1846	Mar. 1936			285,000	43	C	74
102	Stony Creek	at Spangler, Pa.	Cambria	2.7		Sept. 1912			1,110	410	D	23
103	Clearfield Creek	at Dimeeling, Pa.	Clearfield	371	1913	Mar. 1936	18.49	1,164.05	37,600	111	A	48

SUMMARY OF FLOOD DISCHARGES
Susquehanna River Basin(Continued)

No. on map	Stream	Location	County	Drainage Area (sq.mi.)	Date of Flood Data	Maximum Recorded				Method of Determination	Reference to Hydrographic Survey	Remarks	
						Date	Gage height (feet)	Elevation (m.s.l.)	Discharge c.f.s.				
104	Driftwood Branch	at Sterling Run, Pa.	Cameron	281	1913	Mar. 1936	12.0	906.60	28,400	101	AC	42	
105	Sinemahoning Creek	at Beech Cr. Station, Pa.	Clinton	559	1910	Mar. 1936	34.12	586.21	22,300	40	A	23	
106	N. Bald Eagle Creek	at Rockview Prison, Pa.	Centre	2-4		Mar. 1936		1,010	421		D	23	
107	McBrides Gap Run	at Cedar Run, Pa.	Lycoming	604	1918	Mar. 1936	11.39	793.35	30,900	51	AC	30	
108	Fine Creek	nr. Trout Run, Pa.	Lycoming	173	1913	Mar. 1936	17.34	710.74	17,000	98	AC	33	
109	Loyalsock Creek	at Loyalsock, Pa.	Lycoming	443	1925	Nov. 1926	12.3	597.93	34,000	77	A	39	
110	Penn Creek	at Penns Creek, Pa.	Union	301	1929	Sept. 1934	13.00	519.74	12,900	43	A	19	
111	Mahantango Creek, East	nr. Dalmatia, Pa.	Northumberland	162	1929	Aug. 1933	13.66	441.16	9,850	61	A	20	
112	Frankstown Branch	at Williamsburg, Pa.	Blair	291	1810	Mar. 1936	18.58	850.36	47,600	164	AC	70	
113	Juniata River	nr. Petersburg, Pa.	Huntingdon	806	1810	Mar. 1936			80,000	99	D	67	Warrior Ridge Dam.
114	Juniata River	at Newport, Pa.	Perry	3,554	1810	June 1889	35.9	399.06	237,000	71	AC	93	
115	Kettle Creek	nr. Altoona, Pa.	Blair	2-8		Mar. 1936		777	278		D	16	Pottsgrove Dam.
116	Bells Gap Run	nr. Bellwood, Pa.	Blair	18-2		Mar. 1936		3,350	184		D	23	Bellwood Dam.
117	Sinking Run	nr. Tyrone, Pa.	Blair	6-0		Mar. 1936		1,000	167		D	13	Dam No. 2.
118	Sinking Run	nr. Tyrone, Pa.	Blair	6-1		Mar. 1936		913	150		D	12	Dam No. 1.
119	Shaver Creek	nr. Petersburg, Pa.	Huntingdon	46-4	1929	Mar. 1936	9.32	700.70	3,420	74	A	14	
120	Standing Stone Creek	nr. Huntingdon, Pa.	Huntingdon	128	1889	June 1889	9.38	627.19	5,920	46	A	13	
121	Raystown Branch	at Juniata Crossing, Pa.	Bedford	54-9	1889	Mar. 1936		67,000	122	0	70		
122	Raystown Branch	at Saxton, Pa.	Bedford	756	1889	Mar. 1936	24.54	819.27	80,500	106	AC	70	
123	Raystown Branch	at Hawk's Bridge, Pa.	Huntingdon	94-8	1889	Mar. 1936		86,500	91	D	66		Raystown Dam.
124	Juniata River	at Yount, Pa.	Bedford	191	1929	Mar. 1936	18.08	1,064.51	17,800	94	A	33	Gage height affected by backwater.
125	Brush Creek	at Gapsville, Pa.	Bedford	36-8	1929	Mar. 1936	9.91	1,432.20	6,870	187	A	32	

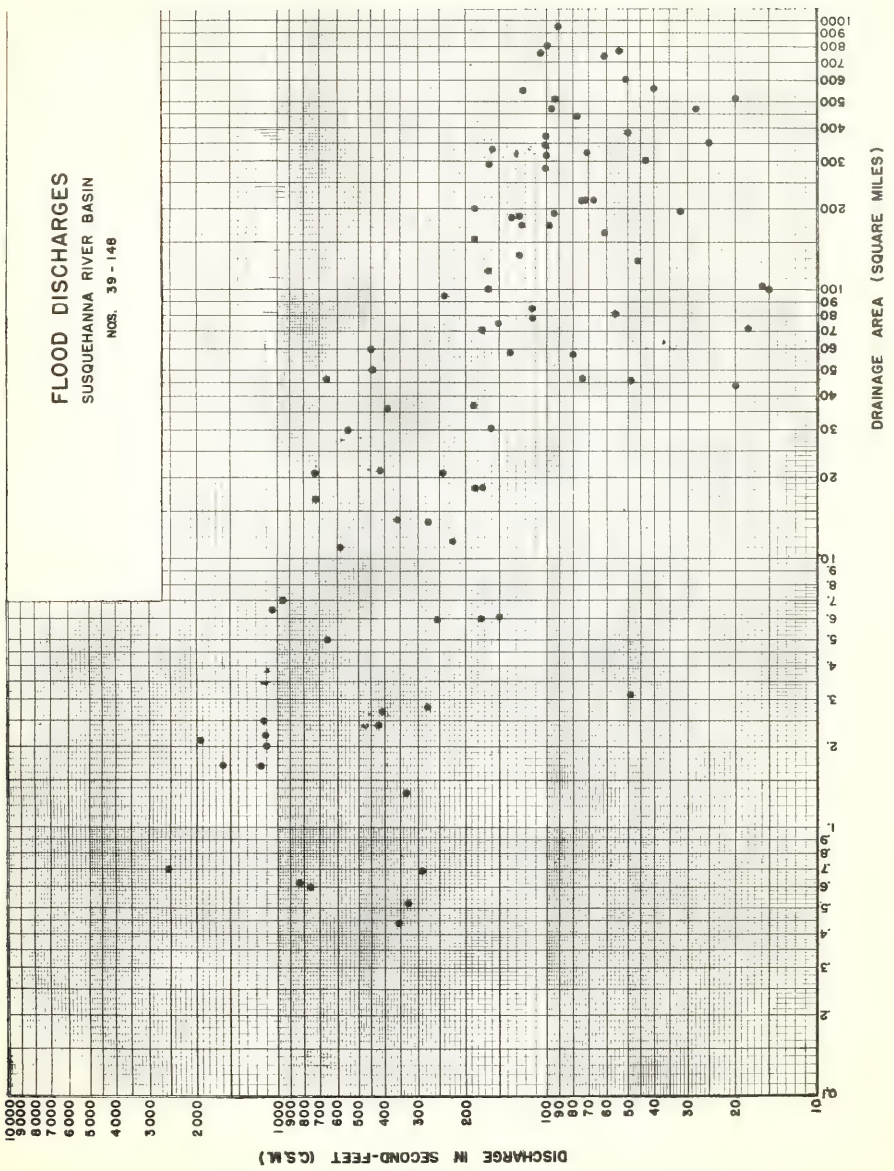
SUMMARY OF FLOOD DISCHARGES

Susquehanna River Basin (Continued)

No. on map	Stream	Location	County	Drainage Area (sq. mi.)	Date of earliest flood data	Maximum Recorded				Method of determination	Percent of development	Remarks	
						Date	Gage height (feet)	Elevation (m.s.l.)	Discharge (c.f.s.)				
126	Great Trough Creek	nr. Marklesburg, Pa.	Huntingdon	84.6	1930	Mar. 1936	8.46	722.34	9,580	113	A	27	
127	Aughwick Creek	nr. Orbisonia, Pa.	Huntingdon	174	1889	June 1889	20.5	639.54	21,500	124	A	11	
128	Tuscarora Creek	nr. Fort Royal, Pa.	Juniata	214	1889	Mar. 1936	21.60	441.10	14,400	67	A	25	Gage height affected by backwater.
129	Cocolamus Creek	nr. Millerstown, Pa.	Perry	57.2	1930	Aug. 1933	8.20	433.70	4,560	80	A	17	
130	Sherman Creek	at Shermandale, Pa.	Perry	200	1927	July 1927	20.34	442.24	37,000	105	A	66	Discharge approximate.
131	Conodoguinet Creek	nr. Hogestown, Pa.	Cumberland	470	1929	Dec. 1924	11.32	361.57	13,100	28	A	15	
132	Spring Creek	at Harrisburg, Pa.	Dauphin	11.6	1889	June 1908	25.6	381.13	53,000	159	A	72	Float velocity and discharge approximate.
133	Watera Creek	at Harper Tavern, Pa.	Lebanon	333	1889	June 1889	25.6	381.13	53,000	159	A	72	Float velocity and discharge approximate.
134	W. Conewago Creek	nr. Manchester, Pa.	York	510	1928	Aug. 1933	21.14	287.18	47,600	93	A	51	
135	Codorus Creek	at Spring Grove, Pa.	York	74.3	1817	Aug. 1933	11.84	448.06	11,200	151	AD	35	
136	S-Branch Codorus Creek	nr. York, Pa.	York	117	1817	Aug. 1933	17.97	391.00	19,300	165	AB	46	
137	Canadochly Creek	nr. Long Level, Pa.	York	2.2		July 1914			2,460	1120	C	59	
138	Cabin Creek	nr. Long Level, Pa.	York	13.9		July 1914			4,930	359	CD	40	
139	Whister's Run	nr. Long Level, Pa.	Lancaster	0.6		July 1914			456	760	D		
140	Fishing Creek	nr. Long Level, Pa.	York	18.2		July 1914			3,130	172	D	22	
141	Mann's Run	nr. Long Level, Pa.	Lancaster	0.7		July 1914			1,780	2540	C		
142	Green Branch	nr. Long Level, Pa.	York	1.7		July 1914			2,720	1600	C	76	
143	Conestoga Creek	at Lancaster, Pa.	Lancaster	322	1928	Aug. 1933	17.52	262.26	22,800	71	AC	32	
144	Indian Run	nr. Long Level, Pa.	Lancaster	2.1		June 1938			4,050	1930	C	100	
145	Pequea Creek	nr. Strasburg, Pa.	Lancaster	78.1		June 1938			8,930	114	C	27	
146	Pequea Creek	nr. Pequea, Pa.	Lancaster	153		June 1938			28,000	183	C	58	

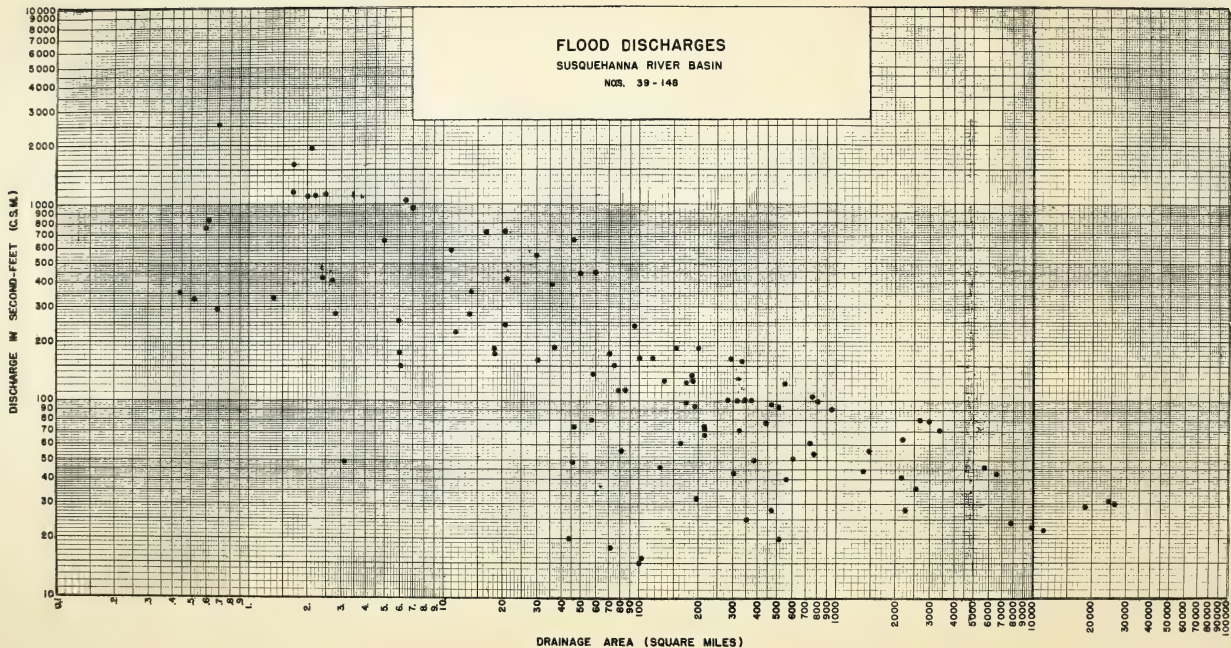
FLOOD DISCHARGES
SUSQUEHANNA RIVER BASIN

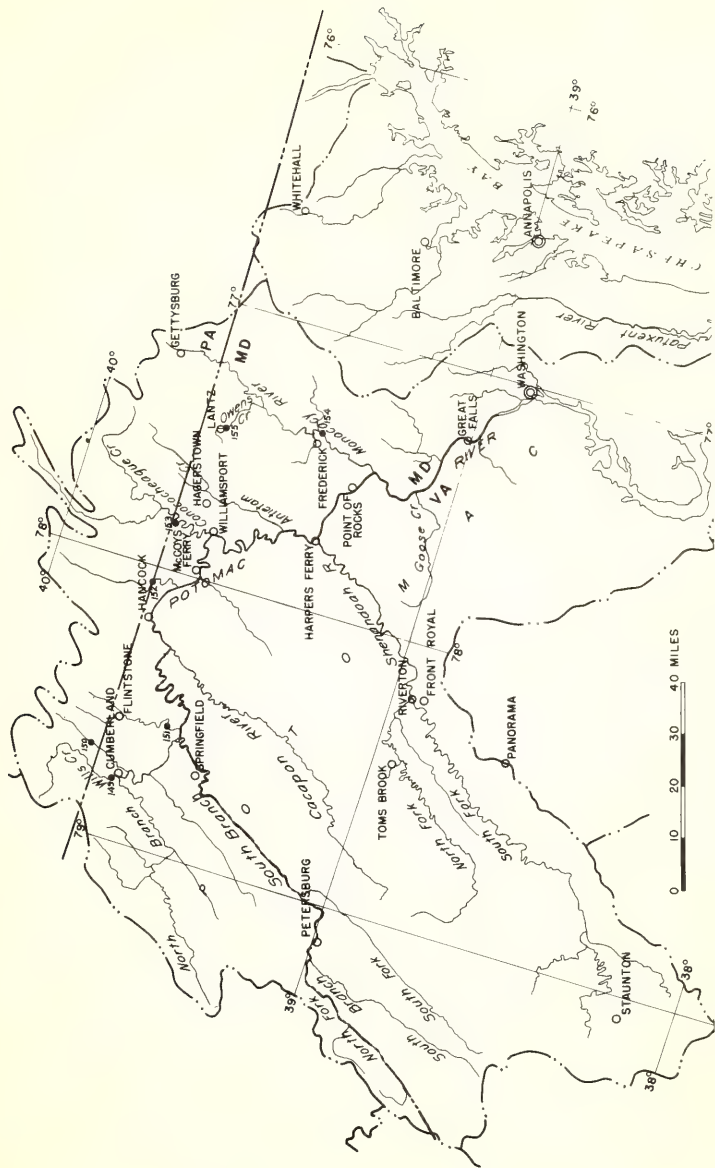
NOS. 39 - 148



SUMMARY OF FLOOD DISCHARGES
Susquehanna River Basin (Continued)

No. on map	Stream	Location	County	Drainage Area (sq. mi.)	Date of Flood	Maximum Recorded				Station No. on the Hydrographic Map	Remarks	
						Date	Gage height (feet)	Elevation (m.s.l.)	Discharge (c.f.s.)			
126	Great Trough Creek	nr. Marklesburg, Pa.	Huntingdon	84.6	1930	Mar. 1936	84.6	722.94	9,580	113	A	27
127	Aughwick Creek	nr. Orbisonia, Pa.	Huntingdon	174	1889	June 1889	20.5	639.54	21,500	124	A	41
128	Tuscarora Creek	nr. Port Royal, Pa.	Juniata	214	1889	Mar. 1936	21.60	441.40	41,400	67	A	25
129	Cocolamus Creek	nr. Millerstown, Pa.	Ferry	57.2	1930	Aug. 1933	8.20	433.70	4,560	80	A	17
130	Sherman Creek	at Shermendale, Pa.	Ferry	200	1927	July 1927	20.34	442.24	37,000	105	A	66
131	Conodoguinet Creek	nr. Hogestown, Pa.	Cumberland	470	1929	Dec. 1934	11.32	361.57	13,100	28	A	15
132	Spring Creek	at Harrisburg, Pa.	Dauphin	11.6	1889	Feb. 1908	25.6	381.13	2,575	222	A	23
133	Swatara Creek	at Harper Tavern, Pa.	Lebanon	333	1889	June 1889	25.6	381.13	53,000	159	A	72
134	W. Conewago Creek	nr. Manchester, Pa.	York	510	1928	Aug. 1933	24.14	287.18	47,600	93	A	51
135	Codorus Creek	at Spring Grove, Pa.	York	74.3	1817	Aug. 1933	11.84	448.06	11,200	151	AD	35
136	S.Branch Codorus Creek	nr. York, Pa.	York	117	1817	Aug. 1933	17.97	391.00	19,300	165	AB	46
137	Canadockly Creek	nr. York Level, Pa.	York	2.2		July 1944			2,460	1120	C	59
138	Cabin Creek	nr. Long Level, Pa.	York	13.9		July 1944			4,990	359	CD	40
139	Whister's Run	nr. Long Level, Pa.	Lancaster	0.6		July 1944			456	760	B	
140	Fishing Creek	nr. Long Level, Pa.	York	18.2		July 1944			3,130	172	S	22
141	Mann's Run	nr. Long Level, Pa.	Lancaster	0.7		July 1944			1,780	2540	C	
142	Green Branch	nr. Long Level, Pa.	York	1.7		July 1944			2,720	1600	C	76
143	Conestoga Creek	at Lancaster, Pa.	Lancaster	322	1928	Aug. 1933	17.52	262.26	22,800	71	AC	32
144	Indian Run	nr. Long Level, Pa.	Lancaster	2.1		July 1944			4,090	1930	C	100
145	Pequea Creek	nr. Strasburg, Pa.	Lancaster	78.1		June 1936			8,930	114	C	27
146	Pequea Creek	nr. Pequea, Pa.	Lancaster	153		June 1936			26,000	183	C	58





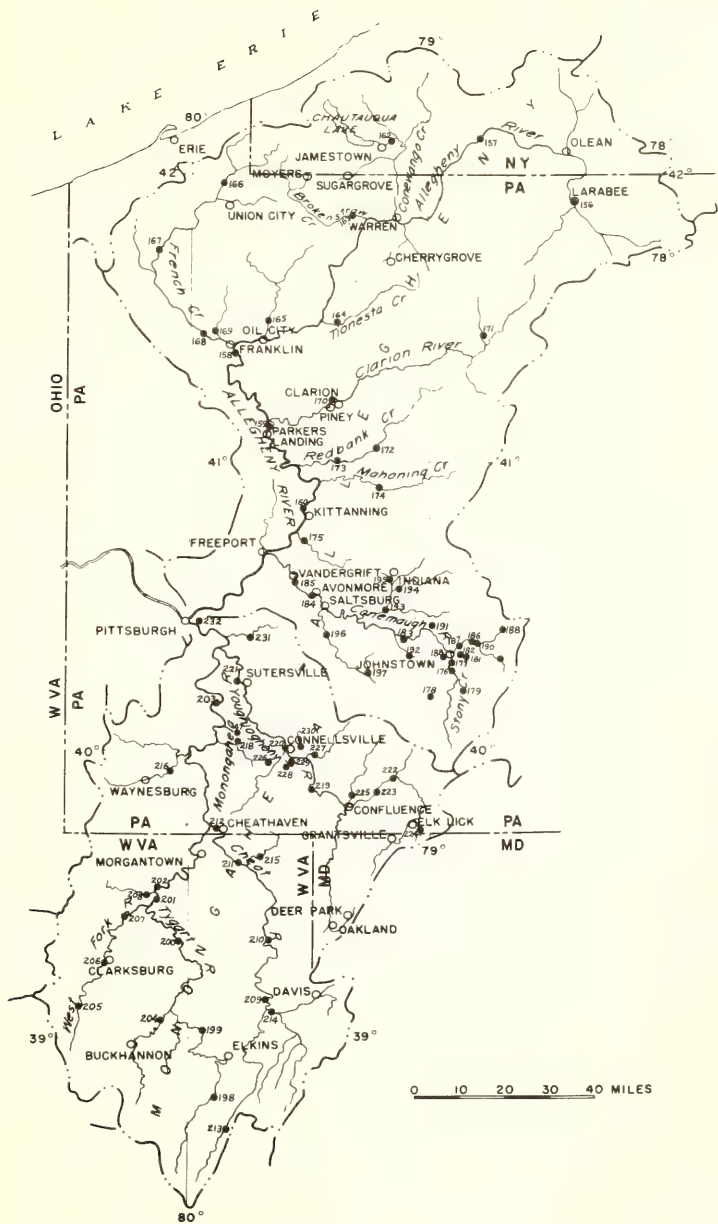
MAP SHOWING LOCATIONS OF FLOOD DETERMINATIONS IN THE POTOMAC RIVER BASIN

Nos. 149 - 155

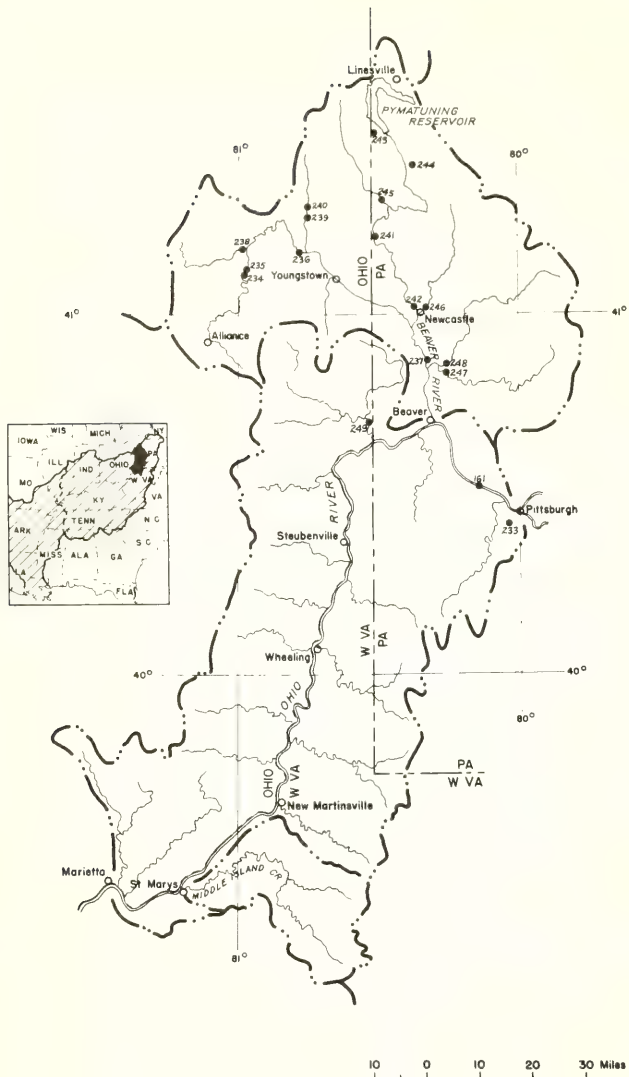
SUMMARY OF FLOOD DISCHARGES

Susquehanna River Basin (Continued)
Potomac River Basin

No. on map	Stream	Location	County	Drainage Area (sq. mi.)	Date of Flood	Maximum Recorded				Per cent of Normal	Remarks	
						Date	Gage Height (feet)	Elevation (m.s.l.)	Discharge (c.f.s.)			
<u>SUSQUEHANNA RIVER BASIN</u>												
Continued												
147	Muddy Creek	at Castle Fin, Pa.	York	133	1928	Aug. 1933	21.11	196.53	16,600	125	Ah	77
148	Deer Creek	at Rocks, Md.	Hanford	94.4	1926	Aug. 1933	17.7	268.1	22,600	239	A	61
<u>POTOMAC RIVER BASIN</u>												
149	Wills Creek	nr. Cumberland, Md.	Allegheny	247	1905	Mar. 1936	22.2	663.1	38,100	154	AC	61
150	Everts Creek	at Koon Dam, Pa.	Bedford	45	1928	Mar. 1936	19.0	6,120	136	136	D	25
151	Towh Creek	nr. Oldtown, Md.	Allegheny	146	1930	Mar. 1936	17.4	451.56	27,000	102	AE	57
152	Lacking Creek	nr. Sylvan, Pa.	Franklin	158	1889	Mar. 1936	16.5	408.27	20,700	131	Ab	42
153	Conococheague Creek	at Fairview, Md.	Washington	494	1889	June 1889	30.	262.	56,000	69	A	47
154	Monocacy River	nr. Frederick, Md.	Frederick	817	1889	Dec. 1934	8.4	4,500	790	790	A	61
155	Owens Creek	at Lantz, Md.	Frederick	5.70	1931							



MAP SHOWING LOCATIONS OF FLOOD DETERMINATIONS IN THE ALLEGHENY AND MONONGAHELA RIVER BASINS. Nos. 156 - 160, 162 - 232



MAP SHOWING LOCATIONS OF FLOOD DETERMINATIONS IN THE BEAVER RIVER BASIN, Nos. 233 - 249
AND OHIO RIVER, No. 161

SUMMARY OF FLOOD DISCHARGES

Ohio River Basin

No. on map	Stream	Location	County	Drainage Area (sq. mi.)	Date to earliest flood data	Maximum Recorded				Method of determination	Percent of gauging	Remarks	
						Date	Gage height (feet)	Elevation (m.s.l.)	Discharge c.f.s.				
147	Allegheny River	at Tonawanda, Pa.	Coke	511	1915	Nov. 1927	17.6	1,440.99	8,210	15	A	0	
148	Allegheny River	at Hod House, N.Y.	Cattaraugus	1,630	1903	Mar. 1910	13.6	1,335.41	11,000	24	A	22	
150	Allegheny River	at Franklin, Pa.	Venango	5,982	1865	Mar. 1865	25.0	981.26	196,000	33	A	54	
159	Allegheny River	at Fenner's Landing, Pa.	Armstrong	7,671	1865	Mar. 1865	29.0	974.14	250,000	33	A	62	
160	Allegheny River	at Pittsburg, Pa.	Armstrong	8,982	1806	Mar. 1913	30.4	794.85	265,000	30	A	61	
161	Ohio River	at Sewickley, Pa.	Allegheny	19,500	1762	Mar. 1936	34.75	724.75	574,000	29	A	85	
162	Chadokir River	at Falconer, N.Y.	Chautauqua	194	1934	Apr. 1936	4.01	1,261.05	2,030	10	A	4	
163	Brokenstraw Creek	at Youngsville, Pa.	Warren	304	1909	Mar. 1913	13.2	1,201.12	14,300	47	A	21	
164	Tionesta Creek	at Hebrasse, Pa.	Forest	481	1909	Mar. 1934	11.4	1,090.4	21,900	46	A	24	
165	Oil Creek	at Rousseville, Pa.	Venango	300	1909	Jan. 1937	9.85	1,030.18	11,300	38	A	16	
166	French Creek	at Carters Corners, Pa.	Erie	208	1910	Mar. 1913	12.64	1,218.34	11,700	56	A	20	
167	French Creek	at Saegerstown, Pa.	Crawford	629	1913	Mar. 1913	17.9	1,111.64	26,300	42	A	25	
168	French Creek	at Utica, Pa.	Venango	1,028	1913	Mar. 1913	15.7	1,035.24	35,600	35	A	26	
169	Sugar Creek	at Sugar Creek, Pa.	Venango	166	1932	Jan. 1937	8.5	1,024.53	8,690	52	A	17	Powerhouse record; furnished by Clarion River Power Co. Borough Dam.
170	Clarion River	at Piney, Pa.	Clarion	931	1864	Mar. 1936			50,000	53	C	36	
171	Big Mill Creek	at Ridgway, Pa.	Elk	284		Mar. 1936			5,650	199	D	30	
172	Redbank Creek	at Wayport, Pa.	Clarion	454		Mar. 1936			30,500	67	C	35	
173	Redbank Creek	at St. Charles, Pa.	Clarion	528	1909	Mar. 1936	18.60	994.84	35,200	67	AC	37	
174	Hahnong Creek	at Dayton, Pa.	Armstrong	321	1916	Mar. 1936	14.53	1,109.77	22,800	71	AC	32	
175	Crooked Creek	at Ford City, Pa.	Armstrong	280	1909	Mar. 1936	17.86	803.98	21,000	75	AE	31	
176	Stony Creek	at Ferndale, Pa.	Cambria	451		Mar. 1936			55,600	130	C	67	
177	Stony Creek	at Johnstown, Pa.	Cambria	467	1889	Mar. 1936	30.26	1,161.26	59,000	126	AE	66	

SUMMARY OF FLOOD DISCHARGES
Ohio River Basin (Continued)

No. on map	Stream	Location	County	Drainage Area (sq. mi.)	Date of Flood	Maximum Recorded			Method of Determination	Remarks	
						Stage (feet)	Elevation (m.s.l.)	Discharge (c.f.s.)			
178	Quemahoning Creek	at Stanton's Mills, Pa.	Somerset	92	1901	4,130	45	D	11		
179	Mill Creek	at Ben's Creek, Pa.	Cambria	5.4	1901	324	60	D	5		
180	Sans Run	at Johnstown, Pa.	Cambria	3.2	Aug. 1931	730	228	C	11		
181	Solomans Run	at Johnstown, Pa.	Cambria	8.5	Aug. 1931	2,020	238	C	22		
182	Shingle Run	at Johnstown, Pa.	Cambria	0.6	Aug. 1931	296	493	C			
183	Conemaugh River	nr. New Florence, Pa.	Westmoreland	74.8	Mar. 1936	91,000	122	B	80		
184	Kiskiminetas River	nr. Apollo, Pa.	Armstrong	1,765	1884	175,000	99	C	94	Furnished by U.S.E.D.	
185	Kiskiminetas River	at Vandergrift, Pa.	Westmoreland	1,825	1884	185,000	101	AC	98	See note on p. 1.	
186	Little Conemaugh River	nr. Mineral Point, Pa.	Cambria	160	Mar. 1936	22,400	140	B	45		
187	Little Conemaugh River	at Conemaugh, Pa.	Cambria	187	Mar. 1936	28,800	154	C	53		
188	Mt. Little Conemaugh River	nr. Wilmore, Pa.	Cambria	24.5	Mar. 1936	5,580	228	D	33	Wilmore Dam.	
189	S.Fork Little Conemaugh River	nr. Lloydell, Pa.	Cambria	6.7	Mar. 1936	824	123	D	10	Lloydell Dam.	
190	S.Fork Little Conemaugh River	nr. Johnstown, Pa.	Cambria	44.6	May 1889	10,010	206	D	39		
191	Trout Run	nr. Cramer, Pa.	Indiana	6.3	Mar. 1936	521	83	D	7	Finley Run Dam.	
192	Tub Mill Creek	nr. New Florence, Pa.	Westmoreland	10.5	Mar. 1936	659	63	D	6	Tub Mill Dam.	
193	Elacklick Creek	at Elacklick, Pa.	Indiana	390	1904	15,700	133	AC	64		
194	Yellow Creek	nr. Homer City, Pa.	Indiana	65.2	Mar. 1936	6,000	92	D	20	Lucerne Dam.	
195	Cherry Run	nr. Homer City, Pa.	Indiana	11.7	Mar. 1936	2,660	227	D	24	Cherry Run Dam.	
196	Loyalhanna Creek	at New Alexandria, Pa.	Westmoreland	265	1913	31,000	117	ABC	48		
197	Trout Run	nr. Latrobe, Pa.	Westmoreland	5.2	Mar. 1936	618	119	D	9	Trout Run Dam.	
198	Tygart River	nr. Bailey, W. Va.	Randolph	187	1915	1,957.29	10,300	55	A	19	
199	Tygart River	at Bellington, W. Va.	Barbour	408	1907	21.48	1,701.37	60	A	30	

SUMMARY OF FLOOD DISCHARGES
Ohio River Basin (Continued)

No. on map	Stream	Location	County	Drainage Area (sq. mi.)	Date of Flood	Maximum Recorded				Method of Determination	Remarks		
						Date	Gage height (feet)	Elevation (m.s.l.)	Discharge				
						c.f.s.	c.s.m.						
200	Tygart River	at Fetterman, W. Va.	Taylor	1,304	1907	July 1912	29.1	986.96	74,300	57	A	48	
201	Monongahela River	at Hault, W. Va.	Monongalia	2,430	1915	Jan. 1919	21.2	870.78	91,500	38	A	44	Higher in 1888; no record after 1930.
202	Monongahela River	at Morgantown, W. Va.	Monongalia	2,648	1928	Mar. 1936	23.88	812.93	77,100	29	A	34	
203	Monongahela River	at Charlevoix, Pa.	Washington	5,213	1873	July 1888	26.1	761.43	156,000	30	A	48	Recorder site; stage deduced from elevation at Old Lock No. 4.
204	Buckhannon River	at Hall, W. Va.	Barbour	277	1915	Mar. 1918	14.7	12,200	44	A	A	18	
205	West Fork River	at Eutawville, W. Va.	Lewis	181	1888	July 1888	27.	12,600	70	A	A	24	
206	West Fork River	at Clarkburg, W. Va.	Harrison	384	1923	May 1924	7.76	16,300	42	A	A	20	
207	West Fork River	at Enterprize, W. Va.	Harrison	759	1932	Mar. 1935	20.00	889.91	274,900	36	A	24	Stage 32.0 feet July 1888.
208	Buffalo Creek	at Barrackville, W. Va.	Marion	115	1907	July 1912	16.	900.4	11,600	101	A	28	
209	Cheat River	nr. Parsons, W. Va.	Tucker	719	1888	July 1888	20.5	1,611.74	85,000	118	A	76	
210	Cheat River	at Romlesburg, W. Va.	Preston	972	1923	Feb. 1932	12.66	65,200	67	A	A	49	
211	Cheat River	nr. Pisgah, W. Va.	Preston	1,360	1927	Mar. 1936	23.9	72,200	53	A	A	45	Same stage Feb. 1932.
212	Cheat River	at Morgantown, W. Va.	Monongalia	1,380	1888	July 1888	18.7	160,000	116	A	A	98	No data since 1926.
213	Shavers Fork	at Cheat Bridge, W. Va.	Randolph	57.5	1896	July 1896	14.	11,000	191	A	A	39	Same stage July 1888.
214	Shavers Fork	at Parsons, W. Va.	Tucker	230	1888	July 1907	12.5	1,644.20	25,000	109	A	41	
215	Big Sandy Creek	at Rockville, W. Va.	Preston	200	1888	July 1907	20.5	30,000	150	A	A	53	
216	So. Fork Tenmile Creek	at Jefferson, Pa.	Greene	180	1931	Nov. 1936	13.8	866.34	8,100	45	A	15	
217	Pan's Run	at Menallen, Pa.	Fayette	1.5		1911			415	277	D	13	
218	Washwater Run	nr. Grinstead, Pa.	Fayette	1.4		July 1912			623	445	D	19	
219	Youghiogheny River	at Ohioyle, Pa.	Fayette	1,065	1888	Mar. 1936	13.35	1,212.26	65,000	80	A	61	
220	Youghiogheny River	at Connelleville, Pa.	Fayette	1,326	1888	Mar. 1936	20.28	880.41	92,500	70	A	58	
221	Youghiogheny River	at Sateraville, Pa.	Westmoreland	1,715	1888	Mar. 1936	30.65	763.79	100,300	58	AC	54	

SUMMARY OF FLOOD DISCHARGES
Ohio River Basin (Continued)

No. on map	Stream	Location	County	Drainage Area (sq. mi.)	Date of gaging	Maximum Recorded				No. of days above stage	Remarks
						Date	Gage height (feet)	Elevation (m.s.l.)	Discharge c.f.s., c.s.m.		
222	Casselman River	nr. Rockwood, Pa.	Somerset	34.1	Mar. 1936		32,000	94	C	43	
223	Casselman River	at Marlinton, Pa.	Somerset	382	Mar. 1936	16.4	1,671.69	35,800	94	AC	45
224	Big Piney Run	nr. Sallsbury, Pa.	Somerset	24.5	Apr. 1937	7.6		4,300	176	A	25
225	Leavel Hill Creek	at Ursina, Pa.	Somerset	12.1	Mar. 1936	10.28	1,339.34	10,300	85	AC	24
226	Big Meadow Run	in Warton Township, Pa.	Fayette	5.8	July 1912			447	77	D	6
227	Indian Creek	nr. Indian Creek, Pa.	Fayette	110	Mar. 1936			6,820	62	D	17
228	Dunbar Creek	at Dunbar, Pa.	Fayette	24	July 1912			5,420	226	C	32
229	61st Run	nr. Dunbar, Pa.	Fayette	7.0	July 1912			3,850	550	C	46
230	Sewickley Creek	in Mt. Pleasant Township, Pa.	Westmoreland	5.4	Aug. 1906			1,717	318	C	24
231	Turtle Creek	at Traford, Pa.	Westmoreland	54.8	Mar. 1933	8.5	788.77	4,420	81	C	16
232	Fall Hollow Run	at East Pittsburgh, Pa.	Allegheny	1.1	June 1917			748	680	D	27
233	Saint Patrick Run	nr. McDonald, Pa.	Washington	4.6	July 1912			1,500	326	D	23
234	Maoning River	nr. Berlin Center, Ohio.	Manoning	247	Jan. 1937	10.97	977.12	6,200	25	A	10
235	Maoning River	at Pricetown, Ohio.	Maoning	276	Jan. 1937	15.01	920.51	6,770	25	A	10
236	Maoning River	at Warren, Ohio.	Trumbull	599	Feb. 1929	7.2	874.46	10,500	18	A	11
237	Beaver River	at Wampun, Pa.	Lawrence	2,235	Mar. 1913	29.9	766.14	87,000	39	AB	43
238	W.Br. Maoning River	at Newton Falls, Ohio.	Portage	97.8	Dec. 1927	11.1		3,540	36	A	9
239	Mosquito Creek	at Miles, Ohio.	Trumbull	139	Mar. 1936	5.15	662.44	2,970	21	A	6
240	Neander Creek	at Ohlstown, Ohio.	Trumbull	77.2	Dec. 1927	9.44	875.75	5,250	68	A	16
241	Shenango River	at Sharon, Pa.	Mercer	608	Mar. 1913	18.1	858.1	25,200	41	A	25
242	Shenango River	at New Castle, Pa.	Lawrence	792	Mar. 1913	17.82	804.8	39,800	50	A	34
243	Sugar Run	at Pymatuning Dam, Pa.	Crawford	9.34	Sept. 1937	6.80	991.39	1,820	195	A	19

SUMMARY OF FLOOD DISCHARGES

Ohio River Basin (Continued)

No. on map	Stream	Location	County	Drainage Area (sq.mi.)	Date of peak discharge	Maximum Recorded			Method of determination	Percent of enveloping curve	Remarks	
						Date	Gage height (feet)	Elevation (m.s.l.)				Discharge
244	Little Shemango River	at Greenville, Pa.	Mercer	104	1919	Jan. 1937	11.00	964.46	4,600	44	A 12	
245	Pymatuning Creek	nr. Orangeville, Pa.	Mercer	169	1914	Mar. 1936	10.68	883.62	3,250	25	A 8	Max. stage, 16.0 ft. Mar. 1913; probable backwater.
246	Meshannock Creek	at New Castle, Pa.	Lawrence	240		Oct. 1911	16.23		24,000	100	A 39	
247	Connoquenessing Creek	at Hazen, Pa.	Beaver	356	1915	June 1924	16.66	868.97	20,300	57	AC 27	
248	Slippery Rock Creek	at Wurtensburg, Pa.	Lawrence	406	1912	Jan. 1937	12.05	824.53	25,700	63	A 31	
249	Little Beaver Creek	nr. East Liverpool, Ohio.	Columbiana	505	1915	Jan. 1937	15.69	718.46	22,100	44	A 24	Max. stage, about 20 ft.; date unknown.

METHOD OF DETERMINATION

A - Rating curve from current meter measurements.

B - Contracted-opening.

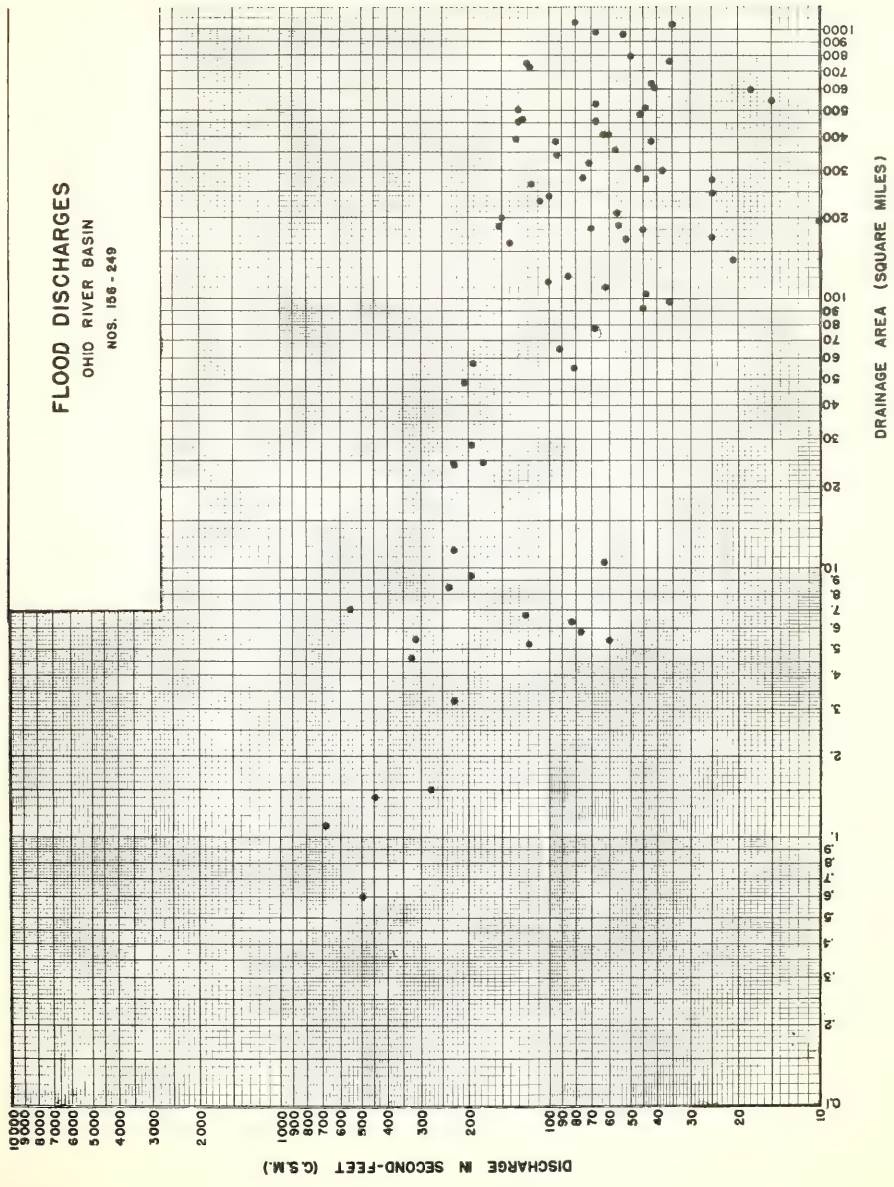
C - Slope-area.

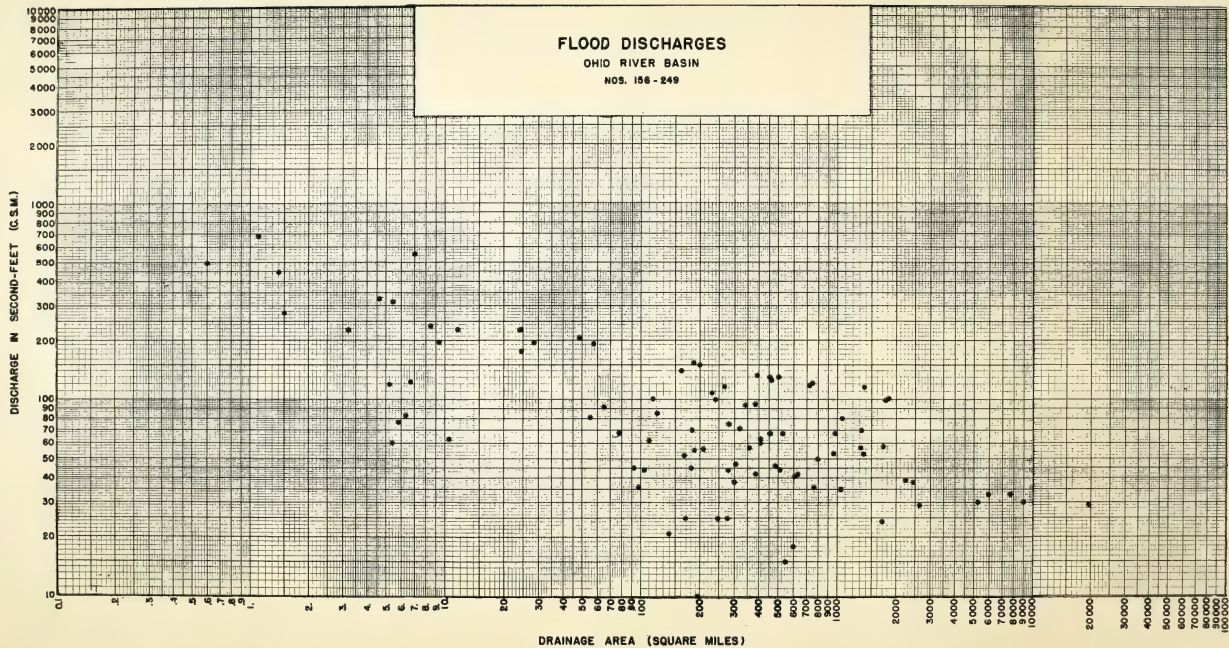
D - Flow over spillway.

Note.- Symbol A used with another symbol indicates determination from rating curve extended, based on other methods of determination.

* See descriptive matter "The Enveloping Curve."

FLOOD DISCHARGES
OHIO RIVER BASIN
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THE ENVELOPING CURVE

This curve was developed from the following flood discharge determinations which were the highest recorded flows for their respective drainage areas:

<u>Location</u>	<u>Drainage Area (sq.mi.)</u>	<u>Discharge (c.s.m.)</u>	<u>Per cent of Envelop</u>
Indian Run near Long Level, Pa.	2.1	1,930	100
Merrill River near Upper Lisle, N.Y.	20.8	726	96
Cheat River at Morgantown, W.Va.	1,380	116	98
Kiskiminetas River at Vandergrift, Pa.	1,825	101	98
West Branch of Susquehanna River at Renovo, Pa.	2,975	79	99
Susquehanna River at Harrisburg, Pa.	24,100	31	100
Susquehanna River at Marietta, Pa.	25,990	30	100

The curve includes all flood flow determinations given in the summary tables with but one exception. The slope-area measurement made on Meads Creek at East Campbell, N.Y., for the flood of July 1935 exceeds this curve by 23 per cent. Although there is no apparent reason for discounting the accuracy of this measurement, it is so exceptionally high in discharge and so far out of step with all others, that it was not used in determining the curve. Of all the miscellaneous flood-flow determinations made during the July 1935 flood in New York,* only four others exceeded this curve. These were outside the area of our study and consequently are not listed in the summary tables.

The enveloping curve should not be construed as a maximum expected flood discharge curve. There are records of storms on areas of 300 square miles or less in Pennsylvania which, it is believed, produced discharges in excess of those indicated by this curve. However, no authentic discharge determinations are available for those floods. Additional information, which may be obtained in future years, will undoubtedly widen the field and enhance the value of these records.

October 1938

* Johnson, Hollister, The New York State Flood of July 1935, Geological Survey Water-Supply Paper 733 E.

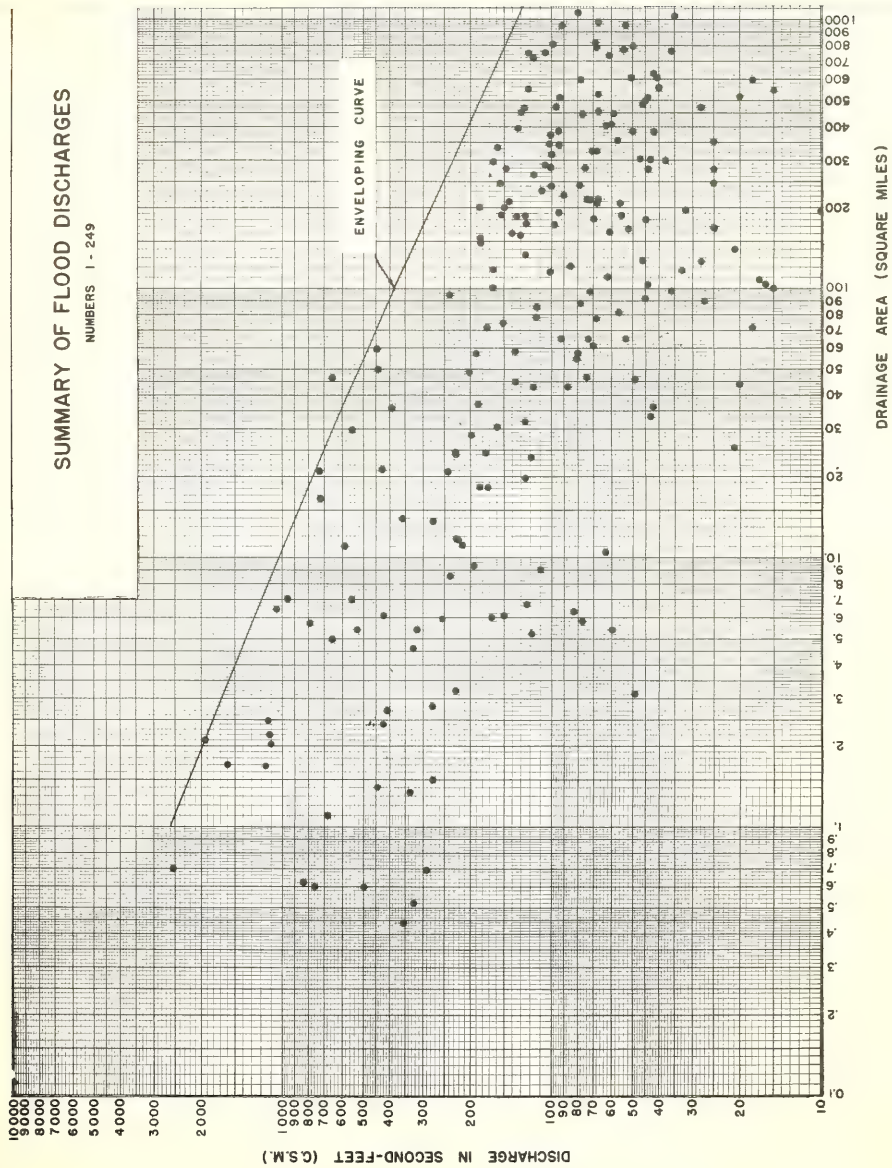
DISCHARGES FOR VARIOUS SIZED DRAINAGE AREAS

(Values from enveloping curve)

Drainage Area					Drainage area				
mi.	Units	Tens	Hundreds	Thousands	Sq. mi.	Units	Tens	Hundreds	Thousands
	c.s.m.	c.s.m.	c.s.m.	c.s.m.		c.s.m.	c.s.m.	c.s.m.	c.s.m.
1	2,800	1,020	380	135	51	510	183	65	
2	2,000	765	281	98	52	505	181	65	
3	1,680	640	231	80	53	501	179	64	
4	1,490	555	205	71	54	497	177	64	
5	1,360	515	185	66	55	493	175	63	
6	1,270	476	168	61	56	489	173	63	
7	1,190	448	158	56	57	485	171	62	
8	1,120	420	148	52	58	482	170	62	
9	1,070	400	140	49	59	479	169	61	
10	1,020	380	135	47	60	476	168	61	
11	980	365	130	45	61	473	167	60	
12	940	352	125	43	62	470	166	60	
13	910	340	121	41	63	467	165	59	
14	885	329	117	40	64	464	164	59	
15	860	319	113	39	65	461	163	58	
16	840	310	110	38	66	458	162	58	
17	820	302	107	37	67	455	161	57	
18	800	294	104	36	68	452	160	57	
19	780	287	101	35	69	449	159	56	
20	765	281	98	34	70	446	158	56	
21	750	275	95	33	71	443	157	55	
22	735	269	92	32	72	440	156	55	
23	720	263	90	32	73	437	155	55	
24	705	258	88	31	74	434	154	54	
25	690	253	86	31	75	431	153	54	
26	680	248	84	30	76	428	152	54	
27	670	243	83	30	77	423	151	53	
28	660	239	82	30	78	424	150	53	
29	650	235	81	29	79	422	149	53	
30	640	231	80	29	80	420	148	52	
31	630	227	79		81	418	147	52	
32	620	224	78		82	416	146	52	
33	610	221	77		83	414	145	51	
34	600	218	76		84	412	144	51	
35	590	215	75		85	410	143	51	
36	585	213	74		86	408	142	50	
37	580	211	73		87	406	142	50	
38	575	209	72		88	404	141	50	
39	570	207	71		89	402	141	50	
40	565	205	71		90	400	140	49	
41	560	203	70		91	398	140	49	
42	555	201	70		92	396	139	49	
43	550	199	69		93	394	139	49	
44	545	197	69		94	392	138	48	
45	540	195	68		95	390	138	48	
46	535	193	68		96	388	137	48	
47	530	191	67		97	387	137	48	
48	525	189	67		98	385	136	47	
49	520	187	66		99	382	136	47	
50	515	185	66		100	380	135	47	

SUMMARY OF FLOOD DISCHARGES

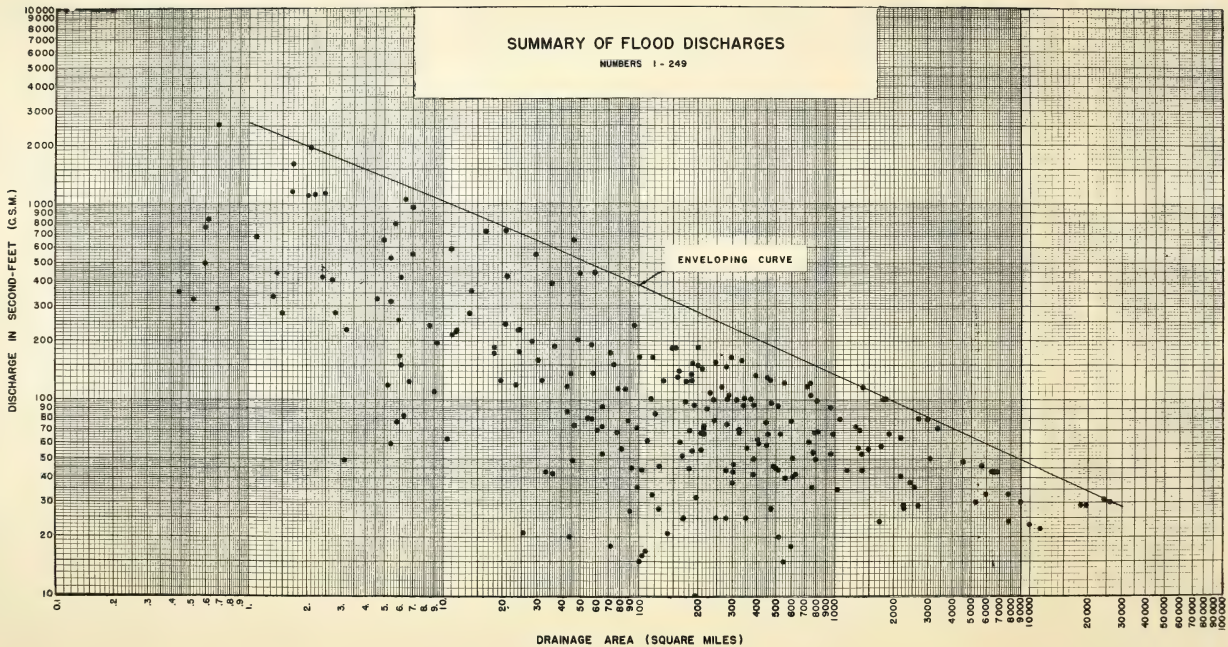
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DISCHARGES FOR VARIOUS SIZED DRAINAGE AREAS

(Values from enveloping curve)

Drainage Area					Drainage area				
Sq. mi.	Units	Tens	Hundreds	Thousands	Sq. mi.	Units	Tens	Hundreds	Thousands
	c.s.m.	c.s.m.	c.s.m.	c.s.m.		c.s.m.	c.s.m.	c.s.m.	c.s.m.
1	2,600	1,020	380	135	51	510	183	65	
2	2,000	765	281	98	52	505	181	35	
3	1,680	640	231	80	53	501	179	64	
4	1,490	565	205	71	54	497	177	64	
5	1,360	515	185	66	55	493	175	63	
6	1,270	476	168	61	56	489	173	63	
7	1,190	446	158	56	57	485	171	62	
8	1,120	420	148	52	58	482	170	62	
9	1,070	400	140	49	59	479	169	61	
10	1,020	380	135	47	60	476	168	61	
11	980	365	130	45	61	473	167	60	
12	940	352	125	43	62	470	166	60	
13	910	340	121	41	63	467	165	59	
14	885	329	117	40	64	464	164	58	
15	860	319	113	39	65	461	163	58	
16	840	310	110	38	66	458	162	58	
17	820	302	107	37	67	455	161	57	
18	800	294	104	36	68	452	160	57	
19	780	287	101	35	69	449	159	56	
20	765	281	98	34	70	446	158	56	
21	750	275	95	33	71	443	157	55	
22	735	269	92	32	72	440	156	55	
23	720	263	90	32	73	437	155	55	
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25	690	253	86	31	75	431	153	54	
26	680	248	84	30	76	428	152	54	
27	670	243	83	30	77	426	151	53	
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29	650	235	81	29	79	422	149	53	
30	640	231	80	29	80	420	148	52	
31	630	227	79		81	418	147	52	
32	620	224	78		82	416	146	52	
33	610	221	77		83	414	145	51	
34	600	218	76		84	412	144	51	
35	590	216	75		85	410	143	51	
36	585	213	74		86	408	142	50	
37	580	211	73		87	406	142	50	
38	575	209	72		88	404	141	50	
39	570	207	71		89	402	141	50	
40	565	205	71		90	400	140	49	
41	560	203	70		91	398	140	49	
42	555	201	70		92	396	139	49	
43	550	199	69		93	394	139	49	
44	545	197	69		94	392	138	48	
45	540	195	68		95	390	138	48	
46	535	193	68		96	388	137	48	
47	530	191	67		97	386	137	47	
48	525	189	67		98	384	136	47	
49	520	187	66		99	382	136	47	
50	515	185	66		100	380	135	47	



Aaron Bldg.



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