

CLARION RIVER BASIN

03030500 CLARION RIVER NEAR PINEY, PA

**LOCATION.**--Lat 41°11'33", long 79°26'25", Clarion County, Hydrologic Unit 05010005, on left bank 0.2 mi downstream from hydroelectric plant of Reliant Energy, 2.3 mi northeast of Piney, 2.4 mi upstream from Piney Creek, and 3 mi southwest of Clarion.

**DRAINAGE AREA.**--951 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1944 to current year (monthly discharge only October 1944 to September 1947).

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 1,002.06 ft above sea level (Reliant Energy bench mark). Prior to Dec. 23, 1947, records from hydroelectric plant 0.2 mi upstream.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Flow regulated since 1924 by hydroelectric plant at Piney Dam 0.2 mi upstream, and since June 1952 by East Branch Clarion River Lake (station 03027000), combined capacity of reservoirs, 113,200 acre-ft. Several measurements of water temperature were made during the year. Satellite telemetry at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--The flood of Mar. 18, 1936 reached a discharge of 50,000 ft<sup>3</sup>/s, as determined by Reliant Energy, elevation, 1,028.5 ft, at lower pool of dam.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2290	386	1870	952	1020	4030	831	1700	1310	876	537	388
2	410	1240	1240	541	630	4310	610	1860	1370	392	669	392
3	116	2660	756	1290	252	3790	2400	1770	648	1500	497	115
4	596	2110	783	2180	238	2890	14500	1420	614	589	866	512
5	362	2150	1100	3780	674	3140	11500	1810	1160	867	386	110
6	641	1130	2090	3290	399	2040	7150	873	1570	648	547	108
7	104	582	1520	1990	245	1410	5510	834	1160	437	1700	230
8	248	561	1350	2560	434	2230	7090	1350	965	99	2430	106
9	220	492	1370	1450	511	962	8720	831	1170	307	1250	1360
10	222	546	628	1850	555	1540	6150	732	652	728	993	108
11	345	524	1210	1560	306	1940	5310	1290	778	1050	673	331
12	542	872	928	1660	688	1360	4410	1030	997	539	411	608
13	598	840	1280	1970	560	1600	3870	565	1420	423	108	576
14	449	360	1830	2880	400	776	2410	567	2470	447	449	955
15	771	396	3490	690	1830	1230	2290	856	2480	98	1030	116
16	472	418	3500	1850	1230	2110	2280	784	2160	103	782	504
17	491	455	3470	1000	1310	2080	2600	1050	1660	1160	109	646
18	338	626	2010	478	1510	2190	2400	805	910	693	336	905
19	587	338	2450	498	578	1830	1270	2470	1340	94	602	211
20	308	319	1870	657	633	2480	1940	3970	2150	381	280	926
21	291	475	2170	1300	1510	2240	2480	3020	1460	1080	605	120
22	495	392	2670	866	1070	2740	4810	3060	1930	92	308	547
23	156	389	1340	462	815	2270	6010	2790	2230	94	702	446
24	104	425	1650	831	1790	2380	5160	4220	1300	383	1110	1740
25	406	413	897	917	5560	1350	4070	3580	1260	423	269	1200
26	263	1500	985	360	8660	1600	3330	3400	e1380	348	106	1050
27	402	6180	844	972	6810	2350	2520	3210	e1680	855	291	457
28	410	4530	1080	497	6740	1790	2930	2110	e1640	453	858	615
29	365	2650	977	337	4890	2270	1980	2580	1970	107	109	640
30	104	2550	1100	286	---	1070	1720	1500	1050	262	666	469
31	103	---	1500	620	---	1550	---	1550	---	677	644	---
TOTAL	13209	36509	49958	40574	51848	65548	128251	57587	42884	16205	20323	16491
MEAN	426	1217	1612	1309	1788	2114	4275	1858	1429	523	656	550
MAX	2290	6180	3500	3780	8660	4310	14500	4220	2480	1500	2430	1740
MIN	103	319	628	286	238	776	610	565	614	92	106	106
(†)	-109	+8.1	+103	+90	+132	+140	+148	-13	-8.1	-103	-8.1	-138

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2000, BY WATER YEAR (WY)

MEAN	892	1597	2159	2093	2320	3297	3144	2204	1445	928	715	720
MAX	2743	5013	4611	6884	5775	6703	5186	4644	6354	3220	3096	2469
(WY)	1991	1986	1978	1952	1976	1964	1970	1984	1972	1992	1994	1992
MIN	40.2	82.5	184	244	527	881	1517	700	345	167	135	120
(WY)	1950	1950	1961	1961	1987	1969	1968	1985	1991	1952	1952	1951

† Change in contents, equivalent in cubic feet per second, in East Branch Clarion River Lake and Piney Reservoir. Records of contents in Piney Reservoir furnished by Reliant Energy. Records of contents in East Branch Clarion River Lake furnished by U.S. Army Corps of Engineers.  
e Estimated.

CLARION RIVER BASIN

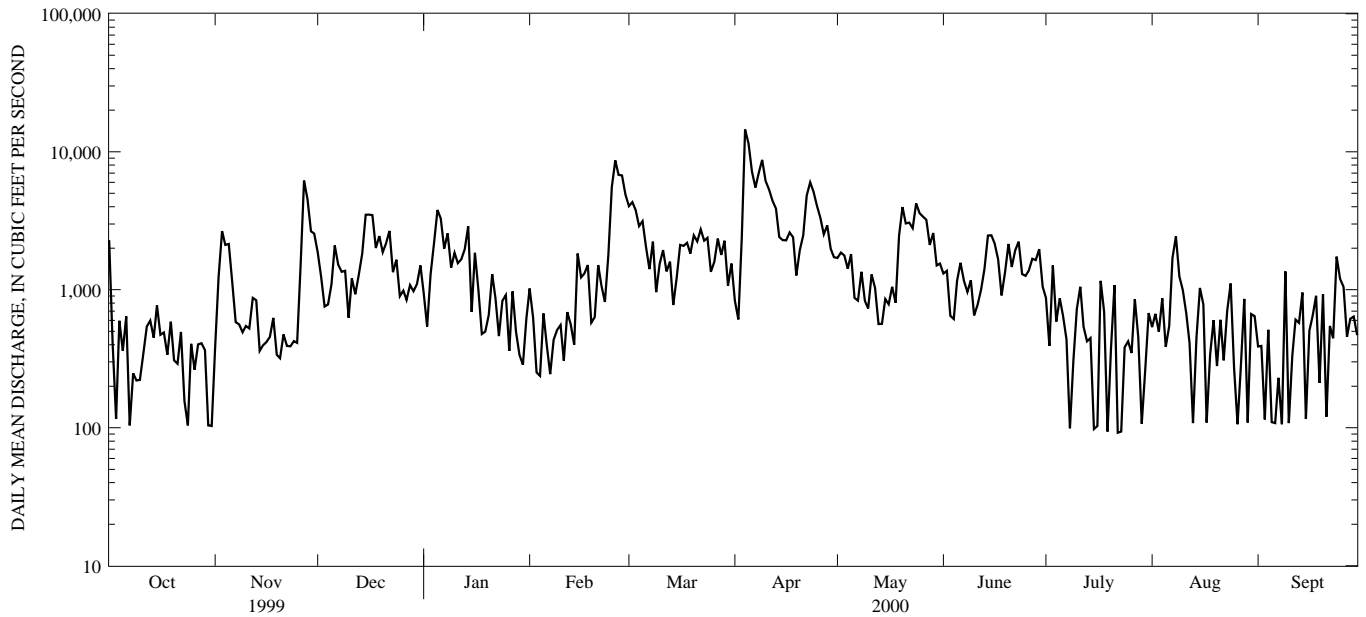
03030500 CLARION RIVER NEAR PINEY, PA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR			FOR 2000 WATER YEAR			WATER YEARS 1948 - 2000	
ANNUAL TOTAL	517195			539387				
ANNUAL MEAN	1417 † -3.2			1474 † +13			1789	
HIGHEST ANNUAL MEAN							2443	
LOWEST ANNUAL MEAN							1223	
HIGHEST DAILY MEAN	19200	Jan 24		14500	Apr 4		51600	Jun 23 1972
LOWEST DAILY MEAN	101	Jun 21		92	Jul 22		11	Oct 1 1966
ANNUAL SEVEN-DAY MINIMUM	198	Jun 16		225	Sep 2		26	Oct 16 1949
INSTANTANEOUS PEAK FLOW				23300			a74500	
INSTANTANEOUS PEAK STAGE				14.84			b28.24	
10 PERCENT EXCEEDS	3490			3080			4070	
50 PERCENT EXCEEDS	771			964			1130	
90 PERCENT EXCEEDS	109			284			125	

† Change in contents, equivalent in cubic feet per second, in East Branch Clarion River Lake and Piney Reservoir. Records of contents in Piney Reservoir furnished by Reliant Energy. Records of contents in East Branch Clarion River Lake furnished by U.S. Army Corps of Engineers.

a From rating curve extended above 59,000 ft<sup>3</sup>/s.

b From floodmark.



1-YEAR HYDROGRAPH  
OCTOBER 1, 1999 TO SEPTEMBER 30, 2000