

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 mi².

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 National Geodetic Vertical Datum of 1929 (Reliant Energy bench mark). Prior to Dec. 23, 1947, records from hydroelectric plant 0.2 mi upstream.

REMARKS.--No estimated daily discharges. Records good. 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 ft³/s, as determined by Reliant Energy, elevation, 1,028.5 ft, at lower pool of dam.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	399	881	1780	3940	616	1230	1480	472	2670	546	4290	1210
2	380	924	880	9640	229	951	2240	823	2350	503	6350	6370
3	353	377	1780	6310	840	2320	2270	1470	1910	510	4700	5060
4	458	827	644	5490	1640	1650	2090	659	2090	520	5160	4710
5	409	486	527	3860	977	1760	7150	1060	2090	578	3690	3970
6	104	533	699	3320	1380	2320	8550	1040	2520	616	3450	2810
7	434	306	513	2850	1320	1370	5680	1930	1570	642	2770	2010
8	405	803	263	2320	1770	1090	5330	1630	2040	518	2710	2020
9	308	491	1250	2120	572	1620	4390	2250	2540	521	3480	1410
10	443	829	499	2040	1200	2530	3950	2300	2740	688	2770	1240
11	286	967	373	1900	1700	2380	3440	1930	2080	1200	2430	1610
12	173	656	1030	1340	870	1170	3200	2090	2020	533	2350	748
13	351	1160	811	1080	1130	2910	2100	2490	4240	549	1830	1210
14	376	864	1530	1640	772	3220	2490	1910	3680	108	841	893
15	272	811	2550	1710	646	2670	1990	2220	2810	107	1900	915
16	1090	803	2870	957	2010	4080	2330	1690	2310	562	972	950
17	625	1890	1530	1360	1120	7000	1680	2010	2070	506	1190	1220
18	106	2360	1700	365	661	10000	1320	1840	1760	353	1570	1250
19	108	1990	1470	368	406	10300	586	1370	1550	690	811	707
20	348	1910	3430	981	450	8610	738	2190	1370	1040	1080	909
21	877	1780	5580	975	952	10900	1360	3780	1180	1370	1010	1270
22	494	2010	4700	1360	956	9700	1240	3060	1510	7350	285	1630
23	421	2380	2580	478	1250	7290	2200	2880	1120	6970	1060	1950
24	625	1960	2740	916	2980	5550	1010	2770	909	5340	103	2360
25	531	1110	2690	416	2670	4760	764	2410	989	5820	1250	1640
26	103	1490	2310	298	1270	3990	513	1740	886	4460	1110	2070
27	1240	1450	1600	1240	1480	3440	489	1920	382	2970	973	1250
28	1390	896	1220	535	1180	3110	2010	1960	483	7240	1090	1500
29	677	1040	2230	587	---	2550	337	1140	727	5690	865	2260
30	559	1060	867	568	---	2350	386	1110	588	4200	910	1540
31	101	---	1570	539	---	2500	---	1910	---	3000	1070	---
TOTAL	14446	35044	54216	61503	33047	125321	73313	58054	55184	65700	64070	58692
MEAN	466	1168	1749	1984	1180	4043	2444	1873	1839	2119	2067	1956
MAX	1390	2380	5580	9640	2980	10900	8550	3780	4240	7350	6350	6370
MIN	101	306	263	298	229	951	337	472	382	107	103	707
(†)	-119	+109	+96	+3.3	+22	+275	+47	+15	-12	-97	-89	-53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2003, BY WATER YEAR (WY)

MEAN	876	1548	2133	2047	2303	3271	3116	2225	1459	930	725	729
MAX	2743	5013	4611	6884	5775	6703	5186	5018	6354	3220	3096	2469
(WY)	1991	1986	1978	1952	1976	1964	1970	2002	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.

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03030500 CLARION RIVER NEAR PINEY, PA--Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1948 - 2003	
ANNUAL TOTAL	629060		698590			
ANNUAL MEAN	1723	† +5.6	1914	† +16	1777	2443
HIGHEST ANNUAL MEAN					1092	1994
LOWEST ANNUAL MEAN					1092	2001
HIGHEST DAILY MEAN	16700	May 13	10900	Mar 21	51600	Jun 23 1972
LOWEST DAILY MEAN	101	Oct 31	101	Oct 31	11	Oct 1 1966
ANNUAL SEVEN-DAY MINIMUM	236	Aug 31	308	Oct 6	26	Oct 16 1949
MAXIMUM PEAK FLOW			16300	Apr 5	a 74500	Jun 23 1972
MAXIMUM PEAK STAGE			12.27	Apr 5	b 28.24	Jun 23 1972
10 PERCENT EXCEEDS	4030		4030		4030	
50 PERCENT EXCEEDS	1090		1370		1120	
90 PERCENT EXCEEDS	243		429		133	

† 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 ft³/s.

b From floodmark.

