

## 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 National Geodetic Vertical Datum of 1929 (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 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	349	2060	854	4930	1570	4590	3220	2220	608	444	106
2	291	453	1590	982	5380	496	3260	4430	1690	755	753	243
3	193	459	1270	933	4410	1500	3250	5670	1030	761	113	848
4	268	768	920	940	3680	3210	3030	4170	1280	273	203	109
5	541	884	962	242	3290	1820	2970	3390	1770	469	448	133
6	109	576	1340	768	1950	1470	2260	2990	3240	221	109	110
7	210	295	734	703	1900	1570	1070	2380	5150	587	467	110
8	104	500	608	1190	2170	1690	2050	2430	4050	895	110	379
9	159	1140	547	823	1650	1720	2320	2770	2970	273	711	462
10	419	383	1420	373	1540	1110	965	3740	2280	257	107	801
11	322	357	472	908	2830	1270	2350	3710	2080	363	106	111
12	110	956	940	261	2870	1380	1720	5270	1390	464	604	252
13	306	455	881	588	2970	1560	814	16700	1370	115	364	253
14	114	255	721	896	1500	460	3040	15400	4620	390	467	262
15	269	256	853	713	1870	1160	7240	11400	9300	426	114	309
16	399	248	1060	1190	1810	1220	7160	7560	6140	423	693	614
17	397	314	1900	893	1670	1990	5540	6420	5060	303	107	658
18	146	246	7120	352	1680	1250	4310	8370	4130	257	107	270
19	424	247	5970	486	1470	875	3680	8260	3290	767	107	485
20	106	243	4150	272	947	1670	3120	6440	2350	111	593	776
21	151	247	3310	537	1780	1490	2640	5520	2200	194	107	109
22	300	244	2330	452	2450	2290	2500	5010	2090	938	527	276
23	271	277	2260	363	1250	994	2080	3230	1660	740	673	109
24	1430	286	2580	1000	1110	895	1670	3490	1490	111	365	416
25	1840	243	2750	1970	1420	2360	1370	2320	1160	770	398	241
26	974	805	2150	2310	1340	2960	1660	1980	780	108	588	1070
27	413	1080	1380	1800	1510	5270	1570	2290	e1240	1430	432	523
28	247	908	1750	1650	1950	5700	2760	1760	e1170	791	109	1050
29	680	692	1600	1910	---	4500	3750	1430	1090	747	436	845
30	203	1270	1270	3380	---	5030	3830	1720	934	111	417	688
31	168	---	477	4010	---	5500	---	2100	---	776	104	---
TOTAL	11857	15436	57375	33749	63327	65980	88569	155570	79224	15434	10883	12618
MEAN	382	515	1851	1089	2262	2128	2952	5018	2641	498	351	421
MAX	1840	1270	7120	4010	5380	5700	7240	16700	9300	1430	753	1070
MIN	104	243	472	242	947	460	814	1430	780	108	104	106
(†)	-75	-5.2	+143	+59	+102	+142	+140	-20	-12	-110	-138	-173

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2002, BY WATER YEAR (WY)

MEAN	883	1555	2140	2048	2323	3257	3128	2232	1452	909	701	707
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.  
e Estimated.

CLARION RIVER BASIN

03030500 CLARION RIVER NEAR PINEY, PA--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1948 - 2002	
ANNUAL TOTAL	397937		610022			
ANNUAL MEAN	1090 † -5.5		1671 † +4.0		1774	
HIGHEST ANNUAL MEAN					2443	
LOWEST ANNUAL MEAN					1092	
HIGHEST DAILY MEAN	7230	Mar 22	16700	May 13	51600	Jun 23 1972
LOWEST DAILY MEAN	104	Jul 25 <sup>a</sup>	104	Oct 8 <sup>b</sup>	11	Oct 1 1966
ANNUAL SEVEN-DAY MINIMUM	135	Jul 25	205	Oct 6	26	Oct 16 1949
MAXIMUM PEAK FLOW			21100	May 13	<sup>c</sup> 74500	Jun 23 1972
MAXIMUM PEAK STAGE			14.04	May 13	<sup>d</sup> 28.24	Jun 23 1972
10 PERCENT EXCEEDS	2810		4080		4030	
50 PERCENT EXCEEDS	625		962		1120	
90 PERCENT EXCEEDS	167		199		130	

† 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.

<sup>a</sup> Also Sept. 1, Oct. 8.

<sup>b</sup> Also Aug. 31.

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

<sup>d</sup> From floodmark.

