

## 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.**--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 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	564	445	533	442	1150	863	2170	1050	993	758	545	104
2	837	310	1040	760	1710	1340	2280	1340	754	378	297	580
3	408	430	716	1460	2300	987	1620	1360	1390	445	230	223
4	787	402	783	1080	954	1110	1690	936	1390	489	105	355
5	228	297	310	452	935	1380	2290	681	1010	240	390	406
6	1390	355	796	923	1140	1290	1680	373	590	339	316	198
7	1510	391	665	294	1040	483	2100	660	1260	404	269	400
8	1610	350	508	806	1140	658	2820	828	847	414	400	107
9	1400	328	675	790	722	1610	2720	706	235	457	650	109
10	1270	406	332	832	4050	1010	3140	736	721	166	105	108
11	1180	718	1080	625	5910	422	2880	609	855	349	106	201
12	801	761	949	576	4100	891	2290	510	707	233	106	460
13	346	610	906	470	3080	599	2030	1270	552	428	208	484
14	553	455	464	419	3320	2170	1530	1030	243	236	107	109
15	1150	540	989	400	5840	3030	1840	1420	686	163	113	335
16	2500	517	1310	340	5520	2150	3840	445	141	442	396	249
17	1420	416	3230	520	5180	2100	4740	599	327	302	289	214
18	1470	385	5750	1460	3870	2830	3930	872	967	200	108	302
19	1700	455	4250	559	3490	2810	3400	610	194	108	113	350
20	1430	452	3170	724	2570	2310	2720	202	201	498	114	245
21	642	534	3030	490	2810	3080	3180	688	774	244	312	904
22	613	458	2980	925	3380	7230	3400	547	252	239	388	109
23	529	334	1450	336	755	6440	3090	1500	979	958	106	107
24	434	298	476	412	1550	4830	2320	2000	687	339	417	196
25	477	388	1170	882	1150	3860	2220	1410	1290	104	292	388
26	464	432	996	508	1970	3610	2430	828	176	107	364	559
27	512	358	2120	362	1390	2900	1720	1000	161	248	607	446
28	583	383	1130	313	1500	1520	904	932	425	110	401	240
29	510	526	1020	623	---	2970	1700	1190	405	110	397	235
30	541	421	703	307	---	1290	1370	1130	380	111	349	556
31	351	---	522	942	---	2530	---	756	---	158	898	---
TOTAL	28210	13155	44053	20032	72526	70303	74044	28218	19592	9777	9498	9279
MEAN	910	438	1421	646	2590	2268	2468	910	653	315	306	309
MAX	2500	761	5750	1460	5910	7230	4740	2000	1390	958	898	904
MIN	228	297	310	294	722	422	904	202	141	104	105	104
( $\pm$ )	-43	+15	+8.8	-14	+30	+133	+209	+87	-58	-121	-162	-152

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)
MEAN	893	2743	40.2	1950	1575	5013	82.5	1950	2145	4611	184	1961
MAX	2743	5013	82.5	1950	5013	5013	82.5	1950	2066	6884	244	1961
MIN	40.2	1991	184	1950	1986	1978	184	1961	2325	5775	527	1987
(WY)	1950	1991	1950	1950	1986	1978	1950	1961	3278	6703	881	1969
									3131	5186	1517	1968
									2180	4644	700	1985
									1430	6354	345	1991
									916	3220	167	1952
									707	3096	135	1952
									712	2469	120	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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1948 - 2001	
ANNUAL TOTAL	525129		398687			
ANNUAL MEAN	1435	† +12	1092	† -13	1776	
HIGHEST ANNUAL MEAN					2443	1994
LOWEST ANNUAL MEAN					1092	2001
HIGHEST DAILY MEAN	14500	Apr 4	7230	Mar 22	51600	Jun 23 1972
LOWEST DAILY MEAN	92	Jul 22	104	Jul 25 <sup>a</sup>	11	Oct 1 1966
ANNUAL SEVEN-DAY MINIMUM	225	Sep 2	135	Jul 25	26	Oct 16 1949
MAXIMUM PEAK FLOW			10900	Mar 22	<sup>b</sup> 74500	Jun 23 1972
MAXIMUM PEAK STAGE			10.06	Mar 22	<sup>c</sup> 28.24	Jun 23 1972
10 PERCENT EXCEEDS	3040		2820		4040	
50 PERCENT EXCEEDS	906		650		1120	
90 PERCENT EXCEEDS	323		206		127	

† 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.

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

<sup>c</sup> From floodmark.

