

CLARION RIVER BASIN

03029500 CLARION RIVER AT COOKSBURG, PA

LOCATION.--Lat 41°19'50", long 79°12'33", Jefferson County, Hydrologic Unit 05010005, on right bank at downstream side of bridge on State Highway 36 at Cooksburg, 300 ft downstream from Toms Run, and 2.7 mi upstream from Cathers Run.

DRAINAGE AREA.--807 mi².

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for October, November 1938, published in WSP 1305.

REVISED RECORDS.--WSP 1305: 1939 (M). WDR PA-85-3: 1979 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,147.00 ft above sea level. Prior to May 17, 1939, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by East Branch Clarion River Lake (station 03027000) since June 1952 and at low flow by industrial plants above station. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1935, 19 ft, Mar. 17, 1936, from floodmarks, discharge, about 56,000 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 10,000 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Dec. 22	1700	10,100	8.88	Jan. 24	1700	*24,400	*13.03

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	273	250	256	e460	2500	1520	2990	1430	447	370	288	253
2	263	243	256	e430	2960	1310	3680	1220	461	781	340	249
3	265	238	261	e460	4390	1220	3230	1100	479	1460	284	246
4	294	235	255	e500	4140	2390	3220	1010	487	539	246	252
5	341	232	256	e540	4030	2110	3520	932	427	354	247	250
6	322	228	258	e580	3470	1820	2720	856	404	320	287	254
7	278	229	269	e590	3110	1680	2280	802	376	518	268	302
8	645	230	263	e580	2880	1440	1910	1120	357	672	270	381
9	2140	230	255	e560	2390	e1350	1860	2690	347	376	293	327
10	1030	239	259	e550	2400	e1200	4450	1880	323	558	288	286
11	899	255	256	e540	2200	e1050	3770	1640	306	660	259	268
12	639	341	241	e530	2450	e960	5110	1510	323	432	248	257
13	513	317	229	e550	3600	e860	4000	1380	304	350	239	251
14	442	263	226	e580	2980	e770	3230	1190	297	313	261	254
15	397	253	220	e600	2540	e700	2630	1010	313	294	332	269
16	371	246	208	e640	2260	e680	2370	847	326	280	338	274
17	342	240	256	e660	2240	e900	3260	757	272	268	281	285
18	318	238	287	e690	2480	2090	3550	694	263	258	261	277
19	317	234	251	e760	2170	2680	3380	671	257	263	259	269
20	390	246	245	e860	1890	2110	3940	648	267	267	247	255
21	367	265	281	e1050	1630	2060	3680	569	258	286	591	253
22	314	301	4900	e2400	1410	2260	3600	512	247	280	587	258
23	298	280	4070	e4800	1230	2060	3780	509	242	278	398	254
24	284	260	2260	19900	1200	1930	4710	625	236	264	323	243
25	262	252	1690	13500	1060	2100	3630	1580	232	248	300	238
26	250	252	1210	7130	969	2050	3120	1240	229	240	307	235
27	245	269	e980	5080	904	2010	2700	956	227	241	347	231
28	243	300	e860	4260	949	2200	2300	806	267	239	326	230
29	244	275	e700	4150	---	2560	1960	677	355	285	289	237
30	265	258	e600	3470	---	2800	1700	560	413	333	273	1170
31	263	---	e520	2910	---	2760	---	501	---	302	260	---
TOTAL	13514	7699	23078	80310	66432	53630	96280	31922	9742	12329	9537	8808
MEAN	436	257	744	2591	2373	1730	3209	1030	325	398	308	294
MAX	2140	341	4900	19900	4390	2800	5110	2690	487	1460	591	1170
MIN	243	228	208	430	904	680	1700	501	227	239	239	230
CFSM	.54	.32	.92	3.21	2.94	2.14	3.98	1.28	.40	.49	.38	.36
IN.	.62	.35	1.06	3.70	3.06	2.47	4.44	1.47	.45	.57	.44	.41

e Estimated.

CLARION RIVER BASIN

03029500 CLARION RIVER AT COOKSBURG, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1999, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	794	1343	1794	1636	1761	2766	2580	1855	1198	787	630	636
MAX (WY)	2357	3906	3821	5654	4138	6185	4721	4086	5307	2565	2732	1995
MIN (WY)	1991	1986	1978	1952	1976	1979	1994	1984	1972	1992	1994	1992
MIN (WY)	86.6	204	150	211	369	764	1217	566	325	139	117	109
(WY)	1952	1961	1961	1961	1987	1969	1976	1985	1999	1952	1952	1952

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1952 - 1999

ANNUAL TOTAL	458784	413281	
ANNUAL MEAN	1257	1132	1480
HIGHEST ANNUAL MEAN			2066
LOWEST ANNUAL MEAN			1077
HIGHEST DAILY MEAN	17500	Jan 9	19900
LOWEST DAILY MEAN	208	Dec 16	208
ANNUAL SEVEN-DAY MINIMUM	232	Nov 3	232
INSTANTANEOUS PEAK FLOW			24400
INSTANTANEOUS PEAK STAGE			13.03
INSTANTANEOUS LOW FLOW			164
ANNUAL RUNOFF (CFSM)	1.56	1.40	1.83
ANNUAL RUNOFF (INCHES)	21.15	19.05	24.92
10 PERCENT EXCEEDS	2920	2980	3220
50 PERCENT EXCEEDS	600	430	902
90 PERCENT EXCEEDS	254	246	296

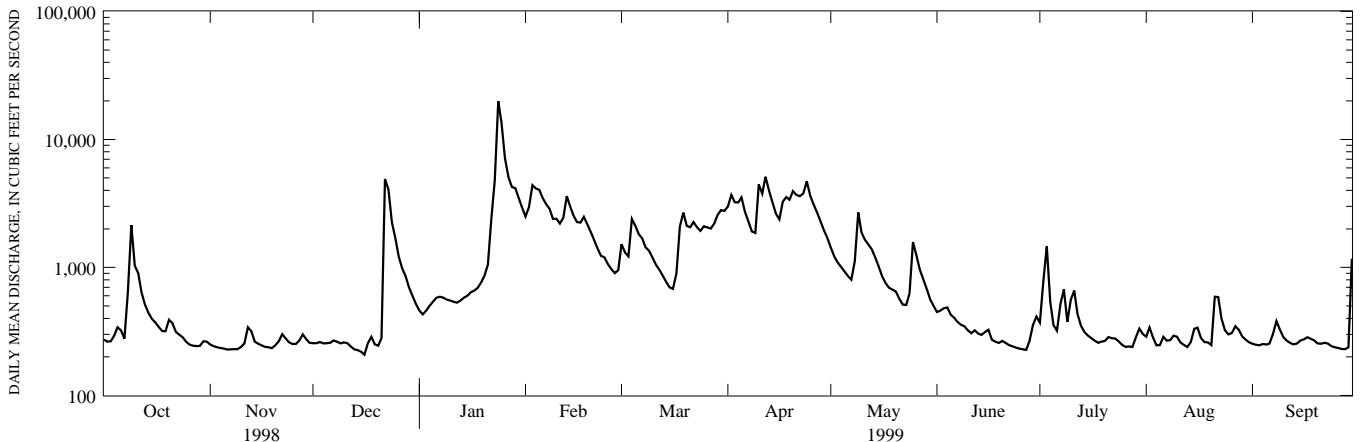
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1951, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	590	1085	1475	1891	1961	3055	2969	1971	1154	579	288	348
MAX (WY)	2134	4241	3050	3962	3881	6815	6288	3965	2789	1765	580	1078
MIN (WY)	1946	1951	1941	1950	1951	1945	1940	1943	1946	1942	1950	1945
MIN (WY)	113	170	337	417	764	1610	725	606	261	158	94.2	82.8
(WY)	1950	1950	1944	1944	1941	1949	1946	1941	1939	1949	1944	1943

SUMMARY STATISTICS WATER YEARS 1939 - 1951

ANNUAL MEAN	1444
HIGHEST ANNUAL MEAN	2023
LOWEST ANNUAL MEAN	953
HIGHEST DAILY MEAN	24600
LOWEST DAILY MEAN	43
ANNUAL SEVEN-DAY MINIMUM	50
INSTANTANEOUS PEAK FLOW	32700
INSTANTANEOUS PEAK STAGE	14.96
INSTANTANEOUS LOW FLOW	41
ANNUAL RUNOFF (CFSM)	1.79
ANNUAL RUNOFF (INCHES)	24.31
10 PERCENT EXCEEDS	3350
50 PERCENT EXCEEDS	793
90 PERCENT EXCEEDS	140

- a From rating curve extended above 40,000 ft³/s.
- b From peak-stage indicator.



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999