

REDBANK CREEK BASIN

03032500 REDBANK CREEK AT ST. CHARLES, PA

LOCATION.--Lat 40°59'40", long 79°23'40", Armstrong County, Hydrologic Unit 05010006, on left bank 400 ft downstream from highway bridge on SR 1005 at St. Charles, 0.3 mi downstream from Leatherwood Creek, and 3 mi west of New Bethlehem.

DRAINAGE AREA.--528 mi².

PERIOD OF RECORD.--Annual maximums, water years 1910-18. October 1918 to current year. Monthly discharge only for some periods, published in WSP 1305. Figures of daily discharge for November 1920 to June 1921, published in WSP 523, are unreliable and should not be used.

REVISED RECORDS.--WSP 743: Drainage area. WSP 1385: 1919, 1936-39. WDR PA-72-1: 1923 (M), 1926 (M), 1928 (M), 1936, 1937 (M), 1938 (M), 1943, 1945 (P), 1952 (M), 1953 (M), 1955 (M), 1956 (P), 1958 (M), 1959 (M), 1964, 1966 (M). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 973.14 ft above sea level. Prior to July 10, 1940, nonrecording gage at site 500 ft upstream at datum 3.10 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 7,000 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Nov. 26	2100	7,780	9.70	Apr. 4	1130	*13,300	*12.12

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	597	e64	786	e450	e270	1620	714	718	341	505	642	99
2	377	e265	655	e480	e270	1730	673	770	354	410	645	93
3	229	e1200	599	e540	e260	1460	1560	762	484	369	358	86
4	157	e890	567	1340	e250	1220	9970	647	445	375	550	81
5	119	682	556	1800	e250	1070	6520	603	346	337	309	74
6	90	504	611	1230	e260	948	4020	571	448	281	352	92
7	77	406	711	991	e260	851	2720	526	561	238	1870	79
8	66	340	630	895	e260	786	3450	484	446	208	2180	65
9	71	297	542	805	e260	741	4240	444	332	188	1380	60
10	100	266	546	826	e260	701	2910	444	270	200	810	64
11	126	244	691	1070	e300	667	2150	548	233	207	558	86
12	119	219	665	1040	e380	816	1820	468	245	176	422	113
13	116	198	598	906	e500	891	1500	414	447	153	355	272
14	318	183	1470	e760	e800	775	1250	444	1950	138	329	311
15	375	172	2950	e580	2030	716	1100	397	1780	143	237	239
16	298	163	1960	e450	1670	700	983	331	2020	185	201	264
17	218	149	1420	e360	1330	1620	1150	294	1630	194	188	326
18	167	199	1120	e330	1120	1570	1200	273	1180	168	175	236
19	135	177	963	e320	1120	1220	1040	337	1290	154	163	174
20	119	157	902	e330	977	1080	925	742	978	134	153	141
21	106	174	1250	e330	875	1800	1590	566	739	125	135	177
22	97	178	1070	e320	953	3220	3430	445	1080	135	119	200
23	107	174	e840	e320	1290	2400	3540	424	962	133	162	199
24	109	160	e600	e330	2120	1730	2660	1180	678	118	184	2280
25	107	161	e520	e320	3220	1410	1970	1220	556	102	188	1560
26	98	2860	e510	e310	3510	1220	1530	802	487	89	149	1060
27	91	5260	e520	e300	2620	1070	1240	619	779	81	131	1050
28	83	2710	e480	e280	2820	1050	1070	569	1290	89	164	765
29	76	1380	e450	e275	2090	981	931	529	813	202	156	560
30	72	979	e440	e270	---	883	812	453	620	207	124	444
31	e66	---	e450	e270	---	790	---	381	---	158	107	---
TOTAL	4886	20811	26072	18828	32325	37736	68668	17405	23784	6202	13496	11250
MEAN	158	694	841	607	1115	1217	2289	561	793	200	435	375
MAX	597	5260	2950	1800	3510	3220	9970	1220	2020	505	2180	2280
MIN	66	64	440	270	250	667	673	273	233	81	107	60
CFSM	.30	1.31	1.59	1.15	2.11	2.31	4.34	1.06	1.50	.38	.82	.71
IN.	.34	1.47	1.84	1.33	2.28	2.66	4.84	1.23	1.68	.44	.95	.79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2000, BY WATER YEAR (WY)

MEAN	378	751	1073	1140	1212	1805	1501	1064	681	417	282	286
MAX	1385	2806	3151	4616	2707	5016	3337	2603	3887	2238	1498	2091
(WY)	1927	1922	1928	1937	1990	1936	1940	1919	1972	1996	1956	1996
MIN	40.3	50.9	75.9	96.8	179	358	367	180	123	61.1	33.5	29.2
(WY)	1931	1931	1961	1931	1934	1969	1925	1926	1936	1966	1930	1939

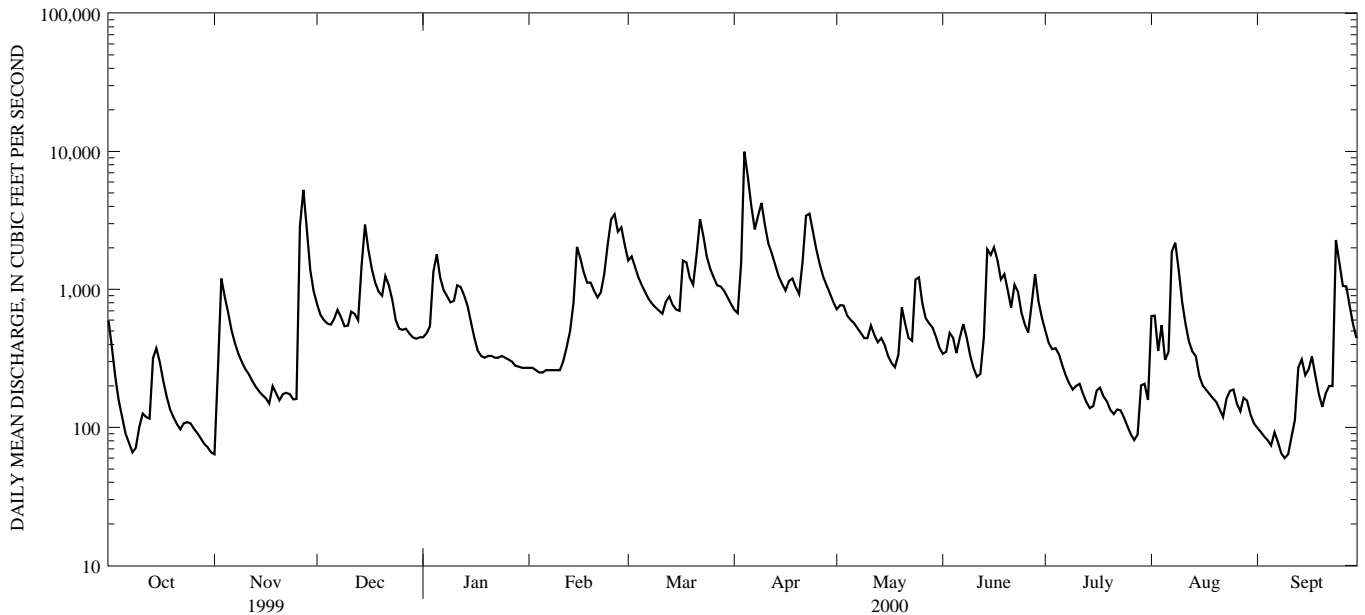
e Estimated.

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03032500 REDBANK CREEK AT ST. CHARLES, PA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1919 - 2000	
ANNUAL TOTAL	272417		281463			
ANNUAL MEAN	746		769		880	
HIGHEST ANNUAL MEAN					1333	1996
LOWEST ANNUAL MEAN					430	1934
HIGHEST DAILY MEAN	12600	Jan 24	9970	Apr 4	28100	Jul 19 1996
LOWEST DAILY MEAN	46	Sep 28	60	Sep 9	20	Sep 28 1922
ANNUAL SEVEN-DAY MINIMUM	52	Sep 22	74	Sep 4	24	Aug 30 1939
INSTANTANEOUS PEAK FLOW			13300	Apr 4	a 66300	Jul 19 1996
INSTANTANEOUS PEAK STAGE			12.12	Apr 4	b 23.90	Jul 19 1996
INSTANTANEOUS LOW FLOW			58	Sep 9,10	c 19	Oct 1 1918
ANNUAL RUNOFF (CFSM)	1.41		1.46		1.67	
ANNUAL RUNOFF (INCHES)	19.19		19.83		22.65	
10 PERCENT EXCEEDS	1640		1730		2110	
50 PERCENT EXCEEDS	410		452		465	
90 PERCENT EXCEEDS	62		119		84	

- a** From rating curve extended above 35,000 ft³/s on basis of slope-area measurement of peak flow.
- b** From floodmarks.
- c** Minimum observed.



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