

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)
Jan. 24	1300	*14,300	*12.48	No other peak greater than base discharge.			

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	54	54	68	e235	1170	1210	1000	811	333	165	109	61
2	51	52	66	e240	2030	1010	1060	741	339	1210	82	54
3	52	51	69	e240	2910	1020	991	681	362	818	107	50
4	76	51	67	e235	2470	1710	991	629	343	468	78	48
5	75	51	73	e230	2250	1440	1470	595	298	299	59	47
6	97	51	72	e220	1800	1300	1140	561	263	214	53	49
7	72	51	66	e210	1560	1120	983	525	249	160	50	206
8	186	51	66	e200	1720	891	882	974	281	128	68	212
9	461	51	67	e300	1430	916	1620	1410	248	110	99	134
10	380	59	71	e440	1380	890	5210	1010	212	175	113	102
11	311	69	67	e560	1300	830	4100	809	179	145	105	72
12	252	e370	60	e600	1350	793	4680	704	157	131	70	56
13	170	e300	57	e760	1710	743	3450	632	139	103	59	51
14	121	e200	53	e900	1380	729	2420	580	136	84	110	51
15	100	e140	48	e1100	1180	711	1780	533	152	72	115	51
16	89	e110	46	e1300	1080	737	1550	482	151	64	111	57
17	76	e88	58	e1400	1060	965	1790	442	113	60	89	93
18	71	e87	61	e1500	1140	2330	1740	416	103	57	67	83
19	90	e86	62	e1500	1050	2340	1510	468	92	55	56	60
20	89	e84	64	e1500	928	1710	1540	410	83	53	55	59
21	76	e87	83	e1200	821	1520	1400	364	74	58	179	63
22	72	89	1580	e1200	687	1680	1550	350	67	78	156	62
23	64	75	1410	e5200	583	1490	1870	478	60	159	200	56
24	60	78	728	12600	e580	1310	2590	631	58	135	131	53
25	57	67	e400	7590	e560	1280	2020	1120	56	99	111	51
26	55	79	e240	4050	e540	1190	1620	875	55	87	168	49
27	55	78	e230	2500	e520	1090	1370	664	52	75	330	47
28	55	82	e230	2230	e610	1070	1160	538	63	61	259	46
29	54	77	e230	2350	---	1090	1010	458	85	68	184	67
30	54	66	e230	1800	---	1070	897	404	127	78	115	664
31	53	---	e230	1410	---	1020	---	356	---	80	78	---
TOTAL	3528	2834	6852	55800	35799	37205	55394	19651	4930	5549	3566	2754
MEAN	114	94.5	221	1800	1279	1200	1846	634	164	179	115	91.8
MAX	461	370	1580	12600	2910	2340	5210	1410	362	1210	330	664
MIN	51	51	46	200	520	711	882	350	52	53	50	46
CFSM	.22	.18	.42	3.41	2.42	2.27	3.50	1.20	.31	.34	.22	.17
IN.	.25	.20	.48	3.93	2.52	2.62	3.90	1.38	.35	.39	.25	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 1999, BY WATER YEAR (WY)

MEAN	381	752	1076	1147	1213	1812	1491	1071	679	420	280	285
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

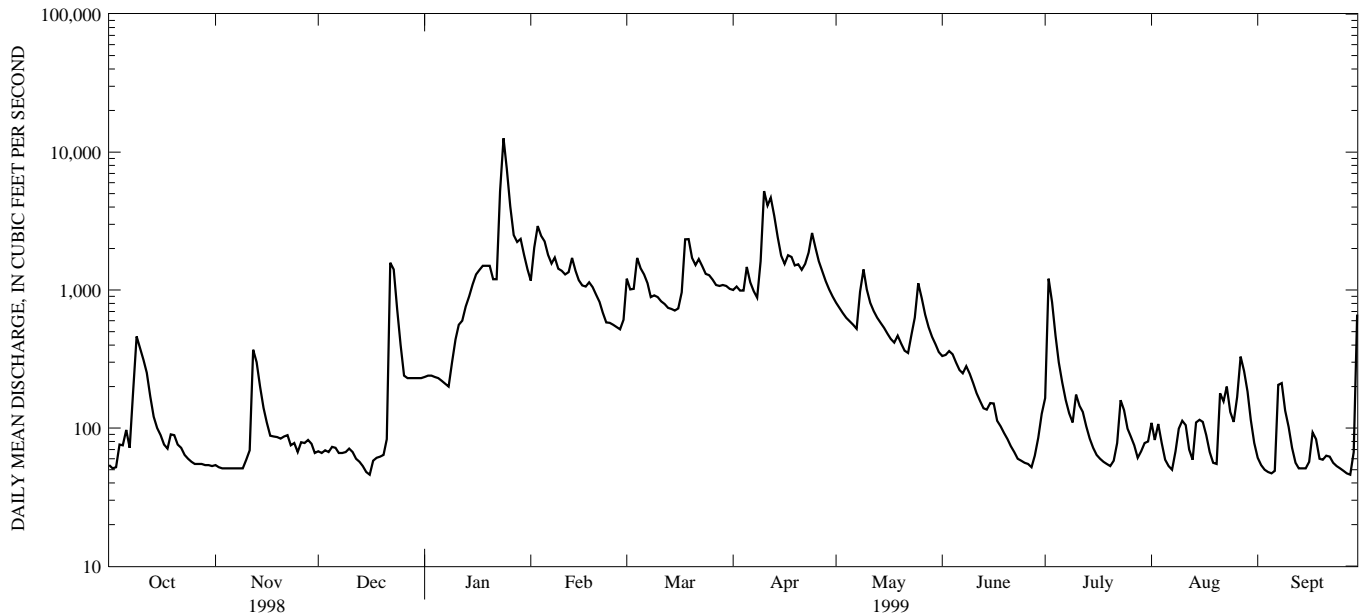
e Estimated.

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

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1919 - 1999	
ANNUAL TOTAL	255207		233862		881	
ANNUAL MEAN	699		641		1333	
HIGHEST ANNUAL MEAN					1996	
LOWEST ANNUAL MEAN					1934	
HIGHEST DAILY MEAN	7520	Jan 8	12600	Jan 24	28100	Jul 19 1996
LOWEST DAILY MEAN	44	Aug 9 ^a	46	Dec 16 ^b	20	Sep 28 1922
ANNUAL SEVEN-DAY MINIMUM	47	Sep 13	51	Nov 3	24	Aug 30 1939
INSTANTANEOUS PEAK FLOW			14300	Jan 24	c66300	Jul 19 1996
INSTANTANEOUS PEAK STAGE			12.48	Jan 24	d23.90	Jul 19 1996
INSTANTANEOUS LOW FLOW			37	Dec 16	f19	Oct 1 1918
ANNUAL RUNOFF (CFSM)	1.32		1.21		1.67	
ANNUAL RUNOFF (INCHES)	17.98		16.48		22.68	
10 PERCENT EXCEEDS	1740		1550		2120	
50 PERCENT EXCEEDS	252		212		465	
90 PERCENT EXCEEDS	54		55		83	

- a Also Sept. 18, 19.
- b Also Sept. 28.
- c From rating curve extended above 35,000 ft³/s on basis of slope-area measurement of peak flow.
- d From floodmarks.
- f Minimum observed.



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