

CHARTIERS CREEK BASIN

03085500 CHARTIERS CREEK AT CARNEGIE, PA

LOCATION.--Lat 40°24'02", long 80°05'48", Allegheny County, Hydrologic Unit 05030101, on left bank 100 ft downstream from Hammond Street bridge, 0.3 mi downstream from Robinson Run, 0.8 mi upstream from Campbells Run, and 8.9 mi upstream from mouth.

DRAINAGE AREA.--257 mi².

PERIOD OF RECORD.--October 1919 to September 1933, October 1940 to current year. Published as "at Crafton" October 1971 to September 1975. Monthly discharge only for some periods, published in WSP 1305. June 1915 to September 1919 (gage heights and discharge measurements only) in reports of Water Supply Commission of Pennsylvania.

GAGE.--Water-stage recorder and concrete weir control. Datum of gage is 755.45 ft above sea level. Prior to Dec. 15, 1931, nonrecording gage at site 0.5 mi downstream at different datum. Jan. 8, 1932 to Sept. 30, 1933, nonrecording gage at site 1.0 mi downstream at different datum. Nov. 20, 1940 to Aug. 18, 1967, water-stage recorder at site 400 ft upstream at datum 1.00 ft higher. Oct. 1, 1971 to Sept. 30, 1975, nonrecording gage at site 4.6 mi downstream, at datum 725.99 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulations at low flow by mine drainage, reservoirs, and industrial usage 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.--Flood of Sept. 2, 1912 reached a discharge of 20,000 ft³/s, from U.S. Army Corps of Engineers.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 31	0530	*2,960	*5.64	Mar. 22	0045	2,540	5.11

**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	81	78	144	e105	782	177	281	238	285	216	80	230
2	79	79	112	e100	498	170	278	230	511	146	72	96
3	77	79	89	e98	367	167	250	220	866	109	70	74
4	72	78	85	e94	309	209	232	210	456	99	108	69
5	214	77	83	e96	285	339	219	201	327	138	88	66
6	524	75	79	e97	278	284	560	190	744	174	71	61
7	191	76	76	e96	273	242	653	178	655	106	65	57
8	128	77	78	e92	252	232	411	179	446	212	113	52
9	118	81	77	e90	273	284	599	195	342	183	66	54
10	107	189	73	e90	355	266	674	174	287	216	81	60
11	95	148	84	e88	271	256	820	164	253	584	122	62
12	90	100	285	e86	237	249	717	358	232	203	80	53
13	88	89	156	84	229	355	520	221	210	141	109	50
14	88	84	446	85	274	567	429	164	187	119	78	111
15	86	79	302	95	445	439	469	152	174	106	67	73
16	84	75	472	123	475	423	670	149	225	98	67	59
17	97	74	1300	117	621	561	490	146	210	93	122	56
18	190	74	488	108	419	506	421	137	156	96	73	54
19	131	74	312	128	340	424	373	157	143	95	92	54
20	98	74	236	172	325	360	447	131	140	85	109	91
21	88	76	217	142	302	983	590	153	181	80	74	65
22	84	72	184	143	251	1800	516	763	306	76	63	57
23	82	72	146	125	242	872	449	838	186	75	98	52
24	91	69	184	122	219	612	400	340	152	71	79	140
25	107	73	e145	117	221	493	353	435	131	201	65	154
26	87	122	e140	102	204	429	322	433	119	257	58	83
27	86	102	e130	117	189	381	307	301	111	102	78	66
28	95	94	e120	104	184	344	287	256	104	78	165	60
29	83	105	e115	95	---	322	260	228	97	72	176	62
30	80	158	e110	690	---	342	248	241	156	70	74	55
31	79	---	e105	2190	---	307	---	189	---	68	186	---
TOTAL	3600	2703	6573	5991	9120	13395	13245	7971	8392	4369	2849	2276
MEAN	116	90.1	212	193	326	432	442	257	280	141	91.9	75.9
MAX	524	189	1300	2190	782	1800	820	838	866	584	186	230
MIN	72	69	73	84	184	167	219	131	97	68	58	50
CFSM	.45	.35	.83	.75	1.27	1.68	1.72	1.00	1.09	.55	.36	.30
IN.	.52	.39	.95	.87	1.32	1.94	1.92	1.15	1.21	.63	.41	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2001, BY WATER YEAR (WY)

MEAN	115	196	284	352	457	580	471	348	235	175	143	127
MAX	393	1400	1003	986	1255	1361	999	887	694	951	960	757
(WY)	1980	1986	1951	1924	1926	1945	1961	1924	1980	1928	1980	1926
MIN	31.3	35.5	36.5	37.8	80.9	101	154	92.7	46.5	30.0	28.4	24.1
(WY)	1933	1931	1931	1931	1964	1969	1925	1926	1926	1926	1930	1927

e Estimated.

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SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1920 - 2001	
ANNUAL TOTAL	86414		80484			
ANNUAL MEAN	236		221		289	
HIGHEST ANNUAL MEAN					527	
LOWEST ANNUAL MEAN					132	
HIGHEST DAILY MEAN	3830	Aug 7	2190	Jan 31	11100	Aug 6 1956
LOWEST DAILY MEAN	69	Nov 24	50	Sep 13	16	Aug 9 1926
ANNUAL SEVEN-DAY MINIMUM	73	Nov 19	55	Sep 7	19	Sep 26 1927
MAXIMUM PEAK FLOW			2960	Jan 31	a13500	Aug 6 1956
MAXIMUM PEAK STAGE			5.64	Jan 31	b16.37	Aug 6 1956
INSTANTANEOUS LOW FLOW			48	Sep 13,23	c16	Aug 9 1926d
ANNUAL RUNOFF (CFSM)	.92		.86		1.13	
ANNUAL RUNOFF (INCHES)	12.51		11.65		15.30	
10 PERCENT EXCEEDS	428		470		618	
50 PERCENT EXCEEDS	146		143		161	
90 PERCENT EXCEEDS	78		72		56	

- a From rating curve extended above 13,100 ft³/s.
- b Site and datum then in use.
- c Minimum observed.
- d Also at times in September 1932.

