

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 National Geodetic Vertical Datum of 1929. 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 National Geodetic Vertical Datum of 1929.

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)
Mar. 26	2100	*4,410	*7.40	May 18	1200	2,700	5.31

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	54	207	e98	309	110	415	349	261	134	66	51
2	55	63	123	e93	229	119	354	354	204	131	65	45
3	53	141	98	91	191	226	341	291	181	127	62	54
4	51	80	85	83	176	185	304	248	180	120	61	208
5	48	65	79	83	143	143	275	230	239	113	85	75
6	62	58	78	e82	138	147	255	219	1260	104	121	59
7	62	57	88	e85	140	135	238	261	1160	100	79	53
8	52	57	92	e86	131	125	226	306	430	97	65	51
9	54	64	131	91	121	120	224	474	315	119	61	49
10	52	58	99	e100	136	126	215	417	262	130	59	48
11	46	54	82	177	266	110	191	278	235	102	57	48
12	64	49	82	e135	192	108	182	365	216	90	76	41
13	89	49	102	e120	164	108	267	771	239	88	89	39
14	69	53	100	e116	139	103	350	1100	358	87	54	42
15	79	54	98	e113	139	102	593	584	315	84	54	102
16	61	53	81	111	133	602	373	430	297	81	52	89
17	68	51	936	101	138	443	297	392	216	79	47	59
18	59	52	1020	93	118	484	262	1930	184	140	49	53
19	55	59	395	92	111	336	246	947	168	339	53	70
20	49	104	259	96	127	898	348	638	153	205	76	63
21	43	68	191	109	238	962	331	503	142	108	55	49
22	42	59	151	111	178	561	347	427	135	89	60	46
23	55	55	141	109	152	429	269	379	130	86	133	43
24	264	53	157	233	136	365	241	352	124	84	329	40
25	119	225	127	261	130	381	228	346	120	82	132	43
26	81	141	108	181	140	1870	207	297	117	78	76	76
27	66	192	e106	152	139	2060	192	268	341	77	64	758
28	61	215	e106	133	121	775	784	393	501	77	59	310
29	58	269	103	121	---	577	593	385	210	73	58	109
30	58	317	102	320	---	543	406	258	157	102	55	79
31	57	---	e100	439	---	428	---	239	---	73	53	---
TOTAL	2087	2869	5627	4215	4475	13681	9554	14431	8850	3399	2405	2852
MEAN	67.3	95.6	182	136	160	441	318	466	295	110	77.6	95.1
MAX	264	317	1020	439	309	2060	784	1930	1260	339	329	758
MIN	42	49	78	82	111	102	182	219	117	73	47	39
CFSM	0.26	0.37	0.71	0.53	0.62	1.72	1.24	1.81	1.15	0.43	0.30	0.37
IN.	0.30	0.42	0.81	0.61	0.65	1.98	1.38	2.09	1.28	0.49	0.35	0.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2002, BY WATER YEAR (WY)

MEAN	114	195	283	349	453	578	469	349	236	175	142	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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1920 - 2002	
ANNUAL TOTAL	78191		74445			
ANNUAL MEAN	214		204		288	
HIGHEST ANNUAL MEAN					527	1928
LOWEST ANNUAL MEAN					132	1954
HIGHEST DAILY MEAN	2190	Jan 31	2060	Mar 27	11100	Aug 6 1956
LOWEST DAILY MEAN	42	Oct 22	39	Sep 13	16	Aug 9 1926
ANNUAL SEVEN-DAY MINIMUM	52	Nov 12	45	Sep 8	19	Sep 26 1927
MAXIMUM PEAK FLOW			4410	Mar 26	a13500	Aug 6 1956
MAXIMUM PEAK STAGE			7.40	Mar 26	b16.37	Aug 6 1956
INSTANTANEOUS LOW FLOW			38	Sep 12-14,24	c16	Aug 9 1926d
ANNUAL RUNOFF (CFSM)	0.83		0.79		1.12	
ANNUAL RUNOFF (INCHES)	11.32		10.78		15.24	
10 PERCENT EXCEEDS	452		410		614	
50 PERCENT EXCEEDS	138		120		160	
90 PERCENT EXCEEDS	57		53		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.

