



2004 Water Year CHESTER CREEK BASIN

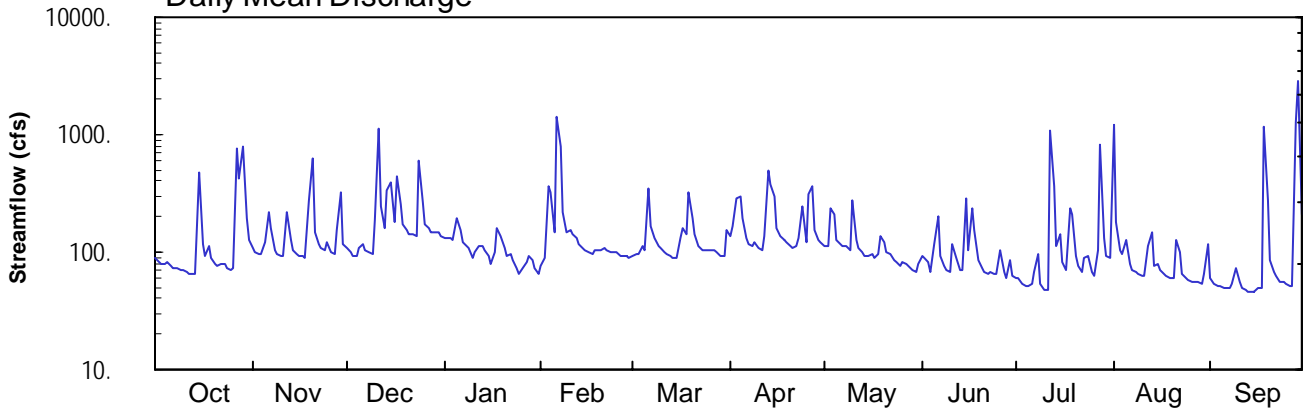
01477000 Chester Creek near Chester, PA

Latitude: 39° 52 ' 08"
Delaware County

Longitude: 075° 24 ' 31"
Datum: 23.41 feet

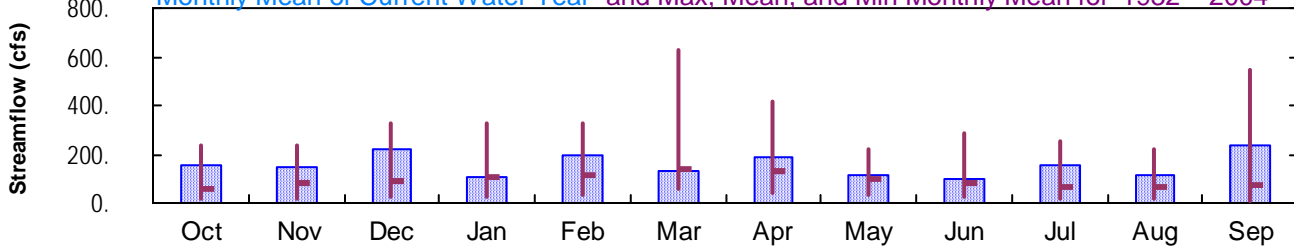
Hydrologic Unit Code: 02040202
Drainage Area: 61.1 mi²

Daily Mean Discharge

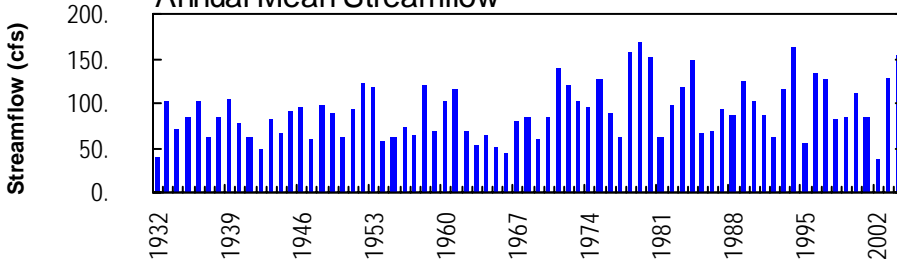


Monthly Statistics

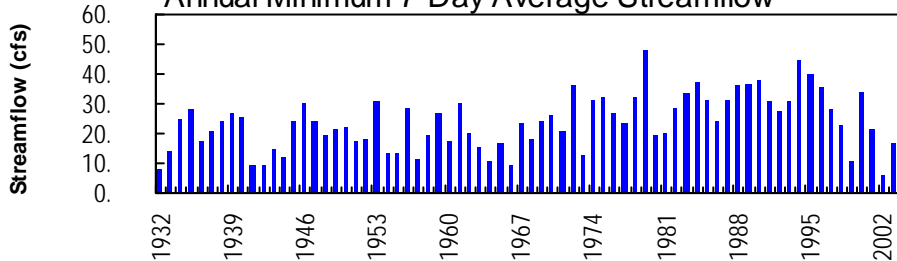
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1932 – 2004



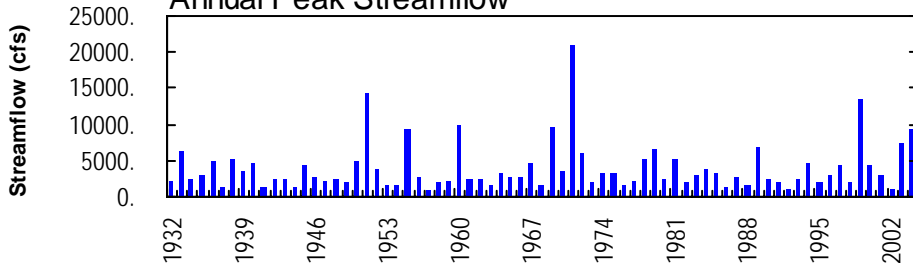
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



01477000-Chester Creek near Chester

CHESTER CREEK BASIN

01477000 CHESTER CREEK NEAR CHESTER, PA

LOCATION.--Lat 39°52'08", long 75°24'31", Delaware County, Hydrologic Unit 02040202, on right bank 30 ft downstream from bridge on Dutton Mill Road, and 3.0 mi northwest of Chester.

DRAINAGE AREA.--61.1 mi².

PERIOD OF RECORD.--August 1931 to current year. Monthly discharges only for some periods, published in WSP 1302.

REVISED RECORDS.--WDR PA-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 23.41 ft above Penn Central Railroad datum. Prior to June 27, 1966, water-stage recorder at site 50 ft upstream, and June 28, 1966, to Oct. 4, 1967, nonrecording gage 30 ft upstream and at gage, all at same datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diversion about 2.6 mi upstream into Ridley Creek basin (see station 01476480 Ridley Creek at Media) by Aqua Pennsylvania Water Company (formerly Philadelphia Suburban Water Company). Diversion for the year was equivalent to a mean daily discharge of 2.7 ft³/s. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Oct. 27	1845	1,720	6.91	July 12	1700	3,410	9.75
Oct. 29	0945	1,410	6.28	July 28	0230	1,740	6.95
Nov. 20	0200	1,420	6.31	Aug. 1	Unknown	2,980	9.10
Dec. 11	0715	2,070	7.58	Sept. 18	1500	2,650	8.58
Feb. 6	1600	3,190	9.43	Sept. 29	0215	*9,450	*16.43

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	110	106	132	e75	92	134	113	92	60	e1200	60
2	83	101	99	131	e90	98	165	111	89	59	e180	53
3	79	97	93	129	369	96	282	236	82	53	105	51
4	78	96	93	129	327	113	301	206	69	52	95	51
5	82	123	108	192	149	104	194	129	115	51	126	50
6	75	215	115	155	1450	350	129	116	202	53	79	50
7	72	161	105	123	e800	165	118	114	93	68	70	49
8	72	106	98	115	e220	130	111	114	77	95	68	54
9	71	95	96	e107	e145	114	121	105	70	54	65	72
10	69	93	186	e90	e155	107	107	281	68	48	63	56
11	67	92	1140	e100	e140	102	103	128	117	47	62	49
12	65	221	245	112	e130	98	136	108	88	1100	111	48
13	65	124	161	111	e115	91	505	100	70	366	147	47
14	65	103	338	105	e110	89	370	94	70	114	76	45
15	472	95	396	e92	e105	90	301	91	288	141	78	46
16	115	92	181	e78	e100	132	157	95	103	82	70	50
17	91	94	446	e100	e98	159	137	90	237	71	66	50
18	114	90	257	163	102	140	127	96	154	234	61	1180
19	89	275	174	137	103	328	121	135	86	209	61	271
20	81	629	156	106	103	192	114	123	73	94	60	84
21	77	148	143	e92	107	141	108	100	68	76	124	69
22	79	116	139	e96	104	113	110	96	66	67	101	62
23	79	108	138	e85	99	106	129	85	68	88	65	57
24	72	105	605	e72	100	102	242	81	65	93	60	55
25	71	121	266	e64	100	106	120	77	64	67	58	53
26	72	100	175	e72	94	102	305	81	105	62	56	52
27	760	95	161	e82	93	102	362	80	68	106	55	51
28	431	155	151	e94	91	98	154	76	60	811	55	1280
29	785	325	147	e84	91	92	128	71	85	129	54	2860
30	197	119	146	e74	---	94	120	68	64	93	65	206
31	127	---	136	e65	---	154	---	80	---	88	118	---
TOTAL	4743	4404	6800	3287	5765	4000	5511	3480	2956	4731	3654	7161
MEAN	153	147	219	106	199	129	184	112	98.5	153	118	239
MAX	785	629	1140	192	1450	350	505	281	288	1100	1200	2860
MIN	65	90	93	64	75	89	103	68	60	47	54	45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2004, BY WATER YEAR (WY)

MEAN	56.9	77.8	92.0	104	116	142	128	101	79.8	69.1	62.9	70.8
MAX	234	233	328	326	326	627	413	224	286	254	217	543
(WY)	1980	1951	1997	1979	1979	1994	1980	1983	2003	1975	1955	1971
MIN	13.7	18.2	24.3	23.4	36.0	53.1	41.9	34.8	28.3	15.6	13.7	10.4
(WY)	1942	1932	1932	1981	2002	1981	1963	1942	1966	2002	1966	1932

e Estimated.

CHESTER CREEK BASIN

01477000 CHESTER CREEK NEAR CHESTER, PA--Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1932 - 2004	
ANNUAL TOTAL	55607		56492		91.5	
ANNUAL MEAN	152		154		168	
HIGHEST ANNUAL MEAN					1979	
LOWEST ANNUAL MEAN					38.0	
HIGHEST DAILY MEAN	1880	Jun 20	2860	Sep 29	6510	Sep 13 1971
LOWEST DAILY MEAN	30	Feb 18	45	Sep 14	5.8	Aug 11 2002
ANNUAL SEVEN-DAY MINIMUM	36	Feb 14	48	Sep 11	6.1	Aug 8 2002
MAXIMUM PEAK FLOW			a9450	Sep 29	a21000	Sep 13 1971
MAXIMUM PEAK STAGE			16.43	Sep 29	b24.59	Sep 13 1971
INSTANTANEOUS LOW FLOW			43	Sep 14	0.30	Aug 7 1934
10 PERCENT EXCEEDS	296		260		156	
50 PERCENT EXCEEDS	96		100		61	
90 PERCENT EXCEEDS	55		60		27	

- a** From rating curve extended above 2,400 ft³/s on basis of contracted-opening measurement at 9,400 ft³/s, at gage height 13.57 ft, and slope-area measurement of peak flow.
- b** From floodmark.