



2005 Water Year CHRISTINA RIVER BASIN

01480700 East Branch Brandywine Creek near Downingtown, PA

Latitude: 40° 02 ' 05"

Longitude: 075° 42 ' 32"

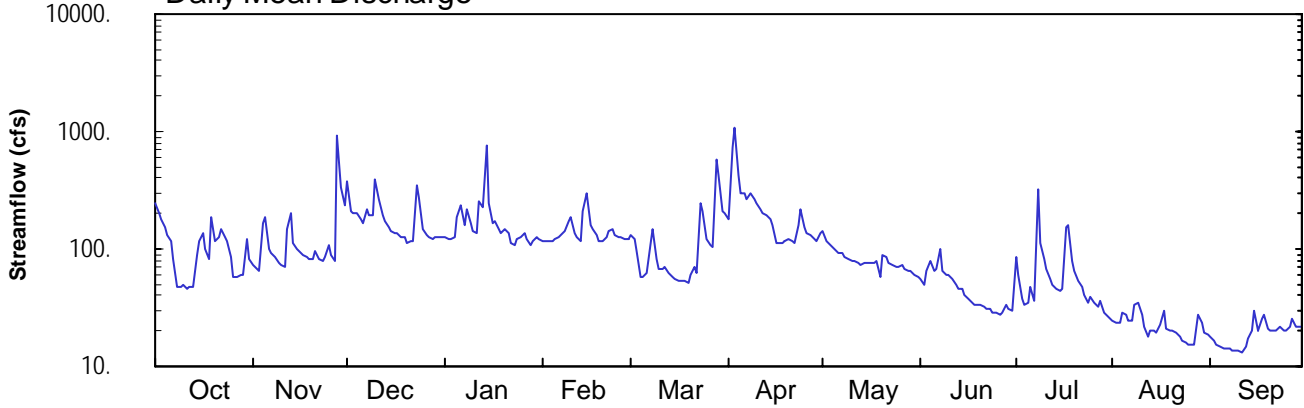
Hydrologic Unit Code: 02040205

Chester County

Datum: 270 feet

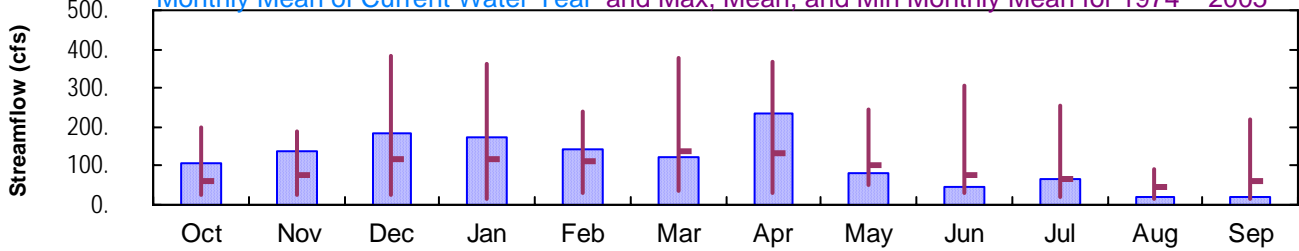
Drainage Area: 60.6 mi²

Daily Mean Discharge

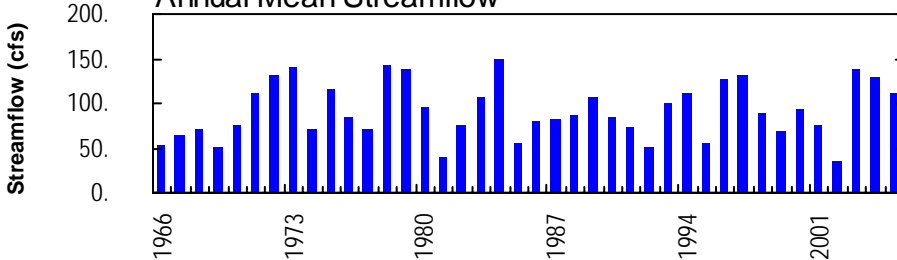


Monthly Statistics

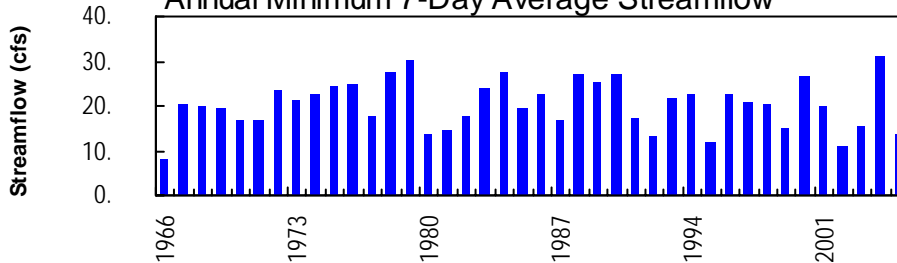
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1974 – 2005



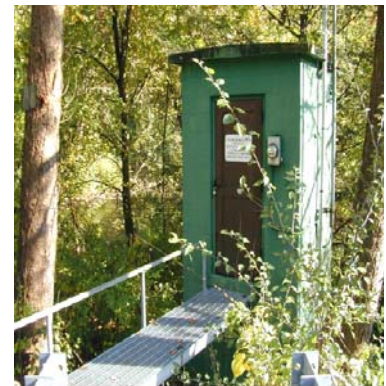
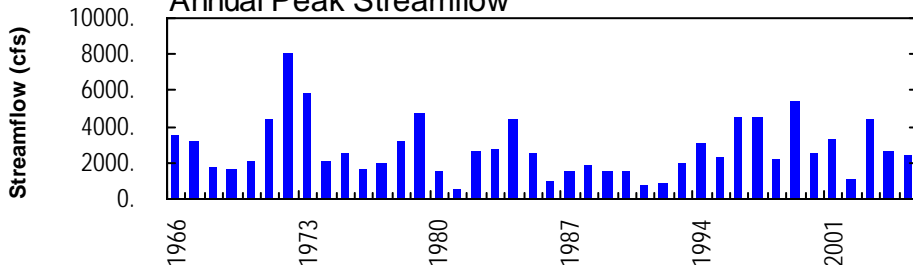
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



01480700-EB Brandywine Creek near Downingtown

CHRISTINA RIVER BASIN

01480700 EAST BRANCH BRANDYWINE CREEK NEAR DOWNINGTOWN, PA

LOCATION.--Lat 40°02'05", long 75°42'32", Chester County, Hydrologic Unit 02040205, on right bank 20 ft downstream from bridge on Dowlin Forge Road, 200 ft east of State Highway 282, 0.4 mi downstream from Shamona Creek, 1.5 mi downstream from Marsh Creek, 2.0 mi upstream from Beaver Creek, and 2.2 mi north of Downingtown.

DRAINAGE AREA.--60.6 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1948-57. October 1965 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 270 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 30, 1966, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated since November 1973 by Marsh Creek Reservoir (station 01480684) 1.9 mi upstream. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	73	375	126	118	130	181	140	55	84	25	18
2	201	70	213	121	117	123	744	119	49	61	24	16
3	177	66	201	121	117	98	1070	114	66	38	23	15
4	153	168	205	125	119	57	418	104	79	33	29	15
5	133	187	183	185	123	59	302	97	64	35	27	14
6	119	102	167	235	128	63	300	94	68	48	25	14
7	81	91	217	159	133	110	270	91	101	37	24	14
8	47	84	198	215	144	147	295	86	65	323	33	14
9	48	77	192	165	174	81	266	83	60	114	35	14
10	49	73	394	143	188	68	241	80	60	81	28	13
11	46	72	265	139	137	68	221	79	55	67	22	13
12	47	150	192	257	124	71	205	77	50	57	18	15
13	47	203	173	226	119	63	192	73	46	50	21	17
14	90	112	157	755	207	59	181	75	45	46	20	20
15	117	100	144	250	303	55	161	78	41	44	20	29
16	136	94	137	163	160	54	111	76	38	45	23	20
17	100	88	134	173	147	54	111	76	37	155	30	26
18	81	86	127	146	129	53	111	78	34	157	21	27
19	184	82	126	139	119	52	115	59	33	80	20	21
20	117	83	114	147	117	61	123	90	33	65	20	20
21	128	98	115	136	128	71	117	87	32	54	19	20
22	145	83	117	114	141	62	114	76	31	47	18	20
23	128	80	350	e110	145	243	163	73	31	41	17	21
24	115	84	273	e120	132	207	222	71	29	35	16	21
25	87	107	149	e125	128	122	153	71	29	38	15	20
26	59	88	133	135	124	108	139	72	28	35	15	22
27	59	79	127	123	124	103	132	66	29	32	15	26
28	59	910	121	e110	124	573	122	64	34	36	28	22
29	60	331	124	e115	---	429	115	66	31	29	23	22
30	123	240	125	125	---	212	135	60	30	27	19	22
31	83	---	127	120	---	201	---	58	---	26	19	---
TOTAL	3262	4161	5675	5323	3969	3857	7030	2533	1383	2020	692	571
MEAN	105	139	183	172	142	124	234	81.7	46.1	65.2	22.3	19.0
MAX	243	910	394	755	303	573	1070	140	101	323	35	29
MIN	46	66	114	110	117	52	111	58	28	26	15	13

e Estimated.

CHRISTINA RIVER BASIN

01480700 EAST BRANCH BRANDYWINE CREEK NEAR DOWNINGTOWN, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2005, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	62.5	78.9	116	119	113	139	132	104	78.0	65.1	45.1	61.4
MAX (WY)	199	187	385	361	242	380	365	246	308	257	93.7	217
MIN (WY)	1997	2004	1997	1979	1979	1994	1983	1989	2003	1984	2003	2003
MIN (WY)	23.2	24.9	23.5	17.5	29.5	35.7	28.9	49.2	29.6	19.7	17.8	17.1
MIN (WY)	1981	2002	1981	1981	2002	1985	1985	1976	1985	2002	2002	1980

SUMMARY STATISTICS FOR 2004 CALENDAR YEAR FOR 2005 WATER YEAR WATER YEARS 1974 - 2005

ANNUAL TOTAL		43149		40476								
ANNUAL MEAN		118		111						92.8		
HIGHEST ANNUAL MEAN										150		1984
LOWEST ANNUAL MEAN										35.0		2002
HIGHEST DAILY MEAN				910	Nov 28		1070	Apr 3		2020	Jan 26	1978
LOWEST DAILY MEAN				26	Jul 11		13	Sep 10,11		9.1	Sep 13	2002
ANNUAL SEVEN-DAY MINIMUM				31	Jul 5		14	Sep 5		11	Sep 8	2002
MAXIMUM PEAK FLOW							2430	Nov 28		a5410	Sep 16	1999
MAXIMUM PEAK STAGE							6.50	Nov 28		9.59	Sep 16	1999
INSTANTANEOUS LOW FLOW							13	Sep 10-12		7.4	Sep 13	2002
10 PERCENT EXCEEDS			199				206			180		
50 PERCENT EXCEEDS			100				86			60		
90 PERCENT EXCEEDS			46				21			25		

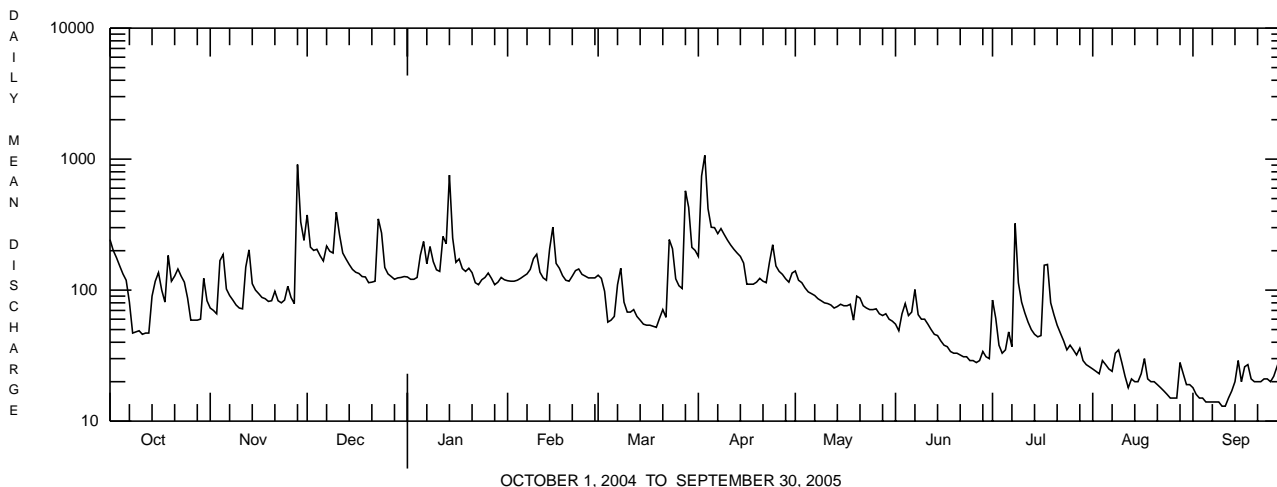
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1973, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	44.3	76.4	92.0	81.4	139	129	123	98.8	99.8	63.1	56.5	45.2
MAX (WY)	120	168	245	168	286	195	238	144	306	128	147	148
MIN (WY)	1972	1973	1973	1973	1971	1972	1973	1973	1972	1972	1971	1971
MIN (WY)	24.8	27.6	32.0	33.3	51.6	70.0	64.3	43.2	30.3	18.3	15.3	20.1
MIN (WY)	1970	1966	1966	1969	1969	1969	1969	1969	1966	1966	1966	1970

SUMMARY STATISTICS WATER YEARS 1966 - 1973

ANNUAL TOTAL ANNUAL MEAN		87.0										
HIGHEST ANNUAL MEAN		139										1973
LOWEST ANNUAL MEAN		51.6										1969
HIGHEST DAILY MEAN		3220				Jun 22						1972
LOWEST DAILY MEAN		7.2				Sep 12						1966
ANNUAL SEVEN DAY MINIMUM		8.0				Sep 7						1966
MAXIMUM PEAK FLOW		a8070				Jun 22						1972
MAXIMUM PEAK STAGE		b12.06				Jun 22						1972
INSTANTANEOUS LOW FLOW		7.2				Sep 2,3,11-13,						1966
ANNUAL RUNOFF (CFSM)		1.44										
ANNUAL RUNOFF (INCHES)		19.51										
10 PERCENT EXCEEDS		163										
50 PERCENT EXCEEDS		56										
90 PERCENT EXCEEDS		23										

- a From rating curve extended above 5,000 ft³/s.
- b From floodmark.



OCTOBER 1, 2004 TO SEPTEMBER 30, 2005