

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 sea level, 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	42	103	e34	152	67	188	44	89	35	23	22
2	39	40	80	e32	122	66	180	46	151	33	22	20
3	37	39	37	e32	100	64	163	45	102	30	21	20
4	54	39	36	e31	83	69	120	46	88	30	45	21
5	124	39	37	e33	121	81	88	48	80	33	28	20
6	57	39	36	37	130	72	91	45	75	32	23	17
7	49	38	35	40	117	78	95	44	71	28	24	21
8	43	38	35	47	107	92	93	44	66	28	22	20
9	39	40	34	50	123	101	94	46	61	31	21	20
10	38	74	34	46	376	84	96	46	57	29	25	20
11	36	52	35	45	156	73	97	44	54	41	37	23
12	34	43	37	53	128	68	153	44	54	30	108	21
13	33	41	35	71	126	205	148	43	68	27	184	21
14	33	51	161	71	128	102	132	42	59	26	53	24
15	33	52	83	94	137	98	112	42	59	25	43	23
16	33	42	64	79	134	139	133	44	67	26	36	20
17	35	41	1050	51	172	174	128	44	81	27	32	19
18	53	39	292	46	122	133	179	45	62	28	29	19
19	74	38	131	230	113	116	148	46	55	29	27	19
20	110	38	129	247	113	112	118	43	52	26	32	44
21	92	38	136	103	113	255	75	79	50	26	29	68
22	58	37	119	82	105	234	74	153	49	25	27	19
23	34	36	101	80	98	151	71	126	73	24	25	21
24	37	36	102	79	62	122	70	84	67	24	24	28
25	41	37	97	74	75	83	66	73	54	23	23	149
26	36	127	93	71	128	75	65	241	48	23	23	92
27	33	74	95	71	80	68	81	489	44	25	22	100
28	45	83	93	68	72	63	123	212	41	24	22	96
29	45	106	75	66	---	65	120	140	38	24	22	69
30	44	110	35	217	---	523	92	96	36	25	20	32
31	43	---	e34	205	---	221	---	84	---	24	21	---
TOTAL	1534	1549	3464	2485	3493	3854	3393	2668	1951	861	1093	1108
MEAN	49.5	51.6	112	80.2	125	124	113	86.1	65.0	27.8	35.3	36.9
MAX	124	127	1050	247	376	523	188	489	151	41	184	149
MIN	33	36	34	31	62	63	65	42	36	23	20	17

e Estimated.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	59.9	74.3	112	120	113	141	132	107	72.3	65.2	43.6	56.2
MAX (WY)	199	169	385	361	242	380	365	246	181	257	90.9	191
MIN (WY)	1997	1997	1997	1979	1979	1994	1983	1989	1982	1984	1989	1979
MIN (WY)	23.2	25.2	23.5	17.5	47.8	35.7	28.9	49.2	29.6	21.3	18.8	17.1
MIN (WY)	1981	1982	1981	1981	1992	1985	1985	1976	1985	1999	1981	1980

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1974 - 2001

ANNUAL TOTAL	33078	27453	
ANNUAL MEAN	90.4	75.2	91.3
HIGHEST ANNUAL MEAN			150
LOWEST ANNUAL MEAN			39.3
HIGHEST DAILY MEAN	1290	Mar 22	2020
LOWEST DAILY MEAN	26	Sep 9,10,12	11
ANNUAL SEVEN-DAY MINIMUM	27	Sep 6	12
MAXIMUM PEAK FLOW			a5410
MAXIMUM PEAK STAGE			7.43
INSTANTANEOUS LOW FLOW			15
10 PERCENT EXCEEDS	158	135	175
50 PERCENT EXCEEDS	61	52	59
90 PERCENT EXCEEDS	35	24	26

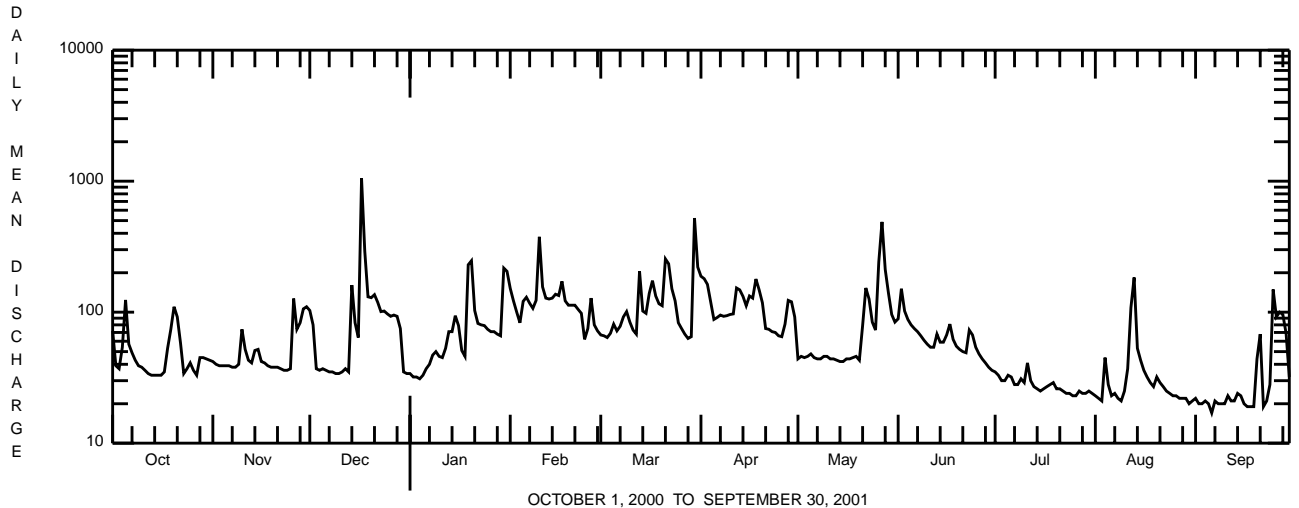
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1973, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	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
LOWEST ANNUAL MEAN	51.6
HIGHEST DAILY MEAN	3220
LOWEST DAILY MEAN	7.2
ANNUAL SEVEN DAY MINIMUM	8.0
MAXIMUM PEAK FLOW	a8070
MAXIMUM PEAK STAGE	b12.06
INSTANTANEOUS LOW FLOW	7.2
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, 2000 TO SEPTEMBER 30, 2001