

CHRISTINA RIVER BASIN

01480685 MARSH CREEK NEAR DOWNINGTOWN, PA

LOCATION.--Lat 40°03'19", long 75°43'00", Chester County, Hydrologic Unit 02040205, on left bank 1,000 ft downstream from Marsh Creek Dam, 0.2 mi upstream from mouth, and 3.0 mi north of Downingtown.

DRAINAGE AREA.--20.3 mi².

PERIOD OF RECORD.--June 1973 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 280 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated since November 1973 by Marsh Creek Reservoir (station 01480684). Several measurements of water temperature were made during the year. Satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	58	17	11	58	86	26	3.6	37	14	9.7
2	26	13	57	17	11	39	82	26	3.6	33	14	9.6
3	36	14	57	17	11	38	70	27	2.7	29	15	11
4	36	14	57	17	11	26	52	27	6.7	27	30	13
5	37	20	57	25	11	13	50	27	16	24	28	11
6	37	26	57	30	11	13	49	27	20	21	25	11
7	37	20	57	30	11	13	47	20	22	18	23	10
8	27	16	57	31	11	13	46	4.9	22	16	20	11
9	8.6	16	57	31	11	13	44	5.7	21	14	19	10
10	9.0	15	57	31	11	13	44	10	20	15	17	10
11	9.1	14	57	31	11	40	44	13	19	14	16	11
12	12	14	57	31	11	57	53	13	18	13	17	10
13	24	14	37	31	11	61	69	14	24	13	21	11
14	36	13	12	31	11	64	69	34	25	12	21	11
15	37	12	31	31	11	59	54	57	24	12	22	16
16	55	12	57	20	11	55	40	57	24	12	20	16
17	49	12	57	11	11	55	40	47	23	12	18	15
18	14	12	57	11	11	35	40	23	25	12	17	14
19	13	12	57	11	11	14	40	23	59	12	16	15
20	13	12	57	11	11	12	40	36	62	12	14	19
21	13	12	42	11	11	13	41	46	56	12	13	18
22	13	12	31	11	11	70	42	60	68	11	12	17
23	13	12	24	11	11	123	59	69	64	10	11	16
24	13	12	9.4	11	11	145	71	69	55	10	11	15
25	13	12	9.4	11	11	132	70	70	46	10	11	14
26	13	20	9.4	11	12	169	58	78	40	12	11	33
27	13	58	9.4	11	21	153	28	74	35	16	11	41
28	13	79	9.4	11	51	72	28	71	34	17	10	53
29	13	72	9.4	11	71	71	28	44	37	16	9.0	61
30	13	65	9.4	11	---	69	27	2.9	38	15	9.5	53
31	13	---	13	11	---	72	---	3.2	---	14	11	---
TOTAL	669.7	648	1225.8	586	430	1780	1511	1104.7	913.6	501	506.5	565.3
MEAN	21.6	21.6	39.5	18.9	14.8	57.4	50.4	35.6	30.5	16.2	16.3	18.8
MAX	55	79	58	31	71	169	86	78	68	37	30	61
MIN	8.6	12	9.4	11	11	12	27	2.9	2.7	10	9.0	9.6
(†)	-2.1	-0.3	-19.4	-2.6	+23.1	+6.7	-5.0	-3.3	+4.9	-3.7	-0.2	+2.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2000, BY WATER YEAR (WY)

MEAN	19.9	23.1	43.0	42.6	33.7	40.0	43.2	34.4	23.6	21.3	14.5	16.9
MAX	59.5	60.0	148	128	72.4	119	140	83.4	71.2	81.6	31.4	54.3
(WY)	1997	1989	1997	1979	1996	1994	1983	1989	1982	1984	1989	1979
MIN	3.39	3.50	3.01	7.30	.86	.83	.84	.72	4.06	5.18	6.42	6.47
(WY)	1981	1979	1974	1981	1989	1974	1974	1974	1976	1983	1981	1981

† Change in contents from Marsh Creek Reservoir, equivalent in cubic feet per second.

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01480685 MARSH CREEK NEAR DOWNINGTOWN, PA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1973 - 2000	
ANNUAL TOTAL	9020.50		10441.6			
ANNUAL MEAN	24.7		28.5		29.5	
HIGHEST ANNUAL MEAN					52.9	1984
LOWEST ANNUAL MEAN					11.6	1974
HIGHEST DAILY MEAN	167	Sep 25,26	169	Mar 26	462	Jun 18 1982
LOWEST DAILY MEAN	.20	Sep 7	2.7	Jun 3	.20	Sep 7 1999
ANNUAL SEVEN-DAY MINIMUM	2.8	Sep 6	5.5	May 30	.40	Feb 27 1980
INSTANTANEOUS PEAK FLOW			268	Mar 26	a560	Dec 14 1983
INSTANTANEOUS PEAK STAGE			3.15	Mar 26	3.70	Dec 14 1983
10 PERCENT EXCEEDS	64		59		66	
50 PERCENT EXCEEDS	15		17		15	
90 PERCENT EXCEEDS	7.8		11		6.2	

a From rating curve extended above 300 ft³/s.

