

CHEMUNG RIVER BASIN

01518862 COWANESQUE RIVER AT WESTFIELD, PA

LOCATION.--Lat 41°55'23", long 77°31'56", Tioga County, Hydrologic Unit 02050104, on left bank at Westfield, 800 ft downstream from Mill Creek, and 0.5 mi upstream from bridge on State Highway 49.

DRAINAGE AREA.--90.6 mi².

PERIOD OF RECORD.--August 1983 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,337.58 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 1,900 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 24	0645	Ice jam	*4.82	Mar. 4	0015	*2,270	4.38

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	5.1	5.7	e2.5	e100	63	321	72	7.7	5.0	2.6	1.5
2	3.3	4.8	5.4	e2.0	119	55	353	63	8.2	25	2.0	1.2
3	4.1	4.8	5.5	e3.5	191	237	314	56	10	11	1.7	1.1
4	4.4	4.6	5.6	e4.5	167	578	391	51	7.9	5.7	1.1	1.4
5	3.7	4.5	6.1	e3.4	146	252	275	46	7.0	4.0	1.4	1.1
6	3.3	4.7	6.1	e3.3	116	196	218	43	5.7	3.6	1.3	1.3
7	3.6	5.4	6.1	e3.0	108	153	183	41	6.6	5.8	1.1	13
8	46	5.3	5.1	e2.8	e90	e130	158	50	6.0	3.8	1.2	6.0
9	38	5.0	5.4	e3.5	e72	e120	428	62	4.9	3.9	1.2	4.1
10	38	5.9	5.2	e4.5	126	e120	301	46	4.2	27	1.1	3.2
11	17	11	6.6	e5.0	138	e100	280	37	4.6	12	1.1	2.8
12	12	9.1	6.2	e6.0	257	e90	280	32	4.4	6.2	.91	2.0
13	9.3	7.4	5.6	e7.0	196	e82	209	29	3.6	4.2	.89	1.7
14	7.9	6.8	e5.2	e9.0	149	e76	181	26	3.7	3.3	1.3	2.2
15	6.9	6.0	e4.4	e11	e140	e70	161	24	4.3	2.8	1.2	2.1
16	6.4	5.8	e4.6	e12	e130	e76	166	21	4.2	1.9	1.0	36
17	6.4	5.9	e5.6	e13	151	240	172	19	3.6	2.3	.62	69
18	5.8	5.6	e4.9	e20	141	441	144	17	4.4	2.3	.71	20
19	6.3	5.1	e5.4	e80	114	252	126	16	4.4	2.1	.75	10
20	5.8	6.1	e6.0	e60	e96	220	116	16	3.5	2.5	1.3	7.0
21	5.7	7.1	e6.6	e40	e80	217	106	14	3.0	2.1	2.8	9.7
22	7.0	6.7	e70	e60	e70	207	101	13	6.6	2.1	1.7	8.6
23	6.9	6.1	e30	e250	e66	195	258	15	2.7	2.1	1.3	5.9
24	6.7	5.5	e20	e1600	e62	217	218	29	2.2	1.9	1.0	4.7
25	6.2	5.2	e12	428	e60	203	161	31	2.1	3.5	1.0	4.2
26	5.2	7.1	e8.0	246	e54	172	143	21	2.5	14	3.3	3.5
27	5.0	7.7	e6.0	e190	e50	170	124	17	2.1	5.9	10	3.1
28	5.2	6.8	e5.0	213	60	188	108	14	4.5	3.4	6.4	5.2
29	5.5	6.8	e4.0	176	---	211	94	12	12	2.4	3.5	3.4
30	5.2	6.3	e3.5	e130	---	218	82	10	8.8	1.9	2.3	82
31	5.4	---	e3.0	e100	---	230	---	8.6	---	2.0	1.9	---
TOTAL	295.2	184.2	278.8	3689.0	3249	5779	6172	951.6	155.4	175.7	59.68	317.0
MEAN	9.52	6.14	8.99	119	116	186	206	30.7	5.18	5.67	1.93	10.6
MAX	46	11	70	1600	257	578	428	72	12	27	10	82
MIN	3.0	4.5	3.0	2.0	50	55	82	8.6	2.1	1.9	.62	1.1
CFSM	.11	.07	.10	1.31	1.28	2.06	2.27	.34	.06	.06	.02	.12
IN.	.12	.08	.11	1.51	1.33	2.37	2.53	.39	.06	.07	.02	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1999, BY WATER YEAR (WY)

MEAN	59.5	111	117	127	135	195	241	120	63.5	35.5	46.2	24.4
MAX	323	353	278	444	281	300	618	382	361	153	372	111
(WY)	1991	1997	1991	1996	1984	1997	1993	1996	1989	1984	1994	1992
MIN	4.36	6.14	8.99	13.6	21.4	91.2	91.3	17.3	5.18	3.19	1.93	2.39
(WY)	1992	1999	1999	1989	1987	1990	1988	1985	1999	1993	1999	1991

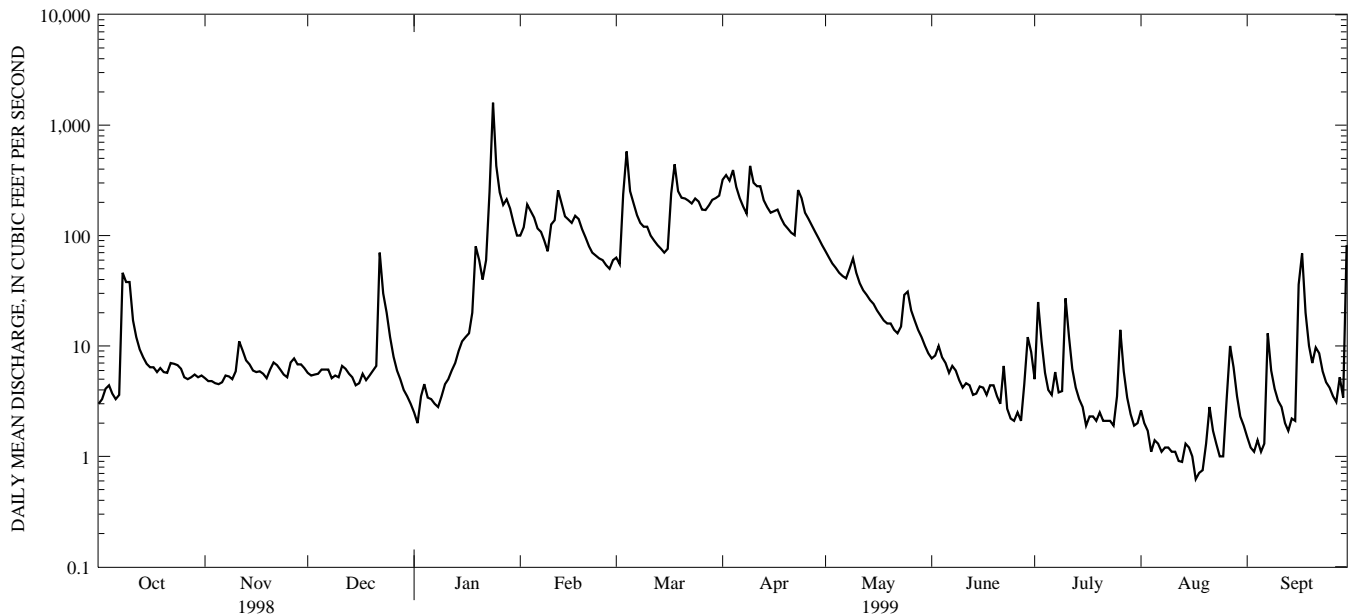
e Estimated.

CHEMUNG RIVER BASIN

01518862 COWANESQUE RIVER AT WESTFIELD, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1983 - 1999	
ANNUAL TOTAL	42437.9		21306.58		106	
ANNUAL MEAN	116		58.4		177	
HIGHEST ANNUAL MEAN					1996	
LOWEST ANNUAL MEAN					58.4 1999	
HIGHEST DAILY MEAN	e2600	Jan 8	e1600	Jan 24	e5400	Jan 19 1996
LOWEST DAILY MEAN	2.6	Sep 15	.62	Aug 17	.53	Sep 16 1991
ANNUAL SEVEN-DAY MINIMUM	2.8	Sep 15	.92	Aug 13	.78	Sep 10 1991
INSTANTANEOUS PEAK FLOW			ab2270	Mar 4	a13000	Jan 19 1996
INSTANTANEOUS PEAK STAGE			c4.82	Jan 24	d11.10	Jan 19 1996
ANNUAL RUNOFF (CFSM)	1.28		.64		1.17	
ANNUAL RUNOFF (INCHES)	17.42		8.75		15.94	
10 PERCENT EXCEEDS	276		193		250	
50 PERCENT EXCEEDS	30		6.8		43	
90 PERCENT EXCEEDS	3.7		2.0		4.8	

- a From rating curve extended above 4,000 ft³/s.
- b Corresponding gage height, 4.38 ft.
- c Ice jam.
- d From floodmark.
- e Estimated.



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999