

## 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 mi<sup>2</sup>.

**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 National Geodetic Vertical Datum of 1929.

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

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 1,900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)	Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)
Mar. 17	1730	2,190	4.63	Aug. 10	0030	3,330	5.58
Mar. 20	2045	2,850	5.19	Sept. 2	0400	3,460	5.67
July 22	0445	2,960	5.28	Sept. 28	0400	2,820	5.17
Aug. 1	0715	*6,440	*7.65				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	9.0	e28	198	e12	e130	227	36	355	41	1390	70
2	4.8	9.7	e24	e180	e13	e130	644	47	187	35	558	915
3	5.6	10	e21	e130	e12	e120	328	43	168	30	732	245
4	6.4	9.4	e18	111	e24	e110	346	37	204	26	648	322
5	7.0	9.1	e22	e94	e50	e110	812	36	216	24	393	179
6	6.2	11	e20	87	e36	e110	403	37	158	22	344	140
7	5.4	12	e18	e80	e30	e110	312	36	167	23	265	111
8	5.6	12	e18	80	e24	e100	272	43	149	22	720	92
9	4.4	11	e16	91	e28	e100	257	38	145	47	536	77
10	4.1	10	e15	96	e22	e90	252	35	116	34	986	63
11	4.6	10	e16	e77	e20	e98	219	38	104	51	474	53
12	5.9	11	e20	e60	e18	e90	187	44	164	28	378	46
13	6.2	14	e22	e52	e18	e98	160	42	182	22	245	48
14	5.9	13	e60	e46	e17	e89	139	39	132	18	187	56
15	5.7	12	e50	e41	e16	e220	123	36	107	15	147	71
16	11	14	e40	e39	e14	685	109	80	89	14	125	112
17	21	72	e24	e32	e16	1080	96	108	75	13	119	58
18	12	73	e20	e26	e20	1030	87	78	85	176	90	46
19	12	45	e80	e30	e30	845	80	68	72	58	73	139
20	16	39	385	e32	e26	1110	73	63	75	36	61	139
21	11	41	195	e24	e22	1480	70	77	855	401	51	86
22	8.6	50	135	e22	e26	1120	83	71	390	1280	46	77
23	7.6	58	108	e22	e200	727	71	58	249	768	40	435
24	6.8	45	85	e20	e240	515	61	113	180	1020	34	163
25	6.7	41	e80	e20	e180	431	55	92	136	424	30	165
26	34	38	e73	e18	e170	487	53	118	105	252	29	135
27	22	35	e66	e15	e160	350	49	107	84	226	40	453
28	15	e30	e60	e15	e140	270	44	101	68	195	29	1280
29	12	30	e55	e17	---	259	40	93	56	136	28	434
30	10	29	e51	e15	---	239	37	79	48	106	42	290
31	9.0	---	77	e14	---	218	---	132	---	84	29	---
TOTAL	298.2	803.2	1902	1784	1584	12551	5689	2025	5121	5627	8869	6500
MEAN	9.62	26.8	61.4	57.5	56.6	405	190	65.3	171	182	286	217
MAX	34	73	385	198	240	1480	812	132	855	1280	1390	1280
MIN	4.1	9.0	15	14	12	89	37	35	48	13	28	46
CFSM	0.11	0.30	0.68	0.64	0.62	4.47	2.09	0.72	1.88	2.00	3.16	2.39
IN.	0.12	0.33	0.78	0.73	0.65	5.15	2.34	0.83	2.10	2.31	3.64	2.67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2003, BY WATER YEAR (WY)

MEAN	50.6	95.0	108	112	131	194	243	118	86.0	39.6	52.6	31.1
MAX	323	353	278	444	281	405	618	382	361	182	372	217
(WY)	1991	1997	1991	1996	1984	2003	1993	1996	1989	2003	1994	2003
MIN	4.36	6.14	8.99	13.6	21.4	91.2	91.3	17.3	5.18	3.19	1.93	2.40
(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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1983 - 2003	
ANNUAL TOTAL	32029.9		52753.4			
ANNUAL MEAN	87.8		145		105	
HIGHEST ANNUAL MEAN					177	
LOWEST ANNUAL MEAN					58.4	
HIGHEST DAILY MEAN	2420	Jun 6	1480	Mar 21	e5400	Jan 19 1996
LOWEST DAILY MEAN	1.9	Sep 9	4.1	Oct 10	0.53	Sep 16 1991
ANNUAL SEVEN-DAY MINIMUM	2.2	Sep 6	5.2	Oct 6	0.78	Sep 10 1991
MAXIMUM PEAK FLOW			a6440	Aug 1	a13000	Jan 19 1996
MAXIMUM PEAK STAGE			7.65	Aug 1	b11.10	Jan 19 1996
ANNUAL RUNOFF (CFSM)	0.97		1.60		1.16	
ANNUAL RUNOFF (INCHES)	13.15		21.66		15.77	
10 PERCENT EXCEEDS	193		381		249	
50 PERCENT EXCEEDS	41		61		43	
90 PERCENT EXCEEDS	4.5		12		5.1	

a From rating curve extended above 4,000 ft<sup>3</sup>/s.

b From floodmark.

e Estimated.

