

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 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 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
June 5	2015	*4,650	*6.29	No other peak greater than base discharge.			

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	6.9	115	e30	267	e56	211	179	72	44	8.1	3.5
2	6.1	6.9	72	e26	179	e50	175	220	53	37	6.7	3.0
3	5.6	8.4	56	e28	e140	103	166	162	45	30	6.3	2.8
4	5.2	7.5	45	e24	121	81	136	132	43	26	5.1	2.6
5	4.4	6.6	39	e22	e100	e68	116	114	1940	22	49	2.4
6	5.0	6.0	33	e18	e90	e66	104	100	2420	19	19	2.2
7	5.1	5.7	29	e20	75	65	91	95	1080	16	11	2.3
8	5.5	5.5	26	e18	68	63	83	83	493	15	8.8	2.0
9	5.1	5.6	28	e16	62	62	82	125	291	24	7.2	1.9
10	4.9	5.8	26	e18	72	96	82	132	208	28	6.4	2.1
11	4.6	5.4	23	e20	178	71	66	87	158	17	5.4	2.3
12	4.3	5.1	21	e18	e100	70	59	256	124	13	4.9	2.3
13	4.6	4.9	25	e16	e85	68	85	581	103	11	6.2	2.4
14	4.9	4.7	51	e16	e78	66	142	682	265	11	4.8	2.1
15	10	4.8	85	e16	e76	62	311	404	820	9.3	4.4	2.6
16	9.4	5.1	57	e16	79	71	180	273	459	8.4	4.4	4.2
17	17	4.9	81	e15	75	62	156	230	302	7.5	4.6	3.6
18	14	4.6	258	e14	e60	68	134	683	239	6.9	4.3	3.2
19	11	4.6	138	e13	e56	71	116	330	176	7.0	3.6	3.1
20	9.0	6.2	108	e14	59	93	106	259	133	7.9	4.6	3.1
21	7.8	6.7	89	e14	93	110	95	214	103	6.6	4.5	2.9
22	7.0	6.0	73	e16	81	90	94	173	82	6.2	5.5	3.0
23	7.3	5.8	65	e18	66	e87	80	141	68	11	12	3.2
24	18	6.0	66	e80	e56	89	67	117	64	12	8.8	2.9
25	16	57	e52	e100	58	88	65	99	61	8.0	7.3	2.8
26	13	60	e45	e86	64	272	62	152	60	8.2	5.7	2.8
27	11	35	e40	72	70	407	53	94	191	7.6	4.7	15
28	11	27	e38	73	61	322	301	76	149	36	4.2	26
29	9.1	50	e38	80	---	294	284	68	75	25	4.2	10
30	8.2	123	e32	155	---	282	219	72	56	13	4.1	7.2
31	7.3	---	e34	152	---	232	---	89	---	9.7	3.9	---
TOTAL	259.2	491.7	1888	1224	2569	3685	3921	6422	10333	503.3	239.7	129.5
MEAN	8.361	16.39	60.90	39.48	91.75	118.9	130.7	207.2	344.4	16.24	7.732	4.317
MAX	18	123	258	155	267	407	311	683	2420	44	49	26
MIN	4.3	4.6	21	13	56	50	53	68	43	6.2	3.6	1.9
CFSM	0.09	0.18	0.67	0.44	1.01	1.31	1.44	2.29	3.80	0.18	0.09	0.05
IN.	0.11	0.20	0.78	0.50	1.05	1.51	1.61	2.64	4.24	0.21	0.10	0.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2002, BY WATER YEAR (WY)

MEAN	52.80	98.61	110.9	115.1	135.0	183.4	245.5	120.6	81.55	32.13	40.96	21.87
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	2.40
(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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1983 - 2002	
ANNUAL TOTAL	25053.1		31665.4			
ANNUAL MEAN	68.6		86.8		103	
HIGHEST ANNUAL MEAN					177	1996
LOWEST ANNUAL MEAN					58.4	1999
HIGHEST DAILY MEAN	1650	Apr 7	2420	Jun 6	e5400	Jan 19 1996
LOWEST DAILY MEAN	e1.4	Aug 14	1.9	Sep 9	0.53	Sep 16 1991
ANNUAL SEVEN-DAY MINIMUM	a1.6	Aug 9	2.2	Sep 6	0.78	Sep 10 1991
MAXIMUM PEAK FLOW			b4650	Jun 5	b13000	Jan 19 1996
MAXIMUM PEAK STAGE			6.29	Jun 5	c11.10	Jan 19 1996
ANNUAL RUNOFF (CFSM)	0.76		0.96		1.14	
ANNUAL RUNOFF (INCHES)	10.29		13.00		15.46	
10 PERCENT EXCEEDS	150		184		243	
50 PERCENT EXCEEDS	20		39		42	
90 PERCENT EXCEEDS	3.1		4.5		4.9	

- a Computed using estimated daily discharges.
- b From rating curve extended above 4,000 ft³/s.
- c From floodmark.
- e Estimated.

