CHEMUNG RIVER BASIN

01520000 COWANESQUE RIVER NEAR LAWRENCEVILLE, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 4l°59'48", long 77°08'25", Tioga County, Hydrologic Unit 02050104, on left bank on SR 4022, 0.5 mi downstream from Cowanesque Dam, 0.8 mi upstream from highway bridge on U.S. Route 15 in Lawrenceville, and 1.4 mi upstream from mouth.

DRAINAGE AREA.--298 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1951 to current year. Prior to October 1951 monthly discharge only, published in WSP 1722.

REVISED RECORDS.--WDR PA-72-1: 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 983.96 ft above National Geodetic Vertical Datum of 1929. Prior to July 1976 at site 1.1 mi upstream at datum 14.07 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since December 1979 by Cowanesque Dam (station 01519995). Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

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	14	20	290	48	731	123	587	635	189	111	29	22
2	14	20	219	38	642	140	514	648	169	85	29	21
3	14	20	167	39	406	177	453	585	130	74	29	22
4	14	20	144	40	390	218	400	449	126	59	30	22
5	16	20	113	40	298	131	330	379	2710	54	31	20
6	17	20	73	40	193	150	295	337	5290	46	28	19
7	17	20	59	55	210	195	295	311	5580	40	27	18
8	17	18	59	66	177	173	295	242	3070	40	26	19
9	16	17	91	66	195	151	239	394	895	49	26	20
10	16	18	81	66	218	162	217	455	641	48	27	20
11	16	18	56	49	451	189	212	315	498	36	25	20
12	16	18	51	40	426	205	193	568	356	36	25	20
13	16	16	60	40	295	219	257	1700	208	36	26	20
14	17	15	111	40	208	185	511	2420	576	37	27	20
15	18	15	143	40	200	168	867	1270	2700	37	29	20
16	18	15	114	50	268	210	587	884	1810	33	28	20
17	19	13	263	62	239	210	474	709	1120	31	27	20
18	18	13	461	61	219	195	453	2340	811	33	27	20
19	16	13	611	45	176	195	376	1240	611	35	28	20
20	16	13	363	36	155	233	288	965	400	30	e27	20
21	17	13	267	36	226	335	259	710	305	29	e26	20
22	17	13	176	49	285	354	278	540	250	31	e26	21
23	16	13	164	54	218	281	281	466	219	33	e25	20
24	17	13	176	67	182	263	200	411	180	33	23	21
25	16	14	130	285	131	306	169	297	170	33	22	22
26	16	13	66	262	170	530	201	411	186	31	24	22
27	16	53	42	173	199	1290	198	347	171	29	24	24
28	20	150	56	128	156	1220	567	306	402	29	24	22
29	22	180	64	197	---	1160	1110	265	310	29	22	21
30	22	198	64	382	---	1030	723	216	162	29	21	22
31	21	---	63	495	---	779	---	218	---	29	21	---
TOTAL	525	1002	4797	3089	7664	11177	11829	21033	30245	1285	809	618
MEAN	16.94	33.40	154.7	99.65	273.7	360.5	394.3	678.5	1008	41.45	26.10	20.60
MAX	22	198	611	495	731	1290	1110	2420	5580	111	31	24
MIN	14	13	42	36	131	123	169	216	126	29	21	18

e Estimated.

CHEMUNG RIVER BASIN

01520000 COWANESQUE RIVER NEAR LAWRENCEVILLE, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2002, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	145.2	263.2	310.4	295.5	398.0	596.2	741.0	379.4	280.6	91.32	94.11	70.81
MAX	1122	1114	864	1198	1027	1527	2773	1115	1222	462	889	315
(WY)	1991	1997	1991	1996	1981	1994	1993	1996	1989	1984	1994	1992
MIN	13.9	14.3	19.1	23.3	57.6	158	231	48.9	17.4	14.1	11.9	5.09
(WY)	1989	1992	1999	1981	1980	1981	1997	1985	1991	1991	1983	1980

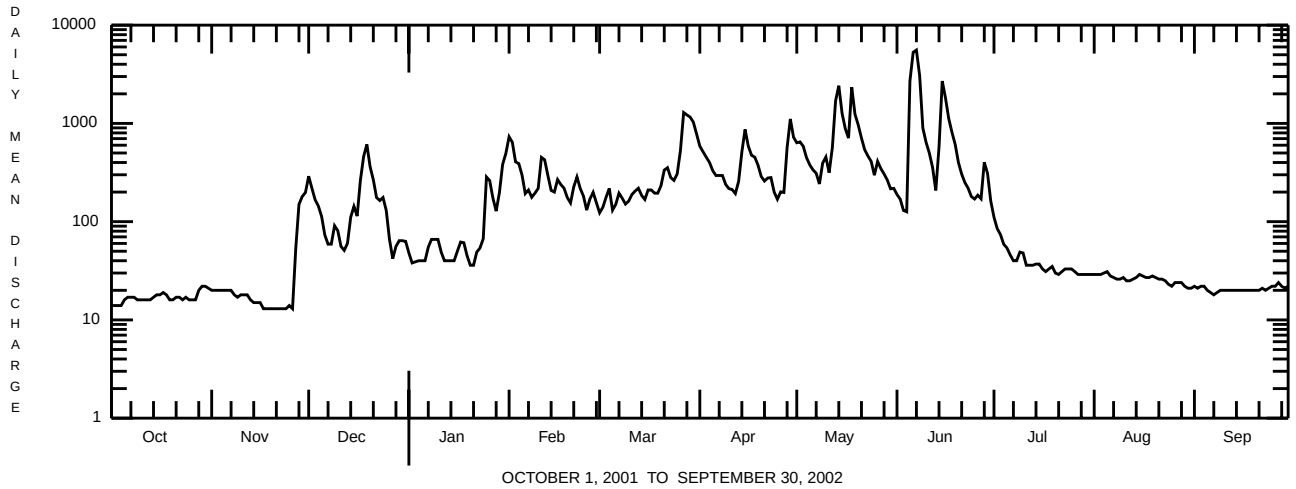
SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1980 - 2002	
ANNUAL TOTAL	69437		94073			
ANNUAL MEAN	190		258		304	
HIGHEST ANNUAL MEAN					498	1984
LOWEST ANNUAL MEAN					165	1999
HIGHEST DAILY MEAN	4760	Apr 8	5580	Jun 7	5840	Jan 23 1996
LOWEST DAILY MEAN	10	Aug 24-27**a**	13	Nov 17-24,26	3.4	Sep 13 1980
ANNUAL SEVEN-DAY MINIMUM	10	Aug 24	13	Nov 17	3.9	Sep 10 1980
MAXIMUM PEAK FLOW			5880	Jun 5	6580	Jan 23 1996
MAXIMUM PEAK STAGE			12.12	Jun 5	12.41	Jan 23 1996
10 PERCENT EXCEEDS	465		580		743	
50 PERCENT EXCEEDS	40		73		101	
90 PERCENT EXCEEDS	13		17		17	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1979, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	121	203	297	288	345	808	707	359	220	61.0	39.1	87.9
MAX	809	826	860	886	1173	1909	1934	797	1366	223	125	1054
(WY)	1956	1978	1973	1952	1976	1964	1958	1960	1972	1977	1977	1975
MIN	3.33	7.95	12.2	13.9	45.6	230	167	55.5	13.8	7.00	3.11	2.52
(WY)	1965	1965	1961	1961	1963	1965	1955	1955	1955	1966	1954	1964

SUMMARY STATISTICS	WATER YEARS 1952 - 1979	
ANNUAL MEAN	294	
HIGHEST ANNUAL MEAN	514	1978
LOWEST ANNUAL MEAN	135	1965
HIGHEST DAILY MEAN	21500	Jun 23 1972
LOWEST DAILY MEAN	.00	Aug 22 1978
ANNUAL SEVEN-DAY MINIMUM	1.5	Sep 22 1964
MAXIMUM PEAK FLOW	**b**43700	Sep 26 1975
MAXIMUM PEAK STAGE	**c**18.13	Sep 26 1975
INSTANTANEOUS LOW FLOW	**d**0.8	Aug 31, Sep 1, 27, 1964
ANNUAL RUNOFF (CFSM)	.99	
ANNUAL RUNOFF (INCHES)	13.41	
10 PERCENT EXCEEDS	694	
50 PERCENT EXCEEDS	95	
90 PERCENT EXCEEDS	10	

a Also Aug. 29, 30.
b From rating curve extended above 6,000 ft^3/s, on basis of slope-area measurement of peak flow.
c From floodmark; site and datum then in use.
d No flow Aug. 22, 1978, during dam construction.



CHEMUNG RIVER BASIN

01520000 COWANESQUE RIVER NEAR LAWRENCEVILLE, PA--Continued
(Pennsylvania Water-Quality Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2002 to current year.

REMARKS.--Other data for the Water-Quality Network can be found on pages 306-334.

COOPERATION.--Samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SAMPLING METHOD, CODES (82398)	OXYGEN, DISSOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
APR 2002													
18...	1300	9813	478	30	11.2	7.1	177	14.4	63	18.5	4.2	44	16.9
JUN													
24...	1200	9813	168	30	10.9	8.7	139	23.2	59	17.7	3.6	46	12.3
AUG													
15...	1330	9813	29	30	7.0	8.4	184	25.5	70	20.5	4.5	56	12.9

Date	RESIDUE AT 105 DEG. C, DISSOLVED (MG/L) (00515)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COPPER, TOTAL RECOVERABLE (µG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (µG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (µG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (µG/L AS MN) (01055)
APR 2002													
18...	84	<2	<.020	.46	<.040	.87	.02	.020	3.4	<10	260	<1.0	50
JUN													
24...	110	6	<.020	.36	<.040	.69	.02	.030	5.0	<10	260	<1.0	40
AUG													
15...	122	8	.160	.22	<.040	.82	.02	.050	5.3	<10	170	<1.0	170

Date	NICKEL, TOTAL RECOVERABLE (µG/L AS NI) (01067)	ZINC, TOTAL RECOVERABLE (µG/L AS ZN) (01092)
APR 2002		
18...	<50	<10
JUN		
24...	<50	<10
AUG		
15...	<50	<10