

CONESTOGA RIVER BASIN

**01576754 CONESTOGA RIVER AT CONESTOGA, PA
(Pennsylvania Water-Quality Network Station)**

LOCATION.--Lat 39°56'47", long 76°22'05", Lancaster County, Hydrologic Unit 02050306, on left bank on SR 3030, 1,500 ft downstream from Little Conestoga Creek, 1.0 mi west of Conestoga, and 2.6 mi upstream from mouth.

DRAINAGE AREA.--470 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to current year.

REVISED RECORDS.--WDR PA-86-2: 1985(M).

GAGE.--Water-stage recorder. Datum of gage is 180.45 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. 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 4,500 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
May 14	1145	*6,700	*7.15	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	149	109	114	e85	224	119	239	432	282	201	97	138
2	143	97	113	e95	225	121	241	425	264	182	86	141
3	139	100	120	e95	223	286	226	1220	247	167	87	127
4	122	101	106	e95	188	311	218	610	232	158	111	113
5	114	107	107	e100	170	226	220	416	233	143	148	103
6	132	98	105	106	162	174	199	355	405	132	107	90
7	117	95	102	140	155	154	193	326	1400	133	95	82
8	113	96	105	141	150	148	188	307	568	136	90	75
9	110	93	152	147	144	140	181	363	352	125	83	72
10	120	93	152	135	140	150	192	510	304	146	78	71
11	110	96	147	206	144	152	201	368	274	132	75	68
12	109	94	136	451	138	149	188	296	257	120	72	63
13	107	95	118	288	141	167	180	488	248	108	74	62
14	115	94	143	201	131	167	197	4520	316	113	77	59
15	156	94	171	169	128	169	302	1230	457	114	70	62
16	129	96	176	154	127	163	522	761	373	113	70	86
17	156	95	157	142	124	149	303	613	281	106	63	82
18	136	94	177	138	118	190	267	938	250	100	73	78
19	125	77	163	134	125	247	230	1250	346	96	73	83
20	113	92	173	141	122	549	223	678	356	91	75	73
21	115	99	145	136	118	969	216	566	260	91	81	67
22	108	104	129	137	120	491	243	498	228	89	92	78
23	108	100	122	142	119	334	357	456	210	95	88	92
24	110	98	129	394	119	262	293	419	199	98	119	85
25	108	113	126	612	117	235	238	397	192	116	168	78
26	101	235	123	356	117	225	211	376	184	102	124	80
27	98	237	123	242	127	424	220	369	188	96	126	429
28	96	161	112	202	118	450	433	366	435	98	114	716
29	107	128	113	179	---	301	1210	346	415	164	217	411
30	104	115	106	176	---	247	646	323	244	139	174	204
31	96	---	e75	209	---	229	---	299	---	114	145	---
TOTAL	3666	3306	4040	5948	4034	8098	8777	20521	10000	3818	3152	3968
MEAN	118	110	130	192	144	261	293	662	333	123	102	132
MAX	156	237	177	612	225	969	1210	4520	1400	201	217	716
MIN	96	77	75	85	117	119	180	296	184	89	63	59
CFSM	0.25	0.23	0.28	0.41	0.31	0.56	0.62	1.41	0.71	0.26	0.22	0.28
IN.	0.29	0.26	0.32	0.47	0.32	0.64	0.69	1.62	0.79	0.30	0.25	0.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2002, BY WATER YEAR (WY)

MEAN	388	510	678	743	765	1063	833	729	504	456	327	409
MAX	1183	1348	2339	1887	1264	3145	2508	2148	1277	1202	659	1252
(WY)	1997	1997	1997	1996	1986	1994	1993	1989	1989	1988	1986	1987
MIN	118	110	130	192	144	261	274	308	203	107	102	132
(WY)	2002	2002	2002	2002	2002	2002	1985	1999	1999	1999	2002	2002

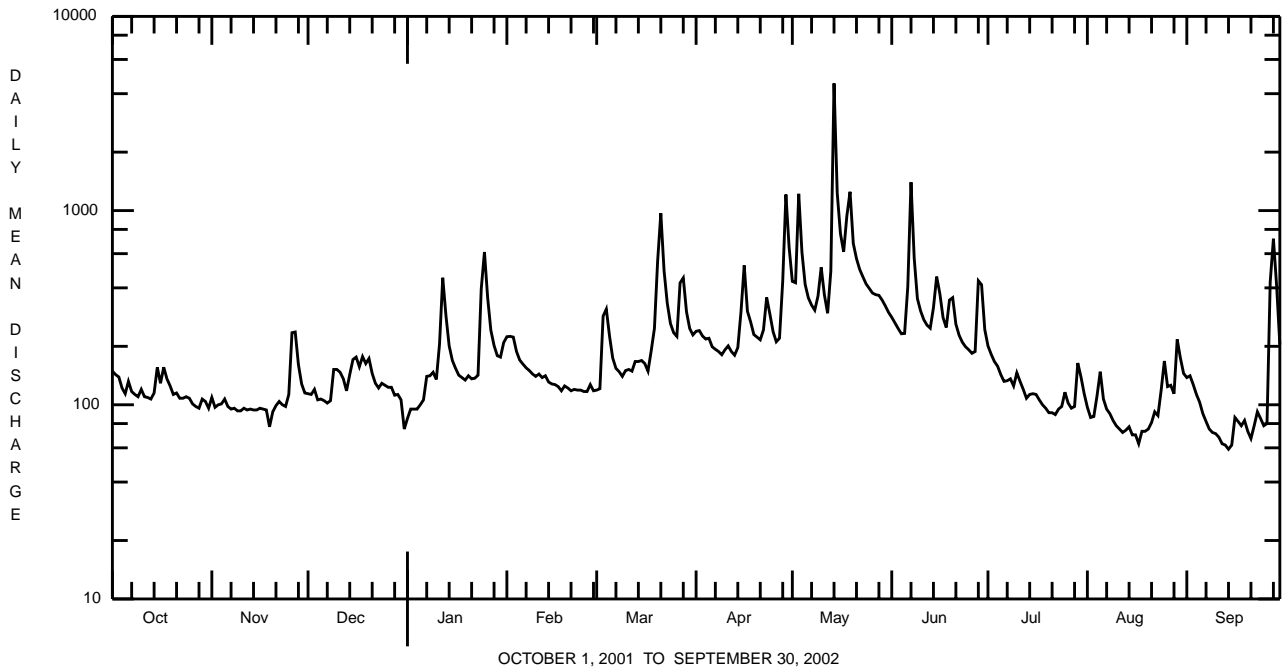
e Estimated.

CONESTOGA RIVER BASIN

01576754 CONESTOGA RIVER AT CONESTOGA, PA--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1985 - 2002	
ANNUAL TOTAL	133916		79328			
ANNUAL MEAN	367		217		616	
HIGHEST ANNUAL MEAN					993	
LOWEST ANNUAL MEAN					217	
HIGHEST DAILY MEAN	2180	Mar 30	4520	May 14	14100	Sep 17 1999
LOWEST DAILY MEAN	e75	Dec 31	59	Sep 14	58	Aug 7 1999
ANNUAL SEVEN-DAY MINIMUM	92	Nov 14	65	Sep 9	65	Sep 9 2002
MAXIMUM PEAK FLOW			6700	May 14	19000	Sep 9 1987
MAXIMUM PEAK STAGE			7.15	May 14	14.37	Sep 9 1987
INSTANTANEOUS LOW FLOW			53	Sep 14,15	52	Aug 7 1999
ANNUAL RUNOFF (CFSM)	0.78		0.46		1.31	
ANNUAL RUNOFF (INCHES)	10.60		6.28		17.82	
10 PERCENT EXCEEDS	759		413		1150	
50 PERCENT EXCEEDS	264		141		421	
90 PERCENT EXCEEDS	106		87		169	

e Estimated.



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01576754 CONESTOGA RIVER AT CONESTOGA, 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 ANA-LYZING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM-PLING METHOD, CODES (82398)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
APR 2002													
10...	1300	9813	188	40	12.7	8.7	771	16.3	250	65.6	20.4	168	60.6
JUN													
17...	1400	9813	269	40	8.0	8.0	645	23.1	240	64.7	19.2	162	48.0
AUG													
26...	1330	9813	121	40	7.9	8.0	900	25.2	230	55.7	21.3	164	78.3

Date	RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L) (00515)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COPPER, TOTAL RECOV-ERABLE (µG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (µG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (µG/L AS MN) (01055)
APR 2002													
10...	540	22	<.020	5.24	<.040	5.8	.08	.140	5.1	<10	130	<1.0	20
JUN													
17...	514	26	.030	6.74	<.040	6.9	.25	.310	4.1	<10	1000	2.1	70
AUG													
26...	548	2	<.020	4.11	<.200	4.5	.42	.470	5.4	<10	160	1.3	20

Date	NICKEL, TOTAL RECOV-ERABLE (µG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)
APR 2002		
10...	<50	10
JUN		
17...	<50	20
AUG		
26...	<50	<10