



2005 Water Year
CONESTOGA RIVER BASIN
01576500 Conestoga River at Lancaster, PA

Latitude: 40° 03 ' 00"

Longitude: 076° 16 ' 39"

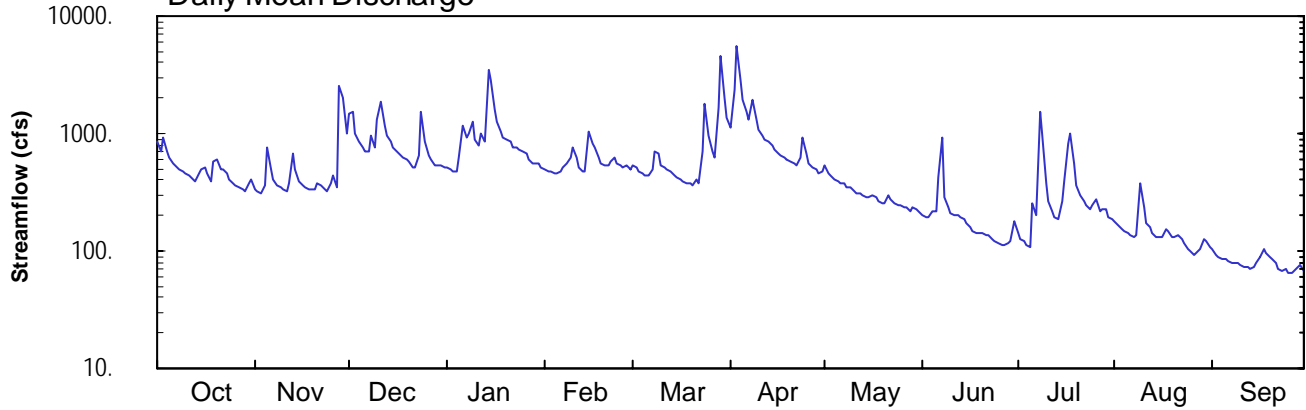
Hydrologic Unit Code: 02050306

Lancaster County

Datum: 245.63 feet

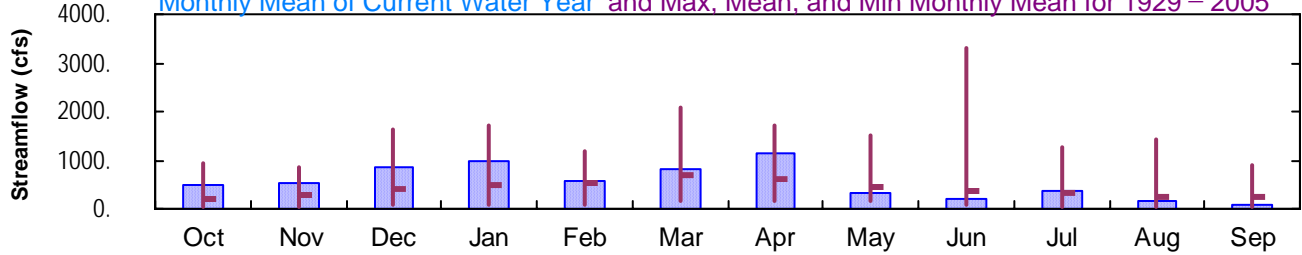
Drainage Area: 324. mi²

Daily Mean Discharge

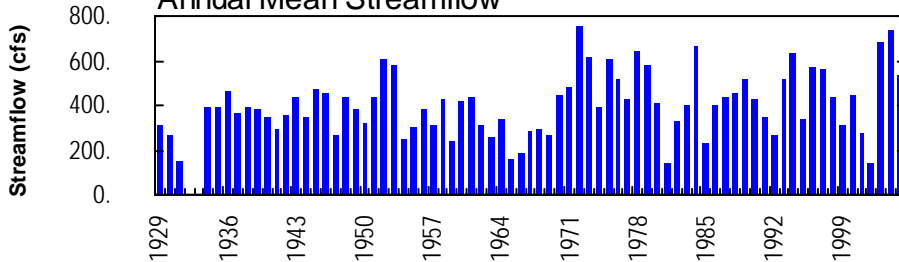


Monthly Statistics

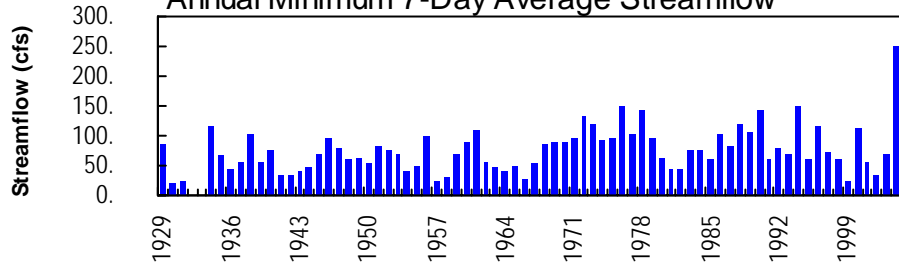
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1929 – 2005



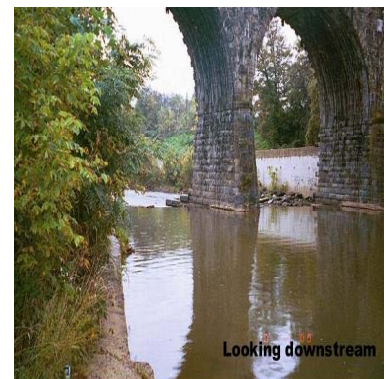
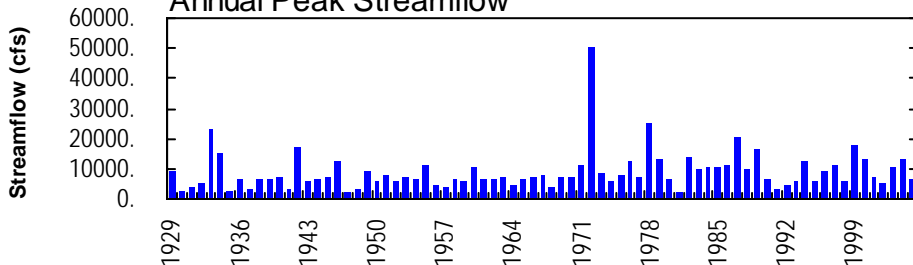
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



01576500-Conestoga River at Lancaster

CONESTOGA RIVER BASIN

01576500 CONESTOGA RIVER AT LANCASTER, PA

LOCATION.--Lat 40°03'00", long 76°16'39", Lancaster County, Hydrologic Unit 02050306, on left bank at Penn Central Railroad bridge, 50 ft downstream from small right-bank tributary, 500 ft downstream from diversion dam at city water plant, and 0.7 mi east of Lancaster.

DRAINAGE AREA.--324 mi².

PERIOD OF RECORD.--October 1928 to March 1932; August, September 1932; April 1933 to current year. Prior to October 1973, published as Conestoga Creek at Lancaster.

REVISED RECORDS.--WSP 1202: Drainage area. WSP 1502: 1943(P). WDR PA-87-2: 1985-86(P) (monthly and yearly summaries) WDR PA-90-2: 1972(M).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 245.63 ft above National Geodetic Vertical Datum of 1929. Prior to May 1, 1933, at site 600 ft upstream at different datum, excluding small tributary.

REMARKS.--Records fair. Regulation at low flow by water plant and mill above station. Diversion upstream for municipal supply of city of Lancaster. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

COOPERATION.--Records of diversion provided by city of Lancaster.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 3,800 ft³/s (revised) and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Nov. 28	2000	4,910	8.76	Mar. 29	0600	*6,740	*10.28
Jan. 14	2100	6,100	9.76	Apr. 3	1100	6,290	9.92

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	869	338	1450	519	494	534	1140	542	199	143	180	102
2	712	322	1520	493	477	524	e2350	465	191	126	166	94
3	918	312	1010	472	475	483	e5630	435	191	120	152	90
4	705	365	853	479	461	455	2910	405	217	112	146	87
5	618	767	766	624	466	446	1950	388	222	106	141	86
6	556	499	696	1150	483	447	1550	374	e416	257	135	83
7	528	401	699	924	514	502	1320	370	e936	205	130	80
8	503	369	944	990	547	697	e1920	355	292	e1560	139	80
9	480	346	764	1280	626	668	1320	354	232	e948	377	78
10	464	332	1320	892	756	543	1080	329	208	374	238	76
11	445	325	1840	803	621	506	977	315	200	267	173	74
12	417	371	1170	1010	515	499	894	306	198	221	162	74
13	399	685	955	871	479	478	842	299	194	197	144	71
14	465	488	851	e3430	475	448	802	286	186	185	133	72
15	504	387	768	2820	1050	424	738	283	172	266	129	79
16	515	361	709	1620	817	403	686	298	158	399	131	88
17	457	347	669	1290	770	393	655	286	149	830	157	103
18	395	337	636	1040	628	384	630	266	142	1000	146	95
19	e575	330	612	933	548	374	601	254	141	551	130	91
20	606	330	571	898	530	369	573	254	141	365	133	84
21	490	372	518	839	539	410	554	299	138	297	137	78
22	489	358	516	750	570	383	526	273	136	265	124	70
23	457	331	658	749	618	695	630	252	126	243	115	69
24	402	328	1570	718	564	1790	940	246	121	225	105	70
25	381	375	843	703	542	952	665	244	116	243	102	66
26	362	440	658	666	521	714	552	238	113	272	93	65
27	351	352	593	614	526	632	520	235	112	220	95	68
28	341	e2520	538	549	503	e1640	500	218	117	226	104	72
29	327	1990	542	551	---	e4670	459	235	122	228	124	77
30	371	1020	529	549	---	1990	473	228	181	197	121	68
31	409	---	519	525	---	1380	---	212	---	188	108	---
TOTAL	15511	16098	26287	29751	16115	24833	34387	9544	6067	10836	4470	2390
MEAN	500	537	848	960	576	801	1146	308	202	350	144	79.7
MAX	918	2520	1840	3430	1050	4670	5630	542	936	1560	377	103
MIN	327	312	516	472	461	369	459	212	112	106	93	65
CFSM	1.54	1.66	2.62	2.96	1.78	2.47	3.54	0.95	0.62	1.08	0.45	0.25
IN.	1.78	1.85	3.02	3.42	1.85	2.85	3.95	1.10	0.70	1.24	0.51	0.27
(†)	17.2	16.7	17.6	17.7	18.0	17.2	17.0	15.7	17.4	16.7	17.8	17.2

† Diversion for municipal supply of city of Lancaster, equivalent in cubic feet per second.

e Estimated.

CONESTOGA RIVER BASIN

01576500 CONESTOGA RIVER AT LANCASTER, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF DAILY RECORD, BY WATER YEAR (WY)

MEAN	219	287	409	477	548	686	629	454	385	313	244	229
MAX	930	866	1618	1699	1191	2089	1720	1529	3286	1253	1427	908
(WY)	1980	1997	1997	1979	1979	1994	1993	1989	1972	2004	1933	1987
MIN	33.2	41.1	70.3	61.3	77.0	155	166	148	92.0	50.3	30.3	40.9
(WY)	1931	1931	2002	1981	2002	2002	1985	1965	1965	1999	1957	1957

SUMMARY STATISTICS FOR 2004 CALENDAR YEAR FOR 2005 WATER YEAR FOR PERIOD OF DAILY RECORD

ANNUAL TOTAL	255568		196289		405	
ANNUAL MEAN	698		538		138	
HIGHEST ANNUAL MEAN					753	
LOWEST ANNUAL MEAN					138	
HIGHEST DAILY MEAN	7700	Jul 28	e5630	Apr 3	47600	Jun 23 1972
LOWEST DAILY MEAN	210	Jul 11	65	Sep 26	7.0	Aug 11 1930
ANNUAL SEVEN-DAY MINIMUM	249	May 29	69	Sep 22	20	Aug 9 1930
MAXIMUM PEAK FLOW			6740	Mar 29	a50300	Jun 23 1972
MAXIMUM PEAK STAGE			10.28	Mar 29	b27.90	Jun 23 1972
ANNUAL RUNOFF (CFSM)	2.16		1.66		1.25	
ANNUAL RUNOFF (INCHES)	29.34		22.54		16.98	
10 PERCENT EXCEEDS	1170		994		817	
50 PERCENT EXCEEDS	488		416		264	
90 PERCENT EXCEEDS	303		107		85	

- a From rating curve extended above 13,000 ft³/s on basis of slope-area measurement at gage height 17.50 ft and contracted-opening measurement of peak flow.
- b From floodmark.
- c Estimated.

