

## WEST CONEWAGO CREEK BASIN

01574000 WEST CONEWAGO CREEK NEAR MANCHESTER, PA  
(Pennsylvania Water-Quality Network Station)

**LOCATION.**--Lat 40°04'56", long 76°43'13", York County, Hydrologic Unit 02050306, on left bank 500 ft upstream from bridge on State Highway 181, 0.6 mi downstream from Little Conewago Creek, and 1.5 mi north of Manchester.

**DRAINAGE AREA.**--510 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1928 to current year. Prior to October 1931, published as Conewago Creek near Manchester.

**REVISED RECORDS.**--WSP 741: Drainage area. WSP 1502: 1930, 1936.

**GAGE.**--Water-stage recorder. Datum of gage is 263.68 ft above National Geodetic Vertical Datum of 1929.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Occasional slight regulation since October 1959 by Conewago Lake about 13 miles upstream, capacity, 3,570 acre-ft. Gage height record affected by backwater from the Susquehanna River on Sept. 18-21. Satellite telemetry at station.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 10,800 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)
Jan. 14	1845	14,000	14.21	Apr. 3	0515	*15,000	*14.90
Mar. 29	0415	15,000	14.89				

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	1750	380	2190	505	e360	646	1690	657	163	165	172	365
2	1290	324	2490	504	e340	655	5780	623	159	182	160	207
3	987	291	1320	467	e350	592	11500	472	160	121	145	135
4	832	322	1000	524	e370	501	5030	409	184	103	133	111
5	688	774	859	964	391	476	3040	371	224	89	120	91
6	548	699	776	2720	454	535	1760	346	215	339	113	82
7	493	454	708	1940	542	1010	1360	329	950	357	112	75
8	440	385	957	1850	630	1680	1880	314	601	4020	431	70
9	402	334	831	2580	815	1850	1550	298	314	2560	365	69
10	381	293	4220	1470	1380	1040	1080	280	545	711	187	67
11	362	276	5920	1220	1110	878	937	261	276	426	163	65
12	334	323	2180	1530	667	845	833	248	226	300	159	62
13	311	735	1580	1380	569	783	756	233	190	244	138	59
14	322	762	1240	8890	571	692	693	219	235	206	128	48
15	354	541	967	5980	2070	621	626	217	258	259	114	47
16	375	481	838	2490	1540	562	571	219	203	1020	122	51
17	357	421	771	1690	1280	532	531	210	158	1410	143	59
18	309	380	693	1210	915	508	511	198	140	1430	251	54
19	330	363	e560	944	683	482	485	181	127	697	165	52
20	357	489	e470	841	583	468	458	190	114	487	144	50
21	444	563	e400	785	592	513	436	348	108	420	156	49
22	526	531	524	644	697	500	411	394	103	608	136	49
23	468	440	730	503	735	1950	583	263	98	535	117	47
24	396	484	2540	e400	657	6110	1610	234	99	318	104	46
25	369	2030	1010	e410	600	2290	939	244	99	379	90	43
26	338	1700	638	e420	595	1540	631	265	95	1160	80	42
27	306	977	548	e400	605	1240	523	232	87	411	75	43
28	285	1070	447	e380	619	5010	483	199	80	291	93	41
29	272	1540	527	e370	---	10700	423	185	78	249	110	41
30	546	901	547	e390	---	4060	442	174	79	213	159	42
31	425	---	490	e370	---	2530	---	171	---	189	147	---
TOTAL	15597	19263	38971	44771	20720	51799	47552	8984	6368	19899	4732	2262
MEAN	503	642	1257	1444	740	1671	1585	290	212	642	153	75.4
MAX	1750	2030	5920	8890	2070	10700	11500	657	950	4020	431	365
MIN	272	276	400	370	340	468	411	171	78	89	75	41
CFSM	0.99	1.26	2.46	2.83	1.45	3.28	3.11	0.57	0.42	1.26	0.30	0.15
IN.	1.14	1.41	2.84	3.27	1.51	3.78	3.47	0.66	0.46	1.45	0.35	0.16

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

MEAN	288	471	693	787	952	1283	994	656	447	259	229	286
MAX	1783	1534	2578	3126	2526	4510	3273	2874	4445	1419	2423	3862
(WY)	1977	1933	1997	1996	1998	1994	1993	1989	1972	1969	1933	1975
MIN	9.71	14.7	43.3	37.7	86.2	345	253	135	52.7	12.2	13.3	12.0
(WY)	1942	1932	1966	1981	1934	1931	1995	1941	1965	1966	1930	1964

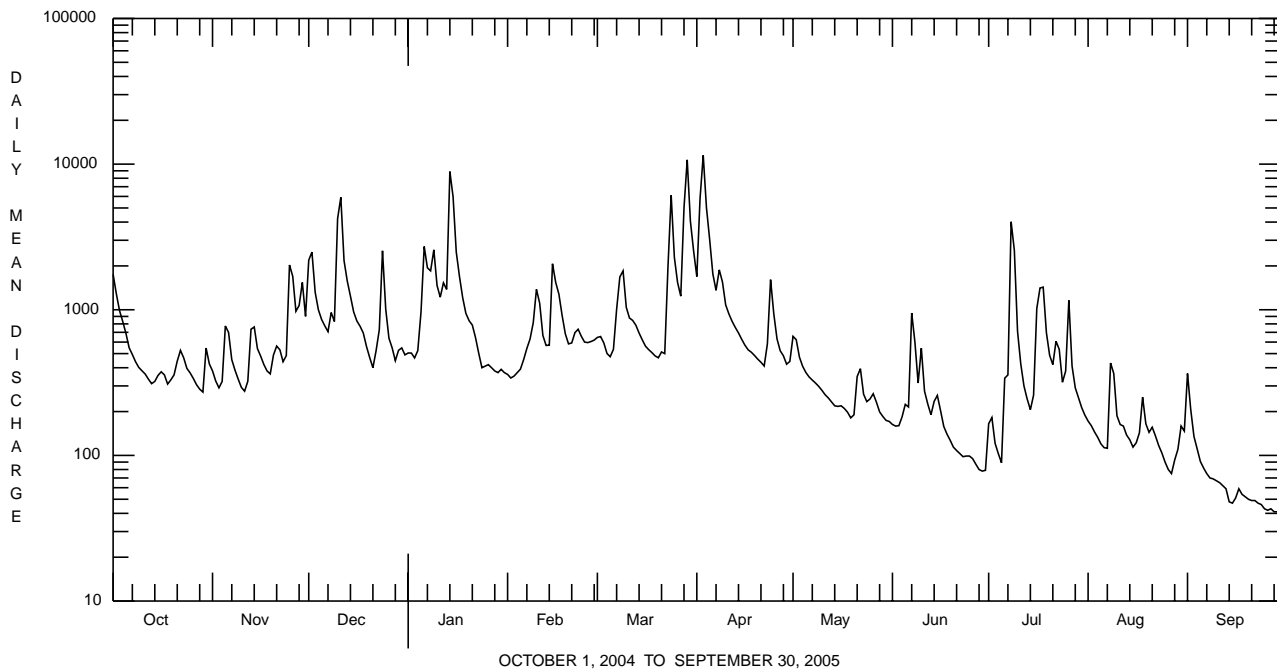
e Estimated.

WEST CONEWAGO CREEK BASIN

01574000 WEST CONEWAGO CREEK NEAR MANCHESTER, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1929 - 2005	
ANNUAL TOTAL	343985		280918		610	
ANNUAL MEAN	940		770		1194	
HIGHEST ANNUAL MEAN					154	2003
LOWEST ANNUAL MEAN					154	1931
HIGHEST DAILY MEAN	13000	Sep 29	11500	Apr 3	64000	Sep 26 1975
LOWEST DAILY MEAN	125	Sep 7	41	Sep 28,29	2.0	Aug 8 1930
ANNUAL SEVEN-DAY MINIMUM	151	Sep 2	43	Sep 24	3.9	Aug 3 1966
MAXIMUM PEAK FLOW			15000	Mar 29, Apr 3	<b>a</b> 96200	Sep 26 1975
MAXIMUM PEAK STAGE			14.90	Apr 3	<b>b</b> 32.11	Sep 26 1975
INSTANTANEOUS LOW FLOW			39	Sep 26 <sup>c</sup>	1.9	Oct 13 1941
ANNUAL RUNOFF (CFSM)	1.84		1.51		1.20	
ANNUAL RUNOFF (INCHES)	25.09		20.49		16.25	
10 PERCENT EXCEEDS	1870		1640		1330	
50 PERCENT EXCEEDS	548		431		255	
90 PERCENT EXCEEDS	219		97		47	

- a** From rating curve extended above 45,000 ft<sup>3</sup>/s on basis of slope-area computation at gage height 30.26 ft.
- b** From floodmark.
- c** Also Sept. 28-30.



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## WATER-QUALITY RECORDS

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

REMARKS.--Samples were collected using a D-Frame net with a mesh size of 500 µm. Samples represent counts per 100 animal (approximate) subsamples.

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.

BIOLOGICAL DATA  
BENTHIC MACROINVERTEBRATES

Date	10/19/04
Benthic macroinvertebrate	Count
Platyhelminthes	
Turbellaria (FLATWORMS)	
Tricladida	
Planariidae	3
Mollusca	
Gastropoda (SNAILS)	
Basommatophora	
Ancylidae	
<i>Ferrissia</i>	1
Arthropoda	
Oligochaeta (AQUATIC EARTHWORMS)	
Tubificida	
Naididae	1
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Baetis</i>	1
Heptageniidae	
<i>Stenonema</i>	10
Isonychiidae	
<i>Isonychia</i>	4
Potamanthidae	
<i>Anthopotamus</i>	2
Plecoptera (STONEFLIES)	
Taeniopterygidae	
<i>Taeniopteryx</i>	69
Trichoptera (CADDISFLIES)	
Hydropsychidae	6
<i>Cheumatopsyche</i>	4
<i>Hydropsyche</i>	2
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Optioservus</i>	1
<i>Stenelmis</i>	5
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	23
Total Organisms	132
Total Taxa	14