



2005 Water Year
CONEWANGO CREEK BASIN
03015000 Conewango Creek at Russell, PA

Latitude: 41° 56' 17"

Longitude: 079° 08' 00"

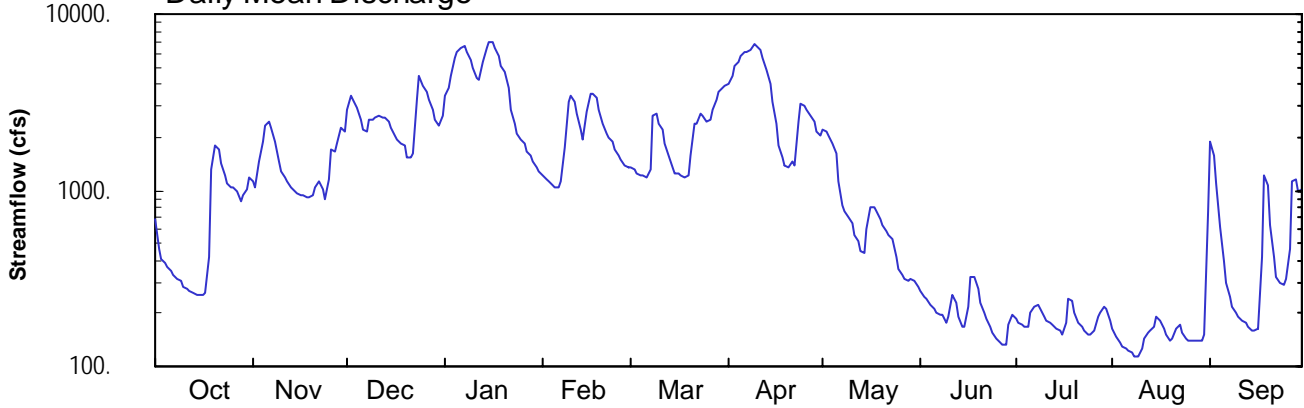
Hydrologic Unit Code: 05010002

Warren County

Datum: 1221.77 feet

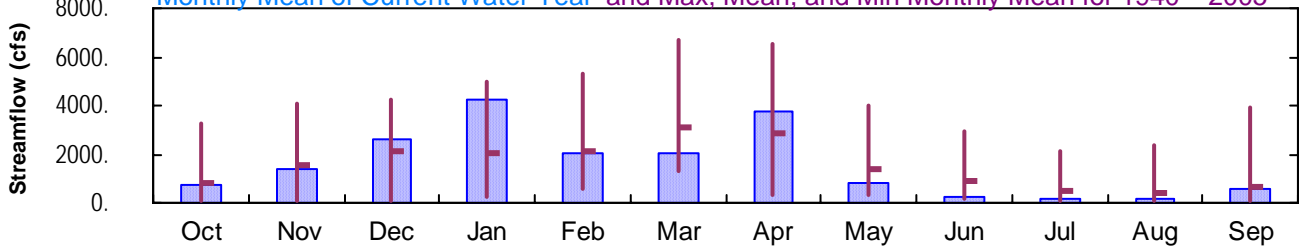
Drainage Area: 816. mi²

Daily Mean Discharge

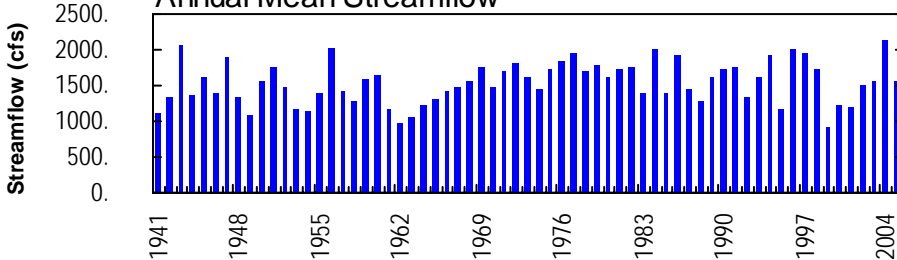


Monthly Statistics

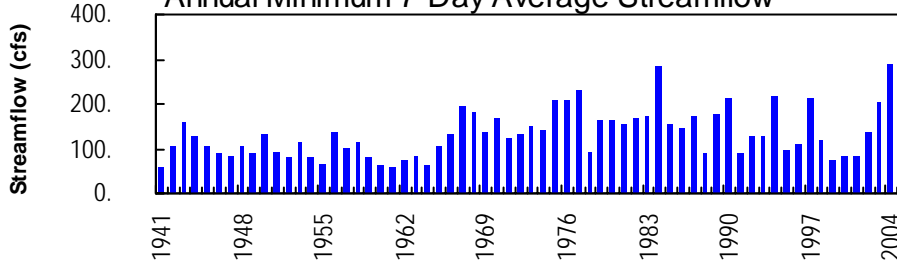
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1940 – 2005



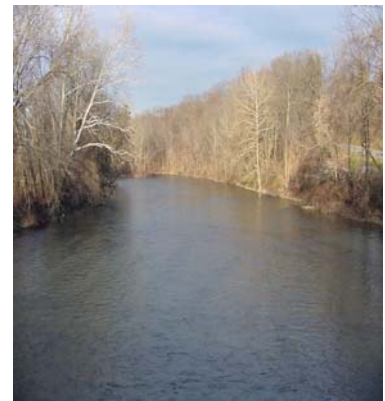
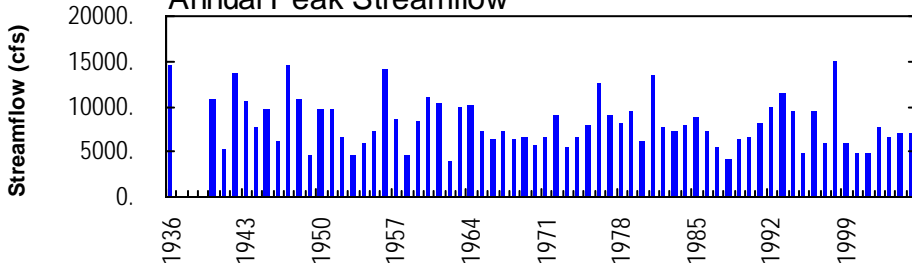
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



CONEWANGO CREEK BASIN

**03015000 CONEWANGO CREEK AT RUSSELL, PA
(Pennsylvania Water-Quality Network Station)**

LOCATION.--Lat 41°56'17", long 79°08'00", Warren County, Hydrologic Unit 05010002, on left bank of highway bridge on SR 957 at Russell, 0.5 mi upstream from Akeley Run, and 8.0 mi upstream from mouth.

DRAINAGE AREA.--816 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for October, November 1939, published in WSP 1305.

REVISED RECORD.--WSP 1083: 1936 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,221.77 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 10, 1941, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since November 1949 by Chautauqua Lake (station 03013946). Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1936 reached a stage of 10.9 ft from floodmark, discharge, 14,600 ft³/s.

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	682	1110	2900	3460	e1220	1340	4040	2240	267	187	164	1910
2	461	1030	3460	3790	e1150	1310	4520	2130	249	178	149	1600
3	411	1470	3240	4510	e1110	1250	5090	2020	241	172	138	1090
4	388	1890	2970	5660	e1070	1200	5400	1830	225	168	131	616
5	370	2330	2520	6090	e1050	1220	5830	1630	212	168	126	399
6	347	2440	2190	6400	e1030	1200	6160	1120	204	201	123	299
7	329	2260	2150	6640	e1110	1320	6090	831	198	217	120	248
8	317	1870	2540	6160	1770	2690	6270	764	196	223	114	216
9	304	1480	2520	5540	3170	2710	6690	701	179	214	114	201
10	286	1280	2560	4910	3480	2410	6670	644	190	193	125	192
11	274	1190	2630	4330	3150	2210	6240	558	256	183	142	183
12	266	1110	2600	4210	2720	1870	5620	510	228	177	155	176
13	263	1050	2570	5330	2230	1580	4870	453	190	171	158	170
14	257	1000	2470	6420	1940	1350	4050	435	168	165	170	162
15	256	963	2270	6960	2830	1240	3180	600	169	159	192	160
16	256	937	2070	6920	3500	1230	2380	801	216	150	182	163
17	264	927	1930	6490	3550	1200	1780	793	319	177	165	419
18	420	920	1830	5860	3320	1200	1520	763	318	242	150	1230
19	1310	920	1780	5050	2840	1200	1400	685	273	237	140	1060
20	1810	930	1540	4650	2390	1580	1340	630	232	200	145	632
21	1700	1050	1530	3810	2120	2400	1470	584	202	179	165	417
22	1440	1120	1630	2880	2010	2370	1400	551	185	169	171	322
23	1230	1010	3290	2360	1880	2750	2470	528	167	162	157	298
24	1100	900	4510	2120	1700	2630	3080	417	154	152	143	288
25	1050	1160	e3970	e1960	1560	2430	3050	360	144	152	140	313
26	1050	1690	e3580	e1830	1500	2550	2850	335	136	158	140	458
27	998	1650	e3260	e1680	1380	2850	2660	313	134	190	140	1120
28	858	1860	e2890	e1560	1340	3310	2440	303	134	201	140	1150
29	945	2270	e2530	e1450	---	3670	2140	312	174	221	140	982
30	1020	2150	e2330	e1360	---	3830	2050	303	195	213	153	1020
31	1180	---	2630	e1290	---	3960	---	284	---	184	760	---
TOTAL	21842	41967	80890	131680	58120	64060	112750	24428	6155	5763	5152	17494
MEAN	705	1399	2609	4248	2076	2066	3758	788	205	186	166	583
MAX	1810	2440	4510	6960	3550	3960	6690	2240	319	242	760	1910
MIN	256	900	1530	1290	1030	1200	1340	284	134	150	114	160
CFSM	0.86	1.71	3.20	5.21	2.54	2.53	4.61	0.97	0.25	0.23	0.20	0.71
IN.	1.00	1.91	3.69	6.00	2.65	2.92	5.14	1.11	0.28	0.26	0.23	0.80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2005, BY WATER YEAR (WY)

MEAN	855	1588	2125	2049	2098	3130	2823	1407	877	484	419	620
MAX	3276	4070	4261	4986	5320	6715	6503	4016	2926	2142	2391	3891
(WY)	1991	1986	1978	1998	1976	1945	1947	1943	1986	1986	1977	1977
MIN	66.1	119	111	215	533	1344	353	296	177	108	82.4	79.9
(WY)	1964	1961	1961	1961	1963	1960	1946	1985	1949	1963	1954	1941

e Estimated.

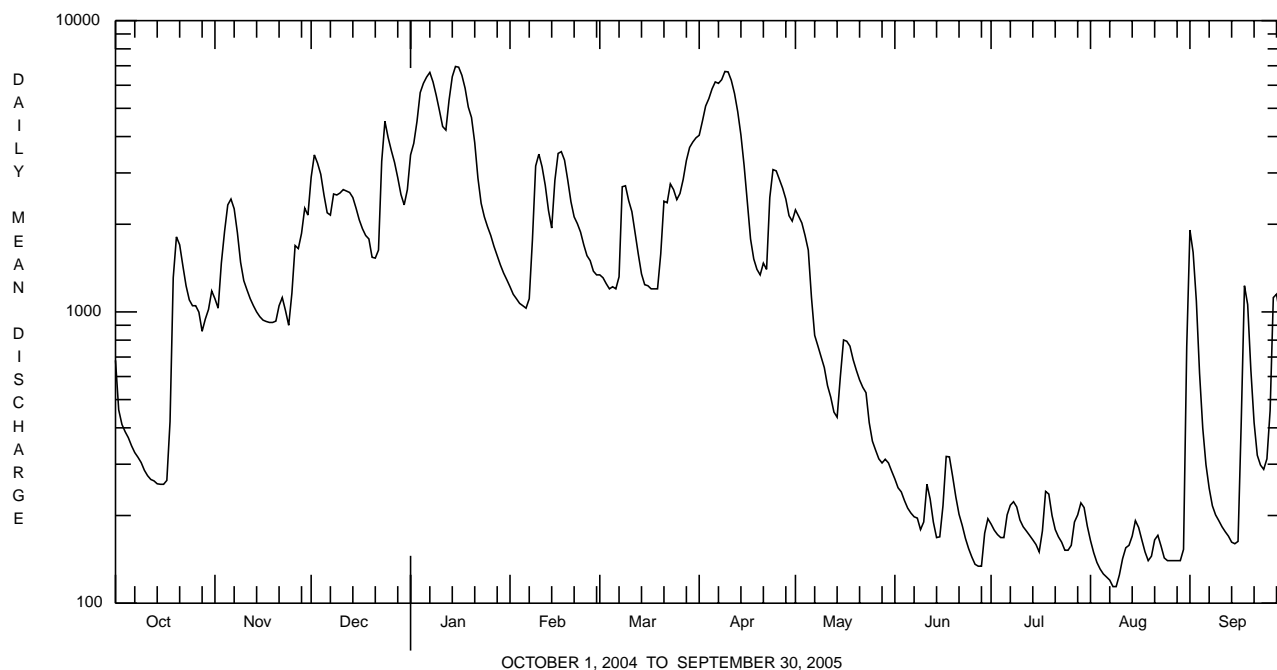
CONEWANGO CREEK BASIN

03015000 CONEWANGO CREEK AT RUSSELL, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1940 - 2005	
ANNUAL TOTAL	725907		570301			
ANNUAL MEAN	1983		1562		1536	
HIGHEST ANNUAL MEAN					2151	
LOWEST ANNUAL MEAN					915	
HIGHEST DAILY MEAN	7010		6960		14700	
LOWEST DAILY MEAN	236		114		57	
ANNUAL SEVEN-DAY MINIMUM	262		122		59	
MAXIMUM PEAK FLOW			7030		a14900	
MAXIMUM PEAK STAGE			8.12		b10.88	
ANNUAL RUNOFF (CFSM)	2.43		1.91		1.88	
ANNUAL RUNOFF (INCHES)	33.09		26.00		25.58	
10 PERCENT EXCEEDS	4430		3820		3800	
50 PERCENT EXCEEDS	1480		1110		1010	
90 PERCENT EXCEEDS	338		163		163	

a From rating curve extended above 13,000 ft³/s.

b From peak-stage indicator.



OCTOBER 1, 2004 TO SEPTEMBER 30, 2005

CONEWANGO CREEK BASIN

03015000 CONEWANGO CREEK AT RUSSELL, PA--Continued
(Pennsylvania Water-Quality Network Station)

WATER-QUALITY RECORDS

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

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 2004 TO SEPTEMBER 2005

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unfltrd lab, µS/cm 25 degC (90095)	Specif. conductance, wat unfltrd lab, µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, unfltrd recover-able, mg/L (00916)	Magnesium, water, unfltrd recover-able, mg/L (00927)
NOV 2004	17...	1028	9813	922	12.5	7.6	7.8	266	249	5.0	100	31.8	5.8
JAN 2005	19...	1028	9813	5030	13.7	7.0	7.7	191	169	.0	69	20.8	4.2
MAR	23...	1028	9813	2730	12.3	7.2	7.7	224	227	2.6	74	22.7	4.2
MAY	25...	1028	9813	368	7.6	7.5	7.9	296	302	15.3	110	33.8	5.6
JUL	26...	1028	9813	152	6.2	7.7	8.0	370	383	25.5	140	43.4	7.9
SEP	07...	1028	9813	251	5.8	7.7	7.6	280	289	19.5	100	31.6	6.0

Date	ANC, wat unfltrd fixed end pt, lab, mg/L as CaCO3 (00417)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat fltrd, mg/L (00515)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia water, unfltrd, mg/L as N (00610)	Nitrate water, unfltrd, mg/L as N (00620)	Nitrite water, unfltrd, mg/L as N (00615)	Ortho-phosphate, water, unfltrd, mg/L as P (70507)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)	Organic carbon, water, unfltrd, mg/L (00680)	Aluminum, water, unfltrd recover-able, µg/L (01105)	Copper, water, unfltrd recover-able, µg/L (01042)
NOV 2004	84	12.0	146	6	.050	.53	<.040	.04	.045	.82	3.3	<200	<10
JAN 2005	55	10.7	132	4	.030	.56	<.040	.02	.024	.82	3.3	340	<10
MAR	58	10.3	174	30	.080	.75	<.040	.01	.054	.98	3.2	880	<10
MAY	92	13.1	192	8	.110	.74	<.040	.04	.057	1.1	--	<200	<10
JUL	115	16.5	232	6	.090	.70	<.040	.06	.095	1.1	--	210	<10
SEP	69	29.3	204	24	.080	.67	<.040	.06	.082	1.3	--	460	10

Date	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, unfltrd recover-able, µg/L (01051)	Manganese, water, unfltrd recover-able, µg/L (01055)	Nickel, water, unfltrd recover-able, µg/L (01067)	Zinc, water, unfltrd recover-able, µg/L (01092)
NOV 2004	450	<1.0	70	<50	<10
JAN 2005	480	<1.0	20	<50	<10
MAR	1190	1.5	70	<50	<10
MAY	420	<1.0	110	<50	<10
JUL	360	<1.0	240	<50	20
SEP	920	1.0	230	<50	<10

CONEWANGO CREEK BASIN

03015000 CONEWANGO CREEK AT RUSSELL, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES

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

Date	08/11/04
Benthic macroinvertebrate	Count
Platyhelminthes	
Turbellaria (FLATWORMS)	
Tricladida	
Planariidae	1
Mollusca	
Gastropoda (SNAILS)	
Basommatophora	
Ancyliidae	
<i>Ferrissia</i>	2
Hydrobiidae	
<i>Ammicola</i>	2
Bivalvia (CLAMS)	
Veneroidea	
Sphaeriidae	
<i>Pisidium</i>	1
<i>Sphaerium</i>	4
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	3
Arthropoda	
Crustacea	
Amphipoda (SCUDS)	
Gammaridae	
<i>Gammarus</i>	3
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Acentrella</i>	1
<i>Baetis</i>	26
Caenidae	
<i>Caenis</i>	1
Heptageniidae	
<i>Stenacron</i>	1
<i>Stenonema</i>	2
Isonychiidae	
<i>Isonychia</i>	1
Plecoptera (STONEFLIES)	
Perlidae	
<i>Acroneuria</i>	1
Megaloptera	
Corydalidae (FISHFLIES AND DOBSONFLIES)	
<i>Corydalus</i>	1
Trichoptera (CADDISFLIES)	
Hydropsychidae	
<i>Cheumatopsyche</i>	34
<i>Hydropsyche</i>	19
Psychomyiidae	
<i>Psychomyia</i>	1
Lepidoptera (MOTHS AND BUTTERFLIES)	
Pyralidae	
<i>Petrophila</i>	1

CONEWANGO CREEK BASIN

03015000 CONEWANGO CREEK AT RUSSELL, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES--Continued

Date	08/11/04
Benthic macroinvertebrate	Count
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Optioservus</i>	4
<i>Stenelmis</i>	10
Psephenidae (WATER PENNIES)	
<i>Psephenus</i>	4
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	
Chironomidae (MIDGES)	32
Simuliidae (BLACK FLIES)	
<i>Simulium</i>	2
Total Organisms	157
Total Taxa	24