



2005 Water Year
WEST BRANCH SUSQUEHANNA RIVER BASIN
01543000 Driftwood Br Sinnemahoning Cr at Sterling Run, PA

Latitude: 41° 24 ' 48"

Longitude: 078° 11 ' 50"

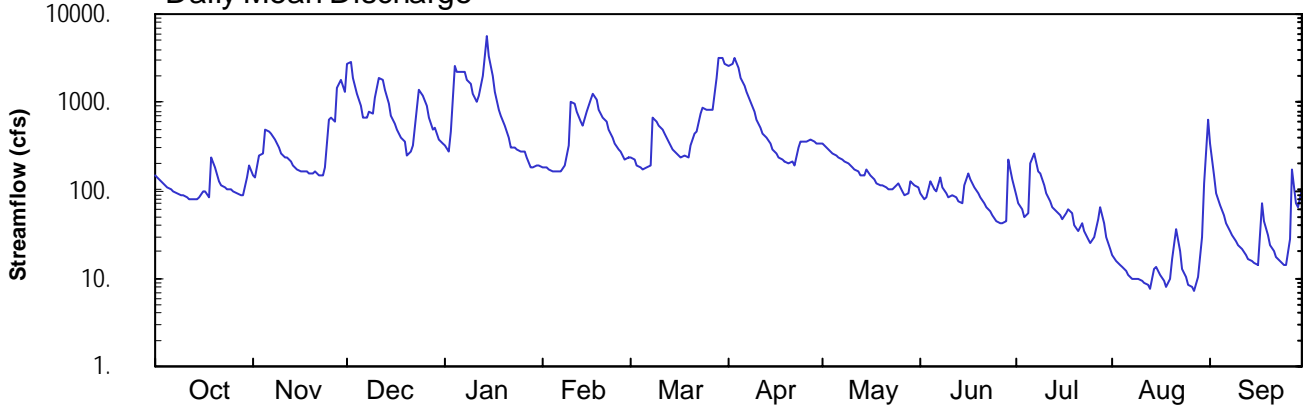
Hydrologic Unit Code: 02050202

Cameron County

Datum: 894.84 feet

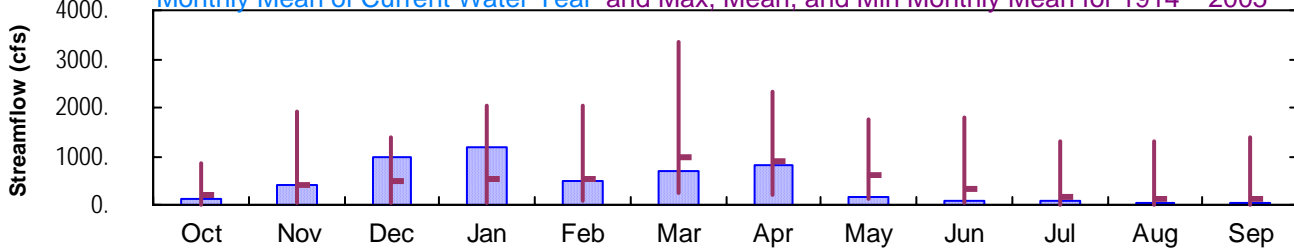
Drainage Area: 272. mi²

Daily Mean Discharge

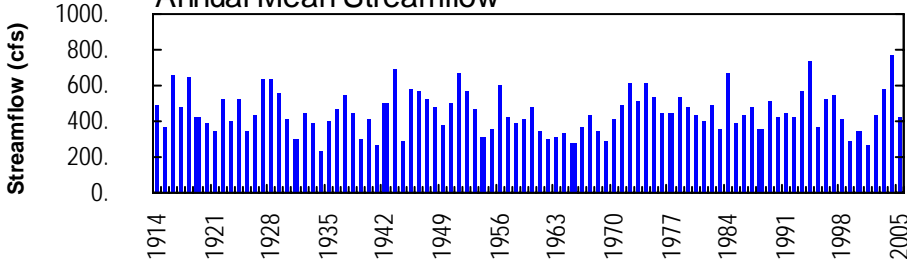


Monthly Statistics

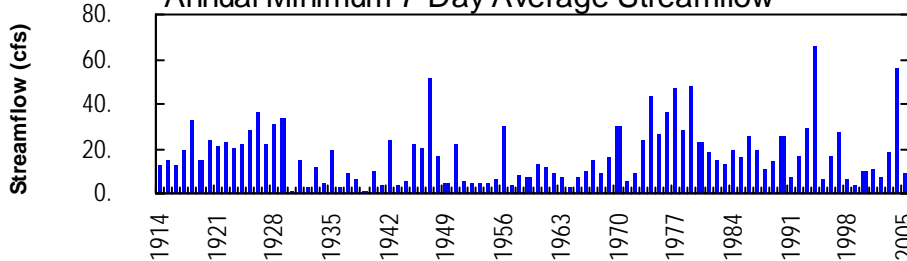
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1914 – 2005



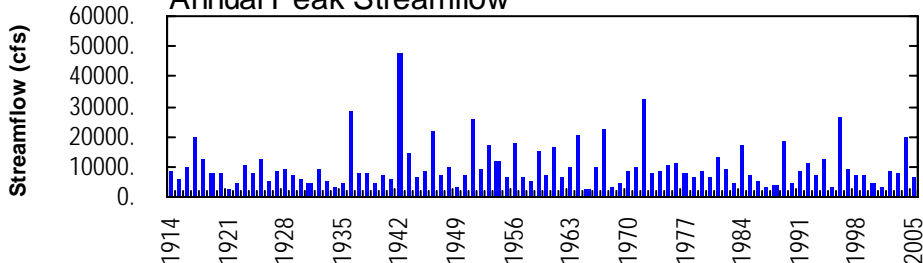
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



WEST BRANCH SUSQUEHANNA RIVER BASIN

01543000 DRIFTWOOD BRANCH SINNEMAHONING CREEK AT STERLING RUN, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 41°24'48", long 78°11'50", Cameron County, Hydrologic Unit 02050202, on left bank at downstream side of highway bridge on SR 3002 at village of Sterling Run, and 300 ft upstream from Sterling Run.

DRAINAGE AREA.--272 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1913 to current year.

REVISED RECORDS.--WSP 1272: Drainage area. WSP 1502: 1933(M), 1934-38, 1939(M).

GAGE.--Water-stage recorder. Datum of gage is 894.84 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1913, to Sept. 30, 1931, nonrecording gage, Oct. 1, 1931, to Sept. 30, 1932, and Oct. 1, 1942, to Oct. 3, 1991, water-stage recorder at site 50 feet upstream on steel-truss bridge at same datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 4,700 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 14	0900	*6,650	*5.73	No other peak greater than base discharge.			

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	146	148	2690	324	e180	242	2580	336	93	90	19	332
2	136	142	2940	282	e180	224	2740	303	80	73	16	145
3	127	249	1930	468	e170	189	3160	288	84	60	14	91
4	117	259	1250	2530	e160	e180	2410	265	129	48	13	66
5	111	490	899	2240	e160	e170	1910	245	104	55	12	52
6	103	469	676	2210	e160	182	1560	231	96	204	11	42
7	97	435	656	2250	e160	196	1280	223	143	257	10	35
8	93	373	795	1840	e190	656	1030	216	110	164	9.8	30
9	88	309	743	1630	e320	589	800	198	93	159	10	27
10	86	263	1110	1280	e1000	543	642	186	85	116	9.3	25
11	83	241	1850	1000	e950	481	526	177	89	91	8.9	21
12	80	240	1820	1160	e800	430	439	164	85	75	8.3	19
13	78	218	1390	2030	612	365	387	148	74	65	7.8	17
14	79	187	978	5510	530	294	338	151	70	58	13	16
15	83	169	718	3350	763	269	293	170	114	52	14	15
16	99	161	562	1950	1080	253	259	149	152	48	11	14
17	98	160	487	1280	1230	234	239	134	131	56	9.6	72
18	84	161	402	e840	1070	244	226	123	107	60	8.0	46
19	233	155	e360	e690	826	239	210	113	94	54	10	31
20	184	159	e250	e550	658	320	200	111	82	40	17	23
21	129	168	e280	e390	604	451	212	109	72	35	37	20
22	115	150	e330	e300	499	464	189	103	65	41	20	17
23	107	145	885	e300	403	726	308	101	59	35	13	15
24	103	183	1390	e290	336	876	354	113	52	28	10	14
25	104	634	1160	e280	297	830	366	122	46	25	8.6	14
26	100	678	902	e270	275	804	362	100	43	29	8.0	28
27	94	614	e670	e240	e220	809	370	89	42	47	7.4	170
28	90	1480	e500	e180	e240	1910	358	94	45	65	10	71
29	90	1800	e510	e180	---	3110	334	128	229	42	30	65
30	137	1350	382	e190	---	3140	344	112	131	29	118	100
31	191	---	337	e190	---	2710	---	107	---	22	632	---
TOTAL	3465	12190	29852	36224	14073	22130	24426	5109	2799	2223	1125.7	1633
MEAN	112	406	963	1169	503	714	814	165	93.3	71.7	36.3	54.4
MAX	233	1800	2940	5510	1230	3140	3160	336	229	257	632	332
MIN	78	142	250	180	160	170	189	89	42	22	7.4	14
CFSM	0.41	1.49	3.54	4.30	1.85	2.62	2.99	0.61	0.34	0.26	0.13	0.20
IN.	0.47	1.67	4.08	4.95	1.92	3.03	3.34	0.70	0.38	0.30	0.15	0.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2005, BY WATER YEAR (WY)

MEAN	189	407	498	515	543	988	908	626	327	173	129	143
MAX	838	1918	1394	2027	2047	3366	2310	1758	1783	1308	1294	1406
(WY)	1918	1951	1928	1937	1918	1936	1940	1953	1972	1942	1994	2004
MIN	10.0	21.2	24.5	33.2	76.0	250	199	104	38.8	16.9	9.20	5.16
(WY)	1965	1965	1961	1961	1963	1981	1946	1941	1991	1966	1957	1964

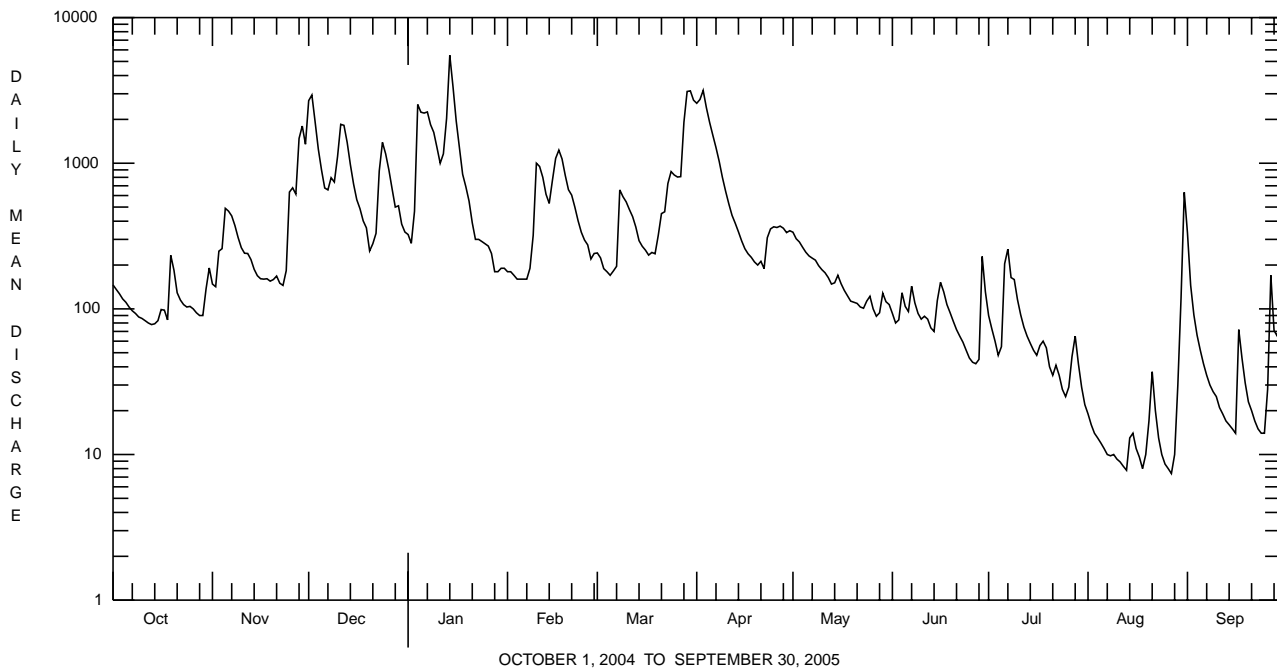
e Estimated.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01543000 DRIFTWOOD BRANCH SINNEMAHONING CREEK AT STERLING RUN, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1914 - 2005	
ANNUAL TOTAL	251461		155249.7			
ANNUAL MEAN	687		425		453	
HIGHEST ANNUAL MEAN					770	2004
LOWEST ANNUAL MEAN					235	1934
HIGHEST DAILY MEAN	13200	Sep 18	5510	Jan 14	18600	Jun 23 1972
LOWEST DAILY MEAN	42	Jul 4	7.4	Aug 27	0.40	Sep 13 1930
ANNUAL SEVEN-DAY MINIMUM	56	Jun 28	9.2	Aug 7	0.87	Aug 28 1939
MAXIMUM PEAK FLOW			6650	Jan 14	a 47800	Jul 18 1942
MAXIMUM PEAK STAGE			5.73	Jan 14	b 14.70	Jul 18 1942
INSTANTANEOUS LOW FLOW					0.40	Sep 12 1930 ^c
ANNUAL RUNOFF (CFSM)	2.53		1.56		1.67	
ANNUAL RUNOFF (INCHES)	34.39		21.23		22.64	
10 PERCENT EXCEEDS	1590		1160		1090	
50 PERCENT EXCEEDS	349		177		208	
90 PERCENT EXCEEDS	105		20		26	

- a** From rating curve extended above 11,000 ft³/s on basis of slope-area measurement of peak flow.
- b** From floodmarks.
- c** Also Sept. 13, 14, 1930.



WEST BRANCH SUSQUEHANNA RIVER BASIN

01543000 DRIFTWOOD BRANCH SINNEMAHONING CREEK AT STERLING RUN, PA--Continued
(Pennsylvania Water-Quality Network Station)

WATER-QUALITY RECORDS

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

REMARKS.--Some values for "dissolved" parameters exceed values for the corresponding "total" parameter. These results are within the limits of analytical precision and methods.

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)	Sampling method, code (82398)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unfltrd lab, μ S/cm 25 degC (90095)	Specif. conductance, wat unfltrd lab, μ S/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	
Date		Calcium water unfltrd recoverable, mg/L (00916)	Magnesium water, fltrd, mg/L (00925)	Magnesium water, unfltrd recoverable, mg/L (00927)	ANC, wat unfltrd fixed end pt, mg/L as CaCO3 (00417)	Acidity water, unfltrd heated, mg/L as CaCO3 (70508)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 105degC wat flt mg/L (00515)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, unfltrd as N, mg/L (00610)	Nitrate water, unfltrd as N, mg/L (00620)	Nitrite water, unfltrd as N, mg/L (00615)	Orthophosphate, water, unfltrd as P, mg/L (70507)	Phosphorus, water, unfltrd as P, mg/L (00665)
NOV 2004														
23...	1030	6.2	1.77	1.8	15	--	10.7	58	<2	<.020	.19	<.040	<.01	<.010
JAN 2005														
19...	1020	5.1	1.69	1.7	10	6.0	11.2	44	<2	.030	.46	<.040	<.01	<.010
MAR														
23...	0900	6.0	1.59	1.7	10	2.4	10.3	72	12	.030	.38	<.040	<.01	.011
MAY														
04...	1030	5.3	1.51	1.6	11	.80	10.1	58	<2	<.020	.30	<.040	<.01	<.010
JUL														
26...	1430	9.5	2.51	2.4	24	--	10.3	70	4	.030	.06	<.040	.01	.015
SEP														
08...	0830	10.8	2.63	2.8	26	--	12.9	120	2	.030	.04	<.040	.01	.017

WEST BRANCH SUSQUEHANNA RIVER BASIN

01543000 DRIFTWOOD BRANCH SINNEMAHONING CREEK AT STERLING RUN, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Total nitrogen, water, unfltrd mg/L (00600)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recover-able, µg/L (01105)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)	Manganese, water, fltrd, µg/L (01056)	Manganese, water, unfltrd recover-able, µg/L (01055)	Nickel, water, fltrd, µg/L (01065)
NOV 2004 23...	.42	1.5	<10	20	<4	<4	30	60	<1.0	<1.0	<5.0	<5.0	<4.0
JAN 2005 19...	.50	1.2	10	60	<4	<4	<20	100	<1.0	<1.0	20	19	<4.0
MAR 23...	.39	.9	10	260	<4	<4	20	330	<1.0	<1.0	16	23	<4.0
MAY 04...	.36	.5	20	20	<4	<4	20	50	<1.0	<1.0	7.8	9.1	<4.0
JUL 26...	.13	.6	50	90	<4	<4	50	140	<1.0	<1.0	11	28	<4.0
SEP 08...	.20	.8	30	90	<4	<4	40	150	<1.0	<1.0	9.0	17	<4.0

Date	Nickel, water, unfltrd recover-able, µg/L (01067)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover-able, µg/L (01092)
NOV 2004 23...	<4.0	<5.0	<5.0
JAN 2005 19...	<4.0	<5.0	<5.0
MAR 23...	<4.0	<5.0	<5.0
MAY 04...	<4.0	<5.0	<5.0
JUL 26...	<4.0	<5.0	<5.0
SEP 08...	<4.0	<5.0	<5.0

WEST BRANCH SUSQUEHANNA RIVER BASIN

01543000 DRIFTWOOD BRANCH SINNEMAHONING CREEK AT STERLING RUN, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES

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

Date	10/20/04
Benthic macroinvertebrate	Count
Arthropoda	
Acariformes	
Hydrachnidia (WATER MITES)	1
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Acentrella</i>	4
Ephemerellidae	
<i>Dannella</i>	1
<i>Ephemerella</i>	20
<i>Eurylophella</i>	1
<i>Serratella</i>	6
Heptageniidae	
<i>Leucrocuta</i>	1
<i>Stenonema</i>	9
Isonychiidae	
<i>Isonychia</i>	14
Leptophlebiidae	
<i>Paraleptophlebia</i>	3
Plecoptera (STONEFLIES)	
Chloroperlidae	
<i>Sweltsa</i>	3
Leuctridae	
<i>Leuctra</i>	5
Perlidae	
<i>Paragnetina</i>	1
Taeniopterygidae	
<i>Taenionema</i>	8
<i>Taeniopteryx</i>	18
Trichoptera (CADDISFLIES)	
Hydropsychidae	
<i>Hydropsyche</i>	7
Lepidostomatidae	
<i>Lepidostoma</i>	1
Psychomyiidae	
<i>Psychomyia</i>	1
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Optioservus</i>	4
Psephenidae (WATER PENNIES)	
<i>Psephenus</i>	1
Diptera (TRUE FLIES)	
Athericidae	
<i>Atherix</i>	1
Chironomidae (MIDGES)	10
Simuliidae (BLACK FLIES)	
<i>Simulium</i>	1
Total Organisms	121
Total Taxa	23