



2004 Water Year

WEST BRANCH SUSQUEHANNA RIVER BASIN

01543000 Driftwood Br Sinnemahoning Cr at Sterling Run, PA

Latitude: 41° 24' 48"

Longitude: 078° 11' 50"

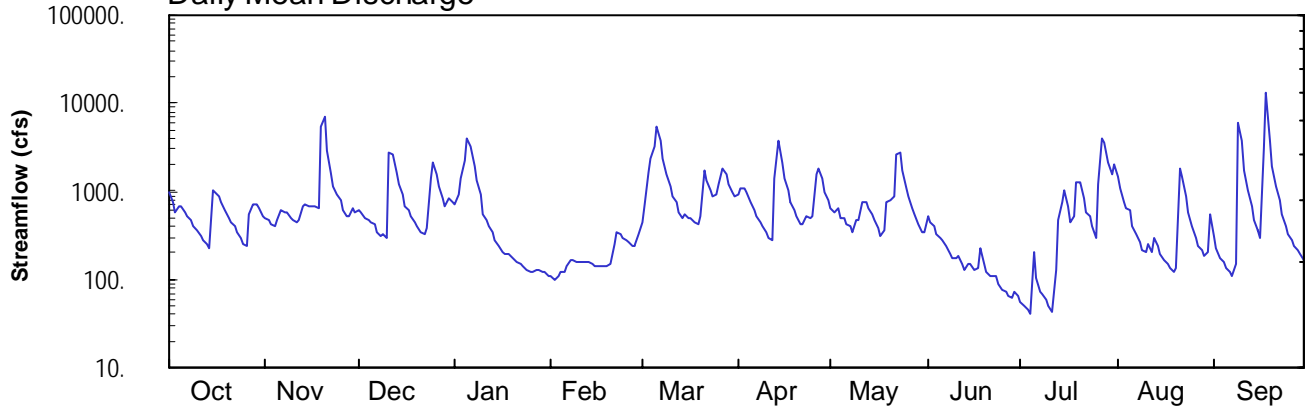
Hydrologic Unit Code: 02050202

Cameron County

Datum: 894.84 feet

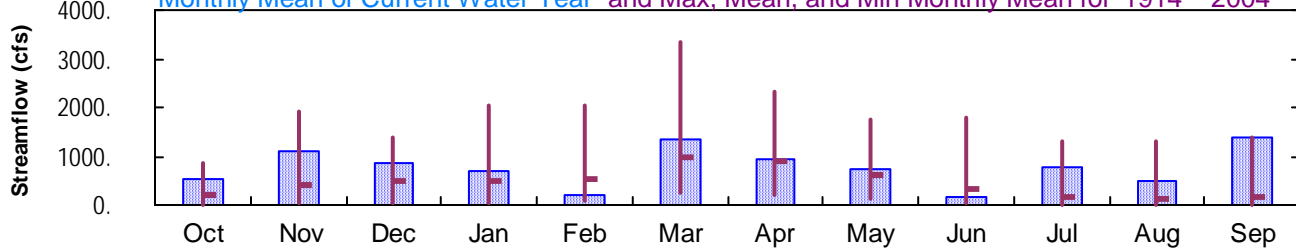
Drainage Area: 272. mi²

Daily Mean Discharge

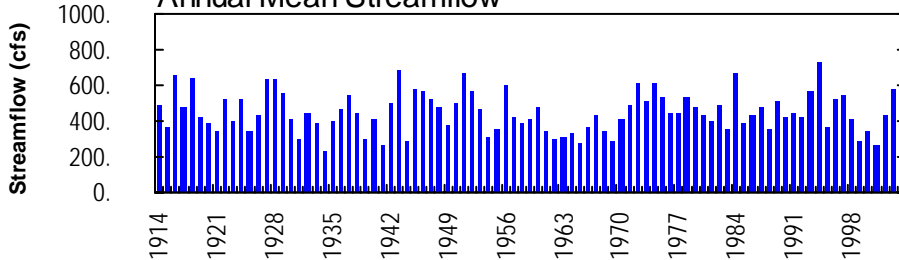


Monthly Statistics

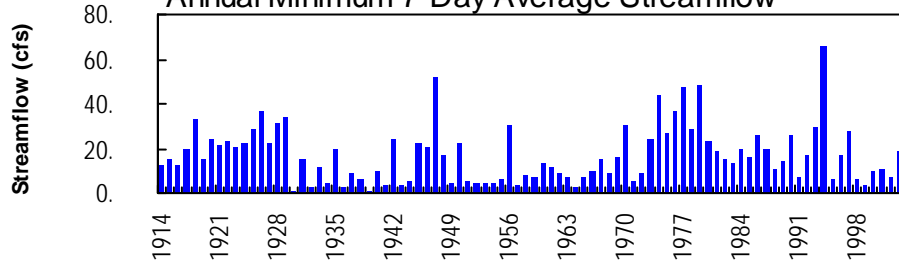
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1914 – 2004



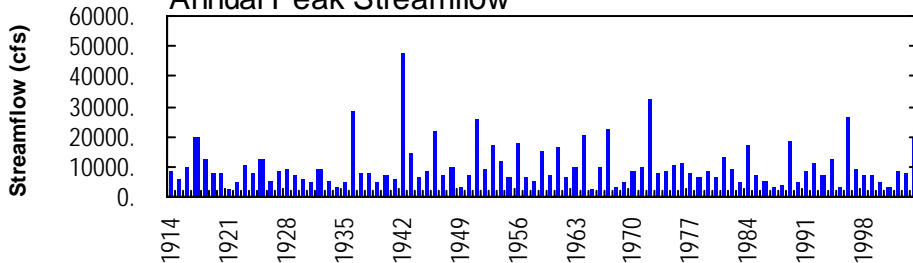
Annual Mean Streamflow



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)
Nov. 19	2145	14,400	8.51	Sept. 9	1415	8,860	6.72
Mar. 6	1100	5,750	5.09	Sept. 18	0415	*19,800	*9.88

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	963	506	603	731	e110	e440	933	645	532	54	1490	318
2	741	468	579	911	e100	e700	1110	583	435	50	1070	224
3	576	433	508	1370	e110	e1600	1090	633	395	45	752	177
4	685	395	463	2180	e120	2370	971	490	322	42	639	154
5	671	463	438	3950	e120	3160	769	484	295	210	614	134
6	578	607	425	3150	e140	5320	612	432	276	105	402	119
7	525	580	e350	1960	e170	3690	524	394	234	74	323	110
8	466	565	e310	1320	e170	2340	452	347	198	68	263	146
9	406	504	323	e920	e160	1530	402	460	173	59	215	6080
10	353	459	290	e550	e160	1110	338	476	174	49	200	3730
11	308	442	2790	e460	e160	877	295	739	182	44	248	1760
12	273	481	2600	e400	e160	750	275	742	150	129	202	1040
13	246	669	1620	e340	e160	580	1420	653	130	467	295	680
14	226	696	1170	e280	e150	483	3840	549	152	757	242	467
15	1030	694	906	e240	e140	557	2170	464	146	1050	195	360
16	983	686	687	e200	e140	499	1390	381	127	688	168	296
17	872	677	619	e190	e140	494	1010	312	137	446	153	3140
18	732	632	529	e190	e140	446	769	360	231	511	133	13200
19	616	5300	449	e180	e140	423	608	771	151	1290	124	3820
20	504	7010	396	e170	e150	511	517	797	123	1280	133	1920
21	450	2860	345	e160	e250	1700	434	884	110	840	1790	1140
22	406	1670	321	e150	e340	1320	427	2590	108	574	1440	785
23	351	1140	378	e140	e320	1030	533	2710	108	535	877	550
24	301	906	1430	e130	e300	870	507	1700	88	408	575	411
25	257	777	2180	e120	e280	933	533	1090	77	297	406	330
26	244	607	1580	e120	e260	1210	1550	865	73	1230	301	277
27	548	513	1120	e130	e240	1800	1840	656	65	3970	244	234
28	708	517	850	e130	e240	1590	1380	554	61	3490	216	211
29	715	654	684	e120	e320	1230	998	418	74	2170	188	194
30	626	581	826	e120	---	963	777	342	64	1560	200	167
31	532	---	747	e110	---	881	---	351	---	1980	554	---
TOTAL	16892	32492	26516	21122	5390	41407	28474	22872	5391	24472	14652	42174
MEAN	545	1083	855	681	186	1336	949	738	180	789	473	1406
MAX	1030	7010	2790	3950	340	5320	3840	2710	532	3970	1790	13200
MIN	226	395	290	110	100	423	275	312	61	42	124	110
CFSM	2.00	3.98	3.14	2.50	0.68	4.91	3.49	2.71	0.66	2.90	1.74	5.17
IN.	2.31	4.44	3.63	2.89	0.74	5.66	3.89	3.13	0.74	3.35	2.00	5.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	190	407	493	508	543	991	909	631	330	174	130	144
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 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	260484		281854			
ANNUAL MEAN	714		770		454	
HIGHEST ANNUAL MEAN					770	
LOWEST ANNUAL MEAN					235	
HIGHEST DAILY MEAN	7010	Nov 20	13200	Sep 18	18600	Jun 23 1972
LOWEST DAILY MEAN	42	Jul 18	42	Jul 4	0.40	Sep 13 1930
ANNUAL SEVEN-DAY MINIMUM	56	Jul 12	56	Jun 28	0.87	Aug 28 1939
MAXIMUM PEAK FLOW			a19800	Sep 18	a47800	Jul 18 1942
MAXIMUM PEAK STAGE			9.88	Sep 18	b14.70	Jul 18 1942
INSTANTANEOUS LOW FLOW					0.40	Sep 12 1930c
ANNUAL RUNOFF (CFSM)	2.62		2.83		1.67	
ANNUAL RUNOFF (INCHES)	35.63		38.55		22.66	
10 PERCENT EXCEEDS	1540		1640		1090	
50 PERCENT EXCEEDS	473		466		208	
90 PERCENT EXCEEDS	140		130		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 2003 TO SEPTEMBER 2004

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, fltrd, mg/L (00915)	Calcium water unfltrd recoverable, mg/L (00916)	
Date		Magnesium, water, unfltrd, mg/L (00925)	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unfltrd, fixed end pt, lab, mg/L as CaCO3 (00417)	Acidity, water, unfltrd, heated, mg/L as CaCO3 (70508)	Sulfate water, unfltrd, mg/L (00945)	Residue on evap. at 105degC, wat fltrd, mg/L (00515)	Residue total at 105 deg. C, suspended, 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)	Orthophosphate, water, unfltrd, mg/L as P (70507)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)
OCT 2003	23...	1.6	1.7	12	.00	10.1	82	14	<.020	.15	<.040	<.01	<.010	.26
DEC 18...	1530	1.7	1.7	9	.00	11.0	54	<2	<.020	.38	<.040	.01	.012	.26
FEB 2004	23...	1.9	1.9	11	10	11.2	44	4	<.020	.56	<.040	<.01	.012	.61
APR 27...	1345	1.3	1.4	8	12	9.4	44	6	<.020	.38	<.040	.01	.012	.52
JUN 23...	1545	1.8	1.9	17	4.4	10.3	62	<2	.030	.21	<.040	<.01	.016	.27
AUG 18...	1030	1.8	1.8	20	.60	9.9	56	4	<.020	.14	<.040	<.01	.011	.18

WEST BRANCH SUSQUEHANNA RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, 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)	Mangan-ese, water, fltrd, µg/L (01056)	Mangan-ese, water, unfltrd recover-able, µg/L (01055)	Nickel, water, fltrd, µg/L (01065)	Nickel, water, unfltrd recover-able, µg/L (01067)
OCT 2003 23...	.8	10	40	<4	<4	30	80	<1.0	<1.0	8	10	<4.0	<4.0
DEC 18...	1.5	10	60	<4	<4	30	110	<1.0	<1.0	20	20	<4.0	<4.0
FEB 2004 23...	2.0	<10	70	<4	<4	<20	120	<1.0	<1.0	10	20	<4.0	<4.0
APR 27...	1.0	40	200	<4	<4	<20	100	<1.0	<1.0	10	20	<4.0	<4.0
JUN 23...	.2	20	60	<4	<4	50	120	<1.0	<1.0	7	10	<4.0	<4.0
AUG 18...	1.0	<10	40	<4	<4	40	100	<1.0	<1.0	5	9	<4.0	<4.0

Date	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover-able, µg/L (01092)
OCT 2003 23...	<5.0	<5.0
DEC 18...	<5.0	<5.0
FEB 2004 23...	<5.0	<5.0
APR 27...	<5.0	<5.0
JUN 23...	<5.0	<5.0
AUG 18...	<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 µm. Samples represent counts per 100 animal (approximate) subsamples.

Date	10/21/03
Benthic Macroinvertebrate	Count
Nemertea (PROBOSCIS WORMS)	
Enopla	
Hoplonemertea	
Tetrastemmatidae	
<i>Prostoma</i>	2
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	16
Arthropoda	
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Acentrella</i>	2
Ephemerellidae	
<i>Ephemerella</i>	7
<i>Eurylophella</i>	3
<i>Serratella</i>	3
Heptageniidae	
<i>Epeorus</i>	6
<i>Leucrocuta</i>	8
<i>Stenonema</i>	7
Isonychiidae	
<i>Isonychia</i>	7
Leptophlebiidae	
<i>Paraleptophlebia</i>	2
Odonata (DRAGONFLIES AND DAMSELFLIES)	
Gomphidae	
<i>Lanthus</i>	1
Plecoptera (STONEFLIES)	
Leuctridae	
<i>Leuctra</i>	2
Perlidae	
<i>Acroneuria</i>	2
Taeniopterygidae	
<i>Taenionema</i>	6
<i>Taeniopteryx</i>	29
Megaloptera	
Corydalidae (FISHFLIES AND DOBSONFLIES)	
<i>Corydalus</i>	1
Trichoptera (CADDISFLIES)	
Apataniidae	
<i>Apatania</i>	5
Hydropsychidae	
<i>Cheumatopsyche</i>	4
<i>Hydropsyche</i>	13
Lepidostomatidae	
<i>Lepidostoma</i>	3
Uenoidae	
<i>Neophylax</i>	1

WEST BRANCH SUSQUEHANNA RIVER BASIN

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

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES--Continued

Date	10/21/03
Benthic Macroinvertebrate	Count
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Optioservus</i>	10
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	62
Tipulidae (CRANE FLIES)	
<i>Antocha</i>	1
Total Organisms	203
Total Taxa	25