



2005 Water Year
WEST BRANCH SUSQUEHANNA RIVER BASIN
01552500 Muncy Creek near Sonestown, PA

Latitude: 41° 21' 25"

Longitude: 076° 32' 06"

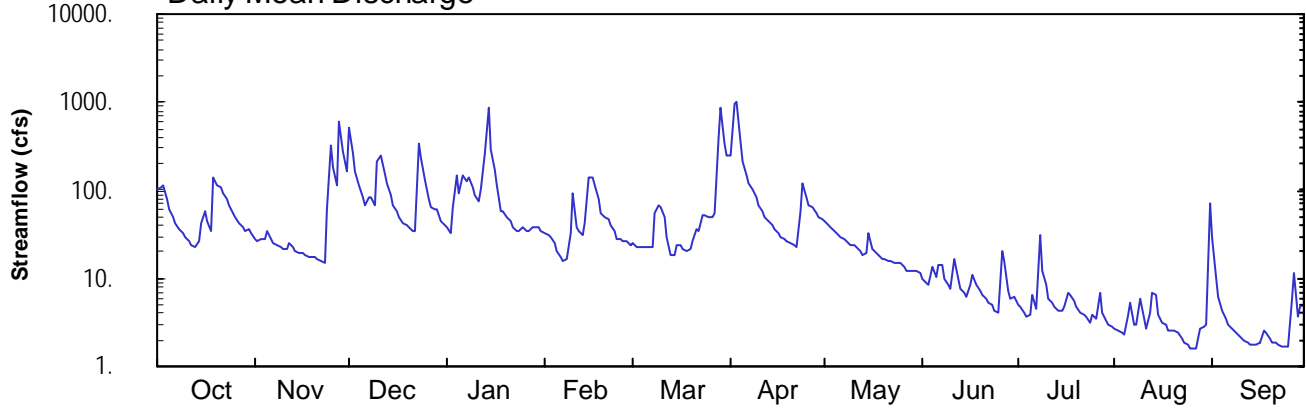
Hydrologic Unit Code: 02050206

Sullivan County

Datum: 1025.01 feet

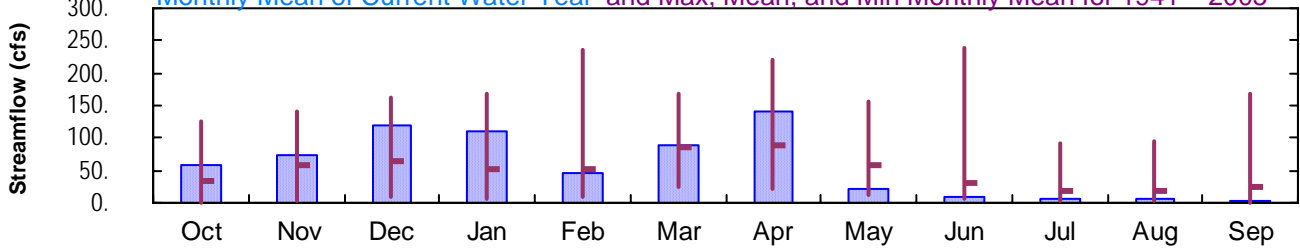
Drainage Area: 23.8 mi²

Daily Mean Discharge

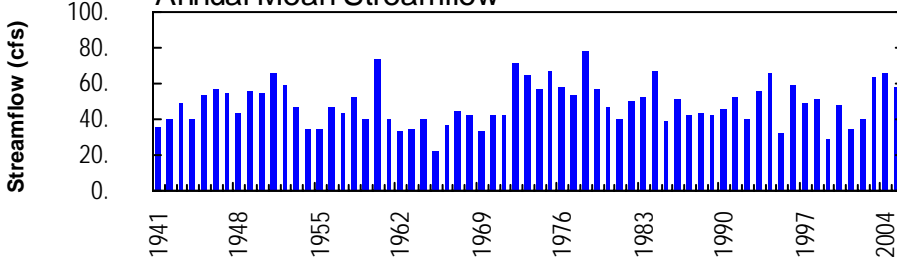


Monthly Statistics

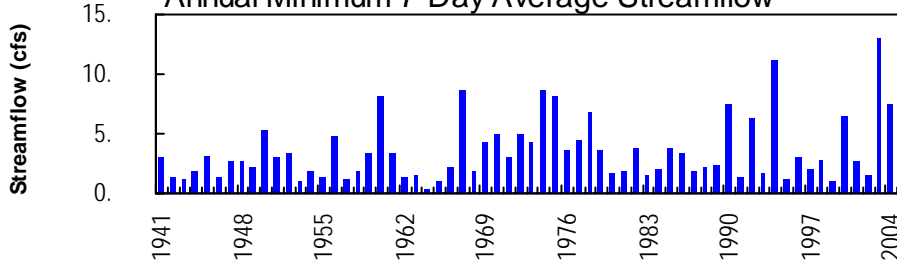
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1941 – 2005



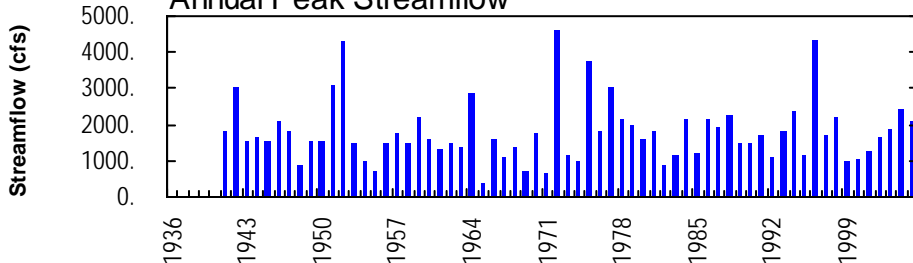
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



WEST BRANCH SUSQUEHANNA RIVER BASIN

01552500 MUNCY CREEK NEAR SONESTOWN, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 41°21'25", long 76°32'06", Sullivan County, Hydrologic Unit 02050206, on right bank 150 ft downstream from Slip Run, 185 ft downstream from bridge on SR 2002, and 1.2 mi east of Sonestown.

DRAINAGE AREA.--23.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1502: 1941-42; WDR PA-00-2: 1942, 1946, 1951-52, 1959, 1964, 1972, 1975, 1977-79, 1984, 1986, 1988, 1991, 1993-94, 1996-97(P).

GAGE.--Water-stage recorder. Datum of gage is 1,025.01 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 31, 1941, nonrecording gage at same site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of about 9.3 ft, discharge not determined.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 1,100 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Nov. 28	0915	1,440	5.23	Mar. 29	0330	1,380	5.14
Dec. 23	1445	1,310	5.01	Apr. 2	1730	*2,070	*6.03
Jan. 14	0615	1,660	5.58				

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	100	29	511	38	32	25	245	45	9.9	5.0	2.7	29
2	109	26	264	33	31	22	942	41	9.1	4.7	2.5	10
3	117	27	163	65	30	e23	1020	38	8.6	4.0	2.4	6.1
4	80	27	112	151	26	e23	357	34	13	3.8	2.3	4.3
5	62	34	85	93	21	e23	208	31	10	3.9	3.9	3.5
6	51	27	68	151	17	e23	148	30	14	6.4	5.4	3.0
7	43	25	81	129	16	23	120	29	14	4.6	3.0	2.7
8	37	24	83	137	17	55	100	27	9.8	32	3.0	2.5
9	33	22	69	108	33	e67	82	24	8.3	12	6.0	2.3
10	29	22	209	90	94	e65	68	23	7.7	8.3	3.5	2.2
11	26	21	252	76	e38	e50	57	22	16	6.0	2.8	2.0
12	24	25	159	103	35	e29	50	20	9.8	5.2	4.0	1.9
13	22	23	119	268	31	e18	45	19	7.7	4.7	6.8	1.8
14	26	20	89	851	42	e18	40	20	6.9	4.2	6.5	1.8
15	43	20	69	294	137	e23	35	33	6.3	4.2	3.9	1.8
16	57	19	57	172	142	e23	32	22	8.5	4.8	3.2	1.9
17	44	18	50	116	114	e21	30	19	11	6.8	3.1	2.6
18	35	18	43	e57	79	21	29	18	8.4	6.6	2.6	2.4
19	142	17	40	e57	e55	22	27	17	7.2	5.5	2.5	2.1
20	116	17	e39	e50	e50	27	25	17	6.4	4.7	2.6	1.9
21	108	17	e35	e44	48	36	24	16	5.9	4.0	2.4	1.9
22	95	16	e35	e38	39	34	23	16	5.4	3.8	2.1	1.7
23	78	15	335	e35	34	51	58	15	5.1	3.6	1.9	1.7
24	67	60	234	e35	e28	52	121	15	4.4	3.2	1.8	1.7
25	56	328	131	e38	e28	49	82	15	4.0	3.8	1.6	1.7
26	48	183	e80	e35	e27	50	69	14	20	3.5	1.6	5.7
27	43	114	e65	e35	e26	56	63	12	16	6.8	1.6	11
28	38	603	e60	e38	e24	400	54	12	7.0	4.1	2.7	3.8
29	35	276	e60	e38	---	852	48	12	6.0	3.2	2.9	4.7
30	36	160	45	39	---	332	46	12	6.2	2.9	3.0	5.0
31	33	---	41	35	---	250	---	12	---	2.8	71	---
TOTAL	1833	2233	3683	3449	1294	2763	4248	680	272.6	179.1	165.3	124.7
MEAN	59.1	74.4	119	111	46.2	89.1	142	21.9	9.09	5.78	5.33	4.16
MAX	142	603	511	851	142	852	1020	45	20	32	71	29
MIN	22	15	35	33	16	18	23	12	4.0	2.8	1.6	1.7
CFSM	2.48	3.13	4.99	4.67	1.94	3.74	5.95	0.92	0.38	0.24	0.22	0.17
IN.	2.87	3.49	5.76	5.39	2.02	4.32	6.64	1.06	0.43	0.28	0.26	0.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2005, BY WATER YEAR (WY)

	34.0	56.7	62.8	51.7	52.9	85.6	88.0	58.9	31.0	18.8	18.4	23.8
MEAN	34.0	56.7	62.8	51.7	52.9	85.6	88.0	58.9	31.0	18.8	18.4	23.8
MAX	127	140	161	167	236	168	220	156	240	93.0	95.3	167
(WY)	1977	1973	1974	1976	1981	1964	1993	1946	1972	1972	1994	1975
MIN	1.44	2.62	8.57	6.60	7.70	25.4	20.9	11.9	4.93	2.21	1.60	0.73
(WY)	1965	1965	1999	1981	1987	1981	1946	1941	1991	1999	1957	1964

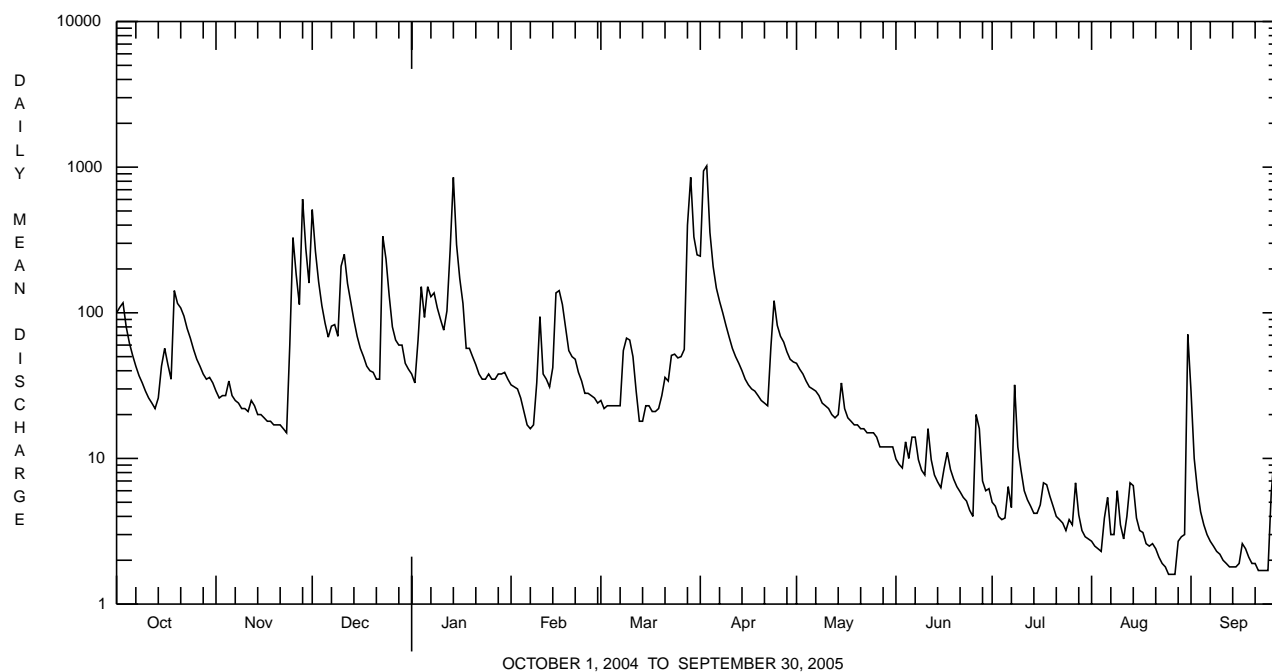
e Estimated.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01552500 MUNCY CREEK NEAR SONESTOWN, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1941 - 2005	
ANNUAL TOTAL	24033.3		20924.7			
ANNUAL MEAN	65.7		57.3		48.5	
HIGHEST ANNUAL MEAN					77.3	1978
LOWEST ANNUAL MEAN					22.1	1965
HIGHEST DAILY MEAN	1400	Sep 18	1020	Apr 3	3910	Jun 22 1972
LOWEST DAILY MEAN	6.4	Jul 4	1.6	Aug 25-27	0.20	Sep 11 1964
ANNUAL SEVEN-DAY MINIMUM	7.5	Jun 30	1.8	Sep 19	0.31	Sep 8 1964
MAXIMUM PEAK FLOW			a2070	Apr 2	a4630	Jun 22 1972
MAXIMUM PEAK STAGE			6.03	Apr 2	8.94	Jun 22 1972
INSTANTANEOUS LOW FLOW					0.10	Sep 11 1964
ANNUAL RUNOFF (CFSM)	2.76		2.41		2.04	
ANNUAL RUNOFF (INCHES)	37.56		32.71		27.69	
10 PERCENT EXCEEDS	130		120		103	
50 PERCENT EXCEEDS	37		26		26	
90 PERCENT EXCEEDS	13		2.9		4.4	

a From rating curve extended above 2,000 ft³/s.



WEST BRANCH SUSQUEHANNA RIVER BASIN

01552500 MUNCY CREEK NEAR SONESTOWN, 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)	Pressure, osmotic water, unfltrd mosm/kg (82550)	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, unfltrd, mg/L (00915)
OCT 2004	20...	1028	9813	121	1.0	11.3	7.2	6.9	50	48	9.3	20	6.6
NOV 08...	1030	1028	9813	23	1.0	12.7	7.3	7.0	58	55	6.0	23	7.6
DEC 14...	1100	1028	9813	91	<1.0	13.8	7.1	7.4	46	44	2.8	16	5.0
JAN 2005	25...	1200	9813	E38	2.0	14.9	7.1	--	49	45	.0	18	5.9

Date	Calcium water, unfltrd recover-able, mg/L (00916)	Magnesium, water, unfltrd, mg/L (00925)	Magnesium, unfltrd recover-able, mg/L (00927)	ANC, wat unfltrd fixed end pt, mg/L as CaCO3 (00417)	Chloride, water, unfltrd, mg/L (00940)	Fluoride, water, unfltrd, mg/L (00951)	Sulfate, unfltrd, mg/L (00945)	Residue on evap. at 105degC, wat flt pending, mg/L (00515)	Residue total at 105 deg. C, unfltrd, 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)	
OCT 2004	20...	6.7	.87	.88	16	1.8	<.2	6.5	48	4	<.020	.18	<.040
NOV 08...	7.7	.94	1.0	16	2.1	<.2	7.0	66	<2	<.020	.14	<.040	
DEC 14...	5.2	.70	.74	12	1.7	<.2	7.2	58	2	.020	.33	<.040	
JAN 2005	25...	5.9	.75	.76	--	2.2	<.2	7.5	42	<2	<.020	.40	<.040

Date	Ortho-phosphate, water, unfltrd, mg/L as P (70507)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)	BOD, water, unfltrd, 5 day, 20 degC, mg/L (00310)	Fecal coliform, M-FC, 0.45 μ MFC, col/100 mL (31616)	Aluminum, water, unfltrd, μ g/L (01106)	Aluminum, water, unfltrd recover-able, μ g/L (01105)	Copper, water, unfltrd, μ g/L (01040)	Copper, water, unfltrd recover-able, μ g/L (01042)	Iron, water, unfltrd, μ g/L (01046)	Iron, water, unfltrd recover-able, μ g/L (01045)	Lead, water, unfltrd, μ g/L (01049)	Lead, water, unfltrd recover-able, μ g/L (01051)	
OCT 2004	20...	<.01	.032	.21	.6	<20	20	50	<4	<4	<20	60	<1.0	<1.0
NOV 08...	<.01	<.010	.44	.9	<20	<10	<10	<4	<4	<20	<20	<1.0	<1.0	
DEC 14...	<.01	<.010	.42	.8	<20	10	30	<4	<4	<20	<20	<1.0	<1.0	
JAN 2005	25...	<.01	<.010	.66	.5	<20	10	20	<4	10	<20	40	<1.0	<1.0

Date	Manganese, water, unfltrd recover-able, μ g/L (01056)	Manganese, water, unfltrd recover-able, μ g/L (01055)	Nickel, water, unfltrd, μ g/L (01065)	Nickel, water, unfltrd recover-able, μ g/L (01067)	Zinc, water, unfltrd, μ g/L (01090)	Zinc, water, unfltrd recover-able, μ g/L (01092)	Phenolic compounds, water, unfltrd, pounds (32730)
OCT 2004	20...	3.4	5.2	<4.0	<4.0	<5.0	<5
NOV 08...	<2.0	<2.0	<4.0	<4.0	<5.0	<5.0	<5
DEC 14...	<2.0	2.5	<4.0	<4.0	<5.0	<5.0	<5
JAN 2005	25...	<2.0	2.0	<4.0	<4.0	<5.0	6.8

WEST BRANCH SUSQUEHANNA RIVER BASIN

01552500 MUNCY CREEK NEAR SONESTOWN, 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 200 animal (approximate) subsamples.

Date	11/05/03
Benthic macroinvertebrate	Count
Arthropoda	
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Baetis</i>	8
Ephemerellidae	
<i>Ephemerella</i>	22
<i>Serratella</i>	3
Heptageniidae	
<i>Epeorus</i>	52
<i>Rhithrogena</i>	6
Isonychiidae	
<i>Isonychia</i>	7
Leptophlebiidae	
<i>Paraleptophlebia</i>	32
Plecoptera (STONEFLIES)	
Capniidae	
<i>Paracapnia</i>	4
Chloroperlidae	
<i>Alloperla</i>	1
<i>Sweltsa</i>	2
Perlidae	
<i>Agnatina</i>	2
Perlodidae	
<i>Isoperla</i>	24
Taeniopterygidae	
<i>Taenionema</i>	2
<i>Taeniopteryx</i>	2
Megaloptera	
Corydalidae	
<i>Nigronia</i>	1
Trichoptera (CADDISFLIES)	
Glossosomatidae	
<i>Glossosoma</i>	2
Hydropsychidae	
<i>Cheumatopsyche</i>	5
<i>Hydropsyche</i>	15
Lepidostomatidae	
<i>Lepidostoma</i>	8
Odontoceridae	
<i>Psilotreta</i>	3
Philopotamidae	
<i>Dolophilodes</i>	2
Rhyacophilidae	
<i>Rhyacophila</i>	1
Uenoidae	
<i>Neophylax</i>	1

WEST BRANCH SUSQUEHANNA RIVER BASIN

01552500 MUNCY CREEK NEAR SONESTOWN, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES--Continued

Date	11/05/03
Benthic macroinvertebrate	Count
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	13
Tipulidae (CRANE FLIES)	
<i>Antocha</i>	2
<i>Hexatoma</i>	3
Total Organisms	223
Total Taxa	26