



2005 Water Year
JUNIATA RIVER BASIN
01562000 Raystown Branch Juniata River at Saxton, PA

Latitude: 40° 12' 57"

Longitude: 078° 15' 56"

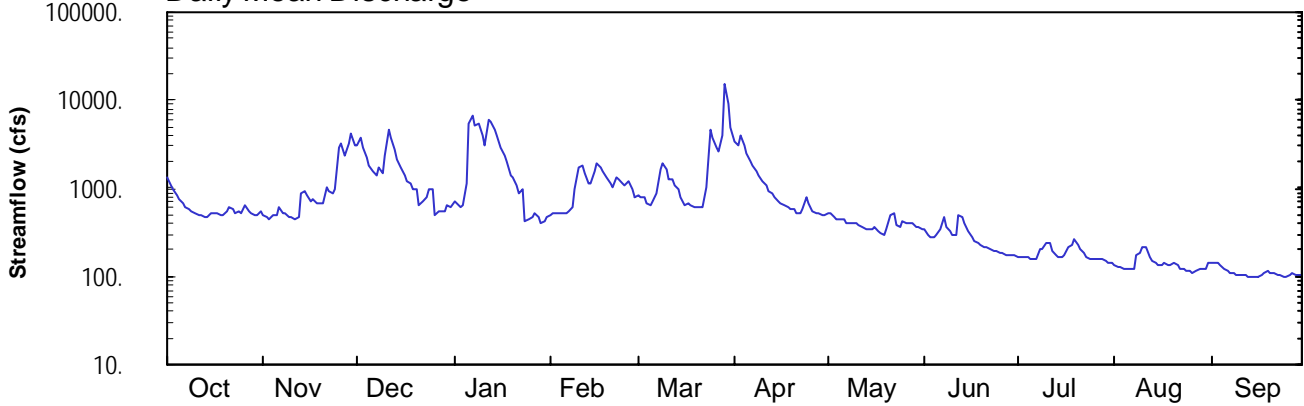
Hydrologic Unit Code: 02050303

Bedford County

Datum: 795.77 feet

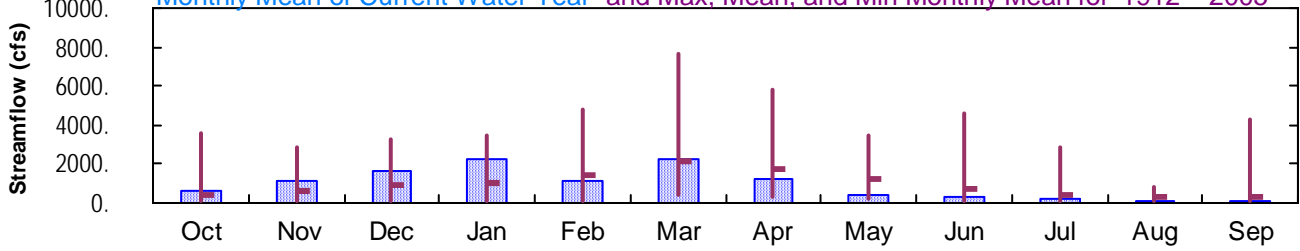
Drainage Area: 756. mi²

Daily Mean Discharge

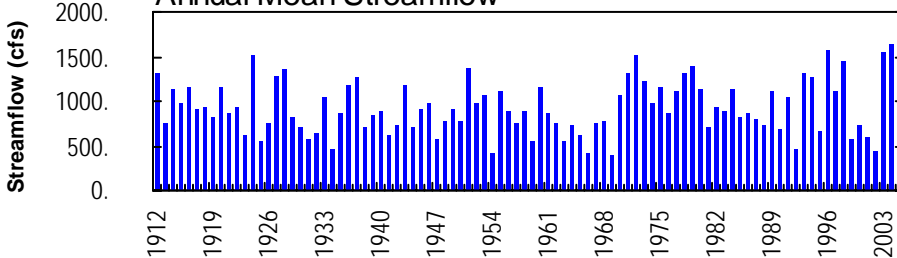


Monthly Statistics

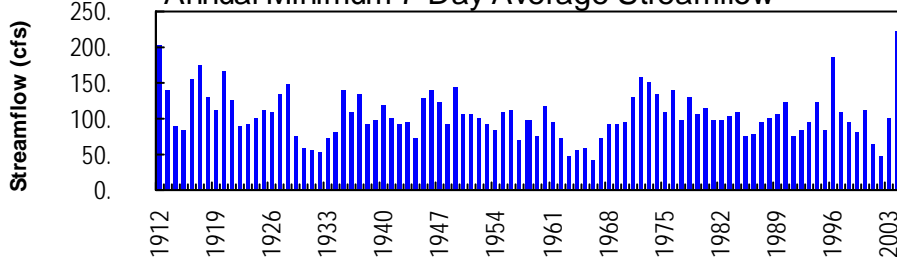
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1912 – 2005



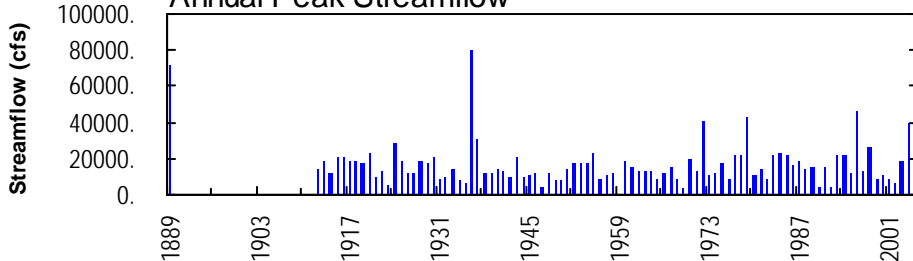
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



JUNIATA RIVER BASIN

01562000 RAYSTOWN BRANCH JUNIATA RIVER AT SAXTON, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 40°12'57", long 78°15'56", Bedford County, Hydrologic Unit 02050303, on left bank 500 ft downstream from bridge on State Highway 913, 0.5 mi west of Saxton, and 1.5 mi upstream from Shoup Run.

DRAINAGE AREA.--756 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1911 to current year. Monthly discharge only for September 1911 published in WSP 1302.

REVISED RECORDS.--WSP 1302: 1912-13(M), 1914-15. WSP 1502: 1934, 1936.

GAGE.--Water-stage recorder. Datum of gage is 795.77 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1931, nonrecording gage at site 0.8 mi downstream at datum 4.82 ft lower.

REMARKS.--Records good 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1, 1889, reached a stage of 23.0 ft at present site and datum, from floodmarks, discharge, about 71,300 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 7,700 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 12	1615	8,230	8.23	Mar. 29	1145	*18,300	*13.13

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	1330	507	3010	695	e490	e820	3340	533	345	169	136	141
2	1080	465	3770	686	e530	e800	3130	513	297	165	131	141
3	974	449	2920	604	e530	e780	4040	468	283	164	127	140
4	849	489	2300	648	534	e670	3100	452	283	163	121	133
5	749	486	1810	1120	525	e640	2490	437	293	160	121	123
6	673	597	1520	5570	533	e700	2070	449	346	157	121	116
7	620	523	1380	6770	548	e900	1800	402	459	157	119	111
8	581	521	1740	5090	625	1620	1590	399	356	210	170	108
9	548	474	1510	5460	975	1940	1380	392	332	206	182	106
10	522	479	2390	3890	1730	1600	1180	409	289	237	213	104
11	500	439	4680	3080	1810	1290	1080	375	298	236	213	104
12	500	481	3810	6030	1440	1250	927	370	487	193	166	102
13	459	869	2820	5690	1150	1110	880	350	481	174	147	e100
14	476	945	2170	4630	1130	991	809	339	401	165	139	99
15	519	827	1710	3940	1590	e800	724	343	319	167	132	99
16	515	727	1390	2960	1910	e650	685	359	277	172	134	100
17	531	732	1180	2390	1740	690	638	334	254	211	142	105
18	501	670	1140	e2000	1570	655	595	316	242	232	137	109
19	490	694	e1000	e1400	1330	625	567	301	231	259	136	114
20	541	685	e970	e1300	1140	605	570	340	219	225	138	112
21	606	1000	e650	e1100	1050	596	528	504	211	207	132	107
22	569	908	e730	e900	1320	595	533	516	204	183	125	105
23	527	869	e800	e950	1280	1030	586	387	198	169	119	102
24	537	977	e1000	e430	1150	4680	774	363	193	157	116	100
25	520	2930	e950	e440	1110	3710	662	429	187	159	115	99
26	640	3170	e500	e480	1210	2960	558	411	182	161	112	104
27	542	2390	e550	e520	967	2560	518	394	176	156	113	109
28	534	3260	e540	e460	e800	4070	530	395	172	156	120	103
29	500	4230	e550	e400	---	15000	484	362	171	152	121	104
30	495	3050	e640	e430	---	8950	490	359	172	144	121	106
31	547	---	e620	e460	---	4780	---	344	---	139	144	---
TOTAL	18975	34843	50750	70523	30717	68067	37258	12345	8358	5605	4263	3306
MEAN	612	1161	1637	2275	1097	2196	1242	398	279	181	138	110
MAX	1330	4230	4680	6770	1910	15000	4040	533	487	259	213	141
MIN	459	439	500	400	490	595	484	301	171	139	112	99
CFSM	0.81	1.54	2.17	3.01	1.45	2.90	1.64	0.53	0.37	0.24	0.18	0.15
IN.	0.93	1.71	2.50	3.47	1.51	3.35	1.83	0.61	0.41	0.28	0.21	0.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2005, BY WATER YEAR (WY)

MEAN	425	626	875	1028	1407	2121	1747	1233	745	396	268	324
MAX	3561	2897	3254	3477	4817	7669	5811	3425	4624	2847	851	4253
(WY)	1977	1998	1973	1937	1979	1936	1993	1924	1972	1989	1915	2004
MIN	59.5	65.3	93.6	132	138	459	338	211	134	66.6	55.1	57.6
(WY)	1964	1931	1931	1981	1934	1990	1915	1926	1965	1966	1966	1963

e Estimated.

JUNIATA RIVER BASIN

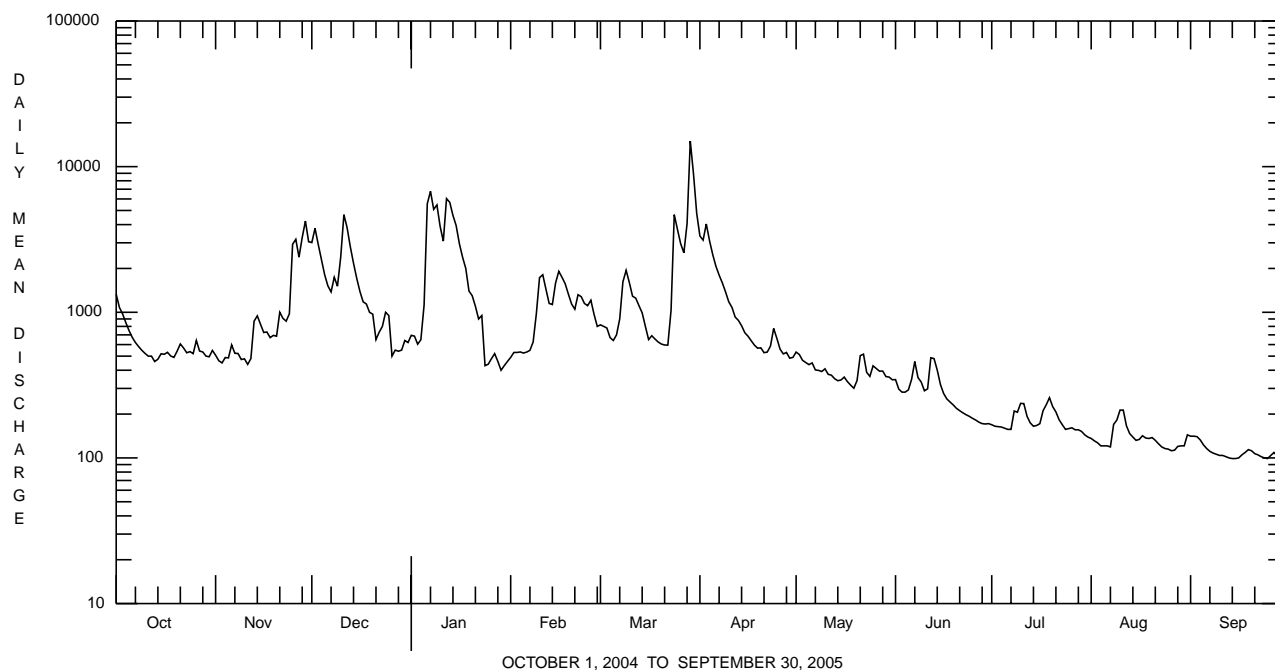
01562000 RAYSTOWN BRANCH JUNIATA RIVER AT SAXTON, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1912 - 2005	
ANNUAL TOTAL	555163		345010			
ANNUAL MEAN	1517		945		930	
HIGHEST ANNUAL MEAN					1637	2004
LOWEST ANNUAL MEAN					402	1969
HIGHEST DAILY MEAN	32800	Sep 18	15000	Mar 29	58300	Mar 18 1936
LOWEST DAILY MEAN	193	Jul 3	99	Sep 14,15,25	39	Sep 12 1966
ANNUAL SEVEN-DAY MINIMUM	223	Jun 29	101	Sep 10	41	Sep 7 1966
MAXIMUM PEAK FLOW			18300	Mar 29	^a 80500	Mar 18 1936
MAXIMUM PEAK STAGE			13.13	Mar 29	^b 24.54	Mar 18 1936
INSTANTANEOUS LOW FLOW			97	Sep 16	39	Sep 6 1966 ^c
ANNUAL RUNOFF (CFSM)	2.01		1.25		1.23	
ANNUAL RUNOFF (INCHES)	27.32		16.98		16.72	
10 PERCENT EXCEEDS	3030		2390		2200	
50 PERCENT EXCEEDS	800		519		429	
90 PERCENT EXCEEDS	313		121		118	

a From rating curve extended above 28,000 ft³/s on basis of slope-area measurement of peak flow.

b From floodmark in gage.

c Also Sept. 7, 12, 1966.



JUNIATA RIVER BASIN

01562000 RAYSTOWN BRANCH JUNIATA RIVER AT SAXTON, PA--Continued
(Pennsylvania Water-Quality Network Station)

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 animals (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	09/14/04
Benthic macroinvertebrate	Count
Mollusca	
Bivalvia (CLAMS)	
Veneroida	
Corbiculidae	
<i>Corbicula fluminea</i>	1
Sphaeriidae	
<i>Sphaerium</i>	2
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Tubificida	
Naididae	1
Arthropoda	
Acariformes	
Hydrachnidia (WATER MITES)	1
Crustacea	
Amphipoda (SCUDS)	
Crangonyctidae	
<i>Crangonyx</i>	2
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Baetis</i>	66
Caenidae	
<i>Caenis</i>	6
Ephemerellidae	1
<i>Ephemerella</i>	3
<i>Serratella</i>	5
Ephemeridae	
<i>Ephemera</i>	1
Heptageniidae	2
<i>Leucrocuta</i>	5
<i>Stenonema</i>	21
Isonychiidae	
<i>Isonychia</i>	27
Potamanthidae	
<i>Anthopotamus</i>	2
Tricorythidae	
<i>Tricorythodes</i>	1
Plecoptera (STONEFLIES)	
Perlidae	
<i>Agnatina</i>	1

JUNIATA RIVER BASIN

01562000 RAYSTOWN BRANCH JUNIATA RIVER AT SAXTON, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES--Continued

Date	09/14/04
Benthic macroinvertebrate	Count
Trichoptera (CADDISFLIES)	
Glossosomatidae	
<i>Proptila</i>	2
Hydropsychidae	
<i>Cheumatopsyche</i>	18
<i>Diplectrona</i>	1
<i>Hydropsyche</i>	14
Leptoceridae	
<i>Triaenodes</i>	1
Philopotamidae	
<i>Chimarra</i>	3
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Dubiraphia</i>	2
<i>Macronychus</i>	1
<i>Optioservus</i>	1
<i>Promoresia</i>	2
<i>Stenelmis</i>	6
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	
	22
Simuliidae (BLACK FLIES)	
<i>Simulium</i>	2
Total Organisms	223
Total Taxa	31