

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)
May 19	0045	*6,270	*7.36	(No peaks above base discharge.)			

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	93	235	e122	272	151	1320	2240	479	176	96	70
2	81	94	212	e114	281	147	1460	1770	452	152	87	70
3	77	96	196	e114	266	199	1040	1810	380	138	81	69
4	75	93	177	e108	e228	316	925	1430	332	126	80	68
5	73	93	160	e106	e204	437	834	1050	305	120	82	65
6	71	93	150	e106	e185	360	666	902	402	112	84	62
7	69	92	146	e109	e157	391	646	796	1150	107	81	59
8	69	90	148	e116	e169	350	526	811	984	103	144	55
9	68	89	172	e123	e173	313	495	1990	568	100	122	53
10	68	87	187	e136	e169	285	583	4830	447	102	98	51
11	71	86	191	e158	193	259	513	3230	385	98	85	49
12	74	84	183	e187	185	237	436	2210	341	93	79	46
13	76	84	159	288	279	221	424	1970	329	89	78	45
14	82	83	150	260	279	215	401	2310	357	97	69	44
15	104	83	160	e227	277	210	697	2040	669	103	64	47
16	111	84	174	e205	259	212	1110	1760	598	105	62	51
17	117	84	197	e184	250	214	892	1340	475	98	62	52
18	142	83	203	e158	235	298	895	2980	391	94	74	53
19	133	82	197	e147	219	789	1290	4830	341	101	65	59
20	114	83	288	e144	199	1420	1120	3250	305	338	70	77
21	105	81	276	e145	187	4450	965	2380	270	219	65	71
22	101	80	260	e142	186	3200	967	1720	241	146	61	86
23	99	79	237	e152	181	2040	1220	1360	219	121	72	106
24	99	77	226	171	174	1370	990	1110	200	105	98	176
25	97	101	e202	230	163	1070	880	986	185	96	122	146
26	90	207	e180	368	154	902	791	868	175	107	159	126
27	89	337	e156	354	154	2330	694	667	179	141	115	180
28	90	279	e148	313	150	2600	1020	606	188	146	97	426
29	90	231	e142	286	---	1830	3460	657	213	151	92	616
30	89	225	e137	267	---	1330	2940	689	209	131	82	340
31	92	---	e127	265	---	1040	---	514	---	110	73	---
TOTAL	2801	3453	5776	5805	5828	29186	30200	55106	11769	3925	2699	3418
MEAN	90.4	115	186	187	208	941	1007	1778	392	127	87.1	114
MAX	142	337	288	368	281	4450	3460	4830	1150	338	159	616
MIN	68	77	127	106	150	147	401	514	175	89	61	44
CFSM	0.12	0.15	0.25	0.25	0.28	1.25	1.33	2.35	0.52	0.17	0.12	0.15
IN.	0.14	0.17	0.28	0.29	0.29	1.44	1.49	2.71	0.58	0.19	0.13	0.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2002, BY WATER YEAR (WY)

MEAN	418	602	849	1004	1422	2099	1738	1230	728	397	263	270
MAX	3561	2897	3254	3477	4817	7669	5811	3425	4624	2847	851	2356
(WY)	1977	1998	1973	1937	1979	1936	1993	1924	1972	1989	1915	1996
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

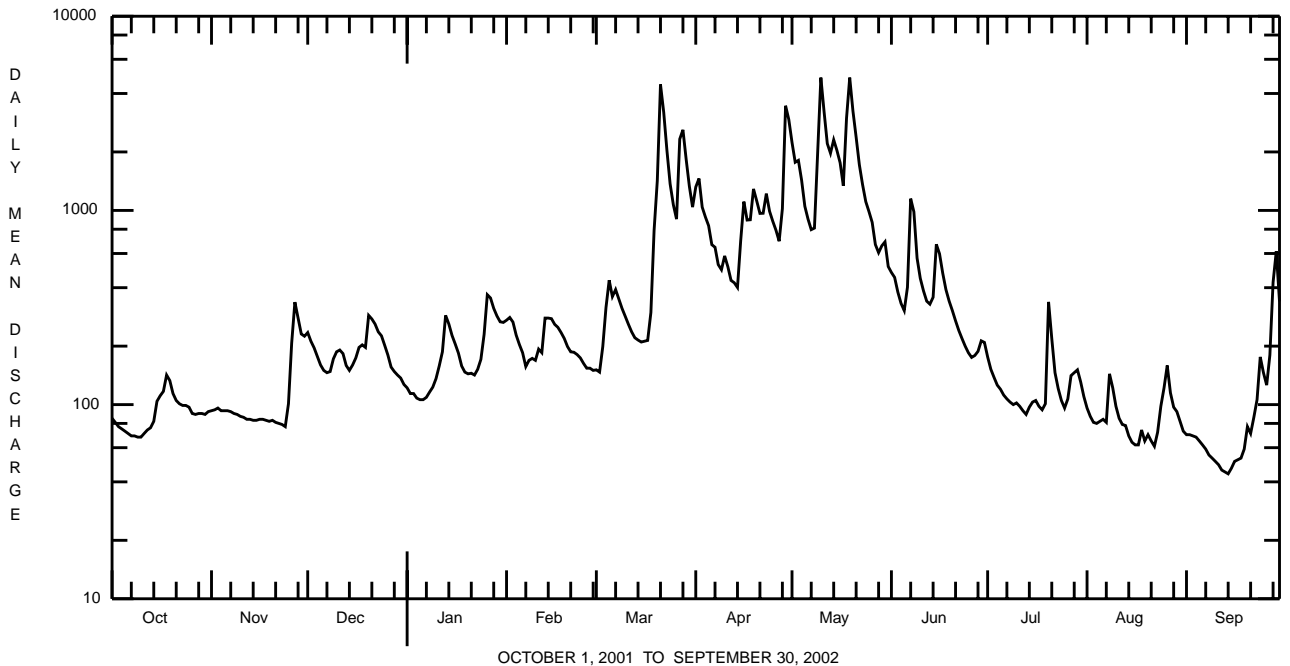
e Estimated.

JUNIATA RIVER BASIN

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

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1912 - 2002	
ANNUAL TOTAL	205689		159966		915	
ANNUAL MEAN	564		438		1575	
HIGHEST ANNUAL MEAN					1996	
LOWEST ANNUAL MEAN					1969	
HIGHEST DAILY MEAN	7140	Apr 17	4830	May 10,19	58300	Mar 18 1936
LOWEST DAILY MEAN	61	Sep 13	44	Sep 14	39	Sep 12 1966
ANNUAL SEVEN-DAY MINIMUM	64	Sep 11	48	Sep 10	41	Sep 7 1966
MAXIMUM PEAK FLOW			6270	May 19	a 80500	Mar 18 1936
MAXIMUM PEAK STAGE			7.36	May 19	b 24.54	Mar 18 1936
INSTANTANEOUS LOW FLOW			41	Sep 12	39	Sep 6 1966
ANNUAL RUNOFF (CFSM)	0.75		0.58		1.21	
ANNUAL RUNOFF (INCHES)	10.12		7.87		16.45	
10 PERCENT EXCEEDS	1590		1110		2170	
50 PERCENT EXCEEDS	221		174		419	
90 PERCENT EXCEEDS	82		73		117	

a From rating curve extended above 21,000 ft³/s on basis of slope-area measurement of peak flow.
b From floodmark in gage.



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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.--Other data for the Water-Quality Network can be found on pages 306-334.

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 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM-PLING METHOD, CODES (82398)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
APR 2002													
16...	0945	9813	1140	40	8.8	7.7	216	17.7	80	21.5	6.3	52	24.4
JUN													
25...	0945	9813	184	40	6.6	7.7	284	25.2	130	33.6	11.3	90	30.8
AUG													
13...	0840	9813	84	40	5.5	7.8	328	24.0	170	37.6	18.2	114	43.7

Date	RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L) (00515)	RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COPPER, TOTAL RECOV-ERABLE (µG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (µG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (µG/L AS MN) (01055)
APR 2002													
16...	132	44	<.020	.65	<.040	1.1	.03	.040	2.9	<10	860	1.1	90
JUN													
25...	212	14	<.020	1.25	<.040	1.4	.01	.030	2.5	<10	360	<1.0	70
AUG													
13...	278	52	<.020	.88	<.040	1.3	.02	.020	2.9	<10	200	1.4	60

Date	NICKEL, TOTAL RECOV-ERABLE (µG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)
APR 2002		
16...	<50	10
JUN		
25...	<50	<10
AUG		
13...	<50	<10