

## JUNIATA RIVER BASIN

## 01556000 FRANKSTOWN BRANCH JUNIATA RIVER AT WILLIAMSBURG, PA

**LOCATION.**--Lat 40°27'47", long 78°12'00", Blair County, Hydrologic Unit 02050302, on left bank 10 ft downstream from highway bridge on SR 2015 at Williamsburg, and 2.5 mi upstream from Clover Creek.

**DRAINAGE AREA.**--291 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1916 to current year.

**REVISED RECORDS.**--WSP 756: Drainage area. WDR PA-71-1: 1954(M), 1960(M), 1961(M). WDR PA-77-2: 1936-39(M).

**GAGE.**--Water-stage recorder. Datum of gage is 831.78 ft above National Geodetic Vertical Datum of 1929 (Penn Central Railroad bench mark). Prior to Aug. 14, 1928, nonrecording gage at same site and datum.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Some regulation at low flow by mill upstream. 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 19.1 ft, from floodmark, discharge, about 35,500 ft<sup>3</sup>/s.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 4,200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)	Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)
Jan. 2	0745	*8,690	*13.49	Sept. 28	0715	5,430	10.79
June 4	1000	6,530	11.73				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	342	248	2010	e150	334	540	233	905	220	250	688
2	80	282	225	6420	e150	328	616	280	590	204	220	750
3	73	243	221	2210	e150	345	544	233	1190	200	1730	1200
4	75	215	179	1470	e320	293	532	225	5360	185	578	1170
5	74	202	205	1050	310	383	1560	299	2520	174	675	719
6	71	422	202	890	e170	1110	1390	437	1590	169	670	551
7	66	374	177	779	e165	704	1160	414	2150	310	402	444
8	63	325	201	731	e160	607	1090	583	1880	194	493	383
9	62	287	178	850	e155	1450	1010	593	1630	171	373	340
10	62	264	156	778	e155	1070	908	1010	1140	173	1390	e300
11	94	309	207	e625	e155	750	1100	1190	910	691	790	264
12	361	328	343	e500	e150	905	1220	942	769	268	640	238
13	189	483	381	e410	e140	1600	1020	890	793	213	442	228
14	141	363	758	e375	e135	1870	844	715	622	181	436	239
15	144	285	940	e365	e100	1540	721	618	534	164	345	269
16	358	278	810	e345	e80	1700	630	2100	456	178	299	324
17	472	928	622	e300	e70	2230	542	2200	416	158	322	224
18	278	801	503	e255	e70	2480	479	1980	983	148	267	213
19	196	614	430	e235	e75	2190	438	1540	628	165	231	1430
20	173	527	784	e220	e80	2140	406	1180	566	140	211	1120
21	154	431	886	e200	e110	2760	381	1160	793	132	197	680
22	142	382	712	e185	355	2290	416	833	650	199	188	549
23	133	351	645	e175	1140	1690	364	972	553	202	176	1490
24	126	302	533	e155	818	1290	316	1240	470	163	162	884
25	124	275	505	e155	569	1030	295	984	412	138	153	684
26	426	251	459	e160	446	875	315	1600	364	125	556	580
27	303	262	399	e160	406	740	312	1400	323	118	468	691
28	218	244	369	e160	362	626	270	1150	284	118	316	4030
29	183	230	351	e155	---	578	253	911	258	112	264	1590
30	492	254	332	e155	---	608	238	727	235	104	484	1020
31	467	---	334	e150	---	570	---	714	---	103	396	---
TOTAL	5886	10854	13295	22628	7146	37086	19910	29353	29974	5820	14124	23292
MEAN	190	362	429	730	255	1196	664	947	999	188	456	776
MAX	492	928	940	6420	1140	2760	1560	2200	5360	691	1730	4030
MIN	62	202	156	150	70	293	238	225	235	103	153	213
CFSM	0.65	1.24	1.47	2.51	0.88	4.11	2.28	3.25	3.43	0.65	1.57	2.67
IN.	0.75	1.39	1.70	2.89	0.91	4.74	2.55	3.75	3.83	0.74	1.81	2.98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2003, BY WATER YEAR (WY)

MEAN	180	279	371	417	547	893	766	526	314	184	146	147
MAX	969	1298	1268	1446	1340	3561	2194	1314	1743	824	738	964
(WY)	1977	1998	1973	1937	1971	1936	1993	1924	1972	1989	1956	1996
MIN	45.9	48.0	52.4	61.3	86.0	263	215	127	83.0	49.7	46.9	45.9
(WY)	1931	1931	1931	1918	1934	1990	1925	1934	1965	1965	1966	1932

e Estimated.

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1917 - 2003	
ANNUAL TOTAL	117773		219368			
ANNUAL MEAN	323		601		396	
HIGHEST ANNUAL MEAN					670	1972
LOWEST ANNUAL MEAN					200	1969
HIGHEST DAILY MEAN	3520	May 18	6420	Jan 2	25000	Mar 18 1936
LOWEST DAILY MEAN	46	Sep 12-14	62	Oct 9,10	31	Dec 24 1930
ANNUAL SEVEN-DAY MINIMUM	47	Sep 9	68	Oct 4	32	Dec 19 1930
MAXIMUM PEAK FLOW			8690	Jan 2	ab30000	Mar 18 1936
MAXIMUM PEAK STAGE			13.49	Jan 2	19.35	Jan 19 1996
INSTANTANEOUS LOW FLOW			c46	Feb 17	13	Jul 24 1934
ANNUAL RUNOFF (CFSM)	1.11		2.07		1.36	
ANNUAL RUNOFF (INCHES)	15.06		28.04		18.51	
10 PERCENT EXCEEDS	755		1330		885	
50 PERCENT EXCEEDS	205		374		205	
90 PERCENT EXCEEDS	61		149		72	

- a From rating curve extended above 14,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.
- b Gage height 18.58 ft, from floodmark in gage shelter.
- c Result of freeze-up.

