



# 2005 Water Year JUNIATA RIVER BASIN

01556000 Frankstown Br Juniata River at Williamsburg, PA

Latitude: 40° 27 ' 47"

Longitude: 078° 12 ' 00"

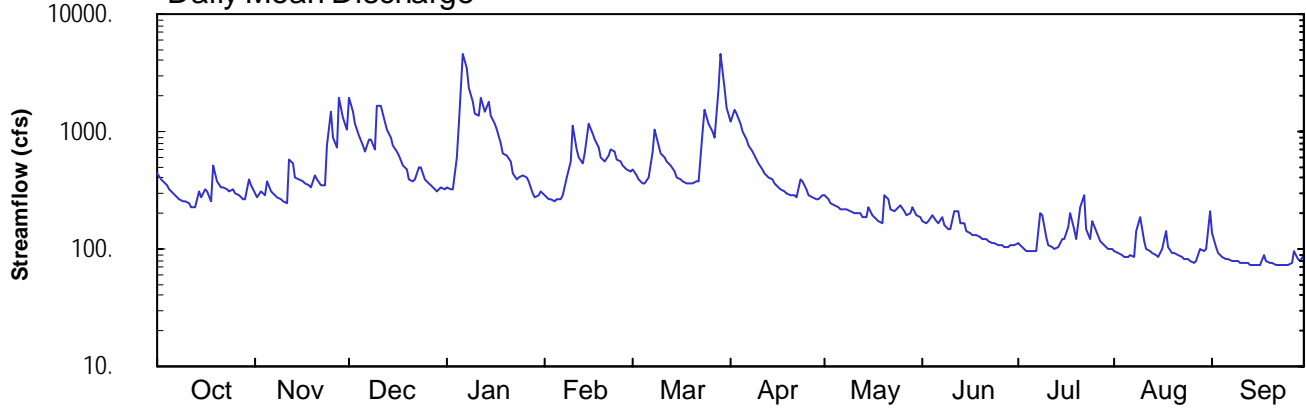
Hydrologic Unit Code: 02050302

Blair County

Datum: 831.78 feet

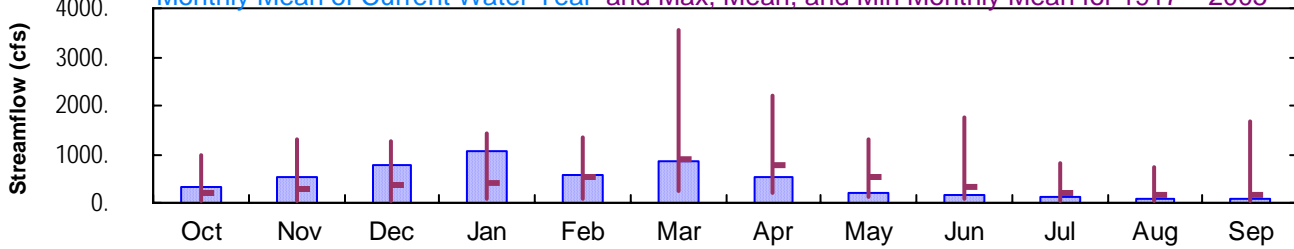
Drainage Area: 291. mi<sup>2</sup>

## Daily Mean Discharge

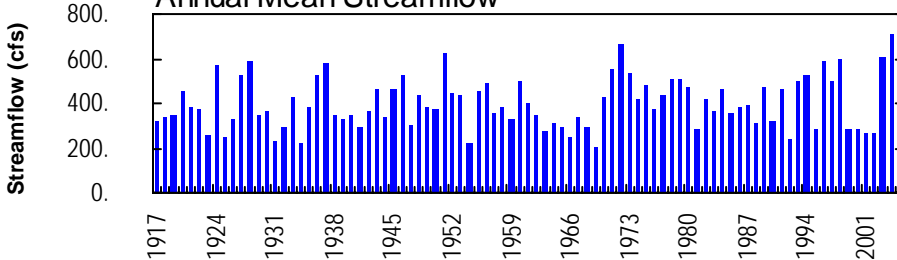


## Monthly Statistics

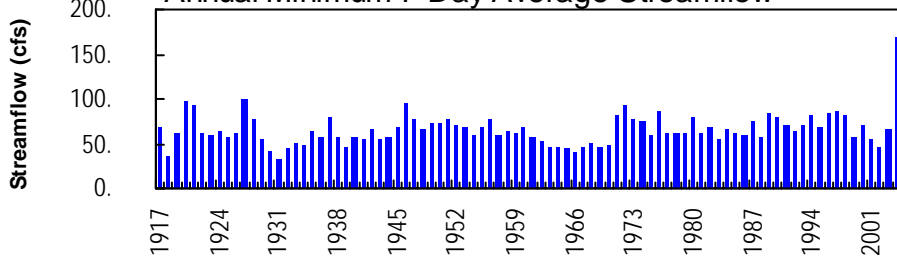
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1917 – 2005



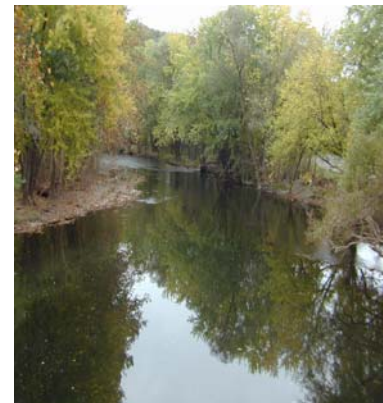
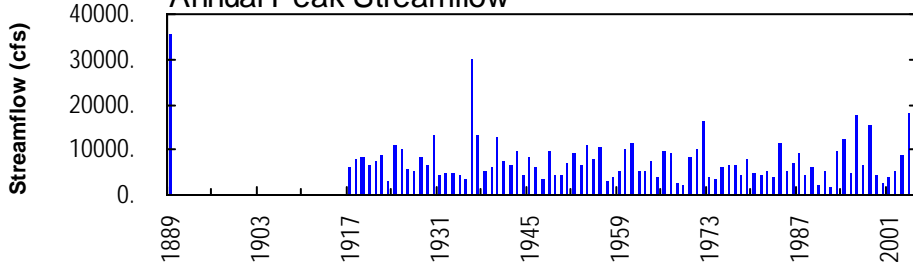
## Annual Mean Streamflow



## Annual Minimum 7-Day Average Streamflow



## Annual Peak Streamflow



## 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. 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. 6	2045	*5,650	*10.99	Mar. 29	0815	5,570	10.92

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	441	294	1940	338	284	470	1220	288	175	111	95	137
2	400	275	1490	318	264	432	1530	264	166	106	92	104
3	381	306	1170	329	261	391	1430	248	173	99	90	92
4	349	285	923	595	257	362	1160	233	194	98	87	87
5	322	384	772	1120	263	369	987	223	176	97	87	83
6	301	313	682	4510	269	406	856	218	163	97	88	82
7	282	296	839	3440	290	683	758	214	184	97	87	80
8	268	277	860	2390	410	1050	679	214	159	202	141	79
9	257	262	709	1770	564	748	586	208	149	196	190	78
10	251	252	1650	1410	1130	648	527	202	148	126	116	77
11	241	250	1660	1370	708	599	481	198	214	110	101	76
12	231	569	1210	1960	613	560	436	200	206	103	96	75
13	228	544	1030	1510	543	512	412	187	165	101	93	74
14	309	414	898	1770	647	456	387	185	166	105	89	73
15	278	393	755	1360	1180	412	359	228	144	121	87	72
16	321	371	677	1170	951	390	335	195	135	121	100	73
17	307	356	624	1030	854	372	322	180	134	153	142	90
18	251	345	512	800	723	364	313	174	131	202	103	79
19	506	331	485	658	612	356	299	168	125	146	94	75
20	382	430	400	631	559	363	288	285	122	122	92	75
21	341	400	e380	557	615	383	291	268	120	225	90	74
22	333	352	398	448	696	373	277	217	117	288	86	73
23	318	346	496	e390	667	1020	388	208	114	147	83	73
24	316	753	502	404	578	1540	379	228	111	121	81	74
25	326	1450	385	423	557	1170	319	236	109	173	79	74
26	301	906	360	413	516	997	292	209	107	141	77	77
27	284	726	354	370	470	884	274	191	105	115	79	97
28	269	1920	321	303	463	2380	261	201	103	114	99	82
29	262	1330	e310	e280	---	4500	261	231	107	104	97	79
30	394	1020	337	e290	---	2380	282	195	107	100	100	90
31	343	---	324	305	---	1630	---	188	---	98	213	---
TOTAL	9793	16150	23453	32662	15944	27200	16389	6684	4329	4139	3154	2454
MEAN	316	538	757	1054	569	877	546	216	144	134	102	81.8
MAX	506	1920	1940	4510	1180	4500	1530	288	214	288	213	137
MIN	228	250	310	280	257	356	261	168	103	97	77	72
CFSM	1.09	1.85	2.60	3.62	1.96	3.02	1.88	0.74	0.50	0.46	0.35	0.28
IN.	1.25	2.06	3.00	4.18	2.04	3.48	2.10	0.85	0.55	0.53	0.40	0.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2005, BY WATER YEAR (WY)

MEAN	184	287	381	427	544	897	768	523	312	184	147	164
MAX	969	1298	1268	1446	1340	3561	2194	1314	1743	824	738	1665
(WY)	1977	1998	1973	1937	1971	1936	1993	1924	1972	1989	1956	2004
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.

JUNIATA RIVER BASIN

01556000 FRANKSTOWN BRANCH JUNIATA RIVER AT WILLIAMSBURG, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1917 - 2005	
ANNUAL TOTAL	247121		162351			
ANNUAL MEAN	675		445		401	
HIGHEST ANNUAL MEAN					714	2004
LOWEST ANNUAL MEAN					200	1969
HIGHEST DAILY MEAN	15000	Sep 18	4510	Jan 6	25000	Mar 18 1936
LOWEST DAILY MEAN	136	Jul 11	72	Sep 15	31	Dec 24 1930
ANNUAL SEVEN-DAY MINIMUM	168	Jul 6	74	Sep 19	32	Dec 19 1930
MAXIMUM PEAK FLOW			5650	Jan 6	ab30000	Mar 18 1936
MAXIMUM PEAK STAGE			10.99	Jan 6	19.46	Sep 18 2004
INSTANTANEOUS LOW FLOW			70	Sep 14-16c	13	Jul 24 1934
ANNUAL RUNOFF (CFSM)	2.32		1.53		1.38	
ANNUAL RUNOFF (INCHES)	31.59		20.75		18.70	
10 PERCENT EXCEEDS	1420		1020		891	
50 PERCENT EXCEEDS	391		288		209	
90 PERCENT EXCEEDS	189		90		72	

- a From rating curve in use at that time based on slope-area measurement at gage height 18.58 ft.
- b Gage height 18.58 ft, from floodmark in gage shelter.
- c Also Sept. 22, 23.

