

## JUNIATA RIVER BASIN

### 01559000 JUNIATA RIVER AT HUNTINGDON, PA

**LOCATION.**--Lat 40°29'05", long 78°01'09", Huntingdon County, Hydrologic Unit 02050302, on right bank 170 ft downstream from Smithfield Bridge on State Highway 26 at Huntingdon, and 0.8 mi upstream from Standing Stone Creek.

**DRAINAGE AREA.**--816 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1941 to current year. Gage-height records collected in this vicinity for the period May 1895 to December 1938 are contained in reports of U.S. Weather Bureau. Prior to October 1950, published as Frankstown Branch Juniata River at Huntingdon.

**REVISED RECORDS.**--WDR PA-73-1: 1936(M). WDR PA-80-2: 1972(M). WDR PA-84-2: 1936(M) 1972(M).

**GAGE.**--Water-stage recorder. Datum of gage is 599.69 ft above sea level.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Flow regulated September 1941 to June 1972, and since December 15, 1985 by Warrior Ridge Hydroelectric Plant 4 mi upstream (reservoir capacity 400 acre-ft). Satellite and landline telemetry at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of Mar. 18, 1936, reached a stage of 21.87 ft, from floodmark, discharge, 81,000 ft<sup>3</sup>/s, from rating curve extended on basis of computation of peak discharge at dam and runoff comparison with downstream station.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 5,500 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. 24	1845	*7,970	*7.11	Apr. 10	0830	7,940	7.09
Mar. 4	0945	6,300	6.21				

#### DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	419	324	298	1430	813	1510	1010	383	338	343	287
2	272	418	385	304	2060	699	1550	884	394	308	449	285
3	219	419	346	282	2080	692	1440	878	569	312	389	281
4	330	406	323	274	1930	4850	1390	804	497	309	265	277
5	379	412	375	e280	2090	2600	2910	793	405	301	364	270
6	331	409	345	e280	1790	1900	2320	755	396	289	329	275
7	275	410	296	e280	1690	1620	1870	735	393	292	262	470
8	626	395	334	e290	1770	1300	1560	729	387	292	243	461
9	1380	373	361	e295	1550	1190	2130	725	366	279	411	340
10	928	416	354	e305	1480	1100	6900	670	347	296	460	332
11	726	510	340	e315	1440	1010	4400	568	344	321	270	246
12	633	498	298	332	1370	968	4180	555	350	311	277	242
13	562	421	298	e450	1320	921	3320	549	345	300	247	239
14	532	404	329	e450	1210	1080	2720	585	342	289	1320	218
15	537	401	347	e455	1130	1060	2270	522	336	289	705	212
16	499	401	296	e410	991	1210	2160	509	334	273	192	308
17	479	400	283	e410	1010	1620	1910	456	433	277	160	437
18	473	399	322	531	980	4090	1660	467	669	292	247	343
19	474	371	344	892	918	3980	1480	460	394	311	285	234
20	461	343	282	928	821	2760	1500	458	344	262	280	277
21	473	394	249	785	836	2660	1620	435	338	259	328	231
22	449	395	349	927	727	4080	2020	429	325	346	316	297
23	437	372	425	1330	576	2960	2290	536	312	386	288	249
24	438	333	367	5670	654	2440	2540	700	301	355	272	268
25	409	390	346	4490	582	2190	2020	540	300	287	296	225
26	405	386	361	2580	571	1940	1780	486	301	313	780	188
27	438	363	286	1980	527	1760	1600	460	274	315	1340	246
28	433	317	268	2160	649	1650	1380	423	409	292	705	207
29	422	390	268	3370	---	1590	1220	419	447	292	421	220
30	426	368	265	2320	---	1550	1110	404	457	297	381	495
31	422	---	303	1810	---	1500	---	416	---	305	293	---
TOTAL	15148	11933	10069	35483	34182	59783	66760	18360	11492	9388	12918	8660
MEAN	489	398	325	1145	1221	1928	2225	592	383	303	417	289
MAX	1380	510	425	5670	2090	4850	6900	1010	669	386	1340	495
MIN	219	317	249	274	527	692	1110	404	274	259	160	188
CFSM	.60	.49	.40	1.40	1.50	2.36	2.73	.73	.47	.37	.51	.35
IN.	.69	.54	.46	1.62	1.56	2.73	3.04	.84	.52	.43	.59	.39

#### STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1999, BY WATER YEAR (WY)

MEAN	558	824	1085	1153	1461	2286	2042	1479	961	580	456	465
MAX	2114	3020	3100	2780	3059	4920	5739	3217	5562	1920	1447	2856
(WY)	1991	1998	1973	1996	1971	1994	1993	1978	1972	1989	1956	1996
MIN	146	233	232	265	379	693	747	528	312	201	163	143
(WY)	1964	1964	1966	1981	1963	1969	1946	1976	1965	1966	1966	1963

e Estimated.

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SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1942 - 1999	
ANNUAL TOTAL	490507		294176		1110	
ANNUAL MEAN	1344		806		1830	
HIGHEST ANNUAL MEAN					1972	
LOWEST ANNUAL MEAN					1969	
HIGHEST DAILY MEAN	9230	Apr 27	6900	Apr 10	50400	Jun 23 1972
LOWEST DAILY MEAN	219	Oct 3	160	Aug 17	40	Sep 12 1963
ANNUAL SEVEN-DAY MINIMUM	298	Oct 1	229	Sep 23	117	Sep 10 1963
INSTANTANEOUS PEAK FLOW			7970	Jan 24	a57000	Jun 23 1972
INSTANTANEOUS PEAK STAGE			7.11	Jan 24	20.03	Jun 23 1972
INSTANTANEOUS LOW FLOW			96	Aug 16,17	b14	Feb 8 1948
ANNUAL RUNOFF (CFSM)	1.65		.99		1.36	
ANNUAL RUNOFF (INCHES)	22.36		13.41		18.49	
10 PERCENT EXCEEDS	3410		1920		2380	
50 PERCENT EXCEEDS	615		416		664	
90 PERCENT EXCEEDS	331		275		268	

a From rating curve extended above 22,000 ft<sup>3</sup>/s on basis of computation of peak discharge at dam, slope-conveyance study, and Pennsylvania Department of Environmental Protection step-backwater study.  
 b Minimum recorded; Also Aug. 2, 1954.

