

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 mi².

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 National Geodetic Vertical Datum of 1929.

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 ft³/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 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Mar. 27	0345	*10,900	*8.45	May 18	1630	8,960	7.48
May 13	2000	6,510	6.23				

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	224	205	725	e253	566	379	1890	1790	1450	421	208	200
2	215	202	467	e243	614	367	1540	2470	908	398	204	200
3	214	207	363	e243	545	694	1340	2390	713	374	205	203
4	212	208	314	e232	537	855	1190	1850	635	374	201	202
5	207	203	298	e243	499	617	1070	1590	664	321	201	192
6	200	198	278	e264	485	620	988	1370	1270	316	207	184
7	192	198	265	e253	477	595	911	1310	3450	312	216	182
8	187	197	269	286	461	552	837	1160	1550	304	197	179
9	186	193	392	272	439	521	811	3040	1170	307	189	177
10	192	190	428	328	423	496	810	3470	996	386	190	176
11	197	192	346	600	1350	474	697	2510	878	332	187	293
12	201	188	307	591	1180	444	629	2260	791	291	182	281
13	204	189	306	503	950	437	652	4770	756	283	189	136
14	207	190	335	449	775	427	902	5230	1340	277	218	131
15	450	196	374	414	674	419	1900	4060	2810	273	189	134
16	367	196	355	405	652	441	1780	3020	1870	266	185	130
17	258	193	347	328	617	507	1670	2460	1390	253	189	152
18	276	191	974	332	561	635	1550	6410	1120	246	187	185
19	243	195	870	315	507	1110	2060	5440	967	248	187	181
20	231	193	668	321	485	2130	1560	3690	839	253	190	176
21	221	196	554	321	493	4240	1350	2820	727	261	204	194
22	215	190	488	321	476	2620	1620	2260	659	239	190	214
23	212	191	444	319	445	1950	1570	1860	619	236	202	390
24	225	190	434	350	418	1580	1310	1580	573	239	337	424
25	246	256	423	584	376	1360	1130	1360	563	236	328	302
26	220	729	361	557	387	2970	1070	1200	527	245	249	153
27	211	371	340	499	428	8150	947	1030	503	285	215	297
28	206	293	e328	483	408	4060	1320	973	573	272	208	819
29	206	362	e307	468	---	2900	2300	929	527	240	213	440
30	205	442	e286	465	---	2280	1720	817	460	222	210	284
31	205	---	e253	505	---	1840	---	1130	---	213	205	---
TOTAL	7035	7144	12899	11747	16228	46670	39124	76249	31298	8923	6482	7211
MEAN	227	238	416	379	580	1505	1304	2460	1043	288	209	240
MAX	450	729	974	600	1350	8150	2300	6410	3450	421	337	819
MIN	186	188	253	232	376	367	629	817	460	213	182	130
CFSM	0.28	0.29	0.51	0.46	0.71	1.84	1.60	3.01	1.28	0.35	0.26	0.29
IN.	0.32	0.33	0.59	0.54	0.74	2.13	1.78	3.48	1.43	0.41	0.30	0.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2002, BY WATER YEAR (WY)

MEAN	545	804	1059	1116	1438	2246	2025	1474	960	568	447	454
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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01559000 JUNIATA RIVER AT HUNTINGDON, PA--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1942 - 2002	
ANNUAL TOTAL	263677		271010			
ANNUAL MEAN	722		742		1093	
HIGHEST ANNUAL MEAN					1830	1972
LOWEST ANNUAL MEAN					595	1969
HIGHEST DAILY MEAN	5460	Apr 17	8150	Mar 27	50400	Jun 23 1972
LOWEST DAILY MEAN	182	Sep 18,19	130	Sep 16	40	Sep 12 1963
ANNUAL SEVEN-DAY MINIMUM	190	Sep 13	150	Sep 13	117	Sep 10 1963
MAXIMUM PEAK FLOW			10900	Mar 27	a 57000	Jun 23 1972
MAXIMUM PEAK STAGE			8.45	Mar 27	20.03	Jun 23 1972
INSTANTANEOUS LOW FLOW			130	Sep 14-17	b 14	Feb 8 1948
ANNUAL RUNOFF (CFSM)	0.89		0.91		1.34	
ANNUAL RUNOFF (INCHES)	12.02		12.35		18.19	
10 PERCENT EXCEEDS	1830		1780		2340	
50 PERCENT EXCEEDS	370		379		651	
90 PERCENT EXCEEDS	201		192		264	

a From rating curve extended above 22,000 ft³/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.

