



2005 Water Year
JUNIATA RIVER BASIN
01567000 Juniata River at Newport, PA

Latitude: 40° 28 ' 42"

Longitude: 077° 07 ' 46"

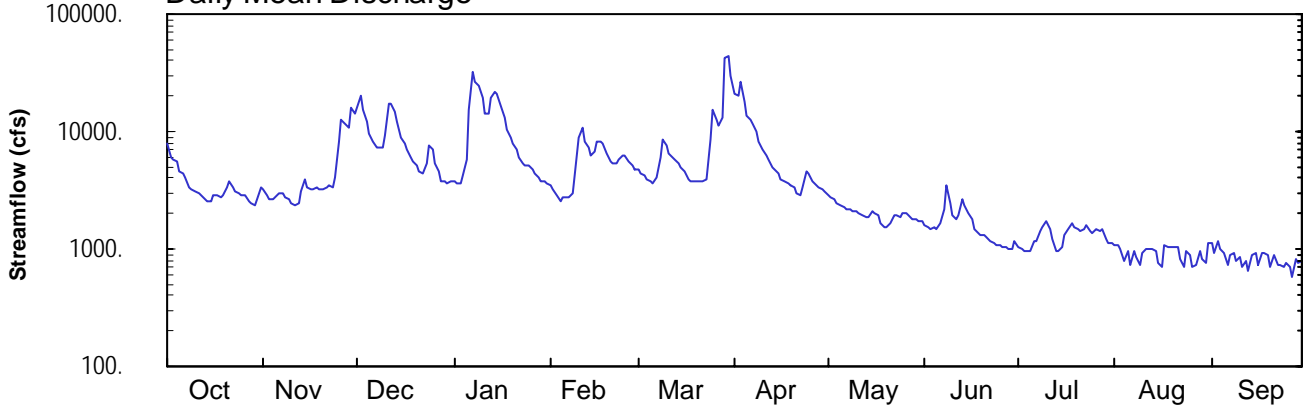
Hydrologic Unit Code: 02050304

Perry County

Datum: 363.93 feet

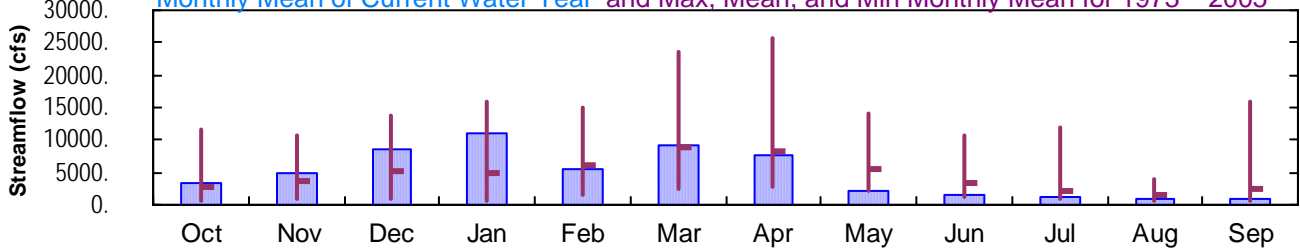
Drainage Area: 3354. mi²

Daily Mean Discharge

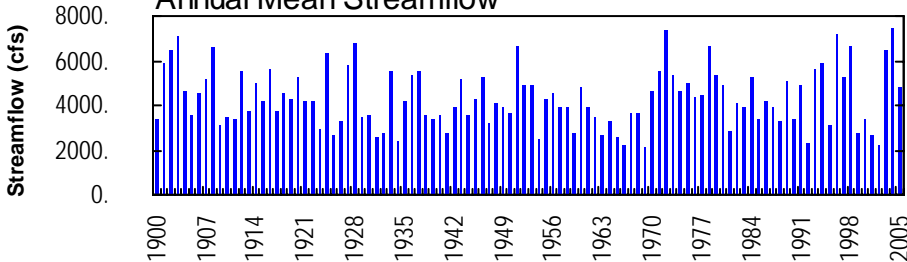


Monthly Statistics

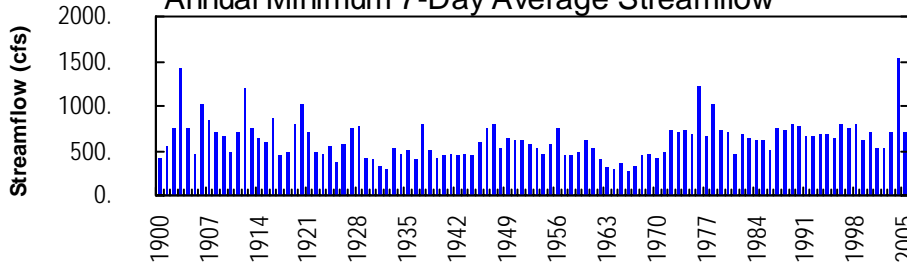
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1973 – 2005



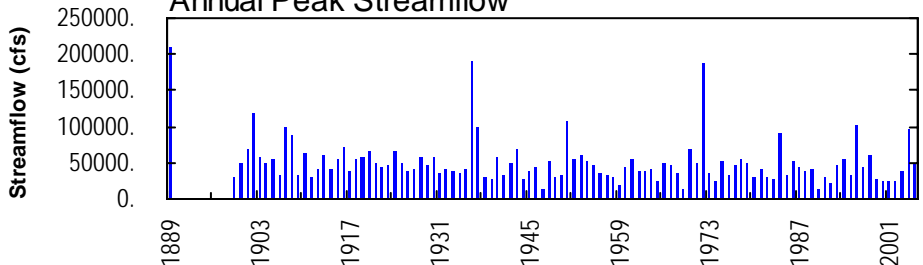
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



01567000-Juniata River at Newport

JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 40°28'42", long 77°07'46", Perry County, Hydrologic Unit 02050304, on right bank at downstream side of bridge on State Highway 34 at Newport, and 1,000 ft upstream from Little Buffalo Creek.

DRAINAGE AREA.--3,354 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1899 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 781: 1902(M). WSP 1302: 1915-17. WSP 1502: 1899-1908, 1914, 1924, 1936. WSP 1722: 1916.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 363.93 ft above National Geodetic Vertical Datum of 1929. Prior to July 16, 1929, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since October 1972 by Raystown Dam (station 01563100) about 75 mi upstream. Satellite and landline telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1, 1889, reached a stage of 35.9 ft, from floodmarks, discharge, about 209,000 ft³/s, from rating curve extended above 100,000 ft³/s.

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	8000	3200	16300	3720	e3500	4750	21100	2830	1580	1050	1090	1140
2	5970	2820	20100	3660	e3200	4470	19900	2780	1520	1010	1070	930
3	5700	2650	15300	3580	e2900	4210	26000	2670	1500	977	1000	1190
4	5590	2640	12000	4190	e2600	3930	18000	2500	1530	958	791	1010
5	4670	2890	9760	5900	2710	3750	13400	2380	1500	966	945	930
6	4430	2960	8340	15500	2780	3560	12700	2300	1660	e1170	745	733
7	4040	3020	7260	31900	2810	4020	11900	2210	2200	e1190	977	900
8	3370	2760	7310	26400	e3000	6060	10100	2160	3530	e1400	853	908
9	3210	2620	7450	24600	e4280	8700	8180	2110	2450	e1550	720	799
10	3080	2420	9290	19600	e8970	7690	6920	2070	1960	e1700	935	846
11	2950	2330	17400	14300	e10600	6470	6350	2010	1810	e1500	983	717
12	2830	2490	17500	14300	e8300	6090	5690	1950	1980	e1200	1010	785
13	2690	3070	14800	19100	e7300	5770	5040	1890	2670	e975	1000	656
14	2580	3880	12100	21700	e6200	5380	4770	1870	2360	e950	967	875
15	2590	3380	8960	20600	e6880	5020	4420	2060	1990	1030	769	908
16	2820	3260	7950	16300	e8290	4560	3950	2010	1790	1300	711	720
17	2830	3200	6900	13300	8250	3950	3750	1970	1490	e1500	1090	934
18	2740	3300	5940	10400	7890	3840	3590	1670	1370	e1650	1050	910
19	2890	3270	5550	8840	6500	3770	3480	1530	1320	e1550	1030	898
20	3380	3270	5120	8000	5470	3730	3350	1540	1290	e1450	1040	710
21	3760	3340	4660	6910	5370	3740	3020	1670	1260	e1400	1050	902
22	3310	3480	4390	e6000	5330	3700	2900	1910	1190	e1500	810	738
23	3140	3410	5280	e5450	5740	3870	3290	1910	1110	e1580	700	726
24	3020	4050	7490	e5200	6200	8640	4540	1900	1090	e1400	952	700
25	2910	8320	6940	e5100	6170	15300	4390	2020	1070	e1350	905	767
26	2830	12900	5430	e4800	5510	12500	3800	2040	1040	1470	694	697
27	2540	11700	e4600	e4400	5140	11300	3530	1940	1020	1400	734	589
28	2420	10900	e3700	e4000	4710	13100	3320	1800	1010	1490	977	826
29	2330	15900	3770	e3800	---	42400	3170	1790	1010	1210	824	749
30	2660	14400	3670	e3700	---	43700	3080	1700	1160	1140	748	792
31	3300	---	3720	e3600	---	30300	---	1720	---	1120	1100	---
TOTAL	108580	147830	268980	338850	156600	288270	227630	62910	48460	40136	28270	24985
MEAN	3503	4928	8677	10930	5593	9299	7588	2029	1615	1295	912	833
MAX	8000	15900	20100	31900	10600	43700	26000	2830	3530	1700	1100	1190
MIN	2330	2330	3670	3580	2600	3560	2900	1530	1010	950	694	589

e Estimated.

JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2005, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2659	3746	5210	5032	5976	8812	8290	5534	3501	2146	1580	2409
MAX (WY)	11610	10850	13770	15810	15070	23500	25780	13940	10640	12080	3916	15960
MIN (WY)	1977	1998	1973	1996	1984	1994	1993	1978	2003	1989	2003	2004
MIN (WY)	657	789	1045	495	1498	2576	2898	2029	1084	864	674	586
(WY)	2002	2002	1999	1981	2002	1990	1995	2005	1991	1988	2002	1986

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1973 - 2005	
ANNUAL TOTAL	2502100		1741501			
ANNUAL MEAN	6836		4771		4565	
HIGHEST ANNUAL MEAN					7470	
LOWEST ANNUAL MEAN					2241	
HIGHEST DAILY MEAN	85100	Sep 19	43700	Mar 30	92300	Jan 20 1996
LOWEST DAILY MEAN	1420	Jul 4	589	Sep 27	450	Jan 13 1981
ANNUAL SEVEN-DAY MINIMUM	1530	Jun 30	720	Sep 22	461	Jan 9 1981
MAXIMUM PEAK FLOW			50100		Mar 29	a103000
MAXIMUM PEAK STAGE			16.86		Mar 29	24.69
10 PERCENT EXCEEDS	15300		11800		10300	
50 PERCENT EXCEEDS	4060		2960		2710	
90 PERCENT EXCEEDS	2100		909		845	

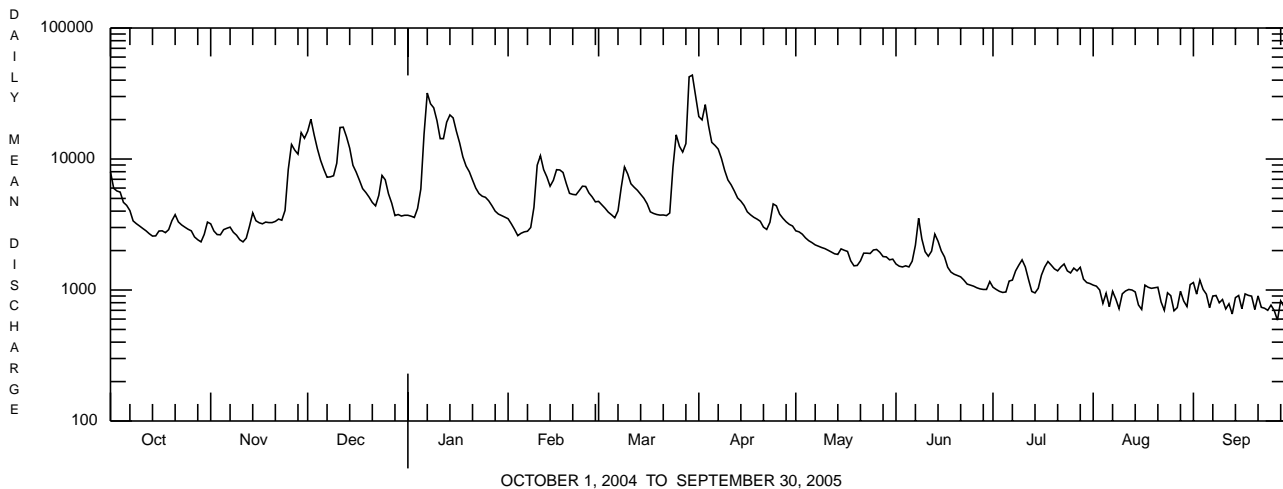
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1899 - 1972, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1820	2658	3649	4621	5570	9856	8097	5797	3612	2072	1563	1419
MAX (WY)	8108	10880	11310	13300	16160	33600	17160	14870	25050	7865	4605	6890
MIN (WY)	1928	1951	1902	1937	1915	1936	1940	1908	1972	1972	1905	1911
MIN (WY)	351	418	471	841	943	2340	2026	1319	890	455	327	370
(WY)	1964	1931	1931	1931	1934	1931	1915	1941	1965	1966	1966	1964

SUMMARY STATISTICS WATER YEARS 1899 - 1972

ANNUAL MEAN	4228
HIGHEST ANNUAL MEAN	7403
LOWEST ANNUAL MEAN	2166
HIGHEST DAILY MEAN	172000
LOWEST DAILY MEAN	207
ANNUAL SEVEN-DAY MINIMUM	269
MAXIMUM PEAK FLOW	a190000
MAXIMUM PEAK STAGE	b34.24
INSTANTANEOUS LOW FLOW	195
ANNUAL RUNOFF (CFSM)	1.26
ANNUAL RUNOFF (INCHES)	17.13
10 PERCENT EXCEEDS	9360
50 PERCENT EXCEEDS	2300
90 PERCENT EXCEEDS	680

- a From rating curve extended above 100,000 ft³/s, on basis of slope-area measurement of peak flow.
- b From floodmark in gage.



OCTOBER 1, 2004 TO SEPTEMBER 30, 2005

JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued
(Pennsylvania Water-Quality Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2002 to current year.

REMARKS.--Samples were collected using a D-Frame net with a mesh size of 500 µm. Samples represent counts per 100 animal (approximate) subsamples.

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.

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES

Date	10/18/04
Benthic macroinvertebrate	Count
Mollusca	
Gastropoda (SNAILS)	
Basommatophora	
Ancylidae	
<i>Ferrissia</i>	2
Hydrobiidae	
<i>Ammicola</i>	11
Pleuroceridae	
<i>Leptoxis carinata</i>	7
Bivalvia (CLAMS)	
Veneroida	
Corbiculidae	
<i>Corbicula fluminea</i>	7
Sphaeriidae	
<i>Pisidium</i>	2
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	1
Tubificida	
Tubificidae	2
Arthropoda	
Crustacea	
Amphipoda (SCUDS)	
Gammaridae	
<i>Gammarus</i>	1
Insecta	
Ephemeroptera (MAYFLIES)	
Ephemerellidae	
<i>Serratella</i>	1
Heptageniidae	
<i>Leucrocuta</i>	16
<i>Stenonema</i>	10
Isonychiidae	
<i>Isonychia</i>	14
Leptophlebiidae	
<i>Paraleptophlebia</i>	1
Potamanthidae	
<i>Anthopotamus</i>	30
Odonata (DRAGONFLIES AND DAMSELFLIES)	
Coenagrionidae	
<i>Argia</i>	1
Plecoptera (STONEFLIES)	
Perlidae	
<i>Agnatina</i>	2
Taeniopterygidae	
<i>Taeniopteryx</i>	2

JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES--Continued

Date	10/18/04
Benthic macroinvertebrate	Count
Megaloptera	
Sialidae (ALDERFLIES)	
<i>Sialis</i>	2
Trichoptera (CADDISFLIES)	1
Hydropsychidae	
<i>Cheumatopsyche</i>	9
<i>Hydropsyche</i>	3
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Optioservus</i>	19
<i>Stenelmis</i>	17
Psephenidae (WATER PENNIES)	
<i>Psephenus</i>	5
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	3
Total Organisms	169
Total Taxa	25