



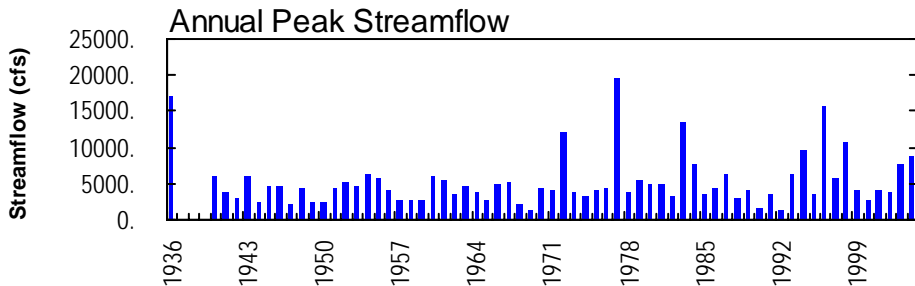
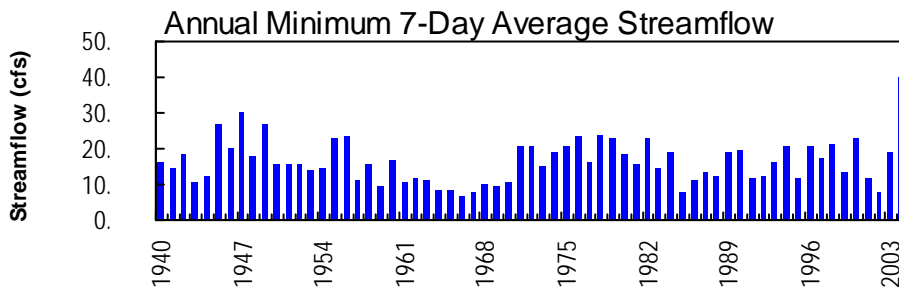
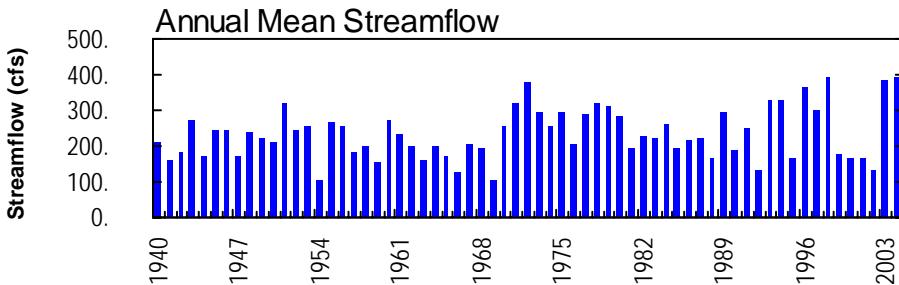
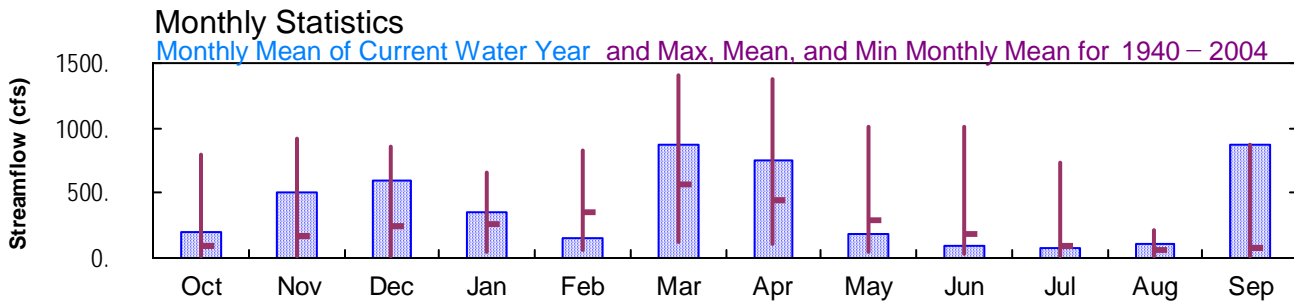
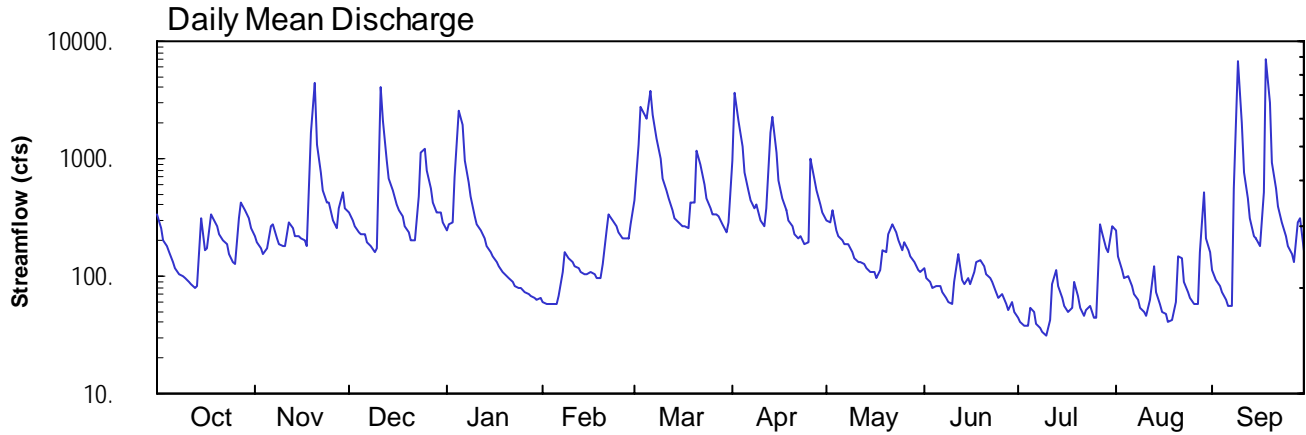
# 2004 Water Year JUNIATA RIVER BASIN

## 01560000 Dunning Creek at Belden, PA

Latitude: 40°04'18"  
Bedford County

Longitude: 078°29'34"  
Datum: 1051.16 feet

Hydrologic Unit Code: 02050303  
Drainage Area: 172. mi<sup>2</sup>



**JUNIATA RIVER BASIN**

**01560000 DUNNING CREEK AT BELDEN, PA**

**LOCATION.**--Lat 40°04'18", long 78°29'34", Bedford County, Hydrologic Unit 02050303, on left bank 10 ft upstream from highway bridge on SR 1014, 0.8 mi southeast of Belden, 3.8 mi north of Bedford, and 4.3 mi upstream from mouth.

**DRAINAGE AREA.**--172 mi<sup>2</sup>.

**PERIOD OF RECORD.**--May 1939 to current year. Prior to October 1939 monthly discharge only, published in WSP 1302.

**REVISED RECORDS.**--WSP 971: 1940(M). WSP 1502: 1940-41. WDR PA-72-1: 1967(M).

**GAGE.**--Water-stage recorder. Datum of gage is 1,051.16 ft above National Geodetic Vertical Datum of 1929.

**REMARKS.**--Records fair except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Satellite telemetry at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Maximum stage known, 17.8 ft, Mar. 18, 1936, from floodmarks (backwater from Raystown Branch Juniata River), discharge, about 16,900 ft<sup>3</sup>/s.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 2,300 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)
Nov. 20	0245	6,130	10.15	Apr. 2	1015	4,450	9.01
Dec. 11	1345	5,560	9.79	Apr. 14	0145	3,050	7.75
Jan. 5	1800	3,230	7.98	Sept. 9	1130	*8,700	*11.45
Mar. 3	0245	3,500	8.23	Sept. 18	1215	8,200	11.25
Mar. 6	1415	4,270	8.87				

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	341	218	352	243	e61	439	947	295	117	44	249	112
2	257	193	304	272	e59	1290	3560	288	96	40	145	94
3	202	172	266	292	e58	2760	2120	362	89	38	114	81
4	177	153	235	700	e58	2330	1240	246	79	38	98	72
5	161	174	230	2510	e58	2180	759	221	82	54	100	63
6	133	265	228	1970	e68	3740	538	203	84	49	81	57
7	117	279	198	965	e110	2360	434	186	73	39	69	55
8	106	206	176	626	e160	1490	384	189	65	37	61	564
9	98	188	162	483	e140	1000	408	158	61	34	54	6830
10	95	179	172	e320	e130	686	298	143	59	31	50	2050
11	89	177	4120	e280	e120	527	268	132	88	43	46	761
12	85	285	2120	e245	e115	454	370	130	151	85	63	461
13	81	253	953	e210	e108	366	1670	127	91	114	122	306
14	81	220	665	e180	e105	311	2260	115	85	82	74	219
15	309	215	534	e160	e103	290	1130	109	97	64	57	209
16	164	206	410	e145	e108	266	650	108	84	56	50	183
17	176	198	360	e130	e102	265	465	96	108	49	47	519
18	329	178	319	e120	e98	253	369	112	133	53	41	6910
19	312	1650	264	e110	e98	429	303	169	135	89	42	2960
20	270	4370	234	e100	e124	431	262	161	124	68	61	932
21	229	1320	204	e96	e246	1190	230	223	105	53	148	553
22	201	753	203	e88	e334	907	213	274	95	46	143	395
23	184	526	475	e83	e302	606	222	240	89	52	89	283
24	153	428	1130	e78	e270	458	190	202	73	55	74	219
25	134	421	1200	e80	e240	384	191	168	66	44	64	180
26	125	300	788	e74	e212	337	999	198	71	43	57	151
27	315	253	558	e70	e207	333	667	167	57	271	57	131
28	425	379	430	e67	e207	319	542	147	52	232	157	283
29	360	523	355	e64	e276	271	411	131	60	175	518	307
30	314	384	347	e63	---	236	344	112	50	159	210	164
31	255	---	282	e64	---	282	---	109	---	267	159	---
TOTAL	6278	15066	18274	10888	4277	27190	22444	5521	2619	2504	3300	26104
MEAN	203	502	589	351	147	877	748	178	87.3	80.8	106	870
MAX	425	4370	4120	2510	334	3740	3560	362	151	271	518	6910
MIN	81	153	162	63	58	236	190	96	50	31	41	55
CFM	1.18	2.92	3.43	2.04	0.86	5.10	4.35	1.04	0.51	0.47	0.62	5.06
IN.	1.36	3.26	3.95	2.35	0.93	5.88	4.85	1.19	0.57	0.54	0.71	5.65

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)**

MEAN	96.3	174	251	259	352	564	450	287	177	89.2	56.9	75.2
MAX	798	917	859	664	825	1408	1370	1013	1015	740	214	870
(WY)	1977	1998	1973	1952	1971	1994	1993	1998	1972	1989	1979	2004
MIN	14.0	18.3	18.8	45.8	65.2	129	112	45.7	25.6	8.96	8.05	9.86
(WY)	1970	1954	1999	1981	1963	1990	1946	1941	1965	1966	1966	1985

e Estimated.

**JUNIATA RIVER BASIN**

**01560000 DUNNING CREEK AT BELDEN, PA--Continued**

<b>SUMMARY STATISTICS</b>	<b>FOR 2003 CALENDAR YEAR</b>		<b>FOR 2004 WATER YEAR</b>		<b>WATER YEARS 1940 - 2004</b>	
ANNUAL TOTAL	159862		144465			
ANNUAL MEAN	438		395		235	
HIGHEST ANNUAL MEAN					397	
LOWEST ANNUAL MEAN					107	
HIGHEST DAILY MEAN	6000	Jun 4	6910	Sep 18	9140	Jun 23 1972
LOWEST DAILY MEAN	25	Jul 31	31	Jul 10	6.4	Sep 6 1964
ANNUAL SEVEN-DAY MINIMUM	30	Jul 25	40	Jul 4	6.7	Aug 5 1966
MAXIMUM PEAK FLOW			8700	Sep 9	<sup>a</sup> 19400	Jul 20 1977
MAXIMUM PEAK STAGE			11.45	Sep 9	14.15	Jul 20 1977
INSTANTANEOUS LOW FLOW			29	Jul 10,11	2.6	Sep 6 1964
ANNUAL RUNOFF (CFSM)	2.55		2.29		1.37	
ANNUAL RUNOFF (INCHES)	34.57		31.24		18.58	
10 PERCENT EXCEEDS	1010		760		573	
50 PERCENT EXCEEDS	223		190		100	
90 PERCENT EXCEEDS	61		58		20	

<sup>a</sup> From rating curve extended above 9,200 ft<sup>3</sup>/s on basis of contracted-opening measurement at gage height 12.67 ft and contracted-opening and flow-over-road measurement at gage height 13.03 ft.