



Water-Data Report 2006

01401650 PIKE RUN AT BELLE MEAD, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°28'05", long 74°38'56" referenced to North American Datum of 1983, Hillsborough Township, Somerset County, NJ, Hydrologic Unit 02030105, on right bank 20 ft upstream from bridge on Township Line Road, 0.7 mi east of Belle Mead, 0.8 mi upstream from Cruser Brook, and 1.0 mi downstream from bridge on U.S. Route 206.

DRAINAGE AREA.--5.36 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1980 to current year.

REVISED RECORDS.--WDR NJ-01-1: 1994(M), 1996(M), 1997(P), 1999(P).

GAGE.--Water-stage recorder, crest-stage gage, and concrete parking-block control. Datum of gage is 58.85 ft above NGVD of 1929.

REMARKS.--Records fair, except for estimated daily discharges and daily discharges below 0.5 ft³/s, which are poor. Several measurements of water temperature were made during the year. Some regulation during summer months, possibly from irrigation. Radio rain and gage-height telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1810, 13.5 ft, Aug. 28, 1971, from floodmark, present datum.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct 09	0000	*1,390	*9.84
Oct 12	0945	1,040	8.70
Dec 16	1000	509	6.58
Jan 03	0515	326	5.65
Jan 18	1500	361	5.84
Jun 28	1000	499	6.53

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e0.00	1.9	11	7.2	8.2	2.8	1.8	2.7	1.5	4.0	0.62	0.85
2	e0.00	1.7	6.5	18	5.6	e3.4	1.8	2.6	9.0	2.8	0.57	41
3	e0.00	1.5	4.3	146	19	e3.7	1.7	2.5	49	2.4	0.52	20
4	e0.00	1.5	3.6	20	26	e2.8	2.9	2.5	12	2.0	0.48	3.7
5	e0.00	1.4	3.2	12	24	2.9	2.3	2.4	6.0	3.8	0.45	4.1
6	e0.00	1.4	3.0	8.1	9.8	2.7	2.2	2.1	4.1	4.6	0.40	6.8
7	e0.00	1.6	2.7	5.6	6.6	2.6	2.0	1.8	19	2.7	0.54	2.8
8	200	1.6	2.1	4.7	5.3	2.5	9.4	1.7	13	2.1	0.52	2.2
9	235	1.8	2.3	4.2	4.5	2.6	7.8	1.6	8.9	1.9	0.41	1.8
10	18	2.9	2.3	3.3	3.7	2.8	3.9	1.6	5.0	1.6	0.35	1.7
11	15	2.0	2.5	7.1	3.5	2.6	2.9	1.6	3.6	1.5	0.35	1.5
12	365	1.6	2.4	17	e3.7	3.2	2.6	30	2.8	1.4	0.31	1.1
13	76	1.5	2.3	7.2	e4.3	3.9	2.4	5.0	2.5	4.3	0.27	1.1
14	103	1.4	e1.7	37	e4.1	3.6	2.4	3.1	2.2	1.8	0.23	3.7
15	32	1.4	1.6	23	5.6	2.9	2.6	4.8	2.2	1.5	0.22	5.8
16	13	4.0	176	e9.4	16	2.6	2.3	52	1.9	1.5	0.24	8.0
17	7.3	24	20	5.6	36	2.5	2.0	12	1.9	1.3	0.21	3.5
18	4.7	5.1	10	119	12	2.5	1.9	6.5	1.7	1.2	0.21	2.1
19	2.9	3.0	7.3	20	e6.5	2.4	1.7	11	1.4	2.5	0.21	1.7
20	2.3	2.3	4.8	12	e5.6	2.3	1.7	9.9	1.4	1.4	0.21	1.5
21	2.1	2.7	3.4	8.8	5.3	2.2	1.6	5.6	1.4	2.9	0.21	1.3
22	7.6	65	2.7	6.1	4.9	2.0	5.8	4.1	1.3	6.2	0.21	1.2
23	28	14	2.6	59	4.9	2.0	72	3.0	1.1	2.4	0.20	1.5
24	12	8.4	2.6	17	4.6	2.0	22	2.6	3.2	1.4	0.19	1.7
25	118	5.6	5.7	11	3.9	2.0	11	2.3	3.8	1.0	0.19	1.3
26	31	3.8	22	6.9	3.7	2.3	6.7	2.1	3.8	0.96	1.2	1.2
27	11	3.2	8.7	4.8	e3.1	2.4	5.3	2.5	3.5	0.87	1.1	1.2
28	6.0	2.9	5.5	4.6	3.0	2.1	4.1	1.9	110	e2.9	8.0	1.2
29	4.2	3.2	14	5.0	---	2.1	3.3	1.6	8.9	e1.6	1.5	2.3
30	3.1	79	11	6.0	---	2.0	2.9	1.5	5.4	e0.90	1.3	1.6
31	2.3	---	6.9	15	---	1.9	---	1.4	---	0.65	1.2	---
Total	1,299.50	251.4	354.7	630.6	243.4	80.3	193.0	186.0	291.5	68.08	22.62	129.45
Mean	41.9	8.38	11.4	20.3	8.69	2.59	6.43	6.00	9.72	2.20	0.73	4.32
Max	365	79	176	146	36	3.9	72	52	110	6.2	8.0	41
Min	0.00	1.4	1.6	3.3	3.0	1.9	1.6	1.4	1.1	0.65	0.19	0.85
Cfsm	7.82	1.56	2.13	3.80	1.62	0.48	1.20	1.12	1.81	0.41	0.14	0.81
In.	9.02	1.74	2.46	4.38	1.69	0.56	1.34	1.29	2.02	0.47	0.16	0.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	6.76	8.31	11.7	13.2	12.7	14.0	12.2	8.30	5.89	6.11	3.10	4.93
Max	41.9	22.3	35.5	43.3	27.5	38.8	43.1	26.2	31.4	26.1	9.94	56.9
(WY)	(2006)	(1989)	(1997)	(1996)	(1994)	(1994)	(1983)	(1989)	(2003)	(1984)	(1990)	(1999)
Min	0.40	0.28	0.12	0.04	1.97	2.59	2.18	1.54	0.37	0.00	0.17	0.02
(WY)	(2002)	(1999)	(1999)	(1981)	(2002)	(2006)	(1985)	(2005)	(1995)	(1999)	(1980)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1980 - 2006	
Annual total	3,922.64		3,750.55			
Annual mean	10.7		10.3		8.96	
Highest annual mean					14.3	1984
Lowest annual mean					3.32	2002
Highest daily mean	365	Oct 12	365	Oct 12	1,590	Sep 16, 1999
Lowest daily mean	0.00	Aug 23	0.00	Oct 1 - 7	0.00	Aug 20, 1980
Annual seven-day minimum	0.00	Aug 23	0.00	Oct 1	0.00	Aug 20, 1980
Maximum peak flow			1,390	Oct 9	^a 4,120	Sep 16, 1999
Maximum peak stage			9.84	Oct 9	^b 13.61	Sep 16, 1999
Instantaneous low flow			0.00	Oct 1 - 7	0.00	Aug 20, 1980
Annual runoff (cfsm)	2.01		1.92		1.67	
Annual runoff (inches)	27.22		26.03		22.72	
10 percent exceeds	18		18		16	
50 percent exceeds	2.3		2.8		2.7	
90 percent exceeds	0.00		0.94		0.30	

^a From rating curve extended above 790 ft³/s on basis of step-backwater computation.^b From high-water mark in gage.^c Estimated.