



Water-Data Report 2007

01377500 PASCACK BROOK AT WESTWOOD, NJ

HACKENSACK RIVER BASIN

LOCATION.--Lat 40°59'34", long 74°01'16" referenced to North American Datum of 1983, Westwood Borough, Bergen County, NJ, Hydrologic Unit 02030103, on right bank 75 ft upstream from bridge on Harrington Avenue in Westwood, 500 ft downstream from Musquapsink Brook, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--29.6 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1934 to current year.

REVISED RECORDS.--WDR NJ-87-1:1984 (P).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 28.62 ft above NGVD of 1929.

COOPERATION.--Gage-height record collected in cooperation with United Water New Jersey.

REMARKS.--Records fair. Flow regulated by Woodcliff Lake 3.0 mi above station (see 01377450). Water diverted for municipal supply by United Water New York (formerly Spring Valley Water Company), by pumpage from well fields in headwater area of Pascack Brook in vicinity of Spring Valley, NY, and by Park Ridge Water Department by pumping from wells above Woodcliff Lake probably reduces flow past this station. Prior to 1989, water was diverted from Saddle River to Musquapsink Brook that then entered Pascack Brook 500 feet upstream of gage. Several measurements of water temperature were made during the year. Satellite/radio gage-height telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct 12	0330	755	3.86
Oct 28	1400	1,200	4.70
Nov 8	2200	1,500	5.19
Dec 23	1115	401	3.15
Jan 1	1330	887	4.13
Jan 8	0845	485	3.33
Mar 2	1200	1,400	5.03
Apr 12	1715	653	3.65
Apr 16	0400	*3,260	*7.36
Apr 27	1030	613	3.57
Aug 8	0700	596	3.54
Aug 9	2315	607	3.56

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	75	37	56	385	28	47	39	96	43	26	34	24
2	42	49	113	99	30	766	42	54	47	25	34	23
3	25	44	50	51	33	144	40	44	56	25	46	24
4	23	36	42	44	29	70	109	43	139	30	38	26
5	92	33	38	41	26	51	91	42	69	46	26	29
6	32	31	38	45	25	41	47	40	62	35	30	31
7	24	30	33	40	34	36	41	39	61	26	37	31
8	21	558	35	308	39	44	39	38	60	23	176	31
9	20	425	32	91	36	51	37	38	60	27	100	27
10	20	155	33	55	36	50	40	46	59	26	150	36
11	55	156	33	45	35	54	44	56	58	66	43	66
12	319	132	33	42	35	40	267	46	58	49	38	34
13	48	75	35	49	35	40	127	39	57	26	39	39
14	32	47	39	50	37	56	81	38	56	33	41	37
15	26	42	35	54	35	77	867	42	55	24	42	26
16	25	84	33	48	34	118	1,950	72	56	23	49	24
17	44	181	30	39	34	84	313	91	43	25	67	24
18	179	107	30	37	34	30	161	109	23	76	77	29
19	48	73	29	39	33	26	125	68	20	50	70	28
20	96	30	27	38	34	52	104	66	27	40	69	39
21	70	29	27	33	37	74	92	44	22	23	131	26
22	39	29	28	35	42	75	83	34	22	25	79	26
23	34	65	202	35	36	154	76	33	21	111	69	24
24	30	102	61	34	31	93	96	32	18	43	54	28
25	28	53	41	34	30	91	135	34	21	34	47	20
26	24	46	75	31	32	61	152	36	25	35	41	20
27	25	43	46	30	32	57	387	36	29	35	33	19
28	655	41	36	31	34	51	144	31	58	42	35	18
29	139	39	33	30	---	45	106	28	42	40	26	17
30	55	39	30	28	---	41	101	28	36	30	30	16
31	45	---	30	29	---	39	---	43	---	35	31	---
Total	2,390	2,811	1,403	1,950	936	2,658	5,936	1,486	1,403	1,154	1,782	842
Mean	77.1	93.7	45.3	62.9	33.4	85.7	198	47.9	46.8	37.2	57.5	28.1
Max	655	558	202	385	42	766	1,950	109	139	111	176	66
Min	20	29	27	28	25	26	37	28	18	23	26	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	41.4	49.1	52.6	54.6	56.9	77.1	78.1	60.1	50.8	45.8	42.7	43.2
Max	158	131	129	151	135	197	198	155	175	180	127	196
(WY)	(2006)	(1978)	(1984)	(1979)	(1973)	(1953)	(1983)	(1989)	(1972)	(1945)	(1971)	(1999)
Min	10.2	9.83	15.8	10.8	15.7	29.3	28.9	21.2	18.2	14.2	10.0	9.45
(WY)	(1942)	(1950)	(1940)	(1954)	(1954)	(2006)	(1991)	(1992)	(1939)	(1944)	(1935)	(1939)

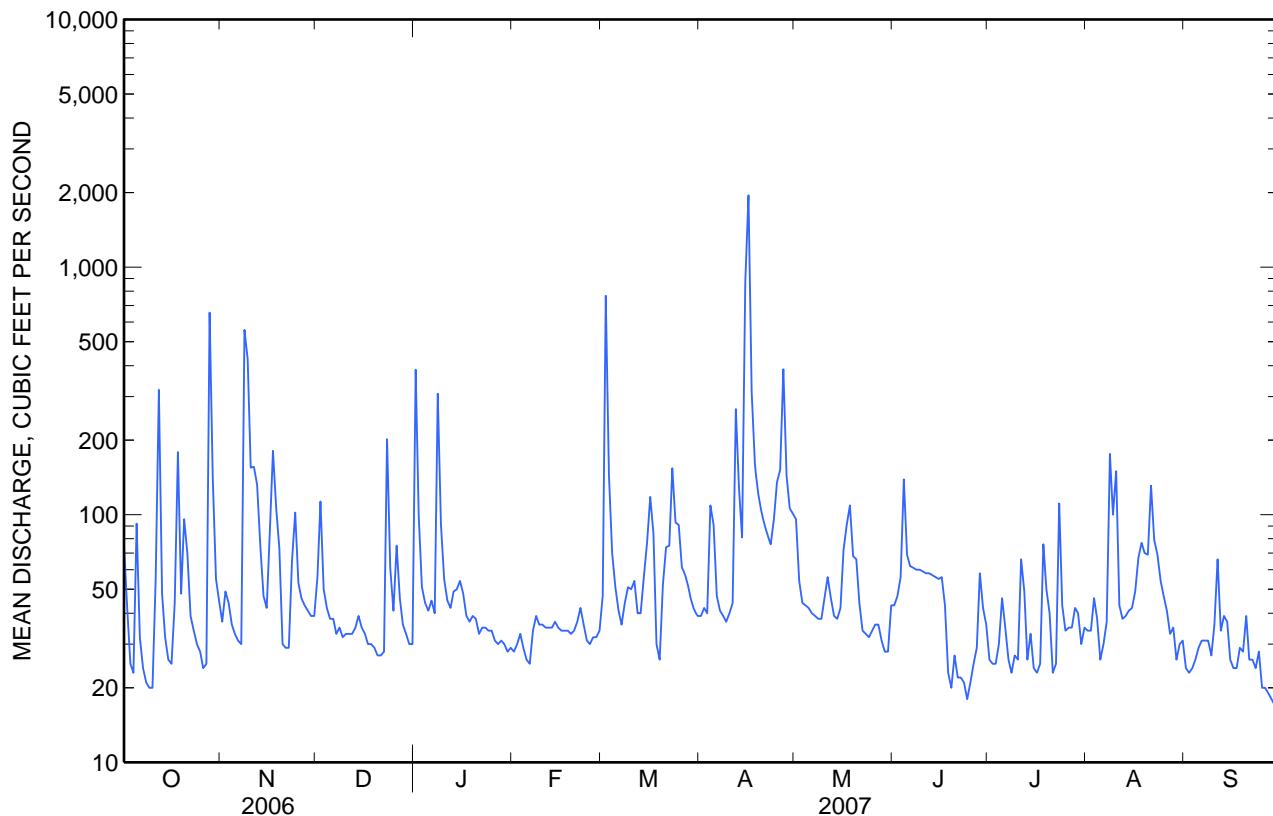
01377500 PASCACK BROOK AT WESTWOOD, NJ—Continued**SUMMARY STATISTICS**

	Calendar Year 2006	Water Year 2007		Water Years 1935 - 2007	
Annual total	20,695	24,751			
Annual mean	56.7	67.8		54.3	
Highest annual mean				88.6	1952
Lowest annual mean				27.6	1965
Highest daily mean	655	Oct 28	1,950	Apr 16	1,950 Apr 16, 2007
Lowest daily mean	11	Aug 20	16	Sep 30	0.45 Apr 26, 1991
Annual seven-day minimum	13	Aug 18	20	Sep 24	6.3 Oct 19, 1949
Maximum peak flow			3,260	Apr 16	^a 9,630 Sep 16, 1999
Maximum peak stage			7.36	Apr 16	^b 12.22 Sep 16, 1999
Instantaneous low flow			15	Jun 23	^c 0.05 Apr 23, 1991
10 percent exceeds	114		108		96
50 percent exceeds	36		39		39
90 percent exceeds	22		25		19

^a From rating curve extended above 3,000 ft³/s on basis of contracted-opening computation of peak flow.

^b From floodmark.

^c Also occurred Sep 28, 1993.



01377500 PASCACK BROOK AT WESTWOOD, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1959-76, 1979-80, 1998, 2000, 2006-07.

REMARKS.--Cooperative Network Site Descriptor: Trace Element Assessment (303d) special study site.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
 [Remark codes: <, less than.]

Date	Time	Turbidity					Specific		Mercury
		white light, det ang 90+/30 corrctd	Barometric pres- sure, oxygen,	Dissolved oxygen, percent of saturation	pH, unfiltrd percent field, std units	water, conductance, wat unf std units	Temperature, air, water, deg C	Temperature, air, water, deg C	
Date	Time	NTRU (63676)	mm Hg (00025)	mg/L (00300)	pH (00301)	water, conductance, wat unf std units	Temperature, air, water, deg C	Temperature, air, water, deg C	Mercury water, unfiltrd recover -able, μg/L
Sep 13...	1015	2.1	770	6.7	70	7.8	535	24.0	17.7
								<0.010	<0.010