



Water-Data Report 2009

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 water from wells above Woodcliff Lake, probably reduces flow past this station. Between water years 1966 to 1989, water was diverted from Saddle River to Musquapsink Brook (see 01390520) that then entered Pascack Brook 500 feet upstream of gage. United Water New Jersey pumps water from wells into the Pascack Brook at three locations upstream of the gage, probably increasing flow past this gage. Several measurements of water temperature were made during the year. Satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 12	0615	*1,440	*5.09
Jun 15	1645	937	4.23
Jun 18	1915	1,260	4.80
Jul 2	1200	775	3.90
Aug 2	2100	750	3.85

Water-Data Report 2009

01377500 PASCACK BROOK AT WESTWOOD, NJ—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e37	24	52	43	32	21	38	26	40	38	117	99
2	25	24	47	42	32	24	44	29	40	183	193	63
3	24	23	34	42	36	21	50	33	44	109	109	22
4	24	23	32	41	36	22	42	37	64	57	79	21
5	27	23	32	41	35	25	36	42	57	35	39	21
6	24	26	31	41	34	28	47	45	48	27	35	20
7	23	24	30	94	33	27	34	151	24	28	33	20
8	23	24	27	86	37	27	29	108	23	128	32	20
9	22	24	27	52	37	40	28	72	56	57	31	20
10	22	23	31	44	39	41	28	51	28	27	35	22
11	21	22	90	45	42	33	33	33	51	26	31	35
12	21	21	675	43	42	30	32	30	132	31	38	68
13	21	27	93	36	40	29	28	29	42	25	66	45
14	21	60	52	29	38	32	27	27	31	27	28	30
15	21	135	75	29	34	32	35	29	241	34	29	26
16	21	171	136	28	26	31	28	29	134	34	28	25
17	20	45	88	28	26	31	31	40	36	35	28	24
18	20	35	57	29	28	31	31	28	364	46	27	23
19	20	30	48	29	40	33	33	36	169	46	26	23
20	20	28	46	29	37	32	48	44	121	65	28	22
21	20	27	45	29	31	31	156	43	122	126	35	21
22	19	29	30	28	29	31	111	43	57	108	113	20
23	19	37	26	28	31	31	72	43	49	103	86	28
24	19	36	46	28	30	31	50	43	43	67	109	36
25	28	38	150	50	30	31	34	42	35	59	45	35
26	49	28	74	25	30	34	31	42	46	33	25	30
27	59	26	57	25	26	39	29	43	91	37	24	41
28	205	25	71	44	23	41	28	42	48	28	53	25
29	87	25	70	56	---	53	28	45	26	64	181	29
30	36	34	53	42	---	42	26	43	43	104	112	34
31	28	---	46	34	---	36	---	41	---	117	103	---
Total	1,026	1,117	2,371	1,240	934	990	1,267	1,389	2,305	1,904	1,918	948
Mean	33.1	37.2	76.5	40.0	33.4	31.9	42.2	44.8	76.8	61.4	61.9	31.6
Max	205	171	675	94	42	53	156	151	364	183	193	99
Min	19	21	26	25	23	21	26	26	23	25	24	20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	41.2	48.7	53.1	54.3	57.3	76.7	77.2	59.7	51.1	46.0	42.9	43.5
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 2008		Water Year 2009		Water Years 1935 - 2009	
Annual total	21,338		17,409			
Annual mean	58.3		47.7		54.3	
Highest annual mean					88.6	1952
Lowest annual mean					27.6	1965
Highest daily mean	682	Feb 13	675	Dec 12	1,950	Apr 16, 2007
Lowest daily mean	16	Sep 20	19	Oct 22-24	0.45	Apr 26, 1991
Annual seven-day minimum	17	Sep 16	20	Oct 18	6.3	Oct 19, 1949
Maximum peak flow			1,440	Dec 12	^a 9,630	Sep 16, 1999
Maximum peak stage			5.09	Dec 12	^b 12.22	Sep 16, 1999
Instantaneous low flow			18	Mar 1	^c 0.05	Apr 23, 1991
10 percent exceeds	91		92		96	
50 percent exceeds	42		34		39	
90 percent exceeds	23		23		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.

