01380500 ROCKAWAY RIVER ABOVE RESERVOIR, AT BOONTON, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 40°54′10″, long 74°24′35″ referenced to North American Datum of 1983, Boonton Town, Morris County, NJ, Hydrologic Unit 02030103, on right bank, under New Jersey Transit railroad bridge, just downstream from bridge on Morris Avenue in Boonton, 1.8 mi upstream from dam at Boonton Reservoir.

DRAINAGE AREA.--116 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for October 1937, published in WSP 1302.

REVISED RECORDS.--WDR NJ-1974: 1938(M). WDR NJ-78-1: 1949(M), 1952(M), 1968(M), 1971(M), 1973(P), 1974(M), 1977(M).

GAGE.--Water-stage and air temperature recorder, crest-stage gage, and concrete control. Datum of gage is 364.47 ft above NGVD of 1929 (levels from New Jersey Geological Survey benchmark).

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Flow regulated by Splitrock Reservoir (see 01379990) on Beaver Brook, 14.5 mi upstream from station. Town of Boonton diverts water for municipal supply from Taylortown Reservoir (see 01380280) on Stony Brook, capacity, 75,000,000 gal and by pumping from wells in vicinity of Boonton. Rockaway Valley trunk sewer bypasses the station (see 01381000). Several measurements of water temperature were made during the year. Satellite gage-height and air-temperature telemetry at station. Stage readings published for this gage prior to Feb 4, 2004 were recorded inside the gage house. It has been found by study that these gage heights can be more than a half foot lower than water levels in the stream due to drawdown. To better address this and other problems, a bubble gage has been installed and its record used from Feb 4, 2004 onward. The published discharges before that date are still accurate.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 950 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 28	2115	1,690	4.67
Nov 09	0245	1,740	4.72
Nov 17	0745	1,060	3.92
Mar 02	1915	1,920	4.91
Apr 16	1115	*4,170	*6.69
Aug 08	1730	1,260	4.17

01380500 ROCKAWAY RIVER ABOVE RESERVOIR, AT BOONTON, NJ—Continued

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

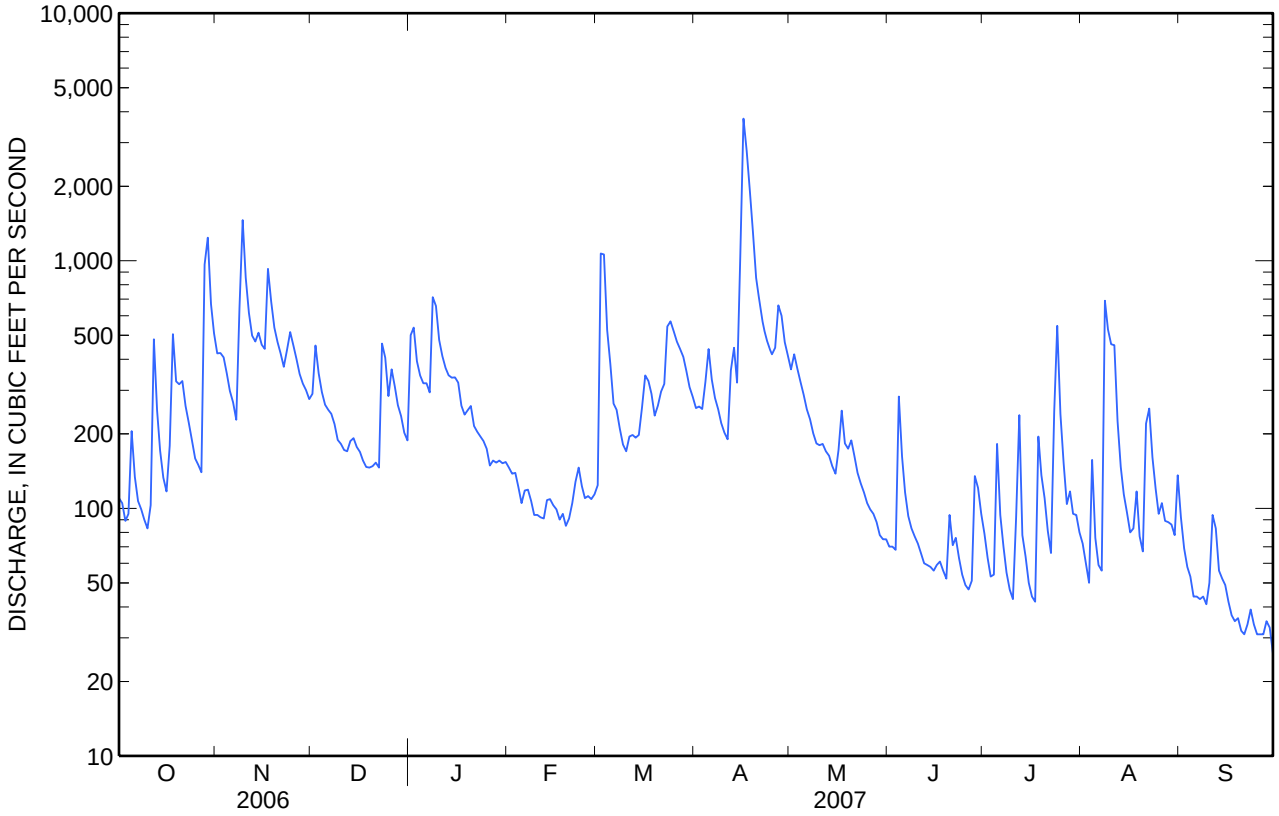
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	110	423	290	501	146	124	254	364	70	79	72	92
2	105	424	455	537	138	1,070	258	419	70	63	60	69
3	89	407	351	393	139	1,060	252	366	68	53	50	58
4	95	350	295	344	e122	525	324	323	283	54	157	53
5	205	298	262	320	e105	382	440	288	162	182	76	44
6	134	268	250	320	e118	e265	331	251	116	94	59	44
7	107	228	241	294	e119	e250	279	229	93	70	56	43
8	99	645	219	713	e107	e210	251	201	83	55	690	44
9	90	1,460	189	657	e94	181	221	183	77	47	528	41
10	83	856	182	479	e94	170	202	180	72	43	460	50
11	103	616	172	412	e92	195	190	182	66	92	456	94
12	482	499	170	369	e91	198	360	170	60	238	225	83
13	249	472	187	345	e108	193	445	163	59	78	147	56
14	171	512	192	337	e109	198	322	148	58	64	114	52
15	133	458	177	338	e103	256	1,040	138	56	50	96	49
16	117	441	169	322	e99	344	3,750	172	59	44	80	42
17	179	928	156	260	e90	327	2,780	248	61	42	83	37
18	505	686	147	239	e95	290	1,910	183	56	195	117	35
19	326	537	146	249	e85	237	1,310	174	52	136	77	36
20	317	469	148	259	91	260	853	188	94	110	67	32
21	327	423	153	215	105	296	689	163	71	81	220	31
22	259	373	146	204	128	318	572	139	76	66	253	34
23	222	436	463	195	146	543	496	126	63	245	161	39
24	188	515	406	187	123	569	450	116	54	546	120	34
25	159	455	284	174	110	519	419	105	49	240	95	31
26	150	402	364	149	112	471	445	99	47	152	105	31
27	140	349	310	156	109	440	661	95	51	104	89	31
28	966	319	261	153	114	409	600	88	135	117	88	35
29	1,240	300	236	156	---	359	469	78	121	95	86	33
30	668	276	202	152	---	309	415	75	95	94	78	26
31	509	---	188	154	---	282	---	75	---	80	136	---
Total	8,527	14,825	7,411	9,583	3,092	11,250	20,988	5,729	2,477	3,609	5,101	1,379
Mean	275	494	239	309	110	363	700	185	82.6	116	165	46.0
Max	1,240	1,460	463	713	146	1,070	3,750	419	283	546	690	94
Min	83	228	146	149	85	124	190	75	47	42	50	26
Cfsm	2.37	4.26	2.06	2.66	0.95	3.13	6.03	1.59	0.71	1.00	1.42	0.40
In.	2.73	4.75	2.38	3.07	0.99	3.61	6.73	1.84	0.79	1.16	1.64	0.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	135	222	278	269	271	387	391	271	188	125	117	122
Max	527	694	718	855	590	798	979	836	847	553	447	484
(WY)	(2006)	(1973)	(1997)	(1979)	(1973)	(1977)	(1983)	(1989)	(1972)	(1975)	(1955)	(1971)
Min	23.7	27.9	49.5	64.2	53.8	112	87.0	90.5	35.3	18.1	16.6	16.8
(WY)	(1965)	(2002)	(1999)	(2002)	(2002)	(2002)	(1985)	(1965)	(1965)	(1966)	(1957)	(1964)

01380500 ROCKAWAY RIVER ABOVE RESERVOIR, AT BOONTON, NJ—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1938 - 2007	
Annual total	98,234		93,971			
Annual mean	269		257		231	
Highest annual mean					396	1952
Lowest annual mean					88.3	1965
Highest daily mean	1,500	Sep 3	3,750	Apr 16	4,220	Jan 25, 1979
Lowest daily mean	30	Aug 22	26	Sep 30	5.7	Aug 10, 1999
Annual seven-day minimum	34	Aug 18	32	Sep 24	6.1	Aug 7, 1999
Maximum peak flow			4,170	Apr 16	5,590	Apr 5, 1984
Maximum peak stage			6.69	Apr 16	[a]7.23	Apr 5, 1984
Annual runoff (cfsm)	2.32		2.22		1.99	
Annual runoff (inches)	31.50		30.14		27.07	
10 percent exceeds	527		503		498	
50 percent exceeds	182		171		155	
90 percent exceeds	84		54		42	

[a] Based on gage height inside gage house, outside gage height may have been more than one half foot higher.