Water-Data Report 2011

01378500 HACKENSACK RIVER AT NEW MILFORD, NJ

HACKENSACK RIVER BASIN

LOCATION.--Lat 40°56′54″, long 74°01′36″ referenced to North American Datum of 1983, Oradell Borough, Bergen County, NJ, Hydrologic Unit 02030103, on right bank upstream from two masonry dams and two lift gates at former pumping plant of United Water New Jersey (formerly known as Hackensack Water Co.), in New Milford, 300 feet upstream of the bridge on Elm Street, 0.6 mi downstream from Oradell Reservoir Dam, and 4.0 mi downstream from the mouth of Pascack Brook.

DRAINAGE AREA.--113 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for October 1921, published in WSP 1302.

REVISED RECORDS.--WSP 601: Drainage area. WSP 711: 1927-28(M). WDR NJ-1970: 1969. WDR NJ-1977: 1975(M). WDR NJ-1984: 1983. WDR NJ-1991: 1990

GAGE.--Water-stage recorder above south dam. Datum of gage is 6.25 ft above NGVD of 1929. October 1921 to November 23, 1923, non-recording gage and Nov. 23, 1923, to Sept. 25, 1934, water-stage recorder at same site at datum 0.05 ft lower.

REMARKS.--Records fair, except discharges below 1 ft^3/s and estimated daily discharges, which are poor. Flow regulated by DeForest Lake (see 01376700), Lake Tappan (see 01376950), Woodcliff Lake (see 01377450) 9.0 mi upstream from station, and Oradell Reservoir (see 01378480) 0.6 mi upstream from station. Water diverted into basin above gage from Sparkill Creek (see 01376272), Saddle River (see 01390520), Wanaque Reservoir, and Pompton and Ramapo Rivers (see 01388981) by United Water New Jersey for municipal supply. Water diverted from Oradell Reservoir at Haworth Plant (see 01378478), DeForest Lake, NY (see 01376699), and Hackensack River at West Nyack, NY (see 01376790) for municipal supply. Diversion at gage was discontinued on May 30, 1990. Several measurements of water temperature were made during the year. Satellite telemetry at station.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	18	16	25	13	9.9	16	41	88	16	15	19	245
2	14	17	21	13	10	15	59	77	17	20	18	93
3	13	18	21	12	9.9	16	44	64	19	19	18	49
4	13	19	22	12	9.8	18	30	82	17	17	15	26
5	12	17	16	12	11	16	39	120	16	18	14	27
6	12	21	19	13	11	27	42	80	16	17	18	663
7	14	19	18	13	10	2,880	50	39	16	19	18	2,750
8	14	17	21	11	11	2,410	41	22	16	19	17	2,520
9	13	16	e21	11	9.9	1,170	22	19	22	16	20	1,150
10	13	16	21	11	9.9	595	17	21	18	18	18	351
11	13	16	19	11	9.9	2,620	21	17	18	18	19	305
12	12	17	24	11	9.9	2,060	64	16	16	18	18	299
13	e48	17	22	10	9.9	675	818	17	19	18	17	61
14	18	17	22	10	13	295	e475	16	20	19	102	25
15	17	16	21	9.9	17	319	e240	25	18	19	824	16
16	15	18	19	9.6	18	480	295	203	19	17	164	14
17	17	21	16	10	16	230	4,080	751	21	17	20	16
18	17	19	17	12	16	243	2,140	867	18	19	73	16
19	15	19	18	11	16	100	638	1,640	19	17	256	18
20	15	18	e18	10	16	38	165	494	19	16	191	20
21	16	14	e19	11	16	58	146	210	19	16	85	19
22	14	23	19	11	16	133	132	125	19	18	18	e15
23	16	18	19	10	16	144	450	102	264	19	18	59
24	15	17	18	9.7	16	217	571	141	1,460	19	20	108
25	14	17	17	9.4	19	176	343	104	333	20	293	30
26	15	20	18	9.7	21	122	78	53	193	20	977	17
27	16	18	17	10	16	74	126	18	29	18	1,050	16
28	15	18	16	9.9	17	59	488	17	24	17	5,310	18
29	12	24	15	9.9	---	53	624	20	21	19	5,380	65
30	15	17	15	9.9	---	39	169	22	15	19	1,590	292
31	13	---	14	9.9	---	28	---	16	---	19	615	---
Total	484	540	588	335.9	381.1	15,326	12,448	5,486	2,737	560	17,215	9,303
Mean	15.6	18.0	19.0	10.8	13.6	494	415	177	91.2	18.1	555	310
Max	48	24	25	13	21	2,880	4,080	1,640	1,460	20	5,380	2,750
Min	12	14	14	9.4	9.8	15	17	16	15	15	14	14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	34.9	58.8	85.2	98.1	112	203	192	110	61.5	42.2	43.0	48.9
Max	480	356	339	359	396	653	787	528	612	543	555	450
(WY)	(1956)	(1928)	(1997)	(1937)	(1939)	(2010)	(2007)	(1989)	(1972)	(1945)	(2011)	(2004)
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00
(WY)	(1922)	(1924)	(1932)	(1971)	(1977)	(1981)	(1981)	(1985)	(1977)	(1954)	(1924)	(1923)

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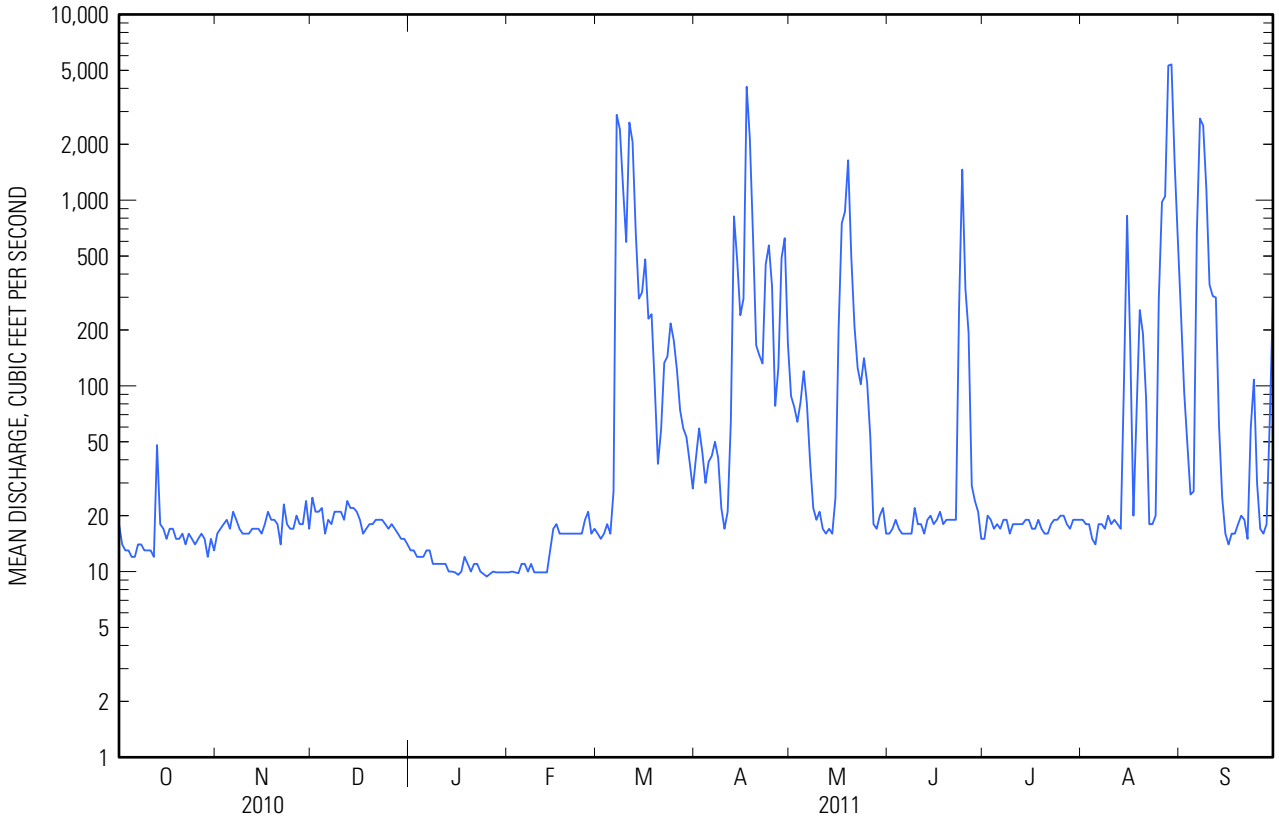
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1922 - 2011	
Annual total	33,276		65,404.0			
Annual mean	91.2		179		90.6	
Highest annual mean					263	1928
Lowest annual mean					0.40	1981
Highest daily mean	3,650	Mar 14	5,380	Aug 29	[a]10,500	Apr 16, 2007
Lowest daily mean	12	Oct 5	9.4	Jan 25	0.00	Many days
Annual seven-day minimum	13	Oct 3	9.8	Jan 24	0.00	Many days
Maximum peak flow			10,500	Aug 28	11,600	Apr 16, 2007
Maximum peak stage			11.84	Aug 28	[b]12.36	Apr 16, 2007
10 percent exceeds	217		325		259	
50 percent exceeds	18		18		15	
90 percent exceeds	15		12		0.00	

[a] Estimated.
[b] From high-water mark in gage house.