Water-Data Report 2013

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 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	13	9.3	10	11	13	13	17	17	16	158	15	21
2	13	11	9.5	10	12	9.5	15	16	16	125	15	16
3	16	10	9.6	8.8	9.1	13	20	15	16	61	16	18
4	15	9.8	10	11	18	10	15	15	18	40	15	17
5	14	10	10	9.8	12	11	19	17	16	21	15	18
6	16	9.2	9.9	9.2	11	11	16	16	16	17	16	17
7	14	e14	11	12	12	14	14	15	496	15	14	16
8	17	12	9.8	9.9	11	9.5	15	17	2,500	17	15	18
9	14	20	10	9.9	12	12	15	15	868	18	16	19
10	14	10	9.3	10	9.5	10	20	14	297	18	22	17
11	16	12	9.8	11	16	11	16	15	826	16	16	18
12	14	11	9.6	9.1	9.6	15	15	15	470	16	18	31
13	15	11	9.7	11	13	14	17	16	329	17	16	27
14	20	10	9.7	10	10	93	15	15	730	18	16	16
15	14	11	9.9	13	11	147	17	15	476	16	14	15
16	15	14	11	13	9.4	112	19	16	201	17	15	17
17	17	12	9.7	11	10	79	15	19	110	17	15	16
18	14	11	11	11	12	49	15	17	76	16	16	17
19	17	11	12	9.9	10	125	15	16	156	19	17	15
20	13	11	9.8	11	9.4	211	15	16	36	16	15	15
21	13	9.6	15	11	9.3	183	16	15	20	17	15	15
22	13	10	11	11	14	128	17	18	17	15	16	15
23	14	12	11	11	10	94	16	16	18	17	15	15
24	14	13	8.8	11	9.8	67	16	460	16	16	16	15
25	15	9.5	9.1	11	11	50	16	785	17	15	15	14
26	14	12	11	10	12	38	15	294	20	16	17	14
27	38	9.9	15	11	12	28	16	132	17	18	17	15
28	29	11	11	10	15	20	21	87	21	15	16	16
29	e13	11	11	12	---	23	19	146	16	17	16	16
30	e14	10	15	16	---	15	18	72	15	17	16	15
31	13	---	10	12	---	22	---	21	---	16	15	---
Total	491	337.3	329.2	337.6	323.1	1,637.0	495	2,363	7,846	837	491	514
Mean	15.8	11.2	10.6	10.9	11.5	52.8	16.5	76.2	262	27.0	15.8	17.1
Max	38	20	15	16	18	211	21	785	2,500	158	22	31
Min	13	9.2	8.8	8.8	9.1	9.5	14	14	15	15	14	14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	35.3	59.1	85.8	96.9	110	199	188	109	63.1	41.8	42.4	48.2
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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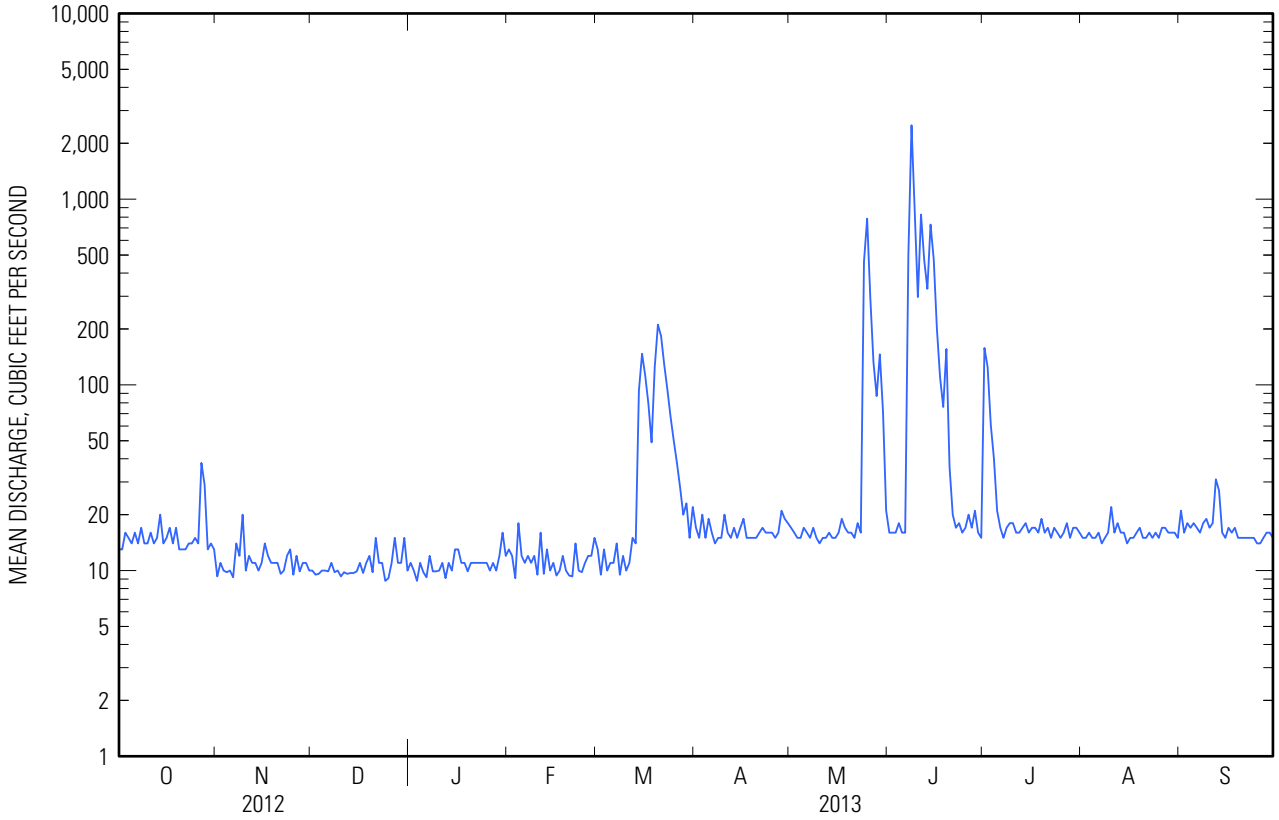
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1922 - 2013	
Annual total	7,146.5		16,001.2			
Annual mean	19.5		43.8		89.7	
Highest annual mean					263	1928
Lowest annual mean					0.40	1981
Highest daily mean	216	Jan 28	2,500	Jun 8	[a]10,500	Apr 16, 2007
Lowest daily mean	8.8	Dec 24	8.8	Many days	0.00	Many days
Annual seven-day minimum	9.7	Dec 8	9.7	Dec 8	0.00	Many days
Maximum peak flow			3,270	Jun 8	11,600	Apr 16, 2007
Maximum peak stage			6.41	Jun 8	[b]12.36	Apr 16, 2007
Instantaneous low flow			[a]0.00	Oct 30-31	[a]0.00	Oct 30, 2012
10 percent exceeds	20		39		256	
50 percent exceeds	15		15		15	
90 percent exceeds	11		10		0.00	

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