Water-Data Report 2012

01381000 ROCKAWAY RIVER BELOW RESERVOIR, AT BOONTON, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 40°53′49″, long 74°23′41″ referenced to North American Datum of 1983, Boonton Town, Morris County, NJ, Hydrologic Unit 02030103, on right bank 2,000 ft downstream from Boonton Reservoir Dam at Boonton, and 0.4 mi upstream from bridge on Greenbank Road.

DRAINAGE AREA.--119 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Gage-height only, March 1903 to February 1904. Monthly discharges only, November 1911 to May 1912 and November 1912 to December 1912. Daily discharges, January 1906 to October 1911, June 1912 to October 1912, and January 1913 to current year. Published as "near Boonton" 1903-4, and as "at Boonton" 1906-37.

REVISED RECORDS.--WSP 1902: 1951-54. WDR NJ-79-1: 1949(M), 1952(M), 1968(M), 1970-74(M), 1977(M). WDR US-2010: 2009 Sewage effluent.

GAGE.--Water-stage recorder. Concrete control since Nov. 5, 1936. Datum of gage is 195.68 ft above NGVD of 1929 (levels from New Jersey Geological Survey benchmark). Mar. 15, 1903 to Feb. 2, 1904, non-recording gage at site 1.9 mi downstream at different datum. Jan. 1, 1906 to Mar. 2, 1918, non-recording gage on Boonton Reservoir Dam 2,000 ft upstream at datum 305.25 ft above NGVD of 1929 (levels from New Jersey Geological Survey benchmark). Records for Mar. 3, 1918 to Sept. 30, 1924 are based on a recording gage at present site operated by Jersey City Water Department and staff gage readings at Boonton Reservoir Dam by Jersey City Water Department.

REMARKS.--Records good, except for estimated daily discharges which are fair. Records represent flow in river only. Sewage effluent enters river about 600 ft below station (records given herein supplied by Rockaway Valley Regional Sewerage Authority). Flow regulated by Boonton Reservoir (see 01380900) 2,000 ft upstream from station, and by Splitrock Reservoir (see 01379990) 16.5 mi above station. Water diverted from Boonton Reservoir for municipal supply of Jersey City (see 01380800). Several measurements of water temperature were made during the year. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Oct 10, 1903 had a maximum daily mean flow of 7,560 ft^3/s with a daily mean gage height of 7.8 ft, site and datum then in use.

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 01381000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/01381000.2012.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	655	328	575	335	233	127	35	62	102	12	12	12
2	656	345	438	305	216	134	71	75	443	12	12	12
3	564	337	374	264	200	147	73	197	656	12	12	12
4	475	315	334	206	184	142	52	228	407	12	12	13
5	413	275	301	193	167	117	36	194	404	12	12	12
6	351	238	295	179	154	93	25	162	305	12	12	12
7	302	210	412	174	146	83	19	127	238	12	12	12
8	262	204	1,220	165	141	88	17	104	178	12	12	12
9	226	196	1,260	152	130	71	23	100	132	12	12	12
10	202	201	885	145	121	76	16	110	105	13	13	12
11	183	202	662	139	118	73	16	92	249	14	12	11
12	171	186	531	292	115	57	14	73	264	12	12	11
13	178	170	459	521	99	57	11	59	418	12	12	11
14	359	158	410	376	91	54	11	48	364	12	12	11
15	445	148	376	269	95	50	12	100	224	12	12	11
16	297	157	330	188	100	47	12	238	154	12	12	11
17	214	338	287	193	112	50	11	192	114	12	12	11
18	170	326	254	200	114	48	11	129	84	12	12	13
19	185	248	229	181	105	42	11	86	69	12	12	11
20	404	203	216	162	94	38	11	58	57	12	12	12
21	390	177	221	159	86	38	11	101	45	12	12	12
22	290	186	245	149	84	37	13	302	34	12	11	12
23	243	859	356	158	77	32	347	307	32	12	11	12
24	219	1,240	408	294	90	26	492	390	22	12	11	12
25	201	817	323	361	129	21	286	282	17	12	11	12
26	163	595	272	308	103	19	191	208	15	12	11	12
27	166	479	274	334	95	14	145	195	13	12	11	12
28	243	415	705	422	84	16	109	215	12	12	11	12
29	246	388	644	361	90	11	83	197	12	12	11	12
30	293	586	447	293	---	10	67	182	12	12	11	12
31	332	---	382	252	---	14	---	146	---	12	11	---
Total	9,498	10,527	14,125	7,730	3,573	1,832	2,231	4,959	5,181	375	363	354
Mean	306	351	456	249	123	59.1	74.4	160	173	12.1	11.7	11.8
Max	656	1,240	1,260	521	233	147	492	390	656	14	13	13
Min	163	148	216	139	77	10	11	48	12	12	11	11
Sewage effluent (cubic feet per second), from plant at Rockaway Valley Regional Sewerage Authority												
	16.8	15.8	16.6	14.6	14.5	13.6	13.4	14.4	15.8	13.3	13.4	13.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	56.6	114	168	178	181	315	299	185	102	57.1	56.1	54.9
Max	459	743	802	692	625	1,023	978	873	770	445	612	840
(WY)	(1908)	(1908)	(1997)	(1979)	(2008)	(2010)	(1983)	(1989)	(2003)	(1984)	(2011)	(2011)
Min	0.00	0.00	0.00	0.00	0.62	1.94	8.83	6.01	0.00	0.00	0.00	0.00
(WY)	(1915)	(1917)	(1917)	(1918)	(1954)	(1931)	(2002)	(1941)	(1912)	(1912)	(1912)	(1912)

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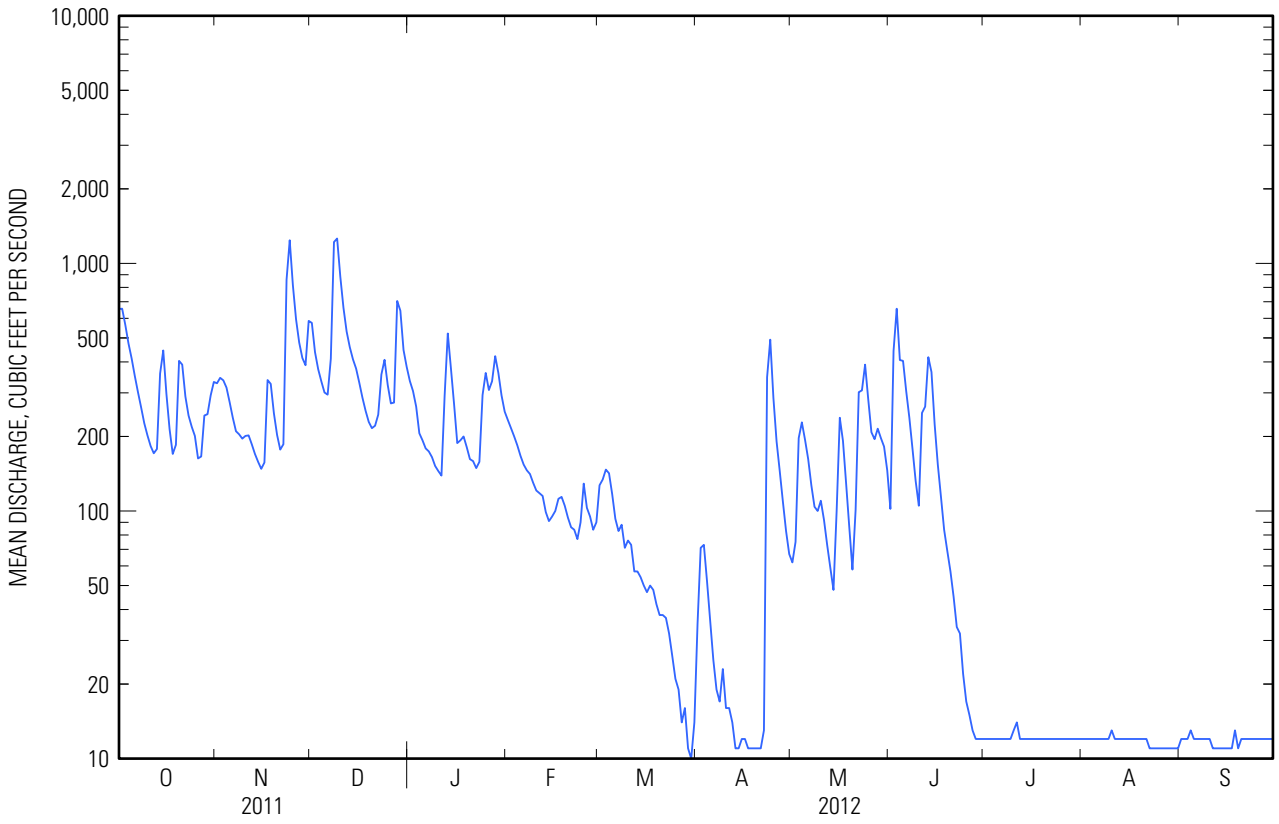
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1906 - 2012	
Annual total	153,903.1		60,748			
Annual mean	422		166		146	
Sewage Effluent	17.4		14.6			
Highest annual mean					399	1908
Lowest annual mean					7.19	1965
Highest daily mean	5,360	Aug 29	1,260	Dec 9	5,360	Aug 29, 2011
Lowest daily mean	8.1	Aug 5	10	Mar 30	0.00	Many days
Annual seven-day minimum	9.3	Aug 4	11	Aug 22	0.00	Many days
Maximum peak flow			1,550	Dec 8	7,390	Aug 28, 2011
Maximum peak stage			5.28	Dec 8	[a]9.73	Aug 28, 2011
Instantaneous low flow			10	Mar 29-31	0.00	Many days
10 percent exceeds	855		394		386	
50 percent exceeds	274		107		54	
90 percent exceeds	41		12		0.50	

[a] Maximum peak stage since 1925.