Water-Data Report 2011

01387400 RAMAPO RIVER AT RAMAPO, NY

Lower Hudson Basin
Hackensack-Passaic Subbasin

LOCATION.--Lat 41°08′25″, long 74°10′08″ referenced to North American Datum of 1927, Rockland County, NY, Hydrologic Unit 02030103, on right bank, 105 ft downstream from highway bridge on New York State Thruway at Ramapo, 500 ft upstream from local bridge, and 0.3 mi upstream from Torne Brook.

DRAINAGE AREA.--86.9 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional low-flow and/or miscellaneous discharge measurements, water years 1936, 1952, 1956-58, 1977. June 1979 to current year.

REVISED RECORDS.--WDR NY-81-1: 1980(m). WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 297.00 ft above NGVD of 1929.

REMARKS.--Records fair. Occasional regulation by Lake Sebago. Satellite and telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,700 ft^3/s, Aug. 28, 2011, gage height, 15.75 ft; minimum discharge, 5.3 ft^3/s, Aug. 7, 1983, gage height, 1.27 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 6,100 ft^3/s, Mar. 12, 1936, by computation of flow over dam.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,050 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 2	0400	1,870	5.74
Mar 7	0900	6,620	10.70
Mar 11	1030	5,710	9.90
Apr 17	0845	3,440	7.64
May 19	1300	1,910	5.79
Jun 23	1345	1,460	5.13
Aug 16	0615	1,140	4.60
Aug 28	1300	*13,700	*15.75
Sep 8	1245	3,670	8.23

Minimum discharge, 17 ft^3/s, Aug. 3, gage height, 1.55 ft.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 01387400, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/01387400.2011.pdf

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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	595	42	668	100	85	849	195	265	124	94	26	552
2	692	40	1,540	121	104	642	245	235	106	84	22	394
3	286	40	696	158	117	502	199	218	88	106	21	302
4	170	66	417	143	107	395	175	248	79	143	30	242
5	149	167	316	129	101	363	183	274	74	106	29	219
6	135	142	260	115	127	1,070	197	209	72	86	25	927
7	116	109	221	112	133	5,230	196	170	68	74	126	2,310
8	95	97	182	110	144	2,400	186	147	64	137	176	3,300
9	82	91	156	102	142	1,060	164	133	63	338	149	2,040
10	72	85	141	95	130	894	149	118	68	172	210	971
11	66	79	137	90	116	4,720	142	108	75	116	117	627
12	71	74	326	97	108	2,580	165	101	82	91	85	458
13	71	81	732	e95	101	1,180	396	97	96	75	71	360
14	68	85	530	e95	106	757	380	92	77	62	126	293
15	103	85	362	e89	140	567	294	116	65	52	624	255
16	99	87	295	82	129	539	511	154	53	47	949	220
17	86	196	248	79	130	508	3,090	292	e132	41	476	164
18	78	202	217	92	195	399	1,610	615	e169	38	275	136
19	70	156	190	133	395	330	827	1,680	93	42	198	114
20	65	133	170	145	349	282	627	1,060	70	40	167	104
21	60	118	154	136	313	294	481	617	57	34	157	102
22	57	109	143	e121	265	332	375	483	147	32	226	116
23	55	110	135	e118	222	312	440	399	875	29	158	151
24	54	106	126	e104	194	309	475	394	845	26	120	304
25	52	99	117	93	443	290	383	301	481	31	131	210
26	48	101	112	92	689	255	332	236	313	46	180	147
27	54	101	145	105	490	228	303	188	226	34	192	118
28	63	94	148	102	569	206	377	158	162	30	8,200	124
29	57	90	119	95	---	182	429	135	132	26	5,280	290
30	51	92	110	89	---	183	318	138	109	41	1,820	484
31	45	---	104	86	---	181	---	140	---	33	851	---
Total	3,765	3,077	9,217	3,323	6,144	28,039	13,844	9,521	5,065	2,306	21,217	16,034
Mean	121	103	297	107	219	904	461	307	169	74.4	684	534
Max	692	202	1,540	158	689	5,230	3,090	1,680	875	338	8,200	3,300
Min	45	40	104	79	85	181	142	92	53	26	21	102
Cfsm	1.40	1.18	3.42	1.23	2.53	10.4	5.31	3.53	1.94	0.86	7.88	6.15
In.	1.61	1.32	3.95	1.42	2.63	12.00	5.93	4.08	2.17	0.99	9.08	6.86

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	122	169	239	196	195	343	311	189	126	60.7	74.1	92.8
Max	826	437	682	594	471	951	802	704	435	291	684	534
(WY)	(2006)	(1996)	(2004)	(1996)	(2008)	(2010)	(1984)	(1989)	(2003)	(1996)	(2011)	(2011)
Min	10.3	11.3	17.5	16.8	35.0	80.7	84.9	62.9	25.5	13.7	10.7	10.8
(WY)	(2002)	(2002)	(2002)	(1981)	(2002)	(2006)	(1985)	(2001)	(1999)	(1993)	(1981)	(1981)

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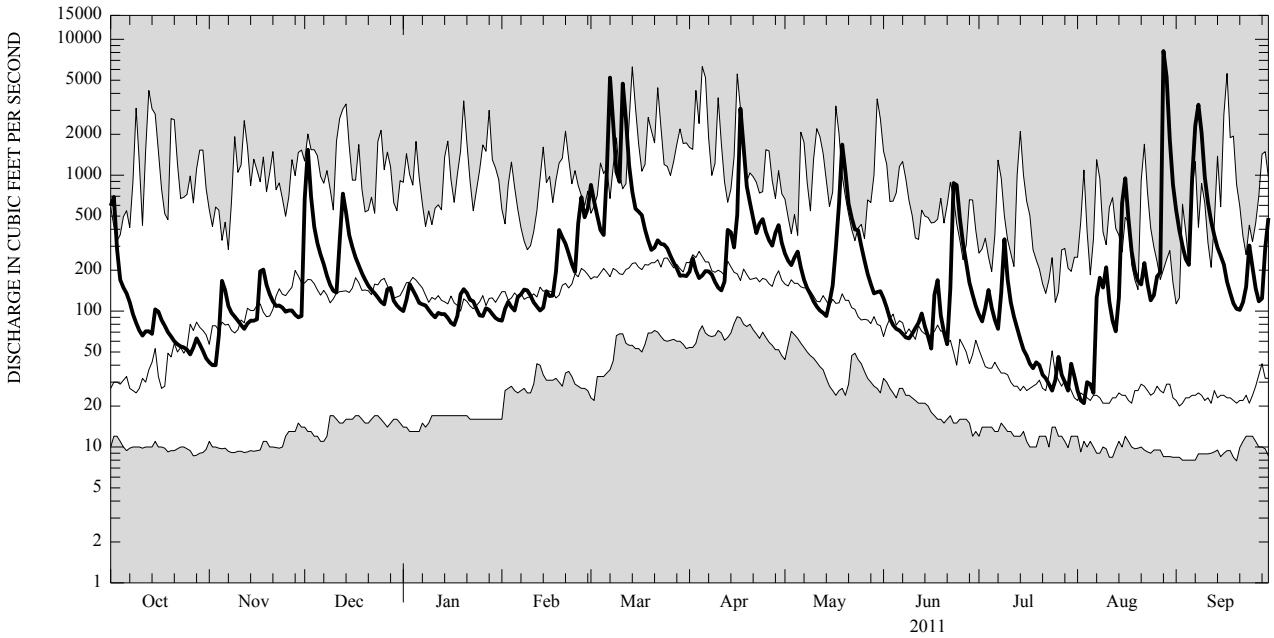
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1979 - 2011	
Annual total	71,403		121,552			
Annual mean	196		333		176	
Highest annual mean					333	2011
Lowest annual mean					63.5	2002
Highest daily mean	6,270	Mar 14	8,200	Aug 28	8,200	Aug 28, 2011
Lowest daily mean	13	Aug 1	21	Aug 3	7.9	Sep 20, 1983
Annual seven-day minimum	14	Jul 31	27	Jul 31	8.1	Sep 1, 1981
Annual runoff (cfsm)	2.25		3.83		2.03	
Annual runoff (inches)	30.57		52.03		27.59	
10 percent exceeds	403		625		367	
50 percent exceeds	96		141		99	
90 percent exceeds	19		57		17	



CURRENT WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.