

01396800 SPRUCE RUN AT CLINTON, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°38'24", long 74°54'56" referenced to North American Datum of 1983, Clinton Town, Hunterdon County, NJ, Hydrologic Unit 02030105, 1,800 ft downstream from dam at Spruce Run Reservoir, 0.2 mi north of Clinton, 0.3 mi upstream from mouth, and 2.2 mi southwest of High Bridge.

DRAINAGE AREA.--41.3 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1959 to current year.

REVISED RECORDS.--WDR US-2011: 1967(M), 1968(M), 1970(M), 1972(M), 1973(M), 1974(M), 1975(M), 1978(M), 1979(M), 1983(M), 1984(M), 1987(M), 1997(M), 2004(M), 2005(M), 2006(M), 2007(M), 2008(M), 2009(M), 2010(M).

GAGE.--Water-stage and precipitation recorder. Concrete control since Mar 15, 1964. Datum of gage is 193.5 ft above NGVD of 1929. May to November 1959, non-recording gage; Nov 25, 1959 to Jul 23, 1961, water-stage recorder at site 1,800 ft upstream and at datum 1.41 ft lower; Jul 24, 1961 to Mar 14, 1964, water-stage recorder at site 1,500 ft upstream at datum 1.41 ft lower.

REMARKS.--Records fair. Flow regulated by Spruce Run Reservoir since August 1963 (see 01396790). Several measurements of water temperature were made during the year. Satellite telemetry at station.

REVISIONS.--Annual peak discharges for water years 1967-68, 1970, 1972-75, 1978-79, 1983-84, 1987, 1997, and 2004-10 have been revised as shown in the following table. These values supersede previously published peaks in their respective annual water data reports.

Water Year	Date	Discharge (ft ³ /s)	Gage height (ft)
1967	Aug 3, 1967	1,680	3.6
1968	May 29, 1968	1,480	3.43
1970	Apr 2, 1970	4,080	5.17
1972	Jun 22, 1972	2,150	3.95
1973	Jun 29, 1973	1,210	3.19
1974	Dec 21, 1973	2,020	3.86
1975	Jul 13, 1975	1,960	3.81
1978	Jan 25, 1978	1,270	3.25
1979	Jan 24, 1979	1,970	---
1983	Apr 16, 1983	2,490	4.19
1984	Jul 7, 1984	3,220	4.67
1987	Apr 4, 1987	1,500	3.45
1997	Dec 2, 1996	1,760	3.66
2004	Dec 11, 2003	1,920	3.78
2005	Apr 2, 2005	2,450	4.16
2006	Jun 28, 2006	1,940	3.8
2007	Apr 16, 2007	3,790	5.01
2008	Mar 8, 2008	1,400	3.36
2009	Aug 2, 2009	2,190	3.98
2010	Mar 14, 2010	1,930	3.79

Maximum daily discharge for water years 1984 and 2007 have been revised superseding those previously published in their respective annual water data reports. The mean daily discharge for July 7, 1984 is 1,540 ft³/s. The mean daily discharge for Apr 16, 2007 is 1,980 ft³/s.

01396800 SPRUCE RUN AT CLINTON, NJ—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	18	56	13	46	8.7	8.6	170	175	72	31	138	212
2	9.0	63	9.6	46	9.4	8.7	170	120	90	47	138	209
3	8.0	56	9.2	25	9.2	8.6	169	87	39	53	166	209
4	10	27	9.2	10	9.2	8.6	170	145	21	24	173	209
5	11	10	9.1	8.7	9.1	8.6	149	169	25	11	157	210
6	7.5	9.5	9.2	7.7	9.2	11	114	74	34	12	138	422
7	8.0	8.1	9.2	8.1	9.2	13	114	79	41	11	139	1,230
8	8.1	8.0	9.2	37	9.0	118	114	73	38	37	150	2,050
9	7.8	8.1	9.2	60	8.6	125	114	81	40	63	145	708
10	23	8.0	9.2	60	8.6	353	114	66	36	29	94	410
11	58	8.8	9.2	60	8.6	1,120	96	63	44	22	100	293
12	37	13	10	60	8.6	453	79	61	53	25	147	330
13	16	23	9.4	60	8.6	308	79	58	47	18	159	275
14	18	23	8.9	70	8.8	301	78	56	54	27	81	251
15	9.2	23	8.9	78	8.8	235	57	91	62	60	11	254
16	11	16	8.7	78	8.6	247	43	270	41	100	8.3	251
17	16	8.9	8.7	78	8.8	243	577	150	141	138	8.6	251
18	13	8.3	8.7	51	9.1	205	267	180	90	143	8.6	250
19	10	8.6	8.6	9.0	9.2	191	207	339	52	182	8.6	247
20	8.4	8.6	8.6	8.1	8.9	172	241	499	36	73	8.6	248
21	9.2	8.6	8.8	9.0	9.1	171	221	267	31	9.0	9.3	251
22	15	8.6	8.8	8.7	8.9	178	97	196	28	122	79	252
23	28	8.6	8.8	8.8	8.0	173	166	175	36	183	198	172
24	35	8.5	8.7	8.6	8.0	203	204	170	83	191	198	94
25	29	8.6	8.6	8.7	9.8	199	227	129	98	192	198	94
26	23	8.6	22	9.3	8.6	191	194	117	52	168	198	193
27	18	8.6	63	9.1	8.6	181	196	110	34	105	82	251
28	8.6	8.4	78	8.6	9.0	185	302	93	28	75	870	640
29	12	10	58	8.6	---	175	308	83	34	76	400	791
30	17	13	46	8.6	---	168	205	108	23	75	215	593
31	34	---	46	8.6	---	168	---	87	---	107	211	---
Total	535.8	486.4	542.5	957.2	248.2	6,130.1	5,242	4,371	1,503	2,409.0	4,637.0	11,850
Mean	17.3	16.2	17.5	30.9	8.86	198	175	141	50.1	77.7	150	395
Max	58	63	78	78	9.8	1,120	577	499	141	192	870	2,050
Min	7.5	8.0	8.6	7.7	8.0	8.6	43	56	21	9.0	8.3	94

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	57.9	32.9	51.2	63.7	65.9	87.2	103	70.6	64.3	73.0	68.9	85.9
Max	290	136	308	258	162	275	342	225	278	244	171	395
(WY)	(1990)	(2004)	(1997)	(1979)	(1971)	(2010)	(1983)	(1984)	(1972)	(1975)	(1995)	(2011)
Min	0.00	0.00	0.00	0.00	0.00	0.19	0.86	0.81	2.60	4.24	4.32	0.50
(WY)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1981)	(1964)	(1963)	(1963)

01396800 SPRUCE RUN AT CLINTON, NJ—Continued

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1959 - 2011	
Annual total	34,411.3		38,912.2			
Annual mean	94.3		107		68.7	
Highest annual mean					111	1997
Lowest annual mean					3.81	1964
Highest daily mean	1,460	Mar 14	2,050	Sep 8	2,050	Sep 8, 2011
Lowest daily mean	7.5	Oct 6	7.5	Oct 6	^a 0.00	Aug 22, 1963
Annual seven-day minimum	8.5	Nov 18	8.5	Nov 18	^a 0.00	Aug 22, 1963
Maximum peak flow			4,000	Sep 8	4,080	Apr 2, 1970
Maximum peak stage			5.13	Sep 8	5.17	Apr 2, 1970
Instantaneous low flow			1.2	Jul 21	^a 0.00	Aug 22, 1963
10 percent exceeds	192		247		160	
50 percent exceeds	73		52		43	
90 percent exceeds	8.9		8.6		7.3	

^a Result of reservoir filling from August 1963 to March 1964.

