

RESERVOIRS IN RARITAN RIVER BASIN

**01396790 SPRUCE RUN RESERVOIR.**--Lat 40°38'37", long 74°55'25", Hunterdon County, Hydrologic Unit 02030105, at dam on Spruce Run, 0.5 mi north of Clinton, and 0.6 mi upstream from mouth.

DRAINAGE AREA.-- 41.3 mi<sup>2</sup>.

PERIOD OF RECORD.-- November 1963 to current year.

REVISED RECORDS.-- WDR NJ-84-1: (M). WDR NJ-85-1: 1984.

GAGE.-- Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway; dam completed in October 1963 with crest of spillway at elevation 273.00 ft. Usable capacity, 11,000,000,000 gal. Dead storage 300,000 gal. Reservoir used for water supply and recreation. Outflow mostly regulated by gates. Water is released to maintain minimum flow on the South Branch Raritan River and, at times, for municipal supply. Records given herein represent usable capacity.

COOPERATION.--Records provided by New Jersey Water Supply Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 11,820,000,000 gal, Jan. 24, 1979, elevation, 274.72 ft; minimum observed, 3,100,000,000 gal, Oct. 18, 1983, elevation, 246.68 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 11,360,000,000 gal, Apr. 3, elevation, 273.75 ft; minimum observed, 5,380,000,000 gal, Sept. 30, elevation, 256.45 ft.

**01397050 ROUND VALLEY RESERVOIR.**--Lat 40°36'39", long 74°50'41", Hunterdon County, Hydrologic Unit 02030105, at main dam on Prescott Brook, 1.8 mi south of Lebanon, 3.2 mi upstream from mouth, and 4.5 mi west of Whitehouse.

DRAINAGE AREA.-- 5.7 mi<sup>2</sup>.

PERIOD OF RECORD.-- March 1966 to current year.

REVISED RECORDS.-- WDR NJ-85-1: 1984. WDR NJ-01-1: 1996 (elevation, contents). WDR NJ-02-1: 2001 (contents), WDR NJ-04-1: (period of record maximum contents)

GAGE.-- Nonrecording gage read daily. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earthfill dam at main dam on Prescott Brook and two dams on South Branch Rockaway Creek tributaries at Lebanon; storage began in March 1966. Capacity at spillway level, 55,000,000,000 gal, elevation, 385.00 ft. Reservoir is used primarily for storage and is filled by pumping from South Branch Raritan River at Hamden Pumping Station (see following page). Outflow is controlled by operation of gates in pipe in dams. Water is released into South Branch Raritan River, South Branch Rockaway Creek, and Prescott Brook.

COOPERATION.--Records provided by New Jersey Water Supply Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 55,460,000,000 gal (revised), June 15, 1975, elevation, 385.63 ft; minimum observed (after first filling), 37,100,000,000 gal, Feb. 9, 1981, elevation, 361.30 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 55,450,000,000 gal, Apr. 4, elevation, 385.60 ft; minimum observed, 49,130,000,000 gal, Sept. 30, elevation, 377.05 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)
01396790 SPRUCE RUN RESERVOIR				01397050 ROUND VALLEY RESERVOIR		
Sept. 30.....	269.10	9,390		384.96	54,960	
Oct. 31.....	267.58	8,870	-26.0	384.70	54,700	-13.0
Nov. 30.....	271.00	10,150	+66.0	384.87	54,870	+8.8
Dec. 31.....	273.09	11,060	+45.4	384.99	54,990	+6.0
CAL YR 2004			+2			+4.9
Jan. 31.....	273.10	11,060	0	385.02	55,020	+1.5
Feb. 28.....	273.02	11,010	-2.8	384.95	54,950	-3.9
Mar. 31.....	273.18	11,110	+5.0	385.22	55,220	+13.5
Apr. 30.....	273.05	11,030	-4.1	384.91	54,910	-16.0
May 31.....	272.92	10,970	-3.0	384.85	54,850	-3.0
June 30.....	271.60	10,380	-30.4	384.43	54,530	-16.5
July 31.....	270.15	9,820	-27.9	384.24	54,370	-8.0
Aug. 31.....	265.68	8,150	-83.3	280.55	51,630	-137
Sept. 30.....	256.45	5,380	-143	377.05	49,130	-129
WTR YR 2005			-17.0			-24.7

† Elevation at 0900 of the last day of each month.

## RARITAN RIVER BASIN

## DIVERSIONS IN RARITAN RIVER BASIN

01396920 Water is diverted at the Hamden Pumping Station 4.0 mi upstream from the gaging station on South Branch Raritan River at Stanton (see station 01397000) for storage in Round Valley Reservoir. Water can be released from Round Valley Reservoir into the South Branch Raritan River at Hamden and are noted as negative discharge. Records provided by New Jersey Water Supply Authority. REVISED RECORDS.-- WDR NJ-85-1: 1984, WDR NJ-03-1: 2002

01399669 Water is also released from Round Valley Reservoir and enters the South Branch Rockaway Creek directly upstream from gaging station (01399670) at Whitehouse Station. Records provided by New Jersey Water Supply Authority.

01400836 Water is diverted from Carnegie Lake (Millstone River) at Princeton to the Delaware and Raritan Canal at the aqueduct 4.1 mi downstream from the gaging station on the Delaware and Raritan Canal at Port Mercer (station 01460440). Negative discharge indicates flow from Canal to Carnegie Lake. Records provided by New Jersey Water Supply Authority. REVISED RECORDS.--WDR NJ-85-1: 1984.

01402910 Water is diverted from the Millstone River just upstream of the Raritan River to the Delaware and Raritan Canal at Ten Mile Lock for municipal supply. Negative discharge indicates flow from Canal to Millstone River. Records provided by the New Jersey Water Supply Authority. REVISED RECORDS.--WDR NJ-85-1: 1984.

01402915 Elizabethtown Water Company diverts water from the Raritan River just downstream from the mouth of the Millstone River at Manville. In October 1996, the intake was relocated from just upstream of mouth to the present location. Previous to the 2003 water year, records were published as 01400509 Raritan and Millstone Rivers. Records provided by the Elizabethtown Water Company. REVISED RECORDS.-- WDR NJ-91-1: 1992. WDR NJ-04-1: Station number.

01405029 Water is diverted from Lawrence Brook at Westons Mills, just upstream of gaging station (01405030), by City of New Brunswick (since 1873), for municipal supply. Records provided by City of New Brunswick Water Department.

01460570 Elizabethtown Water Company diverts water from the Delaware and Raritan Canal, 1200 ft downstream from Ten Mile Lock at Franklin for municipal supply. Records provided by the Elizabethtown Water Company.

## DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTO2004BER 2004 TO SEPTEMBER 2005

MONTH	<u>01396920</u> Hamden pumping station	<u>01399669</u> Whitehouse Release	<u>01400836</u> Carnegie Lake	<u>01402910</u> Ten Mile Lock diversion	<u>01402915</u> Raritan River	<u>01405029</u> Westons Mills	<u>01460570</u> Delaware and Raritan Canal
October.....	0	0	0.50	-28.8	192	3.32	0.90
November.....	0	0	0	-33.4	184	1.63	1.96
December.....	0	0	0	-37.3	195	2.43	2.08
CAL YR 2004	-90	2.33	.04	-34.5	198	3.11	4.52
January.....	-1.20	8.40	0	-32.4	191	3.29	1.75
February.....	0	10.0	0	-42.4	190	5.12	0
March.....	0	0	0	-49.3	183	4.38	0
April.....	-12.2	19.7	0	-36.4	188	5.53	0
May.....	0	0	0	-32.2	195	4.45	13.3
June.....	0	18.7	0	-18.0	227	7.15	12.7
July.....	0	6.60	0	-18.4	216	4.65	17.6
August.....	0	130	0	-6.09	249	7.27	13.2
September.....	0	112	0	-2.37	244	7.07	5.32
WTR YR 2005	-1.10	25.5	.04	-28.0	205	4.68	5.79