



Water-Data Report 2009

01396091 SOUTH BRANCH RARITAN RIVER AT ROUTE 46, AT BUDD LAKE, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°51'34", long 74°45'39" referenced to North American Datum of 1983, Mount Olive Township, Morris County, NJ, Hydrologic Unit 02030105, on upstream right wingwall of bridge on US Route 46 in village of Budd Lake, 300 ft west of Wolfe Road, 700 ft downstream of dam on Budd Lake, and 5.0 mi east of Hackettstown.

DRAINAGE AREA.--5.08 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 2008 to current year.

GAGE.--Water-stage and depth of hole recorder (fathometer, for NJ DOT bridge scour monitoring) and crest-stage gages. Datum of gage is 940 ft NAVD of 1988 (from topographic map).

REMARKS.--Records fair. Several measurements of water temperature were made during the water year. Flow occasionally regulated by Budd Lake. Satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 12	0245	*48	*6.23
No other peak greater than base discharge			

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2.5	10	9.1	17	6.9	5.4	5.7	4.0	4.2	8.9	4.4	5.4
2	2.4	9.4	18	16	6.7	e5.4	5.3	4.3	4.1	18	9.4	3.8
3	2.1	8.2	28	15	6.9	e5.3	6.2	4.2	4.2	17	12	2.7
4	1.9	6.7	26	13	6.5	5.3	5.9	4.4	5.4	15	9.8	2.2
5	2.0	6.3	24	12	6.0	5.1	5.3	4.6	5.5	13	8.3	2.1
6	1.9	7.3	20	12	5.8	5.1	10	5.1	5.7	11	7.0	2.0
7	1.9	6.3	18	14	5.6	5.4	13	8.3	5.3	10	5.7	1.9
8	1.8	5.5	15	15	5.9	6.1	11	8.4	5.1	9.4	4.4	2.0
9	1.7	3.9	13	13	6.3	7.7	9.8	9.6	6.5	8.3	3.6	2.1
10	1.8	3.9	15	13	6.3	7.9	9.0	8.6	6.6	7.1	3.3	2.1
11	1.7	3.5	20	12	7.0	7.6	8.6	7.7	7.1	6.3	3.0	2.3
12	1.7	3.9	41	12	8.7	7.3	7.8	6.7	7.6	7.1	2.8	3.2
13	1.6	4.2	39	11	9.4	6.7	6.8	6.3	9.5	6.5	4.5	2.9
14	1.8	5.1	34	10	9.2	6.2	6.4	5.4	13	5.8	5.5	2.3
15	1.9	9.7	30	9.5	8.6	6.1	7.0	5.8	13	5.2	5.0	2.1
16	1.8	16	29	8.5	7.9	5.8	6.5	5.8	12	5.0	4.1	2.1
17	1.9	13	28	8.0	7.2	5.5	6.0	9.0	10	4.7	3.5	2.1
18	1.9	11	25	7.8	7.0	4.9	5.2	7.7	15	5.0	3.1	2.1
19	1.8	8.8	24	7.7	7.7	5.3	5.0	7.0	16	4.6	3.3	2.0
20	1.8	7.2	23	7.5	7.2	5.3	5.0	6.2	16	4.2	2.9	1.8
21	1.8	6.5	22	7.1	6.8	4.9	5.3	5.7	19	4.2	3.8	1.8
22	1.9	5.9	19	6.9	6.6	4.6	6.4	5.5	17	4.0	7.8	1.7
23	1.8	5.6	17	6.6	6.2	4.2	6.3	5.3	15	3.8	10	1.8
24	1.7	5.5	19	6.0	5.7	3.8	5.5	5.2	13	3.4	8.6	2.1
25	2.7	7.1	25	5.7	5.3	3.4	5.0	5.2	12	3.0	6.7	2.0
26	2.4	6.6	24	5.6	5.0	3.1	4.7	5.0	11	2.5	5.1	1.8
27	2.1	6.1	22	5.4	5.1	3.4	4.6	4.9	11	2.6	4.1	2.7
28	11	5.5	23	6.9	5.5	3.4	4.4	4.6	9.9	2.6	4.9	2.3
29	15	5.0	23	8.0	---	4.9	4.1	4.7	8.9	2.9	7.5	2.0
30	13	6.1	21	7.7	---	7.8	3.8	4.5	8.6	2.7	8.4	1.9
31	11	---	19	7.4	---	6.6	---	4.4	---	3.7	6.8	---
Total	102.3	209.8	713.1	307.3	189.0	169.5	195.6	184.1	297.2	207.5	179.3	69.3
Mean	3.30	6.99	23.0	9.91	6.75	5.47	6.52	5.94	9.91	6.69	5.78	2.31
Max	15	16	41	17	9.4	7.9	13	9.6	19	18	12	5.4
Min	1.6	3.5	9.1	5.4	5.0	3.1	3.8	4.0	4.1	2.5	2.8	1.7

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2008 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3.30	6.99	23.0	9.91	6.75	5.47	6.52	5.94	7.52	4.89	3.99	2.52
Max	3.30	6.99	23.0	9.91	6.75	5.47	6.52	5.94	9.91	6.69	5.78	2.72
(WY)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2008)
Min	3.30	6.99	23.0	9.91	6.75	5.47	6.52	5.94	5.14	3.09	2.19	2.31
(WY)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2008)	(2008)	(2008)	(2009)

01396091 SOUTH BRANCH RARITAN RIVER AT ROUTE 46, AT BUDD LAKE, NJ—Continued**SUMMARY STATISTICS**

	Water Year 2009		Water Years 2008 - 2009	
Annual total	2,824.0			
Annual mean	7.74		7.74	
Highest annual mean			7.74	2009
Lowest annual mean			7.74	2009
Highest daily mean	41	Dec 12	41	Dec 12, 2008
Lowest daily mean	1.6	Oct 13	1.3	Sep 4, 2008
Annual seven-day minimum	1.7	Oct 8	1.4	Aug 30, 2008
Maximum peak flow	48	Dec 12	48	Dec 12, 2008
Maximum peak stage	6.23	Dec 12	6.23	Dec 12, 2008
Instantaneous low flow	1.5	Oct 13	1.2	Aug 29, 2008
10 percent exceeds	15		15	
50 percent exceeds	6.0		6.0	
90 percent exceeds	2.1		2.1	

