

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ

LOCATION.--Lat 40°41'15", long 74°18'42", Union County, Hydrologic Unit 02030104, on left bank 50 ft downstream from bridge on eastbound U.S. Highway 22, 100 ft downstream from Pope Brook, and 1.5 mi south of Springfield.

DRAINAGE AREA.--25.5 mi².

PERIOD OF RECORD.--July 1938 to current year.

REVISED RECORDS.--WSP 1622: 1945. WRD-NJ 1973: 1938(M), 1968(M), 1971(M).

GAGE.--Water-stage recorder. Former concrete control is no longer effective. Datum of gage is 66.17 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Water for municipal supply diverted from river by city of Orange at Orange Reservoir upstream on the West Branch Rahway River. The flow past this station is affected by diversions by pumpage from wells by Orange, South Orange, New Jersey-American Water Co., and Springfield station of Elizabethtown Water Co. (no longer active). Several measurements of water temperature were made during the year. Since 1980, the site may be affected during high flows by backwater from the Lenape Park flood control dam, about 1 mi downstream. Satellite gage-height telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 28	1345	1,180	5.88	Mar 28	2345	*1,370	*6.35

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	9.3	347	17	15	32	39	25	6.7	44	5.9	5.4
2	22	9.4	69	16	15	28	503	16	6.6	19	6.1	4.1
3	18	12	38	18	15	22	272	16	7.6	7.1	5.4	4.0
4	15	78	29	49	26	20	73	14	25	6.1	5.3	3.8
5	15	37	24	32	23	19	47	12	8.3	5.6	5.4	4.0
6	14	19	29	211	23	19	39	12	13	29	5.5	3.9
7	13	17	104	58	23	31	39	12	36	8.0	5.9	4.0
8	13	17	65	149	24	77	144	12	7.2	152	6.8	4.0
9	13	18	40	60	30	39	43	12	6.9	41	7.1	3.9
10	13	19	157	39	71	26	35	11	31	16	6.5	4.2
11	13	21	80	37	34	25	31	11	16	9.9	5.7	3.8
12	14	87	40	84	24	32	28	11	9.9	7.4	5.6	3.8
13	14	75	31	40	20	26	27	11	8.2	9.9	5.4	3.9
14	14	20	27	277	99	24	24	11	7.4	8.4	10	108
15	26	16	24	74	226	22	22	11	7.1	27	29	53
16	28	15	22	43	59	22	20	10	21	8.1	6.3	6.3
17	12	14	21	36	43	21	20	9.9	12	22	5.8	5.2
18	11	14	19	29	31	19	20	9.5	6.8	10	5.1	4.9
19	43	14	19	26	25	18	20	9.5	6.2	7.4	33	4.9
20	14	15	19	25	22	22	19	25	6.1	6.9	8.9	5.0
21	13	28	17	21	30	24	18	9.3	5.7	6.4	4.5	5.1
22	20	14	17	18	38	20	17	11	31	6.5	4.2	4.9
23	13	13	92	e18	31	50	18	9.7	10	6.1	4.1	5.1
24	12	35	56	e18	25	89	36	8.4	6.2	5.9	4.2	5.1
25	12	69	24	e17	30	49	19	11	6.1	12	3.9	5.0
26	13	24	20	e17	23	38	17	9.7	5.5	6.6	4.0	6.6
27	13	15	19	17	21	31	37	8.3	17	8.3	4.0	10
28	14	498	18	16	22	462	19	19	17	9.9	6.0	4.9
29	14	79	19	16	---	458	16	16	19	6.0	6.0	6.7
30	17	35	18	16	---	70	23	7.6	21	6.1	4.8	5.8
31	16	---	17	16	---	46	---	7.0	---	6.5	5.3	---
TOTAL	514	1,336.7	1,521	1,510	1,068	1,881	1,685	377.9	387.5	525.1	225.7	299.3
MEAN	16.6	44.6	49.1	48.7	38.1	60.7	56.2	12.2	12.9	16.9	7.28	9.98
MAX	43	498	347	277	226	462	503	25	36	152	33	108
MIN	11	9.3	17	16	15	18	16	7.0	5.5	5.6	3.9	3.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2005, BY WATER YEAR (WY)

MEAN	19.2	27.8	31.9	31.7	34.6	48.2	43.0	34.6	25.9	25.5	22.7	23.9
MAX	108	107	129	116	79.5	120	139	112	123	138	112	151
(WY)	(1997)	(1973)	(1984)	(1979)	(1998)	(1994)	(1983)	(1989)	(2003)	(1975)	(1942)	(1999)
MIN	2.17	2.73	4.02	4.26	6.86	8.08	7.37	6.31	4.14	2.23	2.10	2.97
(WY)	(1964)	(1950)	(1940)	(1966)	(2002)	(1981)	(1963)	(1965)	(1965)	(1966)	(1964)	(1964)

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1939 - 2005	
ANNUAL TOTAL	14,970.2		11,331.2			
ANNUAL MEAN	40.9		31.0		30.7	
HIGHEST ANNUAL MEAN					55.9	1973
LOWEST ANNUAL MEAN					10.0	1965
HIGHEST DAILY MEAN	502	Sep 29	503	Apr 2	2,270	Sep 16, 1999
LOWEST DAILY MEAN	7.8	Jul 11	3.8	Sep 4,11-12	0.40	Sep 11, 1966
ANNUAL SEVEN-DAY MINIMUM	9.7	Sep 1	3.9	Sep 6	0.71	Oct 8, 1970
MAXIMUM PEAK FLOW			1,370	Mar 28	7,990a	Sep 16, 1999
MAXIMUM PEAK STAGE			6.35	Mar 28	10.67	Sep 16, 1999
INSTANTANEOUS LOW FLOW			3.2	Sep 11	0.10	Sep 11, 1966
10 PERCENT EXCEEDS	88		54		61	
50 PERCENT EXCEEDS	20		17		11	
90 PERCENT EXCEEDS	12		5.4		3.6	

a From rating curve extend above 1,600 ft³/s on basis of slope-area measurement of peak flow.
 e Estimated

