

01395000 RAHWAY RIVER AT RAHWAY, NJ

LOCATION.--Lat 40°37'08", long 74°17'00", Union County, Hydrologic Unit 02030104, on left bank, 100 ft upstream from bridge on St. Georges Avenue in Rahway, and 0.9 mi upstream from Robinsons Branch.

DRAINAGE AREA.--40.9 mi².

PERIOD OF RECORD.--July 1908 to April 1915 (gage heights and discharge measurements only), October 1921 to current year.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922-23(M), 1924, 1930-31(M), 1937. WDR NJ-79-1: 1978.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 8.77 ft above NGVD of 1929. Prior to Aug. 25, 1934, nonrecording gage at site 40 ft downstream from Church Street and 1,500 ft downstream from present site at datum 2.77 ft lower.

REMARKS.--Records good, except for estimated daily values which are fair. Water for municipal supply diverted from river by cities of Rahway and Orange. The flow past this station is affected by diversions by pumpage from wells by Orange, South Orange, New Jersey-American Water Co., Springfield station of Elizabethtown Water Co. (no longer active), by storage in the Lenape Park flood control reservoir (since 1980), and by gate operations at Hansels Dam 5.6 mi upstream from gage in Cranford and Taylor Park Dam on the West Branch Rahway River in Millburn 11.6 mi upstream from gage. Several measurements of water temperature were made during the year. Satellite gage-height telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 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	966	4.02	Mar 29	0000	*1,500	*4.86
Dec 1	1445	675	3.49	Apr 2	2000	1,070	4.20
Jan 14	1600	700	3.54				

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	62	14	374	23	22	46	85	64	9.9	14	6.0	4.7
2	37	14	224	21	21	47	515	32	9.6	76	4.2	3.3
3	30	14	60	22	22	38	679	29	11	13	4.8	4.2
4	24	58	43	71	37	31	133	22	56	9.5	3.9	3.7
5	21	140	36	46	40	30	83	21	16	8.0	3.4	2.9
6	21	25	36	293	40	30	67	20	11	58	3.2	3.0
7	21	20	134	106	41	41	84	20	52	26	2.9	3.9
8	20	16	137	195	40	110	257	19	15	80	4.2	4.0
9	19	15	55	121	46	69	86	18	12	133	5.4	3.3
10	19	14	252	58	101	45	61	18	31	61	5.0	3.0
11	18	15	154	49	59	39	51	16	27	15	4.4	3.6
12	34	97	64	127	36	50	47	16	20	12	3.1	3.9
13	19	164	48	62	31	43	44	15	11	25	2.6	3.6
14	16	40	40	346	81	36	41	15	10	15	2.6	46
15	14	24	34	194	375	33	38	15	9.1	19	32	200
16	53	21	33	66	90	30	37	13	15	27	5.9	22
17	19	20	31	53	74	28	36	13	44	84	3.9	6.0
18	16	18	29	42	47	26	34	13	10	29	3.8	4.8
19	69	17	28	38	38	25	34	14	8.8	11	87	3.9
20	33	18	27	37	34	28	33	47	8.1	9.5	58	4.3
21	19	48	23	32	45	39	31	25	7.5	7.5	7.8	3.5
22	30	21	23	e25	54	30	30	15	18	6.5	5.2	3.2
23	16	20	78	e28	54	77	29	17	48	6.6	5.1	3.1
24	16	32	140	e29	42	158	62	13	11	5.6	3.0	2.8
25	15	103	39	e28	44	91	e35	17	9.3	17	3.6	2.6
26	16	49	30	e27	41	56	e25	19	8.5	10	4.7	4.5
27	16	24	27	e26	35	44	e50	13	14	7.0	4.6	19
28	15	480	23	e25	34	482	e40	13	53	11	4.4	4.2
29	16	393	23	e25	---	972	28	39	16	7.0	9.5	4.8
30	19	58	25	e24	---	160	35	13	51	6.3	5.2	6.6
31	16	---	23	e22	---	79	---	11	---	5.5	6.2	---
TOTAL	759	1,992	2,293	2,261	1,624	3,013	2,810	635	622.8	815.0	305.6	388.4
MEAN	24.5	66.4	74.0	72.9	58.0	97.2	93.7	20.5	20.8	26.3	9.86	12.9
MAX	69	480	374	346	375	972	679	64	56	133	87	200
MIN	14	14	23	21	21	25	25	11	7.5	5.5	2.6	2.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2005, BY WATER YEAR (WY)

MEAN	29.7	43.7	49.3	52.1	58.2	79.1	69.1	53.1	39.5	42.1	38.6	38.9
MAX	197	221	255	211	156	190	246	199	199	268	242	231
(WY)	(1997)	(1973)	(1984)	(1979)	(1925)	(1983)	(1983)	(1989)	(2003)	(1975)	(1971)	(1999)
MIN	1.48	3.05	3.27	1.41	8.15	12.6	7.80	6.20	3.32	0.33	0.43	2.26
(WY)	(1964)	(1966)	(1981)	(1981)	(2002)	(1981)	(1963)	(1965)	(1965)	(1966)	(1964)	(1964)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1922 - 2005	
ANNUAL TOTAL	24,154.2		17,518.8			
ANNUAL MEAN	66.0		48.0		49.4	
HIGHEST ANNUAL MEAN					105	1973
LOWEST ANNUAL MEAN					15.0	1965
HIGHEST DAILY MEAN	993	Sep 29	972	Mar 29	3,670	Sep 17, 1999
LOWEST DAILY MEAN	7.2	Aug 26	2.6	Many days	0.00	Oct 9, 1964
ANNUAL SEVEN-DAY MINIMUM	12	Sep 1	3.3	Sep 19	0.00	Jul 10, 1981
MAXIMUM PEAK FLOW			1,500	Mar 29	5,590	Sep 17, 1999
MAXIMUM PEAK STAGE			4.86	Mar 29	9.60	Sep 17, 1999
INSTANTANEOUS LOW FLOW			2.1	Many days	0.00	Oct 1, 1981
10 PERCENT EXCEEDS	156		86		101	
50 PERCENT EXCEEDS	31		25		19	
90 PERCENT EXCEEDS	16		4.6		3.7	

e Estimated

