DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ

LOCATION.--Lat 40°13'18", long 74°46'42", Mercer County, Hydrologic Unit 02040105, on left bank 450 ft upstream from Calhoun Street Bridge at Trenton, 0.5 mi upstream from Assunpink Creek, and at river mile 134.5.

DRAINAGE AREA.--6,780 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1913 to current year. October 1912 to February 1913 monthly discharge only, published in WSP 1302. Gage- height records collected in this vicinity since 1904 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 951: Drainage area. WSP 1302: 1913-20. WSP 1382: 1924, 1928.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Sept. 30, 1965, at datum 7.77 ft higher. Feb. 24, 1913 to Oct. 2, 1928, nonrecording gage on downstream side of highway bridge at site 450 ft downstream.

REMARKS.--Records good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lakes Wallenpaupack and Hopatcong, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, Neversink, Wild Creek, and Merrill Creek Reservoirs and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs. Diversion to Bradshaw and Merrill Creek Reservoirs and to Delaware and Raritan Canal. Water diverted just above station by borough of Morrisville, PA, and city of Trenton for municipal supply. Satellite gage height and water-quality parameter telemeter at station. Information on the above lakes and reservoirs can be found in the annual Water Data Report NJ-99-1. Other data for this station were unavailable at press time and are published in the annual report "Water Resources Data for New Jersey" (NJ-99-3).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 11, 1903, reached an elevation of about 28.5 ft above sea level, discharge estimated, 295,000 ft^3/s. Maximum elevation since 1692, 30.6 ft above sea level, Mar. 8, 1904, from floodmark, due to ice jam.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50,000 ft^3/s and maximum (*):

Date	Time	Discharge ft^3/s	Gage Height (ft)	Date	Time	Discharge ft^3/s	Gage Height (ft)
Jan. 25	2145	70,400	15.74	Sept. 16	2045	*112,000	*18.53

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3040	3000	3480	2420	13800	10000	15300	7880	5930	2960	2560	2510
2	2880	2930	2980	2490	13800	11500	14200	7430	5360	3010	2670	2450
3	2480	2840	2940	5330	20300	12200	13800	6730	5290	3040	2750	2420
4	2510	2880	2790	8990	22300	13600	13400	6350	5080	2870	2700	2590
5	2890	2900	2730	5850	22100	19300	12800	6780	4790	2590	2650	2600
6	2960	2880	2790	e4010	18700	24600	12000	6740	4460	2690	2650	2760
7	2760	2960	2730	e3500	16800	20400	11600	6690	3980	2550	2570	3010
8	3100	3260	2830	e3810	15600	16900	10800	6390	3650	3120	2540	3180
9	6800	3090	2790	e3930	14300	14500	10200	6950	3560	3400	2580	3330
10	7130	2830	2880	e8450	12900	12900	11600	6570	3850	2840	2570	3250
11	8970	2980	2800	7090	12300	12200	12100	6520	3790	2900	2530	3450
12	7140	3250	2830	5910	11400	11800	12300	6320	3450	2660	2580	2830
13	5340	3370	2960	5580	12700	10800	11700	5820	3200	2260	2570	2820
14	4510	2920	2790	6430	14300	9790	11300	5390	3420	2300	4840	2610
15	4810	2990	2720	6680	14500	9770	10800	4860	3590	2530	4530	2610
16	4510	3180	2680	7620	12900	10300	10200	4530	3400	2580	4330	33900
17	4150	2940	2650	6420	12200	11100	10800	4460	3340	2650	3850	75300
18	4220	2830	2650	9440	14100	11300	10300	4100	3200	2770	3340	48600
19	4080	2750	2720	28500	15700	11000	9660	4090	3360	2840	3070	28100
20	3330	2810	2700	18100	14400	11500	9590	6080	3400	2610	2780	16300
21	3020	2830	2750	19400	12900	11400	10700	7560	3240	2630	2560	12000
22	2920	2830	2680	17700	11500	29100	10100	7490	3180	2630	2750	10500
23	2930	2840	2680	16700	10500	33100	9940	6780	3130	2610	2790	9490
24	2980	2950	2640	23100	9210	30900	10900	7730	3290	2710	2780	9420
25	3090	2890	2960	57300	8740	25600	11200	8580	3100	2850	2620	9820
26	3120	2810	3520	58600	8790	21900	11000	10700	2800	2630	3300	9000
27	3180	3550	2700	37900	8780	19500	9920	12500	2760	2570	4940	7660
28	3230	3950	2300	28400	8590	17700	9840	10500	3020	2480	3620	6270
29	3210	3720	2550	23000	---	16700	8990	8970	2940	2480	3050	5950
30	3290	3930	3050	18800	---	16300	8360	7800	2930	2820	2920	6660
31	3130	---	3250	15900	---	15900	---	6760	---	2730	2720	---
TOTAL	121710	91890	87520	467350	384110	503560	335400	216050	110490	84310	94710	331390
MEAN	3926	3063	2823	15080	13720	16240	11180	6969	3683	2720	3055	11050
MAX	8970	3950	3520	58600	22300	33100	15300	12500	5930	3400	4940	75300
MIN	2480	2750	2300	2420	8590	9770	8360	4090	2760	2260	2530	2420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1999, BY WATER YEAR (WY)

MEAN	6845	10490	12630	12570	12870	20610	22290	14150	8994	7039	5870	5777
MAX	28710	27340	42860	34950	27550	60840	52680	31690	33460	25720	30290	22490
(WY)	1956	1928	1997	1979	1951	1936	1940	1989	1972	1928	1955	1933
MIN	1632	1868	2037	2539	3500	7715	6828	5074	2572	1548	1808	1762
(WY)	1942	1915	1923	1981	1920	1981	1985	1995	1965	1965	1965	1932

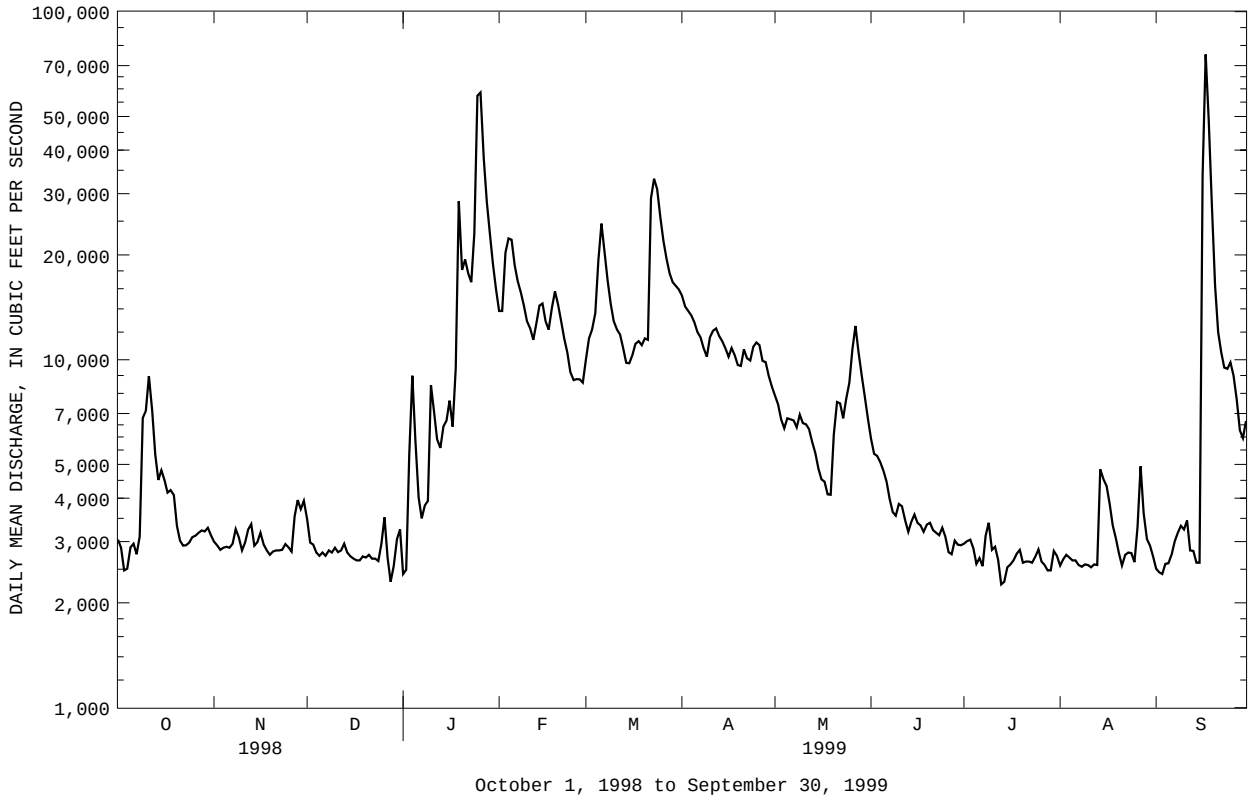
e Estimated.

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1913 - 1999	
ANNUAL TOTAL	4494380		2828490			
ANNUAL MEAN	12310		7749		11670	
HIGHEST ANNUAL MEAN					19810	1928
LOWEST ANNUAL MEAN					4708	1965
HIGHEST DAILY MEAN	66800	May 12	75300	Sep 17	279000	Aug 20 1955
LOWEST DAILY MEAN	2300	Dec 28	2260	Jul 13	1240	Oct 31 1914
ANNUAL SEVEN-DAY MINIMUM	2690	Dec 18	2540	Jul 12	1310	Oct 31 1914
INSTANTANEOUS PEAK FLOW			112000	Sep 16	329000**a**	Aug 20 1955
INSTANTANEOUS PEAK STAGE			18.53	Sep 16	28.60**b**	Aug 20 1955
INSTANTANEOUS LOW FLOW			1940	Jan 1	1180	Oct 31 1963
10 PERCENT EXCEEDS	26200		15900		24600	
50 PERCENT EXCEEDS	8550		3980		7890	
90 PERCENT EXCEEDS	2830		2630		3000	

a From rating curve extended above 230,000 ft^3/s, maximum flow since 1692.
b From high-water mark in gage house.



October 1, 1998 to September 30, 1999