

DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 41°22'14", long 74°41'52", Pike County, PA, Hydrologic Unit 02040104, on right bank 250 ft downstream from bridge (on U.S. Highways 6 and 209) between Port Jervis, N.Y. and Matamoras, PA, 1.2 mi upstream from Neversink River, and 6.5 mi downstream from Mongaup River.

DRAINAGE AREA.--3,070 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1904 to current year.

REVISED RECORDS.--WSP 1031: 1905-36. WDR NY-71-1: 1970. WDR NY-82-1: Drainage area. WDR NY-86-1: 1979-80.

GAGE.--Water-stage recorder. Datum of gage is 415.35 ft above National Geodetic Vertical Datum of 1929. October 1904 to August 13, 1928, non-recording gage at bridge 250 ft upstream at present datum; operated by U.S. Weather Service prior to June 20, 1914.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Lake Wallenpaupack (station 01431700) and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs and smaller reservoirs. Large diurnal fluctuations at medium and low flows caused by powerplants on tributary streams. Subsequent to September 1954, entire flow from 371 mi² of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi² of drainage area controlled by Cannonsville Reservoir. Information on the above lakes and reservoirs can be found in the annual Water-Data Report NY-02-1. Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master. Satellite and telephone gage-height telemeters and National Weather Service telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge prior to current degree of regulation, 233,000 ft³/s, Aug. 19, 1955, gage height, 23.91 ft, from floodmarks in gage house, from rating curve extended above 89,000 ft³/s, on basis of slope-area measurement of peak flow; maximum discharge since current degree of regulation, 134,000 ft³/s, Jan. 20, 1996, gage height, 18.37 ft; maximum gage height, 26.6 ft, Feb. 12, 1981 (ice jam), from floodmarks; minimum observed discharge, 175 ft³/s, Sept. 23, 1908, gage height, 0.6 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--The U.S. Weather Bureau reported a discharge of 205,000 ft³/s, Oct. 10, 1903, gage height, 23.1 ft, from rating curve extended above 70,000 ft³/s, by velocity-area studies; maximum gage height, 25.5 ft, Mar. 8, 1904 (ice jam).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,400 ft³/s, May 14, gage height, 7.68 ft; minimum, 560 ft³/s, Jan. 20, gage height, 1.53 ft, result of freezeup.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1470	1530	1390	1120	6400	2000	7710	11000	7710	2350	1520	1330
2	1540	1660	2040	1100	6580	1670	7420	10100	7240	3000	1570	1390
3	1730	1570	1950	1340	5900	1800	5860	11000	5570	2920	1540	1500
4	1700	1510	1460	1330	4640	2320	5610	7870	4930	2370	1580	1530
5	1700	1600	1260	1350	4050	2610	5010	6420	4510	2440	1510	1490
6	1780	1530	1160	1120	3310	2110	4060	5750	6100	2100	1730	1660
7	1640	1480	1230	1000	2890	2010	3260	5020	19000	1900	1570	1670
8	1770	1470	1110	e980	2540	1900	3520	4610	16100	1800	1540	1520
9	1650	1430	1160	1040	2290	1790	3510	4430	9930	2010	1530	1420
10	1670	1410	1060	1010	2110	1890	3490	4430	8070	2090	1570	1600
11	1750	1420	985	1110	3840	2180	3290	3840	7350	1960	1530	1590
12	1710	1380	1100	1060	8530	2240	3210	3340	6160	1770	1500	1590
13	1790	1350	1180	1020	6040	2030	2470	8140	5740	1610	1560	1670
14	1630	1400	1140	1050	4500	2000	2380	23900	5750	1370	1570	1690
15	1680	1340	1370	1010	3530	2030	4110	18200	8030	1480	1540	1800
16	1780	1420	1840	919	3310	1960	6080	12700	9290	1700	1680	1990
17	1790	1390	1810	885	2940	2140	5400	9800	8450	1670	1700	1580
18	1790	1370	2200	872	2690	2270	4790	10600	6980	1830	1670	1500
19	1710	1360	5430	764	2350	2110	4310	16000	6190	1600	1600	1700
20	1700	1350	4410	666	2120	2240	3500	11600	5390	1700	1640	1470
21	1660	1370	3530	802	2120	2580	3040	8870	4740	1810	1630	1380
22	1690	1390	2840	987	2450	3270	2940	7250	3830	1690	1730	1570
23	1710	1380	2360	e980	2660	3250	3260	6150	3150	1700	1530	790
24	1690	1390	2100	e940	2350	2850	3090	5880	3530	1760	1590	1980
25	1810	1420	2060	e1100	2110	2900	3130	5200	3620	1940	1650	1650
26	1910	1420	2100	1450	2040	3130	3750	3860	3840	1640	1620	1560
27	1750	1660	1640	1980	1940	12200	3810	3650	3850	1560	1410	1700
28	1770	1480	1550	1980	1960	13700	4210	4280	3720	1570	1500	3110
29	1720	1340	1320	2240	---	10000	13600	12100	3140	1540	1750	2970
30	1720	1230	1440	2420	---	8500	13400	8980	2190	1660	1850	2050
31	1680	---	1200	5610	---	8210	---	7160	---	1500	1590	---
TOTAL	53090	43050	57425	41235	98190	111890	143220	262130	194100	58040	49500	50450
MEAN	1713	1435	1852	1330	3507	3609	4774	8456	6470	1872	1597	1682
MAX	1910	1660	5430	5610	8530	13700	13600	23900	19000	3000	1850	3110
MIN	1470	1230	985	666	1940	1670	2380	3340	2190	1370	1410	790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2002, BY WATER YEAR (WY)

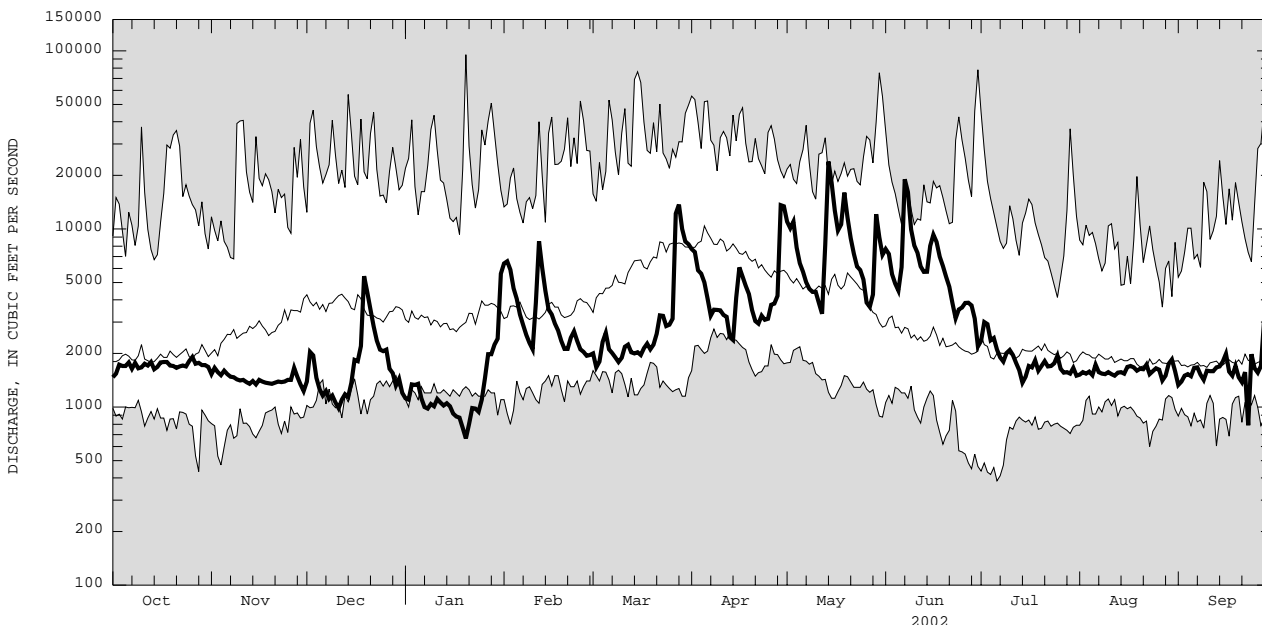
MEAN	2932	3985	5065	4707	5071	7925	9402	6135	3949	2672	2213	2381
MAX	10440	10310	17280	12980	13730	17520	23650	12670	12650	6680	4513	7928
(WY)	1978	1973	1997	1996	1976	1977	1993	1984	1972	1973	1969	1987
MIN	1001	884	1475	1216	1601	2583	2954	1890	993	699	963	1144
(WY)	1965	1965	1999	1981	1980	1981	1985	1995	1965	1965	1965	1965

e Estimated.

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SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1964 - 2002	
ANNUAL TOTAL	1225225		1162320			
ANNUAL MEAN	3357		3184		4698	
HIGHEST ANNUAL MEAN					7216	1973
LOWEST ANNUAL MEAN					2028	1965
HIGHEST DAILY MEAN	32600	Apr 10	23900	May 14	95200	Jan 20 1996
LOWEST DAILY MEAN	985	Dec 11	666	Jan 20	385	Jul 6 1965
ANNUAL SEVEN-DAY MINIMUM	1100	Dec 8	842	Jan 16	432	Jul 1 1965
10 PERCENT EXCEEDS	5880		7190		10200	
50 PERCENT EXCEEDS	1920		1830		2800	
90 PERCENT EXCEEDS	1410		1330		1500	



CURRENT WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
 SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

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01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued
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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-60, 1964 to January 1994, June 1997, 1999 to August 2001, April 2002 to current year.

CHEMICAL DATA: 1958-59 (e), 1964-65 (c), 1966 (a), 1967-68 (c), 1969-76 (d), 1987 (b), 1988-89 (c), 1990-91 (b), 1992, 1997 (a), 1999-2001 (d).

MINOR ELEMENTS DATA: 1970, 1972-73 (a), 1974-76 (c), 1987 (b), 1988-89 (c), 1990-91 (b), 1992 (a).

PESTICIDE DATA: 1974 (a), 1987 (b), 1988-89 (c), 1990 (b), 1997 (a), 1999 (c), 2000-01 (d).

ORGANIC DATA: OC--1974 (b), 1975, 1999-2001 (d).

NUTRIENT DATA: 1968 (a), 1969-76 (d), 1987 (b), 1988-89 (c), 1990 (b), 1999-2001 (d).

BIOLOGICAL DATA:

Bacteria--1973-76 (d).

Phytoplankton--1974 (b), 1975-76 (c).

Periphyton--1976 (a).

SEDIMENT DATA: 1959, 1976 (c), 1988 (b), 1989 (c), 1990-91 (b), 1992 (a), 1999-2001 (d).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January to September 1973

WATER TEMPERATURE: February 1957 to September 1960, January to September 1973, June 1974 to January 1994, October 1998 to August 2001.

SUSPENDED-SEDIMENT DISCHARGE: February 1957 to September 1960, March 1970 to June 1976.

REMARKS.--Other data for the Water-Quality Network can be found on pages 410-425.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum (water years 1957-59, 1973-81, 1983-84, 1988-93, 1999-2000), 30.5°C, July 5, 1999; minimum (water years 1958-60, 1973, 1975-93, 1999, 2001), 0.0°C on many days during winter periods, except 1984.

SUSPENDED-SEDIMENT CONCENTRATION: (water years 1957-60, 1970-76): Maximum daily mean, 760 mg/L, June 29, 1973; minimum daily mean, less than 1 mg/L on many days.

SUSPENDED-SEDIMENT DISCHARGE: (water years 1957-60, 1970-76): Maximum daily, 187,000 tons, June 29, 1973; minimum daily, 1 ton, Aug. 29, 1957.

COOPERATION.--Samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM-PLING METHOD, CODES (82398)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	
APR 2002														
04...	0930	9813	5050	40	12.5	7.2	69	6.9	19	5.8	1.2	11	7.6	
JUN														
05...	0930	9813	3990	40	9.3	7.3	75	17.9	20	5.9	1.2	12	7.4	
AUG														
07...	0900	9813	1550	40	8.3	7.7	98	22.9	26	7.5	1.8	17	7.7	
Date	Time	RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L) (00515)	RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA (MG/L AS N) (00610)	NITRO-GEN, NITRATE (MG/L AS N) (00620)	NITRO-GEN, NITRITE (MG/L AS N) (00615)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, ORTHO (MG/L AS P) (70507)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC (MG/L AS C) (00680)	COPPER, TOTAL RECOV-ERABLE (µG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (µG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (µG/L AS MN) (01055)
APR 2002														
04...	210	2	<.020	.22	<.040	.48	<.01	.020	2.3	<10	100	<1.0	30	
JUN														
05...	50	<2	<.020	.08	<.040	.23	<.01	.020	2.9	<10	270	<1.0	40	
AUG														
07...	<2	<2	<.020	.22	<.040	.36	.01	.010	2.7	<10	100	<1.0	50	
Date	Time	NICKEL, TOTAL RECOV-ERABLE (µG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)											
APR 2002														
04...		<50	<10											
JUN														
05...		<50	<10											
AUG														
07...		<50	<10											