Water-Data Report 2011

01434000 DELAWARE RIVER AT PORT JERVIS, NY

Upper Delaware Basin
Middle Delaware-Mongaup-Brodhead Subbasin

LOCATION.--Lat 41°22′14″, long 74°41′52″ referenced to North American Datum of 1927, Pike County, PA, Hydrologic Unit 02040104, on right bank 250 ft downstream from bridge on U.S. Highways 6 and 209 between Port Jervis, NY and Matamoras, PA, 1.2 mi upstream from Neversink River, and 6.5 mi downstream from Mongaup River.

DRAINAGE AREA.--3,070 mi^2.

SURFACE-WATER 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. WDR NY-04-1: 2003.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 415.35 ft above NGVD 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 Prompton and General Edgar Jadwin reservoirs, Lake Wallenpaupack, and Toronto (01433100), Cliff Lake (01433200), and Swinging Bridge reservoirs (01433000) 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 mi^2 of drainage area controlled by Pepacton Reservoir (01416900), and subsequent to October 1963, entire flow from 454 mi^2 of drainage area controlled by Cannonsville Reservoir (01424997). 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 telemeter 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 ft^3/s, Aug. 19, 1955, gage height, 23.91 ft, from floodmarks in gage house, outside gage height was 24.16 ft, from floodmark, from rating curve extended above 130,000 ft^3/s, on basis of slope-area measurement of peak flow; maximum discharge since current degree of regulation, 189,000 ft^3/s, June 28, 2006, gage height, 21.47 ft, outside gage height was 22.16 ft, from crest-stage gage; maximum gage height, 26.6 ft, Feb. 12, 1981 (ice jam), from floodmarks; minimum observed discharge, 175 ft^3/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 ft^3/s, Oct. 10, 1903, gage height, 23.1 ft, from rating curve extended above 70,000 ft^3/s, by velocity-area studies; maximum gage height, 25.5 ft, Mar. 8, 1904 (ice jam).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 96,000 ft^3/s, Sept. 8, gage height, 15.11 ft; minimum discharge, 1,580 ft^3/s, Jan. 15, gage height, 2.59 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	54,200	3,010	9,150	2,720	2,620	10,800	7,350	22,400	9,340	7,060	2,620	14,800
2	38,100	2,920	32,400	2,610	2,530	11,100	8,190	17,900	6,940	5,110	2,370	12,300
3	16,900	2,710	19,600	3,020	2,420	9,180	7,800	15,000	5,600	8,490	2,060	10,800
4	11,400	2,810	13,400	3,390	2,700	8,170	7,750	16,000	4,280	21,200	2,290	9,560
5	12,800	4,950	10,300	3,150	2,640	8,860	8,980	20,000	3,670	14,200	2,590	10,800
6	16,100	5,160	8,470	2,850	1,990	16,800	12,900	17,100	3,380	11,200	2,350	17,500
7	11,600	4,260	7,590	2,730	2,350	56,300	12,000	13,300	3,430	9,050	6,880	55,900
8	8,970	3,910	7,030	2,150	2,890	32,100	10,900	11,400	3,570	8,310	7,750	87,900
9	7,220	3,720	6,130	1,890	2,990	21,300	9,600	10,000	3,380	9,190	6,250	71,700
10	6,090	3,700	5,370	2,370	2,790	18,100	8,630	8,490	3,060	6,990	5,910	41,500
11	5,630	3,420	5,550	3,010	2,560	64,200	8,350	7,530	2,930	5,790	5,990	27,300
12	5,340	3,210	5,790	2,700	2,460	53,400	8,380	6,830	3,850	5,030	4,940	21,900
13	5,660	2,880	10,300	2,860	2,130	35,300	9,730	5,730	5,430	4,550	4,250	19,100
14	5,060	2,750	11,600	2,460	2,080	28,000	10,700	4,840	4,380	3,970	4,160	16,500
15	5,170	2,620	9,630	2,110	2,710	22,000	9,260	4,250	4,100	3,700	5,680	14,300
16	5,970	2,670	8,520	1,730	2,850	19,900	7,970	5,340	3,860	3,140	8,750	13,100
17	7,370	4,160	7,200	2,140	2,620	20,200	21,800	6,320	3,870	2,670	9,590	11,700
18	5,490	7,130	6,270	2,700	2,860	20,300	22,200	7,900	3,850	2,730	6,770	11,000
19	4,300	5,910	5,730	2,830	4,290	23,600	17,700	15,300	3,640	2,750	5,390	8,220
20	3,810	4,800	5,470	3,350	5,850	21,300	17,700	25,600	3,260	2,580	5,780	7,180
21	3,290	4,270	5,360	3,330	5,070	18,400	16,000	25,700	3,150	2,690	4,750	7,010
22	3,180	4,060	5,170	3,490	4,610	17,300	13,500	19,900	4,050	2,840	4,180	7,070
23	2,770	3,840	5,110	e2,700	4,010	16,400	12,300	14,900	13,600	2,660	3,940	7,520
24	2,540	5,520	4,720	e3,000	3,820	14,700	16,900	13,700	23,700	2,430	3,920	15,700
25	2,580	4,910	4,330	e2,900	4,530	12,800	16,000	12,800	25,000	2,630	4,100	14,500
26	2,330	5,330	4,190	e3,000	6,810	11,100	20,400	10,300	15,200	2,940	4,980	10,800
27	3,130	6,440	3,800	2,940	6,570	9,170	27,300	9,670	10,500	3,370	5,890	9,260
28	5,230	5,940	3,580	2,970	6,590	8,770	34,500	8,900	8,540	2,830	36,900	26,300
29	4,390	5,580	3,250	2,620	---	8,200	41,500	7,520	8,580	2,650	62,300	36,700
30	3,680	4,710	3,050	2,000	---	7,890	29,200	6,870	9,890	2,740	33,800	37,200
31	3,370	---	2,970	2,000	---	7,250	---	11,200	---	2,620	20,400	---
Total	273,670	127,300	241,030	83,720	98,340	632,890	455,490	382,690	208,030	168,110	287,530	655,120
Mean	8,828	4,243	7,775	2,701	3,512	20,420	15,180	12,340	6,934	5,423	9,275	21,840
Max	54,200	7,130	32,400	3,490	6,810	64,200	41,500	25,700	25,000	21,200	62,300	87,900
Min	2,330	2,620	2,970	1,730	1,990	7,250	7,350	4,250	2,930	2,430	2,060	7,010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3,515	4,431	5,679	5,318	5,136	8,647	9,554	5,943	4,353	2,834	2,646	3,244
Max	10,440	11,750	17,280	13,990	13,730	20,420	23,650	12,670	18,220	6,898	9,275	21,840
(WY)	(1978)	(2004)	(1997)	(2006)	(1976)	(2011)	(1993)	(1984)	(2006)	(2006)	(2011)	(2011)
Min	1,001	884	1,475	1,216	1,601	2,583	2,954	1,890	993	699	963	1,144
(WY)	(1965)	(1965)	(1999)	(1981)	(1980)	(1981)	(1985)	(1995)	(1965)	(1965)	(1965)	(1965)

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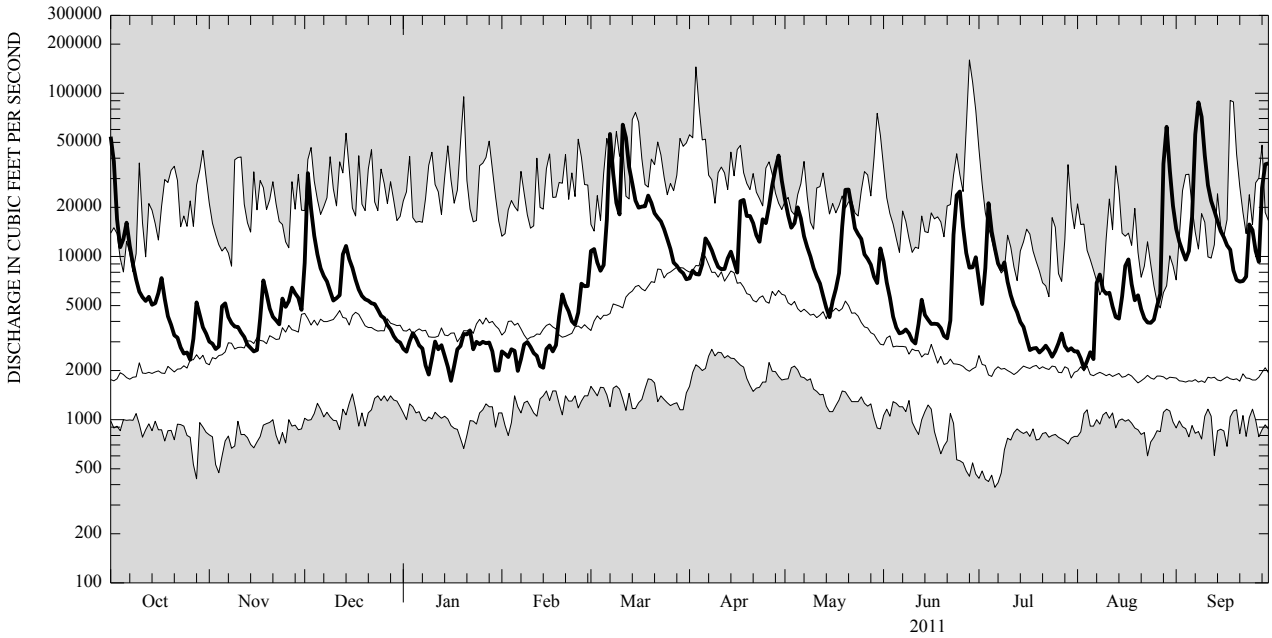
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1964 - 2011	
Annual total	1,984,380		3,613,920			
Annual mean	5,437		9,901		5,105	
Highest annual mean					9,901	2011
Lowest annual mean					2,028	1965
Highest daily mean	54,200	Oct 1	87,900	Sep 8	160,000	Jun 28, 2006
Lowest daily mean	1,190	Sep 29	1,730	Jan 16	385	Jul 6, 1965
Annual seven-day minimum	1,440	Sep 17	2,390	Jan 12	432	Jul 1, 1965
10 percent exceeds	11,300		21,200		10,900	
50 percent exceeds	3,710		5,910		3,030	
90 percent exceeds	1,650		2,650		1,530	



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.