Water-Data Report 2008

01427207 DELAWARE RIVER AT LORDVILLE, NY

Upper Delaware Basin
Upper Delaware Subbasin

LOCATION.--Lat 41°52′02″, long 75°12′51″ referenced to North American Datum of 1927, Wayne County, PA, Hydrologic Unit 02040101, on right bank at Lordville-Equinunk Interstate Bridge at Lordville, 9.7 mi southeast of Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,590 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 2006 (maximum only), July 2006 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder and crest stage gage. Datum of gage is 835.00 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Entire flow from 371 mi^2 of drainage area controlled by Pepacton Reservoir (01416900), and 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 and temperature telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 126,000 ft^3/s, June 28, 2006, gage height, 28.87 ft, from floodmark, from rating curve extended above 23,000 ft^3/s on basis of runoff comparisons with nearby stations; minimum discharge, 371 ft^3/s, Sept. 6, 2008, gage height, 5.38 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 102,000 ft^3/s, Apr. 3, 2005, gage height, 25.20 ft, from floodmark, and 95,600 ft^3/s, Sept. 18, 2004, gage height, 23.53 ft, from floodmark, both by runoff comparisons with nearby stations.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42,800 ft^3/s, Mar. 9, gage height, 16.67 ft; minimum discharge, 371 ft^3/s, Sept. 6, gage height, 5.38 ft.

01427207 DELAWARE RIVER AT LORDVILLE, NY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,360	2,030	2,640	4,560	3,170	3,650	9,830	1,070	937	727	1,270	1,050
2	1,340	1,730	2,240	4,470	4,160	3,520	13,500	1,190	936	660	1,170	893
3	1,360	1,500	2,450	3,910	3,770	3,450	11,100	1,240	878	634	1,220	895
4	1,360	1,350	2,500	3,880	3,570	3,770	10,500	1,610	889	853	1,140	896
5	1,420	1,230	2,090	3,880	3,740	20,600	12,900	1,580	882	1,070	1,020	725
6	1,470	1,380	1,830	3,850	8,890	24,900	11,500	1,420	845	826	1,080	400
7	1,500	1,720	e1,680	3,940	13,700	16,900	10,100	1,330	840	630	1,100	567
8	1,500	1,370	e1,570	5,110	9,890	23,300	8,820	1,330	869	647	999	622
9	1,380	1,240	1,480	9,020	8,000	36,600	7,820	1,380	947	582	1,060	634
10	1,610	1,210	1,420	10,200	6,970	22,900	7,000	1,520	1,010	586	1,090	867
11	1,510	1,190	1,430	11,700	e5,530	15,100	6,370	1,370	1,160	810	1,360	649
12	2,230	1,110	2,340	11,800	e4,780	11,200	6,370	1,260	803	1,240	1,270	629
13	1,410	1,430	2,940	8,500	5,440	8,890	5,970	1,190	771	1,050	1,110	805
14	1,100	1,820	2,640	7,280	8,430	7,450	5,320	1,110	959	1,950	1,030	729
15	931	5,830	2,330	6,470	7,280	7,490	4,600	1,080	1,050	1,200	1,200	728
16	815	8,440	2,240	5,680	6,440	7,060	4,030	1,160	827	908	1,320	613
17	727	5,000	2,170	4,960	5,600	6,070	3,400	1,670	920	810	1,270	531
18	759	3,570	2,030	4,620	10,200	5,420	2,510	1,580	878	1,020	1,250	498
19	623	2,860	2,710	e4,140	15,200	6,320	1,900	1,450	816	1,300	1,310	626
20	1,730	2,820	2,930	e3,710	11,900	19,300	1,660	1,340	841	1,110	1,360	1,020
21	1,740	3,310	2,820	e3,360	9,160	14,600	1,570	1,270	948	1,050	1,330	1,170
22	1,180	2,840	2,740	e3,340	7,730	11,200	1,870	1,340	850	987	1,340	973
23	1,020	2,490	3,210	e3,320	6,760	9,010	2,370	1,330	756	2,800	1,350	1,130
24	1,590	2,200	12,300	e3,230	e5,470	7,770	2,220	1,230	852	14,300	1,350	1,220
25	1,800	2,010	7,660	e3,140	e4,830	6,470	1,790	1,130	767	6,530	1,340	1,060
26	1,520	2,540	5,700	e3,020	e4,390	5,650	1,330	1,060	712	3,220	1,260	873
27	4,770	7,320	4,830	e3,020	e4,200	5,260	1,230	1,020	733	2,540	1,160	847
28	8,420	5,470	4,350	3,010	e3,760	7,040	1,230	957	755	3,270	1,110	705
29	4,420	4,030	4,820	2,980	e3,440	7,150	1,430	901	666	2,120	1,160	938
30	3,110	3,220	5,000	3,240	---	6,000	1,260	856	747	1,680	1,170	789
31	2,440	---	4,560	3,180	---	6,550	---	862	---	1,440	1,170	---
Total	58,145	84,260	101,650	156,520	196,400	340,590	161,500	38,836	25,844	58,550	37,369	24,082
Mean	1,876	2,809	3,279	5,049	6,772	10,990	5,383	1,253	861	1,889	1,205	803
Max	8,420	8,440	12,300	11,800	15,200	36,600	13,500	1,670	1,160	14,300	1,360	1,220
Min	623	1,110	1,420	2,980	3,170	3,450	1,230	856	666	582	999	400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2006 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,994	4,518	3,249	5,054	4,296	8,577	7,037	1,362	985	1,425	1,256	1,406
Max	4,112	6,227	3,279	5,058	6,772	10,990	8,691	1,471	1,109	1,889	1,570	2,356
(WY)	(2007)	(2007)	(2008)	(2007)	(2008)	(2008)	(2007)	(2007)	(2007)	(2008)	(2006)	(2006)
Min	1,876	2,809	3,219	5,049	1,731	6,167	5,383	1,253	861	961	993	803
(WY)	(2008)	(2008)	(2007)	(2008)	(2007)	(2007)	(2008)	(2008)	(2008)	(2007)	(2007)	(2008)

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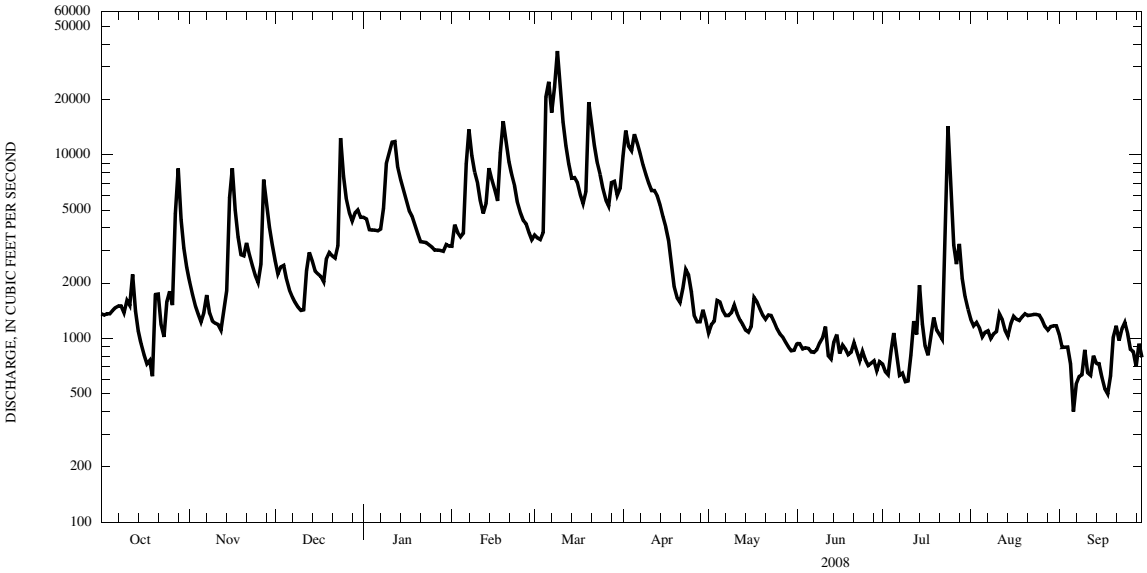
SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 2006 - 2008	
Annual total	1,072,442		1,283,746			
Annual mean	2,938		3,508		3,456	
Highest annual mean					3,508	2008
Lowest annual mean					3,404	2007
Highest daily mean	21,600	Apr 16	36,600	Mar 9	36,600	Mar 9, 2008
Lowest daily mean	623	Oct 19	400	Sep 6	400	Sep 6, 2008
Annual seven-day minimum	794	Jul 17	624	Sep 6	624	Sep 6, 2008
10 percent exceeds	7,070		8,430		7,770	
50 percent exceeds	1,480		1,600		1,800	
90 percent exceeds	880		810		857	



CURRENT WATER YEAR DAILY MEAN DISCHARGE.

01427207 DELAWARE RIVER AT LORDVILLE, NY—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1967 to August 1971, June 1973 to May 1996, July 2006 to current year.

INSTRUMENTATION.--Water-temperature satellite and telephone telemeter provides 15-minute-interval readings. From June 1987 to June 1989, water-temperature satellite telemeter provided one-hour-interval readings. From June 1973 to November 1989, water-temperature recorder provided one-hour-interval readings. Prior to August 1971, water-temperature recorder provided continuous recordings.

REMARKS.--Temperature readings prior to Oct. 1, 2007, rounded to the nearest 0.5°C. Water temperature is affected by release of water from upstream reservoir.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Prior to Oct. 1, 2007--Maximum (water years 1968-70, 1973, 1975-86, 1989, 1991-95, 2007), 30.5°C, June 16, 1976, July 10, 1981; minimum (water years 1968-71, 1974, 1977-78, 1980-96, 2007), 0.0°C on many days during winter period.
WATER TEMPERATURE: After Oct. 1, 2007--Maximum, 27.4°C, June 10, 2008; minimum, 0.1°C on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 27.4°C, June 10; minimum, 0.1°C on many days during winter period.

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	14.2	13.3	13.7	9.7	8.9	9.3	3.2	0.9	2.0	2.5	0.9	1.8
2	14.1	12.9	13.4	9.1	7.6	8.4	0.9	0.1	0.3	2.2	0.4	1.5
3	15.1	13.5	14.2	8.3	6.9	7.5	1.2	0.1	0.6	0.4	0.1	0.1
4	15.6	14.4	15.1	7.3	6.3	6.9	1.1	0.3	0.7	0.6	0.1	0.1
5	15.7	14.5	15.2	7.8	6.3	7.1	0.3	0.1	0.1	1.7	0.3	0.9
6	16.4	14.7	15.6	8.3	7.7	7.9	0.2	0.1	0.1	2.8	1.7	2.3
7	16.5	15.7	16.1	7.7	6.0	6.9	0.2	0.1	0.1	3.6	2.7	3.1
8	17.6	15.1	16.3	6.0	4.5	5.1	0.2	0.1	0.1	3.6	2.8	3.2
9	17.8	16.8	17.1	5.2	4.3	4.9	0.2	0.1	0.2	4.3	3.2	3.7
10	17.9	16.2	17.0	5.6	4.8	5.1	1.1	0.1	0.4	3.9	3.0	3.4
11	17.4	14.8	16.1	4.9	3.7	4.4	1.8	1.1	1.4	3.8	3.3	3.5
12	14.8	12.6	13.8	4.5	4.0	4.2	2.6	1.8	2.2	4.0	3.5	3.8
13	12.6	11.3	11.9	6.5	4.5	5.5	2.0	0.1	1.0	3.5	2.9	3.2
14	11.5	10.7	11.1	6.9	5.7	6.2	1.2	0.1	0.6	3.3	3.1	3.2
15	12.2	11.0	11.5	7.2	6.9	7.1	1.2	0.4	0.8	3.2	2.5	3.0
16	13.1	11.0	12.0	6.9	5.3	6.2	0.4	0.1	0.1	2.5	1.8	2.1
17	13.9	12.1	12.9	5.3	4.4	4.8	0.2	0.1	0.1	1.8	1.0	1.3
18	15.0	13.2	14.1	5.1	4.4	4.7	0.2	0.1	0.1	2.8	1.3	2.0
19	16.3	15.0	15.6	4.8	4.4	4.6	1.6	0.1	0.6	2.3	1.1	1.5
20	16.2	14.5	15.6	5.0	4.5	4.7	2.7	1.6	2.4	1.5	0.1	0.7
21	14.8	13.1	14.1	6.7	5.0	5.8	2.6	2.2	2.5	0.2	0.1	0.1
22	14.7	12.9	13.9	8.1	6.7	7.4	3.2	2.5	2.8	0.8	0.1	0.2
23	14.8	14.0	14.4	7.2	3.8	5.5	4.3	3.2	3.6	1.3	0.5	0.9
24	14.6	13.4	14.0	3.8	2.2	2.8	3.7	2.3	2.7	1.1	0.3	0.8
25	14.0	12.5	13.2	2.8	1.8	2.4	3.1	2.8	2.9	0.8	0.1	0.5
26	13.0	11.5	11.9	4.1	2.6	3.1	3.0	2.5	2.8	1.2	0.1	0.6
27	12.4	11.4	11.8	5.7	4.1	5.1	3.3	2.9	3.1	2.1	0.8	1.5
28	12.3	9.9	11.3	5.2	4.1	4.6	4.1	3.2	3.6	2.0	0.9	1.6
29	9.9	8.8	9.3	4.4	3.7	4.0	4.5	3.7	4.0	2.0	0.9	1.4
30	9.4	7.9	8.7	4.0	3.2	3.5	3.9	2.9	3.3	2.7	1.7	2.2
31	9.9	8.2	9.1	---	---	---	2.9	2.2	2.5	1.7	0.2	1.1
Month	17.9	7.9	13.5	9.7	1.8	5.5	4.5	0.1	1.5	4.3	0.1	1.8

01427207 DELAWARE RIVER AT LORDVILLE, NY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	1.7	0.1	0.7	1.8	0.1	0.9	5.9	2.9	4.4	10.5	7.9	9.5
2	1.7	0.9	1.5	2.7	0.5	1.7	5.6	4.1	4.8	10.6	10.2	10.4
3	2.4	1.3	1.9	3.6	1.3	2.5	4.7	2.5	3.7	10.5	10.1	10.3
4	2.2	1.4	1.7	3.4	2.2	2.5	4.4	3.5	3.8	12.7	9.7	11.1
5	2.4	1.6	2.0	2.2	1.1	1.4	4.4	3.9	4.1	14.6	10.4	12.5
6	2.4	1.7	2.0	3.0	1.2	2.0	6.2	3.6	4.8	15.5	12.1	13.9
7	2.3	1.9	2.1	3.0	1.7	2.4	6.1	4.5	5.3	16.5	12.9	14.9
8	2.2	1.6	1.9	2.7	2.4	2.5	7.3	4.8	6.0	17.1	15.5	16.2
9	2.2	1.9	2.0	2.5	1.4	2.0	7.9	5.6	6.8	15.8	12.4	14.0
10	2.2	0.4	1.7	2.4	1.2	1.8	8.7	6.3	7.5	13.5	11.4	12.4
11	0.4	0.1	0.1	3.4	1.6	2.5	8.0	6.6	6.9	14.1	11.2	12.8
12	0.2	0.1	0.1	2.9	2.2	2.6	9.3	6.5	7.8	13.0	11.5	12.1
13	0.9	0.1	0.4	3.3	1.5	2.4	8.8	6.7	7.6	15.0	10.3	12.7
14	1.1	0.2	0.6	3.2	2.1	2.7	7.1	5.2	6.2	16.3	13.0	14.9
15	1.3	0.7	1.0	3.5	2.8	3.1	8.0	4.7	6.5	16.8	15.2	15.9
16	1.6	0.4	1.1	3.6	2.8	3.2	9.1	5.6	7.5	15.6	12.3	13.8
17	1.3	0.2	0.7	3.8	1.4	2.7	10.6	6.9	8.8	14.4	11.2	12.8
18	2.3	1.3	1.9	3.4	2.2	2.9	12.5	8.8	10.7	13.8	11.7	12.7
19	2.2	1.5	1.9	3.1	2.6	2.8	14.8	11.1	13.0	12.0	10.4	11.1
20	1.6	0.7	1.2	3.1	2.6	2.9	14.4	13.0	13.8	10.9	9.7	10.4
21	1.4	0.2	0.9	3.1	1.7	2.5	16.4	13.2	14.7	12.0	9.9	11.0
22	1.2	0.1	0.5	3.5	1.5	2.6	15.0	12.8	14.1	12.4	10.8	11.6
23	1.5	0.2	0.9	3.8	1.6	2.7	13.8	11.5	12.7	13.7	11.0	12.3
24	2.1	0.2	1.2	4.1	1.8	3.0	13.3	10.6	12.2	15.0	12.1	13.5
25	2.5	0.5	1.6	4.2	1.9	3.2	13.4	11.0	12.3	17.3	12.4	14.8
26	2.2	0.6	1.3	5.0	3.2	4.0	16.5	12.7	14.5	18.9	14.9	17.1
27	1.7	0.8	1.2	4.3	2.9	3.5	16.5	14.3	15.5	20.6	17.8	19.1
28	1.0	0.1	0.4	3.6	2.8	3.2	15.7	12.1	13.5	19.0	15.9	17.6
29	0.7	0.1	0.3	4.3	2.0	3.1	12.1	10.4	11.1	18.9	14.9	17.0
30	---	---	---	4.6	1.8	3.3	10.9	8.8	9.8	19.3	15.6	17.6
31	---	---	---	4.2	2.8	3.1	---	---	---	19.8	17.7	18.6
Month	2.5	0.1	1.2	5.0	0.1	2.6	16.5	2.5	9.0	20.6	7.9	13.7

01427207 DELAWARE RIVER AT LORDVILLE, NY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	20.7	17.9	19.1	23.7	21.6	22.6	23.6	21.0	22.3	17.5	14.5	16.1
2	20.8	17.3	19.2	24.5	21.1	22.7	22.7	20.8	21.7	19.7	16.2	17.8
3	20.4	18.0	19.3	22.9	21.2	21.7	21.4	19.8	20.6	20.2	17.0	18.5
4	19.6	18.0	18.8	21.7	19.5	20.9	21.5	18.9	20.2	19.9	17.2	18.6
5	19.2	17.4	18.2	19.5	16.6	17.9	23.0	19.5	21.3	20.2	17.0	18.7
6	21.2	18.0	19.5	21.3	17.8	19.5	24.0	21.3	22.6	20.6	19.6	20.1
7	24.5	20.4	22.3	24.9	20.7	22.7	23.2	21.2	22.2	22.2	19.3	20.6
8	24.7	23.0	23.9	25.7	23.2	24.5	22.1	20.3	21.3	22.8	19.9	21.3
9	26.5	22.2	24.4	24.5	23.2	23.8	20.9	18.7	19.9	21.3	18.9	20.1
10	27.4	24.1	25.5	24.6	21.5	23.0	19.8	17.9	18.7	20.1	17.2	18.5
11	24.4	20.8	22.3	23.5	20.1	22.1	18.5	16.2	17.5	19.2	17.2	18.3
12	24.3	19.6	21.9	20.1	15.8	17.7	19.6	17.1	18.3	18.6	17.6	18.0
13	25.0	21.0	23.0	18.9	17.7	18.4	20.0	17.6	18.9	17.6	16.5	16.9
14	23.8	21.3	22.6	22.8	18.9	20.8	21.6	18.3	19.9	21.3	17.0	19.2
15	22.3	19.1	20.8	24.1	20.0	22.0	21.4	19.1	20.2	22.1	20.2	21.0
16	23.3	20.7	21.7	25.2	21.1	23.1	19.5	17.3	18.5	20.2	18.4	19.2
17	21.1	19.5	20.3	25.1	22.6	24.0	20.0	17.1	18.5	20.1	17.2	18.5
18	19.5	17.3	18.2	26.1	22.6	24.2	20.2	17.2	18.8	20.0	17.5	18.6
19	18.7	16.3	17.5	23.0	18.8	20.1	19.2	16.9	18.2	18.5	16.0	17.2
20	19.1	17.0	17.9	20.3	18.6	19.5	17.4	14.6	16.1	16.7	13.7	15.3
21	20.4	16.7	18.5	23.8	20.3	22.0	17.6	14.9	16.3	14.2	12.5	13.4
22	21.2	18.1	19.6	23.2	21.7	22.5	18.1	15.4	16.8	16.7	14.1	15.1
23	22.7	19.7	21.0	22.2	18.6	20.6	17.7	15.7	16.8	15.1	13.3	14.2
24	22.6	20.5	21.4	18.7	17.1	18.0	17.3	15.3	16.4	14.2	12.3	13.4
25	22.8	19.7	21.3	19.6	17.1	18.3	16.8	15.4	16.2	14.5	13.2	13.8
26	21.7	20.4	20.9	20.4	17.9	19.2	16.5	13.8	15.2	13.8	13.2	13.4
27	21.7	19.9	20.8	21.3	19.0	20.0	16.6	14.1	15.4	15.6	13.4	14.4
28	22.1	20.0	21.1	20.3	17.9	19.3	16.1	14.7	15.4	16.9	15.6	16.4
29	23.3	21.0	21.9	21.9	18.6	20.2	15.2	13.6	14.5	16.8	16.1	16.6
30	24.0	21.0	22.4	22.0	19.5	20.8	14.8	13.2	13.9	16.8	15.2	16.0
31	---	---	---	23.5	20.3	21.9	16.7	13.3	14.9	---	---	---
Month	27.4	16.3	20.8	26.1	15.8	21.1	24.0	13.2	18.3	22.8	12.3	17.3

	Max	Min	Mean
Year	27.4	0.1	10.6