Water-Data Report 2011

01417000 EAST BRANCH DELAWARE RIVER AT DOWNSVILLE, NY

Upper Delaware Basin
East Branch Delaware Subbasin

LOCATION.--Lat 42°04′30″, long 74°58′36″ referenced to North American Datum of 1927, Delaware County, NY, Hydrologic Unit 02040102, on left bank 0.5 mi downstream from Downsville Dam, at downstream end of outlet channel of Pepacton Reservoir, and 1.0 mi east of Downsville.

DRAINAGE AREA.--372 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1941 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area. WDR NY-06-1: 2004-05 (M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,094.92 ft above NGVD of 1929 (levels by Board of Water Supply, City of New York). Prior to Sept. 26, 1941, nonrecording gage, and Sept. 26, 1941, to June 27, 1955, water-stage recorder, at site 0.8 mi downstream at datum 7.03 ft lower.

REMARKS.--No estimated daily discharges. Records good. Subsequent to September 1954, entire flow from drainage area controlled by Pepacton Reservoir (see 01416900). Part of flow 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 gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge since construction of Pepacton Reservoir, 20,200 ft^3/s, Sept. 18, 2004, gage height, 12.08 ft; minimum discharge, 0.3 ft^3/s, Oct. 11, 1954; minimum gage height, 1.39 ft, Jan. 17, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of about 16 ft (at former site and datum).

EXTREMES FOR PERIOD PRIOR TO REGULATION.--Maximum discharge prior to construction of Pepacton Reservoir, 23,900 ft^3/s, Nov. 26, 1950, gage height, 14.52 ft, site and datum then in use;

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,600 ft^3/s, Sept. 8, gage height, 10.98 ft; minimum discharge, 31 ft^3/s, Oct. 4, gage height, 2.62 ft.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 01417000, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/01417000.2011.pdf

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	69	82	78	193	80	92	692	2,380	289	135	143	2,380
2	56	82	73	193	79	92	692	1,900	179	134	143	1,860
3	56	82	80	192	78	92	692	1,580	148	424	143	1,360
4	55	82	80	192	78	93	692	2,210	138	1,070	143	1,170
5	56	82	80	192	78	93	692	2,400	133	1,360	142	2,030
6	56	82	126	121	78	95	692	1,840	133	1,250	142	3,190
7	56	82	194	79	78	82	692	1,400	133	996	143	11,100
8	56	82	192	80	78	386	693	1,040	133	745	143	14,000
9	56	82	192	80	78	471	693	766	133	717	143	8,380
10	57	82	192	80	140	58	482	556	133	717	143	4,800
11	57	82	192	80	208	60	72	395	133	717	143	2,960
12	58	82	192	80	207	732	72	276	133	595	143	2,350
13	73	82	192	80	207	2,600	73	182	134	507	143	1,900
14	80	82	193	80	206	2,640	104	118	135	507	143	1,420
15	80	82	193	80	207	2,290	295	106	135	358	147	1,210
16	80	82	192	80	207	2,340	625	101	134	147	152	1,070
17	80	82	192	80	153	2,120	1,650	194	134	147	151	924
18	80	82	193	80	98	2,230	2,140	500	134	148	151	796
19	80	82	193	80	97	2,480	2,040	1,340	133	152	152	729
20	80	82	192	80	98	2,470	2,040	1,950	132	155	152	717
21	80	82	193	80	96	2,380	1,810	2,090	133	155	153	712
22	80	81	192	80	95	2,300	1,580	1,830	133	157	323	710
23	80	81	193	80	95	1,870	1,660	1,550	133	158	571	707
24	80	80	193	80	94	1,330	1,770	1,450	133	160	717	706
25	80	81	193	142	94	961	1,710	1,240	132	155	717	708
26	80	81	193	190	93	741	1,970	880	133	146	717	712
27	80	80	191	192	93	692	2,420	982	133	143	418	715
28	80	80	192	146	93	692	3,650	811	134	142	2,090	717
29	82	81	192	80	---	692	4,000	522	134	141	10,600	717
30	82	81	193	80	---	692	3,050	508	134	142	5,870	1,180
31	82	---	193	80	---	692	---	424	---	143	3,300	---
Total	2,207	2,448	5,329	3,432	3,286	34,558	39,443	33,521	4,221	12,623	28,381	71,930
Mean	71.2	81.6	172	111	117	1,115	1,315	1,081	141	407	916	2,398
Max	82	82	194	193	208	2,640	4,000	2,400	289	1,360	10,600	14,000
Min	55	80	73	79	78	58	72	101	132	134	142	706

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	177	168	161	165	142	210	579	378	250	178	194	255
Max	1,236	1,423	2,035	1,258	1,271	2,238	1,931	1,379	2,043	739	916	2,398
(WY)	(2004)	(2004)	(1997)	(1978)	(2008)	(2008)	(2005)	(1984)	(2006)	(1962)	(2011)	(2011)
Min	4.39	6.86	6.13	6.33	6.45	6.54	13.6	18.6	18.0	18.0	17.9	18.1
(WY)	(1955)	(1966)	(1984)	(1964)	(2002)	(1981)	(1965)	(1966)	(1974)	(1974)	(1974)	(1974)

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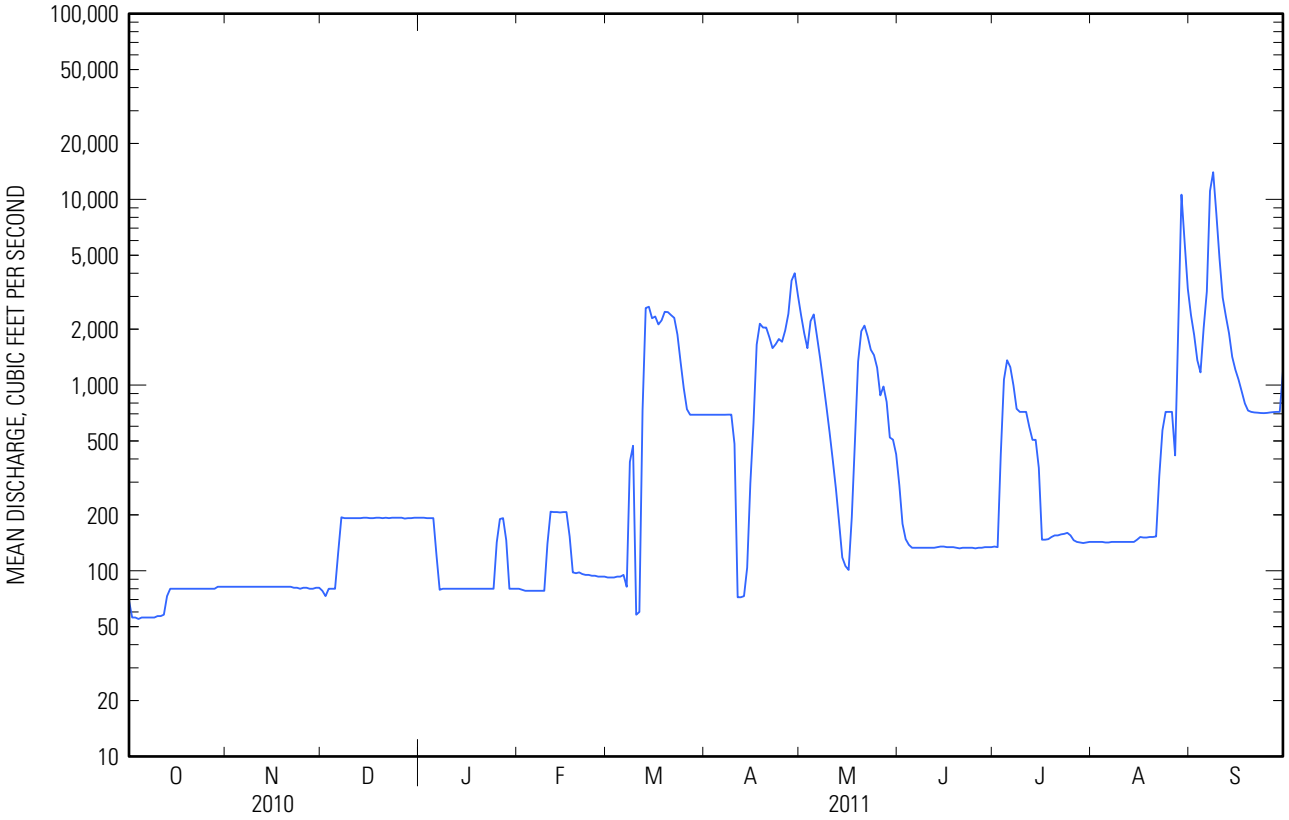
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1955 - 2011	
Annual total	129,494		241,379			
Annual mean	355		661		238	
Highest annual mean					661	2011
Lowest annual mean					57.1	1999
Highest daily mean	6,430	Mar 24	14,000	Sep 8	16,600	Apr 3, 2005
Lowest daily mean	55	Oct 4	55	Oct 4	0.60	Oct 10, 1954
Annual seven-day minimum	56	Oct 2	56	Oct 2	1.5	Oct 6, 1954
10 percent exceeds	680		1,920		676	
50 percent exceeds	139		151		64	
90 percent exceeds	80		80		7.7