



Water-Data Report 2009

01463740 SHABAKUNK CREEK AT SYLVA LAKE DAM, AT EWINGVILLE, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 40°16'16", long 74°46'24" referenced to North American Datum of 1983, Ewing Township, Mercer County, NJ, Hydrologic Unit 02040105, on upstream left bank of dam at outlet of Sylva Lake, on the campus of The College of New Jersey, 0.3 mi downstream from the outlet of Ceva Lake, 0.4 mi downstream of bridge on Ewingville Road, and 0.6 mi southeast of Ewingville.

DRAINAGE AREA.--3.99 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--November 2008 to current year.

GAGE.--Water-stage and precipitation recorder and crest-stage gage. Datum of gage is 86 ft NAVD of 1988.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of July 21, 1975 reached a stage of 95.3 ft above NGVD of 1929, from flood marks, discharge of 5,550 ft³/s computed by a combination of flow-over-dam and flow-over-embankment computations. The flood of Aug 28, 1971 reached a stage of 94.2 ft above NGVD of 1929.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 11	2245	317	3.89
Aug 2	1400	776	4.73
Aug 22	2000	*2,040	*6.30
Aug 29	2300	321	3.90

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	e2.1	11	3.6	6.3	1.9	3.3	4.8	1.7	4.1	13	6.6
2	---	e2.0	4.5	3.9	7.3	1.9	3.4	5.9	1.5	5.8	136	5.9
3	---	e1.6	3.4	3.6	7.2	1.6	11	15	9.7	3.3	27	5.0
4	---	e1.7	3.0	3.5	6.0	1.7	6.8	30	15	2.5	8.8	4.3
5	---	e1.8	2.6	3.5	4.7	1.8	4.3	21	23	2.2	5.4	3.9
6	---	e5.6	2.7	3.6	4.4	2.4	8.1	23	12	2.0	4.2	3.4
7	---	e3.2	1.9	64	5.0	2.7	9.0	85	5.4	2.0	3.3	3.5
8	---	e3.5	1.6	22	9.9	2.5	5.1	23	4.0	1.7	2.9	3.2
9	---	e3.1	1.8	10	5.7	2.5	4.2	13	17	1.5	5.2	3.2
10	---	e2.5	3.1	6.5	4.9	2.0	3.7	9.6	5.7	1.4	4.4	2.6
11	---	e2.5	55	6.4	5.5	2.0	13	8.0	7.5	1.5	2.9	23
12	---	e3.0	102	5.1	6.1	1.6	6.9	6.9	5.3	9.5	5.2	10
13	---	19	18	4.5	6.1	1.9	5.0	6.1	42	1.8	13	5.7
14	---	8.7	7.1	4.2	2.9	2.0	7.1	6.1	31	1.3	5.1	3.9
15	---	21	5.8	3.6	2.5	2.0	8.9	11	9.4	1.3	3.4	3.1
16	---	14	7.4	3.1	2.4	1.9	6.5	6.1	12	1.3	2.6	3.1
17	---	4.3	32	3.0	2.2	1.7	5.2	5.4	5.9	1.5	2.1	2.9
18	---	2.9	11	3.5	2.7	1.8	4.9	4.7	14	1.7	2.6	2.7
19	---	2.3	42	3.6	e3.5	2.0	4.5	4.5	7.7	1.2	3.8	2.3
20	---	2.4	26	3.6	e2.7	2.0	7.0	4.3	12	1.1	2.2	2.2
21	---	2.2	19	3.4	e2.3	1.9	10	3.8	9.7	21	1.9	2.0
22	---	1.4	10	3.2	e2.0	1.8	10	3.5	16	3.2	314	2.0
23	---	1.9	6.7	3.4	e1.7	1.4	6.2	3.4	8.4	41	53	2.0
24	---	2.0	14	3.5	1.4	1.5	5.3	4.1	7.8	10	14	32
25	---	8.1	20	3.1	1.8	1.6	5.3	5.5	6.3	4.0	6.0	4.7
26	---	4.0	8.8	3.1	1.9	2.4	5.3	3.3	6.7	7.3	4.2	3.5
27	---	3.1	7.5	3.1	1.9	3.9	5.2	2.7	6.0	13	3.4	35
28	---	2.4	7.3	13	1.8	4.1	4.9	2.6	4.3	3.1	47	18
29	---	2.1	6.1	10	---	7.7	4.6	13	3.9	9.4	33	10
30	---	13	5.1	5.5	---	6.3	4.5	3.4	4.1	7.2	37	6.0
31	---	---	4.4	4.4	---	3.4	---	2.3	---	31	8.8	---
Total	---	147.4	450.8	220.5	112.8	75.9	189.2	341.0	315.0	198.9	775.4	215.7
Mean	---	4.91	14.5	7.11	4.03	2.45	6.31	11.0	10.5	6.42	25.0	7.19
Max	---	21	102	64	9.9	7.7	13	85	42	41	314	35
Min	---	1.4	1.6	3.0	1.4	1.4	3.3	2.3	1.5	1.1	1.9	2.0
Cfsm	---	1.23	3.64	1.78	1.01	0.61	1.58	2.76	2.63	1.61	6.27	1.80
In.	---	1.37	4.20	2.06	1.05	0.71	1.76	3.18	2.94	1.85	7.23	2.01

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SUMMARY STATISTICS

Water Year 2009		
Highest daily mean	314	Aug 22, 2009
Lowest daily mean	1.1	Jul 20, 2009
Annual seven-day minimum	1.3	Jul 14, 2009
Maximum peak flow	2,040	Aug 22, 2009
Maximum peak stage	6.30	Aug 22, 2009

