

NESHAMINY CREEK BASIN

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD NEAR NESHAMINY, PA

LOCATION.--Lat 40°13'45", long 75°07'12", Bucks County, Hydrologic Unit 02040201, on left bank just upstream from bridge on Valley Road, 6.8 mi upstream from confluence with Neshaminy Creek, 3.0 mi downstream from Bradford Dam, 2.0 mi downstream from Park Creek, and 1.1 mi east of Neshaminy.

DRAINAGE AREA.--26.8 mi².

PERIOD OF RECORD.--November 1998 to current year.

GAGE.--Water stage recorder and crest-stage gage. Datum of gage is 190.42 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 1,600 ft³/s and maximum(*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Dec. 17	1245	2,270	6.73	June 16	2230	*11,300	*14.57

REVISIONS.--The peak discharges and annual maximum (*) reported for water years 1999 and 2000 have been revised as shown in the following table. They supersede figures published in the reports for 1999 and 2000.

Water Year	Date	Discharge ft ³ /s	Gage Height (ft)
1999	Sept. 16, 1999	*7,380	*11.68
	Mar. 22, 1999	2,205	6.64
2000	Sept. 19, 2000	*1,800	*6.15
	Mar. 22, 2000	1,800	6.14

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	13	16	e12	69	31	70	15	64	43	4.6	2.5
2	15	13	14	e12	55	29	52	14	370	47	3.8	2.2
3	13	12	12	e15	42	26	43	13	57	18	3.5	1.7
4	45	12	11	e14	32	26	39	13	37	15	50	1.7
5	78	12	11	e14	152	35	33	12	29	14	14	2.4
6	20	11	10	e15	110	36	63	11	24	12	5.9	2.2
7	15	11	9.9	e15	106	70	52	11	22	11	4.8	2.1
8	13	11	9.5	e16	79	62	45	9.9	19	9.9	3.4	2.0
9	12	12	8.9	e18	81	61	71	15	17	9.9	3.1	2.0
10	11	53	8.7	e14	332	44	80	7.5	15	9.4	20	2.0
11	11	18	9.1	e13	68	35	54	7.0	15	8.3	27	1.9
12	11	11	10	e11	45	32	105	8.5	26	7.1	60	1.7
13	11	9.6	9.6	e10	43	302	58	9.3	17	6.3	80	1.5
14	10	20	169	e10	42	70	42	8.2	14	6.7	20	16
15	10	20	43	e16	46	48	37	7.6	17	6.4	10	7.9
16	10	12	37	e25	46	77	67	7.0	1830	5.2	7.1	3.8
17	12	11	898	e30	96	147	48	7.5	2170	6.2	5.7	2.8
18	22	9.5	175	e25	41	67	41	7.3	647	23	5.0	2.5
19	18	8.6	50	e270	34	45	34	7.5	466	10	4.7	2.1
20	13	8.5	36	279	32	38	30	6.9	59	7.2	4.6	6.9
21	12	8.9	27	87	32	307	28	30	41	6.1	4.1	162
22	11	8.1	25	51	27	211	26	193	35	5.1	3.7	17
23	11	7.1	37	40	27	68	24	49	138	4.6	2.9	8.5
24	11	7.1	21	35	25	50	22	25	68	4.6	3.1	6.0
25	11	8.2	17	30	71	40	20	19	34	36	2.8	41
26	11	154	16	27	103	37	19	134	26	31	2.6	14
27	10	44	e15	26	44	33	19	361	20	11	2.6	7.8
28	11	23	e14	24	36	29	17	92	18	7.5	2.5	5.7
29	13	18	e13	21	---	29	16	42	16	6.0	2.5	4.6
30	13	22	e13	301	---	688	15	30	14	8.2	2.3	4.5
31	15	---	e12	129	---	114	---	23	---	6.2	2.4	---
TOTAL	495	588.6	1757.7	1605	1916	2887	1270	1196.2	6325	401.9	368.7	339.0
MEAN	16.0	19.6	56.7	51.8	68.4	93.1	42.3	38.6	211	13.0	11.9	11.3
MAX	78	154	898	301	332	688	105	361	2170	47	80	162
MIN	10	7.1	8.7	10	25	26	15	6.9	14	4.6	2.3	1.5
CFSM	.60	.73	2.11	1.93	2.55	3.47	1.58	1.44	7.86	.48	.44	.42
IN.	.69	.82	2.44	2.23	2.66	4.01	1.76	1.66	8.78	.56	.51	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
MEAN	19.8	22.6	34.1	48.2	52.6	82.3	38.5	28.1	76.8	16.2	28.6	76.2
MAX	23.6	25.5	56.7	71.2	68.4	93.1	44.7	38.6	211	34.2	47.5	174
(WY)	2000	2000	2001	1999	2001	2001	2000	2001	2001	2000	2000	1999
MIN	16.0	19.6	2.47	21.6	31.7	72.6	28.6	13.3	3.06	1.40	11.9	11.3
(WY)	2001	2001	1999	2000	1999	1999	1999	1999	1999	1999	2001	2001

e Estimated.

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SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL TOTAL	14356.7		19150.1			
ANNUAL MEAN	39.2		52.5		45.8	
HIGHEST ANNUAL MEAN					52.5	2001
LOWEST ANNUAL MEAN					39.2	2000
HIGHEST DAILY MEAN	898	Dec 17	2170	Jun 17	2830	Sep 16 1999
LOWEST DAILY MEAN	2.1	Jul 13	1.5	Sep 13	.24	Aug 2 1999
ANNUAL SEVEN-DAY MINIMUM	2.8	Jul 7	1.9	Sep 7	.27	Aug 1 1999
MAXIMUM PEAK FLOW			a11300	Jun 16	a11300	Jun 16 2001
MAXIMUM PEAK STAGE			b14.57	Jun 16	b14.57	Jun 16 2001
INSTANTANEOUS LOW FLOW			1.3	Sep 12	.15	Aug 8 1999
ANNUAL RUNOFF (CFSM)	1.46		1.96		1.71	
ANNUAL RUNOFF (INCHES)	19.92		26.57		23.22	
10 PERCENT EXCEEDS	82		79		75	
50 PERCENT EXCEEDS	15		16		15	
90 PERCENT EXCEEDS	7.7		4.6		2.8	

a From rating curve extended above 758 ft³/s on basis of contracted-opening measurements at gage height 11.68 and at peak flow.
 b From outside high-water mark.

