

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.

REVISED RECORDS.--WDR PA-01-1: 1999, 2000 (P).

GAGE.--Water stage recorder and crest-stage gage. Datum of gage is 190.42 ft above National Geodetic Vertical Datum of 1929.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 2,100 ft³/s and maximum(*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Nov. 28	1130	2,250	6.70	Apr. 2	2145	*3,580	*8.26
Jan. 14	1115	2,270	6.73	July 17	2030	2,630	7.18

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	17	332	26	22	42	46	52	5.3	64	5.0	4.1
2	34	16	95	23	21	41	1460	25	4.9	166	4.6	2.8
3	27	16	59	23	20	36	771	22	18	28	4.0	2.3
4	22	147	46	27	19	32	286	17	53	14	3.3	2.0
5	19	114	39	58	22	30	84	15	15	14	3.0	1.6
6	16	33	34	152	29	32	65	14	38	49	2.8	1.8
7	14	24	138	80	40	90	55	13	110	37	2.8	1.9
8	13	20	96	172	54	142	207	12	20	316	2.9	1.8
9	13	17	88	89	83	63	75	11	11	82	3.7	1.6
10	13	15	395	57	134	45	56	10	8.0	31	3.4	1.7
11	12	14	152	51	64	42	47	9.5	8.2	18	2.7	1.5
12	12	85	75	125	42	45	42	8.6	5.9	12	2.2	1.5
13	12	183	59	63	35	39	38	7.7	4.9	9.4	2.2	1.7
14	44	46	47	914	142	32	33	7.7	4.9	8.3	2.8	1.7
15	25	32	40	204	305	28	28	7.1	4.3	7.3	36	5.3
16	32	26	35	80	91	26	25	6.8	3.8	301	9.1	2.2
17	24	24	34	60	75	24	24	6.7	3.5	611	8.6	2.1
18	16	20	30	e44	49	23	23	5.8	3.0	200	4.7	2.0
19	68	18	30	e46	37	21	21	5.3	2.8	51	3.7	1.8
20	33	19	27	e38	32	24	18	29	2.9	31	4.5	2.0
21	22	33	26	e31	37	25	17	22	2.6	20	3.5	2.0
22	20	21	21	e28	47	22	16	12	5.1	14	2.7	1.9
23	17	19	250	e25	58	107	32	9.4	4.0	11	2.2	1.9
24	15	21	125	e27	48	120	44	8.7	2.6	8.5	2.0	1.9
25	14	52	51	e30	41	51	22	7.9	2.1	14	1.7	1.7
26	13	28	37	e32	38	39	17	7.9	2.1	11	1.9	2.1
27	13	22	33	e26	38	33	27	7.6	7.9	9.6	2.6	3.4
28	13	901	28	e24	39	489	21	7.1	14	16	3.7	2.4
29	12	180	27	e23	---	259	16	8.6	8.9	8.2	13	2.2
30	23	63	26	e23	---	76	27	6.5	252	6.2	28	2.6
31	20	---	27	e22	---	55	---	5.5	---	5.2	7.2	---
TOTAL	712	2226	2502	2623	1662	2133	3643	388.4	628.7	2173.7	180.5	65.5
MEAN	23.0	74.2	80.7	84.6	59.4	68.8	121	12.5	21.0	70.1	5.82	2.18
MAX	81	901	395	914	305	489	1460	52	252	611	36	5.3
MIN	12	14	21	22	19	21	16	5.3	2.1	5.2	1.7	1.5
CFSM	0.86	2.77	3.01	3.16	2.21	2.57	4.53	0.47	0.78	2.62	0.22	0.08
IN.	0.99	3.09	3.47	3.64	2.31	2.96	5.05	0.54	0.87	3.02	0.25	0.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2005, BY WATER YEAR (WY)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
MEAN	29.9	46.9	62.0	45.6	53.5	72.0	54.4	28.1	62.8	33.6	25.0	63.1
MAX	86.5	102	169	84.6	84.2	105	121	46.8	211	97.7	47.5	174
(WY)	2004	2004	2004	2005	2004	2003	2005	2002	2001	2004	2000	1999
MIN	3.22	3.40	2.47	17.8	9.04	38.3	15.4	12.5	3.06	1.40	5.41	2.18
(WY)	2002	2002	1999	2002	2002	2002	2002	2005	1999	1999	2002	2005

e Estimated.

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1999 - 2005	
ANNUAL TOTAL	22016.2		18937.8			
ANNUAL MEAN	60.2		51.9		49.0	
HIGHEST ANNUAL MEAN					75.3	2004
LOWEST ANNUAL MEAN					16.1	2002
HIGHEST DAILY MEAN	1390	Sep 29	1460	Apr 2	2830	Sep 16 1999
LOWEST DAILY MEAN	3.0	Jul 11	1.5	Sep 11,12	0.24	Aug 2 1999
ANNUAL SEVEN-DAY MINIMUM	4.4	Jul 5	1.6	Sep 8	0.27	Aug 1 1999
MAXIMUM PEAK FLOW			a3580	Apr 2	a11300	Jun 16 2001
MAXIMUM PEAK STAGE			8.26	Apr 2	b14.57	Jun 16 2001
INSTANTANEOUS LOW FLOW			1.3	Sep 12,25	0.15	Aug 8 1999
ANNUAL RUNOFF (CFSM)	2.24		1.94		1.83	
ANNUAL RUNOFF (INCHES)	30.55		26.28		24.83	
10 PERCENT EXCEEDS	117		95		94	
50 PERCENT EXCEEDS	22		22		17	
90 PERCENT EXCEEDS	7.8		2.6		3.8	

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.

