NESHAMINY CREEK BASIN

01464720 NORTH BRANCH NESHAMINY CREEK AT CHALFONT, PA

LOCATION.--Lat 40°17'17", long 75°12'15"', Bucks County, Hydrologic Unit 02040201, on right bank 250 ft upstream from Route 202 bridge in Chalfont, and 0.6 mi upstream from mouth.

DRAINAGE AREA.--31.5 mi^2.

PERIOD OF RECORD.--December 1990 to current year.

REVISED RECORDS.--WDR PA-99-1: 1993-98(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 250 ft above sea level, from topographic map.

REMARKS.--Records fair. Diversion for municipal supply by Forest Park Water Company upstream of gage. Flow regulated by Lake Galena (Peace Valley Reservoir) 1.8 mi upstream, drainage area 15.8 mi^2, normal pool capacity 6,539 ac-ft. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

COOPERATION.--Records of diversion provided by Forest Park Water Company.

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	14	6.1	9.4	10	68	23	138	13	24	58	7.1	10
2	14	13	9.1	9.3	54	21	89	15	226	54	6.9	10
3	12	7.5	6.5	11	38	20	60	15	110	21	7.0	6.7
4	15	6.3	6.1	7.8	29	22	43	15	62	21	11	8.3
5	14	5.9	6.2	8.1	74	24	32	14	37	20	9.7	e9.5
6	13	6.6	7.2	7.8	66	23	46	11	23	16	8.1	e9.4
7	12	6.5	7.8	7.5	61	31	45	21	16	15	8.0	9.2
8	12	7.4	7.3	9.1	50	37	54	24	17	14	8.0	8.1
9	11	7.4	5.8	11	49	41	52	9.8	15	13	9.4	8.2
10	12	10	5.9	7.4	215	33	62	12	15	15	16	6.0
11	11	6.2	6.3	8.4	83	26	58	10	13	12	11	6.7
12	8.0	6.3	9.0	8.2	54	23	90	13	14	13	19	5.1
13	9.3	17	6.0	7.8	49	138	66	12	12	13	33	5.1
14	6.8	9.2	49	7.8	47	60	47	11	11	9.9	14	7.2
15	6.9	6.8	21	11	47	41	36	12	12	11	10	5.9
16	7.1	7.1	16	14	47	46	52	12	480	10	9.4	7.0
17	7.6	6.5	500	14	67	89	39	10	1320	10	9.9	6.7
18	8.6	7.3	91	12	40	71	50	9.8	409	16	7.8	5.4
19	7.7	7.2	38	94	35	43	37	8.9	115	13	7.9	6.9
20	8.0	6.3	28	133	35	28	24	11	60	10	9.2	9.1
21	7.8	6.4	22	61	33	101	23	23	34	10	8.3	8.5
22	8.0	5.5	20	34	26	227	21	82	23	9.2	8.8	6.6
23	7.8	5.6	17	25	24	126	21	33	106	16	9.2	5.1
24	7.1	5.3	17	21	22	83	21	18	102	15	7.9	7.1
25	8.0	4.4	15	20	44	57	18	14	41	19	11	10
26	6.4	21	16	18	76	42	16	54	25	9.9	7.6	8.0
27	6.8	20	12	17	37	31	17	184	20	7.3	8.4	7.1
28	8.8	12	12	16	29	23	15	112	20	7.5	8.4	6.4
29	8.4	8.2	9.4	15	---	23	13	45	17	7.9	8.5	6.6
30	7.4	9.8	11	109	---	356	13	26	17	7.2	6.7	8.1
31	8.0	---	10	112	---	211	---	18	---	8.5	6.4	---
TOTAL	294.5	254.8	997.0	847.2	1499	2120	1298	868.5	3396	482.4	313.6	224.0
MEAN	9.50	8.49	32.2	27.3	53.5	68.4	43.3	28.0	113	15.6	10.1	7.47
MAX	15	21	500	133	215	356	138	184	1320	58	33	10
MIN	6.4	4.4	5.8	7.4	22	20	13	8.9	11	7.2	6.4	5.1
(†)	20.4	20.8	20.7	22.2	20.8	20.4	21.5	24.3	24.2	25.1	25.4	24.3
(≠)	-4.7	-11.4	-2.3	+0.3	+22.5	+14.6	-12.8	+5.7	+9.6	-12.5	-0.2	-7.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)

MEAN	30.5	31.0	65.2	66.5	41.2	82.6	52.2	32.4	26.7	18.8	20.7	30.2
MAX	131	108	236	209	74.6	222	121	136	113	55.8	67.5	197
(WY)	1997	1996	1997	1996	1998	1994	1996	1998	2001	1996	1994	1999
MIN	7.20	7.23	5.58	15.1	14.2	33.2	11.8	11.1	5.92	7.65	4.82	5.86
(WY)	1992	1999	1999	2000	1992	1997	1995	1995	1995	1999	1995	1992

† Diversion by Forest Park Water Company, equivalent in cubic feet per second.
≠ Change in contents, equivalent in cubic feet per second, in Lake Galena.
e Estimated.

NESHAMINY CREEK BASIN

01464720 NORTH BRANCH NESHAMINY CREEK AT CHALFONT, PA--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1991 - 2001	
ANNUAL TOTAL	8552.4		12595.0			
ANNUAL MEAN	23.4		34.5		41.9	
HIGHEST ANNUAL MEAN					67.0	1996
LOWEST ANNUAL MEAN					18.6	1995
HIGHEST DAILY MEAN	500	Dec 17	1320	Jun 17	2090	Sep 16 1999
LOWEST DAILY MEAN	4.4	Nov 25	4.4	Nov 25	2.3	Aug 18 1991
ANNUAL SEVEN-DAY MINIMUM	5.8	Nov 19	5.8	Nov 19	3.0	Aug 12 1991
MAXIMUM PEAK FLOW			**a**3020	Jun 16	**a**6930	Sep 16 1999
MAXIMUM PEAK STAGE			8.62	Jun 16	11.36	Sep 16 1999
INSTANTANEOUS LOW FLOW					.39	Sep 9 2000
10 PERCENT EXCEEDS	50		66		84	
50 PERCENT EXCEEDS	13		13		16	
90 PERCENT EXCEEDS	7.1		6.8		6.3	

a From rating curve extended above 1,550 ft^3/s on basis of velocity-area study of peak flow at gage height 11.36 ft.