



2005 Water Year
NESHAMINY CREEK BASIN
01464720 NB Neshaminy Creek at Chalfont, PA

Latitude: 40° 17 ' 17"

Longitude: 075° 12 ' 15"

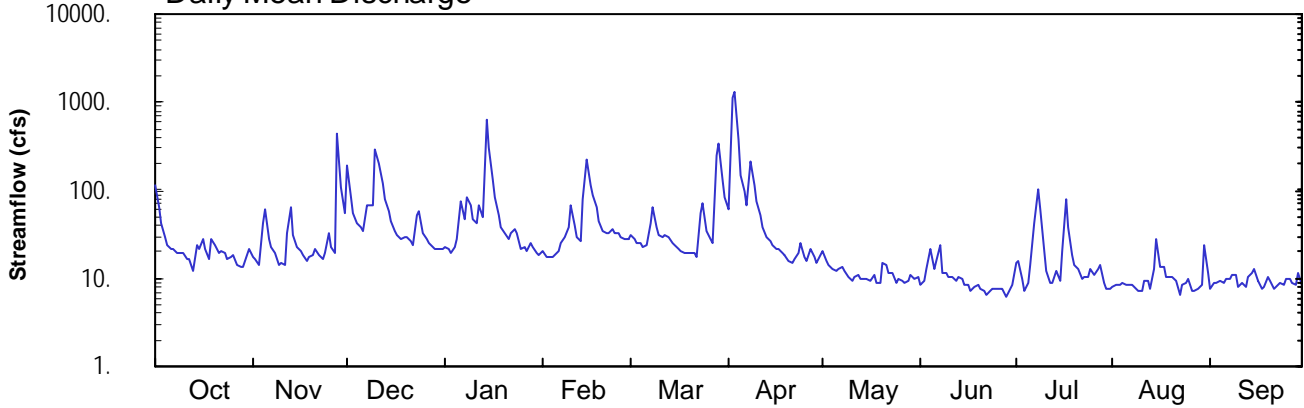
Hydrologic Unit Code: 02040201

Bucks County

Datum: 250 feet

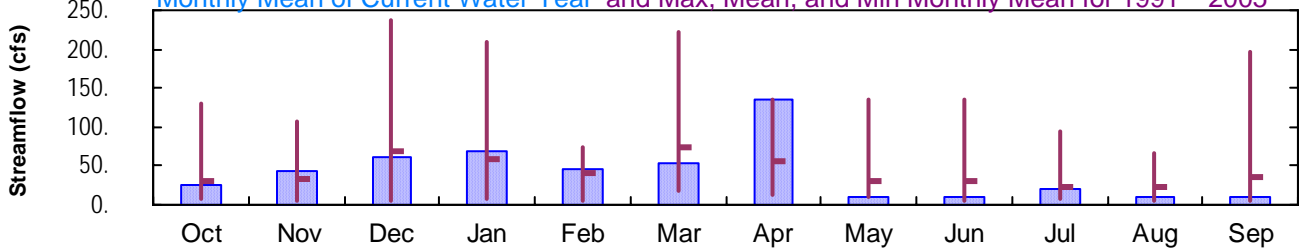
Drainage Area: 31.5 mi²

Daily Mean Discharge

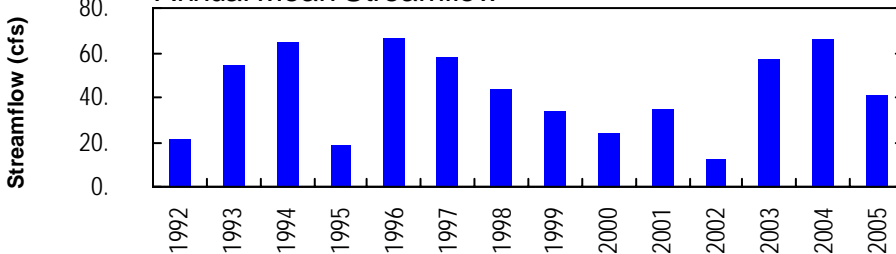


Monthly Statistics

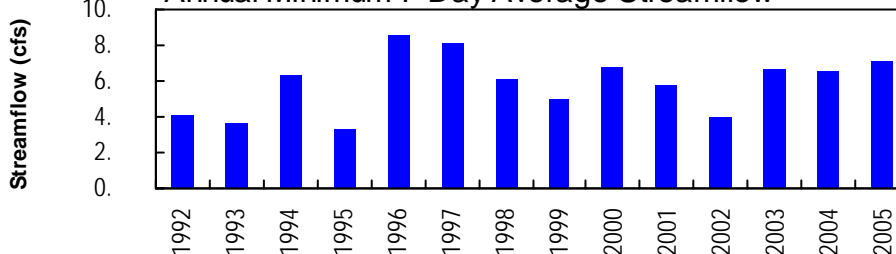
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1991 – 2005



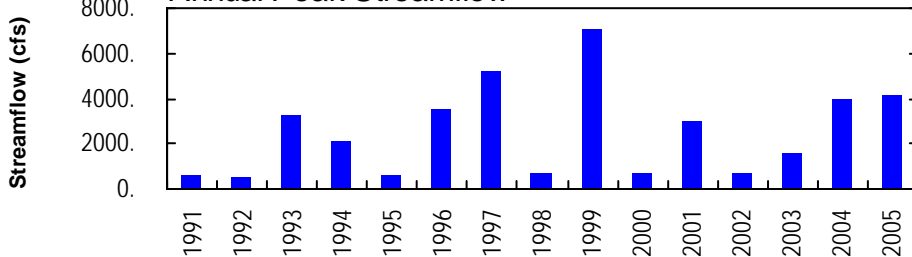
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



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 mi².

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 National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are 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 mi², normal pool capacity 6,539 acre-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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	17	189	22	20	30	60	21	8.5	15	8.1	7.7
2	65	17	83	22	18	28	1120	16	9.6	16	8.3	9.0
3	43	15	55	20	17	25	1290	14	13	9.7	8.2	8.7
4	30	43	43	22	17	25	383	13	21	7.2	8.9	9.5
5	23	60	37	27	18	23	151	12	13	8.7	8.3	9.0
6	22	28	35	74	21	24	96	13	16	14	8.5	9.7
7	22	23	69	46	25	42	69	14	24	43	8.5	9.7
8	19	20	67	83	30	64	217	12	12	102	8.1	11
9	19	14	68	67	38	38	114	11	11	62	7.4	11
10	19	15	286	48	69	32	73	9.5	10	20	7.1	8.0
11	17	14	199	42	41	29	52	10	10	12	9.2	8.8
12	17	33	120	67	29	31	38	11	9.5	8.9	9.2	8.2
13	12	65	81	51	26	29	30	9.6	11	8.9	7.5	10
14	24	30	59	634	79	26	27	9.7	9.7	12	13	11
15	21	23	44	305	219	24	23	9.7	8.6	9.5	27	13
16	28	21	35	136	114	22	22	9.3	8.5	20	13	9.4
17	22	19	30	85	90	20	21	11	7.4	79	13	7.6
18	17	16	28	53	64	20	19	8.8	8.2	38	10	8.1
19	28	17	29	38	44	20	18	9.1	8.4	19	10	10
20	24	18	29	32	35	20	16	15	7.5	14	10	9.6
21	20	21	26	28	33	19	15	15	7.4	13	9.6	7.4
22	21	18	23	33	33	18	17	11	6.5	9.8	6.6	7.9
23	19	16	53	35	37	55	19	11	7.0	10	8.3	8.9
24	17	19	59	32	33	73	25	9.0	7.5	10	9.0	8.5
25	17	33	32	22	33	35	17	10	7.4	13	9.6	9.7
26	e18	23	28	22	30	28	16	9.5	7.5	11	7.3	9.9
27	e14	20	25	21	28	26	21	8.8	7.4	13	7.2	8.8
28	14	446	23	25	28	251	17	9.4	6.2	14	7.8	8.6
29	14	106	22	23	---	331	15	11	6.7	9.0	8.4	12
30	18	54	22	19	---	134	18	10	8.5	7.8	24	8.4
31	21	---	22	19	---	85	---	10	---	7.5	11	---
TOTAL	780	1264	1921	2153	1269	1627	4019	353.4	299.0	637.0	312.1	279.1
MEAN	25.2	42.1	62.0	69.5	45.3	52.5	134	11.4	9.97	20.5	10.1	9.30
MAX	115	446	286	634	219	331	1290	21	24	102	27	13
MIN	12	14	22	19	17	18	15	8.8	6.2	7.2	6.6	7.4
(†)	23.9	23.4	23.1	23.1	23.2	23.1	23.4	24.8	28.2	27.4	29.7	28.8
(≠)	-27.2	+10.9	+2.9	+1.3	+2.3	+5.0	-14.5	+3.7	+2.9	+3.3	-9.1	-22.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2005, BY WATER YEAR (WY)

MEAN	31.8	33.4	69.3	59.0	39.9	75.1	55.4	29.9	31.0	23.4	22.3	35.4
MAX	131	108	236	209	74.6	222	134	136	136	94.1	67.5	197
(WY)	1997	1996	1997	1996	1998	1994	2005	1998	2003	2004	1994	1999
MIN	6.76	4.86	5.06	7.43	6.09	18.6	11.8	11.1	5.92	7.65	4.82	5.86
(WY)	2002	2002	2002	2002	2002	2002	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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1991 - 2005	
ANNUAL TOTAL	17482.6		14913.6			
ANNUAL MEAN	47.8		40.9		42.5	
HIGHEST ANNUAL MEAN					67.0	1996
LOWEST ANNUAL MEAN					12.1	2002
HIGHEST DAILY MEAN	1370	Sep 29	1290	Apr 3	2090	Sep 16 1999
LOWEST DAILY MEAN	6.0	Jul 5	6.2	Jun 28	2.3	Aug 18 1991
ANNUAL SEVEN-DAY MINIMUM	6.6	Jun 30	7.1	Jun 22	3.0	Aug 12 1991
MAXIMUM PEAK FLOW			a4160	Apr 2	a6930	Sep 16 1999
MAXIMUM PEAK STAGE			9.38	Apr 2	11.36	Sep 16 1999
10 PERCENT EXCEEDS	72		69		82	
50 PERCENT EXCEEDS	21		19		16	
90 PERCENT EXCEEDS	11		8.4		6.5	

a From rating curve extended above 1,270 ft³/s on basis of velocity-area study of peak flow at gage height 11.36 ft.

